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RESEARCH IN DRUG DEVELOPMENT AGAINST VIRAL DISEASES
OF MILITARY IMPORTANCE (BIOLOGICAL TESTING)

Annual Report

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E.A. Dulmage, M.G. Hollingshead, J. J. Kirsi
L. Westbrook, and L.J. Wilkoff

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<p>The purpose of this program is to evaluate the efficacy of candidate antiviral compounds against a spectrum of viruses of military importance. This program involves (a) primary testing of chemical compounds and natural products for antiviral efficacy <i>in vitro</i> using CPE-inhibition, plaque-reduction, and MTT assays, (b) primary testing of compounds for antiviral efficacy <i>in vivo</i> in animal model systems, and (c) secondary evaluation of the active candidate antiviral compounds. The target viruses for <i>in vitro</i> testing are Vaccinia Virus (VV), Adenovirus (AD2), Vesicular Stomatitis Virus (VSV), Punta Toro Virus (PT), Sandfly Fever Virus (SF), Yellow Fever Virus (YF), Venezuelan Equine Encephalomyelitis Virus (VE), Japanese Encephalitis Virus (JE), Pichinde Virus (PIC), and Hantaan Virus (HTN). The current <i>in vivo</i> systems are Pichinde Virus infection of hamsters, Venezuelan Equine Encephalomyelitis Virus, Japanese Encephalitis Virus and Vaccinia Virus infections of mice. Over 3500 compounds have been received for <i>in vitro</i> evaluation and over 30,000 assays have been performed on this contract to date. Compounds have been identified in nearly all virus systems that have confirmed antiviral activity</p>			
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exceeding that of the various positive control compounds (Ribavirin, Selenazofurin, Carbocyclic-3-deaza-adenosine, Adenosine dialdehyde and Ara-A). Many of these compounds represent potent and selective new antiviral agents.

During the present report period, a number of compounds were found to exhibit highly significant activity against VV *in vitro*. Compounds AVS-5568 and AVS-5569 were the most selective of these candidate antivirals and should now be examined *in vivo* for therapeutic potential. AVS-5580 demonstrated exceptional antiviral efficacy against VSV *in vitro* with a confirmed Selectivity Index (SI) > 1000. This particular compound also yielded significant activity against PT and SF *in vitro* with a TAI of > 26.4 and SI of > 100,000 at the AI₉₅ level. At least 20 AVS compounds appeared to possess excellent activity against PT and 16 AVS compounds had high activity against SF *in vitro*. Four compounds (AVS-3800, 3799, 3802 and 3801) were found active against FIC by plaque-reduction assay and these warrant further investigation as potential new antiviral drugs. Several compounds were found to have excellent activity against VE. AVS-4051 appeared to be the most potent inhibitor of VE with an IC₉₅ < 0.03 µg/ml and TAI of > 86.8. Seven AVS compounds were shown to have excellent *in vitro* activity against YF and require follow-up studies *in vitro* and *in vivo*. Likewise, 12 compounds appeared to have significant efficacy against JE virus *in vitro*. Among these active leads was AVS-5580 with a TAI of > 95.8.

The implementation of an *in vitro* prescreen against PT and YF was carried out during this report period. The prescreen has successfully identified potential active materials for further testing. Also, the conversion of primary screening methodology from CPE-inhibition to automated MTT microculture assays has significantly improved the quality and reproducibility of the antiviral screening program.

Several *in vivo* studies were performed with PIC, VE and JE viruses with the goal of producing models requiring reduced quantities of drugs. For JE and VE viruses, a brain target organ model appears to be feasible. These models require a single administration of antiviral compounds directly into the central nervous system. For PIC virus, results indicate that single or dual administrations of antiviral compounds may be effective in prolonging the life span of treated animals. With these models, some measure of antiviral efficacy may be made without requiring large quantities of compounds. For murine studies as little as 50 mg of compound would be necessary. For hamster studies as little as 400 mg of compound would be necessary.

For *in vivo* antiviral compound evaluations, no activity was found against PIC virus with AVS-94, AVS-347 or AVS-253 administered on 7-day treatment schedules. No AVS compounds were assessed against VE although 3N-3DU did show some antiviral activity when assessed in the CNS target organ model. Activity against JE virus was present with AVS-2979 and AVS-5587. No activity was found with AVS-360, AVS-215, AVS-272 or AVS-2563 at the dose level tested. AVS-360 did give some indication of anti-JE activity when assessed in the target organ system. Four compounds (AVS-2785, 2994, 3679 and 4225) were assessed against VV-induced tailpox lesions. Of these, AVS-3679 administered IP was the most active.

FOREWORD

Citations of commercial organizations and trade names in this report do not constitute an official Department of the Army endorsement or approval of the products or services of these organizations.

In conducting the research described in this report, the investigators adhered to the "Guide for the Care and Use of Laboratory Animals", DHEW Publication No. (NIH) 86-23, Revised 1985.

In conducting the research described in this report, the investigators adhered to all safety, security, and biocontainment requirements specified in the contract, including all U.S. Public Health Service biosafety guidelines contained in "Biosafety in Microbiological and Biomedical Laboratories", DHHS Publication No. (CDC) 86-23 (March 1985).



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1. INTRODUCTION

This is the Fourth Annual Progress Report on SRI Project No. 5975, Contract No. DAMD17-86-C-6013. It covers the progress of the research program during the report period from November 15, 1988 to November 14, 1989.

The goal of this program is to implement testing systems in which to evaluate the efficacy of candidate antiviral compounds against a spectrum of viruses of military importance. The program consists of three major task areas: a) primary testing of chemical compounds and natural products for antiviral efficacy *in vitro*, b) primary testing of chemical compounds and immunopotentiators for antiviral efficacy *in vivo*, and c) secondary evaluation of compounds found active in the primary *in vitro* and *in vivo* screens.

One of the primary missions of the U.S. Army Medical Research and Development Command is to perform studies on the pathogenesis, diagnosis, epidemiology, prophylaxis, and treatment of infectious diseases of military importance. The Army's infectious disease research program, conducted by the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) at Fort Detrick, is primarily concerned with medical defense against (a) naturally-occurring infectious diseases that could seriously interrupt U.S. military operations such as troop mobilization and deployment and (b) the threat of infectious diseases or toxic effects caused by the potential field use of biological warfare (BW) agents, either conventional BW agents or altered agents, by an unfriendly force.

The U.S. Army has a recognized need for new chemical compounds that will be useful as prophylactic or therapeutic antiviral drugs to treat U.S. military personnel who are at risk of exposure to, or who might become infected with, naturally-occurring viruses or altered viruses for which there exists no effective protection or therapy at the present time. The development of selective antiviral drugs for use in the successful treatment of infections with certain exotic RNA viruses (togaviruses, bunyaviruses, arenaviruses, rhabdoviruses, and other, unclassified RNA viruses) is of particular importance to the Army because there are no other research efforts being conducted, either by the government or by the private sector, which are directed toward the control of these virus diseases of military relevance.

In 1973, USAMRIID initiated a research and development program to identify and to pursue new compounds with activity against these exotic RNA viruses. Approximately 1500 compounds have already been screened *in vitro* for selective antiviral effects against these target viruses and a number of the compounds which were found active in cell culture have been evaluated for antiviral efficacy *in vivo*. Several of these compounds (e.g., Ribavirin, Selenazole, and Pyrazofurin) have been extensively tested for efficacy against lethal RNA virus infections in various animal model systems at USAMRIID. To date, the most promising antiviral drug with demonstrated, broad-spectrum activity against these viruses of military importance, both *in vitro* and *in vivo*, appears to be Ribavirin, its prodrug derivatives, and its carboxamidine derivative (AVS-206). Ribavirin has been evaluated in humans infected with Sandfly Fever (SF) Virus, Lassa Fever Virus, and Korean Hemorrhagic Fever (KHF) Virus and has demonstrated marked clinical efficacy against these particular virus infections. This drug will be further developed for general use in military personnel. There is a real need, however, for more potent and more selective antiviral drugs to combat these virus diseases which represent serious threats throughout the world.

Troops in the field are threatened not only by infectious diseases of natural origin, but also by the possibility of BW attack. The commercial development of antiviral drugs for the treatment of the more common respiratory virus, enteric virus, and herpesvirus infections may not solve the problems which are unique to the Armed Forces. These potential problems of encountering exotic viruses and BW

agents will not be sufficiently addressed by depending solely on the possibility that antiviral drugs originally developed for the treatment of acute respiratory diseases, enterovirus infections, and herpesvirus infections might also be useful in the treatment of these virus diseases of military relevance. A more direct approach, and one which is clearly indicated, is to focus on antiviral drug development efforts designed to attack these particular virus disease threats that are unique to the Armed Forces.

The U.S. Army Medical Research Institute of Infectious Diseases has, for a number of years, been involved in conducting a unique and ambitious antiviral drug research and development program, primarily directed toward the chemical control of exotic RNA virus infections of military importance. Potential antiviral agents have been synthesized and evaluated against a number of target viruses both *in vitro* and *in vivo*. Program emphasis is currently on the development of antivirals for use in the treatment of infections with alphaviruses, flaviviruses, bunyaviruses, arenaviruses, and other viruses which are capable of eroding combat strength in troops deployed in overseas areas. In addition, current efforts are also being directed toward the development of antivirals for use in the treatment of AIDS through an Inter-Agency Agreement with the National Institutes of Health (NIH).

Members of the *Togaviridae* and *Flaviviridae* families (alphaviruses and flaviviruses) are capable of producing serious hemorrhagic or encephalitic diseases in humans. Infections with alphaviruses [Eastern equine encephalomyelitis (EEE), Western equine encephalitis (WEE), and Venezuelan equine encephalitis (VEE)] have occurred in epidemic proportions in the Americas. Chikungunya and O'nyong-nyong viruses also continue to cause epidemic disease on the African continent. The flaviviruses include several members which cause significant disease in humans. Dengue viruses types 1-4 are prevalent causes of acute illness in the tropics and subtropics of the world. Available vaccines are inadequate to control these infections effectively. Other members such as St. Louis encephalitis virus, Japanese B Encephalitis (JE) virus, and West Nile encephalitis virus cause mild to severe encephalitis diseases in humans. The tick-borne encephalitis virus group, represented by Russian Spring-Summer Encephalitis Virus, has caused widespread encephalitic disease in the U.S.S.R. and Northern Europe with high mortality rates. Yellow Fever (YF), in either the urban or jungle form, continues to be a threat, although the use of the 17-D vaccine is quite effective as a prophylactic measure against this disease. The Army's program is interested in controlling infections caused by the dengue viruses, Japanese encephalitis virus, Russian Spring-Summer encephalitis virus, Yellow Fever virus, and West Nile encephalitis virus.

A number of bunyaviruses have caused epidemic disease in many areas of the world: Rift Valley Fever virus was responsible for a major epizootic in Egypt in 1977-79 with considerable losses in domestic animals (sheep and cattle) and significant mortality among those humans infected with the virus. Sandfly fever virus has also been recognized as an important cause of epidemics in the Mediterranean area, in the Middle East, and in Central Europe. Oropouche, La Crosse, and California encephalitis viruses have all caused significant disease in the Americas. Oropouche virus, for example, has been associated with a number of large human epidemics in Brazil over the past twenty years. Hantaan virus, the causative agent of Korean hemorrhagic fever, causes appreciable mortality and is widely distributed in Asia. It has only recently been shown to belong to the *Bunyaviridae* family. Of the *Bunyaviridae* family, the USAMRIID program has initiated studies with Sandfly fever virus, Rift Valley fever virus, Korean hemorrhagic fever virus, and Punta Toro virus.

Of the *Arenaviridae* family, current interest includes Lassa fever virus, an agent which causes significant lethal disease among infected humans in Africa, especially in Sierra Leone. Other arenaviruses under current investigation include Junin and Machupo viruses, the causative agents of Argentine hemorrhagic fever and Bolivian hemorrhagic fever, respectively. These agents are found endemic in wide areas of South America. Pichinde (PIC) virus has been used in antiviral studies as a representative of

this important family of viruses. Vesicular stomatitis virus is currently employed as a representative of the *Rhabdoviridae* family.

Other viruses which cause sporadic but severe hemorrhagic fever in Africa are Marburg and Ebola viruses. These two closely-related agents have been placed in a new family (*Filoviridae*).

The above viruses are those which might be encountered in exotic troop locations and against which troops would not be expected to have any pre-existing immunity. With few exceptions, specific vaccines do not exist for these agents and some of the agents encountered may be poorly classified or may even be unclassified viruses which have not been seen previously. The antiviral chemoprophylaxis/chemotherapy approach may be the best modality to defend against this threat at the present time.

Another recurring problem with naturally-occurring virus infections exists in military boot camps where new recruits are assembled. These troops often develop infections with adenoviruses, influenza viruses, and parainfluenza viruses, sometimes in epidemic proportions. Infections with the adenoviruses have been a distinct military problem for years and multivalent vaccines have been prepared for use in new recruits. Nevertheless, an effective antiviral drug for treatment of adenovirus infections would be quite useful and therefore this virus group is also a target for antiviral chemotherapy in the Army's program.

A number of naturally-occurring viruses could be developed by an adversary into potent biological weapons for use in the field against U.S. forces. Many of the exotic RNA viruses are also potential BW agents, since their dissemination in an area where they are already indigenous could be employed as a means of disguising the source of the infection. In addition, other agents such as smallpox virus could be used very effectively against a susceptible civilian population prior to and during military operations to disrupt logistics and support activities and to create panic and chaos. The threat of BW attack poses some of the same problems as those to be addressed in the defense against naturally-occurring virus infections. Again, a broad-spectrum antiviral drug with selective activity against the RNA viruses could be the only real line of defense against such attack with those particular type of agents. The vaccine approach will only be effective in affording protection against a very limited group of these agents which number in the hundreds of different antigenic types.

With the advances made in the field of molecular genetics, it is now technically possible to genetically engineer altered viruses with enhanced virulence, communicability, drug resistance, and overall threat potential. An example of such misuse of advanced biotechnology would be the insertion of genes for highly toxic peptides such as snake venom toxins, potent bacterial toxins, or other low molecular weight toxins of military importance into the genome of a highly communicable virus such as influenza. The feasibility of inserting foreign genes into vaccinia virus and obtaining expression of those genes in the host cell has already been demonstrated. Recombinant DNA technology has made it possible to insert and express heterologous genes in a variety of different viruses. Effective defense against possible altered viruses used as BW agents may well depend upon the development of antiviral drugs active against the vector viruses.

The Department of Antiviral Studies at USAMRIID is responsible for the acquisition, identification, and development of potential new antiviral drugs which are effective against viruses of military relevance and which might be useful in the treatment of AIDS. The program is therefore, broad-based and involves the synthesis, primary and secondary testing, and further characterization of novel antiviral compounds with regard to their possible biochemical mechanisms of action, pharmacokinetics, metabolism, optimal formulation, optimal combination with other drugs, and safety in animal model

systems. The Department also directs studies in support of IND applications to the FDA for clinical testing of active antiviral agents for use in man.

Since the establishment of its antiviral testing program, the Department of Antiviral Studies, USAMRIID, has evaluated approximately 3,000 compounds in its primary *in vitro* screen. Fewer compounds have been evaluated *in vivo*. Selenazole was reported to have broad-spectrum activity against the exotic RNA viruses *in vitro* and is significantly more potent than Ribavirin against the togaviruses (VEE, YF, JE), bunyaviruses (RVF, SF, KHF), and arenaviruses (PIC) *in vitro*. The activity of this compound against YF virus is most impressive with an ED₅₀ of 0.005 mg/ml in cell culture. The evaluation of Selenazole for therapeutic antiviral efficacy *in vivo*, however, yielded disappointing results and pharmacological problems may be responsible for the lack of efficacy in animal model systems. Ribavirin, on the other hand, has been shown in laboratory animal models to have significant antiviral efficacy against the bunyaviruses (RFV, Punta Toro and KHF) and the arenaviruses (PIC, Junin, Machupo, and Lassa Fever). Clinical trials with Ribavirin in patients with Lassa Fever virus or Hantavirus infections have yielded good results.

Ribavirin has also been shown to be effective in the treatment of Sandfly fever virus in human volunteers. Good progress has been made toward developing this particular antiviral drug for general clinical use by the Army, but new agents with higher potency and selectivity against the exotic RNA viruses will hopefully be identified in the expanded USAMRIID antiviral program. Because of the lag time in diagnosing viral disease, treatment with broad-spectrum antiviral agents offers the best hope to successfully defend against both naturally-occurring disease and against possible BW agents in the field. It is unlikely, however, that a single drug will be found that is effective against all of these exotic RNA virus infections, so additional antiviral agents must be developed. There is also a need to explore the efficacy of immunopotentiators, biological response modifiers, interferons, combination chemotherapy, and new approaches to drug delivery to enhance the antiviral efficacy of these agents.

The present contract at Southern Research Institute was established to enable USAMRIID to evaluate approximately 1,500 compounds per year for efficacy against 10 different target viruses in a primary *in vitro* screen, 96 compounds per year for *in vivo* efficacy against a representative togavirus and arenavirus in appropriate animal model systems, and approximately 5 compounds per year in detailed *in vivo* studies. The basic contract also includes secondary testing studies with candidate antiviral agents that demonstrate promising activity both *in vitro* and *in vivo*. During 1989, antiviral prescreen testing (*in vitro*) of plant extracts against Punta Toro and Yellow Fever Virus was added to this screening program. This report summarizes our progress in implementing the research program and includes summaries of antiviral test data collected up to November 14, 1989.

2. CURRENT SCOPE OF WORK

This section describes the research objectives and the scope of work for each of the four main tasks being performed by Southern Research Institute (SRI) on this contract. These tasks are: (a) Primary testing of compounds for antiviral efficacy *in vitro*, (b) Primary testing of compounds and immunopotentiators for antiviral efficacy *in vivo*, (c) Secondary testing of compounds found active in primary testing, and (d) Antiviral prescreen testing of plant extracts for efficacy against Yellow Fever and Punta Toro Virus, *in vitro*.

2.1 Task 1: In Vitro Antiviral Evaluations

SRI is conducting the primary screening of chemical compounds which are furnished by the Department of Antiviral Studies, USAMRIID, through its repository contractor (Biological Research Faculty and Facility, Inc., [BRFF, Inc.] Ijamsville, MD) for antiviral efficacy in cell culture against representative viruses from the Togaviridae, Flaviviridae, Bunyaviridae, Arenaviridae, Rhabdoviridae, Poxviridae, and Adenoviridae families. The test viruses consist of the following: (1) Venezuelan Equine Encephalomyelitis (VEE) Virus, (2) Yellow Fever (YF) Virus, (3) Japanese Encephalitis (JE) Virus, (4) Sandfly Fever (SF) Virus, (5) Punta Toro (PT) Virus, (6) Hantaan (HTN) Virus, (7) Pichinde (PIC) Virus, (8) Vesicular Stomatitis Virus (VSV), (9) Vaccinia Virus (VV), and (10) Adenovirus type 2 (AD2). During the past year we converted the CPE-inhibition assays to an automated MTT-based assay for all viruses listed above except PIC, AD2, and HTN. SRI is scheduled to evaluate approximately 1500 compounds per year against each of these ten viruses *in vitro*, using CPE-inhibition and quantitative plaque-reduction assays, to determine the 50% minimal inhibitory concentration (MIC_{50}), or median inhibition dose (ID_{50}) of active compounds, respectively. Determinations are also being made of the cytotoxicity of each candidate compound for the host cells, expressed in terms of the minimum (~25%) cytotoxic concentration of the compound. We are calculating an *in vitro* selectivity index for each active compound against each susceptible test virus. All screening data are being reported to BRFF, Inc. and to USAMRIID essentially as it is obtained in hardcopy form and/or on floppy diskettes.

2.2 Task 2: In Vivo Antiviral Evaluations

SRI is conducting the primary testing of chemical compounds and immunopotentiators, being furnished by the Department of Antiviral Studies, USAMRIID, for antiviral efficacy in rodent models and is conducting a preliminary assessment of acute toxicity with each material submitted. SRI is evaluating the compounds and immunopotentiators against representative viruses from the Togaviridae, Arenaviridae, and Flaviviridae and Poxviridae families in rodents. These challenge viruses consist of the following agents: (1) Pichinde Virus in the hamster, (2) Venezuelan Equine Encephalomyelitis Virus in the mouse, (3) Japanese Encephalitis Virus in the mouse, and (4) Vaccinia Virus in the mouse. Compounds are evaluated at the primary level against each of these viruses using parenteral routes of administration. Antiviral efficacy is being expressed in terms of the observed increase in the number of survivors, or in the average day of death, in the treated group compared with that of the control untreated group or the diluent control group.

2.3 Task 3: Secondary Evaluations

SRI is also conducting the secondary testing and further evaluation of compounds found active in the primary antiviral screen. Secondary testing includes a statistical estimation of the *in vivo* activity of the candidate compound, the optimal dosage regimen, the optimal route of administration, the optimal treatment schedule, schedule dependency, the duration of antiviral effect, a determination of the utility of the candidate compound in combination with other drugs, and the influence of formulation on activity. SRI is expecting to evaluate approximately 5 compounds per year in extensive secondary *in vivo* testing to include determinations of dose-response relationships and antiviral efficacy. Data will be reported to USAMRIID essentially as it is obtained.

2.4 Task 4: In Vitro Prescreen Evaluations

Our program was changed during the latter part of this year to implement the Antiviral Prescreen Assay to evaluate plant extracts on a large scale against YF and PT. We are scheduled to test

approximately 3,000 extracts per year using the prescreen assay protocol. A prescreen procedure was developed which uses MTT and evaluates five compounds (at four-log₁₀-dose levels) per virus per 96-well plate.

3. EXPERIMENTAL METHODS

3.1 Cell Culture

A centralized cell culture facility for provision of high-quality cell culture for all of the virus screening laboratories on this project is located at SRI home-site. This centralized cell culture facility consists of two laboratories (one laboratory is approximately 225 sq. ft. and the other approximately 250 sq. ft.). Each laboratory has a laminar flow hood and each laboratory is fully equipped for the maintenance and propagation of cell cultures. Each laminar flow hood has been inspected and certified by the University of Alabama Occupational Health and Safety Department and these inspections and certifications will be done on a yearly basis. One laboratory has been in operation since February 1988 and the other laboratory was completed and came on line in June, 1988.

The centralized cell culture facility is currently propagating and maintaining the Vero (ATCC) cell culture line for this project.

Vero (ATCC) cells are used for seeding 96-well plates for the RNA virus assays and delivered to the BL-3 facility on the following schedules.

- 1) 96-well plates (MTT format: Rows A-H empty wells)

<u>Day Delivered</u>	<u>Number of Plates</u>
Tuesday	65
Wednesday	20
Thursday	65
Friday	35

- 2) 96-well plates (Pre-screen format: Rows 4, 8, 12 empty wells)

<u>Day Delivered</u>	<u>Number of Plates</u>
Wednesday	24

Cell culture plates for the other virus laboratories are supplied as requested. Vero cells in T75 or T150 cell culture flasks for virus production are supplied as requested. In addition, Vero cells seeded in 96-well plates are supplied as requested for special studies, and developmental procedures.

Currently the Centralized Cell Culture Facility supplies the following media and solutions to the BL-3 facility:

Eagles MEM	10 liters every 3 weeks
Eagles MEM (2x)	5 liters as requested
Hanks Balanced Salt Solution	5 liters as requested

For quality control, cell culture lines are routinely monitored for any change in their growth parameters. The cells seeded in 96-well plates are microscopically inspected before delivery to the laboratories to ensure proper cell distribution in the wells and cell integrity.

Sterility cultures are performed on all media and solutions used in the cell culture laboratory. At the time each reagent is made, 0.5 ml from each bottle or flask of reagent is added to an individual tube of thioglycollate medium and Sabouraud medium and the sterility culture tubes are incubated at 37 °C for 48 hours before the solutions are released for use. The culture tubes are held 14 days before being discarded as negative.

At approximately 3-month intervals, samples from cell culture lines that are maintained in the Centralized Cell Culture Facility are sent to the ATCC for mycoplasma testing. These samples are monitored by use of the bisbenzamide DNA-fluorochrome stain and also by cultivating in mycoplasma broth and agar media under aerobic and anaerobic culture conditions.

Cell culture stocks are stored in liquid nitrogen.

3.2 Test Compounds

3.2.1 Receipt, Cataloging, and Storage

Drug preparation for the virus screening laboratories was initiated January 9, 1989. From January 9, 1989 through November 15, 1989, 4880 primary AVS samples have been prepared (this includes retest and positive control samples). From June 21, 1989, to November 15, 1989, 1071 pre-screen samples have been prepared, including retests and positive control samples.

The drug samples submitted for testing were shipped to the centralized drug preparation laboratory by Biological Research Faculty and Facility, Inc. (BRFF). The drugs were checked against the enclosed shipping list, and stored in numerical order in the drug repository facility under the appropriate conditions, according to the information supplied by BRFF, Inc.

Requests for drug preparation are required to be delivered to the centralized drug preparation laboratory five working days prior to the testing date (see Figure 1 for the drug request form). The drugs are solubilized and delivered to the designated laboratory on the day of testing.

3.2.2 Determination of Drug Solubility

If no drug solubility or stability information is provided by the supplier, the following procedure is used to determine drug solubility:

Weigh a 1 mg sample into a homogenizer vessel and add 1 ml of H₂O, which is the first solvent on the priority list. If the drug is not immediately soluble in H₂O, heat in a H₂O bath to 40°C. If the drug is not in solution after heating, homogenize with a hand homogenizer. Repeat the procedure with a freshly weighed 1 mg sample for each solvent in order of priority, until a suitable solvent is found. The priority list of solvents is as follows:

	<u>Solvent</u>	<u>Volume (ml)</u>		<u>Solvent</u>	<u>Volume (ml)</u>
1)	H ₂ O	1	4)	DMSO	0.1
2)	MeOH	0.1	5)	Acetone	0.1
3)	EtOH	0.1			

If the drug is insoluble in all of the above listed solvents, it is to be tested as a suspension in cell culture assay medium with the aid of a hand homogenizer or a vortex mixer. The final concentration of solvent in the starting drug concentration should not exceed 1% (preferably <1%).

3.2.3 Compound Preparation for Testing

The following procedure is employed for the drug preparation:

1. Primary Drugs

All drugs are weighed in specified amounts, and the pre-determined solvent is added as required for the starting drug concentration.

Polystyrene snap-cap tubes are used for the weighed samples except for acetone-soluble drugs, then polypropylene tubes must be used. Polypropylene cryotubes are also used.

2. Pre-screen Drugs (Plant Extracts)

All drugs are weighed in 4 mg samples. On Day 0 (24 hours prior to testing) 40 µl of a specified solvent is added to each sample.

Each sample is homogenized and placed in an ultrasonic bath for 10-12 minutes.

The samples are allowed to extract overnight at room temperature.

On Day 1 (day of testing), 960 µl deionized water is added to each sample and observed for solubility. If a drug is insoluble, it is further homogenized with a tissue tearer until a homogenous suspension is obtained.

3.3 In Vitro Antiviral Screening: DNA Viruses and Exotic RNA Viruses

The viruses and host cell lines used in our *in vitro* assays are listed in Table 1. The antiviral activity of a compound was defined as a measure of its ability to inhibit the cytopathogenic effect (CPE) of the virus on its host cell. Compounds were evaluated against most of the viruses in a standard CPE-inhibition assay or on automated MTT assay. Mammalian cells were pregrown as monolayer cultures in 96-well tissue culture plates using suitable cell culture medium. Stock viruses were pretitered according to the method of **Reed and Muench (1938)** and diluted in cell culture medium to yield 32 TCID₅₀ (tissue culture infectious dose, 50%) units per 0.1 ml. Antiviral assays were designed to test up to six or seven 0.5-log₁₀ concentrations of each compound in triplicate against the challenge viruses. If drug cytotoxicity was provided, then drug concentrations were chosen to range from toxic to noncytotoxic. If no cytotoxicity information was available, testing began at 320 μg/ml. To each of the replicate host cell cultures were added 0.1 ml of the test drug solution and 0.1 ml of virus suspension. Cell controls containing medium alone, virus controls containing medium and virus, and drug cytotoxicity controls containing medium and each drug concentration were included on each plate. The covered plates were incubated at 37 °C until maximum virus-induced CPE were observed in the untreated, virus-infected control cell cultures. Positive control drugs (Table 1) were included in each antiviral assay to validate the test conditions used in the antiviral assays.

For the standard CPE assay, the degree of inhibition of virus-induced CPE and the degree of drug-induced cytotoxicity were observed microscopically. CPE were scored numerically from 0 (normal uninfected cells) to 4 (100% virus-induced cell destruction) for each individual culture as follows:

- 4 = Viral CPE observed in 100% of the cells
- 3 = Viral CPE observed in 75% of the cells
- 2 = Viral CPE observed in 50% of the cells
- 1 = Viral CPE observed in 25% of the cells
- 0 = No CPE; normal cell monolayer
- u = Unsatisfactory test, e.g., contamination or leakage
- t = Drug is toxic to cells, CPE not discernible
- p = Drug is partially toxic to cells, cell monolayer is intact so that CPE may be discernible

Antiviral activity was determined by calculating the degree of inhibition of virus-induced CPE in drug-treated, virus-infected cell cultures by means of a virus rating (VR). The VR is a standard weighted measurement of antiviral activity taking into account both the degree of CPE inhibition and drug cytotoxicity, and was determined by a modification of the method of **Ehrlich *et al.* (1965)**. The VR was calculated as 0.1 of the sum of the numerical differences between the recorded CPE grade of each test well and that of the corresponding virus control culture. Numerical differences between the reading of test wells containing a drug concentration which was partially cytotoxic (p) and their corresponding virus controls were halved. As requested by USAMRIID, the VR was also reported by the method of **Sidwell and Huffman (1971)**. This virus rating (VR*) was calculated by dividing the VR obtained by the method of **Ehrlich *et al.* (1965)** by 3. The inhibitory drug concentration which reduced the CPE by 50% (ID₅₀) was calculated by using a regression analysis program for semilog curve fitting. A therapeutic index (TI) for each active test compound for each susceptible virus was determined by dividing the minimum cytotoxic concentration (MTC) of the test compound by the ID₅₀.

Table 1

In Vitro Antiviral Screening Models

<u>Virus</u>	<u>Strain</u>	<u>Classification</u>	<u>Cell Line</u>	<u>Positive Control Compound</u>
Vaccinia Virus	Lederle Chorio-allantoic	Poxviridae	Vero	Selenazole (AVS-0253), Arabinofuranosyladenine (AVS-1752)
Adenovirus Type 2	Adenoid 6	Adenoviridae	HEp-2	Ribavirin, (AVS-0001), Selenazole (AVS-0253)
Vesicular Stomatitis Virus	Indiana	Rhabdoviridae	L929	Carbocyclic-3-deaza-adenosine (AVS-0303), Adenosine dialdehyde (AVS-1160)
Punta Toro Virus	Adames	Bunyaviridae	Vero	Ribavirin (AVS-0001)
Sandfly Fever Virus	Sicilian	Bunyaviridae	Vero	Ribavirin (AVS-0001)
Pichinde Virus	4763	Arenaviridae	Vero	Ribavirin (AVS-0001)
Venezuelan Equine Encephalomyelitis Virus	Trinidad Donkey	Togaviridae	Vero	Selenazole (AVS-0253)
Yellow Fever Virus	Asibi 17D (Prescreen)	Flaviviridae Flaviviridae	Vero Vero	Selenazole (AVS-0253) Selenazole (AVS-0253)
Japanese Encephalitis Virus	Nakayama	Flaviviridae	Vero	Selenazole (AVS-0253)
Hantaan Virus	76-118	Bunyaviridae	Vero (VSC-6)	Ribavirin (AVS-0001)

Compounds showing antiviral activity in the initial CPE-inhibition assay were retested in confirmatory CPE-inhibition assays. The most active of the compounds having confirmed antiviral activity were further tested in quantitative plaque-reduction assays.

During the past year we changed the method of testing compounds in the primary screen to the automated MTT Assay System, in which the degree of cell viability (and therefore CPE and drug cytotoxicity) is determined by MTT uptake. This procedure is based upon the reduction of the tetrazolium salt, 3-(4,5-dimethyl-thiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) by mitochondrial enzymes of viable host cells to MTT formazan. The blue color of the MTT formazan is measured spectrophotometrically. It was felt that this new system was more efficient and suitable for a large-scale screening program.

The details of the MTT assay procedures for each virus are described on the following pages.

Plate layout and data printout are included in Appendix A.

3.3.1 Vaccinia Virus (VV)

Vaccinia virus, strain Lederle CA, was obtained from Dr. Wilton Rightsel, formerly with Parke, Davis and Co., Detroit, Michigan. We have serially passed VV in HEp-2 (continuous-passage human carcinoma of the larynx) and Vero (continuous-passage African green monkey kidney) cell monolayer cultures. The VV used to screen compounds for USAMRIID was propagated and assayed in Vero cell monolayer cultures in Eagle's Minimal Essential Medium (MEM) supplemented with 2% heat-inactivated fetal bovine serum (Δ fbS) and 50 μ g/ml of gentamicin. Virus stocks were titrated according to the procedure of Reed and Muench (1938) and diluted in culture medium to 100 CCID₅₀ per 0.1 ml.

During the time period covered by this report, compounds were screened for activity against VV in Vero cell monolayer cultures in 96-well plates, employing one of two CPE-inhibition assay procedures.

From 11/16/88 through 12/15/88 the CPE-inhibition assay procedure described in Section 3.3 of this report, in which CPE are graded (0-4) microscopically and a Virus Binding is generated to express activity, was utilized to evaluate compounds. After 12/15/88 this microscopically graded assay procedure was used only for confirmatory assays of compounds found to be active in primary screening on or prior to 12/15/88. A total of 65 assays representing 56 compounds were conducted by this procedure.

Subsequent to 12/15/88 and beginning with Shipment 42, all compounds have been screened for activity against VV by the MTT assay procedure, in which the degree of cell viability (and therefore CPE and drug cytotoxicity) is determined by MTT uptake. This procedure is based on the reduction of the tetrazolium salt, 3-(4,5-dimethyl-thiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) by mitochondrial enzymes of viable host cells to MTT formazan. The blue color of the MTT formazan is measured spectrophotometrically. A total of 622 assays were conducted by this procedure. Vero cells are seeded into 96-well plates at a density of 4×10^4 cells in 0.2 ml per well in MEM + 5% bovine calf serum. The plates are incubated at 37°C overnight. The next day our CPE-inhibition assay is set up according to the format shown in Figure 8 of our Sixth Semiannual Progress Report, December 15, 1988. MEM + 2% heat-inactivated fetal bovine serum (Δ fbS) serves as experiment medium. To each of triplicate test wells containing replicate cell monolayers, 100 μ l of each test drug solution (or suspension) and 100 μ l of experiment virus are dispensed. Six 0.5 log₁₀ concentrations of each drug beginning with 320 μ g/ml are routinely used. Compounds are solubilized or suspended and diluted in culture medium the day of use. Cell controls containing 200 μ l of medium, virus controls containing cells, medium and virus, and

duplicate drug cytotoxicity controls containing cells, medium and each drug concentration are included on each plate. Blank wells, medium (Reagent) control wells, and drug colorimetric controls (drug + medium + MTT + SDS - no cells) accompany each test. The covered plates are incubated at 37°C in a humidified atmosphere containing 2% CO₂.

When CPE reach 100%, 5 days postvirus infection (p.i.), 20 µl of MTT (a 5 mg/ml solution in PBS) are added to each well. The plates are incubated at 37°C for six to seven hours to allow reduction of the MTT to the formazan form. Then 40 µl aliquots of a 30% solution of SDS in 0.02N HCl are added to the plate wells. The plates are incubated overnight to allow the SDS to lyse the cells and dissolve the MTT formazan crystals. The absorbance (570 nm) of the contents of each well is determined by a plate reader. The plate reader is interfaced with a computer programmed to capture the optical density (O.D.) measurements from the reader and calculate indices such as the IC_{25, 50, 95}, TC_{25, 50, 95} and to plot the percents of viral CPE and cell viability of drug-treated cultures.

3.3.2 Adenovirus Type 2 (AD2)

We obtained the Adenoid-6 strain of Adenovirus Type 2 from the American Type Culture Collection. In our laboratories, the virus was passaged in HEp-2 cell monolayer cultures in MEM supplemented with 0.4% lactalbumin hydrolysate and 2% heat-inactivated fbs.

An early "cytotoxicity" is frequently observed in adenovirus-infected cell cultures. This "cytotoxicity", the result of penton toxin following an accumulation of unassembled viral components within the cell, can mask the later-appearing CPE. To prevent the appearance of this early cytotoxicity, virus stocks were treated as follows: Adenovirus-infected HEp-2 cell cultures were subjected to three cycles of freeze-thawing to disrupt the cell membranes. The material from the cultures was centrifuged, and the pooled supernatant fluid was treated with 100 µg/ml of purified trypsin (Worthington, TRL) for one hour at 37°C. The enzyme action was then stopped by adding soybean trypsin inhibitor (Worthington; titrated for specific activity against trypsin) to the supernatant viral fluid. The trypsin-treated virus preparation, along with the untreated supernatant viral fluid was titrated for infectivity in HEp-2 cell cultures to make sure that the viral infectivity of the treated preparation was not diminished. Before the trypsin-treated stock adenovirus was used for antiviral screening, it was evaluated as the challenge virus against our positive control compounds Selenazole and Ribavirin.

During the twelve-month period covered by this report, test compounds were screened for antiviral activity against adenovirus using a CPE-inhibition assay procedure as described above for vaccinia virus in Section 3.3.1. Stock AD2 was diluted in medium to 100 CCID₅₀ per 0.1 ml. We have found that a 32-CCID₅₀ challenge of AD2 per plate well resulted in only 50-70% CPE in four days. Because HEp-2 cells grow rapidly, the host cell cultures in the plate wells deteriorated significantly after four days post-virus infection. Therefore the stronger virus challenge allowed 100% CPE to develop in four days. Six 0.5 log₁₀ concentrations of each compound were evaluated in triplicate HEp-2 cell culture wells. To each culture well was added 0.1 ml of the test drug solution, followed immediately by 0.1 ml of the challenge virus dilution. The 96-well plates were incubated for four days at 37°C in a humidified atmosphere containing 2% CO₂. The CPE were examined microscopically and graded 0-4.

As we discussed in our Sixth Semiannual Progress Report (SRI-89-BIO-109-5975, December 15, 1988) an MTT CPE-inhibition assay was developed for use with AD2 using A549 cells or 293 cells. The MTT assay in either cell line was dose-responsive and reproducible, but would be a more stringent screening assay than the present CPE-inhibition assay which is read microscopically.

As a result of contract modifications by USAMRIID in November, 1989, AD2 was deleted from the virus spectrum utilized for primary screening.

3.3.3 Vesicular Stomatitis Virus (VSV)

The VSV (Indiana strain) was obtained from Dr. Robert Sidwell, Utah State University, Logan, Utah in 1973. Dr. Sidwell had originally obtained the virus from the ATCC. Since the virus has been in this laboratory, it has been passaged 5 times in L929 cells.

The L929 cells were obtained from the ATCC and have been carried in continuous passage or stored frozen in liquid nitrogen. The medium used to maintain the L929 cells was Eagle's minimum essential medium supplemented with 10% or 5% heat-inactivated fetal bovine serum, 100 units penicillin per ml, and 100 μ g streptomycin per ml (EMEM + 10% or 5% heat-inactivated fbs).

From November 16, 1988 to January 13, 1989, CPE-inhibition assay was used to assay the drugs against VSV. The L929 cells were seeded into the 96-well plates at a concentration of 4×10^4 cells per well in 0.2 ml medium. The cells were pregrown for 20 hrs. before the addition of drug and virus.

Stock virus was pretitered according to the method of Reed and Muench (1938) and diluted in cell culture medium to yield 32 TCID₅₀ (tissue culture infectious dose, 50%) units per 0.1 ml. Antiviral assays were designed to test seven 0.5-log₁₀ concentrations of each compound in triplicate against the challenge viruses. If drug cytotoxicity was provided, then drug concentrations were chosen to range from toxic to noncytotoxic. If no cytotoxicity information was available, testing began at 320 μ g/ml. To each of the replicate host cell cultures was added 0.1 ml of the test drug solution and 0.1 ml of virus suspension. Cell controls containing medium alone, virus controls containing medium and virus, and drug cytotoxicity controls containing medium and each drug concentration were included on each plate. The plates were incubated at 37°C and virus-induced CPE were scored on Day 3 post-virus infection.

The degree of inhibition of virus-induced CPE and the degree of drug-induced cytotoxicity were observed microscopically. CPE were scored numerically from 0 (normal uninfected cells) to 4 (100% virus-induced cell destruction) for each individual culture as follows:

- 4 = Viral CPE observed in 100% of the cells
- 3 = Viral CPE observed in 75% of the cells
- 2 = Viral CPE observed in 50% of the cells
- 1 = Viral CPE observed in 25% of the cells
- 0 = No CPE; normal cell monolayer
- u = Unsatisfactory test, e.g., contamination or leakage
- t = Drug is toxic to cells, CPE not discernible
- p = Drug is partially toxic to cells, cell monolayer is intact so that CPE may be discernible

Antiviral activity was determined by calculating the degree of inhibition of virus-induced CPE in drug-treated, virus-infected cell cultures by means of a virus rating (VR). The VR is a standard weighted measurement of antiviral activity taking into account both the degree of CPE inhibition and drug cytotoxicity, and was determined by a modification of the method of Ehrlich *et al.* (1965). The VR was calculated as 0.1 of the sum of the numerical differences between the recorded CPE grade of each test well and that of the corresponding virus control culture. Numerical differences between the reading of test wells containing a drug concentration which was partially cytotoxic (p) and their corresponding virus controls were halved. As requested by USAMRIID, the VR was also reported by the method of Sidwell and Huffman (1971). This virus rating (VR*) was calculated by dividing the VR obtained by the method of Ehrlich, *et al.* (1965) by 3. The inhibitory drug concentration which reduced the CPE by 50% (ID₅₀) was calculated by using a regression analysis program for semilog curve fitting. A therapeutic index (TI)

for each active test compound for each susceptible virus was determined by dividing the minimum cytotoxic concentration (MTC) of the test compound by the ID_{50} .

From January 14, 1989 to November 15, 1989, the following procedure was used to evaluate drugs in the MTT assay. L929 cells were seeded into 96-well tissue culture plates at a concentration of 4×10^4 cells/well on the day before the cells were used for the assay. A volume of 50 μ l of the appropriate drug concentration and 50 μ l of a virus suspension containing 32 $TCID_{50}$ of virus were added per well. On Day 3 after virus infection when CPE was complete in the virus controls, 50 μ l of a solution containing 2 mg/ml MTT in Eagle's MEM + 5% heat-inactivated fetal bovine serum was added. The cultures were incubated with MTT for 7 hours before addition of 100 μ l of 10% SDS:0.01N HCl per well. The cultures were incubated overnight and the following day the optical density was read at 570 nm on a Perkin-Elmer Lambda plate reader.

3.3.4 Punta Toro Virus (PT)

We obtained our original stock of Punta Toro virus (Adames strain) from Dr. Robert Sidwell of Utah State University. His virus stock originated from Dr. Dominique Pifar of USAMRIID.

To grow virus stocks, Vero cells (ATCC) were infected at a low multiplicity of infection (moi; ≤ 0.1) in MEM supplemented with 10% inactivated fbs. Culture fluid was collected at five days post-infection and clarified by centrifugation (5000 rpm, 15 minutes, 4°C) in a Sorvall SA-600 rotor. The supernate was dispensed into 0.5-ml aliquots, then frozen and stored at -84°C. One aliquot was used to determine a $TCID_{50}$ titer and a plaque forming unit (PFU) titer for the stock.

The standard operating procedure is an MTT-based assay as follows:

Vero cells are seeded in 96-well tissue culture plates at a density of 1.5×10^4 cells/well in 100 μ l complete EMEM and incubated overnight at 37°C/5% CO_2 .

The following day, the medium is aspirated and all cells are treated with 100 μ l of pretreatment solution for 30 minutes at 37°C/5% CO_2 . The pretreatment solution is composed of 1% DMSO from a 100% DMSO stock solution, 1% DEAE-Dextran from a 2.0 mg/ml stock solution in sterile water, and 98% Hank's Balanced Salt Solution.

After this the pretreatment medium is aspirated out of the wells and 50 μ l of virus (diluted to a virus load of 32 $TCID_{50}$ /well) are added to the test and virus control wells. The toxicity and cell control wells receive 50 μ l of complete EMEM. The plates are incubated for 30 minutes at 37°C/5% CO_2 to allow virus to adsorb.

After virus adsorption, the test wells receive an additional 50 μ l of a 2X concentration of drug and the control wells receive an additional 50 μ l of complete EMEM. The total volume per well = 100 μ l. Generally the standard drug for concentration range is from 1 μ g/ml to 320 μ g/ml.

The plates are incubated at 37°C/5% CO_2 until the virus control wells exhibit maximum CPE (+4 = 100%) by visual scoring under the microscope (40X). Generally, the PT virus (with 32 $TCID_{50}$ virus load) requires 6-7 days of incubation to achieve maximum CPE. At this time, all wells (excluding piastic control wells) receive 50 μ l of MTT solution (1.50 mg/ml, prepared in complete EMEM).

The plates are incubated 7 hours at 37°C/5% CO_2 (in the dark) to allow reduction of the tetrazolium salt to the formazan product, after which the cells are lysed and the formazan is solubilized by the addition of 100 μ l of a lysing solution (10% SDS-0.01N HCl) to all wells. Generally if the MTT

solution is added in the morning, the lysing agent is added at the end of the day, and lysis occurs overnight (14 - 15 hours in the dark).

3.3.5 Sandfly Fever Virus (SF)

We obtained our original stock of Sandfly Fever virus, Sicilian strain (TC adapted), from Dr. George R. French of the Salk Institute, Government Services Division, Swiftwater, Pennsylvania.

To grow virus stocks, Vero-76 cells (Dr. French, Salk Institute) or Vero cells (ATCC), depending upon availability, were pre-treated with DEAE-dextran (25 $\mu\text{g/ml}$) and 1% DMSO in growth medium (MEM containing 10% inactivated fbs) for 30 minutes at 37°C. This was removed and then the cells were infected with SF virus in growth medium at an moi of 0.1. Virus was allowed to adsorb for one hour at 37°C. A minimal volume of growth medium was then added and the cells were incubated at 37°C. The culture fluid was collected at four days post infection and clarified by centrifugation (5000 rpm, 15 min, 4°C). The supernate was dispensed into 0.5 ml aliquots, then frozen and stored at -84°C. One aliquot was used to determine TCID₅₀ and PFU titers for the stock.

The standard operating procedure is an MTT-based assay as follows:

Vero cells are seeded in 96-well tissue culture plates at a density of 1.5×10^4 cells/well in 100 μl complete EMEM and incubated overnight at 37°C/5% CO₂.

The following day, the medium is aspirated and all cells are treated with 100 μl of pretreatment solution for 30 minutes at 37°C/5% CO₂. The pretreatment solution is composed of 1% DMSO from a 100% stock solution, 1% DEAE-Dextran from a 2.5 mg/ml stock solution in sterile water, and 98% HBSS.

After this, the pretreatment medium is aspirated out of the wells and 50 μl of virus (diluted to a virus load of 32 TCID₅₀/well) are added to the test and virus control wells. The toxicity and cell control wells receive 50 μl of complete EMEM. The plates are incubated for 30 minutes at 37°C/5% CO₂ to allow virus to adsorb.

After virus adsorption, the test wells receive an additional 50 μl of a 2X concentration of drug and the control wells receive an additional 50 μl of complete EMEM. The total volume per well = 100 μl . Generally the standard drug concentration range is from 1 $\mu\text{g/ml}$ to 320 $\mu\text{g/ml}$.

The plates are incubated at 37°C/5% CO₂ until the virus control wells exhibit maximum CPE (+4 = 100%) by visual scoring under the microscope (40X). Generally, the SF virus (with 32 TCID₅₀ virus load) requires 6-7 days of incubation to achieve maximum CPE. At this time, all wells (excluding plastic control wells) receive 50 μl of MTT solution (1.50 mg/ml, prepared in complete EMEM).

The plates are incubated 7 hours at 37°C/5% CO₂ (in the dark) to allow reduction of the tetrazolium salt to the formazan product, after which the cells are lysed and the formazan is solubilized by the addition of 100 μl of a lysing solution (10% SDS-0.01N HCl) to all wells. Generally if the MTT solution is added in the morning, the lysing agent is added at the end of the day, and lysis occurs overnight (14 - 15 hours in the dark).

3.3.6 Pichinde Virus (PIC)

Vero cells, obtained from Dr. George R. French of The Salk Institute, Swiftwater, Pennsylvania,

were maintained in Eagle's Minimal Essential Medium containing 10% fetal bovine serum. Baby hamster kidney (BHK-21) cells were obtained from the American Type Culture Collection and maintained in MEM containing 10% newborn calf serum and 10% tryptose phosphate broth.

Pichinde virus strain 4763 was obtained from Dr. J. Gangemi of the University of South Carolina, School of Medicine. The virus preparation received was that of a guinea pig spleen homogenate from Pichinde virus infected guinea pigs. After amplifying this virus preparation in BHK-21 cells, a three-time plaque-purified virus preparation was generated in Vero cells. The plaque-purified virus was amplified twice in BHK-21 cell cultures and stored at -84°C as a virus seed stock. Several preparations of virus used for plaque-reduction assays were prepared by infecting BHK-21 cells with seed stock virus at a multiplicity of infection of 1 PFU/cell. Culture fluids collected three days post-infection were clarified by centrifugation at $600 \times g$ for 5 min., frozen rapidly in a dry ice/ethanol bath and stored at -84°C in small aliquots. These preparations had virus titers ranging from 6.4×10^7 to 1.2×10^9 PFU/ml.

Vero cells, seeded into six-well cell culture trays at a density of 8×10^5 cells per well, were incubated at 37°C in a humidified 5% CO_2 incubator. The following day the cultures were examined microscopically for confluency. Ribavirin and experimental antiviral drugs were serially diluted in half- \log_{10} increments in MEM containing 10% fbs. The final test concentration range was from 1 - $320\mu\text{g/ml}$. Culture fluids were removed by aspiration and to four of the six cultures of each tray were added a 0.2 ml inocula of PIC virus diluted in MEM containing 10% fbs so as to contain 40 to 80 PFU. To the remaining cultures of each tray, 0.2 ml of culture medium alone was added. The cultures were reincubated as above and periodically shaken so that the inoculum was dispensed over the entire monolayer.

One hour later, 0.2 ml of the appropriate dilution of drug was added to three of the virus-infected cultures (virus-infected, treated) and to one of the mock-infected cultures (toxicity control) on each tray. To the remaining mock-infected (cell control) and virus-infected (virus control) cultures were added 0.2 ml of MEM containing 10% fbs. The culture fluids were mixed by shaking the culture trays, then 1.6 ml of agar overlay was added and each culture was thoroughly mixed as above. The cultures were set on a level surface until the agar overlay solidified and were then reincubated at 37°C . The agar overlay used in the assay contained Eagle's MEM, fetal bovine serum, glutamine, non-essential amino acids, sodium bicarbonate, and Noble agar in final concentrations of 1x, 2%, 1 mM, 1mM, 2.2 mg/ml and 1%, respectively.

Three days later 2 ml of a sterily filtered neutral red solution (0.08 mg/ml in PBS) was added to each culture. Cultures were reincubated; then six to eight hours later plaques were examined and counted. With each daily assay, Ribavirin (positive control antiviral drug) was included in a parallel assay. Drug cytotoxicity was microscopically evaluated and rated as with CPE-inhibition assays.

3.3.7 Venezuelan Equine Encephalomyelitis Virus (VE)

We obtained our original stock of Venezuelan Equine Encephalomyelitis Virus, Trinidad Donkey strain, from Dr. George R. French of The Salk Institute, Swiftwater, Pennsylvania.

The virus was propagated in Vero cells (ATCC) by infection at a moi of <0.1 PFU/cell. Fluids from infected cultures were collected three days post-infection and clarified by centrifugation (5000 rpm, 15 min, 4°C) in a Sorvall SA-600 rotor. The supernatant fluid was dispensed into 0.5-ml aliquots, quick frozen in a dry ice-ethanol bath and stored at -84°C . One aliquot was used to determine TCID_{50} and PFU titers of the stock.

The standard operating procedure is an MTT-based assay as follows:

Vero cells are seeded in 96-well tissue culture plates at a density of 1.5×10^4 cells/well in 100 μ l complete EMEM and incubated overnight at 37°C/5% CO₂.

The following day, the medium is aspirated out of the wells and 50 μ l of virus (diluted to a virus load of 32 TCID₅₀/well) are added to the test and virus control wells. The toxicity and cell control wells receive 50 μ l of complete EMEM. The plates are incubated for 30 minutes at 37°C/5% CO₂ to allow virus to adsorb.

After virus adsorption, the test wells receive an additional 50 μ l of a 2X concentration of drug and the control wells receive an additional 50 μ l of complete EMEM. The total volume per well = 100 μ l. Generally the standard drug test concentration range is from 1.0 μ g/ml to 320 μ g/ml.

The plates are incubated at 37°C/5% CO₂ until the virus control wells exhibit maximum CPE (+4 = 100%) by visual scoring under the microscope (40X). Generally, the VEE (with 32 TCID₅₀ virus load) requires 3 days of incubation to achieve maximum CPE. At this time, all wells (excluding plastic control wells) receive 50 μ l of MTT solution (1.50) mg/ml, prepared in complete EMEM).

The plates are incubated 7 hours at 37°C/5% CO₂ (in the dark) to allow reduction of the tetrazolium salt to the formazan product, after which the cells are lysed and the formazan is solubilized by the addition of 100 μ l of a lysing solution (10% SDS-0.01N HCl) to all wells. If the MTT solution is added in the morning, the lysing agent is added at the end of the day, and lysis occurs overnight (14-15 hours in the dark).

3.3.8 Yellow Fever Virus (YF)

We obtained our original stock of Yellow Fever Virus, Asibi strain, from Dr. Andrew J. Main, Jr., of the Yale Arbovirus Research Unit, New Haven, Connecticut.

To grow virus stocks, Vero cells (ATCC) were infected at an moi of about 0.1 PFU/cell in MEM containing 10% inactivated fbs. Virus was allowed to adsorb for 1 hour, after which a minimal volume of growth medium was added and the cells were incubated at 37°C. The culture fluid was collected at 5 days post infection and the clarified by centrifugation (5000 rpm, 15 minutes, 4°C) in a Sorvall SA-600 rotor. The supernate was dispensed into 0.5 ml aliquots and then frozen and stored at -84°C. One aliquot was used to determine the TCID₅₀ and PFU titers for the stock.

The standard operating procedure is an MTT-based assay as follows:

Vero cells are seeded in 96-well tissue culture plates at a density of 1.5×10^4 cells/well in 100 μ l complete EMEM and incubated overnight at 37°C/5% CO₂.

The following day, the medium is aspirated out of the wells and 50 μ l of virus (diluted to a virus load of 32 TCID₅₀/well) are added to the test and virus control wells. The toxicity and cell control wells receive 50 μ l of complete EMEM. The plates are incubated for 30 minutes at 37°C/5% CO₂ to allow virus to adsorb.

After virus adsorption, the test wells receive an additional 50 μ l of a 2X concentration of drug and the control wells receive an additional 50 μ l of complete EMEM. The total volume per well = 100 μ l. Generally, the standard drug test concentration range is from 1 μ g/ml to 320 μ g/ml.

The plates are incubated at 37°C/5% CO₂ until the virus control wells exhibit maximum CPE (+4 = 100%) by visual scoring under the microscope (40X). Generally, the YF virus (with 32 TCID₅₀ virus load) requires 6-7 days of incubation to achieve maximum CPE. At this time, all wells (excluding plastic control wells) receive 50 µl of MTT solution (1.50 mg/ml, prepared in complete EMEM).

The plates are incubated 7 hours at 37°C/5% CO₂ (in the dark) to allow reduction of the tetrazolium salt to the formazan product, after which the cells are lysed and the formazan is solubilized by the addition of 100 µl of a lysing solution (10% SDS-0.01N HCl) to all wells generally. If the MTT solution is added in the morning, the lysing agent is added at the end of the day, and lysis occurs overnight (14 - 15 hours in the dark).

3.3.9 Japanese Encephalitis Virus (JE)

We obtained our original stock of Japanese Encephalitis Virus, Nakayama strain, from Dr. George R. French of the Salk Institute, Swiftwater, Pennsylvania.

To grow virus stocks, Vero cells (ATCC) were infected at an moi of about 0.1 PFU/cell in MEM containing 5% fbs. Virus was allowed to adsorb for 1 hour, then a minimal volume of growth medium was added and the cells were incubated at 37°C. The culture fluid was collected at 4-5 days post infection and clarified by centrifugation (5000 rpm, 15 minutes, 4°C) in a Sorvall SA-600 rotor. The supernate was dispensed into 0.5 ml aliquots and then frozen and stored at -84°C. One aliquot was used to determine TCID₅₀ and PFU titers of the stock.

The standard operating procedure is an MTT-based assay as follows:

Vero cells are seeded in 96-well tissue culture plates at a density of 1.5 x 10⁴ cells/well in 100 µl complete EMEM and incubated overnight at 37°C/5% CO₂.

The following day, the medium is aspirated out of the wells and 50 µl of virus (diluted to a virus load of 32 TCID₅₀/well) are added to the test and virus control wells. The toxicity and cell control wells receive 50 µl of complete EMEM. The plates are incubated for 30 minutes at 37°C/5% CO₂ to allow virus to adsorb.

After virus adsorption, the test wells receive an additional 50 µl of a 2X concentration of drug and the control wells receive an additional 50 µl of complete EMEM. The total volume per well = 100 µl. Generally the standard drug test concentration range is from 1.0 µg/ml to 520 µg/ml.

The plates are incubated at 37°C/5% CO₂ until the virus control wells exhibit maximum CPE (+4 = 100%) by visual scoring under the microscope (40X). Generally, the JE virus (with 32 TCID₅₀ virus load) requires 6-7 days of incubation to achieve maximum CPE. At this time, all wells (excluding plastic control wells) receive 50 µl of MTT solution (1.50 mg/ml, prepared in complete EMEM).

The plates are incubated 7 hours at 37°C/5% CO₂ (in the dark) to allow reduction of the tetrazolium salt to the formazan product, after which the cells are lysed and the formazan is solubilized by the addition of 100 µl of a lysing solution (10% SDS-0.01N HCl) to all wells. If the MTT solution is added in the morning, the lysing agent is added at the end of the day, and lysis occurs overnight (14 - 15 hours in the dark).

3.3.10 Hantaan Virus (HTN)

We obtained several vials of Hantaan Virus, strain 76-118, (formerly referred to as Korean Hemorrhagic Fever Virus, KHF) from Dr. John W. Huggins and Mr. Orville Brand of USAMRIID. Initial attempts to plaque this virus in a routine plaque assay were unsuccessful. Discussions with Dr. Huggins and Mr. Brand indicated that the quality of the reagents used in the assay is critical. Mr. Brand graciously supplied us with a shipment of his tested cell culture supplies and fresh cultures of Vero VSC-6 cells to use in assaying KHF virus.

Six-well culture trays of VSC-6 cells were seeded at a density of 3.75×10^5 cells/well with MEM containing 5% horse serum, 5% Nu serum, 10 mM HEPES buffer, 2 mM glutamine, 1 mM sodium pyruvate, and penicillin/streptomycin (at 100 units and 100 $\mu\text{g}/\text{ml}$, respectively) and incubated at 37°C in a 5% CO₂ humidified atmosphere. As suggested by Mr. Brand, KHF virus was diluted ten-fold in MEM with supplements and stored at 4°C and stored overnight prior to assay.

The following day, the culture medium was aspirated and 0.4 ml of virus dilution was added to duplicate cultures. Two cultures per tray were mock-infected with 0.4 ml MEM. Culture trays were incubated for 1 hour at 37°C and swirled every 15 minutes.

After 1 hour adsorption, 2.5 ml of overlay consisting of cell culture medium plus 0.6% agarose was added to each culture. The trays were reincubated at 37°C. Seven days after infection, a 2.0 ml volume of overlay was added to each culture and the cultures reincubated. Twelve days after infection, 1 ml of overlay with neutral red was added to each well. Culture trays were reincubated and observed for plaques from Day 13 to Day 20, post infection.

Testing of antiviral compounds against the Hantaan virus was temporarily suspended in our laboratory to complete the development of the ELISA system under the direction of Dr. John Huggins at USAMRIID, Ft. Detrick, Maryland.

3.3.11 Prescreen

Large numbers of plant extracts are available for screening for *in vitro* antiviral activity. We were requested to develop an assay that would: 1) allow more compounds to be evaluated per microtiter plate than in the regular antiviral screen and 2) prescreen plant extracts as well as other compounds for activity against two indicator viruses. The two viruses selected by USAMRIID for this purpose were the attenuated, vaccine strain (17D) of Yellow Fever virus (YF) and Punta Toro virus (PT), both of which are graded as P2 viruses. The prescreen should select candidate compounds for screening against the Asibi strain of YF and the other target RNA viruses in the full screen.

A prescreen procedure was developed which utilizes MTT and evaluates five compounds per virus per 96-well plate.

Host Cells. Vero cells are seeded as monolayer cultures in COSTAR 96-well plates at 15,000/0.2 ml/well in MEM + 10% heat-inactivated fetal bovine serum (Δ fb). The plates are incubated approximately 24 hours prior to use.

Challenge Virus. The 17D strain of YF virus was originally obtained by Dr. Lori Brando from the Alabama Public Health Department in Birmingham, Alabama. The Adames strain of PT virus was obtained from our regular screen. Stock virus pools were prepared by passaging and titrating each virus in Vero cell monolayers. For use in the prescreen assays, PT virus is diluted in experiment medium (MEM + 2% Δ fb) to yield an inoculum of 32 CCID₅₀ per well. The challenge dose of YF virus had to be increased from 32 to 64 CCID₅₀/well in order to obtain sufficient CPE and cell-kill by 6 days post-infection. An antiviral screening assay as long as 7 or 8 days would require replacing the culture fluids with fresh drug during the incubation period, thus increasing the cost of the assay.

Test compounds are dissolved or suspended in DMSO or H₂O, then diluted in serial tenfold dilutions in experiment medium to yield final concentrations of 1000, 100, 10 and 1 μ g/ml in the plate wells. Selenazofurin (AVS-0253) is utilized as a positive control drug for YF; the control drug for PT is Ribavirin (AVS-0001).

Assay Procedure. The assay is designed to evaluate four 1.0 log₁₀ concentrations of each compound in duplicate against the challenge virus. MEM + 2% Δ fb serves as the experiment medium. Cell culture medium is removed from the plate wells. To each of duplicate test wells containing replicate cell monolayers, 100 μ l of each test drug solution (or suspension) and 100 μ l of the challenge virus (diluted in experiment medium) are dispensed. Cell controls (6/plate) containing 200 μ l medium, virus-infected, untreated cell controls (6/plate) containing virus and medium and drug cytotoxicity controls (1/drug concentration) containing cells, medium and test drug are included on each plate. Medium (Reagent) color controls (no cells), and drug colorimetric controls (drug + medium -- no cells) accompany each test. The covered plates are incubated at 37°C in a humidified atmosphere containing 2% CO₂. When CPE reach 100%, 6 days post infection, 20 μ l aliquots of MTT (5 μ g/ml solution in PBS) are added to each well. The plates are incubated at 37°C for six hours to allow reduction of the MTT to the formazan form. Then 40 μ l aliquots of a 30% solution of SDS in 0.02 NHCl are added to the plate wells. The plates are incubated overnight to allow the SDS to lyse the cells and to dissolve the MTT formazan crystals. The absorbance (570 nm) of the contents of each well is determined by a plate reader. The plate reader is interfaced with a computer programmed to capture the optical density (O.D.) measurements from the reader and calculate mean optical densities, indices such as IC₅₀, IC₂₅, SI, and plot the percents cell viability and CPE reduction. The actual O.D. readings, the indices, and bar graphs expressing cell viability and CPE reduction are automatically printed on individual compound data sheets.

An example of a data sheet with results of a prescreen assay is shown as Figure 2. Section I of the data sheet gives the compound and test identification and the actual raw data (O.D. readings) for each assay. Printouts of pertinent Control and Test Results are in Section II. Calculations of the test results are the same as those for assays in the regular screen. Section III displays a bar graph plotted from the computed values in Section II.

3.4 Antiviral Evaluations *In Vivo*

Experimental methods for the *in vivo* testing are described in the Annual Report to USAMRIID (Contract No. DAMD17-86-C-6013) dated December 15, 1988. Protocols used for testing the various viruses *in vivo* are outlined in Section 4.2 of this report.

IN VITRO ANTIVIRAL RESULTS

EXOTIC RNA VIRUSES

PRE-SCREEN ASSAY

DRUG: AVS 0001

SI: >5.04

PLATE NUMBER: 0C9 TEST DATE: 08/24/89
 PROJECT: 5975-4 DATE READ: 08/31/89
 SPONSOR: USAMRIID
 CELLS: VERO Satisfactory
 VIRUS: PT
 STRAIN: ADAMES

Section I

	1	2	3	4	5	6	7	8	9	10	11	12
	drug A - 0.01											
	10x	experimental	color									
A	1.554	1.537	1.462	0.155								
B	1.471	0.510	0.688	0.155								
C	1.537	0.231	0.206	0.178								
D	1.506	0.223	0.227	0.157								
E									virus control			reagent
F									0.211	0.361	0.220	0.175
G									0.249	0.278	0.325	0.179
H									1.455	1.493	1.538	0.174
									1.402	1.474	1.493	0.177
									cell control			blank

low-end toxicity

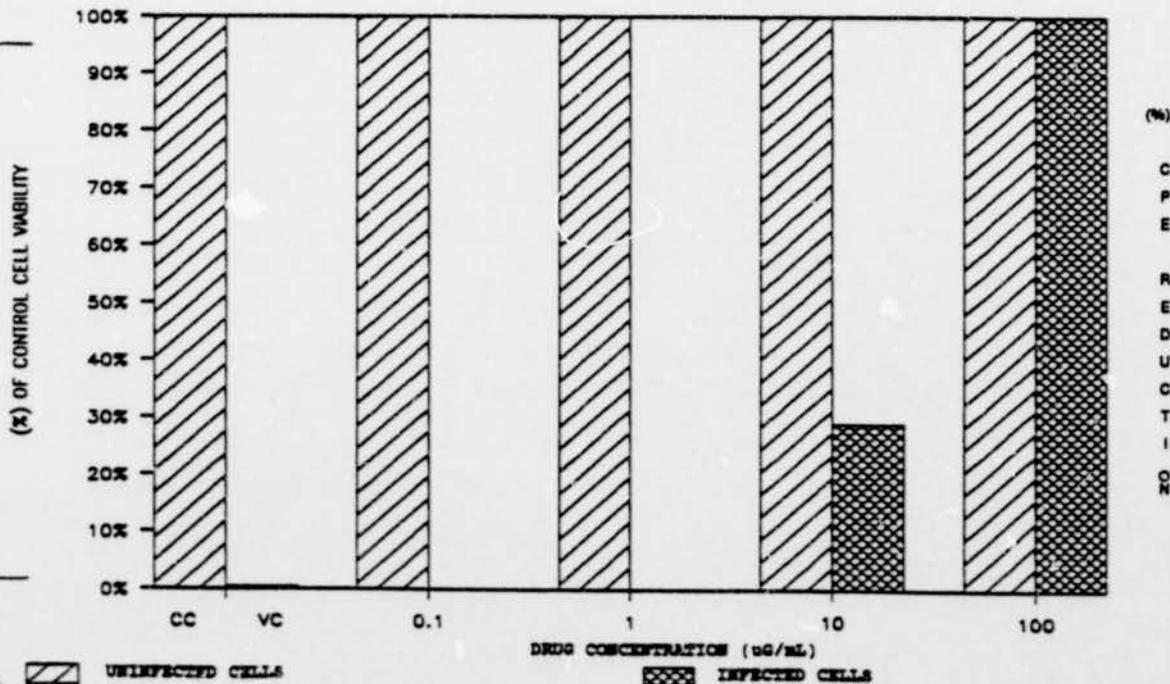
BOLD = highest drug conc

Section II

AVS 0001 vs. PT (08/24/89)

ROW OR PLATE	CONC. (µg/mL)	UNINFECTED CELL VIABILITY		INFECTED CPE REDUCTION		VIRUS CONTROL	
		MEAN	PERCENT	MEAN	PERCENT		
A	100	1.399	100%	1.247	100%	0.098	CELL CONTROL 1.300
B	10	1.316	100%	0.346	29%	1.202	DIFFERENTIAL
C	1	1.359	100%	-0.057	0%	19.80	IC50
D	0.1	1.349	100%	-0.030	0%	> 100.00	MTC25
						> 5.04	SI

Section III



Prescreen Data Sheet
Figure 2

4. RESULTS

4.1 Antiviral Screening *in Vitro*: DNA Viruses and Exotic RNA Viruses

During the twelve-month reporting period from November 15, 1988 to November 14, 1989, a total of 2143 (837 primary screen and 1306 prescreen) test compounds were received at SRI for evaluation in the *in vitro* antiviral screen. Compounds received (for primary screen testing) in amounts too small for appropriate evaluation against all of the viruses were screened according to a priority list of the target viruses. During this reporting period compounds were evaluated *in vitro* against Vaccinia Virus (VV), Adenovirus (AD2), Vesicular Stomatitis Virus (VSV), Punta Toro Virus (PT), Sandfly Fever Virus (SF), Yellow Fever Virus (YF), Japanese Encephalitis Virus (JE), Venezuelan Equine Encephalomyelitis Virus (VE) and Pichinde Virus (PIC) as they were received. Testing of antiviral compounds against Hantaan Korean Hemorrhagic Fever Virus (KHF) was temporarily suspended in order to develop an ELISA assay for evaluating the compounds. A cumulative summary of the compound shipments received, and the assays performed, is presented in Table 2.

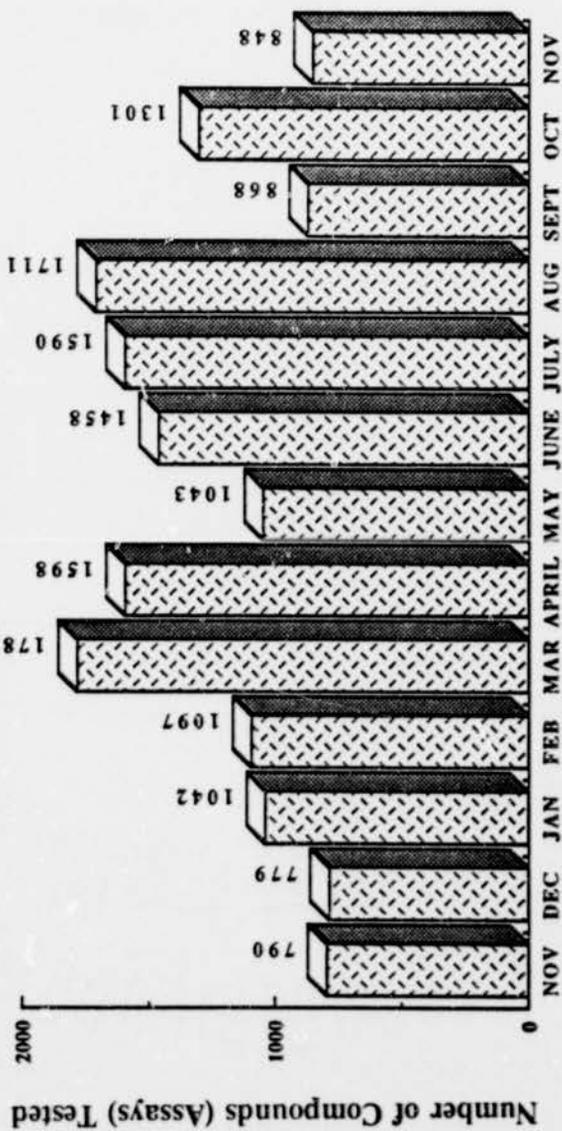
Approximately 16,000 *in vitro* antiviral assays were performed this reporting period (Figure 3). The results for compounds found to be active are summarized in the following sections for each virus. Also, we are retesting those compounds that demonstrated the greatest activity in the initial CPE-inhibition assays in confirmatory CPE-inhibition assays and plaque-reduction assays. A cumulative summary presenting all of the *in vitro* antiviral tests results (both positive and negative) is included as Appendix B.

Table 2

In Vitro Antiviral Screen (Primary and Prescreen)
 Numbers of Compounds Received Through November 14, 1989

Shipment No.	Compounds		Date Received	Shipment No.	Compounds		Date Received	Shipment No.	Compounds		Date Received
	Per Shipment	Per Shipment			Per Shipment	Per Shipment			Per Shipment	Per Shipment	
1	28		05/02/86	28	102		08/10/87	52	80		02/09/89
2	27		05/23/86	29	116		08/19/87	53	99		03/15/89
3	32		06/03/86	30	75		09/03/87	56	103		05/12/89
4	19		06/20/86	31	86		09/11/87	57	133		06/07/89
5	22		07/10/86	32	123		10/09/87	58	73		07/13/89
6	26		07/24/86	33	107		11/03/87	59	47		08/11/89
7	26		07/31/86	34	49		11/25/87	60	78		09/07/89
8	27		08/22/86	35	80		12/22/87	61	138		10/06/89
9	42		09/12/86	36	65		01/29/88				
10	28		09/25/86	37	48		03/09/88	Subtotal	2676		
11	32		10/17/86	38	5		03/15/88	<u>Prescreen</u>			
12	40		11/03-11/04/86	39	68		03/23/88	1P	598		06/08/89
14	1		11/13/86	40	57		04/26/88	2P	13		07/20/89
15	26		12/05/86	41	30		05/13/88	3P	695		09/26/89
16	32		12/12/86	41B	30		05/13/88	Subtotal	1306		
17	30		01/13/87	41C	4		05/13/88	TOTAL	3515		
18	32		01/30/87	42	66		05/13/88				
19	101		03/02/87	43	140		07/08/88				
20	71		03/18/87	44	89		08/10/88				
21	75		04/14/87	45	76		09/13/88				
22	49		05/05/87	46	126		10/06/88				
24	77		06/03/87	47	2		10/20/88				
26	71		06/26/87	48	101		11/02/88				
27	86		07/21/87	51	86		01/10/89				

TOTAL NUMBER OF IN VITRO ANTIVIRAL ASSAYS PERFORMED PER MONTH



MONTH

Figure 3
Total Number of *In Vitro* Antiviral Assays Performed per Month
(November 15, 1988 - November 15, 1989)

	Nov 15 '88	Dec '88	Jan '89	Feb '89	Mar '89	Apr '89	May '89	June '89	July '89	Aug '89	Sep '89	Oct '89	Nov '89	Total No. Tests/Virus
VSV	69	84	109	78	21	0	56	69	59	40	12	86	48	731
VV	27	85	74	89	60	30	32	55	48	43	25	24	29	622
AD2	29	73	44	67	40	15	39	38	42	22	45	24	45*	523
PIC	22	66	69	116	139	129	189	173	143	165	86	33	0	1330
JE	116	79	147	143	241	265	152	188	172	211	110	172	121	2117
PT	121	86	125	142	269	251	132	145	219	209	22	23	91	1835
SF	127	99	137	144	256	279	136	190	173	208	74	193	129	2145
VE	137	113	190	175	514	430	145	180	171	150	115	173	113	2606
YF	142	94	147	143	247	199	162	232	205	186	90	211	67	2125
Prescreen														
PT	--	--	--	--	--	--	--	94	185	236	144	177	110	946
Prescreen														
YF	--	--	--	--	--	--	--	94	173	241	144	185	95	932
Total	790	779	1042	1097	1787	1598	1043	1458	1590	1711	868	1301	848	15,912

*Includes 26 tests done on 11/30/89

4.1.1 Vaccinia Virus (VV)

A total of 622 assays were conducted to evaluate compounds for their ability to inhibit VV-induced CPE in Vero cell monolayer cultures. Figure 4 depicts the number of compounds evaluated each month. Numerous compounds were submitted to SRI in quantities insufficient to permit evaluation against VV, AD2, and VSV.

TOTAL NUMBER OF TESTS AGAINST VACCINIA VIRUS

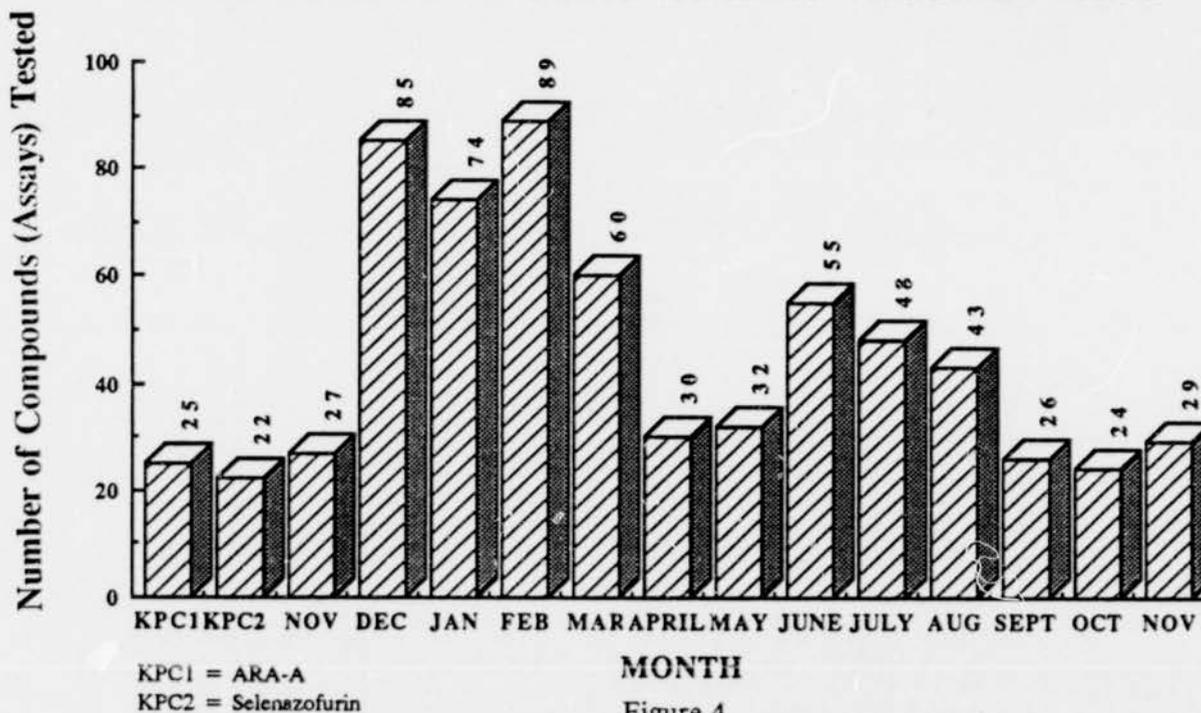


Figure 4

Two compounds were utilized as positive control drugs, Ara-A (AVS-1752) and Selenazofurin (AVS-0253).

Ara-A continues to be a reliable positive control compound for the MTT assays. The following indices summarize the Ara-A data.

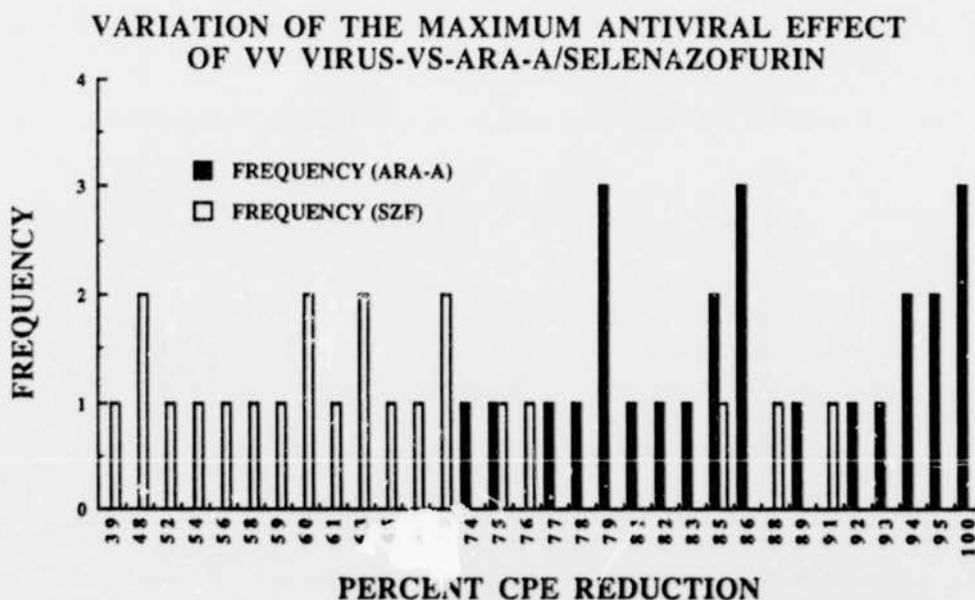
	<u>IC₅₀</u>	<u>TC₅₀</u>	<u>TC₂₅</u>	<u>SI</u>	<u>TAI</u>
Mean	2.26	66.67	35.9	16.04	38.97
S.D.	0.69	15.18	17.07	5.45	7.12
Median	2.12	64.6	31	15.1	36.6

The closeness of the mean and median values indicates the reproducibility of the effect of Ara-A on VV and on host cells. The mean and median values of the same indices for Selenazofurin were:

	<u>IC₅₀</u>	<u>TC₅₀</u>	<u>TC₂₅</u>	<u>SI</u>	<u>TAI</u>
Mean	6.76	159.95	30.67	4.33	19.23
S.D.	4.81	127.65	34.9	6.18	12.66
Median	6.69	87.25	19	2.52	17.49

As can be seen from the mean and median indices, the inhibitory effects and cytotoxicity of Selenazofurin are somewhat inconsistent. The fact that more than one sample of Selenazofurin was used during the twelve month report period may have contributed to the variability of the drug cytotoxicity.

The distribution of the maximum VV CPE inhibition values (% CPE reduction) recorded from the 47 positive control assays (25 Ara-A and 22 Selenazofurin) conducted during the report period is shown in Figure 5. As one would expect, Ara-A demonstrated a greater and more reproducible antiviral effect than Selenazofurin.



Variation of the Maximum Antiviral Effect of VV Virus - VS - Ara-A/Selenazofurin
Figure 5

Scatter plots of the mean cell control O.D. and the mean virus control O.D. from the positive control assays are presented in Figures 6 and 7, respectively. The plot of the virus control O.D.'s indicates good host cell destruction and a uniform level of VV among the day-to-day experiments. Figure 8 gives the frequency and variation of the mean values (O.D.) of the differential from each positive control assay. Each differential value represents the difference between the mean cell control O.D. and the mean O.D. of the virus controls of each of the 47 positive control assays.

VARIATION OF THE VIRUS (LOAD) CONTROLS, VV VIRUS-VS-ARA-A/SELENAZOFURIN

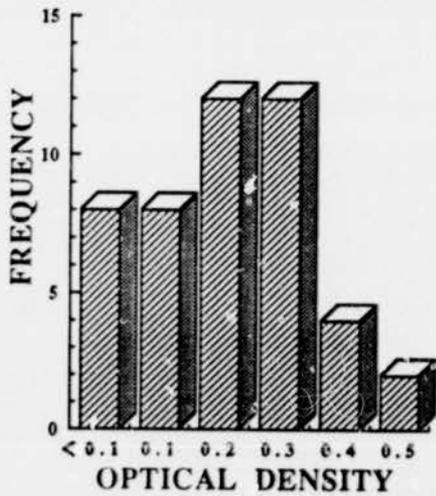


Figure 6

VARIATION OF THE CELL (LOAD) CONTROLS, VV VIRUS-VS-ARA-A/SELENAZOFURIN

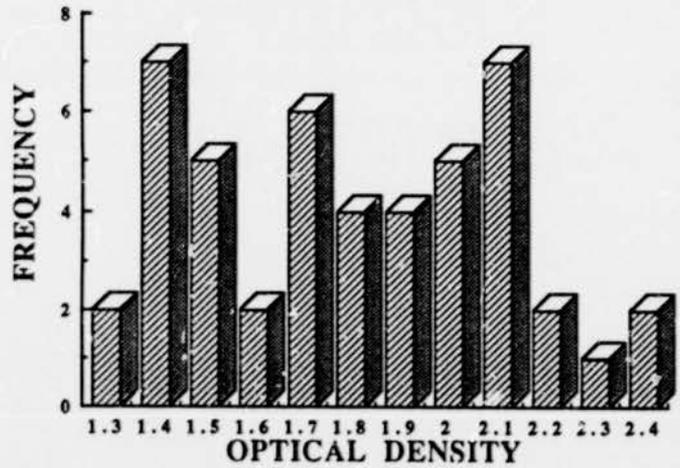


Figure 7

VARIATION OF THE TEST DIFFERENTIAL, VV VIRUS-VS-ARA-A/SELENAZOFURIN

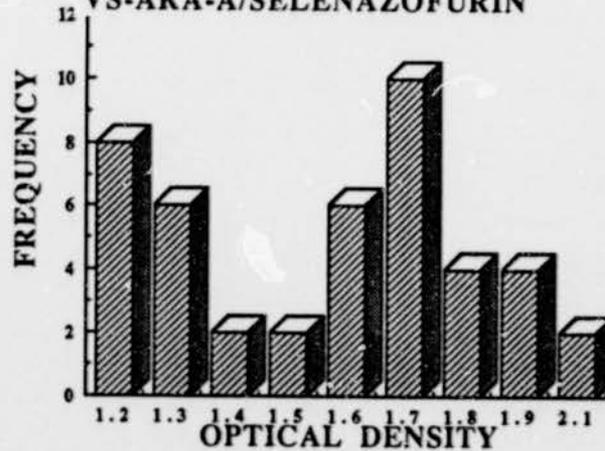


Figure 8

Twenty-three compounds were active against VV, as indicated by a Selectivity Index (SI) > 1.0. The data from the initial evaluations of these active compounds are summarized on Table 3. Compounds AVS 5568, 5569, 1214, 5219, and 5034 exhibited marked inhibition of VV CPE with SI's of > 320, > 158, 65.9, 23.5, and 11.5, respectively, and Total Antiviral Indices (TAI's) ranging from 34 to 60.

Confirmatory retests of active compounds were performed, employing the CPE-inhibition procedure in Vero cell monolayer cultures. The data from the retests which were carried out during the report period are summarized on Table 4. The compounds are listed in ascending numerical order. The results from the primary and the subsequent retests are displayed chronologically for each compound. Of the 29 compounds listed, the antiviral activity observed in the original evaluation, in terms of potency (ID_{50} , selectivity (SI), and inhibition (VR or TAI), was confirmed for all except two of the drugs.

Table 3

Compounds Active Against Vaccinia Virus in Vero Cell Cultures (VV)

AVS No.	Shipment	IC ₉₅	IC ₅₀	TC ₅₀	TC ₂₅	SI	TAI	Date Tested
5568	56	-	> 1.0	> 320	> 320	> 320	> 59.6	06/08/89
5569	56	-	< 1.0	230	158	> 158	> 60.04	06/08/89
1214	52	12.1	1.7	--	109	65.9	> 65.14	03/23/89
5219	51	--	0.3	--	5.3	23.5	~ 33.23	04/06/89
5034	48	--	14.7	--	169.0	11.5	> 34.45	01/12/89
5450	53	--	6.2	--	50.9	8.2	> 27.96	04/13/89
5035	48	--	1.6	--	10.2	6.3	> 36.14	02/02/89
5072	48	121.0	58.7	--	> 320	> 5.5	> 27.28	01/12/89
5069	48	264.0	60.0	--	> 320	> 5.3	> 26.64	01/12/89
5053	48	30.1	7.7	--	39.6	5.2	> 31.95	01/05/89
5186	58	-	49.8	299	128	2.6	17.22	09/07/89
5457	54	--	8.1	--	20.6	2.6	> 11.39	05/11/89
4849	48	--	151.0	--	> 320	> 2.1	> 11.36	12/19/88
4943	51	--	8.3	--	14.3	1.7	8.25	02/02/89
4934	51	--	11.2	--	18.8	1.7	20.86	02/02/89
5058	48	--	198.0	--	> 320	> 1.6	> 10.15	01/05/89
4992	51	--	134.0	--	196.0	1.5	> 11.45	02/16/89
4927	46	--	30.4	--	32	1.3	1.2*	12/29/89
4855	48	--	9.0	--	> 10.0	> 1.1	> 14.0	12/29/88
4098	37	--	0.0003	--	> 0.0003	> 1.1	> 3.43	02/23/89
5155	57	-	2.48	7.66	2.77	1.1	5.01	07/27/89
5488	53	-	313	> 320	> 320	1.02	4.03	07/27/89
5146	57	-	< 1.0	2.44	< 1.0	≥ 1.0	> 2.83	07/13/89

* = This value is a virus r₅₀ rather than TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound.

IC₅₀ = The minimum drug concentration (μg/ml) that inhibited CPE by 50%, calculated by using a regression analysis program for semilog curve fitting.

IC₉₅ = The minimum drug concentration (μg/ml) that inhibited CPE by 95%, calculated by using a regression analysis program for semilog curve fitting.

TC₅₀ = The minimum drug concentration (μg/ml) that reduced cell viability by 50%.

TC₂₅ = The minimum drug concentration (μg/ml) that reduced cell viability by 25%.

TAI = Total Antiviral Index = the area between the cytotoxicity and the antiviral curves.

SI = Selectivity Index, calculated by dividing the TC₂₅ by the ID₅₀.

The CPE-inhibition assay procedure using MTT was employed to confirm the inhibitory effects of compounds shown to be active in the primary screen. The results of the confirmatory evaluations are summarized on Table 4. Except for several compounds, the antiviral effects of the compounds against VV were confirmed. The most active compounds were AVS-5034, 5219, 5568 and 5569.

Table 4

Confirmatory Assays for Compounds Active Against Vaccinia Virus*

AVS No.	Shipment No.	Date Tested	IC ₉₅	IC ₅₀	TC ₅₀	TC ₂₅	SI	TAI
0138	1	06/12/86	~ 32	8.8	> 100	100	11.4	3.1 ^{a,b}
	1	07/12/86	~ 100	19.9	> 320	> 320	> 16.1	3.8 ^c
	1	08/27/87	-	3.1	> 320	> 320	> 103	62.56
1211	27	08/20/87	-	62.1	100	320	5.2	1.5 ^a
	27	08/17/89	72.9	20.2	243	171	8.5	32.1
1654	46	10/13/88	~ 10	2.0	> 320	10	5.0	3.9 ^a
	46	10/27/88	~ 32	3.1	> 320	100	32	4.25 ^a
	46	05/04/89	-	0.01	> 10.0	9.7	12.1	> 38.04
	46	06/01/89	0.96	0.36	9.17	5.0	13.8	> 46.23
1947	28	08/27/87	-	7.8	100	32	4.1	1.5 ^a
	28	05/12/88	-	-	> 100	100	-	0.9 ^a
	28	08/17/89	-	-	26.5	3.2	-	0
1985	2	07/24/86	< 0.32	< 0.32	> 320	100	> 312.5	> 7.2 ^a
	33	04/03/87	0.01	0.001	> 100	32	> 29455	N.A.
	33	04/03/87	< 0.032	0.0036	> 100	10	2746	N.A.
	41b	05/26/88	< 0.032	0.006	> 320	32	5650	10.2 ^a
	41b	02/23/89	< 0.1	0.01	> 320	10	2746	9.1 ^a
	41b	02/23/89	--	0.0044	> 0.32	2.7	602	~ 71.86
2688	22	06/25/87	-	3.1	32	10	3.3	1.35 ^b
	41b	05/26/88	-	5.6	32	10	1.8	0.9 ^b
	41b	08/17/89	-	3.1	9.4	6.3	2.1	0.95
2743	18	02/19/87	320	88.4	> 320	320	3.6	1.5 ^a
	41b	05/26/88	-	-	> 320	> 320	-	0.2 ^a
	41b	08/17/89	-	95.7	> 320	299	3.1	12.85
2860	20	05/07/87	32	3.2	100	32	10.0	2.45
	20	09/07/89	-	6.1	63.2	40.3	6.6	29.17
2866	20	05/07/87	-	100	> 320	> 320	> 3.2	1.8 ^a
	20	08/17/89	289	115	> 320	> 320	> 2.8	20.04
2893	26	07/16/87	-	86.7	> 320	320	3.7	1.65 ^a
	26	05/12/88	320	114.9	> 320	100	0.87	1.15 ^a
	26	08/17/89	79	19.5	300	200	10.3	37.3

Table 4 (Cont'd)

<u>AVS No.</u>	<u>Shipment No.</u>	<u>Date Tested</u>	<u>IC₉₅</u>	<u>IC₅₀</u>	<u>TC₅₀</u>	<u>TC₂₅</u>	<u>SI</u>	<u>TAI</u>
2966	27	08/13/87	-	22.66	> 320	100	4.4	2.2*
	27	05/12/88	-	39.54	> 320	100	2.5	1.6*
	27	08/17/89	-	8.99	158	65.1	7.3	> 25.66
2991	27	08/20/87	3.2	0.77	10	3.2	4.1	1.6*
	41b	05/26/83	-	32	32	10	1.8*	0.75*
	41b	08/17/89	-	2.05	18.7	11.2	5.5	18.75
3571	32	02/11/88	32	17.88	320	100	5.6	1.6*
	32	08/17/89	31	18.10	> 320	> 320	> 17.7	47.60
3940	35	03/03/88	< 32	4.97	> 320	> 320	> 64.4	5.0*
	35	03/17/88	< 32	9.48	> 320	> 320	33.8	4.4*
	35	09/23/88	< 3.2	0.48	> 100	> 100	207.2	N.A.
	35	02/23/89	--	1.52	> 320	> 320	> 211	> 63.25
4531	42	06/23/88	-	110.2	> 320	320	2.9	1.35*
	42	07/07/88	-	88.64	> 320	> 320	> 3.6	2.0*
	42	08/17/89	-	135	> 320	> 320	> 2.4	10.89
4532	42	06/23/88	-	103.2	> 320	320	3.1	1.65*
	42	07/07/88	-	100.2	> 320	320	3.2	1.35*
	42	02/23/89	320	118.1	> 320	320	2.7	1.1*
	42	02/23/89	-	85.8	> 320	> 320	> 3.7	12.7
	42	06/01/89	-	226	> 320	100	0.44	2.74
4822	48	12/08/88	-	9.75	277	96.8	9.9	24.91
	48	05/18/89	-	-	297	188	-	0.17
	48	07/27/89	-	-	275	187	-	> 15.41
4939	51	02/02/89	-	13.8	53.8	39.5	8.8	16.36
	51	06/01/89	-	-	23.3	15.2	-	1.2
	51	08/17/89	-	8.06	20.6	14.3	1.8	9.03
5034	48	01/12/89	-	14.7	> 320	169	11.5	34.45
	48	05/18/89	-	15.8	> 320	> 320	> 20.3	35.02
5035	48	02/02/89	-	1.61	20.9	10.2	6.3	> 36.14
	48	06/01/89	6.66	1.84	24.0	16.5	8.91	34.26
5053	48	01/05/89	30.1	7.7	69.2	39.6	5.2	31.95
	48	02/02/89	--	8.5	66.4	32.8	3.9	25.2

Table 4 (Cont'd)

AVS No.	Shipment No.	Date Tested	IC ₉₅	IC ₅₀	TC ₅₀	TC ₂₅	SI	TAI
5069	48	01/12/89	264.0	60.0	> 320	> 320.0	> 5.3	> 26.64
	48	04/06/89	--	86.9	> 320	295.0	3.4	14.61
5072	48	01/12/89	121	58.7	> 320	> 320	> 5.5	27.28
	48	04/06/89	-	95.7	182	68.6	0.72	0.81
	48	05/18/89	-	-	> 320	90.3	-	1.15
	48	09/07/89	139	59	> 320	247	4.2	22.92
5146	57	07/13/89	-	< 1.0	2.44	< 1.0	≥ 1.0	> 2.83
	57	08/17/89	-	2.88	> 10	> 10	> 3.47	> 14
5219	51	04/06/89	-	0.227	12.2	5.34	23.5	33.23
	51	05/04/89	0.79	0.08	> 10	6.3	84	> 62.29
	51	06/01/89	0.1	< 0.32	13.7	6.16	> 19.3	> 37.83
5450	53	04/13/89	-	6.2	98.1	50.9	8.2	> 27.96
	53	06/01/89	-	-	31.4	15.2	-	6.15
	53	07/13/89	-	12.3	> 100.0	79.1	6.44	> 26.92
5457	54	05/11/89	-	8.07	43.8	20.6	2.6	11.39
	54	06/08/89	-	5.7	20.9	14.8	2.6	15.75
5568	56	06/08/89	-	< 1.0	> 320	> 320	> 320	> 59.6
	56	07/13/89	2.2	0.11	> 320	> 320	291	> 91.13
5569	56	06/08/89	-	< 1.0	230	138	> 158	> 60.04
	56	07/13/89	2.2	< 1.0	> 320	> 320	> 320	> 85.7

IC₉₅ = The minimum drug concentration ($\mu\text{g/ml}$) that inhibited CPE by 95%, calculated by using a regress analysis program for semilog curve fitting.

IC₅₀ = The minimum drug concentration ($\mu\text{g/ml}$) that inhibited CPE by 50%, calculated by using a regress analysis program for semilog curve fitting.

TC₅₀ = The minimum drug concentration ($\mu\text{g/ml}$) that reduced cell viability by 50%.

TC₂₅ = The minimum drug concentration ($\mu\text{g/ml}$) that reduced cell viability by 25%.

TAI = Total Antiviral Index = the area between the cytotoxicity and the antiviral curves.

SI = Selectivity Index, calculated by dividing the TC₂₅ by the ID₅₀.

^a = This value is a virus rating rather than TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound.

^b = L929 cells.

4.1.2 Adenovirus Type 2 (AD2)

Seventeen of the new compounds screened against AD2 from 11/16/88 to 11/16/89 were active, as determined by a VR \geq 1.0 and a selectivity ratio (TI) of $>$ 1.0. The active compounds are listed in descending order, according to the TI on Table 5. AVS-5520 showed the greatest inhibitory effect on AD2-induced CPE with a VR of 2.1 and a TI of 27.0.

Table 5
Compounds Active Against Adenovirus Type (AD2)^a

AVS No.	Shipment	VR	VR*	ID ₅₀	MTC	TI
5520	56	2.1	0.7	11.85	320	27.0
4951	51	1.2	0.40	3.2	32	10
5440	53	1.2	0.40	10	100	10
5445	53	2.0	0.67	0.2	1	6.3
5075	48	2.4	0.80	53.7	> 320	> 6.0
4983	51	1.2	0.40	56.5	320	5.7
5443	53	1.1	0.37	0.7	3.2	4.7
4074	48	1.6	0.53	2.2	10	4.5
5529	56	1.2	0.40	24.33	100	4.1
5444	53	1.5	0.50	0.3	1	3.8
4937	51	1.5	0.50	14.7	32	2.2
4070	35, 48	1.7	0.57	1.8	3.2	1.8
5140	57	1.6	0.53	180.9	> 320	> 1.77
5572	56	1.5	0.5	182.9	> 320	> 1.75
5571	56	1.0	0.33	221.9	> 320	> 1.44
4994	51	1.1	0.37	0.1	0.1	1.2
2034	56	1.9	0.63	0.29	0.32	1.1
4814	48	1.3	0.43	100	100	1.0

^a Compounds identified by their AVS number are listed in descending order from the most active to the least active. CPE-inhibition assays were performed in HEP-2 cells. An active compound is defined here as having a TI of greater than 1.0 and a VR of 1.0 or greater. The VR is a measurement of selective antiviral activity which takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound, determined by a modification of the method of Ehrlich *et al.* (Ann. N.Y. Acad. Sci. 130:5, 1965). VR* is the designation for the virus rating calculated by the method of Sidwell and Huffman (Appl. Microbiol. 22:797, 1971). The drug concentration which reduced the CPE by 50% (50% inhibitory dose, ID₅₀) was calculated using a regression analysis program for semilog curve fitting and is expressed as μ g/ml. The minimum cytotoxic drug concentration (MTC) is also expressed as μ g/ml. The TI of a test compound was determined by dividing the MTC by the ID₅₀.

The CPE-inhibition assay in HEP-2 cells was employed to confirm the inhibitory effects of compounds shown to be active in the primary screen. Results of the confirmatory assays are summarized on Table 6. The compounds are presented in ascending numerical order. The data from the primary and the subsequent CPE-inhibition assays are listed chronologically for each compound. Some of the compounds most effective against AD2 were: AVS-2979, 2980, 3529, 4785, 4796, 4798, 4937, and 5445. The reproducibility of the inhibitory effects of the active compounds was satisfactory considering the low levels (\leq 75%) of CPE-inhibition demonstrated by many of these drugs. We have observed that if the inhibition of AD2 CPE is $<$ 75%, such partial inhibition is frequently not reproducible in this assay system.

Table 6

Confirmatory Assays for Compounds Active Against Adenovirus Type 2*

AVS No.	Shipment No.	Date Tested	VR	VR*	ID ₅₀	MTC	TI
0349	2	09/18/86	1.0	0.33	0.1	0.32	3.2
	2	09/15/89	0	0	-	0.1	-
0360	2	09/18/86	1.5	0.5	0.1	0.1	1.0
	48	01/26/89	1.4	0.47	0.5	0.32	0.7
0361	2	09/18/86	1.3	0.43	0.1	0.1	1.0
	2	10/30/86	0.6	0.20	0.3	0.1	0.3
	2	03/03/88	1.2	0.40	1.3	1.0	0.8
	48	01/26/89	1.4	0.47	0.06	0.1	1.8
1210	27	08/20/87	1.1	0.37	19.93	100	5.0
	27	09/15/89	0.8	0.27	31.27	100	3.2
1211	27	08/20/87	1.3	0.43	4.91	32	6.5
	27	09/15/89	0	0	-	32	-
1983	2	09/18/86	0.9	0.3	100	320	3.2
	2	09/02/89	0.3	0.1	-	> 320	-
1984	2	09/18/86	1.9	0.63	88	> 320	3.6
	41B	05/26/88	0.7	0.23	-	> 320	-
	41B	09/15/89	0.35	0.12	-	320	-
2034	56	06/08/89	1.9	0.63	0.29	0.32	1.1
	56	07/13/89	0.75	0.25	6.34	3.2	0.5
	56	07/27/89	0.7	0.23	5.37	10	1.9
2277	11	11/13/86	1.1	0.36	100	320	3.2
	11	05/12/88	0.35	0.12	-	320	-
	11	09/15/89	0	0	-	100	-
2318	13	12/18/86	1.7	0.56	0.32	3.2	10
	13	09/04/87	1.8	0.6	3.59	10	2.8
	13	09/24/87	0.3	0.1	-	10	-
	13	09/15/89	1.0	0.33	0.32	3.2	10
2529	20	04/24/87	≥ 1.4	≥ 0.47	< 0.032	0.1	> 3.1
	20	09/15/89	0.95	0.32	0.09	0.1	1.1

Table 6 (Cont'd)

<u>AVS No.</u>	<u>Shipment No.</u>	<u>Date Tested</u>	<u>VR</u>	<u>VR*</u>	<u>ID₅₀</u>	<u>MTC</u>	<u>TI</u>
2563	33	01/14/88	1.1	0.37	46.8	100	2.1
	33	01/28/88	1.7	0.57	9.5	100	1.1
	33	03/03/88	1.7	0.57	20.6	100	4.9
	48	01/26/89	0.9	0.30	38.7	10	0.3
2812	33	02/25/88	1.1	0.37	0.14	0.1	0.7
	33	03/10/88	1.5	0.50	0.1	0.1	0.9
	48	01/26/89	1.3	0.43	0.05	0.03	0.7
2964	27	08/20/87	1.2	0.4	100	> 320	3.2
	27	05/12/88	0.7	0.23	-	> 320	-
	27	09/15/89	0	0	-	320	-
2979	25	07/09/87	1.7	0.57	11.4	32	2.8
	25	01/08/88	0.9	0.30	68.4	320	4.7
	25	01/21/88	1.8	0.60	35.8	170	2.8
	41b	05/26/88	1.3	0.43	10	32	3.2
	48	01/26/89	1.5	0.50	4.7	10	2.1
2980	25	07/09/87	2.1	0.70	1.5	10	6.8
	25	10/29/87	2.0	0.67	1.0	3.2	3.3
	25	11/12/87	1.5	0.50	1.5	3.2	2.1
	25	05/12/88	1.2	0.40	5.0	10	2.0
	48	01/26/89	1.7	0.57	1.5	3.2	2.2
2985	27	08/20/87	1.2	0.4	100	> 320	3.2
	27	05/12/89	0	0	-	> 320	-
	27	09/15/89	0	0	-	> 320	-
2994	27	08/20/87	1.5	0.5	25.5	100	3.9
	27	01/08/88	1.15	0.38	32.0	100	3.1
	27	01/21/88	0.7	0.23	64.2	100	1.6
	41B	05/26/88	0.3	0.1	-	320	-
	27	09/15/89	0	0	-	100	-
3527	31	12/17/87	1.0	0.33	2.35	10	4.3
	31	05/12/88	0.4	0.13	-	100	0
	31	09/15/89	0	0	-	10	-

Table 6 (Cont'd)

<u>AVS No.</u>	<u>Shipment No.</u>	<u>Date Tested</u>	<u>VR</u>	<u>VR*</u>	<u>ID₅₀</u>	<u>MTC</u>	<u>TI</u>
3529	31	01/28/88	1.35	0.45	1.59	3.2	2.0
	31	02/18/88	1.6	0.53	1.80	10	5.5
	31	09/15/89	1.45	0.48	3.2	3.2	1.0
3577	32	01/28/88	1.4	0.47	96.4	320	3.3
	32	02/18/88	1.8	0.6	112.7	> 320	2.8
	32	09/15/89	0.55	0.18	-	320	-
3910	34	02/18/88	1.2	0.4	56.51	320	5.7
	34	03/10/88	1.1	0.37	204.3	> 320	1.6
	34	09/15/89	1.15	0.38	70.12	100	1.4
4070	48	01/26/89	1.7	0.57	1	3.2	1.8
	48	03/23/89	1.3	0.43	1.4	1.0	0.9
4074	48	01/26/89	1.6	0.53	2.2	10	4.5
	48	03/23/89	1.35	0.45	1.8	3.2	1.8
	48	09/15/89	0.9	0.3	1.47	3.2	2.2
4785	46	11/03/88	3.4	1.10	4.3	32	7.5
	46	11/17/88	3.2	1.10	3.8	32	8.4
4796	46	11/03/88	2.4	0.80	17.9	100	5.6
	46	11/17/88	2.4	0.80	32	320	10.0
4798	46	11/03/88	2.4	0.80	0.6	3.2	5.6
	46	11/17/88	2.3	0.77	0.6	3.2	5.6
4814	48	12/08/88	1.15	0.35	100	320	3.2
	48	02/02/89	1.25	0.41	100	100	1.0
	48	09/15/89	0.75	0.25	--	32	--
4937	51	02/02/89	1.5	0.5	14.74	32	2.2
	51	03/23/89	1.35	0.45	21.7	100	4.6
4951	51	02/16/89	1.2	0.4	3.2	32	10
	51	09/15/89	0	0	--	32	--
4983	51	02/16/89	1.2	0.4	56.5	320	5.7
	51	09/15/89	0	0	--	320	--

Table 6 (Cont'd)

<u>AVS No.</u>	<u>Shipment No.</u>	<u>Date Tested</u>	<u>VR</u>	<u>VR*</u>	<u>ID₅₀</u>	<u>MTC</u>	<u>TI</u>
4994	51	03/23/89	1.05	0.37	0.1	0.1	1.2
	51	05/04/89	0.9	0.3	0.15	0.32	2.2
	51	05/18/89	1.05	0.35	0.11	0.32	2.9
5075	48	01/12/89	2.4	0.8	53.7	> 320	> 6.0
	48	09/15/89	0.45	0.15	320	100	0.31
5140	57	07/13/89	1.6	0.53	180.9	> 320	1.8
	57	07/27/89	0.8	0.27	317.2	> 320	1.0
5440	53	04/06/89	1.2	0.4	10.0	100	10.0
	53	05/04/89	0.9	0.3	29.4	100	3.4
	53	05/18/89	1.2	0.4	23.9	100	4.1
5444	53	05/04/89	1.5	0.5	0.3	1	3.8
	53	05/18/89	2.1	0.7	0.16	3.2	20.1
5445	53	05/04/89	2.0	0.67	0.2	1	6.3
	53	05/18/89	2.7	0.9	0.08	3.2	38.4
5529	56	06/08/89	1.2	0.4	24.3	100	4.1
	56	07/13/89	0	0	--	320	--

* Compounds are listed in ascending numerical order by AVS number. The results from the primary and the subsequent confirmatory CPE-inhibition assays are listed chronologically for each compound. Abbreviations are defined in the footnote to Table 5.

The positive control drugs for the AD2 CPE-inhibition assays were Ribavirin (AVS-0001) and Selenazofurin (AVS-0253). During this report period, the VR's of the positive control drugs ranged from 1.4 - 3.1 for Ribavirin and from 1.5 - 2.9 for Selenazofurin. The mean ID₅₀ of Ribavirin was 24.05 (\pm 11.1); the mean ID₅₀ of Selenazofurin was 12.35 (\pm 9.78). The selectivity of each of the positive control compounds, as measured by the TI, was: Ribavirin, mean (5.0 \pm 4.1), median 3.9; Selenazofurin, mean 4.96 (\pm 3.21), median 3.91.

A cumulative summary presenting all of the *in vitro* antiviral test results for this reporting period (both positive and negative) is included in Appendix B.

4.1.3 Vesicular Stomatitis Virus

Two different assay methods were used during this reporting period to test a total of 665 compounds against VSV in L929 cells Figure 9. From 11/16/88 to 1/13/89 the CPE-inhibition assay was used, and from 1/14/89 to 11/15/89 the MTT assay was used for primary drug evaluation.

TOTAL NUMBER OF TESTS AGAINST VESICULAR STOMATITIS VIRUS

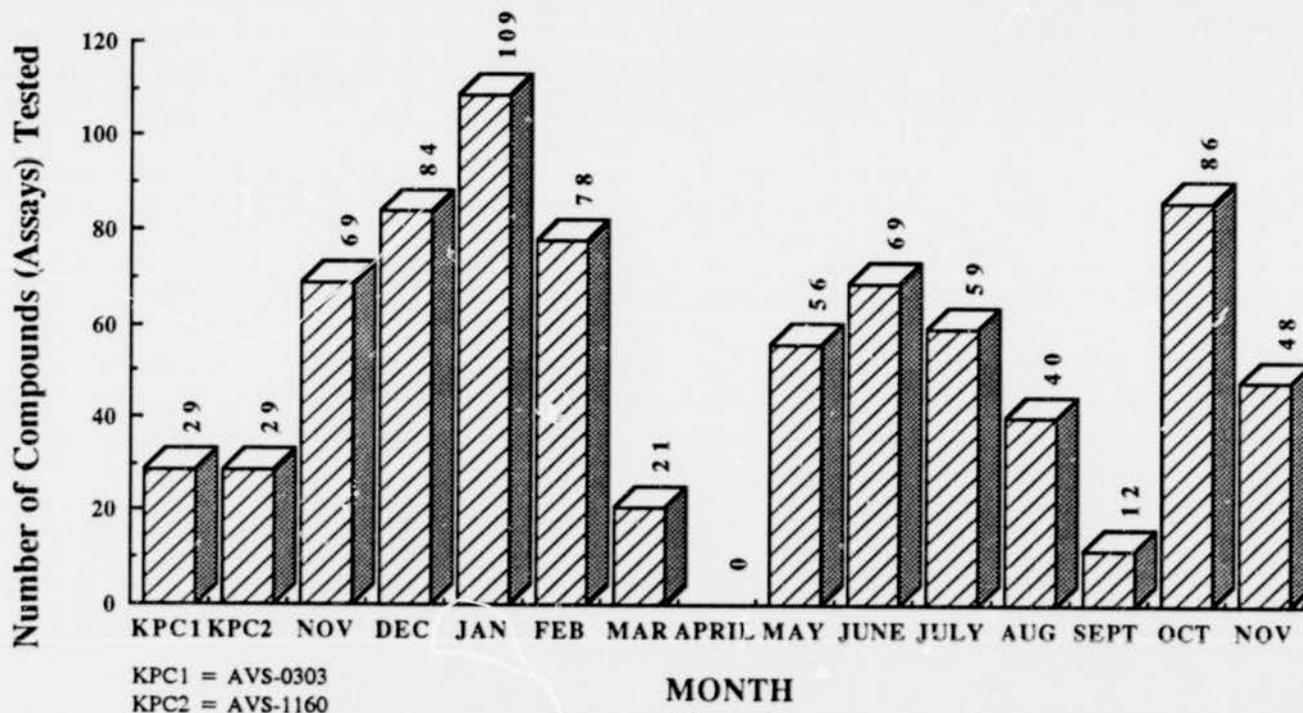


Figure 9

Seven of the 665 drugs tested during this reporting period exhibited confirmed antiviral activity ($VR \geq 2.0$ or $TAI \geq 10$ and $SI \geq 2.0$) against VSV (Table 7).

Table 7

Compounds Most Active Against Vesicular Stomatitis Virus

AVS No.	Shipment	IC ₅₀	TC ₂₅	TAI	SI
5580*	54	19.8	> 100000	> 59.5	> 5060
5219	51	1.96	249	> 71.99	127
1214	52	3.05	20.2	> 30.25	6.61
1217	52	41.6	218	> 29.06	5.24
5556	53	41.8	155	24.99	3.7
4275	39	0.06	0.22	> 18.82	3.66
3968	36	54.2	180	> 17.98	3.32

* Compounds identified by their AVS numbers are listed in descending order by activity. AVS-5580 was tested in Vero cells and activity is expressed as I.U./ml. All other assays were done in L929 cells. See Table 3 for explanation of abbreviations.

The two most active drugs identified during this reporting period with confirmed activity were AVS-5580 with a TAI > 73.5 and > 59.5 and a SI of > 1000 and > 5060, and AVS-5219 with a TAI of > 71.99 and 28.27 and a SI of 127 and 10.6 (Table 8). AVS-1214, 1217, 3968, 4275 and 5556 were less active, but the activity observed in the initial assay was confirmed on retest. Four compounds which appeared to be active in the primary screen (AVS-2151, 5455, 5457, and 5528) had no activity in two retests and were considered inactive.

Two positive control drugs (AVS-303 and 1160) were included in each assay. For the CPE-inhibition assay, the VR of AVS-303 ranged from 2.0 to 3.1, the IC_{50} from 1.0 to 3.9 $\mu\text{g/ml}$, and the TI from 1.1 to 3.8. The VR of AVS-1160 ranged from 1.6 to 2.9, the IC_{50} from 0.3 to 0.9 $\mu\text{g/ml}$, and the TI from 1.3 to 3.1. A wider range of values was obtained with the MTT assay. The TC_{25} of AVS-303 ranged from 4.33 to 320, the IC_{50} from 1.27 to 5.39 $\mu\text{g/ml}$, and the SI from 1.94 to 73.07. The TC_{25} of AVS-1160 ranged from 1.31 to 37.6, the IC_{50} from 0.32 to 55.9 $\mu\text{g/ml}$, and the SI from 1.07 to 36.03.

Table 8

Confirmatory Assays for Compounds Active Against Vesicular Stomatitis Virus

AVS No.	Ship-ment	Date	DIFRNTL	IC ₅₀	TC ₂₅	TAI	SI	Assay Type
1214 ^a	52	03/03/89	1.451	3.05	20.2	> 30.25	6.61	MTT
	52	05/12/89	1.477	2.33	5.78	10.52	2.48	MTT
1217	52	03/03/89	1.451	41.6	218	> 29.06	5.24	MTT
	52	05/12/89	1.429	55.9	144	13.33	2.58	MTT
2151	52	03/03/89	1.107	143	> 320	> 15.67	> 2.24	MTT
	52	05/12/89	1.429	0	202	5.75	0	MTT
	52	10/13/89	1.530	0	262	> 4.31	0	MTT
3968	36	03/18/88	NA	89.5	320	1.25 ^b	3.58	CPE
	36	08/04/89	1.570	54.2	180	> 17.98	3.32	MTT
4275	39	04/08/88	NA	0.22	1.0	3.6 ^b	4.49	CPE
	39	04/19/88	NA	0.16	0.32	4.1 ^b	1.95	CPE
	39	08/11/89	1.504	0.06	0.22	> 18.82	3.66	MTT
5219	51	03/03/89	1.315	1.96	249	> 71.99	127	MTT
	51	05/12/89	1.477	1.85	19.6	28.27	10.6	MTT
5455	54	05/05/89	1.218	1.94	> 320	> 43.91	> 165	MTT
	54	06/02/89	1.343	0	> 320	0	0	MTT
	54	09/15/89	1.154	0	> 320	> 0.68	0	MTT
5457	54	05/05/89	1.036	1.04	13.3	> 27.4	12.4	MTT
	54	06/02/89	1.416	0	7.73	0	0	MTT
	54	09/15/89	1.154	0	8.95	0	0	MTT
5528	52	06/09/89	1.183	76.9	187	11.79	2.44	MTT
	52	09/15/89	1.207	0	86.8	> 3.17	0	MTT
	52	10/13/89	1.530	0	> 320	> 2.83	0	MTT
5556	53	05/12/89	1.300	48.1	141	> 19.17	2.93	MTT
	53	06/02/89	1.391	41.8	155	24.99	3.7	MTT
5580	54	05/05/89	1.153	< 1.0	> 100000	> 73.5	> 1000	MTT
	54	05/19/89	1.657	19.8	> 100000	> 59.5	> 5060	MTT

^a Compounds identified by their AVS numbers are listed in ascending numerical order. AVS-5580 was tested in Vero cells and activity is expressed as I.U./ml. All other assays were done in L929 cells.

^b This value is a virus rating (VR) rather than TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound similar to TAI.

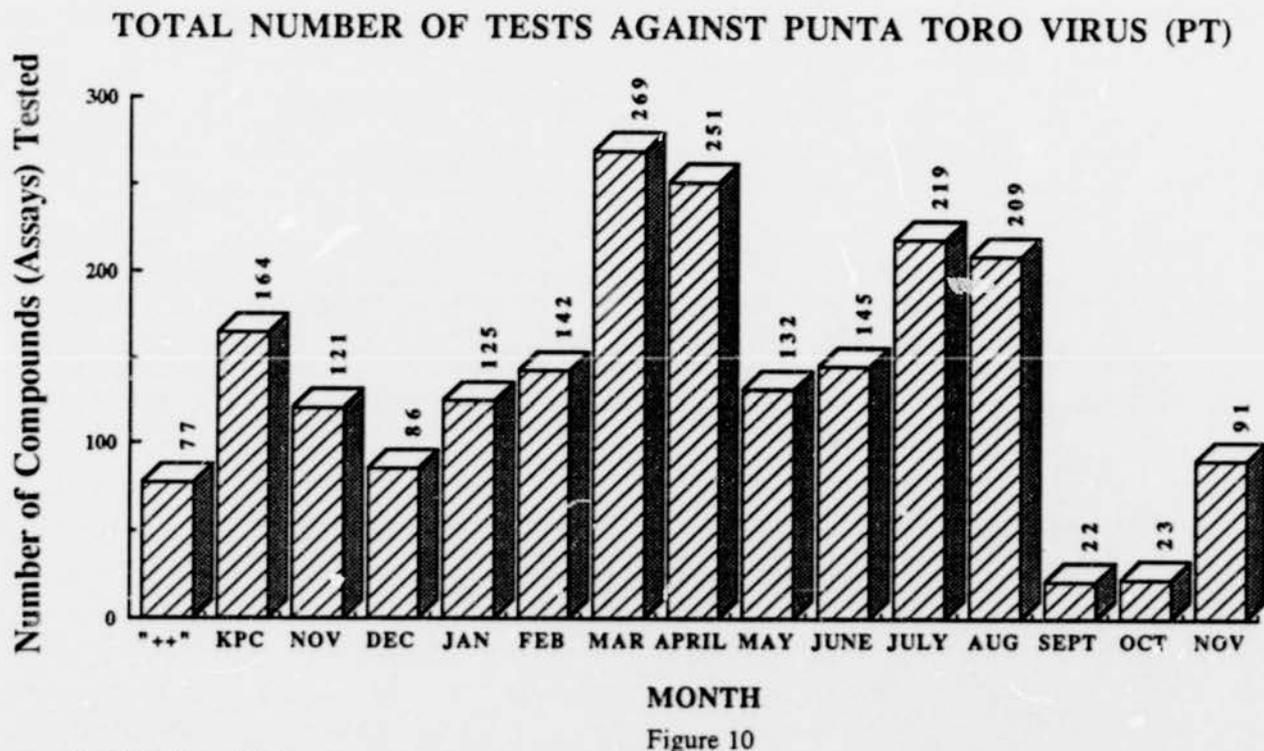
DIFRNTL = The differential is the difference in the cell control and the virus control optical densities.

See Table 3 for explanation of abbreviations.

4.1.4 Punta Toro Virus (PT)

The total output of PT testing during this reporting period is summarized in monthly increments in Figure 10. During this 12-month period 1992 tests were performed against the PT virus with the MTT-array format. Out of these, 164 were control compound assays, Ribavirin (AVS-0001) being the positive control compound. Seventy-seven tests were internal (+++) virus load and cell load quality control tests. The rest, totaling 1751, were actual single dose assays. The total number of assays (1992) represents a 118% increase (improvement) in total testing output during this year as compared to the output of the results from the previous year.

Out of the 1992 single drug assays, 438 different compounds demonstrated antiviral activity at greater than 25% reduction levels. This represents around 22% of the tested compounds having *in vitro* antiviral activity against PT virus. The remainder, 1554 compounds (78%), are to be considered inactive with this assay protocol. The larger number of actives against PT can be partially explained by synergistic or additive effect of Dextran pretreatment.



Test Total = 1992

KPC (Positive Control Compound, Ribavirin) = 164

"++" (Internal Virus and Cell Load) = 77

4.1.4.1 PT-Quality Controls:

4.1.4.1.1 Antiviral Activity

PT-Control Compound-Antiviral Performance: Ribavirin (AVS-0001) has been the sole control compound against PT in these MTT assay screens. The mean and median antiviral inhibition and cytotoxicity patterns of the positive control drug (Ribavirin) are illustrated in Figures 11-A and 11-B. The 164 control tests performed with Ribavirin gave a mean **Total Antiviral Index (TAI)** of 22.24 (SD \pm 16.39) and the median value was 18.70%. The mean **Selectivity Index (SI)** was only 9.16 (SD \pm 31.54) and the median SI value was 3.85, indicating a moderate antiviral selectivity. The closeness of the mean and median values indicate that the present execution of the SOP is consistent and repeatable.

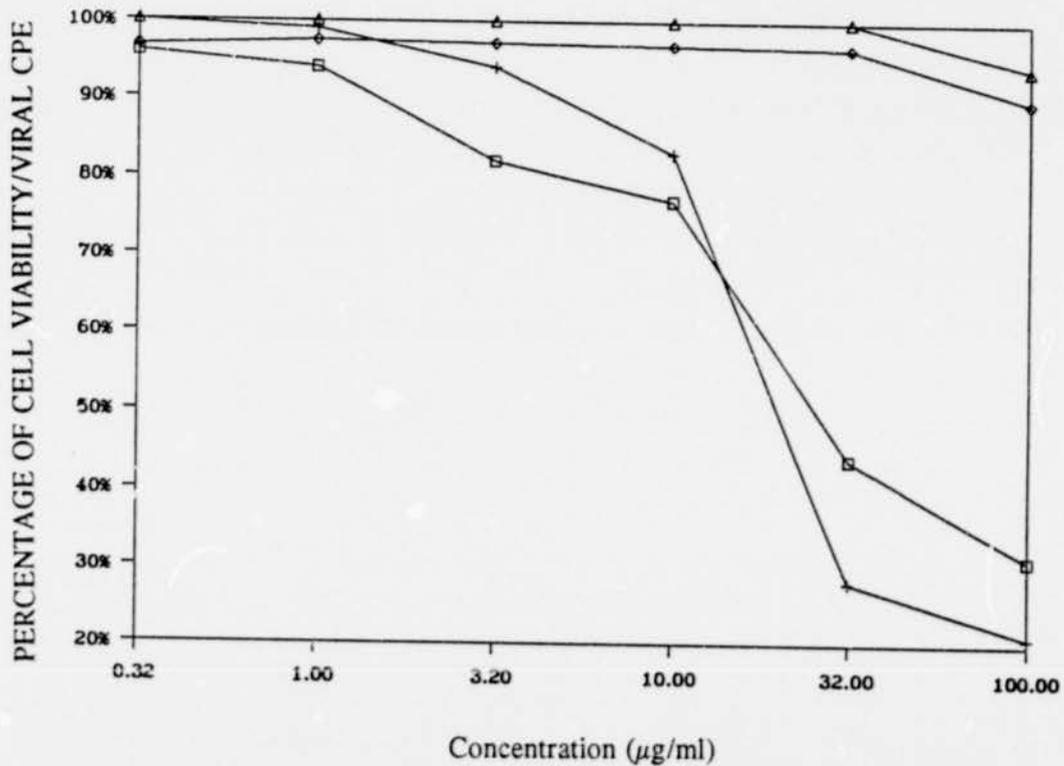
The mean **Antiviral Index 25% (AI₂₅)** value was 22.31 (SD \pm 52.23). The median AI₂₅ value was 7.10. The mean **Antiviral Index 50% (AI₅₀)** was 9.56 (SD \pm 31.48) with a median of 4.77. The mean **Antiviral Index (AI₉₅)** was 2.74 (SD \pm 24.46), with a median of 0. This indicates that the control compound Ribavirin does not consistently reach 95% antiviral reduction.

The mean **Antiviral Inhibitory Concentration 25% (IC₂₅)** was 22.01 μ g/ml (SD \pm 19.22). The median IC₂₅ value was 13.20 μ g/ml. The mean **Antiviral Inhibitory Concentration 50% (IC₅₀)** was 32.87 μ g/ml (SD \pm 31.57). The median IC₅₀ value was 18.55 μ g/ml. The mean **Antiviral Inhibitory Concentration 95% (IC₉₅)** was 13.23 μ g/ml (SD \pm 28.56). The median IC₉₅ value was 0 μ g/ml. This discrepancy indicates that the control compound Ribavirin does not consistently reach 95% reduction levels. The highest starting concentration of Ribavirin (100 μ g/ml) has been readjusted during the latter part of the year to 320 μ g/ml.

A bar graph scatter plot (Figure 12) depicts the distribution of the maximum antiviral reduction values of all 164 control compound assays for Ribavirin. The results indicate that the average, maximum antiviral reduction obtained with the present SOP is around 76.43 (SD \pm 22.94) reduction levels. The maximum reduction levels vary from 0 - 100% but remain quite consistently around the median of 81.50%. The assay control values give a shifted half-bell-shaped distribution curve toward the maximum 100% reduction level. This indicates a quite consistent day-to-day performance of the control compound in the PT-MTT assay.

Ribavirin is active *in vitro* against PT virus and functions as a reasonable quality control compound. On the other hand, regardless of the performance of the PT-quality control drug ribavirin, around 187 other compounds have equal or better antiviral activity against PT-virus than AVS-0001. (See 95% and 50% reduction summaries).

RIBAVIRIN - VS - PUNTA TORO VIRUS (PT)

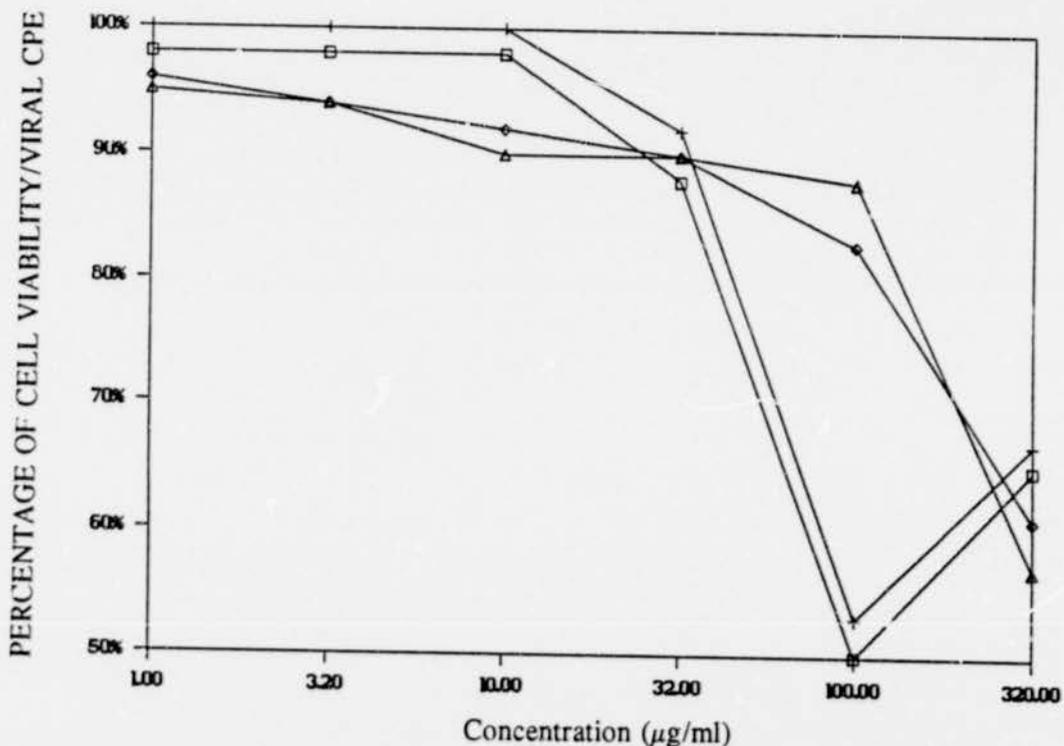


□ Mean % Reduction + Median Reduction ◇ Mean % Reduction Δ Median % Reduction

Conc. (µg/ml)	% Viral CPE						% Cell Viability					
	0.32	1	3.2	10	32	100	0.32	1	3.2	10	32	100
Mean	96	94	82	77	44	31	97	97	97	97	97	90
Median	100	99	94	83	28	21	100	100	100	100	100	94
Std. Dev.	.11	.13	.18	.25	.40	.28	.05	.04	.04	.04	.06	.13
Variance	.01	.02	.03	.06	.16	.08	.00	.00	.00	.02	.02	.02

Figure 11-A
Average Antiviral and Cytotoxicity Values for 135 Positive Control Compound Assays

RIBAVIRIN - VS - PUNTA TORO VIRUS
Readjustment of the Concentration



□ Mean % Reduction + Median Reduction ◇ Mean % Reduction △ Median % Reduction

Conc. (µg/ml)	% Viral CPE						% Cell Viability					
	1	32	10	32	100	320	1	3.2	10	32	100	320
Mean	98	98	97	82	32	56	95	92	91	92	92	67
Median	99	100	98	88	32	63	95	93	90	91	92	65
Std. Dev.	.03	.03	.04	.17	.19	.22	.04	.06	.06	.06	.09	.15
Variance	.00	.00	.00	.03	.04	.05	.00	.00	.00	.00	.01	.02

Figure 11-B
Average Antiviral and Cytotoxicity Values for 29 Positive Control Compound Assays

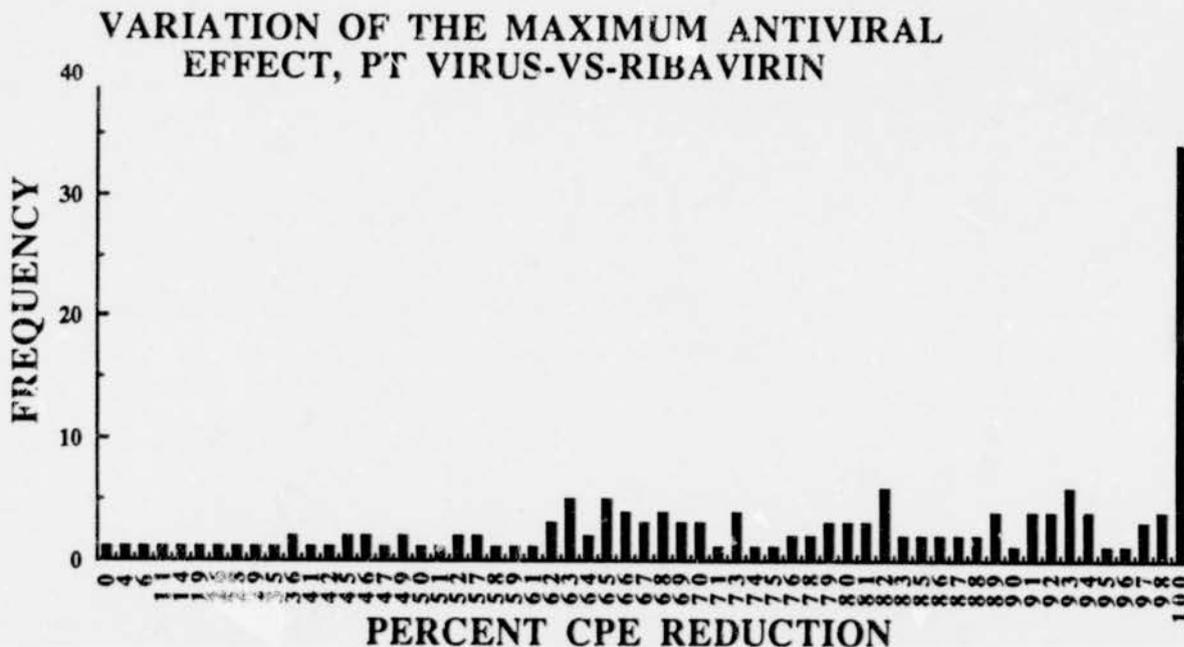


Figure 12
Maximum Antiviral CPE Reduction (%). Summary of 164 Control Compound Tests

4.1.4.1.2. Cellular Cytotoxicity

PT-Control Compound-Cytotoxicity Performance: The 164 cytotoxicity values of the positive control compound Ribavirin are also very consistent. The mean cell Toxic Concentration (TC_{25}) was $122.29 \mu\text{g/ml}$ ($SD \pm 68.08$) and the median was $100 \mu\text{g/ml}$. The mean cell Toxic Concentration 50% (TC_{50}) value was 138.09 ($SD \pm 81.85$) and the median was $100 \mu\text{g/ml}$. The mean cell Toxic Concentration (TC_{95}) value was 138.78 ($SD \pm 83.21$) and the median was $100 \mu\text{g/ml}$.

As can be seen from Figure 11-B, the toxicity starts to become measurable above $100 \mu\text{g/ml}$ concentration. The maximum toxicity has not been reached at $320 \mu\text{g/ml}$. Further increase of the concentration of ribavirin is needed to properly evaluate the maximum cytotoxicity of ribavirin.

The evaluation of the graphs in Figures 11-A and 11-B indicates that when the cytotoxicity reaches around 5% ($100 \mu\text{g/ml}$), the control compound has reached maximum antiviral effect. The cytotoxic effect of ribavirin is insignificant between 1 and $100 \mu\text{g/ml}$. The average cytotoxicity reached 35% at $320 \mu\text{g/ml}$, which is the highest ribavirin concentration tested.

Ribavirin has a definite cytotoxic suppression on cellular metabolism and growth. However, the TC_{25} and TC_{50} toxicity could not be consistently achieved with the $100 \mu\text{g/ml}$ concentration of ribavirin. Therefore, a readjustment to $320 \mu\text{g/ml}$ as being the highest ribavirin concentration tested was done.

4.1.4.1.3. Assay Plate Quality Controls: Cell Load and Virus Load Parameters

PT-Control Compound-Cell Load Performance: A bar graph scatter plot of the mean cell control (O.D. reading) of 164 control assays is plotted in Figure 13. The results indicate that the cell O.D. readings reached a mean 1.146 (SD \pm 0.206) with a median of 1.140 (Range from 0.590 - 1.820). This indicates that a uniform and equal number (15,000 cells/well) of cells are being loaded into every well in the 96-well plate during the day-to-day operation. The cells reduced MTT to formazan giving maximum blue color uniformly and consistently.

PT-Control Compound-Virus Load Performance: A bar graph scatter plot of the mean virus load O.D. readings of the 164 control assays is presented in Figure 14. The results indicate that the average load O.D. reading is 0.398 (SD \pm 0.145) with a median of 0.385 (Range of 0.100 - 0.820). This demonstrates that a good cell destruction is taking place and a uniform load of virus (32 TCID₅₀) is administered on the cell monolayer with very consistent viral CPE results.

PT-Control Compound-Assay Differential Performance: A bar graph scatter plot of the mean O.D. differential values of the 164 control assays is provided in Figure 15. The results indicate that the average differential O.D. reading is 0.748 (SD \pm 0.205) with a median of 0.726 (Range 0.171 - 1.391). The single bell-shaped curve is reasonably sharp and uniform. This reflects that the assays are executed consistently and are repeatable during day-to-day operation with close to 73% accuracy.

VARIATION OF THE CELL (LOAD) CONTROLS, PT VIRUS-VS-RIBAVIRIN

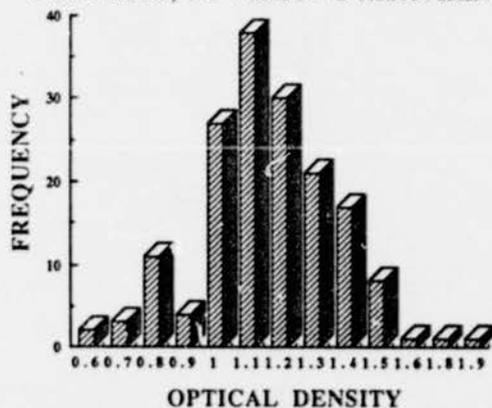


Figure 13

VARIATION OF THE VIRUS (LOAD) CONTROLS, PT VIRUS-VS-RIBAVIRIN

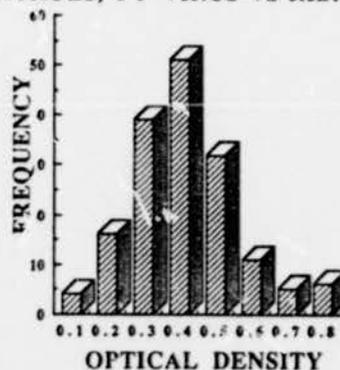


Figure 14

VARIATION OF THE TEST DIFFERENTIAL PT VIRUS-VS-RIBAVIRIN

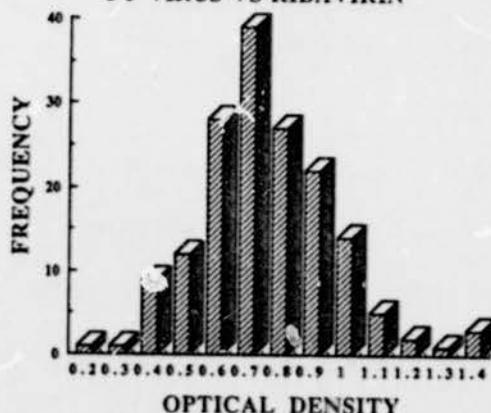


Figure 15

4.1.4.2 PT-Antiviral Activity Results:

Drugs with 95% Antiviral Reduction Levels: Out of the 1992 actual single drug tests, 43 different compounds demonstrated excellent antiviral activity having antiviral reduction values of 95% or better. This represents around 2.0% of the test compounds being active at this excellent reduction level. These compounds are summarized in Table 9 according to the highest **Total Antiviral Index (TAI)**. Compound AVS-5580 demonstrated the greatest *in vitro* promise, having a TAI around 96% and **Selectivity Index (SI)** around >300. Compounds AVS-2309, 4848, 4855, 5546, 5480, 5484, 4863, 5494, 5492, 5138, 5058, 5067, and 3494 demonstrated excellent antiviral activity with TAI values over 40% and SI values between 3 and 150. The other 29 active compounds had TAI's from 10 to 39% and SI's from 0.3 to 180, which may or may not be significant. The *in vitro* antiviral activity of all of the compounds within this category need to be further confirmed and confirmatory testing is presently in progress.

Table 9

AVS Compounds Active Against PT at AI₉₅ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 95	TC 95	AI 95	SI	TAI
5580	54	05/03/89	0.392	7.26 >	100000 >	13800 >	100000 >	96.40
2309	53	04/11/89	0.701	16.80 >	320.00 >	19.10	53.10 >	65.81
4848	48	02/22/89	0.429	71.50 >	320.00 >	4.47 >	104.00 >	64.54
4855	48	02/22/89	0.470	16.80	328.00	19.50	20.50 >	60.96
5546	56	06/14/89	0.898	7.96 >	320.00 >	40.20 >	151.00	60.74
5480	53	03/28/89	0.690	279.00 >	320.00 >	1.15 >	56.60 >	51.38
5484	53	03/28/89	0.768	217.00 >	320.00 >	1.47 >	20.90 >	51.06
4863	48	02/22/89	0.405	27.80 >	320.00 >	11.50	129.00 >	50.97
5494	53	04/18/89	0.550	29.40 >	100.00 >	3.40	40.90 >	48.61
5492	53	03/28/89	0.693	89.20	328.00	3.68	3.23 >	45.79
5138	57	07/11/89	0.554	89.00 >	320.00 >	3.59 >	10.50 >	44.37
5058	48	02/28/89	0.548	320.00 >	320.00 >	1.00 >	12.00 >	42.55
5067	48	03/01/89	0.886	90.00 >	320.00 >	3.56 >	9.19 >	41.88
3494	33	04/19/89	0.744	9.79	96.40	9.85	12.20	41.87
5327	53	04/11/89	0.710	8.94	274.00	30.70	12.10 >	39.16
5497	53	04/18/89	0.672	89.80 >	320.00 >	3.56 >	9.38 >	39.16
5053	48	02/28/89	0.452	10.00	285.00	28.50	9.88	39.13
3586	32	04/19/89	0.711	29.00 >	320.00 >	11.00	0.27	37.49
5515	53	04/18/89	0.761	28.40	97.20	3.42	3.58 >	37.37
5511	53	04/18/89	0.545	3.02 >	320.00 >	106.00 >	179.00	36.92
5137	57	07/11/89	0.554	89.00	309.00	3.47	5.51 >	36.88
2275	53	04/11/89	0.743	90.90 >	320.00 >	3.52	4.01 >	35.79
3592	51	03/07/89	0.859	88.60 >	320.00 >	3.61	6.84	35.74
5691	57	07/19/89	0.548	94.50 >	320.00 >	3.39 >	5.66 >	28.90
2563	48	02/07/89	1.002	0.91 >	3.20 >	3.51	4.51 >	28.54
0360	48	02/07/89	0.992	0.09	2.93	32.00	4.50 >	28.15
4425	44	03/29/89	0.789	29.50	103.00	3.49	2.20 >	27.43
2811	48	02/07/89	0.862	0.09 >	1.00 >	11.30	5.49	25.35
4939	51	03/07/89	0.912	9.14	84.50	9.25	2.49 >	24.44
4592	48	03/01/89	0.968	29.70 >	100.00 >	3.37	3.17	24.18
5350	53	04/12/89	1.185	29.50	276.00	9.35	1.75	23.36
2980	48	02/08/89	0.686	2.77 >	3.20 >	1.16 >	4.10 >	23.21
5495	53	04/18/89	0.550	2.71	189.00	69.80 >	3.71 >	22.03
0361	48	02/07/89	0.911	0.03	0.57	19.20	3.93 >	21.60
2906	53	04/11/89	0.593	94.50 >	320.00 >	3.39	2.51	21.14
2812	48	02/07/89	0.837	0.01 >	0.01 >	1.11 >	2.87 >	19.34
4452	44	07/07/89	0.691	100.00 >	320.00 >	3.20	3.58	17.09
3450	32	04/19/89	0.716	29.70	95.80	3.22	1.71	15.85
4240	53	04/11/89	0.615	9.42	30.70	3.26	1.60	15.74
2979	27	04/19/89	0.515	9.28	92.60	9.99	1.36	14.81
4844	48	02/21/89	0.531	299.00 >	320.00 >	1.07 >	1.98 >	14.30
4070	48	02/08/89	0.678	2.97 >	3.20 >	1.08 >	2.11 >	14.01
4843	48	02/21/89	0.377	299.00 >	320.00 >	1.07 >	2.00 >	9.93

Drugs with 50% Antiviral Reduction Levels: One hundred forty-four different compounds yielded good antiviral activity -- equal to or better than 50% antiviral reduction. This equals around 7.0% of the test compounds being active in this category. These compounds are summarized in Table 10 according to the highest TAI. Compound AVS-0303 appeared to have the best TAI of 59%, and SI at 75. Compounds AVS-4851, 2320, 4861, 4849, 5555, 4827, 5242, 5496, 1841, 0217, 5451 and 4829 have TAI's from 35% - 53% and SI's between 15 and 240, which may or may not be of any significance. The next 131 active compounds demonstrated TAI's from 0.2% to 34% and SI's of 0.2 to > 147. Most of these compounds do not appear to be very selective antiviral agents. However, further verification of their antiviral effects is warranted and confirmatory testing is presently in progress.

Table 10

AVS Compounds Active Against PT at AI₅₀ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
0303	46	01/24/89	0.807	4.25 >	320.00 >	75.20 >	75.20 >	59.26
4851	48	02/22/89	0.591	1.47 >	320.00 >	217.00 >	217.00 >	53.33
2320	53	04/11/89	0.689	2.56	172.00	67.30	36.50 >	52.20
4861	48	02/22/89	0.401	6.80 >	320.00 >	47.10 >	47.10 >	50.93
4849	48	02/22/89	0.435	1.34 >	320.00 >	239.00 >	239.00 >	47.35
5555	53	03/28/89	0.703	7.22 >	320.00 >	44.30 >	44.30 >	46.14
4827	48	02/14/89	0.337	12.70 >	320.00 >	25.10 >	25.10 >	43.84
5242	52	03/08/89	0.798	14.50 >	320.00 >	22.00 >	22.00 >	42.33
5496	53	04/18/89	0.672	6.61 >	100.00 >	15.10 >	15.10 >	40.80
1841	53	03/28/89	0.767	8.81 >	320.00 >	36.30	29.50 >	40.04
0217	33	04/19/89	0.739	22.90 >	320.00 >	14.00 >	14.00 >	38.83
5451	53	04/18/89	0.425	2.52	76.90	30.60	19.10	37.54
4829	48	02/14/89	0.409	10.00 >	320.00 >	32.00 >	32.00 >	36.95
4822	48	02/01/89	1.240	4.76	59.40	12.50	8.12	34.34
1850	53	04/11/89	0.595	9.71 >	100.00 >	10.30	7.52 >	32.53
5488	53	03/28/89	0.663	71.60 >	320.00 >	4.47 >	4.47 >	32.23
1215	53	03/28/89	0.731	30.20	218.00	7.22	3.79 >	31.88
3181	29	05/17/89	0.335	1.65 >	100.00 >	60.40	56.00	31.66
5498	53	04/18/89	0.628	30.00 >	320.00 >	10.70 >	10.70 >	31.59
1217	52	03/15/89	0.881	19.20	269.00	14.00	7.21	31.42
4796	46	01/12/89	0.885	1.58	73.60	46.60	13.80 >	30.97
1214	52	03/15/89	0.721	20.50	211.00	10.30	5.74 >	30.66
5489	53	03/28/89	0.663	140.00 >	320.00 >	2.28 >	2.28 >	30.33
5186	58	10/04/89	0.588	38.20	763.00	19.98	10.31	29.76
4850	48	02/22/89	0.435	2.30	243.00	106.00	58.30 >	29.33
5241	52	03/08/89	0.721	61.60 >	320.00 >	5.20 >	5.20 >	29.23
2720	22	04/21/89	0.463	1.00 >	100.00 >	100.00	67.70	28.46
4897	46	01/31/89	0.848	17.30	170.00	9.81	5.27	27.87
5487	53	03/28/89	0.736	2.98	184.00	61.80	35.00 >	27.75
5493	53	03/28/89	0.693	2.17 >	320.00 >	147.00 >	147.00 >	27.59
5048	48	02/28/89	0.524	8.69 >	320.00 >	36.80 >	36.80	27.34
5556	53	03/28/89	0.847	28.50 >	320.00 >	11.20	3.70 >	26.11
5121	56	07/03/89	0.817	12.30	179.00	14.60	8.82 >	26.06
5075	48	03/01/89	1.023	48.10 >	320.00 >	6.65 >	6.65 >	25.83
1992	56	06/14/89	0.870	57.70 >	320.00 >	5.54	4.17 >	25.78
5481	53	03/28/89	0.690	80.10 >	320.00 >	3.99 >	3.99 >	25.24
3180	29	05/17/89	0.335	0.71 >	100.00 >	141.00	94.90 >	24.92
2907	26	09/07/89	0.546	20.20	210.00	10.38	6.50 >	24.44
4943	51	03/07/89	0.594	1.79	22.20	12.40	6.49 >	24.01
4785	46	01/12/89	0.929 <	1.00	29.10 >	29.10 >	7.19 >	23.97
4106	37	02/24/89	0.269	0.07 >	0.32 >	4.25 >	4.25 >	23.24
4942	51	03/07/89	0.594	68.40	252.00	3.68	1.93 >	23.05
3964	33	03/22/89	0.706	2.68	24.50	9.16	4.58 >	22.98
5323	53	04/11/89	0.746	3.36	29.20	8.68	4.49 >	22.65
4934	51	03/07/89	0.828	2.43	20.50	8.43	4.48 >	22.59
5060	48	02/28/89	0.559	262.00 >	320.00 >	1.22 >	1.22 >	22.52
5201	58	07/26/89	0.469	78.10 >	320.00 >	4.10 >	4.10 >	21.90

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
5033	48	02/28/89	0.539	55.60	150.00	2.70	1.10	21.68
5230	52	03/15/89	0.847	72.70	259.00	3.56	1.23	21.64
5262	52	03/21/89	0.679	7.38	226.00	30.60	14.90	21.37
4871	46	01/17/89	0.904	44.60 >	320.00 >	7.17	4.23	21.31
3169	29	05/16/89	0.521	8.13	98.70	12.10	8.04	20.60
5251	52	03/14/89	0.643	24.60	55.00	2.24	1.32 >	20.48
4985	51	03/14/89	0.680	3.05	149.00	48.70	20.60	20.36
4809	46	01/17/89	1.026	42.50	301.00	7.07	3.53 >	20.27
3064	28	04/21/89	0.576	5.03	22.90	4.56	3.28	20.24
4459	45	11/23/88	0.620	76.00 >	320.00 >	4.21 >	4.21 >	20.21
0206	5	05/10/89	0.699	84.40 >	320.00 >	3.79 >	3.79 >	19.78
5558	53	03/28/89	0.940	13.90	58.50	4.20	2.71 >	19.49
4107	37	02/24/89	0.226	0.30 >	0.32 >	1.08 >	1.08 >	19.43
5450	53	04/12/89	1.091	4.47	27.40	6.14	3.57 >	19.39
1654	46	01/24/89	0.803	6.23 >	320.00 >	51.30	1.06 >	19.28
5040	45	03/01/89	1.066	61.60 >	320.00 >	5.20 >	5.20 >	19.13
5869	60	11/03/89	0.722	133.00 >	320.00 >	2.41 >	2.41 >	18.81
5855	60	11/03/89	0.798	83.10 >	320.00 >	3.85 >	3.85 >	18.47
0148	2	08/23/89	0.646	0.66 >	3.20 >	4.86	4.61 >	18.23
4241	46	01/24/89	0.976	3.99	23.20	5.81	3.51 >	18.23
4715	43	12/13/88	0.809	212.00 >	320.00 >	1.51 >	1.51 >	18.14
5131	56	06/27/89	0.790	2.21	21.10	9.57	7.00 >	18.02
5069	48	03/01/89	0.828	52.30	181.00	3.46	1.87	17.90
5643	57	08/16/89	0.753	52.70	280.00	5.32	3.61	16.92
3168	29	05/16/89	0.521	3.02 >	100.00 >	33.10 >	33.10 >	16.63
0519	52	03/15/89	0.721	65.70	186.00	2.83	1.59 >	16.54
3588	32	04/19/89	0.706	15.90	63.50	3.99	2.44 >	16.51
5501	53	04/18/89	0.818	3.08	65.30	21.20	15.60 >	16.20
5072	48	03/01/89	1.023	22.60	159.00	7.01	3.23 >	16.07
2604	19	12/21/88	0.791	25.50 >	100.00 >	3.91 >	3.91 >	16.02
4222	48	02/08/89	0.691	155.00 >	320.00 >	2.07 >	2.07 >	15.77
4995	51	03/14/89	0.838	6.03	18.60	3.09	1.12	15.77
4860	48	02/21/89	0.444	285.00 >	320.00 >	1.12 >	1.12 >	15.55
4527	47	02/01/89	1.121	5.01	24.70	4.92	2.31 >	15.02
5035	48	02/28/89	0.702	6.66	21.50	3.23	1.35	14.70
1980	27	05/16/89	0.385	2.59 >	100.00 >	38.50	28.30	14.44
6031	61	11/09/89	0.746	82.30	262.00	3.18	2.20	14.42
5485	53	03/28/89	0.768	5.14	20.20	3.92	2.74	14.39
6249	1P	11/14/89	0.925	72.50	269.00	3.71	2.55	14.05
4415	44	03/29/89	0.597	28.70	58.30	2.03	1.15	13.97
4853	48	02/22/89	0.454	1.73	1.72	4.46	2.52 >	13.74
1774	56	06/14/89	0.779	300.00 >	320.00 >	1.07 >	1.07 >	13.43
4795	46	01/12/89	0.885	69.00	275.00	3.99	2.16	13.19
4825	48	02/14/89	0.475	68.40	240.00	3.51	1.57	12.84
2151	52	03/15/89	0.881	80.90	314.00	3.88	1.82	12.14
1736	45	11/16/88	0.665	82.10 >	320.00 >	3.90	3.63 >	12.01
5329	53	04/11/89	0.710	320.00 >	320.00 >	1.00	0.72 >	11.99
6041	61	11/09/89	0.668	282.00 >	320.00 >	1.13 >	1.13 >	11.64
5500	53	04/18/89	0.818	1.90	6.44	3.38	2.34 >	11.57
3112	28	04/25/89	0.854	8.70	19.00	2.19	1.38 >	11.29
5136	57	07/11/89	0.606	81.90	210.00	2.56	1.89	10.99
5452	53	04/18/89	0.693	5.47	18.30	3.34	1.08 >	10.97
2573	57	06/27/89	0.531	286.00 >	320.00 >	1.12 >	1.12 >	10.54
0002	46	01/24/89	0.760	187.00 >	320.00 >	1.71 >	1.71 >	10.46

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
5538	56	08/09/89	0.658	256.00	663.00	2.59	1.92	9.41
5448	53	04/12/89	1.092	5.82	19.80	3.41	1.34	9.08
4590	48	03/01/89	0.998	2.55	5.98	2.34	1.07 >	8.63
5539	56	08/09/89	0.658	2.30	7.32	3.18	2.14	8.62
4800	46	01/17/89	0.966	245.00 >	320.00 >	1.31 >	1.31 >	8.45
5503	53	04/18/89	0.553	30.00	162.00	5.39	2.82	8.43
3374	31	12/20/88	0.993	84.40 >	100.00 >	1.18 >	1.18 >	8.37
1750	45	11/23/88	0.722	202.00 >	320.00 >	1.58 >	1.58 >	8.26
4383	43	12/14/88	0.669	194.00 >	320.00 >	1.65 >	1.65 >	8.17
3550	31	03/29/89	0.895	94.70 >	100.00 >	1.06 >	1.06 >	7.99
3560	31	03/29/89	0.895	279.00 >	320.00 >	1.15	0.64 >	7.60
3425	32	04/19/89	0.515	30.50	46.90	1.54	0.83	7.45
3565	32	04/05/89	0.704	7.79	19.40	2.49	1.65	7.06
5557	53	03/28/89	0.847	2.07	5.56	2.68	1.59 >	7.06
4424	44	03/29/89	0.789	30.00	60.60	2.02	1.07 >	6.96
5525	56	06/14/89	0.854	270.00 >	320.00 >	1.18 >	1.18 >	6.38
3107	28	04/25/89	0.873	28.00	38.20	1.37	0.77 >	6.11
3561	31	03/29/89	0.919	300.00 >	320.00 >	1.07 >	1.07 >	4.87
3098	28	04/25/89	0.868	28.30	42.60	1.50	0.82 >	4.79
5506	53	04/18/89	0.689	31.30	59.50	1.90	1.26	4.42
1019	28	08/23/89	0.691	0.90 >	1.00 >	1.11 >	1.11 >	4.41
5459	54	05/05/89	0.561	9.57	24.90	2.60	1.16 >	4.09
2503	53	04/11/89	0.689 <	1.00	4.40 >	4.40 >	1.82 >	3.91
3110	28	04/25/89	0.953	25.20	46.30	1.84	0.99 >	3.87
5483	53	03/28/89	0.732 <	1.00	5.34 >	5.34 >	2.24 >	3.54
5003	45	03/01/89	1.112	305.00 >	320.00 >	1.05 >	1.05 >	3.53
3589	32	04/19/89	0.706	26.10	30.80	1.18	0.78	3.04
6243	1P	11/14/89	0.803	840.00 >	1000.00 >	1.19	1.14 >	2.85
2318	53	04/11/89	0.701 <	1.00	3.65 >	3.65 >	1.50 >	2.76
5005	45	03/01/89	1.078	320.00 >	320.00 >	1.00 >	1.00 >	2.48
5317	53	04/11/89	0.808	283.00 >	320.00 >	1.13 >	1.13 >	2.40
4431	44	04/05/89	0.900	28.10	47.80	1.70	0.76	2.26
4442	44	04/05/89	0.753	8.85	15.30	1.73	0.47	1.86
3305	30	11/17/88	0.727	277.00 >	320.00 >	1.15	0.78 >	1.50
5318	53	04/11/89	0.808	218.00 >	320.00 >	1.46 >	1.46	0.85
3101	28	04/25/89	0.847	32.00	39.40	1.23	0.66 >	0.66
5405	53	03/28/89	0.816 <	1.00	1.73 >	1.73 ~	1.00 >	0.62
4609	48	03/01/89	0.979 <	0.32	0.60 >	1.88 ~	1.00 >	0.45
3105	28	04/25/89	0.861	32.00	35.90	1.12	0.67	0.24

Drugs with 25% Antiviral Reduction Levels: Two hundred fifty-one other (different) compounds were moderately active reaching better than 25% antiviral reduction values. The list of these compounds is summarized in Table 11. Two hundred fifty-one out of 1992 represent a total of 13% active compounds in this activity category. The highest TAI in this category is for the compounds AVS-5250, 4857, 4862, 5248, 5561, 4428, 5486, 5562, 5517, 5627, 4824, 5052 and 4828, which reached total antiviral effects ranging from 20-36%. The other 238 active compounds demonstrated TAI's from 0 - 19%. In general, the compounds in this category do not appear to have any significant antiviral effect and probably do not need to be presently confirmed further.

Table 11
 AVS Compounds Active Against PT at AI₂₅ Level

<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>
0227	3111	4419	4915	5180	5548
0230	3113	4420	4918	5192	5559
0346	3114	4421	4920	5193	5560
0347	3122	4422	4937	5199	5561
1116	3141	4426	4951	5203	5562
1117	3142	4428	4955	5204	5611
1213	3152	4432	4960	5219	5621
1337	3170	4433	4973	5235	5626
1392	3171	4434	4976	5243	5627
1645	3184	4436	4984	5246	5640
1735	3303	4439	4987	5247	5654
1741	3304	4440	4988	5248	5693
1742	3421	4441	4990	5250	5695
1743	3422	4476	4991	5263	5699
1746	3423	4524	4992	5270	5704
1801	3424	4709	4993	5272	5724
1976	3426	4716	4996	5274	5852
2003	3429	4711	5004	5283	5853
2122	3430	4774	5007	5299	5857
2274	3493	4794	5008	5305	5859
2344	3545	4813	5009	5306	5863
2363	3546	4819	5038	5307	5867
2606	3548	4821	5050	5310	6015
2702	3552	4824	5052	5312	6022
2703	3558	4828	5059	5314	6027
2707	3559	4837	5064	5319	6029
2716	3567	4838	5066	5321	6032
2920	3575	4841	5068	5339	6034
2921	3576	4852	5070	5341	6037
2922	3577	4854	5071	5342	6038
2960	3587	4856	5098	5344	6245
2978	3679	4857	5099	5373	6246
3002	4026	4858	5124	5449	6247
3086	4074	4859	5130	5453	6248
3087	4079	4862	5132	5482	6250
3095	4381	4864	5140	5486	6251
3096	4388	4873	5147	5490	6252
3099	4394	4875	5154	5510	6253
3103	4395	4887	5156	5512	6255
3104	4416	4891	5157	5513	6256
3106	4417	4895	5165	5517	6258
3108	4418	4908	5176	5532	

4.1.4.3. Confirmatory Assays:

Some of the compounds were sent to us in more than one separate drug shipment. These compounds were tested more than once. Data from the confirmatory assays are summarized in Table 12. If a compound showed $\geq 50\%$ reduction in CPE during this reporting period, then it is considered a candidate for confirmatory test. Out of 49 confirmatory tests, 35 compounds (71%) were confirmed active during this reporting period and the remaining 9 compounds gave conflicting results. The criteria for activity is that the confirmatory test has to show $\geq 25\%$ reduction in CPE. Failure to confirm the activity in these compounds was probably due to differences during the assay conditions:

- 1) In confirmatory assays the concentration range is adjusted to a more accurate semilog scale to maximize the TAI window.
- 2) Differences in the "differential" of the two runs can cause the compound to read positive or negative, falsely. The variability in the differential can cause false positives or false negative bias in day-to-day testing calculations, reflecting the variability in the maximum activity of the compound.
- 3) The metabolic rate, age, and passage number, etc., of the cells may cause the above observed variability in test compound activity.

During this reporting period the overall confirmatory rate against PT was 71%. The conflicting results will be retested at a later date based upon the availability of the compound.

4.1.4.4 Recommendations of PT-Actives Based Upon the *In Vitro* Results with MTT Assay (Vero Cells).

Based upon the *in vitro* results with the MTT assay (Vero cells) we recommend the following:

- 1) Compounds with the highest TAI in the 95% activity category that have confirmed results with the exception of "colored" compounds should receive the highest priority for further profile studies and *in vivo* animal testing.
- 2) Compounds with the highest TAI in the 50% activity category that have confirmed results with the exception of "colored" compounds should receive the next highest priority for further profile studies and *in vivo* animal testing.

Table 12

Confirmatory Assays for Compounds Active Against Punta Toro Virus

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₅₀	IC ₉₀	IC ₉₅	IC ₉₅	AI ₉₀	AI ₉₅	SI	TAI	Assay Type	Act-ivity
0065	2	10/23/86	NA	10	16	-10	-	10	0.6	0.1	2.0	2.0*	CPE	+
	53	03/28/89	0.818	-	-	>7.5	-	>100	-	-	-	4.20	MTT	-
0095	2	10/23/86	NA	10	16	-320	-	320	20	3.2	6.2	1.9*	CPE	+
	2	05/20/88	NA	-	-	>320	-	>320	-	-	-	0.0*	CPE	-
	46	01/24/89	0.788	-	-	237	-	>320	-	-	-	4.20	MTT	-
0206	5	10/28/86	NA	-32	43	>320	-	>320	7.4	1.0	>7.4	2.7*	CPE	+
	5	10/30/86	NA	-32	57	>320	-	>320	5.6	1.0	5.7	1.4*	CPE	+
	5	05/10/89	0.699	46	84	>320	-	>320	3.8	-	3.8	>19.78	MTT	+
0272	1	10/03/86	NA	-0.32	1.0	-100	-	100	100	10	3.2	2.3*	CPE	+
	1	06/01/88	NA	0.32	0.5	>10	-	>10	20	3.1	2.0	2.0*	CPE	+
	41	05/10/89	0.699	-	-	0.87	-	>100	-	-	-	>0.07	MTT	-
0360	48	02/07/89	0.992	0.02	0.04	0.4	-	2.9	11	32	4.5	>28.15	MTT	+
	2	08/23/89	0.736	0.06	-	0.3	-	1.0	-	-	-	6.96	MTT	+
0361	2	12/21/87	NA	-0.1	0.2	>0.32	-	>0.32	1.7	-	>1.6	1.1*	CPE	+
	2	03/01/88	NA	-0.032	0.04	0.32	-	-0.32	8	3.2	2.4	1.0*	CPE	+
	48	02/07/89	0.911	0.01	0.01	0.08	-	0.58	5.8	19	3.9	>21.60	MTT	+
	2	08/23/89	0.735	-	-	0.08	-	0.29	-	-	-	>0.60	MTT	-
1215	27	08/28/87	NA	-32	69	>320	-	>320	4.6	-	1.4	1.0*	CPE	+
	53	03/28/89	0.731	2.0	30	218	-	>320	7.2	-	3.8	>31.88	MTT	+
	27	08/29/89	0.525	-	-	188	-	>320	-	-	-	0.00	MTT	-
1654	46	01/24/89	0.803	2.9	6.2	>320	-	>320	>51	-	1.1	>19.28	MTT	+
	53	08/29/89	0.527	42	-	>320	-	>320	-	-	-	7.15	MTT	+
1774	56	06/14/89	0.779	173	300	>320	-	>320	>1.1	-	1.1	>13.43	MTT	+
	56	08/08/89	0.650	211	-	>320	-	>320	-	-	-	>7.23	MTT	+
1841	53	03/28/89	0.767	3	8.8	>320	-	>320	>36	-	30	>40.04	MTT	+
	33	08/29/89	0.567	-	-	>320	-	>320	-	-	-	>0.03	MTT	-

Table 12 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₅₀	IC ₉₀	IC ₉₅	IC ₉₅	AI ₉₅	AI ₉₀	AI ₆₀	AI ₂₅	IC ₂₅	IC ₅₀	IC ₉₀	IC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
1850	53	04/11/89	0.595	0.8	9.7	>100	-	>100	-	>10	>10	88	73	>100	9.7	>100	-	7.5	>32.53	MTT	+
	32	08/29/89	0.489	-	-	>100	-	>100	-	-	-	-	75	>100	-	-	-	-	>4.32	MTT	-
1992	56	06/14/89	0.870	35	58	>320	-	>320	-	>5.5	>320	6.9	241	>320	58	>320	-	4.2	25.78	MTT	+
	56	08/08/89	0.594	43	67	433	-	943	-	6.4	943	5.6	238	433	67	943	-	3.5	11.19	MTT	+
2275	12	12/18/86	NA	10	41	>320	-	>320	-	>7.8	>320	32	320	>320	41	>320	-	7.8	2.1*	CPE	+
	53	04/11/89	0.743	4.0	39	295	9.1	>320	>3.5	7.6	>320	39	155	>320	39	>320	-	4.0	>35.79	MTT	+
	12	08/30/89	0.581	18	31	215	-	>320	-	7.0	>320	7.2	125	215	31	>320	-	4.1	14.04	MTT	+
2309	11	03/02/87	NA	~3.2	8.2	>320	~100	>320	>3.2	>39	>320	31	100	>320	8.2	>320	-	12	3.3*	CPE	+
	11	08/21/87	NA	~3.2	5.9	>320	-	>320	-	36	>320	100	320	>320	5.9	>320	-	36	2.9*	CPE	+
	53	04/11/89	0.701	3.6	5.3	>320	17	>320	>19	>61	>320	79	280	>320	5.3	>320	-	53	>65.81	MTI	+
2318	13	12/30/86	NA	~0.32	0.73	>320	~1.0	>320	>320	438	>320	10	3.2	>320	0.73	>320	-	4.4	4.4*	CPE	+
	53	04/11/89	0.701	<1	<1	3.7	-	>320	-	>3.7	>320	>1.5	1.5	3.7	<1	>320	-	>1.5	>2.76	MTT	+
	13	08/30/89	0.608	0.6	-	8	-	>10	-	-	-	3.8	2.2	8	-	>10	-	-	4.86	MTT	+
2320	13	12/31/86	NA	3.2	18	32	-	320	-	1.8	320	10	32	32	18	320	-	1.8	1.8*	CPE	+
	53	04/11/89	0.689	1.4	2.6	172	-	315	-	67	172	68	94	172	2.6	315	-	37	>52.20	MTT	+
	13	08/30/89	0.608	18.6	-	166	-	313	-	-	166	3.1	58	166	-	313	-	-	1.77	MTT	+
2563	48	02/07/89	1.002	0.2	0.39	>3.2	0.91	>3.2	>3.5	>8.1	>3.2	8.5	1.8	>3.2	0.39	>3.2	-	4.5	>28.54	MTT	+
	15	05/23/89	0.724	-	-	7.5	-	>32	-	-	-	-	5.3	7.5	-	>32	-	-	0.12	MTT	-
2716	22	05/27/89	NA	1.0	27	~100	32	100	3.1	37	100	10	10	~100	27	100	-	3.7	2.0*	CPE	+
	22	05/25/88	NA	~3.2	7.2	>32	-	>32	-	>4.4	>32	3.1	10	>32	7.2	>32	-	1.4	1.0*	CPE	+
	46	01/24/89	0.976	26	-	30	-	93	-	-	30	0.4	11	30	-	93	-	-	2.16	MTT	+
2812	32	03/01/88	NA	~0.003	0.007	~0.032	-	0.032	-	4.6	~0.032	10	0.03	~0.032	0.007	~0.032	-	4.6	1.0*	CPE	+
	48	02/07/89	0.837	0.002	0.003	>0.01	0.009	>0.01	>1.1	>2.9	>0.01	>5.3	>0.01	>0.01	0.003	>0.01	-	>2.9	>19.35	MTT	+
2906	53	04/11/89	0.593	43	57	261	95	>320	>3.4	4.6	>320	3.3	142	261	57	>320	-	2.5	21.14	MTT	+
	26	09/07/89	0.807	-	-	194	-	>320	-	-	-	-	51	194	-	>320	-	-	1.52	MTT	-

Table 12 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₃₅	AL ₃₅	IC ₅₀	IC ₆₀	IC ₉₅	AL ₉₅	IC ₉₅	IC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
2979	48	02/08/89	0.729	1.6	1.8	1.1	-	3.8	-	-	27	-	-	-	3.15	MTT	+
	27	04/19/89	0.515	3.3	6.4	2.0	4.7	9.6	9.3	2.0	93	10	1.4	1.4	14.81	MTT	+
	25	09/07/89	0.572	8.7	6.4	0.73	-	13.5	-	-	100	-	-	-	0	MTT	+
2980	25	12/21/87	NA	<0.32	3.2	>10	0.3	~32	3.2	~107	32	10	10	10	2.8*	CPE	+
	25	03/01/89	NA	~0.32	3.2	10	0.4	~3.2	1.0	~8	3.2	3.2	3.2	7.7	1.5*	CPE	+
	25	05/25/88	NA	~0.32	1.0	~3.1	0.4	~10	1.0	~25	10	10	10	2.7	1.7*	CPE	+
	48	02/08/89	0.686	0.42	>3.2	>7.6	0.8	>3.2	2.8	>4.1	>3.2	>1.2	>4.1	>4.1	>23.21	MTT	+
	48	09/07/89	0.532	0.4	1.3	3.2	0.6	2.0	-	3.4	10	-	-	2.1	11.88	MTT	+
3425	32	04/19/89	0.515	16.6	25	1.5	31	47	-	1.5	95	-	-	0.8	7.45	MTT	+
	32	04/21/89	0.947	14.3	21	1.5	-	35	-	-	94	-	-	-	4.46	MTT	+
3450	32	04/19/89	0.716	11	26	2.5	15	49	30	3.2	96	3.2	1.7	1.7	15.85	MTT	+
	32	04/21/89	0.873	10	49	4.9	26	66	-	2.5	97	-	1.9	1.9	>15.28	MTT	+
3565	32	04/05/89	0.704	5.0	13	2.6	7.8	19	-	2.5	31	-	-	1.7	7.06	MTT	+
	32	04/19/89	0.769	-	>0.32	-	-	>0.32	-	-	>0.32	-	-	-	2.66	MTT	-
3586	32	11/03/88	0.555	-	>3.2	-	-	>3.2	-	-	>3.2	-	-	-	0.00	MTT	-
	32	04/19/89	0.711	4.6	2.1	0.46	7.7	229	29	29.8	>320	>11	0.27	0.27	37.49	MTT	+
3588	32	11/03/88	0.614	-	11	-	-	32	-	-	>100	-	-	-	0.62	MTT	-
	32	04/19/89	0.706	7.2	39	5.4	16	64	-	4.0	276	-	2.4	2.4	>16.51	MTT	+
3589	32	11/03/88	0.614	-	21	-	-	66	-	-	>100	-	-	-	0.00	MTT	-
	32	04/19/89	0.706	14.7	20	1.4	26	31	-	1.2	222	-	0.78	0.78	3.04	MTT	+
3592 ABE	51	01/12/89	1.001	22	104	4.8	84	184	-	2.2	328	-	-	1.2	>19.63	MTT	+
	51	03/07/89	0.859	8.6	189	22	28	>320	89	>12	>320	>3.6	6.8	6.8	35.74	MTT	+
3964	33	03/01/89	0.887	>0.06	38	5.4	12	77	-	6.4	148	-	-	3.1	>14.28	MTT	+
	33	03/22/89	0.706	0.54	12	23	2.7	25	-	9.2	>32	-	4.6	4.6	>22.98	MTT	+
4070	35	04/12/88	NA	<0.32	3.2	10	1.5	~32	10	~21	32	3.2	2.1	2.1	1.85*	CPE	+
	48	02/08/89	0.678	1.1	>3.2	>3.1	1.5	>3.2	3.0	>2.1	>3.2	>1.1	>2.1	>2.1	>14.01	MTT	+

Table 12 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₂₅	AI ₂₅	iC ₅₀	IC ₅₀	AI ₅₀	IC ₉₅	IC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
4240	39	05/11/88	NA	~3.2	32	~10	8.5	~100	~12	32	100	3.1	3.7	1.4*	CPE	+
53	04/11/89	0.615	4.1	8.8	2.2	5.5	17	3.0	3.0	94	31	3.3	1.6	15.74	MTT	+
4241	39	05/11/88	NA	~3.2	10	~3.1	4.9	~100	~20	32	100	3.1	2.0	1.5*	CPE	+
46	01/24/89	0.976	1.6	14	8.6	4.0	23	5.8	5.8	-	87	-	3.5	>18.24	MTT	+
4424	44	10/11/88	NA	~32	100	~31	69	100	1.4	-	>320	-	1.5	1.1*	CPE	+
44	03/29/89	0.789	17	32	1.9	30	61	2.0	2.0	-	>100	-	1.1	>6.96	MTT	+
4452	44	07/07/89	0.691	41.6	204	4.9	57	308	5.4	100	>320	>3.2	3.6	17.09	MTT	+
44	08/16/89	0.768	38	145	3.9	63	270	4.3	4.3	-	>320	-	2.3	10.02	MTT	+
5121	56	07/03/89	0.817	5.2	108	21	12	179	15	-	306	-	8.8	>26.06	MTT	+
56	08/08/89	0.576	9.2	155	17	27	210	7.8	7.8	-	309	-	5.7	>18.62	MTT	+
5128	56	06/27/89	0.588	5.4	16	2.9	10	21	2.1	-	31	-	1.6	9.53	MTT	+
56	08/15/89	0.565	-	15	-	-	-	21	-	-	31	-	-	0.00	MTT	-
5136	57	07/11/89	0.606	40	155	3.9	82	210	2.6	-	309	-	1.9	10.99	MTT	+
57	08/15/89	0.519	-	7.1	-	-	-	145	-	-	303	-	-	0.00	MTT	-
5137	57	07/11/89	0.554	4.8	155	33	28	210	7.5	89	309	3.5	5.5	>36.88	MTT	+
57	08/16/89	0.771	54	108	2.0	92	179	2.0	2.0	-	306	-	1.2	3.52	MTT	+
5138	57	07/11/89	0.554	10	>320	>32	31	>320	>11	89	>320	>3.6	>11	>44.37	MTT	+
57	08/16/89	0.771	58	530	9.2	105	740	7.1	7.1	286	>1000	>3.5	5.1	24.34	MTT	+
5186	58	07/25/89	0.362	45	296	6.6	64	>320	>5.0	-	>320	-	4.7	16.09	MTT	+
58	10/04/89	0.588	20	394	20	38	763	20	20	-	>1000	-	10	29.76	MTT	+
5459	54	05/05/89	0.561	5.5	11	2.0	9.6	25	2.6	-	92	-	1.2	>4.09	MTT	+
54	06/07/89	0.662	-	5.4	-	-	-	12	-	-	88	-	-	0.00	MTT	-
5520	56	06/14/89	0.914	132	>320	>2.5	236	>320	>1.4	-	>320	-	>1.4	>9.91	MTT	+
56	08/08/89	0.624	-	9.3	-	-	-	65	-	-	272	-	-	0.00	MTT	-

Table 12 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₂₅	AI ₂₅	IC ₅₀	IC ₅₀	AI ₅₀	IC ₉₅	IC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
5525	56	06/14/89	0.854	147	>320	>2.2	270	>320	>1.2	-	>320	-	>1.2	>6.38	MTT	+
	56	08/08/89	0.606	-	188	-	-	310	-	-	942	-	-	0.00	MTT	-
5538	56	06/14/89	0.725	207	>320	>1.6	-	>320	-	-	>320	-	-	>16.01	MTT	+
	56	08/09/89	0.658	146	492	3.4	256	663	2.6	-	973	-	1.9	9.41	MTT	+
5539	56	06/14/89	0.821	-	0.7	-	-	7.5	-	-	100	-	-	0.04	MTT	-
	56	08/09/89	0.658	1.5	4.9	3.3	2.3	7.3	3.2	-	90	-	2.1	8.62	MTT	+
5546	56	06/14/89	0.398	1.4	>320	>230	2.1	>320	>151	8.0	>320	>40	>151	60.74	MTT	+
	56	08/09/89	0.759	-	518	-	-	715	-	-	>1000	-	-	1.06	MTT	-
5643	57	07/06/89	0.799	69	>320	>4.6	-	>320	-	-	>320	-	-	>9.80	MTT	+
	57	08/16/89	0.753	20	190	9.8	53	280	5.3	-	>320	-	3.6	16.92	MTT	+
5691	57	07/19/89	0.548	43	>320	>7.5	57	>320	>5.7	95	>320	>3.4	>5.7	>28.90	MTT	+
	57	08/16/89	0.753	118	188	1.6	-	471	-	-	>1000	-	-	0.88	MTT	+

* = This value is a virus rating (VR) rather than a TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound similar to TAI. TAI is more accurate with MTT measurements.

DIFRNTL = The differential is the difference in the cell control and the virus control optical densities.

IC_{25,50,95} = (Viral) Inhibitory Concentration 25%, 50%, and 95% = The drug concentration (μg/ml) that inhibited viral CPE by 25%, 50% or 95% calculated by using a regression analysis program for semilog curve fitting.

TC_{25,50,95} = (Cell) Toxicity Concentration 25%, 50%, and 95% = The drug concentration (μg/ml) that reduced cell viability by 25%, 50%, or 95%.

AI_{25,50,95} = Antiviral Index = A single point ratio of the antiviral and anticeellular effect of the compound, calculated with 25%, 50% or 95% reduction values (calculated by dividing the TC_{25,50, or 95} by the IC_{25,50, or 95}).

SI = Selectivity Index = A ratio calculated by dividing the TC₂₅ by the IC₅₀(Based upon 6 one-half-log₁₀ dilutions, μg/ml, the maximum scale is 0-320).

TAI = Total Antiviral Index = The area between the cytotoxicity and the antiviral curves (based upon a scale of 0-100%).

NA = Not Applicable.

4.1.5 Sandfly Fever Virus (SF)

The total output of SF testing during this reporting period is summarized in monthly increments in Figure 16. During this 12-month period 2154 tests were performed against the SF virus with the MTT-assay format. Out of these, 188 were control compound assays, Ribavirin (AVS-0001) being the positive control compound. Ninety-three tests were internal (+ + +) virus load and cell load quality control tests. The rest, totaling 1873, were actual single dose assays. The total number of assays (2154) represents a 140% increase (improvement) in total testing output during this year as compared to the output of the results from the previous year.

Out of the 1873 single drug assays, 443 different compounds demonstrated antiviral activity at greater than 25% reduction levels. This represents around 24% of the tested compounds having *in vitro* antiviral activity against SF virus. The remainder, 1430 compounds (76%), are to be considered inactive with this assay protocol. The larger number of active compounds against the SF virus can be partially explained by the synergistic or additive effects of Dextran pretreatment.

TOTAL NUMBER OF TESTS AGAINST SANDFLY FEVER VIRUS (SF)

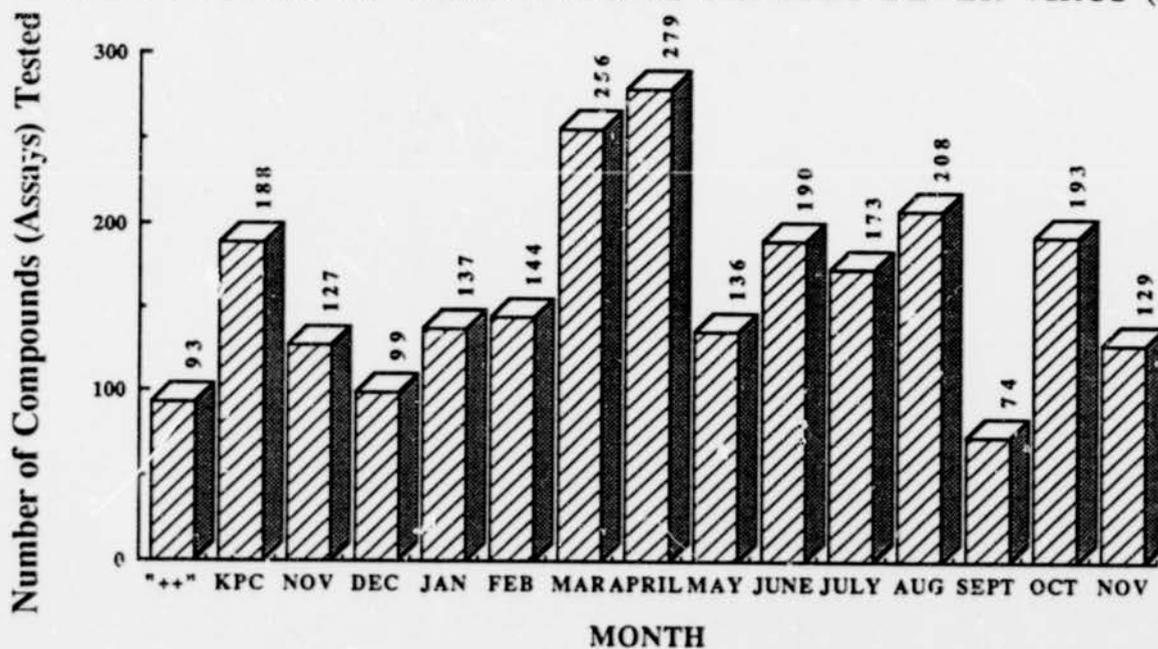


Figure 16

Test Total = 2154

KPC (Positive Control Compound, Ribavirin) = 188

"++" (Internal Virus and Cell Load) = 93

4.1.5.1 SF-Quality Controls:

4.1.5.1.1 Antiviral Activity:

SF-Control Compound-Antiviral Performance: Ribavirin (AVS-0001) has been the sole control compound against SF in these MTT assay screens. The mean and median antiviral inhibition and cytotoxicity patterns of the positive control drug (Ribavirin) are illustrated in Figures 17-A and 17-B. The 188 control tests performed with Ribavirin gave a mean **Total Antiviral Index (TAI)** of 34.62 (SD \pm 14.47) and the median value was 33.95%. The mean **Selectivity Index (SI)** was 16.81(SD \pm 30.82) and the median SI value was 9.93, indicating a poor antiviral selectivity. The closeness of the mean and median values indicate that the present execution of the SOP is consistent and repeatable.

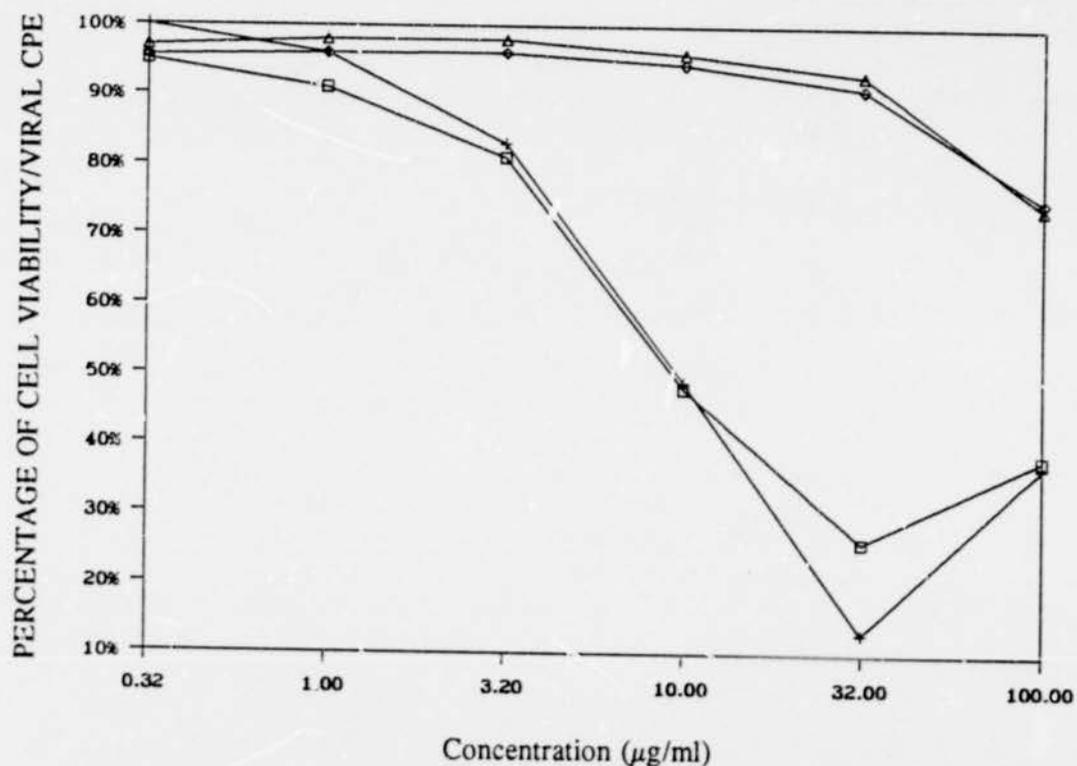
The mean **Antiviral Index 25% (AI₂₅)** value was 48.31 (SD \pm 67.97). The median AI₂₅ value was 24.13. The mean **Antiviral Index 50% (AI₅₀)** was 20.92 (SD \pm 31.36) with a median of 13.40. The mean Antiviral Index (AI₉₅) was 2.25 (SD \pm 4.43) with a median value of 0. This indicates that Ribavirin does not consistently reach 95% antiviral reduction levels. The closeness of the mean and median values indicate that the present execution of the SOP is consistent and repeatable.

The mean **Antiviral Inhibitory Concentration 25% (IC₂₅)** was 4.64 μ g/ml (SD \pm 3.57). The median IC₂₅ value was 3.96 μ g/ml. The mean **Antiviral Inhibitory Concentration 50% (IC₅₀)** was 10.39 μ g/ml (SD \pm 9.48). The median IC₅₀ value was 8.66 μ g/ml. The mean Antiviral Inhibitory Concentration 95% (IC₉₅) was 10.93 μ g/ml (SD \pm 16.75). The median IC₉₅ value was 0 μ g/ml. This discrepancy indicates that the control compound Ribavirin does not consistently reach 95% reduction levels. The highest starting concentration (100 μ g/ml) Ribavirin has been readjusted during the latter part of the year to 320 μ g/ml.

A bar graph scatter plot (Figure 18) depicts the distribution of the maximum antiviral reduction values of all 188 control compound assays for Ribavirin. The results indicate that the average, maximum antiviral reduction obtained with the present SOP is around 85.23 (SD \pm 17.22) reduction levels. The maximum reduction levels vary from 0 - 100% but remain quite consistently around the median of 88.5%. The assay control values give a shifted, bell-shaped curve toward maximum 100% reduction levels. This indicates a quite consistent day-to-day performance of the control compound in the SF-MTT assay.

Ribavirin is active *in vitro* against the SF virus and functions as a reasonable quality control compound. On the other hand, regardless of the performance of the SF quality control drug, ribavirin, around 205 other compounds have equal or better antiviral activity against SF virus than AVS-0001. (See 95% and 50% reduction summaries).

RIBAVIRIN - VS - SANDFLY FEVER VIRUS (SF)



□ Mean %
Reduction

+ Median
Reduction

◇ Mean %
Reduction

△ Median %
Reduction

% Viral CPE

% Cell Viability

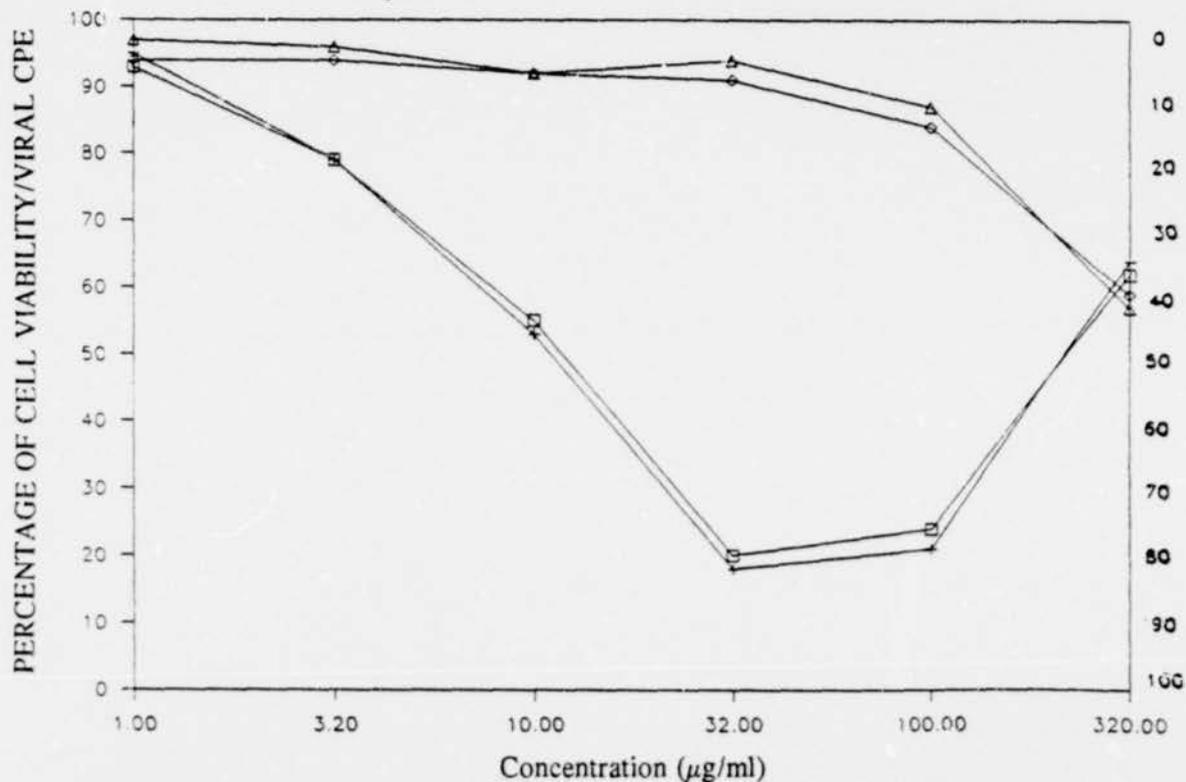
Conc. (µg/ml)	% Viral CPE						% Cell Viability					
	0.32	1	3.2	10	32	100	0.32	1	3.2	10	32	100
Mean	95	91	81	48	26	38	96	96	96	94	91	75
Median	100	96	83	49	13	37	97	98	98	96	93	74
Std. Dev.	.12	.12	.16	.24	.20	.21	.05	.07	.05	.07	.10	.15
Variance	.01	.01	.02	.06	.04	.05	.00	.01	.00	.00	.01	.02

Figure 17-A

Average Antiviral and Cytotoxicity Values for 136 Positive Control Compound Assays

RIBAVIRIN - VS - SANDFLY FEVER VIRUS (SF)

Readjustment of the Concentration of Ribavirin



□ Mean %
Reduction

+ Median
Reduction

◇ Mean %
Reduction

△ Median %
Reduction

% Viral CPE

% Cell Viability

Conc. (µg/ml)	1	3.2	10	32	100	320	1	3.2	10	32	100	320
Mean	93	79	55	20	24	62	94	94	92	91	84	59
Median	95	79	53	18	21	64	97	96	92	94	87	57
Std. Dev.	.07	.12	.18	.17	.21	.13	.07	.07	.07	.11	.15	.14
Variance	.00	.01	.03	.03	.04	.02	.00	.00	.00	.01	.03	.02

Figure 17-B

Average Antiviral and Cytotoxicity Values for 52 Positive Control Compound Assays

VARIATION OF THE MAXIMUM ANTIVIRAL EFFECT, SF VIRUS-VS-RIBAVIRIN

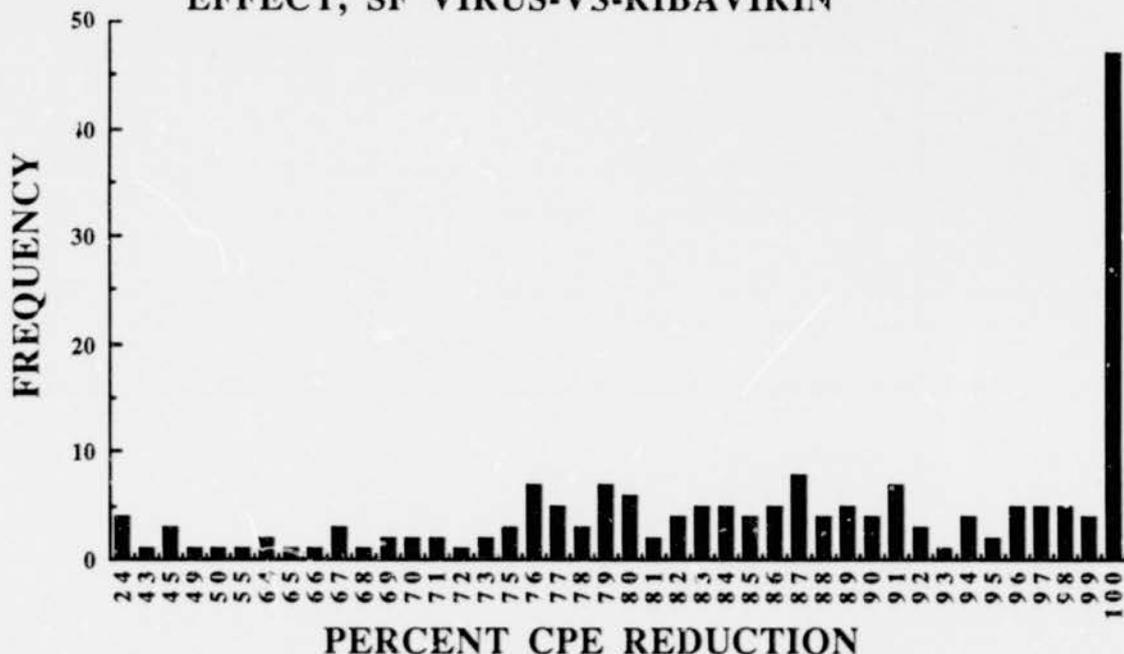


Figure 18

Maximum Antiviral CPE Reduction (%). Summary of 188 Control Compound Tests

4.1.5.1.2. Cellular Cytotoxicity

SF-Control Compound-Cytotoxicity Performance: The 188 cytotoxicity values of the positive control compound ribavirin are also very consistent. The mean cell Toxic Concentration (TC_{25}) is $110.10 \mu\text{g/ml}$ ($SD \pm 71.25$) and the median was $100 \mu\text{g/ml}$. The mean cell Toxic Concentration 50% (TC_{50}) value was 153.57 ($SD \pm 92.41$) and the median was $100 \mu\text{g/ml}$. The mean cell Toxic Concentration (TC_{95}) was 160.75 ($SD \pm 97.96$) and the median was $100 \mu\text{g/ml}$. As can be seen from Figure 17-A or 17-B, the cytotoxicity becomes measurable above $32 \mu\text{g/ml}$ concentration. The maximum cytotoxicity has not been reached at $320 \mu\text{g/ml}$. Further increase of the concentration of ribavirin is needed to properly evaluate the maximum cytotoxicity of ribavirin.

The evaluation of the graph in Figures 17-A and 17-B indicates that when the cytotoxicity reaches around 10% ($32\text{-}100 \mu\text{g/ml}$), the control compound has reached its maximum antiviral effect (80%). The cytotoxic effect of ribavirin is insignificant between 1 and 100. The average cytotoxicity reached 40% at $320 \mu\text{g/ml}$, which is the highest concentration tested.

Ribavirin has a definite cytotoxic suppression on cellular metabolism and growth. However, the TC_{25} and TC_{50} toxicity could not be consistently achieved with the $100 \mu\text{g/ml}$ concentration of ribavirin. Therefore a readjustment of $320 \mu\text{g/ml}$ as being the highest ribavirin concentration tested was done.

4.1.5.1.3. Assay Plate Quality Controls: Cell Load and Virus Load Parameters

SF-Control Compound-Cell Load Performance: A bar graph scatter plot of the mean cell control (O.D. reading) of 188 control assays is plotted in Figure 19. The results indicate that the cell O.D. readings reached a mean 1.255 (SD \pm 0.201) with a median of 1.250 (Range from 0.660 - 1.750). This indicates that a uniform and equal number (15,000 cells/well) of cells are being loaded into every well in the 96-well plate during the day-to-day operation. The cells reduced MTT to formazan giving maximum blue color uniformly and consistently.

SF-Control Compound-Virus Load Performance: A bar graph scatter plot of the mean virus load O.D. readings of the 188 control assays is presented in Figure 20. The results indicate that the average load O.D. reading is 0.321 (SD \pm 0.186) with a median of 0.305 (Range of 0.000 - 0.910). This demonstrates that a good cell destruction is taking place and a uniform load of virus (32 TCID₅₀) is administered on the cell monolayer with very consistent viral CPE results.

SF-Control Compound-Assay Differential Performance: A bar graph scatter plot of the mean O.D. differential values of the 188 control assays is provided in Figure 21. The results indicate that the average differential O.D. reading is 0.933 (SD \pm 0.255) with a median of 0.955 (Range 0.152 - 1.559). The single bell-shaped curve is reasonably sharp and uniform. This reflects that the assays are executed consistently and are repeatable during day-to-day operation with close to 96% accuracy.

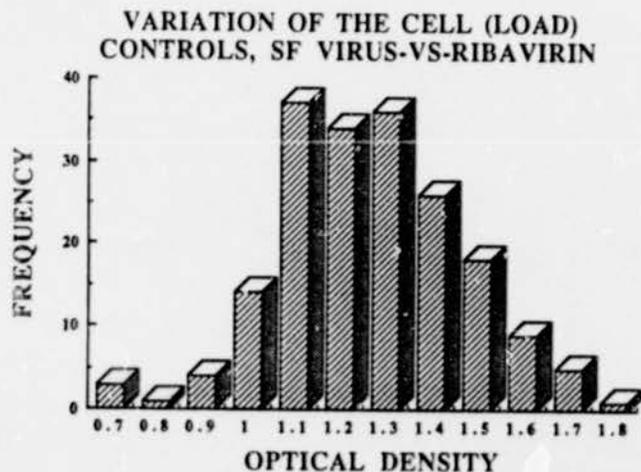


Figure 19

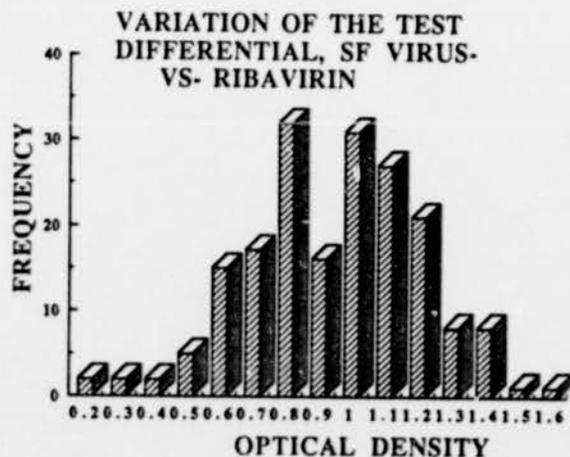


Figure 20

VARIATION OF THE VIRUS (LOAD) CONTROLS, SF VIRUS-VS-RIBAVIRIN

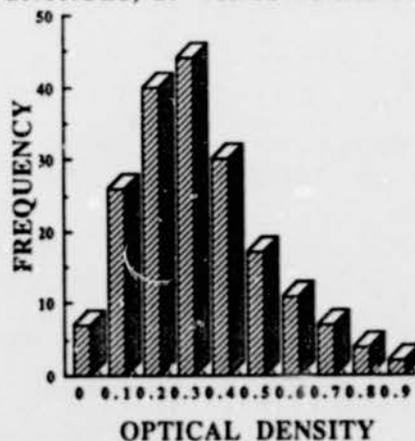


Figure 21

4.1.5.2 SF-Antiviral Activity Results:

Drugs with 95% Antiviral Reduction Levels: Out of the 1873 actual single drug tests, 36 different compounds demonstrated excellent antiviral activity having antiviral reduction values of 95% or better. This represents around 1.92% of the test compounds being active at this excellent reduction level. These compounds are summarized in Table 13 according to the highest **Total Antiviral Index (TAI)**. Compound AVS-5580 demonstrated the greatest *in vitro* promise, having a TAI around 97% and **Selectivity Index (SI)** around >300. Compounds AVS-5278, 5291, 4452, 4796, 5250, 5643, 2320, 0217, 4465, 5075, 5137, 4991, 1217, 4427, and 5138 demonstrated excellent antiviral activity. TAI values ranged from 40-80% and SI values ranged from 6-320. The next 20 active compounds had TAI's from 10 to 39% and SI's from 2 to 15, which may or may not be significant. The *in vitro* antiviral activity of all of the compounds within this category need to be further confirmed and confirmatory testing is presently in progress.

Table 13

AVS Compounds Active Against SF at AI₉₅ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 95	TC 95	AI 95	SI	TAI
5580	54	05/02/89	1.130	789.00 >	100000 >	127.00 >	313.00 >	97.22
5278	52	03/21/89	0.753	23.90 >	320.00 >	13.40 >	174.00 >	79.93
5291	52	03/21/89	0.285	8.55 >	320.00 >	37.40 >	217.00 >	69.04
4452	44	08/16/89	0.609	21.10 >	320.00 >	15.15	88.98 >	68.43
4796	46	01/12/89	0.639	8.10 >	320.00 >	39.50	94.70 >	62.20
5250	52	03/14/89	0.179	86.70 >	320.00 >	3.69 >	320.00 >	60.23
5643	57	08/16/89	0.690	31.40 >	320.00 >	10.20 >	24.77 >	54.56
2320	53	04/11/89	0.598	13.90 >	320.00 >	23.00	49.00 >	54.10
0217	33	04/19/89	0.739	79.60 >	320.00 >	4.02 >	24.40 >	51.36
4465	45	12/06/88	0.866	192.00 >	320.00 >	1.66 >	19.80 >	50.81
5075	48	03/01/89	0.743	65.20 >	320.00 >	4.91 >	19.40 >	49.75
5137	57	08/16/89	0.536	44.30	309.00	6.97	13.44 >	48.27
4991	51	03/14/89	0.155	31.60	340.00	10.80	6.36 >	46.17
1217	52	03/15/89	0.663	74.10 >	320.00 >	4.32	9.12	44.43
4427	44	03/29/89	0.810	2.91	75.70	26.00	9.24 >	43.67
5138	57	08/16/89	0.536	93.80	1000.00	10.66	9.46 >	40.15
4939	51	03/07/89	0.842	10.00	83.80	8.38 >	10.80 >	37.32
3802	35	09/12/89	0.786	0.30 >	10.00 >	33.49	5.51 >	37.07
4934	51	03/07/89	0.836	2.98	80.00	26.90	15.40 >	36.63
4438	44	04/05/89	0.615	8.22	30.70	3.73	4.13 >	36.13
5484	53	03/28/89	0.789	287.00 >	320.00 >	1.12 >	3.00 >	31.86
0206	5	05/10/89	0.993	92.70 >	320.00 >	3.45 >	6.84 >	31.80
5485	53	03/28/89	0.789	8.54	31.70	3.71	4.40 >	30.82
5532	56	08/09/89	0.697	293.00	966.00	3.30	3.70 >	30.01
2275	53	04/11/89	0.721	86.70 >	320.00 >	3.69	6.75	29.77
5498	53	04/18/89	1.058	287.00 >	320.00 >	1.11 >	2.94 >	27.25
5905	61	10/31/89	0.821	3.20	30.30	9.47 >	8.06 >	27.06
4990	51	03/14/89	0.155 <	1.00	198.00 >	198.00 >	4.52 >	26.19
4240	39	09/12/89	0.614	9.70	30.90	3.18	5.69	25.90
5480	53	03/28/89	0.680	283.00 >	320.00 >	1.13 >	3.38 >	25.46
5253	52	03/15/89	0.644	2.62	29.80	11.40 >	4.81 >	23.45
5495	53	04/18/89	1.086	2.83 >	320.00 >	113.00 >	5.16 >	23.12
5241	52	03/08/89	1.042	290.00 >	320.00 >	1.10 >	2.64 >	22.86
5531	56	08/09/89	0.697	96.00	320.00	3.33	3.05 >	19.69
5560	53	03/28/89	0.737	300.00 >	320.00 >	1.07 >	1.94 >	11.99
5242	52	03/08/89	1.035	300.00 >	320.00 >	1.07 >	1.91 >	10.88

Drugs with 50% Antiviral Reduction Levels: One hundred sixty-nine different compounds yielded good antiviral activity -- equal to or better than 50% antiviral reduction. This equals around 9.0% of the test compounds being active in this category. These compounds are summarized in Table 14 according to the highest TAI. Compound AVS-2951 appeared to have the best TAI of 52.00%, and SI at 152. Compounds AVS-5277, 4098, 4472, 4822, 5794, 5067, 3592, 4473, 2948, 1645, 1850, 0919, 4855, 4989, and 5793 have TAI's from 35-50% and SI's between 5 and 200, which may or may not be of any significance. The next 153 active compounds demonstrated TAI's from 0.3% to 35% and SI's of 0.02 to >300. Most of these compounds do not appear to be very selective antiviral agents. However, further verification of their antiviral effects is warranted and confirmatory testing is presently in progress.

Table 14

AVS Compounds Active Against SF at AI₅₀ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
2951	26	09/07/89	0.658	0.21 >	32.00 >	151.74 >	151.74 >	51.85
5277	52	03/21/89	0.753	4.25 >	320.00 >	75.20 >	75.20 >	49.55
4098	37	02/24/89	1.041	0.00 >	0.00 >	201.00 >	201.00 >	47.49
4472	45	12/07/88	0.689	15.90 >	320.00 >	20.10 >	20.10 >	43.60
4822	48	02/01/89	1.057	4.44	222.00	50.00	23.80 >	42.28
5794	59	10/10/89	0.542	34.50 >	320.00 >	9.28 >	9.28 >	42.19
5067	48	03/01/89	0.864	15.80 >	320.00 >	20.20 >	20.20 >	42.00
3592	ABEBE	01/11/89	0.509	26.10 >	320.00 >	12.20 >	12.20 >	41.57
4473	45	12/07/88	0.689	16.70 >	320.00 >	19.20 >	19.20 >	40.66
2948	26	09/07/89	0.658	1.60 >	320.00 >	199.84	173.25 >	40.53
1645	33	08/29/89	0.906	0.57 >	32.00 >	55.82	24.55 >	39.74
1850	53	04/11/89	0.666	10.40 >	100.00 >	9.61	7.42 >	38.87
0919	52	03/15/89	0.502	2.30	162.00	70.60	35.90	38.47
4855	48	02/22/89	0.808	19.50	221.00	11.30	6.23	37.03
4989	51	03/14/89	0.182	2.28 >	320.00 >	141.00 >	141.00 >	36.16
5793	59	10/10/89	0.542	58.50 >	320.00 >	5.47 >	5.47 >	35.69
4875	46	01/18/89	1.142	64.90 >	320.00 >	4.93 >	4.93 >	33.29
2980	25	09/07/89	0.725	0.20	3.09	15.60	8.83 >	32.54
0001	1	06/28/89	1.102	11.80 >	100.00 >	8.44	6.29 >	32.15
2433	17	08/30/89	0.660	10.50 >	320.00 >	30.55	9.55 >	31.95
4984	51	03/14/89	0.226	7.93	228.00	28.70	14.50 >	31.50
5271	52	03/21/89	0.979	46.00 >	320.00 >	6.95 >	6.95 >	31.32
0002	46	01/24/89	1.229	51.60 >	320.00 >	6.21 >	6.21 >	31.30
5058	48	02/28/89	0.907	50.30 >	320.00 >	6.37 >	6.37 >	31.02
4524	45	12/07/88	0.784	18.10 >	320.00 >	17.70	10.90 >	30.17
4439	44	10/11/89	0.857	7.74	65.30	8.44	6.20 >	29.28
5283	52	03/21/89	0.627	2.97	251.00	84.60	38.20 >	29.05
5488	53	03/28/89	0.631	55.70 >	320.00 >	5.75 >	5.75 >	28.32
5186	58	10/04/89	0.694	49.90	887.00	17.76	8.30 >	27.60
5369	54	05/02/89	1.100	9.09 >	320.00 >	35.20	18.50 >	27.11
4432	44	04/05/89	0.580	20.30 >	100.00 >	4.92 >	4.92 >	27.00
5507	53	04/18/89	0.956	42.50	309.00	7.27	3.92 >	26.77
5515	53	04/18/89	0.905	10.80	53.90	4.99	2.38 >	26.74
5625	57	06/28/89	0.991	64.80 >	320.00 >	4.94 >	4.94 >	26.01
4871	46	01/17/89	0.418	21.10 >	320.00 >	15.20	10.90	25.65
1159	52	08/23/89	0.777	32.90	234.00	7.12	5.08	25.57
1730	45	11/22/88	0.974	75.20 >	320.00 >	4.25 >	4.25 >	25.57
5072	48	03/01/89	0.743	19.50	279.00	14.30	7.21 >	25.11
0148	2	08/23/89	0.750	0.32 >	3.20 >	10.00	6.84 >	24.56
2274	12	08/30/89	0.535	18.80 >	100.00 >	5.31 >	5.31 >	24.52

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
5450	53	04/12/89	0.956	2.81	29.30	10.40	6.33 >	24.31
5534	56	06/14/89	1.257	62.80 >	320.00 >	5.10 >	5.10 >	24.30
2363	15	08/30/89	0.630	7.79	63.10	8.09	5.40 >	23.58
2151	52	03/15/89	0.663	48.40 >	320.00 >	6.61	3.54	23.52
4241	46	01/24/89	1.156	2.48	22.90	9.26	6.00 >	23.02
3558	31	03/29/89	0.732	30.00	182.00	6.07	3.39	22.91
5497	53	04/18/89	1.086	88.40 >	320.00 >	3.62 >	3.62 >	22.90
4943	F1	03/07/89	0.915	1.71	22.50	13.20	8.70 >	22.87
1992	56	06/13/89	1.258	94.70 >	320.00 >	3.38 >	3.38 >	22.74
5040	45	12/07/88	0.853	56.60 >	320.00 >	5.66 >	5.66 >	22.70
5372	54	05/02/89	1.044	68.40	180.00	2.63	1.20 >	21.97
2315	13	12/21/88	0.924	100.00 >	100.00 >	1.00	0.56 >	21.92
3803	35	12/13/88	0.623 <	1.00	19.20 >	19.20 >	0.58 >	21.91
5070	48	03/01/89	0.982 <	1.00	142.00 >	142.00 >	62.40 >	21.74
5508	53	04/18/89	0.899	45.70	184.00	4.02	2.27 >	21.73
2631	19	09/06/89	1.159	25.60 >	320.00 >	12.51	6.64 >	21.49
5494	53	04/18/89	1.086	19.60 >	100.00 >	5.09	3.63 >	20.88
5525	56	08/08/89	1.319	52.10	424.00	8.13	4.03	20.56
5791	59	10/10/89	0.566	32.00	204.00	6.38	2.34 >	20.48
4988	51	03/14/89	0.182 <	1.00	184.00 >	184.00 >	104.00 >	20.11
4785	46	01/12/89	0.684 <	1.00	25.80 >	25.80 >	7.20 >	20.09
3935	35	12/13/88	0.519	19.90	175.00	8.80	4.81	19.88
4993	51	03/14/89	0.215	3.09	202.00	65.30	36.60 >	19.88
5548	56	08/09/89	0.975	16.90	173.00	10.27	5.92 >	19.85
1976	1	08/30/89	0.723	16.90 >	100.00 >	5.92	4.41 >	19.58
5795	59	10/10/89	0.619	9.11	198.00	21.71	5.58 >	19.57
5780	59	10/10/89	0.576	54.90	222.00	4.05	2.94 >	19.44
5790	59	10/10/89	0.570	56.60 >	320.00 >	5.66	1.34 >	19.27
5555	53	03/28/89	0.750	23.00 >	320.00 >	13.90 >	13.90	19.19
4937	51	03/07/89	0.865	16.80	144.00	8.59	3.92 >	19.18
5520	56	06/13/89	1.099	164.00 >	320.00 >	1.95 >	1.95 >	19.11
2318	13	08/30/89	0.652	0.50	10.00	20.01	4.02	19.09
5543	56	08/09/89	0.846	0.23	1.81	7.73	4.52	18.77
4919	46	02/01/89	1.166	33.30	184.00	5.51	3.01	18.70
5678	57	08/16/89	0.699	64.50	404.00	6.25	2.69	18.63
5782	59	10/10/89	0.547	65.70	216.00	3.28	2.40 >	18.50
5626	57	06/28/89	0.983	61.60	308.00	4.99	3.31 >	18.19
2811	48	02/07/89	1.359	0.06	0.26	4.52	2.54 >	18.08
5285	52	03/21/89	0.684	5.24	20.50	3.92	2.83 >	17.97
4459	45	11/23/88	0.689	79.60 >	320.00 >	4.02 >	4.02 >	17.74
5503	53	04/18/89	0.979	22.80	155.00	6.81	3.19	17.57
4435	44	04/05/89	0.590	95.70 >	100.00 >	1.04 >	1.04 >	17.40
2506	21	09/06/89	1.058	2.16 >	10.00 >	4.64	4.09 >	17.02
4981	51	03/14/89	0.187	1.85 >	320.00 >	173.00 >	173.00 >	16.99
4995	51	03/14/89	0.232	7.96	52.90	6.65	2.44 >	16.77
5142	57	08/16/89	0.489	61.10	210.00	3.43	2.54	16.64
5500	53	04/18/89	1.057	1.25	5.45	4.36	2.47 >	16.47
5339	53	04/12/89	0.960	26.50	188.00	7.10	3.48	16.29
5284	52	03/21/89	0.627	182.00 >	320.00 >	1.76 >	1.76 >	16.23
5367	54	05/02/89	1.149	81.10 >	320.00 >	3.95	2.83 >	16.05
4739	44	07/06/89	1.116	15.10	62.60	4.15	2.88	16.01
5879	61	10/31/89	0.860	27.50	171.00	6.24	3.41	15.99
2503	21	09/06/89	1.121	0.59	6.60	11.13	3.43	15.85
4477	45	12/07/88	0.782	17.70	47.90	2.70	1.23	15.65

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
3584	32	04/19/89	0.764	53.10	> 320.00	> 6.03	1.43	> 15.48
0360	48	02/07/89	1.334	0.09	0.61	6.63	2.74	15.44
5652	57	07/06/89	1.104	30.90	129.00	4.19	2.18	> 15.36
0346	2	05/10/89	0.961	0.54	2.89	5.33	3.26	> 15.31
2563	48	02/07/89	1.288	5.02	> 3.20	> 0.64	0.50	> 15.19
2979	48	02/07/89	1.110	1.79	4.48	2.50	1.04	> 15.12
5350	53	04/12/89	1.099	17.50	61.70	3.52	2.15	> 14.28
5274	52	03/21/89	1.029	4.86	13.30	2.74	0.82	> 13.93
5252	52	03/14/89	0.185	< 1.00	25.20	> 25.20	> 13.10	> 13.86
5528	56	06/13/89	1.294	6.37	21.70	3.41	2.49	13.69
5542	56	06/14/89	1.113	1.83	7.06	3.86	2.81	> 13.36
1980	27	05/16/89	1.064	24.60	> 100.00	> 4.06	2.29	> 13.03
3038	28	09/07/89	0.677	0.06	> 3.20	> 50.48	4.08	12.88
2812	48	02/07/89	1.352	0.01	> 0.01	> 1.11	> 1.11	> 12.67
4436	44	04/05/89	0.530	24.40	54.00	2.21	1.20	12.40
5280	52	03/21/89	0.766	1.79	5.21	2.91	1.58	> 12.26
2449	18	09/06/89	1.121	21.10	93.60	4.43	0.47	> 11.99
3450	32	04/04/89	0.700	10.00	19.50	1.95	1.02	> 11.92
5403	54	05/04/89	0.678	28.40	91.60	3.23	2.18	11.87
4996	51	03/14/89	0.182	< 1.00	> 320.00	> 320.00	> 320.00	> 11.56
5997	61	11/07/89	0.918	2.88	28.30	9.84	2.47	> 11.40
5936	60	10/24/89	0.933	21.40	57.40	2.68	1.62	> 11.35
5156	57	08/15/89	0.581	1.00	2.68	2.68	1.23	11.24
5653	57	07/06/89	1.104	9.39	26.50	2.82	1.60	> 10.87
5693	57	07/18/89	1.002	141.00	> 320.00	> 2.27	1.94	> 10.84
2586	19	09/06/89	1.103	69.50	> 320.00	> 4.60	0.10	> 10.81
4982	51	03/14/89	0.203	< 1.00	278.00	> 278.00	> 151.00	> 10.53
4475	45	12/07/88	0.751	16.90	53.80	3.19	0.99	10.37
5496	53	04/18/89	1.086	80.00	> 100.00	> 1.25	> 1.25	> 10.35
5538	56	06/14/89	1.315	213.00	> 320.00	> 1.51	> 1.51	> 10.28
4827	48	02/14/89	1.221	241.00	> 320.00	> 1.33	> 1.33	> 10.23
4829	48	02/14/89	1.222	252.00	> 320.00	> 1.27	> 1.27	> 10.11
4428	44	03/29/89	1.002	27.90	63.10	2.26	1.17	9.97
4887	46	01/18/89	1.071	2.85	15.10	5.29	2.43	> 9.61
5906	61	10/31/89	0.821	< 1.00	10.40	> 10.45	> 2.72	> 9.54
4800	46	01/17/89	1.452	188.00	> 320.00	> 1.70	> 1.70	> 9.35
5307	52	03/22/89	1.044	20.10	60.60	3.02	1.50	8.89
2453	18	09/06/89	1.152	3.11	16.10	5.19	1.03	8.70
4527	47	02/01/89	1.259	8.27	17.60	2.12	0.87	> 8.48
5489	53	03/28/89	0.631	215.00	> 320.00	> 1.49	> 1.49	> 8.05
5247	52	03/14/89	0.232	< 1.00	196.00	> 196.00	> 88.50	> 8.04
5994	61	11/07/89	0.838	256.00	> 320.00	> 1.25	1.00	> 7.66
4592	48	03/01/89	0.742	27.80	78.70	2.83	1.45	7.46
4911	46	01/31/89	1.131	171.00	284.00	1.66	0.85	> 7.10
1019	28	08/23/89	0.736	0.70	> 1.00	> 1.43	> 1.43	> 7.04
5134	57	08/15/89	0.868	23.30	59.90	2.57	1.69	7.04
5998	61	11/07/89	0.918	< 1.00	8.40	> 8.40	> 2.29	> 7.02
4951	51	03/07/89	0.549	32.00	72.20	2.26	1.45	6.82
5539	56	08/09/89	0.864	2.59	6.96	2.69	1.71	6.79
4434	44	04/05/89	0.590	28.20	53.00	1.88	1.00	6.30
5133	56	08/15/89	0.841	7.62	8.91	1.17	0.72	6.30
5363	54	06/28/89	1.102	10.00	100.00	10.00	0.40	> 5.71
2590	19	09/06/89	1.190	191.00	> 320.00	> 1.68	0.02	> 5.67
1337	33	08/29/89	0.868	23.50	> 32.00	> 1.36	> 1.36	> 5.53

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
5174	58	07/25/89	1.341	23.60	64.90	2.74	0.04	5.46
5251	52	03/14/89	0.179 <	1.00	55.50 >	55.50 >	32.70 >	5.34
5113	56	08/15/89	0.809	7.57	18.30	2.41	1.50	4.83
5714	58	08/01/89	1.223	2.06	5.41	2.62 <	0.48	4.73
5558	53	03/28/89	0.760	26.80	57.50	2.15	1.35 >	4.77
5449	53	04/12/89	1.022	10.00	20.40	2.04	0.61	4.73
4859	48	02/21/89	0.993	81.40	167.00	2.05	1.08 >	4.67
5098	56	08/08/89	1.430	227.00	443.00	1.95	1.02	4.57
3559	31	03/29/89	0.815	95.70	165.00	1.72	0.91	4.04
5383	54	05/02/89	1.161	73.00	169.00	2.14	1.18	4.01
5557	53	03/28/89	0.813	1.61	5.07	1.94	1.01 >	3.79
3801	35	12/13/88	0.725	23.40	2.20	0.09	0.02	3.27
5153	57	07/11/89	1.141	97.80	169.00	1.73	0.97	3.14
5797	59	10/10/89	0.656	312.00 >	320.00 >	1.02	0.07 >	2.85
5384	54	05/02/89	1.12	27.70	50.70	1.83	0.97	2.73
4891	46	01/18/89	1.265	1.00	2.21 >	2.21 >	1.29 >	2.72
5210	58	08/01/89	1.262	27.00	54.20	2.01	0.72	2.46
5774	59	10/10/89	0.548	100.00	30.30	0.30	0.20 >	2.30
3800	35	12/13/88	0.725 <	1.00	2.61 >	2.61 >	1.39 >	1.98
2902	26	09/07/89	0.652	85.50	89.30	1.04	0.70 >	0.60
4609	48	03/01/89	0.785	0.32	0.60	1.87 <	1.00 >	0.34

Drugs with 25% Antiviral Reduction Levels: Two hundred thirty-eight other (different) compounds were moderately active reaching better than 25% antiviral reduction values. The list of these compounds is summarized in Table 15. Two hundred thirty-eight out of 1873 represent a total of 13% active compounds in this activity category. The highest TAI in this category is for the compounds AVS-5562, 4884, 5248, 2711, 5048, 5365, 2293, 5234, 4979, 5224, 4987, 2292, 5368 and 5556, which reached total antiviral effects of over 20%. The other 224 active compounds demonstrated TAI's from 0 - 19%. In general, the compounds in this category do not appear to have any significant antiviral effect and probably do not need to be presently confirmed further.

Table 15

AVS Compounds Active Against SF at AI₂₅ Level

| <u>AVS
No.</u> |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 0070 | 2543 | 4420 | 4897 | 5091 | 5305 | 5683 |
| 0111 | 2544 | 4421 | 4908 | 5092 | 5310 | 5690 |
| 0215 | 2573 | 4430 | 4914 | 5094 | 5364 | 5691 |
| 0272 | 2575 | 4433 | 4915 | 5096 | 5365 | 5697 |
| 0347 | 2579 | 4445 | 4916 | 5117 | 5366 | 5712 |
| 0361 | 2580 | 4461 | 4918 | 5120 | 5368 | 5716 |
| 0646 | 2680 | 4463 | 4920 | 5124 | 5370 | 5721 |
| 0890 | 2702 | 4590 | 4921 | 5129 | 5371 | 5723 |
| 1052 | 2711 | 4802 | 4925 | 5131 | 5380 | 5724 |
| 1210 | 2907 | 4804 | 4944 | 5132 | 5401 | 5765 |
| 1213 | 2992 | 4809 | 4956 | 5140 | 5403 | 5837 |
| 1214 | 3076 | 4811 | 4968 | 5145 | 5448 | 5839 |
| 1215 | 3087 | 4814 | 4975 | 5149 | 5452 | 5841 |
| 1250 | 3140 | 4816 | 4977 | 5152 | 5457 | 5842 |
| 1733 | 3142 | 4818 | 4978 | 5166 | 5462 | 5843 |
| 1736 | 3169 | 4821 | 4979 | 5175 | 5481 | 5846 |
| 1737 | 3293 | 4825 | 4983 | 5176 | 5482 | 5848 |
| 1746 | 3431 | 4853 | 4985 | 5182 | 5483 | 5849 |
| 1774 | 3494 | 4854 | 4986 | 5183 | 5490 | 5881 |
| 1801 | 3557 | 4872 | 4987 | 5184 | 5492 | 5885 |
| 1841 | 3577 | 4873 | 4992 | 5192 | 5501 | 5916 |
| 2034 | 3578 | 4876 | 4998 | 5197 | 5502 | 5920 |
| 2122 | 3579 | 4877 | 5033 | 5198 | 5504 | 5920 |
| 2199 | 3679 | 4879 | 5041 | 5201 | 5517 | 5922 |
| 2200 | 3734 | 4880 | 5048 | 5207 | 5518 | 5933 |
| 2201 | 3964 | 4881 | 5059 | 5220 | 5524 | 5940 |
| 2226 | 3980 | 4884 | 5060 | 5221 | 5526 | 5947 |
| 2292 | 4044 | 4885 | 5062 | 5224 | 5535 | 5956 |
| 2293 | 4051 | 4889 | 5064 | 5234 | 5556 | 6011 |
| 2296 | 4152 | 4892 | 5068 | 5235 | 5562 | 6014 |
| 2298 | 4239 | 4893 | 5069 | 5246 | 5587 | 6016 |
| 2309 | 4259 | 4894 | 5071 | 5248 | 5644 | 6021 |
| 2450 | 4260 | 4895 | 5087 | 5256 | 5649 | 6029 |
| 2518 | 4271 | 4896 | 5089 | 5270 | 5681 | 6036 |

4.1.5.3. Confirmatory Assays:

Some of the compounds were sent to us in more than one separate drug shipment. These compounds were tested more than once. Data from the confirmatory assays are summarized in Table 16. If a compound showed $\geq 50\%$ reduction in CPE during this reporting period, then it is considered a candidate for confirmatory test. Out of 97 confirmatory tests, 71 (73%) compounds were confirmed active during this reporting period and the remaining 26 compounds gave conflicting results. The criteria for activity is that the confirmatory test has to show $\geq 25\%$ reduction in CPE. Failure to confirm the activity in these compounds was probably due to differences during the assay conditions:

- 1) In confirmatory assays the concentration range is adjusted to a more accurate semilog scale to maximize the TAI window.
- 2) Differences in the "differential" of the two runs can cause the compound to read positive or negative, falsely. The variability in the differential can cause false positives or false negative bias in day-to-day testing calculations, reflecting the variability in the maximum activity of the compound.
- 3) The metabolic rate, age, and passage number, etc., of the cells may cause the above observed variability in test compound activity.

During this reporting period the overall confirmatory rate against SF was 73%. The conflicting results will be retested at a later date based upon the availability of the compound.

4.1.5.4 Recommendations of SF-Actives Based Upon the *in vitro* Results with MTT Assay (Vero Cells).

Based upon the *in vitro* results with the MTT assay (Vero cells) we recommend the following:

- 1) Compounds with the highest TAI in the 95% activity category that have confirmed results with the exception of "colored" compounds should receive the highest priority for further profile studies and *in vivo* animal testing.
- 2) Compounds with the highest TAI in the 50% activity category that have confirmed results with the exception of "colored" compounds should receive the next highest priority for further profile studies and *in vivo* animal testing.

Table 16

Confirmatory Assays for Compounds Active Against Sandfly Fever Virus

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
0065	2	10/28/86	NA	0.1	3.2	32	0.98	>10	10	-	>10	-	3.3	2.6*	CPE	+
	2	05/17/88	NA	3.2	3.2	1.0	5.7	>32	>5.6	32	>32	>1.0	0.6	1.4*	CPE	+
	53	03/28/89	0.684	-	4.3	-	-	8.3	-	-	-	-	-	>2.79	MTT	-
0206	5	10/29/86	NA	3.2	320	100	8.6	>320	>37	100	>320	>3.2	37	3.7*	CPE	+
	5	08/07/87	NA	10	100	10	22	>320	>15	100	>320	>3.2	4.6	2.2*	CPE	+
	5	05/10/89	0.993	32	>320	>10	47	>320	>6.8	93	>320	>3.5	>6.8	>31.80	MTT	+
0217	33	04/19/89	0.739	5.7	>320	>57	13.1	>320	>24	80	>320	>4.0	>24	>51.36	MTT	+
	33	10/11/89	0.901	3.7	290	79	8.2	>320	>39	-	>320	-	35	>36.83	MTT	+
0272	1	10/10/86	NA	~0.32	3.2	~10	1.2	~100	~83	32	100	3.1	2.7	2.2*	CPE	+
	1	06/01/88	NA	~0.32	0.32	~1.0	0.6	3.2	5.3	-	3.2	-	0.5	0.6*	CPE	+
	41	05/10/89	0.993	0.65	0.62	0.96	-	0.92	-	-	>100	-	-	>0.65	MTT	+
0346	2	08/03/87	NA	~0.032	0.32	~10	0.06	~5	~83	0.32	10	31	4.9	2.7*	CPE	+
	2	08/31/87	NA	0.1	1.0	10	0.2	>1	>5	1.0	>1.0	>1.0	4.2	1.6*	CPE	+
	2	05/10/89	0.961	0.35	1.8	5.1	0.5	2.9	5.3	-	32	-	3.3	>15.31	MTT	+
0377	2	10/17/86	NA	0.32	10	31	3.0	~20	7	32	10	0.3	3.4	1.4*	CPE	+
	2	11/25/86	NA	0.32	0.03	0.1	0.1	0.5	5	-	1.0	-	0.2	0.7*	CPE	+
	2	05/17/88	NA	~0.1	1.0	~10	0.2	~5	~25	-	10	-	4.2	1.9*	CPE	+
	41	05/10/89	0.961	5.8	6.6	1.1	-	10	-	-	>32	-	-	1.78	MTT	+
0360	2	10/17/86	NA	<0.01	0.32	32	0.01	~2	~200	0.32	3.2	10	18	2.5*	CPE	+
	2	11/25/86	NA	0.1	0.03	0.3	0.2	~2	~10	-	3.2	-	-	1.1*	CPE	+
	2	08/18/87	NA	0.032	0.01	0.3	0.09	>1	11	0.32	>1.0	>3.1	0.1	1.7*	CPE	+
	48	02/07/89	1.334	0.05	0.32	5.4	0.09	0.61	6.6	-	>3.2	-	2.7	15.44	MTT	+
2	08/23/89	0.732	-	0.10	-	-	0.23	0.2	-	-	>1.0	-	>0.80	MTT	-	
1215	27	09/29/87	NA	~32	100	3.1	66	>320	>4.8	320	>320	>1.0	1.5	1.5*	CPE	+
	53	03/28/89	0.667	24	184	7.8	-	344	-	-	>320	-	-	14.89	MTT	+
1850	53	04/11/89	0.666	0.67	77	115	10	>100	>9.6	-	>100	-	7.4	>38.87	MTT	+
	32	08/29/89	0.943	-	77	-	-	>100	-	-	>100	-	-	0.07	MTT	-

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₅₀	IC ₉₅	AI ₆₀	IC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
1976	27	05/16/89	1.065	14	51	193	3.8	-	>320	-	>320	MTT	+
	1	08/30/89	0.723	7.7	17	>100	>5.9	-	>100	2.2	15.49	MTT	+
1992	56	06/13/89	1.258	48	95	>320	>3.4	-	>320	>3.4	>22.74	MTT	+
	56	08/08/89	1.252	35	66	485	7.3	-	948	4.0	15.71	MTT	+
2162	9	10/31/86	NA	~0.32	5.7	~320	~56	-	320	55	1.3*	CPE	+
	9	05/24/88	NA	~50	60	~320	~5	-	320	0.5	0.6*	CPE	+
	53	04/11/89	0.721	-	-	97	-	-	>100	-	0.00	MTT	-
2275	53	04/11/89	0.721	15	26	326	13	87	>320	6.8	29.77	MTT	+
	12	08/30/89	0.535	7.0	17	259	15	-	>320	11	>35.74	MTT	+
2318	13	12/15/86	NA	<0.32	<0.32	>320	1000	1.0	>320	10	4.6*	CPE	+
	13	07/28/87	NA	~0.2	0.32	>10	>31	1.0	>10	3.1	2.5*	CPE	+
	13	05/25/88	NA	~5	8.3	>320	>39	32	>320	3.9	2.6*	CPE	+
	53	04/11/89	0.669	<1.0	-	2.9	-	-	>320	-	>0.15	MTT	+
	13	08/30/89	0.652	0.2	0.5	10	20	-	>10	4.0	19.09	MTT	+
2520	13	12/15/86	NA	<0.32	2.1	~320	152	-	320	49	3.5*	CPE	+
	13	07/28/87	NA	0.32	0.8	~320	~400	3.2	320	4.3	3.4*	CPE	+
	53	04/11/89	0.598	<1.0	1.6	162	98	14	>320	49	54.10	MTT	+
	13	08/30/89	0.652	<1.0	19.3	156	8.0	-	320	3.6	>19.21	MTT	+
2503	53	04/11/89	0.598	<1.0	-	3.0	-	-	>320	-	>0.01	MTT	+
	21	09/06/89	1.121	0.4	0.59	6.6	11	-	>10	3.4	15.85	MTT	+
2563	32	02/09/88	NA	0.32	0.8	32	40	10	32	13	2.6*	CPE	+
	48	02/07/89	1.288	0.32	5.0	>3.2	>0.64	-	>3.2	0.5	>15.19	MTT	+
	15	05/23/89	1.118	-	-	8.7	-	-	>32	-	0.00	MTT	-
	21	09/06/89	1.090	-	-	1.1	-	-	6.1	-	0.00	MTT	-
2906	26	09/14/87	NA	~20	25	>320	13	100	>320	4.0	2.1*	CPE	+
	26	05/25/88	NA	~50	70	>100	>1.4	-	>100	1.4	0.6*	CPE	+
	53	04/11/89	0.601	-	-	93	-	-	>320	-	6.59	MTT	-
2979	48	02/07/89	1.110	<0.1	1.8	4.5	2.5	-	31	1.0	>15.12	MTT	+
	27	04/19/89	0.801	<1.0	3.8	5.8	1.5	-	66	0.9	>7.04	MTT	+
	25	09/07/89	0.643	1.1	-	3.1	-	-	23	-	>2.91	MTT	+

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₅₀	IC ₉₅	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
2980	25	09/01/87	NA	~0.5	1.2	3.2	32	27	3.2	32	10	2.7	1.7*	CPE	+
	48	02/07/89	1.141	0.42	-	2.2	3.2	-	-	>3.2	-	-	>14.98	MTT	+
	25	09/07/89	0.725	0.03	0.2	1.8	3.1	16	-	>10	-	8.8	>32.54	MTT	+
3038	28	02/02/88	NA	<0.32	<0.32	0.32	320	>1000	0.32	320	>1000	>1.0	3.5*	CPE	+
	53	04/11/89	0.727	-	-	<1.0	1.0	-	-	>320	-	-	0.00	MTT	-
	28	09/07/89	0.677	0.04	0.06	0.26	>3.2	51	-	>3.2	-	4.1	12.88	MTT	+
3450	32	04/04/85	0.700	4.1	10	10	20	2.0	-	79	-	1.0	>11.92	MTT	+
	32	04/19/89	0.702	8.5	-	11	21	-	-	88	-	-	>5.7	MTT	+
3558	31	03/29/89	0.732	17	30	102	182	6.1	-	326	-	3.4	22.91	MTT	+
	31	09/07/89	0.742	-	-	39	100	-	-	298	-	-	0.00	MTT	-
3584	32	11/03/88	1.270	11	18	77	100	>5.6	-	>100	-	4.3	>25.91	MTT	+
	32	04/19/89	0.704	16	53	76	>320	>6.0	-	>320	-	1.4	>15.48	MTT	+
	32	09/12/89	0.803	19	-	32	>320	-	-	>320	-	-	>1.71	MTT	+
3592 ABE	01/11/89	0.509	7.5	>320	>43	>320	320	>12	-	>320	-	12	>41.57	MTT	+
	51	03/07/89	0.680	320	-	266	>320	0.83	-	>320	-	-	7.98	MTT	+
	51	09/12/89	0.741	91	-	>320	>320	>3.5	-	>320	-	-	>13.61	MTT	+
3802	35	12/13/88	0.623	<1.0	<1.0	1.8	3.2	>3.2	-	228	-	>1.8	>2.93	MTT	+
	35	09/12/89	0.786	0.1	0.16	0.9	>10	>62	0.3	>10	33	5.5	>37.07	MTT	+
3803	35	12/13/88	0.623	<1.0	<1.0	0.58	19	>19	-	262	-	>0.6	>21.91	MTT	+
	35	10/11/89	1.041	1.9	14	2.3	9.0	0.64	-	>32	-	0.2	>3.04	MTT	+
3935	35	12/13/88	0.519	13	20	96	175	8.8	-	318	-	4.8	19.88	MTT	+
	35	09/12/89	0.704	20	49	103	175	3.6	-	306	-	2.1	10.22	MTT	+
4240	53	04/11/89	0.727	1.8	3.5	14	29	8.2	9.0	92	10	4.0	>25.72	MTT	+
	39	09/12/89	0.614	1.2	2.7	16	21	7.7	9.7	31	0.2	5.7	25.90	MTT	+
4241	39	05/11/88	NA	~3.2	6.3	10	~100	~16	32	100	3.1	1.6	1.3*	CPE	+
	46	01/24/89	1.156	1.4	2.5	15	23	9.3	-	85	-	6.0	>23.02	MTT	+
4420	44	10/05/88	NA	~20	26	32	~320	~12	100	320	3.2	1.2	1.1*	CPE	+
	44	03/29/89	0.721	85	-	66	>100	-	-	>100	-	-	1.89	MTT	+

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AL ₂₅	IC ₅₀	TC ₅₀	AL ₅₀	IC ₉₅	TC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
4427	44	03/29/89	0.810	0.63	12	18	1.3	20	16	2.9	76	26	9.2	>43.67	MTT	+
	44	10/11/89	0.734	0.84	17	20	1.4	25	17	3.0	>32	>11	12	41.75	MTT	+
4428	44	10/12/88	NA	~3.2	10	~3	5.9	~320	~54	-	320	-	1.5	1.7 ^a	CPE	+
	44	03/29/89	1.002	12	33	2.7	28	63	2.3	-	>100	-	1.2	9.97	MTT	+
4432	44	04/05/89	0.580	12	>100	>8.1	20	>100	>4.9	-	>100	-	>4.9	>27.00	MTT	+
	44	10/11/89	0.734	14	>100	>7.4	48	>100	>2.1	-	>100	-	>2.1	>20.88	MTT	+
4438	44	04/05/89	0.615	0.78	7.6	9.8	1.8	16	8.6	8.2	31	3.7	4.1	>36.13	MTT	+
	44	10/11/89	0.857	1.1	4.9	4.5	-	6.6	-	-	9.7	-	-	>15.52	MTT	+
4439	44	04/05/89	0.615	4.9	20	4.1	11	48	4.3	-	100	-	1.8	>27.07	MTT	+
	44	10/11/89	0.857	3.8	48	13	7.7	65	8.4	-	97	-	6.2	>29.28	MTT	+
4452	44	07/06/89	1.225	3.7	86	23	7.0	219	31	27	>320	>12	12	39.64	MTT	+
	44	08/16/89	0.609	<1.0	193	>193	2.2	286	132	21	>320	>15	89	>68.43	MTT	+
4465	45	12/06/88	0.866	4.1	>320	>78	16	>320	>20	192	>320	>1.67	>20	>50.81	MTT	+
	45	10/11/89	0.952	10	>320	>32	100	>320	>3.2	-	>320	-	>3.2	>27.80	MTT	+
4472	45	12/07/88	0.689	8.0	>320	>40	16	>320	>20	-	>320	-	>20	>43.60	MTT	+
	45	10/11/89	0.952	5.7	>320	>56	58	>320	>5.5	-	>320	-	>5.5	>33.9 ^c	MTT	+
4473	45	12/07/88	0.689	10	320	31	17	>320	>19	-	>320	-	19	>40.66	MTT	+
	45	10/11/89	0.937	9.8	>320	>33	99	>320	>3.2	-	>320	-	>3.2	>27.88	MTT	+
4475	45	12/07/88	0.751	5.0	17	3.4	17	54	3.2	-	261	-	0.99	10.37	MTT	+
	45	10/11/89	0.937	-	>100	-	-	>100	-	-	>100	-	-	1.39	MTT	-
4524	45	12/07/88	0.784	10	198	19	18	>320	>18	-	>320	-	11	>30.17	MTT	+
	45	10/11/89	0.966	97	26	0.26	-	>520	-	-	>320	-	-	0.42	MTT	+
4739	44	07/06/89	1.116	7.7	44	5.7	15	63	4.2	-	97	-	2.9	16.01	MTT	+
	44	08/16/89	0.609	2.0	18	9.2	-	45	-	-	95	-	-	10.58	MTT	+
4871	46	01/17/89	0.418	15	230	16	21	>320	>15	-	>320	-	11	25.65	MTT	+
	46	01/24/89	1.167	14	151	11	22	>320	>15	-	>320	-	6.8	21.39	MTT	+

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₅₀	IC ₉₅	AI ₂₅	AI ₅₀	AI ₉₅	SI	TAI	Assay Type	Act-ivity
4981	51	03/14/89	0.187	1.0	1.8	>320	>312	>173	>173	>173	>16.99	MTT	+
	51	04/20/89	1.225	-	-	>320	-	>320	-	-	>0.60	MTT	-
4982	51	03/14/89	0.203	<1.0	<1.0	151	>151	>278	>320	>151	>10.53	MTT	+
	51	04/20/89	1.225	-	-	150	-	241	>320	-	>0.30	MTT	-
4984	51	03/14/89	0.226	4.4	7.9	115	26	228	>320	15	>31.50	MTT	+
	51	04/20/85	1.194	75	-	64	0.84	95	>320	-	1.46	MTT	+
4988	51	03/14/89	0.182	<1.0	<1.0	104	>124	184	>320	>104	>20.11	MTT	+
	51	04/20/89	1.359	-	-	155	-	210	328	-	>3.70	MTT	-
4989	51	03/14/89	0.182	1.1	2.3	>320	>286	>141	>320	>141	>36.16	MTT	+
	51	04/20/89	1.359	-	-	>320	-	>320	>320	-	>2.90	MTT	-
4990	51	03/14/89	0.155	<1.0	<1.0	4.5	>4.5	8.0	>198	>4.5	>26.19	MTT	+
	51	04/20/89	1.282	-	-	5.4	-	8.3	198	-	>2.52	MTT	-
4991	51	03/14/89	0.155	1.5	17	108	73	191	340	6.4	>46.17	MTT	+
	51	04/20/89	1.282	66	-	156	2.4	211	311	-	>12.52	MTT	+
4993	51	03/14/89	0.215	1.3	3.1	113	86	202	>320	37	>19.88	MTT	+
	51	04/20/89	1.229	-	-	163	-	225	>320	-	>4.91	MTT	-
4995	51	03/14/89	0.232	<1.0	8.0	20	>20	53	305	2.4	>16.77	MTT	+
	51	04/20/89	1.305	18	-	20	1.1	31	>320	-	>5.02	MTT	+
4996	51	03/14/89	0.182	<1.0	<1.0	>320	>320	>320	>320	>320	>11.56	MTT	+
	51	04/20/89	1.289	-	-	>320	-	>320	>320	-	0.00	MTT	-
5070	48	03/01/89	0.982	<1.0	<1.0	62	>62	142	284	>62	>21.74	MTT	+
	48	10/03/89	0.907	-	-	62	-	92	294	-	0.00	MTT	-
5072	48	03/01/89	0.743	12	20	141	12	279	>320	7.2	>25.11	MTT	+
	48	10/03/89	0.907	256	-	265	1.0	759	>1000	-	1.65	MTT	+
	48	10/11/89	0.955	16	31	234	15	>320	>320	7.5	>22.15	MTT	+

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₅₀	IC ₇₅	AL ₂₅	IC ₉₀	TC ₉₀	AL ₉₀	IC ₉₅	TC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
5075	48	03/01/89	0.743	11	17	>320	>29	17	>320	>19	65	>320	>4.9	>19	>49.75	MTT	+
	48	10/03/89	0.905	-	-	100	-	-	592	-	-	>1000	-	-	>0.35	MTT	-
	48	10/11/89	0.895	12	32	302	26	32	>320	>10	-	>320	-	9.4	>35.00	MTT	+
5098	56	06/20/89	1.278	162	-	204	1.3	-	>320	-	-	>320	-	-	>0.52	MTT	+
	56	08/08/89	1.430	129	227	232	1.3	227	443	2.0	-	944	-	1.0	4.57	MTT	+
5113	56	06/21/89	1.104	8.3	-	4.7	0.56	-	11	-	-	320	-	-	0.01	MTT	+
	56	08/15/89	0.809	3.8	7.6	11	3.0	7.6	18	2.4	-	31	-	1.5	4.83	MTT	+
5133	56	06/27/89	1.072	-	-	5.1	-	-	7.0	-	-	21	-	-	1.23	MTT	-
	56	08/15/89	0.841	1.3	7.7	5.5	4.1	7.7	8.9	1.2	-	30	-	0.7	6.30	MTT	+
5134	57	07/11/89	1.394	27	-	12	0.45	-	36	-	-	95	-	-	0.00	MTT	+
	57	08/15/89	0.868	12	23	39	3.3	23	60	2.6	-	97	-	1.7	7.04	MTT	+
5137	57	07/11/89	1.318	17	29	143	8.4	29	202	7.0	-	308	-	5.0	20.48	MTT	+
	57	08/16/89	0.536	4.2	12	155	37	12	210	18	44	309	7.0	13	>48.27	MTT	+
5138	57	07/11/89	1.318	51	93	294	5.8	93	>320	>3.4	-	>320	-	3.2	>13.39	MTT	+
	57	08/16/89	0.536	38	53	499	13	53	678	13	94	1000	11	9.5	>40.15	MTT	+
5142	57	07/11/89	1.331	61	-	47	0.8	-	79	-	-	287	-	-	0.24	MTT	+
	57	08/16/89	0.489	44	61	155	3.5	61	210	3.4	-	309	-	2.5	16.64	MT	+
5153	57	07/11/89	1.141	56	98	95	1.7	98	169	1.8	-	305	-	1.0	3.14	MTT	+
	57	08/16/89	0.834	-	-	53	-	-	90	-	-	294	-	-	1.46	MTT	-
5156	57	07/12/89	1.058	<1.0	-	<1.0	~1.0	-	3.0	-	-	9.3	-	-	0.00	MTT	+
	57	08/15/89	0.581	0.25	1.0	1.2	5.0	1.0	2.7	2.7	-	9.5	-	1.2	11.24	MTT	+
5174	58	07/25/89	1.341	13	24	1	0.07	24	65	2.7	-	268	-	0.04	5.46	MTT	+
	58	10/04/89	0.852	-	-	16	-	-	49	-	-	301	-	-	0.00	MTT	-
5186	58	07/25/89	1.180	89	-	196	2.2	-	296	-	-	>320	-	-	5.18	MTT	+
	58	10/04/89	0.694	22	50	414	19	50	887	18	-	>1000	-	8.3	>27.60	MTT	+

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
5210	58	08/01/89	1.262	13	19	1.5	27	54	2.0	-	257	-	0.7	2.46	MTT	+
	58	10/17/89	1.023	4.9	17	3.4	-	46	-	-	270	-	-	4.54	MTT	+
5247	52	03/14/89	0.232	<1.0	89	>89	<1.0	196	>196	-	>320	-	>89	>8.04	MTT	+
	52	04/20/89	1.235	-	2.6	-	-	7.5	-	-	>320	-	-	>0.17	MTT	-
5250	52	03/14/89	0.179	<1.0	>320	>320	<1.0	>320	>320	87	>320	>3.7	>320	>60.23	MTT	+
	52	04/20/89	1.262	-	91	-	-	165	-	-	305	-	-	>5.80	MTT	-
5251	52	03/14/89	0.179	<1.0	33	>33	<1.0	56	>56	-	96	-	>33	>5.34	MTT	+
	52	04/20/89	1.262	-	6.0	-	-	9.1	-	-	29	-	-	>0.42	MTT	-
5252	52	03/14/89	0.185	<1.0	13	>13	<1.0	25	>25	-	91	-	>13	>13.86	MTT	+
	52	04/20/89	1.091	-	17	-	-	23	-	-	77	-	-	>1.71	MTT	-
5363	54	05/02/89	1.013	7.3	10	1.4	-	25	-	-	>520	-	-	0.74	MTT	+
	54	06/28/89	1.102	1.4	4.0	2.8	10	100	10	-	>320	-	0.4	>5.71	MTT	+
5367	54	05/02/89	1.149	38	230	6.0	81	>320	>4.0	-	>320	-	2.8	>16.55	MTT	+
	54	06/28/89	1.022	18	141	8.0	-	313	-	-	>320	-	-	>15.46	MTT	+
5369	54	05/02/89	1.100	<1.0	168	>168	9.1	>320	>35	-	>320	-	19	>27.11	MTT	+
	54	06/28/89	0.983	<0.32	42	>132	7.7	71	9.2	-	>100	-	5.5	>23.37	MTT	+
5372	54	05/02/89	1.044	2.1	82	39	68	180	2.6	-	>320	-	1.2	>21.97	MTT	+
	54	06/28/89	0.983	<1.0	2.9	>2.9	-	67	-	-	>320	-	-	>8.88	MTT	+
5383	54	05/02/89	1.161	50	94	1.9	79	169	2.1	-	305	-	1.2	4.01	MTT	+
	54	06/28/89	0.926	-	32	-	-	69	-	-	>100	-	-	0.00	MTT	-
5384	54	05/02/89	1.129	17	27	1.6	27	51	1.8	-	95	-	1.0	2.73	MTT	+
	54	06/28/89	1.024	18	26	1.4	-	51	-	-	95	-	-	1.40	MTT	+
5520	56	06/13/89	1.099	43	>320	>7.4	164	>320	>2.0	-	>320	-	>2.0	>19.11	MTT	+
	56	08/08/89	1.319	17	122	7.4	94	260	2.8	-	913	-	1.3	7.73	MTT	+
5525	56	06/13/89	1.227	34	192	5.7	-	283	-	-	>320	-	-	13.71	MTT	+
	56	08/08/89	1.319	17	210	12	52	424	8.1	-	942	-	4.0	20.56	MTT	+

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF- RNTL	IC ₃₅	TC ₃₅	AI ₃₅	IC ₉₀	TC ₉₀	AI ₉₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act- ivity
5528	56	06/13/89	1.294	3.7	16	4.3	6.4	22	3.4	-	>320	-	2.5	13.69	MTT	+
	56	08/09/89	0.804	-	17	-	-	27	-	-	>32	-	-	1.46	MTT	-
5531	56	06/13/89	1.220	48	175	3.6	100	251	2.5	-	>320	-	1.8	>13.96	MTT	+
	56	08/09/89	0.697	37	158	4.3	52	216	4.2	96	320	3.3	3.1	>19.69	MTT	+
5532	56	06/14/89	1.447	176	>320	>1.8	-	>320	-	-	>320	-	-	>4.35	MTT	+
	56	08/09/89	0.697	36	490	14	133	660	5.0	293	966	3.3	3.7	>30.01	MTT	+
5534	56	06/14/89	1.257	42	>320	>7.6	63	>320	>5.1	-	>320	-	>5	>24.30	MTT	+
	56	08/09/89	0.930	38	312	8.3	73	541	7.4	-	954	-	4.3	18.00	MTT	+
5538	56	06/14/89	1.315	124	>320	>2.6	213	>320	>1.5	-	>320	-	>1.5	>10.28	MTT	+
	56	08/09/89	0.864	137	354	2.6	233	570	2.4	-	957	-	1.5	7.90	MTT	+
5539	56	06/14/89	1.339	-	4.8	-	-	7.9	-	-	265	-	-	0.78	MTT	-
	56	08/09/89	0.864	1.3	4.4	3.3	2.6	7.0	2.7	-	75	-	1.7	6.79	MTT	+
5542	56	06/14/89	1.113	1.1	5.1	4.8	1.8	7.1	3.9	-	>320	-	2.8	>13.36	MTT	+
	56	08/09/89	0.832	-	>10	-	-	>10	-	-	>10	-	-	0.00	MTT	-
5543	56	06/14/89	1.231	1.9	9.5	5.1	4.5	18	3.9	-	>320	-	2.1	>14.01	MTT	+
	56	08/09/89	0.846	0.14	1.1	7.3	0.23	1.8	7.7	-	10	-	4.5	>18.77	MTT	+
5548	56	06/14/89	1.089	-	185	-	-	269	-	-	320	-	-	>9.02	MTT	-
	56	08/09/89	0.975	4.0	100	25	17	173	10	-	305	-	6.0	>19.85	MTT	+
5625	57	06/28/89	0.991	33	>320	>9.8	65	>320	>4.9	-	>320	-	>5.0	>26.01	MTT	+
	57	08/09/89	0.703	22	629	29	100	>1000	>10	-	>1000	-	6.3	23.34	MTT	+
5643	57	07/06/89	1.215	7.2	192	27	29	283	10	-	>320	-	6.7	>33.78	MTT	+
	57	08/16/89	0.690	6.7	>320	>48	13	>320	>25	31	>320	>10	>25	>54.56	MTT	+
5652	57	07/06/89	1.104	13	67	5.3	31	129	4.2	-	>320	-	2.2	>15.36	MTT	+
	57	08/22/89	0.889	-	25	-	-	75	-	-	>100	-	-	>1.02	MTT	-
5653	57	07/06/89	1.104	4.3	15	3.5	9.4	27	2.8	-	93	-	1.6	>10.57	MTT	+
	57	08/22/89	0.738	-	7.4	-	-	61	-	-	96	-	-	>2.91	MTT	-

Table 16 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
5678	57	07/18/89	1.173	32	218	6.8	288	> 320	> 1.1	-	> 320	-	0.76	> 9.02	MTT	+
	57	08/16/89	0.699	13	173	13	65	404	6.3	-	940	-	2.7	> 18.63	MTT	+
5693	57	07/18/89	1.002	53	274	5.2	141	> 320	> 2.3	-	> 320	-	1.9	> 10.84	MTT	+
	57	08/16/89	0.611	-	72	-	-	393	-	-	939	-	-	0.00	MTT	-
5714	58	08/01/89	1.223	1.1	< 1.0	< 0.93	2.1	5.4	2.6	-	9.4	-	< 0.48	4.78	MTT	+
	58	10/03/89	0.943	0.73	1.6	2.2	-	2.2	-	-	5.1	-	-	5.98	MTT	+
	58	10/17/89	0.971	-	1.5	-	-	2.2	-	-	7.7	-	-	0.33	MTT	-

= This value is a virus rating (VR) rather than a TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound similar to TAI. TAI is more accurate with MTT measurements.

DIFRNTL = The differential is the difference in the cell control and the virus control optical densities.

IC_{25,50,95} = (Viral) Inhibitory Concentration 25%, 50%, and 95% = The drug concentration (µg/ml) that inhibited viral CPE by 25%, 50% or 95% calculated by using a regression analysis program for semilog curve fitting.

TC_{25,50,95} = (Cell) Toxicity Concentration 25%, 50%, and 95% = The drug concentration (µg/ml) that reduced cell viability by 25%, 50%, or 95%.

AI_{25,50,95} = Antiviral Index = A single point ratio of the antiviral and antiproliferative effect of the compound, calculated with 25%, 50% or 95% reduction values (calculated by dividing the IC_{25,50, or 95} by the IC_{25,50, or 95}).

SI = Selectivity Index = A ratio calculated by dividing the TC₂₅ by the IC₅₀ (Based upon 6 one-half-log₁₀ dilutions, µg/ml, the maximum scale is 0-320).

TAI = Total Antiviral Index = The area between the cytotoxicity and the antiviral curves (based upon a scale of 0-100%).

NA = Not Applicable.

4.1.6 Pichinde Virus (PIC)

Of the 1330 compounds tested against PIC using the plaque reduction assay, 96 (7%) showed antiviral activity (Table 17). Four compounds (AVS-3800, 3799, 3802 and 3801) produced therapeutic indices (TI's) of >10. The most active of these four compounds appears to be AVS-3800 with an IC_{50} of 0.16 $\mu\text{g/ml}$, a minimum toxic concentration (MTC) of 10 $\mu\text{g/ml}$ and a TI value of 62.4. Ribavirin (AVS-0001) was the positive control compound and yielded a mean IC_{50} of 10.65 (\pm 5.38) and a range of 4.10 $\mu\text{g/ml}$ to 17.9 $\mu\text{g/ml}$. The mean MTC was 76.82 (\pm 35.10). The mean TI value was 7.95 (\pm 4.33). One hundred thirty-five positive control assays (AVS-0001) were tested during this reporting period. See Appendix B for these results.

Table 17

Compounds Active Against Pichinde Virus^a

<u>AVS No.</u>	<u>Shipment</u>	<u>IC_{50}</u>	<u>MTC</u>	<u>TI</u>
3800	35	0.16	10	62.4
3799	35	0.56	10	17.6
3802	35	0.56	10	17.6
3801	35	0.31	3.2	10.1
4452	44	11	100	9.5
3803	35	0.49	3.2	6.5
5480	53	60	320	5.3
4035	36	6.9	32	4.7
4871	46,61	22	100	4.6
3422	32	2.4	10	4.2
4240	39,53	2.5	10	4.0
3490	33	9.2	32	3.5
4768	44	31	100	3.2
4611	43	104	> 320	3.1
4234	42	35	100	2.9
3206	29	1.2	3.2	2.8
4073	37	119	320	2.7
1378	45	39	100	2.6
0111	22,42	40	100	2.5
4434	44	13	32	2.4
4113	39,48	1.4	3.2	2.4
4887	46	1.5	3.2	2.2
4610	43	155	320	2.1
4190	39	16	32	2.1
4464	45	0.16	0.32	2.0
3503	33	16	32	2.0
0708	30	50	100	2.0
3565	32	5.0	10	2.0
4071	35	53	100	1.9
4273	39	17	32	1.9
4272	39	56	100	1.8

Table 17 (Cont'd)

<u>AVS No.</u>	<u>Shipment</u>	<u>IC₅₀</u>	<u>MTC</u>	<u>TI</u>
4390	43	18	32	1.7
4769	44	19	32	1.7
5558	53	19	32	1.7
2408	16	192	320	1.7
3355	31	6	10	1.6
3765	35	61	100	1.6
3542	31	20	32	1.6
4802	46	20	32	1.6
4339	42	20	32	1.6
3861	40	21	32	1.5
4373	31	21	32	1.5
1729	45	66	100	1.5
5555	53	208	320	1.5
3788	35	21	32	1.5
3788 ^b	35	--	3.2	--
3509	33	2.1	3.2	1.5
5557	53	2.2	3.2	1.5
3581	32	6.9	10	1.4
5562	53	70	100	1.4
3805	35	6.9	10	1.4
2563	32	23	32	1.4
3867	41	22	32	1.4
4735	44	70	100	1.4
4454	45	7.1	10	1.4
3860	40	23	32	1.4
4120	40	230	320	1.4
4177	39	3.6	5	1.4
3851	40	7.3	10	1.4
4316	42	24	32	1.4
4233	42	238	320	1.3
4049	37	7.8	10	1.3
4241	39,46	7.8	10	1.3
4241 ^b	39,46	18	10	0.7
4427	44	25	32	1.3
4384	43	7.9	10	1.3
4047	37	7.9	10	1.3
4890	46	25	32	1.3
4085	37	254	320	1.3
5491	53	24	32	1.3
3797	35	7.6	10	1.3
3593	30	0.25	0.32	1.3
3496	33	25	32	1.3
1850	32	261	320	1.2
3680	32	82	100	1.2
1901	33	82	100	1.2

Table 17 (Cont'd)

<u>AVS No.</u>	<u>Shipment</u>	<u>IC₅₀</u>	<u>MTC</u>	<u>TI</u>
3677	32	2.7	3.2	1.2
3589	32	27	32	1.2
4261	39	8.1	10	1.2
4192	39	8.2	10	1.2
3789	35	8.2	10	1.2
4216	41	85	100	1.2
3858	40	0.85	1	1.2
4437	44	8.7	10	1.2
1738	45	87	100	1.2
4281	42,61	2.8	3.2	1.1
4127	40	89	100	1.1
4859	48	9.1	10	1.1
4197	39	94	100	1.1
3902	41	9.5	10	1.1
1730	45	306	320	1.1
2980	25	0.86	1	1.1
3488	33	2.8	3.2	1.1
3499	33	9.1	10	1.1
3351	31	30	32	1.1
3919	34	9.3	10	1.1
2403	16	30	32	1.1

^a Compounds identified by their AVS numbers are listed in descending order from the most active to the least active. Assays were done in Vero cells. An active compound is defined here as having a therapeutic index (TI) of greater than 1.0. The drug concentration which reduced the mean plaque number to 50% (50% inhibitory dose, IC₅₀) was calculated using a regression analysis program for semilog curve fitting and is expressed in $\mu\text{g/ml}$. The minimum cytotoxic drug concentration (MTC) is the lowest drug concentration at which toxicity was observed. This is also expressed in $\mu\text{g/ml}$. The therapeutic index (TI) of a compound was determined by dividing the MTC by the IC₅₀.

^b Represents a second test.

4.1.7 Venezuelan Equine Encephalomyelitis (VEE)

The total output of VE testing during this reporting period is summarized in monthly increments in Figure 22. During this 12-month period 2666 tests were performed against the VE virus with the MTT-assay format. Out of these, 228 were control compound assays, selenazofurin (AVS-0253) being the positive control compound. One hundred seven tests were internal (+++) virus load and cell load quality control tests. The rest, totaling 2331, were actual single dose assays. The total number of assays (2666) represents a 208% increase (improvement) in total testing output during this year as compared to the output of the results from the previous year.

Out of the 2331 single drug assays, 289 different compounds demonstrated antiviral activity at greater than 25% reduction levels. This represents around 12% of the tested compounds having *in vitro* antiviral activity against VE virus. The remainder, 2043 compounds (88%), are to be considered inactive with this assay protocol.

TOTAL NUMBER OF TESTS AGAINST VENEZUELAN EQUINE
ENCEPHALOMYELITIS VIRUS (VE)
NOVEMBER 15, 1988 - NOVEMBER 14, 1989

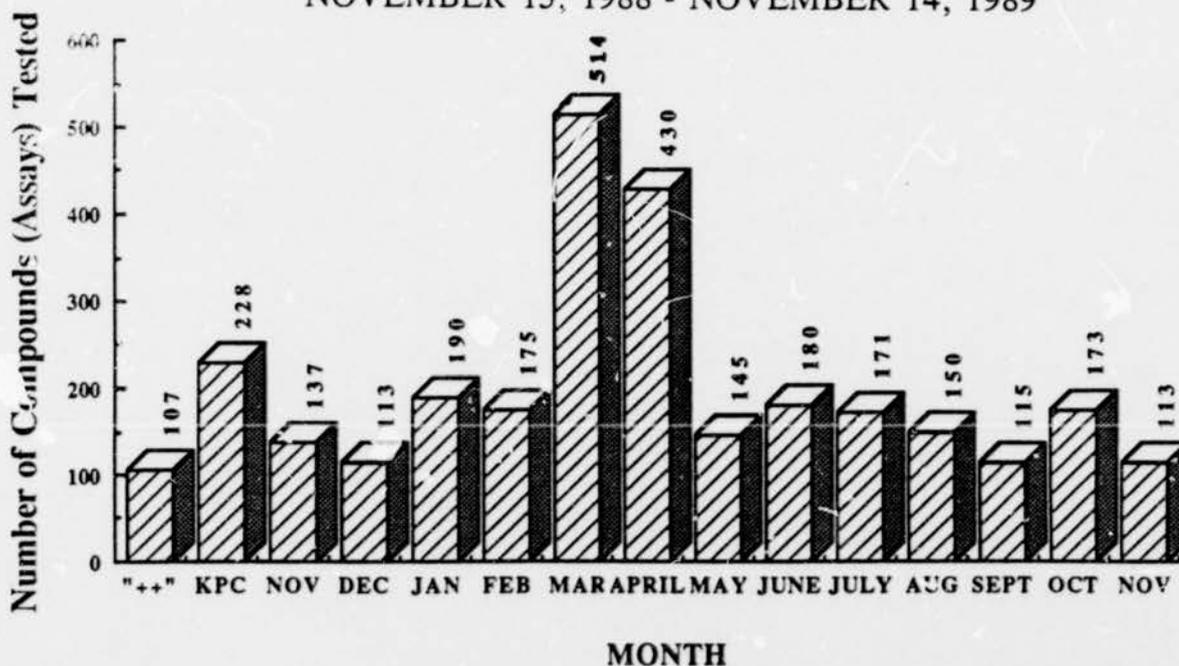


Figure 22

Test Total = 2666

KPC (Positive Control Compound, Selenazofurin) = 228

"++" (Internal Virus and Cell Load) = 107

4.1.7.1 VE-Quality Controls:

4.1.7.1.1 Antiviral Activity

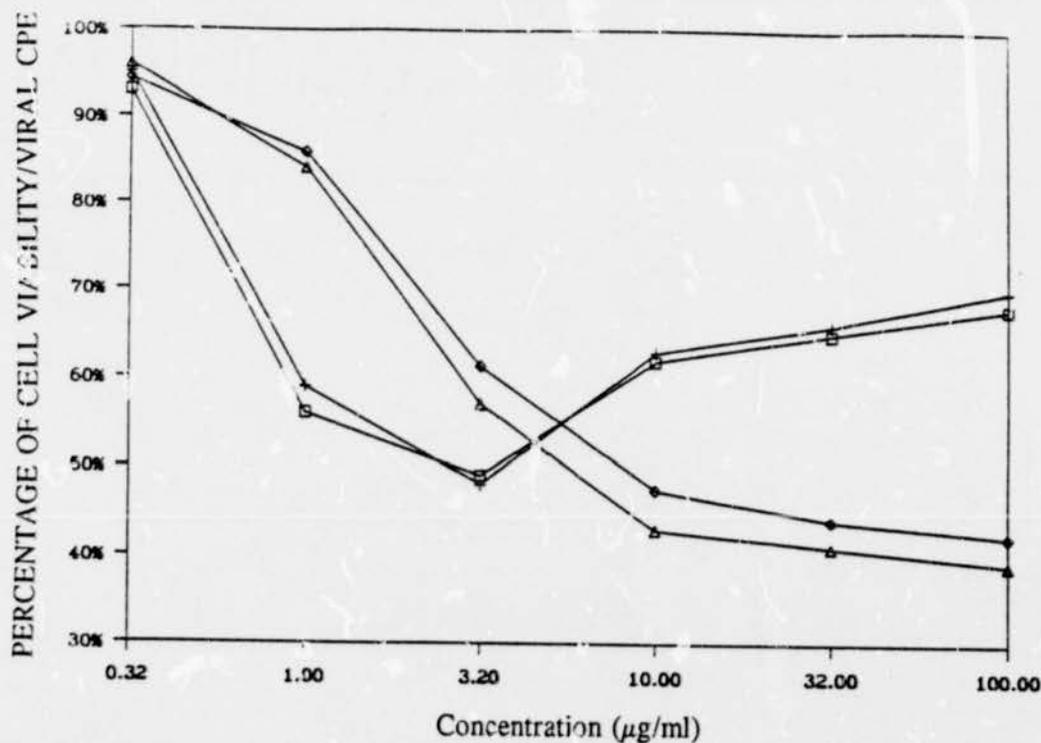
VE-Control Compound-Antiviral Performance: Selenazofurin (AVS-0253) has been the sole control compound against VE in these MTT assay screens. The mean and median antiviral inhibition and cytotoxicity patterns of the positive control drug (Selenazofurin) are illustrated in Figure 34. The 228 control tests performed with Selenazofurin gave a mean Total Antiviral Index (TAI) of 9.52 (SD \pm 7.38) and the median value was 8.42%. The mean Selectivity Index (SI) was only 1.48 (SD \pm 1.65)

The mean Antiviral Index 25% (AI₂₅) value was 3.56 (SD ±2.44). The median AI₂₅ value was 3.25. The mean Antiviral Index 50% (AI₅₀) was 14.97 (SD ±30.08) with a median of 4.00. This indicates that selenazofurin does not consistently reach 50% antiviral reduction levels.

The mean Antiviral Inhibitory Concentration 25% (IC₂₅) was 1.09 µg/ml (SD ±3.62). The median IC₂₅ value was 0.55 µg/ml. The mean Antiviral Inhibitory Concentration 50% (IC₅₀) was 0.93 µg/ml (SD ±1.21). The median IC₅₀ value was 0.80 µg/ml. The discrepancy indicates that the control compound selenazofurin does not consistently reach 50% reduction levels.

The maximum (average) antiviral inhibitory level of the 228 selenazofurin tests (Figure 23) was reached at 3.2 µg/ml of the compound. Further increase of the drug concentration does not improve its antiviral activity. The maximum antiviral effect (~50%) is found with a simultaneous 40% cytotoxic suppression at 3.2 µg/ml. After this concentration the antiviral protection levels off to ~30% reduction levels at 100 µg/ml while simultaneously the selenazofurin becomes maximally toxic (~65%).

SELENAZOFURIN - VS - VENEZUELAN EQUINE ENCEPHALITIS (VE)



□ Mean % Reduction + Median Reduction ◇ Mean % Reduction △ Median % Reduction

Conc. (µg/ml)	% Viral CPE						% Cell Viability					
	0.32	1	3.2	10	32	100	0.32	1	3.2	10	32	100
Mean	93	56	49	62	65	68	94	85	61	48	44	42
Median	95	59	48	63	66	70	96	84	57	43	41	39
Std. Dev.	.11	.17	.15	.11	.10	.10	.11	.13	.13	.10	.09	.09
Variance	.01	.03	.02	.01	.01	.01	.01	.02	.02	.01	.01	.01

Figure 23
Average Antiviral and Cytotoxicity Values for 228 Positive Control Compound Assays

A bar graph scatter plot (Figure 24) depicts the distribution of the maximum antiviral reduction values of all 228 control compound assays for selenazofurin. The results indicate that the average, maximum antiviral reduction obtained with the present SOP is around 57.30 (SD \pm 13.60) reduction levels. The maximum reduction levels vary from 1 - 97% but remain quite consistently around the median of 54%. The assay control values give a relatively normal, bell-shaped distribution curve. This indicates a quite consistent day-to-day performance of the control compound in the VE-MTT assay.

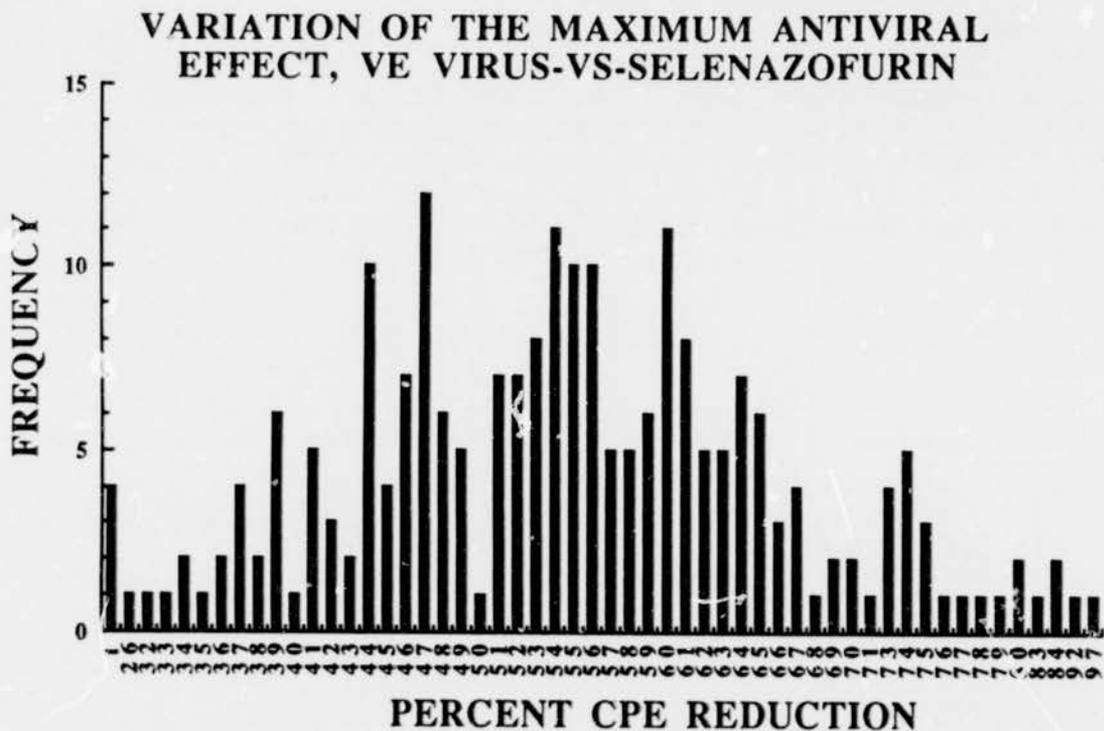


Figure 24
Maximum Antiviral CPE Reduction (%). Summary of 228 Control Compound Tests

Selenazofurin is active *in vitro* against VE virus and functions as a good quality control compound. However, regardless of the performance of the VE quality control drug selenazofurin, around 89 different compounds have equal or better antiviral activity against VE virus than AVS-0253 (see 95% and 50% reduction summaries). Some of these could probably be used as a better *in vitro* antiviral control compound in this large scale antiviral screening program.

4.1.7.1.2. Cellular Cytotoxicity

VE-Control Compound-Cytotoxicity Performance: The 228 cytotoxicity values of the positive control compound selenazofurin are also very consistent. The mean cell Toxic Concentration (TC₂₅) is 4.04 μ g/ml (SD \pm 13.14 and the median is 1.09 μ g/ml. The mean cell Toxic Concentration 50% (TC₅₀) value is 19.52 (SD \pm 30.36) and the median is 7.45 μ g/ml. As can be seen from Figure 23, the observable toxicity starts before 1.0 μ g/ml, and reaches maximum (55%) toxicity at 10 μ g/ml.

When the cytotoxicity reaches around 55% (10 μ g/ml), the control compound has reached its maximum toxicity. At 100 μ l/ml the antiviral protection of selenazofurin is lost (~ 30%). The highest selenazofurin concentration tested in these assays was 100 μ g/ml.

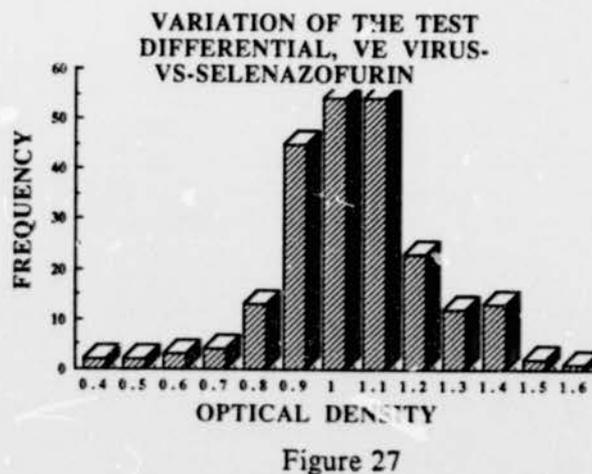
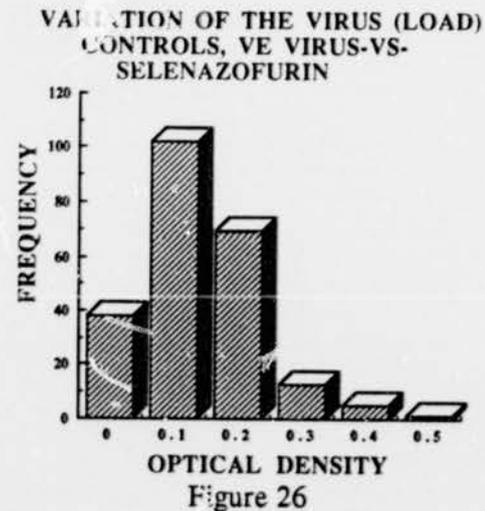
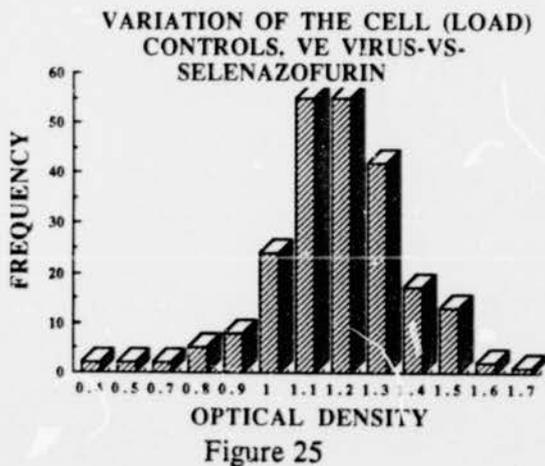
Selenazofurin has a definite cytotoxic suppression of cellular metabolism and growth. A peculiar feature of the control compound is that the toxicity levels off after reaching its maximum cytotoxic value (\pm 55%) and continues at that stationary level at higher concentrations.

4.1.7.1.3. Assay Plate Quality Controls: Cell Load and Virus Load Parameters

VE-Control Compound-Cell Load Performance: A bar graph scatter plot of the mean cell control (O.D. reading) of 228 control assays is plotted in Figure 25. The results indicate that the cell O.D. readings reached a mean 1.171 (SD \pm 0.191) with a median of 1.170 (Range from 0.360 - 1.680). This indicates that a uniform and equal number (15,000 cells/well) of cells are being loaded into every well in the 96-well plate during the day-to-day operation. The cells reduced MTT to formazan giving maximum blue color uniformly and consistently.

VE-Control Compound-Virus Load Performance: A bar graph scatter plot of the mean virus load O.D. readings of the 228 control assays is presented in Figure 26. The results indicate that the average load O.D. reading is 0.128 (SD \pm 0.086) with a median of 0.120 (Range of 0.000 - 0.450). This demonstrates that a good cell destruction is taking place and a uniform load of virus (32 TCID₅₀) is administered on the cell monolayer with very consistent viral CPE results.

VE-Control Compound-Assay Differential Performance: A bar graph scatter plot of the mean O.D. differential values of the 228 control assays is provided in Figure 27. The results indicate that the average differential O.D. reading is 1.037 (SD \pm 0.192) with a median of 1.031 (Range 0.352 - 1.571). The single bell-shaped curve is reasonably sharp and uniform. This reflects that the assays are executed consistently and are repeatable during day-to-day operation with close to 99% accuracy.



4.1.7.2 VE-Antiviral Activity Results:

Drugs with 95% Antiviral Reduction Levels: Out of the 2331 actual single drug tests, 9 different compounds demonstrated excellent antiviral activity having antiviral reduction values of 95% or better. This represents around 0.4% of the test compounds being active at this excellent reduction level. These compounds are summarized in Table 18 according to the highest **Total Antiviral Index (TAI)**. Compound AVS-4051 demonstrated the greatest *in vitro* promise, having a TAI around 87% and **Selectivity Index (SI)** around 300. Compounds AVS-2318, 5906, 1841, 1902, and 5072 demonstrated excellent antiviral activity. TAI values ranged from 27 - 50% and SI values ranged from 0.14 to 108. Three other active compounds (AVS-2453, 3171, and 2960) had TAI's from 3 to 12% and SI's from 0.3 to 4, which may or may not be significant. The *in vitro* antiviral activity of all of the compounds within this category need to be further confirmed and confirmatory testing is presently in progress.

Table 18

AVS Compounds Active Against VE at AI₉₅ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 95	TC 95	AI 95	SI	TAI
4051	37	09/11/89	1.008 <	0.03 >	10.00 >	312.50 >	312.50 >	86.80
2318	13	09/11/89	0.848	0.94 >	10.00 >	10.68 >	19.40 >	49.94
5906	61	11/03/89	0.897	9.42	96.60	10.25	8.87	34.69
1841	33	10/06/89	0.598	288.00 >	320.00 >	1.11	0.14 >	31.88
1902	33	09/11/89	0.754	0.94 >	100.00 >	106.05 >	179.92 >	28.44
5072	48	03/03/89	0.956	264.00 >	320.00 >	1.21 >	4.77 >	27.35
2453	18	09/08/89	0.889	9.85 >	32.00 >	3.25	2.64	12.09
3171	29	05/15/89	1.131	97.00 >	100.00 >	1.03	0.26 >	6.74
2960	27	04/14/89	1.162	276.00 >	320.00 >	1.16 >	4.34 >	2.64

Drugs with 50% Antiviral Reduction Levels: Eighty different compounds yielded good antiviral activity -- equal to or better than 50% antiviral reduction. This equals around 3.4% of the test compounds being active in this category. These compounds are summarized in Table 19 according to the highest **TAI**. Compound AVS-5580 appeared to have the best TAI of 47.00%, and SI at >300. Compounds AVS-5543, 5609, 5643, 0148, 2320, 2433, 1829, 2503, 4742, 5497, 5714, 4871, and 5197 have TAI's over 20% and SI's between 1 and 12, which may or may not be of any significance. The other 65 active compounds demonstrated TAI's from 0.1% to 19% and SI's of 0.02 to 5. Most of these compounds do not appear to be very selective antiviral agents. However, further verification of their antiviral effects is warranted and confirmatory testing is presently in progress.

AVS Compounds Active Against VE at AI₅₀ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
4852	48	02/21/89	1.006	47.80	9.55	0.20	0.80	9.32
5580	54	05/03/89	1.459	56.20 >	100000 >	1780.0 >	1780.0 >	46.70
5543	56	08/11/89	1.436	0.20 >	32.00 >	157.45	3.31 >	39.55
5609	57	06/26/89	0.975	2.88 >	320.00 >	111.00	6.02 >	36.18
5643	57	08/18/89	1.000	37.70 >	320.00 >	8.48 >	8.48 >	35.52
0148	2	08/25/89	0.795	0.02 >	3.20 >	158.70	4.80 >	31.26
2320	13	09/11/89	0.848	7.22	157.00	21.80	6.39 >	28.83
2433	17	09/11/89	0.631	52.30	222.00	4.25	3.08	23.90
1829	32	10/06/89	0.609	27.80 >	320.00 >	11.51 >	11.51 >	21.97
2503	21	09/08/89	1.216	0.68 >	10.00 >	14.82	6.18 >	21.71
4742	44	09/15/89	0.805	19.30 >	320.00 >	16.58	0.38 >	21.61
5497	53	04/17/89	0.950	354.00 >	320.00 >	0.90 >	0.90 >	20.90
5714	58	10/09/89	0.988	1.49	6.38	4.28	3.04	20.06
4871	46	01/16/89	0.802	50.90 >	320.00 >	6.29	3.99 >	19.83
5197	58	10/09/89	1.010	21.90	164.00	7.46	4.04	19.73
5724	58	10/09/89	1.055	204.00 >	1000.00 >	4.90 >	4.90 >	19.40
0111	42	08/25/89	0.761	21.00 >	100.00 >	4.76	2.22 >	18.41
5384	54	05/01/89	0.795	17.90	66.70	3.73	2.72 >	18.03
3315	30	12/07/88	1.293	18.60 >	320.00 >	17.20	2.36 >	17.94
2590	19	09/08/89	1.069	211.00 >	320.00 >	1.52 >	1.52 >	17.85
5119	56	08/07/89	1.123	24.50 >	100.00 >	4.08	3.08	17.35
5138	57	08/18/89	1.070	179.00	711.00	3.97	2.88 >	17.32
5198	58	10/09/89	1.010	19.30	84.90	4.41	3.01 >	17.11
2275	12	09/11/89	0.944	51.20	284.00	5.55	2.65 >	16.91
5383	54	05/01/89	0.794	64.60	211.00	3.27	2.41 >	16.70
6029	61	11/10/89	1.123	86.50 >	320.00 >	3.70 >	3.70 >	16.40
0230	1	08/25/89	0.781	20.10 >	100.00 >	4.98	2.56 >	16.03
1159	52	08/25/89	0.652	64.20	283.00	4.41	2.99	15.49
5523	56	06/12/89	1.168	7.84 >	320.00 >	40.80	0.86 >	15.38
5997	61	11/10/89	1.014 <	1.00	57.50 >	57.50 >	3.20 >	14.84
5175	58	10/09/89	1.000	20.40	59.90	2.94	1.93 >	13.52
2631	19	09/08/89	0.716	181.00 >	320.00 >	1.77 >	1.77 >	13.37
2506	21	09/08/89	1.020	2.26 >	10.00 >	4.42	2.81 >	13.28
5385	54	05/01/89	0.795	26.20	65.60	2.50	1.82 >	12.33
3802	35	09/11/89	1.233	0.19 >	10.00 >	52.25	1.33 >	12.01
3584	32	09/11/89	1.117	72.60	285.00	3.93	2.45	11.91
5691	57	08/18/89	1.091	200.00	734.00	3.67	2.35	11.52
1019	28	08/25/89	0.781	0.55 >	1.00 >	1.83 >	1.83 >	11.45
0646	2	08/25/89	0.866	0.79 >	3.20 >	4.06	1.18 >	11.20
4892	46	01/17/89	0.894	273.00 >	320.00 >	1.17	0.24 >	10.89
1850	32	10/06/89	0.716	77.00 >	100.00 >	1.30 >	1.30 >	10.87
5457	54	05/02/89	1.072	15.70	48.40	3.08	0.48 >	10.84
5176	58	10/09/89	1.000	79.20	200.00	2.52	1.69	10.40
4919	46	01/31/89	1.004	97.00	310.00	3.20	1.67	10.31
2716	22	09/08/89	1.367	8.43 >	10.00 >	1.19 >	1.19 >	9.60
5489	53	03/27/89	1.042	247.00 >	320.00 >	1.29 >	1.29 >	9.35
5531	56	08/11/89	1.293	30.20	291.00	3.63	2.14	8.50
2591	19	09/08/89	1.069	152.00 >	320.00 >	2.11 >	2.11 >	8.35
1215	27	10/06/89	0.795	100.00	268.00	2.68	1.37	8.01
5905	61	11/03/89	0.897	7.41	19.20	2.60	1.68	7.83
3038	28	09/08/89	1.414	0.70 >	3.20 >	4.56	0.41 >	7.76
2989	27	04/14/89	0.883	27.10	63.40	2.34	1.06	7.65
5998	61	11/10/89	1.014 <	1.00	8.43 >	8.43 >	1.55 >	7.49

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
0346	2	05/09/89	0.879	2.76	17.70	6.42	0.83 >	7.21
5541	56	06/16/89	1.276	100.00	26.50	0.27	0.07 >	6.72
5379	54	05/01/89	0.943	6.84	20.00	2.92	0.41 >	6.48
5854	60	10/20/89	1.140	62.60 >	320.00 >	5.12 <	0.02 >	6.22
2902	26	04/14/89	1.201	70.00	155.00	2.21	0.89	6.14
5485	53	03/27/89	1.020	9.30	28.10	3.02	1.00	5.35
5094	56	06/19/89	1.410	73.10	156.00	2.13	1.14	4.52
5495	53	04/17/89	0.957	24.90	8.76	0.35	0.20 >	4.46
2543	21	09/08/89	1.020	30.00	73.00	2.44	1.46	4.43
2544	20	12/20/88	1.115	2.60	6.20	2.38	1.28	4.34
5142	57	07/10/89	1.103	81.10	161.00	1.98	1.04	3.31
3559	31	03/28/89	1.022	71.40	193.00	2.71	1.20	3.25
4409	44	12/13/88	1.206	252.00 >	320.00 >	1.27	0.87 >	2.15
5491	53	03/27/89	0.919	181.00 >	320.00 >	1.77	0.16 >	2.13
3160	29	04/28/89	0.967	23.00 >	32.00 >	1.39	0.27 >	1.91
0113	1	05/22/89	0.623	92.50 >	320.00 >	3.46	0.33 >	1.87
5070	48	03/03/89	0.958	232.00	97.00	0.42	0.26 >	1.63
5393	54	05/02/89	1.045	9.45	2.91	0.31	0.20 >	1.09
3560	31	03/28/89	1.022	287.00 >	320.00 >	1.12	0.40 >	0.75
3164	29	04/28/89	0.937	32.00	37.10	1.16	0.30 >	0.68
3980	36	09/11/89	1.141	100.00 >	100.00 >	1.00	0.32 >	0.40
5492	53	03/27/89	0.904	246.00	100.00	0.41	0.22 >	0.40
4998	51	03/14/89	0.983	249.00 >	320.00 >	1.28	0.11	0.36
4999	51	03/14/89	0.983	88.50	2.48	0.03	0.02 >	0.22
5690	57	07/17/89	0.883	306.00 >	320.00 >	1.05	0.21 >	0.10
2980	25	04/07/89	0.931	100.00	2.62	0.03	0.01 >	0.01
2430	17	03/17/89	0.990	24.80	59.30	2.39	1.21 >	0.00

Drugs with 25% Antiviral Reduction Levels: Two hundred other (different) compounds were moderately active reaching better than 25% antiviral reduction values. The list of these compounds is summarized in Table 20. Two hundred out of 2331 represent a total of 8.6% active compounds in this activity category. The highest TAI in this category is for the compounds AVS-2570, 2580, 2363, 1308, 5450, 1801, 3580, 5494, 5488, and 1315, which reached total antiviral effects of over 15%. The other 190 active compounds demonstrated TAI's from 0 - 14%. In general, the compounds in this category do not appear to have any significant antiviral effect and probably do not need to be presently confirmed further.

AVS Compounds Active Against VE at AI₂₅ Level

<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>
0094	2450	4240	5040	5450
2501	2458	4241	5058	5452
2580	2467	4370	5067	5460
0303	2468	4391	5069	5465
0347	2501	4405	5075	5478
0360	2517	4438	5089	5483
0361	2563	4445	5117	5487
0919	2568	4448	5134	5488
1210	2570	4452	5137	5493
1213	2580	4460	5149	5494
1307	2583	4465	5166	5500
1308	2587	4466	5174	5503
1315	2743	4473	5188	5505
1654	2771	4474	5190	5523
1738	2811	4511	5192	5526
1774	2813	4527	5194	5535
1801	2901	4738	5195	5538
1846	2906	4739	5203	5539
1901	2918	4771	5204	5558
1985	2919	4781	5206	5573
1987	2943	4785	5210	5621
2060	2961	4787	5241	5694
2160	2971	4792	5250	5711
2201	2979	4794	5252	5843
2220	2988	4795	5253	5858
2201	2990	4796	5254	5907
2244	2991	4814	5300	5908
2253	3007	4822	5301	5977
2274	3304	4853	5305	5937
2290	3414	4854	5307	5938
2299	3433	4855	5325	5940
2365	3450	4887	5326	5947
2395	3579	4891	5377	5949
2408	3580	4951	5381	5953
2409	3586	4952	5382	5955
2427	3679	4983	5390	5995
2428	3800	4988	5392	6025
2434	3935	4990	5403	6035
2445	4113	4994	5405	6038
2449	4152	4995	5449	6042

4.1.7.3. Confirmatory Assays:

Some of the compounds were sent to us in more than one separate drug shipment. These compounds were tested more than once. Data from the confirmatory assays are summarized in Table 21. If a compound showed $\geq 50\%$ reduction in CPE during this reporting period, then it is considered a candidate for confirmatory test. Out of 45 confirmatory tests, 30 compounds (67%) were confirmed active during this reporting period and the remaining 15 compounds gave conflicting results. The criteria for activity is that the confirmatory test has to show $\geq 25\%$ reduction in CPE. Failure to confirm the activity in these compounds was probably due to differences during the assay conditions:

- 1) In confirmatory assays the concentration range is adjusted to a more accurate semilog scale to maximize the TAI window.
- 2) Differences in the "differential" of the two runs can cause the compound to read positive or negative, falsely. The variability in the differential can cause false positives or false negative bias in day-to-day testing calculations, reflecting the variability in the maximum activity of the compound.
- 3) The metabolic rate, age, and passage number, etc., of the cells may cause the above observed variability in test compound activity.

During this reporting period the overall confirmatory rate against VE was 67%. The conflicting results will be retested at a later date based upon the availability of the compound.

4.1.7.4 Recommendations of VE-Actives Based Upon the *in vitro* Results with MTT Assay (Vero Cells).

Based upon the *in vitro* results with the MTT assay (Vero cells) we recommend the following:

- 1) Compounds with the highest TAI in the 95% activity category that have confirmed results with the exception of "colored" compounds should receive the highest priority for further profile studies and *in vivo* animal testing.
- 2) Compounds with the highest TAI in the 50% activity category that have confirmed results with the exception of "colored" compounds should receive the next highest priority for further profile studies and *in vivo* animal testing.

Table 21

Confirmatory Assays for Compounds Active Against Venezuelan Equine Encephalomyelitis Virus

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Activity
0111	42	05/09/89	0.956	11	25	2.3	30	75	2.5	-	>320	-	0.8	6.28	MTT	+
	42	08/25/89	0.761	9.2	47	5.1	21	>100	>4.8	-	>100	-	2.2	>18.41	MTT	+
0113	1	05/22/89	0.623	48	31	0.64	93	>320	>3.5	-	>320	-	0.3	>1.87	MTT	+
	1	08/25/89	0.761	69	73	1.1	-	>100	-	-	>100	-	-	1.45	MTT	+
0206	5	05/14/87	NA	~100	320	~3.2	6	>320	>2.4	-	>320	-	2.4	1.0*	CPE	+
	4	05/09/89	0.903	199	198	0.99	-	>320	-	-	>320	-	-	0.00	MTT	+
1215	53	03/27/89	0.859	-	151	-	-	278	-	-	>320	-	-	0.60	MTT	-
	27	04/14/89	1.227	-	84	-	-	209	-	-	>320	-	-	0.00	MTT	-
	27	10/06/89	0.795	52	137	2.6	100	268	2.7	-	>320	-	1.4	8.01	MTT	+
1829	32	04/03/89	1.042	-	>320	-	-	>320	-	-	>320	-	-	>0.15	MTT	-
	32	10/06/89	0.609	2.6	>320	>121	278	>320	>12	-	>320	-	>12	>21.97	MTT	+
1850	53	04/10/89	0.870	-	>100	-	-	>100	-	-	>100	-	-	>1.60	MTT	-
	32	10/06/89	0.716	43	>100	>2.4	77	>100	>1.3	-	>100	-	>1.3	>10.87	MTT	+
2275	12	03/17/89	1.050	-	52	-	-	99	-	-	>100	-	-	2.62	MTT	-
	53	04/10/89	0.908	-	50	-	-	95	-	-	>320	-	-	3.17	MTT	-
	12	09/11/89	0.944	26	136	5.3	51	284	5.6	-	>320	-	2.7	>16.91	MTT	+
2318	13	03/17/89	1.040	0.36	0.25	0.69	1.0	1.4	1.4	-	>10	-	0.3	>0.42	MTT	+
	53	04/10/89	0.905	<1.0	<1.0	~1.0	-	2.6	-	-	>320	-	-	>0.04	MTT	+
	13	09/11/89	0.848	<0.03	>10	>313	0.52	>10	>19	0.94	>10	>11	>19	>49.94	MTT	+
2320	13	03/17/89	1.067	0.68	8.9	13	-	23	-	-	>100	-	-	>13.05	MTT	+
	53	04/10/89	0.895	<1.0	7.6	7.6	-	59	-	-	>320	-	-	>9.89	MTT	+
	13	09/11/89	0.848	<1.0	46	>46	7.2	157	22	-	>320	-	6.4	>28.83	MTT	+

Table 21 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₂₅	AL ₂₅	IC ₅₀	IC ₅₀	AL ₅₀	IC ₉₅	IC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
2433	17	03/17/89	0.950	51	>100	>2.0	88	>100	>1.1	-	>100	-	>1.1	>0.00	MTT	+
	17	09/11/89	0.631	7.4	161	22	52	222	4.3	-	>320	-	3.1	23.90	MTT	+
2453	18	03/24/89	1.018	1.5	1.6	1.1	-	3.0	-	-	9	-	-	>2.93	MTT	+
	18	09/08/89	0.889	3.5	13	3.9	5.0	21	4.1	9.9	>32	>3.3	2.6	12.09	MTT	+
2503	21	03/31/89	1.059	0.18	0.28	1.5	-	2.1	-	-	>3.2	-	-	2.33	MTT	+
	53	04/10/89	0.895	<1.0	<1.0	1.0	-	2.4	-	-	>320	-	-	0.00	MTT	+
	21	09/08/89	1.216	0.4	4.2	10	0.68	>10	>15	-	>10	-	6.2	>21.71	MTT	+
2506	21	03/31/89	0.977	0.9	4.5	5.0	2.2	>10	>4.6	-	>10	-	2.0	10.27	MTT	+
	21	09/08/89	1.020	1.0	6.4	6.2	2.3	>10	>4.4	-	>10	-	2.8	>13.28	MTT	+
2544	20	12/20/88	1.115	1.6	3.3	2.1	2.6	6.2	2.4	-	27	-	1.3	4.34	MTT	+
	20	03/21/89	0.873	-	4.0	-	-	7.3	-	-	29	-	-	0.00	MTT	-
2716	46	01/23/89	1.214	1.4	3.4	2.4	2.7	8.4	3.2	-	94	-	1.3	>6.03	MTT	+
	22	09/08/89	1.367	2.4	>10	>4.1	8.4	>10	>1.2	-	>10	-	>1.2	>9.60	MTT	+
2902	26	04/14/89	1.201	45	62	1.4	70	155	2.2	-	322	-	0.89	6.14	MTT	+
	26	09/08/89	1.421	-	>100	-	-	>100	-	-	>100	-	-	>0.05	MTT	-
2960	27	04/14/89	1.162	37	>320	>8.7	74	>320	>4.3	276	>320	>1.2	>4.3	>2.64	MTT	+
	27	09/08/89	1.440	73	25	0.34	157	>320	>1.9	-	>320	-	0.15	>6.82	MTT	+
2980	48	02/07/89	1.039	2.4	0.23	0.10	-	1.8	-	-	>3.2	-	-	0.11	MTT	+
	48	03/10/89	0.953	-	1.1	-	-	2.4	-	-	>3.2	-	-	0.00	MTT	-
	25	04/07/89	0.931	12	1.5	0.13	100	2.6	0.03	-	>320	-	0.01	>0.01	MTT	+
	25	09/08/89	1.371	5.7	0.76	0.13	-	1.7	-	-	>10	-	-	0.00	MTT	+
3038	53	04/10/89	0.835	<1.0	<1.0	1.0	-	<1.0	-	-	>320	-	-	0.00	MTT	+
	28	04/14/89	0.854	0.07	<0.03	<0.45	-	0.17	-	-	>10	-	-	0.00	MTT	+
	28	09/08/89	1.414	0.26	0.29	1.1	0.70	>3.2	>4.6	-	>3.2	-	0.41	>7.76	MTT	+

Table 21 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AL ₂₅	IC ₅₀	TC ₅₀	AL ₅₀	IC ₉₅	TC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
3315	30	12/07/88	1.293	10	44	4.4	19	>320	>17	-	>320	-	2.4	>17.94	MTT	+
	30	09/08/89	1.433	-	26	-	-	>320	-	-	>320	-	-	0.00	MTT	-
3584	32	11/03/88	1.169	22	61	2.8	80	>100	>1.2	-	>100	-	0.76	>6.35	MTT	+
	32	04/17/89	1.002	63	235	3.7	-	>320	-	-	>320	-	-	>8.17	MTT	+
	32	09/11/89	1.117	44	178	4.0	73	285	3.9	-	>320	-	2.5	11.91	MTT	+
3802	58	08/04/89	1.165	<0.1	<0.10	~1.0	-	0.31	-	-	>32	-	-	0.18	MTT	+
	35	09/11/89	1.233	0.1	0.25	2.7	0.19	>10	>52	-	>10	-	1.3	>12.01	MTT	+
4742	44	04/03/89	0.994	9.6	9.7	1.0	58	>320	>5.5	-	>320	-	0.17	>9.62	MTT	+
	44	09/15/89	0.805	9.9	7.3	1.2	19	>320	>17	-	>320	-	0.38	>21.61	MTT	+
5070	48	03/03/89	0.958	141	59	0.4	232	97	0.4	-	>320	-	0.3	>1.63	MTT	+
	48	10/02/89	1.011	-	106	-	-	179	-	-	311	-	-	0.3	MTT	-
5072	48	03/03/89	0.956	41	>320	>7.9	67	>320	>4.8	264	>320	>1.2	>4.8	>27.35	MTT	+
	48	10/02/89	1.011	54	810	15	138	>1000	>7.3	-	>1000	-	5.9	>24.06	MTT	+
	48	10/06/89	0.390	179	267	1.5	-	>320	-	-	>320	-	-	>3.10	MTT	+
5094	56	06/19/89	1.410	48	84	1.7	73	156	2.1	-	304	-	1.1	4.52	MTT	+
	56	08/07/89	1.154	66	60	0.9	-	99	-	-	298	-	-	0.00	MTT	+
5119	56	06/23/89	0.677	36	93	2.6	-	215	-	-	>320	-	-	7.86	MTT	+
	56	08/07/89	1.123	11	76	7.1	25	>100	>4.1	-	>100	-	3.1	17.35	MTT	+
5138	57	07/10/89	1.145	251	>320	>1.3	-	>320	-	-	>320	-	-	>3.90	MTT	+
	57	08/18/89	1.070	110	515	4.7	179	711	4.0	-	>1000	-	2.9	>17.32	MTT	+
5142	57	07/10/89	1.103	51	84	1.7	81	161	2.0	-	304	-	1.0	3.31	MTT	+
	57	08/18/89	1.116	57	49	0.86	-	127	-	-	301	-	-	0.18	MTT	+
5175	58	07/24/89	0.703	18	5.5	0.3	-	3.5	-	-	93	-	-	0.00	MTT	+
	58	10/09/89	1.000	8.7	39	4.5	20	60	2.9	-	97	-	1.9	>13.52	MTT	+

Table 21 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
5176	58	07/24/89	0.703	259	17	0.07	-	92	-	-	>320	-	-	0.00	MTT	+
	58	10/09/89	1.000	38	134	3.5	79	200	2.5	-	317	-	1.7	10.40	MTT	+
5197	58	07/28/89	1.439	54	44	0.8	92	127	1.4	-	301	-	0.5	0.5	MTT	+
	58	10/09/89	1.010	15	89	6.0	22	164	7.5	-	307	-	4.0	19.73	MTT	+
5198	58	07/28/89	1.439	53	32	0.6	59	140	1.6	-	302	-	0.4	0.93	MTT	+
	58	10/09/89	1.010	14	58	4.2	19	85	4.4	-	295	-	3.0	>17.11	MTT	+
5383	54	05/01/89	0.794	35	156	4.4	65	211	3.3	-	311	-	2.4	>16.70	MTT	+
	54	06/06/89	0.941	-	66	-	-	>100	-	-	>100	-	-	0.00	MTT	-
5384	54	05/31/89	0.795	8.8	49	5.6	18	67	3.7	-	99	-	2.7	>18.03	MTT	+
	54	06/06/89	0.874	-	35	-	-	57	-	-	97	-	-	0.00	MTT	-
5385	54	05/01/89	0.795	13	48	3.7	26	66	2.5	-	98	-	1.8	>12.33	MTT	+
	54	06/06/89	0.874	-	32	-	-	58	-	-	103	-	-	0.65	MTT	-
5393	54	05/02/89	1.045	<1.0	1.9	>1.9	9.5	2.9	0.31	-	>320	-	0.2	>1.09	MTT	+
	54	06/06/89	0.901	-	5.9	-	-	>10	-	-	>10	-	-	0.00	MTT	-
5457	54	05/02/89	1.072	1.8	7.5	4.2	16	48	3.1	-	155	-	0.5	>10.84	MTT	+
	54	06/06/89	0.900	15	5.8	0.4	32	15	-	-	95	-	0.2	>2.09	MTT	+
5541	56	06/16/89	1.276	4.9	7.2	1.5	100	27	0.27	-	>320	-	0.07	>6.72	MTT	+
	56	08/11/89	1.275	100	42	0.4	-	85	-	-	293	-	-	0.00	MTT	+
5543	56	06/16/89	1.260	-	>320	-	-	>320	-	-	>320	-	-	>6.21	MTT	-
	56	08/11/89	1.436	0.1	0.67	6.7	0.20	>32	>157	-	>32	-	3.3	>39.55	MTT	+
5643	57	07/07/89	0.405	-	320	-	-	>320	-	-	>320	-	-	0.70	MTT	-
	57	08/18/89	1.000	8.7	>320	>37	38	>320	>8.5	-	>320	-	>8.5	>35.52	MTT	+

Table 21 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF- RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act- ivity
5690	57	07/17/89	0.883	175	63	0.36	306	>320	>1.1	-	>320	-	0.2	>0.10	MTT	+
	57	08/18/89	1.091	260	74	0.28	-	190	-	-	908	-	-	0.00	MTT	+
5691	57	07/17/89	1.056	320	100	0.31	-	>320	-	-	>320	-	-	0.00	MTT	+
	57	08/18/89	1.091	141	469	3.3	200	734	3.7	-	>1000	-	2.4	11.52	MTT	+
5714	58	07/31/89	0.916	-	3.5	-	-	5.7	-	-	9.7	-	-	0.00	MTT	-
	58	10/02/89	1.007	1.5	4.3	2.9	2.5	6.2	2.5	-	9.6	-	1.7	7.15	MTT	+
	58	10/09/89	0.988	0.87	4.5	5.2	1.5	6.4	4.3	-	9.7	-	3.0	20.06	MTT	+
5724	58	07/31/89	1.158	-	126	-	-	>320	-	-	>320	-	-	0.00	MTT	-
	58	10/09/89	1.055	71	>1000	>14	204	>1000	>4.9	-	>1000	-	>4.9	>19.40	MTT	+

= This value is a virus rating (VR) rather than a TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound similar to TAI. TAI is more accurate with MTT measurements.

DIFRNTL = The differential is the difference in the cell control and the virus control optical densities.

IC_{25,50,95} = (Viral) Inhibitory Concentration 25%, 50%, and 95% = The drug concentration (µg/ml) that inhibited viral CPE by 25%, 50% or 95% calculated by using a regression analysis program and semilog curve fitting.

TC_{25,50,95} = (Cell) Toxicity Concentration 25%, 50%, and 95% = The drug concentration (µg/ml) that reduced cell viability by 25%, 50%, or 95%.

AI_{25,50,95} = Antiviral Index = A single point ratio of the antiviral and anticellular effect of the compound, calculated with 25%, 50% or 95% reduction values (calculated by dividing the TC_{25,50, or 95} by the IC_{25,50, or 95}).

SI = Selectivity Index = A ratio calculated by dividing the TC₂₅ by the IC₅₀ (Based upon 6 one-half-log₁₀ dilutions, µg/ml, the maximum scale is 0-320).

TAI = Total Antiviral Index = The area between the cytotoxicity and the antiviral curves (based upon a scale of 0-100%).

A = Not Applicable.

4.1.8 Yellow Fever Virus (YF)

The total output of YF testing during this reporting period is summarized in monthly increments in Figure 28. During this 12-month period 2132 tests were performed against the YF virus with the MTT-assay format. Out of these, 189 were control compound assays, selenazofurin (AVS-0253) being the positive control compound. One hundred two tests were internal (+++) virus load and cell load quality control tests. The rest, totaling 1841, were actual single dose assays. The total number of assays (2132) represents a 136% increase (improvement) in total testing output during this year as compared to the output of the results from the previous year.

Out of the 1841 single drug assays, 147 different compounds demonstrated antiviral activity at greater than 25% reduction levels. This represents around 8.0% of the tested compounds having *in vitro* antiviral activity against YF virus. The remainder, 1694 compounds (92%), are to be considered inactive with this assay protocol.

TOTAL NUMBER OF TESTS AGAINST YELLOW FEVER VIRUS (YF)
NOVEMBER 15, 1988 - NOVEMBER 14, 1989

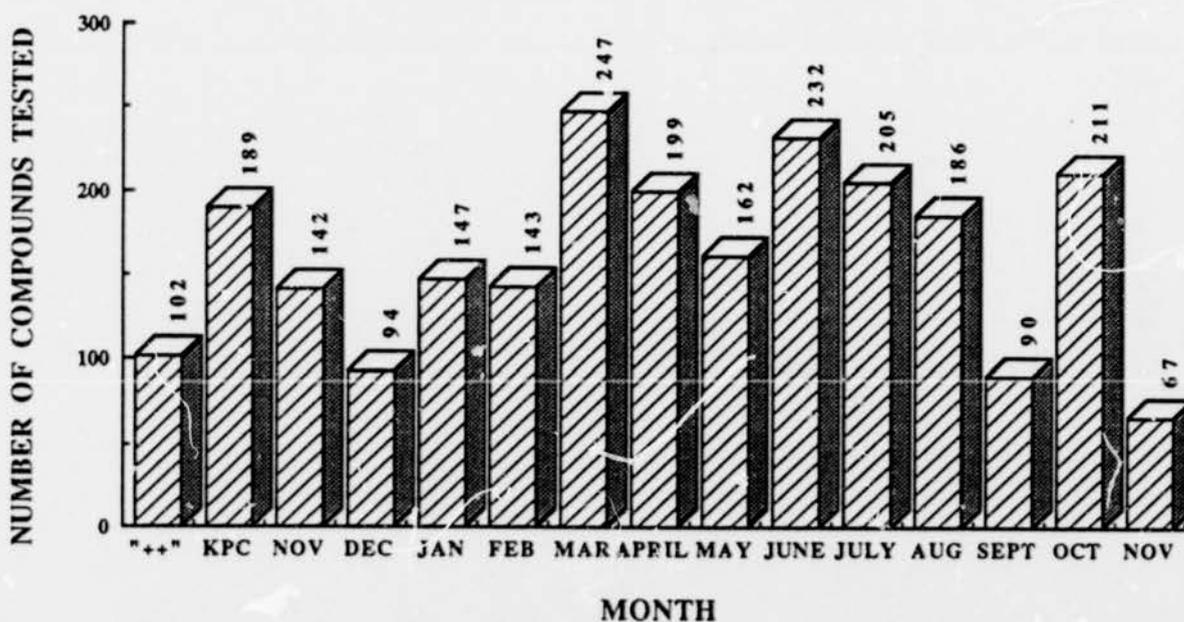


Figure 28

Test Total = 2132

KPC (Positive Control Compound, Selenazofurin) = 189

"++" (Internal Virus and Cell Load) = 102

4.1.8.1 YF-Quality Controls:

4.1.8.1.1 Antiviral Activity

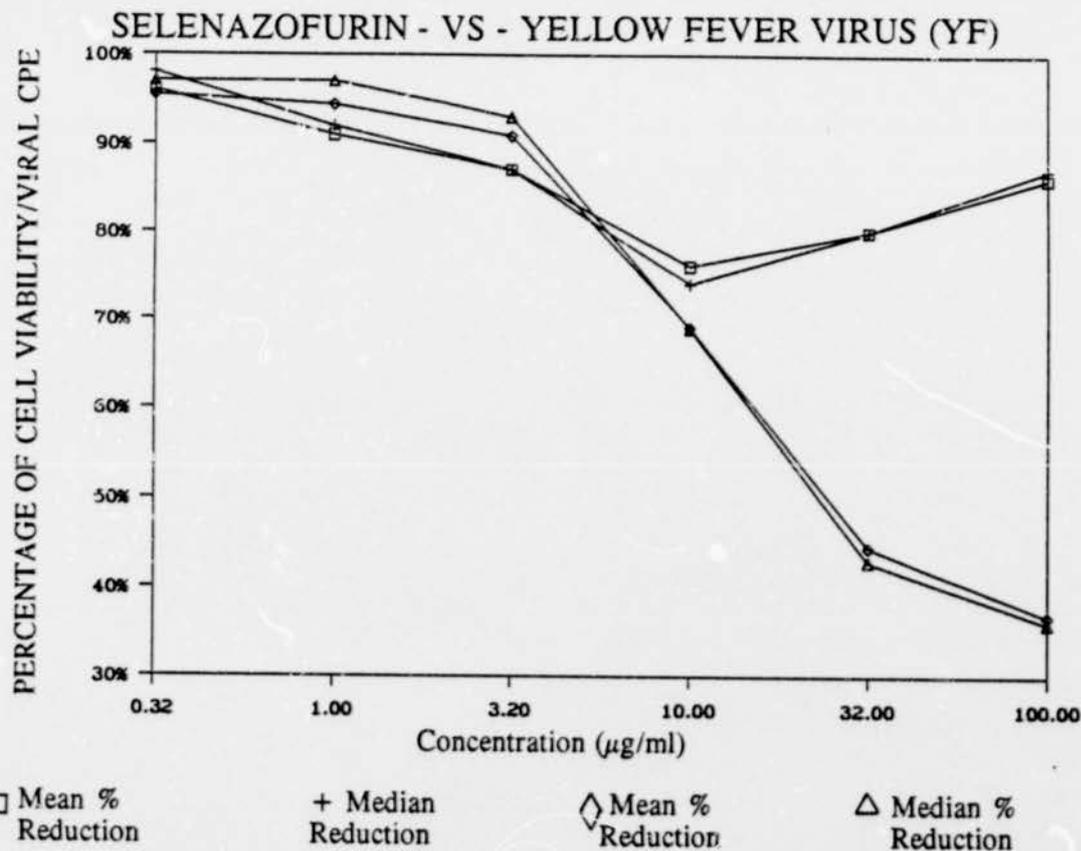
YF-Control Compound-Antiviral Performance: Selenazofurin (AVS-0253) has been the sole control compound against YF in these MTT assay screens. The mean and median antiviral inhibition and cytotoxicity patterns of the positive control drug (Selenazofurin) are illustrated in Figure 29. The 189 control tests performed with Selenazofurin gave a mean Total Antiviral Index (TAI) of 3.42 (SD \pm 4.40) and the median value was 1.89%. The mean Selectivity Index (SI) was only 0.028 (SD \pm 0.24)

and the median SI value was 0, indicating a poor antiviral selectivity. The closeness of the mean and median values indicate that the present execution of the SOP is consistent and repeatable.

The mean Antiviral Index 25% (AI₂₅) value was 2.10 (SD ±5.89). The median AI₂₅ value was 0.85. The mean Antiviral Index 50% (AI₅₀) was 0.026 (SD ±0.36) with a median of 0.0. This indicates that selenazofurin does not consistently reach 50% antiviral reduction levels.

The mean Antiviral Inhibitory Concentration 25% (IC₂₅) was 4.62 µg/ml (SD ±6.15). The median IC₂₅ value was 3.13 µg/ml. The mean Antiviral Inhibitory Concentration 50% (IC₅₀) was 0.18 µg/ml (SD ±1.64). The median IC₅₀ value was 0 µg/ml. The discrepancy indicates that the control compound selenazofurin does not consistently reach 50% reduction levels.

The maximum (average) antiviral inhibitory level of the 189 selenazofurin tests (Figure 29) was reached at 10.0 µg/ml of the compound. Further increase of the drug concentration does not improve its antiviral activity. The maximum antiviral effect (~27%) is found with a simultaneous 30% cytotoxic suppression at 10 µg/ml. After this concentration the antiviral protection levels off to ~15% reduction levels at 100 µg/ml while simultaneously the selenazofurin becomes maximally toxic (~65%).



Conc. (µg/ml)	% Viral CPE						% Cell Viability					
	0.32	1	3.2	10	32	100	0.32	1	3.2	10	32	100
Mean	96	91	87	76	80	86	95	94	91	69	45	37
Median	98	92	87	74	80	87	97	97	93	69	43	36
Std. Dev.	.06	.08	.09	.11	.12	.11	.05	.07	.11	.16	.13	.13
Variance	.00	.01	.01	.01	.01	.01	.00	.00	.01	.02	.02	.02

Figure 29
Average Antiviral and Cytotoxicity Values for 189 Positive Control Compound Assays

A bar graph scatter plot (Figure 30) depicts the distribution of the maximum antiviral reduction values of all 189 control compound assays for selenazofurin. The results indicate that the average, maximum antiviral reduction obtained with the present SOP is around 26.92 (SD \pm 9.86) reduction levels. The maximum reduction levels vary from 0 - 58% but remain quite consistently around the median of 27%. The assay control values give a relatively normal, bell-shaped distribution curve. This indicates a quite consistent day-to-day performance of the control compound in the YF-MTT assay.

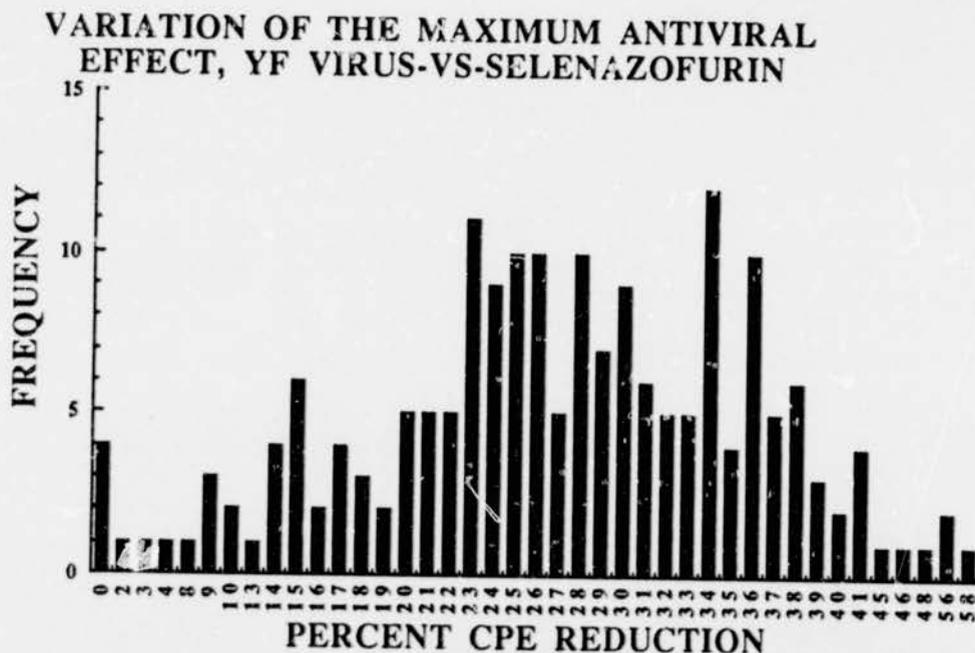


Figure 30
Maximum Antiviral CPE Reduction (%). Summary of 189 Control Compound Tests

Since selenazofurin is only marginally active against YF virus, better quality control compounds are needed. However, regardless of the poor performance of the YF quality control drug selenazofurin, around 147 different compounds have equal or better antiviral activity against YF virus than AVS-0253. Some of these could certainly be used as a better *in vitro* antiviral control compound in this large scale antiviral screening program.

4.1.8.1.2. Cellular Cytotoxicity

YF-Control Compound-Cytotoxicity Performance: The 189 cytotoxicity values of the positive control compound selenazofurin are also very consistent. The mean cell Toxic Concentration (TC₂₅) is 11.54 μ g/ml (SD \pm 13.11 and the median is 8.21 μ g/ml. The mean cell Toxic Concentration 50% (TC₅₀) value is 31.26 (SD \pm 22.14) and the median is 26.90 μ g/ml. As can be seen from Figure 29, the observable toxicity starts around 3.2 μ g/ml, and reaches maximum (65%) toxicity at 100 μ g/ml.

When the cytotoxicity reaches around 30% (10 μ g/ml), the control compound loses its maximum antiviral effect (30%). At 100 μ g/ml the antiviral protection of selenazofurin is lost, and it becomes maximally toxic at this concentration. The highest selenazofurin concentration tested in these assays was 100 μ g/ml.

Selenazofurin has a definite cytotoxic suppression of cellular metabolism and growth. A peculiar feature of the control compound is that the toxicity levels off after reaching its maximum cytotoxic value (\pm 65%) and continues at that stationary level at higher concentrations.

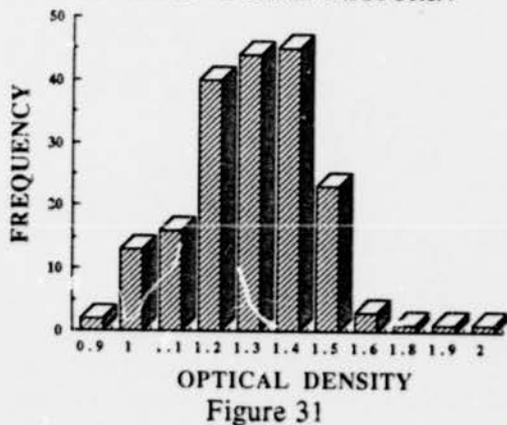
4.1.8.1.3. Assay Plate Quality Controls: Cell Load and Virus Load Parameters

YF-Control Compound-Cell Load Performance: A bar graph scatter plot of the mean cell control (O.D. reading) of 189 control assays is plotted in Figure 31. The results indicate that the cell O.D. readings reached a mean 1.29 (SD \pm 0.166) with a median of 1.300 (Range from 0.900 - 1.950). This indicates that a uniform and equal number (15,000 cells/well) of cells are being loaded into every well in the 96-well plate during the day-to-day operation. The cells reduced MTT to formazan giving maximum blue color uniformly and consistently.

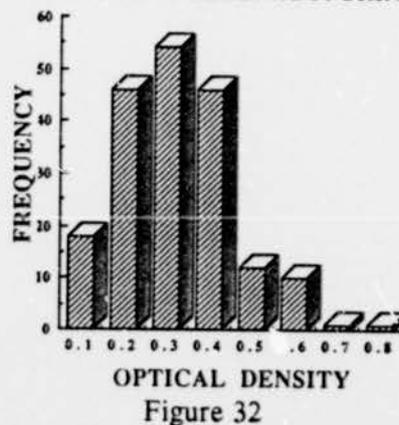
YF-Control Compound-Virus Load Performance: A bar graph scatter plot of the mean virus load O.D. readings of the 189 control assays is presented in Figure 32. The results indicate that the average load O.D. reading is 0.310 (SD \pm 0.132) with a median of 0.290 (Range of 0.03 - 0.81). This demonstrates that a good cell destruction is taking place and a uniform load of virus (32 TCID₅₀) is administered on the cell monolayer with very consistent viral CPE results.

YF-Control Compound-Assay Differential Performance: A bar graph scatter plot of the mean O.D. differential value of the 189 control assays is provided in Figure 32-A. The results indicate that the average differential O.D. reading is 0.980 (SD \pm 0.189) with a median of 0.994 (Range 0.481 - 1.661). The single bell-shaped curve is reasonably sharp and uniform. This reflects that the assays are executed consistently and are repeatable during day-to-day operation with close to 99% accuracy.

VARIATION OF THE CELL (LOAD) CONTROLS
YF VIRUS-VS-SELENAZOFURIN



VARIATION OF THE VIRUS (LOAD) CONTROLS
YF VIRUS-VS-SELENAZOFURIN



VARIATION OF THE TEST DIFFERENTIAL
YF VIRUS-VS-SELENAZOFURIN

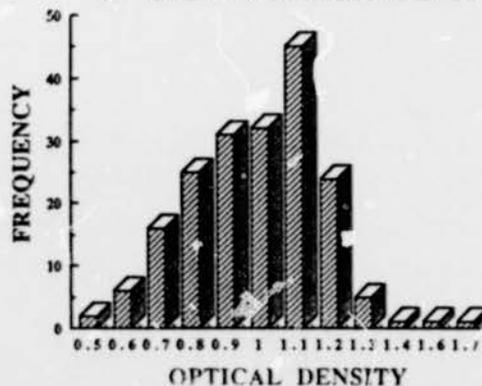


Figure 32-A

4.1.8.2 YF-Antiviral Activity Results:

Drugs with 95% Antiviral Reduction Levels: Out of the 1841 actual single drug tests, 18 different compounds demonstrated excellent antiviral activity having antiviral reduction values of 95% or better. This represents around 1.0% of the test compounds being active at this excellent reduction level. These compounds are summarized in Table 22 according to the highest **Total Antiviral Index (TAI)**. Compound AVS-3102 demonstrated the greatest *in vitro* promise, having a TAI around 99% and **Selectivity Index (SI)** around 300. Compounds AVS-5580, 2631, 3802, 4855, 2604, and 2591 demonstrated excellent antiviral activity. TAI over 40% and SI values over 18. The next 11 active compounds had TAI's from 5 to 35% and SI's from 2 to 7, which may or may not be significant. The *in vitro* antiviral activity of all of the compounds within this category need to be further confirmed and confirmatory testing is presently in progress.

Table 22

AVS Compounds Active Against YF at AI₉₅ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 95	TC 95	AI 95	SI	TAI
3102	28	05/19/89	0.812	0.39 >	100.00 >	258.00 >	313.00 >	99.41
5580	54	05/03/89	1.295	6220.0 >	100000 >	16.10 >	75.60 >	70.14
2631	19	09/06/89	0.650	26.50 >	320.00 >	12.06 >	58.39 >	63.24
3802	35	09/11/89	0.622	0.90 >	10.00 >	11.13 >	29.30 >	55.42
4855	48	09/12/89	0.751	29.30 >	320.00 >	10.91 >	23.82 >	55.28
2604	19	09/06/89	0.650	18.90 >	100.00 >	5.30 >	25.16 >	46.09
2591	19	09/06/89	0.619	30.20 >	320.00 >	10.60 >	17.89 >	39.96
2590	19	09/06/89	0.619	92.70 >	320.00 >	3.45 >	6.84 >	35.03
4113	39	09/11/89	0.624	0.57 >	1.00 >	1.77 >	5.96 >	30.37
5138	57	08/15/89	0.940	283.00 >	1000.00 >	3.53 >	5.90 >	27.36
2506	21	09/06/89	0.715	3.20 >	10.00 >	3.13 >	6.11 >	26.99
5121	56	06/20/89	0.935	89.00 >	309.00 >	3.47 >	4.96 >	25.50
2570	19	09/06/89	0.718	31.00 >	32.00 >	1.03 >	2.16 >	19.20
2586	19	09/06/89	0.775	306.00 >	320.00 >	1.05 >	2.08 >	17.27
2453	18	09/06/89	0.736	10.00 >	31.50 >	3.15 >	2.69 >	14.12
2582	19	09/06/89	0.775	93.60 >	100.00 >	1.07 >	1.94 >	11.89
4992	51	03/13/89	0.765	302.00 >	320.00 >	1.06 >	1.79 >	9.79
0361	2	08/22/89	1.020 <	0.03 >	0.29 >	9.02 >	1.63 >	5.46

Drugs with 50% Antiviral Reduction Levels: Fifty-four different compounds yielded good antiviral activity -- equal to or better than 50% antiviral reduction. This equals around 3.0% of the test compounds being active in this category. These compounds are summarized in Table 23 according to the highest **TAI**. Compound AVS-2978 appeared to have the best TAI of 42.80%, and SI at 7.56. Compounds AVS-2503, 4796, 0148, 2563, 2363, 0360, 2575, 2573, 2309, 4281, and 2580 have TAI's over 20% and SI's between 3 and 8, which may or may not be of any significance. The next 42 active compounds demonstrated TAI's from 3% to 18% and SI's of 0.06 to 5. Most of these compounds do not appear to be very selective antiviral agents. However, further verification of their antiviral effects is warranted and confirmatory testing is presently in progress.

AVS Comounds Active Against YF at AI₅₀ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
2978	27	04/17/89	1.019	42.30 >	320.00 >	7.56 >	7.56 >	42.81
2503	21	09/06/89	0.724	0.22 >	10.00 >	45.48	12.20	32.81
4796	46	09/12/89	0.732	6.08 >	100.00 >	16.45	8.00	27.40
0148	2	08/22/89	0.981	0.06 >	3.20 >	55.79	4.38 >	25.62
2563	21	09/06/89	0.739	0.17	2.20	13.17	6.00 >	25.60
2563	15	08/29/89	0.666	8.18	64.50	7.88	5.52 >	23.84
0360	2	03/22/89	0.842	0.05	0.29	6.23	4.19	22.90
2575	57	06/26/89	1.117	49.30 >	320.00 >	6.49	3.22 >	22.68
2573	57	06/26/89	1.117	68.80 >	320.00 >	4.65 >	4.65 >	21.02
2309	53	04/10/89	0.955	93.70 >	320.00 >	3.42 >	3.42 >	20.90
4281	42	09/12/89	0.715	1.11	8.89	7.98	5.20	20.84
2580	19	09/06/89	0.820	2.37 >	10.00 >	4.22 >	4.22 >	19.63
2811	48	02/06/89	1.184	0.03	0.23	9.00	3.55 >	18.20
5997	61	11/07/89	0.712	4.43	52.40	11.82	3.18 >	17.81
6250	1P	11/14/89	0.669	88.50	286.00	3.24	2.18 >	17.65
2979	48	02/07/89	1.083	1.93	14.90	7.73	3.79 >	17.57
4277	42	09/12/89	0.748	4.37 >	10.00 >	2.29 >	2.29 >	17.50
4278	42	09/12/89	0.742	6.41 >	32.00 >	4.99	4.40 >	16.81
6256	1P	11/14/89	0.598	7.41	50.70	6.85	3.51	16.55
4592	48	02/27/89	0.883	17.20	77.10	4.49	2.39	16.34
3734	34	09/11/89	0.626	3.53 >	10.00 >	2.83	0.23 >	15.84
2318	13	08/29/89	0.872	0.52 >	10.00 >	19.12	0.50	14.62
5916	60	10/23/89	0.874	8.85	46.90	5.30	2.73 >	14.50
5691	57	07/17/89	0.989	144.00 >	320.00 >	2.22 >	2.22 >	14.36
2980	25	09/07/89	0.676	0.22	2.17	9.92	4.78 >	13.49
4590	42	09/12/89	0.672	0.84	3.20	3.82	2.51	13.11
4609	48	02/27/89	0.892	0.06 >	0.10 >	1.71 >	1.71 >	12.34
2812	48	02/06/89	1.135	0.00 >	0.01 >	3.28	2.49 >	12.11
5998	61	11/07/89	0.712 <	1.00	9.73 >	9.73 >	3.12 >	11.86
2579	19	09/06/89	0.820	214.00 >	320.00 >	1.50 >	1.50 >	11.72
5539	56	08/07/89	1.006	2.27	6.08	2.68	1.31 >	11.55
3964	33	03/21/89	1.007	8.27 >	32.00 >	3.87	2.05	11.51
2907	26	09/07/89	0.731	66.80	248.00	3.71	2.58	10.97
4527	47	01/31/89	0.945	7.76	20.70	2.67	1.06 >	10.76
0084	1	08/22/89	0.897	71.50 >	100.00 >	1.40 >	1.40 >	10.57
5186	58	10/03/89	0.877	74.90	341.00	4.56	2.63	10.12
0046	2	08/22/89	1.020	0.29	2.17	7.60	2.10	9.18
0080	42	09/12/89	0.742	6.56 >	10.00 >	1.52 >	1.52 >	8.97
2274	12	08/29/89	0.733	65.20 >	100.00 >	1.53 >	1.53 >	8.90
2992	27	09/07/89	0.676	81.60 >	100.00 >	1.23 >	1.23 >	8.39
4739	44	07/06/89	0.749	29.00	67.60	2.33	1.65	8.03
4452	44	07/06/89	1.012	78.50	301.00	3.84	1.84	7.92
5995	61	11/07/89	0.795	8.19	22.20	2.71	1.08 >	7.66
5535	56	06/13/89	1.142	185.00 >	320.00 >	1.73 >	1.73 >	7.35
3980	36	09/11/89	0.576	65.70 >	100.00 >	1.52 >	1.52 >	7.22
0538	56	06/13/89	1.142	215.00 >	320.00 >	1.49 >	1.49 >	6.96
1736	45	11/17/88	0.816	255.00 >	320.00 >	1.25	1.14 >	6.32
2902	26	09/07/89	0.817	65.20 >	100.00 >	1.53 >	1.53 >	5.72
5543	56	08/07/89	1.101	0.75	1.59	2.12	1.03	5.43
4070	48	03/10/89	0.971	2.26 >	3.20 >	1.42 >	1.42 >	5.01
1975	1	08/29/89	0.851	80.40 >	100.00 >	1.24 >	1.24 >	4.32
5072	48	02/27/89	0.919	230.00 >	320.00 >	1.39	0.38 >	4.01
2950	27	09/07/89	0.754	213.00	41.70	0.20	0.06 >	4.00
5905	61	10/30/89	0.706	8.85	10.10	1.81	0.94 >	3.03

Drugs with 25% Antiviral Reduction Levels: Seventy-five other (different) compounds were moderately active reaching better than 25% antiviral reduction values. The list of these compounds is summarized in Table 24. Seventy-five out of 1841 represent a total of 4% active compounds in this activity category. The highest TAI in this category is for the compounds AVS-5201, 6254, 5488, 5492, 5241, 2979, 0217, 3964, 2320, 5869, and 6253, which reached total antiviral effects of over 10%. The other 64 active compounds demonstrated TAI's from 0 - 9%. In general, the compounds in this category do not appear to have any significant antiviral effect and probably do not need to be presently confirmed further.

Table 24

AVS Compounds Active Against YF at AI₂₅ Level

<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>	<u>AVS No.</u>
0111	2449	4990	5384	5643
0206	2450	5067	5401	5843
0217	2906	5069	5405	5869
0230	3592	5075	5450	5906
1019	3788	5094	5457	5910
1742	4044	5096	5483	5934
1746	4074	5098	5485	5940
1801	4116	5102	5488	5941
1850	4240	5120	5489	5973
1973	4271	5142	5494	6036
1974	4427	5165	5495	6042
2034	4445	5166	5528	6253
2122	4785	5201	5531	6254
2275	4795	5210	5542	6258
2320	4822	5241	5558	6259

4.1.8.3. Confirmatory Assays:

Some of the compounds were sent to us in more than one separate drug shipment. These compounds were tested more than once. Data from the confirmatory assays are summarized in Table 25. If a compound showed $\geq 50\%$ reduction in CPE during this reporting period, then it is considered a candidate for confirmatory test. Out of 38 confirmatory tests, 29 compounds (76%) were confirmed active during this reporting period and the remaining 9 compounds gave conflicting results. The criteria for activity is that the confirmatory test has to show $\geq 25\%$ reduction in CPE. Failure to confirm the activity in these compounds was probably due to differences during the assay conditions:

- 1) In confirmatory assays the concentration range is adjusted to a more accurate semilog scale to maximize the TAI window.
- 2) Differences in the "differential" of the two runs can cause the compound to read positive or negative, falsely. The variability in the differential can cause false positives or false negative bias in day-to-day testing calculations, reflecting the variability in the maximum activity of the compound.
- 3) The metabolic rate, age, and passage number, etc., of the cells may cause the above observed variability in test compound activity.

During this reporting period the overall confirmatory rate against YF was 76%. The conflicting results will be retested at a later date based upon the availability of the compound.

4.1.8.4 Recommendations of YF-Actives Based Upon the *in vitro* Results with MTT Assay (Vero Cells).

Based upon the *in vitro* results with the MTT assay (Vero cells) we recommend the following:

- 1) Compounds with the highest TAI in the 95% activity category that have confirmed results with the exception of "colored" compounds should receive the highest priority for further profile studies and *in vivo* animal testing.
- 2) Compounds with the highest TAI in the 50% activity category that have confirmed results with the exception of "colored" compounds should receive the next highest priority for further profile studies and *in vivo* animal testing.

Table 25

Confirmatory Assays for Compounds Active Against Yellow Fever Virus

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Activity
0084	1	05/22/89	1.252	-	42.9	-	-	73	-	-	>320	-	-	0.32	MTT	-
	1	08/22/89	0.897	30.4	>100	>3.3	72	>100	1.4	-	>100	-	>1.4	10.57	MTT	+
111	42	07/06/88	NA	-32	100	-3.2	48	>320	>6.7	-320	>320	-1.0	2.1	1.5*	CPE	+
	42	05/08/89	1.088	-	64	-	-	235	-	-	>320	-	-	-	MTT	-
206	4.5	01/30/87	NA	-320	320	-1.0	115	>320	>2.8	-320	>320	-1.0	2.8	1.4*	CPE	+
	4.5	02/02/87	NA	-320	320	-1.0	297	>320	>1.1	-320	>320	-1.0	1.1	0.6*	CPE	+
	4.5	05/24/88	NA	-	100	-	217	>320	>1.5	-	>320	-	0.5	0.5*	CPE	-
	4.5	05/08/89	1.072	151	>320	>1.7	-	>320	-	-	>320	-	-	>2.2	MTT	+
303	1	01/15/87	NA	-1.0	100	-100	9.9	320	32	-	320	-	10	2.6*	CPE	+
	1	08/19/87	NA	0.32	0.32	1.0	100	>320	>3.2	-	>320	-	0.003	1.1*	CPE	+
	46	01/23/89	0.986	-	88	-	-	>320	-	-	>320	-	-	0.73	MTT	-
360	2	03/06/87	NA	-0.032	0.32	-10	0.07	>0.32	>4.6	-0.1	>0.32	>3.2	4.6	1.6*	CPE	+
	48	05/18/88	NA	-	>10	-	-	>10	-	-	>10	-	-	0.0*	CPE	-
	48	02/06/89	1.193	0.05	0.2	4.38	0.08	0.51	6.47	-	2.93	-	2.7	>11.7	MTT	+
	48	08/22/89	0.842	0.03	0.2	7.39	3.05	0.29	6.23	-	>1.0	-	4.2	22.90	MTT	+
361	2	03/01/86	NA	0.032	0.1	3.2	0.04	-0.32	-8	-0.1	-0.32	-3.2	2.7	1.1*	CPE	+
	48	02/06/89	1.182	0.01	0.05	4.76	0.02	0.07	4.41	-	0.28	-	2.7	14.54	MTT	+
	48	08/22/89	1.020	<0.03	0.05	>1.63	<0.03	0.07	>2.35	<0.03	0.29	>9.0	>1.6	>5.46	MTT	+
1019	28	11/30/87	NA	-32	-0.32	-100	<0.32	-320	-1000	<0.32	320	1000	>1.0	3.5*	CPE	+
	28	02/02/88	NA	-0.1	0.10	-1.0	0.26	>1.0	>3.8	-1.0	>1.0	>1.0	0.4	1.1*	CPE	+
	28	05/08/89	1.130	0.96	0.68	0.71	-	2.35	-	-	>10	-	-	~10.00	MTT	+
1976	27	05/15/89	0.680	-	94	-	-	-	183	-	>320	-	-	-	MTT	-
	1	08/29/89	0.851	43.9	>100	>2.3	80	>100	>1.2	-	>100	-	>1.2	>4.32	MTT	+

Table 25 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₇₅	TC ₇₅	AI ₇₅	SI	TAI	Assay Type	Act-ivity
2275	12	01/19/87	NA	~10	320	~32	13.1	>320	>24	~32	>320	>10	24.3	3.33*	CPE	+
	12	08/19/87	NA	~32	10	0.3	79.5	~320	~4	-	~320	-	0.13	0.5*	CPE	+
	12	12/14/87	NA	-	>100	-	-	>100	-	-	>100	-	-	0.0*	CPE	-
	12	05/24/87	NA	-	>320	-	-	>320	-	-	>320	-	-	0.0*	CPE	-
	53	04/10/89	0.981	-	149	-	-	253	-	-	>320	-	-	7.85	MTT	-
2309	11	02/13/87	NA	~81.9	320	3.9	81.9	>320	3.9	-	>320	-	3.9	1.0*	CPE	+
	11	05/25/88	NA	52	32	1.9	53.2	>320	6.0	-	>320	-	0.6	1.2	MTT	+
	53	04/10/89	0.955	42	>320	>7.7	94	>320	>3.4	-	>320	-	>3.4	>20.90	MTT	+
2318	13	03/04/88	NA	~1.0	3.2	~3.2	1.6	>320	>200	~3.2	>320	>100	2.0	3.2*	CPE	+
	53	04/10/89	0.955	<1.0	<1	~1.00	-	2.51	-	-	>320	-	-	>0.4	MTT	+
	53	08/29/89	0.872	0.3	0.3	0.97	0.52	>10	>19	-	>10	-	0.5	14.62	MTT	+
2503	21	07/16/87	NA	~1.0	1.0	1.0	0.56	>320	>571	~1.0	>320	>320	1.8	3.6*	CPE	+
	53	04/10/89	0.986	<1.0	<1	~1.00	-	2.52	-	-	>320	-	-	>0.5	MTT	+
	21	09/06/89	0.724	0.14	2.7	19.5	0.22	>10	>45	-	>10	-	12	33.00	MTT	+
2563	21	06/25/87	NA	<0.32	3.2	>10	<0.32	10	31	~1.0	10	10	>10	2.3*	CPE	+
	32	03/01/88	NA	~0.32	<3.2	>10	0.63	3.2	5.1	-	3.2	-	5.1	1.0*	CPE	+
	32	05/25/88	NA	0.10	0.32	3.2	0.13	3.2	25	~0.32	3.2	10	2.4	1.6*	CPE	+
	48	02/06/89	1.189	0.25	1.5	6.1	0.47	2.9	6.1	-	>3.2	-	3.2	>0.1	MTT	+
	15	05/22/89	1.160	1.4	4.0	2.8	2.2	10.9	4.9	-	30.7	-	1.8	8.60	MTT	+
	21	09/06/89	0.739	0.11	1.0	9.3	0.17	2.2	13.2	-	>10	-	6.0	>25.60	MTT	+
2716	22	05/27/87	NA	3.2	10	3.1	7.6	~100	13	~10	100	~10	1.3	1.2*	CPE	+
	46	01/23/89	0.962	-	22	-	-	37	-	-	93.7	-	-	>0.8	MTT	-
2906	26	09/14/87	NA	~24.6	320	13	24.6	>320	13	~320	>320	1.0	12.9	2.3*	CPE	+
	26	05/25/88	NA	10	32	3.2	23.1	>320	14	~100	>320	>3.2	1.4	2.1*	CPE	+
	53	04/10/89	1.020	47	62	1.3	-	97.2	-	-	>320	-	-	4.85	MTT	+
2978	25	02/28/89	0.854	-	>320	-	-	>320	-	-	>320	-	-	0.48	MTT	-
	27	04/17/89	1.019	<1	>320	>320	42	>320	>7.6	-	>320	-	>7.6	>42.81	MTT	+
	27	05/15/89	0.843	-	>100	-	-	>100	-	-	>100	-	-	0.0	MTT	-

Table 25 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AL ₂₅	IC ₅₀	TC ₅₀	AL ₅₀	IC ₉₅	TC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
2979	25	09/01/87	NA	3.2	10	3.1	4.7	32	6.8	10	32	3.2	2.1	1.0*	CPE	+
	48	02/07/89	1.083	0.68	7.3	-	1.9	>0.032	-	-	>0.032	-	3.8	>17.57	MTT	+
	48	03/10/89	1.067	4.4	13	3.0	6.6	25	3.8	-	95.6	-	2.0	8.93	MTT	+
	27	04/17/89	1.045	1.8	13	7.3	-	23	-	-	89.9	-	-	11.98	MTT	+
	25	09/07/89	0.754	-	1.6	-	-	2.5	-	-	9.1	-	-	0.0	MTT	-
2980	25	09/01/87	NA	-0.32	3.2	10	0.63	32	51	-3.2	32	10	5.1	2.3*	CPE	+
	25	05/25/88	NA	0.32	3.2	10	1.4	3.2	2.3	10	10	1	2.3	2.4*	CPE	+
	48	02/07/89	1.154	0.05	1.1	22	0.07	2.4	37	-	>3.2	-	-	11.98	MTT	+
	48	03/10/89	0.971	0.43	1.1	2.6	0.62	2.5	4.1	-	>3.2	-	1.8	10.03	MTT	+
	25	09/07/89	0.676	0.14	1.0	7.7	0.22	2.2	9.9	-	>10	-	4.8	>13.49	MTT	+
3592 ABE	01/11/89	0.904	-	>320	>1.6	-	-	>320	-	-	>320	-	-	>3.53	MTT	-
	51	03/06/89	1.099	-	300	-	-	>320	-	-	>320	-	-	0.0	MTT	-
	51	09/11/89	0.626	22	>320	>1.4	-	>320	-	-	>320	-	-	1.48	MTT	+
3964	27	02/15/88	NA	-10	32	3.2	19.2	32	1.7	-	>320	-	1.7	1.0*	CPE	+
	27	02/28/89	0.854	8.4	49	5.8	-	97.8	-	-	>160	-	-	11.68	MTT	+
	27	05/21/89	1.537	4.2	17	4.0	8.3	>32	>3.87	-	>32	-	2.0	11.51	MTT	+
4070	35	04/12/88	NA	1.0	3.2	3.2	1.3	3.2	1.8	-10	10	1.0	1.8	1.4	CPE	+
	48	02/07/89	1.172	1.4	>3.2	>2.35	2.0	>3.2	>1.57	-	>3.2	-	>1.6	0.1	MTT	+
	48	03/10/89	0.971	1.5	>3.2	>2.15	2.3	>3.2	>1.42	-	>3.2	-	>1.4	>5.01	MTT	+
4074	48	02/07/89	1.156	-	>0.03	-	-	>0.03	-	-	>0.03	-	-	-	MTT	-
	48	03/10/89	0.984	0.02	>0.03	1.7	-	>0.03	-	-	>0.03	-	-	>2.81	MTT	+
4113	48	02/07/89	1.184	0.23	>0.32	>1.4	-	>0.32	-	-	>0.32	-	-	>2.43	MTT	+
	48	03/10/89	0.961	0.31	>0.32	>1.1	-	>0.32	-	-	>0.32	-	-	>1.48	MTT	+
4452	39	05/23/89	1.252	0.47	<0.03	<0.07	-	0.74	-	-	5.8	-	-	-	MTT	+
	39	09/11/89	0.624	0.11	>1.00	>8.9	0.17	>1.0	>6.0	0.6	>1.0	>1.8	>6.0	>30.37	MTT	+
	44	07/06/89	1.012	42.8	44	3.4	78.5	301	3.8	-	>320	-	1.8	7.92	MTT	+
	44	08/15/89	1.023	76.9	43	1.9	-	263	-	-	>320	-	-	3.43	MTT	+

Table 25 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	IC ₃₅	AL ₂₅	IC ₅₀	IC ₉₀	IC ₉₅	IC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
4590	42	07/27/88	NA	0.32	3.2	10	1.4	3.2	~10	2.3	2.3	2.3	1.9*	CPE	+
	48	02/27/89	0.852	0.66	2.8	4.3	2.8	6.6	-	2.4	2.4	1.0	>10.69	MTT	+
	42	09/12/89	0.672	0.34	2.1	6.1	0.84	3.2	-	3.8	3.8	2.5	13.11	MTT	+
4592	42	07/27/88	NA	~1.0	32	~32	3.2	~100	~32	31	31	10	2.4*	CPE	+
	48	02/27/89	0.883	10.4	41	3.9	17.2	77	--	4.5	4.5	2.4	16.34	MTT	+
	42	09/12/89	0.672	3.4	24	5.5	9.7	55	-	5.6	5.6	2.5	11.63	MTT	+
4739	44	07/06/89	0.749	15.6	47.8	3.1	29	67.6	-	2.3	2.3	1.65	8.03	MTT	+
	44	08/15/89	1.023	21.5	39.9	1.9	-	62	-	-	-	-	>1.92	MTT	+
4796	46	01/24/89	0.943	6.63	21.5	3.2	21.7	79.6	-	3.7	3.7	1.0	8.37	MTT	+
	46	09/12/89	0.732	4.4	49	11.2	6.1	>100	-	>16.5	>16.5	8.1	27.40	MTT	+
4855	48	02/21/89	1.222	10	80.8	8.1	20.0	171	89.6	8.6	8.6	4.0	>34.86	MTT	+
	48	09/12/89	0.751	7.2	>320	>44.3	13.4	>320	29.3	>23.8	>23.8	>23.8	>55.28	MTT	+
5072	48	02/27/89	0.919	77.2	87.1	1.1	230	>320	-	>1.4	>1.4	0.38	>4.01	MTT	+
	48	10/02/89	0.927	32	66	2.1	-	253	-	-	-	-	0.98	MTT	+
	48	10/10/89	0.845	-	130	-	-	238	-	-	-	-	>3.94	MTT	-
5121	56	06/20/89	0.935	17.3	155	9.0	31.2	210	89	6.7	6.7	5.0	25.50	MTT	+
	56	08/07/89	0.892	30.5	155	5.1	48.1	210	-	4.4	4.4	3.2	>20.19	MTT	+
5138	57	07/10/89	1.012	64.2	>320	>5.0	123	>320	291	>2.6	>2.6	>2.6	>18.57	MTT	+
	57	08/15/89	0.94	52.7	563	10.7	95.4	806	283	8.5	8.5	5.9	27.36	MTT	+
5186	58	07/24/89	0.952	179	100	0.6	-	312	-	-	-	-	0.37	MTT	+
	58	10/03/89	0.877	49	197	4.0	74.9	341	-	4.6	4.6	2.6	10.12	MTT	+
5535	56	06/13/89	1.142	119	>320	>2.7	185	>320	-	>1.7	>1.7	>1.7	>7.36	MTT	+
	56	08/07/89	1.040	-	473	-	-	711	-	-	-	-	>1.30	MTT	-
5538	56	06/13/89	1.142	147	>320	2.2	215	>320	-	>1.5	>1.5	>1.5	>6.95	MTT	+
	56	08/07/89	1.006	-	501	-	-	682	-	-	-	-	1.11	MTT	+

Table 25 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Activity
5539	56	06/13/89	1.119	1.3	3.8	2.8	-	6.8	-	-	100	-	-	>4.39	MTT	+
	56	08/07/89	1.006	0.65	3.0	4.5	2.3	6.1	2.7	-	>100	-	1.3	>11.55	MTT	+
5543	56	06/13/89	1.042	6.2	8.9	1.4	-	17.1	-	-	>320	-	-	1.85	MTI	+
	56	08/07/89	1.101	0.41	0.8	1.9	0.75	1.6	2.1	-	>32	-	1.0	5.43	MTT	+
5691	57	07/17/89	0.989	68.4	>320	>4.7	144	>320	>2.2	-	>320	-	>2.2	>14.35	MTT	+
	57	08/15/89	1.114	12.3	206	1.7	254	490	1.9	-	>1000	-	0.8	3.01	MTT	+

= This value is a virus rating (VR) rather than a TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound similar to TAI. TAI is more accurate with MTT measurements.

DIFRNTL = The differential is the difference in the cell control and the virus control optical densities.

TC_{25,50,95} = (Viral) Inhibitory Concentration 25%, 50%, and 95% = The drug concentration (µg/ml) that inhibited viral CPE by 25%, 50% or 95% calculated by using a regression analysis program for semilog curve fitting.

TC_{25,50,95} = (Cell) Toxicity Concentration 25%, 50%, and 95% = The drug concentration (µg/ml) that reduced cell viability by 25%, 50%, or 95%.

AI_{25,50,95} = Antiviral Index = A single point ratio of the antiviral and anticellular effect of the compound, calculated with 25%, 50% or 95% reduction values (calculated by dividing the TC_{25,50, or 95} by the IC_{25,50, or 95}).

SI = Selectivity Index = A ratio calculated by dividing the TC₅₀ by the IC₅₀ (Based upon 6 one-half-log₁₀ dilutions, µg/ml, the maximum scale is 0-320).

TAI = Total Antiviral Index = The area between the cytotoxicity and the antiviral curves (based upon a scale of 0-100%).

NA = Not Applicable.

4.1.9 Japanese Encephalitis Virus (JE)

The total output of JE testing during this reporting period is summarized in monthly increments in Figure 33. During this 12-month period 2140 tests were performed against the JE virus with the MTT-assay format. Out of these, 181 were control compound assays, selenazofurin (AVS-0253) being the positive control compound. One hundred twelve tests were internal (+ + +) virus load and cell load quality control tests. The rest, totaling 1847, were actual single dose assays. The total number of assays (2140) represents a 148% increase (improvement) in total testing output during this year as compared to the output of the results from the previous year.

Out of the 1847 single drug assays, 159 different compounds demonstrated antiviral activity at greater than 25% reduction levels. This represents around 9.0% of the tested compounds having *in vitro* antiviral activity against JE virus. The remainder, 1688 compounds (81%), are to be considered inactive with this assay protocol.

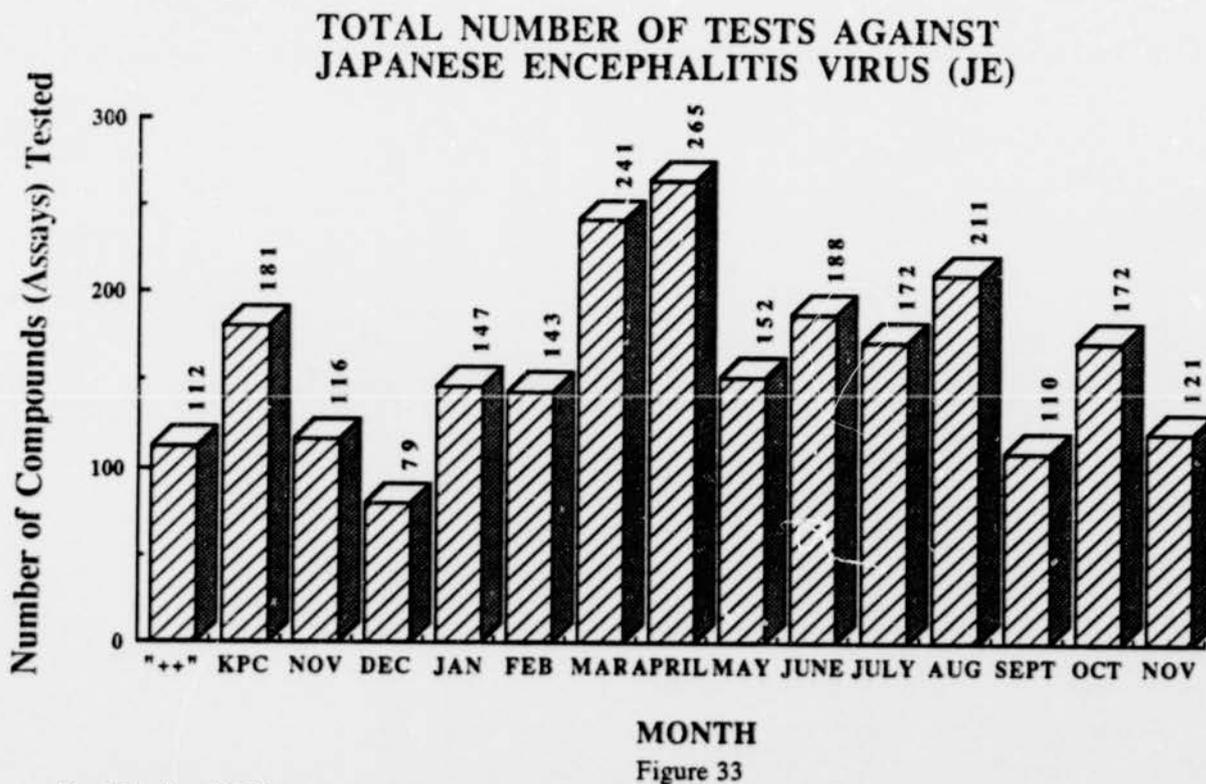


Figure 33

Test Total = 2140

KPC (Positive Control Compound, Selenazofurin) = 181

"++" (Internal Virus and Cell Load) = 112

4.1.9.1 JE-Quality Controls:

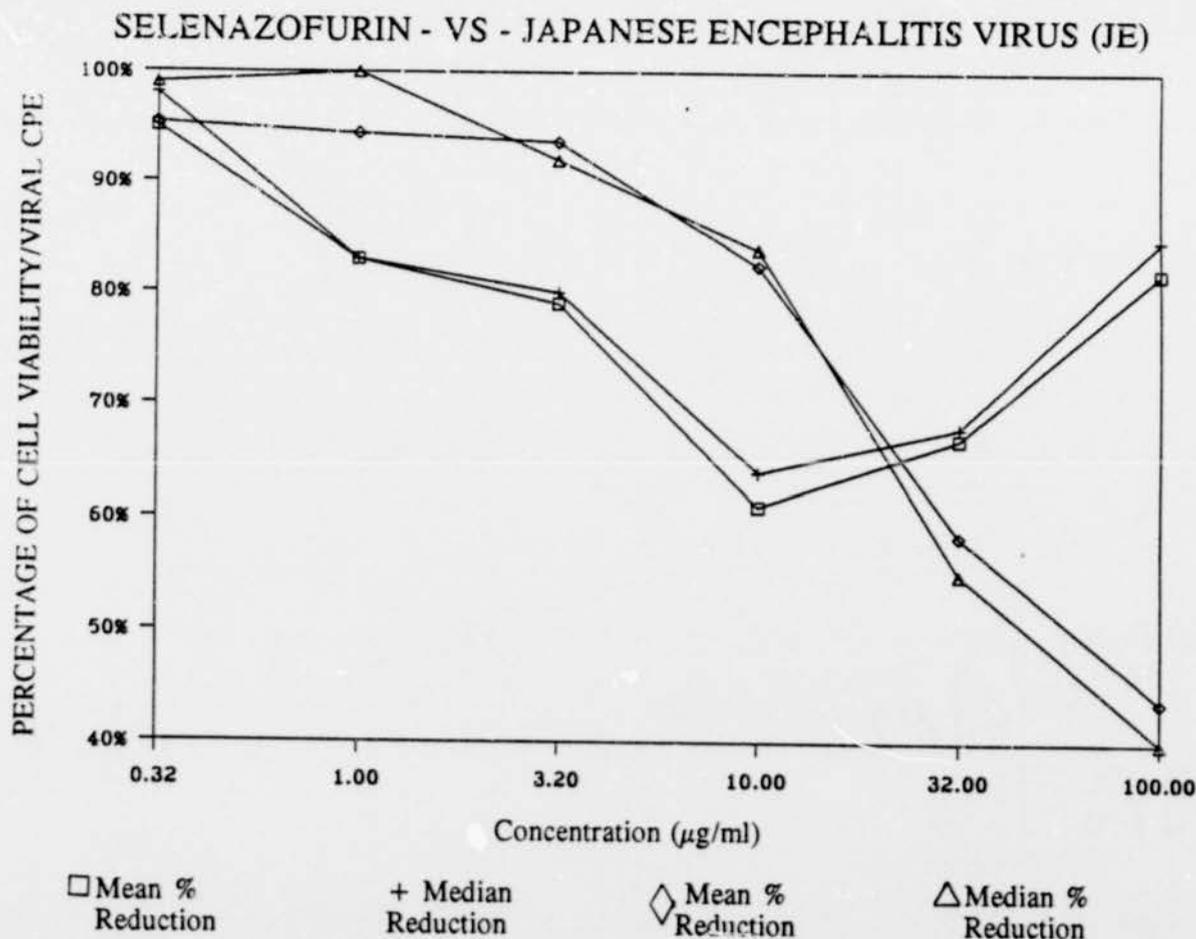
4.1.9.1.1 Antiviral Activity

JE-Control Compound-Antiviral Performance: Selenazofurin (AVS-0253) has been the sole control compound against JE in these MTT assay screens. The mean and median antiviral inhibition and cytotoxicity patterns of the positive control drug (Selenazofurin) are illustrated in Figure 34. The 181 control tests performed with Selenazofurin gave a mean Total Antiviral Index (TAI) of 12.93 (SD \pm 11.64) and the median value was 10.40%. The mean Selectivity Index (SI) was only 1.82 (SD \pm 5.04)

The mean Antiviral Index 25% (AI₂₅) value was 14.30 (SD ± 22.47). The median AI₂₅ value was 4.49. The mean Antiviral Index 50% (AI₅₀) was 3.73 (SD ± 8.22) with a median of 0.0. This indicates that Selenazofurin does not consistently reach 50% antiviral reduction levels.

The mean Antiviral Inhibitory Concentration 25% (IC₂₅) was 4.31 µg/ml (SD ± 8.69). The median IC₂₅ value was 2.17 µg/ml. The mean Antiviral inhibitory Concentration 50% (IC₅₀) was 3.42 µg/ml (SD ± 7.40). The median IC₅₀ value was 0 µg/ml. The discrepancy indicates that the control compound selenazofurin does not consistently reach 50% reduction levels.

The maximum average antiviral inhibitory level of the 181 Selenazofurin tests (Figure 34) was reached at 10.0 µg/ml of the compound. Further increase of the drug concentration does not improve its antiviral activity. The maximum antiviral effect (~40%) is found with a simultaneous 15% cytotoxic suppression at 10 µg/ml. After this concentration the antiviral protection levels off to ~15% reduction levels at 100 µg/ml while simultaneously the selenazofurin becomes maximally toxic (~60%).



Conc. (µg/ml)	% Viral CPE						% Cell Viability					
	0.32	1	3.2	10	32	100	0.32	1	3.2	10	32	100
Mean	95	83	79	61	67	82	94	93	91	80	58	43
Median	98	83	80	64	68	85	99	100	92	84	55	40
Std. Dev.	.07	.12	.14	.20	.20	.16	.13	.14	.19	.20	.20	.17
Variance	.01	.01	.02	.04	.04	.03	.02	.02	.04	.04	.04	.03

Figure 34
Average Antiviral and Cytotoxicity Values for 181 Positive Control Compound Assays

A bar graph scatter plot (Figure 35) depicts the distribution of the maximum antiviral reduction values of all 181 control compound assays for selenazofurin. The results indicate that the average, maximum antiviral reduction obtained with the present SOP is around 43.66 (SD \pm 17.12) reduction levels. The maximum reduction levels vary from 0 - 100% but remain quite consistently around the median of 43%. The assay control values give a relatively normal, bell-shaped distribution curve. This indicates a quite consistent day-to-day performance of the control compound in the JE-MTT assay.

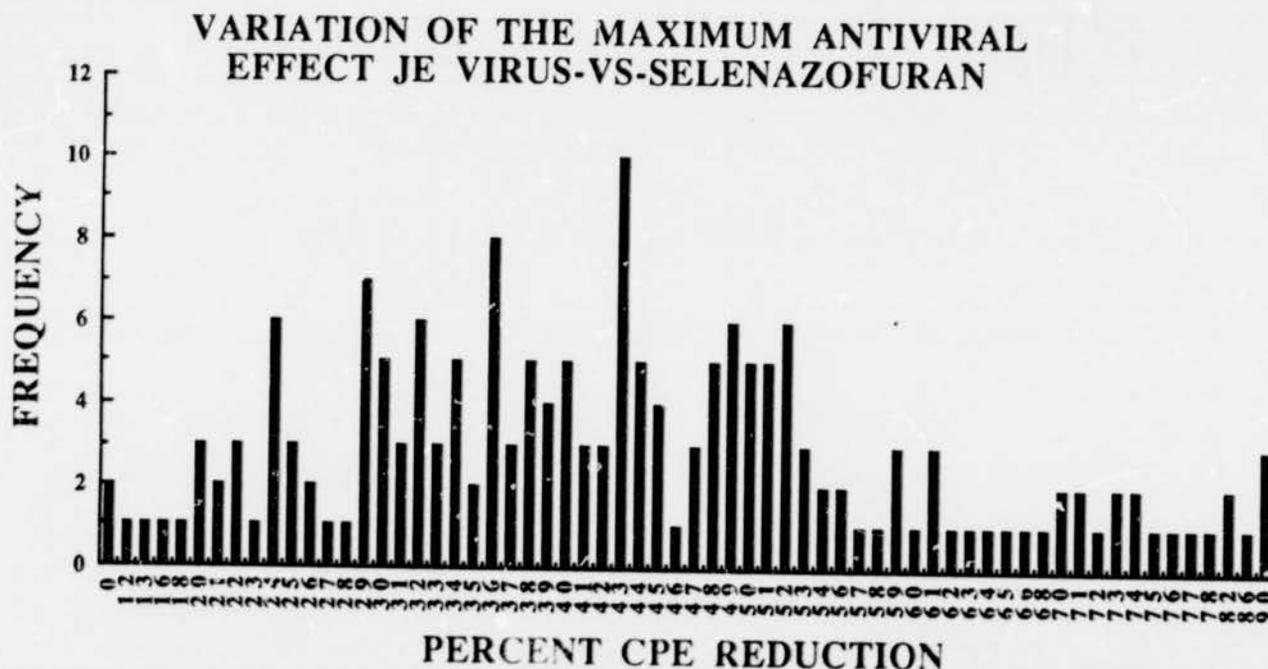


Figure 35
Maximum Antiviral CPE Reduction (%). Summary of 181 Control Compound Tests

Since selenazofurin is only marginally active against JE virus, better quality control compounds are needed. However, regardless of the poor performance of the JE quality control drug selenazofurin, around 159 different compounds have equal or better antiviral activity against JE virus than AVS-0253. Some of these could certainly be used as a better *in vitro* antiviral control compound in this large scale antiviral screening program.

4.1.9.1.2. Cellular Cytotoxicity

JE-Control Compound-Cytotoxicity Performance: The 181 cytotoxicity values of the positive control compound selenazofurin are also very consistent. The mean cell Toxic Concentration (TC₂₅) is 20.32 $\mu\text{g/ml}$ (SD \pm 19.66 and the median is 15.70 $\mu\text{g/ml}$. The mean cell Toxic Concentration 50% (TC₅₀) value is 55.65 (SD \pm 32.05) and the median is 48.00 $\mu\text{g/ml}$. As can be seen from Figure 34, the observable toxicity starts around 3.2 $\mu\text{g/ml}$, and reaches maximum (65%) toxicity at 100 $\mu\text{g/ml}$.

When the cytotoxicity reaches around 15% (10 $\mu\text{g/ml}$), the control compound loses its maximum antiviral effect (43%). At 100 $\mu\text{g/ml}$ the antiviral protection of selenazofurin is lost, and it becomes maximally toxic at this concentration. The highest selenazofurin concentration tested in these assays was 100 $\mu\text{g/ml}$. Selenazofurin has a definite cytotoxic suppression of cellular metabolism and growth. A

peculiar feature of the control compound is that the toxicity levels off after reaching its maximum cytotoxic value ($\pm 60\%$) and continues at that stationary level at higher concentrations.

4.1.9.1.3. Assay Plate Quality Controls: Cell Load and Virus Load Parameters

JE-Control Compound-Cell Load Performance: A bar graph scatter plot of the mean cell control (O.D. reading) of 181 control assays is plotted in Figure 36. The results indicate that the cell O.D. readings reached a mean 1.157 (SD ± 0.235) with a median of 1.180 (Range from 0.540 - 1.690). This indicates that a uniform and equal number (15,000 cells/well) of cells are being loaded into every well in the 96-well plate during the day-to-day operation. The cells reduced MTT to formazan giving maximum blue color uniformly and consistently.

JE-Control Compound-Virus Load Performance: A bar graph scatter plot of the mean virus load O.D. readings of the 181 control assays is presented in Figure 37. The results indicate that the average load O.D. reading is 0.310 (SD ± 0.125) with a median of 0.280 (Range of 0.080 - 0.620). This demonstrates that a good cell destruction is taking place and a uniform load of virus (32 TCID₅₀) is administered on the cell monolayer with very consistent viral CPE results.

JE-Control Compound-Assay Differential Performance: A bar graph scatter plot of the mean O.D. differential values of the 181 control assays is provided in Figure 38. The results indicate that the average differential O.D. reading is 0.847 (SD ± 0.188) with a median of 0.953 (Range 0.410 - 1.382). The single bell-shaped curve is reasonably sharp and uniform. This reflects that the assays are executed consistently and are repeatable during day-to-day operation with close to 99% accuracy.

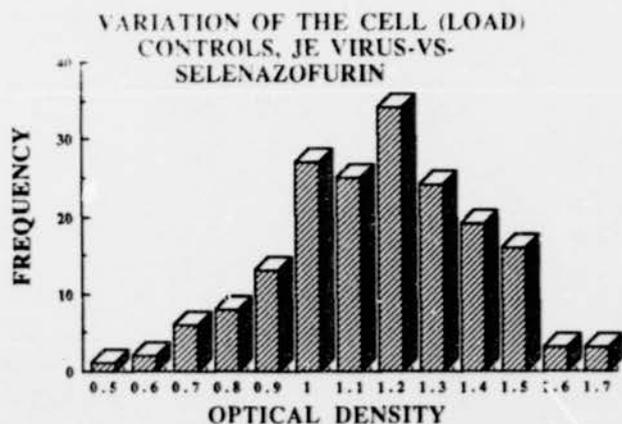


Figure 36

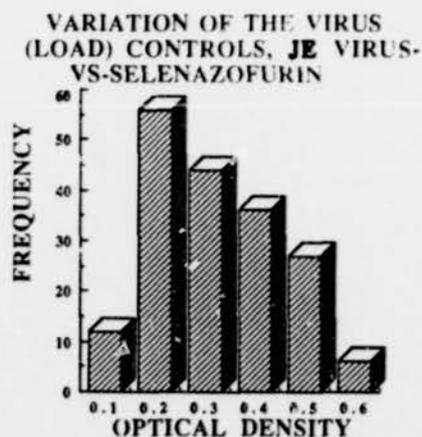


Figure 37

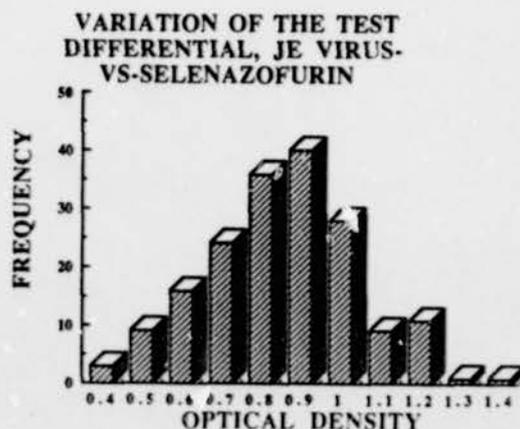


Figure 38

4.1.9.2 JE-Antiviral Activity Results:

Drugs with 95% Antiviral Reduction Levels: Out of the 1847 actual single drug tests, 25 different compounds demonstrated excellent antiviral activity having antiviral reduction values of 95% or better. This represents around 1.4% of the test compounds being active at this excellent reduction level. These compounds are summarized in Table 26 according to the highest **Total Antiviral Index (TAI)**. Compound AVS-5580 demonstrated the greatest *in vitro* promise, having a TAI around 96% and **Selectivity Index (SI)** around 300. Compounds AVS-4855, 4796, 2318, 2563, 2980, 4527, 2811, 4592, 5138, 4609 and 0361 demonstrated excellent antiviral activity. TAI was over 30% and SI values over 18. The next 13 active compounds had TAI's from 13 to 28% and SI's from 6 to 30%, which may or may not be significant. The *in vitro* antiviral activity of all of the compounds within this category need to be further confirmed and confirmatory testing is presently in progress.

Table 26

AVS Compounds Active Against JE at AI₉₅ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 95	TC 95	AI 95	SI	TAI
5580	54	05/03/89	0.486	< 320.00 >	100000 >	313.00 >	313.00 >	95.79
4855	48	09/13/89	0.615	28.80 >	320.00 >	11.12 >	28.79 >	62.18
4796	46	09/13/89	0.539	3.05 >	100.00 >	32.78	40.51 >	60.74
2318	13	08/30/89	0.686	0.87 >	10.00 >	11.45	24.21 >	43.71
2563	48	02/06/89	0.554	0.89 >	3.20 >	3.59 >	10.00 >	41.49
2980	48	03/10/89	0.737	0.73 >	3.20 >	4.39	12.00	40.06
4527	47	01/31/89	0.511	7.72	94.60	12.30	11.20 >	37.38
2811	48	02/06/89	0.629	0.09	0.91	10.40	11.00 >	37.18
4592	48	02/28/89	0.764	26.50 >	100.00 >	3.77	7.19	32.32
5138	57	07/11/89	0.830	94.30 >	320.00 >	3.39	0.16 >	30.37
4609	48	02/28/89	0.810	0.03 >	0.10 >	3.22 >	6.54 >	30.11
0361	48	02/06/89	0.660	0.03	0.30	10.40	4.30 >	29.61
0360	2	08/23/89	0.464	0.09 >	1.00 >	10.84	5.64	27.74
4113	39	05/24/89	0.809	0.28	2.85	10.10	4.01 >	27.24
4281	42	09/13/89	0.706	2.92 >	10.00 >	3.42	4.39 >	24.56
4278	42	09/13/89	0.697	9.40 >	32.00 >	3.40	5.15 >	23.73
5539	56	08/09/89	0.866	3.20	94.30	29.48	3.94 >	23.28
5121	56	08/08/89	0.749	91.50	309.00	3.38	3.78	22.70
4590	48	02/28/89	0.744	0.94	28.70	30.60	4.11 >	21.90
4277	42	09/13/89	0.745	9.12 >	10.00 >	1.10 >	2.51 >	20.16
4074	48	03/10/89	0.762	0.03 >	0.03 >	1.09 >	2.30 >	19.27
2812	48	02/06/89	0.576	0.01 >	0.01 >	1.06 >	2.57	18.14
1337	33	08/29/89	0.806	29.40 >	32.00 >	1.09 >	2.30 >	16.15
4070	48	03/10/89	0.737	2.99 >	3.20 >	1.07 >	1.98 >	13.87
4280	42	09/13/89	0.697	9.29 >	10.00 >	1.08 >	2.10 >	13.40

antiviral activity -- equal to or better than 50% antiviral reduction. This equals around 2.3% of the test compounds being active in this category. These compounds are summarized in Table 27 according to the highest TAI. Compound AVS-0217 appeared to have the best TAI of 41.60%, and SI at 11.39. Compounds AVS-1645, 2979, 2503, 0111, 4785, 5997, 0646, 0148, 0094, 5532, 5515, 3802, and 3964 have TAI's over 20% and SI's between 0.04 and 13.28, which may or may not be of any significance. The other 28 active compounds demonstrated TAI's from 1.7% to 19% and SI's of 0.04 to 4.4. Most of these compounds do not appear to be very selective antiviral agents. However, further confirmation of their antiviral effects is warranted and confirmatory testing is presently in progress.

Table 27

AVS Compounds Active Against JE at AI₅₀ Level

AVS No.	Ship-ment#	Test Date	Diff-rntl.	IC 50	TC 50	AI 50	SI	TAI
0217	33	09/27/89	0.786	28.10 >	320.00 >	11.39 >	11.39 >	41.60
1645	33	08/29/89	0.941	1.79 >	32.00 >	17.89	13.28 >	40.13
2979	48	03/10/89	0.763	2.11	21.20	10.10	5.91	28.50
2503	21	09/06/89	0.986	0.43	9.43	22.06	6.78 >	28.10
0111	42	05/10/89	0.741	48.80 >	320.00 >	6.56	4.45	27.93
4785	46	09/13/89	0.490	1.56	22.10	14.16	5.94 >	27.84
5997	61	11/07/89	0.919	3.51	75.30	21.47	5.23 >	25.75
0646	2	08/23/89	0.427	0.21	3.15	15.21	8.72 >	25.70
0148	2	08/23/89	0.641	0.77 >	3.20 >	4.16	0.04 >	24.05
0094	1	09/27/89	0.766	31.00 >	100.00 >	3.23 >	3.23 >	23.29
5532	56	08/09/89	0.818	172.00	663.00	3.85	2.85 >	21.79
5515	53	04/18/89	0.639	11.20	58.40	5.20	3.04	21.27
3802	35	09/12/89	0.484	0.19 >	10.00 >	52.70	4.25	20.53
3964	33	03/21/89	0.815	6.61	32.30	4.89	2.43	19.74
5695	57	08/22/89	0.605	21.70 >	32.00 >	1.47 >	1.47 >	18.09
5503	53	04/18/89	0.703	25.60	154.00	6.03	2.98	17.26
2275	12	08/30/89	0.803	22.40	234.00	10.43	7.45	17.05
2631	19	09/06/89	0.885	55.40	306.00	5.53	0.01	16.57
5142	57	08/16/89	0.463	56.10	210.00	3.74	2.76	15.95
4452	44	07/07/89	0.945	68.40	277.00	4.05	2.61	14.99
0084	1	08/23/89	0.688	49.20 >	100.00 >	2.03 >	2.03 >	14.89
5998	61	11/07/89	0.919	1.08	22.20	20.56	4.41 >	14.27
1019	28	08/23/89	0.331	0.70 >	1.00 >	1.44 >	1.44 >	14.16
4739	44	07/07/89	0.742	19.00	66.00	3.47	2.54 >	13.96
0347	41	05/10/89	0.913	2.08	8.55	4.10	2.37	12.33
5906	61	10/31/89	0.787	2.12	15.00	7.08	2.00	11.52
5495	53	04/18/89	0.798	1.42	5.75	4.04	1.85 >	11.51
5035	48	10/10/89	1.134	1.72	6.26	3.65	0.19	11.29
4098	37	02/24/89	0.372	0.00 >	0.00 >	1.37 >	1.37 >	11.24
2034	56	08/08/89	0.829	0.65	2.43	3.72	2.62	10.63
5538	56	08/09/89	0.866	207.00	587.00	2.84	1.80 >	10.49
0230	1	08/23/89	0.577	94.00 >	100.00 >	1.06 >	1.06 >	9.02
5058	48	02/27/89	0.881	310.00 >	320.00 >	1.03 >	1.03 >	8.39
2506	21	09/06/89	0.996	7.02 >	10.00 >	1.42 >	1.42 >	8.07
5905	61	10/31/89	0.787	7.06	19.10	2.70	1.78 >	8.02
2992	27	09/07/89	0.875	83.30 >	100.00 >	1.20 >	1.20 >	6.27
4984	51	10/10/89	1.087	7.52	21.20	2.81	1.78	5.98
5535	56	06/14/89	0.967	204.00 >	320.00 >	1.57	1.44 >	5.90
5053	48	10/10/89	1.029	56.60 >	100.00 >	1.77	1.37 >	5.79
4996	51	10/10/89	1.085	232.00 >	320.00 >	1.38	1.38 >	4.44
5072	48	02/28/89	0.724	207.00 >	320.00 >	1.54	0.42 >	3.42
5643	57	07/06/89	0.937	230.00	282.00	1.23	0.04 >	0.68

Drugs with 25% Antiviral Reduction Levels: Ninety-two other (different) compounds were moderately active reaching better than 25% antiviral reduction values. The list of these compounds is summarized in Table 28. Ninety-two out of 1847 represent a total of 5.0% active compounds in this activity category. The highest TAI in this category is for the compounds AVS-1654, 6013, 5996, 6009, 4706, 6011, 0002, 4709, 4710, 0303, 6015, 5717, 2590, 6014 and 6008, which reached total antiviral effects of over 20%. The other 77 active compounds demonstrated TAI's from 0 - 19% with SI's from 0.01 - 320. In general, the compounds in this category do not appear to have any significant antiviral effect and probably do not need to be presently confirmed further.

Table 28

AVS Compounds Active Against JE at AI₂₅ Level

<u>AVS</u> <u>No.</u>	<u>AVS</u> <u>No.</u>	<u>AVS</u> <u>No.</u>	<u>AVS</u> <u>No.</u>
0002	3136	5067	5543
0095	3586	5075	5605
0206	3679	5094	5656
0215	3719	5096	5711
0225	3734	5098	5724
0303	4026	5102	5890
0346	4099	5132	5907
1654	4107	5140	5910
1752	4454	5144	5994
1772	4474	5220	5995
1974	4524	5365	5996
1985	4706	5367	5999
2320	4708	5383	6006
2401	4709	5403	6007
2522	4710	5457	6008
2568	4711	5496	6009
2582	4712	5497	6010
2590	4717	5500	6011
2716	4795	5517	6012
2902	4837	5518	6013
2906	4865	5528	6014
2994	4897	5531	6015
3122	4992	5542	6256

4.1.9.3. Confirmatory Assays:

Some of the compounds were sent to us in more than one separate drug shipment. These compounds were tested more than once. Data from the confirmatory assays are summarized in Table 29. If a compound showed $\geq 50\%$ reduction in CPE during this reporting period, then it is considered a candidate for confirmatory test. Out of 46 confirmatory tests, 37 compounds (80%) were confirmed active during this reporting period and the remaining 9 compounds gave conflicting results. The criteria for activity is that the confirmatory test has to show $\geq 25\%$ reduction in CPE. Failure to confirm the activity in these compounds was probably due to differences during the assay conditions:

- 1) In confirmatory assays the concentration range is adjusted to a more accurate semilog scale to maximize the TAI window.
- 2) Differences in the "differential" of the two runs can cause the compound to read positive or negative, falsely. The variability in the differential can cause false positives or false negative bias in day-to-day testing calculations, reflecting the variability in the maximum activity of the compound.
- 3) The metabolic rate, age, and passage number etc. of the cells may cause the above observed variability in test compound activity.

During this reporting period the overall confirmatory rate against JE was 80%. The conflicting results will be retested at a later date based upon the availability of the compound.

Recommendations of JE-Actives Based Upon the *in vitro* Results with MTT Assay (Vero Cells).

Based upon the *in vitro* results with the MTT assay (Vero cells) we recommend the following:

- 1) Compounds with the highest TAI in the 95% activity category that have confirmed results with the exception of "colored" compounds should receive the highest priority for further profile studies and *in vivo* animal testing.
- 2) Compounds with the highest TAI in the 50% activity category that have confirmed results with the exception of "colored" compounds should receive the next highest priority for further profile studies and *in vivo* animal testing.

Confirmatory Assays for Compounds Active Against Japanese Encephalitis Virus

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AL ₂₅	IC ₅₀	TC ₅₀	AL ₅₀	IC ₉₅	TC ₉₅	AL ₉₅	SI	TAI	Assay Type	Activity
0084	1	05/23/89	0.959	-	54	-	-	91	-	-	>320	-	-	>2.65	MTT	-
	1	08/23/89	0.688	32.5	>100	>3.1	49.2	>100	>2.0	-	>100	-	>2.0	>14.89	MTT	+
0111	42	05/10/89	0.741	8.1	217	27	48.8	>320	>6.6	-	>320	-	4.5	27.93	MTT	+
	42	08/23/89	0.643	60.3	>100	>1.7	-	>100	-	-	>100	-	-	>4.54	MTT	+
0206	5	03/23/87	NA	32	>320	>10	108	>320	>3	-	>320	-	>2.9	1.8*	CPE	+
	5	05/24/88	NA	~125	100	0.8	178	~200	1.1	320	>320	>1.0	0.6	0.6*	CPE	+
	5	05/10/89	0.932	115	253	2.2	-	>320	-	-	>320	-	-	6.27	MTT	+
0217	33	04/19/89	0.797	2.4	>320	>136	35	>320	>9.2	-	>320	-	>9.2	>38.60	MTT	+
	33	09/27/89	0.786	4.3	>320	>75	28	>320	>11.4	-	>320	-	11.4	>41.60	MTT	+
0272	1	03/11/87	NA	1.0	3.2	3.2	1.3	>100	77	10	>100	>10	2.5	2.5*	CPE	+
	1	06/01/88	NA	~0.5	1.0	2.0	0.8	~10	~13	3.2	10	3.1	1.2	1.2*	CPE	+
	41	05/10/89	0.932	-	0.5	-	-	0.82	-	-	>100	-	-	0.00	MTT	-
0360	48	02/06/89	0.722	0.01	0.28	26	0.04	0.67	16	-	2.8	-	6.6	>30.84	MTT	+
	2	08/23/89	0.464	0.03	0.25	9.6	0.04	0.54	12	0.09	>1.0	>10.8	5.6	27.74	MTT	+
0361	2	07/24/87	NA	~0.05	0.1	~2	0.02	>0.1	>5	>0.1	0.1	>1.0	3.8	1.5*	CPE	+
	2	05/24/88	NA	~0.02	0.1	~5	0.02	~0.32	~16	-	0.32	-	4.1	1.4*	CPE	+
	48	02/06/89	0.660	<0.0032	0.04	>14	0.01	0.09	8.3	0.03	0.3	10	4.3	>29.61	MTT	+
	2	08/23/89	0.427	<0.03	0.06	>1.9	<0.03	0.09	>3	-	0.31	-	>1.9	>3.71	MTT	+
1019	28	09/21/87	NA	~1.0	3.2	~3.2	1.3	~320	~246	~3.2	320	~100	2.4	2.5*	CPE	+
	28	05/10/89	0.845	1.1	1.8	1.7	2.5	7.8	3.1	-	>10	-	0.7	3.34	MTT	+
2034	56	06/13/89	0.957	0.6	2.0	3.1	-	2.8	-	-	9.6	-	-	5.07	MTT	+
	56	08/08/89	0.829	0.45	2.0	3.8	0.65	2.4	3.7	-	8.8	-	2.6	10.63	MTT	+
2275	53	04/10/89	0.811	18	106	5.8	-	216	-	-	>320	-	-	12.86	MTT	+
	12	08/30/89	0.803	14	167	12	22	234	10	-	>320	-	7.5	17.05	MTT	+

Table 29 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AL ₂₅	IC ₉₀	TC ₉₀	AL ₉₀	IC ₉₅	TC ₉₅	AL ₉₅	SI	TAI	Assay Type	Activity
2318	13	05/05/87	NA	~0.32	10	~31.3	0.7	10	14	3.2	>320	>100	14	3.3*	CPE	+
	13	07/28/87	NA	~0.32	3.2	10	0.5	>10	20	1.0	>10	>10	6.3	2.5*	CPE	+
	53	04/10/89	0.791	-	<1.0	-	-	2.6	-	-	>320	-	-	0.00	MTT	-
	13	08/30/89	0.686	0.17	6.6	40	0.27	>10	37	0.87	>10	>11	24	>43.71	MTT	+
2503	21	06/18/87	NA	<0.32	1.0	>3	0.19	1.0	5.3	1.0	320	320	5.1	3.6*	CPE	+
	21	05/25/88	NA	>1	3.2	3.2	1.8	3.2	1.8	3.2	>10	>3.1	1.8	1.2*	CPE	+
	53	04/10/89	0.845	<1.0	1.0	>1.0	-	2.6	-	-	>320	-	-	>0.05	MTT	+
	21	09/06/89	0.986	0.18	2.9	15.8	0.43	9.4	22	-	>10	-	6.9	>28.10	MTT	+
2563	32	06/25/87	NA	0.32	<3.2	10	0.6	~3.2	5.3	-	3.2	-	<5.0	1.0*	CPE	+
	32	03/01/88	NA	0.32	1.0	3.1	0.4	~3.2	8.0	1.0	3.2	3.2	2.6	1.0*	CPE	+
	32	05/25/88	NA	~0.5	3.2	~6.4	0.8	~1.0	~1.3	3.2	10	3.1	3.9	1.5*	CPE	+
	48	02/06/89	0.554	0.14	>3.2	>24	0.32	>3.2	>10	0.9	>3.2	>3.6	>10	>41.49	MTT	+
	15	05/23/89	0.850	1.6	12.4	>7.7	2.6	21	8.0	-	>32	-	4.8	20.32	MTT	+
	21	09/06/89	1.087	0.08	1.4	17	0.16	2.2	14	-	8.6	-	8.5	>18.23	MTT	+
2716	22	05/27/87	NA	~2.0	10	~5	3.2	100	31	10	100	10	3.2	1.6*	CPE	+
	22	05/25/88	NA	~10	3.2	0.3	-	>32	-	-	>32	-	-	0.5*	CPE	+
	46	01/23/89	1.248	<1.0	18	>18	-	38	-	-	94	-	-	>14.21	MTT	+
2811	52	12/04/87	NA	<0.32	0.32	1.0	0.6	3.2	5.3	0.32	3.2	10	0.6	1.2*	CPE	+
	32	03/01/88	NA	~0.1	1.0	~10	0.3	>1	3	1	>1	>1	3.5	1.1*	CPE	+
	48	02/06/89	0.629	0.01	0.24	33	0.02	0.48	22	0.09	0.91	10	11	>37.18	MTT	+
2812	32	03/01/88	NA	0.03	<0.03	~1	0.005	~0.032	~6.4	-	0.032	-	5.9	1.0*	CPE	+
	48	02/06/89	0.576	0.002	>0.91	>2.5	0.009	>0.01	>2.6	0.009	>0.01	>1.1	>2.6	18.14	MTT	+
2979	25	08/11/87	NA	~3.2	32	~10	6.2	~100	~16	-	100	-	5.1	1.5*	CPE	+
	25	05/25/88	NA	~5	10	~2	8.4	~32	~3.8	-	32	-	1.2	0.4*	CPE	+
	48	02/07/89	1.181	0.7	0.9	1.3	1.7	2.3	1.4	-	25	-	0.6	1.63	MTT	+
	48	03/10/89	0.763	1.4	12	9	2.1	21	10	-	88	-	5.9	28.50	MTT	+
	27	04/19/89	0.698	1.9	5	3	6.1	8.9	1.5	-	>320	-	0.8	>8.81	MTT	+
	25	09/07/89	0.933	1.9	2.9	1.5	-	16.4	-	-	31	-	-	>4.28	MTT	+
2980	25	08/11/87	NA	0.32	10	31	0.6	~32	~53	3.2	32	10	16	2.3*	CPE	+
	25	05/25/88	NA	~0.5	1.0	~2	0.8	~10	~13	-	10	-	1.2	1.1*	CPE	+
	48	02/07/89	1.142	0.42	1.7	4.1	0.7	>3.2	>4.6	-	>3.2	-	2.5	>15.31	MTT	+
	48	03/10/89	0.737	0.11	2.1	19	0.2	>3.2	>18	0.7	>3.2	>4.4	12	40.06	MTT	+

Table 29 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AL ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AL ₉₅	SI	TAI	Assay Type	Act-ivity
3038	28	09/09/87	NA	<0.32	0.32	1.0	0.1	~32	~320	1.0	32	32	3.1	2.3*	CPE	+
	28	05/25/88	NA	0.1	0.01	0.1	0.3	>1	>3.3	-	>1	-	0.03	0.9*	CPE	+
	53	04/10/89	0.918	-	<1.0	-	-	<1	-	-	>320	-	-	0.00	MTT	-
3964	33	02/28/89	0.820	9.3	53	5.7	41	105	2.6	-	>160	-	1.3	12.64	MTT	+
	33	03/21/89	0.815	1.6	16	10	6.6	32	4.9	-	>32	-	2.4	19.74	MTT	+
	33	09/27/89	0.820	3.9	8.6	2.2	10	25	2.6	-	95	-	0.89	4.70	MTT	+
4070	35	04/12/89	NA	~0.5	1.0	~2	0.7	~32	~46	10	32	3.2	1.5	1.5*	CPE	+
	48	02/07/89	1.137	1.3	3.2	2.4	2.5	>3.2	>1.3	-	>3.2	-	1.3	>5.60	MTT	+
	48	03/10/89	0.737	1.2	>3.2	>2.8	1.6	>3.2	>2.0	3.0	>3.2	>1.1	>2.0	>13.87	MTT	+
4113	48	02/07/89	1.210	0.26	>0.32	>1.2	-	>0.32	-	-	>0.32	-	-	>2.35	MTT	+
	48	03/10/89	0.827	0.12	>0.32	>2.8	0.7	>0.32	>1.6	-	>0.32	-	>1.6	>12.65	MTT	+
	39	05/24/89	0.809	0.05	0.36	7.0	0	0.69	7.7	0.28	2.9	10	4.0	>27.24	MTT	+
	39	09/12/89	0.700	0.12	>1.0	>8.6	0	>1.0	>5.9	-	>1.0	-	>5.9	>22.13	MTT	+
4452	44	07/07/89	0.945	15.4	179	9.2	68	277	4.1	-	>320	-	2.6	14.99	MTT	+
	44	08/16/89	0.655	230	8.3	0.04	-	320	-	-	>320	-	-	0.00	MTT	+
4590	42	07/27/88	NA	~0.5	3.2	~6.4	0.9	>10	>10	3.2	>10	>3	3.6	1.9*	CPE	+
	48	02/28/89	0.744	0.38	2.2	5.7	0.53	5.5	10	0.94	29	31	4.0	>21.90	MTT	+
	42	09/13/89	0.615	0.39	2.2	5.6	0.58	3.8	6.4	-	>10	-	3.7	16.13	MTT	+
4592	42	07/27/88	NA	~2	32	~16	3.4	~5	~15	32	100	3.1	9.4	2.1*	CPE	+
	48	02/28/89	0.764	4.3	50	12	7.0	93	13	27	>100	>3.8	7.2	32.3*	MTT	+
	42	09/13/89	0.615	4.1	23	5.6	6.0	50	8.5	-	>100	-	3.9	>19.07	MTT	+
4609	48	02/28/89	0.810	0.01	>0.1	>10	0.01	0.1	>5.5	0.03	>0.1	>3.2	>6.5	>30.11	MTT	+
	43	09/27/89	0.830	0.01	0.09	7.4	0.02	0.21	8.7	-	1.0	-	3.8	15.73	MTT	+
4739	44	07/07/89	0.742	13	48	3.7	19	66	3.5	-	98	-	2.5	>13.96	MTT	+
	44	08/16/89	0.655	-	0.82	-	-	45	-	-	95	-	-	0.00	MTT	-
4785	46	01/24/89	1.129	1.3	4.2	3.3	2.3	13	5.8	-	>320	-	1.8	>10.37	MTT	+
	46	09/13/89	0.490	0.68	9.3	14	1.6	22	14	-	>32	-	6	>27.84	MTT	+
4796	46	01/24/89	1.080	4.0	39	10	6.6	96	15	-	>320	-	5.9	25.60	MTT	+
	46	09/13/89	0.539	1.0	60	60	1.5	89	60	3.1	>100	>33	41	>60.74	MTT	+

Table 29 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
4855	48	02/21/89	0.598	2.8	112	41	4.8	200	42	15.5	>320	>21	23	>59.97	MTT	+
	48	09/13/89	0.615	4.9	>320	>65	11	>320	>29	29	>320	>11	>29	>62.18	MTT	+
4984	51	03/13/89	0.887	27	19	0.70	-	55	-	-	>320	-	-	3.11	MTT	+
	51	10/10/89	1.087	4.8	13	2.8	7.5	21	2.8	-	81	-	2	5.98	MTT	+
4996	51	03/13/89	0.886	-	292	-	-	>320	-	-	>320	-	-	0.00	MTT	-
	51	10/10/89	1.085	152	320	2.1	232	>320	>1.4	-	>320	-	1.4	>4.44	MTT	+
5035	48	02/27/89	0.974	5	13	2.5	-	22	-	-	86	-	-	3.02	MTT	+
	48	10/10/89	1.134	0.62	0.32	0.51	1.7	6.3	3.7	-	9.7	-	0.2	11.29	MTT	+
5053	48	02/27/89	0.955	-	40	-	-	66	-	-	262	-	-	0.00	MTT	-
	48	10/10/89	1.029	38	77	2.0	57	>100	>1.8	-	>100	-	1.4	>5.79	MTT	+
5058	48	02/27/89	0.881	138	>320	>2.3	310	>320	>1.0	-	>320	-	>1.0	>8.39	MTT	+
	48	10/10/89	1.029	-	>320	-	-	>320	-	-	>320	-	-	>1.37	MTT	-
5072	48	02/28/89	0.724	134	88	0.66	207	>320	>1.5	-	>320	-	0.42	>3.42	MTT	+
	48	09/27/89	0.935	-	139	-	-	215	-	-	>320	-	-	0.25	MTT	-
	48	10/03/89	0.895	-	48	-	-	152	-	-	977	-	-	0.00	MTT	-
5121	56	06/21/89	0.623	33	155	4.6	48	210	4.4	93	309	3.3	3.2	20.58	MTT	+
	56	08/08/89	0.749	22	155	7.2	41	210	5.1	92	309	3.4	3.8	22.70	MTT	+
5138	57	07/11/89	0.830	41	8.95	0.22	56	>320	>5.8	94	>320	>3.4	0.2	>30.37	MTT	+
	57	08/16/89	0.542	72	574	7.95	131	827	6.3	293	>1000	>3.4	4.4	23.50	MTT	+
5142	57	07/11/89	1.007	-	12	-	-	36	-	-	99	-	-	>1.47	MTT	-
	57	08/16/89	0.463	37	155	4.2	56	210	3.7	-	309	-	2.8	15.95	MTT	+
5532	56	06/14/89	0.988	156	>320	>2.1	-	>320	-	-	>320	-	-	7.33	MTT	+
	56	08/09/89	0.818	47	492	11	172	663	3.9	-	973	-	2.9	>21.79	MTT	+
5535	56	06/14/89	0.967	105	294	2.8	204	>320	>1.6	-	>320	-	1.4	>5.90	MTT	+
	56	08/09/89	0.774	-	497	-	-	717	-	-	>1000	-	-	>6.55	MTT	-
5538	56	06/14/89	0.953	224	>320	>1.4	-	>320	-	-	>320	-	-	>1.37	MTT	+
	56	08/09/89	0.866	144	372	2.6	207	587	2.8	-	974	-	1.8	>10.49	MTT	+

Table 29 (Cont'd)

AVS No.	Shp. No.	Date Tested	DIF-RNTL	IC ₂₅	TC ₂₅	AI ₂₅	IC ₅₀	TC ₅₀	AI ₅₀	IC ₉₅	TC ₉₅	AI ₉₅	SI	TAI	Assay Type	Act-ivity
5539	56	06/14/89	0.970	<1.0	5.7	>5.7	1.4	9.3	6.7	3.1	100	32	4.1	>18.67	MTT	+
56	56	08/09/89	0.866	0.55	5.3	10	1.3	7.4	5.5	3.2	94	29	3.9	23.28	MTT	+
5580	54	05/03/89	0.486	<0.32	>100	>313	<0.32	>100	>313	>0.32	>100	>313	>313	>79.97	MTT	+
54	54	05/11/89	0.655	<320	>1000	>313	<320	>1000	>313	-	>1000	-	>313	>75.69	MTT	+
5643	57	07/06/89	0.937	151	10	0.07	230	282	1.2	-	>320	-	0.04	>0.68	MTT	+
57	57	08/16/89	0.631	-	<1.0	-	-	32	-	-	>320	-	-	0.00	MTT	-
5695	57	07/18/89	0.800	<1.0	6.4	>6.4	1.8	10	5.4	-	>320	-	3.6	>16.14	MTT	+
57	57	08/22/89	0.605	4.9	>32	>6.5	22	>32	>1.5	-	>32	-	>1.5	>18.09	MTT	+

= This value is a virus rating (VR) rather than a TAI. The VR is a measurement of selective antiviral activity that takes into account the degree of inhibition of virus-induced CPE and the degree of cytotoxicity produced by the test compound similar to TAI. TAI is more accurate with MTT measurements.

DIF/RNTL = The differential is the difference in the cell control and the virus control optical densities.

IC_{25,50,95} = (Viral) Inhibitory Concentration 25%, 50%, and 95% = The drug concentration (μg/ml) that inhibited viral CPE by 25%, 50% or 95% calculated by using a regression analysis program for semilog curve fitting.

TC_{25,50,95} = (Cell) Toxicity Concentration 25%, 50%, and 95% = The drug concentration (μg/ml) that reduced cell viability by 25%, 50%, or 95%.

AI_{25,50,95} = Antiviral Index = A single point ratio of the antiviral and anticeellular effect of the compound, calculated with 25%, 50% or 95% reduction values (calculated by dividing the TC_{25,50, or 95} by the IC_{25,50, or 95}).

I = Selectivity Index = A ratio calculated by dividing the TC₂₅ by the IC₅₀ (Based upon 6 one-half-log₁₀ dilutions, g/ml, the maximum scale is 0-320).

TAI = Total Antiviral Index = The area between the cytotoxicity and the antiviral curves (based upon a scale of 0-100%).

NA = Not Applicable.

4.1.10 Hantaan Virus (HTN)

Testing of antiviral compounds against the Hantaan virus was temporarily suspended in our laboratory to complete the development of the ELISA system under the direction of Dr. John Huggins at USAMRIID, Ft. Detrick, Maryland.

4.1.11 Prescreen

A total of 1878 prescreen assays were reported during the six-month period covered by this report. Of this number, 869 compounds (plus 77 weighed samples of Ribavirin) were evaluated against PT (Figure 39) and 858 (plus 74 samples of Selenazofurin) against YF (Figure 40).

Punta Toro Virus (PT)

Compounds that demonstrated at least 50% CPE reduction at one drug concentration and selectivity evidenced by an SI of > 1.0 are listed on Table 30. By utilizing an SI > 1.0 as a criterion of activity, 164 compounds were active against PT in the prescreen.

Ribavirin is a reliable positive control drug for PT virus assays. A scatter plot (Figure 41) shows the distribution of the maximum CPE reduction values of the 77 samples of Ribavirin employed as positive controls. As can be seen, the maximum CPE were consistent (100% reduction with a frequency of 63) and within the narrow range of 77-100%. Further evidence of uniformity among the Ribavirin assays may be seen in Figures, 42, 43, and 44 which are scatter plots of the mean O.D.'s of the cell load, virus load, and test differentials, respectively.

Yellow Fever Virus (YF)

Compounds that demonstrated at least 50% CPE reduction at one drug concentration and an SI of > 1.0 are listed on Table 31. Thirty-four compounds met those criteria. Four of the compounds most active against YF (B721568, AVS-4279, AVS-4280 and B721511) showed significant activity against PT.

Selenazofurin (AVS-0253) provides a somewhat unreliable pattern of activity for use as a positive control drug. The scatter plot (Figure 45) of the variation of the maximum antiviral effect of AVS-0253 reveals a wide range of percent CPE reduction. On several assays the maximum reduction was $< 50\%$. However, the plots of mean O.D.'s of the cell load (Figure 46), the virus load (Figure 47), and the test differential (Figure 48) indicate consistent and uniform performance of the prescreen assays. All of the above data point to the need for a more active compound to serve as a positive control drug for YF antiviral assays.

Criteria for Selecting Active Compounds in the Prescreen

The use of the Selectivity Index (calculated as TC_{25}/IC_{50}) is certainly a good indicator of activity. However, use of the SI as a single criterion for determining which compounds in the prescreen should be evaluated in the regular antiviral screen can easily result in elimination of active and potentially useful compounds. The prescreen assay is based upon four $1.0 \log_{10}$ drug dilutions instead of the $0.5 \log_{10}$ serial dilutions normally used. Therefore, values of the iC_{50} , the TC_{25} , and consequently the SI are not as accurate as those calculated from assays in which the drug concentrations are more numerous and closer. A classic example of the fallacy of using only the SI to select activity is demonstrated by the evaluation

of compound B724611 for activity against YF (Figure 49). This compound reduced CPE by 46, 37, and 15% at noncytotoxic drug levels of 100, 10 and 1 $\mu\text{g/ml}$.

I suggest an additional antiviral index for the prescreen based on the sum of the percents CPE reduction at drug concentrations which show > 75% viability in the drug cytotoxicity controls.

Table 30

Compounds Active Against PT (Adames)
in Vero Cells by the Prescreen Assay Procedure

AVS No.	Virus	Test Date	Diff- rntl.	IC 50	TC 25	SI
B721568	PT	08/03/89	1.260	5.77	330.00	57.24
B721568	PT	07/19/89	1.249	8.50	290.00	34.08
B724825	PT	09/14/89	1.194	4.75	156.00	32.91
B724374	PT	06/29/89	1.138	31.60	1000.00	31.60
B724526	PT	07/26/89	1.077	5.60	161.00	28.78
B724447	PT	07/12/89	1.071	7.28	208.00	28.58
B722054	PT	11/08/89	1.068	29.10	786.00	27.94
B722077	PT	11/08/89	1.119	7.88	211.00	26.75
B724740	PT	08/30/89	0.991	3.78	76.60	20.27
B721749	PT	06/29/89	1.223	59.40	1000.00	16.80
B721702	PT	06/21/89	1.305	61.00	1000.00	16.40
B722081	PT	11/08/89	1.263	9.54	134.00	14.03
B721880	PT	10/11/89	0.996	71.50	1000.00	13.99
B721568	PT	08/09/89	1.058	17.80	241.00	13.49
B721092	PT	08/03/89	1.171	26.30	325.00	12.35
B721511	PT	08/03/89	1.260	28.40	330.00	11.61
B724521	PT	07/26/89	1.126	2.88	32.80	11.38
B724698	PT	08/24/89	1.233	4.60	51.50	11.19
B722091	PT	11/08/89	1.022	27.70	310.00	11.17
B721690	PT	06/21/89	1.282	94.70	1000.00	10.60
B724456	PT	07/12/89	1.198	3.33	34.90	10.48
4279	PT	08/03/89	1.154	3.16	32.50	10.28
4280	PT	08/03/89	1.154	3.16	32.50	10.28
B724566	PT	08/03/89	1.332	3.30	32.00	9.70
B721762	PT	06/29/89	1.193	38.60	339.00	8.77
B721756	PT	06/29/89	1.071	37.30	325.00	8.70
B721754	PT	06/29/89	1.071	41.50	337.00	8.13
B722048	PT	11/08/89	1.142	40.10	326.00	8.13
B724458	PT	07/12/89	1.198	3.69	28.90	7.84
B724886	PT	09/27/89	1.129	64.40	505.00	7.84
B724527	PT	07/26/89	1.182	4.19	32.50	7.75
B721917	PT	10/18/89	1.109	44.50	330.00	7.41
B721823	PT	10/25/89	1.135	137.00	1000.00	7.29
B724416	PT	07/06/89	1.123	4.09	29.40	7.17
B724433	PT	07/12/89	1.274	4.21	28.60	6.79
B724519	PT	07/26/89	1.126	3.45	22.70	6.58
B724820	PT	09/14/89	1.133	3.61	23.40	6.48
B721728	PT	06/21/89	1.332	156.00	1000.00	6.41
B724764	PT	09/06/89	1.175	3.74	24.00	6.41
B724453	PT	07/12/89	1.076	5.56	35.10	6.31
B721758	PT	06/29/89	1.193	160.00	1000.00	6.27
B724722	PT	08/30/89	1.033	3.64	22.30	6.12
B724466	PT	07/12/89	1.118	43.60	266.00	6.11
B721899	PT	11/08/89	1.198	55.60	325.00	5.84
B724417	PT	07/06/89	1.123	3.80	22.10	5.81
B724378	PT	06/29/89	1.182	51.20	295.00	5.77
B724512	PT	07/26/89	1.220	55.90	323.00	5.77

Table 30 (Cont'd)

AV No.	Virus	Test Date	Diff- rntl.	IC 50	TC 25	SI
B724783	PT	09/06/89	1.249	38.10	217.00	5.69
B721767	PT	06/29/89	1.105	176.00	1000.00	5.68
B721905	PT	11/08/89	1.037	58.50	325.00	5.56
B724781	PT	09/06/89	1.218	3.87	21.50	5.55
B721769	PT	06/29/89	1.105	53.60	295.00	5.50
B721761	PT	06/29/89	1.193	185.00	1000.00	5.39
B724697	PT	08/24/89	1.233	< 1.00	5.38 >	5.38
B722094	PT	11/15/89	1.115	61.60	325.00	5.28
B721823	PT	10/04/89	1.131	194.00	> 1000.00 >	5.16
B722076	PT	11/08/89	1.119	48.80	242.00	4.96
B724762	PT	09/06/89	1.330	4.13	20.40	4.95
B724712	PT	08/24/89	1.264	4.14	19.80	4.77
B724434	PT	07/12/89	1.274	6.61	30.30	4.58
B724586	PT	08/09/89	1.009	45.60	208.00	4.57
B724457	PT	07/12/89	1.198	3.57	16.20	4.55
B724387	PT	07/26/89	1.125	57.80	263.00	4.55
B724384	PT	07/06/89	1.204	5.21	23.40	4.49
B724418	PT	07/06/89	1.123	4.24	18.80	4.44
B724670	PT	08/24/89	1.202	14.90	66.40	4.44
B722080	PT	11/08/89	1.263	26.70	108.00	4.05
B721719	PT	06/21/89	1.049	266.00	1000.00	3.76
B724607	PT	08/09/89	1.035	5.01	18.80	3.76
B724558	PT	08/03/89	1.173	6.97	26.10	3.74
B721838	PT	10/11/89	1.338	56.80	212.00	3.73
B724508	PT	07/19/89	1.199	5.49	20.00	3.64
B721910	PT	10/18/89	1.115	281.00	> 1000.00 >	3.56
B721734	PT	06/29/89	1.157	282.00	1000.00	3.55
B724423	PT	07/06/89	1.162	3.47	12.20	3.53
B724382	PT	07/06/89	1.270	47.80	168.00	3.51
B724413	PT	07/06/89	1.213	4.43	15.50	3.49
B722078	PT	11/08/89	1.263	37.30	130.00	3.49
B724596	PT	08/09/89	1.032	94.30	324.00	3.44
B724728	PT	08/30/89	0.988	4.51	15.20	3.38
B721979	PT	10/25/89	1.146	298.00	> 1000.00 >	3.35
B724592	PT	08/09/89	1.093	67.70	226.00	3.34
B721908	PT	10/18/89	1.115	99.80	328.00	3.29
B724652	PT	08/16/89	1.023	60.70	199.00	3.28
B724855	PT	09/27/89	1.120	5.08	15.90	3.13
B724860	PT	09/27/89	1.058	65.40	204.00	3.12
B722052	PT	11/08/89	1.142	53.00	164.00	3.10
B724732	PT	08/30/89	1.015	9.73	29.80	3.06
B724719	PT	08/30/89	1.077	4.98	14.80	2.97
B724714	PT	08/30/89	1.005	6.61	19.20	2.90
B724549	PT	08/03/89	1.209	99.00	285.00	2.88
B724553	PT	08/03/89	1.249	39.70	113.00	2.84
3593	PT	06/21/89	1.009	0.44	1.23	2.82
B724644	PT	08/16/89	1.174	65.60	182.00	2.77

Table 30 (Cont'd)

AVS No.	Virus	Test Date	Diff- rntl.	IC 50	TC 25	SI
B724455	PT	07/12/89	1.076	3.61	9.95	2.75
B721722	PT	06/21/89	1.048	365.00	1000.00	2.74
B724590	PT	08/09/89	1.014	60.00	162.00	2.71
B721708	PT	06/21/89	1.089	371.00	1000.00	2.69
B724863	PT	09/27/89	1.132	55.60	150.00	2.69
B721953	PT	11/08/89	1.198	372.00	1000.00	2.69
B724724	PT	08/30/89	1.033	82.70	211.00	2.56
B724420	PT	07/06/89	1.162	24.50	61.90	2.53
B721755	PT	06/29/89	1.071	400.00	1000.00	2.50
B721731	PT	06/21/89	1.332	423.00	1000.00	2.36
B724664	PT	08/16/89	1.103	425.00	1000.00	2.36
B724394	PT	07/06/89	1.200	6.80	15.90	2.34
B724633	PT	08/16/89	1.178	79.90	185.00	2.32
B721511	PT	07/19/89	1.249	144.00	320.00	2.23
B721714	PT	06/21/89	1.049	450.00	1000.00	2.22
B721095	PT	08/03/89	1.171	83.50	184.00	2.21
B724785	PT	09/06/89	1.249	6.69	14.80	2.21
B724415	PT	07/06/89	1.123	3.66	8.05	2.20
B721749	PT	07/19/89	1.188	55.10	120.00	2.18
B721925	PT	10/18/89	1.060	463.00	1000.00	2.16
B721680	PT	06/21/89	1.050	467.00	1000.00	2.14
B724373	PT	07/19/89	1.249	99.40	211.00	2.13
B724797	PT	09/06/89	1.303	92.60	191.00	2.07
B724627	PT	08/16/89	1.091	5.27	10.90	2.06
B724729	PT	08/30/89	1.015	4.63	9.44	2.04
B724373	PT	06/29/89	1.138	250.00	493.00	1.97
B722067	PT	11/08/89	1.022	507.00	1000.00	1.97
B724442	PT	07/12/89	1.149	524.00	1000.00	1.91
B721737	PT	06/29/89	1.157	526.00	1000.00	1.90
B721743	PT	06/29/89	1.176	498.00	946.00	1.90
B724436	PT	07/12/89	1.274	81.00	154.00	1.90
B724439	PT	07/12/89	1.281	76.00	145.00	1.90
B721725	PT	06/21/89	1.048	529.00	1000.00	1.89
B724385	PT	07/06/89	1.204	8.60	16.00	1.86
B724396	PT	07/26/89	1.111	93.90	173.00	1.84
B721826	PT	10/04/89	1.131	550.00	1000.00	1.82
B721730	PT	06/21/89	1.332	91.40	159.00	1.74
B721770	PT	06/29/89	1.105	271.00	467.00	1.72
B722141	PT	11/15/89	1.095	461.00	781.00	1.69
B721787	PT	10/04/89	1.238	458.00	764.00	1.67
B721958	PT	10/25/89	1.136	615.00	1000.00	1.63
B722168	PT	11/15/89	1.154	157.00	255.00	1.63
B724379	PT	07/06/89	1.270	565.00	896.00	1.59
B724769	PT	09/06/89	1.151	630.00	1000.00	1.59
B724885	PT	09/27/89	1.093	5.44	8.52	1.57
B724667	PT	10/04/89	1.158	0.82	1.29	1.57
B724657	PT	08/16/89	1.094	541.00	820.00	1.52

Table 30 (Cont'd)

AVS No.	Virus	Test Date	Diff- rentl.	IC 50	TC 25	SI
B721166	PT	08/03/89	1.233	402.00	601.00	1.50
B724832	PT	09/14/89	1.082	622.00	933.00	1.50
B724544	PT	07/26/89	1.245	5.65	8.33	1.47
B724720	PT	08/30/89	1.077	6.37	9.29	1.46
B722165	PT	11/15/89	1.154	683.00	1000.00	1.46
B724535	PT	07/26/89	1.205	6.75	9.74	1.41
B724661	PT	08/16/89	1.103	570.00	785.00	1.38
B724405	PT	07/06/89	1.203	5.15	7.05	1.37
B721818	PT	10/04/89	1.064	553.00	738.00	1.33
B722006	PT	10/25/89	1.228	758.00	1000.00	1.32
B724509	PT	07/19/89	1.199	91.80	118.00	1.28
B724530	PT	07/26/89	1.182	94.80	120.00	1.26
B724642	PT	08/16/89	1.174	6.33	7.77	1.23
B722162	PT	11/15/89	1.179	815.00	1000.00	1.23
B724411	PT	07/06/89	1.213	99.70	121.00	1.21
B724654	PT	08/16/89	1.023	5.93	7.21	1.21
B721532	PT	08/03/89	1.171	445.00	529.00	1.19
B722089	PT	11/08/89	1.022	9.83	11.70	1.19
B724525	PT	07/26/89	1.077	6.13	7.23	1.18
B724517	PT	07/26/89	1.126	7.40	8.65	1.17
B724716	PT	08/30/89	1.005	5.86	6.78	1.16
B724866	PT	09/27/89	1.132	7.03	7.85	1.12
B721892	PT	10/11/89	0.993	979.00	1000.00	1.02

Table 31

Compounds Active Against YF (17D) in Vero Cells
by the Prescreen Assay Procedure

AVS No.	Virus	Test Date	Diff- rentl.	IC 50	TC 25	SI
B721568	YF	08/09/89	0.898	16.20	360.00	22.24
4279	YF	08/03/89	1.087	2.97	32.50	10.95
4280	YF	08/03/89	1.087	3.00	32.50	10.83
B721511	YF	08/03/89	1.204	30.50	330.00	10.81
B721899	YF	11/08/89	0.902	30.90	325.00	10.52
B724898	YF	09/27/89	0.933	37.30	322.00	8.65
B724618	YF	08/09/89	0.941	37.10	248.00	6.69
B721823	YF	10/04/89	0.934	154.00	1000.00	6.51
4276	YF	08/03/89	1.133	5.06	32.50	6.42
B724610	YF	08/09/89	0.921	45.10	262.00	5.82
B724701	YF	08/24/89	0.873	42.20	227.00	5.39
B724592	YF	08/09/89	0.899	41.40	204.00	4.94
B724466	YF	07/12/89	1.071	45.70	218.00	4.77
2630	YF	06/21/89	1.153	22.30	100.00	4.49
B722111	YF	11/15/89	0.866	45.30	175.00	3.85
B721754	YF	06/29/89	1.024	97.10	360.00	3.71
B724468	YF	07/12/89	1.071	98.80	329.00	3.33
B721953	YF	11/08/89	0.902	320.00	1000.00	3.13
B722165	YF	11/15/89	0.840	345.00	1000.00	2.90
B721728	YF	06/21/89	1.047	447.00	1000.00	2.24
B724844	YF	09/14/89	0.947	50.50	110.00	2.18
B724852	YF	09/14/89	1.053	67.90	142.00	2.09
B724530	YF	07/26/89	1.166	68.70	126.00	1.84
B724863	YF	09/27/89	1.018	69.30	125.00	1.81
B721823	YF	10/25/89	0.996	574.00	1000.00	1.74
B722109	YF	11/15/89	0.866	90.70	155.00	1.71
B724812	YF	09/14/89	0.922	80.10	135.00	1.69
B721702	YF	06/21/89	0.910	748.00	1000.00	1.34
B722181	YF	11/15/89	0.866	93.90	123.00	1.31
B721166	YF	08/03/89	1.133	451.00	589.00	1.30
B724772	YF	10/04/89	0.955	73.90	92.80	1.26
B721714	YF	06/21/89	1.076	919.00	1000.00	1.09
B722087	YF	11/08/89	0.914	703.00	736.00	1.05
B724442	YF	07/12/89	1.088	715.00	730.00	1.02
B724654	YF	08/16/89	1.026	8.54	8.08	0.95
B724510	YF	07/26/89	1.169	808.00	698.00	0.86
B724731	YF	08/30/89	0.813	692.00	598.00	0.86
B724663	YF	08/16/89	1.029	68.10	56.80	0.83
B724657	YF	08/16/89	1.007	786.00	493.00	0.63
B721559	YF	08/03/89	1.133	798.00	457.00	0.57
B721770	YF	06/29/89	1.095	316.00	79.10	0.25

TOTAL NUMBER OF TESTS AGAINST PUNTA TORO VIRUS USING THE PRESREEN PROTOCOL (MAY 16, 1989 - NOV. 15, 1989)

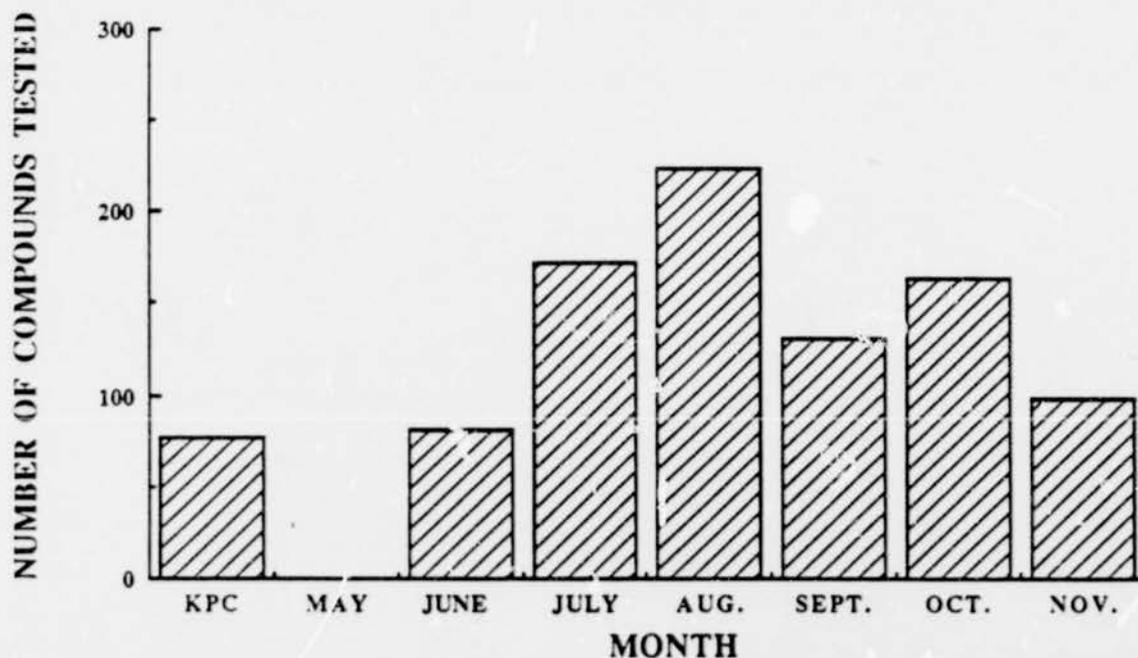


Figure 39

Test Total = 946

KPC (Positive Control Compound, Ribavirin) = 77 Tests

TOTAL NUMBER OF TESTS AGAINST YELLOW FEVER VIRUS USING THE PRESREEN PROTOCOL (MAY 16, 1989 - NOV. 15, 1989)

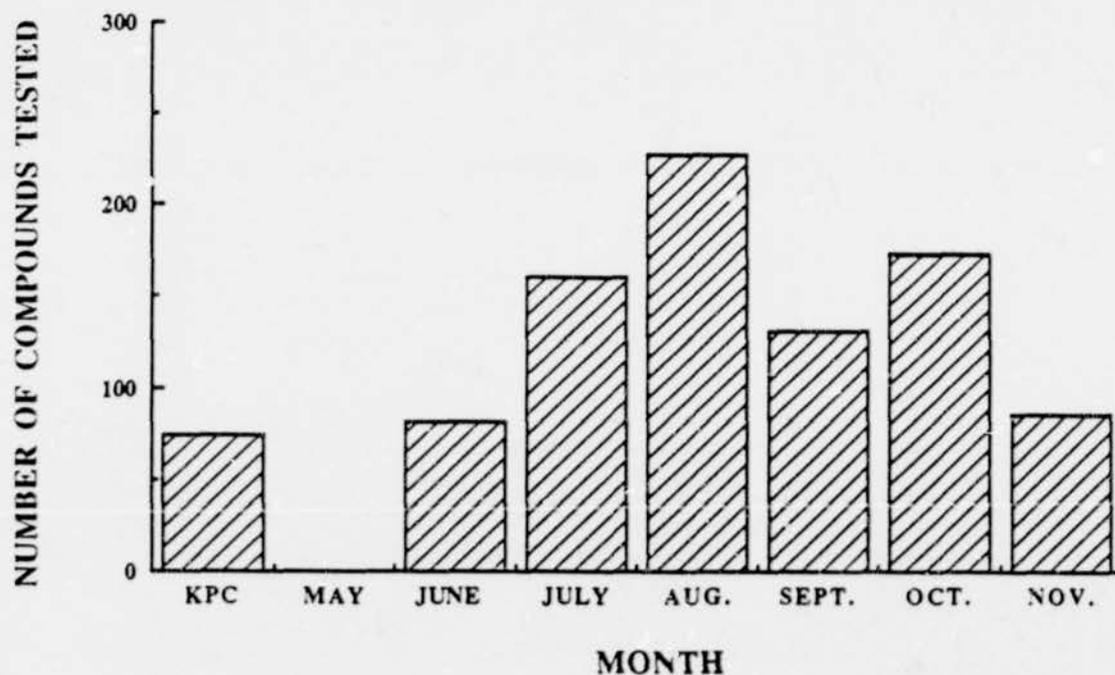


Figure 40

Test Total = 932

KPC (Positive Control Compound, Selenazofurin) = 77 Tests

VARIATION OF THE MAXIMUM ANTIVIRAL EFFECT
PT VIRUS-VS-RIBAVIRIN (PRESCREEN ASSAY)

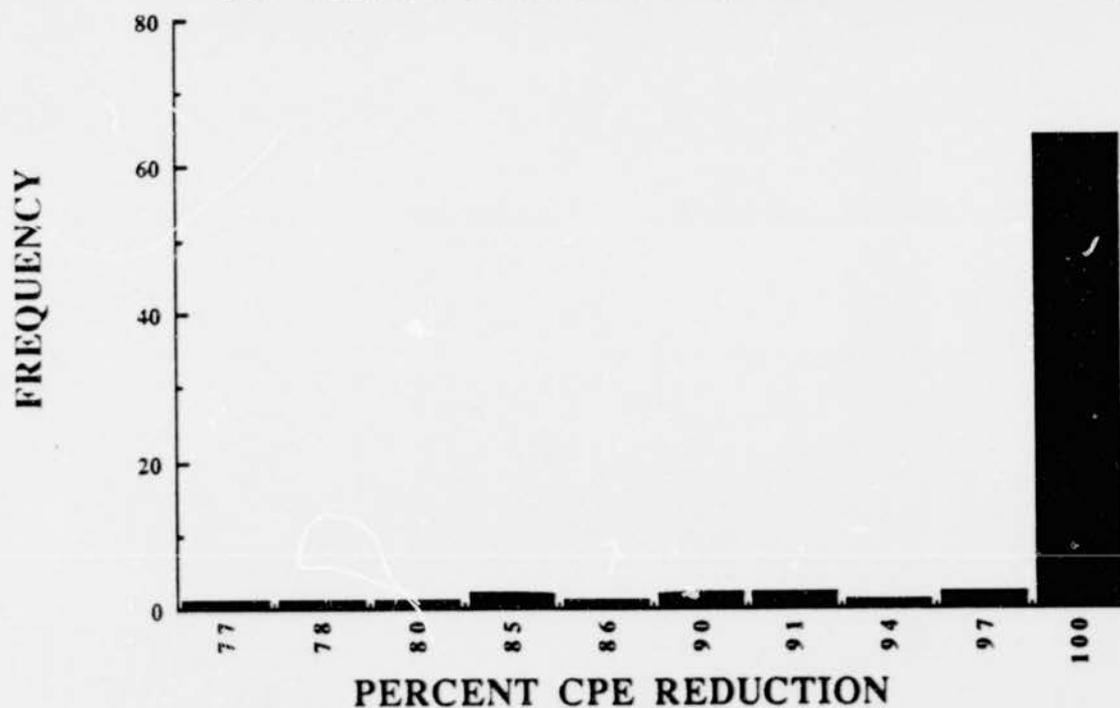


Figure 41

Maximum Antiviral CPE Reduction (%).
Summary of 77 Control Tests

VARIATION OF THE CELL (LOAD) CONTROLS
PT VIRUS-VS-RIBAVIRIN (PRESCREEN ASSAY)

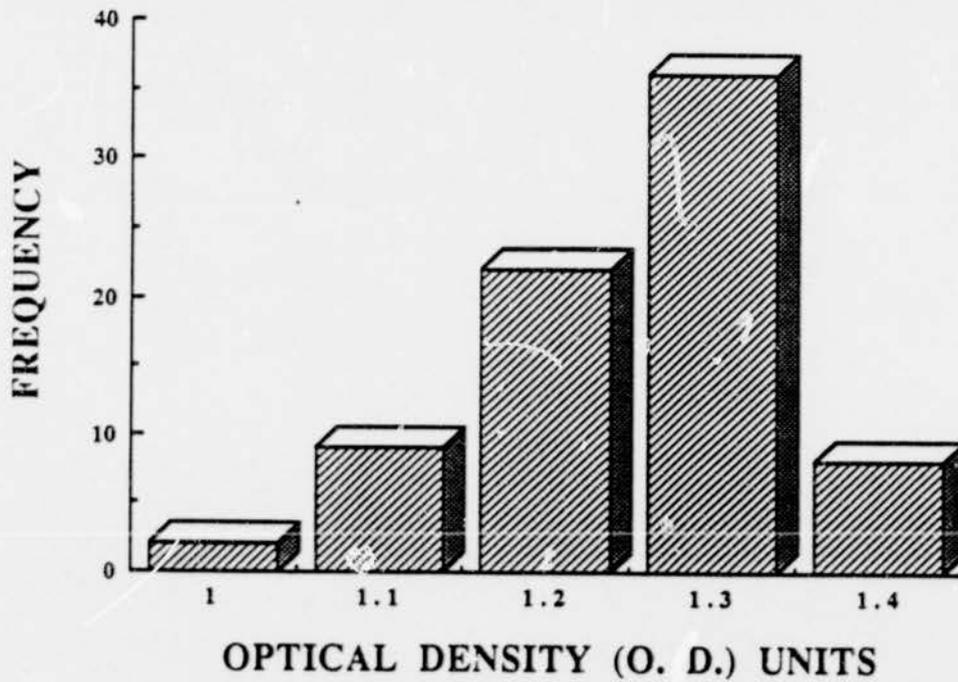


Figure 42

The O.D. Readings Represent the Mean of Cell Controls per Plate.
Summary of 77 Control Tests

VARIATION OF VIRUS (LOAD) CONTROLS
PT VIRUS-VS-RIBAVIRIN (PRESCREEN ASSAY)

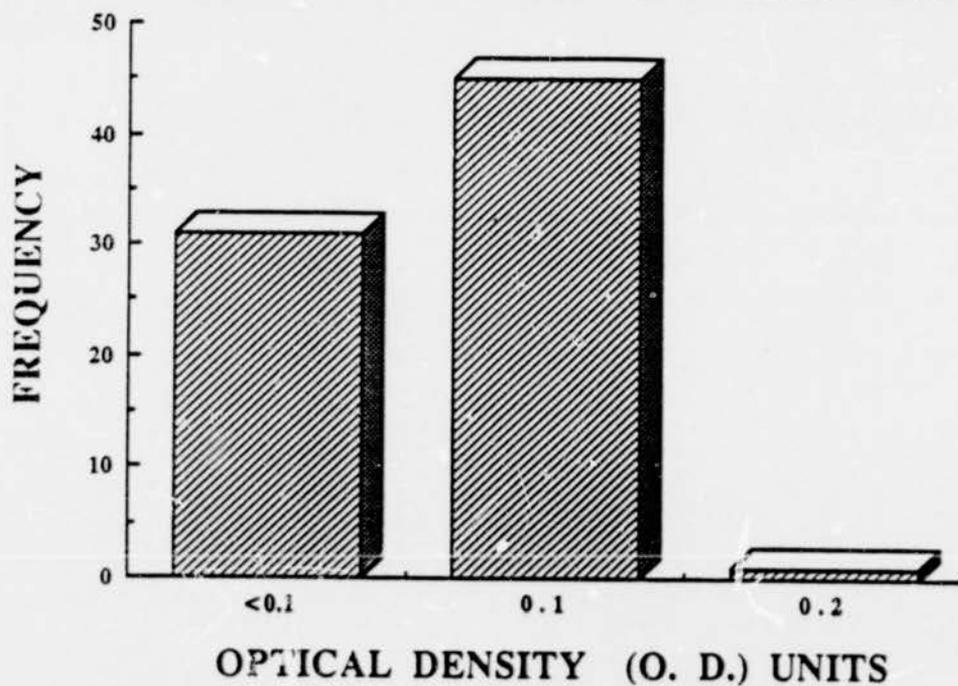


Figure 43

The O.D. Readings Represent the Mean of the Virus Controls per Plate.
Summary of 77 Control Tests

VARIATION OF THE TEST DIFFERENTIAL
PT VIRUS-VS-RIBAVIRIN (PRESCREEN ASSAY)

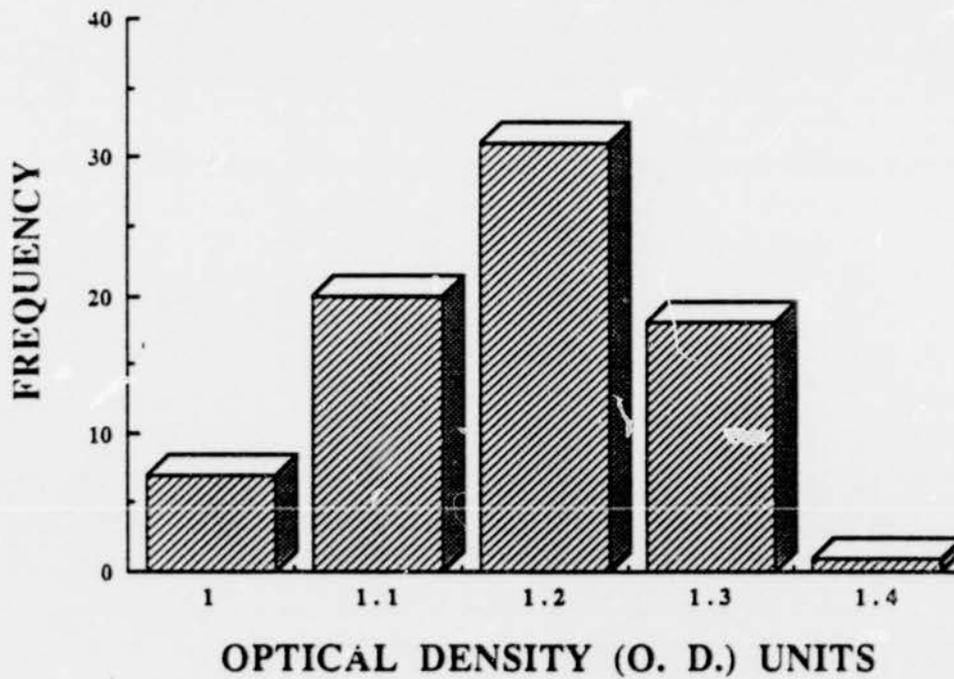


Figure 44

The Test Differential = The O.D. Readings of the Cell Control Minus Virus Controls per Plate.
Summary of 74 Control Tests

VARIATION OF THE MAXIMUM ANTIVIRAL EFFECT
 YF VIRUS-VS-SELENAZOFURIN (PRESCREEN ASSAY)

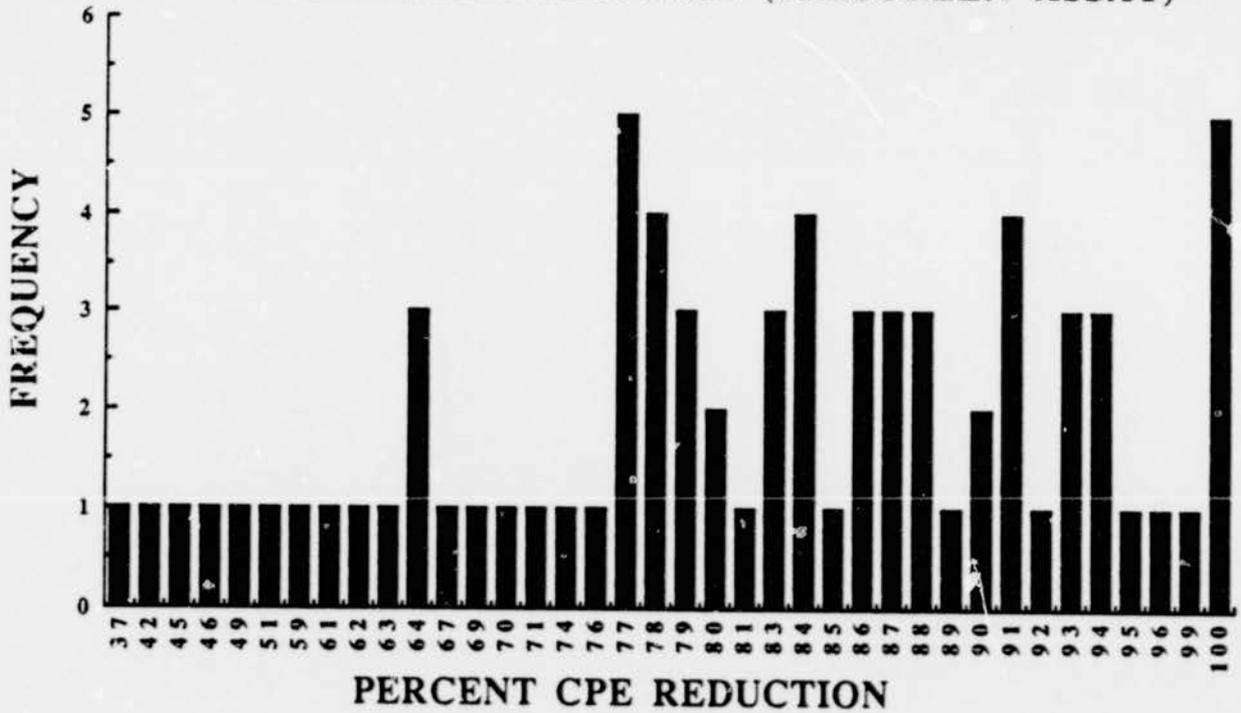


Figure 45

Maximum Antiviral CPE Reduction (%).
 Summary of 74 Control Tests

VARIATION OF THE CELL (LOAD) CONTROLS
YF VIRUS-VS-SELENAZOFURIN (PRESCREEN ASSAY)

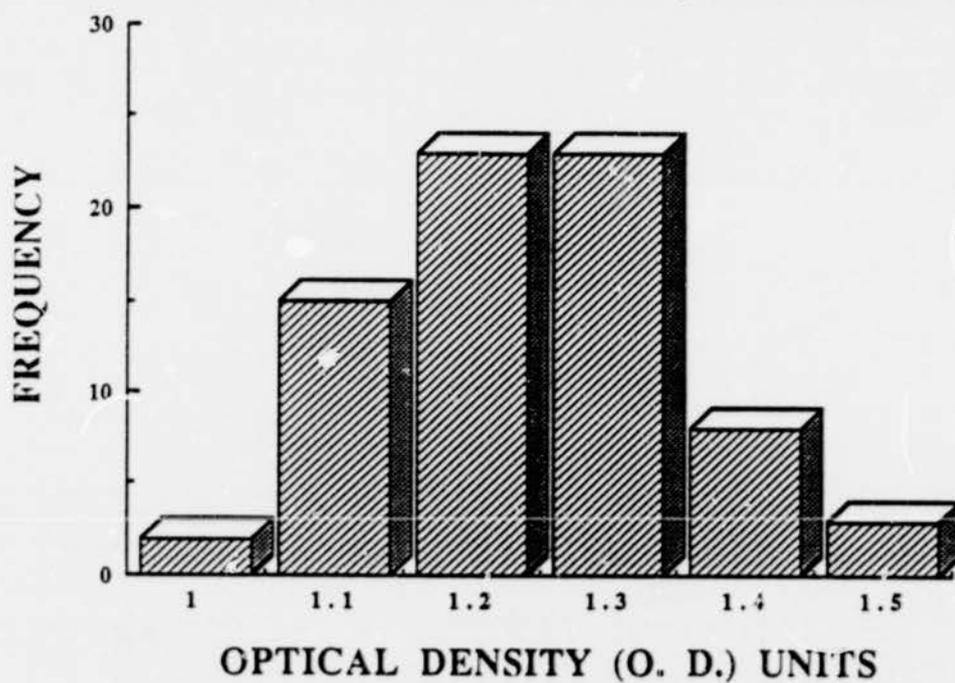


Figure 46

The O.D. Readings Represent the Mean of Cell Controls per Plate.
Summary of 74 Control Tests

VARIATION OF THE VIRUS (LOAD) CONTROLS
YF VIRUS-VS-SELENAZOFURIN (PRESCREEN ASSAY)

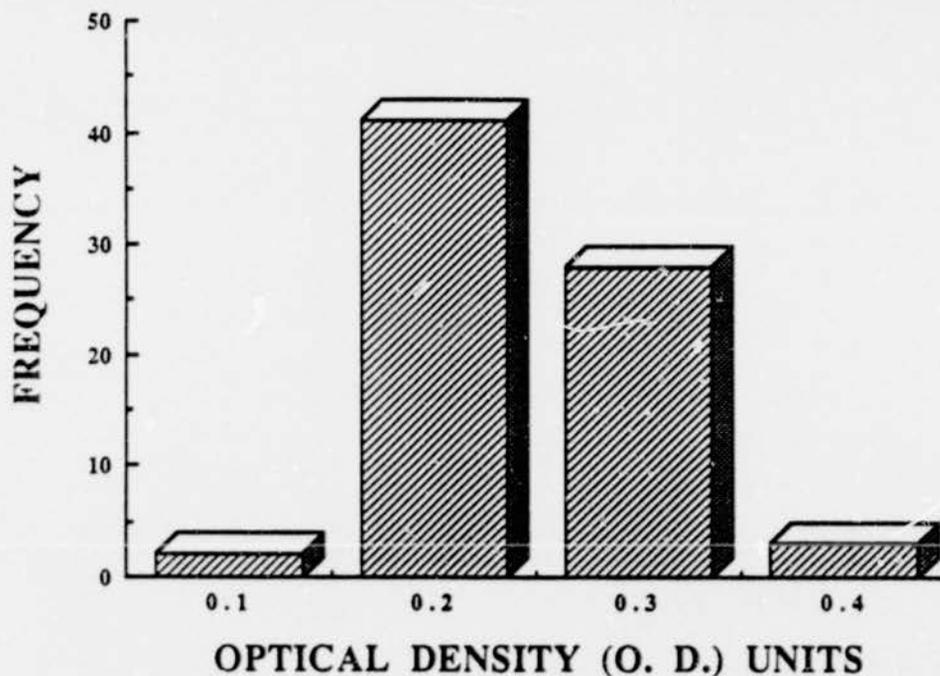


Figure 47

The O.D. Readings Represent the Mean of the Virus Controls per Plate.
Summary of 77 Control Tests

VARIATION OF THE TEST DIFFERENTIAL
YF VIRUS-VS-SELENAZOFURIN (PRESCREEN ASSAY)

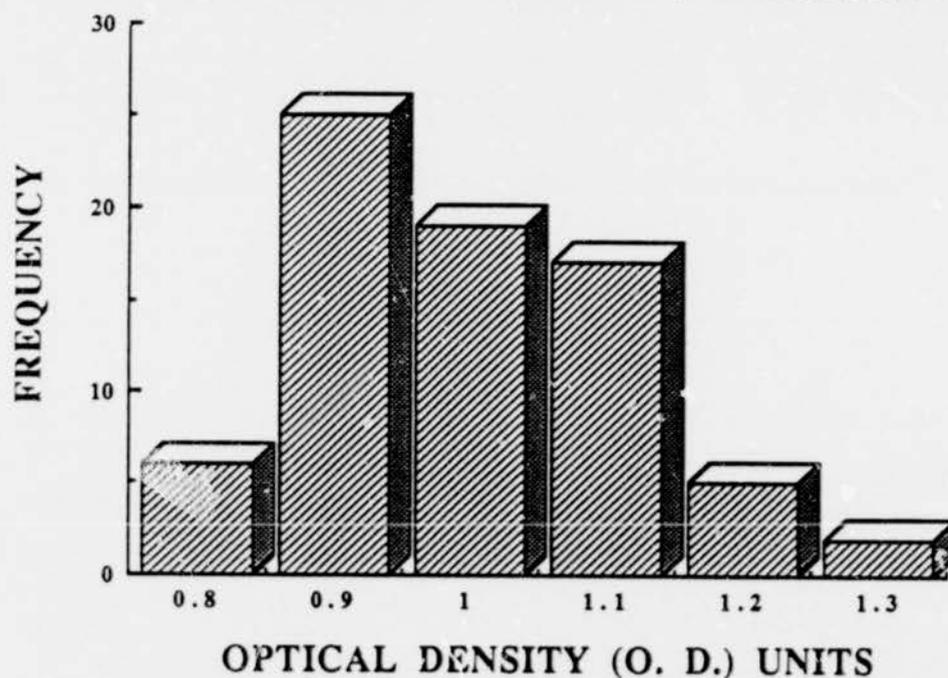


Figure 48

The Test Differential = the O.D. Readings of the Cell Control Minus Virus Controls per Plate
Summary of 74 Control Tests

EXOTIC RNA VIRUSES
 PRE-SCREEN ASSAY
 PLATE NUMBER 0AM TEST DATE 08/09/89
 PROJECT 5975-4 DATE READ 08/16/89
 SPONSOR USAMRIID
 CELLS VERO
 VIRUS YF
 STRAIN 17D

DRUG: B724611
 SI: _____

	1	2	3	4	5	6	7	8	9	10	11	12
	drug A - B724611											
	tox	experimental		ctrl								
A	0.392	0.394	0.397	0.186								
B	1.293	0.801	0.755	0.161								
C	1.268	0.696	0.704	0.165								
D	1.422	0.479	0.524	0.168								
E									virus control			reagent
F									0.364	0.363	0.426	0.175
G									0.361	0.361	0.370	0.175
H									1.286	1.248	1.271	0.188
									1.339	1.303	1.298	0.176
									cell control			blank

tox=cell toxicity BOLD = highest drug conc.

B724611 vs. YF (08/09/89)

ROW ON PLATE	CONC. (ug/ml)	UNINFECTED CELL VIABILITY		INFECTED CPE REDUCTION		VIRUS CONTROL	CELL CONTROL	DIFFERENTIAL	IC50	MTC25	SI
		MEAN	PERCENT	MEAN	PERCENT						
A	1000	0.206	19%	0.014	2%	0.196	1.112	0.917	-----	376.00	-----
B	100	1.132	100%	0.421	46%	-----	-----	-----	-----	-----	-----
C	10	1.103	99%	0.341	37%	-----	-----	-----	-----	-----	-----
D	1	1.254	100%	0.138	15%	-----	-----	-----	-----	-----	-----

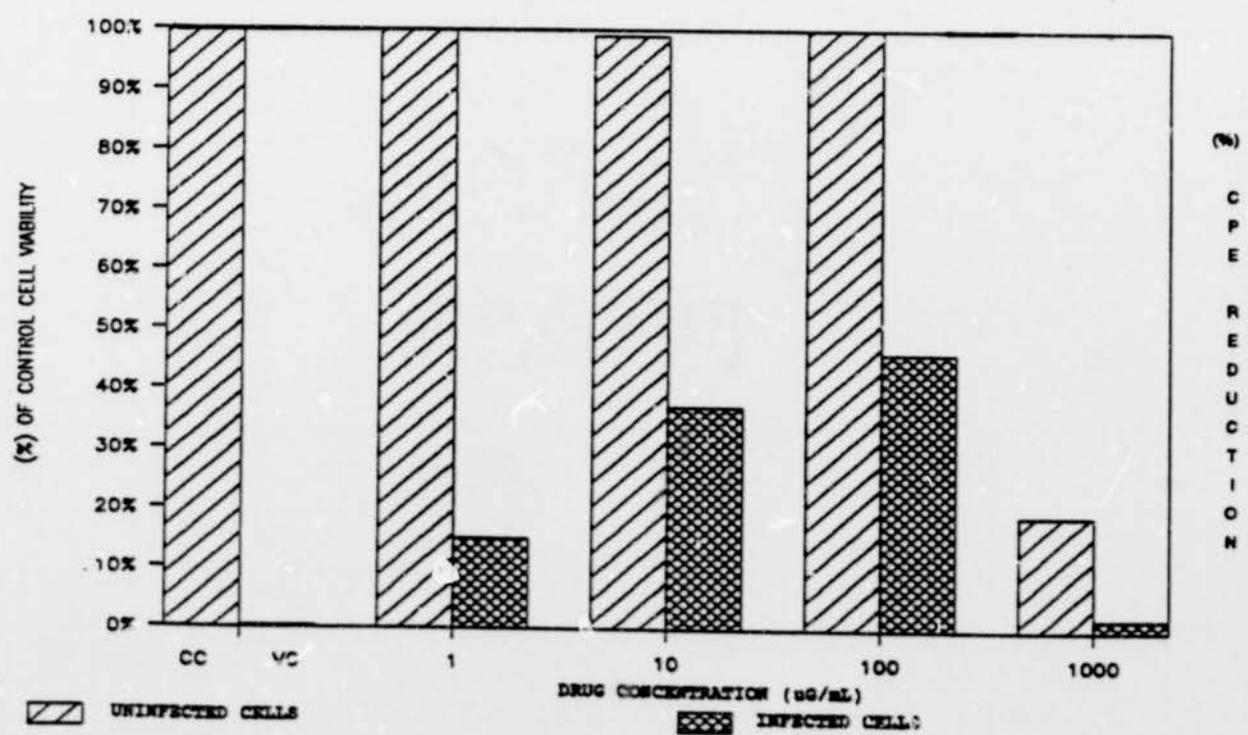


Figure 49

4.2 Antiviral Evaluations In Vivo

A total of 48 compounds have been received for evaluation in the primary *in vivo* antiviral screen. Table 32 presents a cumulative summary of the number of compounds received for testing, and the number of compounds tested, in each *in vivo* antiviral model. A cumulative summary presenting all of the *in vivo* antiviral test results is included in Appendix C.

Table 32

Primary *In Vivo* Antiviral Screen:
Target Viruses and Numbers of Compounds Tested
Through November 15, 1989*

<u>Shipment</u>	<u>Compounds</u>		<u>PIC</u>	<u>VEE</u>	<u>JE</u>	<u>VV</u>
	<u>Per Shipment</u>	<u>Date Received</u>				
13	1	11/13/86	NS	1 (1)	1 (1)	NS
22	11	05/05/87	11 (11)	NS	NS	NS
26	1	06/26/87	1 (1)	NS	NS	NS
27	2	07/21/87	2 (2)	2 (2)	NS	NS
33	9	11/03/87	3 (3)	3 (3)	NS	4 (4)
35	3	12/22/87	NS	NS	3 (3)	NS
36	4	01/29/88	3 (3)	NS	1 (1)	NS
41B	1	05/13/88	NS	NS	1 (1)	NS
Fed EX	1	07/26/88	NS	NS	1 (1)	NS
47	8	10/20/88	NS	NS	8 (8)	NS
49	2	11/11/88	2 (2)	NS	NS	NS
50	2	11/16/88	1 (1)	NS	1 (1)	NS
51	2	01/10/89	NS	NS	NS	2 (2)
55	1	04/19/89	NS	NS	1 (1)	NS
Total	48		23 (23)	6 (6)	17 (17)	6 (6)

* The number of compounds specified for testing against each virus is shown in parentheses. NS indicates that compounds were not specified for testing against that virus.

4.2.1 Pichinde Virus (PIC)

4.2.1.1 Antiviral Drug Evaluations

The primary *in vivo* testing protocol used for evaluation of antiviral efficacy against Pichinde virus was as follows. Soluble compounds were diluted in phosphate-buffered saline (PBS) (pH 7.2) while insoluble compounds were diluted and homogenized in 0.4% carboxymethylcellulose (CMC) in PBS. If there were no stability problems noted on the compound data sheets, compound quantities adequate for the first half of the experiment were prepared on the first day of dosing. Compound quantities for the

second half of the experiment were prepared on Day 3. The prepared compounds were maintained sterilely at 4°C when not in use. The compounds were prepared at concentrations appropriate for dosing animals at 0.1 ml of compound per 20 gm of body weight. Fifteen hamsters (5 uninfected, 10 infected) were treated subcutaneously at each compound dose level once daily for 7 days (q1d x 7) with the first dose administered 2 hours preceding or 4 hours following virus challenge. A virus challenge, consisting of 1×10^4 pfu was administered intraperitoneally (IP) in a volume of 0.5 ml. The amount of compound administered per hamster was based on the average cage weight (5 hamsters/cage). Treatment groups included the test compound dilutions as well as the diluent used for compound preparation. Controls included (1) untreated, uninfected animals, (2) untreated, infected animals, (3) virus-infected diluent-treated animals, and (4) Ribavirin (positive control) treated animals.

Three compounds (AVS-94, AVS-347 and AVS-253) were evaluated. None of these 3 were active against Pichinde. The results are presented in Tables 33 and 34 and Figures 50-52.

Table 33

***In Vivo* Activity of AVS-94 and AVS-347
Against Pichinde Virus Infection
in Hamsters**

Virus: Pichinde

Treatment: q1d x 7, starting 4 hours post-challenge, SC

Pichinde Expt No. 38

<u>Treatment</u>	<u>No. Dead/ No. Uninfected</u>	<u>No. Dead/ No. Infected</u>	<u>ADD + 1 SD^a</u>	<u>p Value^b</u>
Untreated	0/5	9/9	---	
0.9 % Saline	0/5	10/10	9.9 ± 1.1	--
2% Ethanol/Saline	0/5	10/10	10.4 ± 1.8	--
100 mg/kg AVS-01	0/5	6/10	17.8 ± 5.3	0.001
100 mg/kg AVS-94	0/5	9/10	10.4 ± 1.7	0.408
32 mg/kg AVS-94	0/5	10/10	10.3 ± 1.3	0.458
10 mg/kg AVS-94	0/5	10/10	10.1 ± 1.3	0.713
3.2 mg/kg AVS-94	0/5	10/10	9.9 ± 1.4	1.0
100 mg/kg AVS-347	5/5	10/10	1.0 ± 0.0	<10 ⁻⁶
32 mg/kg AVS-347	5/5	10/10	1.3 ± 0.5	<10 ⁻⁶

^a ADD ± 1SD = Average Day of Death ± 1 Standard Deviation

$$\text{ADD} = \frac{\sum [(\text{day of death}) \times (\text{number dead that day})]}{\text{total number of dead}}$$

^b p = Student's t-test comparing death patterns of drug-treated, virus-infected animals to the appropriate diluent-treated, virus-infected control animals.

Table 34

**Results of Testing AVS-347 and AVS-253
Against Pichinde Virus *In Vivo***

Virus: Pichinde

Treatment: q1d x 7, starting 4 hours post-challenge, SC

Pichinde Expt No. 39

<u>Treatment</u>	<u>No. dead/ No. Uninfected</u>	<u>ADD + 1SD*</u>	<u>No. dead/ No. Infected</u>	<u>ADD + 1 SD*</u>	<u>p^b</u>
Untreated	0/5	N/A	10/10	9.8 ± 1.1	.105
0.4% CMC/PBS	0/5	N/A	10/10	13.2 ± 6.2	--
125 mg/kg Ribavirin	0/5	N/A	3/10 ^c	22.7 ± 6.7	.043
20 mg/kg AVS-347	5/5	1.4 ± 0.6	10/10	1.1 ±	0.3.000008
10 mg/kg AVS-347	5/5	1.8 ± 0.5	10/10	2.0 ± 0.5	.00002
5 mg/kg AVS-347	5/5	2.6 ± 1.3	10/10	2.8 ± 1.0	.00006
32 mg/kg AVS-253	0/5	N/A	10/10	10.8 ± 2.7	.277
16 mg/kg AVS-253	1/5	8.0 ± 0.0	10/10	14.9 ± 3.1	.447
32 mg/kg AVS-253 bid	5/5	10.6 ± 1.5	10/10	8.7 ± 1.9	.04
16 mg/kg AVS-253 bid	0/5	N/A	10/10	12.6 ± 4.7	.809

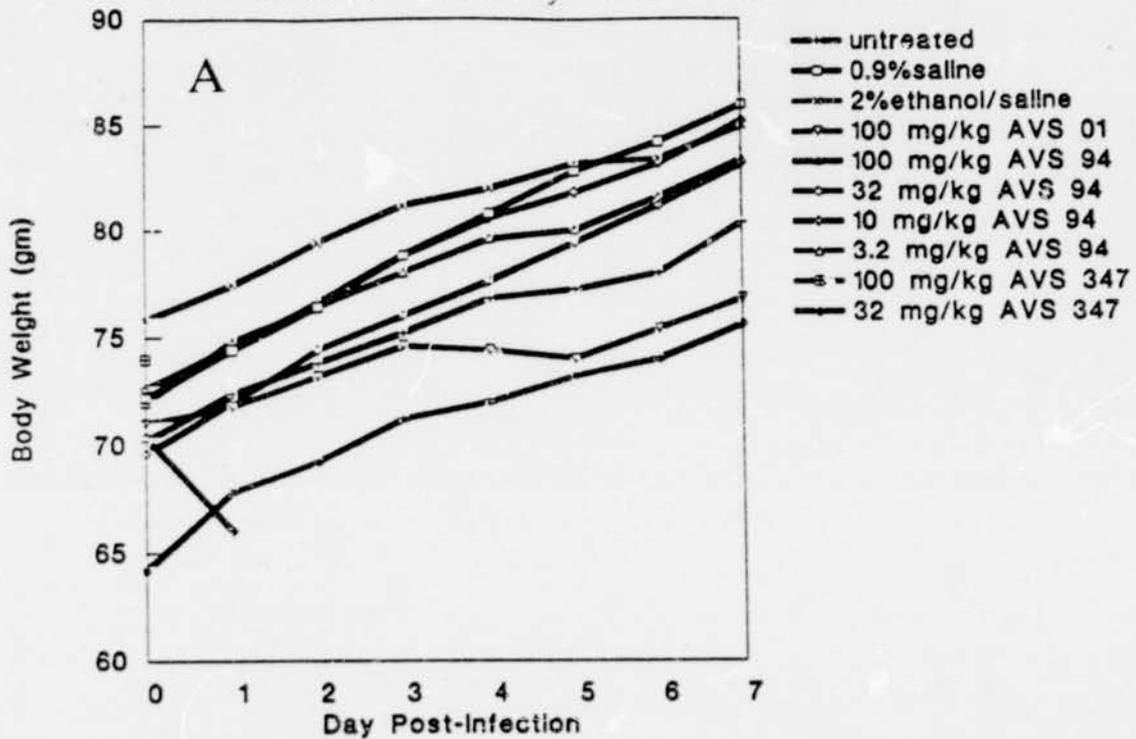
* ADD ± 1SD = Average Day of Death ± 1 Standard Deviation

$$ADD = \frac{\sum [(day\ of\ death) \times (number\ dead\ that\ day)]}{total\ number\ of\ dead}$$

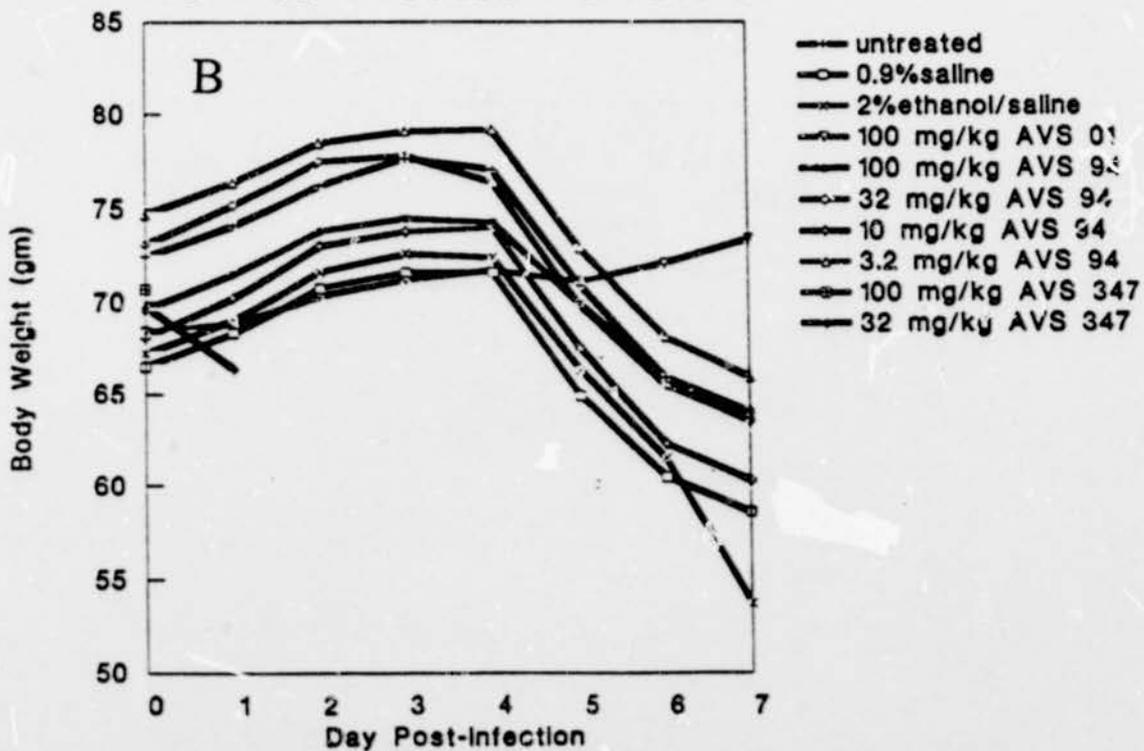
^b p = Student's t-test comparing experimental ADD to diluent control ADD

^c Fisher's Exact Test comparing mortality to diluent control p = .0015

Uninfected Toxicity Controls



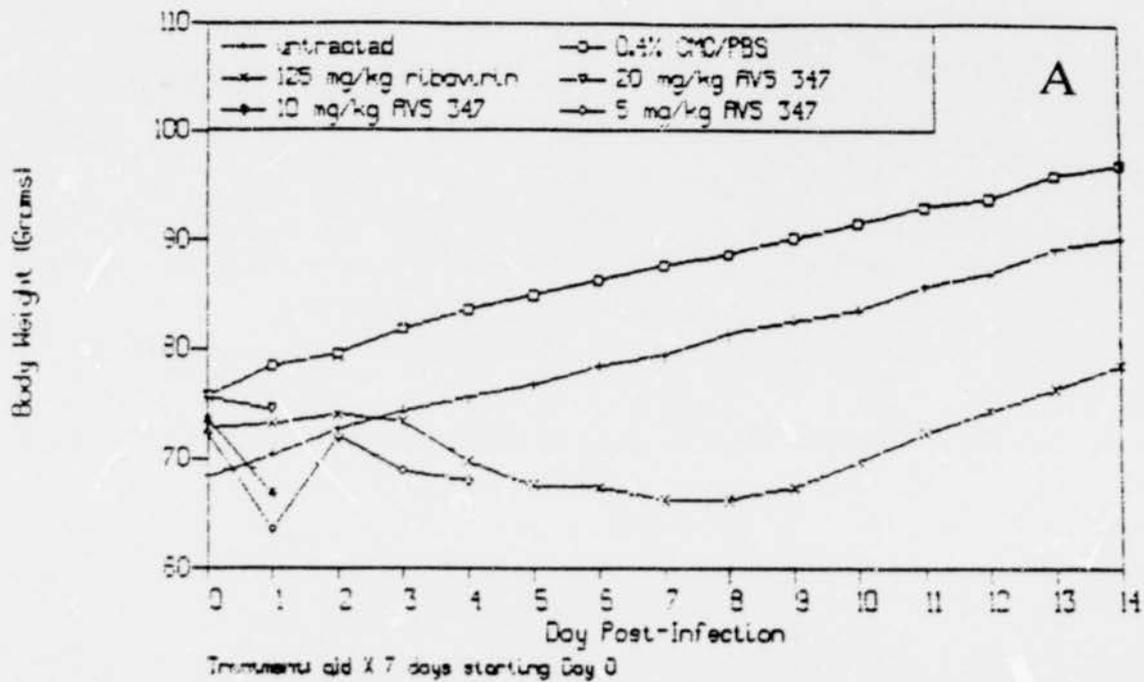
Pichinde Infected Hamsters



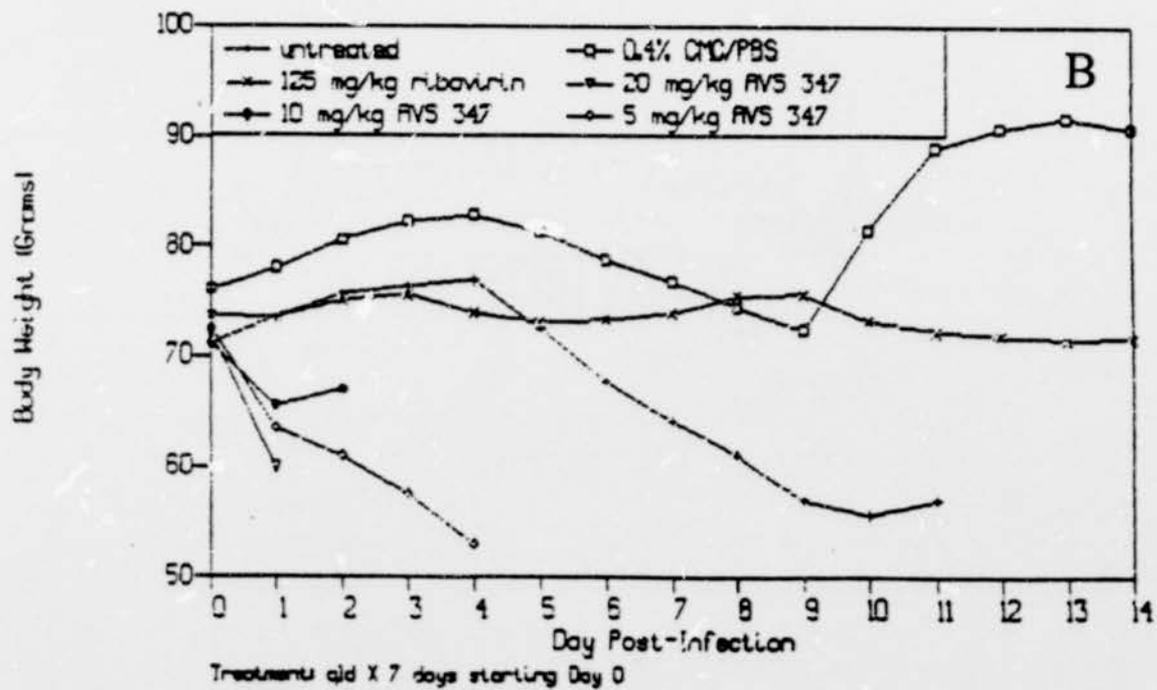
Mean Body Weights of Hamsters (Uninfected and PIC-Infected)
Treated with AVS-01, AVS-94 and AVS-347

Figure 50

Toxicity Control Hamsters



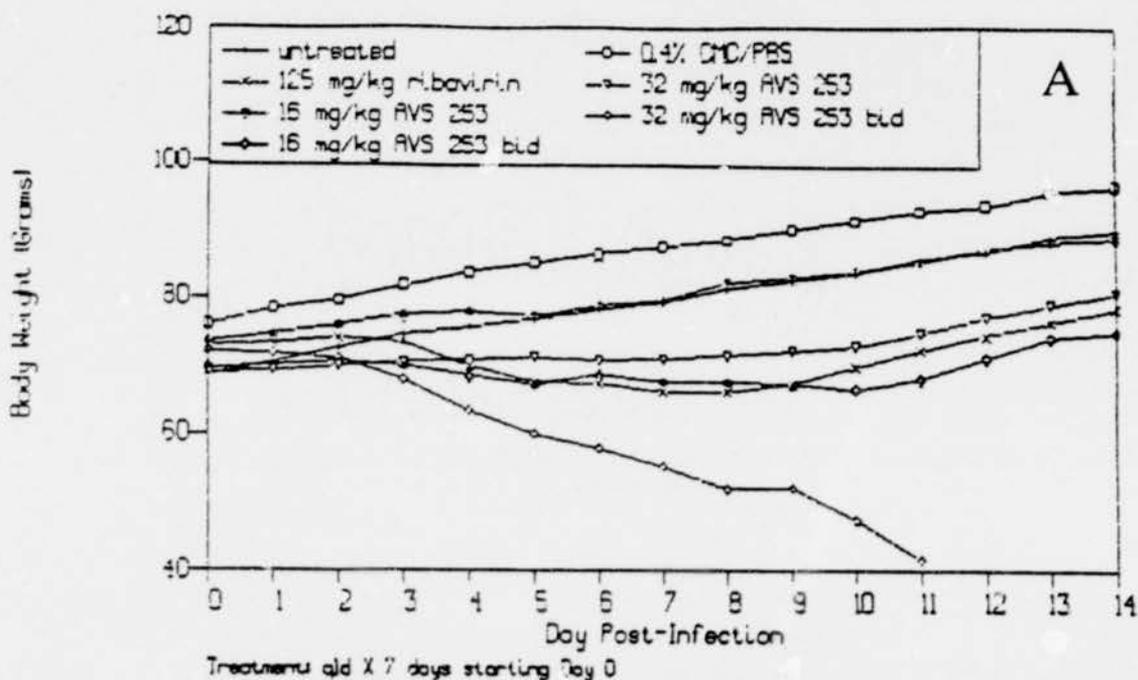
Pichinde Infected Hamsters



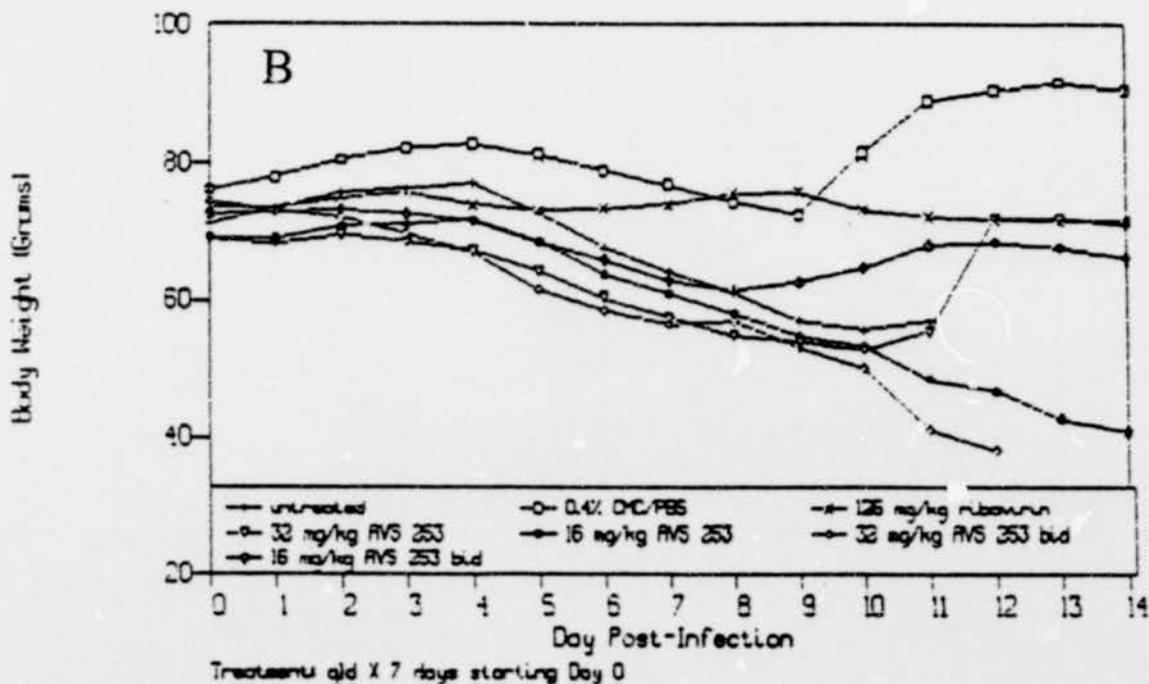
Mean Body Weights of Hamsters (Uninfected and PIC-Infected)
Treated with AVS-347

Figure 51

Toxicity Control Hamsters



Pichinde Infected Hamsters



Mean Body Weights of Hamsters (Uninfected and PIC-Infected)
Treated with AVS-253

Figure 52

4.2.1.2

Intracranial Challenge with Pichinde Virus

The effect of intracranial challenge with Pichinde virus on MHA hamsters was assessed in a series of experiments. The purpose of these studies was to determine whether intracranial challenge produced central nervous system infections. In the initial study, challenge doses of 0.03 ml of pichinde stock virus at dilutions of 10^{-3} to $10^{-6.5}$ were uniformly lethal. At 10^{-7} and $10^{-7.5}$ dilutions the mortality decreased to 62.5% and 33.3%. No mortality occurred at dilutions of 10^{-8} and higher. These results are shown in Table 35.

Table 35

Intracranial Pichinde Virus Challenge

Treatment Group	<u>No. Dead</u> No. Uninfected	<u>No. Dead</u> No. Infected	ADD + 1 SD
Uninfected	0/10		N/A
Sham-infected IC	0/10		N/A
10^{-3} dilution Pichinde IC		10/10	8.3 ± 0.5
10^{-4} dilution Pichinde IC		10/10	9.5 ± 1.2
10^{-5} dilution Pichinde IC		10/10	10.3 ± 2.2
10^{-6} dilution Pichinde IC		9/9	10.4 ± 0.9
10^{-6} dilution		8/8	100% 10.1 ± 2.0
$10^{-6.5}$ dilution		9/9	100% 12.4 ± 3.8
10^{-7} dilution		5/8	62.5% 16.0 ± 5.8
$10^{-7.5}$ dilution		3/9	33.3% 16.3 ± 8.4
10^{-8} dilution		0/10	0% N/A
$10^{-8.5}$ dilution		0/10	0% N/A
10^{-9} dilution		0/9	0% N/A

The effect of AVS-01 treatment on intracranial challenge with Pichinde was assessed. Hamsters were challenged intracranially with 0.03 ml of a 10^{-6} dilution of Pichinde virus. Subcutaneous treatment with AVS-01 (100 mg/kg/day) or PBS was administered on a q1d x 7 days schedule beginning on Day 0. Treatment with AVS-01 reduced mortality (Table 36) by 50%. This is believed to indicate that intracerebrally inoculated Pichinde virus spreads peripherally thereby producing mortality. To confirm this, tissue titrations should be performed.

Table 36

**Antiviral Activity of AVS-01 Against Intracranial
Challenge with Pichinde Virus**

Treatment	<u>No. Dead</u>		<u>No. Dead</u>		p ^a
	No. Uninfected	(ADD + 1 SD)	No. Infected ^b	ADD + 1 SD	
Untreated	0/5		10/10	10.3 ± 1.2	0.74
PBS q1d X 7d SC	0/5		10/10	10.5 ± 1.5	N/A
100 mg/kg AVS-01	0/5		5/10 ^c	19.0 ± 3.0	.00005

^ap value resulting from comparing ADD of the drug-treated, virus-infected versus the PBS-treated, virus-infected animals.

^bAnimals were challenged intracranially with 0.03 ml of a 10⁻⁶ dilution of the Pichinde virus stock.

^cFisher's Exact Test comparing mortality p = 0.016

4.2.1.3 Anti-Pichinde Virus Efficacy of AVS-01 Administered at One or Two Timepoints

The ability of a single dose of AVS-01 to alter the outcome of intraperitoneal challenge with Pichinde virus was assessed in MHA hamsters. A single subcutaneous dose of AVS-01 administered immediately following virus challenge did not alter the mortality significantly although the ADD was slightly prolonged at doses of 800 and 400 mg/kg. Dose levels of 1600 and 3200 mg/kg were toxic (Table 37).

Table 37

Single Dose Efficacy of AVS-01 Against Pichinde Virus

Treatment	No. Dead		No. Infected	ADD + 1 SD	p ^a
	No. Uninfected	(ADD + 1 SD)			
Uninfected	0/5	10/10	10.7 ± 2.3	.48	
PBS	0/5	10/10	10.1 ± 1.2	N/A	
Ribavirin					
3200 mg/kg	5/5	(1.0 ± 0.0)	10/10	1.0 ± 0.0	< 10 ⁻⁶
1600 mg/kg	5/5	(2.4 ± 3.1)	10/10	3.2 ± 4.0	.00006
800 mg/kg	1/5	(20.0 ± 0.0)	8/10	11.6 ± 1.3	.02
400 mg/kg	0/5		9/10	11.3 ± 1.0	.027
Virus Titration					
1 x 10 ⁶ pfu	N/A		5/5	9.2 ± 1.3	ND
1 x 10 ⁵ pfu	N/A		5/5	8.6 ± 0.9	ND
1 x 10 ⁴ pfu	N/A		10/10	9.9 ± 0.9	ND
1 x 10 ³ pfu	N/A		10/10	10.4 ± 1.3	ND

^ap value resulting from comparing the ADD of the drug-treated, virus-infected versus the PBS-treated, virus-infected animals.

The effect of treatment administration time was assessed at a dose of 600 mg/kg. The AVS-01 treatment was administered as a single dose at Day 2 or 4 or 6 post-infection. No significant reduction in mortality occurred; however, there was an increase in ADD when AVS-01 was administered on Day 2 or 4 but not on Day 6. Day 4 was superior to Day 2 for prolonging the ADD. These results are shown in Table 38. These results show that some indication of antiviral efficacy can be obtained with a single treatment administered between Days 2 and 4 post virus challenge.

Table 38

Effect of Treatment Timing on Single Dose AVS-01 Efficacy

Treatment	No. Dead		No. Dead		p*
	No. Uninfected	(ADD + 1 SD)	No. Infected	ADD + 1 SD	
Untreated	1/5	(26.0 ± 0.0)	10/10	12.3 ± 2.5	.94
PBS Day 2	0/5		10/10	12.4 ± 3.1	N/A
PBS Day 4	ND		10/10	11.2 ± 2.3	N/A
PBS Day 6	ND		10/10	12.8 ± 3.2	N/A
Ribavirin					
1200 mg/kg Day 0	3/5	(1.0 ± 0.0)	ND		
600 mg/kg Day 2	0/5		8/10	15.6 ± 2.7	.033
600 mg/kg Day 4	ND		10/10	18.6 ± 5.4	.0009
600 mg/kg Day 6	ND		10/10	11.2 ± 2.9	.258

*p value resulting from comparing the ADD of the drug-treated, virus-infected versus the PBS-treated, virus-infected animals.

A second approach to determining the activity of potential anti-Pichinde compounds available in limited quantities was explored. In this case, AVS-01 was administered twice following virus challenge. Doses of 600 mg/kg and 400 mg/kg were given subcutaneously at two timepoints: Days 2 and 6, Days 3 and 6 or Days 4 and 6. Also, AVS-01 was administered via the drinking water on Days 0-14 at 1.25 mg/ml and 1.0 mg/ml. AVS-01 administered at 600 mg/kg on Days 3 and 6 or 4 and 6 was not well tolerated. AVS-01 at 400 mg/kg administered on Days 4 and 6 was also not well tolerated. All dose levels except the 600 mg/kg (Days 4 and 6) significantly increased the ADD. AVS-01 administered via the drinking water prolonged the ADD and reduced mortality. The results are shown in Table 39.

Table 39

**Antiviral Efficacy of AVS-01 Administered at
Two Timepoints Post-infection**

Treatment	<u>No. Dead</u>		<u>No. Dead</u>	
	No. Uninfected	ADD \pm 1 SD	No. Infected	(ADD \pm 1 SD)
Untreated Control	0/6		10/10	(11.5 \pm 3.2)
PBS Day 2-9	0/5		10/10	(9.6 \pm 1.9)
PBS Day 2 & 6	0/5		10/10	(10.3 \pm 1.6)
PBS Day 3 & 6	0/5		10/10	(9.4 \pm 1.8)
PBS Day 4 & 6	0/5		10/10	(10.7 \pm 1.8)
Day 2 - 9				
100 mg/kg AVS01 Day 2 & 6	0/5		9/10	(21.4 \pm 3.6)*
60 mg/kg AVS-01 Day 3 & 6	0/5		9/10	(18.2 \pm 3.3)*
600 mg/kg AVS-01 Day 4 & 6	2/5	(18.5 \pm 0.7)	9/10	(19.1 \pm 3.1)*
600 mg/kg AVS-01 Day 2 & 6	3/5	(16.7 \pm 0.6)	10/10	(11.8 \pm 2.3)
400 mg/kg AVS-01 Day 3 & 6	0/5		9/10	(21.7 \pm 2.9)*
400 mg/kg AVS-01 Day 4 & 6	0/5		8/10	(18.5 \pm 3.4)*
400 mg/kg AVS-01	1/5	(18.0 \pm 0.0)	8/10	(16.8 \pm 2.7)*
Day 0-14				
1.25 mg AVS-01/ml in H ₂ O	0/5		1/10	(20.0 \pm 0.0)*
Day 0 -14				
1.0 mg AVS-01/ml in H ₂ O	0/5		6/10	(22.3 \pm 3.8)*

* = Average day of death of drug treated animals is significantly prolonged compared to the appropriate PBS treated control animals.

4.2.1.4 Subcutaneous Challenge with Pichinde Virus

To assess the lethality of Pichinde virus administered subcutaneously (SC), groups of 10 hamsters were inoculated with serial \log_{10} dilutions of Pichinde. Challenge doses ranged from 10^2 pfu - 10^6 pfu. As shown in Table 40, only the 10^2 pfu challenge dose resulted in 100% mortality. Thus, there is some difference in lethality for Pichinde virus administered subcutaneously as compared to intraperitoneally. Whether this difference is significant remains undetermined.

Table 40

Subcutaneous Infection with Pichinde Virus

<u>Treatment Group</u>	<u>No. Dead/ No.Treated</u>	<u>ADD \pm 1 SD</u>
Uninfected Control	0/5	NA
1 x 10^6 pfu SQ	6/10	13.7 \pm 3.6
1 x 10^5 pfu SQ	8/10	14.9 \pm 2.2
1 x 10^4 pfu SQ	9/10	14.8 \pm 2.2
1 x 10^3 pfu SQ	8/10	12.8 \pm 2.2
1 x 10^2 pfu SQ	10/10	12.1 \pm 3.4
1 x 10^4 pfu IP	10/10	12.0 \pm 1.8

NA = Not applicable

4.2.2 Venezuelan Equine Encephalomyelitis Virus (VEE)

No compounds were received for testing against VEE during this reporting period. Work was conducted with VEE to assess the feasibility of producing a target organ model.

4.2.2.1 Intracranial Challenge with VEE

Initially the virus was titrated for lethality by the intracranial route using serial dilutions of the virus stock and a standard inoculum volume of 0.03 ml. These results are shown in Tables 41 and 42. The intracranial LD_{50} was between the $10^{-7.4}$ and the $10^{-7.7}$ dilution of stock virus when 0.03 ml was administered.

Table 41

Preliminary VEE Titration

Treatment Groups	No. Dead/No. Treated	ADD + 1 SD
Uninfected control	0/10	N/A
Sham-infected	0/10	N/A
10 ⁻⁶ dilution IC	10/10	5.9 ± 0.9
10 ⁻⁷ dilution IC	10/10	6.5 ± 0.9
10 ⁻⁸ dilution IC	5/10	6.8 ± 0.8
10 ⁻⁹ dilution IC	2/10	7.0 ± 0.0

Table 42

Secondary VEE Intracranial Challenge Titration

Treatment Groups	No. Dead/No. Treated	ADD + 1 SD
Infected control	0/10	N/A
Sham-infected	0/10	N/A
10 ^{-7.1} dilution IC	10/10	6.1 ± 0.3
10 ^{-7.4} dilution IC	10/10	6.6 ± 1.2
10 ^{-7.7} dilution IC	8/10	7.0 ± 0.8
10 ⁻⁸ dilution IC	6/10	6.7 ± 0.8
10 ^{-8.3} dilution IC	8/10	6.4 ± 0.7
10 ^{-8.6} dilution IC	3/9	6.7 ± 0.6
10 ^{-8.9} dilution IC	0/10	N/A

4.2.2.2 Intracranial Titration of VEE in Combination with a Single Dose of PBS

The effects of a single intracranial dose of PBS on the mortality of VEE challenged mice was assessed. In this experiment groups of 10 mice each were challenged with serial dilutions of VEE stock virus and 8 hours post-challenge they received a single dose of 0.03 ml of PBS intracranially. The results are shown in Table 43. Mortality occurred at all challenge levels (10^{-7.1} through 10^{-8.6} dilutions); however, 100% mortality was present only in the 10^{-7.1} through 10^{-7.7} dilutions.

Table 43

Mortality Following IC Challenge with VEE and Single Dose IC Treatment

Treatment Groups	No. Dead/No. Treated	ADD \pm 1 SD
Uninfected, untreated	0/10	N/A
Sham-infected IC	0/9	N/A
10 ^{-7.1} dilution of VEE, IC	10/10	5.8 \pm 1.3
10 ^{-7.4} dilution of VEE, IC	10/10	6.1 \pm 0.7
10 ^{-7.7} dilution of VEE, IC	10/10	6.5 \pm 0.7
10 ^{-8.0} dilution of VEE, IC	8/10	6.3 \pm 1.3
10 ^{-8.3} dilution of VEE, IC	4/10	7.8 \pm 4.2
10 ^{-8.6} dilution of VEE, IC	3/10	6.3 \pm 0.6

4.2.2.3 Effect of 3N-3DU on VEE

The effect of a single intracranial dose of 40 mg of 3N-3DU/kg on VEE infection was assessed. Mice (10/group) were challenged intracranially with 0.03 ml of a 10^{-8.3} dilution of VEE stock virus and treated 6 or 8 or 10 hours later with 0.03 ml of PBS or 3N-3DU intracranially. Mice receiving 40 mg/kg 3N-3DU at 8 hr post virus challenge had a mortality rate of 25% compared to 70% in the PBS treated group. In addition, the ADD for the 3N-3DU treated group was significantly increased ($p = 0.049$). These results are shown in Table 44. Thus, the target organ approach may be a viable alternative for assessing compounds available in limited quantities.

Table 44

Mortality in VEE Challenged Mice Receiving a Single Dose of 3N-3DU

<u>Treatment Groups</u>	<u>No. Dead/No. Treated</u>	<u>ADD ± 1 SD</u>
<u>Uninfected Mice</u>		
Untreated control	0/5	N/A
Sham-infected IC	0/5	N/A
Sham-infected + PBS IC	0/5	N/A
Sham-infected + 40 mg/kg 3N-3DU IC	0/4	N/A
<u>Virus-Infected Mice</u>		
Untreated control	2/5	6.5 ± 0.7
Placebo (PBS)		
6 hrs	6/10	6.3 ± 0.8
Placebo (PBS)		
8 hrs	7/10	5.4 ± 0.5
Placebo (PBS)		
10 hrs	5/10	5.8 ± 1.5
40 mg/kg 3N-3DU		
6 hrs	6/10 (.68)	5.8 ± 0.8
40 mg/kg 3N-3DU		
8 hrs	2/8 (.077)	6.5 ± 0.7 (.049)
40 mg/kg 3N-3DU		
10 hrs	5/8 (.56)	6.5 ± 1.2 (.52)

4.2.2.4 Subcutaneous Challenge with VEE

Mortality produced by VEE following subcutaneous challenge was assessed in groups of 10 mice. Challenge doses ranged from 0.001 pfu to 100 pfu per mouse. Death occurred in all mice challenged with 0.1 pfu or higher. At 0.01 pfu/mouse there was a 30% mortality rate. In comparison, an intraperitoneal challenge with 0.13 pfu/mouse produced a 70% mortality rate. These results are shown in Table 45.

Table 45

Mortality Following Subcutaneous Challenge with VEE

<u>Treatment Groups</u>	<u>No. Dead/No. Treated</u>	<u>ADD \pm 1 SD</u>
Untreated control	0/5	N/A
Sham-infected (SQ)	0/5	N/A
Sham-infected (IP)	0/5	N/A
100 pfu (SQ)	10/10	7.0 \pm 0.7
10 pfu (SQ)	10/10	7.5 \pm 0.5
1 pfu (SQ)	10/10	7.8 \pm 1.0
0.13 pfu (SQ)	10/10	7.5 \pm 0.7
0.1 pfu (SQ)	10/10	7.7 \pm 0.5
0.01 pfu (SQ)	3/10	8.0 \pm 1.0
0.001 pfu (SQ)	0/10	N/A
0.13 pfu (IP)	7/10	7.4 \pm 0.8

4.2.3 Japanese Encephalitis Virus JE4.2.3.1 Titration of JE Virus Challenge Preps

During this reporting period, three different challenge virus stock of JE were titrated *in vivo*. All 3 preps were generated by serial *in vivo* passage of JE virus (Beijing strain) in C57B1/6 mice. The challenge preps consisted of 10% homogenates of brains collected from the challenged mice. The LD₉₀ for Challenge Prep 6 administered intraperitoneally was 0.5 ml of a 1:8000 dilution (Table 46). For Challenge Prep 7, a intraperitoneal dose of 0.5 ml of a 1:12000 dilution resulted in 90-100% mortality (Table 47). The Challenge Prep 8 was more lethal than Preps 6 and 7. Significant mortality occurred at dilutions as high as 1:40,000. These results are shown in Tables 48 and 49.

Table 46

In Vivo Titration of JE Challenge Prep 6 Virus Stock

<u>Challenge Dilution</u>	<u>No. Dead/Total No. Challenged</u>	<u>ADD + 1 SD^a</u>
Uninfected	0/10	N/A ^b
1:1000	10/10	14.2± 2.3
1:2000	10/10	12.9± 2.6
1:3000	10/10	14.1± 1.5
1:4000	10/10	13.4± 2.3
1:5000	10/10	14.7± 0.8
1:6000	10/10	12.2± 1.4
1:7000	10/10	13.1± 2.1
1:8000	9/10	13.4± 2.4
1:9000	7/10	12.6± 2.1
1:10000	6/10	15.2± 1.6
1:12000	9/10	13.1± 2.4
1:14000	9/10	13.9± 1.5
1:16000	5/5	13.0± 1.9

^a ADD ± 1SD = Average Day of Death ± 1 Standard Deviation

$$ADD = \frac{\sum [(day\ of\ death) \times (number\ dead\ that\ day)]}{total\ number\ of\ dead}$$

^b N/A = Not Applicable

Table 47

In Vivo Titration of JE Challenge Prep 7 Virus Stock

<u>Challenge Dilution</u>	<u>No. Dead/Total No. Challenged</u>	<u>ADD ± 1 SD^a</u>
Uninfected	0/10	N/A ^b
1:1000	9/10	12.0± 2.7
1:2000	7/10	12.7± 1.4
1:3000	10/10	12.6± 2.1
1:4000	9/10	13.3± 2.5
1:5000	10/10	13.7± 1.6
1:6000	10/10	14.0± 2.4
1:7000	8/10	13.4± 0.7
1:8000	10/10	14.0± 1.6
1:9000	10/10	14.1± 2.5
1:10000	10/10	13.5± 1.8
1:12000	10/10	13.1± 2.2
1:14000	7/10	13.3± 1.0
1:16000	5/5	13.4± 3.1

* ADD ± 1SD = Average Day of Death ± 1 Standard Deviation

$$\text{ADD} = \frac{\sum [(\text{day of death}) \times (\text{number dead that day})]}{\text{total number of dead}}$$

^b N/A = Not Applicable

Table 48

In Vivo Titration of JE Challenge Stock 8

<u>Challenge Dilution</u>	<u>No. Dead/Total No. Challenged</u>	<u>ADD ± 1 SD^a</u>
Uninfected	0/5	N/A ^b
1:100	10/10	12.6± 1.0
1:200	10/10	12.5± 1.7
1:300	10/10	12.6± 1.7
1:400	9/10	12.2± 1.4
1:500	10/10	11.2± 2.4
1:600	9/9	11.9± 0.8
1:800	10/10	12.5± 1.7
1:1000	10/10	11.8± 1.5
1:2000	10/10	12.4± 1.1
1:3000	9/10	13.6± 1.1
1:4000	9/10	12.8± 1.4
1:5000	8/10	11.8± 2.2
1:6000	10/10	12.5± 2.8
1:7000	10/10	13.2± 1.0
1:8000	10/10	12.0± 1.7
1:9000	8/10	13.1± 1.6
1:10,000	9/10	12.4± 2.2
1:20,000	8/10	12.6± 1.6
1:30,000	10/10	12.8± 1.9
1:40,000	8/10	11.9± 1.6
1:50,000	0/5	N/A

^a ADD ± 1SD = Average Day of Death ± 1 Standard Deviation

$$ADD = \frac{\sum [(day\ of\ death) \times (number\ dead\ that\ day)]}{total\ number\ of\ dead}$$

^b N/A = Not Applicable

Table 49

Secondary *In Vivo* Titration of JE Virus Challenge Prep 8

<u>Challenge Dilution</u>	<u>No. Dead/Total No. Challenged</u>	<u>ADD ± 1 SD^a</u>
Uninfected	0/5	N/A ^b
1:2000	9/10	12.8 ± 2.1
1:4000	10/10	12.7 ± 2.2
1:6000	10/10	13.5 ± 1.0
1:8000	8/10	14.5 ± 1.2
1:10,000	8/10	13.8 ± 1.0
1:20,000	10/10	13.4 ± 1.2
1:30,000	9/10	14.7 ± 2.0
1:40,000	8/10	13.3 ± 1.7
1:50,000	2/10	12.0 ± 2.8
1:60,000	3/10	13.3 ± 2.1
1:70,000	7/10	13.7 ± 1.8

^a ADD ± 1SD = Average Day of Death ± 1 Standard Deviation

$$\text{ADD} = \frac{\sum [(\text{day of death}) \times (\text{number dead that day})]}{\text{total number of dead}}$$

^b N/A = Not Applicable

4.2.3.2 Antiviral Drug Evaluations

Six compounds were evaluated for anti-JE virus activity *in vivo*.

All compounds were prepared in 0.4% carboxymethylcellulose (CMC) in phosphate buffered saline (PBS) at concentrations consistent with dosing at the rate of 0.1 ml of compound per 10 gm of body weight. The compounds were administered on a q1d x 7 day schedule with the first dose given the day preceding virus challenge. Two hours after the second dose of compound was administered (Day 0), 10 of the 15 mice in each treatment group were challenged intraperitoneally with JE virus. The remaining 5 animals in each treatment group served as drug toxicity controls. Mortality was monitored for 28 days and the average day of death (ADD) was calculated for each compound treatment.

AVS-360 at 300 or 150 mg/kg/day did not significantly alter the mortality or ADD. Toxicity control animals receiving AVS-360 at either of the two dose levels did not fail to gain weight throughout the treatment period. Higher doses of AVS-360 should be tolerated, and retesting at higher dose levels and different routes and treatment schedules was suggested.

AVS-2979 was not tolerated at dose levels of 50, 100 or 200 mg/kg. A second study with AVS-2979 was performed at doses of 30 and 15 mg/kg/day. AVS-2979 was not toxic following subcutaneous administration at 30 or 15 mg/kg/day nor at 15 mg/kg/day administered intraperitoneally. The 0.4% CMC-treated (SC), virus-infected mice had an 80% mortality rate while AVS-2979 treated, virus-infected mice had 40% and 30% mortality rates at 30 mg/kg/day and 15 mg/kg/day, respectively. This is a significant reduction in mortality at 15 mg/kg/day ($p = 0.035$). In a third experiment, AVS-2979 was assessed at dose levels of 10 mg/kg and lower. None of the doses at or below 10 mg/kg were effective in reducing mortality or prolonging the ADD. AVS-2979 did have an antiviral effect against JE when 15-30 mg/kg were administered on a prophylactic schedule.

AVS-215 did not reduce mortality in the virus-infected mice nor did it result in an increase in the ADD. It was toxic at 100 mg/kg and partially toxic at 64 mg/kg. The compound was tolerated at 32 mg/kg.

AVS-272 administered at 53, 34 or 17 mg/kg/day did not result in mortality in the toxicity control animals; however, none of the dose levels tested reduced mortality nor increased the ADD in the virus-infected mice.

AVS-2653 at dose levels of 45, 30 or 15 mg/kg/day did not result in mortality nor cause a reduction in weight gain in the toxicity control mice. The virus-infected mice receiving 45 mg/kg/day of AVS-2653 had a mortality rate of 70% which is reduced compared to the diluent-treated control mice ($p = 0.11$). However, mice receiving this dose level did not have an increase in the ADD compared to the diluent-treated, virus-infected control mice. The mice receiving 30 or 15 mg/kg/day did not have a decrease in mortality nor an increase in the ADD compared to the diluent-treated controls.

AVS-5587 was significantly effective in reducing JE virus-induced mortality. The toxicity control mice receiving 200 mg/kg/day did not suffer any detectable drug toxicity as they continued to gain weight throughout the experimental observation period. The virus-infected mice receiving 200 mg AVS-5587/kg/day had a mortality rate of 10% which is significantly different ($p = 5.95 \times 10^{-5}$) from the 100% mortality occurring in the diluent-treated, virus-infected mice. The virus-infected mice receiving 100 mg AVS-5587 kg/day had a mortality rate of 20% which is significantly different ($p = 3.57 \times 10^{-4}$) from the 100% mortality occurring in the diluent-treated, virus-infected mice. The virus-infected mice receiving 50 mg AVS-5587 kg/day had a mortality rate of 10% which is significantly different ($p = 5.95 \times 10^{-5}$) from the 100% mortality occurring in the diluent-treated, virus-infected control mice. The ADD of the mice in these three treatment groups was significantly prolonged compared to the diluent-treated control mice ($p < 0.05$). AVS-5587 at dose levels of 10 mg/kg/day or lower was not effective in significantly reducing the mortality rate nor increase the ADD of virus-infected mice. The minimum effective dose for AVS-5587 in preventing JE virus-induced mortality is between 10 and 50 mg/kg/day on the dose schedule used in the present study.

These results are shown in Tables 50 through 53. The average daily body weights for drug-treated animals are depicted graphically in Figures 53 through 60.

Table 50

In Vivo Antiviral Efficacy of AVS-360, AVS-2979, AVS-215,
AVS-272 and AVS-2563 Against JE Virus

Virus: JE
JE Experiment No. 34

<u>Treatment</u>	<u>No. Dead/ No. Uninfected</u>	<u>ADD ± SD</u>	<u>No. Dead/ No. Infected</u>	<u>ADD ± SD</u>	<u>p value^a</u>	<u>p value^b</u>
<u>Compounds administered subcutaneously q1d x 7 days starting day -1</u>						
Untreated	0/5		10/10	12.1 ± 4.9	0.5	0.21
0.4% CMC in PBS	0/5	1.2 ± 0.5	9/10	14.3 ± 1.5	-	-
AVS-360						
300 mg/kg	0/5		7/10	13.6 ± 1.3	0.29	0.245
150 mg/kg	0/5		8/10	13.5 ± 1.3	0.5	0.244
AVS-2979						
200 mg/kg	5/5	1.2 ± 0.5	10/10	1.4 ± 0.5	0.5	<10 ⁻⁶
100 mg/kg	5/5	1.8 ± 0.5	10/10	2.0 ± 0.7	0.5	<10 ⁻⁶
50 mg/kg	4/5	6.0 ± 2.9	8/10	5.9 ± 1.6	0.5	<10 ⁻⁶
AVS-215						
100 mg/kg	2/5	15.0 ± 2.8	10/10	12.1 ± 1.5	0.5	4.2 x 10 ⁻³
64 mg/kg	0/5		10/10	11.9 ± 2.1	0.5	1.0 x 10 ⁻²
32 mg/kg	0/5		9/10	13.3 ± 1.8	1.0	0.219
AVS-272						
53 mg/kg	0/5		9/10	11.8 ± 1.7	1.0	3.9 x 10 ⁻³
34 mg/kg	0/5		10/10	12.6 ± 1.4	0.5	1.7 x 10 ⁻²
17 mg/kg	0/5		9/10	14.0 ± 1.2	1.0	0.613
<u>Compounds administered intraperitoneally q1d x 7 days starting day -1</u>						
0.4% CMC in PBS	0/5		10/10	13.4 ± 2.6	-	-
AVS-2563						
45 mg/kg	0/5		7/10	13.9 ± 2.2	0.11	0.706
30 mg/kg	0/5		10/10	13.1 ± 1.7	1.0	0.759
15 mg/kg	0/5		9/10	13.0 ± 2.7	0.5	0.743

^a p = value using Fisher's Exact Test comparing mortality to diluent-treated control.

^b p = value using Student's T-test comparing experimental ADD to diluent-treated control.

Table 51

In Vivo Testing of AVS-2979 Against JE Virus Challenge

Virus: JE

JE Experiment No. 38

Treatment: q1d x 7, starting Day -1

<u>Treatment Group</u>	<u>No. Dead/ No. Uninfected</u>	<u>No. Dead/ No. Infected</u>	<u>ADD \pm 1 SD^a</u>
<u>Administered Subcutaneously</u>			
Untreated	0/5	9/10	12.1 \pm 2.0
0.4% CMC	0/5	8/10	13.6 \pm 1.8
30 mg/kg AVS-2979	0/5	4/10 ^b	14.3 \pm 1.3 ^c
15 mg/kg AVS-2979	0/5	3/10 ^d	16.0 \pm 1.7 ^e
<u>Administered Intraperitoneally</u>			
0.4% CMC	0/5	7/9	15.1 \pm 2.4
15 mg/kg AVS-2979	0/5	6/10 ^f	11.8 \pm 1.2 ^g

^a ADD \pm 1SD = Average Day of Death \pm 1 Standard Deviation^b Fisher's exact test versus diluent treated control p = 0.085^c Student's t-test versus diluent treated control p = 0.55^d Fisher's exact test versus diluent treated control p = 0.035^e Student's t-test versus diluent treated control p = 0.077^f Fisher's exact test versus diluent treated control p = 0.37^g Student's t-test versus diluent treated control p = 0.011

Table 52

**Tertiary *In Vivo* Antiviral Testing of AVS-2979
Against JE Virus Challenge**

JE Experiment No. 41

Treatment: q1d x 7, starting Day -1

<u>Treatment</u>	<u>No. Dead/ No. Uninfected</u>	<u>No. Dead/ No. Infected</u>	<u>p^a</u>	<u>ADD + 1 SD^b</u>	<u>p^c</u>
Untreated	0/5	10/10	--	13.4± 2.1	--
0.4% CMC	0/5	10/10	--	13.5± 1.1	--
AVS-2979					
10 mg/kg	0/5	10/10	--	12.2± 1.0	0.013
5 mg/kg	0/5	10/10	--	14.6± 2.6	0.237
2.5 mg/kg	0/5	9/10	(0.5)	13.3± 1.3	0.766
1.25 mg/kg	0/5	10/10	--	12.9± 2.5	0.491

^a p value resulting from Fisher's Exact test comparison of the mortality rates of drug-treated, virus-infected to diluent-treated, virus-infected control mice.

^b ADD ± 1 SD = Average Day of Death ± 1 Standard Deviation.

^c p value resulting from Student's t-test comparison of the ADD of drug-treated, virus-infected to diluent-treated, virus-infected control mice.

Table 53

**Results of Testing AVS-5587 Against
Japanese Encephalitis Virus Challenge**

JE Experiment No. 41

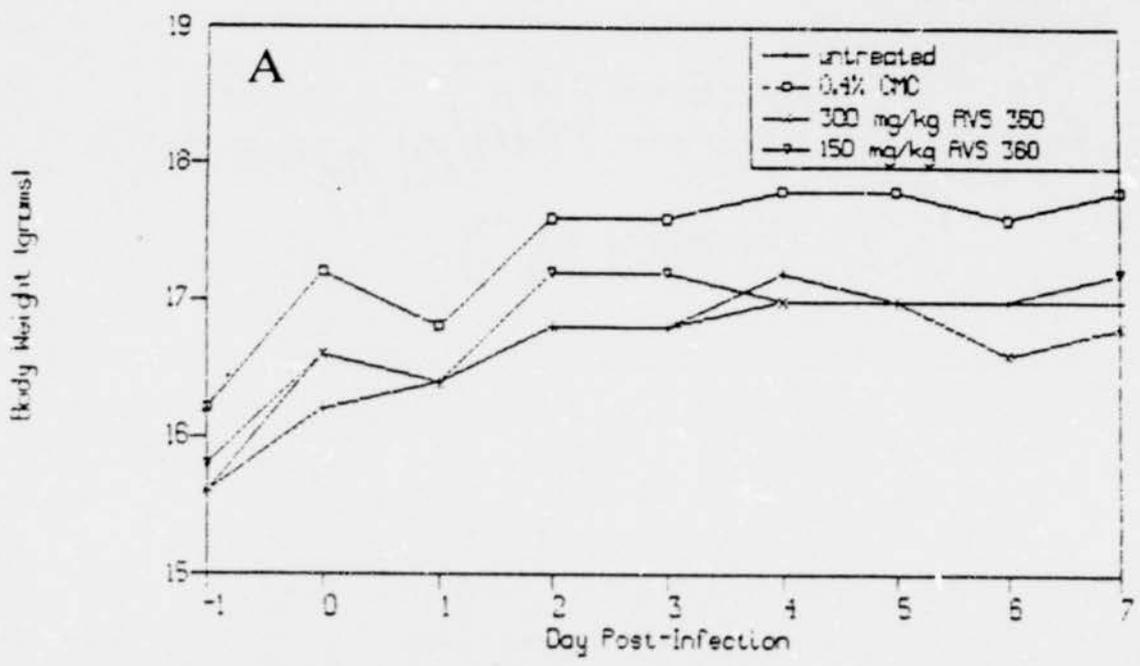
<u>Treatment</u>	<u>No. Dead/ No. Uninfected</u>	<u>No. Dead/ No. Infected</u>	<u>p^a</u>	<u>ADD + 1 SD^b</u>	<u>p^c</u>
Untreated	0/5	10/10	--	13.4± 2.1	--
0.4% CMC	0/5	10/10	--	13.5± 1.1	--
AVS-5587					
200 mg/kg	0/5	1/10	0.00006	17.0± 0.0	0.013
100 mg/kg	0/5	2/10	0.00036	20.0± 1.4	0.00002
50 mg/kg	0/5	1/10	0.00006	18.0± 0.0	0.003
10 mg/kg	0/5	9/10	--	14.2± 1.3	0.20
5 mg/kg	0/5	10/10	--	13.9± 1.8	0.55
1 mg/kg	0/5	10/10	--	14.0± 1.8	0.45
0.5 mg/kg	0/5	7/10	0.11	14.4± 1.6	0.17
0.1 mg/kg	0/5	9/10	0.5	13.1± 2.1	0.61

^a p value resulting from Fisher's Exact test comparison of the mortality rates of drug-treated, virus-infected to diluent-treated, virus-infected control mice.

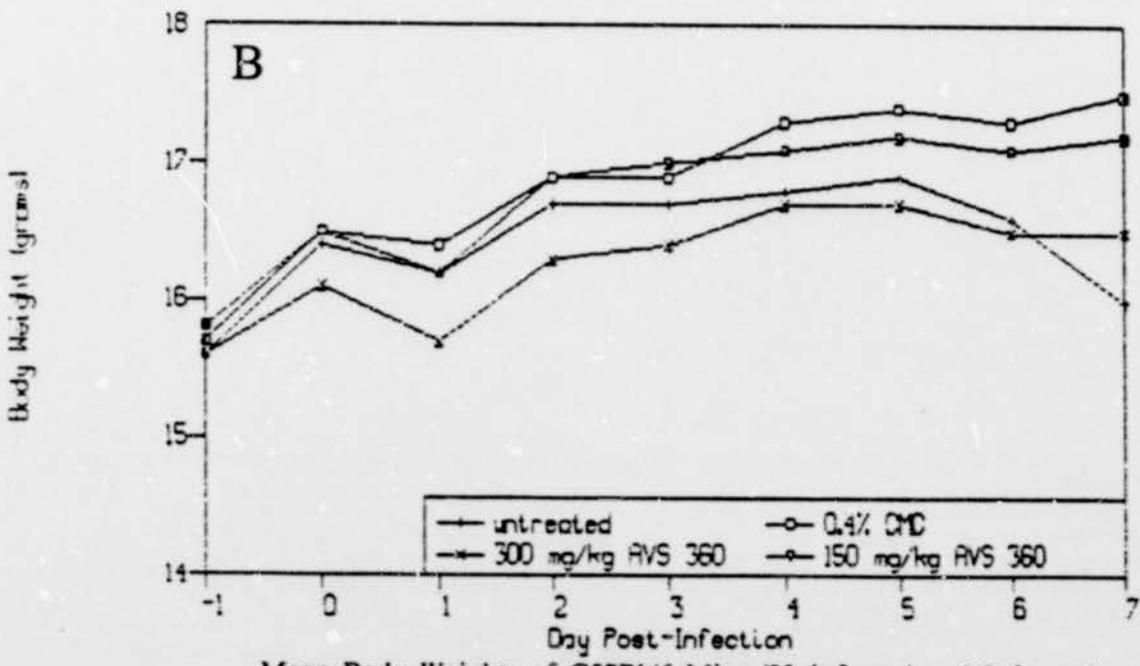
^b ADD ± 1 SD = Average Day of Death ± 1 Standard Deviation.

^c p value resulting from Student's t-test comparison of the ADD of drug-treated, virus-infected to diluent-treated, virus-infected control mice.

JE Experiment # 34
Toxicity Controls



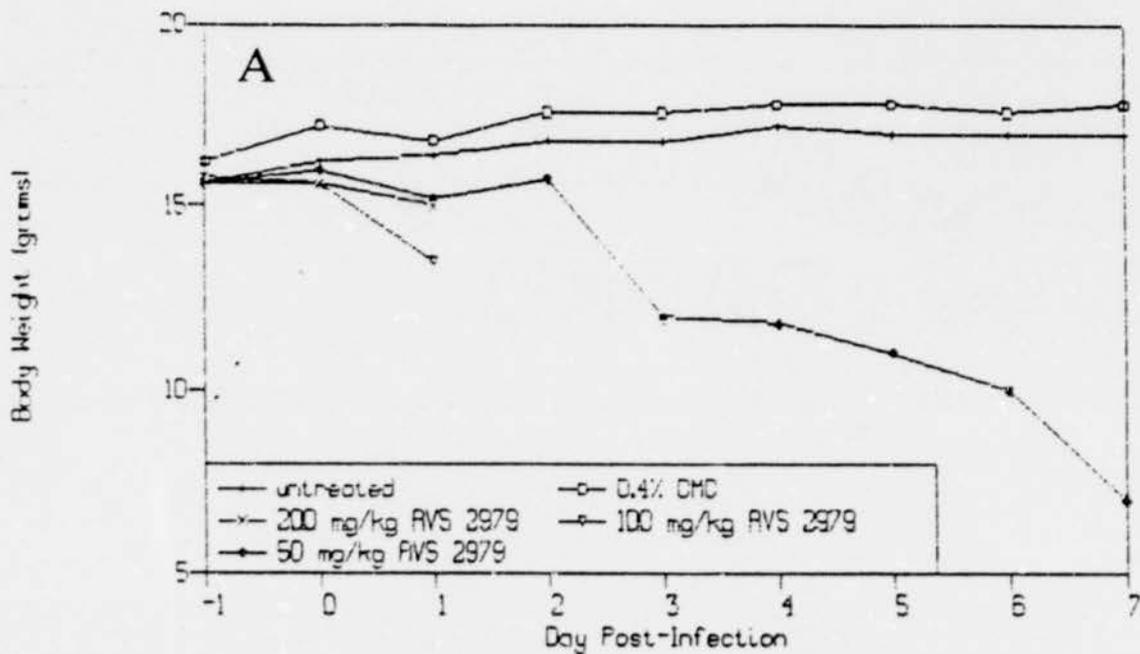
JE Experiment # 34
JE Infected C57BL/6 Mice



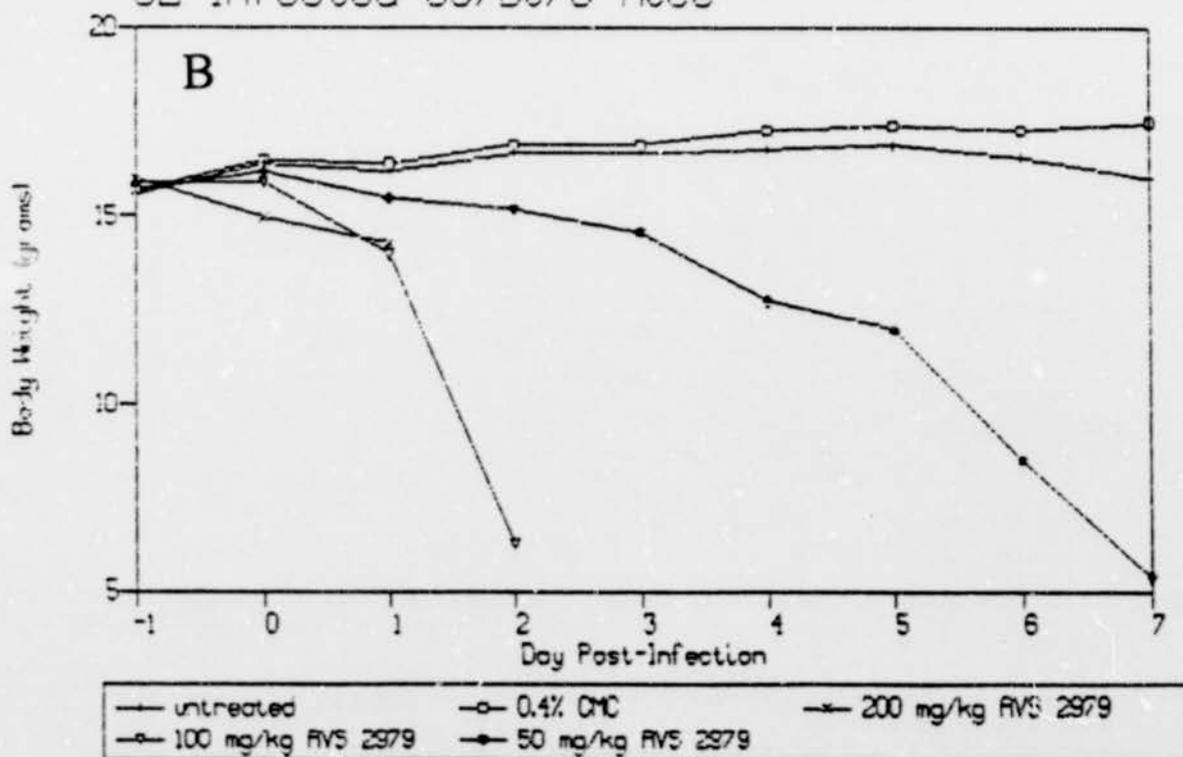
Mean Body Weights of C57BL/6 Mice (Uninfected and Infected)
Treated with AVS-360

Figure 53

Toxicity Controls



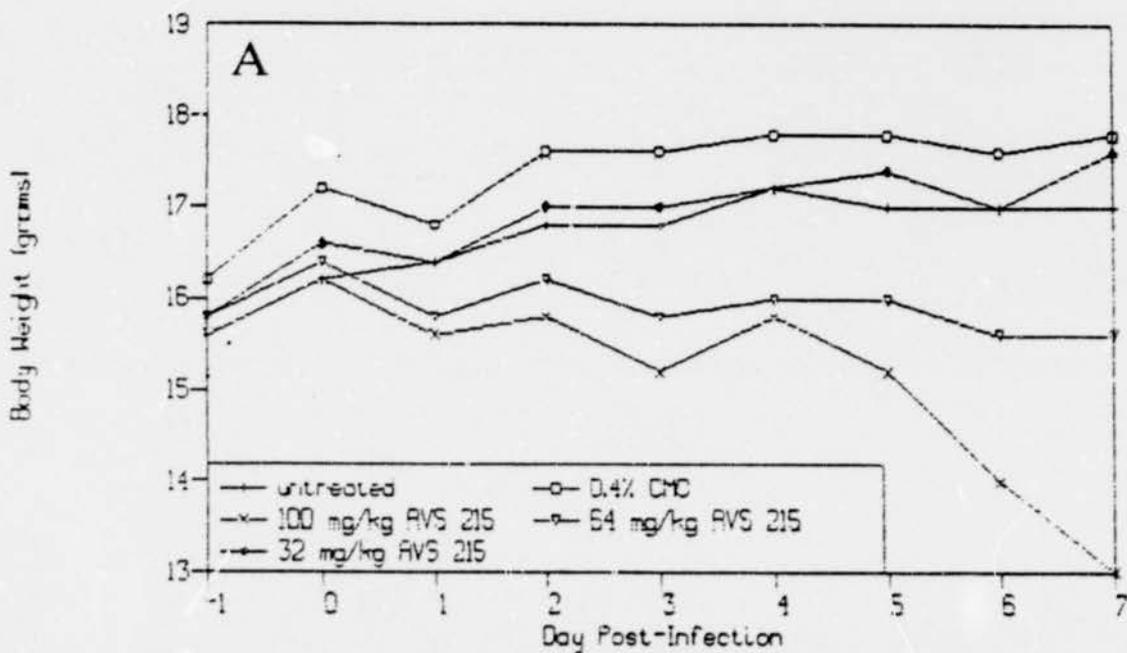
JE Experiment # 34
JE Infected C57BL/6 Mice



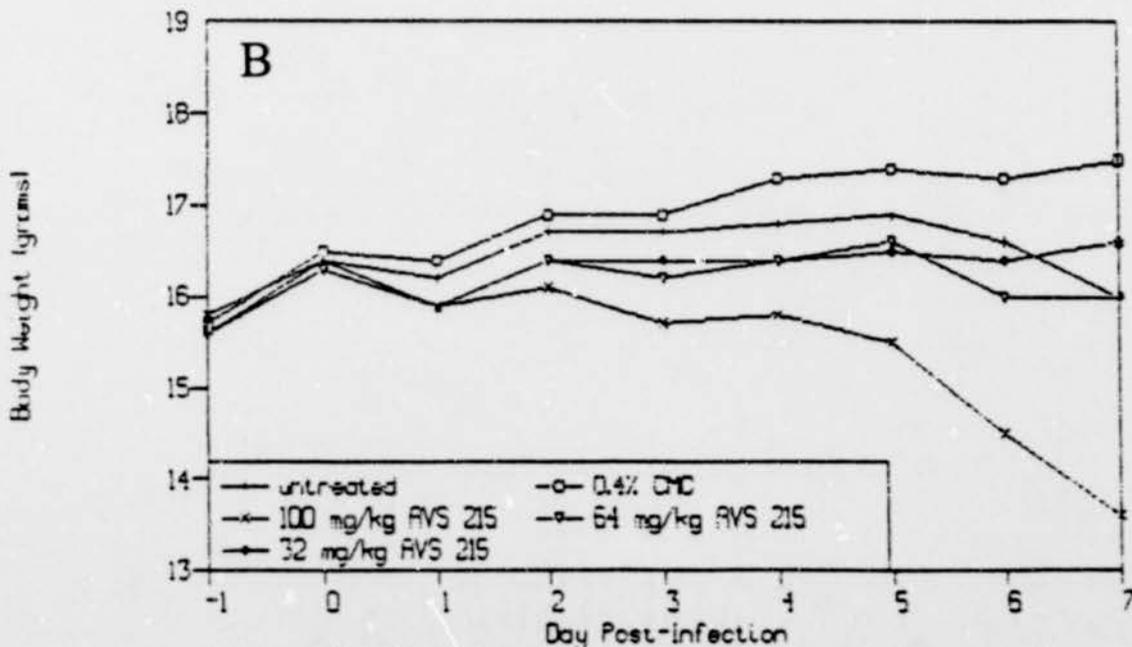
Mean Body Weights of C57BL/6 Mice (Uninfected and JE-Infected)
Treated with AVS-215

Figure 54

JE Experiment # 34
Toxicity Controls



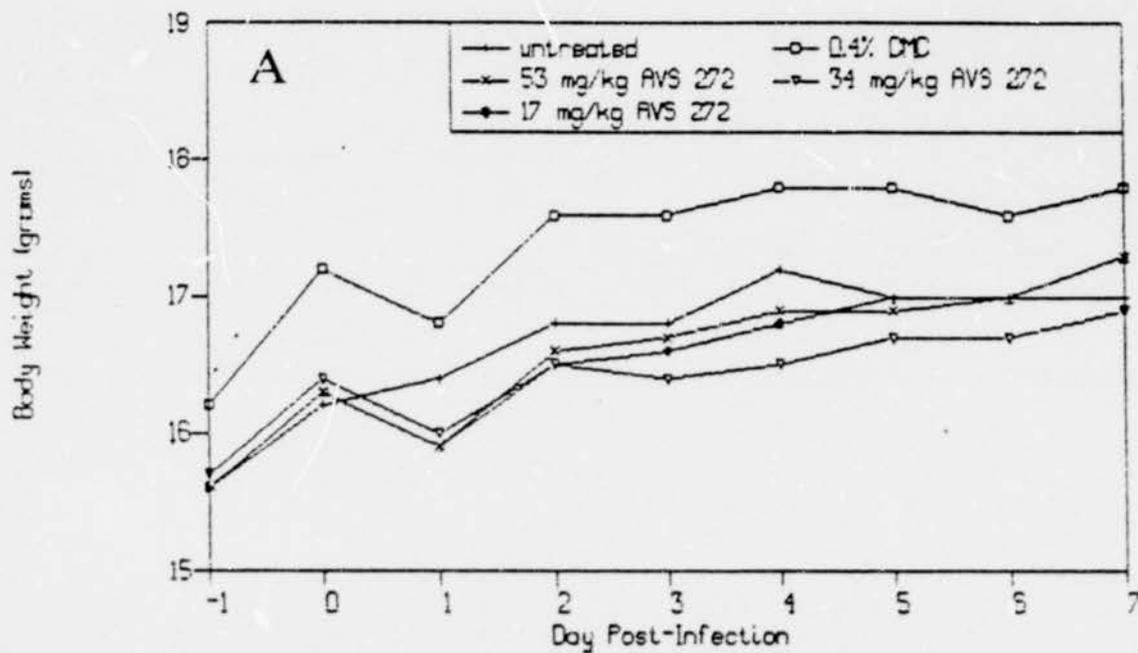
JE Experiment # 34
JE Infected C57BL/6 Mice



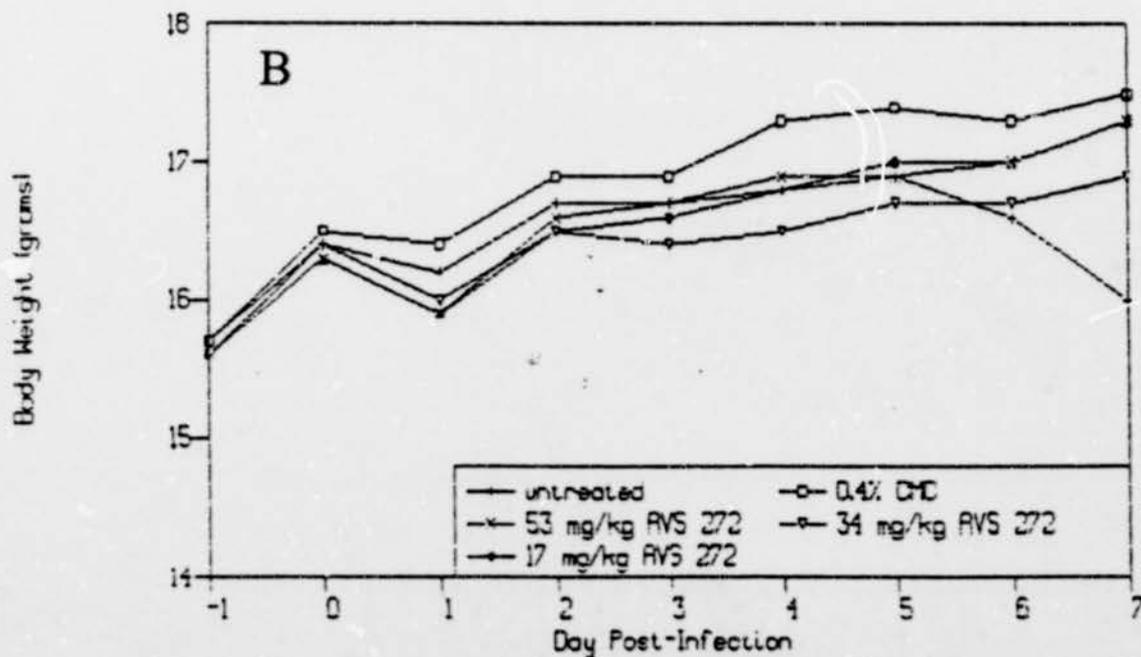
Mean Body Weights of C57BL/6 Mice (Uninfected and JE-Infected)
Treated with AVS-2563

Figure 55

JE Experiment # 34
Toxicity Controls



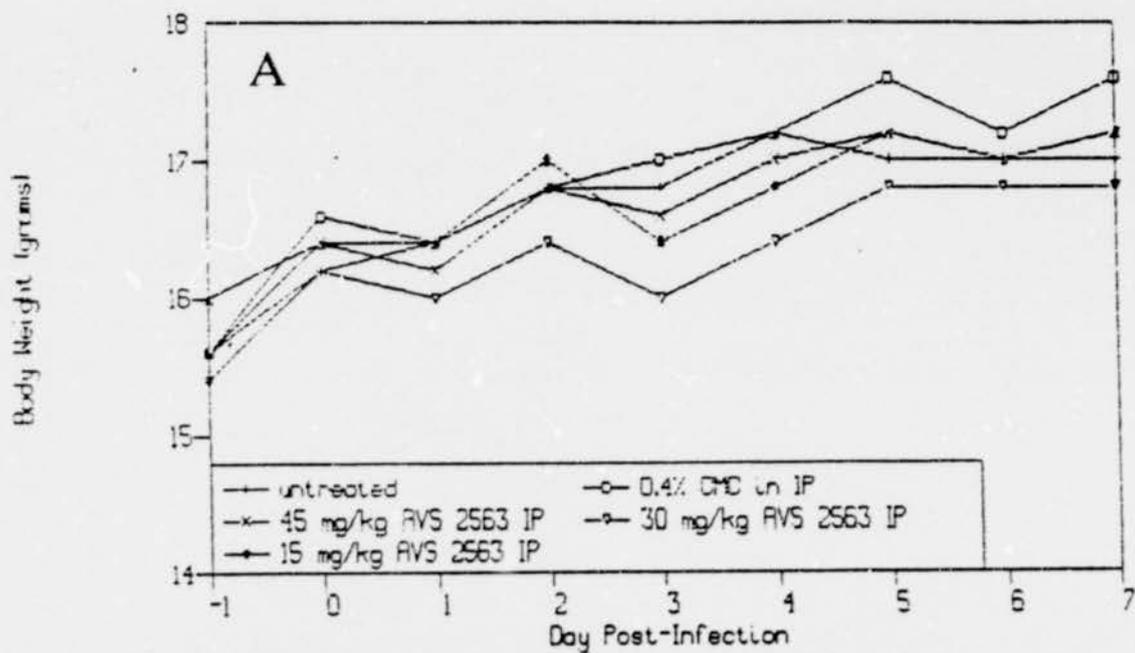
JE Experiment # 34
JE Infected C57BL/6 Mice



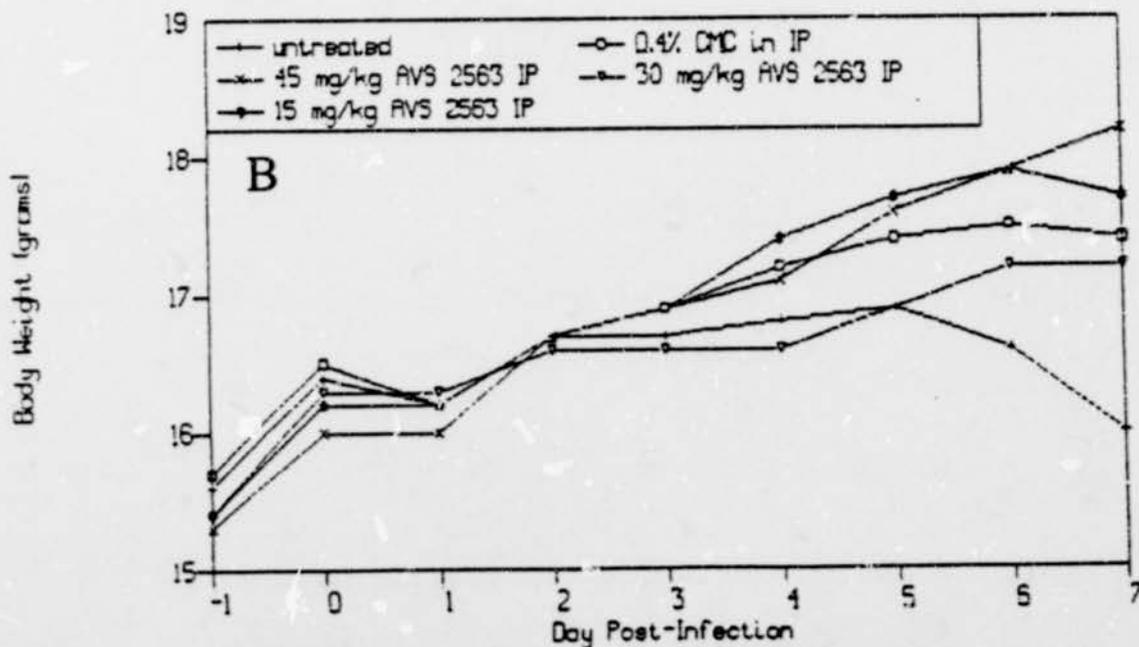
Mean Body Weights of C57BL/6 Mice (Uninfected and JE-Infected) with AVS-272

Figure 56

JE Experiment # 34
Toxicity Controls



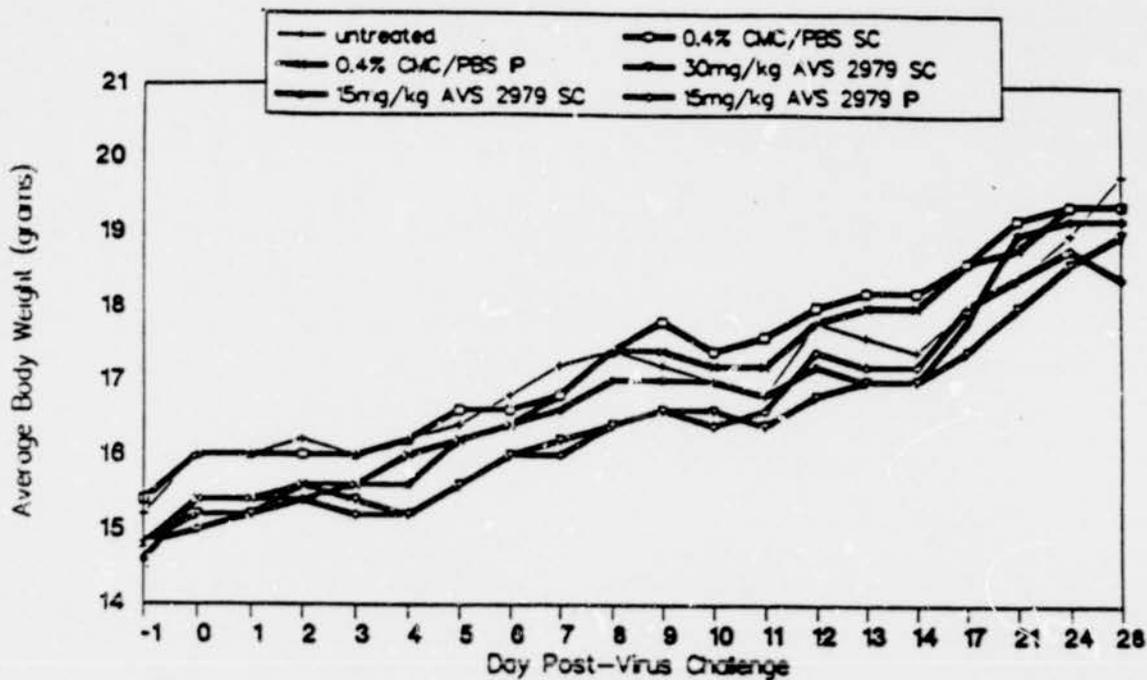
JE Experiment # 34
JE Infected C57BL/6 Mice



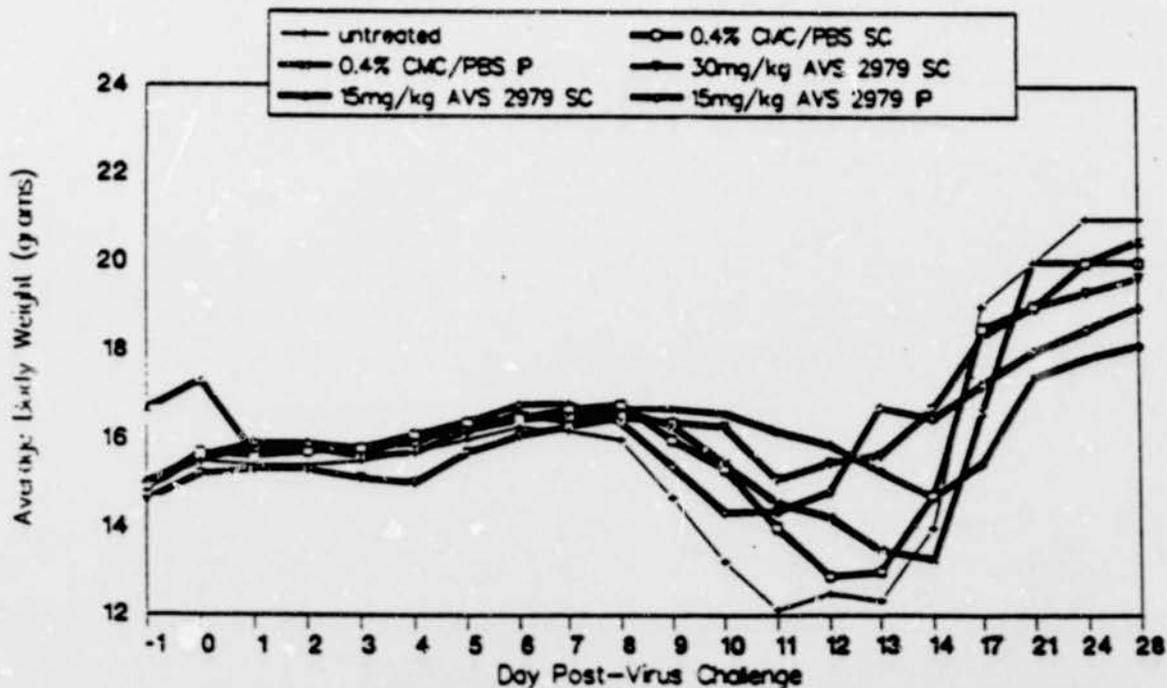
Mean Body Weights of C57BL/6 Mice (Uninfected and JE-Infected) with AVS-2979

Figure 57

JE Exp 38
Toxicity Control Mice



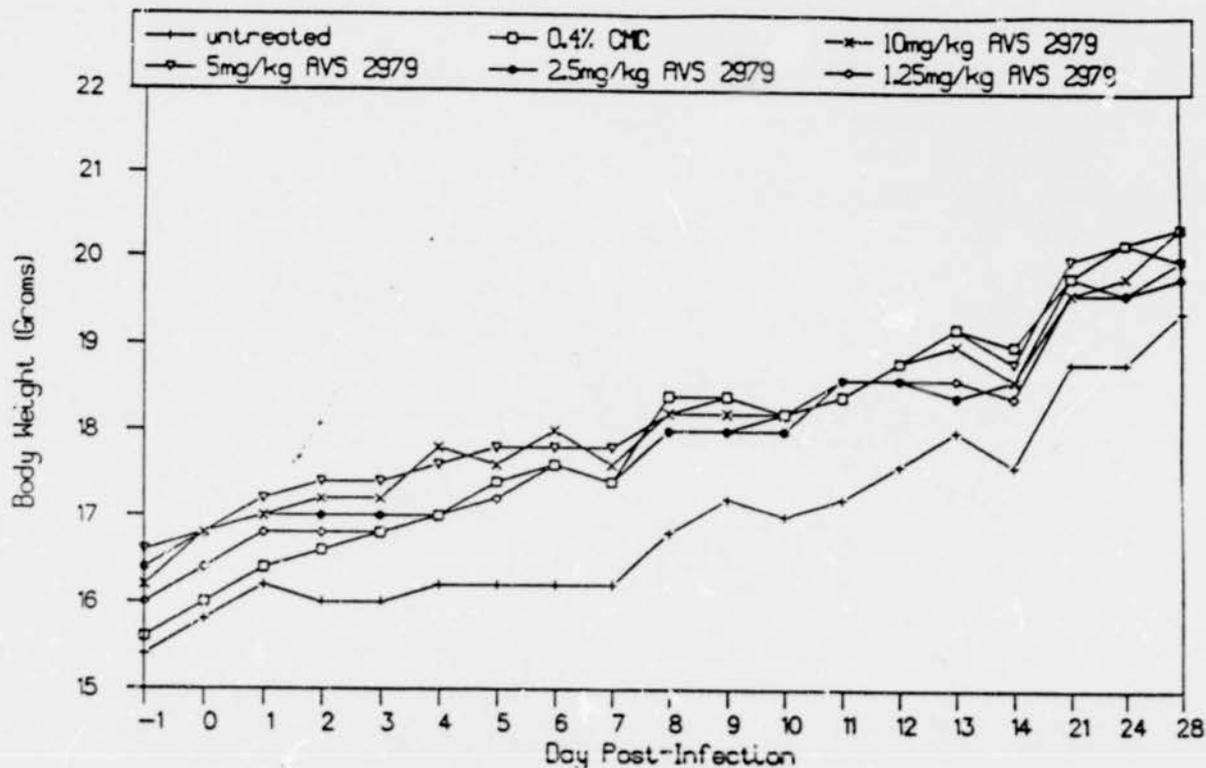
JE Exp 38
Virus-Infected Mice



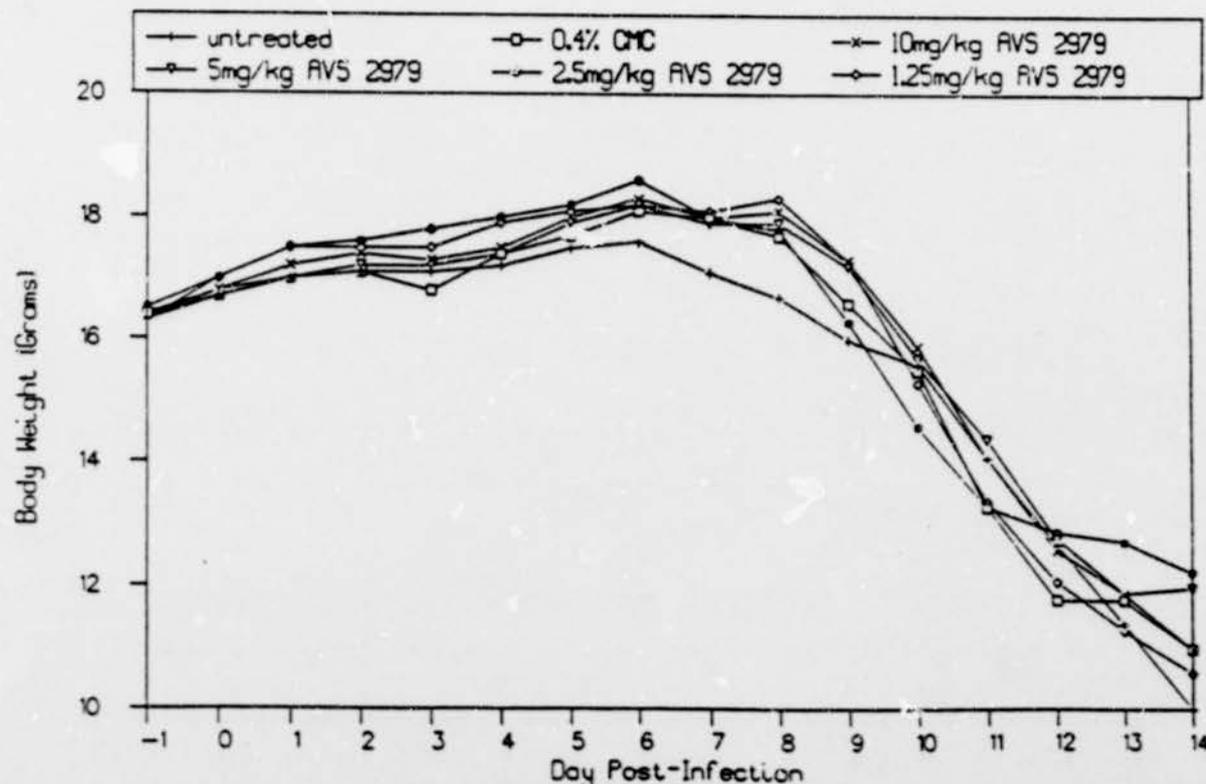
Mean Body Weights of C57Bl/6 Mice (Uninfected and JE-Infected)
Treated with AVS-2979 (JE Experiment No. 38)

Figure 58

Toxicity Control Mice Receiving AVS 2979

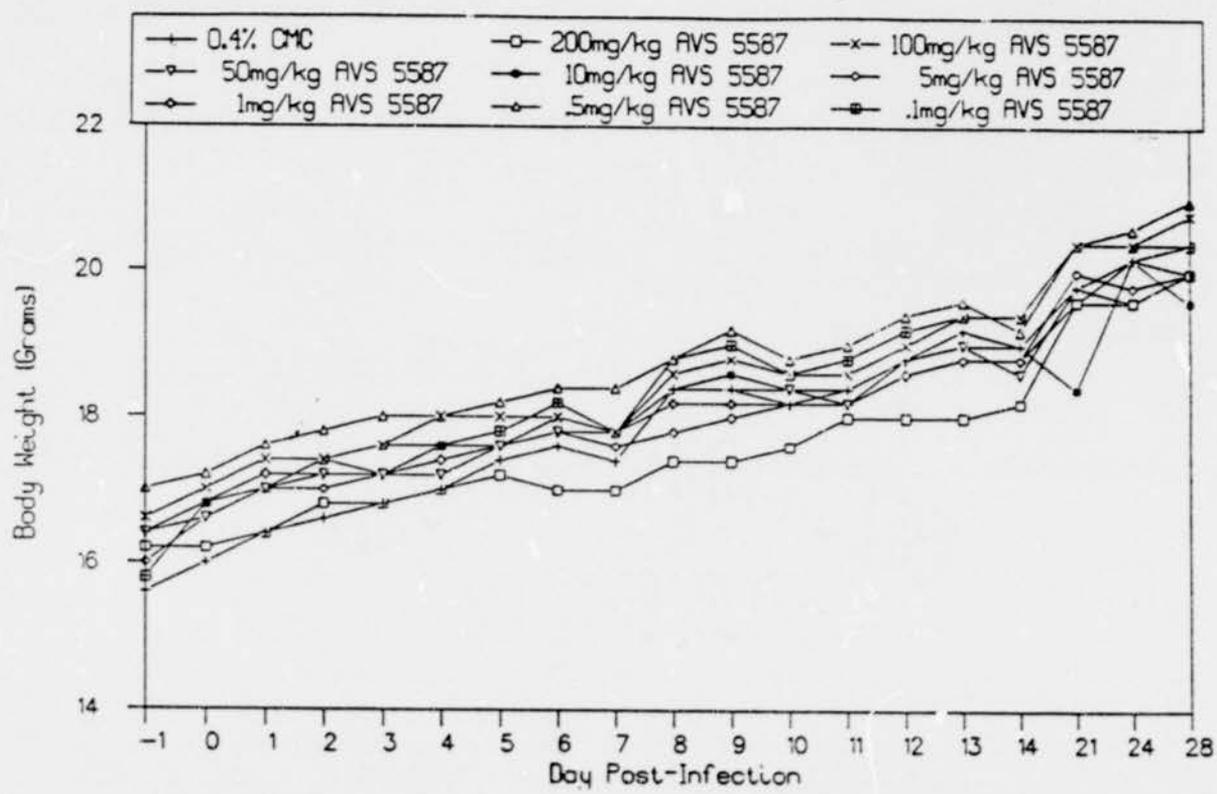


JE Virus Infected Mice Receiving AVS 2979

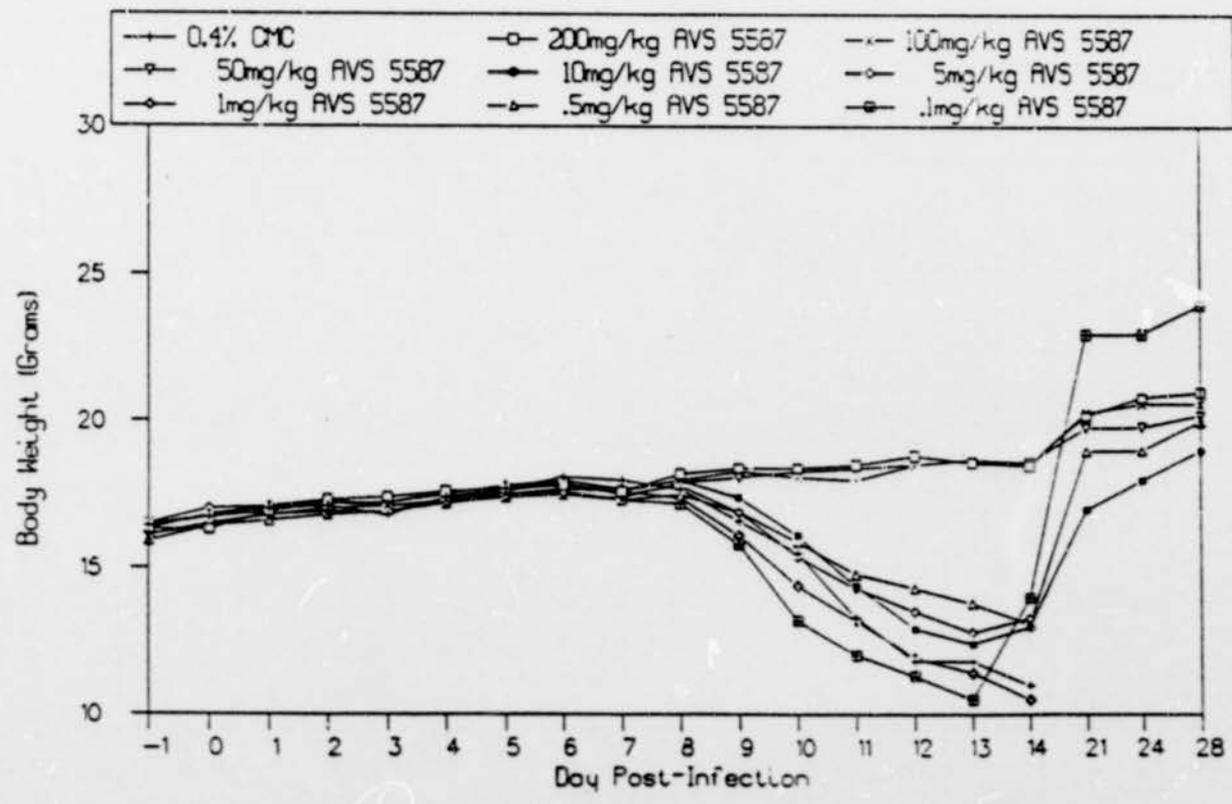


Mean Body Weights of C57B1/6 Mice (Uninfected and JE-Infected) Treated with AVS-2979 (JE Experiment No. 41)

Figure 59



JE Virus Infected Mice Receiving AVS 5587



Mean Body Weights of C57Bl/6 Mice Treated with AVS-5587
Figure 60

4.2.3.3 Intracranial Titration of JE Challenge Prep 8

Preliminary titrations of JE virus Challenge Prep 8 were conducted to determine an intracranial LD₉₀ dose. In the first titration, significant mortality only occurred at dilutions of 1:50,000 and lower when an inoculum volume of 0.03 ml was used. These results are shown in Table 54. A second titration was performed and the only inoculum dilution resulting in 100% mortality was 10⁻⁴. At higher dilutions mortality occurred; however, it was not 100%. These results are shown in Table 55.

Table 54

Preliminary Intracranial Titration of JE

Treatment Groups	No. Dead/Challenged	ADD \pm 1 SD
Uninfected control	0/5	N/A
Sham-infected IC	0/10	N/A
1:10,000 dilution IC	10/10	8.0 \pm 1.4
1:50,000 dilution IC	6/10	8.5 \pm 2.8
1:80,000 dilution IC	4/10	9.3 \pm 2.1
1:100,000 dilution IC	1/10	8.0 \pm 0.0
1:200,000 dilution IC	2/10	11.5 \pm 2.1
1:400,000 dilution IC	0/6	N/A
1:500,000 dilution IC	1/10	11.0 \pm 0.0
1:600,000 dilution IC	0/10	N/A
1:800,000 dilution IC	0/10	N/A
1:1,000,000 dilution IC	0/10	N/A
1:2,000,000 dilution IC	0/10	N/A
1:4,000,000 dilution IC	0/10	N/A
1:6,000,000 dilution IC	0/10	N/A
1:8,000,000 dilution IC	0/10	N/A
1:10,000,000 dilution IC	0/10	N/A

Table 55

Secondary Intracranial JE Virus Challenge

Treatment Groups	No. Dead/Challenged	ADD \pm 1 SD
Untreated control	0/5	N/A
Sham-infected IC	0/5	N/A
10 ⁻⁴ dilution JEV IC	10/10	8.4 \pm 1.6
10 ^{-4.3} dilution JEV IC	7/10	9.9 \pm 3.4
10 ^{-4.6} dilution JEV IC	6/10	10.2 \pm 2.1
10 ^{-4.9} dilution JEV IC	9/10	8.4 \pm 1.0
10 ^{-5.2} dilution JEV IC	3/10	9.7 \pm 4.0
10 ^{-5.5} dilution JEV IC	1/10	8.0 \pm 0.0

4.2.3.4 Target Organ Treatment following Intracranial Challenge with JE Virus

The effects of intracranial treatment with AVS-360 following intracranial JE Challenge were assessed. AVS-360 was administered intracranially at 3 mg/kg or 1 mg/kg in a volume of 0.03 ml at 6 or 8 or 10 hours post-JE inoculation. As shown in Table 56, 1 mg/kg of AVS-360 administered 10 hours post infection resulted in a mortality rate of 20% compared to 55.6% in the diluent treated virus infected control mice. These results indicate that a target organ system for testing antiviral compounds may be possible.

Table 56

Results of Target Organ Treatment of JEV with AVS-360

<u>Treatment</u>	<u>No. Dead/Uninfected</u>	<u>No. Dead/Infected</u>	<u>ADD + 1 SD</u>
<u>6 hr post-infection</u>			
HBSS	0/3	7/10	7.9 ± 0.9
3 mg/kg AVS-360	0/5	5/7	9.0 ± 2.3
1 mg/kg AVS-360	0/5	9/10	8.9 ± 1.6
<u>8 hr post-infection</u>			
HBSS	ND	9/10	8.1 ± 1.7
3 mg/kg AVS-360	ND	9/10	8.0 ± 1.1
1 mg/kg AVS-360	ND	8/10	8.3 ± 0.9
<u>10 hr post-infection</u>			
HBSS	ND	5/9	9.2 ± 2.3
3 mg/kg AVS-360	ND	6/10	8.0 ± 1.5
1 mg/kg AVS-360	ND	2/10	7.5 ± 0.7

ND = not done

4.2.3.5 Comparison of the Subcutaneous and Intraperitoneal Challenge Route for JE Virus

Groups of 10 C57B1/6 mice were challenged by the subcutaneous or intraperitoneal routes with equivalent doses of JE Challenge Prep 8. For the subcutaneous challenge route an inoculum volume of 0.25 ml was used while the intraperitoneal route used an inoculum volume of 0.5 ml. Because of the difference in volumes administered, the subcutaneous challenge doses were 2-fold higher in concentration than the intraperitoneal challenge doses. As shown in Table 57, the subcutaneous route appears qualitatively superior to the intraperitoneal route.

Table 57

**Titration of JEV Challenge Prep 8 by the Subcutaneous and
Intraperitoneal Routes**

Treatment Groups	No. Dead Challenged	ADD + 1 SD
Untreated control	0/5	N/A
Sham-infected SC	0/5	N/A
Sham-infected IP	0/5	N/A
1:5,000 dilution SC (0.25 ml)	10/10	12.6 ± 1.5
1:10,000 dilution SC (0.25 ml)	10/10	12.7 ± 1.8
1:20,000 dilution SC (0.25 ml)	10/10	13.0 ± 2.1
1:30,000 dilution SC (0.25 ml)	10/10	13.5 ± 2.0
1:40,000 dilution SC (0.25 ml)	6/10	12.3 ± 1.5
1:50,000 dilution SC (0.25 ml)	7/10	13.6 ± 2.1
1:10,000 dilution IP (0.5 ml)	10/10	12.4 ± 2.6
1:20,000 dilution IP (0.5 ml)	5/5	13.0 ± 1.7
1:40,000 dilution IP (0.5 ml)	6/10	13.5 ± 1.9
1:60,000 dilution IP (0.5 ml)	8/10	13.4 ± 0.7
1:80,000 dilution IP (0.5 ml)	9/10	12.8 ± 2.7
1:100,000 dilution IP (0.5 ml)	6/10	13.2 ± 2.5

4.2.4 Vaccinia Virus (VV)

4.2.4.1 *In Vivo* Tailpox Model

The *in vivo* model used in these studies was originally developed by Boyle *et al.* (Antimicrob. Agents Chemother, - 1966, 1967, 536) and further defined by Joshi *et al.* (Appl. Microbiol. 1969, 18, 935). Mice inoculated in the tail vein with vaccinia virus develop dermal lesions over the entire tail surface. These lesions, enumerated after fluorescence staining, are a function of the virus challenge level, animal weight and inoculation distance from the base of the tail. The IHD strain of vaccinia virus, passaged once in mouse brain and once in primary rabbit kidney cell culture, is used. Outbred Swiss mice (CD-1, VAF+, Charles River Laboratories, Inc.), weighing 18-21 gm, are inoculated with 0.2 ml of a 1:40 dilution of the stock virus via the tail vein (1 cm from the base). Test compounds are administered intraperitoneally once daily for 7 days, with the first dose given the day preceding virus challenge. Each treatment group is composed of 20 virus-infected mice. Uninfected, drug-treated toxicity controls (5 mice per group) are also included for each treatment administered. The positive control compound, which is included in all assays, is Ara-A. Diluent control mice receive inoculations with the appropriate compound diluent on the same schedule as the compound-treated mice. Animals are sacrificed on the sixth day and their tails are stained with a solution of 1% fluorescein-0.5% methylene blue in 70% methanol. Lesions are enumerated under UV light (354 nm) with the aid of a hand lens. The mean and median number of lesions for each treatment group are calculated prior to and following square root transformation of the individual tailpox counts. Tailpox counts from each of the treatment groups are compared by Student's t-test. A p-value at or below 0.05 is considered indicative of antiviral activity.

4.2.4.2 Acute Toxicity Testing of AVS-2994 and AVS-3679

AVS-2994 and AVS-3679 were tested for toxicity in mice to determine the dose of compound to be assessed in the vaccinia virus-induced tailpox model. The compounds were administered to 3 mice each at dose levels of 3 mg/kg to 500 mg/kg on a seven day treatment schedule. To avoid stability problems, the compounds were prepared daily immediately prior to administration.

As shown in Table 58, there was only one death, which occurred on Day 13 in the group receiving 500 mg AVS-3679/kg/day. With the exception of mice receiving 500 mg AVS-3679/ kg/day, all of the experimental groups gained weight during the 21-day observation period.

Table 58

Mortality in Mice Receiving AVS-2994 or AVS-3679

Treatment	No. Dead/ No. Treated ^a	ADD ^b	GMTD ^c	Average Body Weight (gm)		
				Day 0	Day 7	Day 21
Untreated	0/10			18.6	22.0	24.2
AVS 2994						
500 mg/kg	0/3			18.0	19.3	24.7
300 mg/kg	0/3			17.7	19.3	22.3
100 mg/kg	0/3			17.0	19.7	22.3
30 mg/kg	0/3			17.7	20.0	22.0
10 mg/kg	0/3			18.3	20.0	23.0
3 mg/kg	0/3			19.0	22.3	25.7
AVS-3679						
500 mg/kg	1/3	13 ± 0	17.9	17.0	13.0	21.0
300 mg/kg	0/3			19.3	21.3	25.7
100 mg/kg	0/3			17.0	19.3	21.3
30 mg/kg	0/3			18.3	21.3	24.7
10 mg/kg	0/3			18.3	20.7	22.7
3 mg/kg	0/3			16.0	19.7	22.7

^a Administered intraperitoneally once daily for seven days: first dose administered in sterile water at 0.1 ml/10 gm of body weight; remaining six doses administered in 10% DMSO/90% sterile water at 0.2 ml/10 gm of body weight.

^b ADD = Average day of death ± 1 standard deviation

^c GMTD = Geometric Mean Time to Death

The 500 mg/kg dose levels of AVS 2994 and AVS-3679 proved to be toxic when assessed in the tailpox model. Solvent toxicity associated with DMSO was considered a possible source of the inconsistency in results obtained when AVS-2994 and AVS-3679 were tested against Vaccinia induced tailpox at doses of 500 mg/kg/day. The compounds were therefore prepared in fresh DMSO at 25 mg/kg and injected at 0.2 ml/10 gm [500 mg/kg] and 0.1 ml/10 gm [250 mg/kg] and toxicity controls were injected with DMSO (10% in water) at the rate of 0.2 ml/10 gm and 0.1 ml/10 gm. After receiving two doses of AVS-3679 (500 mg/kg) three of five animals died and the remaining two died after receiving a third dose of compound. One of five mice receiving 500 mg/kg AVS-2994 died after receiving three doses of compound. No compound was administered after the fourth dose as it was apparent that the compounds were toxic at the 500 mg/kg dose level. None of the DMSO vehicle control animals showed signs of toxicity and the vehicle was ruled out as the source of the toxicity.

A third assessment of toxicity was performed at dose levels of 300 and 100 mg/kg. The compounds were prepared daily (immediately prior to use) at concentrations consistent with dosing at 0.1 ml per 10 gm of body weight. Compounds were administered intraperitoneally on a q1d X 7 day schedule. The first dose was prepared in 10% DMSO/water; however, the pH of the solutions was acidic and all further doses were prepared in 10% DMSO/PBS. No mortality occurred with either compound at the dose levels tested. AVS-2994 at doses of 300 mg/kg/day and 100 mg/kg/day did not inhibit weight gain. AVS-3679 at 300 mg/kg/day did result in a failure to gain weight in treated mice. At 100 mg/kg/day, AVS-3679 did not inhibit weight gain. The pH of AVS-2994 prepared in 10% DMSO/water was 3.5 while that prepared in 10% DMSO/PBS had a pH of 6.5. The pH of AVS-3679 prepared in 10% DMSO/water was 3.2 while the pH was 6.1 when prepared in 10% DMSO/PBS.

4.2.4.3 Effect of AVS-2994 and AVS-3679 at Dose Levels of 300 mg/kg/day in the Vaccinia Induced Tailpox Model

The anti-vaccinia virus activities of AVS-2994 and AVS-3679 were assessed in the murine tailpox model at dose levels of 300 mg/kg/day for each compound. Both compounds were prepared daily in 10% DMSO/PBS and administered by the intraperitoneal route. A positive control compound, Ara-A, was included in the study at a dose level of 300 mg/kg/day. Controls included drug-diluent (0.4% CMC and 10% DMSO) treated and untreated virus-challenged mice. The test materials were administered to groups of 30 mice starting on the day preceding virus challenge and continuing for a total of 7 doses. Five mice from each treatment group were not virus challenged and served as drug toxicity controls. Twenty of the remaining 25 mice were challenged intravenously (tail vein) with a 1:40 dilution of vaccinia virus (strain IHD) which had been passaged once in primary rabbit kidney cells. The remaining 5 mice, which were initially included in the study, were sacrificed after the virus challenge had been successfully administered intravenously to 20 mice in each treatment group. On Day 6 post-virus challenge, the mice were sacrificed and the tails were examined for vaccinia virus induced ectodermal lesions.

The means, medians and standard deviations were calculated on the numerical counts (Table 59) and on the square root transformed counts (Table 60) obtained from each treatment group. Treatment with AVS-2994 or with AVS-3679 was associated with antiviral activity in that mice receiving 300 mg/kg/day had mean tailpox counts of 37.7 and 44.2, respectively. In contrast, the mean tailpox count for diluent-treated control mice was 60.9. The tailpox counts for AVS-2994-treated mice were significantly different from the DMSO treated controls ($p = 0.045$). However, the mean tailpox count for AVS-3679-treated mice was not significantly different from the DMSO-treated controls ($p = 0.168$). Mice receiving the positive control drug, Ara-A, had a mean tailpox count of 31.2 which was significantly reduced compared to the diluent-treated controls ($p = 0.001$). The median tailpox count for Ara-A-treated mice was 30.5% of that present in the 0.4% CMC/PBS diluent controls. The median tailpox count for AVS-2994-treated mice was 47.9% of that present in the 10% DMSO/PBS diluent controls. The median tailpox count for AVS-3679-treated mice was 55.3% of that present in the 10% DMSO/PBS diluent controls. Treatment with AVS-2994 or AVS-3679 on the dose schedule assessed in the present study was not as effective as treatment with Ara-A in reducing tailpox counts in vaccinia virus challenged mice.

Table 59

Raw Tailpox Counts for AVS-2994 and AVS-3679

	Treatment Group ^a					
	Untreated	0.4% CMC in PBS	10% DMSO in PBS	300 mg/kg ARA-A	300 mg/kg AVS-2994	300 mg/kg AVS-3679
	23	48	> 96	10	24	3
	18	58	38	3	15	3
	40	89	> 100	1	26	17
	33	95	44	28	21	28
	78	> 81	46	114	12	114
	> 100	> 100	34	18	1	45
	61	40	30	6	47	22
	59	41	> 100	45	129	> 100
	97	14	44	24	> 86	121
	65	66	23	58	42	26
	23	62	63	25	18	9
	81	62	84	21	34	19
	> 100	53	76	56	3	83
	12	104	83	4	> 128	32
	43	23	27	5	20	4
	> 88	110	42	88	1	20
	57	76	48	11	19	105
	57	67	> 100	9	52	TNTC ^b
			> 110	4		
			29	93		
<hr/>						
Number	18	18	20	20	18	17
Mean	57.5	66.1	60.9	31.2	37.7	44.2
Median	58.0	64.0	47.0	19.5	22.5	26.0
SDev	29.0	27.3	29.6	33.8	39.0	42.2
p value ^c	NA	NA	NA	0.001	0.045	0.168
Minimum	12	14	23	1	1	3
Maximum	> 100	110	> 110	114	129	121

^a Administered subcutaneously q1d x 7 days starting Day -1

^b TNTC, Too Numerous to Count

^c Student's t-test compared to the appropriate diluent treated controls

Table 60

Square Root Transformation Counts for
AVS-2994 and AVS-3679-Treated Mice

Treatment Group^a

<u>Untreated</u>	<u>0.4% CMC in PBS</u>	<u>10% DMSO in PBS</u>	<u>300 mg/kg ARA-A</u>	<u>300 mg/kg AVS-2994</u>	<u>300 mg/kg AVS-3679</u>
4.79	6.93	> 9.80	3.16	4.90	1.73
4.24	7.62	6.16	1.73	3.87	1.73
6.32	9.43	> 10.00	1.00	5.10	4.12
5.74	9.75	6.63	5.29	4.58	5.29
8.83	> 9.00	6.78	10.68	3.46	10.68
> 10.00	> 10.00	5.83	4.24	1.00	6.71
7.81	6.32	5.48	2.45	6.86	4.69
7.68	6.40	> 10.00	6.71	11.36	> 10.00
9.85	3.74	6.63	4.90	> 9.27	11.00
8.06	8.12	4.80	7.62	6.48	5.10
4.80	7.87	7.94	5.00	4.24	3.00
9.00	7.87	9.17	4.58	5.83	4.36
> 10.00	7.28	8.72	7.48	1.73	9.11
3.46	10.20	9.11	2.00	> 11.31	5.66
6.56	4.80	5.20	2.24	4.47	2.00
> 9.38	10.49	6.48	9.38	1.00	4.47
7.55	8.71	6.92	3.32	4.36	10.25
7.55	8.18	> 10.00	3.00	7.21	TNTC ^b
		> 10.49	2.00		
		5.39	9.64		

Number	18	18	20	20	18	17
Mean	7.31	7.93	7.58	4.82	5.39	5.88
Median	7.62	8.00	6.85	4.41	4.74	5.10
SDev	2.06	1.83	1.91	2.89	3.02	3.20
p value ^b	NA	NA	NA	0.0004	0.011	0.054

^a Administered subcutaneously q1d x 7 days starting Day -1

^b TNTC, Too Numerous to Count

^c Student's t-test compared to the diluent treated controls

4.2.4.4 Acute Toxicity Testing of AVS-2875 and AVS-4225

AVS-2875 and AVS-4225 were tested for toxicity in mice to determine the dose of compound to be assessed in the vaccinia virus-induced tailpox model. The compounds were administered to 5 mice each at dose levels of 320 mg/kg and 100 mg/kg on a seven-day-treatment schedule. To avoid stability problems, the compounds were prepared daily immediately prior to administration by dissolving in one volume of DMSO and diluting with 9 volumes of PBS. In order to reduce the compound concentration, the administration rate was adjusted to 0.2 ml of compound/10 gm of body weight for AVS-4225 starting on Day 2.

As shown in Table 61, there was only one death, which occurred on Day 1 in the group receiving 320 mg AVS-4225/kg/day. All of the experimental groups gained weight during the 14-day observation period.

Table 61

Acute Toxicity Testing of AVS-2875 and AVS-4225^a

<u>Treatment Group</u>	<u>No. Dead/ No. Treated</u>	<u>ADD ± 1 SD^b</u>
Untreated	0/5	N/A
AVS-2875		
320 mg/kg/day	0/5	N/A
100 mg/kg/day	0/4	N/A
AVS-4225		
320 mg/kg/day	1/5	1.0 ± 0.0
100 mg/kg/day	0/5	N/A

^a Administered intraperitoneally q1d x 7 days

^b ADD = Average day of death ± 1 standard deviation

4.2.4.5 Effects of AVS-2875 and AVS-4225 in the Vaccinia Induced Tailpox Model

The anti-vaccinia virus activities of AVS-2875 and AVS-4225 were assessed in the murine tailpox model at dose levels of 300 mg/kg/day for each compound. Both compounds were prepared daily in 10% DMSO/PBS and administered by the intraperitoneal route. The positive control compound, Ara-A, was included at a dose level of 300 mg/kg/day. Controls included drug-diluent treated and untreated virus-challenged mice. The test materials were administered to groups of 30 mice starting on the day preceding virus challenge and continuing for a total of 7 doses. Five mice from each treatment group were not virus challenged and served as drug toxicity controls. Twenty of the remaining 25 mice were challenged intravenously (tail vein) with a 1:40 dilution of vaccinia virus (strain IHD) which had been passaged once in primary rabbit kidney cells. The remaining 5 mice, which were initially included in the study, were sacrificed after the virus challenge had been successfully administered intravenously to 20 mice in each treatment group. On Day 6 post-virus challenge, the mice were sacrificed and the tails were examined for vaccinia virus induced ectodermal lesions. To visualize the lesions, the tails were stained with a 1% fluorescein-0.5% methylene blue solution and then examined under longwave UV irradiation (354 nm) with the aid of a hand lens.

The means, medians and standard deviations were calculated on the numerical counts (Table 62) and on the square root transformed counts (Table 63) obtained from each treatment group. These values are graphically illustrated in Figure 61. Treatment with AVS-2875 or with AVS-4225 was associated with antiviral activity in that mice receiving 300 mg/kg/day had mean tailpox counts of 47.3 and 41.0, respectively. In contrast, the mean tailpox count for diluent-treated control mice was 101. The tailpox counts for AVS-2875-treated mice were significantly different from the DMSO-treated controls ($p < 10^{-6}$). The mean tailpox count for AVS-4225-treated mice was also significantly different from the DMSO-treated controls ($p < 10^{-6}$). Mice receiving the positive control drug, Ara-A, had a mean tailpox count of 41.9 which was significantly reduced compared to the diluent-treated controls ($p = 7.9 \times 10^{-6}$). The median tailpox count for Ara-A treated mice was 38.4% of that present in the diluent-treated controls. The median tailpox count for AVS-2875-treated mice was 50% of that present in the diluent-treated controls. The median tailpox count for AVS-4225-treated mice was 32.6% of that present in the diluent-treated controls. Treatment with AVS-2875 or AVS-4225 on the dose schedule assessed in the present study was effective in reducing tailpox counts in vaccinia virus challenged mice.

Table 62

Numerical Tailpox Counts for AVS-2875 and AVS-4225 Treated Mice

VV Experiment No. 16

	<u>Treatment Group^a</u>				
	<u>Untreated</u>	<u>10% DMSO in PBS</u>	<u>300 mg/kg Ara-A</u>	<u>300 mg/kg AVS-2875</u>	<u>300 mg/kg AVS-4225</u>
	71	> 46	41	> 94	24
	150	> 107	> 77	> 33	72
	88	> 83	> 80	> 61	17
	124	> 87	> 79	> 40	> 61
	52	> 110	42	> 68	76
	116	> 111	2	> 56	31
	12	> 133	0	51	62
	130	> 95	2	44	> 52
	74	> 75	14	60	91
	> 103	> 79	> 80	4	> 100
	115	> 84	> 117	> 40	50
	> 147	> 111	> 62	18	19
	> 101	> 98	32	60	78
	> 104	> 110	20	> 69	15
	> 128	> 85	> 77	66	5
TNTC ^b	> 94	1	31	0	
TNTC	> 100	25	12	15	
TNTC	TNTC	4	> 44	10	
TNTC			TNTC	1	
<hr/>					
Minimum	12	46	0	4	0
Maximum	150	> 133	> 117	> 94	> 100
Average	101	94.6	41.9	47.3	41
Median	104	95	36.5	47.5	31
SDev	37	19.5	36.4	22.5	32.4
p value	0.537		0.0000079	< 10 ⁻⁶	< 10 ⁻⁶

^a Administered intraperitoneally q1d x 7 days, starting Day -1^b TNTC - Too Numerous To Count^c Student's t-test compared to the diluent-treated controls

Table 63

Square Root Transformed Tailpox Counts
for AVS-2875 and AVS-4225-Treated Mice

VV Experiment No. 16

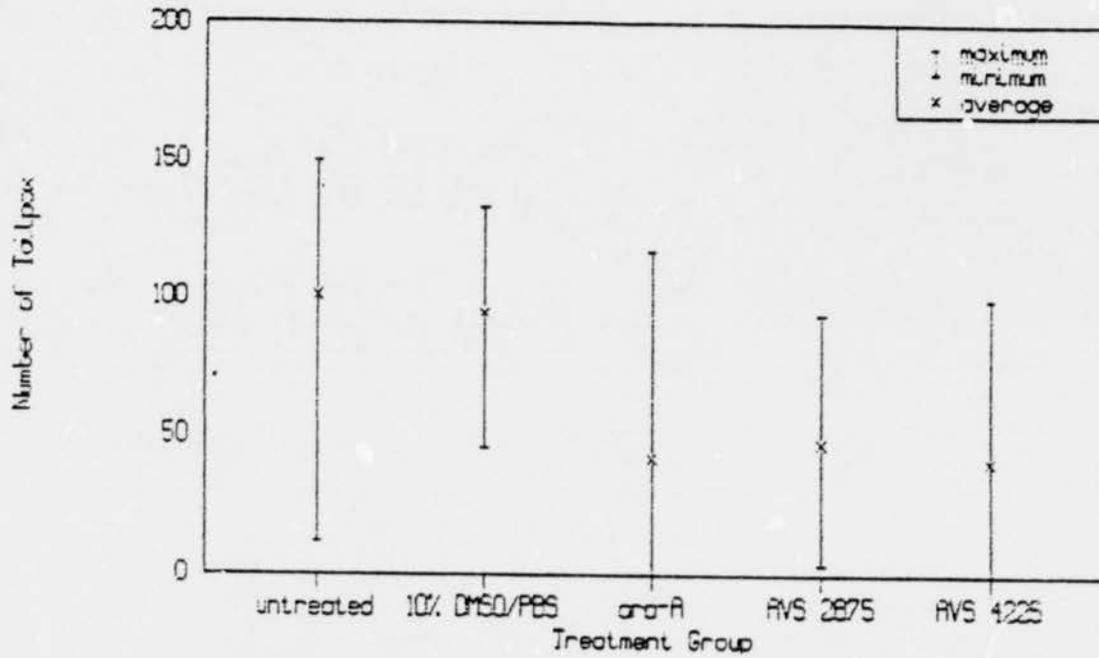
	<u>Treatment Group^a</u>				
	<u>Untreated</u>	<u>10% DMSO in PBS</u>	<u>300 mg/kg Ara-A</u>	<u>300 mg/kg AVS-2875</u>	<u>300 mg/kg AVS-4225</u>
	8.43	> 6.78	6.40	> 9.70	4.90
	12.25	> 10.34	> 8.77	> 5.74	8.49
	9.38	> 9.11	> 8.94	> 7.81	4.12
	11.14	> 9.33	> 8.89	> 6.32	> 7.81
	7.21	> 10.49	6.48	> 8.25	8.72
	10.77	> 10.54	1.41	> 7.48	5.57
	3.46	> 11.53	.00	7.14	7.87
	11.40	> 9.75	1.41	6.63	> 7.21
	8.60	> 8.66	3.74	7.75	9.54
	> 10.15	> 8.89	> 8.94	2.00	> 10.00
	10.72	> 9.17	> 10.82	> 6.32	7.07
	> 12.12	> 10.54	> 7.87	4.24	4.36
	> 10.05	> 9.90	5.66	7.75	8.83
	> 10.20	> 10.49	4.47	> 8.31	3.87
	> 11.31	> 9.22	> 8.77	8.12	2.24
	TNTC ^b	> 9.70	1.00	5.57	.00
	TNTC	> 10.00	5.00	3.46	8.87
	TNTC	TNTC	2.00	> 6.63	3.16
	TNTC			TNTC	1.00
<hr/>					
Minimum	3.46	6.78	.00	2.00	.00
Maximum	12.25	11.53	10.82	9.70	10.00
Average	9.81	9.67	5.59	6.62	5.72
Median	10.2	9.75	6.03	6.89	5.57
SDev	2.24	1.06	3.37	1.90	2.96
p value	0.82		0.000035	0.0000017	0.000009

a Administered intraperitoneally q1d x 7 days, starting Day -1

b TNTC - Too Numerous To Count

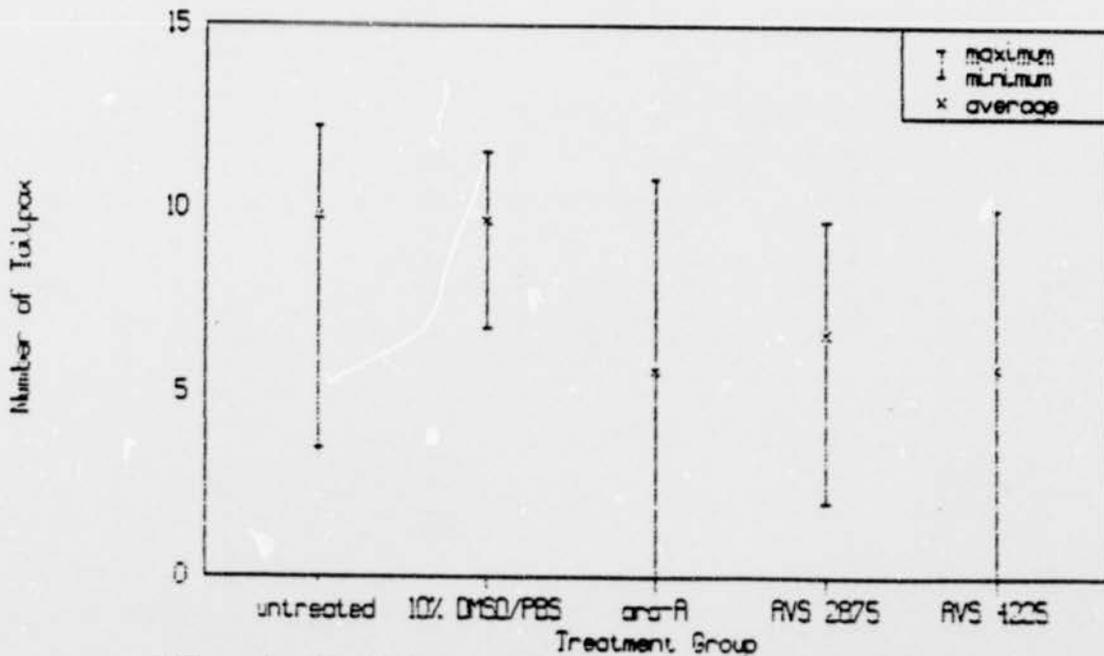
c Student's t-test compared to the diluent-treated controls

Vaccinia Tailpox Experiment #16
Numerical Counts



Compounds were administered at 300 mg/kg/day qd-1 to +5. Tailpox were enumerated on Day 6 post-infection.

Vaccinia Tailpox Experiment #16
Square Root Transformed Counts



Effect of AVS-2875 and AVS-4225 on Vaccinia-Induced Tailpox Model
(Numerical Counts and Square Root Transformed Counts)

Figure 61

4.2.4.6 Anti-Vaccinia Activity of AVS-3679

AVS-3679 was tested for *in vivo* anti-vaccinia virus activity at 300 mg/kg IP and at 100 mg/kg SC. The compound was prepared immediately prior to each injection in a 10% DMSO in PBS solution. Ara-A (400 mg/kg, IP) served as a positive control drug. Compounds were administered on a q1d x 7 days schedule beginning 24 hr before virus challenge.

The results are shown in Table 64. AVS-3679 demonstrated significant activity against vaccinia induced tailpox. AVS-3679 at 300 mg/kg dosed IP was more effective ($p = .007$) than Ara-A in reducing tailpox. The 100 mg/kg SC dose was also effective but not to the same degree as the 300 mg/kg IP dose. AVS-3679 is significantly active against vaccinia induced tailpox and further studies are recommended.

Table 64

Anti-Vaccinia Virus Activity of AVS-3679
Mean Pox Counts of Vaccinia Infected Mice

	0.4% CMC in PBS IP	10% DMSO in PBS IP	400 mg/kg Ara-A IP	300 mg/kg AVS-3679 IP	10% DMSO in PBS SC	100 mg/kg AVS-3679 SC
	6	TNTC	2	0	> 31	7
	50	> 63	7	0	5	0
	47	54	7	0	53	26
	27	33	3	0	14	2
	8	TNTC	5	dead	15	11
	23	15	3	0	101	6
	36	24	1	6	17	28
	45	13	6	1	70	12
	> 47	35	10	0	> 50	21
	dead	> 76	8	1	41	TNTC
	31	10	0	0	65	1
	14	24	14	0	14	> 61
	> 70	24	2	1	83	0
	52	5	7	0	15	11
	46	> 22	1	2	35	0
	> 26	41	6	0	> 38	6
	> 35	32	4	1	> 49	> 56
	16	57	40	4	28	29
	19	68	42	2	8	9
	23	46	10	5	21	37
Minimum	6	5	0	0	5	0
Maximum	> 70	> 76	42	6	101	> 61
Average	33	36	9	1	38	17
SDev	17	21	12	2	27	18
Median	31	33	6	0	33	11
p ^a	NA	NA	9.5x10 ⁻⁶	< 10 ⁻⁶	NA	7.8x10 ⁻³
p ^b	NA	NA	NA	6.8x10 ⁻³	NA	0.106

TNTC - too numerous to count - lesions were coalesced and could not be enumerated.

p^a - Student's t-test comparison of mean pox counts of drug treated to appropriate diluent control.

p^b - Student's t-test comparison of mean pox counts of drug treated to Ara-A treated mice.

Compounds were administered on a q1d x 7 day schedule beginning on Day -1. The Day 0 dose was administered 2 hours prior to virus challenge.

5. DISCUSSION

A number of the submitted compounds exhibited highly selective activity against VV *in vitro*. Compounds AVS-5568, 5569, 1214, 5219 and 5034 exhibited marked inhibition of VV CPE with SI's of > 320, > 158, 65.9, 23.5 and 11.5, respectively and TAI's ranging from 34 to 60 (Table 3). Retests of active compounds during this reporting period were confirmed in 27 of 29 compounds (Table 4).

Some of the compounds found to be most effective against AD2 *in vitro* were: AVS-2979, 2980, 3529, 4785, 4796, 4798, 4937 and 5445 (Table 6).

Seven of the 665 drugs tested during this reporting period exhibited antiviral *in vitro* activity against VSV (Table 7). The two most active drugs were AVS-5580 with a TAI of > 73.5 and > 59.5 and a SI of > 1000 and > 5060, and AVS-5219 with a TAI of > 71.99 and 28.27 and a SI of 127 and 10.6 (Table 8).

During this year, we have performed 1992 assays against the PT virus. This is ~ 150% improvement over the previous year's output of number of assays tested. Out of these assays, 20 AVS compounds appeared to have excellent *in vitro* antiviral potential with antiviral values that reached better than 95% reduction levels (See Table 9). These results definitely warrant that the best out of these active leads would be studied further.

We performed 2154 assays against the SF virus. This is ~ 140% improvement over the previous year's output of number of assays tested. Out of these assays, 16 AVS compounds appeared to have excellent *in vitro* antiviral potential with antiviral values that reached better than 95% reduction levels (See Table 13). These results definitely warrant that the best of these active leads would be studied further.

Four compounds (AVS-3800, 3799, 3802 and 3801) were found to have TI's of ≥ 10 against PIC virus in the initial plaque assay (Table 17). If this activity is confirmed in follow-up testing, they will be good candidates for testing against the virus *in vivo*.

Twenty six hundred-sixty-six assays were performed against the VE virus. This represents ~ 12% improvement over the previous year's output in number of assays tested. As shown in Table 18, six compounds appeared to have excellent *in vitro* antiviral potential with antiviral values that reached better than 95% reduction levels. These results warrant that the best out of these active leads would be studied further.

During this 12-month period, 2132 assays were performed against the YF virus. This represents ~ 136% improvement over the previous year's output of number of assays tested. Out of these assays, seven AVS compounds appeared to have excellent *in vitro* antiviral potential with antiviral values that reached better than 95% reduction (See Table 22). These results warrant that the best of these active leads would be studied further.

We performed 2140 assays against the JE virus. This represents ~ 148% improvement over the previous year's output of number of assays tested. Out of these assays, 12 AVS compounds appeared to have excellent *in vitro* antiviral potential with antiviral values that reached better than 95% reduction levels (See Table 26). These results warrant that the best of these active leads would be studied further.

The "prescreen assay method" for testing plant products against PT and YF viruses has been in place for approximately six months and appears to be working well toward picking-up potential actives for the primary screen protocol.

Since we changed to the MTT microculture assay/automated plate reading system for testing PT, VE, YF, SF, JE, VV and VSV viruses, we have seen improvements in the efficiency of the primary screening program. The automated plate reading has definitely improved the quality of the antiviral test data.

During this reporting period, several *in vivo* studies were performed with Pichinde, VEE and JE viruses with the goal of producing models requiring reduced quantities of drugs. For JE and VEE viruses, a brain target organ model appears to be feasible. These models require a single administration of antiviral compounds directly into the central nervous system. For Pichinde virus, results indicate that single or dual administrations of antiviral compounds may be effective in prolonging the life span of treated animals. With these models, some measure of antiviral efficacy may be made without requiring large quantities of compounds. For murine studies as little as 50 mg of compound would be necessary. For hamster studies as little as 400 mg of compound would be necessary.

For *in vivo* antiviral compound evaluations, no activity was found against Pichinde virus with AVS 94, AVS 347 or AVS 253 administered on 7 day treatment schedules. No AVS compounds were assessed against VEE although 3N-3DU did show some antiviral activity when assessed in the CNS target organ model. Activity against JE virus was present with AVS-2979 and AVS 5587. No activity was found with AVS-360, AVS 215, AVS 272 or AVS 2653 at the dose levels tested. AVS-360 did give some indication of anti-JE activity when assessed in the target organ system. Four compounds (AVS 2875, 2994, 3679 and 4225) were assessed against vaccinia virus induced taiipox lesions. Of these, AVS-3679 administered IP was the most active.

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7. LITERATURE CITED

Literature Cited

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APPENDICES

APPENDIX A

**Example of a Report Generated for the MTT Assay
(Graph/Text Form)**

Section I

	1	2	3	4	5	6	7	8	9	10	11	12
A	reagent background						plastic background					
	0.126	0.122	0.138	0.122	0.114	0.116	0.039	0.039	0.039	0.039	0.040	0.040
B	tox	cc/vc	drug 0001 experimental				tox				cc/vc	
C	1.603	1.575	0.494	0.305	0.276	1.514					2.407	
D	1.581	1.554	0.452	0.406	0.274	1.514					1.537	
E	1.622	1.578	0.634	0.654	0.525	1.555					1.520	
F	1.578	0.502	1.017	0.999	1.021	1.616					0.523	
G	1.626	0.468	1.554	1.539	1.542	1.592					0.500	
H	1.498	0.456	1.403	1.403	1.403	1.392					0.566	
H	drug 0001 colorimetric background											
	0.119	0.113	0.112	0.131	0.115	0.116						

tox=cell toxicity cc=cell control vv=virus control BOLD = highest drug conc values shown are optical dens...

Section II

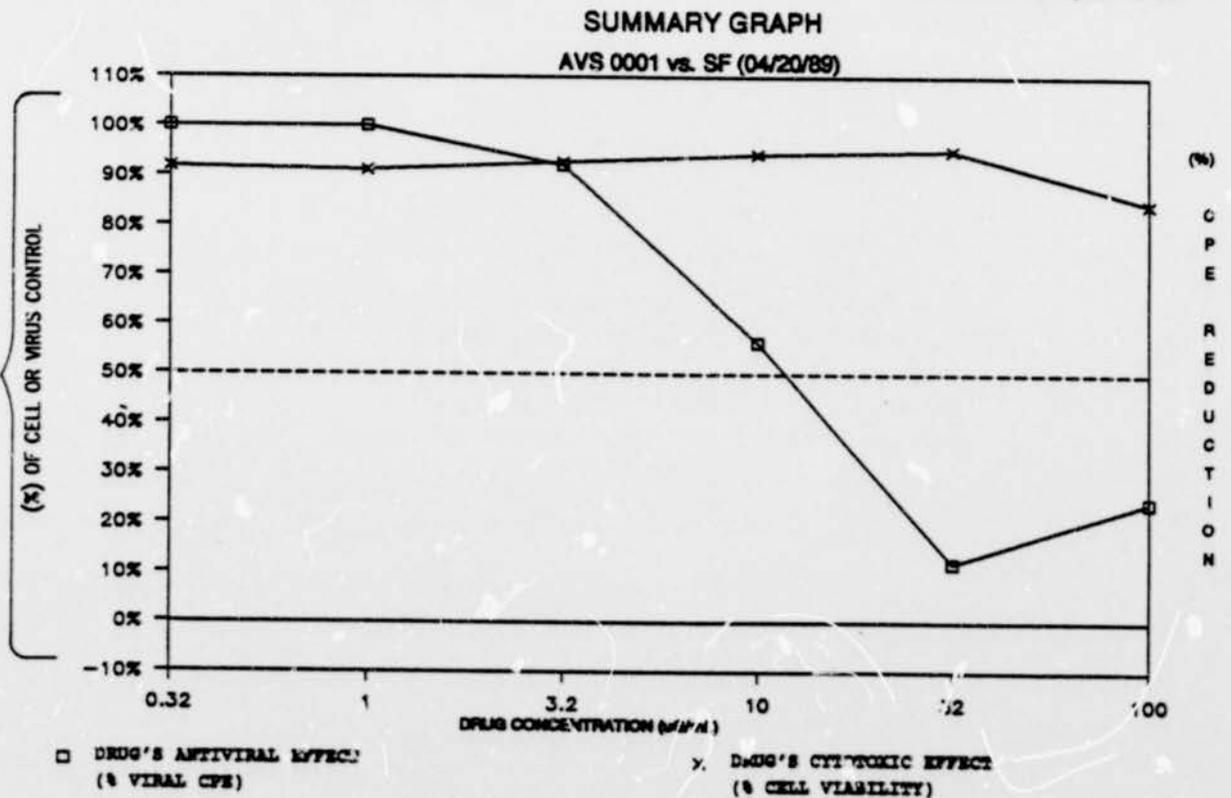
VIRUS CELLS	SF	PROJECT #	5975-1
SHIPMENT NUMBER	01	SPONSOR	USAMRIID
REAGENT	0.126	TEST DATE	04/20/89
VIRUS CONTROL	0.310	DATE READ	05/01/89
CELL CONTROL	1.572		
DIFFERENTIAL	1.193		

DRUG 0001	25%	50%	95%
TC (ug/mL)	> 100.00	> 100.00	> 100.00
IC (ug/mL)	5.48	11.70	-----
ANTIVIRAL INDEX (AI)	> 18.20	> 6.53	-----

DRUG 0001		ANTIVIRAL TEST VALUES			CYTOTOXICITY TEST VALUES		
ROW OR PLATE	CONC. (ug/mL)	MEAN O.D.	% VIRAL CPE	MEAN O.D.	% CELL VIABILITY	COLORIMETRIC CONTROL	
low B	0.32	-0.137	100%	1.443	92%	-0.007	
C	1	-0.117	100%	1.433	91%	-0.008	
D	3.2	0.094	92%	1.458	93%	0.008	
E	10	0.521	56%	1.485	94%	-0.011	
F	32	1.053	12%	1.496	95%	-0.010	
high G	100	0.905	24%	1.326	84%	-0.004	

* highest drug concentration tested values shown are final adjusted numbers

Section III



EXPLANATION OF *IN VITRO* ANTIVIRAL RESULTS FORM (MTT ASSAY)

The *In Vitro* Antiviral Results form (Figure 1) has three sections:

- Section I. Sample and Test Identification and the actual raw data (optical density readings) collected for each 96-well plate.

The Test Identification and Raw Data Section specifies the compound that was tested, a unique plate number (assigned by the computer) and the actual optical density readings for the virus control (vc), cell control (cc), drug alone (tox) and the drug plus virus (drug experimental). Background readings are also taken for the container (plastic), reagent (culture medium) and drug colorimetric.

- Section II. Printouts of pertinent Control and Test Results computed from the raw data are in this section.

Tabular Dose Response Test Results are calculated as follows:

- a. Mean Medium O.D. is subtracted from means of virus and cell control O.D.s.
- b. Drug colorimetric O.D. is subtracted from each infected and uninfected value at the corresponding drug dilution.
- c. The Differential is the mean O.D. attributable to virus kill (CPE).

$$\text{Differential} = (\text{mean O.D. cell control}) - (\text{mean O.D. Virus control}).$$

- d. For infected cells at each drug concentration,

% CPE = the reciprocal of:

$$\frac{[(\text{mean O.D. infected wells} - \text{mean O.D. drug colorimetric wells}) - (\text{mean O.D. virus control} - \text{mean reagent O.D.})]}{\text{Differential}}; \text{ expressed in percent.}$$

- e. For uninfected cells at each drug dilution,

$$\% \text{ Cell Viability} = \frac{[(\text{mean O.D. uninfected drug-treated wells}) - (\text{mean drug colorimetric wells})]}{(\text{mean O.D. cell control})}.$$

Quantitation of Viral Cytopathic Effect (CPE) and Drug Activity are displayed in the shaded area of Section II. These values are defined below:

$TC_{25,50,95}$ = The drug concentration ($\mu\text{g/ml}$) that reduced cell viability by 25%, 50% or 95%.

$IC_{25,50,95}$ = The drug concentration ($\mu\text{g/ml}$) that inhibited CPE by 25%, 50% or 95% calculated by using a regression analysis program for semilog curve fitting.

$AI_{25,50,95}$ = Antiviral Index, calculated by dividing $TC_{25,50}$ or 95 by $IC_{25,50}$ or 95 .

TAI = Total Antiviral Index - the area between the cytotoxicity and the antiviral curves.

SI = Selectivity Index, calculated by dividing the TC_{25} by the IC_{50} .

Section III. The Graphic Results Summary Section displays a plot or graphic illustration from computed values in Section II.

The line connecting the square symbols depicts the percentage of viral CPE in virus-infected cells treated with the test compound (at the indicated concentrations) relative to the Differential. This line expresses the *in vitro* anti-viral activity of the sample.

The line connecting the X symbols depicts the percentage of surviving uninfected cells treated with the test compound relative to the uninfected, untreated control (cell control). This line expresses the cytotoxicity of the drug at the various concentrations, or percent cell viability. The dotted line is just a reference line at 50%.

APPENDIX B

- Total Experience of AVS Compounds Tested Against JE, PT, SF, VE, VSV, VV and YF, *In Vitro*, MTT Assay (Pages 212-381)
- Summary of Antiviral Test Results with AD2, *In Vitro*, CPE Assay (Pages 382-391)
- Summary of Antiviral Test Results with PIC, *In Vitro*, Plaque Reduction Assay (Pages 392-414)
- Summary of Antiviral Test Results with VV, *In Vitro*, CPE Assay (Pages 415-416)
- Summary of Antiviral Test Results with VSV, *In Vitro*, CPE Assay (Pages 417-420)

Total Experience of AVS Compounds
 Tested Against JE, PT, SF, VE, VSV, VV and YF Viruses

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0001	PT	00V	45	11/16/88	0.768	22.00	64.60	2.93	11.60
0001	PT	010	45	11/16/88	0.727	25.50	72.20	2.83 >	10.87
0001	PT	01P	30	11/17/88	0.701	21.70	35.20	1.62	8.72
0001	PT	01W	31	11/17/88	0.633	17.30	61.60	3.55	14.06
0001	PT	107	45	11/22/88	0.868	11.70	74.10	6.35 >	24.94
0001	PT	10C	45	11/22/88	0.922	17.10	66.00	3.87 >	15.09
0001	PT	101	45	11/23/88	0.757	21.10 >	100.00 >	4.75 >	18.7
0001	PT	106	45	11/23/88	0.783	100.00 >	100.00 >	1.00 >	23.84
0001	PT	02F	45	12/06/88	0.645	32.00	77.30	2.42 >	5.82
0001	PT	02K	45	12/06/88	0.526	0.00	77.60	0.00	3.48
0001	PT	033	45	12/07/88	1.132	25.40	54.70	2.16 >	9.91
0001	PT	038	45	12/07/88	1.259	19.40	40.30	2.07 >	10.97
0001	PT	05H	1	12/13/88	0.861	16.30	49.80	3.05	18.70
0001	PT	050	1	12/13/88	0.794	19.10	22.00	1.15	12.02
0001	PT	06F	1	12/14/88	0.663	20.20 >	100.00 >	4.95 >	17.21
0001	PT	06M	1	12/14/88	0.542	75.90 >	100.00 >	1.32 >	6.21
0001	PT	07H	01	12/20/88	0.953	17.20	59.20	3.44 >	18.30
0001	PT	070	01	12/20/88	1.014	18.50	77.00	4.15 >	19.92
0001	PT	085	01	12/21/88	0.748	15.70 >	100.00 >	6.35 >	28.91
0001	PT	088	01	12/21/88	0.791	12.10 >	100.00 >	8.24 >	32.32
0001	PT	09K	46	01/12/89	0.892	14.20 >	100.00 >	7.05 >	31.79
0001	PT	09U	45	01/12/89	0.942	17.40 >	100.00 >	5.73 >	25.00
0001	PT	0A6	45	01/12/89	1.001	17.70 >	100.00 >	5.65 >	28.68
0001	PT	0A7	45	01/12/89	1.013	15.40 >	100.00 >	6.50 >	35.18
0001	PT	0BU	01	01/17/89	0.929	17.60 >	100.00 >	5.68 >	25.91
0001	PT	0C5	01	01/17/89	0.999	15.80	103.00	6.50 >	30.12
0001	PT	0D6	01	01/19/89	1.354	23.70 >	100.00 >	4.22 >	22.17
0001	PT	0DH	01	01/19/89	1.350	17.50 >	100.00 >	5.71 >	27.08
0001	PT	0EO	1	01/24/89	0.760	6.80 >	100.00 >	14.70 >	36.04
0001	PT	0EX	46	01/24/89	0.723	6.04 >	100.00 >	16.60 >	40.25
0001	PT	0G8	1	01/25/89	1.226	17.20 >	100.00 >	5.83 >	24.00
0001	PT	0G9	1	01/25/89	1.391	16.70 >	100.00 >	5.99 >	24.01
0001	PT	0HT	1	01/31/89	0.848	16.90 >	100.00 >	5.92 >	31.28
0001	PT	0I4	1	01/31/89	0.889	15.90 >	100.00 >	6.30 >	31.18
0001	PT	0JH	1	02/01/89	1.000	18.40 >	100.00 >	5.44 >	26.48
0001	PT	0JS	1	02/01/89	1.240	17.40 >	100.00 >	5.74 >	30.96
0001	PT	0KK	1	02/07/89	0.828	11.90 >	100.00 >	8.37 >	34.42
0001	PT	0KS	1	02/07/89	0.875	11.20	87.60	7.85 >	31.51
0001	PT	0LT	1	02/08/89	0.747	14.40 >	100.00 >	6.93 >	32.85
0001	PT	0M1	1	02/08/89	0.582	12.50 >	100.00 >	7.98 >	38.18
0001	PT	0MQ	01	02/14/89	0.396	5.84	87.90	15.00	36.73
0001	PT	0MU	01	02/14/89	0.469	3.43 >	100.00 >	29.20 >	57.38
0001	PT	0NF	01	02/15/89	0.992	24.20 >	100.00 >	4.14 >	17.46
0001	PT	0NJ	01	02/15/89	1.040	19.70 >	100.00 >	5.08 >	20.73
0001	PT	0PD	1	02/21/89	0.633	4.00 >	100.00 >	25.00 >	49.69
0001	PT	0PK	1	02/21/89	0.366	12.50 >	100.00 >	7.98 >	40.38
0001	PT	0PT	1	02/22/89	0.429	0.41 >	100.00 >	247.00 >	81.72
0001	PT	0Q0	1	02/22/89	0.405	1.49 >	100.00 >	67.30 >	75.63
0001	PT	0QX	1	02/24/89	0.332	4.84 >	100.00 >	77.70 >	53.31
0001	PT	0R4	1	02/24/89	0.171	2.83 >	100.00 >	35.40 >	61.22
0001	PT	0SY	1	02/28/89	0.557	8.20 >	100.00 >	12.20 >	36.59
0001	PT	0T8	1	02/28/89	0.559 <	0.32 >	100.00 >	313.00 >	95.60
0001	PT	0UH	1	03/01/89	0.966	9.74 >	100.00 >	10.30 >	41.59
0001	PT	0US	1	03/01/89	1.037	15.20 >	100.00 >	6.59 >	36.00
0001	PT	0V5	1	03/01/89	1.075	15.20 >	100.00 >	6.57 >	33.80
0001	PT	0VC	1	03/01/89	1.123	22.00 >	100.00 >	4.55 >	17.69
0001	PT	0WV	1	03/07/89	0.859	16.70 >	100.00 >	5.99 >	26.39
0001	PT	0X9	1	03/07/89	0.993	19.60 >	100.00 >	5.09 >	25.90
0001	PT	0YY	1	03/08/89	0.752	23.60 >	100.00 >	4.24 >	20.19
0001	PT	0ZC	1	03/08/89	0.981	14.40 >	100.00 >	6.93 >	31.68
0001	PT	P1V	01	03/14/89	0.648	4.21 >	100.00 >	23.80 >	52.51
0001	PT	P29	01	03/14/89	0.694	6.01 >	100.00 >	16.60 >	43.57
0001	PT	P3Y	01	03/15/89	0.856	14.10 >	100.00 >	7.08 >	30.47

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0001	PT	P4C	01	03/15/89	0.882	17.40	> 100.00	> 5.76	> 27.95
0001	PT	P6Y	1	03/21/89	0.701	13.40	> 100.00	> 7.44	> 36.99
0001	PT	P7C	1	03/21/89	0.875	16.50	> 100.00	> 6.07	> 33.88
0001	PT	P84	1	03/22/89	0.588	11.90	> 100.00	> 8.37	> 38.18
0001	PT	P8F	1	03/22/89	0.680	12.60	> 100.00	> 7.92	> 32.84
0001	PT	PCY	1	03/28/89	0.703	3.32	> 100.00	> 30.10	> 60.51
0001	PT	PDC	1	03/28/89	0.767	10.50	> 100.00	> 9.56	> 56.39
0001	PT	PEM	1	03/29/89	0.730	3.79	> 100.00	> 26.40	> 55.91
0001	PT	PF0	1	03/29/89	0.793	18.60	> 100.00	> 5.38	> 34.16
0001	PT	PC4	1	04/05/89	0.704	15.00	> 100.00	> 6.67	> 31.49
0001	PT	PCI	1	04/05/89	0.912	34.10	> 100.00	> 2.93	> 23.75
0001	PT	PFJ	1	04/11/89	0.595	2.34	> 100.00	> 42.70	> 54.72
0001	PT	PFX	1	04/11/89	0.798	14.10	> 100.00	> 7.09	> 36.19
0001	PT	PHM	1	04/12/89	1.066	20.90	> 100.00	> 4.78	> 24.56
0001	PT	PIO	1	04/12/89	1.092	14.30	> 100.00	> 7.01	> 35.62
0001	PT	PKP	01	04/18/89	0.425	11.10	> 100.00	> 9.00	> 39.49
0001	PT	PL3	01	04/18/89	0.659	15.90	> 100.00	> 5.30	> 31.09
0001	PT	PN6	01	04/19/89	0.744	20.30	> 100.00	> 4.92	> 27.35
0001	PT	PA1	1	04/21/89	0.863	23.30	> 100.00	> 4.29	> 24.35
0001	PT	PO1	01	04/21/89	0.463	11.50	> 100.00	> 8.67	> 50.59
0001	PT	PQE	1	04/25/89	0.911	33.40	> 100.00	> 2.99	> 26.15
0001	PT	PQQ	1	04/25/89	0.861	34.90	> 100.00	> 2.87	> 18.76
0001	PT	PSF	1	04/26/89	0.647	97.80	> 100.00	> 1.02	> 13.37
0001	PT	PST	1	04/26/89	0.757	0.00	> 100.00	> 0.00	> 3.62
0001	PT	PTV	1	04/28/89	0.598	59.80	> 100.00	> 1.67	> 21.15
0001	PT	PU6	1	04/28/89	0.630	0.00	> 100.00	> 0.00	> 1.09
0001	PT	PUY	01	05/02/89	0.867	75.50	> 100.00	> 1.32	> 8.25
0001	PT	PYW	1	05/05/89	0.765	0.00	> 100.00	> 0.00	> 4.41
0001	PT	PZY	1	05/09/89	0.555	0.00	> 100.00	> 0.00	> 6.30
0001	PT	Q06	1	05/09/89	0.845	0.00	28.90	0.00	0.02
0001	PT	Q18	1	05/10/89	0.808	0.00	> 100.00	> 0.00	> 4.87
0001	PT	Q1D	1	05/10/89	0.828	0.00	90.60	0.00	17.72
0001	PT	Q2S	01	05/16/89	0.575	0.00	> 100.00	> 0.00	> 4.91
0001	PT	Q2Y	01	05/16/89	0.671	0.00	> 100.00	> 0.00	> 0.35
0001	PT	Q3Q	1	05/17/89	0.702	0.00	> 100.00	> 0.00	> 0.01
0001	PT	Q3W	1	05/17/89	0.434	3.06	> 100.00	> 32.70	> 13.01
0001	PT	Q5V	1	05/23/89	0.833	0.00	> 100.00	> 0.00	> 10.31
0001	PT	Q60	1	05/23/89	0.747	0.00	> 100.00	> 0.00	> 13.71
0001	PT	Q70	1	05/24/89	0.981	75.90	56.00	0.74	1.85
0001	PT	Q6V	1	05/24/89	0.956	72.20	> 100.00	> 1.38	> 8.49
0001	PT	Q70	1	06/06/89	0.500	0.00	> 100.00	> 0.00	> 5.59
0001	PT	Q7E	1	06/06/89	0.408	55.70	> 100.00	> 1.04	> 5.24
0001	PT	QA4	1	06/07/89	0.666	0.00	> 100.00	> 0.00	> 4.26
0001	PT	Q9U	1	06/07/89	0.597	0.00	> 100.00	> 0.00	> 2.35
0001	PT	QE8	1	06/14/89	0.833	80.60	> 100.00	> 1.24	> 6.36
0001	PT	QCJ	1	06/14/89	0.805	60.20	> 100.00	> 1.66	> 16.54
0001	PT	QC8	1	06/14/89	0.779	54.50	> 100.00	> 1.83	> 17.93
0001	PT	QJW	1	06/27/89	0.588	32.00	> 100.00	> 3.13	> 22.77
0001	PT	QL7	1	06/28/89	0.532	76.90	> 100.00	> 1.30	> 18.21
0001	PT	QKW	1	06/28/89	0.512	68.40	> 100.00	> 1.46	> 20.43
0001	PT	QIJ	1	07/03/89	0.792	0.00	> 100.00	> 0.00	> 1.76
0001	PT	QI8	1	07/03/89	0.896	0.00	> 100.00	> 0.00	> 0.00
0001	PT	QNJ	1	07/06/89	0.787	73.90	> 100.00	> 1.35	> 7.87
0001	PT	QN8	1	07/06/89	0.647	54.30	> 100.00	> 1.64	> 14.63
0001	PT	QP7	1	07/07/89	0.725	72.20	> 100.00	> 1.38	> 12.75
0001	PT	QOW	1	07/07/89	0.713	71.40	> 100.00	> 1.40	> 9.70
0001	PT	QSJ	1	07/11/89	0.605	63.20	> 100.00	> 1.58	> 9.54
0001	PT	QSB	1	07/11/89	0.945	48.60	> 100.00	> 2.06	> 13.86
0001	PT	QQV	1	07/11/89	0.691	73.30	> 100.00	> 1.36	> 9.67
0001	PT	QCK	1	07/11/89	0.762	59.60	> 100.00	> 1.58	> 5.62
0001	PT	QUR	1	07/19/89	0.911	73.80	78.80	1.07	3.51
0001	PT	QUN	1	07/19/89	0.899	54.50	> 100.00	> 1.84	> 11.33
0001	PT	QTV	1	07/19/89	0.670	62.80	> 100.00	> 1.59	> 7.96
0001	PT	QTK	1	07/19/89	0.702	75.20	> 100.00	> 1.33	> 5.57
0001	PT	QGV	1	07/19/89	0.628	69.80	> 100.00	> 1.43	> 6.97
0001	PT	QGK	1	07/19/89	0.505	66.20	> 100.00	> 1.51	> 10.03

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0001	PT	QWK	1	07/25/89	0.447	64.80 >	100.00 >	1.54 >	12.55
0001	PT	QW9	1	07/25/89	0.674	20.90 >	100.00 >	4.78 >	22.54
0001	PT	QXW	1	07/26/89	0.445	75.90 >	100.00 >	1.32 >	6.55
0001	PT	QXL	1	07/26/89	0.619	64.50 >	100.00 >	1.55 >	8.78
0001	PT	QZK	1	08/01/89	0.674	76.40 >	200.00 >	2.62 >	20.15
0001	PT	QZ9	1	08/01/89	0.629	84.00 >	200.00 >	2.38 >	16.24
0001	PT	ROG	1	08/02/89	0.709	78.70	320.00	4.06 >	14.31
0001	PT	ROD	1	08/02/89	0.740	74.90 >	320.00 >	4.27 >	17.34
0001	PT	R2W	1	08/08/89	0.657	69.20	221.00	3.19	11.81
0001	PT	R2L	1	08/08/89	0.650	68.40	224.00	3.28 >	11.81
0001	PT	R4P	1	08/09/89	0.604	75.20	205.00	2.73	9.33
0001	PT	R4E	1	08/09/89	0.703	83.40	206.00	2.47	9.08
0001	PT	R6I	1	08/15/89	0.617	80.20	84.90	1.06	3.66
0001	PT	R67	1	08/15/89	0.678	73.70	178.00	2.42	9.17
0001	PT	R8B	1	08/16/89	0.762	73.40	183.00	2.48	9.37
0001	PT	R80	1	08/16/89	0.793	62.40	199.00	3.19 >	13.58
0001	PT	R9U	1	08/22/89	0.545	71.00	214.00	3.01	10.21
0001	PT	R9L	1	08/22/89	0.551	59.00	320.00	5.42 >	18.43
0001	PT	RBN	1	08/23/89	0.697	62.60	210.00	3.36	13.26
0001	PT	RBC	1	08/23/89	0.730	55.50	213.00	3.83 >	17.46
0001	PT	RD5	1	08/29/89	0.592	125.00 >	320.00 >	2.57 >	21.54
0001	PT	RDG	1	08/29/89	0.548	123.00 >	320.00 >	2.60 >	16.67
0001	PT	RFC	1	08/30/89	0.560	144.00 >	320.00 >	2.22 >	11.26
0001	PT	RF1	1	08/30/89	0.568	109.00 >	320.00 >	2.94 >	12.03
0001	PT	RIY	1	09/07/89	0.596	45.00	283.00	6.29 >	28.14
0001	PT	RIN	1	09/07/89	0.651	50.90 >	320.00 >	6.28 >	26.47
0001	PT	RX4	01	10/04/89	0.662	0.00	16.00	0.00	0.00
0001	PT	SEB	01	11/03/89	0.709	25.70	140.00	5.45 >	24.02
0001	PT	SEO	01	11/03/89	0.902	25.50	183.00	7.16 >	19.20
0001	PT	SFR	1	11/07/89	0.488	0.00	283.00	0.00 >	10.68
0001	PT	SFG	1	11/07/89	0.472	0.00 >	320.00	0.00 >	13.58
0001	PT	SHR	1	11/09/89	0.697	43.80	249.00	5.68 >	29.65
0001	PT	SHG	1	11/09/89	0.663	61.20	279.00	4.55 >	17.41
0001	PT	SJG	1	11/14/89	0.696	34.10 >	320.00 >	9.38 >	35.82
0001	PT	SJ6	1	11/14/89	0.847	36.70	320.00	8.72 >	29.32
0001	SF	01J	45	11/16/88	1.022	10.80 >	100.00 >	9.28 >	34.52
0001	SF	01O	45	11/16/88	0.987	9.35 >	100.00 >	10.70 >	39.92
0001	SF	10V	45	11/22/88	0.974	7.79	64.20	8.24	19.45
0001	SF	11O	45	11/22/88	0.717	3.27	89.80	27.40 >	47.79
0001	SF	10P	45	11/23/88	0.750	13.90 >	100.00 >	7.21 >	34.07
0001	SF	10U	45	11/23/88	0.660	4.78 >	100.00 >	20.90 >	50.74
0001	SF	02X	45	12/06/88	0.918	6.34 >	100.00 >	15.80 >	42.05
0001	SF	032	01	12/06/88	1.120	9.56 >	100.00 >	10.40 >	41.32
0001	SF	03R	45	12/07/88	0.763	15.20 >	100.00 >	6.58 >	28.79
0001	SF	03W	45	12/07/88	0.847	5.76 >	100.00 >	17.40 >	43.57
0001	SF	04P	45	12/07/88	0.783	8.10 >	100.00 >	12.30 >	43.51
0001	SF	05W	1	12/13/88	0.565	16.20 >	100.00 >	6.16 >	23.55
0001	SF	063	1	12/13/88	0.717	8.07	68.30	8.47 >	29.17
0001	SF	06N	1	12/13/88	0.560	16.60 >	100.00 >	5.38 >	15.42
0001	SF	06T	1	12/13/88	0.554	20.70 >	100.00 >	4.83 >	19.39
0001	SF	078	01	12/20/88	1.023	11.70	100.00	8.53 >	31.41
0001	SF	07G	01	12/20/88	0.899	8.67	100.00	11.50 >	48.34
0001	SF	089	01	12/21/88	0.865	0.62 >	100.00 >	161.00 >	65.74
0001	SF	08E	01	12/21/88	1.244	5.14	57.30	11.10 >	37.14
0001	SF	OAE	45	01/11/89	0.509	14.90 >	100.00 >	6.72 >	32.78
0001	SF	OAF	45	01/11/89	0.528	13.80 >	100.00 >	7.26 >	35.10
0001	SF	OAG	45	01/11/89	0.484	19.70 >	100.00 >	5.07 >	28.38
0001	SF	OAH	45	01/11/89	0.324	15.30 >	100.00 >	6.52 >	34.57
0001	SF	C9V	46	01/12/89	0.655	17.20 >	100.00 >	5.81 >	30.76
0001	SF	OA5	45	01/12/89	0.712	15.90 >	100.00 >	5.30 >	32.98
0001	SF	OBI	01	01/17/89	1.352	7.10	82.40	11.60 >	41.63
0001	SF	OBT	01	01/17/89	0.599	18.20	95.00	5.22	17.99
0001	SF	ODI	01	01/18/89	1.142	6.84 >	100.00 >	14.60 >	44.41
0001	SF	ODT	01	01/18/89	0.871	20.30 >	320.00 >	15.80 >	43.38
0001	SF	OEY	1	01/24/89	1.229	4.34	43.00	9.91	33.05
0001	SF	OF7	1	01/24/89	1.040	4.73	45.70	9.66 >	36.50

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0001	SF	OGA	1	01/24/89	1.146	10.40	62.70	6.01 >	24.73
0001	SF	OGG	1	01/24/89	1.214	13.00	76.00	5.83 >	26.56
0001	SF	OHH	1	01/31/89	1.171	14.60	87.30	5.96 >	27.32
0001	SF	OHS	1	01/31/89	1.181	11.70	66.90	5.71 >	25.93
0001	SF	OJ5	1	02/01/89	1.166	8.23	64.20	7.80 >	31.66
0001	SF	OJG	1	02/01/89	1.057	8.57 >	100.00 >	11.70 >	43.12
0001	SF	OJT	1	02/07/89	1.339	7.48	66.40	8.88 >	29.85
0001	SF	OL1	1	02/07/89	1.354	5.35	56.90	10.60 >	32.76
0001	SF	OM2	1	02/07/89	1.150	7.36	80.10	10.90 >	34.55
0001	SF	OMA	1	02/07/89	1.124	9.27	69.20	7.47 >	28.94
0001	SF	OMV	01	02/14/89	1.192	8.31	60.40	7.27 >	26.75
0001	SF	OMZ	01	02/14/89	1.287	6.78	44.10	6.50 >	25.05
0001	SF	ONK	01	02/15/89	1.234	18.50	77.30	4.17 >	16.62
0001	SF	ONO	01	02/15/89	1.100	17.10	80.60	4.72 >	17.95
0001	SF	OPL	1	02/21/89	1.179	6.06	58.20	9.60 >	29.38
0001	SF	OPS	1	02/21/89	1.051	6.14	52.60	8.56 >	32.36
0001	SF	OQ1	1	02/22/89	1.012	9.42 >	100.00 >	10.60 >	38.13
0001	SF	OQ8	1	02/22/89	0.772	7.27 >	100.00 >	13.80 >	36.72
0001	SF	ORT	1	02/24/89	0.968	8.31	82.10	9.88 >	29.18
0001	SF	OSO	1	02/24/89	1.068	4.25	61.40	14.40 >	42.04
0001	SF	OT9	1	02/28/89	1.034	7.45	67.50	9.06 >	25.80
0001	SF	OTJ	1	02/28/89	0.930	6.08	62.00	10.20 >	34.96
0001	SF	OUT	1	03/01/89	0.891	4.53	104.00	22.90 >	52.36
0001	SF	OV4	1	03/01/89	0.946	6.34	72.50	11.40 >	33.74
0001	SF	OXA	1	03/07/89	0.680	8.62	71.40	8.29	25.91
0001	SF	OXO	1	03/07/89	0.695	6.01	54.80	9.11 >	37.68
0001	SF	OZD	1	03/08/89	1.051	5.02	65.10	13.80 >	37.55
0001	SF	OZR	1	03/08/89	1.010	6.49	77.50	11.90 >	36.05
0001	SF	P2A	01	03/14/89	0.152	0.50 >	100.00 >	200.00 >	88.85
0001	SF	P2O	01	03/14/89	0.185 <	0.32 >	100.00 >	313.00 >	75.37
0001	SF	P3J	01	03/15/89	0.830	3.69	82.50	22.40 >	48.09
0001	SF	P3X	01	03/15/89	0.722	4.23	100.00	23.60 >	48.53
0001	SF	P7D	1	03/21/89	0.840	10.60	25.50	2.41 >	19.89
0001	SF	P8G	1	03/22/89	1.009	13.30 >	100.00 >	7.53 >	34.49
0001	SF	P8R	1	03/22/89	1.051	14.40 >	100.00 >	6.94 >	30.20
0001	SF	PCJ	1	03/28/89	0.750	4.85	77.30	15.90 >	42.80
0001	SF	PCX	1	03/28/89	0.750	4.88	81.00	16.60 >	43.10
0001	SF	PF1	1	03/29/89	0.811	3.09	77.40	25.00 >	45.86
0001	SF	PFF	1	03/29/89	1.002	11.00 >	100.00 >	9.13 >	33.47
0001	SF	PAG	1	04/04/89	0.834	8.40	100.00	11.90 >	31.18
0001	SF	PAU	1	04/04/89	0.441	5.62 >	100.00 >	17.80 >	42.76
0001	SF	PCJ	1	04/05/89	0.638	8.41 >	100.00 >	11.90 >	32.56
0001	SF	PCX	1	04/05/89	0.514	2.84 >	100.00 >	35.20 >	58.54
0001	SF	PFY	1	04/11/89	0.666	3.35 >	100.00 >	29.90 >	58.89
0001	SF	PGC	1	04/11/89	0.416	7.65 >	100.00 >	13.10 >	41.53
0001	SF	PI1	1	04/12/89	1.257	11.10	84.70	7.62 >	33.83
0001	SF	PIF	1	04/12/89	1.122	7.42	96.30	13.00 >	39.03
0001	SF	PL4	01	04/18/89	1.130	10.20 >	100.00 >	9.77 >	38.62
0001	SF	PLI	01	04/18/89	0.765	4.85 >	100.00 >	20.60 >	49.51
0001	SF	PN7	01	04/19/89	0.649	11.50 >	100.00 >	8.67 >	39.08
0001	SF	PNL	01	04/19/89	0.858	5.66 >	100.00 >	17.70 >	59.29
0001	SF	PUJ	01	04/20/89	1.193	11.70 >	100.00 >	8.53 >	30.31
0001	SF	PUX	01	04/20/89	1.091	10.90 >	100.00 >	9.17 >	39.20
0001	SF	POP	01	04/21/89	0.957	5.02 >	100.00 >	19.90 >	46.94
0001	SF	PQU	1	04/25/89	0.769	5.83 >	100.00 >	17.20 >	48.37
0001	SF	PR6	1	04/25/89	0.782	9.24 >	100.00 >	10.80 >	32.61
0001	SF	PSU	1	04/26/89	0.635	11.30 >	100.00 >	8.83 >	37.25
0001	SF	PU7	1	04/28/89	1.021	6.09 >	100.00 >	16.40 >	45.42
0001	SF	PUI	1	04/28/89	0.611	3.68 >	100.00 >	27.20 >	63.52
0001	SF	PWM	01	05/02/89	1.033	5.03 >	100.00 >	19.90 >	50.92
0001	SF	PYH	1	05/04/89	0.955	5.91 >	100.00 >	16.90 >	49.30
0001	SF	Q07	1	05/09/89	1.085	19.80	50.00	1.62 >	12.08
0001	SF	Q0F	1	05/09/89	0.761	17.90	0.32	0.02	10.85
0001	SF	Q12	1	05/10/89	0.916	15.10 >	100.00 >	6.64 >	28.40
0001	SF	Q17	1	05/10/89	1.071	14.30 >	100.00 >	7.01 >	31.31
0001	SF	Q1W	1	05/16/89	1.065	13.60 >	100.00 >	7.37 >	31.04

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
0001	SF	Q21	1	05/16/89	1.013	13.50	77.30	5.71 >	19.85
0001	SF	Q3X	1	05/17/89	0.781	16.20	82.40	5.09 >	22.52
0001	SF	Q43	1	05/17/89	1.033	14.90 >	100.00 >	6.73 >	24.48
0001	SF	Q61	1	05/23/89	1.366	0.00	80.60	0.00	0.00
0001	SF	Q66	1	05/23/89	1.157	0.00	79.10	0.00	0.00
0001	SF	Q71	1	05/23/89	1.395	0.00	66.00	0.00	0.87
0001	SF	QB7	01	06/02/89	1.508	0.00	32.60	0.00	1.81
0001	SF	QB3	01	06/02/89	1.274	0.00	47.40	0.00	2.83
0001	SF	Q8W	1	06/06/89	1.078	0.00 >	100.00	0.00	0.00
0001	SF	Q8M	1	06/06/89	1.048	18.10	47.10	2.60 >	16.59
0001	SF	QCK	1	06/13/89	1.413	13.40	85.10	6.33 >	33.24
0001	SF	QCV	1	06/13/89	1.220	14.40	67.50	4.67 >	29.14
0001	SF	QE7	1	06/14/89	1.255	12.90	77.90	6.07 >	31.94
0001	SF	QDW	1	06/14/89	1.447	15.70	66.00	4.21 >	24.50
0001	SF	QGJ	1	06/20/89	1.050	9.52 >	100.00 >	10.50 >	42.94
0001	SF	QG8	1	06/20/89	1.343	15.50	84.00	5.43 >	26.97
0001	SF	QI7	1	06/21/89	1.053	14.20	50.10	3.54 >	22.52
0001	SF	QHW	1	06/21/89	1.199	100.00	21.00	0.21 >	10.38
0001	SF	QJV	1	06/27/89	0.956	11.90 >	100.00 >	8.40 >	27.73
0001	SF	QJK	1	06/27/89	1.173	12.20	95.50	7.82 >	30.31
0001	SF	QLJ	1	06/28/89	0.986	15.90	66.00	4.14 >	18.02
0001	SF	QAF	1	06/28/89	0.955	13.70	67.60	4.95 >	24.49
0001	SF	QL8	01	06/28/89	1.559	14.70	56.00	3.80 >	20.32
0001	SF	QOV	1	07/06/89	1.155	7.19 >	100.00 >	13.90 >	41.43
0001	SF	QOK	1	07/06/89	1.040	8.27 >	100.00 >	12.10 >	39.31
0001	SF	QN7	1	07/06/89	1.101	5.73 >	100.00 >	17.50 >	48.81
0001	SF	QMW	1	07/06/89	1.244	11.80 >	100.00 >	8.47 >	29.81
0001	SF	QQJ	1	07/11/89	1.249	11.00	72.00	6.56 >	30.74
0001	SF	QQ8	1	07/11/89	1.394	15.00	30.30	2.02	14.85
0001	SF	QS7	1	07/12/89	0.724	8.27 >	100.00 >	12.10 >	42.72
0001	SF	QRW	1	07/12/89	1.058	13.10 >	100.00 >	7.66 >	31.74
0001	SF	QU7	1	07/18/89	0.979	4.96	90.30	18.20 >	44.16
0001	SF	QTW	1	07/18/89	1.173	9.27	62.60	6.75 >	26.87
0001	SF	QUW	1	07/19/89	0.973	9.48 >	100.00 >	10.50 >	35.28
0001	SF	QUS	1	07/19/89	1.265	15.70	0.32	0.02 >	18.95
0001	SF	QW8	1	07/25/89	1.141	6.57 >	100.00 >	15.22 >	40.56
0001	SF	QVX	1	07/25/89	1.328	8.59	85.40	9.94 >	31.66
0001	SF	QZW	1	08/01/89	0.936	7.06	147.00	20.81 >	49.94
0001	SF	QZL	1	08/01/89	1.262	7.27	17.00	2.34	22.61
0001	SF	ROL	1	08/02/89	0.587	13.30 >	320.00 >	24.05 >	52.63
0001	SF	ROI	1	08/02/89	0.494	19.90 >	320.00 >	16.08 >	33.07
0001	SF	R2J	1	08/08/89	1.219	7.65	172.00	22.42 >	48.37
0001	SF	R28	1	08/08/89	1.390	9.63	89.50	9.30	26.11
0001	SF	R4C	1	08/09/89	0.860	7.00	231.00	32.97	49.51
0001	SF	R41	1	08/09/89	0.804	10.60	215.00	20.26	42.93
0001	SF	R65	1	08/15/89	0.581	6.56	262.00	39.88 >	57.88
0001	SF	R5U	1	08/15/89	0.885	8.13	161.00	19.82	41.02
0001	SF	R7Y	1	08/16/89	0.611	6.30 >	320.00 >	50.79 >	59.63
0001	SF	R7N	1	08/16/89	0.784	3.69	296.00	80.34 >	62.29
0001	SF	R9J	1	08/22/89	0.802	6.39	207.00	32.37 >	44.97
0001	SF	R9A	1	08/22/89	1.002	4.68	249.00	53.28 >	52.11
0001	SF	RAZ	1	08/23/89	0.723	4.73	201.00	42.52 >	54.82
0001	SF	RBA	1	08/23/89	0.777	7.59	132.00	17.45	29.29
0001	SF	RD3	1	08/29/89	0.958	23.10	216.00	9.37	28.91
0001	SF	RCS	1	08/29/89	0.887	15.40	277.00	18.05 >	42.44
0001	SF	REZ	1	08/30/89	0.660	11.00	234.00	21.28	42.90
0001	SF	REC	1	08/30/89	0.823	7.41	230.00	31.01	49.62
0001	SF	RGH	1	09/06/89	1.121	6.34	80.60	12.71 >	32.50
0001	SF	RGS	1	09/06/89	1.245	8.64	107.00	12.39 >	25.23
0001	SF	RIA	1	09/07/89	0.762	2.97	303.00	102.09 >	52.82
0001	SF	RIL	1	09/07/89	0.742	7.27 >	320.00 >	44.03 >	35.33
0001	SF	RK3	1	09/12/89	0.803	5.85	197.00	33.69 >	46.48
0001	SF	RKE	1	09/12/89	0.701	8.55	176.00	20.58 >	44.02
0001	SF	RVB	1	10/03/89	0.974	32.00	24.70	0.77	3.04
0001	SF	RVM	1	10/03/89	0.943	0.00	25.90	0.00 >	4.74
0001	SF	RX2	1	10/04/89	0.724	0.00	23.50	0.00 >	5.23

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0001	SF	RWR	1	10/04/89	0.750	0.00	26.50	0.00 >	4.39
0001	SF	RPI	1	10/10/89	0.586	14.40	49.00	3.39 >	30.32
0001	SF	RPT	1	10/10/89	0.656	56.60	9.55	0.17 >	9.04
0001	SF	RSW	1	10/11/89	0.955	11.30	115.00	10.21 >	28.15
0001	SF	RT8	1	10/11/89	0.839	9.66	100.00	10.35 >	40.56
0001	SF	S3B	1	10/17/89	1.041	18.20	69.40	3.81 >	21.14
0001	SF	S30	1	10/17/89	1.005	12.50	44.40	3.55 >	22.48
0001	SF	S6H	1	10/24/89	1.103	13.60	129.00	9.52 >	31.48
0001	SF	S6S	1	10/24/89	0.982	12.90	158.00	12.26 >	38.26
0001	SF	S88	1	10/25/89	0.881	14.40	183.00	12.71 >	41.74
0001	SF	S7X	1	10/25/89	0.954	12.30	193.00	15.71 >	38.82
0001	SF	SAW	1	10/31/89	0.918	9.22	142.00	15.39 >	43.89
0001	SF	SBA	1	10/31/89	0.748	10.70	163.00	15.25 >	46.48
0001	SF	SD4	1	11/01/89	0.766	14.50	282.00	18.43 >	41.93
0001	SF	SDI	1	11/01/89	0.809	13.80	244.00	17.73 >	43.81
0001	SF	S4R	1	11/02/89	0.623	17.30	124.00	7.19 >	24.12
0001	SF	S4G	1	11/02/89	0.803	17.90	17.90	1.00 >	19.62
0001	SF	SFE	1	11/07/89	0.922	14.10	88.70	6.30 >	29.78
0001	SF	SF3	1	11/07/89	0.838	10.70	295.00	27.51 >	52.43
0001	SF	SH3	1	11/09/89	0.659	6.52 >	320.00 >	49.06 >	60.23
0001	SF	SHE	1	11/09/89	0.779	12.90	247.00	19.16 >	41.03
0001	SF	SIU	1	11/14/89	0.598	6.34 >	320.00 >	50.48 >	55.64
0001	SF	SJ4	1	11/14/89	0.599	5.26	310.00	58.86 >	53.82
0001	SF	P6 QXK	1	07/26/89	0.769	7.96 >	100.00 >	12.56 >	38.54
0001	SF	P6 QX9	1	07/26/89	1.104	15.20	72.80	4.78 >	19.47
0001	YF	O6E	1	12/13/88	0.841	0.00	9.15	0.00 >	0.00
0002	JE	OEE	46	01/23/89	1.238	0.00 >	320.00 >	0.00 >	23.50
0002	PT	OEO	46	01/24/89	0.760	187.00 >	320.00 >	1.71 >	10.46
0002	SF	OEY	46	01/24/89	1.229	51.60 >	320.00 >	6.21 >	31.30
0002	VE	ODU	46	01/23/89	1.232	0.00	233.00	0.00 >	0.00
0002	YF	OE4	46	01/23/89	1.033	0.00 >	320.00 >	0.00 >	3.60
0052	JE	RAM	4	08/23/89	0.778	0.00	11.90	0.00 >	0.00
0052	PT	RBC	4	08/23/89	0.730	0.00	13.10	0.00 >	0.86
0052	SF	RAZ	4	08/23/89	0.723	0.00	12.00	0.00 >	2.61
0052	VE	RA9	4	08/25/89	0.772	0.00	20.40	0.00 >	0.00
0052	YF	R9W	4	08/22/89	0.919	0.00	16.40	0.00 >	0.00
0065	PT	PDA	53	03/28/89	0.818	0.00	3.52	0.00 >	4.21
0065	SF	PCV	53	03/28/89	0.684	0.00	4.29	0.00 >	2.79
0065	VE	PBM	53	03/27/89	0.736	0.00	6.22	0.00 >	0.20
0065	VSV	O34	53	05/12/89	1.506	0.00	299.00	0.00 >	0.00
0065	YF	PCG	53	03/27/89	1.000	0.00	3.35	0.00 >	0.10
0070	SF	O89	01	12/21/88	0.865	0.00	17.40	0.00 >	14.46
0070	VE	O7P	01	12/20/88	1.109	0.00	14.10	0.00 >	0.00
0070	YF	O7U	01	12/19/88	0.803	0.00	17.00	0.00 >	0.00
0071	JE	RAN	2	08/23/89	0.688	0.00 >	10.00 >	0.00 >	0.02
0071	PT	RBD	2	08/23/89	0.695	0.00	8.06	0.00 >	0.00
0071	SF	RBO	2	08/23/89	0.675	0.00 >	10.00 >	0.00 >	3.09
0071	VE	RAA	2	08/25/89	0.849	0.00 >	10.00 >	0.00 >	0.60
0071	YF	R0X	2	08/22/89	0.897	0.00 >	10.00 >	0.00 >	0.40
0084	JE	Q5P	1	05/23/89	0.959	0.00	54.20	0.00 >	2.65
0084	JE	RAN	1	08/23/89	0.688	49.20 >	100.00 >	2.03 >	14.89
0084	PT	Q5V	1	05/23/89	0.833	0.00	34.50	0.00 >	1.12
0084	PT	RBD	1	08/23/89	0.695	0.00	93.20	0.00 >	0.31
0084	SF	Q61	1	05/23/89	1.366	0.00	25.70	0.00 >	0.00
0084	SF	RBO	1	08/23/89	0.675	0.00 >	100.00 >	0.00 >	3.25
0084	VE	Q5J	1	05/22/89	0.568	0.00	122.00	0.00 >	3.04
0084	VE	RAA	1	08/25/89	0.849	0.00 >	100.00 >	0.00 >	0.00
0084	YF	Q57	1	05/22/89	1.252	0.00	42.90	0.00 >	0.32
0084	YF	R9X	1	08/22/89	0.897	71.50 >	100.00 >	1.40 >	10.57
0094	JE	RS9	1	09/27/89	0.766	31.00 >	100.00 >	3.23 >	23.29
0094	SF	RSY	1	10/11/89	1.016	0.00 >	100.00 >	0.00 >	0.00
0094	VE	RTP	1	10/06/89	0.350	0.00 >	100.00 >	0.00 >	6.18
0094	YF	S25	1	10/10/89	0.793	0.00 >	100.00 >	0.00 >	9.21
0095	JE	OEF	46	01/23/89	1.077	0.00	45.60	0.00 >	11.32
0095	JE	RAO	2	08/23/89	0.669	0.00 >	100.00 >	0.00 >	0.99
0095	PT	OEP	46	01/24/89	0.788	0.00	111.00	0.00 >	4.23

AVS No.	VIRUS	Flt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0095	PT	RRE	2	08/23/89	0.728	0.00	96.20	0.00 >	0.01
0095	SF	OEZ	46	01/24/89	1.023	0.00	55.70	0.00 >	0.10
0095	SF	RB1	2	08/23/89	0.693	0.00 >	100.00	0.00	2.20
0095	VE	ODV	46	01/23/89	1.204	0.00	52.40	0.00	0.00
0095	VE	RAB	2	08/25/89	0.782	0.00 >	100.00	0.00	0.00
0095	VSV	034	53	05/12/89	1.506	0.00	297.00	0.00	0.00
0095	YF	OE5	46	01/23/89	0.973	0.00	57.50	0.00 >	0.97
0095	YF	R91	2	08/22/89	0.953	0.00 >	100.00	0.00	0.00
0111	JE	QOW	42	05/10/89	0.741	48.80	217.00	4.45	27.93
0111	JE	RAP	42	08/23/89	0.643	0.00 >	100.00	0.00 >	4.54
0111	PT	Q18	42	05/10/89	0.808	0.00	112.00	0.00 >	1.02
0111	PT	RBF	42	08/23/89	0.537	0.00	88.70	0.00	2.95
0111	SF	Q12	42	05/10/89	0.916	0.00	95.00	0.00	0.00
0111	SF	RB2	42	08/23/89	0.761	0.00	59.20	0.00	2.42
0111	VE	QOG	42	05/05/89	0.956	29.50	24.90	0.84	6.28
0111	VE	RAC	42	08/25/89	0.761	21.00	46.60	2.22 >	18.41
0111	YF	QOQ	42	05/08/89	1.088	0.00	64.00	0.00	0.00
0111	YF	R9Z	42	08/22/89	1.030	0.00	51.40	0.00 >	0.11
0113	JE	Q5Q	1	05/23/89	0.943	0.00	16.50	0.00	0.00
0113	JE	RAP	1	08/23/89	0.643	0.00	27.20	0.00	0.88
0113	PT	Q5W	1	05/23/89	0.810	0.00	49.00	0.00	0.00
0113	PT	RBF	1	08/23/89	0.687	0.00	39.30	0.00	0.00
0113	SF	Q62	1	05/23/89	1.175	0.00	49.00	0.00	0.00
0113	SF	RB2	1	08/23/89	0.761	0.00	38.60	0.00 >	4.08
0113	VE	Q5K	1	05/22/89	0.623	92.50	30.80	0.33 >	1.87
0113	VE	RAC	1	08/25/89	0.761	0.00	72.50	0.00	1.45
0113	YF	Q58	1	05/22/89	1.212	0.00	42.00	0.00	0.02
0113	YF	R9Z	1	08/22/89	1.030	0.00	45.50	0.00	0.31
0138	VE	04W	1	12/12/88	1.418	0.00 >	100.00	0.00 >	0.07
0138	VV	OBK		08/17/89	1.236	3.11 >	320.00 >	102.95 >	62.56
0139	VE	04X	1	12/12/88	1.270	0.00	0.08	0.00	0.00
0148	JE	RAQ	2	08/23/89	0.641	0.77	0.03	0.04 >	24.05
0148	PT	RBG	2	08/23/89	0.646	0.66	3.04	4.61 >	18.23
0148	SF	RB3	2	08/23/89	0.750	0.32	2.19	6.84 >	24.56
0148	VE	RAD	2	08/25/89	0.795	0.02	0.10	4.80 >	31.26
0148	YF	RA0	2	08/22/89	0.981	0.06	0.25	4.38 >	25.62
0200	JE	RAQ	2	08/23/89	0.641	0.00	53.90	0.00	0.00
0200	PT	RBG	2	08/23/89	0.646	0.00	56.70	0.00	0.02
0200	SF	RB3	2	08/23/89	0.750	0.00	42.20	0.00 >	0.98
0200	VE	RAD	2	08/25/89	0.795	0.00	59.40	0.00 >	2.30
0200	YF	RA0	2	08/22/89	0.981	0.00	60.50	0.00	0.00
0206	JE	QOX	5	05/10/89	0.932	0.00	253.00	0.00 >	6.26
0206	PT	Q19	5	05/10/89	0.699	84.40 >	320.00 >	3.79 >	19.78
0206	SF	Q13	5	05/10/89	0.993	46.80 >	320.00 >	6.84 >	31.80
0206	VE	QOH	5	05/09/89	0.903	0.00	198.00	0.00	0.00
0206	YF	QOR	5	05/08/89	1.072	0.00 >	320.00	0.00 >	2.22
0215	JE	RAR	1	08/23/89	0.677	0.00	0.84	0.00	0.00
0215	PT	RBH	1	08/23/89	0.747	0.00	0.94	0.00 >	0.29
0215	SF	RB4	1	08/23/89	0.733	0.00	0.75	0.00	2.02
0215	VE	04X	1	12/12/88	1.270	0.00	0.70	0.00	0.00
0215	VE	RAE	1	08/25/89	0.837	0.00	1.34	0.00 >	0.40
0215	YF	RA1	1	08/22/89	1.027	0.00	0.60	0.00	0.00
0217	JE	PMP	33	04/19/89	0.737	34.70 >	320.00 >	9.22 >	38.60
0217	JE	RSC	33	09/27/89	0.786	28.10 >	320.00 >	11.39 >	41.60
0217	PT	PN4	33	04/19/89	0.739	22.90 >	320.00 >	14.00 >	38.83
0217	SF	PNJ	33	04/19/89	0.739	13.10 >	320.00 >	24.40 >	51.36
0217	SF	RT0	33	10/11/89	0.901	8.23	290.00	35.21 >	36.83
0217	VE	PLV	33	04/17/89	1.004	0.00	57.10	0.00 >	10.09
0217	YF	PMA	33	04/18/89	1.074	0.00 >	320.00	0.00 >	11.71
0223	PT	PDA	53	03/28/89	0.818	0.00 >	320.00	0.00 >	17.82
0223	SF	PCV	53	03/28/89	0.684	0.00	252.00	0.00 >	1.20
0223	VE	PBM	53	03/27/89	0.736	0.00	320.00	0.00	4.86
0223	VSV	035	53	05/12/89	1.484	0.00	200.00	0.00	0.10
0223	VV	02Y	53	04/06/89	1.578	0.00	126.00	0.00	0.00
0223	YF	PCG	53	03/27/89	1.000	0.00	325.00	0.00	0.00
0225	JE	OEF	46	01/23/89	1.077	0.00	181.00	0.00 >	15.39

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0225	PT	OEP	46	01/24/89	0.788	0.00	187.00	0.00	0.00
0225	SF	OEZ	46	01/24/89	1.023	0.00	320.00	0.00	0.00
0225	VE	ODV	46	01/23/89	1.204	0.00 >	320.00	0.00	0.00
0225	YF	OE5	46	01/23/89	0.973	0.00	181.00	0.00	0.60
0228	JE	RAR	1	08/23/89	0.677	0.00	12.00	0.00 >	0.02
0228	PT	RBH	1	08/23/89	0.747	0.00	13.10	0.00 >	0.00
0228	SF	RB4	1	08/23/89	0.733	0.00	8.45	0.00 >	1.58
0228	VE	O4Y	1	12/12/88	1.299	0.00	32.50	0.00	0.00
0228	VE	PAE	1	08/25/89	0.837	0.00	13.20	0.00	0.00
0228	YF	RDT	1	08/29/89	0.793	0.00	2.90	0.00 >	0.82
0230	JE	RAS	1	08/23/89	0.577	94.00 >	100.00 >	1.06 >	9.02
0230	FT	RBI	1	08/23/89	0.717	0.00 >	100.00 >	0.00 >	8.95
0230	SF	RE5	1	03/23/89	0.758	0.00	52.60	0.00	0.26
0230	VE	O4Y	1	12/12/88	1.299	8.67	22.00	2.54	13.79
0230	VE	RAF	1	08/25/89	0.781	20.10	51.40	2.56 >	16.03
0230	YF	RA2	1	08/22/89	1.092	0.00	59.20	0.00 >	0.12
0233	JE	RAS	32	08/23/89	0.577	0.00	4.71	0.00 >	2.08
0233	PT	RBI	32	08/23/89	0.717	0.00	4.73	0.00 >	3.11
0233	SF	RE5	32	08/23/89	0.758	0.00	1.73	0.00	0.00
0233	VE	RAF	32	08/25/89	0.781	0.00	2.17	0.00	0.00
0233	YF	RA2	32	08/22/89	1.092	0.00	1.67	0.00	0.00
0253	JE	O1D	45	11/17/88	1.265	0.00	7.57	0.00	0.00
0253	JE	O1I	45	11/17/88	1.215	0.00	22.60	0.00	2.28
0253	JE	O1Q	45	11/22/88	0.733	0.00	8.51	0.00 >	6.82
0253	JE	O1V	45	11/22/88	0.602	0.00	17.30	0.00	0.67
0253	JE	O1K	45	11/23/88	0.728	10.00	16.30	1.63 >	18.19
0253	JE	O1P	45	11/23/88	0.788	0.00	9.50	0.00 >	14.83
0253	JE	O3L	45	12/07/88	0.988	0.00	11.40	0.00 >	5.79
0253	JE	O3Q	45	12/07/88	1.003	0.00	10.00	0.00 >	6.71
0253	JE	O52	1	12/12/88	1.122	0.00	16.30	0.00 >	22.86
0253	JE	O59	1	12/12/88	0.818	0.00	45.70	0.00 >	25.93
0253	JE	O64	1	12/13/88	1.013	8.27	8.64	1.04 >	21.22
0253	JE	O66	1	12/13/88	1.000	4.98	14.10	2.83 >	25.65
0253	JE	O80	01	12/20/88	1.086	0.00	9.11	0.00 >	10.34
0253	JE	O84	01	12/20/88	1.170	0.00	8.64	0.00	5.67
0253	JE	OAC	45	01/11/89	0.792	0.00	9.16	0.00 >	8.03
0253	JE	OAD	45	01/11/89	1.110	0.00	6.60	0.00	6.63
0253	JE	OAI	01	01/16/89	0.962	0.00	7.66	0.00 >	5.95
0253	JE	OAT	01	01/16/89	1.000	0.00	10.80	0.00	4.51
0253	JE	OC6	01	01/17/89	1.166	0.00	3.20	0.00	0.00
0253	JE	OCH	01	01/17/89	0.955	0.00	8.95	0.00	2.24
0253	JE	OEE	1	01/23/89	1.238	6.34	8.15	1.28 >	21.45
0253	JE	OEN	1	01/23/89	1.226	4.12	8.96	2.17 >	24.53
0253	JE	OFW	1	01/24/89	1.204	0.00	9.70	0.00 >	8.78
0253	JE	OG7	1	01/24/89	0.968	0.00	16.50	0.00 >	14.86
0253	JE	OH5	1	01/30/89	0.765	3.20	93.10	29.10 >	54.18
0253	JE	OHG	1	01/30/89	0.761	3.47	75.70	21.80 >	44.76
0253	JE	OIT	1	01/31/89	0.604	3.38	91.10	27.00 >	52.88
0253	JE	OJ4	1	01/31/89	0.766	4.25	25.00	5.87	34.02
0253	JE	OKB	1	02/06/89	0.647	6.01	69.30	11.50 >	34.86
0253	JE	OKJ	1	02/06/89	0.712	5.28	60.30	11.40 >	36.63
0253	JE	OLK	1	02/07/89	1.065	0.00 >	100.00	0.00	0.00
0253	JE	OLS	1	02/07/89	1.230	0.00 >	100.00	0.00	0.00
0253	JE	OMB	01	02/13/89	0.970	0.00	14.00	0.00 >	11.54
0253	JE	OMF	01	02/13/89	0.865	0.00	13.90	0.00	9.77
0253	JE	ONO	01	02/14/89	1.211	0.00	4.44	0.00	1.84
0253	JE	ON4	01	02/14/89	1.223	0.00	7.73	0.00	0.00
0253	JE	OP5	1	02/20/89	0.448	2.30	71.30	31.00 >	52.69
0253	JE	OPC	1	02/20/89	0.604	3.68	23.80	6.46 >	35.71
0253	JE	OQP	1	02/21/89	0.516	4.81	69.50	14.50 >	39.86
0253	JE	OQW	1	02/21/89	0.747	9.09	9.52	1.05	16.19
0253	JE	ORL	1	02/24/89	0.491	2.12	32.00	15.10 >	37.97
0253	JE	ORS	1	02/24/89	0.494	2.34	68.00	29.10 >	42.53
0253	JE	OSC	1	02/27/89	1.003	8.67	8.82	1.02 >	14.76
0253	JF	OSM	1	02/27/89	0.911	0.00	2.86	0.00	3.20
0253	JZ	OTT	1	02/28/89	0.865	0.00	2.28	0.00	0.68

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
0253	JE	OU4	1	02/28/89	0.847	9.16	6.29	0.69	6.56
0253	JE	OWG	1	03/06/89	1.099	0.00	4.77	0.00 >	0.45
0253	JE	OWU	1	03/06/89	0.872	0.00	17.70	0.00 >	18.42
0253	JE	OY4	1	03/07/89	1.382	0.00	6.60	0.00	2.97
0253	JE	OYI	52	03/07/89	1.176	0.00	8.30	0.00 >	10.03
0253	JE	OZX	1	03/10/89	0.763	2.81	19.20	6.83 >	28.96
0253	JE	P01	1	03/10/89	0.965	0.00	19.60	0.00	22.15
0253	JE	POM	01	03/13/89	0.899	0.00	6.60	0.00	0.00
0253	JE	P10	01	03/13/89	0.562	8.05	10.70	1.33	15.04
0253	JE	P34	01	03/14/89	0.973	0.00	4.33	0.00 >	2.12
0253	JE	P3I	52	03/14/89	0.923	0.00	6.92	0.00 >	13.13
0253	JE	P64	1	03/20/89	1.072	0.00	7.42	0.00	6.45
0253	JE	P6I	1	03/20/89	0.980	0.00	14.90	0.00	8.35
0253	JE	P7S	1	03/21/89	1.169	0.00	10.00	0.00	3.93
0253	JE	P83	1	03/21/89	0.879	0.00	11.80	0.00	7.74
0253	JE	PAA	1	03/24/89	0.922	2.54	7.44	2.93 >	22.70
0253	JE	PAL	1	03/24/89	0.901	0.00	7.09	0.00 >	7.99
0253	JE	PAY	1	03/24/89	0.838	0.00	0.80	0.00 >	2.47
0253	JE	PB9	1	03/24/89	0.887	0.00	C.57	0.00 >	0.56
0253	JE	PE6	1	03/28/89	0.830	0.00	0.82	0.00 >	0.15
0253	JE	P9M	1	04/03/89	0.934	0.00	0.30	0.00	0.00
0253	JE	PA0	1	04/03/89	0.708	0.00	1.99	0.00	0.00
0253	JE	PBP	1	04/04/89	0.913	0.00	10.00	0.00 >	11.80
0253	JE	PC3	1	04/04/89	0.939	0.00	16.90	0.00	10.52
0253	JE	PF4	1	04/10/89	0.798	0.00	8.57	0.00	0.48
0253	JE	PFI	1	04/10/89	0.804	0.00	8.39	0.00 >	8.41
0253	JE	PH7	1	04/11/89	0.826	0.00	20.50	0.00 >	17.31
0253	JE	PHL	1	04/11/89	0.807	0.00	14.80	0.00	9.01
0253	JE	PKA	01	04/18/89	0.635	0.00	6.41	0.00	0.73
0253	JE	PKC	01	04/18/89	0.831	0.00	6.07	0.00 >	10.46
0253	JE	PMD	01	04/19/89	0.683	0.00	8.13	0.00 >	7.54
0253	JE	PMR	01	04/19/89	0.697	0.00	12.50	0.00 >	12.02
0253	JE	PP1	01	04/21/89	0.966	0.00	3.87	0.00	0.27
0253	JE	PPC	01	04/21/89	0.884	0.00	7.65	0.00 >	12.65
0253	JE	PPW	1	04/25/89	0.987	0.00	12.30	0.00 >	9.51
0253	JE	PS0	1	04/26/89	0.956	0.00	8.35	0.00 >	14.19
0253	JE	PSE	1	04/26/89	0.768	0.00	7.92	0.00 >	6.03
0253	JE	PTJ	1	04/28/89	1.118	0.00 <	0.32	0.00	0.00
0253	JE	PTU	1	04/28/89	0.905	0.00	7.14	0.00	2.10
0253	JE	PW7	01	05/02/89	0.492	0.00	19.70	0.00 >	13.60
0253	JE	PXT	1	05/03/89	0.464	0.00	21.00	0.00 >	3.72
0253	JE	PZP	1	05/09/89	0.781	0.00	27.10	0.00 >	9.95
0253	JE	PZX	1	05/09/89	1.008	0.00	16.10	0.00	13.75
0253	JE	Q0W	1	05/10/89	0.741	7.70	24.10	3.12	19.68
0253	JE	Q11	1	05/10/89	0.855	0.00	13.10	0.00	8.39
0253	JE	Q3P	1	05/17/89	0.686	4.20	20.30	4.84 >	29.45
0253	JE	PXT	1	05/19/89	0.761	0.00	6.11	0.00	0.00
0253	JE	Q5P	1	05/23/89	0.959	0.00	8.21	0.00	2.09
0253	JE	Q5U	1	05/23/89	0.906	0.00	10.00	0.00	0.25
0253	JE	Q6U	1	05/24/89	0.963	7.25	12.30	1.69 >	16.02
0253	JE	Q6P	1	05/24/89	1.075	0.00	6.60	0.00	2.05
0253	JE	Q8L	1	06/05/89	0.680	0.00	13.40	0.00	13.06
0253	JE	Q8B	1	06/05/89	0.982	9.35	12.10	1.30	4.27
0253	JE	Q9I	1	06/07/89	0.920	0.00	6.86	0.00	1.85
0253	JE	Q98	1	06/07/89	0.682	0.00	9.62	0.00	1.19
0253	JE	QC7	1	06/13/89	0.858	0.00	26.50	0.00	9.35
0253	JE	QBW	1	06/13/89	0.789	0.00	42.30	0.00	19.51
0253	JE	QDV	1	06/14/89	0.914	27.70	25.70	0.93	26.89
0253	JE	QDK	1	06/14/89	0.988	0.00	18.10	0.00	11.65
0253	JE	QFV	1	06/20/89	0.756	0.00	0.27	0.00	0.00
0253	JE	QFK	1	06/20/89	1.110	0.00	21.40	0.00	6.23
0253	JE	QHJ	1	06/21/89	0.543	14.70	29.60	2.01	26.30
0253	JE	QH8	1	06/21/89	0.954	0.00	24.30	0.00	13.31
0253	JE	QJJ	1	06/27/89	0.869	0.00	20.60	0.00 >	15.66
0253	JE	QJ8	1	06/27/89	0.646	0.00	22.50	0.00	12.06
0253	JE	QKV	1	06/28/89	0.881	8.05	22.20	2.76 >	24.05

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0253	JE	QKK	1	06/28/89	1.013	0.00	15.50	0.00	6.24
0253	JE	QMJ	1	07/06/89	0.790	5.05	25.70	5.09 >	30.10
0253	JE	QM8	1	07/06/89	0.768	10.00	17.80	1.78 >	18.78
0253	JE	QO7	09	07/07/89	0.805	32.00	27.20	0.85	18.43
0253	JE	QNW	1	07/07/89	0.582	32.00	40.90	1.28	25.95
0253	JE	QRJ	1	07/11/89	0.811	30.50	31.10	1.02	21.27
0253	JE	QR8	1	07/11/89	0.847	17.90	31.20	1.74 >	23.05
0253	JE	QPK	1	07/11/89	0.990	0.00	21.30	0.00 >	11.95
0253	JE	QPV	1	07/11/89	1.019	0.00	18.10	0.00 >	9.51
0253	JE	QT7	1	07/18/89	0.853	0.00	12.40	0.00	9.77
0253	JE	QSW	1	07/18/89	0.866	5.88	18.30	3.11 >	19.01
0253	JE	QUH	1	07/19/89	0.899	0.00	0.87	0.00	0.01
0253	JE	QUD	1	07/19/89	0.949	0.00	10.00	0.00	2.32
0253	JE	QVW	1	07/25/89	0.894	0.00	21.00	0.00	4.86
0253	JE	QVL	1	07/25/89	0.531	0.00	27.40	0.00	10.40
0253	JE	QX8	1	07/26/89	0.789	0.00	18.00	0.00 >	12.62
0253	JE	QWX	1	07/26/89	0.760	7.52	25.10	3.33 >	22.35
0253	JE	QYW	1	08/01/89	0.772	0.00	5.14	0.00	0.86
0253	JE	QYL	1	08/01/89	0.668	0.00	23.20	0.00	5.59
0253	JE	ROB	1	08/02/89	0.703	0.00	0.61	0.00	0.00
0253	JE	R08	1	08/02/89	0.822	0.00	1.00	0.00	0.00
0253	JE	R26	1	08/08/89	0.680	0.00	22.70	0.00	5.16
0253	JE	R1V	1	08/08/89	0.807	20.70	20.40	0.98	7.90
0253	JE	R3Z	1	08/09/89	0.888	0.00	12.90	0.00 >	8.47
0253	JE	R3O	1	08/09/89	1.001	0.00	19.60	0.00 >	13.30
0253	JE	R5S	1	08/15/89	0.618	0.00	17.30	0.00	2.46
0253	JE	R5H	1	08/15/89	0.570	0.00	22.10	0.00 >	6.56
0253	JE	R78	1	08/16/89	0.625	0.00	8.45	0.00 >	0.94
0253	JE	R6X	1	08/16/89	0.548	22.20	29.00	1.31 >	18.63
0253	JE	R8X	1	08/22/89	0.691	0.00	19.40	0.00 >	9.02
0253	JE	R8O	1	08/22/89	0.610	5.51	58.60	10.63 >	31.58
0253	JE	RAM	1	08/23/89	0.778	0.00	11.40	0.00	3.26
0253	JE	RAX	1	08/23/89	0.410	7.83	25.30	3.23 >	19.85
0253	JE	RCD	1	08/29/89	0.923	17.40	46.90	2.69 >	18.48
0253	JE	RC2	1	08/29/89	0.811	0.00	67.40	0.00	11.08
0253	JE	RDW	1	08/30/89	0.768	10.00	21.80	2.18	12.25
0253	JE	RE7	1	08/30/89	0.749	0.00	21.40	0.00	9.06
0253	JE	RFR	1	09/06/89	0.972	5.20	28.30	5.45 >	37.39
0253	JE	RG2	1	09/06/89	0.861	0.00	0.20	0.00	1.67
0253	JE	RHV	1	09/07/89	0.878	0.00	15.70	0.00	11.88
0253	JE	RJO	1	09/12/89	0.598	5.66	17.30	3.06 >	20.93
0253	JE	RJD	1	09/12/89	0.437	0.00	9.74	0.00 >	17.27
0253	JE	RLU	1	09/13/89	0.550	4.64	22.50	4.85 >	30.97
0253	JE	RLJ	1	09/13/89	0.745	4.82	25.20	5.24 >	28.45
0253	JE	RQL	1	09/26/89	0.648	9.78	22.90	2.34 >	12.01
0253	JE	RSC	1	09/27/89	0.785	7.46	16.60	2.23 >	19.75
0253	JE	RUW	1	10/03/89	0.668	0.00	15.20	0.00	11.05
0253	JE	RUL	1	10/03/89	0.839	0.00	6.83	0.00	0.34
0253	JE	RWP	1	10/04/89	0.738	0.00	2.97	0.00	0.00
0253	JE	RWE	1	10/04/89	0.767	5.31	12.70	2.39 >	18.79
0253	JE	S21	1	10/10/89	1.126	0.00	20.00	0.00	0.00
0253	JE	S1Q	1	10/10/89	1.217	0.00	23.40	0.00 >	4.77
0253	JE	S2Y	1	10/17/89	0.918	0.00	9.60	0.00 >	0.85
0253	JE	S2N	1	10/17/89	0.734	0.00	14.40	0.00	1.24
0253	JE	S62	1	10/24/89	0.968	0.00	20.20	0.00	8.30
0253	JE	S5R	1	10/24/89	0.949	0.00	21.80	0.00 >	8.81
0253	JE	S77	1	10/25/89	0.679	30.50	21.70	0.71 >	11.45
0253	JE	S7I	1	10/25/89	0.878	0.00	15.20	0.00 >	12.35
0253	JE	SAC	1	10/31/89	0.678	0.00	39.80	0.00 >	26.03
0253	JE	SAE	1	10/31/89	0.798	32.00	28.30	0.89 >	17.50
0253	JF	SCM	1	11/01/89	0.727	0.00	19.90	0.00 >	1.19
0253	JE	SC8	1	11/01/89	0.632	0.00	22.60	0.00	0.22
0253	JE	S41	1	11/02/89	0.882	5.14	21.00	4.08	24.56
0253	JE	S3Q	1	11/02/89	0.515	10.00	83.00	8.30 >	28.38
0253	JE	SEQ	1	11/07/89	0.862	0.00	22.70	0.00 >	26.58
0253	JE	SF1	1	11/07/89	0.745	7.83	27.70	3.54 >	31.05

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAT
0253	JE	SH1	1	11/09/89	0.880	0.00	29.60	0.00	15.71
0253	JE	SGQ	1	11/09/89	0.883	0.00	28.30	0.00	11.77
0253	JE	SIS	1	11/14/89	0.790	39.70	83.50	2.10 >	29.04
0253	JE	SII	1	11/14/89	0.843	32.00	60.00	1.88	16.32
0253	VE	011	45	11/16/88	1.258	10.00	2.05	0.20	16.81
0253	VE	016	45	11/16/88	1.196	0.65	4.56	7.02 >	35.96
0253	VE	11D	01	11/22/88	1.446	0.51	1.37	2.68 >	13.55
0253	VE	11I	01	11/22/88	1.475	0.94	2.60	2.77	14.14
0253	VE	007	01	11/23/88	1.381	0.60	1.59	2.64 >	13.65
0253	VE	012	01	11/23/88	1.419	0.47	1.73	3.70 >	16.92
0253	VE	01W	45	12/06/88	1.164	0.76	3.09	4.09 >	24.24
0253	VE	021	45	12/06/88	1.115	0.67	2.68	3.98 >	23.94
0253	VE	026	01	12/07/88	1.353	0.77	2.47	3.20 >	15.79
0253	VE	031	JAC	12/07/88	1.171	0.89	1.34	1.50 >	7.24
0253	VE	039	45	12/07/88	1.145	1.45	3.11	2.15	16.41
0253	VE	03E	45	12/07/88	1.071	0.92	2.69	2.93	16.23
0253	VE	04A	45	12/07/88	1.164	0.86	2.50	2.90 >	17.84
0253	VE	04A	45	12/07/88	1.131	0.76	2.34	3.09 >	15.78
0253	VE	04W	1	12/12/88	1.418	0.73	1.94	2.66 >	13.08
0253	VE	051	1	12/12/88	1.401	2.31	3.47	1.50	10.12
0253	VE	05P	1	12/13/88	1.319	0.00	1.95	0.00	8.20
0253	VE	05V	1	12/13/88	1.271	0.86	1.89	2.20 >	9.95
0253	VE	06Z	01	12/19/88	1.154	0.80	2.70	3.37	18.97
0253	VE	077	01	12/19/88	1.131	0.81	2.28	2.80 >	15.53
0253	VE	07P	01	12/20/88	1.109	0.79	1.42	1.81 >	10.02
0253	VE	07T	01	12/20/88	1.224	0.59	1.57	2.68 >	13.42
0253	VE	08F	1	01/06/89	0.928	1.79	2.17	1.21 >	11.47
0253	VE	08I	1	01/06/89	0.928	1.79	2.17	1.21 >	11.47
0253	VE	08J	1	01/06/89	1.234	3.04	2.10	0.69	5.10
0253	VE	08R	1	01/06/89	0.930	1.26	2.12	1.68 >	13.35
0253	VE	08S	1	01/06/89	1.023	2.42	2.08	0.86	8.41
0253	VE	08Z	15	01/06/89	0.936	0.98	2.32	2.37	13.32
0253	VE	0A8	45	01/11/89	1.108	0.75	1.73	2.32 >	12.62
0253	VE	0A9	45	01/11/89	1.203	0.86	1.79	2.07	11.11
0253	VE	0B6	01	01/16/89	0.856	0.00	1.44	0.00 >	6.32
0253	VE	0BH	01	01/16/89	0.754	0.00	1.92	0.00	6.21
0253	VE	0CU	01	01/17/89	1.012	0.95	2.47	2.58	10.53
0253	VE	0D5	01	01/17/89	0.885	0.00	1.25	0.00 >	5.29
0253	VE	0DU	1	01/23/89	1.232	0.79	0.88	1.11 >	6.23
0253	VE	0E3	1	01/23/89	1.219	0.78	0.67	0.86 >	4.29
0253	VE	0F8	1	01/24/89	1.058	0.00	1.88	0.00	4.27
0253	VE	0FJ	1	01/24/89	1.155	0.00	1.31	0.00	3.56
0253	VE	0GH	1	01/30/89	1.086	0.81	1.44	1.77 >	8.71
0253	VE	0GS	1	01/30/89	1.040	0.88	1.83	2.09 >	10.15
0253	VE	0I5	1	01/31/89	1.004	0.80	1.81	2.28 >	10.98
0253	VE	0IG	1	01/31/89	0.999	0.88	1.34	1.52 >	7.31
0253	VE	0K2	1	02/06/89	1.076	0.91	2.06	2.26 >	11.05
0253	VE	0KA	1	02/06/89	1.044	0.96	2.02	2.11	9.14
0253	VE	0LB	1	02/07/89	1.060	0.00 >	100.00	0.00	0.00
0253	VE	0LJ	1	02/07/89	1.146	0.00 >	100.00	0.00	0.07
0253	VE	0ML	01	02/13/89	0.916	0.80	1.62	2.02 >	8.95
0253	VE	0MP	01	02/13/89	0.986	0.90	1.50	1.66 >	7.64
0253	VE	0NA	01	02/14/89	0.879	0.00	1.79	0.00 >	5.02
0253	VE	0NE	01	02/14/89	0.909	0.00	1.55	0.00	5.67
0253	VE	0NP	01	02/17/89	0.923	0.88	2.08	2.36	12.54
0253	VE	0O0	01	02/17/89	1.007	2.17	2.10	0.97 >	9.14
0253	VE	0O1	01	02/17/89	0.833	0.76	2.21	2.90 >	14.63
0253	VE	0O2	01	02/17/89	0.913	0.00	1.65	0.00	5.33
0253	VE	0O3	01	02/17/89	0.927	0.86	2.10	2.44 >	11.61
0253	VE	0O4	01	02/17/89	0.941	1.00	2.03	2.03	9.29
0253	VE	0O5	1	02/20/89	0.873	0.00	1.81	0.00 >	6.79
0253	VE	0O6	1	02/20/89	0.974	0.00	1.08	0.00	2.51
0253	VE	0O7	1	02/21/89	0.978	0.00	1.17	0.00 >	3.78
0253	VE	0O8	1	02/21/89	1.008	0.00	1.18	0.00 >	4.66
0253	VE	0O9	1	02/24/89	1.024	0.00	1.40	0.00 >	4.88
0253	VE	0R0	1	02/24/89	1.076	0.00	1.76	0.00	2.44

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0253	VE	OVL	1	03/03/89	0.934	0.00	2.05	0.00 >	7.01
0253	VE	OVL	1	03/03/89	1.015	0.88	1.30	1.48 >	7.99
0253	VE	OVM	1	03/06/89	0.661	0.00	2.31	0.00 >	9.79
0253	VE	OWU	1	03/06/89	0.812	0.00	1.47	0.00	4.91
0253	VE	OXP	1	03/07/89	0.899	0.00	1.73	0.00	6.02
0253	VE	OY3	1	03/07/89	0.812	0.00	0.88	0.00	0.25
0253	VE	OZS	1	03/10/89	0.913	0.00	1.53	0.00 >	6.04
0253	VE	OZW	1	03/10/89	1.057	0.00	0.88	0.00 >	1.67
0253	VE	P07	01	03/13/89	1.007	0.00	0.97	0.00	1.51
0253	VE	PGL	52	03/13/89	0.948	0.00	0.94	0.00 >	3.29
0253	VE	P1G	01	03/14/89	0.967	0.00	1.46	0.00	4.32
0253	VE	P1U	01	03/14/89	1.069	0.00	0.84	0.00	1.38
0253	VE	P4D	01	03/17/89	1.210	0.00	1.94	0.00 >	4.11
0253	VE	P4O	01	03/17/89	1.183	0.00	1.59	0.00 >	2.54
0253	VE	P4P	01	03/17/89	1.029	0.00	1.50	0.00 >	5.95
0253	VE	P50	01	03/17/89	1.106	0.00	1.57	0.00 >	3.77
0253	VE	P51	01	03/17/89	1.009	0.97	2.64	2.71 >	15.59
0253	VE	P5C	01	03/17/89	0.847	0.79	2.57	3.26 >	18.14
0253	VE	P5D	01	03/17/89	1.035	1.47	1.66	1.13	9.20
0253	VE	P5O	01	03/17/89	0.863	0.89	2.36	2.64 >	12.27
0253	VE	P6J	1	03/20/89	1.165	0.89	2.06	2.31	10.20
0253	VE	P6X	1	03/20/89	1.002	0.00	2.04	0.00	7.43
0253	VE	P8S	1	03/21/89	1.175	0.00	1.32	0.00	2.88
0253	VE	P96	1	03/21/89	0.895	0.00	1.82	0.00 >	7.33
0253	VE	P9M	1	03/24/89	0.977	0.00 >	100.00	0.00 >	0.04
0253	VE	P9X	1	03/24/89	1.034	0.00 >	100.00	0.00	0.00
0253	VE	P9Y	1	03/24/89	1.037	0.89	0.79	0.89 >	5.14
0253	VE	PA9	1	03/24/89	0.889	0.89	0.50	1.07 >	6.34
0253	VE	PAM	1	03/24/89	1.228	0.00 <	0.32	0.00	0.00
0253	VE	PAX	1	03/24/89	1.086 <	0.32 <	0.32 -	1.00 >	0.49
0253	VE	PBA	1	03/27/89	0.978	0.00 <	0.32	0.00	0.00
0253	VE	PBO	1	03/27/89	0.944	0.00 <	0.32	0.00 >	0.06
0253	VE	PDD	1	03/28/89	0.850	0.00 <	0.32	0.00 >	0.00
0253	VE	PDR	1	03/28/89	0.970	0.00 <	0.32	0.00	0.00
0253	VE	PFL	1	03/31/89	0.942	2.66	2.76	1.04 >	11.04
0253	VE	PFW	1	03/31/89	1.070	0.00	1.97	0.00 >	6.71
0253	VE	PFX	1	03/31/89	1.128	0.00	1.73	0.00 >	5.01
0253	VE	PG8	1	03/31/89	1.049	0.00	1.96	0.00 >	6.34
0253	VE	PG9	1	03/31/89	0.977	1.91	2.38	1.25	11.91
0253	VE	PGK	1	03/31/89	1.116	2.42	4.90	2.02	11.10
0253	VE	PGL	1	03/31/89	1.072	0.00	1.71	0.00 >	6.66
0253	VE	PGW	1	03/31/89	1.099	0.00	1.54	0.00	6.90
0253	VE	P8S	1	04/03/89	1.093	0.00	1.10	0.00 >	5.31
0253	VE	P96	1	04/03/89	1.018	0.84	1.31	1.56	7.22
0253	VE	PAV	1	04/04/89	0.947	0.73	1.09	1.49 >	8.60
0253	VE	PB9	1	04/04/89	0.966	0.68	0.97	1.44 >	8.49
0253	VE	PCY	1	04/07/89	1.078	0.86	1.07	1.25 >	6.00
0253	VE	PD9	1	04/07/89	1.006	0.00	1.09	0.00 >	5.06
0253	VE	PDA	1	04/07/89	1.194	0.89	2.74	3.08 >	16.08
0253	VE	FDL	1	04/07/89	1.379	0.74	1.31	1.77 >	7.59
0253	VE	PDY	01	04/07/89	1.047	0.00	1.00	0.00 >	2.43
0253	VE	PE9	01	04/07/89	0.942	0.92	0.93	1.00 >	6.43
0253	VE	PEA	1	04/10/89	0.870	0.86	2.06	2.40	9.97
0253	VE	PEO	1	04/10/89	0.849	0.90	2.07	2.30 >	10.24
0253	VE	PGD	1	04/11/89	0.838	0.00	1.97	0.00	7.05
0253	VE	PGR	1	04/11/89	0.932	0.00	1.55	0.00	4.96
0253	VE	PDM	01	04/14/89	1.239	0.90	2.21	2.47 >	12.96
0253	VE	PDX	01	04/14/89	1.192	3.20	4.00	1.25	8.50
0253	VE	PIG	1	04/14/89	1.192	0.78	0.85	1.10	7.31
0253	VE	PIR	1	04/14/89	1.129	0.65	1.58	2.43	11.19
0253	VE	PIS	1	04/14/89	1.266	1.55	3.94	2.54	15.43
0253	VE	PJ3	1	04/14/89	1.025	1.68	2.50	1.49	10.71
0253	VE	PJ4	1	04/14/89	0.827	0.94	2.49	2.66	12.43
0253	VE	PJF	1	04/14/89	0.937	3.09	2.56	0.83	4.76
0253	VE	PJG	01	04/17/89	0.963	0.77	1.00	1.29 >	7.61
0253	VE	PJU	01	04/17/89	0.966	0.75	2.10	2.79 >	11.38

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
0253	VE	PLJ	01	04/17/89	0.982	0.73	2.10	2.89 >	13.87
0253	VE	PLX	01	04/17/89	1.071	0.92	1.31	1.43 >	5.94
0253	VE	POD	01	04/21/89	1.088	0.82	1.62	1.99 >	8.43
0253	VE	POO	01	04/21/89	0.945	0.77	0.95	1.24 >	7.29
0253	VE	PPD	1	04/24/89	1.019	0.66	2.27	3.45	17.22
0253	VE	PPR	1	04/24/89	1.037	0.74	2.38	3.20 >	13.85
0253	VE	PRG	1	04/25/89	0.946	0.56	2.29	4.12 >	19.36
0253	VE	PRU	1	04/25/89	0.947	0.76	1.77	2.35	9.18
0253	VE	PT5	1	04/28/89	1.024	0.97	2.55	2.61 >	13.89
0253	VE	PTI	1	04/28/89	0.861	0.71	2.17	3.06 >	13.64
0253	VE	PVD	01	05/01/89	1.104	0.70	1.35	1.93 >	11.15
0253	VE	PX1	1	05/02/89	1.012	0.80	2.18	2.72 >	12.16
0253	VE	PZF	1	05/08/89	1.117	2.39	1.55	0.65 >	6.43
0253	VE	QOG	1	05/09/89	0.956	2.89	2.14	0.74 >	5.71
0253	VE	QOL	1	05/09/89	0.917	0.00	2.27	0.00	6.11
0253	VE	Q1K	1	05/15/89	1.021	2.49	2.41	0.97 >	9.84
0253	VE	Q1P	1	05/15/89	1.026	3.20	1.28	0.40	1.20
0253	VE	Q3C	1	05/16/89	1.143	2.82	3.20	1.13	6.86
0253	VE	Q3I	1	05/16/89	1.146	0.00	2.72	0.00	3.86
0253	VE	Q5J	1	05/22/89	0.568	0.00	1.93	0.00	0.09
0253	VE	Q5O	1	05/22/89	0.804	0.00	1.00	0.00	0.01
0253	VE	Q6J	1	05/23/89	1.058	0.00	0.88	0.00 >	0.05
0253	VE	Q9T	1	06/06/89	1.069	0.00	1.66	0.00	0.00
0253	VE	Q9P	54	06/06/89	0.939	0.00	0.43	0.00	0.00
0253	VE	QD7	1	06/16/89	1.243	0.95	2.02	2.12 >	10.83
0253	VE	QCW	1	06/16/89	1.281	0.00	1.44	0.00 >	3.92
0253	VE	QFJ	1	06/19/89	1.361	0.00	3.38	0.00	1.92
0253	VE	QF8	1	06/19/89	1.442	0.00	4.07	0.00	3.12
0253	VE	QH7	1	06/23/89	0.353	1.20	1.30	1.09	7.03
0253	VE	QGW	1	06/23/89	1.083	0.00	0.94	0.00	0.18
0253	VE	QJ7	1	06/26/89	0.968	1.00	7.28	7.28 >	30.17
0253	VE	QIW	1	06/26/89	1.044	1.66	7.67	4.64 >	35.84
0253	VE	QLV	1	06/30/89	1.239	0.92	2.07	2.25	11.23
0253	VE	QLK	1	06/30/89	1.447	0.00	1.21	0.00	2.19
0253	VE	QMV	1	07/07/89	0.989	0.00	1.98	0.00	4.32
0253	VE	QO7	1	07/10/89	1.229	0.98	2.04	2.09 >	10.68
0253	VE	QPW	1	07/10/89	1.160	2.17	2.62	1.21 >	11.86
0253	VE	QRV	1	07/14/89	1.423	10.00	2.47	0.25	10.05
0253	VE	QRK	1	07/14/89	1.571	2.83	1.73	0.61	2.57
0253	VE	QTJ	1	07/17/89	0.628	2.79	2.51	0.90 >	10.42
0253	VE	QT8	1	07/17/89	1.150	0.00	1.23	0.00	0.00
0253	VE	QUM	1	07/21/89	0.461	3.20	0.28	0.09 >	9.78
0253	VE	QUI	1	07/21/89	1.059	0.00	0.97	0.00	0.00
0253	VE	QVK	1	07/24/89	0.767	0.00	1.28	0.00	0.06
0253	VE	QV9	1	07/24/89	0.900	0.00	0.87	0.00	0.00
0253	VE	QY8	1	07/28/89	1.343	0.86	1.52	1.78	9.56
0253	VE	QZ8	1	07/31/89	1.100	0.00	1.49	0.00	3.29
0253	VE	QYX	1	07/31/89	1.262	0.00	1.46	0.00	2.92
0253	VE	ROY	1	08/04/89	1.175	1.26	2.26	1.79 >	11.74
0253	VE	RON	1	08/04/89	1.294	0.86	2.01	2.33 >	13.31
0253	VE	RO1	1	08/04/89	1.139	0.00	0.55	0.00	0.00
0253	VE	QZX	1	08/04/89	1.174	1.73	1.93	1.12 >	9.18
0253	VE	R1T	1	08/07/89	0.852	0.00	1.20	0.00 >	2.00
0253	VE	R1I	1	08/07/89	1.087	0.00	1.82	0.00 >	6.77
0253	VE	R39	1	08/11/89	1.395	0.96	2.57	2.69	15.35
0253	VE	R2Y	1	08/11/89	1.387	0.77	2.60	3.37 >	20.04
0253	VE	R5F	1	08/14/89	1.285	1.00	0.92	0.92 >	6.71
0253	VE	R54	1	08/14/89	1.097	1.18	1.00	0.85	5.76
0253	VE	R7L	1	08/18/89	0.962	2.01	2.18	1.09	9.47
0253	VE	R7A	1	08/18/89	0.951	1.47	2.35	1.59 >	13.67
0253	VE	R8Z	1	08/21/89	1.003	2.64	1.99	0.76	5.48
0253	VE	RA9	1	08/25/89	0.772	0.95	2.96	3.12 >	25.44
0253	VE	RAK	1	08/25/89	0.652	0.90	2.10	2.33	11.07
0253	VE	RGF	1	09/08/89	0.842	0.89	6.73	7.54 >	26.13
0253	VE	RG4	1	09/08/89	0.889	0.90	4.56	5.06	30.37
0253	VE	RI8	1	09/08/89	1.420	1.50	6.42	4.29 >	26.95

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0253	VE	RHX	1	09/08/89	1.541	1.40	4.77	3.41 >	27.57
0253	VE	REL	1	09/11/89	0.631	2.01	3.60	1.79	13.03
0253	VE	RK1	1	09/11/89	1.073	0.87	2.32	2.68 >	15.20
0253	VE	RJQ	1	09/11/89	1.117	0.71	5.47	7.68 >	30.25
0253	VE	RL4	1	09/15/89	0.796	1.25	6.50	5.21 >	25.31
0253	VE	RKT	1	09/15/89	0.865	1.52	7.12	4.69 >	23.46
0253	VE	RV9	1	10/02/89	1.007	2.00	3.20	1.60	12.83
0253	VE	RUY	1	10/02/89	1.011	2.94	2.60	0.88	3.98
0253	VE	RTT	1	10/06/89	0.479	0.00	2.68	0.00	2.02
0253	VE	RTN	1	10/06/89	0.390	0.00	2.83	0.00	0.95
0253	VE	RU6	1	10/06/89	0.705	2.75	2.63	0.96	8.84
0253	VE	RTV	1	10/06/89	0.793	0.00	38.20	0.00	7.94
0253	VE	RYK	1	10/09/89	0.905	2.99	2.21	0.74	3.64
0253	VE	RYI	1	10/09/89	0.954	3.07	2.49	0.81	6.59
0253	VE	RY7	1	10/09/89	1.261	0.00	1.62	0.00	0.07
0253	VE	RYV	1	10/09/89	1.026	1.91	3.79	1.99	14.12
0253	VE	S4E	1	10/20/89	1.077	2.03	1.92	0.94 >	8.47
0253	VE	S43	1	10/20/89	1.124	1.46	2.76	1.89 >	17.87
0253	VE	S6F	1	10/23/89	1.063	1.84	1.67	0.91	6.89
0253	VE	S64	1	10/23/89	1.075	1.06	2.94	2.78 >	20.19
0253	VE	S7V	1	10/27/89	0.978	1.08	2.98	2.76	13.96
0253	VE	S7K	1	10/27/89	1.076	1.21	2.30	1.90	14.49
0253	VE	SCO	1	11/03/89	0.944	0.90	7.34	8.14	31.67
0253	VE	SBQ	1	11/03/89	0.974	1.57	2.81	1.79	13.87
0253	VE	SBC	1	11/03/89	0.929	1.36	5.35	3.93	20.33
0253	VE	SD2	1	11/03/89	0.902	1.59	2.65	1.66	13.58
0253	VE	SI4	1	11/10/89	1.055	1.00	6.60	6.60 >	25.99
0253	VE	SHT	1	11/10/89	1.107	1.16	8.68	7.51	36.52
0253	VE	SG4	1	11/10/89	1.019	2.36	3.20	1.35	14.01
0253	VE	SFT	1	11/10/89	0.981	1.79	6.71	3.75	20.51
0253	VEE	Q7Z	1	06/09/89	0.926	0.00	0.37	0.00 >	0.93
0253	VEE	Q7P	1	06/09/89	1.113	0.00 <	0.32	0.00 >	0.09
0253	VEE	QBK	1	06/12/89	1.225	2.27	2.28	1.00	6.90
0253	VEE	QBK	1	06/12/89	1.278	2.85	2.13	0.75 >	8.11
0253	VV	001	1	12/29/88	1.811	8.90	3.20	0.36	2.92
0253	VV	008	01	01/26/89	1.709	7.20	11.30	1.58	13.24
0253	VV	00T	1	02/09/89	1.642	0.00	6.26	0.00	1.53
0253	VV	013	01	02/16/89	2.066	6.65	18.50	2.78 >	15.92
0253	VV	01D	01	02/23/89	1.691	0.00	14.70	0.00 >	5.32
0253	VV	01N	01	03/09/89	1.913	7.25	17.80	2.46 >	13.36
0253	VV	01X	01	03/23/89	1.585	7.06	23.80	3.36 >	19.20
0253	VV	02E	01	03/30/89	1.453	9.24	23.70	2.57	19.05
0253	VV	02Y	01	04/06/89	1.578	8.46	16.10	1.90	7.67
0253	VV	038	01	04/13/89	1.809	0.00	19.50	0.00 >	10.64
0253	VV	03S	01	05/04/89	1.741	5.73	29.60	5.17 >	29.33
0253	VV	03X	01	05/11/89	1.704	6.20	30.40	4.90 >	24.46
0253	VV	049	01	05/18/89	1.925	9.40	12.20	1.30 >	7.21
0253	VV	04Y	01	06/08/89	1.339	24.50	92.00	3.76 >	26.01
0253	VV	05A	01	06/15/89	1.650	7.38	9.50	1.29	11.13
0253	VV	07?		07/13/89	1.390	5.39	21.40	3.97 >	24.66
0253	VV	08L		07/27/89	1.298	6.17	142.00	23.01 >	43.52
0253	VV	0AP		08/10/89	1.202	6.74	9.06	1.34 >	22.86
0253	VV	0BK		08/17/89	1.236	5.31	26.70	5.03 >	30.85
0253	VV	0DW		09/07/89	1.225	4.55	100.00	21.97 >	48.64
0253	VV	0GF		10/05/89	1.282	7.33	8.87	1.21 >	11.29
0253	VV	0ID		11/02/89	1.232	5.27	38.20	7.24 >	34.25
0253	YF	017	45	11/17/88	0.881	0.00	12.90	0.00 >	4.99
0253	YF	01C	45	11/17/88	1.023	0.00	15.00	0.00	3.17
0253	YF	01X	43	11/18/88	1.017	0.00	8.46	0.00	2.23
0253	YF	024	31	11/18/88	1.012	0.00	8.09	0.00	1.36
0253	YF	001	01	11/22/88	0.811	0.00	9.28	0.00	1.91
0253	YF	006	01	11/22/88	0.907	0.00	19.90	0.00	2.54
0253	YF	013	01	11/22/88	0.681	0.00	17.10	0.00	9.31
0253	YF	018	01	11/22/88	0.727	0.00	13.30	0.00	0.00
0253	YF	02L	45	12/06/88	0.838	0.00	6.94	0.00	0.00
0253	YF	02Q	45	12/06/88	0.731	0.00	6.60	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0253	YF	03F	45	12/07/88	0.833	0.00	15.30	0.00	0.00
0253	YF	03K	45	12/07/88	0.761	0.00	9.31	0.00	0.00
0253	YF	04B	45	12/07/88	0.949	0.00	10.70	0.00	0.00
0253	YF	04H	45	12/07/88	0.839	0.00	8.93	0.00	0.00
0253	YF	05A	1	12/12/88	1.052	0.00	8.83	0.00	> 1.02
0253	YF	05G	1	12/12/88	1.091	0.00	18.60	0.00	> 4.17
0253	YF	067	1	12/13/88	0.833	0.00	12.30	0.00	2.21
0253	YF	06U	01	12/19/88	0.630	0.00	19.80	0.00	7.87
0253	YF	06Y	01	12/19/88	0.646	0.00	21.20	0.00	5.19
0253	YF	07U	01	12/19/88	0.803	0.00	15.10	0.00	1.51
0253	YF	07Z	01	12/19/88	0.787	0.00	13.10	0.00	0.11
0253	YF	OAA	45	01/11/89	0.904	0.00	6.93	0.00	1.19
0253	YF	OAB	45	01/11/89	0.959	0.00	6.27	0.00	0.15
0253	YF	OAU	01	01/16/89	0.821	0.00	12.80	0.00	> 0.13
0253	YF	OB5	01	01/16/89	0.659	0.00	14.00	0.00	0.00
0253	YF	OCI	01	01/17/89	1.632	0.00	5.61	0.00	0.00
0253	YF	OCT	01	01/17/89	1.661	0.00	6.60	0.00	0.00
0253	YF	OE4	1	01/23/89	1.033	0.00	3.67	0.00	0.74
0253	YF	OED	1	01/23/89	0.923	0.00	2.89	0.00	0.23
0253	YF	OFK	1	01/24/89	1.105	0.00	3.20	0.00	0.00
0253	YF	OFV	1	01/24/89	0.922	0.00	7.48	0.00	0.13
0253	YF	OGT	1	01/30/89	0.931	0.00	5.73	0.00	0.00
0253	YF	OH4	1	01/30/89	0.978	0.00	5.84	0.00	0.15
0253	YF	OIH	1	01/31/89	0.945	0.00	9.28	0.00	> 0.10
0253	YF	OIS	1	01/31/89	0.970	0.00	7.23	0.00	1.39
0253	YF	OJT	1	02/06/89	1.159	0.00	6.86	0.00	> 3.44
0253	YF	OK1	1	02/06/89	1.171	0.00	5.70	0.00	3.24
0253	YF	OL2	1	02/07/89	1.114	0.00	> 100.00	0.00	0.00
0253	YF	OLA	1	02/07/89	1.094	0.00	> 100.00	0.00	0.00
0253	YF	OMG	01	02/13/89	1.068	0.00	8.14	0.00	1.46
0253	YF	OMK	01	02/13/89	1.182	0.00	8.30	0.00	3.10
0253	YF	ON5	01	02/14/89	1.215	0.00	15.50	0.00	5.46
0253	YF	ON9	01	02/14/89	1.049	0.00	14.20	0.00	> 7.03
0253	YF	OOX	1	02/20/89	1.273	0.00	4.50	0.00	0.00
0253	YF	OP4	1	02/20/89	1.204	0.00	5.52	0.00	0.18
0253	YF	OQH	1	02/21/89	1.246	0.00	6.60	0.00	0.11
0253	YF	OQO	1	02/21/89	1.273	0.00	5.97	0.00	0.00
0253	YF	ORD	1	02/24/89	0.991	0.00	5.61	0.00	> 0.10
0253	YF	ORK	1	02/24/89	1.106	0.00	8.11	0.00	0.26
0253	YF	OSN	1	02/27/89	1.018	0.00	6.45	0.00	0.67
0253	YF	OSX	1	02/27/89	1.102	0.00	6.34	0.00	1.30
0253	YF	OU5	1	02/27/89	0.998	0.00	2.56	0.00	0.00
0253	YF	OUG	1	02/27/89	0.975	0.00	2.90	0.00	> 0.02
0253	YF	OW1	1	03/06/89	1.099	0.00	5.85	0.00	> 1.81
0253	YF	OWF	1	03/06/89	1.116	0.00	4.45	0.00	0.02
0253	YF	OYJ	1	03/07/89	1.048	0.00	6.40	0.00	0.02
0253	YF	OYX	1	03/07/89	0.949	0.00	5.79	0.00	0.90
0253	YF	P02	1	03/10/89	1.067	0.00	6.15	0.00	0.00
0253	YF	P06	1	03/10/89	1.027	0.00	5.67	0.00	0.00
0253	YF	P11	01	03/13/89	0.849	0.00	5.29	0.00	0.00
0253	YF	P1F	01	03/13/89	0.772	0.00	2.80	0.00	0.00
0253	YF	P2P	01	03/14/89	0.782	0.00	4.17	0.00	0.02
0253	YF	P33	01	03/14/89	0.789	0.00	3.90	0.00	0.00
0253	YF	P5P	1	03/20/89	1.115	0.00	7.22	0.00	0.00
0253	YF	P63	1	03/20/89	0.994	0.00	6.37	0.00	0.03
0253	YF	P97	1	03/21/89	1.202	0.00	7.48	0.00	0.00
0253	YF	P9L	1	03/21/89	0.950	0.00	6.89	0.00	0.00
0253	YF	PC4	1	03/27/89	0.930	0.00	1.19	0.00	> 1.21
0253	YF	PCI	1	03/27/89	1.154	0.00	0.65	0.00	> 0.01
0253	YF	PE7	1	03/28/89	1.198	0.00	0.74	0.00	> 0.57
0253	YF	PEL	1	03/28/89	0.956	0.00	0.89	0.00	> 1.71
0253	YF	P97	1	04/03/89	0.938	0.00	8.13	0.00	> 5.38
0253	YF	P9L	1	04/03/89	1.141	0.00	6.37	0.00	2.79
0253	YF	PBA	1	04/04/89	1.195	0.00	8.03	0.00	> 4.62
0253	YF	PBO	1	04/04/89	1.154	0.00	6.34	0.00	> 4.73
0253	YF	PEP	1	04/10/89	0.843	0.00	20.20	0.00	> 10.13

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0253	YF	PF3	1	04/10/89	1.098	0.00	6.66	0.00	4.31
0253	YF	PGS	1	04/11/89	1.148	0.00	9.49	0.00	8.47
0253	YF	PH6	1	04/11/89	1.224	0.00	5.35	0.00	4.57
0253	YF	PJV	01	04/17/89	1.089	0.00	8.74	0.00	4.78
0253	YF	PK9	01	04/17/89	1.151	0.00	10.90	0.00	5.49
0253	YF	PLY	01	04/17/89	1.019	0.00	> 100.00	0.00	> 23.90
0253	YF	PMC	01	04/18/89	1.022	0.00	6.24	0.00	2.25
0253	YF	PPS	1	04/24/89	1.239	0.00	7.67	0.00	6.78
0253	YF	PRV	1	04/25/89	1.297	0.00	6.38	0.00	5.58
0253	YF	PVS	01	05/01/89	1.078	0.00	7.28	0.00	3.81
0253	YF	PXF	1	05/02/89	1.201	0.00	5.24	0.00	> 3.00
0253	YF	PZG	1	05/08/89	1.366	0.00	9.38	0.00	0.50
0253	YF	PZO	1	05/08/89	1.206	0.00	15.50	0.00	4.30
0253	YF	QOQ	1	05/08/89	1.088	0.00	9.27	0.00	0.12
0253	YF	QOV	1	05/08/89	1.095	0.00	4.41	0.00	0.00
0253	YF	Q1E	1	05/15/89	0.680	0.00	9.11	0.00	0.00
0253	YF	Q1J	1	05/15/89	0.859	0.00	7.73	0.00	0.00
0253	YF	Q35	1	05/15/89	0.763	0.00	6.17	0.00	0.00
0253	YF	Q3B	1	05/15/89	1.012	0.00	6.34	0.00	1.17
0253	YF	Q49	1	05/19/89	0.829	0.00	7.19	0.00	> 3.30
0253	YF	Q4L	1	05/19/89	0.782	0.00	6.70	0.00	0.45
0253	YF	Q57	1	05/22/89	1.252	0.00	4.95	0.00	> 0.03
0253	YF	Q5C	1	05/22/89	1.176	0.00	5.47	0.00	0.00
0253	YF	Q67	1	05/23/89	1.211	0.00	5.62	0.00	> 1.42
0253	YF	Q6C	1	05/23/89	0.847	0.00	3.20	0.00	> 0.60
0253	YF	QAI	01	06/02/89	1.033	0.00	9.50	0.00	3.27
0253	YF	QB2	01	06/02/89	0.845	0.00	16.60	0.00	> 8.00
0253	YF	QAS	01	06/02/89	0.979	0.00	7.96	0.00	0.10
0253	YF	QAR	01	06/02/89	0.925	0.00	19.00	0.00	8.20
0253	YF	Q8A	1	06/05/89	0.961	0.00	4.64	0.00	0.11
0253	YF	Q80	1	06/05/89	0.653	0.00	6.51	0.00	> 1.54
0253	YF	Q97	1	06/06/89	0.969	0.00	5.39	0.00	0.00
0253	YF	Q8X	1	06/06/89	0.947	0.00	2.32	0.00	> 0.11
0253	YF	QAG	01	06/08/89	1.092	0.00	13.00	0.00	7.05
0253	YF	QB8	1	06/12/89	1.099	0.00	13.80	0.00	3.56
0253	YF	QBJ	1	06/12/89	1.221	0.00	12.40	0.00	4.05
0253	YF	QDJ	1	06/13/89	1.143	0.00	6.80	0.00	0.06
0253	YF	QD8	1	06/13/89	1.134	0.00	10.00	0.00	0.07
0253	YF	QFW	1	06/19/89	0.947	0.00	16.10	0.00	> 6.83
0253	YF	QG7	1	06/19/89	1.112	0.00	14.10	0.00	> 6.18
0253	YF	QHV	1	06/20/89	1.186	0.00	7.96	0.00	1.59
0253	YF	QHK	1	06/20/89	1.127	0.00	7.49	0.00	1.12
0253	YF	QIK	1	06/26/89	1.078	0.00	21.30	0.00	> 13.07
0253	YF	QIV	1	06/26/89	1.208	0.00	10.70	0.00	4.85
0253	YF	QKJ	1	06/27/89	1.032	0.00	9.38	0.00	> 4.51
0253	YF	QK8	1	06/27/89	0.861	0.00	15.20	0.00	> 3.80
0253	YF	QM7	1	07/03/89	1.135	0.00	9.41	0.00	4.66
0253	YF	QLW	1	07/03/89	1.065	0.00	16.50	0.00	10.09
0253	YF	QNV	1	07/06/89	0.895	3.20	6.22	1.94	> 10.12
0253	YF	QNK	1	07/06/89	0.902	0.00	6.05	0.00	> 5.37
0253	YF	QR7	1	07/10/89	0.940	0.00	5.75	0.00	0.00
0253	YF	QQW	1	07/10/89	0.927	0.00	6.11	0.00	> 2.66
0253	YF	QPJ	1	07/10/89	1.063	0.00	8.64	0.00	4.34
0253	YF	QP8	1	07/10/89	1.097	0.00	9.48	0.00	> 5.96
0253	YF	QUC	1	07/17/89	1.153	0.00	17.50	0.00	0.00
0253	YF	QUS	1	07/17/89	1.072	0.00	3.98	0.00	> 0.20
0253	YF	QSV	1	07/17/89	1.195	0.00	9.41	0.00	> 4.06
0253	YF	QSK	1	07/17/89	1.088	0.00	11.70	0.00	6.57
0253	YF	QWW	1	07/24/89	1.108	0.00	10.00	0.00	1.70
0253	YF	QWL	1	07/24/89	1.255	0.00	7.91	0.00	> 2.41
0253	YF	QV8	1	07/24/89	1.075	0.00	6.72	0.00	0.00
0253	YF	QUX	1	07/24/89	0.908	0.00	16.20	0.00	> 10.59
0253	YF	RO6	1	07/31/89	1.117	0.00	5.75	0.00	0.15
0253	YF	RO3	1	07/31/89	1.101	0.00	7.96	0.00	> 5.62
0253	YF	QYK	1	07/31/89	1.057	0.00	9.70	0.00	6.22
0253	YF	QY9	1	07/31/89	1.097	0.00	8.87	0.00	2.91

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0253	YF	R3M	1	08/07/89	1.090	0.00	12.20	0.00 >	7.71
0253	YF	R3B	1	08/07/89	1.096	0.00	13.80	0.00 >	10.52
0253	YF	R1G	1	08/07/89	1.075	0.00	14.40	0.00 >	3.69
0253	YF	R15	1	08/07/89	0.852	0.00	25.30	0.00 >	18.93
0253	YF	R52	1	08/14/89	1.069	0.00	8.87	0.00 >	4.44
0253	YF	R4R	1	08/14/89	1.010	0.00	10.00	0.00 >	5.05
0253	YF	R6V	1	08/15/89	1.114	0.00	2.10	0.00 >	0.00
0253	YF	R6K	1	08/15/89	0.986	0.00	7.84	0.00 >	4.63
0253	YF	R8M	1	08/21/89	1.136	0.00	6.32	0.00 >	0.00
0253	YF	R8D	1	08/21/89	1.117	0.00	8.06	0.00 >	2.05
0253	YF	R9W	1	08/22/89	0.919	0.00	10.00	0.00 >	6.92
0253	YF	RA7	1	08/22/89	0.983	0.00	5.60	0.00 >	2.09
0253	YF	RC0	1	08/28/89	1.023	0.00	9.60	0.00 >	3.18
0253	YF	RBP	1	08/28/89	1.054	0.00	12.10	0.00 >	2.74
0253	YF	RDI	1	08/29/89	0.938	0.00	6.00	0.00 >	0.00
0253	YF	RDU	1	08/29/89	0.866	0.00	7.17	0.00 >	1.29
0253	YF	RFP	1	09/06/89	0.703	0.00	6.45	0.00 >	6.80
0253	YF	RFE	1	09/06/89	0.797	10.00	6.94	0.69 >	8.52
0253	YF	RHI	1	09/07/89	0.727	0.00	5.98	0.00 >	2.86
0253	YF	RJB	1	09/11/89	0.674	0.00	13.70	0.00 >	3.11
0253	YF	RJO	1	09/11/89	0.521	0.00	28.30	0.00 >	0.75
0253	YF	RLH	1	09/12/89	0.774	0.00	8.95	0.00 >	0.92
0253	YF	RL6	1	09/12/89	0.748	0.00	9.46	0.00 >	1.94
0253	YF	RU8	1	10/02/89	0.956	0.00	8.21	0.00 >	0.22
0253	YF	RUJ	1	10/02/89	0.906	0.00	10.00	0.00 >	0.26
0253	YF	RW1	1	10/03/89	0.585	0.00	16.20	0.00 >	2.40
0253	YF	RWC	1	10/03/89	0.968	0.00	9.69	0.00 >	4.76
0253	YF	RY5	1	10/09/89	0.940	0.00	10.00	0.00 >	1.89
0253	YF	RXU	1	10/09/89	0.707	0.00	18.80	0.00 >	7.95
0253	YF	S27	1	10/10/89	0.869	0.00	17.30	0.00 >	11.30
0253	YF	S23	1	10/10/89	0.845	0.00	18.90	0.00 >	10.36
0253	YF	S3D	1	10/17/89	0.941	0.00	6.16	0.00 >	0.61
0253	YF	S30	1	10/17/89	0.751	0.00	13.30	0.00 >	8.91
0253	YF	S5E	1	10/23/89	0.874	0.00	25.10	0.00 >	17.62
0253	YF	S5P	1	10/23/89	1.035	0.00	16.20	0.00 >	4.84
0253	YF	S75	1	10/24/89	0.820	0.00	18.10	0.00 >	11.22
0253	YF	S6U	1	10/24/89	0.825	0.00	21.40	0.00 >	14.15
0253	YF	S9Y	1	10/30/89	0.821	0.00	13.40	0.00 >	7.78
0253	YF	S9K	1	10/30/89	0.602	0.00	22.90	0.00 >	16.52
0253	YF	SC6	1	10/31/89	0.597	0.00	15.70	0.00 >	5.16
0253	YF	SBS	1	10/31/89	0.481	0.00	12.40	0.00 >	4.10
0253	YF	SEO	1	11/07/89	0.812	0.00	9.64	0.00 >	1.01
0253	YF	SED	1	11/07/89	0.837	0.00	12.70	0.00 >	1.43
0253	YF	SGD	1	11/09/89	0.705	0.00	17.80	0.00 >	2.69
0253	YF	S3O	1	11/09/89	0.716	0.00	24.90	0.00 >	17.85
0253	YF	SIG	1	11/14/89	0.605	20.10	51.80	2.58 >	21.32
0253	YF	SI6	1	11/14/89	0.638	0.00	49.90	0.00 >	15.30
0272	JE	QOX	41	05/10/89	0.932	0.00	0.51	0.00 >	0.00
0272	PT	Q19	41	05/10/89	0.699	0.00	0.59	0.00 >	0.07
0272	SF	Q13	41	05/10/89	0.993	0.00	0.62	0.00 >	0.65
0272	VE	Q4Z	1	12/11/88	1.347	0.00	2.79	0.00 >	0.00
0272	VE	QOH	41	05/09/89	0.903	0.00	0.67	0.00 >	0.00
0272	YF	QOR	41	05/08/89	1.072	0.00	0.56	0.00 >	0.00
0302	JE	RAT	1	08/23/89	0.464	0.00 <	0.32	0.00 >	0.00
0302	PT	RBJ	1	08/23/89	0.736	0.00 <	0.32	0.00 >	0.00
0302	SF	RB6	1	08/23/89	0.732	0.00 <	0.32	0.00 >	0.00
0302	VE	Q4Z	1	12/12/88	1.347	0.00 >	1.00	0.00 >	0.00
0302	VE	RAG	1	08/25/89	0.982	0.00 <	0.32	0.00 >	0.00
0302	YF	RA3	1	08/22/89	0.842	0.00 <	0.32	0.00 >	0.00
0303	JE	OEG	46	01/23/89	1.118	0.00	28.30	0.00 >	22.48
0303	PT	OEQ	46	01/24/89	0.807	4.25 >	320.00 >	75.20 >	59.26
0303	SF	OFO	46	01/24/89	0.924	0.00	190.00	0.00 >	0.00
0303	VE	O50	1	12/12/88	1.351	0.00	10.50	0.00 >	3.07
0303	VE	ODW	46	01/23/89	1.188	0.00	24.70	0.00 >	7.58
0303	VSV	001	1	12/09/88	1.246	1.55	7.89	5.09 >	37.09
0303	VSV	002	1	12/09/88	1.347	1.73	8.03	4.64 >	30.25

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0303	VSV	003	1	12/09/88	1.376	2.57	7.82	3.04 >	33.17
0303	VSV	004	1	12/09/88	1.402	1.74	6.75	3.87 >	27.97
0303	VSV	007	1	01/20/89	1.127	5.39	194.00	36.10 >	49.14
0303	VSV	009	1	01/27/89	1.452	2.17	69.80	32.10 >	58.25
0303	VSV	00J	1	02/03/89	1.609	1.86	9.65	5.19 >	39.84
0303	VSV	017	01	02/10/89	1.406	1.73	23.80	13.70 >	51.54
0303	VSV	01D	01	02/17/89	1.481	1.27	9.38	7.38 >	50.57
0303	VSV	010	01	02/24/89	1.338	2.03	8.06	3.97 >	31.67
0303	VSV	020	01	03/03/89	1.275	1.70	27.80	16.40 >	57.32
0303	VSV	02P	1	04/21/89	1.429 <	1.00 <	1.00 ~	1.00 >	2.54
0303	VSV	03B	1	05/12/89	1.560	1.79	4.77	2.67 >	14.17
0303	VSV	03K	1	05/19/89	1.335	3.00	7.12	2.37	12.11
0303	VSV	04L	1	06/02/89	1.391	1.79	5.65	3.16 >	16.02
0303	VSV	03W	1	06/09/89	1.267	1.65	23.20	14.00 >	51.34
0303	VSV	044	1	06/06/89	1.279	1.94	6.46	3.33 >	23.47
0303	VSV	04E	1	06/23/89	1.343	1.92	5.18	2.70 >	17.07
0303	VSV	04R	1	07/07/89	1.456	2.23	4.33	1.94 >	9.91
0303	VSV	04Y	1	07/21/89	1.472	2.08	6.72	3.23	15.41
0303	VSV	058	1	07/28/89	1.091	1.96	47.70	24.28 >	51.93
0303	VSV	05I	1	08/04/89	1.608	2.01	8.17	4.07 >	30.15
0303	VSV	05U	1	09/15/89	1.283	4.38 >	320.00 >	73.07 >	60.43
0303	VSV	064	1	10/13/89	1.487	2.26	5.96	2.64 >	12.63
0303	VSV	06F	1	10/20/89	1.111	4.68	30.00	6.41 >	24.37
0303	VSV	06T	1	10/24/89	1.300	1.56	8.82	5.64 >	29.97
0303	VSV	074	1	10/27/89	0.968	1.78	25.80	14.55 >	44.03
0303	VSV	07I	1	11/03/89	1.356	1.66	7.45	4.49 >	25.64
0303	VSV	07U	1	11/10/89	1.577	1.28	8.59	6.74 >	37.28
0303	YF	OE6	46	01/23/89	0.986	0.00	87.50	0.00	0.73
0346	JE	QOY	2	05/10/89	0.913	0.00	0.74	0.00	1.85
0346	PT	Q1A	2	05/10/89	0.754	0.00	2.28	0.00 >	0.32
0346	SF	Q14	2	05/10/89	0.961	0.54	1.76	3.26 >	15.31
0346	VE	QOI	2	05/09/89	0.879	2.76	2.29	0.83 >	7.21
0346	YF	QOS	2	05/08/89	1.034	0.00	1.67	0.00	0.40
0347	JE	QOY	41	05/10/89	0.913	2.08	4.94	2.37	12.33
0347	PT	Q1A	41	05/10/89	0.754	0.00	5.59	0.00 >	16.85
0347	SF	Q14	41	05/10/89	0.961	0.00	6.60	0.00	1.78
0347	VE	QOI	41	05/09/89	0.879	0.00	1.60	0.00	0.00
0347	YF	QOS	41	05/08/89	1.034	0.00	4.20	0.00	0.00
0353	VE	PE1	25	04/07/89	0.940	0.00 <	0.10	0.00	0.00
0360	JE	OKC	48	02/06/89	0.722	0.04	0.28	6.61 >	30.84
0360	JE	OKC	48	02/06/89	0.722	0.00 >	0.00	0.00 >	0.08
0360	JE	RAT	2	08/23/89	0.464	0.04	0.25	5.64	27.74
0360	PT	OKL	48	02/07/89	0.992	0.04	0.18	4.50 >	28.15
0360	PT	OKL	48	02/07/89	0.992	0.00 >	0.00	0.00	0.00
0360	PT	RBJ	2	08/23/89	0.736	0.00	0.20	0.00	6.96
0360	SF	OKU	48	02/07/89	1.334	0.09	0.25	2.74	15.44
0360	SF	OKU	48	02/07/89	1.334	0.00 >	0.00	0.00	1.60
0360	SF	RB6	2	08/23/89	0.732	0.00	0.10	0.00 >	0.80
0360	VE	OK3	48	02/06/89	1.007	0.00	0.18	0.00	0.00
0360	VE	OK4	48	02/06/89	0.948	0.00 >	0.00	0.00	0.13
0360	VE	RAG	2	08/25/89	0.982	0.00	0.09	0.00	0.20
0360	VSV	001	48	01/20/89	1.082	0.00 <	1.00	0.00	0.00
0360	VSV	001	48	01/20/89	1.082	0.00	0.17	0.00	0.11
0360	VV	00B	48	01/26/89	1.737	0.00 <	1.00	0.00	0.00
0360	VV	00B	48	01/26/89	1.737	0.00	0.19	0.00	0.00
0360	YF	OJU	48	02/06/89	1.193	0.08	0.21	2.72 >	11.70
0360	YF	OJU	48	02/06/89	1.193	0.00 >	0.00	0.00	0.41
0360	YF	RA3	2	08/22/89	0.842	0.05	0.20	4.19	22.90
0361	JE	OKD	48	02/06/89	0.660	0.01	0.04	4.00 >	29.61
0361	JE	OKD	48	02/06/89	0.660	0.00 >	0.00	0.00 >	0.08
0361	JE	RAU	2	08/23/89	0.427 <	0.03	0.06 >	1.92 >	3.71
0361	PT	OKM	48	02/07/89	0.911	0.01	0.05	3.93 >	21.60
0361	PT	OKM	48	02/07/89	0.911	0.00 >	0.00	0.00 >	0.30
0361	PT	RBK	2	08/23/89	0.735	0.00	0.06	0.00 >	0.60
0361	SF	060	2	12/13/88	0.564	0.00	0.01	0.00	0.00
0361	SF	OKV	48	02/07/89	1.324	0.00	0.04	0.00 >	11.84

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
0361	SF	OKV	48	02/07/89	1.324	0.00 >	0.00	0.00 >	3.10
0361	SF	RB7	2	08/23/89	0.701	0.00	0.05	0.00 >	0.06
0361	VE	OK3	48	02/06/89	1.007	0.00	0.05	0.00 >	1.03
0361	VE	OK4	48	02/06/89	0.948	0.00 >	0.00	0.00	0.55
0361	VE	RAH	2	08/25/89	0.866	0.00	0.06	0.00	0.00
0361	VSV	001	48	01/27/89	1.266	0.00 <	1.00	0.00	0.00
0361	VSV	001	48	01/27/89	1.266	0.00	0.09	0.00	0.00
0361	VV	00C	48	01/26/89	1.741	0.00 <	1.00	0.00	0.00
0361	VV	00C	48	01/26/89	1.741	0.00	0.05	0.00 >	0.50
0361	YF	OJV	48	02/06/89	1.182	0.02	0.05	2.72	14.54
0361	YF	OJV	48	02/06/89	1.182	0.00 >	0.00	0.00	0.28
0361	YF	RA4	2	08/22/89	1.020	< 0.03	0.05 >	1.63 >	5.46
0585	JE	Q5Q	30	05/23/89	0.943	0.00	92.20	0.00	0.00
0585	PT	Q5W	30	05/23/89	0.810	0.00	283.00	0.00	0.28
0585	SF	Q62	30	05/23/89	1.175	0.00 >	320.00	0.00	0.00
0585	VE	Q5K	30	05/22/89	0.623	0.00	56.70	0.00	0.00
0585	YF	Q58	30	05/22/89	1.212	0.00	183.00	0.00	0.00
0646	JE	RAU	2	08/23/89	0.427	0.21	1.80	8.72 >	25.70
0646	PT	RBK	2	08/23/89	0.735	0.00	0.60	0.00	0.75
0646	SF	RB7	2	08/23/89	0.701	0.00	0.61	0.00	4.61
0646	VE	RAH	2	08/25/89	0.866	0.79	0.93	1.18 >	11.20
0646	YF	RA4	2	08/22/89	1.020	0.29	0.60	2.10	9.18
0712	JE	RAV	30	08/23/89	0.331	0.00 >	100.00	0.00	0.00
0712	PT	RBL	30	08/23/89	0.691	0.00 >	100.00	0.00	0.00
0712	SF	RB8	30	08/23/89	0.736	0.00 >	100.00	0.00	0.00
0712	VE	RAI	30	08/25/89	0.781	0.00 >	100.00	0.00	1.52
0712	YF	RA5	30	08/22/89	0.968	0.00 >	100.00	0.00	0.00
0801	VE	P4T	13	03/17/89	1.050	0.00	16.20	0.00 >	0.00
0866	SF	08A	05	12/21/88	1.067	0.00 >	100.00	0.00	0.00
0866	YF	07V	05	12/19/88	0.712	0.00 >	100.00	0.00	0.00
0890	JE	080	09	12/20/88	1.086	0.00 >	320.00	0.00	0.00
0890	SF	08A	09	12/21/88	1.067	0.00 >	320.00	0.00 >	16.48
0890	YF	07V	09	12/19/88	0.712	0.00 >	320.00	0.00	0.00
0919	JE	P3C	52	03/14/89	0.862	0.00	68.40	0.00	0.00
0919	PT	P46	52	03/15/89	0.721	65.70	105.00	1.59 >	16.54
0919	SF	P3R	52	03/15/89	0.502	2.30	82.50	35.90	38.47
0919	VE	P10	52	03/14/89	0.909	0.00	73.00	0.00	3.85
0919	VSV	01X	52	03/03/89	1.399	0.00	111.00	0.00 >	0.11
0919	VV	01X	52	03/23/89	1.585	0.00	9.47	0.00	0.00
0919	YF	P2X	52	03/14/89	0.817	0.00	81.20	0.00	0.00
0999	JE	Q5R	5	05/23/89	0.985	0.00	35.80	0.00	0.00
0999	PT	Q5X	5	05/23/89	0.729	0.00	69.00	0.00 >	6.54
0999	SF	Q63	5	05/23/89	1.156	0.00	80.60	0.00	0.00
0999	VE	Q5L	5	05/22/89	0.537	0.00	47.10	0.00	0.00
0999	YF	Q59	5	05/22/89	1.188	0.00	32.00	0.00	0.00
1019	JE	RAV	28	08/23/89	0.331	0.70 >	1.00 >	1.44 >	14.16
1019	PT	RBL	28	08/23/89	0.691	0.90 >	1.00 >	1.11 >	4.41
1019	SF	RB8	28	08/23/89	0.736	0.70 >	1.00 >	1.43 >	7.04
1019	VE	RAI	28	08/25/89	0.781	0.55 >	1.00 >	1.83 >	11.45
1019	YF	RA5	28	08/22/89	0.968	0.00 >	1.00	0.00 >	5.36
1052	JE	081	09	12/20/88	1.193	0.00	239.00	0.00	0.00
1052	SF	08B	09	12/21/88	0.980	0.00 >	320.00	0.00 >	7.98
1052	YF	07W	09	12/19/88	0.537	0.00 >	320.00	0.00 >	0.10
1116	JE	OG5	45	01/24/89	1.129	0.00	163.00	0.00	0.00
1116	JE	RAW	45	08/23/89	0.364	0.00 >	320.00	0.00 >	5.69
1116	PT	O9T	45	01/12/89	0.870	0.00	226.00	0.00	0.00
1116	PT	OVB	45	03/01/89	1.037	0.00	167.00	0.00	0.02
1116	PT	RBM	45	08/23/89	0.677	0.00 >	320.00	0.00 >	2.96
1116	SF	OA4	45	01/12/89	0.764	0.00	244.00	0.00	0.00
1116	SF	RB9	45	08/23/89	0.663	0.00	320.00	0.00 >	1.50
1116	VE	OFH	45	01/24/89	1.029	0.00	170.00	0.00	0.00
1116	VE	RA7	45	08/25/89	0.658	0.00 >	320.00	0.00	0.00
1116	YF	OFT	45	01/24/89	0.917	0.00	173.00	0.00	0.00
1116	YF	RA6	45	08/22/89	1.016	0.00 >	320.00	0.00	0.00
1117	JE	OG6	45	01/24/89	1.008	0.00 >	320.00	0.00	0.20
1117	JE	RAW	45	08/23/89	0.364	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
1117	PT	O9U	45	01/12/89	0.942	0.00	> 320.00	0.00	> 6.10
1117	PT	OVC	45	03/01/89	1.123	0.00	> 320.00	0.00	> 1.52
1117	PT	RBM	45	08/23/89	0.677	0.00	> 320.00	0.00	> 3.45
1117	SF	OA5	45	01/12/89	0.712	0.00	> 320.00	0.00	0.80
1117	SF	RB9	45	08/23/89	0.663	0.00	> 320.00	0.00	0.00
1117	VE	OFI	45	01/24/89	1.147	0.00	250.00	0.00	0.00
1117	VE	RAJ	45	08/25/89	0.658	0.00	> 320.00	0.00	0.00
1117	YF	OFU	45	01/24/89	0.924	0.00	> 320.00	0.00	0.40
1117	YF	RA6	45	08/22/89	1.016	0.00	> 320.00	0.00	> 0.04
1159	JE	RAX	52	02/23/89	0.410	0.00	168.00	0.00	> 5.14
1159	PT	RBN	52	08/23/89	0.697	60.40	132.00	2.18	10.02
1159	SF	RBA	52	08/23/89	0.777	32.90	167.00	5.08	25.57
1159	VE	RAK	52	08/25/89	0.652	64.20	192.00	2.99	15.49
1159	YF	RA7	52	08/22/89	0.983	0.00	202.00	0.00	2.66
1160	VSV	001	5	12/09/88	1.246	< 0.32	2.89	> 9.04	> 34.45
1160	VSV	002	5	12/09/88	1.347	< 0.32	2.30	> 7.20	> 24.38
1160	VSV	003	5	12/09/88	1.376	0.52	1.76	3.40	34.67
1160	VSV	004	5	12/09/88	1.402	0.33	1.77	5.36	> 23.09
1160	VSV	007	5	01/20/89	1.127	1.98	37.60	19.00	> 44.44
1160	VSV	009	5	01/27/89	1.452	0.56	5.01	8.98	> 33.05
1160	VSV	00J	5	02/03/89	1.609	< 0.32	2.17	> 6.79	> 30.95
1160	VSV	017	05	02/10/89	1.406	0.49	10.00	20.60	> 41.54
1160	VSV	01D	05	02/17/89	1.481	0.42	6.11	14.70	> 40.69
1160	VSV	010	05	02/24/89	1.338	0.50	2.56	5.15	> 27.06
1160	VSV	020	05	03/03/89	1.275	0.55	4.80	8.69	> 44.79
1160	VSV	02P	5	04/21/89	1.429	< 0.32	< 0.32	1.00	> 1.23
1160	VSV	03B	5	05/12/89	1.560	< 0.32	1.49	> 4.65	> 17.19
1160	VSV	03K	5	05/19/89	1.335	0.58	2.30	4.00	> 19.03
1160	VSV	04L	5	06/02/89	1.391	0.73	2.67	3.66	> 19.84
1160	VSV	03W	5	06/09/89	1.267	0.49	12.90	26.10	> 53.38
1160	VSV	044	5	06/16/89	1.279	0.57	3.20	5.59	29.32
1160	VSV	04E	5	06/23/89	1.343	0.57	2.77	4.82	> 25.24
1160	VSV	04R	5	07/07/89	1.456	0.76	1.89	2.48	> 10.75
1160	VSV	04Y	5	07/21/89	1.472	0.92	3.20	3.49	20.11
1160	VSV	058	5	07/28/89	1.091	0.55	19.80	36.03	> 52.59
1160	VSV	05I	5	08/04/89	1.608	0.59	2.49	4.21	> 24.94
1160	VSV	05U	5	09/15/89	1.283	0.76	16.20	21.33	> 47.39
1160	VSV	064	5	10/13/89	1.487	2.39	2.56	1.07	7.06
1160	VSV	06F	5	10/20/89	1.111	3.81	23.40	6.13	> 24.27
1160	VSV	06T	5	10/24/89	1.300	0.84	8.70	10.37	> 34.59
1160	VSV	074	5	10/27/89	0.968	0.45	8.87	19.78	> 41.83
1160	VSV	07I	5	11/03/89	1.356	< 0.32	1.31	> 4.11	> 21.79
1160	VSV	07U	5	11/10/89	1.577	0.59	4.90	8.35	34.57
1176	JE	OEG	46	01/23/89	1.118	0.00	214.00	0.00	> 9.33
1176	PT	OEQ	46	01/24/89	0.807	0.00	247.00	0.00	0.00
1176	SF	OFO	46	01/24/89	0.924	0.00	152.00	0.00	0.00
1176	VE	ODW	46	01/23/89	1.188	0.00	32.00	0.00	0.00
1176	YF	OE6	46	01/23/89	0.986	0.00	256.00	0.00	0.00
1210	JE	RC2	27	08/29/89	0.811	0.00	128.00	0.00	0.00
1210	PT	RD5	27	08/29/89	0.592	0.00	105.00	0.00	0.00
1210	SF	RCS	27	08/29/89	0.887	0.00	131.00	0.00	> 3.25
1210	VE	PIT	27	04/14/89	1.246	0.00	56.00	0.00	0.00
1210	VE	RTV	27	10/06/89	0.793	0.00	123.00	0.00	8.44
1210	YF	RBP	27	08/28/89	1.054	0.00	125.00	0.00	0.00
1211	VE	PIU	27	04/14/89	1.185	0.00	98.80	0.00	2.22
1211	VV	OBL	27	08/17/89	1.249	20.20	171.00	8.48	32.10
1212	VE	PIU	27	04/14/89	1.185	0.00	95.20	0.00	0.00
1213	JE	RC3	27	08/29/89	0.827	0.00	80.60	0.00	0.00
1213	PT	RD6	27	08/29/89	0.525	0.00	93.80	0.00	> 1.60
1213	SF	RCT	27	08/29/89	0.814	0.00	141.00	0.00	3.86
1213	VE	PIV	27	04/14/89	1.227	0.00	111.00	0.00	0.00
1213	VE	RTW	27	10/06/89	0.795	0.00	142.00	0.00	5.23
1213	YF	RBQ	27	08/28/89	0.939	0.00	105.00	0.00	0.00
1214	JE	P3C	52	03/14/89	0.862	0.00	85.10	0.00	0.80
1214	PT	P46	52	03/15/89	0.721	20.50	118.00	5.74	> 30.66
1214	SF	P3R	52	03/15/89	0.502	0.00	111.00	0.00	> 3.24

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
1214	VE	P10	52	03/14/89	0.909	0.00	46.80	0.00 >	5.79
1214	VSV	01Y	52	03/03/89	1.451	3.05	20.20	6.61 >	30.25
1214	VSV	030	52	05/12/89	1.477	2.33	5.78	2.48	10.52
1214	VV	01Y	52	03/23/89	1.384	1.66	109.00	65.90 >	65.14
1214	YF	P2X	52	03/14/89	0.817	0.00	79.00	0.00	0.00
1215	JE	RC3	27	08/29/89	0.827	0.00	66.00	0.00	0.00
1215	PT	PDB	53	03/28/89	0.731	30.20	114.00	3.79 >	31.88
1215	PT	RD6	27	08/29/89	0.525	0.00	73.40	0.00	0.00
1215	SF	PCW	53	03/28/89	0.667	0.00	184.00	0.00	14.89
1215	SF	RCT	27	08/29/89	0.814	0.00	105.00	0.00	0.91
1215	VE	PBN	53	03/27/89	0.859	0.00	151.00	0.00	0.60
1215	VE	PIV	27	04/14/89	1.227	0.00	83.60	0.00	0.00
1215	VE	RTW	27	10/06/89	0.795	100.00	137.00	1.37	8.01
1215	YF	PCH	53	03/27/89	1.099	0.00	118.00	0.00	1.36
1215	YF	RBQ	27	08/28/89	0.939	0.00	79.60	0.00	0.00
1217	JE	P3D	52	03/14/89	0.851	0.00 >	320.00	0.00	0.00
1217	PT	P47	52	03/15/89	0.881	19.20	138.00	7.21	31.42
1217	SF	P3S	52	03/15/89	0.663	10.70	97.80	9.12	44.43
1217	VE	P1P	52	03/14/89	0.870	0.00	100.00	0.00	0.00
1217	VSV	01Y	52	03/03/89	1.451	41.60	218.00	5.24 >	29.06
1217	VSV	031	52	05/12/89	1.429	55.90	144.00	2.58	13.33
1217	VV	01Y	52	03/23/89	1.384	0.00	172.00	0.00 >	6.67
1217	YF	P2Y	52	03/14/89	0.870	0.00	110.00	0.00	0.00
1250	SF	08B	05	12/21/88	0.980	0.00	10.80	0.00 >	6.42
1250	YF	07W	05	12/19/88	0.537	0.00	3.89	0.00 >	1.59
1307	JE	RC4	33	08/29/89	0.760	0.00	52.20	0.00	0.00
1307	PT	RD7	33	08/29/89	0.536	0.00	50.10	0.00	0.00
1307	SF	RCU	33	08/29/89	0.842	0.00	42.50	0.00	1.88
1307	VE	RTX	33	10/06/89	0.826	0.00	22.60	0.00	12.97
1307	YF	RBR	33	08/28/89	1.027	0.00	59.80	0.00	0.00
1308	JE	RC4	33	08/29/89	0.760	0.00 >	100.00	0.00	0.22
1308	PT	RD7	33	08/29/89	0.536	0.00 >	100.00	0.00	0.00
1308	SF	RCU	33	08/29/89	0.842	0.00	77.30	0.00	0.00
1308	VE	RTX	33	10/06/89	0.826	0.00	38.50	0.00 >	18.75
1308	YF	RBR	33	08/28/89	1.027	0.00 >	100.00	0.00	0.00
1312	JE	RC5	33	08/29/89	0.754	0.00 >	100.00	0.00 >	0.05
1312	PT	RD8	33	08/29/89	0.496	0.00 >	100.00	0.00 >	0.79
1312	SF	RCV	33	08/29/89	0.792	0.00 >	100.00	0.00 >	0.92
1312	VE	RTY	33	10/06/89	0.815	0.00 >	100.00	0.00	3.65
1312	YF	RBS	33	08/28/89	1.007	0.00 >	100.00	0.00	0.00
1315	JE	RC5	33	08/29/89	0.754	0.00 >	100.00	0.00	0.00
1315	PT	RD8	33	08/29/89	0.496	0.00 >	100.00	0.00 >	2.14
1315	SF	RCV	33	08/29/89	0.792	0.00 >	100.00	0.00	0.00
1315	VE	RTY	33	10/06/89	0.815	0.00 >	100.00	0.00 >	16.98
1315	YF	RBS	33	08/28/89	1.007	0.00 >	100.00	0.00	0.00
1337	JE	RC6	33	08/29/89	0.806	13.90 >	32.00 >	2.30 >	16.15
1337	PT	RD9	33	08/29/89	0.488	0.00 >	32.00	0.00 >	4.01
1337	SF	RCW	33	08/29/89	0.868	23.50 >	32.00 >	1.36 >	5.53
1337	VE	RTZ	33	10/06/89	0.839	0.00 >	32.00	0.00 >	0.96
1337	YF	RBT	33	08/28/89	1.064	0.00	9.50	0.00	0.00
1392	JE	RC6	33	08/29/89	0.806	0.00	69.80	0.00	6.15
1392	PT	RD9	33	08/29/89	0.488	0.00	75.60	0.00 >	4.55
1392	SF	RCW	33	08/29/89	0.868	0.00	66.00	0.00	0.00
1392	VE	RTZ	33	10/06/89	0.839	0.00	48.40	0.00 >	4.52
1392	VSV	05J	33	08/11/89	1.550	0.00	90.60	0.00 >	1.50
1392	YF	RBT	33	08/28/89	1.064	0.00	70.60	0.00	0.11
1569	VE	P4K	17	03/17/89	1.052	0.00	85.40	0.00	0.34
1645	JE	RC7	33	08/29/89	0.941	1.79	23.80	13.28 >	40.13
1645	PT	RDA	33	08/29/89	0.527	0.00	19.70	0.00 >	9.57
1645	SF	RCX	33	08/29/89	0.906	0.57	14.10	24.55 >	39.74
1645	VE	RU0	33	10/06/89	0.920	0.00 >	32.00	0.00 >	2.28
1645	VSV	05J	33	08/11/89	1.550	268.00 >	320.00 >	1.19 >	8.58
1645	YF	RBU	33	08/28/89	1.079	0.00	10.00	0.00	0.00
1654	JE	OEH	46	01/23/89	1.125	0.00	168.00	0.00 >	29.99
1654	JE	RC7	53	08/29/89	0.941	0.00	27.70	0.00 >	6.03
1654	PT	OER	46	01/24/89	0.803	6.23	6.60	1.06 >	19.28

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
1654	PT	RDA	53	08/29/89	0.527	0.00	3.20	0.00	7.15
1654	SF	OF1	46	01/24/89	1.133	0.00 >	320.00	0.00	0.40
1654	SF	RCX	53	08/29/89	0.906	0.00	62.20	0.00	0.00
1654	VE	ODX	46	01/23/89	1.226	0.00	27.40	0.00 >	9.47
1654	VE	RU0	53	10/06/89	0.920	0.00	76.60	0.00 >	11.29
1654	VV	03W	46	05/01/89	1.754	0.81	9.74	12.10 >	38.04
1654	VV	040	46	06/01/89	2.374	0.36	5.02	13.80 >	46.18
1654	VV	040	46	06/01/89	2.374	0.00 >	0.03	0.00 >	0.05
1654	YF	OE7	46	01/23/89	0.930	0.00 >	320.00	0.00 >	0.40
1654	YF	RBU	53	08/28/89	1.079	0.00	1.63	0.00	0.00
1730	JE	01Q	45	11/22/88	0.733	0.00 >	320.00	0.00	0.00
1730	PT	107	45	11/22/88	0.868	0.00 >	320.00	0.00	0.00
1730	SF	10V	45	11/22/88	0.974	75.20 >	320.00 >	4.25 >	25.57
1730	VE	11D	45	11/22/88	1.446	0.00 >	320.00	0.00	0.00
1730	YF	001	45	11/22/88	0.811	0.00 >	320.00	0.00	0.00
1731	JE	01R	45	11/22/88	0.800	0.00	50.80	0.00	0.05
1731	PT	108	45	11/22/88	0.971	0.00	48.40	0.00	0.00
1731	SF	10W	45	11/22/88	0.822	0.00	151.00	0.00	0.00
1731	VE	11E	45	11/22/88	1.394	0.00	201.00	0.00	0.00
1731	YF	002	45	11/22/88	0.899	0.00	104.00	0.00	0.00
1732	JE	01R	45	11/22/88	0.800	0.00	25.70	0.00	0.00
1732	PT	108	45	11/22/88	0.971	0.00	38.90	0.00	0.00
1732	SF	10W	45	11/22/88	0.822	0.00	44.50	0.00	0.00
1732	VE	11E	45	11/22/88	1.394	0.00	67.40	0.00	0.00
1732	YF	002	45	11/22/88	0.899	0.00	32.50	0.00	0.00
1733	JE	01S	45	11/22/88	0.601	0.00	277.00	0.00	0.00
1733	PT	109	45	11/22/88	0.931	69.80	155.00	2.22	9.52
1733	SF	10X	45	11/22/88	0.812	0.00	196.00	0.00	0.00
1733	VE	11F	45	11/22/88	1.377	0.00	320.00	0.00 >	0.64
1733	YF	003	45	11/22/88	0.935	0.00	131.00	0.00	0.00
1734	JE	01D	45	11/17/88	1.265	0.00	192.00	0.00	0.00
1734	PT	00V	45	11/16/88	0.768	0.00	176.00	0.00	1.14
1734	SF	01J	45	11/16/88	1.022	0.00	202.00	0.00	5.85
1734	VE	011	45	11/16/88	1.258	0.00	188.00	0.00	0.00
1734	YF	017	45	11/17/88	0.881	0.00	257.00	0.00 >	0.71
1735	JE	01E	45	11/17/88	1.343	0.00	164.00	0.00	0.00
1735	PT	00W	45	11/16/88	0.665	0.00	182.00	0.00	2.04
1735	SF	01K	45	11/16/88	0.923	0.00	220.00	0.00	2.61
1735	VE	012	45	11/16/88	1.136	0.00 >	320.00	0.00 >	1.05
1735	YF	018	45	11/17/88	0.816	0.00	212.00	0.00 >	1.21
1736	JE	01E	45	11/17/88	1.343	0.00	311.00	0.00	0.00
1736	PT	00W	45	11/16/88	0.665	82.10	258.00	3.63 >	12.01
1736	SF	01K	45	11/16/88	0.923	0.00	222.00	0.00 >	2.51
1736	VE	012	45	11/16/88	1.136	0.00 >	320.00	0.00 >	2.70
1736	YF	018	45	11/17/88	0.816	255.00	290.00	1.14 >	6.32
1737	JE	01F	45	11/17/88	1.257	0.00	130.00	0.00	0.52
1737	PT	00X	45	11/16/88	0.693	0.00	119.00	0.00	0.00
1737	SF	01L	45	11/16/88	1.064	0.00	106.00	0.00	8.73
1737	VE	013	45	11/16/88	1.140	0.00	131.00	0.00	2.04
1737	YF	019	45	11/17/88	0.997	0.00	121.00	0.00 >	3.81
1738	JE	01F	45	11/17/88	1.257	0.00	65.20	0.00	0.00
1738	PT	00X	45	11/16/88	0.693	0.00	67.50	0.00	0.00
1738	SF	01L	45	11/16/88	1.064	0.00	73.50	0.00	9.60
1738	VE	013	45	11/16/88	1.140	0.00	76.70	0.00	0.20
1738	YF	019	45	11/17/88	0.997	0.00	77.90	0.00 >	5.30
1739	JE	01G	45	11/17/88	1.305	0.00 >	320.00	0.00	0.00
1739	PT	00Y	45	11/16/88	0.655	0.00 >	320.00	0.00 >	0.81
1739	SF	01M	45	11/16/88	0.909	0.00 >	320.00	0.00 >	5.01
1739	VE	014	45	11/16/88	1.140	0.00 >	320.00	0.00	0.00
1739	YF	01A	45	11/17/88	0.865	0.00 >	320.00	0.00 >	6.24
1740	JE	01G	45	11/17/88	1.305	0.00 >	320.00	0.00	0.00
1740	PT	00Y	45	11/16/88	0.655	0.00 >	320.00	0.00	0.00
1740	SF	01M	45	11/16/88	0.909	0.00 >	320.00	0.00	0.40
1740	VE	014	45	11/16/88	1.140	0.00 >	320.00	0.00 >	2.69
1740	YF	01A	45	11/17/88	0.865	0.00 >	320.00	0.00	7.11
1741	JE	01H	45	11/17/88	1.329	0.00	92.70	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
1741	PT	00Z	45	11/16/88	0.607	0.00	66.00	0.00	7.16
1741	VE	01N	45	11/16/88	0.937	0.00	79.20	0.00	3.24
1741	VE	015	45	11/16/88	1.174	0.00	77.30	0.00	0.00
1741	YF	01B	45	11/17/88	0.918	0.00	165.00	0.00 >	1.17
1742	JE	01H	45	11/17/88	1.329	0.00	16.60	0.00	0.12
1742	PT	00Z	45	11/16/88	0.607	0.00	13.80	0.00	6.60
1742	SF	01N	45	11/16/88	0.937	0.00	7.37	0.00	0.00
1742	VE	015	45	11/16/88	1.174	0.00	8.11	0.00	0.00
1742	YF	01B	45	11/17/88	0.918	0.00	18.10	0.00	0.11
1743	JE	01S	45	11/22/88	0.601	0.00	277.00	0.00	0.00
1743	PT	109	45	11/22/88	0.931	0.00	173.00	0.00	1.99
1743	SF	10X	45	11/22/88	0.812	0.00 <	1.00	0.00	0.00
1743	VE	11F	45	11/22/88	1.377	0.00	158.00	0.00	0.00
1743	YF	003	45	11/22/88	0.935	0.00	320.00	0.00	0.00
1744	JE	01T	45	11/22/88	0.509	0.00	24.00	0.00 >	0.10
1744	PT	10A	45	11/22/88	0.923	0.00	13.00	0.00	0.00
1744	SF	10Y	45	11/22/88	0.787	0.00	22.30	0.00	0.00
1744	VE	11G	45	11/22/88	1.372	0.00	18.10	0.00	0.00
1744	YF	004	45	11/22/88	0.908	0.00	56.20	0.00	0.00
1745	JE	01T	45	11/22/88	0.509	0.00 >	320.00	0.00 >	0.71
1745	PT	10A	45	11/22/88	0.923	0.00	201.00	0.00	0.00
1745	SF	10Y	45	11/22/88	0.787	0.00	176.00	0.00	0.00
1745	VE	11G	45	11/22/88	1.372	0.00 >	320.00	0.00	0.40
1745	YF	004	45	11/22/88	0.908	0.00 >	320.00	0.00 >	0.60
1746	JE	01U	45	11/22/88	0.670	0.00	21.60	0.00	0.34
1746	PT	10B	45	11/22/88	0.852	0.00	23.80	0.00	0.30
1746	SF	10Z	45	11/22/88	0.873	0.00	26.10	0.00	3.40
1746	VE	11H	45	11/22/88	1.218	0.00	29.30	0.00	0.00
1746	YF	005	45	11/22/88	0.927	0.00	65.20	0.00	0.00
1747	JE	01U	45	11/22/88	0.670	0.00	66.00	0.00	0.00
1747	PT	10B	45	11/22/88	0.852	0.00	33.60	0.00	0.00
1747	SF	10Z	45	11/22/88	0.873	0.00	60.50	0.00	0.00
1747	VE	11H	45	11/22/88	1.218	0.00	64.70	0.00 >	0.30
1747	YF	005	45	11/22/88	0.927	0.00	86.80	0.00 >	0.98
1748	JE	01V	45	11/22/88	0.602	0.00	203.00	0.00	0.00
1748	PT	10C	45	11/22/88	0.922	0.00	163.00	0.00	0.00
1748	SF	110	45	11/22/88	0.717	0.00	312.00	0.00	0.00
1748	VE	11I	45	11/22/88	1.475	0.00	251.00	0.00	0.00
1748	YF	006	45	11/22/88	0.907	0.00 >	320.00	0.00	0.20
1749	JE	01K	45	11/23/88	0.728	0.00	104.00	0.00	0.40
1749	PT	101	45	11/23/88	0.757	0.00	114.00	0.00	0.00
1749	SF	10P	45	11/23/88	0.750	0.00	96.30	0.00	0.44
1749	VE	007	45	11/23/88	1.381	0.00	152.00	0.00	0.11
1749	YF	013	45	11/22/88	0.681	0.00	102.00	0.00	1.19
1750	JE	01L	45	11/23/88	0.674	0.00 >	320.00	0.00	0.00
1750	PT	102	45	11/23/88	0.722	202.00 >	320.00 >	1.58 >	8.26
1750	SF	10Q	45	11/23/88	0.761	0.00 >	320.00	0.00	4.01
1750	VE	008	45	11/23/88	1.381	0.00 >	320.00	0.00	0.20
1750	YF	014	45	11/22/88	0.700	0.00 >	320.00	0.00	0.00
1751	JE	01L	45	11/23/88	0.674	0.00 >	320.00	0.00	0.00
1751	PT	102	45	11/23/88	0.722	0.00 >	320.00	0.00	0.00
1751	SF	10Q	45	11/23/88	0.761	0.00 >	320.00	0.00	0.00
1751	VE	008	45	11/23/88	1.381	0.00 >	320.00	0.00	0.00
1751	YF	014	45	11/22/88	0.700	0.00	320.00	0.00	0.00
1752	JE	OEH	46	01/23/89	1.125	0.00	45.90	0.00 >	11.12
1752	PT	OER	46	01/24/89	0.803	0.00	0.96	0.00	0.00
1752	SF	CD1	46	01/24/89	1.133	0.00	43.50	0.00	0.00
1752	VE	CDX	46	01/23/89	1.226	0.00	18.50	0.00 >	0.10
1752	VV	010	19	12/29/88	1.799	1.88	26.30	14.00 >	36.60
1752	VV	014	19	01/12/89	1.844	2.33	31.00	13.30 >	35.14
1752	VV	00A	19	01/26/89	1.811	1.68	26.10	15.50 >	34.94
1752	VV	012	19	02/09/89	1.529	2.60	32.80	12.60	35.74
1752	VV	01C	19	02/16/89	1.716	2.15	34.40	16.00 >	42.48
1752	VV	01F	19	02/23/89	1.735	2.57	24.60	9.57	27.28
1752	VV	01W	19	03/09/89	1.857	2.41	28.10	11.70 >	31.27
1752	VV	022	19	03/23/89	1.596	2.21	33.30	15.10 >	36.60

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
1752	VV	02E	19	03/30/89	1.453	1.87	38.30	20.50 >	47.94
1752	VV	02I	53	03/30/89	1.437	1.51	31.50	20.90 >	44.22
1752	VV	035	19	04/06/89	1.748	2.92	29.00	9.92 >	25.68
1752	VV	038	19	04/13/89	1.809	2.12	30.10	14.20 >	35.24
1752	VV	03S	19	05/04/89	1.741	1.74	28.20	16.20 >	40.49
1752	VV	047	19	05/11/89	1.623	1.29	17.70	13.80	34.07
1752	VV	04A	19	05/18/89	1.899	2.08	18.80	9.02 >	31.59
1752	VV	04M	19	06/01/89	2.243	3.51	31.10	8.85	34.26
1752	VV	058	19	06/08/89	1.315	2.00	59.00	29.50 >	54.65
1752	VV	05I	19	06/15/89	1.571	2.49	27.70	11.14	37.69
1752	VV	07B		07/13/89	1.329	2.00	32.00	15.98	45.29
1752	VV	08T		07/27/89	1.447	4.64	95.00	20.46 >	47.67
1752	VV	0AZ	58	08/10/89	1.211	2.50	62.50	25.03	46.27
1752	VV	0BO		08/17/89	1.327	2.12	30.80	14.50	34.64
1752	VV	0E7		09/07/89	1.189	2.59	61.10	23.61 >	43.40
1752	VV	0GR		10/05/89	1.304	1.46	22.30	15.29 >	43.07
1752	VV	0IP		11/02/89	1.406	1.87	45.80	24.46 >	48.02
1752	YF	0E7	46	01/23/89	0.930	0.00	59.50	0.00	0.27
1754	JE	RC8	21	08/29/89	0.900	0.00 >	320.00	0.00 >	1.65
1754	PT	RDB	21	08/29/89	0.527	0.00 >	320.00	0.00 >	6.19
1754	SF	RCY	21	08/29/89	0.914	0.00 >	320.00	0.00	0.00
1754	VE	RU1	21	10/06/89	0.533	0.00 >	320.00	0.00 >	1.74
1754	YF	RBV	21	08/28/89	1.166	0.00	210.00	0.00	0.34
1764	VE	PDH	22	04/07/89	1.129	0.00	119.00	0.00	0.15
1772	JE	R1V	56	08/08/89	0.807	0.00 >	320.00	0.00 >	9.84
1774	JE	QBW	56	06/13/89	0.789	0.00 >	320.00	0.00 >	1.35
1774	PT	QC8	56	06/14/89	0.779	300.00 >	320.00 >	1.07 >	13.43
1774	PT	R2L	56	08/08/89	0.650	0.00 >	320.00	0.00 >	7.23
1774	SF	QCA	56	06/13/89	1.413	0.00	294.00	0.00 >	7.00
1774	SF	P28	56	08/08/89	1.390	0.00	258.00	0.00	0.00
1774	VE	R1I	56	08/07/89	1.087	0.00 >	320.00	0.00 >	1.11
1774	VEE	QBK	56	06/12/89	1.278	0.00 >	320.00	0.00 >	0.36
1774	YF	QB8	56	06/12/89	1.099	0.00 >	320.00	0.00	2.28
1774	YF	R15	56	08/07/89	0.852	0.00 >	320.00	0.00 >	7.70
1777	VE	PDH	22	04/07/89	1.129	0.00 <	0.01	0.00	0.00
1795	VE	PDI	22	04/07/89	1.182	0.00	33.30	0.00 >	0.40
1796	VE	PDI	22	04/07/89	1.182	0.00	15.30	0.00	1.31
1801	JE	P90	32	04/03/89	0.987	0.00	320.00	0.00	0.00
1801	JE	RC8	32	08/29/89	0.900	0.00	265.00	0.00 >	0.41
1801	PT	PDB	53	03/28/89	0.731	0.00	212.00	0.00 >	15.93
1801	PT	PA3	32	04/21/89	1.000	0.00	45.60	0.00	0.46
1801	PT	RDB	32	08/29/89	0.527	0.00	32.00	0.00 >	0.11
1801	SF	PCW	53	03/28/89	0.667	0.00 >	320.00	0.00 >	11.89
1801	SF	PAI	32	04/04/89	0.831	0.00	90.80	0.00	4.2
1801	SF	RCY	32	08/29/89	0.914	0.00	2.65	0.00	0.00
1801	VE	PBN	53	03/27/89	0.859	0.00 >	320.00	0.00 >	8.90
1801	VE	P8U	32	04/03/89	1.013	0.00 >	320.00	0.00	2.06
1801	VE	RU1	32	10/06/89	0.533	0.00 >	320.00	0.00 >	18.10
1801	YF	PCH	53	03/27/89	1.099	0.00	181.00	0.00	0.33
1801	YF	P99	32	04/03/89	0.973	0.00	178.00	0.00	0.82
1801	YF	RBV	32	08/28/89	1.166	0.00	24.40	0.00	0.00
1811	JE	01M	45	11/23/88	0.716	0.00 >	320.00	0.00	3.99
1811	PT	103	45	11/23/88	0.709	0.00 >	320.00	0.00	0.00
1811	SF	10R	45	11/23/88	0.711	0.00 >	320.00	0.00	0.60
1811	VE	009	45	11/23/88	1.388	0.00 >	320.00	0.00	0.00
1811	YF	015	45	11/22/88	0.757	0.00 >	320.00	0.00 >	4.79
1829	JE	P9P	32	04/03/89	1.003	0.00 >	320.00	0.00	0.00
1829	JE	RC9	32	08/29/89	0.723	0.00 >	320.00	0.00 >	0.57
1829	PT	PA4	32	04/21/89	0.995	0.00 >	320.00	0.00 >	3.10
1829	PT	RDC	32	08/29/89	0.586	0.00 >	320.00	0.00	0.00
1829	SF	PAJ	32	04/04/89	0.882	0.00 >	320.00	0.00 >	0.33
1829	SF	RCZ	32	08/29/89	0.911	0.00 >	320.00	0.00	0.00
1829	VE	P8V	32	04/03/89	1.042	0.00 >	320.00	0.00 >	0.15
1829	VE	RU2	32	10/06/89	0.609	27.80 >	320.00 >	11.51 >	21.97
1829	YF	P9A	32	04/03/89	0.982	0.00 >	320.00	0.00 >	3.51
1829	YF	RBW	32	08/28/89	1.007	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
1835	JE	P9P	32	04/03/89	1.003	0.00 >	320.00	0.00	0.00
1835	JE	RC9	32	08/25/89	0.723	0.00 >	320.00	0.00	0.00
1835	PT	PA4	32	04/21/89	0.995	0.00 >	320.00	0.00	0.00
1835	PT	RDC	32	08/29/89	0.586	0.00	210.00	0.00	0.00
1835	SF	PAJ	32	04/04/89	0.882	0.00 >	320.00	0.00 >	0.26
1835	SF	RCZ	32	08/29/89	0.911	0.00	66.00	0.00	0.00
1835	VE	P8V	32	04/03/89	1.042	0.00 >	320.00	0.00 >	0.32
1835	VE	RU2	32	10/06/89	0.609	0.00 >	320.00	0.00	1.51
1835	YF	P9A	32	04/03/89	0.982	0.00 >	320.00	0.00	0.00
1835	YF	RBW	32	08/28/89	1.007	0.00	194.00	0.00	0.00
1841	JE	RCA	33	08/29/89	0.797	0.00	32.00	0.00	0.00
1841	PT	PDC	53	03/28/89	0.767	8.81	260.00	29.50 >	40.04
1841	PT	RDD	33	08/29/89	0.567	0.00	61.10	0.00 >	0.03
1841	SF	PCX	53	03/28/89	0.750	0.00 <	1.00	0.00	0.00
1841	SF	RDO	33	08/29/89	0.935	0.00 >	320.00	0.00 >	2.02
1841	VE	PBO	53	03/27/89	0.944	0.00 >	320.00	0.00	0.12
1841	VE	RU3	33	10/06/89	0.598	19.60	2.79	0.14 >	31.88
1841	YF	PCI	53	03/27/89	1.154	0.00	62.50	0.00	0.00
1841	YF	RBX	33	08/28/89	1.046	0.00	77.30	0.00 >	0.13
1843	JE	RCA	33	08/29/89	0.797	0.00	8.54	0.00	0.00
1843	PT	RDD	33	08/29/89	0.567	0.00 >	320.00	0.00	0.00
1843	SF	RDU	33	08/29/89	0.935	0.00	9.15	0.00	0.00
1843	VE	RU3	33	10/06/89	0.598	0.00	3.06	0.00 >	0.29
1843	YF	RDX	33	08/28/89	1.046	0.00 >	320.00	0.00	0.00
1846	JE	RCB	33	08/29/89	0.725	0.00	74.50	0.00 >	0.03
1846	PT	RDE	33	08/29/89	0.489	0.00	26.50	0.00	0.00
1846	SF	RD1	33	08/29/89	0.943	0.00	40.50	0.00	0.00
1846	VE	RU4	33	10/06/89	0.716	0.00 >	100.00	0.00 >	7.64
1846	YF	RBY	33	08/28/89	1.082	0.00	44.40	0.00	0.00
1850	JE	PF4	53	04/10/89	0.798	0.00 >	100.00	0.00	0.00
1850	JE	RCB	32	08/29/89	0.725	0.00	92.00	0.00	0.58
1850	PT	PFJ	53	04/11/89	0.595	9.71	73.00	7.52 >	32.53
1850	PT	RDE	32	08/29/89	0.489	0.00	74.50	0.00 >	4.32
1850	SF	PFY	53	04/11/89	0.666	10.4C	77.20	7.42 >	38.87
1850	SF	RD1	32	08/29/89	0.943	0.00	77.30	0.00	0.07
1850	VE	PEA	53	04/10/89	0.870	0.00 >	100.00	0.00 >	1.60
1850	VE	RU4	32	10/06/89	0.716	77.00 >	100.00 >	1.30 >	10.87
1850	YF	PEP	53	04/10/89	0.843	0.00	92.30	0.00 >	7.51
1850	YF	RBY	32	08/28/89	1.082	0.00	1.88	0.00	0.00
1899	JE	RCC	33	08/29/89	0.797	0.00 >	100.00	0.00 >	0.10
1899	PT	RDF	33	08/29/89	0.526	0.00 >	100.00	0.00	0.00
1899	SF	RD2	33	08/29/89	0.900	0.00 >	100.00	0.00	0.00
1899	VE	RU5	33	10/06/89	0.757	0.00 >	100.00	0.00 >	3.31
1899	YF	RBZ	33	08/28/89	1.118	0.00 >	100.00	0.00	0.00
1900	JE	RCC	33	08/29/89	0.797	0.00 >	32.00	0.00	1.07
1900	PT	RDF	33	08/29/89	0.526	0.00 >	32.00	0.00	0.00
1900	SF	RD2	33	08/29/89	0.900	0.00 >	32.00	0.00	0.00
1900	VE	RU5	33	10/06/89	0.757	0.00 >	32.00	0.00	3.47
1900	YF	RBZ	33	08/28/89	1.118	0.00 >	32.00	0.00	0.00
1901	JE	RCD	33	08/29/89	0.923	0.00 >	100.00	0.00 >	4.10
1901	PT	RDG	33	08/29/89	0.548	0.00 >	100.00	0.00	0.00
1901	SF	RD3	33	08/29/89	0.958	0.00 >	100.00	0.00	0.00
1901	VE	RU6	33	10/06/89	0.705	0.00 >	100.00	0.00 >	11.74
1901	YF	RCO	33	08/28/89	1.023	0.00 >	100.00	0.00	0.00
1902	JE	RDW	33	08/30/89	0.768	0.00 >	100.00	0.00	1.32
1902	PT	RF1	33	08/30/89	0.568	0.00 >	100.00	0.00	0.00
1902	SF	REO	33	08/30/89	0.823	0.00 >	100.00	0.00 >	0.18
1902	VE	REA	33	09/11/89	0.754	0.56 >	100.00 >	179.92 >	28.44
1902	YF	RDI	33	08/29/89	0.938	0.00 >	100.00	0.00	0.00
1915	VE	PIW	27	04/14/89	1.205	0.00	112.00	0.00	0.06
1947	VV	OBQ	28	08/17/89	1.248	0.00	3.20	0.00	0.00
1970	VE	PIW	27	04/14/89	1.205	0.00	18.80	0.00	0.00
1972	SF	O6N	1	12/13/88	0.562	0.00	5.60	0.00	0.00
1973	JE	RDX	1	08/30/89	0.775	0.00	21.00	0.00	0.00
1973	PT	RF2	1	08/30/89	0.607	0.00	27.30	0.00	0.00
1973	SF	O6O	1	12/13/88	0.564	0.00	9.27	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SJ	TAI
1973	SF	REP	1	08/30/89	0.610	0.00	41.70	0.00	0.33
1973	VE	RTS	1	10/06/89	0.318	0.00 >	100.00	0.00	0.00
1973	YF	RDJ	1	08/29/89	0.960	0.00	43.00	0.00	2.51
1974	JE	RDX	1	08/30/89	0.775	0.00	15.90	0.00	0.00
1974	PT	RF2	1	08/30/89	0.607	0.00	11.40	0.00	0.00
1974	SF	REP	1	08/30/89	0.610	0.00	21.30	0.00	0.00
1974	VE	RTS	1	10/06/89	0.318	0.00 >	100.00	0.00	1.60
1974	YF	RDJ	1	08/29/89	0.960	0.00	22.30	0.00	0.00
1975	JE	QBX	56	06/13/89	0.848	0.00	20.60	0.00	0.00
1975	PT	QC9	56	06/14/89	0.870	0.00	86.40	0.00 >	5.71
1975	SF	QCL	56	06/13/89	1.258	0.00	66.70	0.00 >	0.10
1975	VE	QBL	56	06/12/89	1.053	0.00	168.00	0.00	0.00
1975	YF	QB9	56	06/12/89	1.185	0.00	147.00	0.00	0.00
1976	JE	RDY	1	08/30/89	0.816	0.00	63.70	0.00	0.44
1976	PT	Q2S	27	05/16/89	0.575	0.00	82.00	0.00 >	3.70
1976	PT	RF3	1	08/30/89	0.614	0.00	24.70	0.00	1.62
1976	SF	Q1W	27	05/16/89	1.065	51.20	110.00	2.15	15.49
1976	SF	REQ	1	08/30/89	0.723	16.90	74.50	4.41 >	19.58
1976	VE	Q1X	27	05/15/89	1.021	0.00	94.80	0.00 >	0.38
1976	VE	RTT	1	10/06/89	0.479	0.00 >	100.00	0.00	0.00
1976	YF	Q1E	27	05/15/89	0.680	0.00	93.50	0.00	0.00
1976	YF	RDK	1	08/29/89	0.851	80.40 >	100.00 >	1.24 >	4.32
1980	PT	Q2T	27	05/16/89	0.385	2.59	73.50	28.30	14.44
1980	SF	Q1X	27	05/16/89	1.064	24.60	56.30	2.29 >	13.03
1980	VE	Q1L	27	05/15/89	1.253	0.00 >	100.00	0.00	0.07
1980	YF	Q1F	27	05/15/89	0.843	0.00	54.70	0.00	0.00
1984	YF	Q6U	02	12/19/88	0.630	0.00 >	100.00	0.00	0.00
1985	JE	RDY	2	08/30/89	0.816	0.00	5.40	0.00	0.60
1985	PT	RF3	2	08/30/89	0.614	0.00	4.59	0.00	0.00
1985	SF	REQ	2	08/30/89	0.723	0.00	5.81	0.00	0.00
1985	VE	REC	2	09/11/89	0.737	0.00 >	10.00	0.00 >	7.39
1985	VV	Q1M	41B	02/23/89	1.975 <	1.00	2.65 >	2.65 >	16.01
1985	VV	Q1M	41B	02/23/89	1.975	0.00 >	0.32 >	72.50 >	55.85
1985	YF	RDK	2	08/29/89	0.851	0.00	5.94	0.00 >	1.67
1987	JE	RDZ	2	08/30/89	0.749	0.00 >	100.00	0.00	0.00
1987	PT	RF4	2	08/30/89	0.590	0.00 >	100.00	0.00	0.00
1987	SF	RER	2	08/30/89	0.739	0.00 >	100.00	0.00 >	0.03
1987	VE	RED	2	09/11/89	0.855	0.00 >	100.00	0.00 >	2.48
1987	YF	RDL	2	08/29/89	0.784	0.00 >	100.00	0.00 >	0.20
1992	JE	QBX	56	06/13/89	0.848	0.00	257.00	0.00	1.80
1992	JE	R1W	56	08/08/89	0.829	0.00	26.10	0.00	0.00
1992	PT	QC9	56	06/14/89	0.870	57.70	241.00	4.17 >	25.78
1992	PT	R2M	56	08/08/89	0.594	67.20	238.00	3.54	11.19
1992	SF	QCL	56	06/13/89	1.258	94.70 >	320.00 >	3.38 >	22.74
1992	SF	R29	56	08/08/89	1.252	66.10	262.00	3.96	15.71
1992	VE	R1J	56	08/07/89	1.164	0.00	490.00	0.00 >	1.74
1992	YF	QB9	56	06/12/89	1.185	0.00 >	320.00	0.00	1.15
1992	YF	R16	56	08/07/89	1.093	0.00	370.00	0.00 >	0.18
1997	JE	RSB	3	09/27/89	0.698	0.00 >	320.00	0.00 >	6.21
1997	SF	RSZ	3	10/11/89	0.902	0.00 >	320.00	0.00	0.12
1997	VE	RTQ	3	10/06/89	0.319	0.00	89.30	0.00	0.00
1997	YF	S26	3	10/10/89	0.827	0.00 >	320.00	0.00	0.00
2003	JE	REO	3	08/30/89	0.780	0.00 >	320.00	0.00	0.23
2003	PT	RF5	3	08/30/89	0.593	0.00 >	320.00	0.00 >	1.70
2003	SF	RES	3	08/30/89	0.705	0.00 >	320.00	0.00	0.00
2003	VE	REE	3	09/11/89	0.726	0.00 >	320.00	0.00	2.59
2003	YF	RDM	3	08/29/89	0.836	0.00 >	320.00	0.00	0.00
2013	SF	RT0	3	10/11/89	0.901	0.00	187.00	0.00	0.70
2034	JE	QBY	56	06/13/89	0.957	0.00	1.83	0.00	5.07
2034	JE	R1W	56	08/08/89	0.829	0.65	1.71	2.62	10.63
2034	PT	QCA	56	06/14/89	0.931	0.00	1.98	0.00 >	0.73
2034	PT	R2M	56	08/08/89	0.594	0.00	1.73	0.00 >	3.66
2034	SF	QCM	56	06/13/89	1.214	0.00	2.15	0.00 >	0.43
2034	SF	R29	56	08/08/89	1.252	0.00	1.35	0.00	0.00
2034	VE	R1J	56	08/07/89	1.164	0.00	0.73	0.00	0.00
2034	VEE	QBM	56	06/12/89	1.296	0.00	1.89	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2034	VSV	04C	56	06/02/89	1.224	0.00	2.28	0.00	0.00
2034	YF	QBA	56	06/12/89	1.156	0.00	2.38	0.00	2.21
2034	YF	R16	56	08/07/89	1.093	0.00	1.43	0.00	2.92
2043	VE	PGE	20	03/31/89	1.106	0.00	0.68	0.00	> 0.23
2044	VE	PGE	20	03/31/89	1.106	0.00	20.40	0.00	> 0.00
2045	VE	PGF	20	03/31/89	1.200	0.00	> 100.00	0.00	> 0.10
2046	VE	PCF	20	03/31/89	1.200	0.00	3.88	0.00	> 0.08
2047	VE	PGG	20	03/31/89	1.142	0.00	40.60	0.00	> 0.00
2048	VE	PGG	20	03/31/89	1.142	0.00	11.60	0.00	0.00
2049	JE	QBY	56	06/13/89	0.957	0.00	> 320.00	0.00	0.26
2049	PT	QCA	56	06/14/89	0.931	0.00	153.00	0.00	> 0.73
2049	SF	QCM	56	06/13/89	1.214	0.00	158.00	0.00	> 0.60
2049	VEE	QBM	56	06/12/89	1.296	0.00	157.00	0.00	0.00
2049	YF	QBA	56	06/12/89	1.156	0.00	312.00	0.00	0.09
2050	VE	PGH	20	03/31/89	1.092	0.00	> 100.00	0.00	0.00
2051	VE	PGI	20	03/31/89	1.138	0.00	> 10.00	0.00	0.23
2052	VE	PGI	20	03/31/89	1.138	0.00	5.98	0.00	0.00
2053	VE	PGJ	20	03/31/89	1.059	0.00	> 10.00	0.00	> 0.40
2054	VE	PFL	20	03/31/89	0.942	0.00	> 100.00	0.00	> 0.30
2056	VE	PFM	20	03/31/89	1.126	0.00	30.00	0.00	0.00
2057	VE	PFN	20	03/31/89	1.098	0.00	10.60	0.00	> 0.01
2058	VE	PFN	20	03/31/89	1.098	0.00	14.20	0.00	0.00
2059	VE	P93	20	03/21/89	0.934	0.00	6.53	0.00	> 1.10
2059	VE	PFO	20	03/31/89	1.079	0.00	22.00	0.00	0.00
2059	YF	P9I	20	03/21/89	0.961	0.00	10.30	0.00	0.00
2060	VE	P93	20	03/21/89	0.934	0.00	4.35	0.00	> 3.51
2060	YF	P9I	20	03/21/89	0.961	0.00	2.67	0.00	0.00
2061	VE	P94	20	03/21/89	0.870	0.00	> 100.00	0.00	> 0.00
2061	YF	P9J	20	03/21/89	0.991	0.00	32.80	0.00	0.00
2063	VE	P95	20	03/21/89	0.929	0.00	32.00	0.00	0.00
2063	YF	P9K	20	03/21/89	0.944	0.00	32.80	0.00	0.00
2065	VE	P96	20	03/21/89	0.895	0.00	7.57	0.00	0.00
2065	YF	P9L	20	03/21/89	0.950	0.00	8.40	0.00	0.00
2068	VE	P4G	15	03/17/89	0.990	0.00	> 100.00	0.00	> 0.03
2069	VE	P4G	15	03/17/89	0.990	0.00	> 100.00	0.00	> 0.20
2103	JE	REO	6	08/30/89	0.780	0.00	> 3.20	0.00	0.00
2103	PT	RF5	6	08/30/89	0.593	0.00	> 3.20	0.00	> 0.99
2103	SF	RES	6	08/30/89	0.705	0.00	> 3.20	0.00	0.05
2103	VE	REE	6	09/11/89	0.726	0.00	> 3.20	0.00	1.60
2103	YF	RDM	6	08/29/89	0.836	0.00	> 3.20	0.00	J.51
2122	JE	RE1	7	08/30/89	0.735	0.00	> 100.00	0.00	0.00
2122	PT	RF6	7	08/30/89	0.634	0.00	38.20	0.00	> 0.03
2122	SF	RET	7	08/30/89	0.699	0.00	17.30	0.00	0.00
2122	VE	REF	7	09/11/89	0.697	0.00	> 100.00	0.00	> 13.11
2122	YF	RDN	7	08/29/89	0.812	0.00	100.00	0.00	> 3.57
2127	VSV	05K	7	08/11/89	1.529	0.00	12.90	0.00	0.00
2138	JE	RSB	5	09/27/89	0.698	0.00	198.00	0.00	> 0.77
2138	SF	RSZ	5	10/11/89	0.902	0.00	120.00	0.00	0.00
2138	VE	RTQ	5	10/06/89	0.319	0.00	92.40	0.00	J.00
2138	YF	S26	5	10/10/89	0.827	0.00	247.00	0.00	0.00
2140	SF	05P	5	12/14/88	0.684	0.00	> 320.00	0.00	0.00
2147	VE	050	7	12/12/88	1.351	0.00	51.30	0.00	0.00
2148	VE	051	7	12/12/88	1.401	0.00	49.70	0.00	0.00
2150	VE	05S	7	12/13/88	1.167	0.00	86.10	0.00	> 0.13
2151	JE	P3D	52	03/14/89	0.851	0.00	124.00	0.00	0.00
2151	PT	P47	52	03/15/89	0.881	80.90	147.00	1.82	12.14
2151	SF	P3S	52	03/15/89	0.663	48.40	171.00	3.54	23.52
2151	VE	P1P	52	03/14/89	0.870	0.00	170.00	0.00	> 0.00
2151	VSV	01Z	52	03/03/89	1.107	143.00	> 320.00	> 2.24	> 15.67
2151	VSV	031	52	05/12/89	1.429	0.00	202.00	0.00	5.75
2151	VSV	05V	52	10/13/89	1.530	0.00	262.00	0.00	> 4.31
2151	VV	01Z	52	03/23/89	1.595	0.00	111.00	0.00	4.95
2151	YF	P2Y	52	03/14/89	0.870	0.00	111.00	0.00	0.00
2152	VE	05S	7	12/13/88	1.167	0.00	89.00	0.00	0.00
2159	VE	05T	9	12/13/88	1.189	0.00	291.00	0.00	> 7.03
2160	VE	05T	9	12/13/88	1.189	0.00	9.95	0.00	1.57

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
2161	VE	05U	9	12/13/88	1.188	0.00	20.70	0.00	0.00
2162	JE	PF5	53	04/10/89	0.811	0.00	32.20	0.00	0.00
2162	JE	RE2	9	08/30/89	0.800	0.00	19.90	0.00	0.00
2162	PT	PFK	53	04/11/89	0.743	0.00	46.00	0.00	1.98
2162	PT	RF7	9	08/30/89	0.462	0.00	44.40	0.00	0.00
2162	SF	PFZ	53	04/11/89	0.721	0.00	52.40	0.00	0.00
2162	SF	REU	9	08/30/89	0.873	0.00	4.61	0.00 >	1.47
2162	VE	05U	9	12/13/88	1.188	0.00	10.00	0.00	0.00
2162	VE	PEB	53	04/10/89	0.908	0.00	29.70	0.00	0.00
2162	VE	REG	9	09/11/89	0.961	0.00	32.00	0.00	0.43
2162	YF	PEQ	53	04/10/89	0.981	0.00	49.40	0.00	0.00
2162	YF	RDO	9	08/29/89	0.950	0.00	45.60	0.00	0.00
2183	JE	Q5R	8	05/23/89	0.985	0.00 >	320.00	0.00	0.00
2183	PT	Q5X	8	05/23/89	0.729	0.00 >	320.00	0.00	4.08
2183	SF	Q63	8	05/23/89	1.156	0.00 >	320.00	0.00	0.40
2183	VE	Q5L	8	05/22/89	0.537	0.00 >	320.00	0.00	0.55
2183	YF	Q59	8	05/22/89	1.188	0.00 >	320.00	0.00	0.00
2188	VE	O8F	9	01/06/89	0.928	0.00	2.63	0.00	0.00
2189	VE	O8G	9	01/06/89	0.922	0.00	151.00	0.00	0.20
2190	VE	O8G	9	01/06/89	0.922	0.00	77.20	0.00	0.00
2191	VE	O8H	9	01/06/89	0.959	0.00	11.30	0.00	0.91
2192	VE	O8H	9	01/06/89	0.959	0.00	314.00	0.00	0.00
2195	SF	078	09	12/20/88	1.023	0.00 >	100.00	0.00 >	4.91
2195	VE	070	09	12/19/88	1.114	0.00 >	100.00	0.00	0.00
2196	SF	079	09	12/20/88	0.863	0.00	288.00	0.00 >	4.35
2196	VE	070	09	12/19/88	1.114	0.00	245.00	0.00	0.00
2197	SF	079	09	12/20/88	0.863	0.00 >	100.00	0.00 >	7.08
2197	VE	071	09	12/19/88	1.094	0.00 >	100.00	0.00	0.00
2198	SF	07A	09	12/20/88	0.886	0.00 >	100.00	0.00 >	3.97
2198	VE	071	09	12/19/88	1.094	0.00 >	100.00	0.00	0.00
2199	SF	07A	09	12/20/88	0.886	0.00	158.00	0.00 >	15.41
2199	VE	072	09	12/19/88	1.117	0.00	170.00	0.00	0.00
2200	SF	07B	09	12/20/88	0.993	0.00 >	320.00	0.00 >	8.25
2200	VE	072	09	12/19/88	1.117	0.00 >	320.00	0.00	0.00
2201	SF	07B	09	12/20/88	0.993	0.00 >	100.00	0.00 >	17.92
2201	VE	073	09	12/19/88	1.046	0.00 >	100.00	0.00 >	2.99
2202	SF	07C	09	12/20/88	0.831	0.00	90.60	0.00 >	5.65
2202	VE	073	09	12/19/88	1.046	0.00	48.50	0.00	0.00
2203	VE	O8P	9	01/06/89	0.953	0.00 >	32.00	0.00	0.20
2204	VE	O8P	9	01/06/89	0.953	0.00 >	100.00	0.00	0.00
2205	VE	O8Q	9	01/06/89	0.945	0.00	134.00	0.00	0.00
2206	VE	ONP	09	02/17/89	0.923	0.00	10.00	0.00	0.00
2207	VE	ONQ	09	02/17/89	1.006	0.00	115.00	0.00	0.00
2208	VE	ONQ	09	02/17/89	1.006	0.00	22.00	0.00	0.00
2209	VE	ONR	10	02/17/89	0.942	0.00	25.00	0.00	0.30
2210	VE	ONR	10	02/17/89	0.942	0.00	11.60	0.00	0.00
2211	VE	ONS	10	02/17/89	0.954	0.00	9.83	0.00	0.07
2212	VE	ONS	10	02/17/89	0.954	0.00	4.25	0.00	0.00
2213	VE	ONT	10	02/17/89	0.978	0.00	14.60	0.00	0.00
2214	VE	ONT	10	02/17/89	0.978	0.00	3.33	0.00	0.08
2215	VE	ONU	10	02/17/89	1.037	0.00	174.00	0.00	0.00
2216	VE	ONU	10	02/17/89	1.037	0.00	120.00	0.00	0.00
2217	VE	ONV	10	02/17/89	0.937	0.00	4.38	0.00 >	1.01
2218	VE	ONV	10	02/17/89	0.937	0.00 >	3.20	0.00 >	0.83
2219	VE	ONW	10	02/17/89	0.901	0.00	21.50	0.00	0.46
2220	JE	Q5S	10	05/23/89	0.941	0.00	10.00	0.00	0.00
2220	PT	Q5Y	10	05/23/89	0.736	0.00	46.30	0.00	1.19
2220	SF	Q6L	10	05/23/89	1.127	0.00	22.00	0.00	0.00
2220	VE	Q5M	10	05/22/89	0.642	0.00	20.40	0.00	0.04
2220	YF	Q5A	10	05/22/89	1.177	0.00	43.50	0.00	0.00
2221	VE	ONW	10	02/17/89	0.901	0.00 >	3.20	0.00 >	4.13
2222	VE	ONX	10	02/17/89	0.936	0.00	15.70	0.00	0.08
2223	VE	ONX	10	02/17/89	0.936	0.00	25.50	0.00 >	1.60
2224	VE	ONY	10	02/17/89	0.914	0.00	2.65	0.00 >	0.03
2225	VE	ONY	10	02/17/89	0.914	0.00	2.84	0.00 >	0.68
2226	JE	RE2	10	08/30/89	0.800	0.00	14.90	0.00	1.60

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2226	PT	RF7	10	08/30/89	0.462	0.00	19.00	0.00	1.60
2226	SF	REU	10	08/30/89	0.873	0.00	13.60	0.00 >	4.53
2226	VE	ONZ	10	02/17/89	0.987	0.00	13.20	0.00 >	0.68
2226	VE	REG	10	09/11/89	0.961	0.00	15.50	0.00	6.09
2226	YF	RDO	10	08/29/89	0.950	0.00	0.32	0.00	0.21
2227	VE	ONZ	10	02/17/89	0.987	0.00	10.10	0.00 >	2.78
2228	VE	000	10	02/17/89	1.007	0.00 >	32.00	0.00 >	0.18
2229	VE	001	10	02/17/89	0.833	0.00	16.80	0.00 >	0.67
2230	VE	002	10	02/17/89	0.800	0.00	166.00	0.00	0.00
2231	VE	002	10	02/17/89	0.800	0.00 >	32.00	0.00	0.00
2232	VE	003	10	02/17/89	0.876	0.00	83.30	0.00	0.00
2233	VE	003	10	02/17/89	0.876	0.00	32.40	0.00 >	0.07
2234	VE	004	10	02/17/89	0.894	0.00 >	0.10	0.00	0.00
2235	VE	004	10	02/17/89	0.894	0.00	13.10	0.00 >	0.23
2236	VE	005	10	02/17/89	0.882	0.00	76.50	0.00	0.00
2237	VE	00F	12	02/17/89	0.890	0.00	23.10	0.00 >	0.00
2238	VE	00F	12	02/17/89	0.890	0.00	18.80	0.00	0.00
2239	VE	00G	12	02/17/89	0.880	0.00	13.70	0.00	0.20
2240	VE	00G	12	02/17/89	0.880	0.00 >	32.00	0.00	0.60
2241	VE	00H	12	02/17/89	0.880	0.00	145.00	0.00	0.00
2242	VE	00H	12	02/17/89	0.880	0.00	146.00	0.00 >	0.52
2243	VE	00I	12	02/17/89	0.924	0.00	32.60	0.00 >	0.66
2244	VE	00I	12	02/17/89	0.924	0.00	4.91	0.00	0.52
2245	VE	00J	12	02/17/89	0.840	0.00	121.00	0.00	0.40
2246	VE	00J	12	02/17/89	0.840	0.00	5.79	0.00	0.00
2247	VE	00K	12	02/17/89	0.899	0.00	28.70	0.00 >	0.55
2248	VE	00K	12	02/17/89	0.899	0.00	2.63	0.00 >	1.36
2249	VE	00L	12	02/17/89	0.891	0.00	163.00	0.00 >	1.00
2250	VE	00L	12	02/17/89	0.891	0.00	16.60	0.00 >	0.51
2251	VE	00M	12	02/17/89	0.885	0.00	76.80	0.00 >	0.00
2252	VE	00M	12	02/17/89	0.885	0.00 >	100.00	0.00	0.00
2253	VE	00N	12	02/17/89	0.926	0.00	6.01	0.00 >	0.45
2254	VE	00N	12	02/17/89	0.926	0.00	44.40	0.00	0.00
2255	VE	00O	12	02/17/89	0.941	0.00	45.10	0.00 >	0.00
2256	VE	P5J	12	03/17/89	1.121	0.00	40.00	0.00 >	0.59
2257	VE	P5J	12	03/17/89	1.121	0.00	10.60	0.00 >	0.10
2258	VE	P5K	12	03/17/89	1.043	0.00	225.00	0.00	0.00
2259	VE	P5K	12	03/17/89	1.043	0.00	224.00	0.00	0.00
2260	VE	P5L	12	03/17/89	0.973	0.00 >	320.00	0.00 >	1.30
2261	VE	P5L	12	03/17/89	0.973	0.00 >	320.00	0.00 >	0.50
2262	VE	P5M	12	03/17/89	1.024	0.00 >	100.00	0.00 >	0.00
2263	VE	P5M	12	03/17/89	1.024	0.00 >	320.00	0.00 >	0.98
2264	VE	P5N	12	03/17/89	0.945	0.00 >	320.00	0.00 >	0.00
2265	VE	P5N	12	03/17/89	0.945	0.00 >	100.00	0.00	2.82
2266	VE	P5O	12	03/17/89	0.863	0.00	20.50	0.00 >	0.00
2267	VE	P4P	12	03/17/89	1.029	0.00	8.85	0.00 >	0.00
2268	VE	P4Q	12	03/17/89	1.047	0.00	9.35	0.00	0.00
2270	VE	P4Q	12	03/17/89	1.047	0.00	17.90	0.00	0.00
2271	VE	P4R	12	03/17/89	1.005	0.00	16.60	0.00 >	0.51
2272	VE	P4R	12	03/17/89	1.005	0.00	11.80	0.00 >	0.22
2273	VE	P4S	12	03/17/89	0.918	0.00	47.80	0.00	1.72
2274	JE	RE3	12	08/30/89	0.803	0.00	79.10	0.00	0.30
2274	PT	RF8	12	08/30/89	0.581	0.00	58.40	0.00 >	3.23
2274	SF	REV	12	08/30/89	0.535	18.80 >	100.00 >	5.31 >	24.52
2274	VE	P4S	12	03/17/89	0.918	0.00	46.20	0.00 >	0.00
2274	VE	REH	12	09/11/89	0.944	0.00 >	100.00	0.00 >	5.97
2274	YF	RDP	12	08/29/89	0.733	65.20 >	100.00 >	1.53 >	8.90
2275	JE	PF5	53	04/10/89	0.811	0.00	106.00	0.00	12.86
2275	JE	RE3	12	08/30/89	0.803	22.40	167.00	7.45	17.05
2275	PT	PFK	53	04/11/89	0.743	38.70	155.00	4.01 >	35.79
2275	PT	RF8	12	08/30/89	0.581	30.60	125.00	4.09	14.04
2275	SF	PFZ	53	04/11/89	0.721	25.80	174.00	6.75	29.77
2275	SF	REV	12	08/30/89	0.535	17.10	180.00	10.53 >	35.74
2275	VE	P4T	12	03/17/89	1.050	0.00	51.70	0.00	2.62
2275	VE	PEB	53	04/10/89	0.908	0.00	49.90	0.00	3.17
2275	VE	REH	12	09/11/89	0.944	51.20	136.00	2.65 >	16.91

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2275	YF	PEQ	53	04/10/89	0.981	0.00	149.00	0.00	7.85
2275	YF	RDP	12	08/29/89	0.733	0.00	165.00	0.00 >	4.68
2276	VE	OO5	11	02/17/89	0.882	0.00 >	100.00	0.00 >	0.00
2277	VE	OO6	11	02/17/89	0.902	0.00 >	100.00	0.00	0.00
2278	VE	OO6	11	02/17/89	0.902	0.00 >	32.00	0.00	0.00
2279	VE	OO7	11	02/17/89	0.948	0.00	11.20	0.00	0.00
2280	VE	OO7	11	02/17/89	0.948	0.00	160.00	0.00	0.00
2281	VE	OO8	11	02/17/89	0.821	0.00 >	320.00	0.00	0.00
2282	VE	OO8	11	02/17/89	0.821	0.00 >	100.00	0.00	0.00
2283	VE	OO9	11	02/17/89	0.864	0.00 >	32.00	0.00	0.00
2284	VE	OO9	11	02/17/89	0.864	0.00 >	320.00	0.00	0.00
2285	VE	OOA	11	02/17/89	0.895	0.00 >	100.00	0.00 >	0.40
2286	VE	OOA	11	02/17/89	0.895	0.00 >	32.00	0.00 >	0.23
2287	VE	OOB	11	02/17/89	0.923	0.00	105.00	0.00	0.00
2288	VE	OOB	11	02/17/89	0.923	0.00 >	32.00	0.00	0.00
2289	VE	OOC	11	02/17/89	0.913	0.00 >	32.00	0.00 >	0.04
2290	VE	OOD	11	02/17/89	0.927	0.00	8.64	0.00 >	12.09
2291	SF	07C	09	12/20/88	0.831	0.00 >	32.00	0.00 >	5.57
2291	VE	074	09	12/19/88	1.104	0.00	12.80	0.00	0.00
2291	VV	0BS		08/17/89	1.185	0.00	5.73	0.00	2.72
2292	SF	07D	09	12/20/88	0.782	0.00 >	100.00	0.00 >	20.42
2292	VE	074	09	12/19/88	1.104	0.00 >	100.00	0.00	0.00
2293	SF	07D	09	12/20/88	0.782	0.00 >	320.00	0.00 >	21.89
2293	VE	075	09	12/19/88	1.081	0.00 >	320.00	0.00	0.30
2295	SF	07E	09	12/20/88	0.804	0.00	3.28	0.00 >	14.93
2295	VE	075	09	12/19/88	1.081	0.00	1.02	0.00 >	0.30
2296	SF	07E	09	12/20/88	0.804	0.00	45.60	0.00 >	15.04
2296	VE	076	09	12/19/88	1.066	0.00 >	100.00	0.00	0.00
2297	SF	07F	09	12/20/88	0.742	0.00 >	10.00	0.00 >	5.10
2297	VE	076	09	12/19/88	1.066	0.00 >	100.00	0.00	0.00
2298	SF	07F	09	12/20/88	0.742	0.00	0.66	0.00 >	11.90
2298	VE	077	09	12/19/88	1.131	0.00	0.69	0.00	0.00
2299	VE	08J	11	01/06/89	1.234	0.00	21.40	0.00	4.48
2301	VE	08K	11	01/06/89	0.976	0.00	6.08	0.00	0.30
2302	VE	08K	11	01/06/89	0.976	0.00	2.19	0.00	0.20
2303	VE	08L	11	01/06/89	0.936	0.00 >	100.00	0.00 >	0.00
2304	VE	08L	11	01/06/89	0.936	0.00 >	320.00	0.00 >	0.00
2305	JE	Q5S	11	05/23/89	0.941	0.00	188.00	0.00	0.00
2305	PT	Q5Y	11	05/23/89	0.736	0.00	249.00	0.00 >	8.19
2305	SF	Q64	11	05/23/89	1.127	0.00	231.00	0.00	0.00
2305	VE	Q5M	11	05/22/89	0.642	0.00	139.00	0.00 >	0.10
2305	YF	Q5A	11	05/22/89	1.177	0.00 >	320.00	0.00	0.00
2307	VE	08M	11	01/06/89	0.967	0.00	0.23	0.00	0.00
2308	VE	08M	11	01/06/89	0.967	0.00	0.06	0.00	0.00
2309	JE	PF6	53	04/10/89	0.791	0.00	224.00	0.00	0.00
2309	PT	PFL	53	04/11/89	0.701	5.27	280.00	53.10 >	65.81
2309	SF	PG0	53	04/11/89	0.669	0.00 >	320.00	0.00 >	15.87
2309	VE	OOE	11	02/17/89	0.944	0.00	238.00	0.00	0.00
2309	VE	PEC	53	04/10/89	0.905	0.00	125.00	0.00	0.27
2309	YF	PER	53	04/10/89	0.955	93.70 >	320.00 >	3.42 >	20.90
2310	VE	OOE	11	02/17/89	0.944	0.00	234.00	0.00 >	0.13
2311	VE	07Q	13	12/20/88	1.062	0.00 >	320.00	0.00	0.00
2311	YF	07X	13	12/19/88	0.830	0.00 >	320.00	0.00 >	2.21
2313	JE	081	13	12/20/88	1.193	0.00	0.47	0.00	0.00
2313	PT	085	01	12/21/88	0.748	0.00	0.57	0.00 >	0.07
2313	SF	08C	13	12/21/88	0.924	0.00	0.57	0.00	0.01
2313	VE	07Q	13	12/20/88	1.062	0.00	1.59	0.00	0.00
2313	YF	07X	13	12/19/88	0.830	0.00	1.06	0.00	0.00
2315	JE	082	13	12/20/88	1.187	0.00	44.00	0.00	0.00
2315	PT	086	13	12/21/88	0.760	0.00	57.80	0.00	0.00
2315	SF	08C	13	12/21/88	0.924	100.00	56.50	0.56 >	21.92
2315	VE	07R	13	12/20/88	1.072	0.00 >	100.00	0.00 >	2.30
2315	YF	07Y	13	12/19/88	0.762	0.00	100.00	0.00	0.00
2316	VE	P4U	13	03/17/89	1.063	0.00	81.70	0.00 >	0.00
2317	VE	P4U	13	03/17/89	1.063	0.00	16.00	0.00	0.00
2318	JE	PF6	53	04/10/89	0.791	0.00 <	1.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2318	JE	RE4	13	08/30/89	0.686	0.27	6.60	24.21 >	43.71
2318	PT	PFL	53	04/11/89	0.701 <	1.00	1.50 >	1.50 >	2.76
2318	PT	RF9	13	08/30/89	0.608	0.00	2.18	0.00	4.86
2318	SF	PG0	53	04/11/89	0.669	0.00 <	1.00	0.00 >	0.15
2318	SF	REW	13	08/30/89	0.652	0.50	2.01	4.02	19.09
2318	VE	P4V	13	03/17/89	1.040	1.00	0.25	0.25 >	0.42
2318	VE	PEC	53	04/10/89	0.905	0.00 <	1.00	0.00 >	0.04
2318	VE	REI	13	09/11/89	0.848	0.52 >	10.00 >	19.40 >	49.94
2318	YF	PER	53	04/10/89	0.955	0.00 <	1.00	0.00 >	0.40
2318	YF	RDQ	13	08/29/89	0.872	0.52	0.26	0.50	14.62
2319	VE	P4V	13	03/17/89	1.040	0.00	32.70	0.00	0.00
2320	JE	PF7	53	04/10/89	0.845	0.00	33.70	0.00 >	0.82
2320	JE	RE4	13	08/30/89	0.686	0.00	123.00	0.00	7.76
2320	PT	PFM	53	04/11/89	0.689	2.56	93.50	36.50 >	52.20
2320	PT	RF9	13	08/30/89	0.608	0.00	57.50	0.00	1.77
2320	SF	PG1	53	04/11/89	0.598	1.66	81.50	49.00 >	54.10
2320	SF	REW	13	08/30/89	0.652	19.30	70.10	3.63 >	19.21
2320	VE	P4W	13	03/17/89	1.067	0.00	8.93	0.00 >	13.05
2320	VE	PED	53	04/10/89	0.895	0.00	7.57	0.00 >	9.89
2320	VE	REI	13	09/11/89	0.848	7.22	46.20	6.39 >	28.83
2320	YF	PES	53	04/10/89	0.986	0.00	75.60	0.00 >	11.39
2320	YF	RDQ	13	08/29/89	0.872	0.00	12.20	0.00 >	0.81
2321	VE	P4W	13	03/17/89	1.067	0.00	0.33	0.00	0.14
2322	VE	P4X	13	03/17/89	1.013	0.00 >	100.00	0.00 >	1.53
2323	VE	P4X	13	03/17/89	1.013	0.00	1.73	0.00 >	0.02
2325	VE	P4Y	13	03/17/89	0.984	0.00 >	100.00	0.00	0.00
2326	VE	P4Y	13	03/17/89	0.984	0.00	32.50	0.00	0.00
2327	VE	P4Z	13	03/17/89	0.997	0.00	34.50	0.00 >	0.00
2328	VE	P4Z	13	03/17/89	0.997	0.00	34.70	0.00	0.00
2329	VE	P50	13	03/17/89	1.106	0.00 <	0.32	0.00	0.00
2331	VE	P4D	13	03/17/89	1.210	0.00	11.20	0.00 >	0.00
2335	VE	P4E	13	03/17/89	1.082	0.00	27.10	0.00	0.00
2336	VE	P4E	13	03/17/89	1.082	0.00	32.00	0.00 >	0.00
2340	VE	P4F	13	03/17/89	1.080	0.00	25.80	0.00	0.00
2344	PT	086	13	12/21/88	0.760	0.00	0.02	0.00 >	0.55
2344	VE	07R	13	12/20/88	1.072	0.00	0.01	0.00	0.00
2352	VE	P4F	13	03/17/89	1.080	0.00 >	100.00	0.00	0.00
2355	VE	08N	15	01/06/89	0.922	0.00 >	320.00	0.00 >	0.50
2356	VE	P4H	15	03/17/89	1.066	0.00 >	100.00	0.00	0.00
2357	VE	P4H	15	03/17/89	1.066	0.00 >	100.00	0.00	0.20
2358	JE	RE5	15	08/30/89	0.750	0.00	54.10	0.00 >	0.74
2358	PT	RFA	15	08/30/89	0.592	0.00	54.70	0.00	0.55
2358	SF	REX	15	08/30/89	0.630	0.00	56.30	0.00 >	1.30
2358	VE	P4I	15	03/17/89	1.144	0.00	29.40	0.00	0.00
2358	VE	REJ	15	09/11/89	0.881	0.00	59.40	0.00	0.00
2358	YF	RDR	15	08/29/89	0.666	0.00	76.70	0.00 >	0.10
2359	VE	P4I	15	03/17/89	1.144	0.00 >	32.00	0.00	0.00
2360	VE	08N	15	01/06/89	0.922	0.00 >	100.00	0.00	0.20
2361	JE	PAB	16	03/24/89	0.879	0.00 >	320.00	0.00 >	4.47
2361	VE	P9Z	16	03/24/89	0.978	0.00 >	320.00	0.00 >	0.50
2362	JE	PAC	16	03/24/89	0.808	0.00 >	100.00	0.00 >	12.60
2362	VE	PAO	16	03/24/89	1.050	0.00 >	100.00	0.00	0.00
2363	JE	RE5	15	08/30/89	0.750	0.00	21.00	0.00	0.03
2363	PT	RFA	15	08/30/89	0.592	0.00	45.30	0.00	6.93
2363	SF	REX	15	08/30/89	0.630	7.79	42.10	5.40 >	23.58
2363	VE	P4J	15	03/17/89	1.132	0.00 >	10.00	0.00 >	1.90
2363	VE	REJ	15	09/11/89	0.881	0.00	66.00	0.00 >	19.13
2363	YF	RDR	15	08/29/89	0.666	8.18	45.10	5.52 >	23.84
2364	JE	RE6	15	08/30/89	0.694	0.00	60.30	0.00 >	1.50
2364	PT	RFB	15	08/30/89	0.568	0.00	51.80	0.00	0.00
2364	SF	REY	15	08/30/89	0.687	0.00 >	100.00	0.00	0.67
2364	VE	P4J	15	03/17/89	1.132	0.00 >	32.00	0.00	0.00
2364	VE	REK	15	09/11/89	0.780	0.00 >	100.00	0.00	0.00
2364	YF	RDS	15	08/29/89	0.798	0.00	65.00	0.00 >	0.00
2365	VE	08S	15	01/06/89	1.023	0.00 >	320.00	0.00	0.20
2365	VE	P5I	15	03/17/89	0.974	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2366	VE	O8T	15	01/06/89	0.994	0.00	184.00	0.00	0.10
2367	VE	O8T	15	01/06/89	0.994	0.00	2.38	0.00	0.00
2368	VE	O8U	15	01/06/89	0.976	0.00	2.02	0.00	0.00
2369	VE	O8U	15	01/06/89	0.976	0.00	62.60	0.00	0.00
2370	VE	O8V	15	01/06/89	1.161	0.00 >	32.00	0.00	0.00
2371	VE	O8V	15	01/06/89	1.161	0.00 >	32.00	0.00	0.00
2372	VE	O8W	15	01/06/89	1.063	0.00 >	100.00	0.00	0.20
2373	VE	O8W	15	01/06/89	1.063	0.00 >	32.00	0.00	0.00
2374	VE	O8X	15	01/06/89	0.977	0.00 >	100.00	0.00 >	0.10
2375	VE	O8X	15	01/06/89	0.977	0.00	2.36	0.00	1.59
2376	VE	O8Y	15	01/06/89	0.970	0.00	3.52	0.00	0.65
2377	VE	O8Y	15	01/06/89	0.970	0.00 >	10.00	0.00	0.00
2378	VE	O8Z	15	01/06/89	0.936	0.00 >	100.00	0.00	0.00
2379	JE	PAA	15	03/24/89	0.922	0.00 >	100.00	0.00 >	15.79
2379	VE	P9Y	15	03/24/89	1.037	0.00 >	100.00	0.00	0.06
2380	JE	PAB	15	03/24/89	0.879	0.00 >	32.00	0.00 >	5.84
2380	VE	P9Z	15	03/24/89	0.978	0.00 >	32.00	0.00	0.00
2381	JE	PAC	16	03/24/89	0.808	0.00 >	10.00	0.00 >	5.50
2381	VE	PA0	16	03/24/89	1.050	0.00 >	10.00	0.00	0.00
2382	JE	PAD	16	03/24/89	0.877	0.00 >	3.20	0.00 >	9.99
2382	VE	PA1	16	03/24/89	1.028	0.00 >	3.20	0.00 >	0.32
2383	JE	PAD	16	03/24/89	0.877	0.00	38.20	0.00	0.00
2383	VE	PA1	16	03/24/89	1.028	0.00	49.10	0.00	2.96
2384	JE	PAE	16	03/24/89	0.970	0.00 >	100.00	0.00 >	3.83
2384	VE	PA2	16	03/24/89	0.985	0.00	53.60	0.00	0.78
2385	JE	PAE	16	03/24/89	0.970	0.00 >	320.00	0.00 >	6.11
2385	VE	PA2	16	03/24/89	0.985	0.00 >	320.00	0.00	0.06
2386	JE	PAF	16	03/24/89	0.882	0.00 >	32.00	0.00 >	0.23
2386	VE	PA3	16	03/24/89	1.003	0.00	32.00	0.00	0.44
2387	JE	PAF	16	03/24/89	0.882	0.00 >	32.00	0.00 >	0.23
2387	VE	PA3	16	03/24/89	1.003	0.00 >	32.00	0.00 >	0.08
2388	JE	PAG	16	03/24/89	0.754	0.00 >	320.00	0.00 >	5.57
2388	VE	PA4	16	03/24/89	0.998	0.00	204.00	0.00 >	0.20
2389	JE	PAG	16	03/24/89	0.754	0.00 >	100.00	0.00 >	4.61
2389	VE	PA4	16	03/24/89	0.998	0.00 >	100.00	0.00 >	0.18
2390	JE	PAH	16	03/24/89	0.809	0.00	2.80	0.00 >	0.13
2390	VE	PA5	16	03/24/89	0.931	0.00 >	32.00	0.00	0.00
2391	JE	PAH	16	03/24/89	0.809	0.00	7.73	0.00	0.00
2391	VE	PA5	16	03/24/89	0.931	0.00 >	100.00	0.00	0.20
2392	JE	PAI	16	03/24/89	0.848	0.00 >	100.00	0.00	0.28
2392	VE	PA6	16	03/24/89	0.906	0.00	96.50	0.00 >	1.50
2393	JE	PAI	16	03/24/89	0.848	0.00 >	320.00	0.00	0.00
2393	VE	PA6	16	03/24/89	0.906	0.00	205.00	0.00 >	1.10
2394	JE	PAJ	16	03/24/89	0.838	0.00 >	3.20	0.00 >	3.10
2394	VE	PA7	16	03/24/89	0.891	0.00 >	3.20	0.00 >	1.92
2395	JE	PAJ	16	03/24/89	0.838	0.00	2.80	0.00	0.00
2395	VE	PA7	16	03/24/89	0.891	0.00	5.05	0.00 >	1.84
2396	JE	PAK	16	03/24/89	0.883	0.00 >	320.00	0.00 >	4.60
2396	VE	PA8	16	03/24/89	0.909	0.00 >	320.00	0.00 >	2.42
2397	JE	PAK	16	03/24/89	0.883	0.00 >	32.00	0.00	0.00
2397	VE	PA8	16	03/24/89	0.909	0.00 >	32.00	0.00 >	2.75
2398	JE	PAL	16	03/24/89	0.901	0.00 >	100.00	0.00 >	2.99
2398	VE	PA9	16	03/24/89	0.889	0.00 >	100.00	0.00 >	1.72
2399	JE	PAY	16	03/24/89	0.838	0.00	1.50	0.00	0.00
2399	VE	PAM	16	03/24/89	1.228	0.00	0.40	0.00	0.00
2400	JE	PAZ	16	03/24/89	0.872	0.00 >	320.00	0.00	0.00
2400	VE	PAN	16	03/24/89	1.262	0.00 >	320.00	0.00	0.00
2401	JE	PAZ	16	03/24/89	0.872	0.00	5.01	0.00	4.68
2401	VE	PAN	16	03/24/89	1.262	0.00	1.20	0.00	0.00
2402	JE	PB0	16	03/24/89	0.845	0.00 >	10.00	0.00	1.20
2402	VE	PA0	16	03/24/89	1.185	0.00 >	10.00	0.00	0.00
2403	JE	PB0	16	03/24/89	0.845	0.00	26.80	0.00	0.00
2403	VE	PA0	16	03/24/89	1.185	0.00	18.00	0.00	0.00
2404	JE	PB1	16	03/24/89	0.900	0.00 >	32.00	0.00	1.46
2404	VE	PAP	16	03/24/89	1.202	0.00	30.90	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2405	JE	PB1	16	03/24/89	0.900	0.00	7.00	0.00	0.00
2405	VE	PAP	16	03/24/89	1.202	0.00	5.37	0.00	0.00
2406	JE	PB2	16	03/24/89	0.873	0.00 >	100.00	0.00	0.00
2406	VE	PAQ	16	03/24/89	1.232	0.00 >	100.00	0.00	0.00
2407	JE	PB2	16	03/24/89	0.873	0.00	3.74	0.00	0.00
2407	VE	PAQ	16	03/24/89	1.232	0.00	3.57	0.00	0.00
2408	JE	PB3	16	03/24/89	0.854	0.00	119.00	0.00	1.97
2408	VE	PAR	16	03/24/89	1.163	0.00	171.00	0.00	0.38
2409	JE	PB3	16	03/24/89	0.854	0.00	3.23	0.00	1.20
2409	VE	PAR	16	03/24/89	1.163	0.00	3.74	0.00	0.00
2410	JE	PB4	16	03/24/89	0.801	0.00	0.10	0.00	0.00
2410	VE	PAS	16	03/24/89	1.146	0.00	2.78	0.00	0.10
2411	VE	P4K	17	03/17/89	1.052	0.00	20.20	0.00	0.40
2412	VE	P4L	17	03/17/89	1.069	0.00	23.90	0.00	0.51
2413	VE	P4L	17	03/17/89	1.069	0.00	2.10	0.00 >	0.00
2414	VE	P4M	17	03/17/89	1.021	0.00	19.90	0.00	0.34
2415	VE	P4M	17	03/17/89	1.021	0.00	23.20	0.00 >	0.55
2416	JE	PB5	20	03/24/89	0.787	0.00 >	320.00	0.00	0.00
2416	VE	P4N	17	03/17/89	1.070	0.00	10.50	0.00	1.88
2417	VE	P4N	17	03/17/89	1.070	0.00	25.90	0.00 >	0.00
2418	VE	P4O	17	03/17/89	1.183	0.00	27.20	0.00	0.00
2419	VE	P51	17	03/17/89	1.009	0.00	36.30	0.00 >	0.63
2420	VE	P52	17	03/17/89	1.000	0.00	16.60	0.00	0.00
2421	VE	P52	17	03/17/89	1.000	0.00	13.20	0.00	0.00
2422	VE	P53	17	03/17/89	0.958	0.00	14.30	0.00	0.00
2423	VE	P53	17	03/17/89	0.958	0.00	33.20	0.00	0.00
2424	VE	P54	17	03/17/89	1.017	0.00	14.40	0.00	0.00
2425	VE	P54	17	03/17/89	1.017	0.00	10.00	0.00	0.00
2426	JE	RE6	17	08/30/89	0.694	0.00 >	10.00	0.00	1.80
2426	PT	RFB	17	08/30/89	0.568	0.00 >	10.00	0.00	2.36
2426	SF	REY	17	08/30/89	0.687	0.00 >	10.00	0.00 >	5.46
2426	VE	P55	17	03/17/89	0.970	0.00	5.51	0.00	0.15
2426	VE	REK	17	09/11/89	0.780	0.00 >	10.00	0.00	0.00
2426	YF	RDS	17	08/29/89	0.798	0.00 >	10.00	0.00 >	0.05
2427	VE	P55	17	03/17/89	0.970	0.00	3.64	0.00	1.35
2428	VE	P56	17	03/17/89	0.822	0.00	9.43	0.00 >	7.91
2429	VE	P56	17	03/17/89	0.822	0.00	9.03	0.00 >	7.03
2430	VE	P57	17	03/17/89	0.990	24.80	30.10	1.21 >	0.00
2431	VE	P57	17	03/17/89	0.990	0.00	27.10	0.00	1.32
2433	JE	RE7	17	08/30/89	0.740	0.00	186.00	0.00	8.12
2433	PT	RFC	17	08/30/89	0.560	0.00	176.00	0.00 >	3.51
2433	SF	REZ	17	08/30/89	0.660	10.50	100.00	9.55 >	31.95
2433	VE	P58	17	03/17/89	0.950	87.90 >	100.00 >	1.14 >	0.00
2433	VE	REL	17	09/11/89	0.631	52.30	161.00	3.08	23.90
2433	YF	RDT	17	08/29/89	0.793	0.00	168.00	0.00	0.00
2434	VE	P58	17	03/17/89	0.950	0.00	321.00	0.00 >	5.70
2435	VE	P59	17	03/17/89	0.877	0.00	27.40	0.00	0.00
2436	VE	P59	17	03/17/89	0.877	0.00 >	32.00	0.00	1.20
2437	VE	P5A	17	03/17/89	0.833	0.00	15.40	0.00	0.00
2438	VE	P5A	17	03/17/89	0.833	0.00	13.30	0.00 >	0.00
2439	VE	P5B	17	03/17/89	0.827	0.00	18.10	0.00 >	0.90
2440	VE	P5B	17	03/17/89	0.827	0.00	34.70	0.00	0.00
2441	VE	P5C	17	03/17/89	0.847	0.00	26.00	0.00 >	0.30
2441	VE	P9M	18	03/24/89	0.977	0.00	99.50	0.00	0.00
2442	VE	P9N	18	03/24/89	0.998	0.00	89.20	0.00	0.00
2443	VE	P9N	18	03/24/89	0.998	0.00	77.70	0.00	0.00
2444	VE	P9O	18	03/24/89	0.954	0.00	45.50	0.00	0.00
2445	VE	P9O	18	03/24/89	0.954	0.00	74.90	0.00 >	1.49
2447	VE	P9P	18	03/24/89	0.987	0.00 >	320.00	0.00	0.00
2448	VE	P9P	18	03/24/89	0.987	0.00 >	320.00	0.00	0.00
2449	JE	RFR	18	09/06/89	0.972	0.00	45.00	0.00 >	4.73
2449	SF	RGH	18	09/06/89	1.121	21.10	10.00	0.47 >	11.99
2449	VE	P9Q	18	03/24/89	0.996	0.00	83.60	0.00	0.96
2449	VE	RG4	18	09/08/89	0.889	0.00	173.00	0.00	4.22
2449	YF	RFE	18	09/06/89	0.797	0.00	56.90	0.00	3.91
2450	JE	RFS	18	09/06/89	0.868	0.00	32.00	0.00 >	2.86

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2450	SF	RG1	18	09/06/89	1.152	0.00	1.00	0.00 >	5.64
2450	VE	P9Q	18	03/24/89	0.996	0.00	66.00	0.00 >	6.11
2450	VE	RG5	18	09/08/89	0.889	0.00 >	100.00	0.00 >	0.00
2450	YF	RFF	18	09/06/89	0.736	0.00 >	100.00	0.00 >	8.27
2451	VE	P9R	18	03/24/89	0.989	0.00	3.94	0.00 >	0.04
2452	VE	P9R	18	03/24/89	0.989	0.00	4.47	0.00 >	0.00
2453	JE	RFS	18	09/06/89	0.868	0.00	14.10	0.00 >	1.27
2453	SF	RG1	18	09/06/89	1.152	3.11	3.20	1.03	8.70
2453	VE	P9S	18	03/24/89	1.018	0.00	1.59	0.00 >	2.93
2453	VE	RG5	18	09/08/89	0.889	5.02	13.30	2.64	12.09
2453	YF	RFF	18	09/06/89	0.736	5.83	15.70	2.69	14.12
2454	VE	P9S	18	03/24/89	1.018	0.00	151.00	0.00 >	0.05
2455	VE	P9T	18	03/24/89	0.981	0.00 >	100.00	0.00 >	0.30
2456	VE	P9T	18	03/24/89	0.981	0.00	147.00	0.00 >	0.18
2457	VE	P9U	18	03/24/89	0.953	0.00	93.10	0.00	0.00
2458	VE	P9U	18	03/24/89	0.953	0.00	23.50	0.00	0.00
2459	VE	P9V	18	03/24/89	0.980	0.00	147.00	0.00	0.00
2460	VE	P9V	18	03/24/89	0.980	0.00	112.00	0.00	0.00
2461	VE	P9W	18	03/24/89	0.924	0.00 >	100.00	0.00 >	0.40
2462	VE	P9W	18	03/24/89	0.924	0.00 >	100.00	0.00 >	0.03
2463	VE	P9X	18	03/24/89	1.034	0.00 >	32.00	0.00	0.75
2464	VE	PFX	18	03/31/89	1.128	0.00	30.70	0.00	0.00
2465	VE	PFY	18	03/31/89	1.050	0.00 >	100.00	0.00	0.00
2466	VE	FFY	18	03/31/89	1.050	0.00	37.30	0.00	0.00
2467	VE	PFZ	18	03/31/89	1.020	0.00	40.70	0.00 >	1.22
2468	VE	PFZ	18	03/31/89	1.020	0.00	144.00	0.00 >	2.44
2469	VE	PG0	18	03/31/89	1.071	0.00	141.00	0.00	0.20
2470	VE	PG0	18	03/31/89	1.071	0.00	3.01	0.00 >	0.72
2471	VE	PG2	19	03/31/89	1.101	0.00	13.40	0.00	0.00
2472	VE	PG3	19	03/31/89	1.100	0.00	15.40	0.00	0.00
2473	VE	PG3	19	03/31/89	1.100	0.00	15.70	0.00	0.00
2474	VE	PG4	19	03/31/89	1.037	0.00	2.63	0.00	0.24
2475	VE	PG4	19	03/31/89	1.037	0.00	6.77	0.00	2.71
2476	VE	PG5	19	03/31/89	1.025	0.00	14.60	0.00	0.00
2477	VE	PG5	19	03/31/89	1.025	0.00 >	100.00	0.00	0.00
2479	VE	PG6	19	03/31/89	0.895	0.00	5.22	0.00	0.00
2480	VE	PG6	19	03/31/89	0.895	0.00	5.01	0.00	0.00
2481	VE	PG7	19	03/31/89	1.027	0.00	16.30	0.00	0.00
2482	VE	PG7	19	03/31/89	1.027	0.00	6.91	0.00	0.00
2483	VE	PG8	19	03/31/89	1.049	0.00 >	100.00	0.00	0.20
2484	JE	082	19	12/20/88	1.187	0.00 >	320.00	0.00 >	0.59
2484	VE	075	19	12/20/88	1.115	0.00 >	320.00	0.00 >	1.20
2485	VE	PGL	19	03/31/89	1.072	0.00	170.00	0.00	0.00
2486	VE	PGM	19	03/31/89	1.063	0.00 >	10.00	0.00	0.00
2488	VE	PGM	19	03/31/89	1.063	0.00 >	100.00	0.00	0.00
2490	VE	PGN	19	03/31/89	1.095	0.00 >	320.00	0.00	0.00
2491	VE	PGN	19	03/31/89	1.095	0.00 >	100.00	0.00	0.00
2492	VE	PGO	19	03/31/89	1.074	0.00 >	100.00	0.00	0.00
2493	VE	PGO	19	03/31/89	1.074	0.00 >	320.00	0.00	0.00
2494	VE	PGP	19	03/31/89	1.089	0.00	296.00	0.00	0.00
2495	VE	PGP	19	03/31/89	1.089	0.00 >	32.00	0.00	0.00
2496	VE	PGQ	19	03/31/89	1.068	0.00	61.40	0.00	0.00
2497	VE	PGQ	19	03/31/89	1.068	0.00 >	100.00	0.00	0.00
2498	VE	PGR	19	03/31/89	1.082	0.00 >	32.00	0.00	0.00
2499	VE	PGR	19	03/31/89	1.082	0.00 >	100.00	0.00	0.00
2500	VE	PGS	19	03/31/89	1.053	0.00	88.30	0.00	0.00
2501	JE	RFT	19	09/06/89	0.986	0.00	5.47	0.00 >	0.84
2501	SF	RGJ	19	09/06/89	1.121	0.00 >	100.00	0.00	0.00
2501	VE	PGS	19	03/31/89	1.053	0.00	219.00	0.00	0.15
2501	VE	RG6	19	09/08/89	1.216	0.00 >	100.00	0.00	2.50
2501	YF	RFG	19	09/06/89	0.724	0.00 >	100.00	0.00	1.99
2502	VE	PGT	19	03/31/89	1.043	0.00 >	320.00	0.00	0.00
2503	JE	PF7	53	04/10/89	0.845	0.00	1.00	0.00 >	0.04
2503	JE	RFT	21	09/06/89	0.986	0.43	2.90	6.78 >	28.10
2503	PT	PFM	53	04/11/89	0.689	1.00 <	1.82	82 >	3.91
2503	SF	PG1	53	04/11/89	0.598	0.00 <	1.00	00 >	0.01

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2503	SF	RGJ	21	09/06/89	1.121	0.59	2.04	3.43	15.85
2503	VE	PGJ	21	03/31/89	1.059	0.00	0.28	0.00	2.33
2503	VE	PED	53	04/10/89	0.895	0.00 <	1.00	0.00	0.00
2503	VE	RG6	21	09/08/89	1.216	0.68	4.17	6.18 >	21.71
2503	YF	PES	53	04/10/89	0.986	0.00 <	1.00	0.00 >	0.48
2503	YF	RFG	21	09/06/89	0.724	0.22	2.68	12.20	32.81
2504	VE	PGK	21	03/31/89	1.116	0.00	0.26	0.00	0.24
2505	VE	PFM	21	03/31/89	1.126	0.00 >	100.00	0.00	0.00
2506	JE	RFU	21	09/06/89	0.996	7.02 >	10.00 >	1.42 >	8.07
2506	SF	RGK	21	09/06/89	1.058	2.16	8.83	4.09 >	17.02
2506	VE	PG9	21	03/31/89	0.977	2.20	4.53	2.06	10.27
2506	VE	RG7	21	09/08/89	1.020	2.26	6.37	2.81 >	13.28
2506	YF	RFH	21	09/06/89	0.715	1.64 >	10.00 >	6.11 >	26.99
2507	VE	PFO	20	03/31/89	1.079	0.00 >	100.00	0.00 >	0.01
2508	VE	PFP	20	03/31/89	1.084	0.00 >	320.00	0.00	0.00
2509	VE	PFP	20	03/31/89	1.084	0.00 <	1.00	0.00	0.00
2510	VE	PFQ	20	03/31/89	1.062	0.00 >	0.32	0.00	0.00
2511	VE	PFQ	20	03/31/89	1.062	0.00	73.20	0.00	0.00
2512	VE	PFR	20	03/31/89	0.959	0.00	283.00	0.00 >	0.40
2513	JE	PB4	20	03/24/89	0.801	0.00	0.85	0.00	0.00
2513	VE	PAS	20	03/24/89	1.146	0.00	0.19	0.00	0.00
2514	JE	PB5	20	03/24/89	0.787	0.00	2.89	0.00	0.00
2514	VE	PAT	20	03/24/89	1.096	0.00 <	0.32	0.00	0.00
2515	JE	PB6	20	03/24/89	0.877	0.00	181.00	0.00	0.00
2515	VE	PAU	20	03/24/89	1.076	0.00	110.00	0.00	0.00
2516	VE	PAT	20	03/24/89	1.096	0.00 >	320.00	0.00	0.00
2517	JE	PB6	20	03/24/89	0.877	0.00	6.04	0.00	0.00
2517	VE	PAU	20	03/24/89	1.076	0.00	4.26	0.00	2.93
2518	JE	PB7	20	03/24/89	0.991	0.00	3.25	0.00 >	1.92
2518	SF	RT1	20	10/11/89	0.967	0.00	4.08	0.00	1.34
2518	VE	PAV	20	03/24/89	1.033	0.00	3.27	0.00 >	0.00
2519	JE	PB7	20	03/24/89	0.991	0.00	0.70	0.00 >	6.49
2519	VE	PAV	20	03/24/89	1.033	0.00	0.52	0.00	0.00
2520	JE	PB8	20	03/24/89	1.003	0.00	1.70	0.00 >	0.30
2520	VE	PAW	20	03/24/89	1.127	0.00	3.55	0.00 >	0.42
2521	JE	PB8	20	03/24/89	1.003	0.00	0.22	0.00	0.00
2521	VE	PAW	20	03/24/89	1.127	0.00	0.30	0.00	0.00
2522	JE	PB9	20	03/24/89	0.887	0.00	0.97	0.00 >	8.31
2522	VE	PAX	20	03/24/89	1.086	0.00	1.68	0.00	0.81
2533	VE	PFR	20	03/31/89	0.959	0.00	0.02	0.00	0.00
2534	VE	PFS	20	03/31/89	0.905	0.00	4.57	0.00	0.00
2535	VE	PFS	20	03/31/89	0.905	0.00 >	320.00	0.00	0.00
2536	VE	PFT	20	03/31/89	0.934	0.00 >	320.00	0.00	0.00
2537	VE	PFT	20	03/31/89	0.934	0.00	53.40	0.00	0.00
2538	VE	PFU	20	03/31/89	0.928	0.00 >	320.00	0.00	0.00
2540	VE	PFU	20	03/31/89	0.928	0.00 >	320.00	0.00	0.00
2541	VE	PFV	20	03/31/89	0.948	0.00	4.69	0.00 >	0.10
2542	VE	PFV	20	03/31/89	0.948	0.00	17.80	0.00	0.00
2543	JE	RFU	21	09/06/89	0.996	0.00	7.73	0.00	0.00
2543	SF	RGK	21	09/06/89	1.058	0.00	45.10	0.00	4.84
2543	VE	RG7	21	09/08/89	1.020	30.00	43.70	1.46	4.43
2543	YF	RFH	21	09/06/89	0.715	0.00	50.50	0.00	3.78
2544	JE	083	20	12/20/88	1.156	0.00	1.29	0.00	0.00
2544	JE	P82	20	03/21/89	0.675	0.00	1.43	0.00	0.65
2544	PT	087	20	12/21/88	0.766	0.00	2.08	0.00	0.00
2544	PT	P8E	20	03/22/89	0.623	0.00	4.46	0.00	0.00
2544	SF	08D	20	12/21/88	0.906	0.00	2.70	0.00 >	3.13
2544	SF	P8Q	20	03/22/89	1.038	0.00	3.46	0.00 >	4.09
2544	VE	07S	20	12/20/88	1.115	2.60	3.32	1.28	4.34
2544	VE	P92	20	03/21/89	0.873	0.00	4.00	0.00	0.00
2544	YF	07Y	20	12/19/88	0.762	0.00	3.46	0.00	0.00
2544	YF	P9H	20	03/21/89	1.030	0.00	3.38	0.00	0.00
2548	JE	QBZ	56	06/13/89	0.951	0.00	0.03	0.00	0.00
2548	PT	QCB	56	06/14/89	0.900	0.00	1.65	0.00 >	5.45
2548	SF	QCN	56	06/13/89	1.239	0.00	1.80	0.00	0.63
2548	VEE	QBN	56	06/12/89	1.274	0.00	2.86	0.00 >	0.01

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2548	YF	QBB	56	06/12/89	1.182	0.00	1.80	0.00	0.00
2556	JE	QEZ	56	06/13/89	0.951	0.00	0.13	0.00	0.00
2556	PT	QCB	56	06/14/89	0.900	0.00 <	0.03	0.00	0.00
2556	SF	QCN	56	06/13/89	1.239	0.00	0.06	0.00 >	0.01
2556	VEE	QBN	56	06/12/89	1.274	0.00 <	0.03	0.00	0.00
2556	YF	QBB	56	06/12/89	1.182	0.00	0.06	0.00	0.00
2561	JE	QCO	56	06/13/89	0.975	0.00 <	0.03	0.00	0.00
2561	JE	R3X	56	08/09/89	0.805	0.00	0.01	0.00	0.00
2561	PT	QCC	56	06/14/89	0.880	0.00 <	0.03	0.00	0.00
2561	PT	R4N	56	08/09/89	0.642	0.00	0.01	0.00	0.00
2561	SF	QCO	56	06/13/89	1.112	0.00 <	0.03	0.00	0.00
2561	SF	R4A	56	08/09/89	0.963	0.00	0.00	0.00	0.00
2561	VE	R37	56	08/11/89	1.347	0.00	0.02	0.00	0.00
2561	VEE	QBO	56	06/12/89	1.220	0.00 <	0.03	0.00	0.00
2561	YF	QBC	56	06/12/89	1.085	0.00	0.04	0.00	0.00
2561	YF	R3K	56	08/07/89	1.115	0.00	0.01	0.00	0.00
2563	JE	OKE	48	02/06/89	0.554	0.32 >	3.20 >	10.00 >	41.49
2563	JE	OKE	48	02/06/89	0.554	0.00 >	0.00	0.00 >	0.10
2563	JE	Q5T	15	05/23/89	0.850	2.59	12.40	4.77	20.32
2563	JE	RFV	21	09/06/89	1.087	0.16	1.39	8.49 >	18.23
2563	PT	OKN	48	02/07/89	1.002	0.39	1.77	4.51 >	28.54
2563	PT	OKN	48	02/07/89	1.002	0.00 >	0.00	0.00 >	4.01
2563	PT	Q5Z	15	05/23/89	0.724	0.00	5.33	0.00	0.12
2563	SF	OKW	48	02/07/89	1.288	5.02	2.52	0.50 >	15.19
2563	SF	OKW	48	02/07/89	1.288	0.00 >	0.00	0.00 >	1.80
2563	SF	Q65	15	05/23/89	1.118	0.00	5.94	0.00	0.00
2563	SF	RGL	21	09/06/89	1.090	0.00	0.58	0.00	0.00
2563	VE	OK5	48	02/06/89	0.966	0.00	1.70	0.00	0.00
2563	VE	OK5	48	02/06/89	0.966	0.00 >	0.00	0.00 >	0.00
2563	VE	Q5N	15	05/22/89	0.622	0.00	8.20	0.00 >	3.11
2563	VE	RG8	21	09/08/89	1.018	0.00	0.70	0.00 >	1.90
2563	VSV	002	48	01/20/89	1.015	0.00	1.13	0.00	0.00
2563	VSV	002	48	01/20/89	1.015	0.00 >	1.00	0.00 >	0.30
2563	VV	00D	48	01/26/89	1.826	0.00	8.39	0.00	0.00
2563	VV	00D	48	01/26/89	1.826	0.00 >	0.32	0.00 >	0.02
2563	YF	OJW	48	02/06/89	1.189	0.47	1.51	3.21 >	0.10
2563	YF	OJW	48	02/06/89	1.189	0.00 >	0.00	0.00	0.28
2563	YF	Q5B	15	05/22/89	1.160	2.22	3.98	1.79	8.60
2563	YF	RFI	21	09/06/89	0.739	0.17	1.00	6.00 >	25.60
2564	JE	083	20	12/20/88	1.156	0.00 <	0.32	0.00	0.00
2564	PT	087	20	12/21/88	0.766	0.00 <	0.32	0.00	0.00
2564	SF	08D	20	12/21/88	0.906	0.00 <	0.32	0.00	0.00
2564	VE	07T	20	12/20/88	1.224	0.00 <	0.32	0.00	0.00
2564	YF	07Z	20	12/19/88	0.787	0.00 <	0.32	0.00	0.00
2565	JE	Q5T	21	05/23/89	0.850	0.00 >	320.00	0.00	0.00
2565	JE	RFV	21	09/06/89	1.087	0.00 >	100.00	0.00 >	0.19
2565	PT	Q5Z	21	05/23/89	0.724	0.00 >	320.00	0.00 >	9.69
2565	SF	Q65	21	05/23/89	1.118	0.00 >	320.00	0.00	0.31
2565	SF	RGL	21	09/06/89	1.090	0.00	29.80	0.00	0.00
2565	VE	Q5N	21	05/22/89	0.622	0.00	186.00	0.00 >	8.16
2565	VE	RG8	21	09/08/89	1.018	0.00 >	100.00	0.00	0.00
2565	YF	Q5B	21	05/22/89	1.160	0.00 >	320.00	0.00	0.00
2565	YF	RFI	21	09/06/89	0.739	0.00	64.00	0.00 >	0.07
2566	VE	PGA	21	03/31/89	1.093	0.00	308.00	0.00	1.67
2567	VE	PGD	21	03/31/89	1.053	0.00 >	320.00	0.00	0.00
2568	JE	RFW	21	09/06/89	0.937	0.00	167.00	0.00 >	13.13
2568	SF	RGM	21	09/06/89	1.214	0.00	162.00	0.00	0.00
2568	VE	PGH	21	03/31/89	1.092	0.00	289.00	0.00	3.71
2568	VE	RG9	21	09/08/89	1.100	0.00	137.00	0.00 >	9.34
2568	YF	RFJ	21	09/06/89	0.718	0.00	222.00	0.00	4.41
2569	VE	PCY	21	04/07/89	1.078	0.00 >	100.00	0.00	0.00
2570	JE	RFW	19	09/06/89	0.937	0.00 >	32.00	0.00	0.00
2570	SF	RGM	19	09/06/89	1.214	0.00 >	32.00	0.00	0.01
2570	VE	RG9	19	09/08/89	1.100	0.00 >	32.00	0.00 >	20.78
2570	YF	RFJ	19	09/06/89	0.718	14.80 >	32.00 >	2.16 >	19.20
2573	JE	QJF	57	06/27/89	0.797	0.00 >	320.00	0.00 >	3.70

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2573	PT	QK3	57	06/27/89	0.531	286.00 >	320.00 >	1.12 >	10.54
2573	SF	QJR	57	06/27/89	1.140	0.00 >	320.00	0.00 >	8.15
2573	VE	QJ3	57	06/26/89	1.058	0.00 >	320.00	0.00 >	1.24
2573	YF	QIR	57	06/26/89	1.117	68.80 >	320.00 >	4.65 >	21.02
2575	JE	QJF	57	06/27/89	0.797	0.00 >	320.00	0.00	3.79
2575	PT	QK3	57	06/27/89	0.531	0.00	273.00	0.00	0.00
2575	SF	QJR	57	06/27/89	1.140	0.00	93.20	0.00	0.00
2575	VE	QJ3	57	06/26/89	1.058	0.00 >	320.00	0.00	0.00
2575	YF	QIR	57	06/26/89	1.117	49.30	159.00	3.22 >	22.68
2579	JE	RFX	19	09/06/89	0.655	0.00 >	320.00	0.00 >	19.70
2579	SF	RGN	19	09/06/89	1.009	0.00 >	320.00	0.00 >	4.22
2579	VE	RGA	19	09/08/89	0.796	0.00 >	320.00	0.00	2.79
2579	YF	RFK	19	09/06/89	0.820	214.00 >	320.00 >	1.50 >	11.72
2580	JE	RFX	19	09/06/89	0.655	0.00 >	10.00	0.00 >	6.63
2580	SF	RGN	19	09/06/89	1.009	0.00 >	10.00	0.00 >	6.29
2580	VE	RGA	19	09/08/89	0.796	0.00 >	10.00	0.00 >	19.31
2580	YF	RFK	19	09/06/89	0.820	2.37 >	10.00 >	4.22 >	19.63
2582	JE	RFY	19	09/06/89	0.884	0.00 >	100.00	0.00 >	13.57
2582	SF	RG0	19	09/06/89	1.103	0.00	2.81	0.00	0.00
2582	VE	PGT	19	03/31/89	1.043	0.00 >	100.00	0.00 >	7.28
2582	VE	RGB	19	09/08/89	0.951	0.00 >	100.00	0.00	0.00
2582	YF	RFL	19	09/06/89	0.775	51.60 >	100.00 >	1.94 >	11.89
2583	VE	PGU	19	03/31/89	1.033	0.00 >	100.00	0.00 >	3.57
2584	VE	PGU	19	03/31/89	1.033	0.00 >	100.00	0.00 >	4.32
2586	JE	RFY	19	09/06/89	0.884	0.00	8.40	0.00 >	0.79
2586	SF	RG0	19	09/06/89	1.103	69.50	6.98	0.10 >	10.81
2586	VE	RGB	19	09/08/89	0.951	0.00 >	320.00	0.00	0.00
2586	YF	RFL	19	09/06/89	0.775	153.00 >	320.00 >	2.08 >	17.27
2587	VE	PGV	19	03/31/89	1.022	0.00 >	10.00	0.00 >	4.68
2590	JE	RFZ	19	09/06/89	0.825	0.00	267.00	0.00 >	21.26
2590	SF	RGP	19	09/06/89	1.190	191.00	3.06	0.02 >	5.67
2590	VE	RGC	19	09/08/89	1.069	211.00 >	320.00 >	1.52 >	17.85
2590	YF	RFM	19	09/06/89	0.619	46.80 >	320.00 >	6.84 >	35.03
2591	JE	RFZ	19	09/06/89	0.825	0.00	43.70	0.00	0.39
2591	SF	RGP	19	09/06/89	1.190	0.00 >	320.00	0.00	0.00
2591	VE	RGC	19	09/08/89	1.069	152.00 >	320.00 >	2.11 >	8.35
2591	YF	RFM	19	09/06/89	0.619	17.90 >	320.00 >	17.89 >	39.96
2592	VE	PGA	19	03/31/89	1.093	0.00 >	100.00	0.00	0.33
2593	VE	PGB	19	03/31/89	1.080	0.00 >	320.00	0.00	0.66
2594	VE	PGB	19	03/31/89	1.080	0.00 >	320.00	0.00	0.25
2597	VE	RTR	19	10/06/89	0.370	0.00 >	320.00	0.00	0.00
2600	VE	PGC	19	03/31/89	1.084	0.00	82.90	0.00	0.00
2603	VE	PGC	19	03/31/89	1.084	0.00 >	100.00	0.00	0.15
2604	JE	RG0	19	09/06/89	0.885	0.00	1.00	0.00	0.00
2604	PT	088	19	12/21/88	0.791	25.50 >	100.00 >	3.91 >	16.02
2604	SF	RGQ	19	09/06/89	1.159	0.00	2.61	0.00	0.16
2604	VE	RGD	19	09/08/89	0.716	0.00	58.20	0.00	3.98
2604	YF	RFN	19	09/06/89	0.650	3.38	85.10	25.16 >	46.09
2605	PT	07H	19	12/20/88	0.953	0.00 >	100.00	0.00 >	1.20
2606	PT	07I	19	12/20/88	0.992	0.00 >	100.00	0.00 >	4.52
2607	PT	07I	19	12/20/88	0.992	0.00	34.80	0.00	0.00
2608	PT	07J	19	12/20/88	0.925	0.00 >	100.00	0.00	4.12
2609	SF	RT1	19	10/11/89	0.967	0.00 >	100.00	0.00	0.00
2612	SF	RT2	19	10/11/89	1.041	0.00	44.60	0.00	0.00
2627	VE	PGD	19	03/31/89	1.053	0.00	193.00	0.00	2.78
2631	JE	RG0	19	09/06/89	0.885	55.40	0.69	0.01	16.57
2631	SF	RGQ	19	09/06/89	1.159	25.60	170.00	6.64 >	21.49
2631	VE	RGD	19	09/08/89	0.716	181.00 >	320.00 >	1.77 >	13.37
2631	YF	RFN	19	09/06/89	0.650	5.48 >	320.00 >	58.39 >	63.24
2640	VE	PCZ	21	04/07/89	1.064	0.00 >	320.00	0.00	0.00
2641	VE	PCZ	21	04/07/89	1.064	0.00 >	320.00	0.00	0.00
2642	VE	PDO	21	04/07/89	1.082	0.00 >	320.00	0.00	0.00
2643	VE	PDO	21	04/07/89	1.082	0.00 >	320.00	0.00	0.00
2644	VE	PD1	21	04/07/89	1.099	0.00 >	320.00	0.00	0.00
2645	VE	PD1	21	04/07/89	1.099	0.00 >	320.00	0.00	0.00
2646	VE	PD2	21	04/07/89	1.109	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2647	VE	PD2	21	04/07/89	1.109	0.00	> 320.00	0.00	0.00
2648	VE	PD3	21	04/07/89	1.086	0.00	> 320.00	0.00	0.00
2649	JE	Q5U	21	05/23/89	0.906	0.00	75.70	0.00	0.00
2649	PT	Q60	21	05/23/89	0.747	0.00	180.00	0.00	2.99
2649	SF	Q66	21	05/23/89	1.157	0.00	83.50	0.00	0.00
2649	VE	PD3	21	04/07/89	1.086	0.00	14.00	0.00	0.00
2649	VE	Q50	21	05/22/89	0.804	0.00	62.60	0.00	0.00
2649	YF	Q5C	21	05/22/89	1.176	0.00	94.80	0.00	0.00
2650	JE	Q6P	21	05/24/89	1.075	0.00	> 320.00	0.00	0.00
2650	PT	Q6V	21	05/24/89	0.956	0.00	> 320.00	0.00	> 3.64
2650	SF	Q71	21	05/23/89	1.395	0.00	> 320.00	0.00	> 0.00
2650	VE	PD4	21	04/07/89	1.110	0.00	> 100.00	0.00	> 0.70
2650	VE	Q6J	21	05/23/89	1.058	0.00	> 320.00	0.00	0.00
2650	YF	Q67	21	05/23/89	1.211	0.00	80.60	0.00	0.00
2651	VE	PD4	21	04/07/89	1.110	0.00	> 100.00	0.00	0.00
2652	JE	RG1	21	09/06/89	0.876	0.00	81.50	0.00	0.00
2652	SF	RGR	21	09/06/89	1.240	0.00	2.89	0.00	0.00
2652	VE	PD5	21	04/07/89	1.018	0.00	> 320.00	0.00	0.00
2652	VE	RGE	21	09/08/89	0.887	0.00	> 320.00	0.00	0.00
2653	VE	PD5	21	04/07/89	1.018	0.00	> 320.00	0.00	0.00
2654	VE	PD6	21	04/07/89	0.945	0.00	141.00	0.00	0.00
2655	VE	PD6	21	04/07/89	0.945	0.00	> 320.00	0.00	0.00
2656	VE	PD7	21	04/07/89	0.969	0.00	> 320.00	0.00	0.00
2657	VE	PD7	21	04/07/89	0.969	0.00	> 320.00	0.00	0.00
2658	JE	Q6Q	21	05/24/89	0.886	0.00	> 320.00	0.00	> 0.10
2658	PT	Q6W	21	05/24/89	1.190	0.00	> 320.00	0.00	0.00
2658	SF	Q72	21	05/23/89	1.087	0.00	> 320.00	0.00	> 7.20
2658	VE	PD8	21	04/07/89	0.981	0.00	> 320.00	0.00	0.60
2658	VE	Q6K	21	05/23/89	0.883	0.00	> 320.00	0.00	0.00
2658	YF	Q68	21	05/23/89	1.378	0.00	> 320.00	0.00	0.00
2659	VE	PD8	21	04/07/89	0.981	0.00	> 320.00	0.00	> 0.90
2660	VE	PD9	21	04/07/89	1.006	0.00	> 100.00	0.00	0.00
2661	VE	PDA	21	04/07/89	1.194	0.00	> 320.00	0.00	0.62
2662	VE	PDB	21	04/07/89	1.289	0.00	> 320.00	0.00	0.32
2663	VE	PDB	21	04/07/89	1.289	0.00	106.00	0.00	0.00
2664	VE	PDC	21	04/07/89	1.254	0.00	> 320.00	0.00	0.00
2665	VE	PDC	21	04/07/89	1.254	0.00	> 320.00	0.00	0.00
2666	VE	PDD	21	04/07/89	1.349	0.00	> 320.00	0.00	0.00
2667	VE	PDD	21	04/07/89	1.349	0.00	1.00	0.00	0.00
2668	VE	PDE	21	04/07/89	1.259	0.00	> 320.00	0.00	0.39
2669	VE	PDE	21	04/07/89	1.259	0.00	> 320.00	0.00	0.00
2670	VE	PDF	21	04/07/89	1.330	0.00	95.80	0.00	0.00
2671	VE	PDF	21	04/07/89	1.330	0.00	> 100.00	0.00	0.00
2672	JE	RG1	21	09/06/89	0.876	0.00	198.00	0.00	2.01
2672	SF	RGR	21	09/06/89	1.240	0.00	32.00	0.00	0.00
2672	VE	PDG	21	04/07/89	1.231	0.00	> 320.00	0.00	> 0.22
2672	VE	RGE	21	09/08/89	0.887	0.00	> 320.00	0.00	0.00
2673	VE	PDG	21	04/07/89	1.231	0.00	> 320.00	0.00	0.15
2674	VE	O80	21	01/06/89	0.950	0.00	> 320.00	0.00	0.40
2675	VE	O80	21	01/06/89	0.950	0.00	> 320.00	0.00	0.00
2678	JE	RG2	21	09/06/89	0.861	0.00	< 1.00	0.00	0.00
2678	SF	RGS	21	09/06/89	1.245	0.00	3.20	0.00	0.00
2678	VE	RGF	21	09/08/89	0.842	0.00	> 320.00	0.00	> 5.47
2678	YF	RFP	21	09/06/89	0.703	0.00	> 320.00	0.00	> 0.14
2680	PT	RIN	21	09/07/89	0.651	0.00	> 320.00	0.00	> 0.52
2680	SF	RIA	21	09/07/89	0.762	0.00	> 320.00	0.00	> 13.19
2680	VE	RHX	21	09/08/89	1.541	0.00	> 320.00	0.00	> 0.01
2680	YF	RH7	21	09/07/89	0.762	0.00	> 320.00	0.00	> 0.30
2685	VE	PDJ	22	04/07/89	1.059	0.00	126.00	0.00	0.04
2686	VE	PDJ	22	04/07/89	1.059	0.00	> 320.00	0.00	0.40
2687	VE	PDK	22	04/07/89	1.151	0.00	> 320.00	0.00	> 0.00
2688	VE	PDK	22	04/07/89	1.151	0.00	1.06	0.00	0.00
2688	VV	OBP	41B	08/17/89	1.325	3.05	6.29	2.00	> 10.95
2689	VE	PDL	22	04/07/89	1.379	0.00	58.90	0.00	> 0.25
2689	VV	OBR	22	08/17/89	1.241	0.00	60.30	0.00	0.00
2690	VE	PDM	22	04/14/89	1.239	0.00	13.50	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
2691	VE	PDN	22	04/14/89	1.101	0.00	17.30	0.00	0.00
2692	VE	PDN	22	04/14/89	1.101	0.00	19.30	0.00	0.00
2693	VE	PDO	22	04/14/89	1.092	0.00	58.90	0.00	0.00
2694	VE	PDO	22	04/14/89	1.092	0.00 >	100.00	0.00	0.00
2695	VE	PDP	22	04/14/89	0.819	0.00	32.00	0.00	0.00
2696	VE	PDP	22	04/14/89	0.819	0.00	0.17	0.00	0.00
2697	VE	PDQ	22	04/14/89	1.085	0.00 >	100.00	0.00	0.00
2698	VE	PDQ	22	04/14/89	1.085	0.00 >	100.00	0.00	0.00
2699	VE	PDR	22	04/14/89	1.228	0.00 >	100.00	0.00	0.05
2700	VE	PDR	22	04/14/89	1.228	0.00	16.60	0.00	3.10
2701	VE	PDS	22	04/14/89	1.064	0.00	60.20	0.00	0.00
2702	JE	OKF	48	02/06/89	0.635	0.00 >	100.00	0.00 >	0.30
2702	JE	OKF	48	02/06/89	0.635	0.00 >	0.10	0.00 >	4.32
2702	PT	OKO	48	02/07/89	0.953	0.00	64.40	0.00 >	0.02
2702	PT	OKO	48	02/07/89	0.953	0.00 >	0.10	0.00	0.00
2702	SF	OKX	48	02/07/89	1.344	0.00	68.30	0.00 >	7.30
2702	SF	OKX	48	02/07/89	1.344	0.00 >	0.10	0.00 >	11.59
2702	VE	OK6	48	02/06/89	0.966	0.00 >	100.00	0.00	0.00
2702	VE	OK6	48	02/06/89	0.966	0.00 >	0.10	0.00 >	0.05
2702	VSV	003	48	01/20/89	1.102	0.00 >	320.00	0.00	1.04
2702	VSV	003	48	01/20/89	1.102	0.00 >	1.00	0.00	0.00
2702	VV	00E	48	01/26/89	1.809	0.00	83.90	0.00	0.00
2702	VV	00E	48	01/26/89	1.809	0.00 >	0.32	0.00	0.00
2702	YF	OJX	48	02/06/89	1.174	0.00	58.90	0.00	0.39
2702	YF	OJY	48	02/06/89	1.158	0.00 >	0.10	0.00	1.15
2703	JE	OKG	48	02/06/89	0.694	0.00 >	320.00	0.00 >	0.50
2703	JE	OKG	48	02/06/89	0.694	0.00 >	0.32	0.00	1.40
2703	PT	OKP	48	02/07/89	0.874	0.00 >	320.00	0.00 >	14.42
2703	PT	OKP	48	02/07/89	0.874	0.00 >	0.32	0.00	0.00
2703	SF	OKY	48	02/07/89	1.406	0.00 >	320.00	0.00 >	8.20
2703	SF	OKY	48	02/07/89	1.406	0.00 >	0.32	0.00 >	2.30
2703	VE	OK7	48	02/06/89	0.942	0.00 >	320.00	0.00 >	0.50
2703	VE	OK7	48	02/06/89	0.942	0.00 >	0.32	0.00	0.00
2703	VSV	004	48	01/20/89	0.990	0.00	302.00	0.00	0.00
2703	VSV	004	48	01/20/89	0.990	0.00 >	1.00	0.00 >	0.08
2703	VV	00F	48	01/26/89	1.869	0.00	246.00	0.00	1.92
2703	VV	00F	48	01/26/89	1.869	0.00 >	0.32	0.00 >	0.25
2703	YF	OJX	48	02/06/89	1.174	0.00 >	320.00	0.00	0.27
2703	YF	OJY	48	02/06/89	1.158	0.00 >	0.32	0.00	0.40
2705	VE	PDS	22	04/14/89	1.034	0.00 >	100.00	0.00	0.00
2707	JE	OG6	PRTY	01/24/89	1.008	0.00	229.00	0.00	0.00
2707	PT	OG8	PRTY	01/25/89	1.226	0.00	353.00	0.00	1.63
2707	SF	OGA	PRTY	01/24/89	1.146	0.00	320.00	0.00 >	1.11
2707	VE	OFI	PRTY	01/24/89	1.147	0.00	320.00	0.00	0.00
2707	YF	OFU	PRTY	01/24/89	0.924	0.00	293.00	0.00	0.12
2709	VE	PDT	22	04/14/89	1.037	0.00 >	100.00	0.00	0.00
2710	VE	PDT	22	04/14/89	1.037	0.00 >	100.00	0.00	0.48
2711	JE	RHL	22	09/07/89	0.830	0.00 >	320.00	0.00	0.00
2711	PT	RIO	22	09/07/89	0.579	0.00 >	320.00	0.00 >	0.62
2711	SF	RIB	22	09/07/89	0.566	0.00 >	320.00	0.00 >	23.19
2711	VE	PDU	22	04/14/89	0.910	0.00 >	100.00	0.00	0.00
2711	VE	RHY	22	09/08/89	1.505	0.00 >	320.00	0.00 >	0.86
2711	YF	RH8	22	09/07/89	0.737	0.00 >	320.00	0.00 >	0.01
2714	VE	PDU	22	04/14/89	0.910	0.00	8.43	0.00	0.68
2715	SF	OAG	PRTY	01/11/89	0.484	0.00	0.00	0.00	2.35
2715	VV	014	37	01/12/89	1.844	0.00 >	0.00	0.00 >	0.20
2716	JE	OEI	46	01/23/89	1.248	0.00	18.20	0.00 >	14.21
2716	JE	RHM	22	09/07/89	0.989	0.00	0.19	0.00	0.00
2716	PT	OES	46	01/24/89	0.976	0.00	10.80	0.00	2.16
2716	PT	RIP	22	09/07/89	0.605	0.00 >	10.00	0.00 >	4.91
2716	SF	OF2	46	01/24/89	1.156	0.00	14.00	0.00	0.00
2716	SF	RIC	22	09/07/89	0.735	0.00 >	10.00	0.00	5.08
2716	VE	ODY	46	01/23/89	1.214	2.67	3.40	1.27 >	6.03
2716	VE	RHZ	22	09/08/89	1.367	8.43 >	10.00 >	1.19 >	9.60
2716	YF	OES	46	01/23/89	0.962	0.00	21.50	0.00 >	0.80
2716	YF	RH9	22	09/07/89	0.642	0.00 >	10.00	0.00	3.43

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2720	JE	PP1	22	04/21/89	0.966	0.00	97.40	0.00	0.00
2720	PT	PO1	22	04/21/89	0.463	1.00	67.70	67.70	28.46
2720	SF	POP	22	04/21/89	0.957	0.00	164.00	0.00	1.70
2720	VE	POD	22	04/21/89	1.088	0.00	148.00	0.00	0.00
2720	YF	Q49	22	05/19/89	0.829	0.00	183.00	0.00 >	3.51
2722	JE	PP2	22	04/21/89	0.939	0.00	45.80	0.00	0.00
2722	VE	POE	22	04/21/89	1.120	0.00	2.20	0.00	0.00
2739	VE	PDV	22	04/14/89	1.080	0.00	24.90	0.00 >	0.00
2740	VE	PDV	22	04/14/89	1.080	0.00	127.00	0.00	0.00
2741	VE	PG1	18	03/31/89	1.023	0.00 >	320.00	0.00 >	0.30
2742	VE	PG1	18	03/31/89	1.023	0.00 >	320.00	0.00 >	0.20
2743	VE	PG2	18	03/31/89	1.101	0.00	214.00	0.00	2.38
2743	VV	OBL	41B	08/17/89	1.249	95.70	299.00	3.12 >	12.85
2744	VE	PDW	22	04/14/89	1.031	0.00 >	100.00	0.00	0.82
2745	VE	PDW	22	04/14/89	1.031	0.00 >	100.00	0.00	0.00
2770	VE	PDX	22	04/14/89	1.192	0.00	67.50	0.00 >	2.09
2771	VE	PDY	22	04/07/89	1.047	0.00	10.60	0.00	0.00
2772	VE	PDZ	22	04/07/89	0.961	0.00	129.00	0.00 >	0.01
2773	VE	PDZ	22	04/07/89	0.961	0.00	145.00	0.00	0.00
2774	VE	PE0	22	04/07/89	0.919	0.00	30.40	0.00 >	0.03
2775	VE	PE0	22	04/07/89	0.919	0.00 >	320.00	0.00	0.12
2789	JE	Q6Q	24	05/24/89	0.886	0.00 >	320.00	0.00 >	1.12
2789	SF	Q72	24	05/23/89	1.087	0.00 >	320.00	0.00	2.60
2789	VE	Q6K	24	05/23/89	0.883	0.00 >	320.00	0.00	0.52
2789	VE	Q68	24	05/23/89	1.378	0.00	100.00	0.00	0.00
2811	VE	OKH	48	02/06/89	0.629	0.02	0.24	11.00 >	37.18
2811	JE	OKH	48	02/06/89	0.629	0.00 >	0.00	0.00 >	3.98
2811	PT	OKQ	48	02/07/89	0.862	0.03	0.16	5.49	25.35
2811	PT	OKQ	48	02/07/89	0.862	0.00 >	0.00	0.00	0.56
2811	SF	OKZ	48	02/07/89	1.359	0.06	0.15	2.54 >	18.08
2811	SF	OKZ	48	02/07/89	1.359	0.00 >	0.00	0.00 >	2.80
2811	VE	OK8	48	02/06/89	0.980	0.00	0.07	0.00 >	0.15
2811	VE	OK8	48	02/06/89	0.980	0.00 >	0.00	0.00 >	0.07
2811	VSV	002	48	01/27/89	1.108	< 1.00	< 1.00	< 1.00 >	0.55
2811	VSV	002	48	01/27/89	1.108	0.32	0.25	0.78 >	0.10
2811	YF	OJZ	48	02/06/89	1.184	0.03	0.09	3.55 >	18.20
2811	YF	OJZ	48	02/06/89	1.184	0.00 >	0.00	0.00 >	2.10
2812	JE	OKI	48	02/06/89	0.576	0.00 >	0.01 >	2.57	18.14
2812	JE	OKI	48	02/06/89	0.576	0.00 >	0.00	0.00 >	4.10
2812	PT	OKR	48	02/07/89	0.837	0.00 >	0.01 >	2.87 >	19.34
2812	PT	OKR	48	02/07/89	0.837	0.00 >	0.00	0.00	0.00
2812	SF	OLO	48	02/07/89	1.352	0.01 >	0.01 >	1.11 >	12.67
2812	SF	OLO	48	02/07/89	1.352	0.00 >	0.00	0.00 >	3.91
2812	VE	OK9	48	02/06/89	0.982	0.00 >	0.01	0.00	0.00
2812	VE	OK9	48	02/06/89	0.982	0.00 >	0.00	0.00 >	0.22
2812	VSV	003	48	01/27/89	1.416	0.00 <	1.00	0.00	0.00
2812	VSV	003	48	01/27/89	1.416	0.00	0.02	0.00	0.16
2812	VV	00G	48	01/26/89	1.831	0.00 <	1.00	0.00	0.00
2812	VV	00G	48	01/26/89	1.831	0.00	0.02	0.00	0.00
2812	YF	OKO	48	02/06/89	1.135	0.00	0.01	2.49 >	12.11
2812	YF	OKO	48	02/06/89	1.135	0.00 >	0.00	0.00	0.33
2813	JE	PKO	25	04/18/89	0.831	0.00 <	0.10	0.00	0.00
2813	PT	PL3	25	04/18/89	0.659	0.00 <	0.10	0.00	0.00
2813	SF	PLI	25	04/18/89	0.765	0.00 <	0.10	0.00	0.00
2813	VE	PJU	25	04/17/89	0.966	0.00 <	0.10	0.00	0.00
2813	YF	PK9	25	04/17/89	1.151	0.00 <	0.10	0.00	0.00
2860	SF	06P	20	12/14/88	0.684	0.00	3.63	0.00	0.00
2860	VV	0E8	20	09/07/89	1.249	6.10	40.30	6.60 >	29.17
2861	SF	06Q	20	12/13/88	0.578	0.00	20.30	0.00	0.00
2862	SF	06Q	20	12/13/88	0.578	0.00	6.84	0.00	0.00
2863	SF	06R	20	12/13/88	0.618	0.00	0.49	0.00	0.00
2864	SF	06R	20	12/13/88	0.618	0.00 >	100.00	0.00	0.00
2865	VE	PFW	20	03/31/89	1.070	0.00	67.10	0.00	1.03
2866	VE	PGV	20	03/31/89	1.022	0.00 >	100.00	0.00	0.05
2866	VV	OBM	20	08/17/89	1.261	115.00 >	320.00 >	2.77 >	20.04
2867	VE	PGW	20	03/31/89	1.099	0.00	0.71	0.00 >	1.02

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2868	JE	RHN	20	09/07/89	0.824	0.00	0.03	0.00	0.00
2868	PT	RIQ	20	09/07/89	0.651	0.00	1.47	0.00	1.97
2868	SF	RID	20	09/07/89	0.681	0.00	1.78	0.00 >	1.10
2868	VE	RIO	20	09/08/89	1.504	0.00	3.36	0.00 >	0.02
2863	YF	RHA	20	09/07/89	0.763	0.00	2.32	0.00 >	0.00
2869	VE	PE2	26	04/07/89	0.931	0.00	123.00	0.00 >	0.38
2870	VE	PE3	26	04/07/89	1.008	0.00 <	0.32	0.00 >	0.00
2871	VE	PE3	26	04/07/89	1.008	0.00 <	1.00	0.00	0.00
2872	VE	PE4	26	04/07/89	0.994	0.00	74.70	0.00	0.00
2873	VE	PE4	26	04/07/89	0.994	0.00 >	320.00	0.00	0.90
2874	VE	PE5	26	04/07/89	0.881	0.00 >	320.00	0.00 >	1.60
2875	VE	PE5	26	04/07/89	0.881	0.00	309.00	0.00	0.20
2876	VE	PE6	26	04/07/89	0.870	0.00 >	320.00	0.00 >	1.33
2878	VE	PE6	26	04/07/89	0.870	0.00	53.70	0.00 >	0.00
2879	VE	PE7	26	04/07/89	0.881	0.00 >	320.00	0.00 >	1.10
2883	VE	PE7	26	04/07/89	0.881	0.00	282.00	0.00	0.00
2884	VE	PE8	26	04/07/89	0.897	0.00	331.00	0.00 >	0.10
2885	VE	PE8	26	04/07/89	0.897	0.00	29.10	0.00 >	0.06
2888	VE	PE9	26	04/07/89	0.942	0.00 >	320.00	0.00 >	3.30
2889	VE	PJF	26	04/14/89	0.937	0.00 >	320.00	0.00	1.60
2890	VE	PIG	26	04/14/89	1.192	0.00	257.00	0.00	0.00
2891	VE	PIH	26	04/14/89	1.205	0.00 >	320.00	0.00	0.00
2893	VV	OBM	26	08/17/89	1.261	19.50	200.00	10.26	37.50
2901	VE	PIH	26	04/14/89	1.205	0.00	42.70	0.00	1.88
2902	JE	RHO	26	09/07/89	1.031	0.00 <	0.32	0.00	0.00
2902	PT	RIR	26	09/07/89	0.807	0.00	44.70	0.00 >	2.11
2902	SF	RIE	26	09/07/89	0.652	85.50	59.40	0.70 >	0.60
2902	VE	PII	26	04/14/89	1.201	70.00	62.20	0.89	6.14
2902	VE	RI1	26	09/08/89	1.421	0.00 >	100.00	0.00 >	0.05
2902	YF	RHB	26	09/07/89	0.817	65.20 >	100.00 >	1.53 >	5.72
2903	VE	PII	26	04/14/89	1.201	0.00 >	320.00	0.00	0.00
2904	VE	PIJ	26	04/14/89	1.160	0.00	199.00	0.00	0.00
2905	VE	PIJ	26	04/14/89	1.160	0.00	17.00	0.00	0.00
2906	JE	FF9	53	04/10/89	0.798	0.00	110.00	0.00	9.60
2906	JE	RHO	26	09/07/89	1.031	0.00 <	1.00	0.00	0.00
2906	PT	PFN	53	04/11/89	0.593	56.60	142.00	2.51	21.14
2906	PT	RIR	26	09/07/89	0.807	0.00	51.40	0.00	1.52
2906	SF	PG2	53	04/11/89	0.601	0.00	51.70	0.00	6.59
2906	SF	RIE	26	09/07/89	0.652	0.00	100.00	0.00 >	3.60
2906	VE	PEE	53	04/10/89	0.903	0.00	34.80	0.00	7.35
2906	VE	PIK	26	04/14/89	1.212	0.00	77.70	0.00	0.23
2906	VE	RI1	26	09/08/89	1.421	0.00	227.00	0.00	0.00
2906	YF	PET	53	04/10/89	1.020	0.00	61.80	0.00	4.85
2906	YF	RHB	26	09/07/89	0.817	0.00	108.00	0.00	3.44
2907	JE	RHP	26	09/07/89	0.925	0.00	49.00	0.00	0.00
2907	PT	RIS	26	09/07/89	0.546	20.20	131.00	6.50 >	24.44
2907	SF	RIF	26	09/07/89	0.564	0.00	108.00	0.00 >	16.90
2907	VE	PIK	26	04/14/89	1.212	0.00	19.40	0.00	0.00
2907	VE	RI2	26	09/08/89	1.316	0.00	165.00	0.00	0.75
2907	YF	RHC	26	09/07/89	0.731	66.80	172.00	2.58	10.97
2908	VE	PIL	26	04/14/89	1.165	0.00	36.70	0.00	0.00
2909	VE	PIL	26	04/14/89	1.165	0.00	190.00	0.00	0.00
2910	VE	PIM	26	04/14/89	1.115	0.00	88.60	0.00	0.00
2911	VE	PIM	26	04/14/89	1.115	0.00 >	320.00	0.00	0.00
2912	VE	PIN	26	04/14/89	1.135	0.00 >	320.00	0.00	0.00
2913	VE	PIN	26	04/14/89	1.135	0.00	125.00	0.00	0.00
2914	VE	PIO	26	04/14/89	1.226	0.00	85.40	0.00 >	0.00
2915	VE	PIO	26	04/14/89	1.226	0.00	54.70	0.00	0.00
2918	VE	PIP	26	04/14/89	1.167	0.00	25.50	0.00	0.00
2919	VE	FIP	25	04/14/89	1.167	0.00	14.00	0.00	0.01
2920	JE	P9Q	32	04/03/89	0.949	0.00	169.00	0.00	0.00
2920	PT	PA5	32	04/21/89	1.032	0.00	187.00	0.00	2.35
2920	SF	PAK	32	04/04/89	0.949	0.00	129.00	0.00	0.00
2920	VL	P8W	32	04/03/89	1.046	0.00	131.00	0.00	0.00
2920	YF	P9B	32	04/03/89	0.935	0.00	252.00	0.00	0.00
2921	JE	P9Q	32	04/03/89	0.949	0.00	93.80	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2921	PT	PA5	32	04/21/89	1.032	0.00	173.00	0.00	8.15
2921	SF	PAK	32	04/04/89	0.949	0.00	84.60	0.00	0.00
2921	VE	P6W	32	04/03/89	1.046	0.00	94.40	0.00	0.00
2921	YF	P9B	32	04/03/89	0.935	0.00	187.00	0.00	0.00
2922	JE	P9R	32	04/03/89	0.916	0.00	21.70	0.00	0.00
2922	PT	PA6	32	04/21/89	0.875	0.00	26.20	0.00	1.11
2922	SF	PAL	32	04/04/89	0.937	0.00	12.50	0.00	0.00
2922	VE	P8X	32	04/03/89	1.025	0.00	19.20	0.00	0.00
2922	YF	P9C	32	04/03/89	0.954	0.00	48.00	0.00 >	0.20
2923	JE	P9R	32	04/03/89	0.916	0.00 >	100.00	0.00	0.00
2923	PT	PA6	32	04/21/89	0.875	0.00 >	100.00	0.00 >	2.38
2923	SF	PAL	32	04/04/89	0.937	0.00 >	100.00	0.00 >	2.01
2923	VE	P8X	32	04/03/89	1.025	0.00	80.60	0.00	0.00
2923	YF	P9C	32	04/03/89	0.954	0.00 >	100.00	0.00	0.00
2924	JE	P9S	32	04/03/89	0.948	0.00 >	320.00	0.00	0.00
2924	PT	PA7	32	04/21/89	1.055	0.00	137.00	0.00	0.00
2924	SF	PAM	32	04/04/89	0.808	0.00	199.00	0.00	0.22
2924	VE	P8Y	32	04/03/89	1.028	0.00	245.00	0.00	0.00
2924	YF	P9D	32	04/03/89	0.912	0.00 >	320.00	0.00	0.00
2925	JE	P9S	32	04/03/89	0.948	0.00 >	320.00	0.00	0.00
2925	PT	PA7	32	04/21/89	1.055	0.00 >	320.00	0.00	0.00
2925	SF	PAM	32	04/04/89	0.808	0.00 >	320.00	0.00	1.24
2925	VE	P8Y	32	04/03/89	1.028	0.00 >	320.00	0.00	0.00
2925	YF	P9D	32	04/03/89	0.912	0.00 >	320.00	0.00	0.00
2928	JE	RHP	26	09/07/89	0.925	0.00	8.64	0.00	0.00
2928	PT	RIS	26	09/07/89	0.546	0.00 >	100.00	0.00 >	3.20
2928	SF	RIF	26	09/07/89	0.564	0.00 >	100.00	0.00 >	7.69
2928	VE	RI2	26	09/08/89	1.316	0.00 >	100.00	0.00	0.32
2928	YF	RHC	26	09/07/89	0.731	0.00 >	100.00	0.00 >	0.17
2934	VE	PE1	25	04/07/89	0.940	0.00 <	0.10	0.00	0.00
2943	VE	PIQ	26	04/14/89	1.157	0.00	29.60	0.00	0.00
2944	VE	PIQ	26	04/14/89	1.157	0.00	45.20	0.00	0.00
2945	VE	PIR	26	04/14/89	1.129	0.00	41.20	0.00	0.00
2946	JE	RHQ	26	09/07/89	0.802	0.00 >	320.00	0.00 >	1.40
2948	PT	RIT	26	09/07/89	0.519	0.00 >	320.00	0.00	0.00
2948	SF	RIG	26	09/07/89	0.658	1.60	277.00	173.25 >	40.53
2948	VE	RI3	26	09/08/89	1.462	0.00	199.00	0.00 >	0.03
2948	YF	RHD	26	09/07/89	0.843	0.00	10.00	0.00	0.00
2950	VE	PIS	26	04/14/89	1.266	0.00	6.11	0.00 >	0.08
2951	JE	RHQ	26	09/07/89	0.802	0.00 >	32.00	0.00	2.00
2951	PT	RIT	26	09/07/89	0.519	0.00 >	32.00	0.00 >	0.82
2951	SF	RIG	26	09/07/89	0.658	0.21 >	32.00 >	151.74 >	51.85
2951	VE	PIT	26	04/14/89	1.246	0.00	273.00	0.00	0.43
2951	VE	RI3	26	09/08/89	1.462	0.00 >	32.00	0.00 >	0.25
2951	YF	RHD	26	09/07/89	0.843	0.00 >	32.00	0.00	0.00
2956	VE	PIX	27	04/14/89	1.248	0.00	94.60	0.00	0.00
2957	VE	PIX	27	04/14/89	1.248	0.00	24.10	0.00	0.00
2958	VE	PIY	27	04/14/89	1.175	0.00	87.50	0.00	0.15
2959	VE	PIY	27	04/14/89	1.175	0.00	95.20	0.00	0.00
2960	JE	RHR	27	09/07/89	0.933	0.00	6.74	0.00 >	0.52
2960	PT	RIU	27	09/07/89	0.572	0.00	18.00	0.00	4.14
2960	SF	RIH	27	09/07/89	0.643	0.00	8.35	0.00 >	2.96
2960	VE	PIZ	27	04/14/89	1.162	73.70 >	320.00 >	4.38 >	2.64
2960	VE	RI4	27	09/08/89	1.440	167.00	24.70	0.15 >	0.82
2960	YF	RHE	27	09/07/89	0.754	213.00	13.10	0.06 >	4.00
2961	VE	PIZ	27	04/14/89	1.162	0.00	21.30	0.00	0.00
2964	VE	PJO	27	04/14/89	1.245	0.00	84.60	0.00	0.00
2965	VE	PJO	27	04/14/89	1.245	0.00	21.70	0.00	0.00
2966	VE	PJ1	27	04/14/89	1.127	0.00	102.00	0.00	0.00
2966	VV	OBN	27	08/17/89	1.299	8.99	65.10	7.25 >	25.66
2967	VE	PJ1	27	04/14/89	1.127	0.00	37.00	0.00	0.00
2969	VE	PJ2	27	04/14/89	1.100	0.00	198.00	0.00 >	0.15
2970	VE	PJ2	27	04/14/89	1.100	0.00	51.40	0.00 >	0.27
2971	VE	PJ3	27	04/14/89	1.025	0.00	69.40	0.00	0.00
2972	VE	PJ4	27	04/14/89	0.827	0.00	4.12	0.00	0.10
2973	JE	Q10	27	05/10/89	0.761	0.00	9.50	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2973	PT	Q1C	27	05/10/89	0.637	0.00	29.60	0.00 >	0.70
2973	SF	Q16	27	05/10/89	1.011	0.00	23.60	0.00 >	0.00
2973	VE	Q0K	27	05/09/89	0.869	0.00	20.50	0.00 >	0.10
2973	YF	Q0U	27	05/08/89	1.099	0.00	16.90	0.00 >	0.00
2974	VE	PJ5	27	04/14/89	0.924	0.00 >	320.00	0.00	0.00
2975	VE	PJ5	27	04/14/89	0.924	0.00	256.00	0.00	0.00
2978	JE	OU3	25	02/28/89	0.820	0.00 >	320.00	0.00 >	2.00
2978	JE	PMD	27	04/19/89	0.683	0.00 >	320.00	0.00 >	4.69
2978	PT	OUR	25	03/01/89	0.887	0.00 >	320.00	0.00 >	0.00
2978	PT	Q2T	27	05/16/89	0.385	0.00 >	320.00	0.00	5.59
2978	SF	OV3	25	03/01/89	0.961	0.00 >	320.00	0.00 >	10.20
2978	SF	PN7	27	04/19/89	0.649	0.00 >	320.00	0.00 >	0.81
2978	SF	Q1X	27	05/16/89	1.064	0.00 >	100.00	0.00	0.00
2978	VE	OVK	48	03/03/89	0.914	0.00 >	320.00	0.00 >	4.30
2978	VE	PLJ	27	04/17/89	0.982	0.00 >	320.00	0.00	0.53
2978	VE	Q1L	27	05/15/89	1.253	0.00 >	100.00	0.00	0.00
2978	YF	OUF	25	02/28/89	0.854	0.00 >	320.00	0.00	0.48
2978	YF	PLY	27	04/17/89	1.019	42.30 >	320.00 >	7.56 >	42.81
2978	YF	Q1F	27	05/15/89	0.843	0.00 >	100.00	0.00	0.00
2979	JE	OLL	48	02/07/89	1.181	1.67	0.93	0.56	1.63
2979	JE	OLL	48	02/07/89	1.181	0.00 >	0.03	0.00	0.00
2979	JE	OZX	48	03/10/89	0.763	2.11	12.40	5.91	28.30
2979	JE	PME	27	04/19/89	0.698	6.11	4.95	0.81 >	8.81
2979	JE	RHR	25	09/07/89	0.933	0.00	2.90	0.00 >	4.28
2979	PT	OLU	48	02/08/89	0.729	0.00	1.75	0.00	3.15
2979	PT	OLU	48	02/08/89	0.729	0.00 >	0.03	0.00	0.00
2979	PT	PMT	27	04/19/89	0.515	4.73	6.41	1.36	14.81
2979	PT	RIU	25	09/07/89	0.572	0.00	6.39	0.00	0.00
2979	SF	OM3	48	02/07/89	1.110	1.79	1.86	1.04 >	15.12
2979	SF	OM3	48	02/07/89	1.110	0.00 >	0.03	0.00	0.80
2979	SF	PN8	27	04/19/89	0.801	3.77	3.20	0.85 >	7.04
2979	SF	RIH	25	09/07/89	0.643	0.00	1.82	0.00 >	2.91
2979	VE	OLC	48	02/07/89	0.996	0.00	1.76	0.00	0.49
2979	VE	OLC	48	02/07/89	0.996	0.00 >	0.03	0.00	0.00
2979	VE	OZS	48	03/10/89	0.913	0.00	17.30	0.00	0.00
2979	VE	PLK	27	04/17/89	0.964	0.00	1.87	0.00	0.00
2979	VE	RI4	25	09/08/89	1.440	0.00	27.70	0.00	0.00
2979	VSV	005	48	01/20/89	1.076	0.00	4.26	0.00 >	0.01
2979	VSV	005	48	01/20/89	1.076	0.00 >	1.00	0.00	0.41
2979	VV	001	48	01/26/89	1.587	0.00	4.41	0.00	0.00
2979	VV	001	48	01/26/89	1.587	0.00 >	0.32	0.00	0.00
2979	YF	OL3	48	02/07/89	1.083	1.93	7.31	3.79 >	17.57
2979	YF	OL3	48	02/07/89	1.083	0.00 >	0.03	0.00 >	0.03
2979	YF	PO2	48	03/17/89	1.067	6.55	13.20	2.02	8.93
2979	YF	PLZ	27	04/17/89	1.045	0.00	12.90	0.00	11.98
2979	YF	RHE	25	09/07/89	0.754	0.00	1.64	0.00	0.00
2980	JE	OLM	48	02/07/89	1.142	0.69	1.72	2.48 >	15.31
2980	JE	OLM	48	02/07/89	1.142	0.00 >	0.00	0.00	0.00
2980	JE	OZY	48	03/10/89	0.737	0.18	2.10	12.00	40.06
2980	JE	RHS	25	09/07/89	0.875	0.27	0.90	3.37 >	17.45
2980	PT	OLV	48	02/08/89	0.686	0.78 >	3.20 >	4.10 >	23.21
2980	PT	OLV	48	02/08/89	0.686	0.00 >	0.00	0.00	0.00
2980	PT	RIV	25	09/07/89	0.532	0.59	1.25	2.11	11.88
2980	SF	OM4	48	02/07/89	1.141	0.00	2.19	0.00 >	14.98
2980	SF	OM4	48	02/07/89	1.141	0.00 >	0.00	0.00	0.40
2980	SF	RII	25	09/07/89	0.725	0.20	1.75	8.83 >	32.54
2980	VE	OLD	48	02/07/89	1.039	0.00	0.23	0.00	0.11
2980	VE	OLD	48	02/07/89	1.039	0.00 >	0.00	0.00	0.00
2980	VE	OZT	48	03/10/89	0.953	0.00	1.10	0.00	0.00
2980	VE	PE2	25	04/07/89	0.931	100.00	1.49	0.01 >	0.01
2980	VE	RI5	25	09/08/89	1.371	0.00	0.76	0.00	0.00
2980	VSV	006	48	01/20/89	1.124	0.00	2.34	0.00	0.00
2980	VSV	006	48	01/20/89	1.124	0.00 >	1.00	0.00	0.12
2980	VV	002	48	01/26/89	1.912	0.00	1.55	0.00	0.00
2980	VV	002	48	01/26/89	1.912	0.00 >	0.32	0.00	0.00
2980	YF	OL4	48	02/07/89	1.154	0.07	1.14	17.50 >	0.13

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
2980	YF	OL4	48	02/07/89	1.154	0.00	> 0.00	0.00	0.00
2980	YF	P03	48	03/10/89	0.971	0.62	1.12	1.80	10.03
2980	YF	RHF	25	09/07/89	0.676	0.22	1.04	4.78	> 13.49
2981	VE	PJ6	27	04/14/89	1.007	0.00	91.80	0.00	0.00
2982	VE	PJ6	27	04/14/89	1.007	0.00	2.70	0.00	0.00
2983	VE	PJ7	27	04/14/89	0.963	0.00	> 320.00	0.00	0.00
2984	VE	PJ7	27	04/14/89	0.963	0.00	22.40	0.00	0.00
2985	VE	PJ8	27	04/14/89	1.012	0.00	220.00	0.00	0.00
2986	VE	PJ8	27	04/14/89	1.012	0.00	> 320.00	0.00	0.00
2987	VE	PJ9	27	04/14/89	0.979	0.00	> 100.00	0.00	> 2.39
2988	VE	PJ9	27	04/14/89	0.979	0.00	32.50	0.00	0.00
2989	VE	PJA	27	04/14/89	0.883	27.10	28.80	1.06	7.65
2990	VE	PJA	27	04/14/89	0.883	0.00	182.00	0.00	0.09
2991	VE	PJB	27	04/14/89	0.913	0.00	7.62	0.00	> 9.63
2991	VSV	O5K	27	08/11/89	1.529	6.36	10.30	1.62	7.72
2991	VV	OBS	41B	08/17/89	1.185	2.05	11.20	5.47	18.75
2992	JE	RHS	27	09/07/89	0.875	83.30	> 100.00	> 1.20	> 6.27
2992	PT	RIV	27	09/07/89	0.532	0.00	> 100.00	0.00	> 1.62
2992	SF	RII	27	09/07/89	0.725	0.00	> 100.00	0.00	> 13.00
2992	VE	PJB	27	04/14/89	0.913	0.00	104.00	0.00	0.00
2992	VE	RI5	27	09/08/89	1.371	0.00	89.90	0.00	0.00
2992	YF	RHF	27	09/07/89	0.676	81.60	> 100.00	> 1.23	> 8.39
2993	VE	PJC	27	04/14/89	0.914	0.00	> 320.00	0.00	> 0.03
2994	JE	PF8	53	04/10/89	0.798	0.00	91.60	0.00	1.20
2994	JE	Q10	41	05/10/89	0.761	0.00	190.00	0.00	9.76
2994	PT	PFN	53	04/11/89	0.593	0.00	108.00	0.00	2.40
2994	PT	Q1C	41	05/10/89	0.637	0.00	182.00	0.00	> 11.28
2994	SF	PG2	53	04/11/89	0.601	0.00	117.00	0.00	0.00
2994	SF	Q16	41	05/10/89	1.011	0.00	156.00	0.00	0.00
2994	VE	PEE	53	04/10/89	0.90	0.00	69.80	0.00	0.00
2994	VE	PJC	27	04/14/89	0.914	0.00	91.20	0.00	0.00
2994	VE	QOK	41	05/09/89	0.869	0.00	151.00	0.00	> 1.27
2994	YF	PET	53	04/10/89	1.020	0.00	70.80	0.00	2.31
2994	YF	QOU	41	05/08/89	1.099	0.00	157.00	0.00	0.17
2995	VE	PJD	27	04/14/89	0.885	0.00	> 320.00	0.00	0.00
3001	JE	FS0	27	04/26/89	0.956	0.00	4.85	0.00	0.00
3001	PT	PSF	27	04/26/89	0.647	0.00	6.67	0.00	0.00
3001	SF	QB3	27	06/02/89	1.274	0.00	0.79	0.00	0.00
3001	VE	PRG	27	04/25/89	0.946	0.00	4.30	0.00	0.00
3001	YF	PRV	27	04/25/89	1.297	0.00	6.36	0.00	0.00
3002	JE	PS1	27	04/26/89	0.940	0.00	6.96	0.00	0.00
3002	PT	PSG	27	04/26/89	0.817	0.00	6.03	0.00	> 2.51
3002	SF	QB4	27	06/02/89	1.070	0.00	4.26	0.00	> 1.49
3002	VE	PRH	27	04/25/89	0.927	0.00	3.20	0.00	0.00
3002	YF	PRW	27	04/25/89	1.157	0.00	5.99	0.00	0.00
3003	JE	PS1	27	04/26/89	0.940	0.00	0.45	0.00	0.00
3003	PT	PSG	27	04/26/89	0.817	0.00	0.49	0.00	> 0.30
3003	VE	PRH	27	04/25/89	0.927	0.00	0.70	0.00	> 0.17
3003	YF	PRW	27	04/25/89	1.157	0.00	1.48	0.00	0.00
3004	JE	PS2	27	04/26/89	0.994	0.00	2.71	0.00	> 1.02
3004	PT	PSH	27	04/26/89	0.818	0.00	3.39	0.00	0.56
3004	SF	QB5	27	06/02/89	1.311	0.00	12.50	0.00	0.00
3004	VE	PRI	27	04/25/89	0.888	0.00	18.50	0.00	0.00
3004	YF	PRX	27	04/25/89	1.054	0.00	4.61	0.00	0.00
3005	JE	PS2	27	04/26/89	0.994	0.00	> 100.00	0.00	1.08
3005	PT	PSH	27	04/26/89	0.818	0.00	55.50	0.00	> 0.76
3005	SF	QB5	27	06/02/89	1.311	0.00	57.50	0.00	0.00
3005	VE	PRI	27	04/25/89	0.888	0.00	> 100.00	0.00	0.00
3005	YF	PRX	27	04/25/89	1.054	0.00	> 100.00	0.00	0.00
3006	JE	PS3	27	04/26/89	0.826	0.00	85.10	0.00	> 6.90
3006	PT	PSI	27	04/26/89	0.632	0.00	0.96	0.00	0.00
3006	SF	QB6	27	06/02/89	1.348	0.00	99.30	0.00	0.00
3006	VE	PRJ	27	04/25/89	0.819	0.00	206.00	0.00	0.15
3006	YF	PRY	27	04/25/89	1.056	0.00	193.00	0.00	0.40
3007	JE	PS3	27	04/26/89	0.826	0.00	12.90	0.00	0.00
3007	PT	PSI	27	04/26/89	0.632	0.00	17.60	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3007	SF	QB6	27	06/02/89	1.348	0.00	17.30	0.00	0.00
3007	VE	PRJ	27	04/25/89	0.819	0.00	19.00	0.00	0.00
3007	YF	PRY	27	04/25/89	1.056	0.00	24.10	0.00	0.00
3035	VE	PJD	28	04/14/89	0.885	0.00	0.44	0.00	0.00
3036	VE	PJE	28	04/14/89	0.854	0.00	4.49	0.00	0.70
3038	JE	PF9	53	04/10/89	0.918	0.00	1.00	0.00	0.00
3038	JE	RHT	28	09/07/89	1.033	0.00	0.08	0.00	0.42
3038	PT	PFO	53	04/11/89	0.615	0.00	1.00	0.00	0.00
3038	PT	RIW	28	09/07/89	0.519	0.00	0.25	0.00	0.48
3038	SF	PG3	53	04/11/89	0.727	0.00	1.00	0.00	0.00
3038	SF	RIJ	28	09/07/89	0.677	0.06	0.26	4.08	12.88
3038	VE	PEF	53	04/10/89	0.835	0.00	1.00	0.00	0.00
3038	VE	PJE	28	04/14/89	0.854	0.00	0.03	0.00	0.00
3038	VE	RI6	28	09/08/89	1.414	0.70	0.29	0.41	7.76
3038	YF	PEU	53	04/10/89	1.026	0.00	1.00	0.00	0.00
3038	YF	RHG	28	09/07/89	0.693	0.00	0.14	0.00	0.00
3064	JE	PP4	28	04/21/89	0.957	0.00	9.76	0.00	0.00
3064	PT	PO4	28	04/21/89	0.576	5.03	16.50	3.28	20.24
3064	SF	POS	28	04/21/89	0.780	0.00	16.40	0.00	0.55
3064	VE	POG	28	04/21/89	1.127	0.00	8.72	0.00	0.00
3064	YF	Q4B	28	05/19/89	0.785	0.00	19.30	0.00	0.20
3065	JE	PP4	28	04/21/89	0.957	0.00	6.90	0.00	0.00
3065	PT	PO4	28	04/21/89	0.576	0.00	1.00	0.00	0.00
3065	SF	POS	28	04/21/89	0.780	0.00	5.80	0.00	0.00
3065	VE	POG	28	04/21/89	1.127	0.00	4.98	0.00	0.00
3065	YF	Q4B	28	05/19/89	0.785	0.00	18.50	0.00	1.00
3071	JE	PP5	28	04/21/89	0.898	0.00	13.60	0.00	0.00
3071	VE	POH	28	04/21/89	1.163	0.00	9.39	0.00	0.00
3071	YF	Q4C	28	05/19/89	0.881	0.00	22.50	0.00	0.60
3073	JE	PP6	28	04/21/89	1.052	0.00	8.45	0.00	0.00
3073	VE	POI	28	04/21/89	1.157	0.00	5.41	0.00	0.00
3073	YF	Q4C	28	05/19/89	0.881	0.00	13.70	0.00	1.22
3075	JE	PP7	28	04/21/89	0.746	0.00	10.70	0.00	0.00
3075	PT	PO7	28	04/21/89	0.627	0.00	18.20	0.00	3.31
3075	SF	POV	28	04/21/89	0.381	0.00	17.20	0.00	1.45
3075	VE	POJ	28	04/21/89	1.121	0.00	10.60	0.00	0.00
3075	YF	Q4D	28	05/19/89	0.852	0.00	18.90	0.00	2.00
3075	JE	PP7	28	04/21/89	0.746	0.00	10.50	0.00	1.91
3076	PT	PO7	28	04/21/89	0.627	0.00	2.58	0.00	1.79
3076	SF	POV	28	04/21/89	0.881	0.00	15.50	0.00	11.39
3076	VE	POJ	28	04/21/89	1.121	0.00	10.10	0.00	0.50
3076	YF	Q4D	28	05/19/89	0.852	0.00	15.50	0.00	1.96
3086	JE	PPB	28	04/21/89	0.747	0.00	12.10	0.00	1.68
3086	PT	POB	28	04/21/89	0.748	0.00	15.60	0.00	13.93
3086	SF	POZ	28	04/21/89	0.791	0.00	16.20	0.00	0.35
3086	VE	PON	28	04/21/89	0.950	0.00	13.00	0.00	0.72
3086	YF	Q4F	28	05/19/89	0.913	0.00	16.60	0.00	2.79
3087	JE	PPB	28	04/21/89	0.747	0.00	32.80	0.00	1.20
3087	PT	POB	28	04/21/89	0.748	0.00	15.30	0.00	8.93
3087	SF	POZ	28	04/21/89	0.791	0.00	17.20	0.00	2.86
3087	VE	PON	28	04/21/89	0.950	0.00	13.50	0.00	0.51
3087	YF	Q4F	28	05/19/89	0.913	0.00	16.10	0.00	3.55
3089	JE	PP3	28	04/21/89	0.910	0.00	17.70	0.00	0.00
3089	VE	POF	28	04/21/89	1.146	0.00	13.10	0.00	0.00
3089	YF	QAH	28	06/08/89	0.966	0.00	10.30	0.00	0.92
3092	JE	PP9	28	04/21/89	0.761	0.00	81.40	0.00	0.00
3092	VE	POL	28	04/21/89	0.971	0.00	81.90	0.00	0.46
3092	YF	QAH	28	06/08/89	0.966	0.00	137.00	0.00	0.20
3093	JE	PPA	28	04/21/89	0.724	0.00	10.00	0.00	0.00
3093	VE	PCM	28	04/21/89	1.015	0.00	10.00	0.00	0.05
3095	JE	PPW	28	04/25/89	0.987	0.00	21.50	0.00	0.24
3095	PT	PQE	28	04/25/89	0.911	0.00	21.80	0.00	3.44
3095	SF	PQU	28	04/25/89	0.769	0.00	18.60	0.00	0.00
3095	VE	PPD	28	04/24/89	1.019	0.00	16.10	0.00	0.00
3095	YF	Q4L	28	05/19/89	0.782	0.00	23.80	0.00	0.00
3096	JE	PPX	28	04/25/89	0.943	0.00	16.30	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3096	PT	PQF	28	04/25/89	0.868	0.00	13.70	0.00 >	5.58
3096	SF	PQV	28	04/25/89	0.641	0.00	17.10	0.00	0.20
3096	VE	PPE	28	04/24/89	1.039	0.00	9.04	0.00	0.00
3096	YF	Q4M	28	05/19/89	0.802	0.00	16.30	0.00 >	2.24
3098	JE	PPX	28	04/25/89	0.943	0.00	35.50	0.00	0.00
3098	PT	PQF	28	04/25/89	0.868	28.30	23.20	0.82 >	4.79
3098	SF	PQV	28	04/25/89	0.641	0.00	20.20	0.00 >	1.90
3098	VE	PPE	28	04/24/89	1.039	0.00	17.00	0.00	0.00
3098	YF	Q4M	28	05/19/89	0.802	0.00	21.00	0.00 >	0.50
3099	JE	PPY	28	04/25/89	1.031	0.00	22.20	0.00 >	1.90
3099	PT	PQG	28	04/25/89	0.850	0.00	21.70	0.00 >	5.87
3099	SF	PQW	28	04/25/89	0.816	0.00	19.20	0.00 >	2.09
3099	VE	PPF	28	04/24/89	1.067	0.00	15.60	0.00	0.00
3099	YF	Q4N	28	05/19/89	0.846	0.00	20.40	0.00	0.21
3100	JE	PPY	28	04/25/89	1.031	0.00	35.70	0.00	1.03
3100	PT	PQG	28	04/25/89	0.850	0.00	21.30	0.00 >	0.82
3100	SF	PQW	28	04/25/89	0.816	0.00	21.00	0.00 >	8.50
3100	VE	PPF	28	04/24/89	1.067	0.00	9.98	0.00 >	0.06
3100	YF	Q4N	28	05/19/89	0.846	0.00	20.80	0.00	0.00
3101	JE	PPZ	28	04/25/89	0.993	0.00	29.00	0.00	0.40
3101	PT	PQH	28	04/25/89	0.847	32.00	21.00	0.66 >	0.66
3101	SF	PQX	28	04/25/89	0.706	0.00	20.20	0.00	0.00
3101	VE	PPG	28	04/24/89	1.023	0.00	9.08	0.00	0.00
3101	YF	Q4O	28	05/19/89	0.812	0.00	23.80	0.00	0.00
3102	YF	Q4O	28	05/19/89	0.812	< 0.32 >	100.00 >	313.00 >	99.41
3103	JE	PPZ	28	04/25/89	0.993	0.00	44.10	0.00	0.20
3103	PT	PQH	28	04/25/89	0.847	0.00	22.90	0.00	1.24
3103	SF	PQX	28	04/25/89	0.706	0.00	20.20	0.00	0.00
3103	VE	PPG	28	04/24/89	1.023	0.00	16.10	0.00	0.00
3103	YF	Q4P	28	05/19/89	0.828	0.00	23.10	0.00	0.00
3104	JE	PQO	28	04/25/89	1.090	0.00	29.60	0.00	0.20
3104	PT	PQI	28	04/25/89	0.861	0.00	20.70	0.00	3.49
3104	SF	PQY	28	04/25/89	0.816	0.00	19.30	0.00 >	0.66
3104	VE	PPH	28	04/24/89	1.060	0.00	15.80	0.00	0.00
3104	YF	Q4P	28	05/19/89	0.828	0.00	19.00	0.00 >	1.01
3105	JE	PQO	28	04/25/89	1.090	0.00	27.20	0.00	0.00
3105	PT	PQI	28	04/25/89	0.861	32.00	21.50	0.67	0.24
3105	SF	PQY	28	04/25/89	0.816	0.00	19.30	0.00	2.81
3105	VE	PPH	28	04/24/89	1.060	0.00	10.70	0.00	0.00
3105	YF	Q4Q	28	05/19/89	0.874	0.00	24.50	0.00	0.00
3106	JE	PQ1	28	04/25/89	0.565	0.00	32.90	0.00 >	0.10
3106	PT	PQJ	28	04/25/89	0.873	0.00	19.70	0.00 >	6.61
3106	SF	PQZ	28	04/25/89	0.715	0.00	19.20	0.00 >	5.00
3106	VE	PPI	28	04/24/89	0.979	0.00	16.00	0.00	0.00
3106	YF	Q4Q	28	05/19/89	0.874	0.00	21.50	0.00	0.00
3107	JE	PQ1	28	04/25/89	0.565	0.00	37.90	0.00	0.00
3107	PT	PQJ	28	04/25/89	0.873	28.00	21.50	0.77 >	6.11
3107	SF	PQZ	28	04/25/89	0.715	0.00	19.50	0.00 >	3.60
3107	VE	PPI	28	04/24/89	0.979	0.00	18.80	0.00	0.00
3107	YF	Q4R	28	05/19/89	1.106	0.00	26.20	0.00	0.00
3108	JE	PQ2	28	04/25/89	0.868	0.00	25.70	0.00 >	1.39
3108	PT	PQK	28	04/25/89	0.849	0.00	20.60	0.00	0.62
3108	SF	PRO	28	04/25/89	0.746	0.00	19.50	0.00	1.85
3108	VE	PPJ	28	04/24/89	1.098	0.00	13.40	0.00	0.00
3108	YF	Q4R	28	05/19/89	1.106	0.00	16.60	0.00	0.00
3109	JE	PQ2	28	04/25/89	0.868	0.00	18.90	0.00 >	0.10
3109	PT	PQK	28	04/25/89	0.849	0.00	16.90	0.00	0.00
3109	SF	PRO	28	04/25/89	0.746	0.00	17.30	0.00 >	2.30
3109	VE	PPJ	28	04/24/89	1.098	0.00	11.20	0.00	0.00
3109	YF	Q4S	28	05/19/89	0.683	0.00	19.00	0.00	0.31
3110	JE	PQ3	28	04/25/89	0.895	0.00	24.50	0.00 >	0.20
3110	PT	PQL	28	04/25/89	0.953	25.20	24.90	0.99 >	3.87
3110	SF	PR1	28	04/25/89	0.860	0.00	19.20	0.00 >	6.30
3110	VE	PPK	28	04/24/89	0.882	0.00	20.60	0.00 >	0.00
3110	YF	Q4S	28	05/19/89	0.683	0.00	20.20	0.00	0.00
3111	JE	PQ3	28	04/25/89	0.895	0.00	20.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3111	PT	PQL	28	04/25/89	0.953	0.00	20.70	0.00	0.00
3111	SF	PR1	28	04/25/89	0.860	0.00	18.00	0.00 >	3.10
3111	VE	PPK	28	04/24/89	0.882	0.00	19.10	0.00 >	0.30
3111	YF	Q4T	28	05/19/89	0.867	0.00	17.70	0.00	0.00
3112	JE	PQ4	28	04/25/89	0.935	0.00	12.20	0.00	0.00
3112	PT	PQM	28	04/25/89	0.854	8.70	12.00	1.28 >	11.29
3112	SF	PR2	28	04/25/89	0.629	0.00	9.06	0.00 >	8.79
3112	VE	PPL	28	04/24/89	0.992	0.00	11.00	0.00	0.00
3112	YF	Q4T	28	05/19/89	0.867	0.00	7.65	0.00	0.05
3113	JE	PQ4	28	04/25/89	0.935	0.00	21.00	0.00	0.00
3113	PT	PQM	28	04/25/89	0.854	0.00	19.70	0.00 >	5.44
3113	SF	PR2	28	04/25/89	0.629	0.00	12.00	0.00 >	0.14
3113	VE	PPL	28	04/24/89	0.992	0.00	7.43	0.00	0.00
3113	YF	Q4U	28	05/19/89	0.837	0.00	19.50	0.00	0.00
3114	JE	PQ5	28	04/25/89	0.988	0.00	19.30	0.00	0.00
3114	PT	PQN	28	04/25/89	0.922	0.00	20.20	0.00	3.04
3114	SF	PR3	28	04/25/89	0.678	0.00	18.70	0.00	0.00
3114	VE	PPM	28	04/24/89	0.945	0.00	12.30	0.00	0.00
3114	YF	Q4U	28	05/19/89	0.837	0.00	19.00	0.00	0.00
3115	JE	PQ5	28	04/25/89	0.988	0.00 >	3.20	0.00	0.00
3115	PT	PQN	28	04/25/89	0.922	0.00 >	3.20	0.00	0.52
3115	SF	PR3	28	04/25/89	0.678	0.00 >	3.20	0.00	1.46
3115	VE	PPM	28	04/24/89	0.945	0.00 >	3.20	0.00	0.20
3115	YF	Q4V	28	05/19/89	0.834	0.00 >	3.20	0.00	1.60
3116	JE	PQ6	28	04/25/89	0.925	0.00	13.50	0.00 >	0.99
3116	PT	PQO	28	04/25/89	0.947	0.00	11.90	0.00	0.00
3116	SF	PR4	28	04/25/89	0.684	0.00	15.50	0.00 >	0.01
3116	VE	PPN	28	04/24/89	0.920	0.00	0.08	0.00	0.10
3116	YF	Q4V	28	05/19/89	0.834	0.00	15.50	0.00	0.00
3117	JE	PQ6	28	04/25/89	0.925	0.00	3.78	0.00	0.00
3117	PT	PQO	28	04/25/89	0.947	0.00	4.33	0.00	1.38
3117	SF	PR4	28	04/25/89	0.684	0.00	5.35	0.00 >	0.26
3117	VE	PPN	28	04/24/89	0.920	0.00	3.96	0.00	0.00
3117	YF	Q4W	28	05/19/89	0.939	0.00	4.90	0.00	1.60
3118	JE	PQ7	28	04/25/89	0.957	0.00	15.40	0.00	0.00
3118	PT	PQP	28	04/25/89	0.880	0.00	16.50	0.00	0.10
3118	SF	PR5	28	04/25/89	0.712	0.00	17.50	0.00 >	0.23
3118	VE	PPO	28	04/24/89	0.956	0.00	15.30	0.00 >	0.00
3118	YF	Q4W	28	05/19/89	0.939	0.00	18.10	0.00	0.91
3119	JE	PS4	28	04/26/89	0.839	0.00	17.90	0.00 >	1.90
3119	PT	PSJ	28	04/26/89	0.560	0.00	15.30	0.00	0.00
3119	SF	PSU	28	04/26/89	0.635	0.00	13.90	0.00	0.00
3119	VE	PRK	28	04/25/89	0.878	0.00	11.30	0.00	0.00
3119	YF	QAI	28	06/02/89	1.033	0.00	13.90	0.00	0.00
3120	JE	PS4	28	04/26/89	0.839	0.00	19.00	0.00	1.71
3120	PT	PSJ	28	04/26/89	0.560	0.00	17.70	0.00 >	0.20
3120	SF	PSV	28	04/26/89	0.619	0.00	18.10	0.00 >	1.80
3120	VE	PRK	28	04/25/89	0.878	0.00	12.40	0.00	0.00
3120	YF	QAJ	28	06/02/89	0.910	0.00	16.10	0.00	0.00
3121	JE	PS5	28	04/26/89	0.862	0.00	15.20	0.00 >	3.10
3121	PT	PSK	28	04/26/89	0.455	0.00	14.10	0.00	0.00
3121	SF	PSV	28	04/26/89	0.619	0.00	14.60	0.00	1.11
3121	VE	PRL	28	04/25/89	0.894	0.00	7.66	0.00	0.00
3121	YF	QAJ	28	06/02/89	0.910	0.00	14.80	0.00	0.17
3122	JE	PS5	28	04/26/89	0.862	0.00	15.30	0.00	6.60
3122	PT	PSK	28	04/26/89	0.455	0.00	10.30	0.00	7.40
3122	SF	PSW	28	04/26/89	0.626	0.00	14.40	0.00 >	5.43
3122	VE	PRL	28	04/25/89	0.894	0.00	8.17	0.00 >	0.42
3122	YF	QAK	28	06/02/89	0.881	0.00	15.20	0.00	0.52
3123	JE	PS6	28	04/25/89	0.692	0.00 >	10.00	0.00	7.21
3123	PT	PSL	28	04/26/89	0.570	0.00 >	10.00	0.00	0.00
3123	SF	PSW	28	04/26/89	0.626	0.00 >	10.00	0.00 >	1.37
3123	VE	PRM	28	04/25/89	0.982	0.00	8.19	0.00	0.60
3123	YF	QAK	28	06/02/89	0.881	0.00 >	10.00	0.00	0.00
3124	JE	PS6	28	04/26/89	0.692	0.00	49.00	0.00	0.93
3124	PT	PSL	28	04/26/89	0.570	0.00	49.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
3124	SF	PSX	28	04/26/89	0.560	0.00	49.20	0.00	0.00
3124	VE	PRM	28	04/25/89	0.982	0.00	16.30	0.00	0.00
3124	YF	QAL	28	06/02/89	0.966	0.00	35.40	0.00	0.00
3125	JE	PS7	28	04/26/89	0.866	0.00	12.10	0.00 >	5.89
3125	PT	PSM	28	04/26/89	0.632	0.00	11.10	0.00 >	0.00
3125	SF	PSX	28	04/26/89	0.560	0.00	9.74	0.00 >	1.30
3125	VF	PRN	28	04/25/89	0.728	0.00	6.78	0.00 >	0.00
3125	YF	QAL	28	06/02/89	0.966	0.00	6.15	0.00 >	0.00
3126	JE	PS7	28	04/26/89	0.866	0.00	18.70	0.00 >	5.49
3126	PT	PSM	28	04/26/89	0.632	0.00	17.50	0.00 >	0.05
3126	SF	PSY	28	04/26/89	0.634	0.00	18.00	0.00 >	6.79
3126	VE	PRN	28	04/25/89	0.728	0.00	17.80	0.00 >	0.00
3126	YF	QAM	28	06/02/89	1.030	0.00	17.20	0.00 >	0.54
3127	SF	PSY	28	04/26/89	0.634	0.00	17.20	0.00 >	2.99
3127	YF	QAM	28	06/02/89	1.030	0.00	13.20	0.00 >	0.00
3129	JE	PS9	28	04/26/89	0.824	0.00 >	10.00	0.00 >	5.51
3129	PT	PSO	28	04/26/89	0.687	0.00 >	10.00	0.00 >	0.00
3129	VE	PRP	28	04/25/89	0.788	0.00 >	10.00	0.00 >	0.00
3129	YF	QAN	28	06/02/89	0.931	0.00 >	10.00	0.00 >	0.03
3130	JE	PS9	28	04/26/89	0.824	0.00	19.80	0.00 >	0.07
3130	PT	PSO	28	04/26/89	0.687	0.00	21.40	0.00 >	0.00
3130	SF	PTO	28	04/26/89	0.543	0.00	35.60	0.00 >	0.00
3130	VE	PRP	28	04/25/89	0.788	0.00	18.10	0.00 >	0.00
3130	YF	QAN	28	06/02/89	0.931	0.00	11.20	0.00 >	0.00
3131	SF	PTO	28	04/26/89	0.543	0.00	11.40	0.00 >	0.00
3131	YF	QAO	28	06/02/89	0.948	0.00	15.00	0.00 >	0.80
3135	SF	PT1	29	04/26/89	0.651	0.00	6.67	0.00 >	0.58
3135	YF	QAO	29	06/02/89	0.948	0.00	10.00	0.00 >	0.00
3136	JE	PSC	35	04/26/89	0.856	0.00	8.24	0.00 >	0.13
3136	PT	PSR	35	04/26/89	0.612	0.00	8.35	0.00 >	0.00
3136	SF	PT1	35	04/26/89	0.656	0.00	6.44	0.00 >	0.00
3136	VE	PRS	35	04/25/89	0.719	0.00	7.56	0.00 >	0.00
3136	YF	QAP	35	06/02/89	0.865	0.00	14.90	0.00 >	0.17
3137	JE	PSC	35	04/26/89	0.856	0.00	15.60	0.00 >	0.00
3137	PT	PSR	35	04/26/89	0.612	0.00	15.50	0.00 >	0.00
3137	SF	PT2	35	04/26/89	0.677	0.00	15.70	0.00 >	5.66
3137	VE	PRS	35	04/25/89	0.719	0.00	16.30	0.00 >	1.00
3137	YF	QAP	35	06/02/89	0.865	0.00	15.60	0.00 >	0.00
3138	JE	PSD	35	04/26/89	0.840	0.00	15.30	0.00 >	4.59
3138	PT	PSS	35	04/26/89	0.707	0.00	12.10	0.00 >	0.00
3138	SF	PT2	35	04/26/89	0.677	0.00	13.10	0.00 >	5.30
3138	VE	PRT	35	04/25/89	0.822	0.00	16.70	0.00 >	1.12
3138	YF	QAQ	35	06/02/89	0.982	0.00	13.30	0.00 >	0.00
3139	JE	PSD	35	04/26/89	0.840	0.00	21.50	0.00 >	3.57
3139	PT	PSS	35	04/26/89	0.707	0.00	18.50	0.00 >	0.00
3139	SF	PT3	35	04/26/89	0.645	0.00	19.80	0.00 >	0.00
3139	VE	PRT	35	04/25/89	0.822	0.00	20.80	0.00 >	1.70
3139	YF	QAQ	35	06/02/89	0.982	0.00	18.60	0.00 >	0.06
3140	JE	PSE	35	04/26/89	0.766	0.00	72.80	0.00 >	0.00
3140	PT	PST	35	04/26/89	0.757	0.00	163.00	0.00 >	0.00
3140	SF	PT3	35	04/26/89	0.645	0.00	232.00	0.00 >	4.01
3140	VE	PRU	35	04/25/89	0.947	0.00	185.00	0.00 >	0.00
3140	YF	QAR	35	06/02/89	0.925	0.00	52.00	0.00 >	0.00
3141	JE	PTJ	29	04/28/89	1.118	0.00	0.09	0.00 >	0.00
3141	PT	PTV	29	04/28/89	0.598	0.00	15.50	0.00 >	9.88
3141	SF	PU7	29	04/28/89	1.021	0.00	15.50	0.00 >	0.00
3141	VE	PT5	29	04/28/89	1.024	0.00	7.65	0.00 >	0.33
3141	YF	QAS	29	06/02/89	0.979	0.00	10.30	0.00 >	0.00
3142	JE	PTK	29	04/28/89	1.143	0.00	11.80	0.00 >	0.00
3142	PT	PTW	29	04/28/89	0.945	0.00	19.50	0.00 >	14.51
3142	SF	PUB	29	04/28/89	0.992	0.00	20.40	0.00 >	8.70
3142	VE	PT6	29	04/28/89	1.039	0.00	17.30	0.00 >	0.00
3142	YF	QAT	29	06/02/89	0.994	0.00	19.50	0.00 >	8.89
3143	JE	PTK	29	04/28/89	1.143	0.00	3.20	0.00 >	0.00
3143	PT	PTW	29	04/28/89	0.945	0.00	15.50	0.00 >	6.90
3143	SF	PUB	29	04/28/89	0.992	0.00	15.70	0.00 >	3.42

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3143	VE	PT6	29	04/28/89	1.039	0.00	8.83	0.00 >	0.45
3143	YF	QAT	29	06/02/89	0.994	0.00	11.10	0.00 >	0.76
3144	JE	PTL	29	04/28/89	1.051	0.00	3.65	0.00	0.00
3144	PT	PTX	29	04/28/89	0.834	0.00	15.50	0.00	5.60
3144	SF	PU9	29	04/28/89	0.889	0.00	11.40	0.00 >	0.46
3144	VE	PT7	29	04/28/89	0.982	0.00	5.12	0.00	0.00
3144	YF	QAU	29	06/02/89	1.041	0.00	12.10	0.00	0.00
3145	JE	PTL	29	04/28/89	1.051	0.00	1.60	0.00	0.00
3145	PT	PTX	29	04/28/89	0.834	0.00	5.36	0.00	1.73
3145	SF	PU9	29	04/28/89	0.889	0.00	12.10	0.00	0.00
3145	VE	PT7	29	04/28/89	0.982	0.00	7.33	0.00	0.00
3145	YF	QAU	29	06/02/89	1.041	0.00	0.79	0.00 >	0.05
3146	YF	QAV	29	06/02/89	1.016	0.00	18.90	0.00	0.85
3152	JE	PQ7	29	04/25/89	0.957	0.00	48.50	0.00	0.00
3152	PT	PQP	29	04/25/89	0.880	0.00	57.80	0.00	8.67
3152	SF	PR5	29	04/25/89	0.712	0.00	28.10	0.00	0.00
3152	VE	PPO	29	04/24/89	0.956	0.00	10.90	0.00	0.30
3152	YF	PPS	29	04/24/89	1.239	0.00	18.70	0.00	0.66
3153	YF	QAV	29	06/02/89	1.016	0.00	142.00	0.00	0.00
3154	JE	PTO	29	04/28/89	1.180	0.00	14.30	0.00	0.04
3154	PT	PU0	29	04/28/89	0.602	0.00	21.50	0.00	2.40
3154	SF	PUC	29	04/28/89	0.886	0.00	19.70	0.00 >	3.12
3154	VE	PTA	29	04/28/89	0.883	0.00	16.40	0.00	0.00
3154	YF	QAW	29	06/02/89	0.914	0.00	19.80	0.00	0.20
3155	JE	PTO	29	04/28/89	1.180	0.00	97.30	0.00	2.10
3155	PT	PU0	29	04/28/89	0.602	0.00	190.00	0.00	4.19
3155	SF	PUC	29	04/28/89	0.886	0.00	181.00	0.00 >	5.57
3155	VE	PTA	29	04/28/89	0.883	0.00	125.00	0.00	0.00
3155	YF	QAW	29	06/02/89	0.914	0.00	179.00	0.00	0.20
3156	JE	PTP	29	04/28/89	0.942	0.00	178.00	0.00	3.38
3156	PT	PU1	29	04/28/89	0.629	0.00	206.00	0.00	4.41
3156	SF	PUD	29	04/28/89	0.822	0.00	206.00	0.00 >	0.01
3156	VE	PTB	29	04/28/89	0.877	0.00	202.00	0.00	0.00
3156	YF	QAX	29	06/02/89	0.897	0.00	195.00	0.00 >	0.33
3158	JE	PTP	29	04/28/89	0.942	0.00	17.20	0.00	0.00
3158	PT	PU1	29	04/28/89	0.629	0.00	22.00	0.00	4.21
3158	SF	PUD	29	04/28/89	0.822	0.00	22.00	0.00	0.00
3158	VE	PTB	29	04/28/89	0.877	0.00	18.50	0.00	0.00
3158	YF	QAX	29	06/02/89	0.897	0.00	20.40	0.00	0.71
3159	JE	PTQ	29	04/28/89	0.949	0.00	12.60	0.00	0.00
3159	PT	FU2	29	04/28/89	0.614	0.00	17.50	0.00	0.00
3159	SF	PUE	29	04/28/89	0.761	0.00	19.30	0.00 >	3.90
3159	VE	PTC	29	04/28/89	0.967	0.00	36.90	0.00	0.00
3159	YF	QAY	29	06/02/89	0.892	0.00	17.10	0.00	0.00
3160	JE	PTQ	29	04/28/89	0.949	0.00	5.42	0.00	0.00
3160	PT	PU2	29	04/28/89	0.614	0.00	12.00	0.00 >	0.32
3160	SF	PUE	29	04/28/89	0.761	0.00	8.35	0.00 >	1.90
3160	VE	PTC	29	04/28/89	0.967	23.00	6.22	0.27 >	1.91
3160	YF	QAY	29	06/02/89	0.892	0.00	7.21	0.00	0.00
3161	JE	PTR	29	04/28/89	0.680	0.00	3.85	0.00	0.00
3161	PT	PU3	29	04/28/89	0.664	0.00	7.06	0.00	0.50
3161	SF	PUF	29	04/28/89	0.927	0.00	6.41	0.00	0.00
3161	VE	PTD	29	04/28/89	1.021	0.00	3.08	0.00 >	0.40
3161	YF	QAZ	29	06/02/89	0.936	0.00	4.56	0.00	0.00
3162	JE	PTR	29	04/28/89	0.680	0.00	5.26	0.00	0.00
3162	PT	PU3	29	04/28/89	0.664	0.00	15.30	0.00	5.63
3162	SF	PUF	29	04/28/89	0.927	0.00	11.60	0.00	0.00
3162	VE	PTD	29	04/28/89	1.021	0.00	5.96	0.00	0.38
3162	YF	QAZ	29	06/02/89	0.936	0.00	7.33	0.00	0.00
3163	JE	PTS	29	04/28/89	0.819	0.00	3.72	0.00	0.00
3163	PT	PU4	29	04/28/89	0.585	0.00	8.20	0.00	0.00
3163	SF	PUG	29	04/28/89	0.956	0.00	8.35	0.00	0.00
3163	VE	PTE	29	04/28/89	0.937	0.00	5.54	0.00 >	0.10
3163	YF	QBO	29	06/02/89	0.886	0.00	6.46	0.00	0.00
3164	JE	PTS	29	04/28/89	0.819	0.00	5.03	0.00	0.00
3164	PT	PU4	29	04/28/89	0.585	0.00	8.35	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3164	SF	PUG	29	04/28/89	0.956	0.00	10.30	0.00	0.00
3164	VE	PTE	29	04/28/89	0.937	32.00	9.57	0.30 >	0.68
3164	YF	QB0	29	06/02/89	0.886	0.00	5.82	0.00	0.00
3165	YF	QB1	29	06/02/89	0.963	0.00	19.60	0.00 >	4.55
3167	JE	PTU	29	04/28/89	0.905	0.00	1.29	0.00	0.00
3167	PT	PU6	29	04/28/89	0.630	0.00	1.63	0.00	0.00
3167	SF	PUI	29	04/28/89	0.611	0.00	1.74	0.00 >	0.40
3167	VE	PTG	29	04/28/89	0.914	0.00	1.86	0.00 >	0.54
3167	YF	QB1	29	06/02/89	0.963	0.00	1.79	0.00 >	0.45
3168	PT	Q2U	29	05/16/89	0.521	3.02 >	100.00 >	33.10 >	16.63
3168	SF	Q1Y	29	05/16/89	1.035	0.00 >	100.00	0.00	0.00
3168	VE	Q1M	29	05/15/89	1.238	0.00	45.60	0.00	0.00
3168	YF	Q1G	29	05/15/89	0.867	0.00 >	100.00	0.00	0.00
3169	PT	Q2U	29	05/16/89	0.521	8.13	65.30	8.04	20.60
3169	SF	Q1Y	29	05/16/89	1.035	0.00	78.90	0.00	1.23
3169	VE	Q1M	29	05/15/89	1.238	0.00	113.00	0.00	0.00
3169	YF	Q1G	29	05/15/89	0.867	0.00	49.00	0.00	0.00
3170	PT	Q2V	29	05/16/89	0.602	0.00	22.10	0.00	6.37
3170	SF	Q1Z	29	05/16/89	1.040	0.00	12.90	0.00	0.00
3170	VE	Q1N	29	05/15/89	1.131	0.00	18.10	0.00	0.00
3170	YF	Q1H	29	05/15/89	0.817	0.00	12.90	0.00	0.00
3171	PT	Q2V	29	05/16/89	0.602	0.00	23.10	0.00	7.18
3171	SF	Q1Z	29	05/16/89	1.040	0.00	14.00	0.00	0.00
3171	VE	Q1N	29	05/15/89	1.131	48.50	12.40	0.26 >	6.74
3171	YF	Q1H	29	05/15/89	0.817	0.00	16.40	0.00	0.00
3172	PT	Q3Q	29	05/17/89	0.702	0.00	47.70	0.00	0.00
3172	SF	Q3X	29	05/17/89	0.781	0.00	56.60	0.00 >	3.60
3172	VE	Q3C	29	05/16/89	1.143	0.00	53.40	0.00	0.00
3172	YF	Q35	29	05/15/89	0.763	0.00	61.80	0.00	0.40
3173	JE	PQ8	29	04/25/89	0.898	0.00	58.20	0.00	1.40
3173	PT	PQQ	29	04/25/89	0.861	0.00	57.40	0.00	2.87
3173	SF	PR6	29	04/25/89	0.782	0.00	44.30	0.00	2.00
3173	VE	PPP	29	04/24/89	0.878	0.00	16.80	0.00 >	0.00
3173	YF	PPT	29	04/24/89	1.143	0.00	20.40	0.00	1.11
3174	PT	Q3R	29	05/17/89	0.671	0.00	17.00	0.00	0.00
3174	SF	Q3Y	29	05/17/89	0.820	0.00	6.60	0.00	0.00
3174	VE	Q3D	29	05/16/89	1.123	0.00	9.43	0.00	0.00
3174	YF	Q36	29	05/15/89	0.919	0.00	15.20	0.00	0.00
3175	PT	Q3R	29	05/17/89	0.671	0.00	15.60	0.00	2.47
3175	SF	Q3Y	29	05/17/89	0.320	0.00	13.10	0.00	0.76
3175	VE	Q3D	29	05/16/89	1.123	0.00	12.10	0.00	0.00
3175	YF	Q36	29	05/15/89	0.919	0.00	8.06	0.00	0.04
3180	JE	Q3N	29	05/17/89	0.936	0.00	49.40	0.00	1.75
3180	PT	Q3U	29	05/17/89	0.335	0.71	67.40	94.90 >	24.92
3180	SF	Q41	29	05/17/89	0.918	0.00	35.20	0.00	0.00
3180	VE	Q3G	29	05/16/89	1.065	0.00	51.00	0.00	0.00
3180	YF	Q39	29	05/15/89	0.879	0.00	56.40	0.00	0.80
3181	JE	Q3N	29	05/17/89	0.936	0.00	37.70	0.00 >	1.31
3181	PT	Q3U	29	05/17/89	0.335	1.65	92.70	56.00	31.66
3181	SF	Q41	29	05/17/89	0.918	0.00	28.70	0.00	0.00
3181	VE	Q3G	29	05/16/89	1.065	0.00	50.20	0.00	0.12
3181	YF	Q39	29	05/15/89	0.879	0.00	55.60	0.00	0.80
3183	JE	Q30	29	05/17/89	0.825	0.00	2.08	0.00 >	0.61
3183	PT	Q3V	29	05/17/89	0.666	0.00	4.90	0.00	1.45
3183	SF	Q42	29	05/17/89	0.830	0.00	4.90	0.00	0.00
3183	VE	Q3H	29	05/16/89	1.099	0.00	2.41	0.00	0.00
3183	YF	Q3A	29	05/15/89	0.914	0.00	4.85	0.00	0.96
3184	JE	Q30	29	05/17/89	0.825	0.00 >	320.00	0.00 >	6.00
3184	PT	Q3V	29	05/17/89	0.666	0.00 >	320.00	0.00	8.09
3184	SF	Q42	29	05/17/89	0.830	0.00 >	320.00	0.00	0.00
3184	VE	Q3H	29	05/16/89	1.099	0.00	282.00	0.00	0.00
3184	YF	Q3A	29	05/15/89	0.914	0.00 >	320.00	0.00	0.40
3185	JE	Q3P	29	05/17/89	0.686	0.00	1.93	0.00	0.00
3185	PT	Q3W	29	05/17/89	0.434	0.00	4.62	0.00 >	2.60
3185	SF	Q43	29	05/17/89	1.033	0.00	3.83	0.00	0.00
3185	VE	Q3I	29	05/16/89	1.146	0.00	1.63	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3185	YF	Q3B	29	05/15/89	1.012	0.00	4.08	0.00	0.10
3247	JE	RHT	30	09/07/89	1.033	0.00	19.10	0.00	0.00
3247	PT	RIW	30	09/07/89	0.519	0.00	34.30	0.00	0.00
3247	SF	RIJ	20	09/07/89	0.677	0.00	9.09	0.00	0.00
3247	VE	RI6	30	09/08/89	1.414	0.00	29.10	0.00	0.00
3247	YF	RHG	30	09/07/89	0.693	0.00	39.00	0.00	0.00
3280	YF	05A	30	12/12/88	1.052	0.00	104.00	0.00 >	2.10
3284	YF	05B	30	12/12/88	1.012	0.00	14.40	0.00 >	0.40
3286	YF	05B	30	12/12/88	1.012	0.00	33.00	0.00 >	0.10
3288	YF	05C	30	12/12/88	0.922	0.00	33.40	0.00	0.00
3290	YF	05C	30	12/12/88	0.922	0.00	32.50	0.00	0.00
3292	YF	05D	30	12/12/88	0.999	0.00	8.75	0.00 >	0.20
3293	JE	Q6R	30	05/24/89	0.943	0.00	1.00	0.00	0.00
3293	PT	Q6X	30	05/24/89	1.149	0.00	12.00	0.00	0.00
3293	SF	Q73	30	05/23/89	1.045	0.00	44.60	0.00 >	9.03
3293	VE	Q6L	30	05/23/89	0.918	0.00	22.80	0.00	0.00
3293	YF	Q69	30	05/23/89	1.381	0.00	8.87	0.00	0.00
3294	YF	05D	30	12/12/88	0.999	0.00	24.50	0.00	0.00
3295	YF	05E	30	12/12/88	0.968	0.00	10.60	0.00	0.00
3296	YF	05E	30	12/12/88	0.968	0.00	32.50	0.00	0.40
3297	YF	05F	30	12/12/88	1.018	0.00	22.70	0.00 >	0.20
3299	YF	05F	30	12/12/88	1.018	0.00	116.00	0.00 >	1.65
3303	PT	01P	30	11/17/88	0.701	0.00	247.00	0.00 >	1.07
3303	VE	026	30	12/07/88	1.353	0.00 >	320.00	0.00	0.00
3304	JE	Q6R	30	05/24/89	0.943	0.00	2.16	0.00	0.00
3304	PT	01Q	30	11/17/88	0.727	0.00	21.50	0.00	0.00
3304	PT	Q6X	30	05/24/89	1.149	0.00	14.80	0.00	1.58
3304	SF	Q73	30	05/23/89	1.045	0.00	36.30	0.00 >	0.42
3304	VE	027	30	12/07/88	1.319	0.00	17.10	0.00 >	0.03
3304	VE	Q6L	30	05/23/89	0.918	0.00	32.00	0.00	0.03
3304	YF	Q69	30	05/23/89	1.381	0.00	6.03	0.00	0.00
3305	JE	Q6S	30	05/24/89	1.044	0.00	53.40	0.00	0.00
3305	PT	01Q	30	11/17/88	0.727	277.00	217.00	0.78 >	1.50
3305	SF	Q74	30	05/23/89	0.858	0.00	82.00	0.00	0.00
3305	VE	027	30	12/07/88	1.319	0.00	320.00	0.00	0.00
3305	VE	Q6M	30	05/23/89	0.944	0.00	156.00	0.00	0.20
3305	YF	Q6A	30	05/23/89	1.334	0.00	35.10	0.00	0.00
3306	PT	01R	30	11/17/88	0.683	0.00	35.20	0.00	0.00
3306	VE	028	30	12/07/88	1.326	0.00	226.00	0.00	0.00
3308	JE	Q6S	30	05/24/89	1.044	0.00	3.20	0.00	0.00
3308	PT	01R	30	11/17/88	0.683	0.00	30.60	0.00	0.00
3308	PT	Q6Y	30	05/24/89	1.053	0.00	41.20	0.00	0.00
3308	SF	Q74	30	05/23/89	0.858	0.00	55.90	0.00	0.00
3308	VE	028	30	12/07/88	1.326	0.00	41.00	0.00	0.00
3308	VE	Q6M	30	05/23/89	0.944	0.00	30.80	0.00	0.00
3308	YF	Q6A	30	05/23/89	1.334	0.00	3.65	0.00	0.00
3309	PT	01S	30	11/17/88	0.792	0.00	20.80	0.00	0.00
3310	PT	01S	30	11/17/88	0.792	0.00	27.30	0.00	0.00
3314	PT	01T	30	11/17/88	0.738	0.00	7.91	0.00	0.00
3314	VE	029	30	12/07/88	1.293	0.00	22.50	0.00 >	1.87
3315	JE	RHU	30	09/07/89	0.921	0.00	11.10	0.00 >	1.29
3315	PT	01T	30	11/17/88	0.738	0.00	6.29	0.00	0.00
3315	PT	RIX	30	09/07/89	0.579	0.00	19.50	0.00	0.89
3315	SF	RIK	30	09/07/89	0.709	0.00	14.80	0.00	0.00
3315	VE	029	30	12/07/88	1.293	18.60	43.80	2.36 >	17.94
3315	VE	RI7	30	09/08/89	1.433	0.00	25.90	0.00	0.00
3315	YF	RHH	30	09/07/89	0.764	0.00	7.45	0.00	0.00
3316	PT	01U	30	11/17/88	0.645	0.00	39.00	0.00	0.00
3317	PT	01U	30	11/17/88	0.645	0.00	28.20	0.00	0.00
3317	VE	030	30	12/07/88	1.244	0.00	115.00	0.00	0.00
3348	PT	01V	31	11/17/88	0.874	0.00	4.90	0.00	0.00
3348	VE	030	31	12/07/88	1.244	0.00	7.53	0.00	0.00
3349	PT	01V	31	11/17/88	0.874	0.00	3.01	0.00 >	0.05
3349	VE	031	31	12/07/88	1.171	0.00	5.68	0.00	0.00
3350	PT	01W	31	11/17/88	0.633	0.00	33.20	0.00	0.00
3350	VE	05R	31	12/13/88	1.206	0.00	13.40	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3365	PT	07J	31	12/20/88	0.955	0.00	19.90	0.00	1.40
3366	PT	07K	31	12/20/88	1.039	0.00	2.06	0.00	0.00
3367	JE	058	31	12/12/88	1.022	0.00	3.45	0.00 >	7.50
3367	PT	05N	31	12/13/88	0.753	0.00	2.80	0.00	0.91
3368	PT	07K	31	12/20/88	1.039	0.00	11.40	0.00	0.00
3369	PT	07L	31	12/20/88	1.005	0.00	81.40	0.00	0.92
3370	PT	07L	31	12/20/88	1.005	0.00	3.65	0.00	0.00
3371	PT	07M	31	12/20/88	0.998	0.00	27.90	0.00 >	0.60
3372	JE	RHU	31	09/07/89	0.921	0.00	15.20	0.00	0.20
3372	PT	07M	31	12/20/88	0.998	0.00	21.20	0.00 >	1.09
3372	PT	RIX	31	09/07/89	0.579	0.00	15.50	0.00 >	2.73
3372	SF	RIK	31	09/07/89	0.709	0.00	14.30	0.00	0.00
3372	VE	RI7	31	09/08/89	1.433	0.00	11.60	0.00	0.00
3372	YF	RHH	31	09/07/89	0.764	0.00	11.50	0.00 >	0.03
3373	PT	07N	31	12/20/88	0.993	0.00 >	320.00	0.00	0.60
3374	PT	07N	31	12/20/88	0.993	84.40 >	100.00 >	1.18 >	8.37
3375	PT	07O	31	12/20/88	1.014	0.00	7.57	0.00 >	1.16
3376	JE	059	31	12/12/88	0.818	0.00 >	100.00	0.00 >	18.31
3376	PT	05O	31	12/13/88	0.794	0.00 >	100.00	0.00	0.40
3381	YF	021	31	11/18/88	0.932	0.00	262.00	0.00	0.00
3382	YF	022	31	11/18/88	1.034	0.00	89.30	0.00 >	2.43
3383	YF	022	31	11/18/88	1.034	0.00 >	320.00	0.00 >	2.70
3384	YF	023	31	11/18/88	1.000	0.00	40.00	0.00 >	1.90
3385	YF	023	31	11/18/88	1.000	0.00 >	320.00	0.00 >	1.40
3386	YF	024	31	11/18/88	1.012	0.00	67.90	0.00 >	0.20
3421	JE	P9T	32	04/03/89	0.849	0.00	22.70	0.00	0.61
3421	PT	PA8	32	04/21/89	0.897	0.00	20.20	0.00 >	3.35
3421	SF	PAN	32	04/04/89	0.832	0.00	11.60	0.00 >	0.10
3421	VE	P8Z	32	04/03/89	0.983	0.00	12.70	0.00	0.00
3421	YF	P9E	32	04/03/89	1.183	0.00	23.40	0.00	0.63
3422	JE	P9T	32	04/03/89	0.849	0.00	1.65	0.00	0.19
3422	PT	PA8	32	04/21/89	0.897	0.00	2.34	0.00 >	6.55
3422	SF	PAN	32	04/04/89	0.832	0.00	1.35	0.00 >	0.20
3422	VE	P8Z	32	04/03/89	0.983	0.00	1.76	0.00	0.00
3422	YF	P9E	32	04/03/89	1.183	0.00	1.45	0.00	0.00
3423	JE	P9U	32	04/03/89	0.942	0.00	15.90	0.00	0.00
3423	PT	PA9	32	04/21/89	0.953	0.00	20.20	0.00	1.95
3423	SF	PAO	32	04/04/89	0.804	0.00	8.51	0.00	0.00
3423	VE	P90	32	04/03/89	0.910	0.00	18.60	0.00 >	0.00
3423	YF	P9F	32	04/03/89	0.938	0.00	24.70	0.00 >	1.16
3424	JE	P9U	32	04/03/89	0.942	0.00	19.30	0.00	0.00
3424	PT	PA9	32	04/21/89	0.953	0.00	20.40	0.00	5.53
3424	SF	PAO	32	04/04/89	0.804	0.00	7.95	0.00	0.00
3424	VE	P90	32	04/03/89	0.910	0.00	25.00	0.00	0.00
3424	YF	P9F	32	04/03/89	0.938	0.00	26.90	0.00 >	3.13
3425	JE	P9V	32	04/03/89	0.761	0.00	27.70	0.00	0.00
3425	JE	PME	32	04/19/89	0.698	0.00	25.50	0.00	0.15
3425	PT	PMT	32	04/19/89	0.515	30.50	25.30	0.83	7.45
3425	PT	PAA	32	04/21/89	0.947	0.00	21.50	0.00	4.46
3425	SF	PAP	32	04/04/89	0.708	0.00	22.20	0.00 >	0.10
3425	SF	PN8	32	04/19/89	0.801	0.00	25.40	0.00 >	0.20
3425	VE	P91	32	04/03/89	0.837	0.00	25.70	0.00	0.00
3425	VE	PLK	32	04/17/89	0.964	0.00	25.30	0.00 >	0.00
3425	YF	P9G	32	04/03/89	0.981	0.00	25.40	0.00 >	1.52
3425	YF	PLZ	32	04/17/89	1.045	0.00	26.50	0.00	0.81
3426	JE	P9V	32	04/03/89	0.761	0.00	28.50	0.00	0.00
3426	JE	PMF	32	04/19/89	0.642	0.00	29.70	0.00	0.00
3426	PT	PAA	32	04/21/89	0.947	0.00	21.70	0.00	4.42
3426	SF	PAP	32	04/04/89	0.708	0.00	22.30	0.00	1.75
3426	VE	P91	32	04/03/89	0.837	0.00	28.10	0.00	0.00
3426	VE	PLL	32	04/17/89	0.927	0.00	27.50	0.00 >	0.00
3426	YF	P9G	32	04/03/89	0.981	0.00	28.70	0.00 >	2.08
3428	JE	P9W	32	04/03/89	0.706	0.00	4.63	0.00	0.00
3428	PT	PAB	32	04/21/89	0.851	0.00	7.18	0.00	0.63
3428	SF	PAQ	32	04/04/89	0.749	0.00	5.70	0.00 >	0.30
3428	VE	P92	32	04/03/89	0.826	0.00	19.50	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3428	YF	P9H	32	04/03/89	1.007	0.00	12.60	0.00 >	1.20
3429	JE	P9X	32	04/03/89	0.659	0.00	26.90	0.00	1.01
3429	JE	PMG	32	04/19/89	0.681	0.00	23.50	0.00	0.00
3429	PT	PMV	32	04/19/89	0.645	0.00	19.80	0.00	2.66
3429	PT	PAC	32	04/21/89	0.883	0.00	20.00	0.00	0.00
3429	SF	PAR	32	04/04/89	0.664	0.00	22.80	0.00	0.00
3429	SF	PNA	32	04/19/89	0.816	0.00	22.50	0.00	0.00
3429	VE	P93	32	04/03/89	0.852	0.00	25.70	0.00	0.00
3429	VE	PLM	32	04/17/89	0.941	0.00	26.00	0.00	0.00
3429	YF	P9I	32	04/03/89	0.974	0.00	24.30	0.00 >	0.92
3429	YF	PM1	32	04/18/89	1.022	0.00	22.70	0.00	0.00
3430	JE	P9X	32	04/03/89	0.659	0.00	25.40	0.00	0.40
3430	JE	PMG	32	04/19/89	0.681	0.00	23.50	0.00	0.00
3430	PT	PMV	32	04/19/89	0.645	0.00	20.00	0.00	0.00
3430	PT	PAC	32	04/21/89	0.883	0.00	18.40	0.00	6.62
3430	SF	PAR	32	04/04/89	0.664	0.00	12.30	0.00 >	0.69
3430	SF	PNA	32	04/19/89	0.816	0.00	22.50	0.00	0.13
3430	VE	P93	32	04/03/89	0.852	0.00	25.50	0.00 >	0.00
3430	VE	PLM	32	04/17/89	0.941	0.00	24.30	0.00	0.00
3430	YF	P9I	32	04/03/89	0.974	0.00	27.00	0.00 >	1.40
3430	YF	PM1	32	04/18/89	1.022	0.00	23.00	0.00 >	0.40
3431	JE	P9Y	32	04/03/89	0.779	0.00	22.80	0.00	2.27
3431	JE	PMH	32	04/19/89	0.621	0.00	12.90	0.00	0.00
3431	PT	PMW	32	04/19/89	0.616	0.00	17.90	0.00	0.80
3431	PT	PAD	32	04/21/89	0.818	0.00	18.50	0.00	0.80
3431	SF	PAS	32	04/04/89	0.638	0.00	13.80	0.00	0.00
3431	SF	PNB	32	04/19/89	0.915	0.00	11.40	0.00 >	7.39
3431	VE	P94	32	04/03/89	0.880	0.00	15.40	0.00 >	0.00
3431	VE	PLN	32	04/17/89	0.951	0.00	17.80	0.00	0.00
3431	YF	P9J	32	04/03/89	0.964	0.00	23.80	0.00	0.00
3431	YF	PM2	32	04/18/89	1.039	0.00	23.00	0.00	0.00
3432	JE	P9Y	32	04/03/89	0.779	0.00	1.58	0.00	0.00
3432	JE	PMH	32	04/19/89	0.621	0.00	4.57	0.00	0.00
3432	PT	PMW	32	04/19/89	0.616	0.00	4.92	0.00	0.00
3432	PT	PAD	32	04/21/89	0.818	0.00	4.90	0.00	0.00
3432	SF	PAS	32	04/04/89	0.638	0.00	2.81	0.00 >	0.50
3432	SF	PNB	32	04/19/89	0.915	0.00	2.74	0.00 >	2.10
3432	VE	P94	32	04/03/89	0.880	0.00	4.29	0.00	0.00
3432	VE	PLN	32	04/17/89	0.951	0.00	3.86	0.00	0.06
3432	YF	P9J	32	04/03/89	0.964	0.00	2.79	0.00 >	0.10
3432	YF	PM2	32	04/18/89	1.039	0.00	2.74	0.00 >	1.33
3433	JE	P9Z	32	04/03/89	0.723	0.00	2.84	0.00 >	0.51
3433	JE	PMI	32	04/19/89	0.654	0.00	3.33	0.00	0.00
3433	PT	PMX	32	04/19/89	0.716	0.00	5.44	0.00	0.00
3433	PT	PAE	32	04/21/89	0.873	0.00	6.08	0.00	0.21
3433	SF	PAT	32	04/04/89	0.700	0.00	3.04	0.00 >	1.49
3433	SF	PNC	32	04/19/89	0.702	0.00	3.56	0.00	0.00
3433	VE	P95	32	04/03/89	0.995	0.00	3.79	0.00	0.00
3433	VE	PLO	32	04/17/89	0.974	0.00	5.76	0.00	0.00
3433	YF	P9K	32	04/03/89	1.017	0.00	3.06	0.00 >	0.40
3433	YF	PM3	32	04/18/89	1.083	0.00	3.88	0.00 >	1.79
3450	JE	P9Z	32	04/03/89	0.723	0.00	8.83	0.00	0.00
3450	JE	PMI	32	04/19/89	0.654	0.00	36.30	0.00	0.00
3450	PT	PMX	32	04/19/89	0.716	15.30	26.20	1.71	15.85
3450	PT	PAE	32	04/21/89	0.873	26.40	49.20	1.87 >	15.28
3450	SF	PAT	32	04/04/89	0.700	10.00	10.20	1.02 >	11.92
3450	SF	PNC	32	04/19/89	0.702	0.00	11.20	0.00 >	5.73
3450	VE	P95	32	04/03/89	0.995	0.00	38.60	0.00	2.71
3450	VE	PLO	32	04/17/89	0.974	0.00	3.57	0.00	1.25
3450	YF	P9K	32	04/03/89	1.017	0.00	8.83	0.00 >	0.10
3450	YF	PM3	32	04/18/89	1.083	0.00	14.80	0.00 >	0.20
3492	JE	PMQ	33	04/19/89	0.836	0.00	17.50	0.00	0.00
3492	PT	PN5	33	04/19/89	0.724	0.00	70.40	0.00	0.00
3492	SF	PNK	33	04/19/89	0.766	0.00	78.30	0.00 >	3.11
3492	VE	PLW	33	04/17/89	1.025	0.00	14.50	0.00	0.00
3492	YF	PMB	33	04/18/89	0.974	0.00	48.70	0.00 >	0.10

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rr:l.	IC 50	TC 25	SI	TAI
3493	JE	PMQ	33	04/19/89	0.836	0.00	20.90	0.00	0.00
3493	PT	PN5	33	04/19/89	0.724	0.00	23.80	0.00	0.11
3493	SF	PNK	33	04/19/89	0.766	0.00	26.80	0.00 >	5.10
3493	VE	PLW	33	04/17/89	1.025	0.00	24.40	0.00	0.00
3493	YF	PMB	33	04/18/89	0.974	0.00	26.50	0.00	0.32
3494	JE	PMR	33	04/19/89	0.697	0.00	32.20	0.00	1.20
3494	PT	PN6	33	04/19/89	0.744	3.79	46.30	12.20	41.87
3494	SF	PNL	33	04/19/89	0.858	0.00	30.20	0.00 >	9.26
3494	VE	PLX	33	04/17/89	1.071	0.00	28.30	0.00	0.40
3494	YF	PMC	32	04/18/89	1.022	0.00	29.70	0.00	0.00
3520	YF	06V	31	12/19/88	0.679	0.00	5.54	0.00	0.00
3521	YF	06V	31	12/19/88	0.679	0.00	37.70	0.00	0.00
3522	YF	06W	31	12/19/88	0.632	0.00	288.00	0.00 >	0.05
3526	SF	PN9	32	04/19/89	0.843	0.00	24.60	0.00 >	5.10
3526	YF	PM0	32	04/18/89	1.007	0.00	29.00	0.00	1.76
3528	YF	06W	31	12/19/88	0.632	0.00	40.40	0.00	0.00
3529	YF	06X	31	12/19/88	0.663	0.00	0.83	0.00	0.00
3530	YF	06X	31	12/19/88	0.663	0.00 >	320.00	0.00	0.00
3545	PT	PEM	31	03/29/89	0.730	0.00	240.00	0.00 >	10.00
3545	SF	FF1	31	03/29/89	0.811	0.00	241.00	0.00	0.00
3545	VE	PDD	31	03/28/89	0.850	0.00	257.00	0.00 >	0.10
3545	YF	PE7	31	03/28/89	1.198	0.00	182.00	0.00	0.00
3546	PT	PEN	31	03/29/89	0.843	0.00	9.70	0.00	2.80
3546	SF	PF2	31	03/29/89	0.798	0.00	13.50	0.00	1.20
3546	VE	PDE	31	03/28/89	0.763	0.00	16.00	0.00	0.00
3546	YF	PE8	31	03/28/89	1.208	0.00	10.50	0.00	0.00
3547	PT	PEN	31	03/29/89	0.843	0.00	8.70	0.00	0.00
3547	SF	PF2	31	03/29/89	0.798	0.00	4.02	0.00	0.00
3547	VE	PDE	31	03/28/89	0.763	0.00	17.50	0.00	0.00
3547	YF	PE8	31	03/28/89	1.208	0.00	8.30	0.00	0.00
3548	PT	PEO	31	03/29/89	0.919	0.00	65.90	0.00	0.13
3548	SF	PF3	31	03/29/89	0.766	0.00	62.10	0.00	2.60
3548	VE	PDF	31	03/28/89	0.818	0.00	42.50	0.00	0.00
3548	YF	PE9	31	03/28/89	1.226	0.00	39.10	0.00	0.00
3549	PT	PEO	31	03/29/89	0.919	0.00	7.20	0.00	0.10
3549	SF	PF3	31	03/29/89	0.766	0.00	8.19	0.00	0.00
3549	VE	PDF	31	03/28/89	0.818	0.00	14.20	0.00	0.00
3549	YF	PE9	31	03/28/89	1.226	0.00	7.17	0.00	0.00
3550	PT	PEP	31	03/29/89	0.895	94.70 >	100.00 >	1.06 >	7.99
3550	SF	PF4	31	03/29/89	0.803	0.00	88.40	0.00	0.60
3550	VE	PDG	31	03/28/89	0.805	0.00 >	100.00	0.00	0.00
3550	YF	PEA	31	03/28/89	1.176	0.00 >	100.00	0.00	0.00
3551	PT	PEP	31	03/29/89	0.895	0.00	2.57	0.00	0.00
3551	SF	PF4	31	03/29/89	0.803	0.00	104.00	0.00	0.00
3551	VE	PDG	31	03/28/89	0.805	0.00 >	320.00	0.00	0.00
3551	YF	PEA	31	03/28/89	1.176	0.00	2.91	0.00	0.00
3552	PT	PEQ	31	03/29/89	0.871	0.00	1.52	0.00	0.00
3552	SF	PF5	31	03/29/89	0.810	0.00	10.90	0.00	1.22
3552	VE	PDH	31	03/28/89	0.858	0.00	21.10	0.00	0.00
3552	YF	PEB	31	03/28/89	1.123	0.00 >	32.00	0.00 >	0.05
3554	SF	05X	29	12/13/88	0.637	0.00 >	320.00	0.00	0.00
3556	PT	PEQ	31	03/29/89	0.871	0.00 >	100.00	0.00	1.52
3556	SF	PF5	31	03/29/89	0.810	0.00	32.90	0.00	0.00
3556	VE	PDH	31	03/28/89	0.858	0.00	61.00	0.00	0.00
3556	YF	PEB	31	03/28/89	1.123	0.00	90.50	0.00	0.00
3557	PT	PER	31	03/29/89	0.868	0.00	31.50	0.00	4.24
3557	SF	PF6	31	03/29/89	0.732	0.00	43.70	0.00	6.92
3557	VE	PDI	31	03/28/89	0.770	0.00	44.50	0.00	0.00
3557	YF	PEC	31	03/28/89	1.129	0.00	34.50	0.00	1.80
3558	JE	RHV	31	09/07/89	0.878	0.00	25.80	0.00 >	1.41
3558	PT	PER	31	03/29/89	0.868	0.00	71.90	0.00	1.38
3558	PT	RIY	31	09/07/89	0.596	0.00	32.00	0.00 >	0.20
3558	SF	PF6	31	03/29/89	0.732	30.00	102.00	3.39	22.91
3558	SF	RIL	31	09/07/89	0.742	0.00	39.30	0.00	0.00
3558	VE	PDI	31	03/28/89	0.770	0.00	139.00	0.00	1.55
3558	VE	RI8	31	09/08/89	1.420	0.00	122.00	0.00 >	0.01

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3558	YF	PEC	31	03/28/89	1.129	0.00	82.80	0.00	0.30
3558	YF	RHI	31	09/07/89	0.727	0.00	58.40	0.00	0.00
3559	PT	PES	31	03/29/89	0.895	0.00	52.80	0.00	4.15
3559	SF	PF7	31	03/29/89	0.815	95.70	87.50	0.91	4.04
3559	VE	PDJ	31	03/28/89	1.022	71.40	85.60	1.20	3.25
3559	YF	PED	31	03/28/89	1.210	0.00	100.00	0.00	2.83
3560	PT	PES	31	03/29/89	0.895	279.00	177.00	0.64 >	7.60
3560	SF	PF7	31	03/29/89	0.815	0.00	96.90	0.00	0.00
3560	VE	PDJ	31	03/28/89	1.022	287.00	116.00	0.40 >	0.75
3560	YF	PED	31	03/28/89	1.210	0.00	104.00	0.00	0.00
3561	PT	PET	31	03/29/89	0.919	300.00 >	320.00 >	1.07 >	4.87
3561	SF	FF8	31	03/29/89	0.744	0.00 >	320.00 >	0.00 >	0.00
3561	VE	PDK	31	03/28/89	0.942	0.00 >	320.00 >	0.00 >	0.18
3561	YF	PEE	31	03/28/89	1.037	0.00 >	320.00 >	0.00 >	0.20
3562	PT	PET	31	03/29/89	0.919	0.00	2.82	0.00	0.63
3562	SF	PF8	31	03/29/89	0.744	0.00	3.19	0.00	0.00
3562	VE	PDK	31	03/28/89	0.942	0.00	4.18	0.00 >	0.01
3562	YF	PEE	31	03/28/89	1.037	0.00	4.74	0.00	0.00
3563	JE	P90	31	04/03/89	0.987	0.00 >	320.00	0.00	0.00
3563	PT	PA3	31	04/21/89	1.000	0.00 >	320.00	0.00	0.00
3563	SF	PAI	31	04/04/89	0.831	0.00 >	320.00	0.00 >	0.68
3563	VE	P8U	31	04/03/89	1.013	0.00 >	320.00	0.00	0.00
3563	YF	P99	31	04/03/89	0.973	0.00 >	320.00	0.00	0.31
3564	JE	PA0	32	04/03/89	0.708	0.00 <	0.32	0.00	0.00
3564	JE	PMJ	32	04/19/89	0.880	0.00	0.01	0.00 >	0.10
3564	PT	PMY	32	04/19/89	0.769	0.00	0.01	0.00	0.00
3564	SF	PAU	32	04/04/89	0.441	0.00 <	0.32	0.00	0.00
3564	SF	PND	32	04/19/89	0.803	0.00	0.01	0.00 >	0.35
3564	VE	P96	32	04/03/89	1.018	0.00 <	0.32	0.00	0.00
3564	VE	PLP	32	04/17/89	0.969	0.00 <	0.00	0.00	0.00
3564	YF	P9L	32	04/03/89	1.141	0.00 <	0.32	0.00	0.00
3564	YF	PM4	32	04/18/89	1.010	0.00	0.00	0.00 >	0.05
3565	JE	PBP	32	04/04/89	0.913	0.00	3.02	0.00 >	0.00
3565	JE	FMJ	32	04/19/89	0.880	0.00 >	0.32	0.00 >	6.09
3565	PT	PC4	32	04/05/89	0.704	7.79	12.90	1.55	7.06
3565	PT	PMY	32	04/19/89	0.769	0.00 >	0.32	0.00	2.66
3565	SF	PCJ	32	04/05/89	0.638	0.00	2.85	0.00	2.20
3565	SF	PND	32	04/19/89	0.803	0.00 >	0.32	0.00 >	1.61
3565	VE	PAV	32	04/04/89	0.947	0.00	3.55	0.00	0.95
3565	VE	PLP	32	04/17/89	0.969	0.00 >	0.32	0.00	0.00
3565	YF	PBA	32	04/04/89	1.195	0.00	4.23	0.00	2.18
3565	YF	PM4	32	04/18/89	1.010	0.00 >	0.32	0.00	0.20
3566	JE	PBQ	32	04/04/89	0.877	0.00 <	0.32	0.00	0.00
3566	JE	PMK	32	04/19/89	0.858	0.00 <	1.00	0.00	0.00
3566	PT	PC5	32	04/05/89	0.865	0.00 <	0.32	0.00	0.00
3566	PT	PMZ	32	04/19/89	0.722	0.00 <	1.00	0.00	0.00
3566	SF	PCK	32	04/05/89	0.690	0.00 <	0.32	0.00	0.00
3566	SF	PNE	32	04/19/89	0.882	0.00 <	1.00	0.00	0.00
3566	VE	PAW	32	04/04/89	0.970	0.00 <	0.32	0.00	0.00
3566	VE	PLQ	32	04/17/89	1.046	0.00 <	1.00	0.00	0.00
3566	YF	PBB	32	04/04/89	1.106	0.00 <	0.32	0.00	0.00
3566	YF	PM5	32	04/18/89	1.141	0.00	1.83	0.00	0.00
3567	JE	PBQ	32	04/04/89	0.877	0.00	6.37	0.00	0.00
3567	PT	PC5	32	04/05/89	0.865	0.00	2.26	0.00	0.00
3567	SF	PCK	32	04/05/89	0.690	0.00	3.98	0.00	0.00
3567	VE	PAW	32	04/04/89	0.970	0.00	6.29	0.00	0.00
3567	YF	PBB	32	04/04/89	1.106	0.00	6.37	0.00	0.00
3568	JE	Q6T	32	05/24/89	0.809	0.00 <	0.03	0.00	0.00
3568	PT	Q6Z	32	05/24/89	1.102	0.00 <	0.03	0.00	0.00
3568	SF	Q75	32	05/23/89	1.082	0.00 <	0.03	0.00	0.00
3568	VE	Q6N	32	05/23/89	0.883	0.00 <	0.03	0.00	0.00
3568	YF	Q6B	32	05/23/89	1.252	0.00 <	0.03	0.00	0.00
3569	JE	PBR	32	04/04/89	0.854	0.00	4.71	0.00	0.22
3569	PT	PC6	32	04/05/89	0.753	0.00	0.32	0.00	0.00
3569	SF	PCL	32	04/05/89	0.731	0.00	0.84	0.00	0.00
3569	VE	PAX	32	04/04/89	0.923	0.00	2.99	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3569	YF	PBC	32	04/04/89	1.155	0.00	2.00	0.00	0.00
3570	JE	PBS	32	04/04/89	0.866	0.00	136.00	0.00 >	0.20
3570	PT	PC7	32	04/05/89	0.910	0.00	96.90	0.00	0.13
3570	SF	PCM	32	04/05/89	0.672	0.00	103.00	0.00	0.00
3570	VE	PAY	32	04/04/89	0.902	0.00	96.00	0.00	0.00
3570	YF	PBD	32	04/04/89	1.159	0.00	119.00	0.00	0.78
3571	JE	PBS	32	04/04/89	0.866	0.00 >	100.00	0.00	1.00
3571	PT	PC7	32	04/05/89	0.910	0.00 >	100.00	0.00	0.00
3571	SF	PCM	32	04/05/89	0.672	0.00 >	100.00	0.00	1.04
3571	VE	PAY	32	04/04/89	0.902	0.00 >	100.00	0.00	0.00
3571	VV	OBN	32	08/17/89	1.299	18.10 >	320.00 >	17.68 >	47.60
3571	YF	PBD	32	04/04/89	1.159	0.00 >	100.00	0.00	1.40
3572	JE	PBT	32	04/04/89	0.830	0.00	104.00	0.00	0.40
3572	JE	PMK	32	04/19/89	0.858	0.00	41.30	0.00	1.44
3572	PT	PC8	32	04/05/89	0.884	0.00 >	100.00	0.00	0.00
3572	PT	PMZ	32	04/19/89	0.722	0.00	21.70	0.00	1.74
3572	SF	PCN	32	04/05/89	0.671	0.00	100.00	0.00	2.17
3572	SF	PNE	32	04/19/89	0.882	0.00	75.90	0.00 >	2.70
3572	VE	PAZ	32	04/04/89	0.944	0.00	76.60	0.00 >	0.00
3572	VE	PLQ	32	04/17/89	1.046	0.00	42.20	0.00	0.12
3572	YF	PBE	32	04/04/89	1.086	0.00 >	100.00	0.00	0.00
3572	YF	PM5	32	04/18/89	1.141	0.00	95.70	0.00	0.32
3573	JE	PBT	32	04/04/89	0.830	0.00	48.10	0.00	0.60
3573	PT	PC8	32	04/05/89	0.884	0.00	22.90	0.00	0.00
3573	SF	PCN	32	04/05/89	0.671	0.00	41.50	0.00 >	6.51
3573	VE	PAZ	32	04/04/89	0.944	0.00	41.70	0.00 >	0.00
3573	YF	PBE	32	04/04/89	1.086	0.00	45.10	0.00	0.00
3574	JE	PBU	32	04/04/89	0.817	0.00	15.60	0.00	0.00
3574	PT	PC9	32	04/05/89	0.683	0.00	11.70	0.00	0.00
3574	SF	PCO	32	04/05/89	0.696	0.00	15.90	0.00	4.34
3574	VE	PBO	32	04/04/89	0.967	0.00	12.80	0.00 >	1.15
3574	YF	PBF	32	04/04/89	1.146	0.00	23.90	0.00	0.00
3575	JE	PBU	32	04/04/89	0.817	0.00	13.50	0.00	0.00
3575	PT	PC9	32	04/05/89	0.683	0.00	13.90	0.00	8.65
3575	SF	PCO	32	04/05/89	0.696	0.00	12.60	0.00 >	2.78
3575	VE	PBO	32	04/04/89	0.967	0.00	11.60	0.00 >	2.14
3575	YF	PBF	32	04/04/89	1.146	0.00	10.70	0.00	0.27
3576	JE	PBV	32	04/04/89	0.857	0.00 >	320.00	0.00 >	0.90
3576	PT	PCA	32	04/05/89	0.804	0.00 >	320.00	0.00 >	8.32
3576	SF	PCP	32	04/05/89	0.671	0.00 >	320.00	0.00 >	1.50
3576	VE	PB1	32	04/04/89	0.981	0.00 >	320.00	0.00	0.40
3576	YF	PBG	32	04/04/89	1.100	0.00 >	320.00	0.00	0.46
3577	JE	PBV	32	04/04/89	0.857	0.00	154.00	0.00	0.00
3577	PT	PCA	32	04/05/89	0.804	0.00	64.80	0.00	9.81
3577	SF	PCP	32	04/05/89	0.671	0.00	152.00	0.00	7.46
3577	VE	PB1	32	04/04/89	0.981	0.00	57.80	0.00	0.00
3577	YF	PBG	32	04/04/89	1.100	0.00	171.00	0.00	0.00
3578	JE	PBW	32	04/04/89	0.854	0.00 >	320.00	0.00 >	4.10
3578	PT	PCB	32	04/05/89	0.822	0.00 >	320.00	0.00	1.20
3578	SF	PCQ	32	04/05/89	0.644	0.00 >	320.00	0.00 >	13.49
3578	VE	PB2	32	04/04/89	0.922	0.00 >	320.00	0.00 >	1.50
3578	YF	PBH	32	04/04/89	1.077	0.00 >	320.00	0.00 >	1.00
3579	JE	PBW	32	04/04/89	0.854	0.00	8.83	0.00 >	0.90
3579	PT	PCB	32	04/05/89	0.822	0.00	11.30	0.00	0.00
3579	SF	PCQ	32	04/05/89	0.644	0.00	17.30	0.00	5.46
3579	VE	PB2	32	04/04/89	0.922	0.00	17.50	0.00 >	6.77
3579	YF	PBH	32	04/04/89	1.077	0.00	16.90	0.00	0.00
3580	JE	PBX	32	04/04/89	0.903	0.00	5.24	0.00 >	3.50
3580	PT	PCC	32	04/05/89	0.869	0.00 >	10.00	0.00	3.12
3580	SF	PCR	32	04/05/89	0.502	0.00 >	10.00	0.00 >	3.40
3580	VE	PB3	32	04/04/89	0.930	0.00 >	10.00	0.00 >	18.01
3580	YF	PBI	32	04/04/89	1.113	0.00 >	10.00	0.00	2.11
3583	JE	PML	32	04/19/89	0.824	0.00	280.00	0.00	0.81
3583	PT	PNO	32	04/19/89	0.588	0.00	216.00	0.00 >	1.60
3583	SF	PNF	32	04/19/89	0.764	0.00	253.00	0.00 >	4.83
3583	VE	PLR	32	04/17/89	1.002	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3583	YF	PM6	32	04/18/89	1.008	0.00	> 320.00	0.00	> 1.01
3584	JE	PML	32	04/19/89	0.824	0.00	56.50	0.00	0.00
3584	JE	RJD	32	09/12/89	0.437	0.00	66.00	0.00	> 6.23
3584	PT	PNO	32	04/19/89	0.588	0.00	64.40	0.00	0.00
3584	SF	PNF	32	04/19/89	0.764	53.10	75.70	1.43	> 15.48
3584	SF	RK3	32	09/12/89	0.803	0.00	32.00	0.00	> 1.71
3584	VE	PLR	32	04/17/89	1.002	0.00	235.00	0.00	> 8.17
3584	VE	RJQ	32	09/11/89	1.117	72.60	178.00	2.45	11.91
3584	YF	PM6	32	04/18/89	1.008	0.00	138.00	0.00	2.25
3584	YF	RJO	32	09/11/89	0.521	0.00	81.90	0.00	0.49
3586	JE	PMM	32	04/19/89	0.711	0.00	21.00	0.00	> 3.90
3586	PT	PN1	32	04/19/89	0.711	7.68	2.10	0.27	37.49
3586	SF	PNG	32	04/19/89	0.636	0.00	104.00	0.00	0.00
3586	VE	PLS	32	04/17/89	0.989	0.00	20.30	0.00	> 3.11
3586	YF	PM7	32	04/18/89	0.963	0.00	27.10	0.00	> 6.34
3587	JE	PMM	32	04/19/89	0.711	0.00	103.00	0.00	0.00
3587	PT	PN1	32	04/19/89	0.711	0.00	182.00	0.00	> 16.86
3587	SF	PNG	32	04/19/89	0.636	0.00	140.00	0.00	0.00
3587	VE	PLS	32	04/17/89	0.989	0.00	137.00	0.00	0.00
3587	YF	PM7	32	04/18/89	0.963	0.00	128.00	0.00	0.00
3588	JE	PMN	32	04/19/89	0.856	0.00	21.50	0.00	0.00
3588	PT	PN2	32	04/19/89	0.706	15.90	38.90	2.44	> 16.51
3588	SF	PNH	32	04/19/89	0.773	0.00	46.40	0.00	> 4.03
3588	VE	PLT	32	04/17/89	1.003	0.00	23.00	0.00	0.12
3588	YF	PM8	32	04/18/89	1.002	0.00	46.70	0.00	0.00
3589	JE	PMN	32	04/19/89	0.856	0.00	16.70	0.00	0.00
3589	PT	PN2	32	04/19/89	0.706	26.10	20.40	0.78	3.04
3589	SF	PNH	32	04/19/89	0.773	0.00	11.60	0.00	> 4.20
3589	VE	PLT	32	04/17/89	1.003	0.00	14.20	0.00	0.03
3589	YF	PM8	32	04/18/89	1.002	0.00	11.30	0.00	0.00
3590	JE	PMO	32	04/19/89	0.773	0.00	134.00	0.00	3.59
3590	PT	PN3	32	04/19/89	0.714	0.00	162.00	0.00	1.60
3590	SF	PNI	32	04/19/89	0.712	0.00	125.00	0.00	> 6.19
3590	VE	PLU	32	04/17/89	1.020	0.00	141.00	0.00	0.11
3590	YF	PM9	32	04/18/89	1.056	0.00	129.00	0.00	0.00
3592	JE	OAC	ABEB	01/11/89	0.792	0.00	> 320.00	0.00	> 2.52
3592	JE	OWG	51	03/06/89	1.099	0.00	201.00	0.00	0.00
3592	JE	RJE	51	09/12/89	0.519	0.00	59.20	0.00	> 0.16
3592	PT	OA6	ABEB	01/12/89	1.001	83.90	104.00	1.24	> 19.63
3592	PT	OWV	51	03/07/89	0.859	27.70	189.00	6.84	35.74
3592	SF	OAE	ABEB	01/11/89	0.509	26.10	> 320.00	> 12.20	> 41.57
3592	SF	OXA	51	03/07/89	0.680	0.00	266.00	0.00	7.98
3592	SF	RK4	51	09/12/89	0.741	0.00	> 320.00	0.00	> 13.61
3592	VE	OSQ	ABEB	01/06/89	0.945	0.00	> 320.00	0.00	0.00
3592	VE	OAS	ABEB	01/11/89	1.108	0.00	> 320.00	0.00	0.00
3592	VE	OVM	51	03/06/89	0.661	0.00	310.00	0.00	0.00
3592	VE	RJR	51	09/11/89	1.371	0.00	> 320.00	0.00	0.00
3592	YF	OAA	ABEB	01/11/89	0.904	0.00	> 320.00	0.00	> 3.53
3592	YF	OW1	51	03/06/89	1.099	0.00	300.00	0.00	0.00
3592	YF	RJ1	51	09/11/89	0.626	0.00	> 320.00	0.00	> 1.48
3602	SF	O5W	29	12/13/88	0.565	0.00	> 320.00	0.00	0.00
3605	JE	PMO	32	04/19/89	0.773	0.00	> 320.00	0.00	> 3.40
3605	PT	PN3	32	04/19/89	0.714	0.00	> 320.00	0.00	0.20
3605	SF	PNI	32	04/19/89	0.712	0.00	> 320.00	0.00	2.00
3605	VE	PLU	32	04/17/89	1.020	0.00	150.00	0.00	0.00
3605	YF	PM9	32	04/18/89	1.056	0.00	167.00	0.00	0.00
3607	JE	PMP	32	04/19/89	0.797	0.00	> 320.00	0.00	> 9.78
3607	PT	PN4	32	04/19/89	0.739	0.00	> 320.00	0.00	> 3.77
3607	SF	PNJ	32	04/19/89	0.739	0.00	> 320.00	0.00	> 1.70
3607	VE	PLV	32	04/17/89	1.004	0.00	196.00	0.00	0.13
3607	YF	PMA	32	04/18/89	1.074	0.00	> 320.00	0.00	> 1.30
3679	JE	Q11	41	05/10/89	0.855	0.00	17.00	0.00	0.00
3679	PT	Q1D	41	05/10/89	0.828	0.00	18.80	0.00	7.68
3679	SF	Q17	41	05/10/89	1.071	0.00	20.20	0.00	> 0.50
3679	VE	QOL	41	05/09/89	0.917	0.00	18.80	0.00	0.04
3679	YF	QOV	41	05/08/89	1.095	0.00	15.90	0.00	0.00

AVS No.	VIRUS	Pl. #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
3718	JE	064	32	12/13/88	1.013	0.00	118.00	0.00 >	9.31
3719	JE	065	32	12/13/88	0.990	0.00	93.30	0.00 >	15.29
3727	SF	05X	34	12/13/88	0.637	0.00	48.30	0.00	0.00
3734	JE	RJE	34	09/12/89	0.519	0.00 >	10.00	0.00 >	15.94
3734	SF	RK4	34	09/12/89	0.741	0.00 >	10.00	0.00 >	4.97
3734	VE	RJR	34	09/11/89	1.371	0.00 >	10.00	0.00	0.00
3734	YF	RJ1	34	09/11/89	0.626	3.53	0.83	0.23 >	15.84
3708	JE	RJF	35	09/12/89	0.484	0.00	38.10	0.00	0.00
3788	SF	RK5	35	09/12/89	0.786	0.00	43.80	0.00	0.00
3788	VE	RJS	35	09/11/89	1.233	0.00	21.00	0.00	0.00
3788	YF	RJ2	35	09/11/89	0.622	0.00	46.90	0.00	4.49
3797	SF	05Y	35	12/13/88	0.680	0.00	12.80	0.00	0.00
3798	SF	05Z	35	12/13/88	0.767	0.00	15.10	0.00	0.00
3799	SF	05Z	35	12/13/88	0.767	0.00	4.38	0.00	0.00
3800	SF	060	35	12/13/88	0.725 <	1.00	1.39 >	1.39 >	1.98
3800	VE	RTR	35	10/06/89	0.370	0.00	4.84	0.00	6.57
3801	SF	060	35	12/13/88	0.725	23.40	0.57	0.02	3.27
3802	JE	RJF	35	09/12/89	0.484	0.19	0.81	4.25	20.53
3802	SF	061	35	12/13/88	0.623 <	1.00	1.75 >	1.75 >	2.93
3802	SF	RK5	35	09/12/89	0.786	0.16	0.88	5.51 >	37.07
3802	VE	R00	58	08/04/89	1.165	0.00 <	0.10	0.00	0.18
3802	VE	RJS	35	09/11/89	1.233	0.19	0.25	1.33 >	12.01
3802	YF	RJ2	35	09/11/89	0.622	0.34 >	10.00 >	29.30 >	55.42
3803	SF	061	35	12/13/88	0.623 <	1.00	0.58 >	0.58 >	21.91
3803	SF	RT2	35	10/11/89	1.041	14.10	2.25	0.16 >	3.04
3805	SF	062	35	12/13/88	0.519	0.00	10.40	0.00	0.40
3829	JE	RJG	40	09/12/89	0.439	0.00	0.09	0.00	0.00
3829	SF	RK6	40	09/12/89	0.733	0.00	5.95	0.00	0.00
3829	VE	RJT	40	09/11/89	1.214	0.00	4.17	0.00	0.00
3829	YF	RJ3	40	09/11/89	0.566	0.00 >	10.00	0.00 >	2.77
3920	JE	RJG	34	09/12/89	0.439	0.00	5.82	0.00	1.10
3920	SF	RK6	34	09/12/89	0.733	0.00	4.41	0.00	0.00
3920	VE	RJT	34	09/11/89	1.214	0.00	6.22	0.00	0.00
3920	YF	RJ3	34	09/11/89	0.566	0.00	8.87	0.00 >	0.55
3922	JE	RJH	34	09/12/89	0.404	0.00	153.00	0.00	0.27
3922	SF	RK7	34	09/12/89	0.704	0.00 >	320.00	0.00	0.00
3922	VE	RJU	34	09/11/89	1.180	0.00 >	320.00	0.00 >	0.28
3922	YF	RJ4	34	09/11/89	0.475	0.00 >	320.00	0.00 >	0.59
3935	JE	RJH	35	09/12/89	0.404	0.00	117.00	0.00 >	0.90
3935	SF	062	35	12/13/88	0.519	19.90	95.70	4.81	19.88
3935	SF	RK7	35	09/12/89	0.704	49.30	103.00	2.09	10.22
3935	VE	RJU	35	09/11/89	1.180	0.00	41.20	0.00	0.00
3935	YF	RJ4	35	09/11/89	0.475	0.00	146.00	0.00	0.00
3936	SF	06S	35	12/14/88	0.828	0.00 >	320.00	0.00	0.00
3937	SF	06S	35	12/14/88	0.828	0.00 >	320.00	0.00	0.00
3938	SF	06T	35	12/13/88	0.554	0.00 >	320.00	0.00	0.00
3964	JE	OU3	33	02/28/89	0.820	40.60	53.00	1.30	12.64
3964	JE	P81	33	03/21/89	0.815	6.61	16.00	2.43	19.74
3964	JE	RSA	33	09/27/89	0.830	9.64	8.57	0.89	4.70
3964	PT	OUR	33	03/01/89	0.887	12.10	37.80	3.13 >	14.28
3964	PT	P8D	33	03/22/89	0.706	2.68	12.30	4.58 >	22.98
3964	SF	OV3	33	03/21/89	0.961	0.00 >	160.00	0.00 >	11.21
3964	SF	P8P	33	03/22/89	0.973	0.00	10.80	0.00	3.92
3964	VE	P91	33	03/21/89	0.853	0.00	21.00	0.00 >	0.00
3964	VE	PTI	48	04/28/89	0.861	0.00	14.90	0.00	0.97
3964	YF	OUP	33	02/28/89	0.854	0.00	49.20	0.00	11.68
3964	YF	P9G	33	03/21/89	1.007	8.27	16.90	2.05	11.51
3968	VSV	059	36	08/04/89	1.570	54.20	180.00	3.32 >	17.98
3980	JE	RJI	36	09/12/89	0.577	0.00	43.30	0.00	0.00
3980	SF	RK8	36	09/12/89	0.654	0.00	77.30	0.00 >	6.51
3980	VE	RJV	36	09/11/89	1.141	100.00	32.00	0.32 >	0.40
3980	YF	RJ5	36	09/11/89	0.576	65.70 >	100.00 >	1.52 >	7.22
4026	JE	ORM	36	02/24/89	0.421	0.00 >	0.00	0.00 >	9.36
4026	JE	ORM	36	02/24/89	0.421	0.00 >	0.00	0.00 >	2.81
4026	PT	OQY	36	02/24/89	0.256	0.00 >	0.00	0.00 >	11.53
4026	PT	OQY	36	02/24/89	0.256	0.00 >	0.00	0.00	3.62

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4026	SF	ORU	36	02/24/89	1.009	0.00 >	0.00	0.00	3.60
4026	SF	ORU	36	02/24/89	1.009	0.00 >	0.00	0.00 >	6.01
4026	VE	OR6	36	02/24/89	1.005	0.00 >	0.00	0.00	0.00
4026	VE	OR6	36	02/24/89	1.005	0.00 >	0.00	0.00	0.00
4026	VSV	01E	36	02/24/89	1.304	0.00 >	0.00	0.00 >	1.47
4026	VSV	01E	36	02/24/89	1.304	0.00 >	0.00	0.00 >	1.95
4026	VV	01G	36	02/23/89	1.682	0.00	0.00	0.00 >	0.03
4026	VV	01G	36	02/23/89	1.682	0.00 >	0.00	0.00	0.00
4026	YF	ORE	36	02/24/89	0.997	0.00 >	0.00	0.00	0.56
4026	YF	ORE	36	02/24/89	0.997	0.00 >	0.00	0.00	1.24
4031	JE	RJI	36	09/12/89	0.577	0.00 <	0.01	0.00	0.00
4033	SF	RK8	36	09/12/89	0.654	0.00 >	3.20	0.00	0.00
4033	VE	RJV	36	09/11/89	1.141	0.00 >	3.20	0.00	0.00
4033	YF	RJ5	36	09/11/89	0.576	0.00 >	3.20	0.00 >	1.36
4044	JE	RJJ	37	09/12/89	0.514	0.00 >	100.00	0.00 >	2.90
4044	SF	RK9	37	09/12/89	0.679	0.00 >	100.00	0.00 >	12.39
4044	VE	RJW	37	09/11/89	1.008	0.00 >	100.00	0.00	0.00
4044	YF	RJ6	37	09/11/89	0.647	0.00 >	100.00	0.00 >	4.00
4051	JE	RJJ	37	09/12/89	0.514	0.00	1.58	0.00 >	3.80
4051	SF	RK9	37	09/12/89	0.679	0.00	1.58	0.00 >	4.54
4051	VE	RJW	37	09/11/89	1.008	< 0.03 >	10.00 >	312.50 >	86.80
4051	YF	RJ6	37	09/11/89	0.647	0.00	2.22	0.00	0.00
4070	JE	OLN	48	02/07/89	1.137	2.45	3.24	1.32 >	5.66
4070	JE	OLN	48	02/07/89	1.137	0.00 >	0.00	0.00	0.00
4070	JE	OZY	48	03/10/89	0.737	1.61 >	3.20 >	1.98 >	13.87
4070	PT	OLW	48	02/08/89	0.678	1.52 >	3.20 >	2.11 >	14.01
4070	PT	OLW	48	02/08/89	0.678	0.00 >	0.00	0.00	0.00
4070	SF	OM5	48	02/07/89	1.153	0.00 >	3.20	0.00 >	4.51
4070	SF	OM5	48	02/07/89	1.153	0.00 >	0.00	0.00	1.00
4070	VE	OLE	48	02/07/89	1.082	0.00	2.85	0.00 >	0.02
4070	VE	OLE	48	02/07/89	1.082	0.00 >	0.00	0.00 >	0.02
4070	VE	OZT	48	03/10/89	0.953	0.00 >	3.20	0.00	0.12
4070	VSV	004	48	01/27/89	1.283	10.00	2.34	0.23	1.20
4070	VSV	004	48	01/27/89	1.283	0.00 >	1.00	0.00	0.00
4070	VV	003	48	01/26/89	2.062	0.00	4.25	0.00	0.00
4070	VV	003	48	01/26/89	2.062	0.00 >	0.32	0.00	0.00
4070	YF	OL5	48	02/07/89	1.172	2.04 >	3.20 >	1.57	0.10
4070	YF	OL5	48	02/07/89	1.172	0.00 >	0.00	0.00	0.86
4070	YF	P03	48	03/10/89	0.971	2.26 >	3.20 >	1.42 >	5.01
4074	JE	OLP	48	02/07/89	1.229	0.00 >	0.03	0.00	0.00
4074	JE	OLP	48	02/07/89	1.229	0.00	0.00	0.00	0.00
4074	JE	OZ2	48	03/10/89	0.762	0.01 >	0.03 >	2.30 >	19.27
4074	PT	OLY	48	02/08/89	0.718	0.00 >	0.03	0.00 >	6.49
4074	PT	OLY	48	02/08/89	0.718	0.00 >	0.00	0.00	0.00
4074	SF	OM7	48	02/07/89	1.222	0.00 >	0.03	0.00 >	6.49
4074	SF	OM7	48	02/07/89	1.222	0.00 >	0.00	0.00	0.53
4074	VE	OLG	48	02/07/89	1.083	0.00 >	0.03	0.00	0.00
4074	VE	OLG	48	02/07/89	1.083	0.00 >	0.00	0.00	0.00
4074	VE	OZU	48	03/10/89	1.009	0.00 >	0.03	0.00 >	0.01
4074	VSV	005	48	01/27/89	1.307	0.00 <	1.00	0.00	0.00
4074	VSV	005	48	01/27/89	1.307	0.00	0.67	0.00 >	2.70
4074	VV	004	48	01/26/89	1.799	0.00 <	1.00	0.00	0.00
4074	VV	004	48	01/26/89	1.799	0.00 >	0.32	0.00	0.00
4074	YF	OL7	48	02/07/89	1.156	0.00 >	0.03	0.00	0.00
4074	YF	OL7	48	02/07/89	1.156	0.00 >	0.03	0.00	0.00
4074	YF	P04	48	03/10/89	0.984	0.00 >	0.03	0.00 >	2.81
4097	JE	ORN	37	02/24/89	0.404	0.00	0.10	0.00 >	0.00
4097	JE	ORN	37	02/24/89	0.404	0.00 >	0.00	0.00 >	0.10
4097	PT	OQZ	37	02/24/89	0.351	0.00	0.00	0.00	3.47
4097	PT	OQZ	37	02/24/89	0.351	0.00 >	0.00	0.00	4.04
4097	SF	ORV	37	02/24/89	1.005	0.00	0.07	0.00 >	2.30
4097	SF	ORV	37	02/24/89	1.005	0.00 >	0.00	0.00	2.03
4097	VE	OR7	37	02/24/89	1.043	0.00	0.01	0.00	0.00
4097	VE	OR7	37	02/24/89	1.043	0.00 >	0.00	0.00	0.00
4097	VSV	01F	37	02/24/89	1.351	0.00	0.00	0.00 >	0.01
4097	VSV	01F	37	02/24/89	1.351	0.00 >	0.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rnti.	IC 50	TC 25	SI	TAI
4097	VV	01H	37	02/23/89	1.708	0.00	0.08	0.00	0.00
4097	VV	01H	37	02/23/89	1.708	0.00 >	0.00	0.00	0.00
4097	YF	ORF	37	02/24/89	0.996	0.00	0.07	0.00	0.00
4097	YF	ORF	37	02/24/89	0.996	0.00 >	0.00	0.00	0.00
4098	JE	ORO	37	02/24/89	0.372	0.00 >	0.00 >	1.37 >	11.24
4098	JE	ORO	37	02/24/89	0.372	0.00 >	0.00	0.00 >	0.30
4098	PT	ORO	37	02/24/89	0.321	0.00 >	0.00	0.00 >	5.00
4098	PT	ORO	37	02/24/89	0.321	0.00 >	0.00	0.00 >	4.00
4098	SF	ORW	37	02/24/89	1.041	0.00 >	0.00	0.00 >	0.78
4098	SF	ORW	37	02/24/89	1.041	0.00 >	0.00 >	201.00 >	47.49
4098	VE	OR8	37	02/24/89	0.988	0.00 >	0.00	0.00	0.00
4098	VE	OR8	37	02/24/89	0.988	0.00 >	0.00	0.00	0.00
4098	VSV	01G	37	02/24/89	1.407	0.00 >	0.00	0.00 >	0.70
4098	VSV	01G	37	02/24/89	1.407	0.00 >	0.00	0.00	0.07
4098	VV	01K	37	02/23/89	1.860	0.00 >	0.00 >	1.05 >	3.43
4098	VV	01K	37	02/23/89	1.860	0.00 >	0.00	0.00	0.00
4098	YF	ORG	37	02/24/89	0.988	0.00 >	0.00	0.00	0.45
4098	YF	ORG	37	02/24/89	0.988	0.00 >	0.00	0.00	0.42
4099	JE	ORP	37	02/24/89	0.425	0.00 >	0.00	0.00 >	9.23
4099	JE	ORP	37	02/24/89	0.425	0.00 >	0.00	0.00	1.24
4099	PT	OR1	37	02/24/89	0.296	0.00 >	0.00	0.00 >	15.89
4099	PT	OR1	37	02/24/89	0.296	0.00 >	0.00	0.00 >	7.91
4099	SF	ORX	37	02/24/89	0.870	0.00 >	0.00	0.00 >	4.05
4099	SF	ORX	37	02/24/89	0.870	0.00 >	0.00	0.00	0.00
4099	VE	OR9	37	02/24/89	0.989	0.00 >	0.00	0.00	0.00
4099	VE	OR9	37	02/24/89	0.989	0.00 >	0.00	0.00	0.00
4099	VSV	01H	37	02/24/89	1.354	0.00 >	0.00	0.00	0.60
4099	VSV	01H	37	02/24/89	1.354	0.00 >	0.00	0.00 >	0.30
4099	VV	01L	37	02/23/89	1.988	0.00	0.00	0.53 >	1.62
4099	VV	01L	37	02/23/89	1.988	0.00 >	0.00	0.00	0.00
4099	YF	ORH	37	02/24/89	0.943	0.00 >	0.00	0.00	1.75
4099	YF	ORH	37	02/24/89	0.943	0.00 >	0.00	0.00	1.45
4105	JE	OLO	48	02/07/89	1.087	0.00	10.70	0.00	0.38
4105	JE	OLO	48	02/07/89	1.087	0.00 >	0.03	0.00	0.26
4105	JE	OZZ	48	03/10/89	0.762	0.00 >	100.00	0.00	2.10
4105	PT	OLX	48	02/08/89	0.679	7.37	11.10	1.51	10.07
4105	PT	OLX	48	02/08/89	0.679	0.00 >	0.03	0.00	0.00
4105	SF	OM6	48	02/07/89	1.140	0.00	9.63	0.00 >	0.81
4105	SF	OM6	48	02/07/89	1.140	0.00 >	0.03	0.00	0.15
4105	VE	OLF	48	02/07/89	1.034	0.00	8.14	0.00	0.00
4105	VE	OLF	48	02/07/89	1.034	0.00 >	0.03	0.00	0.00
4105	VE	OZU	48	03/10/89	1.009	0.00	49.20	0.00	0.00
4105	VSV	006	48	01/27/89	1.291	0.00 >	320.00	0.00	1.68
4105	VSV	006	48	01/27/89	1.291	0.00 >	1.00	0.00	1.24
4105	VV	005	48	01/26/89	1.803	0.00	108.00	0.00	0.00
4105	VV	005	48	01/26/89	1.803	0.00 >	0.32	0.00	0.00
4105	YF	OL6	48	02/07/89	1.229	0.00	10.50	0.00	1.63
4105	YF	OL6	48	02/07/89	1.229	0.00 >	0.03	0.00	0.13
4105	YF	104	48	03/10/89	0.984	0.00 >	100.00	0.00	0.00
4106	JE	ORQ	37	02/24/89	0.418	0.00 >	0.32	0.00 >	0.20
4106	JE	ORQ	37	02/24/89	0.418	0.00 >	0.00	0.00	0.60
4106	PT	OR2	37	02/24/89	0.269	0.07 >	0.32 >	4.25 >	23.24
4106	PT	OR2	37	02/24/89	0.269	0.00 >	0.00	0.00	0.00
4106	SF	ORY	37	02/24/89	1.106	0.00	0.17	0.00 >	0.28
4106	SF	ORY	37	02/24/89	1.106	0.00 >	0.00	0.00 >	0.98
4106	VE	ORA	37	02/24/89	0.985	0.00	0.13	0.00	0.00
4106	VE	ORA	37	02/24/89	0.985	0.00 >	0.00	0.00	0.00
4106	VSV	01I	37	02/24/89	1.377	0.00 >	0.32	0.00 >	0.05
4106	VSV	01I	37	02/24/89	1.377	0.00 >	0.00	0.00	0.70
4106	VV	01I	37	02/23/89	1.750	0.00	0.17	0.00	0.00
4106	VV	01I	37	02/23/89	1.750	0.00 >	0.00	0.00	0.00
4106	YF	ORI	37	02/24/89	0.933	0.00 >	0.32	0.00 >	5.19
4106	YF	ORI	37	02/24/89	0.933	0.00 >	0.00	0.00 >	1.55
4107	JE	ORR	37	02/24/89	0.448	0.00 >	0.32	0.00 >	7.13
4107	JE	ORR	37	02/24/89	0.448	0.00 >	0.00	0.00	0.34
4107	PT	OR3	37	02/24/89	0.226	0.30 >	0.32 >	1.08 >	19.43

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4*	PT	OR3	37	02/24/89	0.226	0.00 >	0.00	0.00 >	5.01
4107	SF	ORZ	37	02/24/89	1.059	0.00 >	0.32	0.00 >	1.58
4107	SF	ORZ	37	02/24/89	1.059	0.00 >	0.00	0.00 >	0.13
4107	VF	ORB	37	02/24/89	1.001	0.00 >	0.32	0.00	0.60
4107	VE	ORB	37	02/24/89	1.001	0.00 >	0.00	0.00	0.20
4107	VSV	01J	37	02/24/89	1.387	0.00 >	0.32	0.00	0.15
4107	VSV	01J	37	02/24/89	1.387	0.00 >	0.00	0.00	0.15
4107	VV	01J	37	02/23/89	1.831	0.00 >	0.32	0.00	0.00
4107	VV	01J	37	02/23/89	1.831	0.00 >	0.00	0.00	0.00
4107	YF	ORJ	37	02/24/89	0.977	0.00 >	0.32	0.00	1.26
4107	YF	ORJ	37	02/24/89	0.977	0.00 >	0.00	0.00	0.90
4113	JE	OLQ	48	02/07/89	1.210	0.00 >	0.32	0.00 >	2.35
4113	JE	OLQ	48	02/07/89	1.210	0.00 >	0.00	0.00	0.00
4113	JE	P00	48	03/10/89	0.827	0.20 >	0.32 >	1.61 >	12.65
4113	JE	Q6T	39	05/24/89	0.809	0.09	0.36	4.01 >	27.24
4113	JE	RJK	39	09/12/89	0.700	0.17 >	1.00 >	5.89 >	22.13
4113	PT	OLZ	48	02/08/89	0.674	0.00 >	0.32	0.00	0.11
4113	PT	OLZ	48	02/08/89	0.674	0.00 >	0.00	0.00	0.00
4113	PT	Q6Z	39	05/24/89	1.102	0.00	0.23	0.00	0.00
4113	SF	OM8	48	02/07/89	1.152	0.00 >	0.32	0.00 >	2.00
4113	SF	OM8	48	02/07/89	1.152	0.00 >	0.00	0.00 >	0.80
4113	SF	Q75	39	05/23/89	1.082	0.00	0.56	0.00	0.00
4113	SF	RKA	39	09/12/89	0.756	0.00 >	1.00	0.00 >	2.90
4113	VE	OLH	48	02/07/89	1.083	0.00 >	0.32	0.00	0.00
4113	VE	OLH	48	02/07/89	1.083	0.00 >	0.00	0.00	0.00
4113	VE	OZV	48	03/10/89	1.015	0.00 >	0.32	0.00	0.00
4113	VE	Q6N	39	05/23/89	0.883	0.00	0.71	0.00	0.00
4113	VE	RJX	39	09/11/89	1.045	0.00	0.71	0.00	0.00
4113	VSV	007	48	01/27/89	1.120	0.00	1.93	0.00	0.00
4113	VSV	007	48	01/27/89	1.120	0.00 >	1.00	0.00 >	0.20
4113	VV	006	48	01/26/89	1.843	0.00	1.17	0.00	0.00
4113	VV	006	48	01/26/89	1.843	0.00 >	0.32	0.00	0.00
4113	YF	OL8	48	02/07/89	1.184	0.00 >	0.32	0.00 >	2.43
4113	YF	OL8	48	02/07/89	1.184	0.00 >	0.00	0.00	0.41
4113	YF	P05	48	03/10/89	0.961	0.00 >	0.32	0.00 >	1.48
4113	YF	Q6B	39	05/23/89	1.252	0.00 <	0.03	0.00	0.00
4113	YF	RJ7	39	09/11/89	0.624	0.17 >	1.00 >	5.96 >	30.37
4116	JE	RJK	40	09/12/89	0.700	0.00 >	320.00	0.00	0.00
4116	SF	RKA	40	09/12/89	0.756	0.00 >	320.00	0.00 >	0.90
4116	VE	RJX	40	09/11/89	1.045	0.00	289.00	0.00	0.00
4116	YF	RJ7	40	09/11/89	0.624	0.00 >	320.00	0.00 >	1.61
4140	JE	RJL	40	09/12/89	0.626	0.00	6.28	0.00	0.47
4140	SF	RK	40	09/12/89	0.756	0.00 >	10.00	0.00 >	3.69
4140	VE	R	40	09/11/89	1.019	0.00 >	10.00	0.00	0.00
4140	YF	RJ8	40	09/11/89	0.589	0.00 >	10.00	0.00 >	0.62
4152	JE	RJL	41	09/12/89	0.626	0.00	15.50	0.00	3.31
4152	SF	RKB	41	09/12/89	0.756	0.00	15.50	0.00 >	14.39
4152	VE	RJY	41	09/11/89	1.019	0.00	13.10	0.00	0.84
4152	YF	RJ8	41	09/11/89	0.589	0.00	15.50	0.00 >	1.15
4172	PT	Q2Y	41	05/16/89	0.671	0.00 >	320.00	0.00	5.74
4172	SF	Q21	41	05/16/89	1.013	0.00 >	320.00	0.00	0.00
4172	VE	Q1P	41	05/15/89	1.026	0.00	190.00	0.00	0.00
4172	YF	Q1J	41	05/15/89	0.859	0.00 >	320.00	0.00	0.00
4182	VV	OBR	39	08/17/89	1.241	0.00	54.70	0.00	0.71
4222	JE	OLR	43	02/07/89	1.289	0.00	260.00	0.00	0.00
4222	JE	OLR	48	02/07/89	1.289	0.00 >	0.32	0.00	0.00
4222	JE	P00	48	03/10/89	0.827	0.00 >	320.00	0.00	1.00
4222	PT	OMO	48	02/08/89	0.691	155.00 >	320.00 >	2.07 >	15.77
4222	PT	OMO	48	02/08/89	0.691	0.00 >	0.32	0.00 >	0.03
4222	SF	OM9	48	02/07/89	1.139	0.00 >	320.00	0.00 >	1.90
4222	SF	OM9	48	02/07/89	1.139	0.00 >	0.32	0.00 >	0.50
4222	VE	OLI	48	02/07/89	1.048	0.00	199.00	0.00	0.00
4222	VE	OLI	48	02/07/89	1.048	0.00 >	0.32	0.00	0.02
4222	VE	OZV	48	03/10/89	1.015	0.00	148.00	0.00	0.00
4222	VSV	008	48	01/27/89	1.308	0.00 >	320.00	0.00	1.58
4222	VSV	008	48	01/27/89	1.308	0.00 >	1.00	0.00	0.12

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4222	VV	007	48	01/26/89	1.921	0.00	314.00	0.00 >	0.03
4222	VV	007	48	01/26/89	1.921	0.00 >	0.32	0.00 >	2.16
4222	YF	021	44	11/18/88	0.932	0.00 >	320.00	0.00	0.00
4222	YF	OL9	48	02/07/89	1.207	0.00 >	320.00	0.00 >	5.32
4222	YF	OL9	48	02/07/89	1.207	0.00 >	0.32	0.00 >	0.10
4222	YF	P05	48	03/10/89	0.961	0.00	190.00	0.00	0.00
4239	JE	RJM	39	09/12/89	0.539	0.00 >	10.00	0.00	6.61
4239	SF	RKC	39	09/12/89	0.614	0.00	5.27	0.00	3.40
4239	VE	RJZ	39	09/11/89	0.967	0.00	5.21	0.00	0.00
4239	YF	RJ9	39	09/11/89	0.536	0.00	4.81	0.00	0.00
4240	JE	PF9	53	04/10/89	0.918	0.00	8.75	0.00 >	6.26
4240	JE	RJM	39	09/12/89	0.539	0.00	15.30	0.00	4.92
4240	PT	PFO	53	04/11/89	0.615	5.52	8.83	1.60	15.74
4240	SF	PG3	53	04/11/89	0.727	3.48	13.90	3.98 >	25.72
4240	SF	RKC	39	09/12/89	0.614	2.73	15.50	5.69	25.90
4240	VE	PEF	53	04/10/89	0.835	0.00	8.26	0.00 >	6.91
4240	VE	RJZ	39	09/11/89	0.967	0.00	15.00	0.00	4.79
4240	YF	PEU	53	04/10/89	1.026	0.00	8.75	0.00 >	8.50
4240	YF	RJ9	39	09/11/89	0.536	0.00	11.60	0.00	1.66
4241	JE	OEI	46	01/23/89	1.248	0.00	14.50	0.00 >	1.22
4241	PT	OES	46	01/24/89	0.976	3.99	14.00	3.51 >	18.23
4241	SF	OF2	46	01/24/89	1.156	2.48	14.90	6.00 >	23.02
4241	VE	ODY	46	01/23/89	1.214	0.00	18.50	0.00 >	2.35
4241	YF	OE8	46	01/23/89	0.962	0.00	11.00	0.00 >	0.10
4259	JE	RJN	39	09/12/89	0.487	0.00	4.92	0.00	2.57
4259	SF	RKD	39	09/12/89	0.755	0.00	4.80	0.00	8.19
4259	VE	RKO	39	09/11/89	0.900	0.00	4.90	0.00 >	5.64
4259	YF	RJA	39	09/11/89	0.627	0.00	4.90	0.00 >	2.22
4260	JE	RJN	39	09/12/89	0.487	0.00	7.35	0.00	3.01
4260	SF	RKD	39	09/12/89	0.755	0.00	4.90	0.00 >	7.40
4260	VE	RKO	39	09/11/89	0.900	0.00	5.09	0.00 >	3.10
4260	YF	RJA	39	09/11/89	0.627	0.00	4.88	0.00 >	1.19
4271	JE	RJO	39	09/12/89	0.598	0.00	5.47	0.00	0.00
4271	SF	RKE	39	09/12/89	0.701	0.00 >	10.00	0.00 >	11.94
4271	VE	RK1	39	09/11/89	1.073	0.00 >	10.00	0.00	0.00
4271	YF	RJB	39	09/11/89	0.674	0.00	8.57	0.00 >	5.58
4275	VSV	O5L	39	08/11/89	1.504	0.06	0.22	3.66 >	18.82
4277	JE	RL7	42	09/13/89	0.745	3.99 >	10.00 >	2.51 >	20.16
4277	VE	RKT	42	09/15/89	0.865	0.00 >	10.00	0.00	2.51
4277	YF	RL6	42	09/12/89	0.748	4.37 >	10.00 >	2.29 >	17.50
4278	JE	RLK	42	09/13/89	0.697	5.38	27.70	5.15 >	23.73
4278	VE	RKU	42	09/15/89	0.756	0.00	22.50	0.00	1.20
4278	YF	RL7	42	09/12/89	0.742	6.41	28.20	4.40 >	16.81
4280	JE	RLK	42	09/13/89	0.697	4.77 >	10.00 >	2.10 >	13.40
4280	VE	RKU	42	09/15/89	0.756	0.00 >	10.00	0.00	0.20
4280	YF	RL7	42	09/12/89	0.742	6.56 >	10.00 >	1.52 >	8.97
4281	JE	RLL	42	09/13/89	0.706	1.29	5.66	4.39 >	24.56
4281	VE	RKV	42	09/15/89	0.718	0.00	5.02	0.00	0.40
4281	YF	RL8	42	09/12/89	0.715	1.11	5.80	5.20	20.84
4366	JE	RLL	43	09/13/89	0.706	0.00	5.11	0.00 >	0.82
4366	VE	RKV	43	09/15/89	0.718	0.00	6.03	0.00	0.00
4366	YF	RL8	43	09/12/89	0.715	0.00	5.24	0.00	0.00
4370	JE	RLM	43	09/13/89	0.607	0.00	15.90	0.00	0.00
4370	VE	RKW	43	09/15/89	0.720	0.00	23.80	0.00	0.61
4370	YF	RL9	43	09/12/89	0.711	0.00	25.60	0.00	0.00
4381	PT	06F	43	12/14/88	0.663	0.00	8.54	0.00	2.00
4381	YF	067	43	12/13/88	0.833	0.00	7.45	0.00	0.00
4382	PT	06G	43	12/14/88	0.569	0.00 >	320.00	0.00	0.00
4382	YF	068	43	12/13/88	0.854	0.00 >	320.00	0.00	0.00
4383	PT	06G	43	12/14/88	0.669	194.00 >	320.00 >	1.65 >	8.17
4383	YF	068	43	12/13/88	0.854	0.00 >	320.00	0.00	0.00
4384	PT	06H	43	12/14/88	0.754	0.00	7.91	0.00	0.00
4384	YF	069	43	12/13/88	0.755	0.00	9.91	0.00	0.00
4385	PT	06H	43	12/14/88	0.754	0.00 >	320.00	0.00	0.00
4385	YF	069	43	12/13/88	0.755	0.00 >	320.00	0.00	0.00
4386	PT	06I	43	12/14/88	0.604	0.00	32.70	0.00	2.35

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4386	YF	06A	43	12/13/88	0.657	0.00	32.50	0.00	0.00
4388	PT	06I	43	12/14/88	0.604	0.00	114.00	0.00	4.44
4388	YF	06A	43	12/13/88	0.657	0.00	117.00	0.00 >	0.10
4389	PT	06J	43	12/14/88	0.650	0.00	85.70	0.00	0.00
4389	YF	06B	43	12/13/88	0.639	0.00	192.00	0.00	0.00
4390	PT	06J	43	12/14/88	0.690	0.00	32.00	0.00	0.00
4390	YF	06B	43	12/13/88	0.639	0.00	79.80	0.00	0.00
4391	JE	RLM	43	09/13/89	0.607	0.00	10.00	0.00 >	0.01
4391	PT	06K	43	12/14/88	0.636	0.00	11.90	0.00	0.00
4391	VE	RKW	43	09/15/89	0.720	0.00	15.90	0.00 >	6.91
4391	YF	06C	43	12/13/88	0.479	0.00	13.90	0.00	0.00
4391	YF	RL9	43	09/12/89	0.711	0.00	12.40	0.00	0.00
4392	PT	06K	43	12/14/88	0.636	0.00 >	320.00	0.00	0.00
4392	YF	06C	43	12/13/88	0.479	0.00 >	320.00	0.00 >	9.90
4393	PT	06L	43	12/14/88	0.672	0.00	7.27	0.00	2.31
4393	YF	06D	43	12/13/88	0.827	0.00	8.75	0.00	0.00
4394	PT	06L	43	12/14/88	0.672	0.00	22.60	0.00	1.88
4394	YF	06D	43	12/13/88	0.827	0.00	2.50	0.00	0.00
4395	PT	06M	43	12/14/88	0.542	0.00 >	320.00	0.00 >	4.84
4395	YF	06E	43	12/13/88	0.841	0.00 >	320.00	0.00	0.00
4405	JE	01I	44	11/17/88	1.215	0.00	0.05	0.00	0.00
4405	PT	010	44	11/16/88	0.727	0.00	0.02	0.00	0.00
4405	SF	010	44	11/16/88	0.987	0.00	0.07	0.00 >	1.63
4405	VE	016	44	11/16/88	1.196	0.00	0.05	0.00	0.56
4405	YF	01C	44	11/17/88	1.023	0.00	0.02	0.00	0.00
4406	VE	05P	44	12/13/88	1.319	0.00	131.00	0.00	0.00
4407	VE	05Q	44	12/13/88	1.149	0.00	160.00	0.00	0.00
4408	VE	05Q	44	12/13/88	1.149	0.00	118.00	0.00	0.00
4409	VE	05R	44	12/13/88	1.206	252.00	219.00	0.87 >	2.15
4415	PT	PEU	44	03/29/89	0.597	28.70	33.00	1.15	13.97
4415	SF	PF9	44	03/29/89	0.877	0.00	31.10	0.00 >	3.10
4415	VE	PDL	44	03/28/89	0.842	0.00	26.80	0.00	1.36
4415	YF	PEF	44	03/28/89	1.038	0.00	28.90	0.00	0.00
4416	PT	PEU	44	03/29/89	0.597	0.00	11.90	0.00 >	6.81
4416	SF	PF9	44	03/29/89	0.877	0.00	4.64	0.00	0.00
4416	VE	PDL	44	03/28/89	0.842	0.00	6.60	0.00	0.33
4416	YF	PEF	44	03/28/89	1.038	0.00	13.00	0.00	0.00
4417	JE	PE1	44	03/28/89	0.843	0.00	32.00	0.00	0.20
4417	PT	PEV	44	03/29/89	0.728	0.00	41.50	0.00	5.00
4417	SF	PFA	44	03/29/89	0.826	0.00	38.60	0.00 >	2.20
4417	VE	PDM	44	03/28/89	0.865	0.00	35.20	0.00	3.15
4417	YF	PEG	44	03/28/89	1.048	0.00	39.10	0.00	0.28
4418	JE	PE1	44	03/28/89	0.843	0.00	67.30	0.00 >	0.74
4418	PT	PEV	44	03/29/89	0.728	0.00	54.30	0.00	4.86
4418	SF	PFA	44	03/29/89	0.826	0.00	55.80	0.00 >	1.90
4418	VE	PDM	44	03/28/89	0.865	0.00	64.60	0.00	0.00
4418	YF	PEG	44	03/28/89	1.048	0.00	60.90	0.00	0.20
4419	JE	PE2	44	03/28/89	0.921	0.00	31.90	0.00	0.00
4419	PT	PEW	44	03/29/89	0.802	0.00	22.10	0.00 >	10.45
4419	SF	PFB	44	03/29/89	0.721	0.00	32.80	0.00 >	0.40
4419	VE	PDN	44	03/28/89	0.851	0.00	40.00	0.00	0.34
4419	YF	PEH	44	03/28/89	0.950	0.00	32.80	0.00	0.00
4420	JE	PE2	44	03/28/89	0.921	0.00	58.60	0.00	0.53
4420	PT	PEW	44	03/29/89	0.802	0.00	33.00	0.00	1.59
4420	SF	PFB	44	03/29/89	0.721	0.00	65.90	0.00	1.89
4420	VE	PDN	44	03/28/89	0.851	0.00	94.00	0.00	0.00
4420	YF	PEH	44	03/28/89	0.950	0.00	51.60	0.00	0.00
4421	JE	PE3	44	03/28/89	0.833	0.00	66.60	0.00	0.56
4421	PT	PEX	44	03/29/89	0.758	0.00	56.20	0.00	9.66
4421	SF	PFC	44	03/29/89	0.731	0.00	65.90	0.00	0.00
4421	VE	PDO	44	03/28/89	0.924	0.00	96.20	0.00	0.00
4421	YF	PEI	44	03/28/89	0.984	0.00	58.80	0.00	0.00
4422	JE	PE3	44	03/28/89	0.833	0.00	44.00	0.00	0.00
4422	PT	PEX	44	03/29/89	0.758	0.00	50.90	0.00	11.99
4422	SF	PFC	44	03/29/89	0.731	0.00	44.50	0.00 >	1.30
4422	VE	PDO	44	03/28/89	0.924	0.00	35.50	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4422	YF	PEI	44	03/28/89	0.984	0.00	55.80	0.00	0.00
4424	JE	PE4	44	03/28/89	0.791	0.00	27.90	0.00	0.00
4424	PT	PEY	44	03/29/89	0.789	30.00	32.00	1.07 >	6.96
4424	SF	PFD	44	03/29/89	0.794	0.00	12.20	0.00	0.00
4424	VE	PDP	44	03/28/89	0.850	0.00	33.80	0.00	1.61
4424	YF	PEJ	44	03/28/89	1.019	0.00	34.60	0.00	0.00
4425	JE	PE4	44	03/28/89	0.791	0.00	31.40	0.00	0.00
4425	PT	PEY	44	03/29/89	0.789	14.40	31.70	2.20 >	27.43
4425	SF	PFD	44	03/29/89	0.794	0.00	29.80	0.00	0.00
4425	VE	PDP	44	03/28/89	0.850	0.00	45.90	0.00	0.60
4425	YF	PEJ	44	03/28/89	1.019	0.00	32.40	0.00	0.42
4426	JE	PE5	44	03/28/89	0.825	0.00	54.20	0.00	0.00
4426	PT	PEZ	44	03/29/89	0.766	0.00	53.10	0.00	11.50
4426	SF	PFE	44	03/29/89	0.810	0.00	46.20	0.00	0.00
4426	VE	PDQ	44	03/28/89	0.915	0.00	51.70	0.00 >	0.03
4426	YF	PEK	44	03/28/89	0.980	0.00	56.80	0.00	0.20
4427	JE	PE5	44	03/28/89	0.825	0.00	9.43	0.00	2.21
4427	PT	PEZ	44	03/29/89	0.766	0.00	11.50	0.00 >	2.30
4427	SF	PFE	44	03/29/89	0.810	1.25	11.60	9.24 >	43.67
4427	SF	RT3	44	10/11/89	0.734	1.41	17.20	12.22	41.75
4427	VE	PDQ	44	03/28/89	0.915	0.00	9.94	0.00	1.13
4427	YF	PEK	44	03/28/89	0.980	0.00	23.60	0.00	0.40
4428	JE	PE6	44	03/28/89	0.830	0.00	13.30	0.00	0.73
4428	PT	PFO	44	03/29/89	0.793	0.00	39.60	0.00 >	23.05
4428	SF	PFF	44	03/29/89	1.002	27.90	32.60	1.17	9.97
4428	VE	PDR	44	03/28/89	0.970	0.00	41.70	0.00 >	0.18
4429	YF	PEL	44	03/28/89	0.956	0.00	46.20	0.00	0.00
4429	JE	PBX	44	04/04/89	0.903	0.00	14.80	0.00	0.30
4429	PT	PCC	44	04/05/89	0.869	7.81	1.92	0.25	10.45
4429	SF	PCR	44	04/05/89	0.502	0.00	9.70	0.00 >	0.69
4429	VE	PB3	44	04/04/89	0.930	0.00	4.54	0.00	0.19
4429	YF	PBI	44	04/04/89	1.113	0.00	14.10	0.00 >	0.80
4430	JE	PBY	44	04/04/89	0.927	0.00 >	100.00	0.00 >	2.90
4430	PT	PCD	44	04/05/89	0.900	0.00 >	100.00	0.00	0.00
4430	SF	PCS	44	04/05/89	0.530	0.00 >	100.00	0.00 >	16.01
4430	VE	PB4	44	04/04/89	0.892	0.00 >	100.00	0.00 >	0.53
4430	YF	PBJ	44	04/04/89	1.080	0.00 >	100.00	0.00	1.40
4431	JE	PBY	44	04/04/89	0.927	0.00	30.90	0.00 >	1.50
4431	PT	PCD	44	04/05/89	0.900	28.10	21.20	0.76	2.26
4431	SF	PCS	44	04/05/89	0.530	0.00	26.50	0.00 >	0.70
4431	VE	PB4	44	04/04/89	0.892	0.00	30.30	0.00 >	0.00
4431	YF	PBJ	44	04/04/89	1.080	0.00	30.80	0.00	0.13
4432	JE	PBZ	44	04/04/89	0.995	0.00 >	100.00	0.00 >	1.72
4432	PT	PCE	44	04/05/89	0.756	0.00	94.00	0.00	10.21
4432	SF	PCT	44	04/05/89	0.580	20.30 >	100.00 >	4.92 >	27.00
4432	SF	RT3	44	10/11/89	0.734	48.40 >	100.00 >	2.06 >	20.88
4432	VE	PB5	44	04/04/89	0.927	0.00 >	100.00	0.00	0.80
4432	YF	PBK	44	04/04/89	1.083	0.00 >	100.00	0.00 >	0.20
4433	JE	PBZ	44	04/04/89	0.995	0.00	43.80	0.00 >	3.03
4433	PT	PCE	44	04/05/89	0.756	0.00	40.70	0.00 >	7.68
4433	SF	PCT	44	04/05/89	0.580	0.00	91.00	0.00 >	0.98
4433	VE	PB5	44	04/04/89	0.927	0.00	73.50	0.00 >	1.40
4433	YF	PBK	44	04/04/89	1.083	0.00	75.50	0.00	0.00
4434	JE	PC0	44	04/04/89	0.964	0.00	26.20	0.00 >	1.65
4434	PT	PCF	44	04/05/89	0.752	0.00	14.40	0.00	0.88
4434	SF	PCU	44	04/05/89	0.590	28.20	28.20	1.00	6.30
4434	VE	PB6	44	04/04/89	0.922	0.00	25.10	0.00 >	0.00
4434	YF	PBL	44	04/04/89	1.085	0.00	30.90	0.00	0.00
4435	JE	PC0	44	04/04/89	0.964	0.00 >	100.00	0.00 >	1.53
4435	PT	PCF	44	04/05/89	0.752	0.00	51.80	0.00	3.50
4435	SF	PCU	44	04/05/89	0.590	95.70 >	100.00 >	1.04 >	17.40
4435	VE	PB6	44	04/04/89	0.922	0.00 >	100.00	0.00	0.43
4435	YF	PBL	44	04/04/89	1.085	0.00 >	100.00	0.00 >	0.15
4436	JE	PC1	44	04/04/89	0.916	0.00	23.60	0.00	0.00
4436	PT	PCG	44	04/05/89	0.725	0.00	18.50	0.00	0.00
4436	SF	PCV	44	04/05/89	0.530	24.40	29.20	1.20	12.40

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4436	VE	PB7	44	04/04/89	0.934	0.00	29.20	0.00 >	0.40
4436	YF	PBM	44	04/04/89	1.085	0.00	30.20	0.00 >	0.03
4437	JE	PC1	44	04/04/89	0.916	0.00	8.05	0.00	0.00
4437	PT	PCG	44	04/05/89	0.725	0.00	8.08	0.00	0.34
4437	SF	PCV	44	04/05/89	0.530	0.00	7.32	0.00 >	4.37
4437	VE	PB7	44	04/04/89	0.934	0.00	9.59	0.00	0.44
4437	YF	PBM	44	04/04/89	1.085	0.00	14.30	0.00	0.03
4438	JE	PC2	44	04/04/89	0.924	0.00	4.20	0.00	0.00
4438	PT	PCH	44	04/05/89	0.715	0.00	7.76	0.00	2.85
4438	SF	PCW	44	04/05/89	0.615	1.84	7.58	4.13 >	36.13
4438	SF	RT4	44	10/11/89	0.857	0.00	4.90	0.00 >	15.52
4438	VE	PB8	44	04/04/89	0.891	0.00	8.33	0.00	3.79
4438	YF	PBN	44	04/04/89	1.080	0.00	8.52	0.00	0.00
4439	JE	PC2	44	04/04/89	0.924	0.00	18.40	0.00	0.18
4439	PT	PCH	44	04/05/89	0.715	0.00	32.80	0.00	5.67
4439	SF	PCW	44	04/05/89	0.615	11.30	19.80	1.76 >	27.07
4439	SF	RT4	44	10/11/89	0.857	7.74	48.00	6.20 >	29.28
4439	VE	PB8	44	04/04/89	0.891	0.00	33.50	0.00	0.00
4439	YF	PBN	44	04/04/89	1.080	0.00	57.60	0.00	0.69
4440	JE	PC3	44	04/04/89	0.939	0.00	22.40	0.00	0.00
4440	PT	PCI	44	04/05/89	0.912	0.00	9.88	0.00 >	0.15
4440	SF	PCX	44	04/05/89	0.514	0.00	11.10	0.00 >	6.20
4440	VE	P5D	44	03/17/89	1.035	0.00	5.88	0.00	0.00
4440	VE	PB9	44	04/04/89	0.966	0.00	14.60	0.00	0.00
4440	YF	PBO	44	04/04/89	1.164	0.00	12.10	0.00 >	0.10
4441	JE	P9W	44	04/03/89	0.706	0.00	10.40	0.00	0.00
4441	PT	PAB	44	04/21/89	0.851	0.00	15.50	0.00	6.34
4441	SF	PAQ	44	04/04/89	0.749	0.00	7.58	0.00 >	2.29
4441	VE	P5E	44	03/17/89	0.847	0.00	7.47	0.00	0.00
4441	VE	P92		04/03/89	0.826	0.00	32.60	0.00	0.00
4441	YF	P9H	44	04/03/89	1.007	0.00	11.00	0.00	0.00
4442	JE	PBR	44	04/04/89	0.854	0.00	2.87	0.00 >	1.00
4442	PT	PC6	44	04/05/89	0.753	8.85	4.19	0.47	1.86
4442	SF	PCL	44	04/05/89	0.731	0.00	5.85	0.00	0.00
4442	VE	P5E	44	03/17/89	0.847	0.00	3.07	0.00	0.00
4442	VE	PAX	44	04/04/89	0.923	0.00	3.72	0.00	0.00
4442	YF	PBC	44	04/04/89	1.155	0.00	4.33	0.00	0.72
4443	JE	QNW	44	07/07/89	0.582	0.00	17.50	0.00	0.00
4443	PT	QOW	44	07/07/89	0.713	0.00	18.20	0.00	0.90
4443	SF	QOK	44	07/06/89	1.040	0.00	9.03	0.00	0.00
4443	VE	P5F	44	03/17/89	0.822	0.00	18.50	0.00 >	0.00
4443	VE	RON	44	08/04/89	1.294	0.00	30.00	0.00	0.00
4443	YF	QNK	44	07/06/89	0.902	0.00	28.70	0.00	0.00
4444	JE	QNX	44	07/07/89	0.917	0.00	1.28	0.00	0.00
4444	JE	R5O	44	08/15/89	0.564	0.00	4.95	0.00	3.41
4444	PT	QOX	44	07/07/89	0.696	0.00	1.25	0.00	0.00
4444	PT	R6E	44	08/15/89	0.615	0.00	1.15	0.00	0.00
4444	SF	QOL	44	07/06/89	1.075	0.00	1.54	0.00	0.00
4444	SF	R61	44	08/15/89	0.836	0.00	3.38	0.00	0.00
4444	VE	P5F	44	03/17/89	0.822	0.00	1.52	0.00	0.00
4444	VE	R0O	44	08/04/89	1.329	0.00	1.44	0.00	0.00
4444	VE	R5B	44	08/14/89	1.299	0.00	2.47	0.00	0.00
4444	YF	QNL	44	07/06/89	0.928	0.00	1.54	0.00	0.00
4444	YF	R4Y	44	08/14/89	1.112	0.00	1.72	0.00 >	0.33
4445	JE	QNX	44	07/07/89	0.917	0.00	1.00	0.00	0.00
4445	JE	R6X	44	08/16/89	0.548	0.00	7.92	0.00	0.00
4445	PT	QOX	44	07/07/89	0.696	0.00	10.00	0.00	0.00
4445	PT	R8O	44	08/16/89	0.793	0.00	18.10	0.00	0.00
4445	SF	QOL	44	07/06/89	1.075	0.00	3.92	0.00 >	0.13
4445	SF	R7N	44	08/16/89	0.784	0.00	6.98	0.00 >	0.82
4445	VE	P5G	44	03/17/89	0.872	0.00	36.40	0.00 >	4.23
4445	VE	R0O	44	08/04/89	1.329	0.00	32.00	0.00	0.00
4445	VE	R7A	44	08/18/89	0.951	0.00	62.90	0.00	0.00
4445	YF	QNL	44	07/06/89	0.928	0.00	7.36	0.00	0.00
4445	YF	R6K	44	08/15/89	0.986	0.00	18.60	0.00 >	0.10
4446	VE	P5G	44	03/17/89	0.872	0.00	36.60	0.00 >	1.80

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4446	VE	ROP	44	08/04/89	1.277	0.00	> 320.00	0.00	0.00
4447	JE	QNY	44	07/07/89	0.918	0.00	21.00	0.00	0.00
4447	PT	QOY	44	07/07/89	0.672	0.00	52.80	0.00	0.20
4447	SF	QOM	44	07/06/89	1.117	0.00	41.10	0.00	0.00
4447	VE	P5H	44	03/17/89	0.812	0.00	30.00	0.00	0.00
4447	VE	ROP	44	08/04/89	1.277	0.00	220.00	0.00	0.00
4447	YF	QNM	44	07/06/89	0.925	0.00	127.00	0.00	0.00
4448	JE	QNZ	44	07/07/89	1.096	0.00	13.10	0.00	0.00
4448	JE	R5P	44	08/15/89	0.428	0.00	21.00	0.00	> 2.26
4448	PT	QOZ	44	07/07/89	0.656	0.00	19.50	0.00	> 1.67
4448	PT	R6F	44	08/15/89	0.638	0.00	16.00	0.00	0.00
4448	SF	QON	44	07/06/89	1.121	0.00	18.10	0.00	0.00
4448	SF	R62	44	08/15/89	0.868	0.00	16.50	0.00	0.00
4448	VE	P5H	44	03/17/89	0.812	0.00	27.40	0.00	> 0.00
4448	VE	ROQ	44	08/04/89	1.259	0.00	17.00	0.00	0.00
4448	VE	R5C	44	08/14/89	1.268	0.00	10.70	0.00	0.00
4448	YF	QNN	44	07/06/89	1.030	0.00	17.30	0.00	0.00
4448	YF	R4Z	44	08/14/89	1.161	0.00	16.60	0.00	0.00
4449	VE	P5I	44	03/17/89	0.974	0.00	> 320.00	0.00	0.14
4450	JE	QOO	44	07/07/89	0.920	0.00	> 320.00	0.00	> 1.95
4450	PT	QPO	44	07/07/89	0.658	0.00	> 320.00	0.00	> 4.39
4450	SF	QOO	44	07/06/89	1.130	0.00	> 320.00	0.00	0.00
4450	YF	QNO	44	07/06/89	1.055	0.00	> 320.00	0.00	0.00
4451	JE	QOO	44	07/07/89	0.920	0.00	4.22	0.00	0.00
4451	PT	QPO	44	07/07/89	0.658	0.00	89.50	0.00	> 4.92
4451	SF	QOO	44	07/06/89	1.130	0.00	30.80	0.00	0.00
4451	YF	QNO	44	07/06/89	1.055	0.00	50.80	0.00	0.00
4452	JE	QO1	44	07/07/89	0.945	68.40	179.00	2.61	14.99
4452	JE	R6Y	44	08/16/89	0.655	0.00	8.30	0.00	0.00
4452	PT	QP1	44	07/07/89	0.691	56.90	204.00	3.58	17.09
4452	PT	R81	44	08/16/89	0.768	62.60	145.00	2.32	10.02
4452	SF	QOF	44	07/06/89	1.225	7.02	85.90	12.20	39.64
4452	SF	R7O	44	08/16/89	0.609	2.17	193.00	88.98	> 68.43
4452	VE	R7B	44	08/16/89	1.077	0.00	49.00	0.00	4.78
4452	YF	QNP	44	07/06/89	1.012	78.50	144.00	1.84	7.92
4452	YF	R6L	44	08/15/89	1.023	0.00	143.00	0.00	3.43
4453	JE	01M	45	11/23/88	0.716	0.00	100.00	0.00	0.00
4453	PT	103	45	11/23/88	0.709	0.00	68.10	0.00	0.00
4453	SF	10R	45	11/23/88	0.711	0.00	114.00	0.00	0.60
4453	VE	009	45	11/23/88	1.388	0.00	94.10	0.00	0.00
4453	YF	015 JAC	45	11/22/88	0.757	0.00	90.70	0.00	> 0.10
4454	JE	01N	45	11/23/88	0.619	0.00	15.50	0.00	3.52
4454	PT	104	45	11/23/88	0.821	0.00	12.10	0.00	0.00
4454	SF	10S	45	11/23/88	0.715	0.00	5.88	0.00	0.00
4454	VE	010	45	11/23/88	1.387	0.00	3.55	0.00	0.00
4454	YF	016	45	11/22/88	0.743	0.00	14.40	0.00	0.00
4455	JE	01N	45	11/23/88	0.619	0.00	50.40	0.00	0.00
4455	PT	104	45	11/23/88	0.821	0.00	117.00	0.00	0.00
4455	SF	10S	45	11/23/88	0.715	0.00	80.60	0.00	5.09
4455	VE	010	45	11/23/88	1.387	0.00	> 320.00	0.00	0.06
4455	YF	016	45	11/22/88	0.743	0.00	50.60	0.00	0.00
4458	JE	010	45	11/23/88	0.781	0.00	4.90	0.00	0.00
4458	PT	105	45	11/23/88	0.620	0.00	3.73	0.00	0.00
4458	SF	10T	45	11/23/88	0.689	0.00	4.27	0.00	0.00
4458	VE	011	45	11/23/88	1.414	0.00	14.50	0.00	0.00
4458	YF	017	45	11/22/88	0.645	0.00	4.20	0.00	0.00
4459	JE	010	45	11/23/88	0.781	0.00	300.00	0.00	0.00
4459	PT	105	45	11/23/88	0.620	76.00	> 320.00	> 4.21	> 20.21
4459	SF	10T	45	11/23/88	0.689	79.60	> 320.00	> 4.02	> 17.74
4459	VE	011	45	11/23/88	1.414	0.00	117.00	0.00	0.11
4459	YF	017	45	11/22/88	0.645	0.00	> 320.00	0.00	0.00
4460	JE	01P	45	11/23/88	0.783	0.00	11.10	0.00	0.00
4460	PT	106	45	11/23/88	0.783	0.00	17.90	0.00	0.00
4460	SF	10U	45	11/23/88	0.660	0.00	8.75	0.00	2.06
4460	VE	012	45	11/23/88	1.419	0.00	18.10	0.00	0.00
4460	YF	018	45	11/22/88	0.727	0.00	8.75	0.00	> 0.40

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4461	PT	02F	45	12/06/88	0.645	0.00	34.60	0.00	0.00
4461	SF	02X	45	12/06/88	0.918	0.00	23.50	0.00	8.97
4461	VE	01W	45	12/06/88	1.164	0.00	23.50	0.00	0.00
4461	YF	02L	45	12/06/88	0.838	0.00	24.20	0.00	0.00
4462	PT	02G	45	12/06/88	0.638	0.00	16.50	0.00	0.00
4462	SF	02Y	45	12/06/88	0.787	0.00	26.50	0.00	0.06
4462	VE	01X	45	12/06/88	1.136	0.00	84.10	0.00	0.34
4462	YF	02M	45	12/06/88	0.798	0.00	26.00	0.00	0.00
4463	PT	02G	45	12/06/88	0.638	0.00	4.55	0.00	0.00
4463	SF	02Y	45	12/06/88	0.787	0.00	24.70	0.00	2.77
4463	VE	01X	45	12/06/88	1.136	0.00	111.00	0.00	0.48
4463	YF	02M	45	12/06/88	0.798	0.00	57.30	0.00	0.00
4464	PT	02H	45	12/06/88	0.614	0.00 <	1.00	0.00	0.00
4464	SF	02Z	45	12/06/88	0.866	0.00 <	1.00	0.00	0.00
4464	VE	01Y	45	12/06/88	0.886	0.00 <	1.00	0.00	0.00
4464	YF	02N	45	12/06/88	0.776	0.00 <	1.00	0.00	0.00
4465	PT	02H	45	12/06/88	0.614	0.00	275.00	0.00	0.00
4465	SF	02Z	45	12/06/88	0.866	16.20 >	320.00 >	19.80 >	50.61
4465	SF	RT5	45	10/11/89	0.952	100.00 >	320.00 >	3.20 >	27.80
4465	VE	01Y	45	12/06/88	0.886	0.00 >	320.00	0.00 >	10.23
4465	YF	02N	45	12/06/88	0.776	0.00 >	320.00	0.00	0.00
4466	PT	02I	45	12/06/88	0.590	0.00	4.45	0.00	0.00
4466	SF	030	45	12/06/88	0.868	0.00	5.27	0.00 >	2.24
4466	VE	01Z	45	12/06/88	1.082	0.00	6.11	0.00 >	0.40
4466	YF	02O	45	12/06/88	0.761	0.00	5.22	0.00	0.00
4468	PT	02J	45	12/06/88	0.544	0.00	306.00	0.00	0.00
4468	SF	031	45	12/06/88	0.773	0.00	242.00	0.00	2.94
4468	VE	020	45	12/06/88	1.090	0.00 >	320.00	0.00 >	0.57
4468	YF	02P	45	12/06/88	0.794	0.00 >	320.00	0.00	0.00
4469	PT	02J	45	12/06/88	0.544	0.00	320.00	0.00	0.00
4469	SF	031	45	12/06/88	0.773	0.00 >	320.00	0.00	0.60
4469	VE	020	45	12/06/88	1.090	0.00 >	320.00	0.00 >	0.02
4469	YF	02P	45	12/06/88	0.794	0.00 >	320.00	0.00	0.00
4470	PT	02K	45	12/06/88	0.526	0.00	16.60	0.00	0.00
4470	SF	032	45	12/06/88	1.120	0.00	32.50	0.00 >	0.60
4470	VE	021	45	12/06/88	1.115	0.00	24.70	0.00	0.48
4470	YF	02Q	45	12/06/88	0.731	0.00	32.50	0.00	0.00
4471	PT	02I	45	12/06/88	0.590	0.00	11.60	0.00	0.00
4471	SF	030	45	12/06/88	0.868	0.00	8.75	0.00 >	1.70
4471	VE	01Z	45	12/06/88	1.082	0.00	8.75	0.00 >	1.30
4471	YF	02O	45	12/06/88	0.761	0.00	8.75	0.00 >	0.00
4472	JE	03M	45	12/07/88	0.956	0.00 >	320.00	0.00 >	0.01
4472	PT	034	45	12/07/88	1.114	0.00 >	320.00	0.00	1.76
4472	SF	03S	45	12/07/88	0.689	15.90 >	320.00 >	20.10 >	43.60
4472	SF	RT5	45	10/11/89	0.952	57.70 >	320.00 >	5.54 >	33.99
4472	VE	03A	45	12/07/88	1.086	0.00 >	320.00	0.00	0.00
4472	YF	03G	45	12/07/88	0.750	0.00 >	320.00	0.00	0.00
4473	JE	03M	45	12/07/88	0.956	0.00 >	320.00	0.00	0.00
4473	PT	034	45	12/07/88	1.114	0.00 >	320.00	0.00 >	4.17
4473	SF	03S	45	12/07/88	0.689	16.70	320.00	19.20 >	40.66
4473	SF	RT6	45	10/11/89	0.937	99.40 >	320.00 >	3.22 >	27.88
4473	VE	03A	45	12/07/88	1.086	0.00 >	320.00	0.00 >	3.53
4473	YF	03G	45	12/07/88	0.750	0.00 >	320.00	0.00	0.00
4474	JE	03N	45	12/07/88	0.963	0.00	187.00	0.00 >	1.01
4474	PT	035	45	12/07/88	1.072	0.00	106.00	0.00	0.00
4474	SF	03T	45	12/07/88	0.751	0.00	157.00	0.00	2.41
4474	VE	03B	45	12/07/88	1.072	0.00	206.00	0.00	1.44
4474	YF	03H	45	12/07/88	0.825	0.00	164.00	0.00	0.00
4475	JE	03N	45	12/07/88	0.963	0.00	84.90	0.00	0.00
4475	PT	035	45	12/07/88	1.072	0.00	113.00	0.00	0.16
4475	SF	03T	45	12/07/88	0.751	16.90	16.80	0.99	10.37
4475	SF	RT6	45	10/11/89	0.937	0.00 >	100.00	0.00	1.39
4475	VE	03B	45	12/07/88	1.072	0.00 >	320.00	0.00	0.00
4475	YF	03H	45	12/07/88	0.825	0.00	9.58	0.00	0.00
4476	JE	030	45	12/07/88	0.887	0.00	52.00	0.00 >	0.05
4476	PT	036	45	12/07/88	0.987	0.00	77.30	0.00 >	1.59

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
4476	SF	03U	45	12/07/88	0.782	0.00	232.00	0.00	0.00
4476	VE	03C	45	12/07/88	1.062	0.00	233.00	0.00	0.00
4476	YF	03I	45	12/07/88	0.759	0.00 >	320.00	0.00	0.00
4477	JE	03O	45	12/07/88	0.887	0.00	34.60	0.00	0.00
4477	PT	036	45	12/07/88	0.987	0.00	34.60	0.00	0.00
4477	SF	03U	45	12/07/88	0.782	17.70	21.80	1.23	15.65
4477	VE	03C	45	12/07/88	1.062	0.00	42.70	0.00 >	0.41
4477	YF	03I	45	12/07/88	0.759	0.00	35.40	0.00	0.00
4511	JE	03P	45	12/07/88	0.954	0.00	19.10	0.00	0.00
4511	PT	037	45	12/07/88	1.133	0.00	13.10	0.00	0.00
4511	SF	03V	45	12/07/88	0.784	0.00	34.80	0.00	0.21
4511	VE	03D	45	12/07/88	1.065	0.00	53.90	0.00	0.00
4511	YF	03J	45	12/07/88	0.782	0.00	21.80	0.00	0.00
4524	JE	03P	45	12/07/88	0.954	0.00 >	320.00	0.00 >	8.50
4524	PT	037	45	12/07/88	1.133	0.00	20.20	0.00	3.53
4524	SF	03V	45	12/07/88	0.784	18.10	198.00	10.90 >	30.17
4524	SF	RT7	45	10/11/89	0.966	0.00	25.50	0.00	0.42
4524	VE	03D	45	12/07/88	1.065	0.00 >	320.00	0.00	0.00
4524	YF	03J	45	12/07/88	0.782	0.00	23.00	0.00	0.00
4527	JE	OIZ	47	01/31/89	0.511	1.50	16.80	11.20 >	37.38
4527	PT	OJN	47	02/01/89	1.121	5.01	11.60	2.31 >	15.02
4527	SF	OJB	47	02/01/89	1.259	8.27	7.20	0.87 >	8.48
4527	VE	OIB	47	01/31/89	0.968	0.00	6.82	0.00	0.37
4527	YF	OIN	47	01/31/89	0.945	7.76	8.26	1.06 >	10.76
4531	VV	OBO	42	08/17/89	1.327	135.00 >	320.00 >	2.38 >	10.89
4532	VV	O1F	42	02/23/89	1.735	85.80 >	320.00 >	3.73 >	12.70
4532	VV	O4M	42	06/01/89	2.243	226.00	100.00	0.44 >	2.75
4590	JE	OUO	48	02/28/89	0.744	0.53	2.17	4.11 >	21.90
4590	JE	OUO	48	02/28/89	0.744	0.00 >	0.10	0.00	0.88
4590	JE	RLN	42	09/13/89	0.615	0.58	2.17	3.71	16.13
4590	PT	OUO	48	03/01/89	0.998	2.55	2.72	1.07 >	8.63
4590	PT	OUO	48	03/01/89	0.998	0.00 >	0.10	0.00 >	2.60
4590	SF	OVO	48	03/01/89	0.823	0.00	2.38	0.00	4.61
4590	SF	OVO	48	03/01/89	0.823	0.00 >	0.10	0.00	2.21
4590	VE	PTG	48	04/28/89	0.914	0.00	1.96	0.00 >	0.08
4590	VE	RKX	42	09/15/89	0.699	0.00	2.00	0.00	0.31
4590	YF	OUC	48	02/27/89	0.852	2.79	2.80	1.00 >	10.69
4590	YF	OUC	48	02/27/89	0.852	0.00 >	0.10	0.00 >	0.70
4590	YF	RLA	42	09/12/89	0.372	0.84	2.10	2.51	13.11
4592	JE	OU1	48	02/28/89	0.764	6.97	50.10	7.19	32.32
4592	JE	OU1	48	02/28/89	0.764	0.00 >	0.10	0.00	0.00
4592	JE	RLN	42	09/13/89	0.615	5.96	23.10	3.87 >	19.07
4592	PT	OUP	48	03/01/89	0.968	15.20	48.10	3.17	24.18
4592	PT	OUP	48	03/01/89	0.968	0.00 >	0.10	0.00	0.40
4592	SF	OV1	48	03/01/89	0.749	27.80	40.30	1.45	7.46
4592	SF	OV1	48	03/01/89	0.749	0.00 >	0.10	0.00	0.70
4592	VE	PTH	48	04/28/89	0.832	0.00	27.80	0.00 >	1.42
4592	VE	RKX	42	09/15/89	0.699	0.00	20.60	0.00	0.00
4592	YF	OUO	48	02/27/89	0.883	17.20	41.00	2.39	16.34
4592	YF	OUO	48	02/27/89	0.883	0.00 >	0.10	0.00	0.60
4592	YF	RLA	42	09/12/89	0.672	9.69	24.10	2.49	11.63
4609	JE	OU2	48	02/28/89	0.810	0.00 <	0.32	0.00	0.00
4609	JE	OU2	48	02/28/89	0.810	0.01 >	0.10 >	6.54 >	30.11
4609	JE	RSA	43	09/27/89	0.830	0.02	0.09	3.76	15.73
4609	PT	OUQ	48	03/01/89	0.979	0.32 <	0.32 -	1.00 >	0.45
4609	PT	OUQ	48	03/01/89	0.979	0.00 >	0.10	0.00 >	9.97
4609	SF	OV2	48	03/01/89	0.785	0.32 <	0.32 <	1.00 >	0.34
4609	SF	OV2	48	03/01/89	0.785	0.00 >	0.10	0.00 >	6.48
4609	VE	PTH	48	04/28/89	0.832	0.00 >	0.10	0.00 >	0.31
4609	YF	OUE	48	02/27/89	0.892	0.00 <	0.32	0.00	0.00
4609	YF	OUE	48	02/27/89	0.892	0.06 >	0.10 >	1.71 >	12.34
4617	JE	RLO	43	09/13/89	0.536	0.00 >	320.00	0.00	3.54
4617	VE	RKY	43	09/15/89	0.685	0.00 >	320.00	0.00	0.00
4617	YF	RLB	43	09/12/89	0.721	0.00 >	320.00	0.00	0.00
4706	JE	O52	43	12/12/88	1.122	0.00 >	320.00	0.00 >	24.32
4706	PT	O5H	43	12/13/88	0.861	0.00	155.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4707	JE	053	43	12/12/88	1.065	0.00	92.40	0.00 >	4.39
4707	PT	05I	43	12/13/88	0.756	0.00	129.00	0.00	0.38
4708	JE	053	43	12/12/88	1.065	0.00	137.00	0.00 >	16.32
4708	PT	05I	43	12/13/88	0.756	0.00	96.60	0.00	0.00
4709	JE	054	43	12/12/88	1.068	0.00 >	320.00	0.00 >	23.50
4709	PT	05J	43	12/13/88	0.815	0.00	246.00	0.00 >	1.81
4710	JE	054	43	12/12/88	1.068	0.00	229.00	0.00 >	22.52
4710	PT	05J	43	12/13/88	0.815	0.00	198.00	0.00	0.00
4711	JE	055	43	12/12/88	1.061	0.00	44.00	0.00 >	11.65
4711	PT	05K	43	12/13/88	0.800	0.00	30.20	0.00	0.00
4712	JE	055	43	12/12/88	1.061	0.00	46.30	0.00 >	9.73
4712	PT	05K	43	12/13/88	0.800	0.00	30.50	0.00	0.00
4713	JE	056	43	12/12/88	1.052	0.00	15.20	0.00 >	5.12
4713	PT	05L	43	12/13/88	0.786	0.00	11.80	0.00	0.00
4714	JE	056	43	12/12/88	1.052	0.00	4.31	0.00 >	1.31
4714	PT	05L	43	12/13/88	0.786	0.00	4.16	0.00	0.00
4715	JE	057	43	12/12/88	0.808	0.00 >	320.00	0.00 >	12.39
4715	PT	05M	43	12/13/88	0.809	212.00 >	320.00 >	1.51 >	18.14
4716	JE	057	43	12/12/88	0.808	0.00	14.40	0.00	0.00
4716	PT	05M	43	12/13/88	0.809	0.00	20.40	0.00 >	5.00
4717	JE	058	43	12/12/88	1.022	0.00 >	320.00	0.00 >	21.81
4717	PT	05N	43	12/13/88	0.753	0.00 >	320.00	0.00	3.25
4720	JE	065	43	12/13/88	0.990	0.00	221.00	0.00 >	7.11
4720	JE	RLO	43	09/13/89	0.536	0.00 >	100.00	0.00 >	1.80
4720	VE	RKY	43	09/15/89	0.685	0.00 >	100.00	0.00	1.20
4720	YF	O1X	43	11/18/88	1.017	0.00 >	320.00	0.00 >	1.90
4720	YF	RLB	43	09/12/89	0.721	0.00 >	100.00	0.00	0.00
4721	JE	066	43	12/13/88	1.000	0.00	184.00	0.00 >	11.22
4721	YF	O1Y	43	11/18/88	0.886	0.00	42.70	0.00	0.00
4722	YF	O1Y	43	11/18/88	0.886	0.00	272.00	0.00	0.00
4723	YF	O1Z	43	11/18/88	0.931	0.00	155.00	0.00	0.00
4724	YF	O1Z	43	11/18/88	0.931	0.00	59.90	0.00 >	0.81
4725	YF	O20	43	11/18/88	0.885	0.00	165.00	0.00	0.00
4727	YF	O20	43	11/18/88	0.885	0.00	188.00	0.00 >	0.40
4737	JE	Q01	44	07/07/89	0.945	0.00	7.17	0.00	0.00
4737	PT	QP1	44	07/07/89	0.691	0.00	59.90	0.00	0.00
4737	SF	QOP	44	07/06/89	1.225	0.00	35.70	0.00	0.00
4737	YF	QNP	44	07/06/89	1.012	0.00	52.00	0.00	0.00
4738	JE	Q02	44	07/07/89	0.742	0.00	181.00	0.00	0.00
4738	PT	QP2	44	07/07/89	0.713	0.00	320.00	0.00	0.34
4738	SF	QOQ	44	07/06/89	1.116	0.00	128.00	0.00	0.00
4738	VE	ROT	44	08/04/89	1.160	0.00	52.50	0.00	6.38
4738	YF	QNQ	44	07/06/89	0.749	0.00	279.00	0.00	0.00
4739	JE	Q02	44	07/07/89	0.742	19.00	48.30	2.54 >	13.96
4739	JE	R6Y	44	08/16/89	0.655	0.00	0.82	0.00	0.00
4739	PT	QP2	44	07/07/89	0.713	0.00	17.30	0.00	0.00
4739	PT	R81	44	08/16/89	0.768	0.00	21.70	0.00	0.00
4739	SF	QOQ	44	07/06/89	1.116	15.10	43.50	2.88	16.01
4739	SF	R70	44	08/16/89	0.609	0.00	18.40	0.00 >	10.58
4739	VE	ROT	44	08/04/89	1.160	0.00	49.70	0.00	0.00
4739	VE	R7B	44	08/18/89	1.077	0.00	50.30	0.00	7.95
4739	YF	QNQ	44	07/06/89	0.749	29.00	47.80	1.65	8.03
4739	YF	R6L	44	08/15/89	1.023	0.00	39.90	0.00 >	1.92
4740	JE	Q03	44	07/07/89	0.671	0.00	20.80	0.00	0.00
4740	PT	QP3	44	07/07/89	0.643	0.00	40.80	0.00 >	0.40
4740	SF	QOR	44	07/06/89	1.094	0.00	20.30	0.00	0.00
4740	VE	ROU	44	08/04/89	1.151	0.00	104.00	0.00	0.00
4740	YF	QNR	44	07/06/89	0.931	0.00	47.10	0.00	0.00
4741	JL	PSM	44	04/03/89	0.934	0.00	0.96	0.00	0.00
4741	PT	PA1	44	04/21/89	0.863	0.00 >	320.00	0.00	5.75
4741	SF	PAG	44	04/04/89	0.834	0.00	155.00	0.00	0.00
4741	VE	P8S	44	04/03/89	1.093	0.00	41.20	0.00	0.01
4741	YF	P97	44	04/03/89	0.938	0.00 >	320.00	0.00	2.12
4742	JE	P9N	44	04/03/89	1.018	0.00	5.31	0.00	0.00
4742	JE	RLP	44	09/13/89	0.490	0.00	7.79	0.00 >	2.24
4742	PT	PA2	44	04/21/89	0.985	0.00	13.00	0.00	1.60

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rnti.	IC 50	TC 25	SI	TAI
4742	SF	PAH	44	04/04/89	1.000	0.00	7.81	0.00 >	0.16
4742	VE	P8T	44	04/03/89	0.994	58.00	9.68	0.17 >	9.62
4742	VE	RKZ	44	09/15/89	0.805	19.30	7.32	0.38 >	21.61
4742	YF	P98	44	04/03/89	0.966	0.00	32.00	0.00 >	0.80
4742	YF	RLC	44	09/12/89	0.577	0.00	7.25	0.00 >	0.00
4743	JE	P9N	44	04/03/89	1.018	0.00	1.77	0.00	0.00
4743	PT	PA2	44	04/21/89	0.985	0.00	4.55	0.00	0.00
4743	SF	PAH	44	04/04/89	1.000	0.00	4.60	0.00 >	2.25
4743	VE	P8T	44	04/03/89	0.994	0.00	3.20	0.00 >	0.08
4743	YF	P98	44	04/03/89	0.966	0.00	4.86	0.00	0.00
4771	JE	OEJ	46	01/23/89	1.220	0.00	22.90	0.00 >	3.02
4771	PT	OET	46	01/24/89	0.717	0.00	23.50	0.00	0.00
4771	SF	OF3	46	01/24/89	1.053	0.00	32.50	0.00	0.00
4771	VE	ODZ	46	01/23/89	1.136	0.00	39.90	0.00	0.00
4771	YF	OE9	46	01/23/89	1.025	0.00	35.40	0.00	0.00
4772	JE	OEJ	46	01/23/89	1.220	0.00 >	320.00	0.00 >	9.99
4772	PT	OET	46	01/24/89	0.717	0.00 >	320.00	0.00 >	0.00
4772	SF	OF3	46	01/24/89	1.053	0.00 >	320.00	0.00 >	0.40
4772	VE	ODZ	46	01/23/89	1.136	0.00 >	320.00	0.00	0.00
4772	YF	OE9	46	01/23/89	1.025	0.00 >	320.00	0.00	0.60
4773	JE	OEK	46	01/23/89	1.097	0.00 >	320.00	0.00 >	11.79
4773	PT	OEJ	46	01/24/89	0.732	0.00 >	320.00	0.00 >	1.50
4773	SF	OF4	46	01/24/89	1.231	0.00 >	320.00	0.00	0.00
4773	VE	OEO	46	01/23/89	1.243	0.00 >	320.00	0.00	0.00
4773	YF	OEA	46	01/23/89	0.919	0.00 >	320.00	0.00	0.20
4774	JE	OEK	46	01/23/89	1.097	0.00	183.00	0.00 >	6.20
4774	PT	OEJ	46	01/24/89	0.732	0.00	259.00	0.00 >	6.98
4774	SF	OF4	46	01/24/89	1.231	0.00	153.00	0.00	0.00
4774	VE	OEO	46	01/23/89	1.243	0.00	103.00	0.00	0.00
4774	YF	OEA	46	01/23/89	0.919	0.00	234.00	0.00	0.40
4774	JE	OEL	46	01/23/89	1.198	0.00 >	320.00	0.00 >	13.87
4775	PT	OEJ	46	01/24/89	0.739	0.00 >	320.00	0.00	1.00
4775	SF	OF5	46	01/24/89	1.214	0.00 >	320.00	0.00	1.60
4775	VE	OE1	46	01/23/89	1.202	0.00	320.00	0.00 >	0.05
4775	YF	OEB	46	01/23/89	0.926	0.00 >	320.00	0.00 >	1.60
4776	JE	OEL	46	01/23/89	1.198	0.00	17.60	0.00 >	1.02
4776	PT	OEJ	46	01/24/89	0.739	0.00	22.40	0.00	0.20
4776	SF	OF5	46	01/24/89	1.214	0.00	20.70	0.00	0.00
4776	VE	OE1	46	01/23/89	1.202	0.00	13.70	0.00 >	0.03
4776	YF	OEB	46	01/23/89	0.926	0.00	23.70	0.00	0.00
4777	JE	OEM	46	01/23/89	1.228	0.00	75.10	0.00 >	7.30
4777	PT	OEJ	46	01/24/89	0.826	0.00	34.70	0.00	0.00
4777	SF	OF6	46	01/24/89	1.225	0.00	71.60	0.00	1.83
4777	VE	OE2	46	01/23/89	1.217	0.00	47.40	0.00	0.00
4777	YF	OEC	46	01/23/89	0.921	0.00	92.30	0.00 >	1.60
4778	JE	OEM	46	01/23/89	1.228	0.00	24.60	0.00 >	4.60
4778	PT	OEJ	46	01/24/89	0.826	0.00	44.60	0.00	0.61
4778	SF	OF6	46	01/24/89	1.225	0.00	37.10	0.00	0.77
4778	VE	OE2	46	01/23/89	1.217	0.00	8.49	0.00	0.00
4778	YF	OEC	46	01/23/89	0.921	0.00	40.40	0.00 >	1.90
4779	JE	OEN	46	01/23/89	1.226	0.00 >	320.00	0.00 >	13.69
4779	PT	OEX	46	01/24/89	0.723	0.00 >	320.00	0.00	0.00
4779	SF	OF7	46	01/24/89	1.040	0.00 >	320.00	0.00	0.20
4779	VE	OE3	46	01/23/89	1.219	0.00	320.00	0.00 >	0.10
4779	YF	OED	46	01/23/89	0.923	0.00 >	320.00	0.00	1.00
4780	JE	OFW	46	01/24/89	1.204	0.00 >	320.00	0.00	0.00
4780	PT	O9K	46	01/12/89	0.892	0.00 >	320.00	0.00	0.00
4780	SF	O9V	46	01/12/89	0.655	0.00 >	320.00	0.00	0.00
4780	VE	OF8	46	01/24/89	1.058	0.00	320.00	0.00	0.00
4780	YF	OFK	46	01/24/89	1.105	0.00 >	320.00	0.00	0.00
4781	JE	OFX	46	01/24/89	1.107	0.00	15.60	0.00	0.11
4781	PT	O9L	46	01/12/89	0.887	0.00	91.80	0.00	0.00
4781	SF	O9W	46	01/12/89	0.808	0.00	79.80	0.00	1.40
4781	VE	OF9	46	01/24/89	1.155	0.00	26.50	0.00	0.00
4781	VV	OIQ	61	11/02/89	1.344	0.00	2.10	0.00	0.00
4781	YF	OFL	46	01/24/89	0.997	0.00	20.20	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4782	JE	OFX	46	01/24/89	1.107	0.00	> 320.00	0.00	0.00
4782	PT	O9L	46	01/12/89	0.887	0.00	> 320.00	0.00	> 6.01
4782	SF	O9W	46	01/12/89	0.808	0.00	> 320.00	0.00	> 1.12
4782	VE	OF9	46	01/24/89	1.155	0.00	68.30	0.00	0.00
4782	YF	OFL	46	01/24/89	0.997	0.00	> 320.00	0.00	0.00
4783	JE	OFY	46	01/24/89	1.152	0.00	> 320.00	0.00	0.00
4783	PT	O9M	46	01/12/89	0.927	0.00	> 320.00	0.00	0.80
4783	SF	O9X	46	01/12/89	0.782	0.00	269.00	0.00	0.60
4783	VE	OFA	46	01/24/89	1.043	0.00	283.00	0.00	0.00
4783	YF	OFM	46	01/24/89	0.991	0.00	251.00	0.00	1.27
4784	JE	OFY	46	01/24/89	1.152	0.00	> 320.00	0.00	0.00
4784	PT	O9M	46	01/12/89	0.927	0.00	> 320.00	0.00	0.00
4784	SF	O9X	46	01/12/89	0.782	0.00	> 320.00	0.00	0.20
4784	VE	OFA	46	01/24/89	1.043	0.00	300.00	0.00	0.71
4784	YF	OFM	46	01/24/89	0.991	0.00	> 320.00	0.00	0.00
4785	JE	OFZ	46	01/24/89	1.129	2.27	4.18	1.84	> 0.05
4785	JE	RLP	46	09/13/89	0.490	1.56	9.27	5.94	> 10.37
4785	PT	O9N	46	01/12/89	0.929	< 1.00	7.19	> 7.19	> 27.84
4785	SF	O9Y	46	01/12/89	0.684	< 1.00	7.20	> 7.20	> 23.97
4785	VE	OFB	46	01/24/89	1.120	0.00	1.83	0.00	> 20.09
4785	VE	RKZ	46	09/15/89	0.805	0.00	6.51	0.00	> 0.00
4785	YF	OFN	46	01/24/89	0.993	0.00	6.60	0.00	> 2.17
4785	YF	RLC	46	09/12/89	0.577	0.00	7.00	0.00	> 5.05
4786	JE	OFZ	46	01/24/89	1.129	0.00	42.70	0.00	7.52
4786	PT	O9N	46	01/12/89	0.929	0.00	167.00	0.00	0.00
4786	SF	O9Y	46	01/12/89	0.684	0.00	157.00	0.00	0.00
4786	VE	OFB	46	01/24/89	1.120	0.00	52.50	0.00	0.00
4786	YF	OFN	46	01/24/89	0.993	0.00	101.00	0.00	0.00
4787	JE	OGO	46	01/24/89	1.239	0.00	45.90	0.00	> 0.83
4787	PT	O9O	46	01/12/89	0.901	0.00	128.00	0.00	0.60
4787	SF	O9Z	46	01/12/89	0.868	0.00	98.70	0.00	0.13
4787	VE	OFC	46	01/24/89	1.009	0.00	63.70	0.00	0.00
4787	YF	OFO	46	01/24/89	0.973	0.00	74.70	0.00	1.80
4788	JE	OGO	46	01/24/89	1.239	0.00	4.86	0.00	0.00
4788	PT	O9O	46	01/12/89	0.901	0.00	19.10	0.00	0.00
4788	SF	O9Z	46	01/12/89	0.868	0.00	26.80	0.00	0.00
4788	VE	OFC	46	01/24/89	1.009	0.00	5.65	0.00	0.00
4788	YF	OFO	46	01/24/89	0.973	0.00	13.00	0.00	0.00
4789	JE	OG1	46	01/24/89	1.022	0.00	17.80	0.00	0.00
4789	PT	O9P	46	01/12/89	0.966	0.00	46.30	0.00	2.81
4789	SF	OAO	46	01/12/89	0.746	0.00	75.20	0.00	0.00
4789	VE	OFD	46	01/24/89	1.024	0.00	37.50	0.00	0.00
4789	YF	OFF	46	01/24/89	0.943	0.00	47.40	0.00	> 0.00
4790	JE	OG1	46	01/24/89	1.022	0.00	> 320.00	0.00	> 0.00
4790	PT	O9P	46	01/12/89	0.966	0.00	> 320.00	0.00	> 3.81
4790	SF	OAO	46	01/12/89	0.746	0.00	> 320.00	0.00	> 0.00
4790	VE	OFD	46	01/24/89	1.024	0.00	18.20	0.00	0.00
4790	YF	OFF	46	01/24/89	0.943	0.00	36.90	0.00	> 0.40
4791	JE	OG2	46	01/24/89	1.094	0.00	> 320.00	0.00	> 0.00
4791	PT	O9Q	46	01/12/89	0.959	0.00	> 320.00	0.00	> 0.62
4791	SF	OAI	46	01/12/89	0.812	0.00	> 320.00	0.00	> 0.12
4791	VE	OFF	46	01/24/89	0.960	0.00	> 320.00	0.00	> 0.40
4791	YF	OFQ	46	01/24/89	0.950	0.00	> 320.00	0.00	> 0.40
4792	JE	OG2	46	01/24/89	1.094	0.00	12.90	0.00	0.00
4792	PT	O9Q	46	01/12/89	0.959	0.00	88.00	0.00	0.00
4792	SF	OAI	46	01/12/89	0.812	0.00	93.00	0.00	0.00
4792	VE	OFF	46	01/24/89	0.960	0.00	53.80	0.00	0.00
4792	YF	OFQ	46	01/24/89	0.950	0.00	42.30	0.00	0.12
4793	JE	OG3	46	01/24/89	1.071	0.00	< 1.00	0.00	0.00
4793	PT	O9R	46	01/12/89	0.890	0.00	< 1.00	0.00	0.00
4793	SF	OAI	46	01/12/89	0.836	0.00	< 1.00	0.00	0.00
4793	VE	OFF	46	01/24/89	1.102	0.00	< 1.00	0.00	0.00
4793	YF	OFF	46	01/24/89	0.944	0.00	< 1.00	0.00	0.00
4794	JE	OG3	46	01/24/89	1.071	0.00	24.70	0.00	0.00
4794	PT	O9R	46	01/12/89	0.890	0.00	151.00	0.00	> 0.05
4794	SF	OAI	46	01/12/89	0.836	0.00	188.00	0.00	> 4.36

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4794	VE	OFF	46	01/24/89	1.102	0.00	23.00	0.00	0.00
4794	YF	OFR	46	01/24/89	0.944	0.00	43.70	0.00	0.35
4795	JE	OG4	46	01/24/89	1.080	0.00	73.40	0.00	0.00
4795	JE	RLQ	46	09/13/89	0.539	0.00	84.50	0.00	0.00
4795	PT	O9S	46	01/12/89	0.885	69.00	149.00	2.16	13.19
4795	SF	OA3	46	01/12/89	0.639	0.00	187.00	0.00	0.58
4795	VE	OFG	46	01/24/89	1.044	0.00	52.80	0.00	0.00
4795	VE	RL0	46	09/15/89	0.662	0.00	110.00	0.00	1.66
4795	YF	OFS	46	01/24/89	0.943	0.00	81.90	0.00 >	1.98
4795	YF	RLD	46	09/12/89	0.732	0.00	121.00	0.00	1.50
4796	JE	OG4	46	01/24/89	1.080	6.57	38.80	5.90	25.60
4796	JE	RLQ	46	09/13/89	0.539	1.49	60.30	40.51 >	60.74
4796	PT	O9S	46	01/12/89	0.885	1.58	21.70	13.80 >	30.97
4796	SF	OA3	46	01/12/89	0.639	2.22	210.00	94.70 >	62.20
4796	VE	OFG	46	01/24/89	1.044	0.00	1.31	0.00	0.00
4796	VE	RL0	46	09/15/89	0.662	0.00	6.24	0.00	7.42
4796	YF	OFS	46	01/24/89	0.943	21.70	21.50	0.99	8.37
4796	YF	RLD	46	09/12/89	0.732	6.08	49.00	8.06	27.40
4797	JE	OG5	46	01/24/89	1.129	0.00 >	320.00	0.00	0.00
4797	PT	O9T	46	01/12/89	0.870	0.00 >	320.00	0.00	0.00
4797	SF	OA4	46	01/12/89	0.764	0.00 >	320.00	0.00	2.00
4797	VE	OFH	46	01/24/89	1.029	0.00 >	320.00	0.00	0.12
4797	YF	OFT	46	01/24/89	0.917	0.00 >	320.00	0.00 >	0.90
4798	JE	OAI	46	01/16/89	0.962	0.00 <	1.00	0.00	0.00
4798	PT	OBU	46	01/17/89	0.929	0.00 <	1.00	0.00	0.00
4798	SF	OBI	46	01/17/89	1.352	0.00 <	1.00	0.00	0.00
4798	VE	OB6	46	01/16/89	0.856	0.00 <	1.00	0.00	0.00
4798	YF	OAU	46	01/16/89	0.821	0.00 <	1.00	0.00	0.00
4799	JE	OAJ	46	01/16/89	0.969	0.00	3.65	0.00	0.00
4799	PT	OBV	46	01/17/89	0.966	0.00	17.60	0.00	0.00
4799	SF	OBJ	46	01/17/89	1.452	0.00	11.80	0.00	0.00
4799	VE	OB7	46	01/16/89	0.804	0.00	10.70	0.00 >	0.02
4799	YF	CAV	46	01/16/89	0.794	0.00	16.30	0.00	0.00
4800	JE	OAJ	46	01/16/89	0.969	0.00 >	320.00	0.00	0.80
4800	PT	OBV	46	01/17/89	0.966	245.00 >	320.00 >	1.31 >	6.45
4800	SF	OBJ	46	01/17/89	1.452	188.00 >	320.00 >	1.70 >	9.35
4800	VE	OB7	46	01/16/89	0.804	0.00 >	320.00	0.00	0.07
4800	YF	CAV	46	01/16/89	0.794	0.00 >	320.00	0.00	0.00
4801	JE	OAK	46	01/16/89	1.111	0.00	11.60	0.00	0.00
4801	PT	OBW	46	01/17/89	0.975	0.00	121.00	0.00 >	0.23
4801	SF	OBK	46	01/17/89	1.364	0.00	107.00	0.00 >	3.90
4801	VE	OB8	46	01/16/89	0.880	0.00	32.00	0.00	0.07
4801	YF	OAW	46	01/16/89	0.842	0.00	123.00	0.00	0.00
4802	JE	OAK	46	01/16/89	1.111	0.00	61.90	0.00	0.45
4802	PT	OBW	46	01/17/89	0.975	0.00	69.30	0.00	0.00
4802	SF	OBK	46	01/17/89	1.364	0.00	82.10	0.00 >	5.54
4802	VE	OB8	46	01/16/89	0.880	0.00	98.60	0.00	0.00
4802	YF	OAW	46	01/16/89	0.842	0.00	88.20	0.00	0.00
4803	JE	OAL	46	01/16/89	1.008	0.00 <	1.00	0.00	0.00
4803	PT	OBX	46	01/17/89	0.980	0.00	1.67	0.00	0.00
4803	SF	OBL	46	01/17/89	1.277	0.00	5.95	0.00 >	0.19
4803	VE	OB9	46	01/16/89	0.879	0.00	2.63	0.00	0.00
4803	YF	OAX	46	01/16/89	0.805	0.00	1.54	0.00	0.00
4804	JE	OAL	46	01/16/89	1.008	0.00 >	320.00	0.00	0.00
4804	PT	OBX	46	01/17/89	0.980	0.00 >	320.00	0.00 >	0.21
4804	SF	OBL	46	01/17/89	1.277	0.00 >	320.00	0.00 >	9.45
4804	VE	OB9	46	01/16/89	0.879	0.00 >	320.00	0.00 >	0.03
4804	YF	OAX	46	01/16/89	0.805	0.00 >	320.00	0.00 >	0.10
4805	JE	OAM	46	01/16/89	1.057	0.00 >	320.00	0.00	0.00
4805	PT	OBY	46	01/17/89	1.013	0.00 >	320.00	0.00 >	10.43
4805	SF	OBM	46	01/17/89	0.613	0.00 >	320.00	0.00	0.00
4805	VE	OBA	46	01/16/89	0.827	0.00 >	320.00	0.00	0.00
4805	YF	OAY	46	01/16/89	0.873	0.00 >	320.00	0.00	0.00
4306	JE	OAM	46	01/16/89	1.057	0.00	170.00	0.00	0.05
4806	PT	OBY	46	01/17/89	1.013	0.00 >	320.00	0.00 >	4.32
4806	SF	OBM	46	01/17/89	0.613	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4806	VE	OBA	46	01/16/89	0.827	0.00	137.00	0.00	0.31
4806	YF	OAY	46	01/16/89	0.873	0.00	273.00	0.00	0.00
4807	JE	OAN	46	01/16/89	1.151	0.00	38.60	0.00	0.00
4807	PT	OBZ	46	01/17/89	0.992	0.00	124.00	0.00	2.86
4807	SF	OBN	46	01/17/89	0.447	0.00	81.80	0.00	0.00
4807	VE	OBB	46	01/16/89	0.765	0.00	32.00	0.00	0.18
4807	YF	OAZ	46	01/16/89	0.871	0.00	114.00	0.00	0.10
4808	JE	OAN	46	01/16/89	1.151	0.00	138.00	0.00	0.00
4808	PT	OBZ	46	01/17/89	0.992	0.00	176.00	0.00	0.00
4808	SF	OBN	46	01/17/89	0.447	0.00	320.00	0.00	0.00
4808	VE	OBB	46	01/16/89	0.765	0.00	134.00	0.00	0.00
4808	YF	OAZ	46	01/16/89	0.871	0.00	186.00	0.00	0.00
4809	JE	OAO	46	01/16/89	1.000	0.00	74.10	0.00	0.40
4809	JE	RLR	46	09/13/89	0.539	0.00	86.80	0.00	1.60
4809	PT	OCO	46	01/17/89	1.026	42.50	150.00	3.53	20.27
4809	SF	OBO	46	01/17/89	0.354	0.00	266.00	0.00	0.00
4809	SF	OGB	46	01/24/89	1.046	0.00	110.00	0.00	5.72
4809	VE	OBC	46	01/16/89	0.907	0.00	6.00	0.00	0.00
4809	VE	RL1	46	09/15/89	0.792	0.00	147.00	0.00	0.00
4809	YF	OBO	46	01/16/89	0.768	0.00	285.00	0.00	0.20
4809	YF	RLE	46	09/12/89	0.727	0.00	93.20	0.00	0.00
4810	JE	OAO	46	01/16/89	1.000	0.00	10.40	0.00	0.00
4810	PT	OCO	46	01/17/89	1.026	0.00	15.50	0.00	5.48
4810	SF	OBO	46	01/17/89	0.354	0.00	18.80	0.00	0.00
4810	SF	OGB	46	01/24/89	1.046	0.00	11.70	0.00	2.00
4810	VE	OBC	46	01/16/89	0.907	0.00	13.70	0.00	0.00
4810	YF	OBO	46	01/16/89	0.768	0.00	16.90	0.00	0.00
4811	JE	OAP	46	01/16/89	1.004	0.00	135.00	0.00	0.00
4811	PT	OC1	46	01/17/89	1.000	0.00	212.00	0.00	2.23
4811	SF	OBP	46	01/17/89	0.549	0.00	320.00	0.00	0.00
4811	SF	OGC	46	01/24/89	1.134	0.00	223.00	0.00	0.76
4811	VE	OBD	46	01/16/89	0.844	0.00	215.00	0.00	0.00
4811	YF	OBI	46	01/16/89	0.782	0.00	304.00	0.00	0.00
4812	JE	OAP	46	01/16/89	1.004	0.00	320.00	0.00	0.00
4812	PT	OC1	46	01/17/89	1.000	0.00	320.00	0.00	1.35
4812	SF	OBP	46	01/17/89	0.549	0.00	320.00	0.00	0.00
4812	SF	OGC	46	01/24/89	1.134	0.00	320.00	0.00	0.28
4812	VE	OBD	46	01/16/89	0.844	0.00	320.00	0.00	0.00
4812	YF	OBI	46	01/16/89	0.782	0.00	320.00	0.00	0.07
4813	JE	OAP	46	01/16/89	0.956	0.00	320.00	0.00	0.00
4813	JE	OIZ	48	01/31/89	0.511	0.00	320.00	0.00	0.20
4813	PT	OC2	46	01/17/89	0.930	0.00	320.00	0.00	12.13
4813	PT	OJN	48	02/01/89	1.121	0.00	320.00	0.00	6.41
4813	SF	OBQ	46	01/17/89	0.549	0.00	320.00	0.00	0.00
4813	SF	OGD	46	01/24/89	1.181	0.00	204.00	0.00	4.35
4813	SF	OJB	48	02/01/89	1.259	0.00	320.00	0.00	5.67
4813	VE	OBE	46	01/16/89	0.849	0.00	278.00	0.00	0.00
4813	VE	OIB	48	01/31/89	0.968	0.00	320.00	0.00	0.23
4813	YF	OB2	46	01/16/89	0.759	0.00	320.00	0.00	0.00
4813	YF	OIN	48	01/31/89	0.945	0.00	320.00	0.00	0.00
4814	JE	OJO	48	01/31/89	0.737	0.00	15.70	0.00	0.00
4814	PT	OJO	48	02/01/89	1.069	0.00	11.80	0.00	0.38
4814	SF	OJC	48	02/01/89	1.224	0.00	13.20	0.00	1.06
4814	VE	OIC	48	01/31/89	0.850	0.00	20.60	0.00	0.36
4814	YF	OIO	48	01/31/89	0.962	0.00	18.80	0.00	0.00
4815	JE	OJO	48	01/31/89	0.737	0.00	135.00	0.00	0.00
4815	PT	OJO	48	02/01/89	1.069	0.00	131.00	0.00	0.31
4815	SF	OJC	48	02/01/89	1.224	0.00	93.80	0.00	0.00
4815	VE	OIC	48	01/31/89	0.850	0.00	81.50	0.00	0.00
4815	YF	OIO	48	01/31/89	0.962	0.00	111.00	0.00	0.00
4816	JE	OJ1	48	01/31/89	0.670	0.00	110.00	0.00	0.20
4816	PT	OJP	48	02/01/89	1.119	0.00	72.50	0.00	0.00
4816	SF	OJD	48	02/01/89	1.165	0.00	91.80	0.00	4.30
4816	VE	OID	48	01/31/89	0.715	0.00	320.00	0.00	0.00
4816	YF	OIP	48	01/31/89	0.934	0.00	96.00	0.00	0.00
4817	JE	OJ1	48	01/31/89	0.670	0.00	111.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
4817	PT	OJP	48	02/01/89	1.119	0.00	81.80	0.00	0.00
4817	SF	OJD	48	02/01/89	1.165	0.00	41.70	0.00 >	1.64
4817	VE	OID	48	01/31/89	0.715	0.00	82.40	0.00	0.12
4817	YF	OIP	48	01/31/89	0.934	0.00	92.60	0.00	0.00
4818	JE	OJ2	48	01/31/89	0.691	0.00 >	320.00	0.00	0.11
4818	PT	OJQ	48	02/01/89	1.147	0.00 >	320.00	0.00 >	1.51
4818	SF	OJE	48	02/01/89	1.042	0.00	311.00	0.00 >	0.53
4818	VE	OIE	48	01/31/89	0.803	0.00	204.00	0.00	0.00
4818	YF	OIQ	48	01/31/89	0.937	0.00 >	320.00	0.00	0.00
4819	JE	OJ2	48	01/31/89	0.691	0.00	252.00	0.00	0.00
4819	PT	OJQ	48	02/01/89	1.147	0.00	139.00	0.00	0.10
4819	SF	OJE	48	02/01/89	1.042	0.00	119.00	0.00	0.10
4819	VE	OIE	48	01/31/89	0.803	0.00	137.00	0.00	0.00
4819	YF	OIQ	48	01/31/89	0.937	0.00	137.00	0.00 >	0.10
4820	JE	OJ3	48	01/31/89	0.688	0.00	91.00	0.00	0.00
4820	PT	OJR	48	02/01/89	1.167	0.00	96.80	0.00 >	1.20
4820	SF	OJF	48	02/01/89	1.080	0.00	93.70	0.00 >	0.80
4820	VE	OIF	48	01/31/89	0.945	0.00	91.10	0.00	0.00
4820	YF	OIR	48	01/31/89	0.966	0.00	94.70	0.00 >	0.05
4821	JE	OJ3	48	01/31/89	0.688	0.00	121.00	0.00	0.00
4821	PT	OJR	48	02/01/89	1.167	0.00	59.20	0.00	0.62
4821	SF	OJF	48	02/01/89	1.080	0.00	27.70	0.00 >	0.70
4821	VE	OIF	48	01/31/89	0.945	0.00	59.20	0.00	0.00
4821	YF	OIR	48	01/31/89	0.966	0.00	61.60	0.00	0.00
4822	JE	OJ4	48	01/31/89	0.766	0.00	34.20	0.00	0.00
4822	JE	RLR	48	09/13/89	0.539	0.00	9.74	0.00 >	0.40
4822	PT	OJS	48	02/01/89	1.240	4.76	38.60	8.12	34.34
4822	SF	CJG	48	02/01/89	1.057	4.44	106.00	23.80 >	42.28
4822	VE	OIG	48	01/31/89	0.999	0.00	21.90	0.00	0.00
4822	VE	RL1	48	09/15/89	0.792	0.00	106.00	0.00 >	11.82
4822	VV	049	48	05/18/89	1.925	0.00	180.00	0.00	0.17
4822	VV	08V	48	07/27/89	1.392	0.00	187.00	0.00 >	15.41
4822	YF	OIS	48	01/31/89	0.970	0.00	45.80	0.00 >	0.80
4822	YF	RLF	48	09/12/89	0.727	0.00	32.00	0.00 >	2.38
4823	JE	OMB	48	02/13/89	0.970	0.00	37.20	0.00	0.00
4823	PT	OMQ	48	02/14/89	0.396	0.00	91.70	0.00	0.04
4823	SF	OMV	48	02/14/89	1.192	0.00	48.60	0.00 >	0.01
4823	VE	OML	48	02/13/89	0.916	0.00	46.00	0.00	0.12
4823	YF	OMG	48	02/13/89	1.068	0.00	86.90	0.00	0.04
4824	JE	OMC	48	02/13/89	0.869	0.00 >	320.00	0.00	0.00
4824	PT	OMR	48	02/14/89	0.475	0.00 >	320.00	0.00 >	19.91
4824	SF	OMW	48	02/14/89	1.201	0.00 >	320.00	0.00	0.00
4824	VE	OMM	48	02/13/89	0.856	0.00 >	320.00	0.00	0.40
4824	YF	OMH	48	02/13/89	1.072	0.00 >	320.00	0.00	0.11
4825	JE	OMC	48	02/13/89	0.869	0.00	2.71	0.00	0.00
4825	JE	RLS	48	09/13/89	0.624	0.00	212.00	0.00 >	2.66
4825	PT	OMR	48	02/14/89	0.475	3.40	107.00	1.57	12.84
4825	SF	OMW	48	02/14/89	1.201	0.00	86.20	0.00 >	4.90
4825	VE	OMM	48	02/13/89	0.856	0.00 >	320.00	0.00 >	0.00
4825	VE	RL2	48	09/15/89	0.773	0.00 >	320.00	0.00 >	2.10
4825	YF	OMH	48	02/13/89	1.072	0.00	121.00	0.00	0.64
4825	YF	RLF	48	09/12/89	0.694	0.00	110.00	0.00 >	0.79
4826	JE	OMD	48	02/13/89	0.963	0.00	6.29	0.00	0.00
4826	PT	OMS	48	02/14/89	0.337	0.00	18.80	0.00	1.39
4826	SF	OMX	48	02/14/89	1.221	0.00	11.30	0.00	0.00
4826	VE	OMN	48	02/13/89	0.922	0.00	13.90	0.00 >	0.51
4826	YF	OMI	48	02/13/89	1.089	0.00	15.20	0.00	0.30
4827	JE	OMD	48	02/13/89	0.963	0.00	3.03	0.00	0.00
4827	JE	RLS	48	09/13/89	0.624	0.00 >	320.00	0.00 >	4.27
4827	PT	OMS	48	02/14/89	0.337	12.70 >	320.00 >	25.10 >	43.84
4827	SF	OMX	48	02/14/89	1.221	241.00 >	320.00 >	1.33 >	10.23
4827	VE	OMN	48	02/13/89	0.922	0.00 >	320.00	0.00 >	1.20
4827	VE	RL2	48	09/15/89	0.773	0.00 >	320.00	0.00 >	0.40
4827	YF	OMI	48	02/13/89	1.089	0.00	172.00	0.00	0.00
4827	YF	RLF	48	09/12/89	0.694	0.00 >	320.00	0.00	0.00
4828	JE	OME	48	02/13/89	1.017	0.00	10.60	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4828	PT	OMT	48	02/14/89	0.409	0.00	110.00	0.00	19.68
4828	SF	OMY	48	02/14/89	1.222	0.00	23.80	0.00	0.00
4828	VE	OMO	48	02/13/89	0.920	0.00	43.30	0.00	0.35
4828	YF	OMJ	48	02/13/89	1.128	0.00	82.20	0.00	0.00
4829	JE	OME	48	02/13/89	1.017	0.00 <	1.00	0.00	0.00
4829	JE	RLT	48	09/13/89	0.615	0.00 >	320.00	0.00 >	3.89
4829	PT	OMT	48	02/14/89	0.409	10.00 >	320.00 >	32.00 >	36.95
4829	SF	OMY	48	02/14/89	1.222	252.00 >	320.00 >	1.27 >	10.11
4829	VE	OMO	48	02/13/89	0.920	0.00 >	320.00	0.00	0.60
4829	VE	RL3	48	09/15/89	0.761	0.00 >	320.00	0.00 >	1.41
4829	YF	OMJ	48	02/13/89	1.128	0.00	175.00	0.00	0.00
4829	YF	RLG	48	09/12/89	0.751	0.00 >	320.00	0.00	0.00
4830	JE	ONO	48	02/14/89	1.211	0.00	1.31	0.00	0.00
4830	PT	ONF	48	02/15/89	0.992	0.00	61.80	0.00	0.00
4830	SF	ONK	48	02/15/89	1.234	0.00	68.50	0.00	0.00
4830	VE	ONA	48	02/14/89	0.879	0.00	120.00	0.00 >	0.00
4830	YF	ON5	48	02/14/89	1.215	0.00	106.00	0.00	0.00
4831	JE	ON1	48	02/14/89	1.160	0.00	3.65	0.00	0.00
4831	PT	ONG	48	02/15/89	0.947	0.00	92.40	0.00	0.76
4831	SF	ONL	48	02/15/89	1.229	0.00	143.00	0.00	0.00
4831	VE	ONB	48	02/14/89	0.848	0.00 >	320.00	0.00	0.00
4831	YF	ON6	48	02/14/89	1.097	0.00	139.00	0.00	0.32
4832	JE	ON1	48	02/14/89	1.160	0.00	1.00	0.00	0.00
4832	PT	ONG	48	02/15/89	0.947	0.00	92.70	0.00	0.00
4832	SF	ONL	48	02/15/89	1.229	0.00	76.00	0.00	0.00
4832	VE	ONB	48	02/14/89	0.848	0.00	150.00	0.00	0.00
4832	YF	ON6	48	02/14/89	1.097	0.00	98.90	0.00	0.00
4833	JE	ON2	48	02/14/89	1.162	0.00 >	320.00	0.00	0.00
4833	PT	ONH	48	02/15/89	0.934	0.00 >	320.00	0.00	0.00
4833	SF	ONM	48	02/15/89	1.193	0.00 >	320.00	0.00	0.00
4833	VE	ONC	48	02/14/89	0.882	0.00 >	320.00	0.00	0.00
4833	YF	ON7	48	02/14/89	1.071	0.00 >	320.00	0.00	0.32
4834	JE	ON2	48	02/14/89	1.162	0.00	2.35	0.00	0.00
4834	PT	ONH	48	02/15/89	0.934	0.00	87.30	0.00	0.00
4834	SF	ONM	48	02/15/89	1.193	0.00	87.60	0.00	0.00
4834	VE	ONC	48	02/14/89	0.882	0.00	118.00	0.00	0.00
4834	YF	ON7	48	02/14/89	1.071	0.00	125.00	0.00	0.48
4835	JE	ON3	48	02/14/89	1.169	0.00	41.90	0.00	0.00
4835	PT	ONI	48	02/15/89	0.964	0.00	99.40	0.00	0.04
4835	SF	ONN	48	02/15/89	1.102	0.00	85.20	0.00	0.00
4835	VE	OND	48	02/14/89	0.830	0.00	128.00	0.00	0.00
4835	YF	ON8	48	02/14/89	0.958	0.00	134.00	0.00	0.40
4836	JE	ON3	48	02/14/89	1.169	0.00	21.00	0.00	0.00
4836	PT	ONI	48	02/15/89	0.964	0.00	86.80	0.00	0.00
4836	SF	ONN	48	02/15/89	1.102	0.00	77.70	0.00	0.00
4836	VE	OND	48	02/14/89	0.830	0.00	133.00	0.00	0.43
4836	VV	OO1	48	12/29/88	1.811	0.00	110.00	0.00	0.00
4836	YF	ON8	48	02/14/89	0.958	0.00	144.00	0.00	0.00
4837	JE	OP5	48	02/20/89	0.448	0.00 >	320.00	0.00 >	17.28
4837	PT	OPD	48	02/21/89	0.633	0.00 >	320.00	0.00 >	9.95
4837	SF	OPL	48	02/21/89	1.179	0.00	160.00	0.00	0.00
4837	VE	OOP	48	02/20/89	0.873	0.00	237.00	0.00	0.11
4837	YF	OOX	48	02/20/89	1.273	0.00	256.00	0.00	0.00
4838	JE	OP6	48	02/20/89	0.602	0.00 >	320.00	0.00 >	11.70
4838	PT	OPE	48	02/21/89	0.442	0.00 >	320.00	0.00 >	14.79
4838	SF	OPM	48	02/21/89	1.004	0.00 >	320.00	0.00	0.04
4838	VE	OOQ	48	02/20/89	0.879	0.00 >	320.00	0.00 >	0.00
4838	YF	OOY	48	02/20/89	1.289	0.00 >	320.00	0.00	0.00
4839	JE	OP6	48	02/20/89	0.602	0.00 >	320.00	0.00 >	7.39
4839	PT	OPE	48	02/21/89	0.442	0.00	274.00	0.00	4.22
4839	SF	OPM	48	02/21/89	1.004	0.00	160.00	0.00 >	0.32
4839	VE	OOQ	48	02/20/89	0.879	0.00	134.00	0.00	0.00
4839	VV	OO2	48	12/29/88	1.708	0.00	115.00	0.00	0.00
4839	YF	OOY	48	02/20/89	1.289	0.00	147.00	0.00	0.00
4840	JE	OP7	48	02/20/89	0.633	0.00	172.00	0.00 >	5.20
4840	PT	OPF	48	02/21/89	0.503	0.00	61.70	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4840	SF	OPN	48	02/21/89	0.957	0.00	99.70	0.00	0.00
4840	VE	00R	48	02/20/89	0.852	0.00	145.00	0.00 >	0.00
4840	VV	002	48	12/29/88	1.708	0.00	324.00	0.00 >	0.22
4840	YF	00Z	48	02/20/89	1.179	0.00	123.00	0.00	0.00
4841	JE	OP7	48	02/20/89	0.630	0.00	259.00	0.00 >	5.70
4841	PT	OPF	48	02/21/89	0.503	0.00	45.40	0.00	1.20
4841	SF	OPN	48	02/21/89	0.957	0.00	139.00	0.00	0.00
4841	VE	00R	48	02/20/89	0.852	0.00	96.60	0.00	0.00
4841	VV	003	48	12/29/88	1.902	0.00	1.00	0.00	0.00
4841	YF	00Z	48	02/20/89	1.179	0.00	112.00	0.00	0.00
4842	JE	OP8	48	02/20/89	0.646	0.00	26.30	0.00 >	1.20
4842	PT	OPG	48	02/21/89	0.377	0.00	20.60	0.00	0.00
4842	SF	OPQ	48	02/21/89	1.053	0.00	24.70	0.00	0.00
4842	VE	00S	48	02/20/89	0.881	0.00	21.60	0.00 >	0.01
4842	VV	003	48	12/29/88	1.902	0.00 <	1.00	0.00	0.00
4842	VV	022	48	03/23/89	1.596	0.00	7.09	0.00 >	1.80
4842	YF	OP0	48	02/20/89	1.199	0.00	21.00	0.00	0.00
4843	JE	OP8	48	02/20/89	0.646	0.00 >	320.00	0.00 >	6.59
4843	PT	OPG	48	02/21/89	0.377	160.00 >	320.00 >	2.00 >	9.93
4843	SF	OP0	48	02/21/89	1.053	0.00 >	320.00	0.00 >	0.11
4843	VE	00S	48	02/20/89	0.881	0.00	165.00	0.00	0.00
4843	VV	004	48	12/29/88	1.944	0.00	16.50	0.00	0.00
4843	YF	OP0	48	02/20/89	1.199	0.00 >	320.00	0.00	0.00
4844	JE	OP9	48	02/20/89	0.639	0.00 >	320.00	0.00 >	9.10
4844	PT	OPH	48	02/21/89	0.531	161.00 >	320.00 >	1.98 >	14.30
4844	SF	OPP	48	02/21/89	1.186	0.00 >	320.00	0.00 >	7.39
4844	VE	00T	48	02/20/89	0.931	0.00	285.00	0.00	0.15
4844	VV	004	48	12/29/88	1.944	0.00	88.70	0.00	0.00
4844	YF	OP1	48	02/20/89	1.071	0.00 >	320.00	0.00	0.00
4845	JE	OP9	48	02/20/89	0.639	0.00	82.60	0.00 >	3.80
4845	PT	OPH	48	02/21/89	0.531	0.00	8.87	0.00	0.00
4845	SF	OPP	48	02/21/89	1.186	0.00	60.80	0.00 >	2.40
4845	VE	00T	48	02/20/89	0.931	0.00	102.00	0.00	0.00
4845	VV	005	48	12/29/88	1.842	0.00	57.70	0.00	0.00
4845	YF	OP1	48	02/20/89	1.071	0.00	30.70	0.00	0.00
4846	JE	OPA	48	02/20/89	0.589	0.00 >	320.00	0.00 >	7.49
4846	PT	OPI	48	02/21/89	0.423	0.00 >	320.00	0.00	0.00
4846	SF	OPQ	48	02/21/89	1.020	0.00 >	320.00	0.00	0.00
4846	VE	00U	48	02/20/89	0.911	0.00	226.00	0.00 >	0.90
4846	VV	005	48	12/29/88	1.842	0.00	320.00	0.00	0.00
4846	YF	OP2	48	02/20/89	1.164	0.00 >	320.00	0.00	0.00
4847	JE	OPA	48	02/20/89	0.589	0.00 >	320.00	0.00 >	7.59
4847	PT	OPI	48	02/21/89	0.423	0.00 >	320.00	0.00 >	0.01
4847	SF	OPQ	48	02/21/89	1.020	0.00 >	320.00	0.00	1.11
4847	VE	00U	48	02/20/89	0.911	0.00 >	320.00	0.00 >	0.51
4847	VV	006	48	12/29/88	1.622	0.00	308.00	0.00 >	0.01
4847	YF	OP2	48	02/20/89	1.164	0.00 >	320.00	0.00	0.00
4848	JE	OQP	48	02/21/89	0.516	0.00 >	320.00	0.00 >	0.20
4848	PT	OPT	48	02/22/89	0.429	3.09 >	320.00 >	104.00 >	64.54
4848	SF	OQ1	48	02/22/89	1.012	0.00 >	320.00	0.00	1.40
4848	VE	OQ9	48	02/21/89	0.978	0.00 >	320.00	0.00	0.00
4848	VV	006	48	12/29/88	1.622	0.00 >	320.00	0.00	0.00
4848	YF	OQH	48	02/21/89	1.246	0.00 >	320.00	0.00	0.00
4849	JE	OQQ	48	02/21/89	0.499	0.00 >	320.00	0.00	0.20
4849	PT	OPT	48	02/22/89	0.435	1.34 >	320.00 >	239.00 >	47.35
4849	SF	OQ2	48	02/22/89	0.934	0.00 >	320.00	0.00 >	0.23
4849	VE	OQA	48	02/21/89	0.993	0.00 >	320.00	0.00	0.00
4849	VV	007	48	12/29/88	1.822	151.00 >	320.00 >	2.11 >	11.36
4849	YF	OQI	48	02/21/89	1.206	0.00 >	320.00	0.00 >	0.81
4850	JE	OQQ	48	02/21/89	0.499	0.00	141.00	0.00	0.00
4850	PT	OPU	48	02/22/89	0.435	2.30	134.00	58.30 >	29.33
4850	SF	OQ2	48	02/22/89	0.934	0.00	92.50	3.00 >	0.78
4850	VE	OQA	48	02/21/89	0.993	0.00	43.20	0.00	0.00
4850	VV	007	48	12/29/88	1.822	0.00	48.60	0.00	0.00
4850	YF	OQI	48	02/21/89	1.206	0.00	130.00	0.00	0.24
4851	JE	OQR	48	02/21/89	0.638	0.00 >	320.00	0.00	0.30

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4851	PT	OPV	48	02/22/89	0.591	1.47 >	320.00 >	217.00 >	53.33
4851	SF	OQ3	48	02/22/89	0.820	0.00	299.00	0.00	0.00
4851	VE	OQB	48	02/21/89	1.006	0.00	282.00	0.00	0.00
4851	VV	008	48	12/29/88	1.903	0.00 >	320.00	0.00 >	0.13
4851	YF	OQJ	48	02/21/89	1.214	0.00 >	320.00	0.00 >	0.10
4852	JE	OQR	48	02/21/89	0.638	0.00	4.43	0.00	0.00
4852	PT	OPV	48	02/22/89	0.591	0.00	9.33	0.00 >	10.16
4852	SF	OQ3	48	02/22/89	0.820	0.00	13.00	0.00	0.00
4852	VE	OQB	48	02/21/89	1.006	47.80	3.88	0.08	0.32
4852	VV	008	48	12/29/88	1.903	0.00	8.93	0.00	0.00
4852	YF	OQJ	48	02/21/89	1.214	0.00	12.80	0.00	0.00
4853	JE	OQS	48	02/21/89	0.654	0.00	4.56	0.00	0.00
4853	PT	OPW	48	02/22/89	0.454	1.73	4.36	2.52 >	13.74
4853	SF	OQ4	48	02/22/89	0.983	0.00	8.49	0.00 >	10.57
4853	VE	OQC	48	02/21/89	0.941	0.00	5.17	0.00 >	0.56
4853	VV	009	48	12/29/88	1.903	0.00	11.30	0.00	0.00
4853	YF	OQK	48	02/21/89	1.221	0.00	7.09	0.00 >	0.64
4854	JE	OQS	48	02/21/89	0.654	0.00	10.60	0.00	0.00
4854	PT	OPW	48	02/22/89	0.454	0.00	12.40	0.00 >	5.76
4854	SF	OQ4	48	02/22/89	0.983	0.00	19.40	0.00 >	6.47
4854	VE	OQC	48	02/21/89	0.941	0.00	9.35	0.00	0.00
4854	VV	009	48	12/29/88	1.903	0.00	20.40	0.00	0.00
4854	YF	OQK	48	02/21/89	1.221	0.00	22.40	0.00	0.00
4855	JE	OQT	48	02/21/89	0.598	4.79	112.00	23.40 >	59.97
4855	JE	RLT	48	09/13/89	0.615	11.10 >	320.00 >	28.79 >	62.10
4855	PT	OPX	48	02/22/89	0.470	5.08	104.00	20.50 >	60.96
4855	SF	OQ5	48	02/22/89	0.808	19.50	122.00	6.23	37.03
4855	VE	OQD	48	02/21/89	0.913	0.00	23.50	0.00	0.00
4855	VE	OVK	48	03/03/89	0.914	0.00	26.50	0.00 >	0.27
4855	VE	RL3	48	09/15/89	0.761	0.00	52.20	0.00	9.08
4855	VV	010	48	12/29/88	1.799	9.00 >	10.00 >	1.10 >	14.00
4855	YF	OQL	48	02/21/89	1.222	20.00	80.80	4.04 >	34.86
4855	YF	RLG	48	09/12/89	0.751	13.40 >	320.00 >	23.82 >	55.28
4856	JE	OQT	48	02/21/89	0.598	0.00 >	320.00	0.00	0.20
4856	PT	OPX	48	02/22/89	0.470	0.00 >	320.00	0.00 >	18.99
4856	SF	OQ5	48	02/22/89	0.808	0.00 >	320.00	0.00	4.54
4856	VE	OQD	48	02/21/89	0.913	0.00 >	320.00	0.00	0.00
4856	VE	OVL	48	03/03/89	1.015	0.00 >	320.00	0.00 >	0.43
4856	YF	OQL	48	02/21/89	1.222	0.00 >	320.00	0.00	0.00
4857	JE	OQU	48	02/21/89	0.565	0.00 >	320.00	0.00 >	0.40
4857	PT	OPY	48	02/22/89	0.464	0.00 >	320.00	0.00 >	33.30
4857	SF	OQ6	48	02/22/89	0.799	0.00 >	320.00	0.00 >	3.40
4857	VE	OQE	48	02/21/89	0.930	0.00 >	320.00	0.00	0.00
4857	YF	OQM	48	02/21/89	1.204	0.00 >	320.00	0.00	0.00
4858	JE	OQU	48	02/21/89	0.565	0.00	68.40	0.00	0.00
4858	PT	OPY	48	02/22/89	0.464	0.00	54.70	0.00 >	10.40
4858	SF	OQ6	48	02/22/89	0.799	0.00	48.30	0.00	0.40
4858	VE	OQE	48	02/21/89	0.930	0.00	42.60	0.00	0.00
4858	YF	OQM	48	02/21/89	1.204	0.00	25.40	0.00	0.00
4859	JE	OPB	48	02/20/89	0.559	0.00	45.20	0.00 >	2.60
4859	PT	OPJ	48	02/21/89	0.444	0.00	26.70	0.00 >	7.04
4859	SF	OPR	48	02/21/89	0.993	81.40	88.20	1.08 >	4.67
4859	VE	OOV	48	02/20/89	0.923	0.00	68.20	0.00 >	0.85
4859	YF	OP3	48	02/20/89	1.141	0.00	72.70	0.00	0.00
4860	JE	OPB	48	02/20/89	0.559	0.00 >	320.00	0.00 >	9.69
4860	PT	OPJ	48	02/21/89	0.444	285.00 >	320.00 >	1.12 >	15.55
4860	SF	OPR	48	02/21/89	0.993	0.00 >	320.00	0.00 >	1.00
4860	VE	OOV	48	02/20/89	0.923	0.00 >	320.00	0.00 >	0.50
4860	YF	OP3	48	02/20/89	1.141	0.00 >	320.00	0.00	0.00
4861	JE	OQV	48	02/21/89	0.477	0.00 >	320.00	0.00	0.00
4861	PT	OPZ	48	02/22/89	0.401	6.80 >	320.00 >	47.10 >	50.93
4861	SF	OQ7	48	02/22/89	0.798	0.00 >	320.00	0.00 >	10.58
4861	VE	OQF	48	02/21/89	0.923	0.00 >	320.00	0.00 >	0.20
4861	YF	OQN	48	02/21/89	1.214	0.00 >	320.00	0.00	2.29
4862	JE	OQV	48	02/21/89	0.477	0.00 >	320.00	0.00	0.80
4862	PT	OPZ	48	02/22/89	0.401	0.00 >	320.00	0.00 >	32.88

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4862	SF	OQ7	48	02/22/89	0.798	0.00	> 320.00	0.00	0.00
4862	VE	OQF	48	02/21/89	0.923	0.00	> 320.00	0.00	0.00
4862	YF	OQN	48	02/21/89	1.214	0.00	141.00	0.00	0.00
4863	JE	OQW	48	02/21/89	0.747	0.00	80.80	0.00	0.00
4863	JE	RLU	48	09/13/89	0.550	0.00	172.00	0.00	0.00
4863	PT	OQ0	48	02/22/89	0.405	1.09	140.00	129.00	> 50.97
4863	SF	OQ8	48	02/22/89	0.772	0.00	167.00	0.00	> 0.30
4863	VE	OQG	48	02/21/89	1.008	0.00	142.00	0.00	> 0.54
4863	VE	RL4	48	09/15/89	0.796	0.00	204.00	0.00	> 2.30
4863	YF	OQO	48	02/21/89	1.273	0.00	114.00	0.00	0.00
4863	YF	RLH	48	09/12/89	0.774	0.00	195.00	0.00	> 0.06
4864	JE	OAQ	46	01/16/89	0.956	0.00	252.00	0.00	2.54
4864	PT	OC2	46	01/17/89	0.930	0.00	274.00	0.00	> 2.69
4864	SF	OBQ	46	01/17/89	0.549	0.00	> 320.00	0.00	0.00
4864	SF	OGD	46	01/24/89	1.181	0.00	242.00	0.00	0.78
4864	VE	OBE	46	01/16/89	0.849	0.00	> 320.00	0.00	> 0.01
4864	YF	OB2	46	01/16/89	0.759	0.00	225.00	0.00	0.00
4865	JE	OAR	46	01/16/89	0.960	0.00	> 320.00	0.00	> 9.02
4865	PT	OC3	46	01/17/89	0.904	0.00	> 320.00	0.00	> 2.91
4865	SF	OBR	46	01/17/89	0.418	0.00	> 320.00	0.00	0.00
4865	SF	OGE	46	01/24/89	1.167	0.00	161.00	0.00	1.95
4865	VE	OBF	46	01/16/89	0.802	0.00	> 320.00	0.00	0.15
4865	YF	OB3	46	01/16/89	0.604	0.00	> 320.00	0.00	1.60
4866	JE	OIY	46	01/31/89	0.703	0.00	> 320.00	0.00	0.00
4866	PT	OJM	46	02/01/89	1.190	0.00	> 320.00	0.00	1.65
4866	SF	OJA	46	02/01/89	1.108	0.00	> 320.00	0.00	> 4.51
4866	VE	OIA	46	01/31/89	1.002	0.00	> 320.00	0.00	0.00
4866	YF	OIM	46	01/31/89	1.002	0.00	> 320.00	0.00	0.40
4871	JE	OAR	46	01/16/89	0.960	0.00	282.00	0.00	5.41
4871	PT	OC3	46	01/17/89	0.904	44.60	189.00	4.23	21.31
4871	SF	OBR	46	01/17/89	0.418	21.10	230.00	10.90	25.65
4871	SF	OGE	46	01/24/89	1.167	22.10	151.00	6.82	21.39
4871	VE	OBF	46	01/16/89	0.802	50.90	203.00	3.99	> 19.83
4871	YF	OB3	46	01/16/89	0.694	0.00	> 320.00	0.00	0.28
4872	JE	OAS	46	01/16/89	0.937	0.00	157.00	0.00	0.00
4872	PT	OC4	46	01/17/89	0.928	0.00	193.00	0.00	> 0.05
4872	SF	OBS	46	01/17/89	0.499	0.00	306.00	0.00	0.00
4872	SF	OGF	46	01/24/89	1.148	0.00	73.80	0.00	> 1.34
4872	VE	OBG	46	01/16/89	0.769	0.00	> 320.00	0.00	0.00
4872	YF	OB4	46	01/16/89	0.752	0.00	157.00	0.00	0.84
4873	JE	OAS	46	01/16/89	0.937	0.00	198.00	0.00	0.00
4873	PT	OC4	46	01/17/89	0.928	0.00	191.00	0.00	> 0.72
4873	SF	OBS	46	01/17/89	0.499	0.00	96.80	0.00	0.00
4873	SF	OGF	46	01/24/89	1.148	0.00	128.00	0.00	> 0.91
4873	VE	OBG	46	01/16/89	0.769	0.00	194.00	0.00	0.00
4873	YF	OB4	46	01/16/89	0.752	0.00	144.00	0.00	0.36
4874	JE	OAT	46	01/16/89	1.000	0.00	> 320.00	0.00	> 0.60
4874	PT	OC5	46	01/17/89	0.999	0.00	> 320.00	0.00	2.15
4874	SF	OBT	46	01/17/89	0.599	0.00	> 320.00	0.00	0.00
4874	SF	OGG	46	01/24/89	1.214	0.00	> 320.00	0.00	> 1.50
4874	VE	OBH	46	01/16/89	0.754	0.00	> 320.00	0.00	0.00
4874	YF	OB5	46	01/16/89	0.659	0.00	> 320.00	0.00	0.00
4875	JE	OC6	46	01/17/89	1.166	0.00	> 320.00	0.00	0.00
4875	PT	OD6	46	01/19/89	1.354	0.00	> 320.00	0.00	> 13.61
4875	SF	ODI	46	01/18/89	1.142	64.90	> 320.00	> 4.93	> 33.29
4875	VE	OCU	46	01/17/89	1.012	0.00	> 320.00	0.00	0.00
4875	YF	OCI	46	01/17/89	1.632	0.00	317.00	0.00	0.53
4876	JE	OC7	46	01/17/89	1.072	0.00	> 320.00	0.00	0.00
4876	JE	SIQ	46	10/10/89	1.217	0.00	> 1000	0.00	0.00
4876	PT	OD7	46	01/19/89	1.386	0.00	> 320.00	0.00	> 0.00
4876	SF	ODJ	46	01/18/89	1.182	0.00	> 320.00	0.00	> 19.35
4876	VE	OCV	46	01/17/89	0.937	0.00	> 320.00	0.00	0.40
4876	YF	OCJ	46	01/17/89	1.554	0.00	> 320.00	0.00	0.00
4877	JE	OC7	46	01/17/89	1.072	0.00	66.50	0.00	0.00
4877	PT	OD7	46	01/19/89	1.386	0.00	168.00	0.00	0.00
4877	SF	ODJ	46	01/18/89	1.182	0.00	115.00	0.00	> 9.44

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4877	VE	OCV	46	01/17/89	0.937	0.00	61.50	0.00	0.00
4877	YF	OCJ	46	01/17/89	1.554	0.00	94.20	0.00	0.00
4878	JE	OC8	46	01/17/89	1.097	0.00 >	320.00	0.00	7.00
4878	PT	OD8	46	01/19/89	1.306	0.00 >	320.00	0.00	2.40
4878	SF	ODK	46	01/18/89	1.111	0.00 >	320.00	0.00 >	5.63
4878	VE	OCW	46	01/17/89	0.919	0.00	291.00	0.00	0.00
4878	YF	OCK	46	01/17/89	1.604	0.00 >	320.00	0.00	0.00
4879	JE	OC8	46	01/17/89	1.037	0.00 >	320.00	0.00	0.00
4879	PT	OD8	46	01/19/89	1.306	0.00 >	320.00	0.00	0.20
4879	SF	ODK	46	01/18/89	1.111	0.00 >	320.00	0.00 >	8.69
4879	VE	OCW	46	01/17/89	0.919	0.00 >	320.00	0.00	0.00
4879	YF	OCK	46	01/17/89	1.604	0.00 >	320.00	0.00	0.00
4880	JE	OC9	46	01/17/89	0.983	0.00	82.00	0.00	0.00
4880	PT	OD9	46	01/17/89	1.294	0.00	104.00	0.00	0.00
4880	SF	ODL	46	01/18/89	1.161	0.00	87.00	0.00 >	7.96
4880	VE	OCX	46	01/17/89	0.921	0.00	94.20	0.00	0.00
4880	YF	OCL	46	01/17/89	1.612	0.00	103.00	0.00	0.00
4881	JE	OC9	46	01/17/89	0.983	0.00	24.70	0.00	0.00
4881	PT	OD9	46	01/19/89	1.294	0.00	131.00	0.00	0.00
4881	SF	ODL	46	01/18/89	1.161	0.00	129.00	0.00 >	9.81
4881	VE	OCX	46	01/17/89	0.921	0.00	50.30	0.00	0.00
4881	YF	OCL	46	01/17/89	1.612	0.00	44.60	0.00	0.00
4882	JE	OCA	46	01/17/89	1.032	0.00	9.31	0.00	0.00
4882	PT	ODA	46	01/19/89	1.331	0.00	168.00	0.00	2.96
4882	SF	ODM	46	01/18/89	1.178	0.00	119.00	0.00 >	5.41
4882	VE	OCY	46	01/17/89	1.006	0.00	27.90	0.00	0.00
4882	YF	OCM	46	01/17/89	1.603	0.00	60.00	0.00	0.10
4883	JE	OCA	46	01/17/89	1.032	0.00	240.00	0.00	0.00
4883	PT	ODA	46	01/19/89	1.331	0.00 >	320.00	0.00	0.00
4883	SF	ODM	46	01/18/89	1.178	0.00	80.80	0.00 >	0.60
4883	VE	OCY	46	01/17/89	1.006	0.00	21.00	0.00	0.00
4883	YF	OCM	46	01/17/89	1.603	0.00	115.00	0.00	0.00
4884	JE	OCB	46	01/17/89	1.014	0.00 >	320.00	0.00	0.00
4884	PT	ODB	46	01/19/89	1.312	0.00 >	320.00	0.00	0.13
4884	SF	ODN	46	01/18/89	1.401	0.00 >	320.00	0.00 >	26.10
4884	VE	OCZ	46	01/17/89	0.990	0.00 >	320.00	0.00	0.37
4884	YF	OCN	46	01/17/89	1.441	0.00 >	320.00	0.00	0.00
4885	JE	OCB	46	01/17/89	1.014	0.00	10.70	0.00	0.00
4885	PT	ODB	46	01/19/89	1.312	0.00	31.80	0.00	0.00
4885	SF	ODN	46	01/18/89	1.401	0.00	40.70	0.00 >	13.14
4885	VE	OCZ	46	01/17/89	0.990	0.00	39.80	0.00	0.00
4885	YF	OCN	46	01/17/89	1.441	0.00	48.50	0.00	0.00
4886	JE	OCC	46	01/17/89	1.170	0.00	32.00	0.00	0.00
4886	PT	ODC	46	01/19/89	1.331	0.00	38.10	0.00	0.00
4886	SF	ODO	46	01/18/89	1.071	0.00	68.00	0.00 >	6.80
4886	VE	ODO	46	01/17/89	1.002	0.00	52.20	0.00	0.00
4886	YF	OCO	46	01/17/89	1.682	0.00	54.30	0.00	0.20
4887	JE	OCC	46	01/17/89	1.170	0.00	4.26	0.00	0.00
4887	JE	S1R	46	10/10/89	1.025	0.00 >	10.00	0.00	0.80
4887	PT	ODC	46	01/19/89	1.331	0.00	9.18	0.00	2.50
4887	SF	ODO	46	01/18/89	1.071	2.85	6.91	2.43 >	9.61
4887	VE	ODO	46	01/17/89	1.002	0.00	4.33	0.00 >	1.95
4887	YF	OCO	46	01/17/89	1.682	0.00	6.60	0.00	0.00
4888	JE	OCD	46	01/17/89	0.946	0.00 >	320.00	0.00	0.48
4888	PT	ODD	46	01/19/89	1.339	0.00 >	320.00	0.00	0.00
4888	SF	ODP	46	01/18/89	1.237	0.00 >	320.00	0.00 >	9.70
4888	VE	CD1	46	01/17/89	0.938	0.00 >	320.00	0.00	0.74
4888	YF	OCP	46	01/17/89	1.654	0.00 >	320.00	0.00	1.31
4889	JE	OCD	46	01/17/89	0.946	0.00	46.70	0.00	0.00
4889	PT	ODD	46	01/19/89	1.339	0.00	66.00	0.00	0.00
4889	SF	ODP	46	01/18/89	1.237	0.00	47.70	0.00 >	8.43
4889	VE	OD1	46	01/17/89	0.938	0.00	29.40	0.00 >	0.03
4889	YF	OCP	46	01/17/89	1.654	0.00	51.70	0.00	0.28
4890	JE	OCE	46	01/17/89	0.973	0.00	13.50	0.00	0.00
4890	PT	ODE	46	01/19/89	1.267	0.00	22.40	0.00	0.00
4890	SF	ODQ	46	01/18/89	1.265	0.00	18.50	0.00 >	2.65

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
4890	VE	OD2	46	01/17/89	0.955	0.00	11.50	0.00 >	0.01
4890	YF	OCQ	46	01/17/89	1.657	0.00	14.10	0.00 >	0.10
4891	JE	OCE	46	01/17/89	0.973	0.00 <	1.00	0.00 >	0.00
4891	PT	ODE	46	01/19/89	1.267	0.00	1.76	0.00 >	0.87
4891	SF	ODQ	46	01/18/89	1.265	< 1.00	1.29	> 1.29 >	2.72
4891	VE	OD2	46	01/17/89	0.955	0.00 <	1.00	0.00 >	0.00
4891	YF	OCQ	46	01/17/89	1.657	0.00	1.26	0.00	0.00
4892	JE	OCF	46	01/17/89	0.848	0.00	14.60	0.00	0.00
4892	PT	ODF	46	01/19/89	1.247	0.00	73.10	0.00	1.23
4892	SF	ODR	46	01/18/89	1.147	0.00	91.70	0.00 >	12.16
4892	VE	OD3	46	01/17/89	0.894	273.00	64.50	0.24 >	10.89
4892	YF	OCR	46	01/17/89	1.672	0.00	52.50	0.00	0.00
4893	JE	OCF	46	01/17/89	0.848	0.00	200.00	0.00	0.00
4893	PT	ODF	46	01/19/89	1.247	0.00 >	320.00	0.00	0.00
4893	SF	ODR	46	01/18/89	1.147	0.00 >	320.00	0.00 >	12.22
4893	VE	OD3	46	01/17/89	0.894	0.00	162.00	0.00	0.24
4893	YF	OCR	46	01/17/89	1.672	0.00 >	320.00	0.00	0.20
4894	JE	OCG	46	01/17/89	0.939	0.00	71.90	0.00	0.80
4894	PT	ODG	46	01/19/89	1.358	0.00	112.00	0.00	0.15
4894	SF	ODS	46	01/18/89	1.243	0.00	91.70	0.00 >	7.32
4894	VE	OD4	46	01/17/89	0.941	0.00	172.00	0.00	0.14
4894	YF	OCS	46	01/17/89	1.709	0.00	104.00	0.00	0.13
4895	JE	OCG	46	01/17/89	0.939	0.00	25.00	0.00	0.11
4895	PT	ODG	46	01/19/89	1.353	0.00	72.40	0.00	0.07
4895	SF	ODS	46	01/18/89	1.243	0.00	57.50	0.00 >	9.94
4895	VE	OD4	46	01/17/89	0.941	0.00	20.40	0.00	0.00
4895	YF	OCS	46	01/17/89	1.709	0.00	42.40	0.00	0.00
4896	JE	OCH	46	01/17/89	0.955	0.00	34.30	0.00	0.00
4896	PT	ODH	46	01/19/89	1.350	0.00	85.40	0.00	0.00
4896	SF	ODT	46	01/18/89	0.871	0.00	68.70	0.00 >	3.00
4896	VE	OD5	46	01/17/89	0.885	0.00	68.60	0.00 >	0.00
4896	YF	OCT	46	01/17/89	1.661	0.00	45.20	0.00 >	0.03
4897	JE	OH5	46	01/30/89	0.765	0.00	7.07	0.00	2.70
4897	PT	OHT	46	01/31/89	0.848	17.30	91.40	5.27	27.87
4897	SF	OHH	46	01/31/89	1.171	0.00	89.10	0.00	0.10
4897	VE	OGH	46	01/30/89	1.086	0.00	94.60	0.00 >	0.90
4897	YF	OGT	46	01/30/89	0.931	0.00	90.70	0.00	0.00
4898	JE	OH6	46	01/30/89	0.834	0.00	9.02	0.00 >	0.82
4898	PT	OHU	46	01/31/89	0.882	0.00	15.30	0.00 >	2.22
4898	SF	OHI	46	01/31/89	1.207	0.00	7.49	0.00	0.00
4898	VE	OGI	46	01/30/89	0.995	0.00	13.80	0.00	0.11
4898	YF	OGU	46	01/30/89	0.935	0.00	1.81	0.00	0.00
4899	JE	OH6	46	01/30/89	0.834	0.00	1.00	0.00	0.00
4899	PT	OHU	46	01/31/89	0.882	0.00	1.91	0.00	0.00
4899	SF	OHI	46	01/31/89	1.207	0.00	1.46	0.00	0.00
4899	VE	OGI	46	01/30/89	0.995	0.00	1.86	0.00 >	0.00
4899	YF	OGU	46	01/30/89	0.935	0.00	1.06	0.00	0.00
4900	JE	OH7	46	01/30/89	0.748	0.00 <	1.00	0.00	0.00
4900	PT	OHV	46	01/31/89	0.866	0.00	1.55	0.00	0.00
4900	SF	OHJ	46	01/31/89	1.196	0.00	1.39	0.00	0.00
4900	VE	OGJ	46	01/30/89	0.985	0.00	1.48	0.00	0.00
4900	YF	OGV	46	01/30/89	0.943	0.00	1.53	0.00	0.00
4901	JE	OH7	46	01/30/89	0.748	0.00	3.63	0.00	0.00
4901	PT	OHV	46	01/31/89	0.866	0.00	4.41	0.00	0.00
4901	SF	OHJ	46	01/31/89	1.196	0.00	4.72	0.00	0.00
4901	VE	OGJ	46	01/30/89	0.985	0.00	10.80	0.00 >	0.00
4901	YF	OGV	46	01/30/89	0.943	0.00	4.69	0.00	0.00
4902	JE	OH8	46	01/30/89	0.809	0.00	1.35	0.00	0.00
4902	PT	OHW	46	01/31/89	0.896	0.00	1.55	0.00	0.00
4902	SF	OHK	46	01/31/89	1.161	0.00	1.33	0.00	0.00
4902	VE	OGK	46	01/30/89	0.966	0.00	1.62	0.00	0.00
4902	YF	OGW	46	01/30/89	0.910	0.00	1.43	0.00	0.00
4903	JE	OH8	46	01/30/89	0.809	0.00	1.68	0.00	0.00
4903	PT	OHW	46	01/31/89	0.896	0.00	3.25	0.00	0.21
4903	SF	OHK	46	01/31/89	1.161	0.00	3.20	0.00 >	0.01
4903	VE	OGK	46	01/30/89	0.966	0.00	4.81	0.00 >	0.40

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4903	YF	OGW	46	01/30/89	0.910	0.00	4.52	0.00	0.00
4904	JE	OH9	46	01/30/89	0.673	0.00	20.40	0.00	0.00
4904	PT	OHX	46	01/31/89	0.948	0.00	11.40	0.00 >	3.62
4904	SF	OHL	46	01/31/89	1.251	0.00	7.37	0.00	0.00
4904	VE	OGL	46	01/30/89	0.975	0.00	12.10	0.00	0.00
4904	YF	OGX	46	01/30/89	0.944	0.00	17.40	0.00	0.00
4905	JE	OH9	46	01/30/89	0.673	0.00	17.60	0.00	0.00
4905	PT	OHX	46	01/31/89	0.948	0.00	10.00	0.00	0.85
4905	SF	OHL	46	01/31/89	1.251	0.00	5.69	0.00	0.00
4905	VE	OCL	46	01/30/89	0.975	0.00	7.73	0.00	0.00
4905	YF	OGX	46	01/30/89	0.944	0.00	15.40	0.00	0.00
4906	JE	OHA	46	01/30/89	0.781	0.00	4.40	0.00	0.00
4906	PT	OHY	46	01/31/89	0.978	0.00	4.14	0.00	0.00
4906	SF	OHM	46	01/31/89	1.216	0.00	2.41	0.00 >	0.03
4906	VE	OGM	46	01/30/89	1.028	0.00	4.70	0.00 >	0.10
4906	YF	OGY	46	01/30/89	0.992	0.00	4.80	0.00	0.00
4907	JE	OHA	46	01/30/89	0.781	0.00 <	1.00	0.00	0.00
4907	PT	OHY	46	01/31/89	0.978	0.00 <	1.00	0.00	0.00
4907	SF	OHM	46	01/31/89	1.216	0.00 <	1.00	0.00	0.00
4907	VE	OGM	46	01/30/89	1.028	0.00 <	1.00	0.00	0.00
4907	VV	OOA	46	01/26/89	1.811	0.00	0.84	0.00 >	1.30
4907	YF	OGY	46	01/30/89	0.992	0.00 <	1.00	0.00	0.00
4908	JE	OHB	46	01/30/89	0.684	0.00	31.10	0.00 >	1.04
4908	PT	OHZ	46	01/31/89	0.901	0.00	82.80	0.00 >	9.70
4908	SF	OHN	46	01/31/89	1.113	0.00	80.80	0.00	0.75
4908	VE	OGN	46	01/30/89	1.000	0.00	102.00	0.00 >	0.00
4908	YF	OGZ	46	01/30/89	0.901	0.00	85.30	0.00	0.00
4909	JE	OHB	46	01/30/89	0.684	0.00	58.70	0.00	0.00
4909	PT	CHZ	46	01/31/89	0.901	0.00	47.70	0.00 >	8.03
4909	SF	OHN	46	01/31/89	1.113	0.00	66.80	0.00	0.00
4909	VE	OGN	46	01/30/89	1.000	0.00	43.70	0.00	0.00
4909	YF	OGZ	46	01/30/89	0.901	0.00	52.00	0.00	0.00
4910	JE	OHC	46	01/30/89	0.739	0.00	89.70	0.00 >	0.30
4910	PT	OIO	46	01/31/89	0.842	0.00	78.20	0.00	5.41
4910	SF	OHO	46	01/31/89	1.131	0.00	47.50	0.00	0.00
4910	VE	OGO	46	01/30/89	0.980	0.00	35.20	0.00	0.10
4910	YF	OHO	46	01/30/89	0.862	0.00	82.80	0.00	0.00
4911	JE	OHC	46	01/30/89	0.739	0.00	37.10	0.00	0.00
4911	PT	OIO	46	01/31/89	0.842	0.00	97.10	0.00 >	1.30
4911	SF	OHO	46	01/31/89	1.131	171.00	147.00	0.85 >	7.10
4911	VE	OGO	46	01/30/89	0.980	0.00	84.20	0.00	0.63
4911	YF	OHO	46	01/30/89	0.862	0.00	80.30	0.00	0.00
4912	JE	OHD	46	01/30/89	0.896	0.00 >	320.00	0.00 >	0.08
4912	PT	OI1	46	01/31/89	0.804	0.00 >	320.00	0.00 >	5.69
4912	SF	OHP	46	01/31/89	1.155	0.00 >	320.00	0.00 >	2.41
4912	VE	OGP	46	01/30/89	0.997	0.00 >	320.00	0.00	0.40
4912	YF	OH1	46	01/30/89	0.890	0.00 >	320.00	0.00	0.00
4913	JE	OHD	46	01/30/89	0.896	0.00	67.20	0.00	0.00
4913	PT	OI1	46	01/31/89	0.804	0.00	229.00	0.00	3.76
4913	SF	OHP	46	01/31/89	1.155	0.00	148.00	0.00	0.00
4913	VE	OGP	46	01/30/89	0.997	0.00	165.00	0.00	0.00
4913	YF	OH1	46	01/30/89	0.890	0.00	163.00	0.00	0.00
4914	JE	OHE	46	01/30/89	0.816	0.00	25.70	0.00	0.00
4914	PT	OI2	46	01/31/89	0.757	0.00	22.70	0.00	0.00
4914	SF	OHQ	46	01/31/89	1.145	0.00	13.10	0.00	0.00
4914	VE	OGQ	46	01/30/89	0.963	0.00	15.90	0.00	0.00
4914	YF	OH2	46	01/30/89	0.838	0.00	19.40	0.00	0.00
4915	JE	OHE	46	01/30/89	0.816	0.00	37.90	0.00	0.00
4915	PT	OI2	46	01/31/89	0.757	0.00	23.10	0.00	0.00
4915	SF	OHQ	46	01/31/89	1.145	0.00	13.10	0.00	0.00
4915	VE	OGQ	46	01/30/89	0.963	0.00	18.60	0.00	0.00
4915	YF	OH2	46	01/30/89	0.838	0.00	14.60	0.00	0.00
4916	JE	OHF	46	01/30/89	0.846	0.00	8.09	0.00 >	0.82
4916	PT	OI3	46	01/31/89	0.824	0.00	6.00	0.00	0.46
4916	SF	OHR	46	01/31/89	1.166	0.00	5.92	0.00 >	0.15
4916	VE	OGR	46	01/30/89	0.981	0.00	7.24	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4916	YF	OH3	46	01/30/89	0.830	0.00	4.04	0.00	0.00
4917	JE	OHF	46	01/30/89	0.846	0.00	11.40	0.00	0.00
4917	PT	OI3	46	01/31/89	0.824	0.00	13.50	0.00	0.00
4917	SF	OHR	46	01/31/89	1.166	0.00	8.17	0.00	0.00
4917	VE	OGR	46	01/30/89	0.981	0.00	8.49	0.00	0.00
4917	YF	OH3	46	01/30/89	0.830	0.00	5.58	0.00	0.00
4918	JE	OHG	46	01/30/89	0.861	0.00	> 320.00	0.00	0.00
4918	PT	OI4	46	01/31/89	0.889	0.00	> 320.00	0.00	0.80
4918	SF	OHS	46	01/31/89	1.181	0.00	241.00	0.00	0.20
4918	VE	OGS	46	01/30/89	1.040	0.00	255.00	0.00	> 1.22
4918	YF	OH4	46	01/30/89	0.978	0.00	> 320.00	0.00	0.00
4919	JE	OIT	46	01/31/89	0.604	0.00	13.40	0.00	0.00
4919	PT	OJH	46	02/01/89	1.003	0.00	102.00	0.00	2.46
4919	SF	OJ5	46	02/01/89	1.166	33.30	100.00	3.01	18.70
4919	VE	OI5	46	01/31/89	1.004	97.00	162.00	1.67	10.31
4919	YF	OIH	46	01/31/89	0.945	0.00	97.40	0.00	0.00
4920	JE	OIU	46	01/31/89	0.669	0.00	101.00	0.00	0.00
4920	PT	OJI	46	02/01/89	1.097	0.00	56.40	0.00	0.15
4920	SF	OJ6	46	02/01/89	1.191	0.00	22.30	0.00	> 1.66
4920	VE	OI6	46	01/31/89	0.903	0.00	> 320.00	0.00	0.00
4920	YF	OII	46	01/31/89	0.944	0.00	32.00	0.00	> 0.10
4921	JE	OIU	46	01/31/89	0.669	0.00	6.51	0.00	0.00
4921	PT	OJI	46	02/01/89	1.097	0.00	8.75	0.00	0.00
4921	SF	OJ6	46	02/01/89	1.191	0.00	13.30	0.00	> 4.69
4921	VE	OI6	46	01/31/89	0.903	0.00	23.90	0.00	0.00
4921	YF	OII	46	01/31/89	0.944	0.00	12.30	0.00	0.00
4922	JE	OIV	46	01/31/89	0.812	0.00	77.70	0.00	0.00
4922	PT	OJJ	46	02/01/89	1.097	0.00	130.00	0.00	0.00
4922	SF	OJ7	46	02/01/89	1.111	0.00	110.00	0.00	0.33
4922	VE	OI7	46	01/31/89	0.869	0.00	32.00	0.00	0.00
4922	YF	OIJ	46	01/31/89	0.922	0.00	79.20	0.00	0.00
4923	JE	OIV	46	01/31/89	0.812	0.00	62.40	0.00	0.00
4923	PT	OJJ	46	02/01/89	1.097	0.00	82.90	0.00	0.00
4923	SF	OJ7	46	02/01/89	1.111	0.00	26.50	0.00	0.00
4923	VE	OI7	46	01/31/89	0.869	0.00	16.50	0.00	0.00
4923	YF	OIJ	46	01/31/89	0.922	0.00	34.60	0.00	> 0.08
4924	JE	OIW	46	01/31/89	0.847	0.00	1.50	0.00	0.00
4924	PT	OJK	46	02/01/89	1.086	0.00	3.25	0.00	0.00
4924	SF	OJ8	46	02/01/89	1.057	0.00	1.70	0.00	0.00
4924	VE	OI8	46	01/31/89	0.907	0.00	1.66	0.00	0.00
4924	YF	OIK	46	01/31/89	1.058	0.00	3.25	0.00	> 2.36
4925	JE	OIW	46	01/31/89	0.847	0.00	4.07	0.00	0.00
4925	PT	OJK	46	02/01/89	1.086	0.00	8.03	0.00	0.45
4925	SF	OJ8	46	02/01/89	1.057	0.00	8.75	0.00	0.94
4925	VE	OI8	46	01/31/89	0.907	0.00	12.90	0.00	0.00
4925	YF	OJK	46	01/31/89	1.058	0.00	8.75	0.00	> 0.91
4926	JE	OIX	46	01/31/89	0.778	0.00	> 320.00	0.00	0.00
4926	PT	OJL	46	02/01/89	1.167	0.00	> 320.00	0.00	> 3.14
4926	SF	OJ9	46	02/01/89	1.074	0.00	> 320.00	0.00	> 3.89
4926	VE	OI9	46	01/31/89	0.950	0.00	> 320.00	0.00	> 0.50
4926	YF	OIL	46	01/31/89	0.972	0.00	> 320.00	0.00	0.00
4927	JE	OIX	46	01/31/89	0.778	0.00	80.40	0.00	0.00
4927	PT	OJL	46	02/01/89	1.167	0.00	35.40	0.00	0.00
4927	SF	OJ9	46	02/01/89	1.074	0.00	28.00	0.00	0.11
4927	VE	OI9	46	01/31/89	0.950	0.00	28.00	0.00	0.00
4927	YF	OIL	46	01/31/89	0.972	0.00	28.00	0.00	0.00
4928	JE	OIY	46	01/31/89	0.703	0.00	> 320.00	0.00	0.00
4928	PT	OJM	46	02/01/89	1.190	0.00	> 320.00	0.00	0.00
4928	SF	OJA	46	02/01/89	1.108	0.00	> 320.00	0.00	6.56
4928	VE	OIA	46	01/31/89	1.002	0.00	> 320.00	0.00	> 0.00
4928	YF	OIM	46	01/31/89	1.002	0.00	> 320.00	0.00	0.80
4932	JE	OWH	51	03/06/89	1.102	0.00	22.70	0.00	0.00
4932	PT	OWW	51	03/07/89	0.782	0.00	38.60	0.00	0.00
4932	SF	OXB	51	03/07/89	0.864	0.00	32.90	0.00	> 1.11
4932	VE	OVN	51	03/06/89	0.726	0.00	21.70	0.00	> 0.10
4932	VSV	OCA	51	02/03/89	1.234	0.00	76.70	0.00	0.10

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4932	YF	OW2	51	03/06/89	1.078	0.00	42.00	0.00	0.00
4933	JE	OWH	51	03/06/89	1.102	0.00 >	320.00	0.00	0.00
4933	PT	OWW	51	03/07/89	0.782	0.00 >	320.00	0.00	0.00
4933	SF	OXB	51	03/07/89	0.864	0.00 >	320.00	0.00 >	3.10
4933	VE	OVN	51	03/06/89	0.726	0.00 >	320.00	0.00 >	0.10
4933	VSV	OOA	51	02/03/89	1.234	0.00	72.50	0.00	1.16
4933	YF	OW2	51	03/06/89	1.078	0.00 >	320.00	0.00	0.00
4934	JE	OWI	51	03/06/89	1.053	0.00	11.40	0.00	0.00
4934	JE	S1R	51	10/10/89	1.025	0.00 >	32.00	0.00	0.00
4934	PT	OWX	51	03/07/89	0.828	2.43	10.90	4.48 >	22.59
4934	SF	OXC	51	03/07/89	0.836	1.00	15.40	15.40 >	36.63
4934	VE	OVO	51	03/06/89	0.708	0.00	20.40	0.00 >	5.98
4934	VSV	OOB	51	02/03/89	1.228	0.00	29.20	0.00	0.00
4934	VV	00L	51	02/02/89	1.613	11.20	18.80	1.68	20.86
4934	VV	04N	51	06/01/89	2.287	0.00	14.70	0.00	0.06
4934	VV	OBP	51	08/17/89	1.325	0.00	15.40	0.00	0.45
4934	YF	OW3	51	03/06/89	1.064	0.00	15.40	0.00 >	0.60
4935	JE	OWI	51	03/06/89	1.053	0.00	32.00	0.00	0.00
4935	PT	OWX	51	03/07/89	0.828	0.00	153.00	0.00	0.00
4935	SF	OXC	51	03/07/89	0.836	0.00	211.00	0.00	0.00
4935	VE	OVO	51	03/06/89	0.708	0.00	210.00	0.00 >	0.00
4935	VSV	OOB	51	02/03/89	1.228	0.00	64.90	0.00	0.00
4935	VV	00L	51	02/02/89	1.613	0.00	90.90	0.00	0.06
4935	YF	OW3	51	03/06/89	1.064	0.00	95.90	0.00	0.00
4936	JE	OWJ	51	03/06/89	1.042	0.00 >	320.00	0.00	0.00
4936	PT	OWY	51	03/07/89	0.881	0.00 >	320.00	0.00 >	1.70
4936	SF	OXD	51	03/07/89	0.865	0.00 >	320.00	0.00 >	6.31
4936	VE	OVP	51	03/06/89	0.722	0.00 >	320.00	0.00 >	0.00
4936	VSV	00C	51	02/03/89	1.340	0.00 >	320.00	0.00	0.80
4936	YF	OW4	51	03/06/89	1.113	0.00 >	320.00	0.00	0.00
4937	JE	OWJ	51	03/06/89	1.042	0.00	5.75	0.00	0.00
4937	PT	OWY	51	03/07/89	0.881	0.00	77.70	0.00 >	10.22
4937	SF	OXD	51	03/07/89	0.865	16.80	65.70	3.92 >	19.18
4937	VE	OVP	51	03/06/89	0.722	0.00	115.00	0.00 >	3.17
4937	VSV	00C	51	02/03/89	1.340	0.00	153.00	0.00	0.00
4937	YF	OW4	51	03/06/89	1.113	0.00	36.10	0.00	0.00
4938	JE	OWK	51	03/06/89	1.071	0.00 >	320.00	0.00	0.00
4938	PT	OWZ	51	03/07/89	0.912	0.00 >	320.00	0.00	0.00
4938	SF	OXE	51	03/07/89	0.842	0.00 >	320.00	0.00 >	3.90
4938	VE	OVQ	51	03/06/89	0.729	0.00 >	320.00	0.00 >	1.61
4938	VSV	00D	51	02/03/89	1.322	0.00 >	320.00	0.00	0.00
4938	YF	OW5	51	03/06/89	1.091	0.00 >	320.00	0.00 >	0.03
4939	JE	OWK	51	03/06/89	1.071	0.00	12.60	0.00	0.00
4939	JE	S1S	51	10/10/89	1.094	0.00	16.70	0.00	0.00
4939	PT	OWZ	51	03/07/89	0.912	4.05	10.10	2.49 >	24.44
4939	SF	OXE	51	03/07/89	0.842 <	1.00	10.80 >	10.80 >	37.32
4939	VE	OVQ	51	03/06/89	0.729	0.00	13.10	0.00 >	3.50
4939	VSV	00D	51	02/03/89	1.322	0.00	23.40	0.00 >	0.02
4939	VV	OBQ	51	08/17/89	1.248	8.06	14.30	1.77	9.03
4939	YF	OW5	51	03/06/89	1.091	0.00	15.40	0.00	0.00
4940	JE	OWL	51	03/06/89	0.905	0.00	87.80	0.00	0.00
4940	PT	OXO	51	03/07/89	0.817	0.00	108.00	0.00 >	0.27
4940	SF	OXF	51	03/07/89	0.872	0.00	106.00	0.00 >	7.39
4940	VE	OVR	51	03/06/89	0.737	0.00	66.00	0.00	0.00
4940	VSV	00E	51	02/03/89	1.697	0.00	150.00	0.00	0.00
4940	YF	OW6	51	03/06/89	1.073	0.00	130.00	0.00	0.00
4941	JE	OWL	51	03/06/89	0.905	0.00 >	320.00	0.00	0.12
4941	PT	OXO	51	03/07/89	0.817	0.00 >	320.00	0.00	0.40
4941	SF	OXF	51	03/07/89	0.872	0.00 >	320.00	0.00 >	12.80
4941	VE	OVR	51	03/06/89	0.737	0.00 >	320.00	0.00 >	0.04
4941	VSV	00E	51	02/03/89	1.697	0.00 >	320.00	0.00	0.00
4941	YF	OW6	51	03/06/89	1.073	0.00 >	320.00	0.00	0.00
4942	JE	OWM	51	03/06/89	0.936	0.00	68.70	0.00 >	0.60
4942	JE	S1S	51	10/10/89	1.094	0.00	320.00	0.00	0.00
4942	PT	OX1	51	03/07/89	0.594	68.40	132.00	1.93 >	23.05
4942	SF	OXG	51	03/07/89	0.915	0.00	12.90	0.00 >	2.94

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4942	VE	OVS	51	03/06/89	0.764	0.00	148.00	0.00	0.00
4942	VSV	OOF	51	02/03/89	1.420	0.00	178.00	0.00 >	1.94
4942	VV	OOP	51	02/02/89	1.749	0.00	51.70	0.00	0.00
4942	YF	OW7	51	03/06/89	1.126	0.00	20.00	0.00	0.00
4943	JE	OWM	51	03/06/89	0.936	0.00	13.00	0.00	0.00
4943	JE	S1T	51	10/10/89	1.069	0.00 >	32.00	0.00	0.00
4943	PT	OX1	51	03/07/89	0.594	1.79	11.60	6.49 >	24.01
4943	SF	OXG	51	03/07/89	0.915	1.71	14.90	8.70 >	22.87
4943	VE	OVS	51	03/06/89	0.764	0.00	14.50	0.00	0.00
4943	VSV	OOF	51	02/03/89	1.420	0.00	37.90	0.00 >	1.56
4943	VV	OOF	51	02/02/89	1.749	8.31	14.30	1.72	8.25
4943	YF	OW7	51	03/06/89	1.126	0.00	5.43	0.00	0.00
4944	JE	OWN	51	03/06/89	0.931	0.00 >	320.00	0.00 >	1.36
4944	PT	OX2	51	03/07/89	0.816	0.00 >	320.00	0.00 >	0.81
4944	SF	OXH	51	03/07/89	0.961	0.00 >	320.00	0.00 >	17.51
4944	VE	OVT	51	03/06/89	0.833	0.00 >	320.00	0.00 >	0.00
4944	VSV	OOG	51	02/03/89	1.324	0.00 >	320.00	0.00	0.00
4944	VV	OOQ	51	02/02/89	1.819	0.00 <	1.00	0.00	0.00
4944	YF	OW8	51	03/06/89	1.168	0.00 >	320.00	0.00	0.15
4945	JE	OWN	51	03/06/89	0.931	0.00	74.40	0.00	0.00
4945	PT	OX2	51	03/07/89	0.816	0.00	93.40	0.00	0.00
4945	SF	OXH	51	03/07/89	0.961	0.00	87.50	0.00 >	5.01
4945	VE	OVT	51	03/06/89	0.833	0.00	71.00	0.00	0.00
4945	VSV	OOG	51	02/03/89	1.324	0.00	6.47	0.00	0.00
4945	VV	OOQ	51	02/02/89	1.819	0.00	41.30	0.00	0.00
4945	YF	OW8	51	03/06/89	1.168	0.00	95.70	0.00	0.00
4946	JE	OWO	51	03/06/89	0.902	0.00	23.70	0.00	0.00
4946	PT	OX3	51	03/07/89	0.841	0.00	25.90	0.00	0.00
4946	SF	OXI	51	03/07/89	0.788	0.00	32.00	0.00	0.00
4946	VE	OVU	51	03/06/89	0.716	0.00	38.50	0.00	0.00
4946	VSV	OOH	51	02/03/89	1.587	0.00	47.80	0.00	0.50
4946	YF	OW9	51	03/06/89	1.115	0.00	0.78	0.00	0.00
4947	JE	OWO	51	03/06/89	0.902	0.00 <	1.00	0.00	0.00
4947	PT	OX3	51	03/07/89	0.841	0.00	1.77	0.00 >	0.61
4947	SF	OXI	51	03/07/89	0.788	0.00	1.63	0.00	0.00
4947	VE	OVU	51	03/06/89	0.716	0.00	1.54	0.00	0.00
4947	VSV	OOH	51	02/03/89	1.587	0.00	13.80	0.00	0.03
4947	YF	OW9	51	03/06/89	1.115	0.00	1.39	0.00	0.00
4948	JE	OWP	51	03/06/89	0.988	0.00 >	320.00	0.00	0.00
4948	PT	OX4	51	03/07/89	0.995	0.00 >	320.00	0.00	1.60
4948	SF	OXJ	51	03/07/89	0.825	0.00 >	320.00	0.00 >	4.59
4948	VE	OVV	51	03/06/89	0.658	0.00 >	320.00	0.00	0.00
4948	VSV	OOI	51	02/03/89	1.624	0.00 >	320.00	0.00	0.77
4948	YF	OWA	51	03/06/89	1.029	0.00 >	320.00	0.00	0.00
4949	JE	OWP	51	03/06/89	0.988	0.00	26.90	0.00	0.00
4949	PT	OX4	51	03/07/89	0.995	0.00	34.70	0.00 >	0.00
4949	SF	OXJ	51	03/07/89	0.825	0.00	48.80	0.00 >	2.90
4949	VE	OVV	51	03/06/89	0.658	0.00	45.60	0.00	0.00
4949	VSV	OOI	51	02/03/89	1.624	0.00	80.90	0.00	0.00
4949	YF	OWA	51	03/06/89	1.029	0.00	37.10	0.00	0.00
4950	JE	OWQ	51	03/06/89	0.889	0.00	1.69	0.00	0.00
4950	PT	OX5	51	03/07/89	0.729	0.00	4.31	0.00	0.00
4950	SF	OXX	51	03/07/89	0.549	0.00	5.18	0.00	0.00
4950	VE	OVW	51	03/06/89	0.612	0.00	4.17	0.00	0.00
4950	YF	OWB	51	03/06/89	1.008	0.00	4.07	0.00	0.00
4951	JE	OWQ	51	03/06/89	0.889	0.00	64.50	0.00	0.00
4951	PT	OX5	51	03/07/89	0.729	0.00	38.60	0.00	3.34
4951	SF	OXX	51	03/07/89	0.549	32.00	46.40	1.45	6.82
4951	VE	OVW	51	03/06/89	0.612	0.00	51.00	0.00	0.00
4951	VSV	OOU	51	02/10/89	1.349	0.00	16.50	0.00	0.00
4951	VV	OOU	51	02/09/89	1.597	0.00	8.52	0.00	0.01
4951	YF	OWB	51	03/06/89	1.008	0.00	18.20	0.00	0.00
4952	JE	OWR	51	03/06/89	0.812	0.00	37.70	0.00	0.00
4952	PT	OX6	51	03/07/89	0.944	0.00	24.70	0.00	0.00
4952	SF	OXL	51	03/07/89	0.786	0.00	25.00	0.00	0.02
4952	VE	OVX	51	03/06/89	0.617	0.00	20.30	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4952	VSV	00W	51	02/10/89	1.349	0.00	3.68	0.00	0.00
4952	VV	00V	51	02/09/89	1.696	0.00	0.93	0.00	0.00
4952	YF	OWC	51	03/06/89	0.980	0.00	39.70	0.00	0.00
4953	JE	OY4	51	03/07/89	1.382	0.00	8.63	0.00	0.00
4953	PT	OYY	51	03/08/89	0.752	0.00	13.00	0.00	0.00
4953	SF	OZD	51	03/08/89	1.051	0.00	7.38	0.00	0.00
4953	VE	OXF	51	03/07/89	0.899	0.00	20.50	0.00	0.00
4953	VSV	00X	51	02/10/89	0.724	0.00	39.30	0.00	> 0.06
4953	VV	00V	51	02/09/89	1.696	0.00	16.90	0.00	0.00
4953	YF	OYJ	51	03/07/89	1.048	0.00	4.94	0.00	0.00
4954	JE	OY5	51	03/07/89	1.231	0.00	> 320.00	0.00	> 5.20
4954	PT	OYZ	51	03/08/89	0.793	0.00	> 320.00	0.00	> 6.59
4954	SF	OZE	51	03/08/89	1.083	0.00	> 320.00	0.00	> 0.38
4954	VE	OXQ	51	03/07/89	0.785	0.00	> 320.00	0.00	> 0.20
4954	VSV	00X	51	02/10/89	0.724	0.00	> 320.00	0.00	> 1.60
4954	VV	00W	51	02/09/89	1.643	0.00	100.00	0.00	> 0.04
4954	YF	OYK	51	03/07/89	0.980	0.00	> 320.00	0.00	> 0.00
4955	JE	OY5	51	03/07/89	1.231	0.00	5.70	0.00	0.24
4955	PT	OYZ	51	03/08/89	0.793	0.00	12.30	0.00	1.60
4955	SF	OZE	51	03/08/89	1.083	0.00	6.60	0.00	0.00
4955	VE	OXQ	51	03/07/89	0.785	0.00	6.54	0.00	0.21
4955	VSV	00Y	51	02/10/89	1.411	0.00	3.39	0.00	> 0.61
4955	VV	00W	51	02/09/89	1.643	0.00	2.40	0.00	0.00
4955	YF	OYK	51	03/07/89	0.920	0.00	9.31	0.00	0.00
4956	JE	OY6	51	03/07/89	1.240	0.00	13.90	0.00	0.00
4956	PT	OZO	51	03/08/89	0.853	0.00	38.60	0.00	0.22
4956	SF	OZF	51	03/08/89	1.072	0.00	11.70	0.00	0.00
4956	VE	OXR	51	03/07/89	0.769	0.00	18.00	0.00	> 0.02
4956	VSV	00Y	51	02/10/89	1.411	0.00	25.20	0.00	> 0.15
4956	VV	00X	51	02/09/89	1.587	0.00	14.30	0.00	> 0.01
4956	YF	OYL	51	03/07/89	0.990	0.00	40.70	0.00	0.00
4957	JE	OY6	51	03/07/89	1.240	0.00	18.30	0.00	0.06
4957	PT	OZO	51	03/08/89	0.853	0.00	13.10	0.00	> 0.00
4957	SF	OZF	51	03/08/89	1.072	0.00	16.50	0.00	> 0.28
4957	VE	OXR	51	03/07/89	0.769	0.00	13.10	0.00	> 0.08
4957	VSV	00Z	51	02/10/89	1.321	0.00	46.60	0.00	> 0.00
4957	VV	00X	51	02/09/89	1.587	0.00	4.71	0.00	0.00
4957	YF	OYL	51	03/07/89	0.990	0.00	18.40	0.00	0.00
4958	JE	OY7	51	03/07/89	1.143	0.00	20.30	0.00	> 1.26
4958	PT	OZ1	51	03/08/89	1.013	0.00	28.90	0.00	> 0.75
4958	SF	OZG	51	03/08/89	1.071	0.00	9.60	0.00	> 0.04
4958	VE	OXs	51	03/07/89	0.753	0.00	42.50	0.00	> 0.62
4958	VSV	00Z	51	02/10/89	1.321	0.00	43.70	0.00	> 0.60
4958	VV	00Y	51	02/09/89	1.471	0.00	6.76	0.00	> 0.10
4958	YF	OYM	51	03/07/89	1.002	0.00	13.10	0.00	0.00
4959	JE	OY7	51	03/07/89	1.143	0.00	22.80	0.00	> 1.30
4959	PT	OZ1	51	03/08/89	1.013	0.00	23.90	0.00	> 1.95
4959	SF	OZG	51	03/08/89	1.071	0.00	34.00	0.00	> 0.00
4959	VE	OXs	51	03/07/89	0.753	0.00	55.80	0.00	> 0.84
4959	VSV	010	51	02/10/89	1.318	0.00	249.00	0.00	> 0.16
4959	VV	00T	51	02/09/89	1.642	0.00	32.00	0.00	0.00
4959	YF	OYM	51	03/07/89	1.002	0.00	31.10	0.00	0.00
4960	JE	OY7	51	03/07/89	1.245	0.00	91.20	0.00	> 1.50
4960	PT	OZ2	51	03/08/89	1.073	0.00	98.10	0.00	> 6.41
4960	SF	OZH	51	03/08/89	1.090	0.00	70.10	0.00	> 0.00
4960	VE	OXT	51	03/07/89	0.766	0.00	94.50	0.00	> 3.05
4960	VSV	010	51	02/10/89	1.318	0.00	101.00	0.00	> 0.01
4960	VV	00Y	51	02/09/89	1.471	0.00	105.00	0.00	> 0.29
4960	YF	OYN	51	03/07/89	1.002	0.00	81.30	0.00	0.00
4961	JE	OY8	51	03/07/89	1.245	0.00	75.10	0.00	> 0.20
4961	PT	OZ2	51	03/08/89	1.073	0.00	106.00	0.00	> 0.12
4961	SF	OZH	51	03/08/89	1.090	0.00	79.40	0.00	0.02
4961	VE	OXT	51	03/07/89	0.766	0.00	83.70	0.00	1.31
4961	VSV	011	51	02/10/89	1.520	0.00	> 320.00	0.00	> 0.06
4961	VV	00Z	51	02/09/89	1.538	0.00	87.00	0.00	> 0.40
4961	YF	OYN	51	03/07/89	1.002	0.00	75.90	0.00	0.00

Total Experience (Cont'd)

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4962	JE	OY9	51	03/07/89	1.271	0.00	6.05	0.00 >	0.64
4962	PT	OZ3	51	03/08/89	0.890	0.00	45.20	0.00 >	4.52
4962	SF	OZI	51	03/08/89	1.121	0.00	55.40	0.00	0.41
4962	VE	OXU	51	03/07/89	0.744	0.00	65.80	0.00	1.73
4962	VSV	O11	51	02/10/89	1.520	0.00	104.00	0.00 >	0.20
4962	VV	O0Z	51	02/09/89	1.538	0.00	52.90	0.00	2.91
4962	YF	OYO	51	03/07/89	0.958	0.00	19.80	0.00	0.00
4963	JE	OY9	51	03/07/89	1.271	0.00	73.60	0.00	0.20
4963	PT	OZ3	51	03/08/89	0.890	0.00	82.80	0.00 >	4.80
4963	SF	OZI	51	03/08/89	1.121	0.00	55.80	0.00	0.00
4963	VE	OXU	51	03/07/89	0.744	0.00	68.60	0.00 >	0.34
4963	VSV	O12	51	02/10/89	1.371	0.00	112.00	0.00	0.00
4963	VV	O10	51	02/09/89	1.857	0.00	49.80	0.00	0.00
4963	YF	OYO	51	03/07/89	0.958	0.00	58.30	0.00	0.00
4964	JE	OYA	51	03/07/89	1.242	0.00 >	320.00	0.00	0.80
4964	PT	OZ4	51	03/08/89	0.756	0.00 >	320.00	0.00 >	0.00
4964	SF	OZJ	51	03/08/89	1.076	0.00 >	320.00	0.00	0.00
4964	VE	OXV	51	03/07/89	0.744	0.00 >	320.00	0.00	0.11
4964	VSV	O12	51	02/10/89	1.371	0.00 >	320.00	0.00	0.20
4964	VV	O10	51	02/09/89	1.857	0.00	100.00	0.00	0.00
4964	YF	OYP	51	03/07/89	1.015	0.00 >	320.00	0.00	0.00
4965	JE	OYA	51	03/07/89	1.242	0.00	148.00	0.00	0.12
4965	PT	OZ5	51	03/08/89	0.790	0.00	214.00	0.00	2.60
4965	SF	OZJ	51	03/08/89	1.076	0.00	95.20	0.00	0.00
4965	VE	OXV	51	03/07/89	0.744	0.00	139.00	0.00 >	0.50
4965	VSV	O13	51	02/10/89	1.393	0.00 >	320.00	0.00	0.00
4965	VV	O11	51	02/09/89	1.623	0.00	70.80	0.00 >	0.04
4965	YF	OYP	51	03/07/89	1.015	0.00	109.00	0.00	0.00
4966	JE	OYB	51	03/07/89	1.072	0.00	134.00	0.00 >	0.30
4966	PT	OZ5	51	03/08/89	0.790	0.00	153.00	0.00	2.60
4966	SF	OZK	51	03/08/89	0.977	0.00	111.00	0.00	0.69
4966	VE	OXW	51	03/07/89	0.829	0.00	87.20	0.00	0.23
4966	VSV	O13	51	02/10/89	1.393	0.00 >	320.00	0.00 >	0.10
4966	VV	O00	51	02/09/89	1.597	0.00	60.40	0.00	0.00
4966	YF	OYQ	51	03/07/89	1.027	0.00	101.00	0.00	0.00
4967	JE	OYB	51	03/07/89	1.072	0.00	51.00	0.00	0.00
4967	PT	OZ4	51	03/08/89	0.756	0.00	187.00	0.00	0.00
4967	SF	OZK	51	03/08/89	0.977	0.00	131.00	0.00	3.07
4967	VE	OXW	51	03/07/89	0.829	0.00	0.58	0.00	1.80
4967	VSV	O14	51	02/10/89	1.423	0.00	76.00	0.00	0.00
4967	VV	O11	51	02/09/89	1.623	0.00	304.00	0.00	1.20
4967	YF	OYQ	51	03/07/89	1.027	0.00	77.70	0.00	0.00
4968	JE	OYC	51	03/07/89	1.125	0.00	49.60	0.00	0.00
4968	PT	OZ6	51	03/08/89	0.870	0.00	166.00	0.00	1.20
4968	SF	OZL	51	03/08/89	1.017	0.00	177.00	0.00	0.70
4968	VE	OXX	51	03/07/89	0.785	0.00 >	320.00	0.00 >	0.97
4968	VSV	O14	51	02/10/89	1.423	0.00	175.00	0.00	0.00
4968	VV	O12	51	02/09/89	1.529	0.00	241.00	0.00	0.00
4968	YF	OYR	51	03/07/89	1.005	0.00	153.00	0.00	0.00
4969	JE	OYC	51	03/07/89	1.125	0.00	7.74	0.00	0.00
4969	PT	OZ6	51	03/08/89	0.870	0.00	14.80	0.00	0.00
4969	SF	OZL	51	03/08/89	1.017	0.00	10.40	0.00	0.00
4969	VE	OXX	51	03/07/89	0.785	0.00	13.60	0.00	0.00
4969	VSV	O15	51	02/10/89	1.524	0.00	44.00	0.00	0.00
4969	VV	O13	51	02/16/89	2.066	0.00	17.80	0.00	0.00
4969	YF	OYR	51	03/07/89	1.005	0.00	5.94	0.00	0.00
4970	JE	OYD	51	03/07/89	1.179	0.00	55.80	0.00 >	0.90
4970	PT	OZ7	51	03/08/89	0.918	0.00	85.50	0.00	0.00
4970	SF	OZM	51	03/08/89	1.082	0.00	41.30	0.00	0.00
4970	VE	OXY	51	03/07/89	0.750	0.00	18.60	0.00	0.00
4970	VSV	O15	51	02/10/89	1.524	0.00	102.00	0.00 >	0.03
4970	VV	O14	51	02/16/89	2.037	0.00	2.93	0.00	0.00
4970	YF	OYS	51	03/07/89	1.053	0.00	59.70	0.00	0.00
4971	JE	OYD	51	03/07/89	1.179	0.00 >	320.00	0.00 >	1.42
4971	PT	OZ7	51	03/08/89	0.918	0.00 >	320.00	0.00 >	1.21
4971	SF	OZM	51	03/08/89	1.082	0.00	88.70	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
4971	VE	OXY	51	03/07/89	0.750	0.00 >	320.00	0.00	0.00
4971	YF	OYS	51	03/07/89	1.053	0.00 >	320.00	0.00	0.67
4972	JE	OYE	51	03/07/89	1.182	0.00 >	320.00	0.00	0.00
4972	PT	OZ8	51	03/08/89	0.756	0.00	106.00	0.00	0.00
4972	SF	CZN	51	03/08/89	1.060	0.00	53.20	0.00	0.00
4972	VE	OXZ	51	03/07/89	0.760	0.00	52.10	0.00	0.00
4972	VSV	O16	51	02/10/89	1.533	0.00	145.00	0.00	0.00
4972	VV	O14	51	02/16/89	2.037	0.00	63.20	0.00	0.00
4972	YF	OYT	51	03/07/89	0.779	0.00	49.80	0.00 >	0.30
4973	JE	OYE	51	03/07/89	1.182	0.00 >	320.00	0.00	0.12
4973	PT	OZ8	51	03/08/89	0.758	0.00	21.90	0.00 >	3.22
4973	SF	OZN	51	03/08/89	1.080	0.00	18.60	0.00	0.02
4973	VE	OXZ	51	03/07/89	0.760	0.00	16.70	0.00	0.00
4973	VSV	O16	51	02/10/89	1.538	0.00	73.90	0.00	0.00
4973	VV	O15	51	02/16/89	2.026	0.00	16.90	0.00	0.00
4973	YF	OYT	51	03/07/89	0.779	0.00	23.70	0.00	0.04
4974	JE	OYF	51	03/07/89	1.206	0.00 >	320.00	0.00	0.00
4974	PT	OZ9	51	03/08/89	0.813	0.00 >	320.00	0.00	2.79
4974	SF	OZO	51	03/08/89	1.064	0.00 >	320.00	0.00	0.00
4974	VE	OYO	51	03/07/89	0.738	0.00 >	320.00	0.00	0.00
4974	VSV	O18	51	02/17/89	1.557	0.00 >	320.00	0.00	0.00
4974	VV	O15	51	02/16/89	2.026	0.00	320.00	0.00	0.00
4974	YF	OYU	51	03/07/89	0.924	0.00 >	320.00	0.00	0.00
4975	JE	POM	51	03/13/89	0.899	0.00	85.10	0.00	0.00
4975	PT	P1V	51	03/14/89	0.648	0.00	154.00	0.00	0.79
4975	SF	P2A	51	03/14/89	0.152	0.00 >	320.00	0.00 >	12.42
4975	SF	PUJ	51	04/20/89	1.193	0.00	66.00	0.00	0.00
4975	VE	P07	51	03/13/89	1.007	0.00	224.00	0.00	0.00
4975	VSV	O18	51	02/17/89	1.557	0.00 >	320.00	0.00	0.00
4975	VV	O16	51	02/16/89	1.916	0.00	187.00	0.00 >	0.13
4975	YF	P11	51	03/13/89	0.849	0.00	128.00	0.00	0.00
4976	JE	PON	51	03/13/89	0.869	0.00	87.60	0.00	0.00
4976	PT	P1W	51	03/14/89	0.677	0.00	101.00	0.00 >	9.51
4976	SF	P2B	51	03/14/89	0.192	0.00	157.00	0.00	0.00
4976	SF	PUK	51	04/20/89	1.137	0.00	116.00	0.00	0.00
4976	VE	P08	51	03/13/89	0.952	0.00	114.00	0.00	0.00
4976	VSV	O19	51	02/17/89	1.476	0.00	144.00	0.00	0.00
4976	VV	O16	51	02/16/89	1.916	0.00	95.70	0.00	0.00
4976	YF	P12	51	03/13/89	0.760	0.00	82.30	0.00	0.00
4977	JE	PON	51	03/13/89	0.869	0.00	86.70	0.00	0.00
4977	PT	P1W	51	03/14/89	0.677	0.00	75.90	0.00	0.00
4977	SF	P2B	51	03/14/89	0.192	0.00	191.00	0.00 >	4.44
4977	SF	PUK	51	04/20/89	1.137	0.00	179.00	0.00 >	0.71
4977	VE	P08	51	03/13/89	0.952	0.00	90.40	0.00	0.00
4977	VSV	O19	51	02/17/89	1.476	0.00	263.00	0.00	0.00
4977	VV	O17	51	02/16/89	1.848	0.00	120.00	0.00 >	1.61
4977	YF	P12	51	03/13/89	0.760	0.00	113.00	0.00	0.00
4978	JE	P00	51	03/13/89	0.873	0.00 >	320.00	0.00	0.00
4978	PT	P1X	51	03/14/89	0.660	0.00 >	320.00	0.00	0.00
4978	SF	P2C	51	03/14/89	0.224	0.00 >	320.00	0.00 >	3.32
4978	SF	PUL	51	04/20/89	1.244	0.00 >	320.00	0.00	0.00
4978	VE	P09	51	03/13/89	0.936	0.00 >	320.00	0.00 >	0.16
4978	VSV	O1A	51	02/17/89	1.497	0.00 >	320.00	0.00 >	0.43
4978	VV	O17	51	02/16/89	1.848	0.00	2.98	0.00	0.00
4978	YF	P13	51	03/13/89	0.783	0.00 >	320.00	0.00	0.00
4979	JE	P00	51	03/13/89	0.873	0.00	113.00	0.00	0.00
4979	PT	P1X	51	03/14/89	0.660	0.00	87.50	0.00	0.00
4979	SF	P2C	51	03/14/89	0.224	0.00	331.00	0.00 >	21.64
4979	SF	PUL	51	04/20/89	1.244	0.00 >	320.00	0.00 >	5.89
4979	VE	P09	51	03/13/89	0.936	0.00	227.00	0.00	0.00
4979	VSV	O1A	51	02/17/89	1.497	0.00	72.80	0.00	0.33
4979	VV	O18	51	02/16/89	1.925	0.00	147.00	0.00	0.00
4979	YF	P13	51	03/13/89	0.783	0.00	137.00	0.00	0.00
4980	JE	POP	51	03/13/89	0.851	0.00	2.55	0.00	0.00
4980	PT	PLY	51	03/14/89	0.698	0.00	3.94	0.00	0.00
4980	SF	P2D	51	03/14/89	0.187	0.00	8.76	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4980	SF	PUM	51	04/20/89	1.225	0.00	4.81	0.00	0.00
4980	VE	POA	51	03/13/89	0.940	0.00	2.39	0.00	0.00
4980	VSV	01B	51	02/17/89	1.549	0.00	35.80	0.00	0.00
4980	VV	07C	ME	07/13/89	1.378	0.00	6.83	0.00	0.00
4980	YF	P14	51	03/13/89	0.819	0.00	4.86	0.00	0.00
4981	JE	POP	51	03/13/89	0.851	0.00 >	320.00	0.00	0.00
4981	JE	S1T	51	10/10/89	1.069	0.00	89.50	0.00	0.00
4981	PT	P1Y	51	03/14/89	0.698	0.00	120.00	7.00	0.00
4981	SF	P2D	51	03/14/89	0.187	1.85 >	320.00 >	173.00 >	16.99
4981	SF	PUM	51	04/20/89	1.225	0.00 >	320.00	0.00 >	0.60
4981	VE	POA	51	03/13/89	0.940	0.00	221.00	0.00	0.00
4981	VSV	01B	51	02/17/89	1.549	0.00	199.00	0.00	0.00
4981	VV	019	51	02/16/89	2.007	0.00	106.00	0.00	0.00
4981	YF	P14	51	03/13/89	0.819	0.00	153.00	0.00	0.00
4982	JE	POQ	51	03/13/89	0.802	0.00	66.20	0.00	0.00
4982	JE	S1U	51	10/10/89	1.087	0.00	43.30	0.00 >	0.02
4982	PT	P1Z	51	03/14/89	0.756	0.00	64.00	0.00	0.01
4982	SF	P2E	51	03/14/89	0.203 <	1.00	151.00 >	151.00 >	10.53
4982	SF	PUN	51	04/20/89	1.225	0.00	150.00	0.00 >	0.30
4982	VE	POB	51	03/13/89	0.930	0.00	21.80	0.00	0.00
4982	VSV	01C	51	02/17/89	1.516	0.00	25.10	0.00	0.00
4982	VV	019	51	02/16/89	2.007	0.00	13.90	0.00	0.00
4982	YF	P15	51	03/13/89	0.793	0.00	75.70	0.00	0.00
4983	JE	POQ	51	03/13/89	0.802	0.00	107.00	0.00	0.00
4983	PT	P1Z	51	03/14/89	0.756	0.00	68.00	0.00	0.00
4983	SF	P2E	51	03/14/89	0.203	0.00 >	320.00	0.00	15.57
4983	SF	PUN	51	04/20/89	1.225	0.00 >	320.00	0.00 >	2.30
4983	VE	POB	51	03/13/89	0.930	0.00	47.40	0.00	0.00
4983	VSV	01K	51	02/24/89	1.242	0.00	54.20	0.00	0.14
4983	VV	01A	51	02/16/89	1.664	0.00	100.00	0.00 >	0.03
4983	YF	P15	51	03/13/89	0.793	0.00	112.00	0.00	0.00
4984	JE	PJR	51	03/13/89	0.887	0.00	19.10	0.00	3.11
4984	JE	S1U	51	10/10/89	1.087	7.52	13.40	1.78	5.98
4984	PT	P20	51	03/14/89	0.680	0.00	23.50	0.00	4.76
4984	SF	P2F	51	03/14/89	0.226	7.93	115.00	14.50 >	31.50
4984	SF	PUO	51	04/20/89	1.194	0.00	63.50	0.00	1.46
4984	VE	POC	51	03/13/89	0.949	0.00	33.60	0.00	0.00
4984	YF	P16	51	03/13/89	0.813	0.00	43.50	0.00	0.16
4985	JE	POR	51	03/13/89	0.887	0.00	62.70	0.00	0.00
4985	JE	S1V	51	10/10/89	1.209	0.00	133.00	0.00	0.00
4985	PT	P20	51	03/14/89	0.680	3.05	62.90	20.60	20.36
4985	SF	P2F	51	03/14/89	0.226	0.00	104.00	0.00	12.65
4985	SF	PUO	51	04/20/89	1.194	0.00	153.00	0.00	0.00
4985	VE	POC	51	03/13/89	0.949	0.00	80.10	0.00	0.00
4985	VSV	01K	51	02/24/89	1.242	0.00	37.90	0.00	0.00
4985	VV	01A	51	02/16/89	1.664	0.00	102.00	0.00 >	0.80
4985	YF	P16	51	03/13/89	0.813	0.00	66.00	0.00	0.00
4986	JE	POS	51	03/13/89	0.930	0.00 >	320.00	0.00	0.00
4986	PT	P21	51	03/14/89	0.713	0.00 >	320.00	0.00	1.64
4986	SF	P2G	51	03/14/89	0.271	0.00 >	320.00	0.00 >	17.57
4986	SF	PUP	51	04/20/89	1.261	0.00 >	320.00	0.00 >	8.30
4986	VE	POD	51	03/13/89	0.952	0.00 >	320.00	0.00	0.00
4986	VSV	01L	51	02/24/89	1.266	0.00 >	320.00	0.00	0.20
4986	VV	01B	51	02/16/89	1.941	0.00 >	320.00	0.00	0.00
4986	YF	P17	51	03/13/89	0.782	0.00 >	320.00	0.00	0.00
4987	JE	POS	51	03/13/89	0.930	0.00 >	320.00	0.00	0.00
4987	PT	P21	51	03/14/89	0.713	0.00 >	320.00	0.00	4.31
4987	SF	P2G	51	03/14/89	0.271	0.00 >	320.00	0.00 >	21.01
4987	SF	PUP	51	04/20/89	1.261	0.00 >	320.00	0.00 >	1.90
4987	VE	POD	51	03/13/89	0.952	0.00 >	320.00	0.00	0.00
4987	VSV	01L	51	02/24/89	1.266	0.00	26.60	0.00	0.00
4987	VV	01B	51	02/16/89	1.941	0.00	37.00	0.00	0.10
4987	YF	P17	51	03/13/89	0.782	0.00 >	320.00	0.00	0.00
4988	JE	POT	51	03/13/89	0.925	0.00	36.60	0.00	0.00
4988	PT	P22	51	03/14/89	0.716	0.00	64.50	0.00	4.78
4988	SF	P2H	51	03/14/89	0.182 <	1.00	104.00 >	104.00 >	20.11

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
4988	SF	PUQ	51	04/20/89	1.359	0.00	155.00	0.00 >	3.70
4988	VE	POE	51	03/13/89	0.943	0.00	64.50	0.00	0.00
4988	YF	P18	51	03/13/89	0.848	0.00	78.30	0.00	0.00
4989	JE	POT	51	03/13/89	0.925	0.00 >	320.00	0.00	0.00
4989	PT	P22	51	03/14/89	0.716	0.00 >	320.00	0.00	0.92
4989	SF	P2H	51	03/14/89	0.182	2.28 >	320.00 >	141.00 >	36.16
4989	SF	PUQ	51	04/20/89	1.359	0.00 >	320.00	0.00 >	2.90
4989	VE	POE	51	03/13/89	0.943	0.00 >	320.00	0.00 >	0.00
4989	YF	P18	51	03/13/89	0.848	0.00 >	320.00	0.00	0.00
4990	JE	POU	51	03/13/89	0.764	0.00 >	320.00	0.00	0.00
4990	JE	S1V	51	10/10/89	1.309	0.00	0.74	0.00	0.00
4990	PT	P23	51	03/14/89	0.634	0.00	2.20	0.00 >	1.64
4990	SF	P2I	51	03/14/89	0.155 <	1.00	4.52 >	4.52 >	26.19
4990	SF	PUR	51	04/20/89	1.282	0.00	5.35	0.00 >	2.52
4990	VE	POF	51	03/13/89	0.897	0.00	2.22	0.00	0.00
4990	YF	P19	51	03/13/89	0.799	0.00	2.26	0.00	0.00
4991	JE	POU	51	03/13/89	0.764	0.00	36.40	0.00	0.00
4991	JE	S1W	51	10/10/89	1.156	0.00	155.00	0.00 >	2.06
4991	PT	P23	51	03/14/89	0.634	0.00	108.00	0.00 >	13.20
4991	SF	P2I	51	03/14/89	0.155	16.90	108.00	6.36 >	46.17
4991	SF	PUR	51	04/20/89	1.282	0.00	156.00	0.00 >	12.52
4991	VE	POF	51	03/13/89	0.897	0.00	106.00	0.00	0.12
4991	YF	P19	51	03/13/89	0.799	0.00	70.20	0.00	0.00
4992	JE	POV	51	03/13/89	0.707	0.00	309.00	0.00 >	0.90
4992	PT	P24	51	03/14/89	0.746	0.00	181.00	0.00	4.08
4992	SF	P2J	51	03/14/89	0.215	0.00 >	320.00	0.00 >	9.42
4992	SF	PUS	51	04/20/89	1.229	0.00 >	320.00	0.00 >	1.10
4992	VE	POG	51	03/13/89	0.912	0.00 >	320.00	0.00	0.00
4992	VSV	01M	51	02/24/89	1.423	0.00	198.00	0.00	0.00
4992	VV	01C	51	02/16/89	1.716	134.00	196.00	1.46 >	11.45
4992	YF	P1A	51	03/13/89	0.765	179.00 >	320.00 >	1.79 >	9.79
4993	JE	POV	51	03/13/89	0.707	0.00	28.20	0.00	0.00
4993	JE	S1W	51	10/10/89	1.156	0.00	147.00	0.00	0.00
4993	PT	P24	51	03/14/89	0.746	0.00	43.80	0.00	10.19
4993	SF	P2J	51	03/14/89	0.215	3.09	113.00	36.60 >	19.88
4993	SF	PUS	51	04/20/89	1.229	0.00	163.00	0.00 >	4.91
4993	VE	POG	51	03/13/89	0.912	0.00	84.90	0.00	0.00
4993	VSV	01M	51	02/24/89	1.423	0.00	90.30	0.00 >	0.03
4993	VV	01Q	51	03/09/89	1.956	0.00	87.50	0.00	0.00
4993	YF	P1A	51	03/13/89	0.765	0.00	37.60	0.00	0.00
4994	JE	POW	51	03/13/89	0.905	0.00 <	1.00	0.00	0.00
4994	PT	P25	51	03/14/89	0.838	0.00 <	1.00	0.00	0.00
4994	SF	P2K	51	03/14/89	0.232	0.00 <	1.00	0.00	0.00
4994	SF	PUT	51	04/20/89	1.305	0.00 <	1.00	0.00	0.00
4994	VE	POH	51	03/13/89	0.860	0.00 <	1.00	0.00	0.00
4994	VSV	01N	51	02/24/89	1.365	0.00 <	1.00	0.00	0.00
4994	VV	020	51	03/23/89	1.509	0.00	0.04	0.00 >	0.10
4994	YF	P1B	51	03/13/89	0.693	0.00 <	1.00	0.00	0.00
4995	JE	POW	51	03/13/89	0.905	0.00	4.76	0.00	0.24
4995	JE	S1X	51	10/10/89	1.085	0.00 >	100.00	0.00 >	2.79
4995	PT	P25	51	03/14/89	0.838	6.03	6.72	1.12	15.77
4995	SF	P2K	51	03/14/89	0.232	7.96	19.50	2.44 >	16.77
4995	SF	PUT	51	04/20/89	1.305	0.00	20.40	0.00 >	5.02
4995	VE	POH	51	03/13/89	0.860	0.00	6.85	0.00	0.43
4995	VSV	01N	51	02/24/89	1.365	0.00	112.00	0.00	0.00
4995	VV	01R	51	03/09/89	1.871	0.00	108.00	0.00	0.03
4995	YF	P1B	51	03/13/89	0.693	0.00	7.11	0.00	0.50
4996	JE	POX	51	03/13/89	0.886	0.00	292.00	0.00	0.00
4996	JE	S1X	51	10/10/89	1.085	232.00	320.00	1.38 >	4.44
4996	PT	P26	51	03/14/89	0.660	0.00 >	320.00	0.00 >	18.57
4996	SF	P2L	51	03/14/89	0.182 <	1.00 >	320.00 >	320.00 >	11.56
4996	SF	PUU	51	04/20/89	1.289	0.00 >	320.00	0.00	0.00
4996	VE	POI	51	03/13/89	0.934	0.00	320.00	0.00 >	0.46
4996	VSV	01Q	51	03/03/89	1.351	0.00 >	320.00	0.00	0.00
4996	VV	01S	51	03/09/89	1.812	0.00	2.65	0.00	0.00
4996	VV	023	51	03/23/89	1.553	0.00	5.75	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl..	IC 50	TC 25	SI	TAI
4996	VV	023	51	03/23/89	1.553	0.00 >	0.32	0.0 >	0.62
4996	VV	034	51	04/06/89	1.737	0.00	19.80	0.0	0.00
4996	VV	034	51	04/06/89	1.737	0.00 >	0.32	0.00	0.00
4996	YF	P1C	51	03/13/89	0.784	0.00 >	320.00	0.00	0.00
4997	JE	P34	51	03/14/89	0.373	0.00	87.60	0.00	0.00
4997	PT	P3Y	51	03/15/89	0.856	0.00	26.50	0.00	0.07
4997	SF	P3J	51	03/15/89	0.830	0.00	36.90	0.00	0.01
4997	VE	P1G	51	03/14/89	0.967	0.00	119.00	0.00	0.00
4997	VSV	01Q	51	03/03/89	1.351	0.00	160.00	0.00	0.00
4997	VV	01S	51	03/09/89	1.812	0.00	92.10	0.00	0.00
4997	YF	P2P	51	03/14/89	0.782	0.00	98.10	0.00	0.00
4998	JE	P35	51	03/14/89	0.946	0.00	77.20	0.00	0.00
4998	PT	P3Z	51	03/15/89	0.842	0.00	77.70	0.00	0.00
4998	SF	P3K	51	03/15/89	1.046	0.00	53.60	0.00 >	0.15
4998	VE	P1H	51	03/14/89	0.983	249.00	28.10	0.11	0.36
4998	VSV	01R	51	03/03/89	1.128	0.00	274.00	0.00	0.00
4998	VV	01T	51	03/09/89	2.058	0.00	39.60	0.00	0.00
4998	YF	P2Q	51	03/14/89	1.016	0.00	79.20	0.00	0.00
4999	JE	P35	51	03/14/89	0.946	0.00	1.59	0.00	0.00
4999	PT	P32	51	03/15/89	0.842	0.00	1.22	0.00	0.00
4999	SF	P3K	51	03/15/89	1.046	0.00	0.86	0.00	0.00
4999	VE	P1H	51	03/14/89	0.983	88.50	1.58	0.02 >	0.22
4999	YF	P2Q	51	03/14/89	1.016	0.00	1.48	0.00	0.00
5000	JE	03Q	45	12/07/88	1.003	0.00 >	320.00	0.00	0.04
5000	PT	038	45	12/07/88	1.259	0.00	271.00	0.00	0.00
5000	SF	03W	45	12/07/88	0.847	0.00 >	320.00	0.00	0.22
5000	VE	03E	45	12/07/88	1.071	0.00	216.00	0.00	0.00
5000	YF	03K	45	12/07/88	0.761	0.00 >	320.00	0.00	0.00
5001	SF	04P	45	12/07/88	0.783	0.00 >	320.00	0.00 >	1.00
5001	VE	044	45	12/07/88	1.164	0.00	328.00	0.00 >	0.40
5001	YF	04B	45	12/07/88	0.949	0.00 >	320.00	0.00	0.00
5002	PT	0V6	45	03/01/89	1.112	0.00	168.00	0.00	1.00
5002	SF	04Q	45	12/07/88	0.795	0.00	142.00	0.00	0.00
5002	VE	045	45	12/07/88	1.119	0.00	287.00	0.00 >	0.10
5002	YF	04C	45	12/07/88	0.905	0.00	260.00	0.00	0.00
5003	PT	0V6	45	03/01/89	1.117	305.00 >	320.00 >	1.05 >	3.53
5003	SF	04Q	45	12/07/88	0.755	0.00 >	320.00	0.00	0.00
5003	VE	045	45	12/07/88	1.119	0.00	254.00	0.00 >	0.70
5003	YF	04C	45	12/07/88	0.905	0.00 >	320.00	0.00	0.00
5004	PT	0V7	45	03/01/89	1.078	0.00 >	320.00	0.00 >	5.09
5004	SF	04R	45	12/07/88	0.721	0.00 >	320.00	0.00	0.00
5004	VE	046	45	12/07/88	1.072	0.00 >	320.00	0.00 >	0.20
5004	YF	04D	45	12/07/88	0.857	0.00 >	320.00	0.00	0.00
5005	PT	0V7	45	03/01/89	1.078	320.00 >	320.00 >	1.00 >	2.48
5005	SF	04R	45	12/07/88	0.721	0.00 >	320.00	0.00	2.40
5005	VE	046	45	12/07/88	1.072	0.00	309.00	0.00	0.00
5005	YF	04D	45	12/07/88	0.857	0.00 >	320.00	0.00	0.00
5006	PT	0V8	45	03/01/89	1.143	0.00	190.00	0.00	0.00
5006	SF	04S	45	12/07/88	0.768	0.00 >	320.00	0.00	0.00
5006	VE	047	45	12/07/88	1.101	0.00	177.00	0.00 >	1.06
5006	YF	04E	45	12/07/88	0.864	0.00 >	320.00	0.00	0.00
5007	PT	0V8	45	03/01/89	1.143	0.00 >	320.00	0.00 >	2.30
5007	SF	04S	45	12/07/88	0.768	0.00 >	320.00	0.00	0.00
5007	VE	047	45	12/07/88	1.101	0.00 >	320.00	0.00 >	0.20
5007	YF	04E	45	12/07/88	0.864	0.00 >	320.00	0.00	0.00
5008	PT	0V9	45	03/01/89	1.108	0.00 >	320.00	0.00 >	2.72
5008	SF	04T	45	12/08/88	0.809	0.00 >	320.00	0.00	1.88
5008	VE	048	45	12/07/88	1.133	0.00 >	320.00	0.00 >	0.10
5008	YF	04F	45	12/07/88	0.843	0.00 >	320.00	0.00	0.00
5009	PT	0V9	45	03/01/89	1.108	0.00 >	320.00	0.00 >	0.56
5009	SF	04T	45	12/08/88	0.809	0.00 >	320.00	0.00	3.27
5009	VE	048	45	12/07/88	1.133	0.00	303.00	0.00	0.55
5009	YF	04F	45	12/07/88	0.843	0.00 >	320.00	0.00	0.00
5029	JE	OSC	48	02/27/89	1.003	0.00	39.90	0.00	0.00
5029	PT	OSY	48	02/28/89	0.557	0.00	56.50	0.00 >	2.09
5029	SF	OT9	48	02/23/89	1.034	0.00	68.50	0.00 >	0.28

AVS No.	VIRUS	Flt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5029	YF	OSN	48	02/27/89	1.018	0.00	51.40	0.00	0.00
5030	JE	OSD	48	02/27/89	0.960	0.00	115.00	0.00 >	0.90
5030	PT	OSZ	48	02/28/89	0.662	0.00	85.20	0.00	0.00
5030	SF	OTA	48	02/28/89	0.970	0.00	135.00	0.00	0.00
5030	YF	OSO	48	02/27/89	1.023	0.00	117.00	0.00	0.00
5031	JE	OSD	48	02/27/89	0.960	0.00	7.28	0.00	0.00
5031	PT	OSZ	48	02/28/89	0.662	0.00	8.11	0.00	0.56
5031	SF	OTA	48	02/28/89	0.970	0.00	5.38	0.00	0.00
5031	YF	OSO	48	02/27/89	1.023	0.00	13.70	0.00	0.00
5032	JE	OSE	48	02/27/89	0.960	0.00	13.60	0.00	0.00
5032	PT	OTO	48	02/28/89	0.539	0.00	16.40	0.00	0.00
5032	SF	OTB	48	02/28/89	0.961	0.00	8.21	0.00 >	0.27
5032	YF	OSP	48	02/27/89	0.953	0.00	23.40	0.00	0.00
5033	JE	OSE	48	02/27/89	0.960	0.00	84.40	0.00 >	0.01
5033	PT	OTO	48	02/28/89	0.539	55.60	61.30	1.10	21.68
5033	SF	OTB	48	02/28/89	0.961	0.00	75.50	0.00 >	7.91
5033	YF	OSP	48	02/27/89	0.953	0.00	106.00	0.00	0.13
5034	JE	OSF	48	02/27/89	0.974	0.00	32.00	0.00 >	0.06
5034	PT	OT1	48	02/28/89	0.702	0.00	103.00	0.00	0.26
5034	SF	OTC	48	02/28/89	0.987	0.00	90.20	0.00	0.00
5034	VV	04A	43	05/18/89	1.899	15.80 >	320.00 >	20.30 >	35.02
5034	YF	OSQ	48	02/27/89	0.970	0.00	136.00	0.00	2.60
5035	JE	OSF	48	02/27/89	0.974	0.00	12.80	0.00	3.02
5035	JE	S1Y	48	10/10/89	1.134	1.72	0.32	0.19	11.29
5035	PT	OT1	48	02/28/89	0.702	6.66	9.00	1.35	14.70
5035	SF	OTC	48	02/28/89	0.987	0.00	16.60	0.00	2.26
5035	VV	04N	48	06/01/89	2.287	1.84	16.50	8.97	34.26
5035	YF	OSQ	48	02/27/89	0.970	0.00	11.50	0.00	2.97
5036	JE	OSG	48	02/27/89	0.865	0.00	225.00	0.00	0.00
5036	PT	OT2	48	02/28/89	0.520	0.00	188.00	0.00	0.00
5036	SF	OTF	48	02/28/89	0.999	0.00	173.00	0.00 >	3.66
5036	YF	OSR	48	02/27/89	0.981	0.00	252.00	0.00	0.00
5037	JE	OSG	48	02/27/89	0.865	0.00 >	320.00	0.00 >	0.88
5037	PT	OT2	48	02/28/89	0.520	0.00 >	320.00	0.00	0.06
5037	SF	OTD	48	02/28/89	0.999	0.00 >	320.00	0.00	0.00
5037	YF	OSR	48	02/27/89	0.981	0.00 >	320.00	0.00	0.00
5038	JE	OSH	48	02/27/89	0.999	0.00 >	320.00	0.00 >	0.41
5038	PT	OT3	48	02/28/89	0.678	0.00 >	320.00	0.00 >	18.60
5038	SF	OTE	48	02/28/89	0.998	0.00 >	320.00	0.00 >	10.07
5038	YF	OSS	48	02/27/89	1.192	0.00 >	320.00	0.00	0.00
5040	PT	OVA	45	03/01/89	1.066	61.60 >	320.00 >	5.20 >	19.13
5040	SF	04U	45	12/07/88	0.853	56.60 >	320.00 >	5.66 >	22.70
5040	VE	049	45	12/07/88	1.107	0.00	252.00	0.00 >	9.10
5040	YF	04G	45	12/07/88	0.866	0.00 >	320.00	0.00	0.00
5041	PT	OVA	45	03/01/89	1.066	0.00 >	320.00	0.00	0.00
5041	SF	04U	45	12/07/88	0.853	0.00 >	320.00	0.00 >	6.42
5041	VE	049	45	12/07/88	1.107	0.00 >	320.00	0.00 >	1.12
5041	YF	04G	45	12/07/88	0.866	0.00 >	320.00	0.00	0.00
5042	PT	OVB	45	03/01/89	1.037	0.00 >	320.00	0.00	0.30
5042	VE	04A	45	12/07/88	1.131	0.00 >	320.00	0.00	0.20
5042	YF	04H	45	12/07/88	0.839	0.00 >	320.00	0.00	0.00
5047	JE	OSH	48	02/27/89	0.999	0.00	82.10	0.00	0.00
5047	PT	OT3	48	02/28/89	0.678	0.00	122.00	0.00	8.20
5047	SF	OTE	48	02/28/89	0.998	0.00	113.00	0.00 >	2.54
5047	VV	009	48	01/26/89	1.817	0.00	29.40	0.00	0.00
5047	YF	OSS	48	02/27/89	1.192	0.00	143.00	0.00	0.12
5048	JE	OSI	48	02/27/89	0.963	0.00 >	320.00	0.00	0.00
5048	JE	S1Y	48	10/10/89	1.134	0.00	58.20	0.00	0.00
5048	PT	OT4	48	02/28/89	0.524	8.69 >	320.00 >	36.80	27.34
5048	SF	OTF	48	02/28/89	0.784	0.00 >	320.00	0.00 >	22.29
5048	VV	009	48	01/26/89	1.817	0.00	113.00	0.00 >	0.30
5048	YF	OST	48	02/27/89	1.030	0.00 >	320.00	0.00	0.00
5049	JE	OSI	48	02/27/89	0.963	0.00	3.20	0.00	0.00
5049	PT	OT4	48	02/28/89	0.524	0.00	7.21	0.00	0.00
5049	SF	OTF	48	02/28/89	0.784	0.00	21.30	0.00	0.00
5049	YF	OST	48	02/27/89	1.030	0.00	17.60	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5050	JE	OSJ	48	02/27/89	0.943	0.00	2.62	0.00	0.00
5050	PT	OT5	48	02/28/89	0.452	0.00	6.95	0.00 >	8.03
5050	SF	OTG	48	02/28/89	0.881	0.00	4.65	0.00	0.00
5050	YF	OSU	48	02/27/89	1.038	0.00	6.91	0.00	0.00
5051	JE	OSJ	48	02/27/89	0.943	0.00	2.89	0.00	0.00
5051	PT	OT5	48	02/28/89	0.452	0.00	8.83	0.00	2.93
5051	SF	OTG	48	02/28/89	0.881	0.00	3.68	0.00	0.00
5051	YF	OSU	48	02/27/89	1.038	0.00	64.60	0.00	0.00
5052	JE	OSK	48	02/27/89	0.955	0.00 >	320.00	0.00	0.00
5052	PT	OT6	48	02/28/89	0.452	0.00 >	320.00	0.00	19.79
5052	SF	OTH	48	02/28/89	0.910	0.00 >	320.00	0.00	2.15
5052	YF	OSV	48	02/27/89	0.957	0.00 >	320.00	0.00 >	0.10
5053	JE	OSK	48	02/27/89	0.955	0.00	39.60	0.00	0.00
5053	JE	S1Z	48	10/10/89	1.029	56.60	77.30	1.37 >	5.79
5053	PT	OT6	48	02/28/89	0.452	4.31	42.60	9.86	39.13
5053	SF	OTH	48	02/28/89	0.910	0.00	37.60	0.00	8.52
5053	YF	OSV	48	02/27/89	0.957	0.00	86.00	0.00	0.00
5058	JE	OSL	48	02/27/89	0.881	310.00 >	320.00 >	1.03 >	8.39
5058	JE	S1Z	48	10/10/89	1.029	0.00 >	320.00	0.00 >	1.37
5058	PT	OT7	48	02/28/89	0.548	26.60 >	320.00 >	12.00 >	42.55
5058	SF	OTI	48	02/28/89	0.907	50.30 >	320.00 >	6.37 >	31.02
5058	VE	Q77	48	05/23/89	1.000	0.00	223.00	0.00	0.00
5058	YF	OSW	48	02/27/89	1.012	0.00 >	320.00	0.00 >	3.01
5059	JE	OSL	48	02/27/89	0.881	0.00 >	320.00	0.00	0.00
5059	PT	OT7	48	02/28/89	0.548	0.00 >	320.00	0.00 >	0.00
5059	SF	OTI	48	02/28/89	0.907	0.00 >	320.00	0.00 >	8.79
5059	VE	Q77	48	05/23/89	1.000	0.00 >	320.00	0.00	0.00
5059	YF	OSW	48	02/27/89	1.012	0.00 >	320.00	0.00	0.00
5060	JE	OSM	48	02/27/89	0.911	0.00 >	320.00	0.00 >	3.40
5060	PT	OT8	48	02/28/89	0.559	262.00 >	320.00 >	1.22 >	22.52
5060	SF	OTJ	48	02/28/89	0.930	0.00 >	320.00	0.00 >	3.90
5060	YF	OSX	48	02/27/89	1.102	0.00 >	320.00	0.00 >	0.30
5061	JE	OTT	48	02/28/89	0.865	0.00	56.20	0.00	0.00
5061	PT	OUH	48	03/01/89	0.966	0.00	84.20	0.00	1.41
5061	SF	OUT	48	03/01/89	0.891	0.00	55.90	0.00	0.00
5061	VE	OVD	48	03/03/89	0.934	0.00	65.10	0.00	0.00
5061	YF	OU5	48	02/27/89	0.998	0.00	44.70	0.00	0.00
5062	JE	OTU	48	02/28/89	0.909	0.00 >	320.00	0.00 >	0.53
5062	PT	OUI	48	03/01/89	0.879	0.00 >	320.00	0.00	5.14
5062	SF	OUU	48	03/01/89	0.901	0.00 >	320.00	0.00 >	12.31
5062	VE	OVE	48	03/03/89	0.929	0.00 >	320.00	0.00 >	0.32
5062	YF	OU6	48	02/27/89	0.874	0.00 >	320.00	0.00	0.72
5063	JE	OTU	48	02/28/89	0.909	0.00	229.00	0.00	2.46
5063	PT	OUI	48	03/01/89	0.879	0.00	263.00	0.00	1.00
5063	SF	OUU	48	03/01/89	0.901	0.00	214.00	0.00 >	2.01
5063	VE	OVE	48	03/03/89	0.929	0.00	183.00	0.00 >	0.02
5063	YF	OU6	48	02/27/89	0.874	0.00	238.00	0.00	0.00
5064	JE	OTV	48	02/28/89	0.939	0.00	114.00	0.00	0.00
5064	PT	OUJ	48	03/01/89	0.889	0.00	110.00	0.00	4.45
5064	SF	OUV	48	03/01/89	0.977	0.00	126.00	0.00 >	15.28
5064	VE	OVF	48	03/03/89	0.941	0.00 >	320.00	0.00	0.00
5064	YF	OU7	48	02/27/89	0.855	0.00	164.00	0.00	0.00
5065	JE	OTV	48	02/28/89	0.939	0.00 >	320.00	0.00	0.34
5065	PT	OUJ	48	03/01/89	0.889	0.00 >	320.00	0.00	0.00
5065	SF	OUV	48	03/01/89	0.977	0.00 >	320.00	0.00 >	0.84
5065	VE	OVF	48	03/03/89	0.941	0.00 >	320.00	0.00	0.00
5065	YF	OU7	48	02/27/89	0.855	0.00 >	320.00	0.00	0.00
5066	JE	OTW	48	02/28/89	0.906	0.00	119.00	0.00	2.59
5066	PT	OUK	48	03/01/89	0.886	0.00	145.00	0.00 >	13.59
5066	SF	OUI	48	03/01/89	0.864	0.00	154.00	0.00 >	9.87
5066	VE	OVG	48	03/03/89	0.924	0.00	178.00	0.00	0.00
5066	YF	OU8	48	02/27/89	0.925	0.00	89.90	0.00	0.00
5067	JE	OTW	48	02/28/89	0.906	0.00 >	320.00	0.00 >	13.14
5067	JE	S20	48	10/10/89	1.121	0.00	289.00	0.00	0.34
5067	PT	OUK	48	03/01/89	0.886	34.80 >	320.00 >	9.19 >	41.88
5067	SF	OUI	48	03/01/89	0.864	15.80 >	320.00 >	20.20 >	42.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5067	VE	OVG	48	03/03/89	0.924	0.00	> 320.00	0.00	> 4.26
5067	VV	008	48	01/26/89	1.705	0.00	78.80	0.00	> 0.40
5067	YF	OU8	48	02/27/89	0.925	0.00	320.00	0.00	0.34
5068	JE	OTX	48	02/28/89	0.903	0.00	244.00	0.00	0.30
5068	PT	OUL	48	03/01/89	0.828	0.00	> 320.00	0.00	11.04
5068	SF	OUX	48	03/01/89	0.873	0.00	> 320.00	0.00	> 6.46
5068	VE	OVH	48	03/03/89	0.966	0.00	221.00	0.00	0.00
5068	YF	OU9	48	02/27/89	0.849	0.00	> 320.00	0.00	1.70
5069	JE	OTX	48	02/28/89	0.903	0.00	98.80	0.00	0.00
5069	JE	RUL	48	10/03/89	0.839	0.00	176.00	0.00	0.00
5069	JE	S20	48	10/10/89	1.121	0.00	87.60	0.00	0.00
5069	PT	OUL	48	03/01/89	0.828	52.30	97.70	1.87	17.70
5069	SF	OUX	48	03/01/89	0.873	0.00	82.70	0.00	> 16.55
5069	SF	RVB	48	10/03/89	0.974	0.00	273.00	0.00	0.54
5069	VE	OVH	48	03/03/89	0.966	0.00	157.00	0.00	> 2.61
5069	VE	RUY	48	10/02/89	1.011	0.00	197.00	0.00	0.00
5069	VV	037	48	04/06/89	1.619	86.90	295.00	3.39	> 14.61
5069	YF	OU9	48	02/27/89	0.849	0.00	106.00	0.00	2.59
5069	YF	RU3	48	10/02/89	0.956	0.00	191.00	0.00	0.26
5070	JE	OTY	48	02/28/89	0.924	0.00	63.80	0.00	0.00
5070	JE	RUM	48	10/03/89	0.895	0.00	41.70	0.00	0.00
5070	JE	S21	48	10/10/89	1.126	0.00	9.35	0.00	0.00
5070	PT	OUM	48	03/01/89	0.928	0.00	78.70	0.00	> 10.50
5070	SF	OUY	48	03/01/89	0.982	< 1.00	62.40	> 62.40	> 21.74
5070	SF	RVC	48	10/03/89	0.907	0.00	61.80	0.00	0.00
5070	VE	OVI	48	03/03/89	0.958	23.00	59.20	0.26	> 1.63
5070	VE	RUZ	48	10/02/89	1.011	0.00	106.00	0.00	0.03
5070	YF	OUA	48	02/27/89	0.844	0.00	75.20	0.00	0.00
5070	YF	RU9	48	10/02/89	0.927	0.00	52.70	0.00	0.00
5071	JE	OTY	48	02/28/89	0.924	0.00	3.85	0.00	0.00
5071	PT	OUM	48	03/01/89	0.928	0.00	164.00	0.00	18.15
5071	SF	OUY	48	03/01/89	0.982	0.00	58.60	0.00	> 14.80
5071	VE	OVI	48	03/03/89	0.958	0.00	38.50	0.00	0.00
5071	YF	OUA	48	02/27/89	0.844	0.00	51.80	0.00	0.10
5072	JE	OTZ	48	02/28/89	0.724	207.00	88.00	0.42	> 3.42
5072	JE	RS7	48	09/27/89	0.935	0.00	139.00	0.00	0.25
5072	JE	RUM	48	10/03/89	0.895	0.00	47.70	0.00	0.00
5072	PT	OUN	48	03/01/89	1.023	22.60	73.10	3.23	> 16.07
5072	SF	CJZ	48	03/01/89	0.743	19.50	141.00	7.21	> 25.11
5072	SF	RVC	48	10/03/89	0.907	0.00	265.00	0.00	1.65
5072	SF	RSW	48	10/11/89	0.955	31.10	234.00	7.50	> 22.15
5072	VE	OVJ	48	03/03/89	0.956	67.00	> 320.00	> 4.77	> 27.35
5072	VE	RUZ	48	10/02/89	1.011	138.00	810.00	5.88	> 24.06
5072	VE	RTN	48	10/06/89	0.390	0.00	267.00	0.00	> 3.10
5072	VV	035	48	04/06/89	1.748	95.70	68.60	0.72	0.81
5072	VV	OE8	48	09/07/89	1.249	59.00	247.00	4.18	> 22.92
5072	YF	OUB	48	02/27/89	0.919	230.00	87.10	0.38	> 4.01
5072	YF	RU9	48	10/02/89	0.927	0.00	66.00	0.00	0.98
5072	YF	S23	48	10/10/89	0.845	0.00	130.00	0.00	> 3.94
5075	JE	OTZ	48	02/28/89	0.724	0.00	> 320.00	0.00	> 4.46
5075	JE	RS8	48	09/27/89	0.841	0.00	> 320.00	0.00	> 2.41
5075	JE	RUN	48	10/03/89	0.893	0.00	139.00	0.00	0.00
5075	PT	OUN	48	03/01/89	1.023	48.10	> 320.00	> 6.65	> 25.83
5075	SF	OUZ	48	03/01/89	0.743	16.50	> 320.00	> 19.40	> 49.75
5075	SF	RVD	48	10/03/89	0.905	0.00	100.00	0.00	> 0.35
5075	SF	RSX	48	10/11/89	0.395	32.00	302.00	9.43	> 35.00
5075	VE	OVJ	48	03/03/89	0.956	0.00	> 320.00	0.00	7.36
5075	VE	RVO	48	10/07/89	0.996	0.00	228.00	0.00	0.00
5075	VE	RTO	48	10/06/89	0.323	0.00	247.00	0.00	0.7
5075	YF	OUB	48	02/27/89	0.919	0.00	> 320.00	0.00	> 2.14
5075	YF	RUA	48	10/02/89	0.979	0.00	423.00	0.00	> 0.32
5075	YF	S24	48	10/10/89	0.853	0.00	> 320.00	0.00	> 2.46
5080	JE	P36	51	03/14/89	0.922	0.00	> 320.00	0.00	0.00
5080	PT	P40	51	03/15/89	0.875	0.00	> 320.00	0.00	0.00
5080	SF	P3L	51	03/15/89	0.892	0.00	> 320.00	0.00	> 6.40
5080	VE	P1I	51	03/14/89	1.023	0.00	> 320.00	0.00	0.03

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5080	VSV	01R	51	03/03/89	1.128	0.00 >	320.00	0.00	0.00
5080	VV	01N	51	03/09/89	1.913	0.00 >	320.00	0.00	0.00
5080	YF	P2R	51	03/14/89	0.852	0.00 >	320.00	0.00	0.00
5081	JE	P36	51	03/14/89	0.922	0.00 >	320.00	0.00	0.00
5081	PT	P40	51	03/15/89	0.875	0.00 >	320.00	0.00	0.00
5081	SF	P3L	51	03/15/89	0.892	0.00 >	320.00	0.00 >	1.00
5081	VE	P1I	51	03/14/89	1.023	0.00 >	320.00	0.00	0.00
5081	VSV	01S	51	03/03/89	1.232	0.00 >	320.00	0.00	0.00
5081	YF	P2R	51	03/14/89	0.852	0.00 >	320.00	0.00	0.00
5082	JE	P37	51	03/14/89	0.920	0.00	4.15	0.00	0.00
5082	PT	P41	51	03/15/89	0.988	0.00	5.41	0.00	0.00
5082	SF	P3M	51	03/15/89	0.787	0.00	3.54	0.00	0.00
5082	VE	P1J	51	03/14/89	1.111	0.00	3.63	0.00	0.00
5082	VSV	01S	51	03/03/89	1.232	0.00	4.31	0.00	0.00
5082	VV	01T	51	03/09/89	2.058	0.00	2.78	0.00	0.00
5082	YF	P2S	51	03/14/89	0.923	0.00	3.61	0.00	0.00
5083	JE	P37	51	03/14/89	0.920	0.00 <	1.00	0.00	0.00
5083	PT	P41	51	03/15/89	0.988	0.00 <	1.00	0.00	0.00
5083	SF	P3M	51	03/15/89	0.787	0.00 <	1.00	0.00	0.00
5083	VE	P1J	51	03/14/89	1.111	0.00 <	1.00	0.00	0.00
5083	VSV	01T	51	03/03/89	1.171	0.00	110.00	0.00	0.00
5083	VV	020	51	03/23/89	1.509	0.00	0.05	0.00	0.00
5083	YF	P2S	51	03/14/89	0.923	0.00 <	1.00	0.00	0.00
5084	JE	P38	51	03/14/89	1.033	0.00 <	1.00	0.00	0.00
5084	PT	P42	51	03/15/89	0.989	0.00 <	1.00	0.00	0.00
5084	SF	P3N	51	03/15/89	0.801	0.00 <	1.00	0.00	0.00
5084	VE	P1K	51	03/14/89	0.966	0.00 <	1.00	0.00	0.00
5084	VSV	01T	51	03/03/89	1.171	0.00	40.80	0.00	0.00
5084	VV	021	51	03/23/89	1.470	0.00	0.05	0.00	0.00
5084	YF	P2T	51	03/14/89	0.850	0.00 <	1.00	0.00	0.00
5085	JE	P38	51	03/14/89	1.033	0.00 <	1.00	0.00	0.00
5085	PT	P42	51	03/15/89	0.989	0.00 <	1.00	0.00	0.00
5085	SF	P3N	51	03/15/89	0.801	0.00 <	1.00	0.00	0.00
5085	VE	P1K	51	03/14/89	0.966	0.00 <	1.00	0.00	0.00
5085	VSV	01U	51	03/03/89	1.373	0.00	20.50	0.00	0.17
5085	VV	01V	51	03/09/89	1.884	0.00	3.65	0.00	0.00
5085	VV	037	51	04/06/89	1.619	0.00	6.24	0.00	0.00
5085	YF	P2T	51	03/14/89	0.850	0.00 <	1.00	0.00	0.00
5086	JE	P39	51	03/14/89	0.988	0.00 <	1.00	0.00	0.00
5086	PT	P43	51	03/15/89	0.847	0.00 <	1.00	0.00	0.00
5086	SF	P30	51	03/15/89	0.822	0.00 <	1.00	0.00	0.00
5086	VE	P1L	51	03/14/89	0.918	0.00 <	1.00	0.00	0.00
5086	VSV	01U	51	03/03/89	1.373	0.00	44.00	0.00	0.00
5086	VV	021	51	03/23/89	1.470	0.00	0.05	0.00	0.00
5086	YF	P2U	51	03/14/89	0.884	0.00 <	1.00	0.00	0.00
5087	JE	QFN	56	06/20/89	0.936	0.00 >	320.00	0.00	0.00
5087	JE	R1X	56	08/08/89	0.795	0.00 >	320.00	0.00 >	0.73
5087	PT	QGN	56	07/19/89	0.607	0.00 >	320.00	0.00 >	0.50
5087	SF	QGB	56	06/20/89	1.234	0.00 >	320.00	0.00 >	5.20
5087	SF	R2A	56	08/08/89	1.202	0.00 >	320.00	0.00 >	4.30
5087	VE	QFB	56	06/19/89	1.409	0.00 >	320.00	0.00 >	0.31
5087	VE	R1K	56	08/07/89	1.084	0.00 >	320.00	0.00 >	0.30
5087	YF	QFZ	56	06/19/89	1.055	0.00 >	320.00	0.00 >	2.71
5088	JE	QFN	56	06/20/89	0.936	0.00	81.50	0.00	0.00
5088	PT	QGN	56	07/19/89	0.607	0.00 >	320.00	0.00	0.03
5088	SF	QGB	56	06/20/89	1.234	0.00	252.00	0.00	0.00
5088	VE	QFB	56	06/19/89	1.409	0.00 >	320.00	0.00	0.00
5088	YF	QFZ	56	06/19/89	1.055	0.00 >	320.00	0.00 >	2.02
5089	JE	QFO	56	06/20/89	0.948	0.00	41.70	0.00	0.00
5089	JE	R1X	56	03/08/89	0.795	0.00	55.40	0.00	0.00
5089	PT	QGO	56	07/19/89	0.593	0.00	60.80	0.00	0.00
5089	SF	QGC	56	06/20/89	1.214	0.00	52.10	0.00	3.56
5089	SF	R2A	56	08/08/89	1.202	0.00	53.20	0.00	2.28
5089	VE	QFC	56	06/19/89	1.377	0.00	83.50	0.00	0.00
5089	VE	R1K	56	08/07/89	1.084	0.00	145.00	0.00	0.00
5089	YF	QGO	56	06/19/89	1.070	0.00	148.00	0.00	0.52

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5090	JE	QFO	56	06/20/89	0.948	0.00 >	320.00	0.00 >	0.03
5090	PT	QGO	56	07/19/89	0.593	0.00 >	320.00	0.00	0.00
5090	SF	QGC	56	06/20/89	1.214	0.00 >	320.00	0.00	0.00
5090	VE	QFC	56	06/19/89	1.377	0.00 >	320.00	0.00	0.00
5090	YF	QGO	56	06/19/89	1.070	0.00 >	320.00	0.00	0.10
5091	JE	QFP	56	06/20/89	1.109	0.00	2.98	0.00	0.00
5091	JE	R1Y	56	08/08/89	0.737	0.00	4.14	0.00	0.81
5091	PT	QGP	56	07/19/89	0.724	0.00	4.65	0.00	0.53
5091	PT	R2O	56	08/08/89	0.637	0.00	3.55	0.00	0.00
5091	SF	QGD	56	06/20/89	1.348	0.00	4.28	0.00 >	4.14
5091	SF	R2B	56	08/08/89	1.402	0.00	3.38	0.00	2.76
5091	VE	QFD	56	06/19/89	1.464	0.00	4.97	0.00	0.00
5091	VE	R1L	56	03/07/89	1.154	0.00	4.93	0.00 >	1.65
5091	YF	QG1	56	06/19/89	1.224	0.00	4.90	0.00	0.00
5091	YF	R18	56	08/07/89	0.992	0.00	4.57	0.00	0.00
5092	JE	QFP	56	06/20/89	1.109	0.00	6.29	0.00	0.00
5092	PT	QGP	56	07/19/89	0.724	0.00	16.10	0.00	0.00
5092	SF	QGD	56	06/20/89	1.348	0.00	8.54	0.00	1.56
5092	VE	QFD	56	06/19/89	1.404	0.00	13.00	0.00	0.00
5092	YF	QG1	56	06/19/89	1.224	0.00	19.10	0.00	0.00
5093	JE	QFQ	56	06/20/89	0.830	0.00 <	1.00	0.00	0.00
5093	JE	R3X	56	08/09/89	0.805	0.00	0.64	0.00	0.81
5093	PT	QGO	56	07/19/89	0.442	0.00 <	1.00	0.00	0.00
5093	PT	R4N	56	08/09/89	0.642	0.00	0.22	0.00	0.00
5093	SF	QGE	56	06/20/89	1.411	0.00 <	1.00	0.00	0.00
5093	SF	R4A	56	08/09/89	0.963	0.00	0.52	0.00	0.00
5093	VE	QFE	56	06/19/89	1.410	0.00 <	1.00	0.00	0.00
5093	VE	R37	56	08/11/89	1.347	0.00 >	10.00	0.00 >	0.40
5093	YF	QG2	56	06/19/89	0.905	0.00 <	1.00	0.00	0.00
5093	YF	R3K	56	08/07/89	1.115	0.00	0.28	0.00	0.00
5094	JE	QFQ	56	06/20/89	0.830	0.00	14.10	0.00	0.10
5094	JE	R1Y	56	08/08/89	0.737	0.00	34.40	0.00	0.00
5094	PT	QGO	56	07/19/89	0.442	0.00	56.60	0.00	0.00
5094	PT	R2O	56	08/08/89	0.637	0.00	49.30	0.00 >	0.81
5094	SF	QGE	56	06/20/89	1.411	0.00	32.00	0.00	0.00
5094	SF	R2B	56	08/08/89	1.402	0.00	50.40	0.00	0.00
5094	VE	QFE	56	06/19/89	1.410	73.10	83.50	1.14	4.52
5094	VE	R1L	56	08/07/89	1.154	0.00	59.80	0.00	0.00
5094	YF	QG2	56	06/19/89	0.905	0.00	85.40	0.00	1.50
5094	YF	R18	56	08/07/89	0.992	0.00	65.10	0.00	0.00
5095	JE	QFR	56	06/20/89	0.975	0.00 >	320.00	0.00	0.00
5095	PT	QGR	56	07/19/89	0.632	0.00 >	320.00	0.00	2.20
5095	SF	QGF	56	06/20/89	1.380	0.00 >	320.00	0.00	0.00
5095	VE	QFF	56	06/19/89	1.342	0.00 >	320.00	0.00	0.00
5095	YF	QG3	56	06/19/89	0.985	0.00 >	320.00	0.00 >	2.81
5096	JE	QFR	56	06/20/89	0.975	0.00	6.16	0.00	0.00
5096	JE	R1Z	56	08/08/89	0.716	0.00	4.75	0.00	0.07
5096	PT	QGR	56	07/19/89	0.632	0.00	12.80	0.00	0.10
5096	PT	R2P	56	08/08/89	0.615	0.00	4.08	0.00	0.00
5096	SF	QGF	56	06/20/89	1.380	0.00	6.60	0.00	0.00
5096	SF	R2C	56	08/08/89	1.430	0.00	0.66	0.00	0.00
5096	VE	QFF	56	06/19/89	1.342	0.00	8.95	0.00	0.00
5096	VE	R1M	56	08/07/89	1.107	0.00	5.01	0.00	0.12
5096	YF	QG3	56	06/19/89	0.985	0.00	8.87	0.00	0.00
5096	YF	R19	56	08/07/89	1.144	0.00	4.54	0.00	0.25
5097	JE	QFS	56	06/20/89	0.866	0.00	9.03	0.00	0.00
5097	PT	QGS	56	07/19/89	0.616	0.00	54.70	0.00	0.31
5097	SF	QGG	56	06/20/89	1.278	0.00	25.50	0.00	0.00
5097	VE	QFG	56	06/19/89	1.305	0.00	31.10	0.00	0.00
5097	YF	QG4	56	06/19/89	1.123	0.00	46.30	0.00	0.00
5098	JE	QFS	56	06/20/89	0.866	0.00	113.00	0.00	0.00
5098	JE	R1Z	56	08/08/89	0.716	0.00	69.10	0.00	0.13
5098	PT	QGS	56	07/19/89	0.616	0.00	108.00	0.00	0.00
5098	PT	R2P	56	08/08/89	0.615	0.00	69.80	0.00 >	0.02
5098	SF	QGG	56	06/20/89	1.278	0.00	204.00	0.00 >	0.52
5098	SF	R2C	56	08/08/89	1.430	227.00	232.00	1.02	4.57

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5098	VE	QFG	56	06/19/89	1.306	0.00	> 320.00	0.00	0.00
5098	VE	R1M	56	08/07/89	1.107	0.00	227.00	0.00	0.30
5098	YF	QG4	56	06/19/89	1.123	0.00	173.00	0.00	0.33
5098	YF	R19	56	08/07/89	1.144	0.00	115.00	0.00	> 0.02
5099	JE	QFT	56	06/20/89	0.846	0.00	3.20	0.00	0.00
5099	PT	QGT	56	07/19/89	0.551	0.00	> 320.00	0.00	> 4.96
5099	SF	QGH	56	06/20/89	1.272	0.00	> 320.00	0.00	0.00
5099	VE	QFH	56	06/19/89	1.300	0.00	> 320.00	0.00	0.00
5099	YF	QG5	56	06/19/89	1.068	0.00	> 320.00	0.00	> 1.91
5100	JE	QFT	56	06/20/89	0.846	0.00	< 1.00	0.00	0.00
5100	JE	R3Y	56	08/09/89	0.887	0.00	0.29	0.00	0.86
5100	PT	QGT	56	07/19/89	0.551	0.00	< 1.00	0.00	0.00
5100	PT	R40	56	08/09/89	0.629	0.00	0.22	0.00	0.00
5100	SF	QGH	56	06/20/89	1.272	0.00	< 1.00	0.00	0.00
5100	SF	R4B	56	08/09/89	0.905	0.00	0.32	0.00	0.00
5100	VE	QFH	56	06/19/89	1.300	0.00	< 1.00	0.00	0.00
5100	VE	R38	56	08/11/89	1.323	0.00	> 10.00	0.00	0.00
5100	YF	QG5	56	06/19/89	1.068	0.00	< 1.00	0.00	0.00
5100	YF	R3L	56	08/07/89	1.165	0.00	0.22	0.00	0.00
5101	JE	QFU	56	06/20/89	0.563	0.00	5.47	0.00	0.00
5101	PT	QGU	56	07/19/89	0.576	0.00	53.30	0.00	0.00
5101	SF	QGI	56	06/20/89	1.168	0.00	35.40	0.00	0.00
5101	VE	QFI	56	06/19/89	1.303	0.00	26.50	0.00	0.00
5101	YF	QG6	56	06/19/89	1.093	0.00	55.50	0.00	0.00
5102	JE	QFU	56	06/20/89	0.563	0.00	4.20	0.00	> 4.41
5102	JE	R20	56	08/08/89	0.763	0.00	2.21	0.00	0.00
5102	PT	QGU	56	07/19/89	0.576	0.00	4.36	0.00	0.00
5102	PT	R2Q	56	08/08/89	0.698	0.00	3.38	0.00	0.00
5102	SF	QGI	56	06/20/89	1.168	0.00	4.76	0.00	0.00
5102	SF	R2D	56	08/08/89	1.375	0.00	3.38	0.00	0.00
5102	VE	QFI	56	06/19/89	1.303	0.00	10.80	0.00	0.00
5102	VE	R1N	56	08/07/89	1.123	0.00	5.11	0.00	> 1.98
5102	YF	QG6	56	06/19/89	1.093	0.00	6.78	0.00	0.00
5102	YF	R1A	56	08/07/89	1.231	0.00	3.63	0.00	0.00
5103	JE	QFV	56	06/20/89	0.756	0.00	1.47	0.00	0.00
5103	PT	QGV	56	07/19/89	0.628	0.00	21.00	0.00	0.00
5103	SF	QGJ	56	06/20/89	1.050	0.00	22.20	0.00	0.00
5103	VE	QFJ	56	06/19/89	1.361	0.00	13.10	0.00	0.00
5103	YF	QG7	56	06/19/89	1.112	0.00	20.60	0.00	0.00
5104	JE	QH8	56	06/21/89	0.954	0.00	< 1.00	0.00	0.00
5104	JE	R3Y	56	08/09/89	0.887	0.00	0.29	0.00	0.31
5104	PT	QI8	56	07/03/89	0.896	0.00	< 1.00	0.00	0.00
5104	PT	R40	56	08/09/89	0.629	0.00	0.20	0.00	0.00
5104	SF	QHW	56	06/21/89	1.199	0.00	< 1.00	0.00	0.00
5104	SF	R4B	56	08/09/89	0.905	0.00	0.28	0.00	> 0.28
5104	VE	QGW	56	06/23/89	1.083	0.00	< 1.00	0.00	0.00
5104	VE	R38	56	08/11/89	1.323	0.00	> 10.00	0.00	0.00
5104	YF	QHK	56	06/20/89	1.127	0.00	< 1.00	0.00	0.00
5104	YF	R3L	56	08/07/89	1.165	0.00	0.22	0.00	0.00
5105	JE	QH9	56	06/21/89	1.032	0.00	2.76	0.00	0.00
5105	PT	QI9	56	07/03/89	0.932	0.00	8.49	0.00	> 1.64
5105	SF	QHX	56	06/21/89	0.978	0.00	5.58	0.00	0.00
5105	VE	QGX	56	06/23/89	1.020	0.00	15.10	0.00	0.00
5105	YF	QHL	56	06/20/89	1.074	0.00	17.60	0.00	0.00
5106	JE	QH9	56	06/21/89	1.032	0.00	< 1.00	0.00	0.00
5106	JE	R3Z	56	08/09/89	0.888	0.00	0.20	0.00	0.00
5106	PT	QI9	56	07/03/89	0.932	0.00	< 1.00	0.00	0.00
5106	PT	R4P	56	08/09/89	0.604	0.00	0.23	0.00	0.00
5106	SF	QHX	56	06/21/89	0.978	0.00	< 1.00	0.00	0.00
5106	SF	R4C	56	08/09/89	0.860	0.00	0.28	0.00	0.00
5106	VE	QGX	56	06/23/89	1.020	0.00	< 1.00	0.00	0.00
5106	VE	R39	56	08/11/89	1.395	0.00	> 10.00	0.00	0.00
5106	YF	QHL	56	06/20/89	1.074	0.00	< 1.00	0.00	0.00
5106	YF	R3M	56	08/07/89	1.090	0.00	0.29	0.00	> 0.10
5107	JE	QHA	56	06/21/89	0.968	0.00	4.09	0.00	0.00
5107	JE	R5H	56	08/15/89	0.570	0.00	9.27	0.00	0.40

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5107	PT	QIA	56	07/03/89	0.750	0.00	15.50	0.00 >	0.40
5107	PT	R67	56	08/15/89	0.678	0.00	9.32	0.00	0.00
5107	SF	QHY	56	06/21/89	1.218	0.00	11.60	0.00	0.00
5107	SF	R5U	56	08/15/89	0.885	0.00	9.15	0.00	0.00
5107	VE	QGY	56	06/23/89	0.998	0.00	4.97	0.00	0.00
5107	VE	R54	56	08/14/89	1.097	0.00	5.53	0.00	0.00
5107	YF	QHM	56	06/20/89	1.113	0.00	12.80	0.00	0.00
5107	YF	R4R	56	08/14/89	1.010	0.00	5.27	0.00	0.00
5108	JE	QHA	56	06/21/89	0.968	0.00	93.20	0.00	0.00
5108	PT	QIA	56	07/03/89	0.750	0.00 >	320.00	0.00 >	8.26
5108	SF	QHY	56	06/21/89	1.218	0.00 >	320.00	0.00	0.00
5108	VE	QGY	56	06/23/89	0.998	0.00 >	320.00	0.00	0.00
5108	YF	QHM	56	06/20/89	1.113	0.00 >	320.00	0.00	0.00
5109	JE	QHB	56	06/21/89	1.047	0.00	100.00	0.00	0.00
5109	PT	QIB	56	07/03/89	0.917	0.00	274.00	0.00 >	0.23
5109	SF	QHZ	56	06/21/89	1.222	0.00	144.00	0.00	0.00
5109	VE	QGZ	56	06/23/89	0.859	0.00	60.80	0.00	0.00
5109	YF	QHN	56	06/20/89	1.137	0.00	305.00	0.00	0.00
5110	JE	QHA	56	06/21/89	1.047	0.00	0.96	0.00	0.00
5110	PT	QIB	56	07/03/89	0.917	0.00	15.80	0.00	0.00
5110	SF	QHZ	56	06/21/89	1.222	0.00	5.79	0.00	0.00
5110	VE	QGZ	56	06/23/89	0.859	0.00	80.60	0.00	0.00
5110	YF	QHN	56	06/20/89	1.137	0.00	9.46	0.00	0.10
5111	JE	QHC	56	06/21/89	0.732	0.00 >	320.00	0.00	0.12
5111	PT	QIC	56	07/03/89	0.931	0.00 >	320.00	0.00	0.00
5111	SF	QIO	56	06/21/89	1.201	0.00 >	320.00	0.00	0.00
5111	VE	QHO	56	06/23/89	0.864	0.00 >	320.00	0.00	0.00
5111	YF	QHO	56	06/20/89	1.127	0.00 >	320.00	0.00	0.00
5112	JE	QHC	56	06/21/89	0.732	0.00	1.06	0.00	0.00
5112	JE	R5I	56	08/15/89	0.428	0.00 >	10.00	0.00 >	0.69
5112	PT	QIC	56	07/03/89	0.931	0.00	4.00	0.00 >	0.02
5112	PT	R68	56	08/15/89	0.588	0.00 >	10.00	0.00 >	0.31
5112	SF	QIO	56	06/21/89	1.201	0.00	2.93	0.00	0.00
5112	SF	R5V	56	08/15/89	0.809	0.00 >	10.00	0.00 >	0.37
5112	VE	QHO	56	06/23/89	0.864	0.00	1.09	0.00	0.00
5112	VE	R55	56	08/14/89	1.292	0.00 >	10.00	0.00	0.00
5112	YF	QHO	56	06/20/89	1.127	0.00	4.00	0.00	0.00
5112	YF	R4S	56	08/14/89	1.160	0.00 >	10.00	0.00	0.00
5113	JE	QHD	56	06/21/89	0.696	0.00	11.10	0.00	0.00
5113	JE	R5I	56	08/15/89	0.428	0.00	15.60	0.00	0.00
5113	PT	QID	56	07/03/89	0.796	0.00	6.94	0.00 >	0.01
5113	PT	R68	56	08/15/89	0.588	0.00	14.40	0.00 >	0.32
5113	SF	QI1	56	06/21/89	1.104	0.00	4.66	0.00	0.01
5113	SF	R5V	56	08/15/89	0.809	7.57	11.40	1.50	4.83
5113	VE	QH1	56	06/23/89	0.905	0.00	8.99	0.00	0.00
5113	VE	R55	56	08/14/89	1.292	0.00	6.60	0.00	0.00
5113	YF	QHP	56	06/20/89	1.188	0.00	13.90	0.00	0.00
5113	YF	R4S	56	08/14/89	1.160	0.00	3.05	0.00	0.00
5114	JE	QHD	56	06/21/89	0.696	0.00 >	320.00	0.00	0.13
5114	PT	QID	56	07/03/89	0.796	0.00 >	320.00	0.00	0.00
5114	SF	QI1	56	06/21/89	1.104	0.00	0.89	0.00	0.00
5114	VE	QH1	56	06/23/89	0.905	0.00 >	320.00	0.00	0.00
5114	YF	QHP	56	06/20/89	1.188	0.00 >	320.00	0.00 >	0.91
5115	JE	QHE	56	06/21/89	0.604	0.00 >	320.00	0.00	0.00
5115	PT	QIE	56	07/03/89	0.810	0.00 >	320.00	0.00	0.00
5115	SF	QI2	56	06/21/89	1.137	0.00	228.00	0.00 >	1.73
5115	VE	QH2	56	06/23/89	0.798	0.00	153.00	0.00	0.00
5115	YF	QHQ	56	06/20/89	0.754	0.00 >	320.00	0.00	0.00
5116	JE	QHE	56	06/21/89	0.604	0.00 >	320.00	0.00	1.20
5116	PT	QIE	56	07/03/89	0.810	0.00 >	320.00	0.00 >	0.20
5116	SF	QI2	56	06/21/89	1.137	0.00 >	320.00	0.00	0.00
5116	VE	QH2	56	06/23/89	0.798	0.00	229.00	0.00	0.00
5116	YF	QHQ	56	06/20/89	0.754	0.00 >	320.00	0.00 >	3.71
5117	JE	QHF	56	06/21/89	0.611	0.00	4.70	0.00	0.00
5117	JE	R5J	56	08/15/89	0.524	0.00	4.61	0.00 >	1.31
5117	PT	QIF	56	07/03/89	0.842	0.00	3.07	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
5117	PT	R69	56	08/15/89	0.582	0.00	4.10	0.00	0.00
5117	SF	QI3	56	06/21/89	0.990	0.00	3.82	0.00 >	1.17
5117	SF	R5W	56	08/15/89	0.819	0.00	4.56	0.00 >	0.92
5117	VE	QH3	56	06/23/89	0.793	0.00	4.28	0.00	0.00
5117	VE	R56	56	08/14/89	1.291	0.00	3.64	0.00	0.33
5117	YF	QHR	56	06/20/89	1.033	0.00	14.40	0.00	2.04
5117	YF	R4T	56	08/14/89	1.137	0.00	2.38	0.00	0.00
5118	JE	QHF	56	06/21/89	0.611	0.00 >	320.00	0.00 >	2.11
5118	PT	QIF	56	07/03/89	0.842	0.00 >	320.00	0.00 >	1.50
5118	SF	QI3	56	06/21/89	0.990	0.00	66.00	0.00	0.00
5118	VE	QH3	56	06/23/89	0.793	0.00	238.00	0.00	0.00
5118	YF	QHR	56	06/20/89	1.033	0.00	204.00	0.00	0.00
5119	JE	QHG	56	06/21/89	0.721	0.00	17.90	0.00	0.00
5119	JE	R20	56	08/08/89	0.763	0.00	14.60	0.00	0.00
5119	PT	QIG	56	07/03/89	0.831	0.00	14.30	0.00	0.00
5119	PT	R2Q	56	08/08/89	0.698	0.00	10.00	0.00	0.00
5119	SF	QI4	56	06/21/89	1.083	0.00	26.10	0.00	2.32
5119	SF	R2D	56	08/08/89	1.375	0.00	20.60	0.00	0.42
5119	VE	QH4	56	06/23/89	0.677	0.00	92.70	0.00	7.86
5119	VE	R1N	56	08/07/89	1.123	24.50	75.60	3.08	17.35
5119	YF	QHS	56	06/20/89	1.019	0.00	17.60	0.00	0.16
5119	YF	R1A	56	08/07/89	1.231	0.00	6.83	0.00	0.00
5120	JE	QHG	56	06/21/89	0.721	0.00	81.50	0.00	0.00
5120	JE	R21	56	08/08/89	0.749	0.00	48.30	0.00 >	0.15
5120	PT	QIG	56	07/03/89	0.831	0.00	69.50	0.00 >	0.71
5120	PT	R2R	56	08/08/89	0.576	0.00	48.20	0.00 >	0.19
5120	SF	QI4	56	06/21/89	1.083	0.00	88.20	0.00	1.69
5120	SF	R2E	56	08/08/89	1.095	0.00	129.00	0.00	8.91
5120	VE	QH4	56	06/23/89	0.677	0.00	188.00	0.00	0.00
5120	VE	R10	56	08/07/89	1.069	0.00 >	320.00	0.00 >	0.20
5120	YF	QHS	56	06/20/89	1.019	0.00	210.00	0.00	3.60
5120	YF	R1B	56	08/07/89	0.892	0.00	76.60	0.00 >	0.25
5121	JE	QHH	56	06/21/89	0.623	48.20	155.00	3.22	20.58
5121	JE	R21	56	08/08/89	0.749	41.10	155.00	3.78	22.70
5121	PT	QIH	56	07/03/89	0.817	12.30	108.00	8.82 >	26.06
5121	PT	R2R	56	08/08/89	0.576	27.10	155.00	5.72 >	18.62
5121	SF	QI5	56	06/21/89	1.141	0.00	135.00	0.00	0.00
5121	SF	R2E	56	08/08/89	1.095	0.00	133.00	0.00	0.00
5121	VE	QH5	56	06/23/89	0.590	0.00	69.80	0.00	0.30
5121	VE	R10	56	08/07/89	1.069	0.00	173.00	0.00	0.40
5121	YF	QHT	56	06/20/89	0.935	31.20	155.00	4.96	25.50
5121	YF	R1B	56	08/07/89	0.892	48.10	155.00	3.22 >	20.19
5122	JE	QHH	56	06/21/89	0.623	0.00	52.70	0.00 >	0.01
5122	PT	QIH	56	07/03/89	0.817	0.00	73.20	0.00	0.00
5122	SF	QI5	56	06/21/89	1.141	0.00	18.40	0.00	0.00
5122	VE	QH5	56	06/23/89	0.590	0.00	51.80	0.00	0.00
5122	YF	QHT	56	06/20/89	0.935	0.00	68.20	0.00	0.00
5123	JE	QHI	56	06/21/89	0.588	0.00	1.27	0.00	0.00
5123	JE	R5J	56	08/15/89	0.524	0.00	2.38	0.00 >	0.08
5123	PT	QII	56	07/03/89	1.017	0.00	14.70	0.00 >	6.53
5123	PT	R69	56	08/15/89	0.582	0.00	5.47	0.00	0.00
5123	SF	QI6	56	06/21/89	0.923	0.00	15.40	0.00	0.00
5123	SF	R5W	56	08/15/89	0.819	0.00	2.80	0.00	0.00
5123	VE	QH6	56	06/23/89	0.545	0.00 <	1.00	0.00	0.00
5123	VE	R56	56	08/14/89	1.291	0.00	3.20	0.00	0.00
5123	YF	QHU	56	06/20/89	1.040	0.00	20.70	0.00	0.00
5123	YF	R4T	56	08/14/89	1.137	0.00	28.00	0.00	0.00
5124	JE	QHI	56	06/21/89	0.588	0.00	5.09	0.00 >	0.95
5124	JE	R22	56	08/08/89	0.857	0.00	15.80	0.00	0.00
5124	PT	QII	56	07/03/89	1.017	0.00	5.66	0.00 >	3.19
5124	PT	R2S	56	08/08/89	0.701	0.00	3.20	0.00	0.00
5124	SF	QI6	56	06/21/89	0.923	0.00	5.89	0.00 >	3.12
5124	VE	QH6	56	06/23/89	0.545	0.00	6.74	0.00	0.00
5124	VE	R1P	56	08/07/89	1.080	0.00	6.46	0.00	0.60
5124	YF	QHU	56	06/20/89	1.040	0.00	7.15	0.00	0.48
5124	YF	R1C	56	08/07/89	1.014	0.00	5.14	0.00 >	1.14

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5126	JE	QHJ	56	06/21/89	0.543	0.00	> 320.00	0.00	0.00
5126	PT	QIJ	56	07/03/89	0.792	0.00	257.00	0.00	> 0.21
5126	SF	QI7	56	06/21/89	1.053	0.00	> 320.00	0.00	2.45
5126	VE	QH7	56	06/23/89	0.353	0.00	> 320.00	0.00	0.00
5126	YF	QHV	56	06/20/89	1.186	0.00	> 320.00	0.00	> 1.74
5128	JE	QJ8	56	06/27/89	0.646	0.00	14.60	0.00	0.00
5128	JE	R5K	56	08/15/89	0.415	0.00	15.50	0.00	> 1.40
5128	PT	QJW	56	06/27/89	0.588	10.00	15.50	1.55	> 9.53
5128	PT	R6A	56	08/15/89	0.565	0.00	14.80	0.00	0.00
5128	SF	QJK	56	06/27/89	1.173	0.00	11.10	0.00	0.00
5128	SF	R5X	56	08/15/89	0.841	0.00	14.30	0.00	1.08
5128	VE	QIW	56	06/26/89	1.044	0.00	17.90	0.00	0.18
5128	VE	R57	56	08/14/89	1.186	0.00	5.14	0.00	0.00
5128	YF	QIK	56	06/26/89	1.078	0.00	15.50	0.00	2.40
5128	YF	R4U	56	08/14/89	1.157	0.00	5.12	0.00	> 0.02
5129	JE	QJ9	56	06/27/89	0.655	0.00	208.00	0.00	> 6.90
5129	PT	QJX	56	06/27/89	0.551	0.00	228.00	0.00	> 6.30
5129	SF	QJL	56	06/27/89	1.120	0.00	138.00	0.00	1.61
5129	VE	QJX	56	06/26/89	1.201	0.00	295.00	0.00	0.15
5129	YF	QIL	56	06/26/89	1.209	0.00	191.00	0.00	0.00
5130	JE	QJ9	56	06/27/89	0.655	0.00	> 320.00	0.00	0.00
5130	JE	R22	56	08/08/89	0.857	0.00	247.00	0.00	0.00
5130	PT	QJX	56	06/27/89	0.551	0.00	> 320.00	0.00	> 13.79
5130	PT	R2S	56	08/08/89	0.701	0.00	3.20	0.00	0.00
5130	SF	QJL	56	06/27/89	1.120	0.00	> 320.00	0.00	1.07
5130	VE	QIX	56	06/26/89	1.201	0.00	> 320.00	0.00	0.00
5130	VE	R1Z	56	08/07/89	1.080	0.00	41.10	0.00	0.00
5130	YF	QIL	56	06/26/89	1.209	0.00	320.00	0.00	0.00
5130	YF	R1C	56	08/07/89	1.014	0.00	49.60	0.00	> 0.60
5131	JE	QJA	56	06/27/89	0.837	0.00	16.50	0.00	> 3.62
5131	PT	QJY	56	06/27/89	0.790	2.21	15.40	7.00	> 18.02
5131	SF	QJM	56	06/27/89	1.119	0.00	14.20	0.00	7.52
5131	VE	QIY	56	06/26/89	1.147	0.00	37.80	0.00	> 0.10
5131	YF	QIM	56	06/26/89	1.275	0.00	14.50	0.00	> 0.52
5132	JE	QJA	56	06/27/89	0.837	0.00	8.21	0.00	2.18
5132	JE	R23	56	08/08/89	0.754	0.00	4.59	0.00	7.00
5132	PT	QJY	56	06/27/89	0.790	0.00	15.50	0.00	> 18.07
5132	PT	R2T	56	08/08/89	0.615	0.00	0.93	0.00	0.00
5132	SF	QJM	56	06/27/89	1.119	0.00	9.18	0.00	2.72
5132	SF	R2G	56	08/08/89	1.403	0.00	3.43	0.00	0.00
5132	VE	QIY	56	06/26/89	1.147	0.00	13.10	0.00	0.00
5132	VE	R1Q	56	08/07/89	1.061	0.00	4.66	0.00	0.00
5132	YF	QIM	56	06/26/89	1.275	0.00	6.08	0.00	0.00
5132	YF	R1D	56	08/07/89	0.930	0.00	4.74	0.00	> 0.15
5133	JE	QJB	56	06/27/89	0.785	0.00	4.88	0.00	0.69
5133	JE	R5K	56	08/15/89	0.415	0.00	5.47	0.00	> 2.66
5133	PT	QJZ	56	06/27/89	0.435	0.00	5.94	0.00	> 0.10
5133	PT	R6A	56	08/15/89	0.565	0.00	6.48	0.00	0.00
5133	SF	QJN	56	06/27/89	1.072	0.00	5.09	0.00	1.23
5133	SF	R5X	56	08/15/89	0.841	7.62	5.51	0.72	6.30
5133	VE	QIZ	56	06/26/89	1.181	0.00	6.29	0.00	0.00
5133	VE	R57	56	08/14/89	1.186	0.00	4.29	0.00	0.17
5133	YF	QIN	56	06/26/89	1.144	0.00	5.56	0.00	0.00
5133	YF	R4U	56	08/14/89	1.157	0.00	4.01	0.00	0.00
5134	JE	QPK	57	07/11/89	0.990	0.00	49.20	0.00	0.00
5134	JE	R5P	57	08/15/89	0.428	0.00	49.50	0.00	> 0.80
5134	PT	QOK	57	07/11/89	0.762	0.00	35.40	0.00	0.00
5134	PT	R6F	57	08/15/89	0.638	0.00	37.10	0.00	0.00
5134	SF	QO8	57	07/11/89	1.394	0.00	11.80	0.00	0.00
5134	SF	R62	57	08/15/89	0.868	23.30	39.40	1.69	7.04
5134	VE	QPW	57	07/10/89	1.160	0.00	24.90	0.00	0.00
5134	VE	R5C	57	08/14/89	1.268	0.00	19.10	0.00	0.00
5134	VSV	046	57	06/23/89	1.456	0.00	137.00	0.00	0.00
5134	VV	075	57	07/13/89	1.334	0.00	40.00	0.00	> 0.08
5134	YF	QP8	57	07/10/89	1.057	0.00	49.20	0.00	> 0.90
5134	YF	R4Z	57	08/14/89	1.161	0.00	40.70	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5135	JE	QPL	57	07/11/89	0.872	0.00	> 320.00	0.00	> 1.57
5135	PT	QQL	57	07/11/89	0.606	0.00	249.00	0.00	2.14
5135	SF	QQ9	57	07/11/89	1.376	0.00	210.00	0.00	0.00
5135	VE	QPX	57	07/10/89	1.175	0.00	304.00	0.00	0.00
5135	VSV	046	57	06/23/89	1.456	0.00	> 320.00	0.00	0.00
5135	VV	08L	57	07/27/89	1.298	0.00	> 320.00	0.00	0.00
5135	YF	QP9	57	07/10/89	1.053	0.00	> 320.00	0.00	> 1.21
5136	JE	QPL	57	07/11/89	0.872	0.00	106.00	0.00	> 0.07
5136	JE	R5Q	57	08/15/89	0.521	0.00	155.00	0.00	0.11
5136	PT	QQL	57	07/11/89	0.606	81.90	155.00	1.89	10.99
5136	PI	R6G	57	08/15/89	0.619	0.00	7.09	0.00	0.00
5136	SF	QQ9	57	07/11/89	1.376	0.00	3.20	0.00	0.00
5136	SF	R63	57	08/15/89	0.851	0.00	35.80	0.00	0.00
5136	VE	QPX	57	07/10/89	1.175	0.00	210.00	0.00	0.00
5136	VE	R5D	57	08/14/89	1.226	0.00	28.30	0.00	0.00
5136	VSV	047	57	06/23/89	1.272	0.00	45.20	0.00	0.00
5136	VV	08M	57	07/27/89	1.496	0.00	180.00	0.00	0.00
5136	YF	QP9	57	07/10/89	1.053	0.00	86.80	0.00	0.00
5136	YF	R50	57	08/14/89	1.230	0.00	58.20	0.00	0.00
5137	JE	QPM	57	07/11/89	0.830	0.00	156.00	0.00	> 0.64
5137	JE	R6Z	57	08/16/89	0.542	0.00	156.00	0.00	> 5.89
5137	PT	QQM	57	07/11/89	0.554	28.10	155.00	5.51	> 36.88
5137	PT	R82	57	08/16/89	0.771	91.90	108.00	1.18	3.52
5137	SF	QQA	57	07/11/89	1.318	28.80	143.00	4.95	20.48
5137	SF	R7P	57	08/16/89	0.536	11.50	155.00	13.44	> 48.27
5137	VE	QPY	57	07/10/89	1.145	0.00	155.00	0.00	> 1.07
5137	VE	R7C	57	08/18/89	1.070	0.00	128.00	0.00	0.77
5137	VSV	047	57	06/23/89	1.272	0.00	106.00	0.00	1.27
5137	VV	08M	57	07/27/89	1.496	0.00	164.00	0.00	0.00
5137	YF	QPA	57	07/10/89	1.012	0.00	153.00	0.00	0.10
5137	YF	R6M	57	08/15/89	0.940	0.00	130.00	0.00	0.50
5138	JE	QPM	57	07/11/89	0.830	55.60	8.95	0.16	> 30.37
5138	JE	R6Z	57	08/16/89	0.542	131.00	574.00	4.39	23.50
5138	PT	QQM	57	07/11/89	0.554	30.60	> 320.00	> 10.50	> 44.37
5138	PT	R82	57	08/16/89	0.771	105.00	530.00	5.07	24.34
5138	SF	QQA	57	07/11/89	1.318	93.00	294.00	3.16	> 13.39
5138	SF	R7P	57	08/16/89	0.536	52.70	499.00	9.46	> 40.15
5138	VE	QPY	57	07/10/89	1.145	0.00	> 320.00	0.00	> 3.90
5138	VE	R7C	57	08/18/89	1.070	179.00	515.00	2.88	> 17.32
5138	VSV	04G	57	07/07/89	1.611	270.00	> 320.00	> 1.18	> 5.22
5138	VV	08N	57	07/27/89	1.429	105.00	22.90	0.22	> 13.24
5138	YF	QPA	57	07/10/89	1.012	123.00	> 320.00	> 2.59	> 18.57
5138	YF	R6M	57	08/15/89	0.940	95.40	563.00	5.90	27.36
5139	JE	QPN	57	07/11/89	0.830	0.00	41.40	0.00	> 2.36
5139	PT	QQN	57	07/11/89	0.510	0.00	18.90	0.00	0.06
5139	SF	QQB	57	07/11/89	1.349	0.00	13.60	0.00	0.00
5139	VE	QPZ	57	07/10/89	1.139	0.00	47.60	0.00	0.00
5139	VSV	04G	57	07/07/89	1.611	0.00	37.10	0.00	0.00
5139	VV	08N	57	07/27/89	1.429	0.00	23.90	0.00	0.00
5139	YF	QPB	57	07/10/89	0.940	0.00	49.00	0.00	0.78
5140	JE	QPN	57	07/11/89	0.830	0.00	> 320.00	0.00	> 4.48
5140	JE	R70	57	08/16/89	0.463	0.00	> 1000.00	0.00	2.74
5140	PT	QQN	57	07/11/89	0.510	0.00	> 320.00	0.00	> 2.65
5140	PT	R83	57	08/16/89	0.687	0.00	194.00	0.00	0.00
5140	SF	QQB	57	07/11/89	1.349	0.00	> 320.00	0.00	0.00
5140	SF	R7Q	57	08/16/89	0.489	0.00	117.00	0.00	> 12.76
5140	VE	QPZ	57	07/10/89	1.139	0.00	> 320.00	0.00	0.00
5140	VE	R7D	57	08/18/89	1.116	0.00	456.00	0.00	0.00
5140	VSV	049	57	06/23/89	0.928	0.00	> 320.00	0.00	0.00
5140	VV	073	57	07/13/89	1.390	0.00	> 320.00	0.00	0.18
5140	YF	QPB	57	07/10/89	0.940	0.00	> 320.00	0.00	> 0.10
5140	YF	R6N	57	08/15/89	0.921	0.00	524.00	0.00	0.00
5141	JE	QPO	57	07/11/89	1.007	0.00	> 320.00	0.00	> 4.50
5141	PT	QQO	57	07/11/89	0.560	0.00	173.00	0.00	0.00
5141	SF	QQC	57	07/11/89	1.331	0.00	> 320.00	0.00	0.00
5141	VE	QQO	57	07/10/89	1.103	0.00	> 320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5141	VSV	049	57	06/23/89	0.928	0.00 >	320.00	0.00	0.40
5141	VV	074	57	07/13/89	1.355	0.00 >	320.00	0.00	0.00
5141	YF	QPC	57	07/10/89	1.118	0.00 >	320.00	0.00 >	1.40
5142	JE	QPO	57	07/11/89	1.007	0.00	11.80	0.00 >	1.47
5142	JE	R70	57	08/16/89	0.463	56.10	155.00	2.76	15.95
5142	PT	QQO	57	07/11/89	0.560	0.00	51.50	0.00	3.66
5142	PT	R83	57	08/16/89	0.687	0.00	81.20	0.00	0.00
5142	SF	QQC	57	07/11/89	1.331	0.00	47.10	0.00	0.24
5142	SF	R7Q	57	08/16/89	0.489	61.10	155.00	2.54	16.64
5142	VE	QQO	57	07/10/89	1.103	81.10	84.30	1.04	3.31
5142	VE	R7D	57	08/18/89	1.116	0.00	49.00	0.00	0.18
5142	VSV	04A	57	06/23/89	1.506	0.00	2.80	0.00	0.00
5142	VV	074	57	07/13/89	1.355	0.00	9.24	0.00	0.00
5142	YF	QPC	57	07/10/89	1.118	0.00	33.20	0.00	0.00
5142	YF	R6N	57	08/15/89	0.921	0.00	62.50	0.00 >	2.02
5143	VSV	04A	57	06/23/89	1.506	0.00 >	320.00	0.00 >	0.04
5144	JE	QPP	57	07/11/89	0.818	0.00 >	320.00	0.00 >	15.78
5144	JE	R71	57	08/16/89	0.608	0.00 <	3.20	0.00	0.00
5144	PT	QQP	57	07/11/89	0.464	0.00 >	320.00	0.00 >	4.19
5144	PT	R84	57	08/16/89	0.739	0.00	320.00	0.00	0.00
5144	SF	QQD	57	07/11/89	1.393	0.00 >	320.00	0.00	0.00
5144	SF	R7P	57	08/16/89	0.601	0.00	497.00	0.00	1.16
5144	VE	QQ1	57	07/10/89	1.111	0.00 >	320.00	0.00	0.00
5144	VE	R7E	57	08/18/89	1.120	0.00	367.00	0.00	0.00
5144	VSV	04B	57	06/23/89	0.893	0.00 >	320.00	0.00	0.40
5144	VV	075	57	07/13/89	1.334	0.00	150.00	0.00	0.04
5144	YF	QPD	57	07/10/89	1.100	0.00 >	320.00	0.00	0.53
5144	YF	R6O	57	08/15/89	0.875	0.00	880.00	0.00 >	0.22
5145	JE	QPQ	57	07/11/89	0.928	0.00	119.00	0.00 >	2.31
5145	JE	R71	57	08/16/89	0.608	0.00 <	3.20	0.00	0.00
5145	PT	QQQ	57	07/11/89	0.761	0.00	26.00	0.00 >	0.10
5145	PT	R84	57	08/16/89	0.739	0.00	56.50	0.00	0.00
5145	SF	QQE	57	07/11/89	1.209	0.00	30.50	0.00	0.00
5145	SF	R7R	57	08/16/89	0.601	0.00	34.80	0.00	0.00
5145	VE	QQ2	57	07/10/89	1.247	0.00	198.00	0.00	0.07
5145	VE	R7E	57	08/18/89	1.120	0.00	68.40	0.00	0.00
5145	VSV	04B	57	06/23/89	0.893	0.00	263.00	0.00	0.00
5145	VV	080	57	07/27/89	1.466	0.00	77.30	0.00	0.00
5145	YF	QPE	57	07/10/89	0.980	0.00	104.00	0.00 >	0.90
5145	YF	R6O	57	08/15/89	0.875	0.00	88.70	0.00 >	0.02
5146	JE	QPQ	57	07/11/89	0.928	0.00	2.06	0.00 >	0.17
5146	PT	QQQ	57	07/11/89	0.761	0.00	3.65	0.00 >	0.82
5146	SF	QQE	57	07/11/89	1.209	0.00 <	1.00	0.00	0.00
5146	VE	QQ2	57	07/10/89	1.247	0.00	76.60	0.00	0.00
5146	VSV	04C	57	06/23/89	1.275	0.00	1.00	0.00	0.00
5146	VV	076	57	07/13/89	1.354 <	1.00 <	1.00	1.00 >	2.83
5146	VV	0BT	57	08/17/89	1.195	2.88 >	10.00	3.47 >	14.00
5146	YF	QPE	57	07/10/89	0.980	0.00	4.93	0.00 >	0.04
5147	JE	QPR	57	07/11/89	0.892	0.00 >	320.00	0.00	0.23
5147	JE	R72	57	08/16/89	0.577	0.00	241.00	0.00 >	1.96
5147	PT	QQR	57	07/11/89	0.804	0.00 >	320.00	0.00 >	0.95
5147	PT	R85	57	08/16/89	0.847	0.00	121.00	0.00	0.00
5147	SF	QQF	57	07/11/89	1.246	0.00	201.00	0.00	0.00
5147	SF	R7S	57	08/16/89	0.628	0.00	95.00	0.00	0.46
5147	VE	QQ3	57	07/10/89	1.136	0.00 >	320.00	0.00	0.00
5147	VE	R7F	57	08/18/89	1.137	0.00	569.00	0.00	0.00
5147	VSV	04C	57	06/23/89	1.275	0.00	137.00	0.00	0.00
5147	VV	076	57	07/13/89	1.354	0.00	155.00	0.00	0.00
5147	YF	QPF	57	07/10/89	1.013	0.00 >	320.00	0.00 >	2.10
5147	YF	R6P	57	08/15/89	1.029	0.00	592.00	0.00	0.00
5148	JE	QPR	57	07/11/89	0.892	0.00	11.80	0.00	0.00
5148	JE	R5Q	57	08/15/89	0.521	0.00	28.30	0.00	0.00
5148	PT	QQR	57	07/11/89	0.804	0.00	13.30	0.00 >	0.77
5148	PT	R6G	57	08/15/89	0.619	0.00	0.60	0.00	0.00
5148	SF	QQF	57	07/11/89	1.246	0.00	0.93	0.00	0.00
5148	SF	R63	57	08/15/89	0.851	0.00	17.30	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
5148	VE	QQ3	57	07/10/89	1.136	0.00	47.70	0.00	0.00
5148	VE	R5D	57	08/14/89	1.226	0.00	12.40	0.00	0.00
5148	VSV	04D	57	06/23/89	1.135	0.00	4.85	0.00	0.00
5148	VV	080	57	07/27/89	1.456	0.00	15.40	0.00	0.00
5148	YF	QPF	57	07/10/89	1.013	0.00	17.30	0.00	0.00
5148	YF	R50	57	08/14/89	1.230	0.00	1.00	0.00	0.00
5149	JE	QPS	57	07/11/89	0.950	0.00	1.55	0.00 >	0.02
5149	JE	R5R	57	08/15/89	0.525	0.00	0.16	0.00 >	3.41
5149	PT	QQS	57	07/11/89	0.725	0.00	2.00	0.00 >	0.18
5149	PT	R6H	57	08/15/89	0.622	0.00	0.19	0.00	0.00
5149	SF	QQG	57	07/11/89	1.172	0.00	1.95	0.00	0.00
5149	SF	R64	57	08/15/89	0.816	0.00	0.28	0.00 >	0.20
5149	VE	QQ4	57	07/10/89	1.163	0.00	1.98	0.00	0.00
5149	VE	R5E	57	08/14/89	1.319	0.00	0.05	0.00	0.00
5149	VSV	04D	57	06/23/89	1.135	0.00	3.29	0.00	0.00
5149	VV	077	57	07/13/89	1.375	0.00	3.07	0.00	0.62
5149	YF	QPG	57	07/10/89	1.192	0.00	1.37	0.00	0.00
5149	YF	R51	57	08/14/89	1.255	0.00	0.15	0.00	0.00
5150	JE	QPS	57	07/11/89	0.950	0.00 >	320.00	0.00 >	3.76
5150	PT	QQS	57	07/11/89	0.725	0.00 >	320.00	0.00	1.24
5150	SF	QQG	57	07/11/89	1.172	0.00	1.00	0.00	0.00
5150	VE	QQ4	57	07/10/89	1.163	0.00 >	320.00	0.00 >	0.10
5150	VSV	04H	57	07/07/89	1.438	0.00	269.00	0.00	0.00
5150	VV	077	57	07/13/89	1.375	0.00 >	320.00	0.00	0.00
5150	YF	QPG	57	07/10/89	1.192	0.00 >	320.00	0.00	0.00
5151	JE	QPT	57	07/11/89	0.934	0.00 >	320.00	0.00 >	6.09
5151	PT	QQT	57	07/11/89	0.634	0.00 >	320.00	0.00 >	0.87
5151	SF	QQH	57	07/11/89	1.167	0.00 >	320.00	0.00	0.24
5151	VE	QQ5	57	07/10/89	1.158	0.00 >	320.00	0.00	0.00
5151	VSV	04H	57	07/07/89	1.438	0.00	100.00	0.00 >	0.01
5151	VV	078	57	07/13/89	1.392	0.00 >	320.00	0.00	0.06
5151	YF	QPH	57	07/10/89	0.912	0.00 >	320.00	0.00 >	1.21
5152	JE	QPT	57	07/11/89	0.934	0.00	91.50	0.00	0.17
5152	JE	R72	57	08/16/89	0.577	0.00	67.40	0.00	0.00
5152	PT	QQT	57	07/11/89	0.634	0.00	70.90	0.00 >	0.58
5152	PT	R85	57	08/16/89	0.847	0.00	36.00	0.00	0.00
5152	SF	QQH	57	07/11/89	1.167	0.00	1.00	0.00	0.88
5152	SF	R7S	57	08/16/89	0.628	0.00	50.50	0.00 >	0.78
5152	VE	QQ5	57	07/10/89	1.158	0.00	217.00	0.00	0.00
5152	VE	R7F	57	08/18/89	1.137	0.00	81.90	0.00	0.00
5152	VSV	04I	57	07/07/89	1.336	0.00	210.00	0.00 >	0.05
5152	VV	08P	57	07/27/89	1.410	0.00	195.00	0.00	0.00
5152	YF	QPH	57	07/10/89	0.912	0.00	147.00	0.00	0.00
5152	YF	R6P	57	08/15/89	1.029	0.00	70.90	0.00 >	0.01
5153	JE	QFU	57	07/11/89	1.009	0.00	20.00	0.00	2.42
5153	JE	R73	57	08/16/89	0.667	0.00	83.50	0.00	3.87
5153	PT	QQU	57	07/11/89	0.668	0.00	67.40	0.00 >	5.85
5153	PT	R86	57	08/16/89	0.794	0.00	90.60	0.00	1.09
5153	SF	QQI	57	07/11/89	1.141	97.80	95.00	0.97	3.14
5153	SF	R7T	57	08/16/89	0.834	0.00	52.70	0.00	1.46
5153	VE	QQ6	57	07/10/89	1.098	0.00	106.00	0.00	0.00
5153	VE	R7G	57	08/18/89	0.992	0.00	117.00	0.00	0.00
5153	VSV	04I	57	07/07/89	1.336	0.00	23.60	0.00	0.00
5153	VV	08P	57	07/27/89	1.410	92.20	72.20	0.78 >	4.36
5153	YF	QPI	57	07/10/89	1.029	0.00	66.00	0.00	0.00
5153	YF	R6Q	57	08/15/89	1.110	0.00	55.90	0.00 >	0.01
5154	JE	QPU	57	07/11/89	1.009	0.00	75.70	0.00 >	0.93
5154	JE	R73	57	08/16/89	0.667	0.00	80.00	0.00	0.00
5154	PT	QQU	57	07/11/89	0.668	0.00	66.00	0.00	1.24
5154	PT	R86	57	08/16/89	0.794	0.00	100.00	0.00	0.00
5154	SF	QQI	57	07/11/89	1.141	0.00	61.90	0.00	0.02
5154	SF	R7T	57	08/16/89	0.834	0.00	75.70	0.00	0.00
5154	VE	QQ6	57	07/10/89	1.098	0.00	238.00	0.00	0.00
5154	VE	R7G	57	08/18/89	0.992	0.00	178.00	0.00	0.20
5154	VSV	04J	57	07/07/89	1.416	0.00	53.30	0.00	0.00
5154	VV	08Q	57	07/27/89	1.452	0.00	200.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5154	YF	QPI	57	07/10/89	1.029	0.00	154.00	0.00	0.00
5154	YF	R6Q	57	08/15/89	1.110	0.00	52.40	0.00	0.00
5155	JE	R5R	57	08/15/89	0.525	0.00	5.55	0.00 >	4.75
5155	PT	QQV	57	07/11/89	0.691	0.00	1.59	0.00 >	0.01
5155	PT	R6H	57	08/15/89	0.622	0.00	0.09	0.00	0.00
5155	SF	QQJ	57	07/11/89	1.249	0.00	1.49	0.00	0.00
5155	SF	R64	57	08/15/89	0.816	0.00	4.49	0.00	1.38
5155	VE	QQ7	57	07/10/89	1.229	0.00	15.70	0.00 >	0.72
5155	VE	R5E	57	08/14/89	1.319	0.00	1.23	0.00	0.00
5155	VSV	04J	57	07/07/89	1.416	0.00	2.12	0.00	0.00
5155	VV	08Q	57	07/27/89	1.452	2.48	2.77	1.12	5.01
5155	YF	QPJ	57	07/10/89	1.063	0.00	1.80	0.00	0.00
5155	YF	R51	57	08/14/89	1.255	0.00	1.41	0.00	0.00
5156	JE	QR8	57	07/11/89	0.847	0.00 <	1.00	0.00	0.00
5156	JE	R5S	57	08/15/89	0.618	0.00	0.23	0.00 >	0.13
5156	PT	QS8	57	07/11/89	0.943	0.00	1.24	0.00 >	1.33
5156	PT	R6I	57	08/15/89	0.617	0.00	0.55	0.00	0.00
5156	SF	QRW	57	07/12/89	1.058	0.00 <	1.00	0.00	0.00
5156	SF	R65	57	08/15/89	0.581	1.00	1.23	1.23	11.24
5156	VE	QRK	57	07/14/89	1.571	0.00 <	1.00	0.00	0.00
5156	VE	R5F	57	08/14/89	1.285	0.00	0.69	0.00	0.00
5156	VSV	04K	57	07/07/89	1.389	0.00	1.86	0.00 >	0.02
5156	VV	08R	57	07/27/89	1.579	0.00 <	1.00	0.00	0.00
5156	VV	0BT	57	08/17/89	1.195	0.00	1.00	0.00	0.00
5156	YF	QQW	57	07/10/89	0.927	0.00	1.80	0.00	0.00
5156	YF	R52	57	08/14/89	1.069	0.00	0.84	0.00	0.00
5157	JE	QR9	57	07/11/89	0.722	0.00 >	320.00	0.00 >	0.78
5157	JE	R74	57	08/16/89	0.777	0.00	509.00	0.00	0.30
5157	PT	QS9	57	07/11/89	0.840	0.00 >	320.00	0.00 >	9.22
5157	PT	R87	57	08/16/89	0.714	0.00	496.00	0.00	0.31
5157	SF	QRX	57	07/12/89	1.075	0.00 >	320.00	0.00	0.00
5157	SF	R7U	57	08/16/89	0.740	0.00	511.00	0.00	2.26
5157	VE	QRL	57	07/14/89	1.265	0.00 >	320.00	0.00	1.60
5157	VE	R7H	57	08/18/89	1.157	0.00	376.00	0.00	0.06
5157	VSV	04K	57	07/07/89	1.389	0.00 >	320.00	0.00	0.00
5157	VV	08R	57	07/27/89	1.579	0.00	239.00	0.00	0.00
5157	YF	QQX	57	07/10/89	1.018	0.00 >	320.00	0.00	0.12
5157	YF	R6R	57	08/15/89	1.132	0.00	341.00	0.00	0.00
5158	JE	QR9	57	07/11/89	0.722	0.00	46.10	0.00 >	0.04
5158	PT	QS9	57	07/11/89	0.840	0.00	22.80	0.00 >	3.60
5158	SF	QRX	57	07/12/89	1.075	0.00	10.00	0.00	0.00
5158	VE	QRL	57	07/14/89	1.265	0.00	22.60	0.00	0.00
5158	VSV	04L	57	07/07/89	1.333	0.00 >	320.00	0.00 >	2.06
5158	VV	078	57	07/13/89	1.392	0.00	8.95	0.00	0.00
5158	YF	QQX	57	07/10/89	1.018	0.00	21.90	0.00	0.00
5159	JE	QRA	57	07/11/89	0.742	0.00 >	320.00	0.00	0.00
5159	PT	QSA	57	07/11/89	0.904	0.00 >	320.00	0.00 >	0.95
5159	SF	QRY	57	07/12/89	1.028	0.00 >	320.00	0.00	0.00
5159	VE	QRM	57	07/14/89	1.417	0.00 >	320.00	0.00	0.00
5159	VSV	04L	57	07/07/89	1.333	0.00 >	320.00	0.00	0.08
5159	VV	079	57	07/13/89	1.356	0.00 >	320.00	0.00	0.00
5159	YF	QQY	57	07/10/89	0.994	0.00 >	320.00	0.00 >	0.10
5160	JE	QRA	57	07/11/89	0.742	0.00 >	320.00	0.00	0.40
5160	PT	QSA	57	07/11/89	0.904	0.00 >	320.00	0.00 >	0.60
5160	SF	QRY	57	07/12/89	1.028	0.00 >	320.00	0.00 >	0.94
5160	VE	QRM	57	07/14/89	1.417	0.00 >	320.00	0.00	0.00
5160	VSV	04M	57	07/07/89	1.285	0.00 >	320.00	0.00 >	1.35
5160	VV	079	57	07/13/89	1.356	0.00 >	320.00	0.00	0.00
5160	YF	QQY	57	07/10/89	0.994	0.00 >	320.00	0.00	0.00
5161	JE	QRB	57	07/11/89	0.875	0.00 >	320.00	0.00	0.28
5161	PT	QSB	57	07/11/89	0.809	0.00	230.00	0.00	1.38
5161	SF	QRZ	57	07/12/89	1.005	0.00	26.50	0.00	0.00
5161	VE	QRN	57	07/14/89	1.407	0.00 >	320.00	0.00	0.00
5161	VSV	04M	57	07/07/89	1.285	0.00	224.00	0.00	0.05
5161	VV	07A	57	07/13/89	1.439	0.00	260.00	0.00 >	0.05
5161	YF	QQZ	57	07/10/89	0.904	0.00 >	320.00	0.00 >	0.03

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	TC 50	TC 25	SI	TAI
5162	JE	QRB	57	07/11/89	0.875	0.00	2.32	0.00	0.00
5162	PT	QSB	57	07/11/89	0.809	0.00	26.50	0.00	0.00
5162	SF	QRZ	57	07/12/89	1.005	0.00	1.73	0.00	0.00
5162	VE	QRN	57	07/14/89	1.407	0.00	55.40	0.00	0.00
5162	VSV	04N	57	07/07/89	1.233	0.00	134.00	0.00 >	0.87
5162	VV	08S	57	07/27/89	1.446	0.00	32.00	0.00	0.00
5162	YF	QOZ	57	07/10/89	0.904	0.00	116.00	0.00	0.00
5163	JE	QRC	57	07/11/89	0.965	0.00 >	320.00	0.00	0.67
5163	PT	QSC	57	07/11/89	0.774	0.00 >	320.00	0.00	0.00
5163	SF	QSO	57	07/12/89	1.011	0.00	222.00	0.00	0.00
5163	VE	QRO	57	07/14/89	1.346	0.00 >	320.00	0.00	0.28
5163	VSV	04N	57	07/07/89	1.283	0.00	179.00	0.00	0.00
5163	VV	07A	57	07/13/89	1.439	0.00	40.50	0.00	0.01
5163	YF	QAO	57	07/10/89	1.075	0.00 >	320.00	0.00 >	0.28
5164	JE	QRC	57	07/11/89	0.965	0.00 <	1.00	0.00	0.00
5164	JE	R8P	57	08/22/89	0.682	0.00	1.31	0.00	0.00
5164	PT	QSC	57	07/11/89	0.774	0.00	1.33	0.00	0.00
5164	PT	R9M	57	08/22/89	0.517	0.00	1.17	0.00	0.00
5164	SF	QSO	57	07/12/89	1.011	0.00 <	1.00	0.00	0.00
5164	SF	R9B	57	08/22/89	0.984	0.00	1.30	0.00	0.00
5164	VE	QRO	57	07/14/89	1.346	0.00 <	1.00	0.00	0.00
5164	VE	R90	57	08/21/89	1.051	0.00	1.30	0.00	0.00
5164	VSV	040	57	07/07/89	1.159	0.00	4.43	0.00 >	0.03
5164	VV	08S	57	07/27/89	1.446	0.00 <	1.00	0.00	0.00
5164	VV	0BU	57	08/17/89	1.171	0.00	0.46	0.00 >	0.50
5164	YF	QRO	57	07/10/89	1.075	0.00 <	1.00	0.00	0.00
5164	YF	R8E	57	08/21/89	0.973	0.00	1.39	0.00	0.00
5165	JE	QRD	57	07/11/89	0.956	0.00 >	320.00	0.00 >	0.94
5165	JE	R74	57	08/16/89	0.777	0.00	503.00	0.00	0.51
5165	PT	QSD	57	07/11/89	0.739	0.00	262.00	0.00 >	8.08
5165	PT	R87	57	08/16/89	0.714	0.00	490.00	0.00	6.46
5165	SF	QS1	57	07/12/89	1.006	0.00	320.00	0.00	0.82
5165	SF	R7U	57	08/16/89	0.740	0.00	507.00	0.00	17.03
5165	VE	QRP	57	07/14/89	1.449	0.00 >	320.00	0.00	0.96
5165	VE	R7H	57	08/18/89	1.157	0.00	345.00	0.00 >	0.79
5165	VSV	040	57	07/07/89	1.159	0.00 >	320.00	0.00 >	3.35
5165	VV	08T	57	07/27/89	1.447	0.00 >	320.00	0.00 >	2.14
5165	YF	QR1	57	07/10/89	1.145	0.00 >	320.00	0.00 >	1.73
5165	YF	R6R	57	08/15/89	1.132	0.00	451.00	0.00	1.13
5166	JE	QVL	58	07/25/89	0.531	0.00	4.78	0.00 >	0.59
5166	JE	RWI	58	10/04/89	0.793	0.00	3.72	0.00	0.00
5166	PT	QW9	58	07/25/89	0.674	0.00	5.82	0.00 >	0.71
5166	PT	RX8	58	10/04/89	0.620	0.00	4.90	0.00	2.36
5166	SF	QVX	58	07/25/89	1.328	0.00	3.69	0.00 >	0.04
5166	SF	RWV	58	10/04/89	0.852	0.00	4.92	0.00 >	2.10
5166	VE	QV9	58	07/24/89	0.900	0.00	5.87	0.00	0.00
5166	VE	RYO	58	10/09/89	0.818	0.00	4.95	0.00	4.01
5166	VSV	04Z	58	07/28/89	1.356	0.00	7.45	0.00	0.44
5166	VV	0AP	58	08/10/89	1.202	0.00	4.57	0.00 >	0.23
5166	YF	QUX	58	07/24/89	0.908	0.00	6.53	0.00	0.00
5166	YF	RW5	58	10/03/89	0.689	0.00	4.90	0.00	0.20
5167	JE	QVM	58	07/25/89	0.585	0.00	4.42	0.00 >	0.62
5167	JE	RUN	58	10/03/89	0.893	0.00	3.96	0.00	0.00
5167	PT	QWA	58	07/25/89	0.646	0.00	4.29	0.00	0.00
5167	SF	QVY	58	07/25/89	1.346	0.00	3.90	0.00	0.00
5167	SF	RVD	58	10/03/89	0.905	0.00	4.97	0.00 >	2.39
5167	VE	QVA	58	07/24/89	0.787	0.00	5.59	0.00	0.00
5167	VE	RVO	58	10/02/89	0.996	0.00	4.54	0.00	0.00
5167	VSV	04Z	58	07/28/89	1.356	0.00	7.25	0.00	0.09
5167	VV	0AQ	58	08/10/89	1.243	0.00	4.33	0.00	0.00
5167	YF	QUY	58	07/24/89	0.956	0.00	5.05	0.00	0.00
5167	YF	RUA	58	10/02/89	0.979	0.00	4.41	0.00	0.39
5168	JE	QVM	58	07/25/89	0.585	0.00	1.92	0.00 >	0.00
5168	JE	RUO	58	10/03/89	0.946	0.00	3.38	0.00 >	0.01
5168	PT	QWA	58	07/25/89	0.646	0.00	2.00	0.00 >	0.40
5168	SF	QVY	58	07/25/89	1.346	0.00 <	1.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5168	SF	RVE	58	10/03/89	0.914	0.00	4.38	0.00 >	2.40
5168	VE	QVA	58	07/24/89	0.787	0.00	1.80	0.00	0.00
5168	VE	RV1	58	10/02/89	0.980	0.00	2.20	0.00	0.00
5168	VSV	050	58	07/28/89	1.441	0.00	4.07	0.00	0.00
5168	VV	OAQ	58	08/10/89	1.243	0.00	4.85	0.00	0.00
5168	YF	QUY	58	07/24/89	0.956	0.00	4.57	0.00	0.00
5168	YF	RUB	58	10/02/89	0.870	0.00	4.40	0.00	0.00
5169	JE	QVN	58	07/25/89	0.605	0.00	4.57	0.00 >	0.81
5169	JE	RUO	58	10/03/89	0.946	0.00	3.93	0.00 >	0.00
5169	PT	QWB	58	07/25/89	0.620	0.00	3.04	0.00 >	0.48
5169	SF	QVZ	58	07/25/89	1.289	0.00	4.35	0.00	0.00
5169	SF	RVE	58	10/03/89	0.914	0.00	3.90	0.00 >	1.30
5169	VE	QVB	58	07/24/89	0.750	0.00	1.48	0.00	0.00
5169	VE	RV1	58	10/02/89	0.980	0.00	2.32	0.00	0.00
5169	VSV	050	58	07/28/89	1.441	0.00	4.01	0.00	0.00
5169	VV	OAR	58	08/10/89	1.177	0.00	4.90	0.00	0.00
5169	YF	QUZ	58	07/24/89	1.003	0.00	4.27	0.00	0.00
5169	YF	RUB	58	10/02/89	0.870	0.00	4.20	0.00	0.00
5170	JE	QVN	58	07/25/89	0.605	0.00	4.69	0.00 >	0.45
5170	JE	RUP	58	10/03/89	0.892	0.00	3.04	0.00 >	0.00
5170	PT	QWB	58	07/25/89	0.620	0.00	4.85	0.00 >	1.02
5170	SF	QVZ	58	07/25/89	1.289	0.00	0.83	0.00	0.00
5170	SF	RVF	58	10/03/89	0.904	0.00	2.41	0.00	2.33
5170	VE	QVB	58	07/24/89	0.750	0.00	1.39	0.00	0.00
5170	VE	RV2	58	10/02/89	1.094	0.00	1.88	0.00	0.06
5170	VSV	051	58	07/28/89	1.199	0.00	4.16	0.00 >	0.01
5170	VV	OAR	58	08/10/89	1.177	0.00	4.52	0.00	0.00
5170	YF	QUZ	58	07/24/89	1.003	0.00	4.69	0.00	0.00
5170	YF	RUC	58	10/02/89	0.987	0.00	4.52	0.00	0.00
5171	JE	QVO	58	07/25/89	0.600	0.00	4.90	0.00 >	1.71
5171	JE	RUP	58	10/03/89	0.892	0.00	3.38	0.00	0.00
5171	PT	QWC	58	07/25/89	0.604	0.00	3.01	0.00 >	0.15
5171	SF	QWO	58	07/25/89	1.223	0.00	4.53	0.00	0.00
5171	SF	RVF	58	10/03/89	0.904	0.00	4.90	0.00 >	1.42
5171	VE	QVC	58	07/24/89	0.701	0.00	2.22	0.00	0.00
5171	VE	RV2	58	10/02/89	1.094	0.00	2.47	0.00	0.00
5171	VSV	051	58	07/28/89	1.199	0.00	5.41	0.00 >	0.64
5171	VV	OAS	58	08/10/89	1.285	0.00	3.93	0.00	0.00
5171	YF	QVO	58	07/24/89	0.997	0.00	4.90	0.00	0.00
5171	YF	RUC	58	10/02/89	0.987	0.00	4.14	0.00	0.00
5172	JE	QVO	58	07/25/89	0.600	0.00 >	320.00	0.00 >	4.92
5172	PT	QWC	58	07/25/89	0.604	0.00	267.00	0.00	0.22
5172	SF	QWO	58	07/25/89	1.223	0.00	186.00	0.00	0.00
5172	VE	QVC	58	07/24/89	0.701	0.00	136.00	0.00	0.00
5172	VSV	052	58	07/28/89	1.188	0.00 >	320.00	0.00	0.60
5172	VV	OAS	58	08/10/89	1.285	0.00	204.00	0.00	0.00
5172	YF	QVO	58	07/24/89	0.997	0.00	272.00	0.00	1.64
5173	JE	QVP	58	07/25/89	0.595	0.00	6.68	0.00	0.00
5173	JE	RUQ	58	10/03/89	0.879	0.00	3.34	0.00	0.00
5173	PT	QWD	58	07/25/89	0.656	0.00	2.68	0.00	0.00
5173	SF	QW1	58	07/25/89	1.341	0.00	4.50	0.00	0.00
5173	SF	RVG	58	10/03/89	0.915	0.00	6.16	0.00 >	1.24
5173	VE	QVD	58	07/24/89	0.637	0.00	12.80	0.00	0.00
5173	VE	RV3	58	10/02/89	0.728	0.00	25.70	0.00	0.60
5173	VSV	052	58	07/28/89	1.188	0.00	2.21	0.00	0.00
5173	VV	OAT	58	08/10/89	1.277	0.00	13.80	0.00	0.10
5173	YF	QV1	58	07/24/89	0.983	0.00	12.90	0.00 >	0.33
5173	YF	RUD	58	10/02/89	0.882	0.00	14.10	0.00 >	0.08
5174	JE	QVP	58	07/25/89	0.595	0.00	52.70	0.00	0.00
5174	JE	RWI	58	10/04/89	0.893	0.00	24.70	0.00	0.00
5174	PT	QWD	58	07/25/89	0.656	0.00	42.00	0.00	0.00
5174	PT	RX8	58	10/04/89	0.620	0.00	36.90	0.00	0.00
5174	SF	QW1	58	07/25/89	1.341	23.60	0.96	0.04	5.46
5174	SF	RWV	58	10/04/89	0.852	0.00	16.00	0.00	0.00
5174	VE	QVD	58	07/24/89	0.637	0.00	16.90	0.00	0.00
5174	VE	RYO	58	10/09/89	0.818	0.00	67.20	0.00	7.41

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5174	VSV	053	58	07/28/89	1.226	0.00	112.00	0.00	2.06
5174	VV	OAT	58	08/10/89	1.277	0.00	49.80	0.00	0.66
5174	YF	QV1	58	07/24/89	0.983	0.00	56.30	0.00	0.00
5174	YF	RW5	58	10/03/89	0.689	0.00	46.10	0.00 >	0.40
5175	JE	QVQ	58	07/25/89	0.798	0.00	11.40	0.00 >	0.03
5175	JE	RWJ	58	10/04/89	0.854	0.00	16.20	0.00	0.00
5175	PT	QWE	58	07/25/89	0.579	0.00	14.70	0.00	0.25
5175	PT	RX9	58	10/04/89	0.631	0.00	32.90	0.00 >	2.19
5175	SF	QW2	58	07/25/89	1.227	0.00	12.70	0.00	0.00
5175	SF	RWW	58	10/04/89	0.941	0.00	18.80	0.00	1.16
5175	VE	QVE	58	07/24/89	0.703	0.00	5.54	0.00	0.00
5175	VE	RYP	58	10/09/89	1.000	20.40	39.40	1.93 >	13.52
5175	VSV	053	58	07/28/89	1.226	0.00	34.30	0.00	0.00
5175	VV	OAU	58	08/10/89	1.272	0.00	13.90	0.00	0.00
5175	YF	QV2	58	07/24/89	1.044	0.00	15.80	0.00	0.00
5175	YF	RW6	58	10/03/89	0.842	0.00	14.40	0.00	0.00
5176	JE	QVQ	58	07/25/89	0.798	0.00	92.40	0.00	0.00
5176	JE	RWJ	58	10/04/89	0.854	0.00	103.00	0.00	0.00
5176	PT	QWE	58	07/25/89	0.579	0.00	121.00	0.00	1.71
5176	PT	RX9	58	10/04/89	0.631	0.00	138.00	0.00 >	12.63
5176	SF	QW2	58	07/25/89	1.227	0.00	116.00	0.00	3.77
5176	SF	RWW	58	10/04/89	0.941	0.00	128.00	0.00 >	6.52
5176	VE	QVE	58	07/24/89	0.703	0.00	17.30	0.00	0.00
5176	VE	RYP	58	10/09/89	1.000	79.20	134.00	1.69	10.40
5176	VSV	054	58	07/28/89	1.129	0.00	56.30	0.00	0.00
5176	VV	OAU	58	08/10/89	1.272	0.00	50.50	0.00	0.00
5176	YF	QV2	58	07/24/89	1.044	0.00	119.00	0.00	0.00
5176	YF	RW6	58	10/03/89	0.842	0.00	137.00	0.00	0.00
5177	JE	QVR	58	07/25/89	0.697	0.00	17.20	0.00 >	0.52
5177	PT	QWF	58	07/25/89	0.714	0.00	14.20	0.00	0.00
5177	SF	QW3	58	07/25/89	1.297	0.00	18.40	0.00	0.00
5177	VE	QVF	58	07/24/89	0.889	0.00	15.60	0.00	0.00
5177	VSV	054	58	07/28/89	1.129	0.00	163.00	0.00 >	0.08
5177	VV	OAV	58	08/10/89	1.210	0.00	11.60	0.00	0.00
5177	YF	QV3	58	07/24/89	1.036	0.00	15.50	0.00	0.00
5178	JE	QVR	58	07/25/89	0.697	0.00 >	320.00	0.00	0.00
5178	JE	RWK	58	10/04/89	0.489	0.00	613.00	0.00	0.20
5178	PT	QWF	58	07/25/89	0.714	0.00 >	320.00	0.00 >	3.64
5178	PT	RXA	58	10/04/89	0.570	0.00	566.00	0.00 >	1.60
5178	SF	QW3	58	07/25/89	1.297	0.00	320.00	0.00	0.00
5178	SF	RWX	58	10/04/89	0.674	0.00	240.00	0.00	0.00
5178	VE	QVF	58	07/24/89	0.889	0.00	269.00	0.00	0.40
5178	VE	RYQ	58	10/09/89	1.118	0.00	568.00	0.00 >	0.43
5178	VSV	055	58	07/28/89	1.298	0.00 >	320.00	0.00	0.00
5178	VV	OAV	58	08/10/89	1.210	0.00 >	320.00	0.00	0.00
5178	YF	QV3	58	07/24/89	1.036	0.00 >	320.00	0.00 >	0.81
5178	YF	RW7	58	10/03/89	0.499	0.00	594.00	0.00	0.00
5179	JE	QVS	58	07/25/89	0.555	0.00	20.80	0.00 >	3.65
5179	PT	QWG	58	07/25/89	0.544	0.00	22.30	0.00	3.06
5179	SF	QW4	58	07/25/89	1.229	0.00	21.50	0.00	1.67
5179	VE	QVG	58	07/24/89	0.898	0.00	12.90	0.00	0.00
5179	VSV	055	58	07/28/89	1.298	0.00	15.20	0.00	0.00
5179	VV	OAV	58	08/10/89	1.288	0.00	21.70	0.00	0.00
5179	YF	QV4	58	07/24/89	0.827	0.00	18.60	0.00	0.00
5180	JE	QVS	58	07/25/89	0.555	0.00 >	320.00	0.00	0.20
5180	JE	RWK	58	10/04/89	0.489	0.00 >	320.00	0.00	2.99
5180	PT	QWG	58	07/25/89	0.544	0.00 >	320.00	0.00 >	5.81
5180	PT	RXA	58	10/04/89	0.570	0.00 >	320.00	0.00 >	0.30
5180	SF	QW4	58	07/25/89	1.229	0.00	1.00	0.00	0.00
5180	SF	RWX	58	10/04/89	0.674	0.00 >	320.00	0.00 >	0.48
5180	VE	QVC	58	07/24/89	0.898	0.00	262.00	0.00	0.00
5180	VE	RYQ	58	10/09/89	1.118	0.00 >	320.00	0.00 >	1.27
5180	VSV	056	58	07/28/89	1.359	0.00 >	320.00	0.00	0.00
5180	VV	OAV	58	08/10/89	1.288	0.00 >	320.00	0.00	0.00
5180	YF	QV4	58	07/24/89	0.827	0.00 >	320.00	0.00 >	0.81
5180	YF	RW7	58	10/03/89	0.499	0.00 >	320.00	0.00 >	0.72

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5181	JE	QVT	58	07/25/89	0.573	0.00	15.60	0.00 >	0.10
5181	PT	QWH	58	07/25/89	0.501	0.00	10.60	0.00	0.00
5181	SF	QW5	58	07/25/89	1.243	0.00	14.10	0.00	0.00
5181	VE	QVH	58	07/24/89	0.863	0.00	18.40	0.00	0.25
5181	VSV	056	58	07/28/89	1.359	0.00	18.50	0.00	0.00
5181	VV	OAX	58	08/10/89	1.216	0.00	12.60	0.00 >	0.03
5181	YF	QV5	58	07/24/89	0.920	0.00	15.60	0.00	0.00
5182	JE	QVT	58	07/25/89	0.573	0.00	160.00	0.00	0.30
5182	JE	RWL	58	10/04/89	0.812	0.00	73.40	0.00	0.00
5182	PT	QWH	58	07/25/89	0.501	0.00	89.50	0.00	0.00
5182	PT	RXB	58	10/04/89	0.641	0.00	202.00	0.00 >	2.95
5182	SF	QW5	58	07/25/89	1.243	0.00	41.70	0.00	0.00
5182	SF	RWY	58	10/04/89	0.694	0.00	198.00	0.00 >	9.01
5182	VE	QVH	58	07/24/89	0.868	0.00	80.60	0.00	0.00
5182	VE	RYR	58	10/09/89	1.146	0.00	179.00	0.00	0.00
5182	VSV	057	58	07/28/89	1.349	0.00	304.00	0.00	1.51
5182	VV	OAX	58	08/10/89	1.216	0.00	135.00	0.00	0.00
5182	YF	QV5	58	07/24/89	0.920	0.00	126.00	0.00	0.00
5182	YF	RW8	58	10/03/89	0.785	0.00	177.00	0.00 >	0.41
5183	JE	QVU	58	07/25/89	0.569	0.00	176.00	0.00 >	1.40
5183	JE	RWL	58	10/04/89	0.812	0.00	66.00	0.00	0.00
5183	PT	QWI	58	07/25/89	0.452	0.00	27.60	0.00	0.00
5183	PT	RXB	58	10/04/89	0.641	0.00	199.00	0.00 >	3.81
5183	SF	QW6	58	07/25/89	1.204	0.00	77.30	0.00	1.50
5183	SF	RWZ	58	10/04/89	0.694	0.00	215.00	0.00 >	12.25
5183	VE	QVI	58	07/24/89	0.861	0.00	70.10	0.00	0.00
5183	VE	RYR	58	10/09/89	1.146	0.00	166.00	0.00	0.00
5183	VSV	057	58	07/28/89	1.349	0.00	255.00	0.00	0.00
5183	VV	OAY	58	08/10/89	1.277	0.00	150.00	0.00	0.00
5183	YF	QV6	58	07/24/89	0.892	0.00	120.00	0.00	0.00
5183	YF	RW8	58	10/03/89	0.785	0.00	156.00	0.00 >	0.90
5184	JE	QVU	58	07/25/89	0.569	0.00 >	320.00	0.00	0.40
5184	JE	RWM	58	10/04/89	0.840	0.00	367.00	0.00	0.00
5184	PT	QWI	58	07/25/89	0.452	0.00 >	320.00	0.00	0.00
5184	PT	RXC	58	10/04/89	0.588	0.00	535.00	0.00 >	1.20
5184	SF	QW6	58	07/25/89	1.204	0.00 >	320.00	0.00 >	5.30
5184	SF	RWZ	58	10/04/89	0.694	0.00	332.00	0.00	0.00
5184	VE	QVI	58	07/24/89	0.861	0.00	320.00	0.00	0.20
5184	VE	RYS	58	10/09/89	0.919	0.00	553.00	0.00	1.20
5184	VSV	059	58	08/04/89	1.570	0.00 >	320.00	0.00 >	2.20
5184	VV	OAY	58	08/10/89	1.277	0.00 >	320.00	0.00	0.00
5184	YF	QV6	58	07/24/89	0.892	0.00 >	320.00	0.00	0.00
5184	YF	RW9	58	10/03/89	0.877	0.00	417.00	0.00 >	0.04
5185	JE	QVV	58	07/25/89	0.505	0.00	30.40	0.00	0.00
5185	PT	QWJ	58	07/25/89	0.362	0.00	13.80	0.00	0.00
5185	SF	QW7	58	07/25/89	1.180	0.00	14.90	0.00	0.00
5185	VE	QVJ	58	07/24/89	0.800	0.00	14.60	0.00	0.00
5185	VSV	05A	58	08/04/89	1.548	0.00	47.10	0.00	0.00
5185	VV	OAZ	58	08/10/89	1.211	0.00	29.90	0.00 >	2.12
5185	YF	QV7	58	07/24/89	0.952	0.00	21.50	0.00	0.00
5186	JE	QVV	58	07/25/89	0.505	0.00 >	320.00	0.00	1.40
5186	JE	RWM	58	10/04/89	0.840	0.00	36.50	0.00	0.00
5186	PT	QWJ	58	07/25/89	0.362	63.60	296.00	4.66	16.09
5186	PT	RXC	58	10/04/89	0.588	38.20	394.00	10.31	29.76
5186	SF	QW7	58	07/25/89	1.180	0.00	196.00	0.00	5.18
5186	SF	RWZ	58	10/04/89	0.694	49.90	414.00	8.30 >	27.60
5186	VE	QVJ	58	07/24/89	0.800	0.00	81.20	0.00	0.00
5186	VE	RYS	58	10/09/89	0.919	0.00	647.00	0.00	0.00
5186	VSV	05A	58	08/04/89	1.548	0.00	14.10	0.00	0.63
5186	VV	ODW	58	09/07/89	1.225	49.80	128.00	2.56 >	17.22
5186	YF	QV7	58	07/24/89	0.952	0.00	100.00	0.00	0.37
5186	YF	RW9	58	10/03/89	0.877	74.90	197.00	2.63	10.12
5187	JE	QVW	58	07/25/89	0.994	0.00 <	1.00	0.00	0.00
5187	JE	RUQ	58	10/03/89	0.879	0.00	0.28	0.00	0.00
5187	PT	QWK	58	07/25/89	0.447	0.00 <	1.00	0.00	0.00
5187	SF	QW8	58	07/25/89	1.141	0.00 <	1.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5187	SF	RVG	58	10/03/89	0.915	0.00	0.20	0.00 >	0.20
5187	VE	QVK	58	07/24/89	0.767	0.00 <	1.00	0.00	0.00
5187	VE	RV3	58	10/02/89	0.728	0.00	0.94	0.00	0.96
5187	JSV	05B	58	08/04/89	1.607	0.00	3.20	0.00	0.00
5187	VV	ODX	58	09/07/89	1.234	0.00 <	1.00	0.00	0.00
5187	YF	QV8	58	07/24/89	1.075	0.00 <	1.00	0.00	0.00
5187	YF	RUD	58	10/02/89	0.882	0.00	0.52	0.00 >	0.30
5188	JF	QWX	58	07/26/89	0.760	0.00	2.57	0.00	0.00
5188	JE	RUR	58	10/03/89	0.514	0.00 <	0.10	0.00	0.00
5188	PT	QXL	58	07/26/89	0.519	0.00	2.54	0.00	0.00
5188	SF	RVH	58	10/03/89	0.899	0.00 <	0.10	0.00	0.00
5188	SF P6	QX9	58	07/26/89	1.104	0.00 <	1.00	0.00	0.00
5188	VE	QXX	58	07/28/89	1.481	0.00	3.44	0.00	0.00
5188	VE	RV4	58	10/02/89	1.093	0.00	0.10	0.00	0.00
5188	VSV	05B	58	08/04/89	1.607	0.00	26.70	0.00	0.00
5188	VV	ODX	58	09/07/89	1.234	0.00	17.30	0.00	0.00
5188	YF	QWL	58	07/24/89	1.255	0.00 <	1.00	0.00	0.00
5188	YF	RUE	58	10/02/89	0.816	0.00 <	0.10	0.00	0.00
5189	JE	QWY	58	07/26/89	0.713	0.00	1.55	0.00	0.00
5189	JE	RUR	58	10/03/89	0.514	0.00	2.17	0.00 >	5.09
5189	PT	QXM	58	07/26/89	0.751	0.00	1.55	0.00 >	0.11
5189	SF	RVH	58	10/03/89	0.899	0.00	0.88	0.00 >	1.92
5189	SF P6	QXA	58	07/26/89	1.016	0.00	1.52	0.00	0.00
5189	VE	QXY	58	07/28/89	1.446	0.00	1.00	0.00	0.00
5189	VE	RV4	58	10/02/89	1.093	0.00	1.59	0.00	0.00
5189	VSV	05C	58	08/04/89	1.600	0.00	4.02	0.00	0.00
5189	VV	ODY	58	09/07/89	1.282	0.00	4.92	0.00	0.34
5189	YF	QWM	58	07/24/89	1.426	0.00	1.14	0.00	0.00
5189	YF	RUE	58	10/02/89	0.816	0.00 >	3.20	0.00 >	0.36
5190	JE	QWY	58	07/26/89	0.713	0.00	1.55	0.00	0.00
5190	JE	RUS	58	10/03/89	0.719	0.00	1.88	0.00	3.65
5190	PT	QXM	58	07/26/89	0.751	0.00	1.55	0.00 >	0.02
5190	SF	RVI	58	10/03/89	0.788	0.00	0.70	0.00 >	2.23
5190	SF P6	QXA	58	07/26/89	1.016	0.00	1.39	0.00	0.00
5190	VE	QXY	58	07/28/89	1.446	0.00 <	1.00	0.00	0.00
5190	VE	RV5	58	10/02/89	0.951	0.00	2.02	0.00 >	1.30
5190	VSV	05C	58	08/04/89	1.600	0.00	4.01	0.00	0.00
5190	VV	ODY	58	09/07/89	1.282	0.00	4.85	0.00	0.36
5190	YF	QWM	58	07/24/89	1.426	0.00	1.24	0.00	0.00
5190	YF	RUF	58	10/02/89	0.907	0.00	3.09	0.00	0.02
5191	JE	QWZ	58	07/26/89	0.777	0.00	2.28	0.00	0.00
5191	JE	RUS	58	10/03/89	0.719	0.00	1.77	0.00	1.94
5191	PT	QXN	58	07/26/89	0.814	0.00	1.73	0.00 >	0.02
5191	SF	RVI	58	10/03/89	0.788	0.00	0.97	0.00 >	4.49
5191	SF P6	QXB	58	07/26/89	1.023	0.00	1.68	0.00	0.00
5191	VE	QXZ	58	07/28/89	1.501	0.00	1.41	0.00	0.00
5191	VE	RV5	58	10/02/89	0.951	0.00	2.08	0.00 >	1.70
5191	VSV	05D	58	08/04/89	1.526	0.00	4.42	0.00	0.00
5191	VV	ODZ	58	09/07/89	1.259	0.00	4.92	0.00	0.00
5191	YF	QWN	58	07/24/89	1.344	0.00	1.18	0.00	0.00
5191	YF	RUF	58	10/02/89	0.907	0.00	2.76	0.00	0.00
5192	JE	QWZ	58	07/26/89	0.777	0.00 >	320.00	0.00	0.00
5192	JE	RWN	58	10/04/89	0.777	0.00	303.00	0.00	0.00
5192	PT	QXN	58	07/26/89	0.814	0.00 >	320.00	0.00 >	0.58
5192	PT	RXD	58	10/04/89	0.642	0.00	638.00	0.00	0.00
5192	SF	RXO	58	10/04/89	0.699	0.00	531.00	0.00	1.83
5192	SF P6	QXB	58	07/26/89	1.023	0.00	0.96	0.00	0.00
5192	VE	QXZ	58	07/28/89	1.501	0.00	220.00	0.00	0.00
5192	VE	RYT	58	10/09/89	0.931	0.00	706.00	0.00	0.40
5192	VSV	05D	58	08/04/89	1.526	0.00 >	320.00	0.00	0.00
5192	VV	ODZ	58	09/07/89	1.259	0.00	282.00	0.00	0.00
5192	YF	QWN	58	07/24/89	1.344	0.00	218.00	0.00	0.00
5192	YF	RWA	58	10/03/89	0.840	0.00	429.00	0.00	0.05
5193	JE	QXO	58	07/26/89	0.766	0.00 >	100.00	0.00	0.00
5193	PT	QXO	58	07/26/89	0.724	0.00 >	100.00	0.00 >	2.58
5193	SF P6	QXC	58	07/26/89	1.084	0.00 >	100.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5193	VE	QYO	58	07/28/89	1.504	0.00	62.20	0.00	0.00
5193	YF	QWO	58	07/24/89	1.308	0.00 >	100.00	0.00	0.00
5194	JE	QX0	58	07/26/89	0.766	0.00 <	1.00	0.00	0.00
5194	JE	RUT	58	10/03/89	0.857	0.00	1.28	0.00	0.00
5194	PT	QXO	58	07/26/89	0.724	0.00	1.35	0.00	0.00
5194	SF	RVJ	58	10/03/89	0.942	0.00	1.25	0.00 >	1.02
5194	SF P6	QXC	58	07/26/89	1.084	0.00 <	1.00	0.00	0.00
5194	VE	QYO	58	07/28/89	1.504	0.00 <	1.00	0.00	0.00
5194	VE	RV6	58	10/02/89	0.944	0.00	1.59	0.00	0.00
5194	VSV	05E	58	08/04/89	1.719	0.00	3.75	0.00	0.00
5194	VV	OE0	58	09/07/89	1.270	0.00 <	1.00	0.00	0.00
5194	YF	QWO	58	07/24/89	1.308	0.00 <	1.00	0.00	0.00
5194	YF	RUG	58	10/02/89	0.889	0.00	1.20	0.00 >	0.93
5195	JE	QX1	58	07/26/89	0.718	0.00 <	1.00	0.00	0.00
5195	JE	RUT	58	10/03/89	0.857	0.00	1.43	0.00	0.00
5195	PT	QXP	58	07/26/89	0.737	0.00	1.35	0.00	0.00
5195	SF	RVJ	58	10/03/89	0.942	0.00	1.55	0.00 >	2.03
5195	SF P6	QXD	58	07/26/89	1.051	0.00 <	1.00	0.00	0.00
5195	VE	QY1	58	07/28/89	1.442	0.00 <	1.00	0.00	0.00
5195	VE	RV6	58	10/02/89	0.944	0.00	1.64	0.00	0.00
5195	VSV	05E	58	08/04/89	1.719	0.00	2.16	0.00	0.00
5195	YF	QWP	58	07/24/89	1.391	0.00	1.26	0.00	0.00
5195	YF	RUG	58	10/02/89	0.889	0.00	1.11	0.00 >	0.08
5196	JE	QX1	58	07/26/89	0.718	0.00	14.60	0.00	0.00
5196	PT	QXP	58	07/26/89	0.737	0.00	17.90	0.00	0.00
5196	SF P6	QXD	58	07/26/89	1.051	0.00 <	1.00	0.00	0.00
5196	VE	QY1	58	07/28/89	1.442	0.00	5.47	0.00	0.00
5196	VSV	05F	58	08/04/89	1.610	0.00	6.67	0.00	0.00
5196	VV	OE1	58	09/07/89	1.232	0.00	14.90	0.00	0.00
5196	YF	QWP	58	07/24/89	1.391	0.00	5.14	0.00	0.00
5197	JE	QX2	58	07/26/89	0.797	0.00	36.30	0.00 >	1.43
5197	JE	RWO	58	10/04/89	0.803	0.00	17.30	0.00	0.00
5197	PT	QXQ	58	07/26/89	0.760	0.00	46.70	0.00 >	3.99
5197	PT	RXE	58	10/04/89	0.594	0.00	89.10	0.00	0.00
5197	SF	RX0	58	10/04/89	0.699	0.00	130.00	0.00	14.49
5197	SF P6	QXE	58	07/26/89	0.844	0.00	55.10	0.00	0.00
5197	VE	QY2	58	07/28/89	1.439	91.90	44.40	0.48	0.48
5197	VE	RYU	58	10/09/89	1.010	21.90	88.70	4.04	19.73
5197	VSV	05F	58	08/04/89	1.610	0.00	20.30	0.00	0.88
5197	VV	OE2	58	09/07/89	1.192	0.00	16.20	0.00	0.00
5197	YF	QWQ	58	07/24/89	1.326	0.00	45.00	0.00	0.00
5197	YF	RWB	58	10/03/89	0.920	0.00	30.20	0.00 >	0.38
5198	JE	QX2	58	07/26/89	0.797	0.00	36.00	0.00	0.00
5198	JE	RWO	58	10/04/89	0.803	0.00	11.70	0.00	0.00
5198	PT	QXQ	58	07/26/89	0.760	0.00	54.70	0.00	7.32
5198	PT	RXE	58	10/04/89	0.594	0.00	87.90	0.00	0.00
5198	SF	RX1	58	10/04/89	0.707	0.00	124.00	0.00	13.08
5198	SF P6	QXE	58	07/26/89	0.844	0.00	57.70	0.00	0.00
5198	VE	QY2	58	07/28/89	1.439	88.50	32.00	0.36	0.93
5198	VE	RYU	58	10/09/89	1.010	19.30	57.90	3.01 >	17.11
5198	VSV	05G	58	08/04/89	1.514	0.00	12.10	0.00	0.01
5198	VV	OE2	58	09/07/89	1.192	0.00	11.80	0.00	0.00
5198	YF	QWQ	58	07/24/89	1.326	0.00	30.70	0.00	0.00
5198	YF	RWB	58	10/03/89	0.920	0.00	22.60	0.00 >	1.05
5199	JE	QX3	58	07/26/89	0.833	0.00 >	320.00	0.00 >	16.10
5199	PT	QXR	58	07/26/89	0.555	0.00 >	320.00	0.00 >	7.93
5199	SF P6	QXF	58	07/26/89	0.821	0.00 >	320.00	0.00	0.00
5199	VE	QY3	58	07/28/89	1.026	0.00 >	320.00	0.00	0.00
5199	VSV	05G	58	08/04/89	1.514	0.00 >	320.00	0.00 >	0.32
5199	VV	OE3	58	09/07/89	1.247	0.00 >	320.00	0.00	0.23
5199	YF	QWR	58	07/24/89	1.189	0.00 >	320.00	0.00 >	1.87
5200	JE	QX3	58	07/26/89	0.833	0.00	44.20	0.00 >	3.52
5200	PT	QXR	58	07/26/89	0.555	0.00	50.50	0.00 >	3.05
5200	SF P6	QXF	58	07/26/89	0.821	0.00	43.20	0.00	0.00
5200	VE	QY3	58	07/28/89	1.026	0.00	57.80	0.00	0.32
5200	VSV	05H	58	08/04/89	1.575	0.00	114.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5200	VV	OE3	58	09/07/89	1.247	0.00	55.20	0.00	0.00
5200	YF	QWR	58	07/24/89	1.189	0.00	51.00	0.00	1.21
5201	JE	QX4	58	07/26/89	0.715	0.00 >	320.00	0.00 >	10.90
5201	JE	S2N	58	10/17/89	0.734	0.00	350.00	0.00	0.00
5201	PT	QXS	58	07/26/89	0.469	78.10 >	320.00 >	4.10 >	21.90
5201	SF	S30	58	10/17/89	1.005	0.00	222.00	0.00 >	2.21
5201	SF P6	QXG	58	07/26/89	0.915	0.00	276.00	0.00	4.54
5201	VE	QY4	58	07/28/89	1.299	0.00	239.00	0.00	0.38
5201	VE	RY7	58	10/09/89	1.261	0.00	100.00	0.00	0.00
5201	VSV	05H	58	08/04/89	1.575	0.00 >	320.00	0.00 >	1.00
5201	VV	OE4	58	09/07/89	1.205	0.00	253.00	0.00	0.00
5201	YF	QWS	58	07/24/89	1.224	0.00 >	320.00	0.00	0.12
5201	YF	RXU	58	10/09/89	0.707	0.00	465.00	0.00 >	15.95
5202	JE	QX4	58	07/26/89	0.715	0.00	283.00	0.00 >	9.28
5202	PT	QXS	58	07/26/89	0.469	0.00	192.00	0.00	3.94
5202	SF P6	QXG	58	07/26/89	0.915	0.00	170.00	0.00	0.55
5202	VE	QY4	58	07/28/89	1.299	0.00	206.00	0.00	0.00
5202	VSV	05L	58	08/11/89	1.504	0.00 >	320.00	0.00	1.63
5202	VV	OE4	58	09/07/89	1.205	0.00 >	320.00	0.00	0.00
5202	YF	QWS	58	07/24/89	1.224	0.00	220.00	0.00	0.18
5203	JE	QX5	58	07/26/89	0.703	0.00	2.47	0.00	0.00
5203	JE	S2O	58	10/17/89	0.826	0.00 <	0.32	0.00	0.00
5203	PT	QXT	58	07/26/89	0.295	0.00 <	1.00	0.00	0.00
5203	SF	S31	58	10/17/89	1.047	0.00 <	0.32	0.00	0.00
5203	SF P6	QXH	58	07/26/89	0.834	0.00 <	1.00	0.00	0.00
5203	VE	QY5	58	07/28/89	1.188	0.00	7.33	0.00	0.00
5203	VE	RY8	58	10/09/89	1.183	0.00 <	0.32	0.00	0.00
5203	VSV	05M	58	08/11/89	1.510	0.00 <	1.00	0.00	0.00
5203	VSV	05R	58	09/15/89	1.163	0.00	27.20	0.00	0.00
5203	VV	OE5	58	09/07/89	1.244	0.00	5.10	0.00	0.00
5203	YF	QWT	58	07/24/89	1.264	0.00 <	1.00	0.00	0.00
5203	YF	RXV	58	10/09/89	0.846	0.00 <	0.32	0.00	0.00
5204	JE	QX5	58	07/26/89	0.703	0.00	1.00	0.00	0.00
5204	JE	S2O	58	10/17/89	0.826	0.00 <	0.32	0.00	0.00
5204	PT	QXT	58	07/26/89	0.295	0.00	1.51	0.00	0.02
5204	SF	S31	58	10/17/89	1.047	0.00 <	0.32	0.00	0.00
5204	SF P6	QXH	58	07/26/89	0.834	0.00 <	1.00	0.00	0.00
5204	VE	QY5	58	07/28/89	1.188	0.00	13.70	0.00	0.00
5204	VE	RY8	58	10/09/89	1.183	0.00 <	0.32	0.00	0.00
5204	VSV	05M	58	08/11/89	1.510	0.00 <	1.00	0.00	0.00
5204	VSV	05R	58	09/15/89	1.163	0.00 >	32.00	0.00	0.00
5204	VV	OE5	58	09/07/89	1.244	0.00	8.40	0.00	0.00
5204	YF	QWT	58	07/24/89	1.264	0.00 <	1.00	0.00	0.00
5204	YF	RXV	58	10/09/89	0.846	0.00 <	0.32	0.00	0.00
5205	JE	QX6	58	07/26/89	0.761	0.00	66.00	0.00 >	6.53
5205	PT	QXU	58	07/26/89	0.380	0.00	7.73	0.00	0.00
5205	SF P6	QXI	58	07/26/89	0.667	0.00	129.00	0.00	5.67
5205	VE	QY6	58	07/28/89	1.252	0.00	100.00	0.00	0.31
5205	VSV	05N	58	08/11/89	1.503	0.00	92.40	0.00	0.00
5205	VV	OE6	58	09/07/89	1.236	0.00	283.00	0.00	0.12
5205	YF	QWU	58	07/24/89	1.103	0.00	27.10	0.00	0.00
5206	JE	QX6	58	07/26/89	0.761	0.00	3.04	0.00 >	0.48
5206	JE	RUU	58	10/03/89	0.742	0.00	1.53	0.00	0.12
5206	PT	QXU	58	07/26/89	0.380	0.00	2.28	0.00	0.00
5206	SF	RVK	58	10/03/89	0.937	0.00	1.80	0.00	0.20
5206	SF P6	QXI	58	07/26/89	0.667	0.00	2.81	0.00	0.00
5206	VE	QY6	58	07/28/89	1.252	0.00	2.35	0.00	0.00
5206	VE	RV7	58	10/02/89	1.025	0.00	2.78	0.00	0.00
5206	VSV	05N	58	08/11/89	1.503	0.00	135.00	0.00 >	5.08
5206	VV	OE6	58	09/07/89	1.236	0.00	13.80	0.00 >	0.20
5206	YF	QWU	58	07/24/89	1.103	0.00	1.96	0.00	0.00
5206	YF	RUH	58	10/02/89	0.859	0.00	1.57	0.00	0.00
5207	JE	QX7	58	07/26/89	0.754	0.00	4.71	0.00 >	1.06
5207	JE	RUU	58	10/03/89	0.742	0.00	6.41	0.00	1.25
5207	PT	QXV	58	07/26/89	0.421	0.00	4.11	0.00	0.00
5207	SF	RVK	58	10/03/89	0.937	0.00	6.53	0.00 >	1.52

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5207	SF P6	QXJ	58	07/26/89	0.724	0.00	15.20	0.00	6.83
5207	VE	QY7	58	07/28/89	1.262	0.00	6.03	0.00	0.00
5207	VE	RV7	58	10/02/89	1.025	0.00	12.60	0.00 >	0.01
5207	VSV	050	58	08/11/89	1.580	0.00	6.74	0.00	0.00
5207	VV	OE7	58	09/07/89	1.189	0.00	6.25	0.00	0.00
5207	YF	QWV	58	07/24/89	1.169	0.00	5.77	0.00	0.00
5207	YF	RUH	58	10/02/89	0.859	0.00	0.30	0.00	0.00
5208	JE	QX7	58	07/26/89	0.754	0.00 >	320.00	0.00	4.59
5208	PT	QXV	58	07/26/89	0.421	0.00 >	320.00	0.00 >	1.92
5208	SF P6	QXJ	58	07/26/89	0.724	0.00 >	320.00	0.00	2.63
5208	VE	QY7	58	07/28/89	1.262	0.00 >	320.00	0.00	0.00
5208	VSV	050	58	08/11/89	1.580	0.00 >	320.00	0.00	0.03
5208	VV	OE0	58	09/07/89	1.270	0.00 >	320.00	0.00	0.00
5208	VV	OGF	58	10/05/89	1.282	0.00 >	320.00	0.00	0.00
5208	YF	QWV	58	07/24/89	1.169	0.00 >	320.00	0.00 >	0.13
5210	JE	QYL	58	08/01/89	0.668	0.00	51.10	0.00	0.00
5210	JE	S2P	58	10/17/89	0.842	0.00	46.50	0.00	0.00
5210	PT	QZ9	58	08/01/89	0.629	0.00	48.80	0.00	1.55
5210	SF	QZL	58	08/01/89	1.262	27.00	19.40	0.72	2.46
5210	SF	S32	58	10/17/89	1.023	0.00	16.80	0.00	4.54
5210	VE	QYX	58	07/31/89	1.262	0.00	23.60	0.00	0.00
5210	VE	RY9	58	10/09/89	1.245	0.00	26.00	0.00	0.02
5210	VSV	05P	58	08/11/89	1.400	0.00	53.50	0.00	0.00
5210	VV	OGG	58	10/05/89	1.377	0.00	38.60	0.00	0.35
5210	YF	QY9	58	07/31/89	1.097	0.00	60.30	0.00	0.00
5210	YF	RXW	58	10/09/89	0.908	0.00	36.30	0.00	0.00
5211	JE	QYM	58	08/01/89	0.905	0.00 <	1.00	0.00	0.00
5211	JE	RUV	58	10/03/89	0.768	0.00	1.49	0.00 >	2.65
5211	PT	QZA	58	08/01/89	0.639	0.00	1.21	0.00	0.00
5211	SF	QZM	58	08/01/89	1.257	0.00 <	1.00	0.00	0.00
5211	SF	RVL	58	10/03/89	0.906	0.00	1.27	0.00 >	1.36
5211	VE	QYY	58	07/31/89	1.152	0.00	2.10	0.00	0.00
5211	VE	RV8	58	10/02/89	1.050	0.00	1.43	0.00	0.00
5211	VSV	05P	58	08/11/89	1.400	0.00	4.66	0.00	0.00
5211	VV	OGG	58	10/05/89	1.377	0.00	1.35	0.00	0.00
5211	YF	QYA	58	07/31/89	1.019	0.00	1.64	0.00 >	0.05
5211	YF	RUI	58	10/02/89	0.959	0.00	1.26	0.00	0.01
5213	JE	QYN	58	08/01/89	0.787	0.00 <	1.00	0.00	0.00
5213	JE	RUV	58	10/03/89	0.768	0.00	0.83	0.00	4.60
5213	PT	QZB	58	08/01/89	0.566	0.00	1.55	0.00 >	0.17
5213	SF	QZN	58	08/01/89	1.259	0.00	1.00	0.00	0.00
5213	SF	RVL	58	10/03/89	0.906	0.00	0.56	0.00 >	3.02
5213	VE	QYZ	58	07/31/89	1.105	0.00	1.08	0.00	0.00
5213	VE	RV8	58	10/02/89	1.050	0.00	1.30	0.00	0.00
5213	VSV	05Q	58	08/11/89	1.440	9.16	11.60	1.27 >	9.48
5213	VV	OGH	58	10/05/89	1.383	0.00	1.39	0.00	0.00
5213	YF	QYB	58	07/31/89	1.164	0.00	1.14	0.00	0.00
5213	YF	RUI	58	10/02/89	0.959	0.00	1.21	0.00	0.00
5214	JE	QYN	58	08/01/89	0.787	0.00 >	320.00	0.00 >	3.19
5214	PT	QZB	58	08/01/89	0.566	0.00 >	320.00	0.00 >	4.80
5214	SF	QZN	58	08/01/89	1.259	0.00	255.00	0.00	0.00
5214	VE	QYZ	58	07/31/89	1.105	0.00 >	320.00	0.00	0.00
5214	VSV	05Q	58	08/11/89	1.440	0.00 >	320.00	0.00 >	7.21
5214	VV	OGH	58	10/05/89	1.383	0.00	238.00	0.00	0.00
5214	YF	QYB	58	07/31/89	1.164	0.00 >	320.00	0.00 >	2.34
5215	JE	QYO	58	08/01/89	0.795	0.00	249.00	0.00	0.77
5215	PT	QZC	58	08/01/89	0.551	0.00	220.00	0.00	5.19
5215	SF	QZO	58	08/01/89	1.162	0.00	100.00	0.00	0.00
5215	VE	QZO	58	07/31/89	1.122	0.00	143.00	0.00	0.00
5215	VV	OGI	58	10/05/89	1.396	0.00	196.00	0.00 >	2.22
5215	YF	QYC	58	07/31/89	1.072	0.00	203.00	0.00	0.00
5216	JE	QYO	58	08/01/89	0.795	0.00 >	320.00	0.00	0.12
5216	PT	QZC	58	08/01/89	0.551	0.00 >	320.00	0.00 >	2.90
5216	SF	QZO	58	08/01/89	1.162	0.00 >	320.00	0.00	0.00
5216	VE	QZO	58	07/31/89	1.122	0.00	310.00	0.00	0.00
5216	VV	OGI	58	10/05/89	1.396	0.00	220.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5216	YF	QYC	58	07/31/89	1.072	0.00 >	320.00	0.00 >	1.44
5219	JE	P39	51	03/14/89	0.988	0.00	78.30	0.00	0.24
5219	PT	P43	51	03/15/89	0.847	0.00	105.00	0.00	15.37
5219	SF	P30	51	02/15/89	0.822	0.00	94.80	0.00	0.00
5219	VE	P1L	51	03/14/89	0.918	0.00	20.60	0.00 >	6.21
5219	VSV	01V	51	03/03/89	1.351	1.96	249.00	127.00 >	71.99
5219	VSV	030	51	05/12/89	1.477	1.85	19.60	10.60	28.27
5219	VV	036	51	04/06/89	1.893 <	1.00	5.34 >	5.34 >	21.47
5219	VV	036	51	04/06/89	1.893	0.23 >	0.32 >	1.41 >	11.77
5219	VV	03W	51	05/04/89	1.754	0.07	6.32	84.00 >	62.29
5219	VV	04P	51	06/01/89	2.341 <	0.32	6.16 >	19.30 >	37.83
5219	VV	04P	51	06/01/89	2.341	0.00 >	0.10	0.00	0.00
5219	YF	P2U	51	03/14/89	0.884	0.00	62.40	0.00	0.00
5220	JE	P3A	51	03/14/89	0.918	0.00 >	320.00	0.00 >	19.07
5220	PT	P44	51	03/15/89	0.926	0.00 >	320.00	0.00	0.00
5220	SF	P3P	51	03/15/89	0.752	0.00 >	320.00	0.00	8.29
5220	VE	P1M	51	03/14/89	0.970	0.00 >	320.00	0.00 >	2.91
5220	VSV	01V	51	03/03/89	1.351	0.00 >	320.00	0.00 >	5.77
5220	VV	01P	51	03/09/89	1.746	0.00 >	320.00	0.00 >	6.30
5220	YF	P2V	51	03/14/89	0.842	0.00 >	320.00	0.00	0.00
5221	JE	P3E	52	03/14/89	1.039	0.00	122.00	0.00 >	1.72
5221	PT	P48	52	03/15/89	0.784	0.00	109.00	0.00	2.88
5221	SF	P3T	52	03/15/89	0.655	0.00	138.00	0.00 >	15.29
5221	VE	P1Q	52	03/14/89	1.050	0.00	109.00	0.00 >	0.03
5221	VSV	01C	52	02/17/89	1.516	0.00 >	320.00	0.00	0.00
5221	VV	01D	52	02/23/89	1.691	0.00 >	320.00	0.00 >	0.10
5221	YF	P2Z	52	03/14/89	0.955	0.00	121.00	0.00	3.23
5223	JE	P3A	51	03/14/89	0.918	0.00	17.80	0.00	0.00
5223	PT	P44	51	03/15/89	0.926	0.00	14.20	0.00	2.92
5223	SF	P3P	51	03/15/89	0.752	0.00	21.00	0.00	0.66
5223	VE	P1M	51	03/14/89	0.970	0.00	7.73	0.00	0.00
5223	VSV	01W	51	03/03/89	1.224	0.00 >	320.00	0.00 >	0.10
5223	VV	01U	51	03/09/89	1.877	0.00	7.62	0.00	0.33
5223	YF	P2V	51	03/14/89	0.842	0.00	17.90	0.00	0.00
5224	JE	P3B	51	03/14/89	0.844	0.00 >	320.00	0.00	0.00
5224	PT	P45	51	03/15/89	0.940	0.00 >	320.00	0.00	0.00
5224	SF	P3Q	51	03/15/89	0.837	0.00 >	320.00	0.00 >	21.17
5224	VE	P1N	51	03/14/89	1.081	0.00 >	320.00	0.00	0.03
5224	VSV	01W	51	03/03/89	1.224	0.00 >	320.00	0.00	0.00
5224	VV	01P	51	03/09/89	1.746	0.00 >	320.00	0.00 >	0.11
5224	YF	P2W	51	03/14/89	0.636	0.00 >	320.00	0.00	0.00
5225	JE	P3B	51	03/14/89	0.844	0.00 >	320.00	0.00	0.00
5225	PT	P45	51	03/15/89	0.940	0.00 >	320.00	0.00	0.00
5225	SF	P3Q	51	03/15/89	0.837	0.00 >	320.00	0.00	7.62
5225	VE	P1N	51	03/14/89	1.081	0.00	158.00	0.00	0.00
5225	VSV	01X	51	03/03/89	1.399	0.00 >	320.00	0.00	0.00
5225	VV	01Q	51	03/09/89	1.956	0.00	131.00	0.00	0.00
5225	YF	P2W	51	03/14/89	0.636	0.00 >	320.00	0.00	0.00
5228	JE	P3E	52	03/14/89	1.039	0.00	20.30	0.00 >	0.77
5228	PT	P48	52	03/15/89	0.784	0.00	17.60	0.00	0.00
5228	SF	P3T	52	03/15/89	0.655	0.00	21.80	0.00 >	0.20
5228	VE	P1Q	52	03/14/89	1.050	0.00	5.60	0.00	0.00
5228	YF	P2Z	52	03/14/89	0.955	0.00	13.80	0.00	0.53
5230	JE	P3F	52	03/14/89	0.956	0.00	123.00	0.00	0.00
5230	PT	P49	52	03/15/89	0.847	72.70	89.20	1.23	21.64
5230	SF	P3U	52	03/15/89	0.644	0.00	167.00	0.00 >	8.39
5230	VE	P1R	52	03/14/89	0.905	0.00	131.00	0.00	0.00
5230	YF	P30	52	03/14/89	0.824	0.00	138.00	0.00	0.00
5231	JE	OWR	52	03/06/89	0.812	0.00	89.10	0.00	0.00
5231	PT	OX6	52	03/07/89	0.944	0.00	54.20	0.00	2.02
5231	SF	OXL	52	03/07/89	0.786	0.00	23.70	0.00	0.11
5231	VE	OVX	52	03/06/89	0.617	0.00	15.50	0.00	0.00
5231	YF	OWC	52	03/06/89	0.980	0.00	76.90	0.00	0.00
5233	JE	OWS	52	03/06/89	0.712	0.00	95.00	0.00	0.00
5233	PT	OX7	52	03/07/89	0.918	0.00	79.40	0.00	0.00
5233	SF	OXM	52	03/07/89	0.768	0.00	79.50	0.00 >	3.51

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5233	VE	OVY	52	03/06/89	0.735	7.00	36.00	0.00	0.00
5233	YF	OWD	52	03/06/89	0.986	0.00	87.70	0.00	0.00
5234	JE	OWS	52	03/06/89	0.712	0.00 >	320.00	0.00	0.40
5234	PT	OX7	52	03/07/89	0.918	0.00 >	320.00	0.00	5.26
5234	SF	OXM	52	03/07/89	0.768	0.00	331.00	0.00 >	21.78
5234	VE	OVY	52	03/06/89	0.735	0.00 >	320.00	0.00	0.15
5234	YF	OWD	52	03/06/89	0.986	0.00	300.00	0.00	2.63
5235	JE	OWT	52	03/06/89	0.781	0.00	155.00	0.00	0.00
5235	PT	OX8	52	03/07/89	0.960	0.00	162.00	0.00 >	0.09
5235	SF	OXN	52	03/07/89	0.787	0.00	133.00	0.00 >	1.10
5235	VE	OVZ	52	03/06/89	0.723	0.00	130.00	0.00	0.00
5235	YF	OWE	52	03/06/89	0.976	0.00	131.00	0.00	0.00
5236	JE	OWT	52	03/06/89	0.781	0.00	47.40	0.00	0.00
5236	PT	OX8	52	03/07/89	0.960	0.00	101.00	0.00	0.00
5236	SF	OXN	52	03/07/89	0.787	0.00	104.00	0.00 >	6.70
5236	VE	OVZ	52	03/06/89	0.723	0.00	118.00	0.00	0.13
5236	YF	OWE	52	03/06/89	0.976	0.00	134.00	0.00	1.20
5237	JE	OWU	52	03/06/89	0.872	0.00 >	320.00	0.00	1.60
5237	PT	OX9	52	03/07/89	0.995	0.00	141.00	0.00	0.00
5237	SF	OXO	52	03/07/89	0.695	0.00	197.00	0.00 >	2.39
5237	VE	OWO	52	03/06/89	0.812	0.00	288.00	0.00	0.00
5237	YF	OWF	52	03/06/89	1.116	0.00	332.00	0.00	1.97
5238	JE	OYF	52	03/07/89	1.206	0.00	6.35	0.00	0.00
5238	PT	OZ9	52	03/08/89	0.813	0.00	96.70	0.00	0.00
5238	SF	OZO	52	03/08/89	1.064	0.00	18.50	0.00	0.00
5238	VE	OYO	52	03/07/89	0.738	0.00	12.00	0.00	0.00
5238	YF	OYU	52	03/07/89	0.924	0.00	8.71	0.00	0.00
5239	JE	OYG	52	03/07/89	1.269	0.00	74.60	0.00	0.15
5239	PT	OZA	52	03/08/89	0.721	0.00 >	320.00	0.00	2.40
5239	SF	OZP	52	03/08/89	1.042	0.00	143.00	0.00	0.00
5239	VE	OY1	52	03/07/89	0.749	0.00	246.00	0.00	0.00
5239	YF	OYV	52	03/07/89	0.800	0.00	123.00	0.00	0.00
5241	JE	OYG	52	03/07/89	1.269	0.00	17.50	0.00	0.00
5241	PT	OZA	52	03/08/89	0.721	61.60 >	320.00 >	5.20 >	29.23
5241	SF	OZP	52	03/08/89	1.042	121.00 >	320.00 >	2.64 >	22.86
5241	VE	OY1	52	03/07/89	0.749	0.00 >	320.00	0.00 >	4.42
5241	YF	OYV	52	03/07/89	0.800	0.00 >	320.00	0.00	13.17
5242	JE	OYH	52	03/07/89	1.190	0.00 >	320.00	0.00 >	3.81
5242	PT	OZB	52	03/08/89	0.798	14.50 >	320.00 >	22.00 >	42.33
5242	SF	OZQ	52	03/08/89	1.035	168.00 >	320.00 >	1.91 >	10.88
5242	VE	OY2	52	03/07/89	0.773	0.00	79.10	0.00	2.82
5242	YF	OYW	52	03/07/89	0.855	0.00 >	320.00	0.00	1.92
5243	JE	OYH	52	03/07/89	1.190	0.00 >	320.00	0.00	0.20
5243	PT	OZB	52	03/08/89	0.798	0.00 >	320.00	0.00 >	14.99
5243	SF	OZQ	52	03/08/89	1.035	0.00 >	320.00	0.00	1.68
5243	VE	OY2	52	03/07/89	0.773	0.00 >	320.00	0.00	0.33
5243	YF	OYW	52	03/07/89	0.855	0.00 >	320.00	0.00	0.20
5244	JE	OYI	52	03/07/89	1.176	0.00 >	320.00	0.00	0.20
5244	PT	OZC	52	03/08/89	0.981	0.00 >	320.00	0.00 >	2.55
5244	SF	OZR	52	03/08/89	1.010	0.00 >	320.00	0.00	1.80
5244	VE	OY?	52	03/07/89	0.912	0.00 >	320.00	0.00	0.00
5244	YF	OYX	52	03/07/89	0.949	0.00 >	320.00	0.00	0.00
5246	JE	POX	52	03/13/89	0.886	0.00	12.90	0.00	0.00
5246	PT	P26	52	03/14/89	0.660	0.00	130.00	0.00	9.95
5246	SF	P2L	52	03/14/89	0.182	0.00 >	320.00	0.00 >	10.59
5246	SF	PUU	52	04/20/89	1.289	0.00 >	320.00	0.00 >	3.69
5246	VE	POI	52	03/13/89	0.934	0.00	21.00	0.00	0.00
5246	YF	P1C	52	03/13/89	0.784	0.00	20.50	0.00	0.00
5247	JE	POY	52	03/13/89	0.819	0.00	1.78	0.00	0.00
5247	PT	P27	52	03/14/89	0.659	0.00	3.50	0.00	2.66
5247	SF	P2M	52	03/14/89	0.232 <	1.00	88.50 >	88.50 >	8.04
5247	SF	PUV	52	04/20/89	1.235	0.00	2.59	0.00 >	0.17
5247	VE	POJ	52	03/13/89	0.897	0.00	59.90	0.00	0.00
5247	YF	P1D	52	03/13/89	0.745	0.00	10.00	0.00	0.00
5248	JE	POY	52	03/13/89	0.819	0.00 >	320.00	0.00	0.00
5248	PT	P27	52	03/14/89	0.659	0.00 >	320.00	0.00 >	29.56

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5248	SF	P2M	52	03/14/89	0.232	0.00 >	320.00	0.00 >	23.31
5248	SF	PUV	52	04/20/89	1.235	0.00 >	320.00	0.00 >	3.89
5248	VE	P92	52	03/21/89	0.873	0.00 >	320.00	0.00	0.11
5248	YF	P1D	52	03/13/89	0.745	0.00 >	320.00	0.00	0.00
5250	JE	P0Z	52	03/13/89	0.712	0.00	144.00	0.00	0.00
5250	PT	P28	52	03/14/89	0.643	0.00 >	320.00	0.00 >	35.97
5250	SF	P2N	52	03/14/89	0.179 <	1.00 >	320.00 >	320.00 >	60.23
5250	SF	PUW	52	04/20/89	1.262	0.00	90.60	0.00 >	5.80
5250	VE	P94	52	03/21/89	0.870	0.00 >	320.00	0.00 >	2.20
5250	YF	P1E	52	03/13/89	0.741	0.00 >	320.00	0.00	0.07
5251	JE	P0Z	52	03/13/89	0.712	0.00	3.65	0.00	0.00
5251	PT	P28	52	03/14/89	0.643	24.60	32.50	1.32 >	20.48
5251	SF	P2N	52	03/14/89	0.179 <	1.00	32.70 >	32.70 >	5.34
5251	SF	PI	52	04/20/89	1.262	0.00	5.97	0.00 >	0.42
5251	VE	P0K	52	03/13/89	0.867	0.00	12.10	0.00	0.00
5251	YF	P1E	52	03/13/89	0.741	0.00	4.32	0.00	0.00
5252	JE	F10	52	03/13/89	0.562	0.00	10.60	0.00	0.00
5252	PT	P29	52	03/14/89	0.694	0.00	12.20	0.00	2.99
5252	SF	P20	52	03/14/89	0.185 <	1.00	13.10 >	13.10 >	13.86
5252	SF	PUX	52	04/20/89	1.091	0.00	16.50	0.00 >	1.71
5252	VE	P0K	52	03/13/89	0.867	0.00	13.00	0.00	0.00
5252	YF	P1F	52	03/13/89	0.772	0.00	9.95	0.00	0.00
5253	JE	P3F	52	03/14/89	0.956	0.00	4.70	0.00	0.00
5253	PT	P49	52	03/15/89	0.847	0.00	4.19	0.00 >	2.95
5253	SF	P3U	52	03/15/89	0.644 <	1.00	4.81 >	4.81 >	23.45
5253	VE	P1R	52	03/14/89	0.905	0.00	3.34	0.00 >	4.38
5253	YF	P30	52	03/14/89	0.924	0.00	3.60	0.00	1.03
5254	JE	P3G	52	03/14/89	0.950	0.00	13.90	0.00	0.00
5254	PT	P4A	52	03/15/89	0.705	0.00	26.80	0.00	0.00
5254	SF	P3V	52	03/15/89	0.699	0.00	23.30	0.00 >	0.50
5254	VE	P1S	52	03/14/89	0.966	0.00	19.10	0.00	0.00
5254	YF	P31	52	03/14/89	0.892	0.00	24.70	0.00	0.00
5255	JE	P3G	52	03/14/89	0.950	0.00	29.50	0.00	0.00
5255	PT	P4A	52	03/15/89	0.705	0.00	57.20	0.00	0.00
5255	SF	P3V	52	03/15/89	0.699	0.00	37.90	0.00	0.00
5255	VE	P1S	52	03/14/89	0.966	0.00	26.80	0.00	0.00
5255	YF	P31	52	03/14/89	0.892	0.00	37.70	0.00	0.00
5256	JE	P3H	52	03/14/89	1.020	0.00 >	320.00	0.00	0.00
5256	PT	P4B	52	03/15/89	0.755	0.00 >	320.00	0.00	5.43
5256	SF	P3W	52	03/15/89	0.596	0.00 >	320.00	0.00	12.78
5256	VE	P1T	52	03/14/89	1.015	0.00 >	320.00	0.00	0.00
5256	YF	P32	52	03/14/89	0.816	0.00 >	320.00	0.00	0.00
5258	JE	P3H	52	03/14/89	1.020	0.00	6.22	0.00	0.00
5258	PT	P4B	52	03/15/89	0.755	0.00	43.30	0.00	0.00
5258	SF	P3W	52	03/15/89	0.596	0.00	14.40	0.00	0.00
5258	VE	P1T	52	03/14/89	1.015	0.00 <	1.00	0.00	0.00
5258	YF	P32	52	03/14/89	0.816	0.00	10.30	0.00	0.00
5260	JE	P3I	52	03/14/89	0.923	0.00	74.10	0.00	0.00
5260	PT	P4C	52	03/15/89	0.882	0.00	84.10	0.00	1.00
5260	SF	P3X	52	03/15/89	0.722	0.00	45.60	0.00	0.14
5260	VE	P1U	52	03/14/89	1.069	0.00	28.70	0.00	0.00
5260	YF	P33	52	03/14/89	0.769	0.00	75.70	0.00	0.00
5261	JE	P64	52	03/20/89	1.072	0.00	71.70	0.00	0.00
5261	PT	P6Y	52	03/21/89	0.701	0.00	101.00	0.00	1.20
5261	SF	P7D	52	03/21/89	0.840	0.00	68.50	0.00 >	1.37
5261	VE	P6J	52	03/20/89	1.165	0.00	56.80	0.00	0.00
5261	YF	P5P	52	03/20/89	1.115	0.00	57.20	0.00	0.00
5262	JE	P65	52	03/20/89	0.935	0.00	64.40	0.00 >	0.30
5262	PT	P6Z	52	03/21/89	0.679	7.38	11.00	14.90	21.37
5262	SF	P7E	52	03/21/89	0.985	0.00	14.40	0.00	0.00
5262	VE	P6K	52	03/20/89	0.791	0.00	23.40	0.00	0.00
5262	YF	P5Q	52	03/20/89	1.117	0.00	85.10	0.00	0.00
5263	JE	P65	52	03/20/89	0.935	0.00	43.90	0.00	2.32
5263	PT	P6Z	52	03/21/89	0.679	0.00	80.30	0.00	0.00
5263	SF	P7E	52	03/21/89	0.985	0.00	48.90	0.00	0.00
5263	VE	P6K	52	03/20/89	0.791	0.00	11.70	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5263	YF	P5Q	52	03/20/89	1.117	0.00	62.50	0.00	0.00
5264	JE	P66	52	03/20/89	0.920	0.00	4.05	0.00	0.00
5264	PT	P70	52	03/21/89	0.641	0.00	7.62	0.00 >	0.00
5264	SF	P7F	52	03/21/89	1.036	0.00	5.20	0.00	0.00
5264	VE	P6L	52	03/20/89	1.165	0.00	0.93	0.00	0.00
5264	YF	P5R	52	03/20/89	1.131	0.00	4.75	0.00	0.00
5265	JE	P66	52	03/20/89	0.920	0.00	4.37	0.00	0.00
5265	PT	P70	52	03/21/89	0.641	0.00	13.30	0.00	0.00
5265	SF	P7F	52	03/21/89	1.036	0.00	11.30	0.00	0.00
5265	VE	P6L	52	03/20/89	1.165	0.00	12.70	0.00	0.00
5265	YF	P5R	52	03/20/89	1.131	0.00	9.62	0.00	0.00
5266	JE	P67	52	03/20/89	1.021	0.00	10.00	0.00	0.00
5266	PT	P71	52	03/21/89	0.571	0.00	8.83	0.00	0.00
5266	SF	P7G	52	03/21/89	1.013	0.00	10.00	0.00 >	0.18
5266	VE	P6M	52	03/20/89	1.224	0.00	38.70	0.00	0.00
5266	YF	P5S	52	03/20/89	1.109	0.00	10.80	0.00	0.00
5267	JE	P67	52	03/20/89	1.021	0.00	48.00	0.00	0.00
5267	PT	P71	52	03/21/89	0.571	0.00	108.00	0.00	0.00
5267	SF	P7G	52	03/21/89	1.013	0.00	61.60	0.00	0.00
5267	VE	P6M	52	03/20/89	1.224	0.00	56.70	0.00	0.00
5267	YF	P5S	52	03/20/89	1.109	0.00	50.50	0.00	0.00
5269	JE	P68	52	03/20/89	1.052	0.00	51.20	0.00	0.00
5269	PT	P72	52	03/21/89	0.901	0.00	72.10	0.00	0.00
5269	SF	P7H	52	03/21/89	0.876	0.00	69.50	0.00	0.00
5269	VE	P6N	52	03/20/89	1.110	0.00	67.10	0.00	0.00
5269	YF	P5T	52	03/20/89	1.049	0.00	62.60	0.00	0.00
5270	JE	P68	52	03/20/89	1.052	0.00	27.90	0.00	0.00
5270	PT	P72	52	03/21/89	0.901	0.00	37.20	0.00	2.65
5270	SF	P7H	52	03/21/89	0.876	0.00	68.30	0.00	6.03
5270	VE	P6N	52	03/20/89	1.110	0.00	75.50	0.00	0.00
5270	YF	P5T	52	03/20/89	1.049	0.00	91.50	0.00	0.00
5271	JE	P69	52	03/20/89	0.835	0.00 >	320.00	0.00 >	6.70
5271	PT	P73	52	03/21/89	0.741	0.00 >	320.00	0.00 >	8.28
5271	SF	P7I	52	03/21/89	0.979	46.00 >	320.00 >	6.95 >	31.32
5271	VE	P60	52	03/20/89	1.048	0.00 >	320.00	0.00	0.00
5271	YF	P5U	52	03/20/89	1.068	0.00 >	320.00	0.00	0.00
5272	JE	P69	52	03/20/89	0.835	0.00 >	320.00	0.00 >	3.90
5272	PT	P73	52	03/21/89	0.741	0.00	184.00	0.00 >	8.79
5272	SF	P7I	52	03/21/89	0.979	0.00	91.20	0.00	0.09
5272	VE	P60	52	03/20/89	1.048	0.00	103.00	0.00	0.00
5272	YF	P5U	52	03/20/89	1.068	0.00	107.00	0.00	0.00
5273	JE	P6A	52	03/20/89	1.003	0.00	13.30	0.00	0.00
5273	PT	P74	52	03/21/89	0.636	0.00	10.80	0.00 >	5.01
5273	SF	P7J	52	03/21/89	1.029	0.00	12.40	0.00 >	0.06
5273	VE	P6P	52	03/20/89	1.218	0.00	11.00	0.00	0.00
5273	YF	P5V	52	03/20/89	0.999	0.00	14.00	0.00	0.00
5274	JE	P6A	52	03/20/89	1.003	0.00	3.33	0.00	0.00
5274	PT	P74	52	03/21/89	0.636	0.00	8.83	0.00 >	7.41
5274	SF	P7J	52	03/21/89	1.029	4.86	3.99	0.82 >	13.93
5274	VE	P6P	52	03/20/89	1.218	0.00	4.02	0.00	1.42
5274	YF	P5V	52	03/20/89	0.999	0.00	13.50	0.00	0.05
5275	JE	P6B	52	03/20/89	1.029	0.00	0.96	0.00	0.00
5275	PT	P75	52	03/21/89	0.709	0.00	41.30	0.00 >	4.59
5275	SF	P7K	52	03/21/89	0.875	0.00	51.40	0.00 >	3.90
5275	VE	P6Q	52	03/20/89	1.088	0.00	35.30	0.00	0.15
5275	YF	P5W	52	03/20/89	1.061	0.00	41.70	0.00	0.00
5276	JE	P6B	52	03/20/89	1.029	0.00	3.20	0.00	0.00
5276	PT	P75	52	03/21/89	0.709	0.00	42.00	0.00 >	0.00
5276	SF	P7K	52	03/21/89	0.875	0.00	24.90	0.00 >	1.21
5276	VE	P6Q	52	03/20/89	1.088	0.00	4.38	0.00	0.07
5276	YF	P5W	52	03/20/89	1.061	0.00	7.50	0.00	0.00
5277	JE	P6C	52	03/20/89	0.982	0.00	26.50	0.00	0.00
5277	PT	P76	52	03/21/89	0.708	0.00	303.00	0.00	6.25
5277	SF	P7L	52	03/21/89	0.753	4.25 >	320.00 >	75.20 >	49.55
5277	VE	P6R	52	03/20/89	1.043	0.00 >	320.00	0.00	1.20
5277	YF	P5X	52	03/20/89	0.917	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5278	JE	P6C	52	03/20/89	0.982	0.00	320.00	0.00	0.00
5278	PT	P76	52	03/21/89	0.708	0.00 >	320.00	0.00 >	9.19
5278	SF	P7L	52	03/21/89	0.753	1.84 >	320.00	> 174.00 >	79.93
5278	VE	P6R	52	03/20/89	1.043	0.00 >	320.00	0.00	1.37
5278	YF	P5X	52	03/20/89	0.917	0.00 >	320.00	0.00	0.00
5279	JE	P6D	52	03/20/89	1.020	0.00	154.00	0.00	0.00
5279	PT	P77	52	03/21/89	0.730	0.00	190.00	0.00	1.20
5279	SF	P7M	52	03/21/89	0.766	0.00	143.00	0.00 >	1.70
5279	VE	P6S	52	03/20/89	1.056	0.00 >	320.00	0.00	1.78
5279	YF	P5Y	52	03/20/89	1.019	0.00 >	320.00	0.00	0.00
5280	JE	P6D	52	03/20/89	1.020	0.00	2.66	0.00	0.00
5280	PT	P77	52	03/21/89	0.730	0.00	3.27	0.00 >	0.62
5280	SF	P7M	52	03/21/89	0.766	1.79	2.82	1.58 >	12.26
5280	VE	P6S	52	03/20/89	1.056	0.00	4.27	0.00	1.23
5280	YF	P5Y	52	03/20/89	1.019	0.00	12.20	0.00	0.92
5281	JE	P6E	52	03/20/89	0.854	0.00	7.82	0.00 >	0.50
5281	PT	P78	52	03/21/89	0.719	0.00	9.22	0.00 >	0.03
5281	SF	P7N	52	03/21/89	0.741	0.00	5.25	0.00 >	0.40
5281	VE	P6T	52	03/20/89	1.090	0.00	6.19	0.00	0.00
5281	YF	P5Z	52	03/20/89	0.972	0.00	3.88	0.00	0.00
5282	JE	P6E	52	03/20/89	0.854	0.00	147.00	0.00 >	3.80
5282	PT	P78	52	03/21/89	0.719	0.00	167.00	0.00 >	1.28
5282	SF	P7N	52	03/21/89	0.741	0.00	166.00	0.00	0.15
5282	VE	P6T	52	03/20/89	1.090	0.00	178.00	0.00 >	0.62
5282	YF	P5Z	52	03/20/89	0.972	0.00	39.00	0.00	0.00
5283	JE	P6F	52	03/20/89	0.851	0.00	4.90	0.00	0.00
5283	PT	P79	52	03/21/89	0.656	0.00	7.53	0.00	5.95
5283	SF	P70	52	03/21/89	0.627	2.97	114.00	38.20 >	29.05
5283	VE	P6U	52	03/20/89	1.028	0.00	142.00	0.00 >	3.20
5283	YF	P60	52	03/20/89	0.838	0.00	137.00	0.00	1.85
5284	JE	P6F	52	03/20/89	0.851	0.00 >	320.00	0.00 >	3.73
5284	PT	P79	52	03/21/89	0.656	0.00 >	320.00	0.00	0.00
5284	SF	P70	52	03/21/89	0.627	182.00 >	320.00	> 1.76 >	16.23
5284	VE	P6U	52	03/20/89	1.028	0.00 >	320.00	0.00	0.11
5284	YF	P60	52	03/20/89	0.838	0.00 >	320.00	0.00	0.00
5285	JE	P6G	52	03/20/89	0.885	0.00	10.30	0.00	0.05
5285	PT	P7A	52	03/21/89	0.682	0.00	14.00	0.00 >	3.63
5285	SF	P7P	52	03/21/89	0.684	5.24	14.80	2.83 >	17.97
5285	VE	P6V	52	03/20/89	1.092	0.00	8.08	0.00	3.76
5285	YF	P61	52	03/20/89	0.944	0.00	12.50	0.00	0.00
5286	JE	P6G	52	03/20/89	0.885	0.00 >	320.00	0.00 >	5.02
5286	PT	P7A	52	03/21/89	0.682	0.00 >	320.00	0.00	0.24
5286	SF	P7P	52	03/21/89	0.684	0.00 >	320.00	0.00	5.20
5286	VE	P6V	52	03/20/89	1.092	0.00 >	320.00	0.00	0.00
5286	YF	P61	52	03/20/89	0.944	0.00 >	320.00	0.00	0.00
5289	JE	P6H	52	03/20/89	0.901	0.00	75.50	0.00	3.10
5289	PT	P7B	52	03/21/89	0.740	0.00	85.20	0.00 >	0.00
5289	SF	P7Q	52	03/21/89	0.675	0.00	62.60	0.00	5.09
5289	VE	P6W	52	03/20/89	0.896	0.00	204.00	0.00	0.00
5289	YF	P62	52	03/20/89	0.885	0.00	111.00	0.00	0.00
5290	JE	P6H	52	03/20/89	0.901	0.00 >	320.00	0.00	1.64
5290	PT	P7B	52	03/21/89	0.740	0.00 >	320.00	0.00 >	1.40
5290	SF	P7Q	52	03/21/89	0.675	0.00	115.00	0.00	8.06
5290	VE	P6W	52	03/20/89	0.896	0.00 >	320.00	0.00 >	0.00
5290	YF	P62	52	03/20/89	0.885	0.00 >	320.00	0.00	0.00
5291	JE	P6I	52	03/20/89	0.986	0.00 >	320.00	0.00 >	1.76
5291	PT	P7C	52	03/21/89	0.875	0.00 >	320.00	0.00	0.66
5291	SF	P7R	52	03/21/89	0.285	1.47 >	320.00	> 217.00 >	69.04
5291	VE	P6X	52	03/20/89	1.002	0.00 >	320.00	0.00	0.00
5291	YF	P63	52	03/20/89	0.994	0.00 >	320.00	0.00	0.00
5292	JE	P7S	52	03/21/89	1.169	0.00	98.80	0.00	0.00
5292	PT	P84	52	03/22/89	0.588	0.00	214.00	0.00	4.39
5292	SF	P8G	52	03/22/89	1.009	0.00	104.00	0.00	0.00
5292	VE	P8S	52	03/21/89	1.175	0.00	129.00	0.00	0.00
5292	YF	P97	52	03/21/89	1.202	0.00	174.00	0.00	0.00
5294	JE	P7T	52	03/21/89	1.118	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5294	PT	P85	52	03/22/89	0.650	0.00 >	320.00	0.00	0.00
5294	SF	P8H	52	03/22/89	1.022	0.00 >	320.00	0.00 >	0.62
5294	VE	P8T	52	03/21/89	1.079	0.00 >	320.00	0.00	0.00
5294	YF	P98	52	03/21/89	1.150	0.00 >	320.00	0.00	0.00
5295	JE	P7T	52	03/21/89	1.119	0.00 >	320.00	0.00	0.00
5295	PT	P85	52	03/22/89	0.650	0.00 >	320.00	0.00	0.11
5295	SF	P8H	52	03/22/89	1.022	0.00 >	320.00	0.00	0.00
5295	VE	P8T	52	03/21/89	1.079	0.00	324.00	0.00	0.00
5295	YF	P98	52	03/21/89	1.150	0.00 >	320.00	0.00	0.00
5296	JE	P7U	52	03/21/89	1.129	0.00	55.60	0.00	0.00
5296	PT	P86	52	03/22/89	0.580	0.00	99.60	0.00	0.00
5296	SF	P8I	52	03/22/89	1.044	0.00	32.00	0.00	0.00
5296	VE	P8U	52	03/21/89	1.044	0.00	164.00	0.00	0.16
5296	YF	P99	52	03/21/89	1.182	0.00	103.00	0.00	0.00
5297	JE	P7U	52	03/21/89	1.129	0.00 >	320.00	0.00	0.00
5297	PT	P86	52	03/22/89	0.580	0.00	224.00	0.00	0.00
5297	SF	P8I	52	03/22/89	1.044	0.00 >	320.00	0.00	0.00
5297	VE	P8U	52	03/21/89	1.044	0.00	260.00	0.00	0.00
5297	YF	P99	52	03/21/89	1.182	0.00 >	320.00	0.00	0.00
5298	JE	P7V	52	03/21/89	1.230	0.00 >	320.00	0.00	0.00
5298	PT	P87	52	03/22/89	0.666	0.00 >	320.00	0.00	0.00
5298	SF	P8J	52	03/22/89	1.028	0.00 >	320.00	0.00	0.00
5298	VE	P8V	52	03/21/89	0.994	0.00 >	320.00	0.00	0.00
5298	YF	P9A	52	03/21/89	1.207	0.00 >	320.00	0.00	0.00
5299	JE	P7V	52	03/21/89	1.230	0.00	74.50	0.00	0.00
5299	PT	P87	52	03/22/89	0.666	0.00	98.10	0.00 >	6.47
5299	SF	P8J	52	03/22/89	1.028	0.00	119.00	0.00	0.00
5299	VE	P8V	52	03/21/89	0.994	0.00	2.99	0.00	0.00
5299	YF	P9A	52	03/21/89	1.207	0.00	85.10	0.00	0.00
5300	JE	P7W	52	03/21/89	0.999	0.00	15.50	0.00	0.00
5300	PT	P88	52	03/22/89	0.744	0.00	71.90	0.00	0.00
5300	SF	P8K	52	03/22/89	1.106	0.00	88.60	0.00	0.00
5300	VE	P8W	52	03/21/89	0.994	0.00	14.80	0.00	2.16
5300	YF	P9B	52	03/21/89	1.209	0.00	15.40	0.00	0.00
5301	JE	P7W	52	03/21/89	0.999	0.00	14.20	0.00	0.00
5301	PT	P88	52	03/22/89	0.744	0.00	42.10	0.00	0.00
5301	SF	P8K	52	03/22/89	1.106	0.00	37.10	0.00	0.00
5301	VE	P8W	52	03/21/89	0.994	0.00	26.30	0.00	0.41
5301	YF	P9B	52	03/21/89	1.209	0.00	25.50	0.00	0.00
5302	JE	P7X	52	03/21/89	0.990	0.00 >	320.00	0.00 >	0.02
5302	PT	P89	52	03/22/89	0.606	0.00 >	320.00	0.00	0.00
5302	SF	P8L	52	03/22/89	1.087	0.00 >	320.00	0.00	0.20
5302	VE	P8X	52	03/21/89	0.924	0.00 >	320.00	0.00	0.00
5302	YF	P9C	52	03/21/89	1.168	0.00 >	320.00	0.00	0.00
5303	JE	P7X	52	03/21/89	0.990	0.00	3.65	0.00	0.00
5303	PT	P89	52	03/22/89	0.606	0.00	3.59	0.00	0.00
5303	SF	P8L	52	03/22/89	1.087	0.00	4.90	0.00	0.00
5303	VE	P8X	52	03/21/89	0.924	0.00	3.92	0.00	0.00
5303	YF	P9C	52	03/21/89	1.168	0.00	4.64	0.00	0.00
5304	JE	P7Y	52	03/21/89	0.906	0.00	15.60	0.00	0.00
5304	PT	P8A	52	03/22/89	0.559	0.00	13.70	0.00 >	7.54
5304	SF	P8M	52	03/22/89	1.004	0.00	20.30	0.00 >	0.13
5304	VE	P8Y	52	03/21/89	0.933	0.00	30.80	0.00 >	0.00
5304	YF	P9D	52	03/21/89	1.225	0.00	26.00	0.00	0.00
5305	JE	P7Y	52	03/21/89	0.906	0.00	5.37	0.00	0.35
5305	PT	P8A	52	03/22/89	0.559	0.00	14.50	0.00	6.20
5305	SF	P8M	52	03/22/89	1.004	0.00	14.20	0.00 >	6.64
5305	VE	P8Y	52	03/21/89	0.933	0.00	16.10	0.00	8.14
5305	YF	P9D	52	03/21/89	1.225	0.00	15.40	0.00	0.00
5306	JE	P7Z	52	03/21/89	0.978	0.00 >	320.00	0.00	0.69
5306	PT	P8B	52	03/22/89	0.566	0.00 >	320.00	0.00 >	2.94
5306	SF	P8N	52	03/22/89	1.044	0.00 >	320.00	0.00 >	0.37
5306	VE	P8Z	52	03/21/89	1.021	0.00 >	320.00	0.00 >	7.31
5306	YF	P9E	52	03/21/89	1.067	0.00 >	320.00	0.00 >	0.30
5307	JE	P7Z	52	03/21/89	0.978	0.00	3.19	0.00	0.00
5307	PT	P8B	52	03/22/89	0.566	0.00	22.50	0.00 >	6.81

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5307	SF	P8N	52	03/22/89	1.044	20.10	30.20	1.50	8.89
5307	VE	P8Z	52	03/21/89	1.021	0.00	4.74	0.00	1.64
5307	YF	P9E	52	03/21/89	1.067	0.00	9.18	0.00	0.00
5308	JE	P80	52	03/21/89	1.202	0.00	14.00	0.00 >	1.61
5308	PT	P8C	52	03/22/89	0.352	0.00	40.80	0.00	0.00
5308	SF	P8C	52	03/22/89	1.029	0.00	31.10	0.00 >	0.19
5308	VE	P90	52	03/21/89	1.054	0.00	19.80	0.00	0.00
5308	YF	P9F	52	03/21/89	1.256	0.00	21.80	0.00	0.60
5309	JE	P80	52	03/21/89	1.202	0.00	5.43	0.00	0.50
5309	PT	P8C	52	03/22/89	0.352	0.00	12.90	0.00	0.00
5309	SF	P80	52	03/22/89	1.029	0.00	24.40	0.00	0.00
5309	VE	P90	52	03/21/89	1.054	0.00	8.00	0.00	0.00
5309	YF	P9F	52	03/21/89	1.256	0.00	24.30	0.00	0.32
5310	JE	P81	52	03/21/89	0.915	0.00	201.00	0.00	0.73
5310	PT	P8D	52	03/22/89	0.706	0.00	272.00	0.00 >	0.00
5310	SF	P8P	52	03/22/89	0.973	0.00	171.00	0.00	0.20
5310	VE	P91	52	03/21/89	0.853	0.00 >	320.00	0.00	0.00
5310	YF	P9G	52	03/21/89	1.007	0.00 >	320.00	0.00	0.00
5312	JE	PFA	53	04/10/89	0.816	0.00	128.00	0.00	0.00
5312	PT	PFP	53	04/11/89	0.694	0.00	206.00	0.00 >	15.58
5312	SF	PG4	53	04/11/89	0.518	0.00	274.00	0.00	2.99
5312	VE	PEG	53	04/10/89	0.841	0.00	195.00	0.00 >	0.00
5312	VSV	035	53	05/12/89	1.484	0.00 >	320.00	0.00	0.00
5312	VV	02Z	53	04/06/89	1.769	0.00	173.00	0.00 >	0.05
5312	YF	PEV	53	04/10/89	1.102	0.00	183.00	0.00	0.00
5314	JE	PFA	53	04/10/89	0.816	0.00 >	320.00	0.00 >	0.01
5314	PT	PFP	53	04/11/89	0.694	0.00 >	320.00	0.00 >	6.49
5314	SF	PG4	53	04/11/89	0.518	0.00 >	320.00	0.00	0.40
5314	VE	PEG	53	04/10/89	0.841	0.00 >	320.00	0.00 >	0.00
5314	VSV	036	53	05/12/89	1.528	0.00 >	320.00	0.00 >	0.15
5314	VV	02Z	53	04/06/89	1.769	320.00	320.00	1.00 >	4.68
5314	YF	PEV	53	04/10/89	1.102	0.00 >	320.00	0.00	0.15
5315	JE	PFB	53	04/10/89	0.743	0.00 >	320.00	0.00 >	0.32
5315	PT	PFC	53	04/11/89	0.798	0.00 >	320.00	0.00	1.73
5315	SF	PG5	53	04/11/89	0.579	0.00 >	320.00	0.00	0.00
5315	VE	PEH	53	04/10/89	0.958	0.00 >	320.00	0.00	0.04
5315	VSV	036	53	05/12/89	1.528	0.00 >	320.00	0.00 >	0.02
5315	VV	030	53	04/06/89	1.794	0.00 >	320.00	0.00	0.00
5315	YF	PEW	53	04/10/89	0.996	0.00 >	320.00	0.00	0.23
5316	JE	PFB	53	04/10/89	0.743	0.00 >	320.00	0.00 >	0.23
5316	PT	PFQ	53	04/11/89	0.798	0.00 >	320.00	0.00	3.93
5316	SF	PG5	53	04/11/89	0.579	0.00 >	320.00	0.00 >	0.36
5316	VE	PEH	53	04/10/89	0.958	0.00 >	320.00	0.00 >	0.11
5316	VSV	037	53	05/12/89	1.522	0.00 >	320.00	0.00	0.00
5316	VV	030	53	04/06/89	1.794	0.00 >	320.00	0.00 >	0.02
5316	YF	PEW	53	04/10/89	0.996	0.00 >	320.00	0.00	0.00
5317	JE	PFC	53	04/10/89	0.805	0.00 >	320.00	0.00	0.20
5317	PT	PFR	53	04/11/89	0.808	283.00 >	320.00 >	1.13 >	2.40
5317	SF	PG6	53	04/11/89	0.662	0.00 >	320.00	0.00 >	0.96
5317	VE	PEI	53	04/10/89	0.835	0.00 >	320.00	0.00	0.00
5317	YF	PEX	53	04/10/89	0.984	0.00 >	320.00	0.00	0.40
5318	JE	PFC	53	04/10/89	0.805	0.00 >	320.00	0.00 >	0.10
5318	PT	PFR	53	04/11/89	0.808	218.00 >	320.00 >	1.46	0.85
5318	SF	PG6	53	04/11/89	0.662	0.00 >	320.00	0.00 >	4.39
5318	VE	PEI	53	04/10/89	0.835	0.00 >	320.00	0.00	0.00
5318	YF	PEX	53	04/10/89	0.984	0.00 >	320.00	0.00	0.53
5319	JE	PFD	53	04/10/89	0.908	0.00 >	320.00	0.00	0.00
5319	PT	PFS	53	04/11/89	0.693	0.00 >	320.00	0.00 >	17.31
5319	SF	PG7	53	04/11/89	0.628	0.00 >	320.00	0.00	2.40
5319	VE	PEJ	53	04/10/89	0.829	0.00 >	320.00	0.00 >	0.00
5319	YF	PEY	53	04/10/89	1.008	0.00 >	320.00	0.00	0.17
5320	JE	PFD	53	04/10/89	0.908	0.00 >	320.00	0.00	0.00
5320	PT	PFS	53	04/11/89	0.693	0.00 >	320.00	0.00 >	0.00
5320	SF	PG7	53	04/11/89	0.628	0.00 >	320.00	0.00	0.00
5320	VE	PEJ	53	04/10/89	0.829	0.00 >	320.00	0.00 >	0.00
5320	YF	PEY	53	04/10/89	1.008	0.00 >	320.00	0.00	0.27

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
5321	JE	PFE	53	04/10/89	0.690	0.00	> 320.00	0.00	>
5321	PT	PFT	53	04/11/89	0.746	7.00	> 320.00	0.00	> 16.68
5321	SF	PG8	53	04/11/89	0.728	0.00	> 320.00	0.00	> 9.03
5321	VE	PEK	53	04/10/89	0.740	0.00	> 320.00	0.00	> 0.00
5321	YF	PEZ	53	04/10/89	0.965	0.00	> 320.00	0.00	> 0.00
5322	JE	PFE	53	04/10/89	0.690	0.00	3.04	0.00	0.00
5322	PT	PFT	53	04/11/89	0.746	0.00	4.76	0.00	1.46
5322	SF	PG8	53	04/11/89	0.728	0.00	4.23	0.00	0.66
5322	VE	PEK	53	04/10/89	0.740	0.00	4.06	0.00	0.00
5322	YF	PEZ	53	04/10/89	0.965	0.00	4.74	0.00	0.00
5323	JE	PFF	53	04/10/89	0.688	0.00	3.20	0.00	0.00
5323	PT	PFU	53	04/11/89	0.746	3.36	15.10	4.49	> 22.65
5323	SF	PG9	53	04/11/89	0.794	0.00	11.70	0.00	0.00
5323	VE	PEL	53	04/10/89	0.776	0.00	16.00	0.00	0.00
5323	YF	PFO	53	04/10/89	0.975	0.00	18.70	0.00	0.00
5324	JE	PFF	53	04/10/89	0.688	0.00	69.50	0.00	0.00
5324	PT	PFU	53	04/11/89	0.746	0.00	83.30	0.00	> 0.00
5324	SF	PG9	53	04/11/89	0.794	0.00	79.30	0.00	0.00
5324	VE	PEL	53	04/10/89	0.776	0.00	43.80	0.00	0.00
5324	YF	PFO	53	04/10/89	0.975	0.00	77.20	0.00	0.00
5325	JE	PFG	53	04/10/89	0.846	0.00	5.05	0.00	0.00
5325	PT	PFV	53	04/11/89	0.811	0.00	8.75	0.00	0.00
5325	SF	PGA	53	04/11/89	0.766	0.00	13.30	0.00	0.00
5325	VE	PEM	53	04/10/89	0.789	0.00	6.09	0.00	0.00
5325	YF	PF1	53	04/10/89	0.975	0.00	14.30	0.00	0.00
5326	JE	PFG	53	04/10/89	0.846	0.00	8.26	0.00	0.00
5326	PT	PFV	53	04/11/89	0.811	0.00	9.33	0.00	> 0.00
5326	SF	PGA	53	04/11/89	0.766	0.00	47.60	0.00	> 5.79
5326	VE	PEM	53	04/10/89	0.789	0.00	12.10	0.00	2.68
5326	YF	PF1	53	04/10/89	0.975	0.00	7.27	0.00	1.68
5327	JE	PFH	53	04/10/89	0.745	0.00	13.70	0.00	> 0.10
5327	PT	PFW	53	04/11/89	0.710	3.27	39.60	12.10	> 39.16
5327	SF	PGB	53	04/11/89	0.626	0.00	22.70	0.00	0.20
5327	VE	PEN	53	04/10/89	0.812	0.00	22.10	0.00	0.50
5327	YF	PF2	53	04/10/89	1.083	0.00	20.00	0.00	0.53
5329	JE	PFH	53	04/10/89	0.745	0.00	187.00	0.00	> 0.32
5329	PT	PFW	53	04/11/89	0.710	320.00	229.00	0.72	> 11.99
5329	SF	PGB	53	04/11/89	0.626	0.00	139.00	0.00	0.00
5329	VE	PEN	53	04/10/89	0.812	0.00	181.00	0.00	0.00
5329	YF	PF2	53	04/10/89	1.083	0.00	226.00	0.00	1.50
5330	JE	PFI	53	04/10/89	0.804	0.00	49.70	0.00	> 0.05
5330	PT	PFX	53	04/11/89	0.798	0.00	40.00	0.00	> 5.52
5330	SF	PGC	53	04/11/89	0.416	0.00	49.30	0.00	0.00
5330	VE	PEO	53	04/10/89	0.849	0.00	47.40	0.00	0.54
5330	YF	PF3	53	04/10/89	1.098	0.00	30.40	0.00	0.00
5331	JE	PH7	53	04/11/89	0.826	0.00	8.02	0.00	> 0.04
5331	PT	PHM	53	04/12/89	1.066	0.00	17.90	0.00	> 3.79
5331	SF	PI1	53	04/12/89	1.257	0.00	6.48	0.00	0.00
5331	VE	PGD	53	04/11/89	0.838	0.00	5.51	0.00	0.00
5331	YF	PGS	53	04/11/89	1.148	0.00	13.50	0.00	0.00
5332	JE	PH8	53	04/11/89	0.858	0.00	6.69	0.00	0.00
5332	PT	PHN	53	04/12/89	1.178	0.00	13.10	0.00	0.00
5332	SF	PI2	53	04/12/89	1.004	0.00	10.00	0.00	> 0.08
5332	VE	PGE	53	04/11/89	0.885	0.00	5.14	0.00	0.00
5332	YF	PGT	53	04/11/89	1.347	0.00	10.80	0.00	0.00
5333	JE	PH8	53	04/11/89	0.858	0.00	> 320.00	0.00	> 3.49
5333	PT	PHN	53	04/12/89	1.178	0.00	217.00	0.00	0.00
5333	SF	PI2	53	04/12/89	1.004	0.00	167.00	0.00	0.60
5333	VE	PGE	53	04/11/89	0.885	0.00	152.00	0.00	0.00
5333	YF	PGT	53	04/11/89	1.347	0.00	21.00	0.00	0.00
5334	JE	PH9	53	04/11/89	0.838	0.00	32.50	0.00	> 2.61
5334	PT	PHO	53	04/12/89	1.242	0.00	17.50	0.00	0.11
5334	SF	PI3	53	04/12/89	1.067	0.00	24.10	0.00	> 0.36
5334	VE	PGF	53	04/11/89	0.824	0.00	16.90	0.00	0.00
5334	YF	PGU	53	04/11/89	1.285	0.00	32.90	0.00	0.00
5335	JE	PH9	53	04/11/89	0.838	0.00	2.66	0.00	> 0.81

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5335	PT	PHO	53	04/12/89	1.242	0.00	2.66	0.00	0.25
5335	SF	PI3	53	04/12/89	1.067	0.00	3.27	0.00	0.87
5335	VE	PGF	53	04/11/89	0.824	0.00	4.07	0.00	0.00
5335	YF	PGU	53	04/11/89	1.285	0.00	2.33	0.00	0.00
5336	JE	PHA	53	04/11/89	0.671	0.00	45.70	0.00 >	0.20
5336	PT	PHP	53	04/12/89	1.090	0.00	38.20	0.00	0.00
5336	SF	PI4	53	04/12/89	0.954	0.00	48.80	0.00 >	0.50
5336	VE	PGG	53	04/11/89	0.874	0.00	41.00	0.00	0.00
5336	YF	PGV	53	04/11/89	1.171	0.00	32.90	0.00	0.00
5337	JE	PHA	53	04/11/89	0.671	0.00	101.00	0.00	0.00
5337	PT	PHP	53	04/12/89	1.090	0.00	87.00	0.00 >	0.00
5337	SF	PI4	53	04/12/89	0.954	0.00	89.10	0.00	2.00
5337	VE	PGG	53	04/11/89	0.874	0.00	96.70	0.00	0.00
5337	YF	PGV	53	04/11/89	1.171	0.00	59.30	0.00	0.00
5338	JE	PHB	53	04/11/89	0.631	0.00 >	320.00	0.00	5.39
5338	PT	PHQ	53	04/12/89	1.104	0.00 >	320.00	0.00	1.20
5338	SF	PI5	53	04/12/89	0.960	0.00	300.00	0.00 >	3.10
5338	VE	PGH	53	04/11/89	0.870	0.00	605.00	0.00	0.00
5338	YF	PGW	53	04/11/89	1.238	0.00 >	320.00	0.00	0.00
5339	JE	PHB	53	04/11/89	0.631	0.00	55.80	0.00	0.00
5339	PT	PHQ	53	04/12/89	1.104	0.00	53.60	0.00	0.33
5339	SF	PI5	53	04/12/89	0.960	26.50	92.40	3.48	16.29
5339	VE	PGH	53	04/11/89	0.870	0.00	249.00	0.00	0.30
5339	YF	PGW	53	04/11/89	1.238	0.00	43.30	0.00	0.00
5341	JE	PHC	53	04/11/89	0.847	0.00	9.80	0.00	2.29
5341	PT	PHR	53	04/12/89	1.067	0.00	27.70	0.00	9.16
5341	SF	PI6	53	04/12/89	1.022	0.00	14.60	0.00	0.60
5341	VE	PGI	53	04/11/89	0.852	0.00	17.00	0.00	0.00
5341	YF	PGX	53	04/11/89	1.187	0.00	34.60	0.00	0.00
5342	JE	PHD	53	04/11/89	0.972	0.00 >	320.00	0.00 >	5.89
5342	PT	PHS	53	04/12/89	1.091	0.00 >	320.00	0.00 >	2.32
5342	SF	PI7	53	04/12/89	0.956	0.00	249.00	0.00	5.92
5342	VE	PGJ	53	04/11/89	0.849	0.00 >	640.00	0.00	0.00
5342	YF	PGY	53	04/11/89	1.235	0.00 >	320.00	0.00	0.04
5344	JE	PHE	53	04/11/89	0.819	0.00 >	320.00	0.00	6.39
5344	PT	PHT	53	04/12/89	1.185	0.00 >	320.00	0.00 >	7.51
5344	SF	PI8	53	04/12/89	1.099	0.00	233.00	0.00 >	2.11
5344	VE	PGK	53	04/11/89	0.867	0.00 >	640.00	0.00	0.00
5344	YF	PGZ	53	04/11/89	0.955	0.00 >	320.00	0.00 >	0.10
5350	JE	PHE	53	04/11/89	0.819	0.00	24.60	0.00	1.20
5350	PT	PHT	53	04/12/89	1.185	14.30	25.00	1.75	23.36
5350	SF	PI8	53	04/12/89	1.099	17.50	37.70	2.15 >	14.28
5350	VE	PGK	53	04/11/89	0.867	0.00	83.00	0.00	0.20
5350	YF	PGZ	53	04/11/89	0.955	0.00	72.70	0.00	1.99
5354	JE	PHF	53	04/11/89	0.931	0.00	9.51	0.00 >	0.20
5354	PT	PHU	53	04/12/89	1.210	0.00	38.00	0.00 >	0.60
5354	SF	PI9	53	04/12/89	1.080	0.00	25.90	0.00	0.00
5354	VE	PGL	53	04/11/89	0.923	0.00	18.10	0.00	0.00
5354	YF	PHO	53	04/11/89	1.145	0.00	93.80	0.00	0.00
5355	JE	PHF	53	04/11/89	0.931	0.00	10.30	0.00	0.00
5355	PT	PHU	53	04/12/89	1.210	0.00	17.90	0.00 >	0.00
5355	SF	PI9	53	04/12/89	1.080	0.00	11.70	0.00	0.00
5355	VE	PGL	53	04/11/89	0.923	0.00	9.60	0.00 >	0.13
5355	YF	PHO	53	04/11/89	1.145	0.00	20.00	0.00	1.07
5361	JE	PW7	54	05/02/89	0.492	0.00 >	320.00	0.00 >	6.39
5361	PT	PUY	54	05/02/89	0.867	0.00 >	320.00	0.00 >	4.55
5361	SF	PWM	54	05/02/89	1.033	0.00	320.00	0.00 >	8.19
5361	VE	PVD	54	05/01/89	1.104	0.00 >	320.00	0.00 >	6.15
5361	YF	PVS	54	05/01/89	1.078	0.00	200.00	0.00	0.00
5362	JE	PW8	54	05/02/89	0.624	0.00	0.25	0.00	7.79
5362	JE	Q8B	54	06/05/89	0.982	0.00	90.30	0.00	0.00
5362	PT	PUZ	54	05/02/89	0.849	0.00 >	320.00	0.00 >	1.20
5362	PT	Q7E	54	06/06/89	0.408	0.00 >	320.00	0.00	0.00
5362	SF	PWN	54	05/02/89	1.013	0.00	220.00	0.00	0.00
5362	SF	Q8M	54	06/06/89	1.048	0.00	100.00	0.00	0.00
5362	VE	PVE	54	05/01/89	1.047	0.00	109.00	0.00 >	5.41

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5362	VEE	Q7P	54	06/09/89	1.113	0.00	116.00	0.00	0.00
5362	YF	PVT	54	05/01/89	1.089	0.00	210.00	0.00	0.20
5362	YF	Q80	54	06/05/89	0.653	0.00	210.00	0.00	0.00
5363	JE	PW8	54	05/02/89	0.624	0.00	6.17	0.00	0.00
5363	JE	Q98	54	06/07/89	0.682	0.00	7.36	0.00	0.00
5363	PT	PUZ	54	05/02/89	0.849	0.00	13.50	0.00	> 0.03
5363	PT	Q9U	54	06/07/89	0.597	0.00	7.06	0.00	0.00
5363	SF	PWN	54	05/02/89	1.013	0.00	10.00	0.00	0.74
5363	SF	QA5	54	06/28/89	1.102	10.00	3.96	0.40	> 5.71
5363	VE	PVE	54	05/01/89	1.047	0.00	186.00	0.00	> 13.53
5363	VE	Q9J	54	06/06/89	0.901	0.00	1.00	0.00	0.00
5363	YF	PVT	54	05/01/89	1.089	0.00	12.90	0.00	> 0.33
5363	YF	Q8X	54	06/06/89	0.947	0.00	8.95	0.00	0.00
5364	JE	PW9	54	05/02/89	0.544	0.00	4.90	0.00	0.00
5364	JE	Q99	54	06/07/89	0.738	0.00	4.56	0.00	0.00
5364	PT	PVO	54	05/02/89	0.851	0.00	4.82	0.00	0.00
5364	PT	Q9V	54	06/07/89	0.633	0.00	167.00	0.00	0.00
5364	SF	PWO	54	05/02/89	1.117	0.00	6.19	0.00	> 3.64
5364	SF	QA6	54	06/28/89	1.077	0.00	32.00	0.00	0.00
5364	VE	PVF	54	05/01/89	1.032	0.00	3.04	0.00	0.00
5364	VE	Q9K	54	06/06/89	0.927	0.00	21.00	0.00	0.00
5364	YF	PVU	54	05/01/89	1.080	0.00	5.75	0.00	0.00
5364	YF	Q8Y	54	06/06/89	0.937	0.00	191.00	0.00	0.00
5365	JE	PW9	54	05/02/89	0.738	0.00	> 320.00	0.00	> 6.61
5365	JE	Q99	54	06/07/89	0.738	0.00	< 1.00	0.00	0.00
5365	PT	PVO	54	05/02/89	0.851	0.00	> 320.00	0.00	> 0.13
5365	PT	Q9V	54	06/07/89	0.633	0.00	> 320.00	0.00	> 0.03
5365	SF	PWO	54	05/02/89	1.117	0.00	> 320.00	0.00	> 22.19
5365	SF	QA6	54	06/28/89	1.077	0.00	296.00	0.00	> 9.70
5365	VE	PVF	54	05/01/89	1.032	0.00	9.03	0.00	> 0.78
5365	VE	Q9K	54	06/06/89	0.927	0.00	184.00	0.00	0.00
5365	YF	PVU	54	05/01/89	1.080	0.00	221.00	0.00	> 0.13
5365	YF	Q8Y	54	06/06/89	0.937	0.00	> 320.00	0.00	0.00
5366	JE	PWA	54	05/02/89	0.550	0.00	2.80	0.00	0.00
5366	PT	PV1	54	05/02/89	0.842	0.00	67.50	0.00	0.00
5366	SF	PWP	54	05/02/89	1.149	0.00	51.20	0.00	> 10.05
5366	VE	PVG	54	05/01/89	1.013	0.00	9.60	0.00	> 4.48
5366	YF	PVV	54	05/01/89	1.140	0.00	19.40	0.00	> 0.15
5367	JE	PWA	54	05/02/89	0.550	0.00	277.00	0.00	> 9.30
5367	JE	Q9A	54	06/07/89	0.834	0.00	7.28	0.00	0.00
5367	PT	PV1	54	05/02/89	0.842	0.00	> 320.00	0.00	0.00
5367	PT	Q9W	54	06/07/89	0.595	0.00	207.00	0.00	0.00
5367	SF	PWP	54	05/02/89	1.149	81.10	230.00	2.83	> 16.05
5367	SF	QA7	54	06/28/89	1.022	0.00	141.00	0.00	> 15.46
5367	VE	PVG	54	05/01/89	1.013	0.00	50.10	0.00	> 5.70
5367	YF	PVV	54	05/01/89	1.140	0.00	51.40	0.00	0.00
5367	YF	Q8Z	54	06/06/89	0.987	0.00	178.00	0.00	0.00
5368	JE	PWB	54	05/02/89	0.603	0.00	29.90	0.00	0.00
5368	JE	Q9A	54	06/07/89	0.834	0.00	< 1.00	0.00	0.00
5368	PT	PV2	54	05/02/89	0.796	0.00	83.50	0.00	0.00
5368	PT	Q9W	54	06/07/89	0.595	0.00	16.20	0.00	0.00
5368	SF	PWQ	54	05/02/89	1.100	0.00	58.80	0.00	> 20.29
5368	SF	QA7	54	06/28/89	1.022	0.00	3.20	0.00	> 9.30
5368	VE	PVH	54	05/01/89	1.011	0.00	5.96	0.00	> 0.62
5368	VE	Q9L	54	06/06/89	0.813	0.00	36.30	0.00	0.00
5368	YF	PVW	54	05/01/89	1.072	0.00	12.00	0.00	0.00
5368	YF	Q8Z	54	06/06/89	0.987	0.00	8.43	0.00	0.00
5369	JE	PWB	54	05/02/89	0.603	0.00	139.00	0.00	0.00
5369	JE	Q9B	54	06/07/89	0.801	0.00	0.69	0.00	0.00
5369	PT	PV2	54	05/02/89	0.796	0.00	269.00	0.00	0.12
5369	PT	Q9X	54	06/07/89	0.591	0.00	> 320.00	0.00	0.00
5369	SF	PWQ	54	05/02/89	1.100	9.09	168.00	18.50	> 27.11
5369	SF	QA8	54	06/28/89	0.983	7.69	42.20	5.49	> 23.37
5369	VE	PVH	54	05/01/89	1.011	0.00	28.90	0.00	> 2.24
5369	VE	Q9M	54	06/06/89	0.885	0.00	39.20	0.00	0.00
5369	YF	PVW	54	05/01/89	1.072	0.00	83.00	0.00	> 1.26

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5369	YF	Q90	54	06/06/89	0.874	0.00	59.20	0.00	0.00
5370	JE	PWC	54	05/02/89	0.569	0.00	3.20	0.00	0.00
5370	PT	PV3	54	05/02/89	0.845	0.00	34.40	0.00	0.00
5370	SM	PWR	54	05/02/89	1.149	0.00	6.80	0.00	> 4.90
5370	VE	PVI	54	05/01/89	1.029	0.00	13.50	0.00	> 1.14
5370	YF	PVX	54	05/01/89	1.145	0.00	10.00	0.00	> 0.13
5371	JE	PWC	54	05/02/89	0.569	0.00	26.90	0.00	0.00
5371	PT	PV3	54	05/02/89	0.845	0.00	139.00	0.00	0.00
5371	SF	PWR	54	05/02/89	1.149	0.00	18.00	0.00	0.00
5371	VE	PVI	54	05/01/89	1.029	0.00	200.00	0.00	> 0.40
5371	YF	PVX	54	05/01/89	1.145	0.00	129.00	0.00	0.00
5372	JE	PWD	54	05/02/89	0.301	0.00	2.54	0.00	0.00
5372	JE	Q9B	54	06/07/89	0.801	0.00	< 1.00	0.00	0.00
5372	PT	PV4	54	05/02/89	0.845	0.00	92.70	0.00	0.00
5372	PT	Q9X	54	06/07/89	0.591	0.00	43.30	0.00	0.00
5372	SF	PWS	54	05/02/89	1.044	68.40	82.00	1.20	> 21.97
5372	SF	QA8	54	06/28/89	0.983	0.00	2.93	0.00	> 8.88
5372	VE	PVJ	54	05/01/89	1.045	0.00	8.70	0.00	> 3.62
5372	VE	Q9M	54	06/06/89	0.886	0.00	86.00	0.00	0.00
5372	YF	PVY	54	05/01/89	1.169	0.00	41.70	0.00	> 0.34
5372	YF	Q90	54	06/06/89	0.874	0.00	28.70	0.00	> 0.18
5373	JE	PWD	54	05/02/89	0.301	0.00	267.00	0.00	0.00
5373	PT	PV4	54	05/02/89	0.845	0.00	228.00	0.00	10.76
5373	SF	PWS	54	05/02/89	1.044	0.00	190.00	0.00	0.00
5373	VE	PVJ	54	05/01/89	1.045	0.00	9.20	0.00	> 0.30
5373	YF	PVY	54	05/01/89	1.169	0.00	100.00	0.00	0.00
5374	JE	PWE	54	05/02/89	0.411	0.00	220.00	0.00	0.80
5374	PT	PV5	54	05/02/89	0.831	0.00	253.00	0.00	0.00
5374	SF	PWT	54	05/02/89	1.076	0.00	195.00	0.00	2.23
5374	VE	PVK	54	05/01/89	1.119	0.00	41.70	0.00	> 0.72
5374	YF	PVZ	54	05/01/89	1.242	0.00	177.00	0.00	0.04
5375	JE	PWE	54	05/02/89	0.411	0.00	< 1.00	0.00	0.00
5375	JE	Q8C	54	06/05/89	1.100	0.00	0.20	0.00	0.00
5375	PT	PV5	54	05/02/89	0.831	0.00	1.55	0.00	0.00
5375	PT	Q7F	54	06/06/89	0.529	0.00	1.19	0.00	> 0.70
5375	SF	PWT	54	05/02/89	1.076	0.00	1.35	0.00	0.00
5375	SF	Q8N	54	06/06/89	1.166	0.00	0.74	0.00	0.00
5375	VE	PVK	54	05/01/89	1.119	0.00	1.34	0.00	0.00
5375	VEE	Q7Q	54	06/09/89	1.056	0.00	0.45	0.00	0.00
5375	YF	PVZ	54	05/01/89	1.242	0.00	1.21	0.00	0.00
5375	YF	Q81	54	06/05/89	0.741	0.00	0.90	0.00	0.00
5376	JE	PWF	54	05/02/89	0.376	0.00	85.90	0.00	0.00
5376	PT	PV6	54	05/02/89	0.771	0.00	129.00	0.00	1.44
5376	SF	PWU	54	05/02/89	1.090	0.00	112.00	0.00	0.00
5376	VE	PVL	54	05/01/89	0.938	0.00	38.40	0.00	> 5.84
5376	YF	PW0	54	05/01/89	1.146	0.00	43.80	0.00	0.00
5377	JE	PWF	54	05/02/89	0.376	0.00	85.10	0.00	> 3.80
5377	PT	PV6	54	05/02/89	0.771	0.00	114.00	0.00	> 0.50
5377	SF	PWU	54	05/02/89	1.090	0.00	74.50	0.00	0.00
5377	VE	PVL	54	05/01/89	0.938	0.00	20.40	0.00	> 6.68
5377	YF	PW0	54	05/01/89	1.146	0.00	59.20	0.00	0.00
5378	JE	PWG	54	05/02/89	0.432	0.00	142.00	0.00	0.60
5378	PT	PV7	54	05/02/89	0.795	0.00	117.00	0.00	> 0.02
5378	SF	PWV	54	05/02/89	1.230	0.00	48.00	0.00	0.35
5378	VE	PVM	54	05/01/89	0.943	0.00	67.50	0.00	> 9.16
5378	YF	PW1	54	05/01/89	1.235	0.00	77.30	0.00	0.00
5379	JE	PWG	54	05/02/89	0.432	0.00	1.79	0.00	0.00
5379	JE	Q8C	54	06/05/89	1.100	0.00	1.22	0.00	0.00
5379	JE	Q9C	54	06/07/89	0.854	0.00	1.07	0.00	0.00
5379	PT	PV7	54	05/02/89	0.795	0.00	4.90	0.00	0.30
5379	PT	Q7F	54	06/06/89	0.529	0.00	> 3.20	0.00	7.26
5379	PT	Q9Y	54	06/07/89	0.611	0.00	4.74	0.00	0.00
5379	SF	PWY	54	05/02/89	1.230	0.00	4.56	0.00	0.00
5379	SF	Q8N	54	06/06/89	1.166	0.00	> 3.20	0.00	0.00
5379	SF	QA9	54	06/28/89	0.926	0.00	5.24	0.00	0.00
5379	VZ	PVM	54	05/01/89	0.943	6.84	2.83	0.41	> 6.48

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5379	VEE	Q7Q	54	06/09/89	1.056	0.00	1.50	0.00	0.00
5379	YF	PW1	54	05/01/89	1.235	0.00	4.83	0.00	0.00
5379	YF	Q81	54	06/05/89	0.741	0.00 >	3.20	0.00	0.00
5379	YF	Q91	54	06/06/89	0.985	0.00	4.33	0.00	0.00
5380	JE	PWH	54	05/02/89	0.571	0.00	206.00	0.00 >	3.79
5380	PT	PV8	54	05/02/89	0.891	0.00	164.00	0.00 >	2.52
5380	SF	PWW	54	05/02/89	1.170	0.00	166.00	0.00 >	1.01
5380	VE	PVN	54	05/01/89	0.988	0.00	136.00	0.00 >	8.81
5380	YF	PW2	54	05/01/89	1.174	0.00	140.00	0.00	0.00
5381	JE	PWH	54	05/02/89	0.571	0.00	3.02	0.00	0.00
5381	PT	PV8	54	05/02/89	0.891	0.00	59.70	0.00	0.00
5381	SF	PWW	54	05/02/89	1.170	0.00	54.70	0.00	0.00
5381	VE	PVN	54	05/01/89	0.988	0.00	35.60	0.00 >	0.65
5381	YF	PW2	54	05/01/89	1.174	0.00	35.30	0.00	0.00
5382	JE	PWI	54	05/02/89	0.420	0.00 <	1.00	0.00	0.00
5382	JE	Q8D	54	06/05/89	0.938	0.00	0.44	0.00	0.00
5382	PT	PV9	54	05/02/89	0.891	0.00	1.48	0.00	0.00
5382	PT	Q7G	54	06/06/89	0.443	0.00	0.51	0.00	2.35
5382	SF	PWX	54	05/02/89	1.161	0.00	1.13	0.00	0.00
5382	SF	Q80	54	06/06/89	1.069	0.00	0.54	0.00 >	0.25
5382	VE	PVO	54	05/01/89	0.794	0.00 <	1.00	0.00	0.00
5382	VEE	Q7R	54	06/09/89	1.021	0.00	0.45	0.00	0.00
5382	YF	PW3	54	05/01/89	1.168	0.00 <	1.00	0.00	0.00
5382	YF	Q82	54	06/05/89	0.840	0.00	0.49	0.00	0.00
5383	JE	PWI	54	05/02/89	0.420	0.00	49.00	0.00	0.00
5383	JE	Q9C	54	06/07/89	0.854	0.00	0.28	0.00	0.00
5383	PT	PV9	54	05/02/89	0.891	0.00	61.30	0.00 >	2.87
5383	PT	Q9Y	54	06/07/89	0.611	0.00	24.70	0.00	1.34
5383	SF	PWX	54	05/02/89	1.161	79.00	93.50	1.18	4.01
5383	SF	QA9	54	06/28/89	0.926	0.00	32.00	0.00	0.00
5383	VE	PVO	54	05/01/89	0.794	64.60	156.00	2.41 >	16.70
5383	VE	Q9N	54	06/06/89	0.941	0.00	66.00	0.00	0.00
5383	YF	PW3	54	05/01/89	1.168	0.00	57.50	0.00	0.00
5383	YF	Q91	54	06/06/89	0.985	0.00	31.10	0.00	0.00
5384	JE	PWJ	54	05/02/89	0.595	0.00	15.50	0.00 >	0.51
5384	JE	Q9D	54	06/07/89	0.822	0.00	10.60	0.00	0.00
5384	PT	PVA	54	05/02/89	0.940	0.00	24.50	0.00 >	3.31
5384	PT	Q9Z	54	06/07/89	0.585	0.00	18.90	0.00 >	3.29
5384	SF	PWY	54	05/02/89	1.129	27.70	26.90	0.97	2.73
5384	SF	QAA	54	06/28/89	1.024	0.00	26.20	0.00	1.40
5384	VE	PVP	54	05/01/89	0.795	17.90	48.60	2.72 >	18.03
5384	VE	Q90	54	06/06/89	0.874	0.00	34.70	0.00	0.00
5384	YF	PW4	54	05/01/89	1.107	0.00	19.40	0.00	0.00
5384	YF	Q92	54	06/06/89	0.835	0.00	26.70	0.00	0.00
5385	JE	PWJ	54	05/02/89	0.595	0.00	21.50	0.00 >	1.50
5385	JE	Q9D	54	06/07/89	0.822	0.00	8.46	0.00	0.00
5385	PT	PVA	54	05/02/89	0.940	0.00	49.00	0.00 >	5.80
5385	PT	Q9Z	54	06/07/89	0.585	0.00	19.30	0.00 >	6.70
5385	SF	PWY	54	05/02/89	1.129	0.00	49.00	0.00	0.00
5385	VE	PVP	54	05/01/89	0.795	26.20	47.70	1.82 >	12.33
5385	VE	Q90	54	06/06/89	0.874	0.00	32.20	0.00	0.65
5385	YF	PW4	54	05/01/89	1.107	0.00	42.00	0.00	0.00
5385	YF	Q92	54	06/06/89	0.835	0.00	13.50	0.00	0.00
5386	JE	PWK	54	05/02/89	0.421	0.00 <	1.00	0.00	0.00
5386	JE	Q8D	54	06/05/89	0.938	0.00	0.01	0.00	0.00
5386	PT	PVB	54	05/02/89	0.919	0.00	1.44	0.00	0.00
5386	PT	Q7G	54	06/06/89	0.443	0.00	1.56	0.00	4.99
5386	SF	PWZ	54	05/02/89	1.127	0.00	1.60	0.00	0.00
5386	SF	Q80	54	06/06/89	1.069	0.00	1.12	0.00	0.00
5386	VE	PVQ	54	05/01/89	0.839	0.00 <	1.00	0.00	0.00
5386	VEE	Q7R	54	06/09/89	1.021	0.00	0.71	0.00	0.00
5386	YF	PW5	54	05/01/89	1.133	0.00	1.30	0.00	0.00
5386	YF	Q82	54	06/05/89	0.840	0.00	0.09	0.00	0.00
5387	JE	PWK	54	05/02/89	0.421	0.00	38.20	0.00	0.00
5387	PT	PVB	54	05/02/89	0.919	0.00	84.50	0.00	0.00
5387	SF	PWZ	54	05/02/89	1.127	0.00	88.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5387	VE	PVQ	54	05/01/89	0.839	0.00	69.10	0.00	4.43
5387	YF	PW5	54	05/01/89	1.133	0.00	71.70	0.00	0.00
5388	JE	PXT	54	05/03/89	0.464	0.00	5.35	0.00	0.00
5388	JE	PXT	54	05/19/89	0.761	0.00	5.10	0.00	0.00
5388	PT	PYW	54	05/05/89	0.765	0.00	19.20	0.00	0.00
5388	SF	PYH	54	05/04/89	0.955	0.00	25.70	0.00	0.00
5388	VE	PX1	54	05/02/89	1.012	0.00	10.00	0.00	0.53
5388	YF	PXF	54	05/02/89	1.201	0.00	41.70	0.00	0.00
5389	JE	PXU	54	05/03/89	0.417	0.00 >	320.00	0.00	0.00
5389	JE	PXU	54	05/19/89	0.939	0.00	2.00	0.00	0.00
5389	PT	PYX	54	05/05/89	0.782	0.00	10.00	0.00	0.00
5389	SF	PYI	54	05/04/89	0.943	0.00	15.10	0.00	0.00
5389	VE	PX2	54	05/02/89	1.045	0.00	8.49	0.00 >	0.01
5389	YF	PXG	54	05/02/89	1.145	0.00	79.60	0.00	0.00
5390	JE	PXU	54	05/03/89	0.417	0.00	2.49	0.00	0.00
5390	JE	PXU	54	05/19/89	0.939	0.00	1.31	0.00	0.00
5390	JE	Q8E	54	06/05/89	1.079	0.00	0.01	0.00	0.00
5390	PT	PYX	54	05/05/89	0.782	0.00	2.93	0.00	0.00
5390	PT	Q7H	54	06/06/89	0.491	0.00 >	3.20	0.00 >	7.19
5390	SF	PYI	54	05/04/89	0.943	0.00	4.33	0.00	0.00
5390	SF	Q8P	54	06/06/89	1.045	0.00 >	3.20	0.00 >	1.05
5390	VE	PX2	54	05/02/89	1.045	0.00	4.56	0.00 >	2.67
5390	VEE	Q7S	54	06/09/89	1.026	0.00 >	3.20	0.00	0.00
5390	YF	PXG	54	05/02/89	1.145	0.00	5.70	0.00	0.00
5390	YF	Q83	54	06/05/89	0.869	0.00 >	3.20	0.00	0.00
5391	JE	PXV	54	05/03/89	0.406	0.00	262.00	0.00	0.00
5391	JE	PXV	54	05/19/89	0.926	0.00	14.70	0.00	0.00
5391	PT	PYY	54	05/05/89	0.626	0.00	152.00	0.00	0.00
5391	SF	PYJ	54	05/04/89	0.866	0.00	80.60	0.00	0.11
5391	VE	PX3	54	05/02/89	1.047	0.00	3.06	0.00	0.00
5391	YF	PXH	54	05/02/89	1.121	0.00	320.00	0.00	0.00
5392	JE	PXV	54	05/03/89	0.406	0.00 <	1.00	0.00	0.00
5392	JE	PXV	54	05/19/89	0.926	0.00 <	1.00	0.00	0.00
5392	JE	Q8E	54	06/05/89	1.079	0.00	0.10	0.00	0.00
5392	PT	PYY	54	05/05/89	0.626	0.00	1.22	0.00	0.00
5392	PT	Q7H	54	06/06/89	0.491	0.00	0.54	0.00	0.68
5392	SF	PYJ	54	05/04/89	0.866	0.00	1.10	0.00	0.00
5392	SF	Q8P	54	06/06/89	1.045	0.00	0.76	0.00	0.37
5392	VE	PX3	54	05/02/89	1.047	0.00 <	1.00	0.00	0.00
5392	VE	Q7S	54	06/09/89	1.026	0.00	0.24	0.00	0.00
5392	YF	PXH	54	05/02/89	1.121	0.00	1.00	0.00	0.00
5392	YF	Q83	54	06/05/89	0.869	0.00	0.50	0.00	0.00
5393	JE	PXW	54	05/03/89	0.451	0.00	2.17	0.00	0.00
5393	JE	PXW	54	05/19/89	0.938	0.00	1.70	0.00	0.00
5393	JE	Q9E	54	06/07/89	0.588	0.00	5.67	0.00	0.00
5393	PT	PYZ	54	05/05/89	0.796	0.00	1.33	0.00	0.00
5393	PT	QA0	54	06/07/89	0.632	0.00	5.18	0.00 >	1.29
5393	SF	PYK	54	05/04/89	0.956	0.00	1.55	0.00	0.00
5393	SF	QAB	54	06/28/89	0.913	0.00	0.57	0.00 >	1.79
5393	VE	PX4	54	05/02/89	1.045	9.45	1.87	0.20 >	1.09
5393	VE	Q9J	1	06/06/89	0.901	0.00	5.88	0.00	0.00
5393	YF	PXI	54	05/02/89	1.120	0.00	1.67	0.00	0.00
5393	YF	Q93	54	06/06/89	0.847	0.00	5.66	0.00	0.00
5394	JE	PXW	54	05/03/89	0.451	0.00	44.40	0.00	0.00
5394	JE	PXW	54	05/19/89	0.938	0.00	7.20	0.00	0.00
5394	PT	PYZ	54	05/05/89	0.796	0.00	40.80	0.00	0.00
5394	SF	PYK	54	05/04/89	0.956	0.00	52.90	0.00	0.00
5394	VE	PX4	54	05/02/89	1.045	0.00	6.42	0.00 >	0.01
5394	YF	PXI	54	05/02/89	1.120	0.00	66.00	0.00	0.00
5395	JE	PXX	54	05/03/89	0.458	0.00	5.92	0.00	0.00
5395	JE	PXX	54	05/19/89	0.774	0.00	5.92	0.00	0.00
5395	PT	PZ0	54	05/05/89	0.720	0.00	8.30	0.00	0.00
5395	SF	PYL	54	05/04/89	0.814	0.00	25.40	0.00	0.00
5395	VE	PX5	54	05/02/89	1.045	0.00	2.83	0.00	0.00
5395	YF	PXJ	54	05/02/89	1.124	0.00	10.00	0.00	0.00
5396	JE	PXX	54	05/03/89	0.458	0.00	15.20	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5396	JE	PXX	54	05/19/89	0.774	0.00	< 1.00	0.00	0.00
5396	PT	PZ0	54	05/05/89	0.720	0.00	< 1.00	0.00	0.00
5396	SF	PYL	54	05/04/89	0.814	0.00	13.90	0.00	0.00
5396	VE	PX5	54	05/02/89	1.045	0.00	1.73	0.00	0.00
5396	YF	PXJ	54	05/02/89	1.124	0.00	8.06	0.00	0.00
5397	JE	PXY	54	05/03/89	0.338	0.00	> 320.00	0.00	0.00
5397	JE	PXY	54	05/19/89	0.911	0.00	24.70	0.00	0.00
5397	PT	PZ1	54	05/05/89	0.764	0.00	164.00	0.00	0.33
5397	SF	PYM	54	05/04/89	0.742	0.00	243.00	0.00	0.00
5397	VE	PX6	54	05/02/89	1.006	0.00	133.00	0.00	> 0.27
5397	YF	PXK	54	05/02/89	1.110	0.00	273.00	0.00	0.00
5398	JE	PXY	54	05/03/89	0.338	0.00	> 320.00	0.00	> 3.84
5398	JE	PXY	54	05/19/89	0.911	0.00	14.80	0.00	0.00
5398	PT	PZ1	54	05/05/89	0.764	0.00	52.00	0.00	0.00
5398	SF	PYM	54	05/04/89	0.742	0.00	204.00	0.00	0.03
5398	VE	PX6	54	05/02/89	1.006	0.00	10.00	0.00	0.00
5398	YF	PXK	54	05/02/89	1.110	0.00	> 320.00	0.00	0.00
5399	JE	PXZ	54	05/03/89	0.396	0.00	1.03	0.00	0.00
5399	JE	PXZ	54	05/19/89	0.888	0.00	1.12	0.00	0.00
5399	JE	Q8F	54	06/05/89	0.979	0.00	0.14	0.00	0.00
5399	PT	PZ2	54	05/05/89	0.707	0.00	< 1.00	0.00	0.00
5399	PT	Q7I	54	06/06/89	0.505	0.00	0.49	0.00	> 2.60
5399	SF	PYN	54	05/04/89	0.744	0.00	< 1.00	0.00	0.00
5399	VE	PX7	54	05/02/89	1.026	0.00	< 1.00	0.00	0.00
5399	VEE	Q7T	54	06/09/89	1.103	0.00	0.15	0.00	0.02
5399	YF	PXL	54	05/02/89	1.119	0.00	< 1.00	0.00	0.00
5399	YF	Q84	54	06/05/89	0.851	0.00	0.17	0.00	0.00
5400	JE	PXZ	54	05/03/89	0.396	0.00	3.46	0.00	0.00
5400	JE	PXZ	54	05/19/89	0.888	0.00	2.10	0.00	0.00
5400	PT	PZ2	54	05/05/89	0.707	0.00	4.18	0.00	0.00
5400	SF	PYN	54	05/04/89	0.744	0.00	4.95	0.00	0.00
5400	VE	PX7	54	05/02/89	1.026	0.00	1.45	0.00	0.00
5400	YF	PXL	54	05/02/89	1.119	0.00	4.69	0.00	0.00
5401	JE	PYC	54	05/03/89	0.382	0.00	263.00	0.00	0.00
5401	JE	PY0	54	05/19/89	0.851	0.00	49.00	0.00	0.10
5401	JE	Q9E	54	06/07/89	0.588	0.00	104.00	0.00	0.00
5401	PT	PZ3	54	05/05/89	0.682	0.00	76.20	0.00	0.00
5401	PT	QA0	54	06/07/89	0.632	0.00	144.00	0.00	> 1.05
5401	SF	PYO	54	05/04/89	0.810	0.00	58.40	0.00	0.00
5401	SF	QAB	54	06/28/89	0.913	0.00	125.00	0.00	0.70
5401	VE	PX8	54	05/02/89	1.080	0.00	137.00	0.00	0.25
5401	VE	Q9P	54	06/06/89	0.939	0.00	139.00	0.00	0.12
5401	YF	PXM	54	05/02/89	1.002	0.00	134.00	0.00	7.78
5401	YF	Q93	54	06/06/89	0.847	0.00	210.00	0.00	2.31
5402	JE	PY0	54	05/03/89	0.382	0.00	1.00	0.00	0.00
5402	JE	PY0	54	05/19/89	0.851	0.00	< 1.00	0.00	0.00
5402	PT	PZ3	54	05/05/89	0.682	0.00	0.86	0.00	0.00
5402	SF	PYO	54	05/04/89	0.810	0.00	0.96	0.00	0.00
5402	VE	PX8	54	05/02/89	1.080	0.00	5.77	0.00	0.00
5402	YF	PXM	54	05/02/89	1.002	0.00	5.78	0.00	0.00
5403	JE	PY1	54	05/03/89	0.457	0.00	85.10	0.00	> 3.00
5403	JE	PY1	54	05/19/89	0.682	0.00	64.10	0.00	13.55
5403	JE	Q9F	54	06/07/89	0.608	0.00	70.60	0.00	1.33
5403	PT	PZ4	54	05/05/89	0.649	0.00	137.00	0.00	0.00
5403	PT	QA1	54	06/07/89	0.635	0.00	65.30	0.00	1.60
5403	SF	PYP	54	05/04/89	0.678	28.40	61.80	2.18	11.87
5403	SF	QAC	54	06/28/89	0.939	0.00	154.00	0.00	> 7.98
5403	VE	PX9	54	05/02/89	1.057	0.00	58.90	0.00	> 2.35
5403	VE	Q9Q	54	06/06/89	0.900	0.00	82.30	0.00	1.12
5403	YF	PXN	54	05/02/89	1.061	0.00	155.00	0.00	2.58
5403	YF	Q94	54	06/06/89	0.653	0.00	133.00	0.00	0.00
5404	JE	PY1	54	05/03/89	0.457	0.00	16.30	0.00	0.00
5404	JE	PY1	54	05/19/89	0.682	0.00	16.00	0.00	1.28
5404	PT	PZ4	54	05/05/89	0.649	0.00	45.00	0.00	0.00
5404	SF	PYP	54	05/04/89	0.678	0.00	17.20	0.00	0.00
5404	VE	PX9	54	05/02/89	1.057	0.00	12.20	0.00	> 0.19

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5404	YF	PXN	54	05/02/89	1.061	0.00	18.20	0.00	0.58
5405	PT	PD2	53	03/28/89	0.816	< 1.00	< 1.00	< 1.00	> 0.62
5405	SF	PCN	53	03/28/89	0.692	0.00	< 1.00	0.00	0.00
5405	VE	PBE	53	03/27/89	1.019	0.00	< 1.00	0.00	0.00
5405	VSV	04C	53	06/02/89	1.224	0.00	0.61	0.00	0.40
5405	VV	03D	53	04/13/89	1.627	0.00	0.02	0.00	0.00
5405	VV	04R	53	06/01/89	2.531	0.00	1.49	0.00	0.00
5405	YF	PC8	53	03/27/89	1.071	0.00	< 1.00	0.00	0.00
5438	JE	PHG	53	04/11/89	0.900	0.00	17.80	0.00	0.00
5438	JE	PQ8	53	04/25/89	0.898	0.00	89.10	0.00	0.00
5438	PT	PHV	53	04/12/89	1.119	0.00	29.50	0.00	0.30
5438	SF	PIA	53	04/12/89	1.060	0.00	10.00	0.00	0.00
5438	VE	PGM	53	04/11/89	0.859	0.00	< 20.00	0.00	0.00
5438	VE	PPP	53	04/24/89	0.878	0.00	19.40	0.00	0.00
5438	VSV	037	53	05/12/89	1.522	0.00	139.00	0.00	0.00
5438	VV	031	53	04/06/89	1.627	0.00	17.60	0.00	0.00
5438	YF	PH1	53	04/11/89	1.108	0.00	27.60	0.00	0.75
5438	YF	PPT	53	04/24/89	1.143	0.00	181.00	0.00	> 0.03
5439	JE	PHG	53	04/11/89	0.900	0.00	91.90	0.00	> 9.84
5439	JE	PQ9	53	04/25/89	0.970	0.00	> 320.00	0.00	2.00
5439	PT	PHV	53	04/12/89	1.119	0.00	266.00	0.00	0.80
5439	SF	PIA	53	04/12/89	1.060	0.00	274.00	0.00	0.40
5439	VE	PGM	53	04/11/89	0.859	0.00	470.00	0.00	0.00
5439	VE	PPQ	53	04/24/89	0.889	0.00	> 320.00	0.00	0.20
5439	VSV	038	53	05/12/89	1.561	0.00	> 320.00	0.00	0.00
5439	VV	031	53	04/06/89	1.627	0.00	17.60	0.00	0.00
5439	YF	PH1	53	04/11/89	1.108	0.00	223.00	0.00	0.96
5439	YF	PPU	53	04/24/89	1.085	0.00	> 320.00	0.00	0.00
5440	JE	PHH	53	04/11/89	0.971	0.00	20.30	0.00	0.00
5440	PT	PHW	53	04/12/89	1.073	0.00	7.43	0.00	2.00
5440	SF	PIB	53	04/12/89	1.073	0.00	7.43	0.00	0.00
5440	VE	PGN	53	04/11/89	0.840	0.00	2.74	0.00	0.00
5440	VSV	038	53	05/12/89	1.561	0.00	55.40	0.00	0.00
5440	VV	033	53	04/06/89	1.915	0.00	21.90	0.00	0.00
5440	YF	PH2	53	04/11/89	1.175	0.00	15.50	0.00	0.25
5441	JE	PHH	53	04/11/89	0.971	0.00	8.44	0.00	0.00
5441	PT	PHW	53	04/12/89	1.073	0.00	8.83	0.00	> 0.00
5441	SF	PIB	53	04/12/89	1.073	0.00	14.30	0.00	0.00
5441	VE	PGN	53	04/11/89	0.840	0.00	14.40	0.00	0.00
5441	VV	033	53	04/06/89	1.915	0.00	7.03	0.00	0.00
5441	YF	PH2	53	04/11/89	1.175	0.00	13.90	0.00	1.58
5442	JE	PHI	53	04/11/89	0.907	0.00	10.90	0.00	0.00
5442	JE	PQ9	53	04/25/89	0.970	0.00	92.40	0.00	0.00
5442	PT	PHX	53	04/12/89	1.160	0.00	9.27	0.00	0.00
5442	SF	PIC	53	04/12/89	1.036	0.00	8.21	0.00	0.00
5442	VE	PGO	53	04/11/89	0.813	0.00	3.69	0.00	0.00
5442	VE	PPQ	53	04/24/89	0.889	0.00	147.00	0.00	0.00
5442	VSV	02J	53	04/21/89	1.480	0.00	< 1.00	0.00	0.00
5442	VSV	04D	53	06/02/89	1.283	0.00	3.65	0.00	0.00
5442	VV	039	53	04/13/89	1.629	0.00	9.32	0.00	0.00
5442	YF	PH3	53	04/11/89	1.097	0.00	93.00	0.00	1.64
5442	YF	PPU	53	04/24/89	1.085	0.00	167.00	0.00	0.00
5443	JE	PHI	53	04/11/89	0.907	0.00	1.80	0.00	0.00
5443	PT	PHX	53	04/12/89	1.160	0.00	1.36	0.00	0.00
5443	SF	PIC	53	04/12/89	1.036	0.00	1.53	0.00	0.00
5443	VE	PGO	53	04/11/89	0.813	0.00	< 1.00	0.00	0.00
5443	VSV	02J	53	04/21/89	1.480	0.00	< 1.00	0.00	0.00
5443	VSV	04D	53	06/02/89	1.283	0.00	2.57	0.00	0.11
5443	VV	03U	53	05/04/89	2.171	0.00	1.40	0.00	0.00
5443	YF	PH3	53	04/11/89	1.097	0.00	1.80	0.00	0.00
5444	JE	PHJ	53	04/11/89	0.965	0.00	2.56	0.00	0.00
5444	PT	PHY	53	04/12/89	1.109	0.00	< 1.00	0.00	0.00
5444	SF	PID	53	04/12/89	1.067	0.00	1.13	0.00	0.00
5444	VE	PGP	53	04/11/89	0.845	0.00	< 2.00	0.00	0.00
5444	VSV	02K	53	04/21/89	1.377	0.00	< 1.00	0.00	0.00
5444	VSV	04E	53	06/02/89	1.367	0.00	1.12	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5444	YF	PH4	53	04/11/89	1.027	0.00	1.88	0.00	0.00
5445	JE	HJ	53	04/11/89	0.969	0.00 <	2.00	0.00	0.00
5445	PT	PHY	53	04/12/89	1.109	0.00 <	1.00	0.00	0.00
5445	SF	PID	53	04/12/89	1.067	0.00 <	1.00	0.00	0.00
5445	VE	PGP	53	04/11/89	0.845	0.00 <	2.00	0.00	0.00
5445	VSV	02K	53	04/21/89	1.377	0.00 <	1.00	0.00	0.00
5445	VSV	04E	53	06/02/89	1.367	0.00	1.66	0.00	0.00
5445	VV	03T	53	05/04/89	2.107	0.00	0.17	0.00	0.00
5445	YF	PH4	53	04/11/89	1.027	0.00 <	1.00	0.00	0.00
5446	JE	PHK	53	04/11/89	0.905	0.00 <	1.00	0.00	0.00
5446	PT	PHZ	53	04/12/89	1.167	0.00 <	1.00	0.00	0.00
5446	SF	PIE	53	04/12/89	1.016	0.00 <	1.00	0.00	0.00
5446	VE	PGQ	53	04/11/89	0.905	0.00 <	1.00	0.00	0.00
5446	VSV	J2L	53	04/21/89	1.413	0.00 <	1.00	0.00	0.00
5446	VSV	04F	53	06/02/89	1.454	0.00	0.22	0.00	0.00
5446	VV	03U	53	05/04/89	2.171	0.00	0.08	0.00	0.00
5446	YF	PH5	53	04/11/89	1.045	0.00 <	1.00	0.00	0.00
5447	JE	PHK	53	04/11/89	0.905	0.00 <	2.00	0.00	0.00
5447	PT	PHZ	53	04/12/89	1.167	0.00 <	1.00	0.00	0.00
5447	SF	PIE	53	04/12/89	1.016	0.00 <	1.00	0.00	0.00
5447	VE	PGQ	53	04/11/89	0.905	0.00 <	2.00	0.00	0.00
5447	VSV	02L	53	04/21/89	1.413	0.00 <	1.00	0.00	0.00
5447	VSV	04F	53	06/02/89	1.454	0.00	0.09	0.00	0.00
5447	VV	03T	53	05/04/89	2.107	0.00	0.27	0.00 >	0.01
5447	YF	PH5	53	04/11/89	1.045	0.00 <	1.00	0.00	0.00
5448	JE	PHL	53	04/11/89	0.807	0.00	3.60	0.00	0.00
5448	PT	PIO	53	04/12/89	1.092	5.82	7.82	1.34	9.08
5448	SF	PIF	53	04/12/89	1.122	0.00	5.47	0.00 >	6.12
5448	VE	PGR	53	04/11/89	0.932	0.00	10.00	0.00	0.15
5448	VSV	02M	53	04/21/89	1.523	0.00	28.90	0.00	0.00
5448	VSV	039	53	05/12/89	1.563	0.00	79.90	0.00	0.00
5448	VV	03A	53	04/13/89	1.686	0.00	6.11	0.00 >	0.56
5448	YF	PH6	53	04/11/89	1.224	0.00	14.40	0.10	0.33
5449	JE	PHC	53	04/11/89	0.847	0.00	10.00	0.00	0.00
5449	PT	PHR	53	04/12/89	1.067	0.00	5.86	0.00	2.19
5449	SF	PI6	53	04/12/89	1.022	10.00	6.11	0.61	4.73
5449	VE	PGI	53	04/11/89	0.852	0.00	8.91	0.00	3.30
5449	VSV	02M	53	04/21/89	1.523	0.00	57.90	0.00	0.27
5449	VSV	039	53	05/12/89	1.563	0.00	68.80	0.00	0.00
5449	VV	03A	53	04/13/89	1.686	0.00	2.89	0.00	0.09
5449	YF	PGX	53	04/11/89	1.187	0.00	16.50	0.00	1.39
5450	JE	PHD	53	04/11/89	0.972	0.00	12.30	0.00 >	0.58
5450	PT	PHS	53	04/12/89	1.091	4.47	16.00	3.57 >	19.39
5450	SF	PI7	53	04/12/89	0.956	2.81	17.80	6.33 >	24.31
5450	VE	PGJ	53	04/11/89	0.849	0.00	51.40	0.00 >	18.75
5450	VSV	02N	53	04/21/89	1.457	0.00	8.06	0.00	0.00
5450	VSV	03A	53	05/12/89	1.389	0.00	89.50	0.00	0.00
5450	VV	03B	53	04/13/89	1.537	6.20	50.90	8.21 >	27.96
5450	VV	04V	53	06/01/89	2.442	0.00	15.20	0.00	6.15
5450	VV	07C	20	07/13/89	1.378	12.30	79.10	6.44 >	26.92
5450	YF	PGY	53	04/11/89	1.235	0.00	4.23	0.00	4.37
5451	JE	PKA	53	04/18/89	0.635	0.00	3.00	0.00	0.00
5451	PT	PKP	53	04/18/89	0.425	2.52	48.10	19.10	37.54
5451	SF	PL4	53	04/18/89	1.130	0.00	8.95	0.00 >	0.25
5451	VE	PJG	53	04/17/89	0.963	0.00	53.20	0.00 >	0.13
5451	VSV	02N	53	04/21/89	1.457	0.00	161.00	0.00	0.00
5451	VSV	03A	53	05/12/89	1.389	0.00	210.00	0.00	0.00
5451	VV	03B	53	04/13/89	1.537	0.00	8.30	0.00 >	0.50
5451	YF	PJV	53	04/17/89	1.089	0.00	6.98	0.00	0.00
5452	JE	PKB	53	04/18/89	0.769	0.00	3.20	0.00	0.00
5452	PT	PKQ	53	04/18/89	0.693	5.47	5.89	1.08 >	10.97
5452	SF	PL5	53	04/18/89	1.050	0.00	8.00	0.00	0.00
5452	VE	PJH	53	04/17/89	0.951	0.00	53.90	0.00 >	14.23
5452	VSV	02O	53	04/21/89	1.487	0.00	51.40	0.00	0.00
5452	VSV	03C	53	05/19/89	1.472	0.00	108.00	0.00	0.00
5452	VV	03C	53	04/13/89	1.580	0.00	9.03	0.00 >	3.17

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5452	YF	PJW	53	04/17/89	1.122	0.00	7.73	0.00	0.00
5453	JE	PKB	53	04/18/89	0.769	0.00	12.40	0.00	0.00
5453	PT	PKQ	53	04/18/89	0.693	0.00	5.89	0.00 >	7.09
5453	SF	PL5	53	04/18/89	1.050	0.00	17.80	0.00	0.00
5453	VE	PJH	53	04/17/89	0.951	0.00	32.00	0.00 >	0.15
5453	VSV	O2O	53	04/21/89	1.487	0.00	86.80	0.00	0.00
5453	VSV	O3C	53	05/19/89	1.472	0.00	143.00	0.00	0.00
5453	VV	O3C	53	04/13/89	1.580	0.00	35.20	0.00 >	2.60
5453	YF	PJW	53	04/17/89	1.122	0.00	38.20	0.00	0.00
5454	JE	PY2	54	05/03/89	0.446	0.00	4.71	0.00	0.00
5454	JE	PY2	54	05/19/89	0.781	0.00	3.12	0.00	0.00
5454	PT	Q2X	54	05/16/89	0.608	0.00	1.94	0.00	0.00
5454	SF	PYQ	54	05/04/89	0.799	0.00	2.49	0.00	0.00
5454	VE	PXA	54	05/02/89	1.131	0.00	1.05	0.00	0.00
5454	VV	O3X	54	05/11/89	1.704	0.00	4.80	0.00	0.00
5454	YF	PXO	54	05/02/89	1.146	0.00	2.00	0.00 >	0.04
5455	JE	PY2	54	05/03/89	0.446	0.00 >	320.00	0.00	4.79
5455	JE	PY2	54	05/19/89	0.781	0.00 >	320.00	0.00 >	1.08
5455	PT	Q2X	54	05/16/89	0.608	0.00 >	320.00	0.00	4.61
5455	SF	PYQ	54	05/04/89	0.799	0.00 >	320.00	0.00 >	4.69
5455	VE	PXA	54	05/02/89	1.131	0.00	222.00	0.00	0.00
5455	VSV	O4G	54	06/02/89	1.343	0.00 >	320.00	0.00	0.00
5455	VSV	O5S	54	09/15/89	1.154	0.00 >	320.00	0.00 >	0.68
5455	YF	PXO	54	05/02/89	1.146	0.00 >	320.00	0.00	0.00
5456	JE	PY3	54	05/03/89	0.486	0.00 <	1.00	0.00	0.00
5456	JE	PY3	54	05/19/89	0.910	0.00 <	1.00	0.00	0.00
5456	JE	Q8F	54	06/05/89	0.979	0.00	0.05	0.00	0.00
5456	PT	PZ6	54	05/05/89	0.613	0.00 <	1.00	0.00	0.00
5456	PT	Q7I	54	06/06/89	0.505	0.00	0.21	0.00 >	3.21
5456	SF	PYR	54	05/04/89	0.732	0.00 <	1.00	0.00	0.00
5456	SF	Q8Q	54	06/06/89	1.127	0.00	0.05	0.00	0.03
5456	VE	PXB	54	05/02/89	1.072	0.00 <	1.00	0.00	0.00
5456	VEE	Q7T	54	06/09/89	1.103	0.00	0.14	0.00	0.00
5456	VSV	O4G	54	06/02/89	1.343	0.00	0.32	0.00	0.00
5456	VV	O4S	53	06/01/89	2.534	0.00	0.27	0.00	0.00
5456	YF	PXP	54	05/02/89	1.144	0.00 <	1.00	0.00	0.00
5456	YF	Q84	54	06/05/89	0.851	0.00	0.16	0.00	0.00
5457	JE	PY3	54	05/03/89	0.486	0.00	45.40	0.00	3.20
5457	JE	PY3	54	05/19/89	0.910	0.00	20.20	0.00 >	0.57
5457	JE	Q9F	54	06/07/89	0.608	0.00	46.80	0.00	0.00
5457	PT	PZ6	54	05/05/89	0.613	0.00	29.00	0.00	0.00
5457	PT	QA1	54	06/07/89	1.635	0.00	17.00	0.00	0.00
5457	SF	PYR	54	05/04/89	0.732	0.00	24.90	0.00	14.96
5457	SF	QAC	54	06/28/89	0.939	0.00	22.20	0.00 >	6.69
5457	VE	PXB	54	05/02/89	1.072	15.70	7.53	0.48 >	10.84
5457	VE	Q9Q	54	06/06/89	0.900	32.00	5.79	0.18 >	2.09
5457	VSV	O4H	54	06/02/89	1.416	0.00	7.73	0.00	0.00
5457	VSV	O5S	54	09/15/89	1.154	0.00	8.95	0.00	0.00
5457	VV	O58	54	06/08/89	1.315	5.70	14.80	2.60	15.75
5457	YF	PXP	54	05/02/89	1.144	0.00	21.00	0.00 >	3.60
5457	YF	Q94	54	06/06/89	0.853	0.00	10.90	0.00	0.00
5458	JE	PY4	54	05/03/89	0.492	0.00 <	1.00	0.00	0.00
5458	JE	PY4	54	05/19/89	0.708	0.00 <	1.00	0.00	0.00
5458	JE	Q8G	54	06/05/89	1.172	0.00	0.00	0.00	0.00
5458	PT	PZ7	54	05/05/89	0.561	0.00 <	1.00	0.00	0.00
5458	PT	Q7J	54	06/06/89	0.599	0.00 <	0.00	0.00	0.00
5458	SF	PYS	54	05/04/89	0.712	0.00 <	1.00	0.00	0.00
5458	VE	PXC	54	05/02/89	1.115	0.00 <	1.00	0.00	0.00
5458	VEE	Q7U	54	06/09/89	1.089	0.00	0.14	0.00	0.47
5458	VSV	O3D	54	05/19/89	1.341	0.00 <	1.00	0.00	0.00
5458	VSV	O4H	54	06/02/89	1.416	0.00	0.21	0.00	0.00
5458	VV	O4S	53	06/01/89	2.534	0.00	0.58	0.00	0.00
5458	YF	PXQ	54	05/02/89	1.163	0.00 <	1.00	0.00	0.00
5458	YF	Q85	54	06/05/89	0.596	0.00	0.19	0.00	0.00
5459	JE	PY4	54	05/03/89	0.492	0.00	15.50	0.00	0.00
5459	JE	PY4	54	05/19/89	0.708	0.00	9.50	0.00 >	0.56

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5459	JE	Q9G	54	06/07/89	0.639	0.00	33.80	0.00	3.78
5459	PT	PZ7	54	05/05/89	0.561	9.57	11.10	1.16 >	4.09
5459	PT	QA2	54	06/07/89	0.662	0.00	5.40	0.00	0.00
5459	SF	PYS	54	05/04/89	0.712	0.00	5.80	0.00	0.00
5459	SF	QAD	54	06/28/89	0.955	0.00	27.20	0.00	0.00
5459	VE	PXC	54	05/02/89	1.115	0.00	27.00	0.00 >	0.30
5459	VE	Q9R	54	06/06/89	0.931	0.00	26.60	0.00	0.00
5459	VSV	O3D	54	05/19/89	1.341	0.00	13.70	0.00	0.00
5459	VV	O40	54	05/11/89	1.642	0.00	28.90	0.00	0.00
5459	YF	PXQ	54	05/02/89	1.163	0.00	12.60	0.00	0.00
5459	YF	Q95	54	06/06/89	0.886	0.00	7.92	0.00	0.00
5460	JE	PY5	54	05/03/89	0.464	0.00	6.35	0.00	0.00
5460	JE	PY5	54	05/19/89	0.699	0.00	7.67	0.00	0.00
5460	JE	Q9G	54	06/07/89	0.639	0.00	6.02	0.00	0.00
5460	PT	PZ8	54	05/05/89	0.606	0.00	13.60	0.00 >	1.15
5460	PT	QA2	54	06/07/89	0.662	0.00	7.92	0.00	0.10
5460	SF	PYT	54	05/04/89	0.731	0.00	11.20	0.00	0.00
5460	SF	QAD	54	06/28/89	0.955	0.00	7.15	0.00	0.00
5460	VE	PXD	54	05/02/89	1.086	0.00	5.25	0.00 >	0.09
5460	VE	Q9R	54	06/06/89	0.931	0.00	5.04	0.00	0.00
5460	VSV	O3E	54	05/19/89	1.474	0.00	27.10	0.00	0.05
5460	VV	O40	54	05/11/89	1.642	0.00	4.71	0.00	0.00
5460	YF	PXR	54	05/02/89	1.082	0.00	6.60	0.00	0.00
5460	YF	Q95	54	06/06/89	0.886	0.00	7.73	0.00	0.00
5461	JE	PY5	54	05/03/89	0.464	0.00	17.90	0.00	0.00
5461	JE	PY5	54	05/19/89	0.699	0.00	16.30	0.00	0.00
5461	PT	PZ8	54	05/05/89	0.606	0.00	24.10	0.00	0.58
5461	SF	PYT	54	05/04/89	0.731	0.00	15.80	0.00 >	2.60
5461	VE	PXD	54	05/02/89	1.086	0.00	11.00	0.00 >	0.10
5461	YF	PXR	54	05/02/89	1.082	0.00	29.60	0.00	0.00
5462	JE	PY6	54	05/03/89	0.424	0.00	6.17	0.00	0.00
5462	JE	PY6	54	05/19/89	0.764	0.00	6.82	0.00	1.31
5462	JE	Q9H	54	06/07/89	0.758	0.00	6.90	0.00	0.52
5462	PT	PZ9	54	05/05/89	0.567	0.00	3.77	0.00	0.00
5462	PT	QA3	54	06/07/89	0.743	0.00	3.67	0.00	0.00
5462	SF	PYU	54	05/04/89	0.764	0.00	6.03	0.00	0.10
5462	SF	QAE	54	06/28/89	0.929	0.00	5.51	0.00	0.32
5462	VE	PXE	54	05/02/89	1.205	0.00	5.73	0.00	0.00
5462	VE	Q9S	54	06/06/89	0.892	0.00	29.10	0.00	0.00
5462	VSV	O3E	54	05/19/89	1.474	0.00	9.03	0.00	0.00
5462	VV	O41	54	05/11/89	1.930	0.00	15.50	0.00 >	0.13
5462	YF	PXS	54	05/02/89	1.134	0.00	5.29	0.00	0.56
5462	YF	Q96	54	06/06/89	0.882	0.00	5.74	0.00	0.00
5463	JE	PY6	54	05/03/89	0.424	0.00	19.50	0.00	0.00
5463	JE	PY6	54	05/19/89	0.764	0.00	12.90	0.00	0.00
5463	PT	PZ9	54	05/05/89	0.567	0.00	50.50	0.00	0.67
5463	SF	PYU	54	05/04/89	0.764	0.00	51.20	0.00 >	1.51
5463	VE	PXE	54	05/02/89	1.205	0.00	3.20	0.00	0.00
5463	VSV	O3F	54	05/19/89	1.453	0.00	115.00	0.00	2.58
5463	YF	PXS	54	05/02/89	1.134	0.00	26.50	0.00	0.00
5464	JE	PZP	54	05/09/89	0.781	0.00	14.90	0.00	0.00
5464	PT	PZY	54	05/09/89	0.555	0.00	58.90	0.00	0.00
5464	SF	Q07	54	05/09/89	1.085	0.00	14.60	0.00	0.00
5464	VE	Q0M	54	05/09/89	0.886	0.00	3.08	0.00	0.00
5464	VSV	O3F	54	05/19/89	1.453	0.00	173.00	0.00	1.70
5464	VV	O41	54	05/11/89	1.930	0.00 <	1.00	0.00	0.00
5464	VV	O59	54	06/08/89	1.291	0.00	2.65	0.00	0.00
5464	YF	FZG	54	05/08/89	1.366	0.00	26.70	0.00	0.00
5465	JE	PZQ	54	05/09/89	0.777	0.00	21.70	0.00	0.80
5465	JE	Q9H	54	06/07/89	0.758	0.00	1.00	0.00	0.11
5465	PT	PZZ	54	05/09/89	0.986	0.00	22.60	0.00	2.49
5465	PT	QA3	54	06/07/89	0.743	0.00	2.62	0.00 >	0.23
5465	SF	Q08	54	05/09/89	1.052	0.00	13.30	0.00	0.00
5465	SF	QAE	54	06/28/89	0.929	0.00	19.10	0.00 >	0.02
5465	VE	Q0M	54	05/09/89	0.886	0.00	12.60	0.00 >	0.63
5465	VE	Q9S	54	06/06/89	0.892	0.00	43.50	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5465	VSV	03G	54	05/19/89	1.432	0.00	55.70	0.00	0.00
5465	YF	PZH	54	05/08/89	1.369	0.00	27.80	0.00	0.00
5465	YF	Q96	54	06/06/89	0.882	0.00	34.60	0.00	0.00
5466	JE	PZQ	54	05/09/89	0.777	0.00 <	1.00	0.00	0.00
5466	JE	Q8G	54	06/05/89	1.172	0.00	0.01	0.00	0.00
5466	PT	PZZ	54	05/09/89	0.986	0.00 <	1.00	0.00	0.00
5466	PT	Q7J	54	06/06/89	0.599	0.00	0.01	0.00	0.00
5466	SF	Q08	54	05/09/89	1.052	0.00 <	1.00	0.00	0.00
5466	SF	Q8R	54	06/06/89	1.177	0.00	0.02	0.00	0.00
5466	VE	Q0N	54	05/09/89	0.886	0.00 <	1.00	0.00	0.00
5466	VEE	Q7U	54	06/09/89	1.089	0.00 <	0.00	0.00	0.00
5466	VSV	03G	54	05/19/89	1.432	0.00 <	1.00	0.00	0.00
5466	VSV	04I	54	06/02/89	1.469	0.00	0.03	0.00	0.00
5466	VV	04U	53	06/01/89	2.289	0.00	0.14	0.00	0.00
5466	YF	PZH	54	05/08/89	1.369	0.00 <	1.00	0.00	0.00
5466	YF	Q85	54	06/05/89	0.596	0.00	0.01	0.00	0.00
5467	JE	PZR	54	05/09/89	0.721	0.00 <	1.00	0.00	0.00
5467	JE	Q8H	54	06/05/89	0.797	0.00 <	0.00	0.00	0.00
5467	PT	Q00	54	05/09/89	0.920	0.00 <	1.00	0.00	0.00
5467	PT	Q7K	54	06/06/89	0.522	0.00 <	0.00	0.00	0.00
5467	SF	Q09	54	05/09/89	1.035	0.00 <	1.00	0.00	0.00
5467	SF	Q8S	54	06/06/89	1.030	0.00 <	0.00	0.00	0.00
5467	VE	Q0N	54	05/09/89	0.886	0.00 <	1.00	0.00	0.00
5467	VEE	Q7V	54	06/09/89	1.020	0.00	0.00	0.00	0.00
5467	VSV	03H	54	05/19/89	1.471	0.00 <	1.00	0.00	0.00
5467	VSV	04I	54	06/02/89	1.469	0.00	0.03	0.00	0.00
5467	VV	04U	53	06/01/89	2.289	0.00	0.26	0.00	0.00
5467	YF	PZI	54	05/08/89	1.422	0.00 <	1.00	0.00	0.00
5467	YF	Q86	54	06/05/89	0.743	0.00	0.02	0.00	0.00
5468	JE	PZR	54	05/09/89	0.721	0.00	4.80	0.00	0.00
5468	JE	Q8H	54	06/05/89	0.797	0.00	0.15	0.00 >	1.90
5468	PT	Q00	54	05/09/89	0.920	0.00 <	1.00	0.00	0.00
5468	PT	Q7K	54	06/06/89	0.522	0.00	0.41	0.00	0.00
5468	SF	Q09	54	05/09/89	1.035	0.00	1.24	0.00	0.00
5468	SF	Q8S	54	06/06/89	1.030	0.00	0.21	0.00 >	0.20
5468	VE	Q00	54	05/09/89	0.795	0.00	1.18	0.00	0.00
5468	VEE	Q7V	54	06/09/89	1.020	0.00	0.32	0.00	0.00
5468	VSV	03H	54	05/19/89	1.471	0.00	1.00	0.00	0.00
5468	YF	PZI	54	05/08/89	1.422	0.00	1.24	0.00	0.00
5468	YF	Q86	54	06/05/89	0.743	0.00	0.72	0.00	0.00
5469	JE	PZS	54	05/09/89	0.660	0.00 <	1.00	0.00	0.00
5469	JE	Q8I	54	06/05/89	0.828	0.00	0.20	0.00	1.41
5469	PT	Q01	54	05/09/89	0.846	0.00 <	1.00	0.00	0.00
5469	PT	Q7L	54	06/06/89	0.581	0.00	0.12	0.00 >	1.50
5469	SF	Q0A	54	05/09/89	1.046	0.00 <	1.00	0.00	0.00
5469	SF	Q8T	54	06/06/89	0.960	0.00	0.19	0.00 >	0.10
5469	VE	Q00	54	05/09/89	0.795	0.00 <	1.00	0.00	0.00
5469	VEE	Q7W	54	06/09/89	0.971	0.00	0.08	0.00	0.00
5469	VSV	03I	54	05/19/89	1.433	0.00 <	1.00	0.00	0.00
5469	VSV	04J	54	06/02/89	1.253	0.00	0.21	0.00	0.00
5469	VV	04T	53	06/01/89	2.442	0.00	0.43	0.00	0.00
5469	YF	PZJ	54	05/08/89	1.280	0.00 <	1.00	0.00	0.00
5469	YF	Q87	54	06/05/89	0.809	0.00	0.09	0.00	0.00
5470	JE	PZS	54	05/09/89	0.660	0.00 <	1.00	0.00	0.00
5470	JE	Q8I	54	06/05/89	0.828	0.00	0.24	0.00	5.28
5470	PT	Q01	54	05/09/89	0.846	0.00 <	1.00	0.00	0.00
5470	PT	Q7L	54	06/06/89	0.581	0.00	0.14	0.00	0.00
5470	SF	Q0A	54	05/09/89	1.046	0.00 <	1.00	0.00	0.00
5470	SF	Q8T	54	06/06/89	0.960	0.00	0.15	0.00	0.00
5470	VEE	Q7W	54	06/09/89	0.971	0.00	0.04	0.00	0.00
5470	VSV	03I	54	05/19/89	1.433	0.00 <	1.00	0.00	0.00
5470	VSV	04J	54	06/02/89	1.253	0.00	0.33	0.00	0.00
5470	YF	PZJ	54	05/08/89	1.280	0.00 <	1.00	0.00	0.00
5470	YF	Q87	54	06/05/89	0.809	0.00	0.14	0.00	0.00
5471	JE	PZT	54	05/09/89	0.640	0.00 <	1.00	0.00	0.00
5471	JE	Q8J	54	06/05/89	0.869	0.00	0.01	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5471	PT	Q02	54	05/09/89	0.759	0.00 <	1.00	0.00	0.00
5471	PT	Q7M	54	06/06/89	0.647	0.00	0.01	0.00	0.00
5471	SF	Q0B	54	05/09/89	1.073	0.00 <	1.00	0.00	0.00
5471	SF	Q8U	54	06/06/89	0.967	0.00	0.01	0.00	0.00
5471	VE	PZB	54	05/08/89	1.135	0.00 <	1.00	0.00	0.00
5471	VEE	Q7X	54	06/09/89	0.912	0.00 <	0.00	0.00	0.00
5471	YF	PZK	54	05/08/89	1.275	0.00 <	1.00	0.00	0.00
5471	YF	Q88	54	06/05/89	0.772	0.00	0.01	0.00	0.00
5472	JE	PZT	54	05/09/89	0.640	0.00	1.19	0.00	0.00
5472	JE	Q8J	54	06/05/89	0.869	0.00	0.03	0.00	0.00
5472	PT	Q02	54	05/09/89	0.759	0.00 <	1.00	0.00	0.00
5472	PT	Q7M	54	06/06/89	0.647	0.00	0.01	0.00	0.00
5472	SF	Q0B	54	05/09/89	1.073	0.00 <	1.00	0.00	0.00
5472	SF	Q8U	54	06/06/89	0.967	0.00	0.02	0.00	0.00
5472	VE	PZB	54	05/08/89	1.135	0.00 <	1.00	0.00	0.00
5472	VEE	Q7X	54	06/09/89	0.912	0.00 <	0.01	0.00	0.00
5472	YF	PZK	54	05/08/89	1.275	0.00 <	1.00	0.00	0.00
5472	YF	Q88	54	06/05/89	0.772	0.00	0.01	0.00	0.00
5473	JE	PZU	54	05/09/89	0.659	0.00 <	1.00	0.00	0.00
5473	JE	Q8K	54	06/05/89	0.771	0.00	0.02	0.00	0.10
5473	PT	Q03	54	05/09/89	0.670	0.00 <	1.00	0.00	0.00
5473	PT	Q7N	54	06/06/89	0.597	0.00	0.03	0.00 >	1.44
5473	SF	Q0C	54	05/09/89	0.898	0.00 <	1.00	0.00	0.00
5473	SF	Q8V	54	06/06/89	0.958	0.00	0.01	0.00	0.04
5473	VE	PZC	54	05/08/89	1.082	0.00 <	1.00	0.00	0.00
5473	VE	Q7Y	54	06/09/89	0.905	0.00	0.05	0.00	0.00
5473	VSV	03J	54	05/19/89	1.452	0.00 <	1.00	0.00	0.00
5473	VSV	04K	54	06/02/89	1.391	0.00	0.08	0.00	0.02
5473	YF	PZL	54	05/08/89	1.334	0.00 <	1.00	0.00	0.00
5473	YF	Q89	54	06/05/89	0.881	0.00	0.02	0.00	0.00
5474	JE	PZU	54	05/09/89	0.659	0.00	87.60	0.00	0.00
5474	PT	Q03	54	05/09/89	0.670	0.00	31.00	0.00	0.00
5474	SF	Q0C	54	05/09/89	0.898	0.00	7.03	0.00	0.00
5474	VE	PZC	54	05/08/89	1.082	0.00	142.00	0.00 >	0.01
5474	VSV	03J	54	05/19/89	1.452	0.00 >	320.00	0.00 >	1.08
5474	YF	PZL	54	05/08/89	1.334	0.00	143.00	0.00	0.00
5475	JE	PZV	54	05/09/89	0.775	0.00 <	1.00	0.00	0.00
5475	JE	Q8K	54	06/05/89	0.771	0.00	0.13	0.00	1.10
5475	PT	Q04	54	05/09/89	0.619	0.00 <	1.00	0.00	0.00
5475	PT	Q7N	54	06/06/89	0.597	0.00	0.15	0.00 >	3.93
5475	SF	Q0D	54	05/09/89	0.918	0.00 <	1.00	0.00	0.00
5475	SF	Q8V	54	06/06/89	0.958	0.00	0.44	0.00	0.00
5475	VE	PZD	54	05/08/89	1.022	0.00 <	1.00	0.00	0.00
5475	VV	04T	53	06/01/89	2.442	0.00	0.05	0.00	0.00
5475	YF	PZM	54	05/08/89	1.291	0.00 <	1.00	0.00	0.00
5475	YF	Q89	54	06/05/89	0.881	0.00	0.13	0.00	0.00
5476	JE	PZV	54	05/09/89	0.775	0.00	9.74	0.00	0.00
5476	PT	Q04	54	05/09/89	0.619	0.00	33.80	0.00	4.87
5476	SF	Q0D	54	05/09/89	0.918	0.00	11.70	0.00	0.01
5476	VE	PZD	54	05/08/89	1.022	0.00	26.00	0.00 >	0.10
5476	YF	PZM	54	05/08/89	1.291	0.00	10.60	0.00	0.46
5477	JE	PZW	54	05/09/89	0.811	0.00	4.33	0.00 >	0.47
5477	PT	Q05	54	05/09/89	0.632	0.00	1.60	0.00	0.00
5477	SF	Q0E	54	05/09/89	0.799	0.00	1.48	0.00	0.00
5477	VE	PZE	54	05/08/89	1.098	0.00	1.55	0.00	0.00
5477	VV	04V	54	06/01/89	2.442	0.00	0.60	0.00	0.00
5477	YF	PZN	54	05/08/89	1.103	0.00	1.79	0.00	0.00
5478	JE	PZW	54	05/09/89	0.811	0.00	7.06	0.00 >	0.81
5478	JE	Q9I	54	06/07/89	0.920	0.00	1.79	0.00	0.00
5478	PT	Q05	54	05/09/89	0.632	0.00	2.90	0.00	0.00
5478	PT	QA4	54	06/07/89	0.666	0.00	29.30	0.00	0.00
5478	SF	Q0E	54	05/09/89	0.799	0.00	1.00	0.00	0.00
5478	SF	QAF	54	06/28/89	0.955	0.00	2.20	0.00 >	0.00
5478	VE	PZE	54	05/08/89	1.098	0.00	2.31	0.00	0.00
5478	VE	Q9T	54	06/06/89	1.069	0.00	2.47	0.00	0.00
5478	YF	PZN	54	05/08/89	1.103	0.00	2.34	0.00 >	0.02

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5478	YF	Q97	54	06/06/89	0.969	0.00	2.59	0.00	0.00
5479	JE	PZX	54	05/09/89	1.008	0.00	1.89	0.00	0.00
5479	JE	Q8L	54	06/05/89	0.680	0.00	0.01	0.00	0.00
5479	PT	Q06	54	05/09/89	0.845	0.00	4.26	0.00 >	0.02
5479	PT	Q70	54	06/06/89	0.500	0.00 >	3.20	0.00 >	3.67
5479	SF	Q0F	54	05/09/89	0.761	0.00	5.25	0.00	0.00
5479	SF	Q8W	54	06/06/89	1.078	0.00 >	3.20	0.00	0.11
5479	VE	PZF	54	05/08/89	1.117	0.00	7.96	0.00	0.00
5479	VEE	Q7Z	54	06/09/89	0.926	0.00 >	3.20	0.00	1.30
5479	VV	Q47	54	05/11/89	1.623	0.00	3.64	0.00	0.00
5479	YF	PZO	54	05/08/89	1.206	0.00	12.40	0.00	0.00
5479	YF	Q8A	54	06/05/89	0.961	0.00	1.33	0.00	0.03
5480	PT	PD3	53	03/28/89	0.690	5.66 >	320.00 >	56.60 >	51.38
5480	SF	PCO	53	03/28/89	0.680	94.60 >	320.00 >	3.38 >	25.46
5480	VE	PBF	53	03/27/89	1.023	0.00	257.00	0.00	0.00
5480	VSV	04S	53	07/21/89	1.717	0.00 >	320.00	0.00	0.00
5480	VV	02H	53	03/30/89	1.636	0.00	9.38	0.00	0.00
5480	YF	PC9	53	03/27/89	0.995	0.00 >	320.00	0.00	4.39
5481	PT	PD3	53	03/28/89	0.690	80.10 >	320.00 >	3.99 >	25.24
5481	SF	PCO	53	03/28/89	0.680	0.00 >	320.00	0.00 >	13.94
5481	VE	PBF	53	03/27/89	1.023	0.00 >	320.00	0.00 >	2.02
5481	VSV	04S	53	07/21/89	1.717	0.00 >	320.00	0.00	0.00
5481	VV	08U	53	07/27/89	1.390	0.00 >	320.00	0.00 >	1.71
5481	YF	PC9	53	03/27/89	0.995	0.00 >	320.00	0.00	0.40
5482	PT	PD4	53	03/28/89	0.732	0.00 >	320.00	0.00 >	10.51
5482	SF	PCP	53	03/28/89	0.721	0.00 >	320.00	0.00 >	13.41
5482	VE	PBG	53	03/27/89	1.030	0.00 >	320.00	0.00	0.40
5482	YF	PCA	53	03/27/89	1.059	0.00 >	320.00	0.00 >	5.71
5483	PT	PD4	53	03/28/89	0.732 <	1.00	2.24 >	2.24 >	3.54
5483	SF	PCP	53	03/28/89	0.721	0.00	2.55	0.00 >	4.06
5483	VE	PBG	53	03/27/89	1.030	0.00	1.31	0.00	0.00
5483	YF	PCA	53	03/27/89	1.059	0.00	2.42	0.00 >	5.94
5484	PT	PD5	53	03/28/89	0.768	15.30 >	320.00 >	20.90 >	51.06
5484	SF	PCQ	53	03/28/89	0.789	107.00 >	320.00 >	3.00 >	31.86
5484	VE	PBH	53	03/27/89	1.020	0.00 >	320.00	0.00	0.20
5484	VSV	04T	53	07/21/89	1.621	0.00 >	320.00	0.00 >	5.60
5484	VV	08U	53	07/27/89	1.390	0.00	296.00	0.00 >	1.81
5484	YF	PCB	53	03/27/89	1.109	0.00 >	320.00	0.00 >	6.19
5485	PT	PD5	53	03/28/89	0.768	5.14	14.10	2.74	14.39
5485	SF	PCQ	53	03/28/89	0.789	1.89	8.33	4.40 >	30.82
5485	VE	PBH	53	03/27/89	1.020	9.30	9.33	1.00	5.35
5485	VSV	04T	53	07/21/89	1.621	0.00	50.10	0.00 >	6.98
5485	VV	08V	53	07/27/89	1.392	0.00	17.30	0.00	0.00
5485	YF	PCB	53	03/27/89	1.109	0.00	8.41	0.00	4.64
5486	PT	PD6	53	03/28/89	0.736	0.00	101.00	0.00 >	22.91
5486	SF	PCR	53	03/28/89	0.719	0.00	84.70	0.00	0.00
5486	VE	PBI	53	03/27/89	0.956	0.00	108.00	0.00	2.34
5486	YF	PCC	53	03/27/89	1.022	0.00	56.80	0.00 >	0.23
5487	PT	PD6	53	03/28/89	0.736	2.98	104.00	35.00 >	27.75
5487	SF	PCR	53	03/28/89	0.719	0.00	92.50	0.00	0.00
5487	VE	PBI	53	03/27/89	0.956	0.00	86.50	0.00	2.68
5487	VSV	04U	53	07/21/89	1.684	239.00	272.00	1.14 >	10.81
5487	YF	PCC	53	03/27/89	1.022	0.00	74.20	0.00	0.00
5488	PT	PD7	53	03/28/89	0.663	71.60 >	320.00 >	4.47 >	32.23
5488	SF	PCS	53	03/28/89	0.631	55.70 >	320.00 >	5.75 >	28.32
5488	VE	PBJ	53	03/27/89	1.042	0.00 >	320.00	0.00 >	17.12
5488	VSV	04U	53	07/21/89	1.684	0.00 >	320.00	0.00 >	2.36
5488	VV	08W	53	07/27/89	1.567	313.00 >	320.00 >	1.02 >	4.03
5488	YF	PCD	53	03/27/89	1.018	0.00 >	320.00	0.00 >	13.71
5489	PT	PD7	53	03/28/89	0.663	140.00 >	320.00 >	2.28 >	30.33
5489	SF	PCS	53	03/28/89	0.631	215.00 >	320.00 >	1.49 >	8.05
5489	VE	PBJ	53	03/27/89	1.042	247.00 >	320.00 >	1.29 >	9.35
5489	VSV	04V	53	07/21/89	1.626	0.00 >	320.00	0.00 >	0.18
5489	VV	08W	53	07/27/89	1.567	0.00 >	320.00	0.00 >	0.26
5489	YF	PCD	53	03/27/89	1.018	0.00 >	320.00	0.00 >	4.02
5490	PT	PD8	53	03/28/89	0.954	0.00	90.90	0.00 >	11.49

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
5490	SF	PCT	53	03/28/89	0.655	0.00	100.00	0.00 >	6.34
5490	VE	PBK	53	03/27/89	0.919	0.00	105.00	0.00 >	2.50
5490	YF	PCE	53	03/27/89	0.989	0.00	97.10	0.00	0.00
5491	PT	PD8	53	03/28/89	0.954	0.00	16.60	0.00	7.98
5491	SF	PCT	53	03/28/89	0.655	0.00	33.00	0.00	0.00
5491	VE	PBK	53	03/27/89	0.919	181.00	29.70	0.16 >	2.13
5491	YF	PCE	53	03/27/89	0.989	0.00	42.70	0.00	0.00
5492	PT	PD9	53	03/28/89	0.693	32.00	103.00	3.23 >	45.79
5492	SF	PCU	53	03/28/89	0.753	0.00	103.00	0.00 >	15.28
5492	VE	PBL	53	03/27/89	0.904	246.00	55.00	0.22 >	0.40
5492	YF	PCF	53	03/27/89	1.015	0.00	88.60	0.00 >	2.90
5493	PT	PD9	53	03/28/89	0.693	2.17 >	320.00 >	147.00 >	27.59
5493	SF	PCU	53	03/28/89	0.753	0.00 >	320.00	0.00	1.00
5493	VE	PBL	53	03/27/89	0.904	0.00 >	320.00	0.00 >	2.31
5493	YF	PCF	53	03/27/89	1.015	0.00 >	320.00	0.00 >	0.30
5494	JE	PKC	53	04/18/89	0.798	0.00	42.00	0.00	8.22
5494	PT	PKR	53	04/18/89	0.550	1.68	68.70	40.90 >	48.61
5494	SF	PL6	53	04/18/89	1.086	19.60	71.30	3.63 >	20.88
5494	VE	PJI	53	04/17/89	0.957	0.00 >	100.00	0.00 >	17.95
5494	YF	PJX	53	04/17/89	1.019	0.00	70.20	0.00 >	13.31
5495	JE	PKC	53	04/18/89	0.798	1.42	2.63	1.85 >	11.51
5495	PT	PKR	53	04/18/89	0.550	< 1.00	3.71 >	3.71 >	22.03
5495	SF	PL6	53	04/18/89	1.086	< 1.00	5.16 >	5.16 >	23.12
5495	VE	PJI	53	04/17/89	0.957	24.90	4.90	0.20 >	4.46
5495	VSV	04V	53	07/21/89	1.626	0.00	50.10	0.00	0.00
5495	VV	08X	53	07/27/89	1.516	0.00	66.70	0.00 >	1.68
5495	YF	PJX	53	04/17/89	1.019	0.00	4.17	0.00 >	5.76
5496	JE	PKD	53	04/18/89	0.788	0.00 >	100.00	0.00 >	3.35
5496	PT	PKS	53	04/18/89	0.672	6.61 >	100.00 >	15.10 >	40.80
5496	SF	PL7	53	04/18/89	1.086	80.00 >	100.00 >	1.25 >	10.35
5496	VE	PJJ	53	04/17/89	0.950	0.00 >	100.00	0.00 >	2.80
5496	YF	PJY	53	04/17/89	1.028	0.00 >	100.00	0.00	0.00
5497	JE	PKD	53	04/18/89	0.788	0.00	166.00	0.00	17.62
5497	PT	PKS	53	04/18/89	0.672	34.10 >	320.00 >	9.38 >	39.16
5497	SF	PL7	53	04/18/89	1.086	30.40 >	320.00 >	3.62 >	22.90
5497	VE	PJJ	53	04/17/89	0.950	354.00 >	320.00 >	0.90 >	20.90
5497	VSV	04W	53	07/21/89	1.659	0.00 >	320.00	0.00	0.00
5497	VV	08X	53	07/27/89	1.516	0.00 >	320.00	0.00 >	3.02
5497	YF	PJY	53	04/17/89	1.028	0.00 >	320.00	0.00 >	0.81
5498	JE	PKE	53	04/18/89	0.876	0.00 >	320.00	0.00	0.00
5498	PT	PKT	53	04/18/89	0.628	30.00 >	320.00 >	10.70 >	31.59
5498	SF	PL8	53	04/18/89	1.058	109.00 >	320.00 >	2.94 >	27.25
5498	VE	PJK	53	04/17/89	0.930	0.00	236.00	0.00	2.97
5498	VSV	04W	53	07/21/89	1.659	0.00 >	320.00	0.00	2.67
5498	VV	08Y	53	07/27/89	1.525	0.00	183.00	0.00	0.00
5498	YF	PJZ	53	04/17/89	1.053	0.00 >	320.00	0.00	0.00
5499	JE	PKE	53	04/18/89	0.876	0.00 >	320.00	0.00	0.00
5499	PT	PKT	53	04/18/89	0.628	0.00 >	320.00	0.00	0.00
5499	SF	PL8	53	04/18/89	1.058	0.00 >	320.00	0.00 >	0.10
5499	VE	PJK	53	04/17/89	0.930	0.00 >	320.00	0.00	0.43
5499	YF	PJZ	53	04/17/89	1.053	0.00 >	320.00	0.00	0.00
5500	JE	PKF	53	04/18/89	0.670	0.00	4.68	0.00 >	4.24
5500	PT	PKU	53	04/18/89	0.818	1.90	4.47	2.34 >	11.57
5500	SF	PL9	53	04/18/89	1.057	1.25	3.08	2.47 >	16.47
5500	VE	PJL	53	04/17/89	0.959	0.00	3.92	0.00 >	2.65
5500	YF	PKO	53	04/17/89	1.075	0.00	4.79	0.00	1.22
5501	JE	PKF	53	04/18/89	0.670	0.00	16.50	0.00	0.00
5501	PT	PKU	53	04/18/89	0.818	3.08	48.00	15.60 >	16.20
5501	SF	PL9	53	04/18/89	1.057	0.00	40.90	0.00	2.95
5501	VE	PJL	53	04/17/89	0.959	0.00	50.30	0.00	3.45
5501	YF	PKO	53	04/17/89	1.075	0.00	64.30	0.00	0.00
5502	JE	PKG	53	04/18/89	0.703	0.00	27.90	0.00	1.14
5502	PT	PKV	53	04/18/89	0.553	0.00	33.50	0.00	0.00
5502	SF	PLA	53	04/18/89	0.979	0.00	68.40	0.00	0.00
5502	VE	PJM	53	04/17/89	0.917	0.00	18.20	0.00	0.40
5502	YF	PKI	53	04/17/89	1.036	0.00	52.70	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5503	JE	PKG	53	04/18/89	0.703	25.60	76.10	2.98	17.26
5503	PT	PKV	53	04/18/89	0.553	30.00	84.40	2.82	8.43
5503	SF	PLA	53	04/18/89	0.979	22.80	72.70	3.19	17.57
5503	VE	PJM	53	04/17/89	0.917	0.00	64.90	0.00	2.30
5503	YF	PK1	53	04/17/89	1.036	0.00	85.00	0.00	0.00
5504	JE	PKH	53	04/18/89	0.707	0.00	93.40	0.00	0.00
5504	PT	PKW	53	04/18/89	0.724	0.00	104.00	0.00	3.11
5504	SF	PLB	53	04/18/89	1.055	0.00	92.10	0.00 >	13.74
5504	VE	PJN	53	04/17/89	1.005	0.00	101.00	0.00	1.54
5504	YF	PK2	53	04/17/89	1.102	0.00	104.00	0.00	0.00
5505	JE	PKH	53	04/18/89	0.707	0.00	84.00	0.00	1.80
5505	PT	PKW	53	04/18/89	0.724	0.00	96.50	0.00 >	0.00
5505	SF	PLB	53	04/18/89	1.055	0.00	80.00	0.00	0.00
5505	VE	PJN	53	04/17/89	1.005	0.00	0.96	0.00 >	0.44
5505	YF	PK2	53	04/17/89	1.102	0.00	105.00	0.00	0.74
5506	JE	PKI	53	04/18/89	0.679	0.00	38.60	0.00	0.15
5506	PT	PKX	53	04/18/89	0.689	31.30	39.30	1.26	4.42
5506	SF	PLC	53	04/18/89	0.956	0.00	32.50	0.00	0.10
5506	VE	PJO	53	04/17/89	0.944	0.00	35.50	0.00	0.00
5506	YF	PK3	53	04/17/89	0.983	0.00	19.90	0.00 >	0.20
5507	JE	PKI	53	04/18/89	0.679	0.00	97.30	0.00	0.26
5507	PT	PKX	53	04/18/89	0.689	0.00	157.00	0.00	0.00
5507	SF	PLC	53	04/18/89	0.956	42.50	167.00	3.92 >	26.77
5507	VE	PJO	53	04/17/89	0.944	0.00	121.00	0.00	0.00
5507	YF	PK3	53	04/17/89	0.983	0.00	156.00	0.00 >	0.05
5508	JE	PKJ	53	04/18/89	0.810	0.00	77.70	0.00	0.45
5508	PT	PKY	53	04/18/89	0.596	0.00	104.00	0.00	1.80
5508	SF	PLD	53	04/18/89	0.899	45.70	104.00	2.27 >	21.73
5508	VE	PJP	53	04/17/89	0.954	0.00	101.00	0.00	0.12
5508	YF	PK4	53	04/17/89	0.973	0.00	104.00	0.00	0.00
5509	JE	PKJ	53	04/18/89	0.810	0.00 >	320.00	0.00 >	7.09
5509	PT	PKY	53	04/18/89	0.596	0.00 >	320.00	0.00	0.60
5509	SF	PLD	53	04/18/89	0.899	0.00 >	320.00	0.00 >	3.72
5509	VE	PJP	53	04/17/89	0.954	0.00 >	320.00	0.00	0.40
5509	YF	PK4	53	04/17/89	0.973	0.00 >	320.00	0.00	0.00
5510	JE	PKK	53	04/18/89	0.745	0.00 >	320.00	0.00 >	0.21
5510	PT	PKZ	53	04/18/89	0.545	0.00 >	320.00	0.00	12.38
5510	SF	PLE	53	04/18/89	0.962	0.00 >	320.00	0.00	0.00
5510	VE	PJQ	53	04/17/89	0.906	0.00 >	320.00	0.00	0.00
5510	YF	PK5	53	04/17/89	1.028	0.00 >	320.00	0.00	0.00
5511	JE	PKK	53	04/18/89	0.745	0.00 >	320.00	0.00 >	0.03
5511	PT	PKZ	53	04/18/89	0.545	1.79 >	320.00 >	179.00	36.92
5511	SF	PLE	53	04/18/89	0.962	0.00 >	320.00	0.00	0.00
5511	VE	PJQ	53	04/17/89	0.906	0.00 >	320.00	0.00	0.13
5511	VSV	04X	53	07/21/89	1.696	0.00	201.00	0.00	0.00
5511	VV	08Y	53	07/27/89	1.525	0.00 >	320.00	0.00	0.15
5511	YF	PK5	53	04/17/89	1.028	0.00 >	320.00	0.00	0.00
5512	JE	PKL	53	04/18/89	0.580	0.00 >	320.00	0.00 >	0.71
5512	PT	PL0	53	04/18/89	0.633	0.00 >	320.00	0.00	13.97
5512	SF	PLF	53	04/18/89	0.916	0.00 >	320.00	0.00	0.00
5512	VE	PJR	53	04/17/89	0.945	0.00 >	320.00	0.00	0.78
5512	YF	PK6	53	04/17/89	1.055	0.00 >	320.00	0.00	0.00
5513	JE	FKL	53	04/18/89	0.580	0.00 >	320.00	0.00 >	1.60
5513	PT	PL0	53	04/18/89	0.633	0.00 >	320.00	0.00 >	17.48
5513	SF	PLF	53	04/18/89	0.916	0.00 >	320.00	0.00	0.00
5513	VE	PJR	53	04/17/89	0.945	0.00 >	320.00	0.00 >	5.70
5513	YF	PK6	53	04/17/89	1.055	0.00 >	320.00	0.00	0.00
5515	JE	PKM	53	04/18/89	0.639	11.20	34.20	3.04	21.27
5515	PT	PL1	53	04/18/89	0.761	9.22	33.00	2.58 >	37.37
5515	SF	PLG	53	04/18/89	0.905	10.80	25.80	2.38 >	26.74
5515	VE	PJS	53	04/17/89	0.893	0.00	68.00	0.00	2.33
5515	VSV	04X	53	07/21/89	1.696	0.00	48.50	0.00	0.00
5515	VV	08Z	53	07/27/89	1.419	0.00	85.00	0.00 >	0.10
5515	YF	PK7	53	04/17/89	1.028	0.00	48.30	0.00	1.02
5516	JE	PKN	53	04/18/89	0.705	0.00	104.00	0.00 >	3.70
5516	PT	PL2	53	04/18/89	0.725	0.00	103.00	0.00	1.96

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5516	SF	PLH	53	04/18/89	0.865	0.00	104.00	0.00 >	1.31
5516	VE	PJT	53	04/17/89	0.976	0.00	205.00	0.00	0.13
5516	YF	PK8	53	04/17/89	1.017	0.00	104.00	0.00	0.00
5517	JE	PKN	53	04/18/89	0.705	0.00 >	320.00	0.00 >	16.70
5517	PT	PL2	53	04/18/89	0.725	0.00 >	320.00	0.00 >	21.28
5517	SF	PLH	53	04/18/89	0.865	0.00 >	320.00	0.00 >	11.63
5517	VE	PJT	53	04/17/89	0.976	0.00 >	320.00	0.00 >	0.50
5517	YF	PK8	53	04/17/89	1.017	0.00 >	320.00	0.00	0.00
5518	JE	QC0	56	06/13/89	0.975	0.00 >	320.00	0.00 >	6.75
5518	JE	R23	56	08/08/89	0.754	0.00	20.80	0.00	0.00
5518	PT	QCC	56	06/14/89	0.880	0.00 >	320.00	0.00 >	6.70
5518	PT	R2T	56	08/08/89	0.615	0.00	19.90	0.00	0.27
5518	SF	QCO	56	06/13/89	1.112	0.00 >	320.00	0.00 >	7.51
5518	SF	R2G	56	08/08/89	1.403	0.00	15.40	0.00	0.00
5518	VE	R1Q	56	08/07/89	1.061	0.00	14.30	0.00	0.33
5518	VEE	QBO	56	06/12/89	1.220	0.00 >	320.00	0.00	0.00
5518	YF	QBC	56	06/12/89	1.085	0.00 >	320.00	0.00 >	1.81
5518	YF	R1D	56	08/07/89	0.930	0.00	19.50	0.00	1.82
5519	JE	QC1	56	06/13/89	0.829	0.00 >	320.00	0.00 >	4.08
5519	PT	QCD	56	06/14/89	0.914	0.00 >	320.00	0.00 >	10.19
5519	SF	QCP	56	06/13/89	1.099	0.00 >	320.00	0.00 >	3.10
5519	VEE	QBP	56	06/12/89	1.358	0.00 >	320.00	0.00	0.00
5519	YF	QBD	56	06/12/89	1.044	0.00 >	320.00	0.00	0.11
5520	JE	QC1	56	06/13/89	0.829	0.00 >	320.00	0.00	0.13
5520	JE	R24	56	08/08/89	0.496	0.00	40.20	0.00	0.00
5520	PT	QCD	56	06/14/89	0.914	236.00 >	320.00 >	1.35 >	9.91
5520	PT	R2U	56	08/08/89	0.624	0.00	9.32	0.00	0.00
5520	SF	QCP	56	06/13/89	1.099	164.00 >	320.00 >	1.95 >	19.11
5520	SF	R2H	56	08/08/89	1.319	93.90	122.00	1.30	7.73
5520	VE	R1R	56	08/07/89	1.024	0.00	20.80	0.00	0.43
5520	VEE	QBP	56	06/12/89	1.358	0.00	51.90	0.00	0.00
5520	VSV	O3N	56	06/09/89	1.196	90.90	106.00	1.16	6.76
5520	VV	O5A	56	06/15/89	1.650	0.00	16.60	0.00	0.00
5520	YF	QBD	56	06/12/89	1.044	0.00	57.00	0.00	4.20
5520	YF	R1E	56	08/07/89	1.033	0.00	24.70	0.00 >	0.71
5521	JE	QC2	56	06/13/89	0.868	0.00	4.56	0.00	0.00
5521	PT	QCE	56	06/14/89	0.901	0.00 >	320.00	0.00 >	1.10
5521	SF	QCQ	56	06/13/89	1.314	0.00	283.00	0.00	0.00
5521	VE	QBQ	56	06/12/89	1.146	0.00 >	320.00	0.00	0.00
5521	YF	QBE	56	06/12/89	1.077	0.00 >	320.00	0.00	0.00
5522	JE	QC2	56	06/13/89	0.868	0.00	11.90	0.00	0.00
5522	JE	R5L	56	08/15/89	0.394	0.00	0.88	0.00	0.00
5522	PT	QCE	56	06/14/89	0.901	0.00	15.00	0.00 >	2.18
5522	PT	R6B	56	08/15/89	0.561	0.00	9.03	0.00	0.00
5522	SF	QCQ	56	06/13/89	1.314	0.00	15.50	0.00	0.10
5522	SF	R5Y	56	08/15/89	0.881	0.00	8.15	0.00	0.00
5522	VE	R58	56	08/14/89	1.269	0.00	5.75	0.00	0.00
5522	VSV	O3N	56	06/09/89	1.196	0.00	1.68	0.00	0.00
5522	VV	O51	56	06/08/89	1.378	0.00	3.54	0.00	0.00
5522	YF	QBE	56	06/12/89	1.077	0.00	13.90	0.00	0.00
5522	YF	R4V	56	08/14/89	1.127	0.00	6.50	0.00	0.00
5523	JE	QC3	56	06/13/89	0.678	0.00	147.00	0.00	0.11
5523	JE	R24	56	08/08/89	0.496	0.00	76.70	0.00	0.00
5523	PT	QCF	56	06/14/89	0.831	0.00	168.00	0.00	0.01
5523	PT	R2U	56	08/08/89	0.624	0.00	56.60	0.00	0.00
5523	SF	QCR	56	06/13/89	1.270	0.00	170.00	0.00	1.79
5523	SF	R2H	56	08/08/89	1.319	0.00	50.10	0.00	0.15
5523	VE	R1R	56	08/07/89	1.024	0.00	58.20	0.00 >	1.00
5523	VEE	QBR	56	06/12/89	1.183	0.00	179.00	0.00	0.00
5523	YF	QBF	56	06/12/89	0.986	0.00	183.00	0.00	0.96
5523	YF	R1E	56	08/07/89	1.033	0.00	63.00	0.00 >	1.94
5524	JE	QC3	56	06/13/89	0.678	0.00	320.00	0.00	3.47
5524	JE	R25	56	08/08/89	0.747	0.00	57.30	0.00	0.00
5524	PT	QCF	56	06/14/89	0.831	0.00	283.00	0.00 >	6.60
5524	PT	R2V	56	08/08/89	0.606	0.00	114.00	0.00 >	0.53
5524	SF	QCR	56	06/13/89	1.270	0.00	204.00	0.00	0.95

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5524	SF	R2I	56	08/08/89	1.319	0.00	58.60	0.00	0.00
5524	VE	R1S	56	08/07/89	0.919	0.00	97.40	0.00 >	0.70
5524	VEE	QBR	56	06/12/89	1.182	0.00	231.00	0.00	0.10
5524	VSV	030	56	06/09/89	1.183	0.00	100.00	0.00	0.00
5524	VV	051	56	06/08/89	1.378	0.00	57.50	0.00	0.08
5524	YF	QBF	56	06/12/89	0.986	0.00 >	320.00	0.00	2.34
5524	YF	R1F	56	08/07/89	1.090	0.00	96.90	0.00 >	0.05
5525	JE	QC4	56	06/13/89	0.700	0.00 >	320.00	0.00	5.99
5525	JE	R2S	56	08/08/89	0.747	0.00	162.00	0.00 >	0.04
5525	PT	QCG	56	06/14/89	0.854	270.00 >	320.00 >	1.18 >	6.38
5525	PT	R2V	56	08/08/89	0.606	0.00	188.00	0.00	0.00
5525	SF	QCS	56	06/13/89	1.227	0.00	192.00	0.00	13.71
5525	SF	R2I	56	08/08/89	1.319	52.10	210.00	4.03	20.56
5525	VE	R1S	56	08/07/89	0.919	0.00	435.00	0.00 >	1.30
5525	VEE	QBS	56	06/12/89	1.222	0.00 >	320.00	0.00	0.00
5525	YF	QBG	56	06/12/89	1.012	0.00 >	320.00	0.00	2.33
5525	YF	R1F	56	08/07/89	1.090	0.00	107.00	0.00	1.44
5526	JE	QC4	56	06/13/89	0.700	0.00	69.30	0.00 >	2.03
5526	JE	R26	56	08/08/89	0.680	0.00 >	320.00	0.00	0.30
5526	PT	QCG	56	06/14/89	0.854	0.00	57.00	0.00	0.00
5526	PT	R2W	56	08/08/89	0.657	0.00 >	320.00	0.00	0.00
5526	SF	QCS	56	06/13/89	1.227	0.00	66.70	0.00	1.10
5526	SF	R2J	56	08/08/89	1.219	0.00 >	320.00	0.00 >	2.96
5526	VE	R1T	56	08/07/89	0.852	0.00 >	320.00	0.00	0.11
5526	VEE	QBS	56	06/12/89	1.222	0.00	62.70	0.00	0.00
5526	YF	QBG	56	06/12/89	1.012	0.00	76.70	0.00	0.10
5526	YF	R1G	56	08/07/89	1.075	0.00 >	320.00	0.00	0.00
5527	JE	QC5	56	06/13/89	0.655	0.00 >	320.00	0.00 >	2.90
5527	PT	QCH	56	06/14/89	0.779	0.00 >	320.00	0.00 >	9.79
5527	SF	QCT	56	06/13/89	1.294	0.00 >	320.00	0.00	0.20
5527	VEE	QBT	56	06/12/89	1.168	0.00	212.00	0.00	0.00
5527	YF	QBH	56	06/12/89	1.236	0.00 >	320.00	0.00 >	0.91
5528	JE	QC5	56	06/13/89	0.655	0.00	9.50	0.00	3.04
5528	JE	R30	56	08/09/89	1.001	0.00	25.70	0.00	0.60
5528	PT	QCH	56	06/14/89	0.779	0.00	16.70	0.00	0.00
5528	PT	R4E	56	08/09/89	0.703	0.00	19.60	0.00	1.07
5528	SF	QCT	56	06/13/89	1.294	6.37	15.90	2.49	13.69
5528	SF	R41	56	08/09/89	0.804	0.00	17.30	0.00	1.46
5528	VE	R2Y	56	08/11/89	1.387	0.00	19.20	0.00	0.00
5528	VEE	QBT	56	06/12/89	1.168	7.84	6.79	0.86 >	15.38
5528	VSV	030	56	06/09/89	1.183	76.90	187.00	2.44	11.79
5528	VSV	05T	56	09/15/89	1.207	0.00	86.80	0.00 >	3.17
5528	VSV	05V	52	10/13/89	1.530	0.00 >	320.00	0.00 >	2.83
5528	VV	052	56	06/08/89	1.319	0.00	12.80	0.00	0.00
5528	YF	QBH	56	06/12/89	1.236	0.00	15.80	0.00	3.13
5528	YF	R3B	56	08/07/89	1.096	0.00	18.60	0.00	0.00
5529	JE	QC6	56	06/13/89	0.699	0.00	137.00	0.00	3.54
5529	PT	QCI	56	06/14/89	0.808	0.00	159.00	0.00	1.11
5529	SF	QCU	56	06/13/89	1.198	0.00	156.00	0.00	2.83
5529	VEE	QBU	56	06/12/89	1.140	0.00	215.00	0.00	0.00
5529	VSV	03P	56	06/09/89	1.302	0.00 >	320.00	0.00	0.00
5529	VV	052	56	06/08/89	1.319	0.00	32.00	0.00	0.00
5529	YF	QBI	56	06/12/89	1.187	0.00	165.00	0.00	3.23
5530	JE	QC6	56	06/13/89	0.699	0.00	15.50	0.00	0.60
5530	JE	R5L	56	08/15/89	0.394	0.00	17.10	0.00	0.00
5530	PT	QCI	56	06/14/89	0.808	0.00	17.10	0.00	0.20
5530	PT	R6B	56	08/15/89	0.561	0.00	14.30	0.00	0.00
5530	SF	QCU	56	06/13/89	1.198	0.00	15.60	0.00	1.10
5530	SF	R5Y	56	08/15/89	0.881	0.00	12.90	0.00	0.03
5530	VE	R58	56	08/14/89	1.269	0.00	11.30	0.00	0.00
5530	VEE	QBU	56	06/12/89	1.140	0.00	16.20	0.00	0.05
5530	YF	QBI	56	06/12/89	1.187	0.00	15.50	0.00	0.00
5530	YF	R4V	56	08/14/89	1.127	0.00	13.10	0.00	0.00
5531	JE	QC7	56	06/13/89	0.858	0.00	0.78	0.00	3.21
5531	JE	R3P	56	08/09/89	0.818	0.00	173.00	0.00 >	9.67
5531	PT	QCJ	56	06/14/89	0.805	0.00	177.00	0.00	9.38

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5531	PT	R4F	56	08/09/89	0.664	0.00	167.00	0.00	0.56
5531	SF	QCV	56	06/13/89	1.220	100.00	175.00	1.75 >	13.96
5531	SF	R42	56	08/09/89	0.697	51.70	158.00	3.05 >	19.69
5531	VE	R2Z	56	08/11/89	1.293	80.20	172.00	2.14	8.50
5531	VEE	QBV	56	06/12/89	1.225	240.00	234.00	0.97 >	2.55
5531	YF	QBJ	56	06/12/89	1.221	0.00	174.00	0.00	1.89
5531	YF	R3C	56	08/07/89	1.086	0.00	187.00	0.00	4.57
5532	JE	QDK	56	06/14/89	0.988	0.00 >	320.00	0.00 >	7.33
5532	JE	R3P	56	08/09/89	0.818	172.00	492.00	2.85 >	21.79
5532	PT	QE8	56	06/14/89	0.833	0.00 >	320.00	0.00 >	13.02
5532	PT	R4F	56	08/09/89	0.664	0.00	433.00	0.00	4.25
5532	SF	QDW	56	06/14/89	1.447	0.00 >	320.00	0.00 >	4.35
5532	SF	R42	56	08/09/89	0.697	133.00	490.00	3.70 >	30.01
5532	VE	QCW	56	06/16/89	1.281	0.00 >	320.00	0.00 >	0.67
5532	VE	R2Z	56	08/11/89	1.293	0.00	257.00	0.00	0.00
5532	VSV	O3P	56	06/09/89	1.302	0.00 >	320.00	0.00	0.00
5532	VV	O53	56	06/08/89	1.260	0.00	215.00	0.00 >	1.30
5532	YF	QD8	56	06/13/89	1.134	0.00 >	320.00	0.00 >	4.54
5532	YF	R3C	56	08/07/89	1.086	0.00	492.00	0.00 >	6.13
5533	JE	QDL	56	06/14/89	0.975	0.00 >	320.00	0.00 >	0.50
5533	PT	QE9	56	06/14/89	0.891	0.00 >	320.00	0.00	5.13
5533	SF	QDX	56	06/14/89	1.257	0.00 >	320.00	0.00	0.53
5533	VE	QCX	56	06/16/89	1.222	0.00 >	320.00	0.00	0.00
5533	YF	QD9	56	06/13/89	1.148	0.00 >	320.00	0.00	0.00
5534	JE	QDL	56	06/14/89	0.975	0.00	21.00	0.00	0.00
5534	JE	R3Q	56	08/09/89	0.774	0.00	329.00	0.00 >	7.76
5534	PT	QE9	56	06/14/89	0.891	0.00 >	320.00	0.00	9.77
5534	PT	R4G	56	08/09/89	0.622	0.00	312.00	0.00	0.71
5534	SF	QDX	56	06/14/89	1.257	62.80 >	320.00 >	5.10 >	24.30
5534	SF	R43	56	08/09/89	0.930	72.80	312.00	4.28	18.00
5534	VE	QCX	56	06/16/89	1.222	0.00 >	320.00	0.00	0.07
5534	VE	R30	56	08/11/89	1.350	0.00	177.00	0.00 >	0.01
5534	VSV	O3Q	56	06/09/89	1.084	0.00	200.00	0.00	0.62
5534	VV	O53	56	06/08/89	1.260	0.00	156.00	0.00	0.00
5534	YF	QD9	56	06/13/89	1.148	0.00 >	320.00	0.00	0.00
5534	YF	R3D	56	08/07/89	1.040	0.00	312.00	0.00	0.00
5535	JE	QDM	56	06/14/89	0.967	204.00	294.00	1.44 >	5.90
5535	JE	R3Q	56	08/09/89	0.774	0.00	497.00	0.00 >	6.55
5535	PT	QEA	56	06/14/89	0.812	0.00	202.00	0.00	1.25
5535	PT	R4G	56	08/09/89	0.522	0.00	374.00	0.00	0.00
5535	SF	QDY	56	06/14/89	1.288	0.00	267.00	0.00 >	1.49
5535	SF	R43	56	08/09/89	0.930	0.00	194.00	0.00	0.00
5535	VE	QCY	56	06/16/89	1.233	0.00	196.00	0.00	0.00
5535	VE	R30	56	08/11/89	1.350	0.00	250.00	0.00 >	0.02
5535	VSV	O3Q	56	06/09/89	1.084	0.00 >	320.00	0.00 >	0.71
5535	VV	O54	56	06/08/89	1.480	0.00	166.00	0.00	0.00
5535	YF	QDA	56	06/13/89	1.142	185.00 >	320.00 >	1.73 >	7.36
5535	YF	R3D	56	08/07/89	1.040	0.00	178.00	0.00 >	1.30
5536	JE	QDM	56	06/14/89	0.967	0.00 >	320.00	0.00 >	0.15
5536	PT	QEA	56	06/14/89	0.812	0.00 >	320.00	0.00	6.15
5536	SF	QDY	56	06/14/89	1.288	0.00 >	320.00	0.00	0.60
5536	VE	QCY	56	06/16/89	1.233	0.00 >	320.00	0.00 >	0.40
5536	YF	QDA	56	06/13/89	1.142	0.00 >	320.00	0.00 >	0.82
5537	JE	QDN	56	06/14/89	0.953	0.00	7.53	0.00	0.00
5537	PT	QEB	56	06/14/89	0.725	0.00	37.00	0.00	3.01
5537	SF	QDZ	56	06/14/89	1.315	0.00	43.30	0.00	1.40
5537	VE	QCZ	56	06/16/89	1.215	0.00	48.50	0.00	0.00
5537	VSV	O3R	56	06/09/89	1.138	0.00	7.45	0.00 >	8.13
5537	VV	O54	56	06/08/89	1.480	0.00	41.40	0.00	0.00
5537	YF	QDB	56	06/13/89	1.142	0.00	42.00	0.00	0.00
5538	JE	QDN	56	06/14/89	0.953	0.00 >	320.00	0.00 >	1.37
5538	JE	R3R	56	08/09/89	0.866	207.00	372.00	1.80 >	10.49
5538	PT	QEB	56	06/14/89	0.725	0.00 >	320.00	0.00 >	10.01
5538	PT	R4H	56	08/09/89	0.658	256.00	492.00	1.92	9.41
5538	SF	QDZ	56	06/14/89	1.315	213.00 >	320.00 >	1.51 >	10.28
5538	SF	R44	56	08/09/89	0.864	233.00	354.00	1.52	7.90

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5538	VE	QCZ	56	06/16/89	1.215	0.00 >	320.00	0.00 >	0.21
5538	VE	R31	56	08/11/89	1.338	0.00	354.00	0.00	2.47
5538	VSV	O3R	56	06/09/89	1.138	0.00 >	320.00	0.00	0.00
5538	YF	QDB	56	06/13/89	1.142	215.00 >	320.00 >	1.49 >	6.96
5538	YF	R3E	56	08/07/89	1.006	0.00	501.00	0.00	1.11
5539	JE	QDO	56	06/16/89	0.970	1.38	5.66	4.10 >	18.67
5539	JE	R3R	56	08/09/89	0.866	1.34	5.27	3.94 >	23.28
5539	PT	QEC	56	06/14/89	0.821	0.00	0.71	0.00	0.04
5539	PT	R4H	56	08/09/89	0.658	2.30	4.92	2.14	8.62
5539	SF	QE0	56	06/14/89	1.339	0.00	4.81	0.00	0.78
5539	SF	R44	56	08/09/89	0.864	2.59	4.42	1.71	6.79
5539	VE	QD0	56	06/16/89	1.243	0.00	2.20	0.00	0.00
5539	VE	R31	56	08/11/89	1.338	0.00	1.14	0.00	0.00
5539	YF	QDC	56	06/13/89	1.119	0.00	3.80	0.00 >	4.39
5539	YF	R3E	56	08/07/89	1.006	2.27	2.96	1.31 >	11.55
5540	JE	QDO	56	06/14/89	0.970	0.00 >	320.00	0.00	0.12
5540	PT	QEC	56	06/14/89	0.821	0.00 >	320.00	0.00	2.90
5540	SF	QE0	56	06/14/89	1.339	0.00 >	320.00	0.00	0.39
5540	VE	QD0	56	06/16/89	1.243	0.00 >	320.00	0.00	0.00
5540	VSV	O3S	56	06/09/89	1.158	0.00 >	320.00	0.00 >	1.50
5540	VV	O55	56	06/08/89	1.431	0.00 >	320.00	0.00	0.00
5540	YF	QDC	56	06/13/89	1.119	0.00 >	320.00	0.00 >	0.25
5541	JE	QDP	56	06/14/89	1.037	0.00	7.85	0.00 >	0.92
5541	JE	R3S	56	08/09/89	0.804	0.00	37.70	0.00 >	1.76
5541	PT	QED	56	06/14/89	0.665	0.00	26.70	0.00	0.10
5541	PT	R4I	56	08/09/89	0.646	0.00	39.00	0.00	0.00
5541	SF	QE1	56	06/14/89	1.113	0.00	29.60	0.00 >	2.69
5541	SF	R45	56	08/09/89	0.832	0.00	42.20	0.00	0.00
5541	VE	QD1	56	06/16/89	1.276	100.00	7.21	0.97 >	6.72
5541	VE	R32	56	08/11/89	1.275	0.00	42.20	0.00	0.00
5541	VSV	O3S	56	06/09/89	1.158	0.00 >	320.00	0.00	0.26
5541	VV	O55	56	06/08/89	1.431	0.00	12.90	0.00	0.00
5541	YF	QDD	56	06/13/89	1.222	0.00	41.70	0.00	0.37
5541	YF	R3F	56	08/07/89	1.063	0.00	65.10	0.00	0.15
5542	JE	QDP	56	06/14/89	1.037	0.00	4.08	0.00 >	2.87
5542	JE	R3S	56	08/09/89	0.804	0.00 >	10.00	0.00 >	6.21
5542	PT	QED	56	06/14/89	0.665	0.00	5.25	0.00	0.00
5542	PT	R4I	56	08/09/89	0.646	0.00 >	10.00	0.00 >	0.44
5542	SF	QE1	56	06/14/89	1.113	1.83	5.13	2.81 >	13.35
5542	SF	R45	56	08/09/89	0.832	0.00 >	10.00	0.00	0.00
5542	VE	QD1	56	06/16/89	1.276	0.00	22.20	0.00	0.00
5542	VE	R32	56	08/11/89	1.275	0.00 >	10.00	0.00	0.00
5542	YF	QDD	56	06/13/89	1.222	0.00	4.73	0.00 >	1.36
5542	YF	R3F	56	08/07/89	1.063	0.00 >	10.00	0.00 >	0.40
5543	JE	QDQ	56	06/14/89	1.152	0.00	5.24	0.00	0.00
5543	JE	R3T	56	08/09/89	0.848	0.00	0.67	0.00 >	0.40
5543	PT	QEE	56	06/14/89	0.848	0.00	16.70	0.00 >	2.41
5543	PT	R4J	56	08/09/89	0.759	0.00	0.62	0.00	0.00
5543	SF	QE2	56	06/14/89	1.231	4.53	9.50	2.10 >	14.01
5543	SF	R46	56	08/09/89	0.846	0.23	1.06	4.52	18.77
5543	VE	QD2	56	06/16/89	1.260	0.00 >	320.00	0.00 >	0.21
5543	VE	R33	56	08/11/89	1.436	0.20	0.67	3.31 >	39.55
5543	VSV	O3T	56	06/09/89	1.009	0.00	16.70	0.00	3.88
5543	VV	O56	56	06/08/89	1.395	0.00	4.85	0.00 >	0.01
5543	YF	QDE	56	06/13/89	1.042	0.00	8.91	0.00	1.85
5543	YF	R3G	56	08/07/89	1.101	0.75	0.77	1.03	5.43
5544	JE	QDQ	56	06/14/89	1.152	0.00	0.93	0.00	0.00
5544	PT	QEE	56	06/14/89	0.848	0.00	37.80	0.00 >	6.01
5544	SF	QE2	56	06/14/89	1.231	0.00	20.20	0.00	1.74
5544	VE	QD2	56	06/16/89	1.260	0.00 >	320.00	0.00 >	0.05
5544	YF	QDE	56	06/13/89	1.042	0.00	36.30	0.00	0.08
5545	JE	QDR	56	06/14/89	1.069	0.00 >	320.00	0.00	0.00
5545	PT	QEF	56	06/14/89	0.898	0.00 >	320.00	0.00	2.57
5545	SF	QE3	56	06/14/89	0.968	0.00 >	320.00	0.00 >	2.41
5545	VE	QD3	56	06/16/89	1.242	0.00 >	320.00	0.00 >	1.20
5545	VSV	O3T	56	06/09/89	1.009	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5545	VV	056	56	06/08/89	1.395	0.00	124.00	0.00	0.00
5545	YF	QDF	56	06/13/89	1.124	0.00 >	320.00	0.00 >	3.52
5546	JE	QDR	56	06/14/89	1.069	0.00 >	320.00	0.00 >	0.66
5546	JE	R3T	56	08/09/89	0.848	0.00	522.00	0.00 >	1.02
5546	PT	QEF	56	06/14/89	0.898	2.11 >	320.00 >	151.00	60.74
5546	PT	R4J	56	08/09/89	0.759	0.00	518.00	0.00	1.06
5546	SF	QE3	56	06/14/89	0.968	0.00 >	320.00	0.00	0.00
5546	SF	R46	56	08/09/89	0.846	0.00	459.00	0.00	0.00
5546	VE	QD3	56	06/16/89	1.242	0.00	195.00	0.00	0.00
5546	VE	R33	56	08/11/89	1.436	0.00	344.00	0.00	1.97
5546	VSV	03U	56	06/09/89	1.067	0.00 >	320.00	0.00	0.00
5546	VV	057	56	06/08/89	1.336	0.00 >	320.00	0.00 >	1.63
5546	YF	QDF	56	06/13/89	1.124	0.00 >	320.00	0.00 >	1.11
5546	YF	R3G	56	08/07/89	1.101	0.00	518.00	0.00	0.00
5547	JE	QDS	56	06/14/89	1.056	0.00 >	320.00	0.00 >	0.31
5547	PT	QEG	56	06/14/89	0.862	0.00 >	320.00	0.00 >	9.27
5547	SF	QE4	56	06/14/89	1.089	0.00 >	320.00	0.00 >	0.00
5547	VE	QD4	56	06/16/89	1.246	0.00 >	320.00	0.00 >	1.40
5547	YF	QDG	56	06/13/89	1.142	0.00 >	320.00	0.00 >	1.04
5548	JE	QDS	56	06/14/89	1.056	0.00	23.20	0.00	0.00
5548	JE	R3U	56	08/09/89	1.014	0.00	59.40	0.00 >	0.14
5548	PT	QEG	56	06/14/89	0.862	0.00	160.00	0.00	7.64
5548	PT	R4K	56	08/09/89	0.472	0.00	67.40	0.00	0.80
5548	SF	QE4	56	06/14/89	1.089	0.00	185.00	0.00 >	9.02
5548	SF	R47	56	08/09/89	0.975	16.90	100.00	5.92 >	19.85
5548	VE	QD4	56	06/16/89	1.246	0.00	193.00	0.00	0.00
5548	VE	R34	56	08/11/89	1.340	0.00	46.50	0.00	0.00
5548	VSV	03U	56	06/09/89	1.067	0.00 >	320.00	0.00	0.00
5548	VV	057	56	06/08/89	1.336	0.00	49.00	0.00	0.00
5548	YF	QDG	56	06/13/89	1.142	0.00	185.00	0.00	0.59
5548	YF	R3H	56	08/07/89	1.236	0.00	60.50	0.00	0.00
5555	PT	PCY	53	03/28/89	0.703	7.22 >	320.00 >	44.30 >	46.14
5555	SF	PCJ	53	03/28/89	0.750	23.00 >	320.00 >	13.90	19.19
5555	VE	PBA	53	03/27/89	0.978	0.00 >	320.00	0.00	2.99
5555	YF	PC4	53	03/27/89	0.930	0.00 >	320.00	0.00 >	0.60
5556	PT	PCZ	53	03/28/89	0.847	28.50	105.00	3.70 >	26.11
5556	SF	PCK	53	03/28/89	0.813	0.00	300.00	0.00 >	20.16
5556	VE	PBB	53	03/27/89	1.038	0.00	306.00	0.00	1.20
5556	VSV	032	53	05/12/89	1.300	48.10	141.00	2.93 >	19.17
5556	VSV	04K	53	06/02/89	1.391	41.80	155.00	3.70	24.99
5556	VV	02F	53	03/27/89	1.627	0.00	115.00	0.00 >	0.20
5556	YF	PC5	53	03/27/89	0.965	0.00 >	320.00	0.00	1.40
5557	PT	PCZ	53	03/28/89	0.847	2.07	3.29	1.59 >	7.06
5557	SF	PCY	53	03/28/89	0.813	2.61	2.65	1.01 >	3.79
5557	VE	PBA	53	03/27/89	1.038	0.00	2.10	0.00	0.00
5557	VSV	032	53	05/12/89	1.300	0.00	4.36	0.00	0.00
5557	VV	02G	53	03/30/89	1.364	0.00 <	1.00	0.00	0.00
5557	VV	03D	53	04/13/89	1.627	0.00	0.12	0.00 >	0.01
5557	VV	04R	53	06/01/89	2.531	0.00	2.39	0.00	0.00
5557	YF	PC5	53	03/27/89	0.965	0.00	4.46	0.00	0.66
5558	PT	PD0	53	03/28/89	0.940	13.90	37.80	2.71 >	19.49
5558	SF	PCL	53	03/28/89	0.760	26.80	36.30	1.35 >	4.77
5558	VE	PBC	53	03/27/89	1.117	0.00	33.40	0.00	0.20
5558	VSV	033	53	05/12/89	1.476	0.00	12.10	0.00 >	0.03
5558	VV	02H	53	03/30/89	1.636	0.00	8.43	0.00	0.65
5558	YF	PC6	53	03/27/89	0.981	0.00	32.50	0.00	4.41
5559	PT	PD0	53	03/28/89	0.940	0.00	32.90	0.00 >	4.11
5559	SF	PCL	53	03/28/89	0.760	0.00	28.00	0.00 >	0.21
5559	VE	PBC	53	03/27/89	1.117	0.00	30.20	0.00	0.00
5559	YF	PC6	53	03/27/89	0.981	0.00	37.80	0.00	0.00
5560	PT	PD1	53	03/28/89	0.937	0.00 >	320.00	0.00 >	15.18
5560	SF	PCM	53	03/28/89	0.737	165.00 >	320.00 >	1.94 >	11.99
5560	VE	PBD	53	03/27/89	1.121	0.00 >	320.00	0.00 >	0.10
5560	YF	PC7	53	03/27/89	0.965	0.00 >	320.00	0.00	5.74
5561	PT	PD1	53	03/28/89	0.937	0.00 >	320.00	0.00 >	29.25
5561	SF	PCM	53	03/28/89	0.737	0.00 >	320.00	0.00	4.39

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5561	VE	PBD	53	03/27/89	1.121	0.00 >	320.00	0.00 >	6.80
5561	VSV	033	53	05/12/89	1.476	286.00 >	320.00 >	1.12 >	5.80
5561	VV	02G	53	03/30/89	1.364	0.00	106.00	0.00 >	2.73
5561	YF	PC7	53	03/27/89	0.965	0.00 >	320.00	0.00	0.80
5562	PT	PD2	53	03/28/89	0.816	0.00 >	320.00	0.00 >	21.88
5562	SF	PCN	53	03/28/89	0.692	0.00 >	320.00	0.00 >	29.89
5562	VE	PBE	53	03/27/89	1.019	0.00 >	320.00	0.00	0.00
5562	YF	PC8	53	03/27/89	1.071	0.00 >	320.00	0.00	0.00
5567	JE	QDT	56	06/14/89	0.974	0.00	44.70	0.00	0.00
5567	JE	R5M	56	08/15/89	0.384	0.00	15.50	0.00	0.00
5567	PT	QEH	56	06/14/89	0.865	0.00	43.30	0.00	2.99
5567	PT	R6C	56	08/15/89	0.595	0.00	14.30	0.00	0.00
5567	SF	QE5	56	06/14/89	1.012	0.00	49.00	0.00	0.30
5567	SF	R5Z	56	08/15/89	0.790	0.00	14.40	0.00 >	0.20
5567	VE	QD5	56	06/16/89	1.242	0.00	49.00	0.00 >	0.60
5567	VE	R59	56	08/14/89	1.298	0.00	12.40	0.00	0.00
5567	VSV	03V	56	06/09/89	1.165	0.00	49.00	0.00	0.00
5567	VV	05B	56	06/15/89	1.749	0.00	50.10	0.00	0.00
5567	YF	QDH	56	06/13/89	1.111	0.00	13.70	0.00	0.00
5567	YF	R4W	56	08/14/89	1.199	0.00	12.80	0.00	0.00
5568	JE	QDT	56	06/14/89	0.974	0.00 >	320.00	0.00 >	1.06
5568	PT	QEH	56	06/14/89	0.865	0.00	0.93	0.00 >	6.97
5568	SF	QE5	56	06/14/89	1.012	0.00 >	320.00	0.00	0.00
5568	VE	QD5	56	06/16/89	1.242	0.00 >	320.00	0.00	0.00
5568	VSV	03V	56	06/09/89	1.165	0.00	217.00	0.00 >	0.03
5568	VV	04Y	56	06/08/89	1.339 <	1.00 >	320.00 >	320.00 >	59.60
5568	YF	QDH	56	06/13/89	1.111	0.00 >	320.00	0.00	1.11
5569	JE	QDU	56	06/14/89	0.931	0.00 >	320.00	0.00	0.13
5569	PT	QEI	56	06/14/89	0.923	0.00 >	320.00	0.00	2.30
5569	SF	QE6	56	06/14/89	1.130	0.00	320.00	0.00	0.60
5569	VE	QD6	56	06/16/89	1.309	0.00 >	320.00	0.00 >	0.03
5569	VSV	03X	56	06/16/89	1.593	0.00	86.40	0.00	0.00
5569	VV	04Z	56	06/08/89	1.255 <	1.00	158.00 >	157.89 >	60.04
5569	YF	QDI	56	06/13/89	1.062	0.00 >	320.00	0.00 >	1.19
5570	JE	QJB	56	06/27/89	0.785	0.00 >	320.00	0.00	0.19
5570	PT	QJZ	56	06/27/89	0.435	0.00 >	320.00	0.00 >	4.80
5570	SF	QJN	56	06/27/89	1.072	0.00 >	320.00	0.00	2.66
5570	VE	QIZ	56	06/26/89	1.181	0.00 >	320.00	0.00	0.00
5570	VSV	03X	56	06/16/89	1.593	0.00 >	320.00	0.00 >	1.98
5570	VV	05D	56	06/15/89	1.662	0.00 >	320.00	0.00	0.00
5570	YF	QIN	56	06/26/89	1.144	0.00 >	320.00	0.00	0.89
5571	JE	QJC	56	06/27/89	0.678	0.00 >	320.00	0.00	3.73
5571	PT	QK0	56	06/27/89	0.450	0.00 >	320.00	0.00	2.00
5571	SF	QJO	56	06/27/89	1.033	0.00 >	320.00	0.00	0.00
5571	VE	QJO	56	06/26/89	1.151	0.00 >	320.00	0.00	0.02
5571	VSV	04F	56	07/07/89	1.607	0.00 >	32.00	0.00	0.00
5571	VV	05D	56	06/15/89	1.662	0.00	94.80	0.00	0.00
5571	YF	QIO	56	06/26/89	1.178	0.00 >	320.00	0.00	0.00
5572	JE	QJC	56	06/27/89	0.678	0.00 >	320.00	0.00	0.56
5572	PT	QK0	56	06/27/89	0.450	0.00 >	320.00	0.00	3.19
5572	SF	QJO	56	06/27/89	1.033	0.00 >	320.00	0.00	1.08
5572	VE	QJO	56	06/26/89	1.151	0.00 >	320.00	0.00 >	2.70
5572	VSV	04F	56	07/07/89	1.607	0.00 >	320.00	0.00	0.00
5572	VV	05E	56	06/15/89	1.595	0.00 >	320.00	0.00	0.00
5572	YF	QIO	56	06/26/89	1.178	0.00 >	320.00	0.00	0.00
5573	JE	QJD	56	06/27/89	0.543	0.00	2.17	0.00	0.00
5573	JE	R3U	56	08/09/89	1.014	0.00	2.83	0.00	0.00
5573	PT	QK1	56	06/27/89	0.513	0.00	16.10	0.00	0.00
5573	PT	R4K	56	08/09/89	0.472	0.00	18.20	0.00	0.00
5573	SF	QJF	56	06/27/89	0.998	0.00	15.40	0.00	2.39
5573	SF	R47	56	08/09/89	0.975	0.00	1.17	0.00	0.00
5573	VE	QJ1	56	06/26/89	1.236	0.00	28.00	0.00	2.71
5573	VE	R34	56	08/11/89	1.340	0.00	17.80	0.00	0.92
5573	VSV	03Y	56	06/16/89	1.568	0.00	114.00	0.00	0.00
5573	VV	05E	56	06/15/89	1.595	0.00	3.82	0.00	0.00
5573	YF	QIP	56	06/26/89	1.192	0.00	10.50	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5573	YF	R3H	56	08/07/89	1.236	0.00	9.24	0.00 >	2.16
5574	JE	QJD	56	06/27/89	0.543	0.00 >	320.00	0.00 >	0.00
5574	PT	QK1	56	06/27/89	0.513	0.00 >	320.00	0.00 >	1.00
5574	SF	QJP	56	06/27/89	0.998	0.00 >	320.00	0.00 >	0.07
5574	VE	QJ1	56	06/26/89	1.236	0.00 >	320.00	0.00	0.12
5574	VSV	03Y	56	06/16/89	1.568	0.00	7.73	0.00	0.00
5574	VV	05F	56	06/15/89	1.626	0.00	3.02	0.00	0.00
5574	YF	QIP	56	06/26/89	1.192	0.00 >	320.00	0.00	0.00
5575	JE	QDU	56	06/14/89	0.931	0.00	7.03	0.00	0.00
5575	PT	QEI	56	06/14/89	0.923	0.00	19.90	0.00	0.00
5575	SF	QE6	56	06/14/89	1.130	0.00	40.00	0.00	0.00
5575	VE	QD6	56	06/16/89	1.309	0.00	37.70	0.00	0.00
5575	VSV	03Z	56	06/16/89	1.491	0.00	2.13	0.00	0.00
5575	VV	05F	56	06/15/89	1.626	0.00	1.73	0.00	0.00
5575	YF	QDI	56	06/13/89	1.062	0.00	27.10	0.00	0.00
5576	JE	QDV	56	06/14/89	0.914	0.00 <	1.00	0.00	0.00
5576	JE	R5M	56	08/15/89	0.384	0.00	0.95	0.00 >	0.10
5576	PT	QEJ	56	06/14/89	0.835	0.00 <	1.00	0.00	0.00
5576	PT	R6C	56	08/15/89	0.595	0.00	0.54	0.00	0.00
5576	SF	QE7	56	06/14/89	1.255	0.00 <	1.00	0.00	0.00
5576	SF	R5Z	56	08/15/89	0.790	0.00	1.69	0.00 >	1.09
5576	VE	QD7	56	06/16/89	1.243	0.00	0.44	0.00	0.00
5576	VE	R59	56	08/14/89	1.298	0.00	0.57	0.00	0.00
5576	VSV	03Z	56	06/16/89	1.491	0.00	0.96	0.00	0.00
5576	VV	05G	56	06/15/89	1.748	0.00 <	1.00	0.00	0.00
5576	VV	07B	56	07/13/89	1.329	0.00	0.07	0.00	0.00
5576	YF	QDJ	56	06/13/89	1.143	0.00 <	1.00	0.00	0.00
5576	YF	R4W	56	08/14/89	1.199	0.00	0.51	0.00	0.00
5577	JE	QJE	56	06/27/89	0.871	0.00	28.60	0.00	0.00
5577	PT	QK2	56	06/27/89	0.473	0.00	70.40	0.00	1.60
5577	SF	QJQ	56	06/27/89	1.188	0.00	32.00	0.00	0.00
5577	VE	QJ2	56	06/26/89	1.083	0.00 >	320.00	0.00 >	5.02
5577	VSV	040	56	06/16/89	1.504	0.00	88.70	0.00	0.80
5577	VV	05G	56	06/15/89	1.748	0.00 <	1.00	0.00	0.00
5577	YF	QIQ	56	06/26/89	1.068	0.00	14.40	0.00	0.00
5578	JE	QJE	56	06/27/89	0.871	0.00	14.80	0.00	0.00
5578	PT	QK2	56	06/27/89	0.473	0.00	85.20	0.00 >	0.60
5578	SF	QJQ	56	06/27/89	1.188	0.00	28.30	0.00	0.00
5578	VE	QJ2	56	06/26/89	1.083	0.00	232.00	0.00	0.00
5578	VSV	040	56	06/16/89	1.504	0.00 >	320.00	0.00	0.00
5578	VV	05H	56	06/15/89	1.641	0.00	8.64	0.00	0.00
5578	YF	QIQ	56	06/26/89	1.068	0.00	177.00	0.00	0.00
5580	JE	PY8	54	05/03/89	0.486 <	320.00 >	100000 >	313.00 >	95.79
5580	JE	PY8	54	05/03/89	0.486 <	0.32 >	100.00 >	313.00 >	79.97
5580	JE	Q56	54	05/11/89	0.655 <	320.00 >	100000 >	313.00 >	75.69
5580	JE	Q56	54	05/11/89	0.655 >	17.00 >	100.00 >	5.87 >	26.11
5580	PT	PYE	54	05/03/89	0.392 <	1.00 >	100000 >	100000 >	96.40
5580	PT	PYE	54	05/03/89	0.392 >	0.00 >	100.00	0.00	0.48
5580	SF	PYG	54	05/02/89	1.130 <	320.00 >	100000 >	313.00 >	97.22
5580	SF	PYG	54	05/02/89	1.130 >	68.40 >	100.00 >	1.46 >	9.86
5580	VE	PYA	54	05/03/89	1.459 >	56.20 >	100000 >	1780.0 >	46.70
5580	VE	PYA	54	05/03/89	1.459 >	0.00 >	100.00	0.00	0.00
5580	VV	048	54	05/11/89	1.663	0.00	66700.0	0.00	0.00
5580	VV	048	54	05/11/89	1.663	0.00	89.50	0.00	0.00
5580	YF	PYC	54	05/03/89	1.295	1320.0 >	100000 >	75.60 >	70.14
5580	YF	PYC	54	05/03/89	1.295 >	0.00 >	100.00	0.00 >	1.71
5583	JE	QFK	56	06/20/89	1.110	0.00	128.00	0.00	0.00
5583	PT	QGK	56	07/19/89	0.508	0.00 >	320.00	0.00	0.00
5583	SF	QG8	56	06/20/89	1.343	0.00	186.00	0.00	0.00
5583	VE	QF8	56	06/19/89	1.442	0.00	312.00	0.00	0.00
5583	VSV	041	56	06/16/89	1.433	0.00	69.80	0.00	0.00
5583	VV	05B	56	06/15/89	1.749	0.00	197.00	0.00	0.00
5583	YF	QFW	56	06/19/89	0.947	0.00 >	320.00	0.00 >	2.24
5584	JE	QFL	56	06/20/89	1.096	0.00	10.00	0.00	0.00
5584	PT	QGL	56	07/19/89	0.609	0.00	175.00	0.00	0.00
5584	SF	QG9	56	06/20/89	1.369	0.00	238.00	0.00 >	0.90

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5584	VE	QF9	56	06/19/89	1.397	0.00	222.00	0.00	0.00
5584	VSV	041	56	06/16/89	1.433	0.00	2.10	0.00	0.00
5584	VV	05C	56	06/15/89	1.778	0.00	1.88	0.00	0.00
5584	YF	QFX	56	06/19/89	1.050	0.00	257.00	0.00	0.00
5585	JE	QPL	56	06/20/89	1.096	0.00	109.00	0.00	0.00
5585	PT	QGL	56	07/19/89	0.609	0.00	170.00	0.00	0.00
5585	SF	QG9	56	06/20/89	1.369	0.00	194.00	0.00	0.00
5585	VE	QF9	56	06/19/89	1.397	0.00 >	320.00	0.00	0.00
5585	VSV	042	56	06/16/89	1.344	0.00 >	320.00	0.00	0.00
5585	VV	05H	56	06/15/89	1.641	0.00	210.00	0.00	0.00
5585	YF	QFX	56	06/19/89	1.050	0.00 >	320.00	0.00 >	2.36
5586	JE	QFM	56	06/20/89	1.055	0.00	32.00	0.00	0.00
5586	PT	QGM	56	07/19/89	0.621	0.00	43.30	0.00	0.00
5586	SF	QGA	56	06/20/89	1.370	0.00	18.80	0.00	0.00
5586	VE	QFA	56	06/19/89	1.121	0.00	184.00	0.00 >	0.40
5586	VSV	042	56	06/16/89	1.344	0.00	88.70	0.00	0.00
5586	VV	05C	56	06/15/89	1.778	0.00	10.00	0.00	0.00
5586	YF	QFY	56	06/19/89	1.082	0.00 >	320.00	0.00	0.39
5587	JE	QFM	56	06/20/89	1.055	0.00	222.00	0.00	0.00
5587	PT	QGM	56	07/19/89	0.621	0.00 >	320.00	0.00	0.00
5587	SF	QGA	56	06/20/89	1.370	0.00	108.00	0.00	0.00
5587	VE	QFA	56	06/19/89	1.121	0.00	162.00	0.00	2.71
5587	VSV	043	56	06/16/89	1.415	0.00 >	320.00	0.00	0.00
5587	VV	04Z	56	06/08/89	1.255	0.00	202.00	0.00	0.00
5587	YF	QFY	56	06/19/89	1.082	0.00 >	320.00	0.00	0.00
5603	JE	QJG	57	06/27/89	0.712	0.00	97.40	0.00	0.00
5603	PT	QK4	57	06/27/89	0.553	0.00 >	320.00	0.00	2.99
5603	SF	QJS	57	06/27/89	1.126	0.00	84.00	0.00	0.00
5603	VE	QJ4	57	06/26/89	1.026	0.00 >	320.00	0.00 >	2.05
5603	VSV	04P	57	07/07/89	1.149	0.00 >	320.00	0.00 >	0.83
5603	YF	QIS	57	06/26/89	1.088	0.00	265.00	0.00	0.14
5604	JE	QJG	57	06/27/89	0.712	0.00	53.50	0.00	0.00
5604	PT	QK4	57	06/27/89	0.553	0.00	150.00	0.00 >	0.10
5604	SF	QJS	57	06/27/89	1.126	0.00	51.80	0.00	0.00
5604	VE	QJ4	57	06/26/89	1.026	0.00	141.00	0.00	0.00
5604	VSV	04P	57	07/07/89	1.149	0.00 >	320.00	0.00	0.00
5604	YF	QIS	57	06/26/89	1.088	0.00	173.00	0.00	0.00
5605	JE	QJH	57	06/27/89	0.645	0.00 >	320.00	0.00 >	5.74
5605	PT	QK5	57	06/27/89	0.513	0.00 >	320.00	0.00 >	4.10
5605	SF	QJT	57	06/27/89	1.142	0.00 >	320.00	0.00 >	1.31
5605	VE	QJ5	57	06/26/89	1.161	0.00 >	320.00	0.00	0.02
5605	VSV	04Q	57	07/07/89	1.377	0.00 >	320.00	0.00 >	1.81
5605	YF	QIT	57	06/26/89	1.060	0.00 >	320.00	0.00 >	1.11
5607	JE	QJH	57	06/27/89	0.645	0.00	160.00	0.00	0.76
5607	PT	QK5	57	06/27/89	0.513	0.00	172.00	0.00 >	3.00
5607	SF	QJT	57	06/27/89	1.142	0.00	90.60	0.00	0.00
5607	VE	QJ5	57	06/26/89	1.161	0.00	155.00	0.00	0.00
5607	YF	QIT	57	06/26/89	1.060	0.00	177.00	0.00	0.00
5608	JE	QJI	57	06/27/89	0.611	0.00 >	320.00	0.00 >	4.71
5608	PT	QK6	57	06/27/89	0.539	0.00 >	320.00	0.00 >	2.91
5608	SF	QJU	57	06/27/89	0.948	0.00	80.60	0.00	0.00
5608	VE	QJ6	57	06/26/89	0.975	0.00 >	320.00	0.00 >	2.12
5608	YF	QIU	57	06/26/89	1.056	0.00 >	320.00	0.00	0.00
5609	JE	QJI	57	06/27/89	0.611	0.00	166.00	0.00 >	1.02
5609	PT	QK6	57	06/27/89	0.539	0.00	177.00	0.00 >	6.90
5609	SF	QJU	57	06/27/89	0.948	0.00	164.00	0.00	0.00
5609	VE	QJ6	57	06/26/89	0.975	2.88	17.30	6.02 >	36.18
5609	YF	QIU	57	06/26/89	1.056	0.00	186.00	0.00	0.22
5610	JE	QJJ	57	06/27/89	0.869	0.00 >	320.00	0.00	2.99
5610	PT	QK7	57	06/27/89	0.565	0.00 >	320.00	0.00 >	5.10
5610	SF	QTV	57	06/27/89	0.956	0.00 >	320.00	0.00	0.60
5610	VE	QJ7	57	06/26/89	0.968	0.00 >	320.00	0.00 >	2.30
5610	YF	QIV	57	06/26/89	1.208	0.00 >	320.00	0.00	0.00
5611	JE	QKK	57	06/28/89	1.013	0.00	32.00	0.00	0.00
5611	JE	R3V	57	08/09/89	0.960	0.00	47.70	0.00 >	0.01
5611	PT	QKW	57	06/28/89	0.512	0.00	126.00	0.00 >	10.63

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5611	PT	R4L	57	08/09/89	0.592	0.00	80.60	0.00	0.00
5611	SF	QL8		06/28/89	1.559	0.00	36.10	0.00	0.00
5611	SF	R48	57	08/09/89	0.703	0.00	32.00	0.00	0.00
5611	VE	QLK	57	06/30/89	1.447	0.00	26.80	0.00	0.00
5611	VE	R35	57	08/11/89	1.218	0.00	355.00	0.00	0.00
5611	YF	QK8	57	06/27/89	0.861	0.00	88.70	0.00	0.00
5611	YF	R3I	57	08/07/89	1.188	0.00	68.00	0.00	0.00
5612	JE	QKL	57	06/28/89	1.044	0.00 >	320.00	0.00	0.00
5612	PT	QKX	57	06/28/89	0.528	0.00 >	320.00	0.00	0.40
5612	SF	QL9	57	06/28/89	1.456	0.00 >	320.00	0.00	0.00
5612	VE	QLL	57	06/30/89	1.243	0.00 >	320.00	0.00	0.00
5612	YF	QK9	57	06/27/89	0.923	0.00 >	320.00	0.00	0.00
5613	JE	QKL	57	06/28/89	1.044	0.00	19.10	0.00	0.00
5613	PT	QKX	57	06/28/89	0.528	0.00	17.90	0.00	0.23
5613	SF	QL9	57	06/28/89	1.456	0.00	17.90	0.00	0.00
5613	VE	QLL	57	06/30/89	1.243	0.00	30.90	0.00	0.00
5613	YF	QK9	57	06/27/89	0.923	0.00	24.00	0.00	0.00
5614	JE	QRD	57	07/11/89	0.956	0.00	3.90	0.00	0.00
5614	JE	R8Q	57	08/22/89	0.683	0.00	11.60	0.00	0.00
5614	PT	QSD	57	07/11/89	0.739	0.00	5.39	0.00	0.00
5614	PT	R9N	57	08/22/89	0.510	0.00	11.90	0.00	0.00
5614	SF	QS1	57	07/12/89	1.006	0.00	4.79	0.00	0.00
5614	SF	R9C	57	08/22/89	0.906	0.00	12.30	0.00 >	0.55
5614	VE	QRP	57	07/14/89	1.449	0.00	11.00	0.00	0.00
5614	VE	R91	57	08/21/89	1.100	0.00	6.60	0.00	0.00
5614	YF	QR1	57	07/10/89	1.145	0.00	7.81	0.00	0.00
5614	YF	R8F	57	08/21/89	1.083	0.00	1.55	0.00	0.00
5615	JE	QKM	57	06/28/89	1.013	0.00	42.80	0.00	0.00
5615	PT	QKY	57	06/28/89	0.633	0.00	0.96	0.00	0.00
5615	SF	QLA	57	06/28/89	1.504	0.00	25.50	0.00	0.00
5615	VE	QLM	57	06/30/89	1.334	0.00	29.00	0.00	0.00
5615	YF	QKA	57	06/27/89	0.970	0.00	41.50	0.00	0.00
5616	JE	QRE	57	07/11/89	0.785	0.00	133.00	0.00 >	1.87
5616	PT	QSE	57	07/11/89	0.954	0.00	19.10	0.00	0.29
5616	SF	QS2	57	07/12/89	1.045	0.00	5.58	0.00	0.00
5616	VE	QRQ	57	07/14/89	1.307	0.00	160.00	0.00	0.00
5616	YF	QR2	57	07/10/89	0.919	0.00	24.50	0.00	0.00
5617	JE	QKM	57	06/28/89	1.013	0.00	36.20	0.00	0.00
5617	PT	QKY	57	06/28/89	0.633	0.00	23.60	0.00	0.00
5617	SF	QLA	57	06/28/89	1.504	0.00	12.90	0.00	0.00
5617	VE	QLM	57	06/30/89	1.334	0.00	11.60	0.00	0.00
5617	YF	QKA	57	06/27/89	0.970	0.00	42.20	0.00	0.00
5618	JE	QKN	57	06/28/89	0.961	0.00	11.50	0.00 >	0.80
5618	PT	QKZ	57	06/28/89	0.560	0.00	16.00	0.00	4.09
5618	SF	QLB	57	06/28/89	1.524	0.00	14.70	0.00	0.00
5618	VE	QLN	57	06/30/89	1.141	0.00	17.80	0.00	0.00
5618	YF	QKB	57	06/27/89	0.929	0.00	18.70	0.00	0.00
5619	JE	QKN	57	06/28/89	0.961	0.00	13.90	0.00	0.32
5619	PT	QKZ	57	06/28/89	0.560	0.00	16.30	0.00	3.87
5619	SF	QLB	57	06/28/89	1.524	0.00	14.50	0.00	0.00
5619	VE	QLN	57	06/30/89	1.141	0.00	18.10	0.00	0.00
5619	YF	QKB	57	06/27/89	0.929	0.00	16.10	0.00	0.00
5620	JE	QKO	57	06/28/89	0.809	0.00	15.50	0.00 >	3.01
5620	PT	QLO	57	06/28/89	0.427	0.00	15.70	0.00	1.37
5620	SF	QLC	57	06/28/89	1.520	0.00	13.30	0.00	0.00
5620	VE	QLO	57	06/30/89	1.126	0.00	23.40	0.00	0.00
5620	YF	QKC	57	06/27/89	0.952	0.00	16.00	0.00	0.00
5621	JE	QKO	57	06/28/89	0.809	0.00	10.80	0.00	0.60
5621	JE	R5N	57	08/15/89	0.483	0.00	14.40	0.00	0.00
5621	PT	QLO	57	06/28/89	0.427	0.00	15.50	0.00 >	8.55
5621	PT	R5D	57	08/15/89	0.517	0.00	15.80	0.00 >	1.91
5621	SF	QLC	57	06/28/89	1.520	0.00	11.10	0.00	0.00
5621	SF	R60	57	08/15/89	0.796	0.00	14.30	0.00	0.00
5621	VE	QLO	57	06/30/89	1.126	0.00	12.90	0.00	0.00
5621	VE	R5A	57	08/14/89	0.885	0.00	21.80	0.00	0.00
5621	YF	QKC	57	06/27/89	0.952	0.00	14.10	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5621	YF	R4X	57	08/14/89	0.864	0.00	15.80	0.00 >	1.23
5622	JE	QKP	57	06/28/89	0.798	0.00	11.60	0.00	0.00
5622	JE	R5N	57	08/15/89	0.483	0.00	13.90	0.00	0.00
5622	PT	QL1	57	06/28/89	0.492	0.00	14.80	0.00	0.00
5622	PT	R6D	57	08/15/89	0.517	0.00	15.50	0.00	0.00
5622	SF	QLD	57	06/28/89	1.474	0.00	15.80	0.00	0.10
5622	SF	R60	57	08/15/89	0.796	0.00	12.10	0.00	0.00
5622	VE	QLP	57	06/30/89	1.187	0.00	15.80	0.00	0.00
5622	VE	R5A	57	08/14/89	0.885	0.00	16.20	0.00	0.00
5622	YF	QKD	57	06/27/89	1.089	0.00	13.30	0.00	0.00
5622	YF	R4X	57	08/14/89	0.864	0.00	15.50	0.00 >	2.23
5623	JE	QKP	57	06/28/89	0.798	0.00	296.00	0.00	0.00
5623	PT	QL1	57	06/28/89	0.492	0.00	173.00	0.00	0.11
5623	SF	QLD	57	06/28/89	1.474	0.00	188.00	0.00	0.00
5623	VE	QLP	57	06/30/89	1.187	0.00	84.30	0.00	0.00
5623	YF	QKD	57	06/27/89	1.089	0.00	299.00	0.00	0.00
5624	JE	QKQ	57	06/28/89	0.631	0.00	82.00	0.00	0.60
5624	PT	QL2	57	06/28/89	0.495	0.00	77.90	0.00	0.35
5624	SF	QLE	57	06/28/89	0.991	0.00	49.00	0.00 >	0.40
5624	VE	QLQ	57	06/30/89	1.441	0.00	34.70	0.00	0.00
5624	YF	QKE	57	06/27/89	0.886	0.00	69.00	0.00	0.00
5625	JE	QKQ	57	06/28/89	0.631	0.00 >	320.00	0.00	0.60
5625	JE	R3V	57	08/05	0.960	0.00 >	1000.00	0.00	0.00
5625	PT	QL2	57	06/28	0.495	0.00 >	320.00	0.00	2.98
5625	PT	R4L	57	08/01	0.592	0.00	637.00	0.00	0.00
5625	SF	QLE	57	06/28/89	0.991	64.80 >	320.00 >	4.94 >	26.01
5625	SF	R48	57	08/07/89	0.703	100.00	629.00	6.29	23.34
5625	VE	QLQ	57	06/30/89	1.441	0.00	232.00	0.00	0.00
5625	VE	R35	57	08/11/89	1.218	0.00	906.00	0.00 >	2.11
5625	YF	QKE	57	06/27/89	0.886	0.00 >	320.00	0.00	0.00
5625	YF	R3I	57	08/07/89	1.188	0.00	858.00	0.00	0.23
5626	JE	QKR	57	06/28/89	0.697	0.00	234.00	0.00 >	9.65
5626	PT	QL3	57	06/28/89	0.495	0.00	231.00	0.00 >	11.09
5626	SF	QLF	57	06/28/89	0.983	61.60	204.00	3.31 >	18.19
5626	VE	QLR	57	06/30/89	1.122	0.00	72.50	0.00	0.00
5626	YF	QKF	57	06/27/89	0.842	0.00	206.00	0.00	0.00
5627	JE	QKR	57	06/28/89	0.697	0.00 >	320.00	0.00 >	10.78
5627	JE	R3W	57	08/09/89	0.676	0.00 >	1000.00	0.00 >	3.90
5627	PT	QL3	57	06/28/89	0.495	0.00	304.00	0.00 >	20.25
5627	PT	R4M	57	08/09/89	0.653	0.00	728.00	0.00	0.00
5627	SF	QLF	57	06/28/89	0.983	0.00 >	320.00	0.00 >	0.56
5627	SF	R49	57	08/09/89	0.877	0.00	646.00	0.00 >	0.06
5627	VE	QLR	57	06/30/89	1.122	0.00 >	320.00	0.00	0.00
5627	VE	R36	57	08/11/89	1.257	0.00 >	1000.00	0.00	0.00
5627	YF	QKF	57	06/27/89	0.842	0.00 >	320.00	0.00	0.00
5627	YF	R3J	57	08/07/89	1.206	0.00	745.00	0.00	0.00
5628	JE	QKS	57	06/28/89	0.687	0.00	304.00	0.00 >	4.80
5628	PT	QL4	57	06/28/89	0.506	0.00	88.70	0.00	1.60
5628	SF	QLC	57	06/28/89	0.940	0.00	69.80	0.00	0.00
5628	VE	QLS	57	06/30/89	1.111	0.00	92.70	0.00	0.00
5628	YF	QKG	57	06/27/89	1.013	0.00	164.00	0.00	0.00
5629	JE	QKS	57	06/28/89	0.687	0.00 >	320.00	0.00 >	5.50
5629	PT	QL4	57	06/28/89	0.506	0.00 >	320.00	0.00 >	9.41
5629	SF	QLG	57	06/28/89	0.940	0.00 >	320.00	0.00	0.00
5629	VE	QLS	57	06/30/89	1.111	0.00 >	320.00	0.00	0.10
5629	YF	QKG	57	06/27/89	1.013	0.00 >	320.00	0.00	0.00
5630	JE	QKT	57	06/28/89	0.767	0.00	69.80	0.00 >	0.70
5630	PT	QL5	57	06/28/89	0.520	0.00	182.00	0.00	9.54
5630	SF	QLH	57	06/28/89	0.935	0.00	75.40	0.00	0.00
5630	VE	QLT	57	06/30/89	1.043	0.00 >	320.00	0.00	0.00
5630	YF	QKH	57	06/27/89	0.927	0.00	304.00	0.00	0.00
5631	JE	QKT	57	06/28/89	0.767	0.00 >	320.00	0.00 >	8.49
5631	PT	QL5	57	06/28/89	0.520	0.00 >	320.00	0.00 >	10.48
5631	SF	QLH	57	06/28/89	0.935	0.00 >	320.00	0.00	0.06
5631	VE	QLT	57	06/30/89	1.043	0.00 >	320.00	0.00 >	0.10
5631	YF	QKH	57	06/27/89	0.927	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5632	JE	QKU	57	06/28/89	0.845	0.00 >	320.00	0.00 >	9.80
5632	PT	QL6	57	06/28/89	0.604	0.00 >	320.00	0.00 >	5.79
5632	SF	QLI	57	06/28/89	0.911	0.00 >	320.00	0.00 >	0.01
5632	VE	QLU	57	06/30/89	1.044	0.00 >	320.00	0.00 >	0.20
5632	YF	QKI	57	06/27/89	1.000	0.00 >	320.00	0.00 >	0.40
5633	JE	QKU	57	06/28/89	0.845	0.00 >	320.00	0.00 >	4.90
5633	PT	QL6	57	06/28/89	0.604	0.00	253.00	0.00	2.66
5633	SF	QLI	57	06/28/89	0.911	0.00	236.00	0.00	0.00
5633	VE	QLU	57	06/30/89	1.044	0.00	217.00	0.00	0.10
5633	YF	QKI	57	06/27/89	1.000	0.00 >	320.00	0.00 >	2.90
5634	JE	QKV	57	06/28/89	0.881	0.00	6.44	0.00 >	0.25
5634	JE	R50	57	08/15/89	0.564	0.00	4.83	0.00	0.00
5634	PT	QL7	57	06/28/89	0.532	0.00	4.56	0.00	0.00
5634	PT	R6E	57	08/15/89	0.615	0.00	8.64	0.00	0.00
5634	SF	QLJ	57	06/28/89	0.986	0.00	4.90	0.00	0.00
5634	SF	R61	57	08/15/89	0.836	0.00	5.03	0.00	0.00
5634	VE	QLV	57	06/30/89	1.239	0.00	6.81	0.00	0.00
5634	VE	R5B	57	08/14/89	1.299	0.00	7.32	0.00	0.00
5634	YF	QKJ	57	06/27/89	1.032	0.00	13.10	0.00	0.00
5634	YF	R4Y	57	08/14/89	1.112	0.00	10.90	0.00	0.60
5635	JE	QM8	57	07/06/89	0.768	0.00	3.12	0.00	0.00
5635	PT	QNB	57	07/06/89	0.647	0.00	68.40	0.00	0.00
5635	SF	QMW	57	07/06/89	1.244	0.00	29.80	0.00	0.00
5635	VE	QMK	57	07/07/89	0.666	0.00	0.71	0.00	0.00
5635	YF	QLW	57	07/03/89	1.065	0.00	92.70	0.00	0.00
5636	JE	QM9	57	07/06/89	0.978	0.00	182.00	0.00	0.00
5636	PT	QN9	57	07/06/89	0.756	0.00	265.00	0.00 >	4.82
5636	SF	QMX	57	07/06/89	1.283	0.00	161.00	0.00	0.00
5636	VE	QML	57	07/07/89	0.705	0.00	77.30	0.00	0.00
5636	YF	QLX	57	07/03/89	1.166	0.00	225.00	0.00	0.04
5637	JE	QM9	57	07/06/89	0.978	0.00	126.00	0.00	0.00
5637	PT	QN9	57	07/06/89	0.756	0.00	155.00	0.00	0.35
5637	SF	QMX	57	07/06/89	1.283	0.00	135.00	0.00 >	0.70
5637	VE	QML	57	07/07/89	0.705	0.00	76.50	0.00	0.04
5637	YF	QLX	57	07/03/89	1.166	0.00	181.00	0.00	0.00
5638	JE	QMA	57	07/06/89	0.969	0.00	54.70	0.00	0.00
5638	PT	QNA	57	07/06/89	0.790	0.00	118.00	0.00 >	0.13
5638	SF	QMY	57	07/06/89	1.217	0.00	258.00	0.00 >	0.28
5638	VE	QMM	57	07/07/89	0.574	0.00	2.93	0.00	0.00
5638	YF	QLY	57	07/03/89	1.181	0.00	204.00	0.00	0.00
5639	JE	QMA	57	07/06/89	0.969	0.00	283.00	0.00	0.00
5639	PT	QNA	57	07/06/89	0.790	0.00 >	320.00	0.00	0.00
5639	SF	QMY	57	07/06/89	1.217	0.00 >	320.00	0.00 >	1.95
5639	VE	QMM	57	07/07/89	0.574	0.00 >	320.00	0.00	0.14
5639	YF	QLY	57	07/03/89	1.181	0.00 >	320.00	0.00	0.00
5640	JE	QMB	57	07/06/89	0.907	0.00	160.00	0.00 >	0.03
5640	JE	R75	57	08/16/89	0.631	0.00	267.00	0.00	0.48
5640	PT	QNB	57	07/06/89	0.720	0.00	204.00	0.00 >	11.11
5640	PT	R88	57	08/16/89	0.753	0.00	169.00	0.00	0.00
5640	SF	QMZ	57	07/06/89	1.324	0.00	165.00	0.00 >	0.60
5640	SF	R7V	57	08/16/89	0.690	0.00	52.40	0.00	0.00
5640	VE	QMN	57	07/07/89	0.464	0.00	32.00	0.00	0.00
5640	VE	R7I	57	08/18/89	1.000	0.00	195.00	0.00	1.80
5640	YF	QLZ	57	07/03/89	1.169	0.00	168.00	0.00	0.00
5640	YF	R6S	57	08/15/89	1.030	0.00	200.00	0.00	0.00
5641	JE	QMB	57	07/06/89	0.907	0.00 >	320.00	0.00	0.00
5641	PT	QNB	57	07/06/89	0.720	0.00 >	320.00	0.00	1.93
5641	SF	QMZ	57	07/06/89	1.324	0.00 >	320.00	0.00 >	0.63
5641	VE	QMN	57	07/07/89	0.464	0.00	192.00	0.00	0.38
5641	YF	QLZ	57	07/03/89	1.169	0.00 >	320.00	0.00	0.00
5642	JE	QMC	57	07/06/89	0.937	0.00	10.00	0.00	0.00
5642	PT	QNC	57	07/06/89	0.799	0.00	22.20	0.00 >	0.01
5642	SF	QNO	57	07/06/89	1.215	0.00	21.70	0.00	0.00
5642	VE	QMO	57	07/07/89	0.405	0.00	13.80	0.00	0.00
5642	YF	QMO	57	07/03/89	1.158	0.00	32.90	0.00	0.00
5643	JE	QMC	57	07/06/89	0.937	230.00	10.00	0.04 >	0.68

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5643	JE	R75	57	08/16/89	0.631	0.00 <	1.00	0.00	0.00
5643	PT	QNC	57	07/06/89	0.799	0.00 >	320.00	0.00 >	9.80
5643	PT	R88	57	08/16/89	0.753	52.70	190.00	3.61	16.92
5643	SF	QNO	57	07/06/89	1.215	28.60	192.00	6.69 >	33.78
5643	SF	R7V	57	08/16/89	0.690	12.90 >	320.00 >	24.77 >	54.56
5643	VE	QMO	57	07/07/89	0.405	0.00	320.00	0.00	0.70
5643	VE	R7I	57	08/18/89	1.000	37.70 >	320.00 >	8.48 >	35.52
5643	YF	QMO	57	07/03/89	1.158	0.00	75.30	0.00	0.00
5643	YF	R6S	57	08/15/89	1.030	0.00	131.00	0.00 >	0.43
5644	JE	QMD	57	07/06/89	0.797	0.00	1.77	0.00	0.00
5644	JE	R8Q	57	08/22/89	0.683	0.00	4.33	0.00	0.00
5644	PT	QND	57	07/06/89	0.785	0.00	6.29	0.00	0.00
5644	PT	R9N	57	08/22/89	0.510	0.00	6.70	0.00	0.00
5644	SF	QN1	57	07/06/89	0.933	0.00	8.87	0.00 >	5.42
5644	SF	R9C	57	08/22/89	0.906	0.00	6.40	0.00	3.31
5644	VE	QMP	57	07/07/89	0.457	0.00	18.60	0.00 >	0.90
5644	VE	R91	57	08/21/89	1.100	0.00	4.90	0.00	0.00
5644	YF	QM1	57	07/03/89	1.188	0.00	8.20	0.00	0.07
5644	YF	R8F	57	08/21/89	1.083	0.00	4.50	0.00	0.00
5646	JE	QMD	57	07/06/89	0.797	0.00	2.76	0.00	0.00
5646	JE	R8R	57	08/22/89	0.790	0.00	11.70	0.00	0.00
5646	PT	QND	57	07/06/89	0.785	0.00	8.45	0.00	0.00
5646	PT	R9O	57	08/22/89	0.524	0.00	14.50	0.00 >	0.21
5646	SF	QN1	57	07/06/89	0.933	0.00	15.70	0.00 >	0.28
5646	SF	R9D	57	08/22/89	0.899	0.00	14.30	0.00 >	1.55
5646	VE	QMP	57	07/07/89	0.457	0.00	3.20	0.00	0.00
5646	YF	QM1	57	07/03/89	1.188	0.00	15.30	0.00	0.00
5646	YF	R8G	57	08/21/89	0.943	0.00	16.70	0.00	0.00
5648	JE	R8R	57	08/22/89	0.790	0.00	0.86	0.00	0.00
5648	PT	QNE	57	07/06/89	0.690	0.00	1.80	0.00	0.00
5648	PT	R9O	57	08/22/89	0.524	0.00	1.83	0.00	0.43
5648	SF	QN2	57	07/06/89	1.361	0.00	1.04	0.00	0.00
5648	SF	R9D	57	08/22/89	0.899	0.00	1.63	0.00 >	0.60
5648	VE	QMQ	57	07/07/89	1.074	0.00	1.05	0.00	0.00
5648	YF	QM2	57	07/03/89	0.862	0.00	2.12	0.00	0.00
5648	YF	R8G	57	08/21/89	0.943	0.00	2.04	0.00	0.00
5649	JE	QME	57	07/06/89	0.527	0.00	257.00	0.00	0.00
5649	JE	R8S	57	08/22/89	0.590	0.00	22.80	0.00 >	3.64
5649	PT	QNE	57	07/06/89	0.690	0.00	3.56	0.00 >	0.13
5649	PT	R9P	57	08/22/89	0.550	0.00	14.20	0.00	0.00
5649	SF	QN2	57	07/06/89	1.361	0.00	5.17	0.00 >	4.06
5649	SF	R9E	57	08/22/89	0.889	0.00	16.50	0.00	0.00
5649	VE	QMQ	57	07/07/89	1.074	0.00	19.30	0.00	0.00
5649	YF	QM2	57	07/03/89	0.862	0.00	5.78	0.00	0.00
5649	YF	R8H	57	08/21/89	1.045	0.00	5.14	0.00	0.00
5650	JE	QMF	57	07/06/89	0.781	0.00 >	320.00	0.00	2.79
5650	PT	QNF	57	07/06/89	0.806	0.00 >	320.00	0.00	0.06
5650	SF	QN3	57	07/06/89	1.012	0.00	262.00	0.00 >	0.54
5650	VE	QMR	57	07/07/89	0.968	0.00	212.00	0.00	0.20
5650	YF	QM3	57	07/03/89	1.025	0.00 >	320.00	0.00	1.52
5651	JE	QMF	57	07/06/89	0.781	0.00 >	320.00	0.00	0.00
5651	PT	QNF	57	07/06/89	0.806	0.00 >	320.00	0.00	0.00
5651	SF	QN3	57	07/06/89	1.012	0.00 >	320.00	0.00 >	0.08
5651	VE	QMR	57	07/07/89	0.968	0.00 >	320.00	0.00	0.00
5651	YF	QM3	57	07/03/89	1.025	0.00 >	320.00	0.00	0.00
5652	JE	QMG	57	07/06/89	0.794	0.00	45.60	0.00	0.00
5652	JE	R8S	57	08/22/89	0.590	0.00	61.40	0.00 >	1.21
5652	PT	QNG	57	07/06/89	0.786	0.00	30.40	0.00	0.63
5652	PT	R9P	57	08/22/89	0.550	0.00	32.00	0.00	0.00
5652	SF	QN4	57	07/06/89	1.104	30.90	67.40	2.18 >	15.36
5652	SF	R9E	57	08/22/89	0.889	0.00	25.10	0.00 >	1.02
5652	VE	QMS	57	07/07/89	0.867	0.00	224.00	0.00	0.00
5652	YF	QM4	57	07/03/89	1.011	0.00	54.70	0.00	0.00
5652	YF	R8H	57	08/21/89	1.045	0.00	56.30	0.00	0.00
5653	JE	QMG	57	07/06/89	0.794	0.00	46.70	0.00	0.05
5653	JE	R8T	57	08/22/89	0.677	0.00	49.00	0.00 >	4.30

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5653	PT	QNG	57	07/06/89	0.786	0.00	14.60	0.00	0.00
5653	PT	R9Q	57	08/22/89	0.544	0.00	10.90	0.00 >	0.02
5653	SF	QN4	57	07/06/89	1.104	9.39	15.00	1.60 >	10.87
5653	SF	R9F	57	08/22/89	0.738	0.00	7.38	0.00 >	2.91
5653	VE	QMS	57	07/07/89	0.867	0.00	320.00	0.00	0.00
5653	YF	QM4	57	07/03/89	1.011	0.00	34.60	0.00	0.00
5653	YF	R8I	57	08/21/89	1.125	0.00	10.60	0.00	0.00
5654	JE	QMH	57	07/06/89	0.722	0.00 >	320.00	0.00 >	4.79
5654	JE	R76	57	08/16/89	0.820	0.00 >	1000.00	0.00 >	3.31
5654	PT	QNH	57	07/06/89	0.790	0.00 >	320.00	0.00 >	5.37
5654	PT	R89	57	08/16/89	0.766	0.00 >	1000.00	0.00 >	0.00
5654	SF	QN5	57	07/06/89	1.152	0.00 >	320.00	0.00 >	0.10
5654	SF	R7W	57	08/16/89	0.699	0.00 >	1000.00	0.00	0.00
5654	VE	QMT	57	07/07/89	0.795	0.00 >	320.00	0.00	0.00
5654	VE	R7J	57	08/18/89	1.039	0.00 >	1000.00	0.00	0.00
5654	YF	QM5	57	07/03/89	1.044	0.00 >	320.00	0.00 >	2.81
5654	YF	R6T	57	08/15/89	1.120	0.00 >	1000.00	0.00	0.00
5655	JE	QMH	57	07/06/89	0.722	0.00	55.00	0.00	2.40
5655	PT	QNH	57	07/06/89	0.790	0.00	57.00	0.00	3.88
5655	SF	QN5	57	07/06/89	1.152	0.00	53.00	0.00 >	0.50
5655	VE	QMT	57	07/07/89	0.795	0.00	37.50	0.00	0.00
5655	YF	QM5	57	07/03/89	1.044	0.00	21.70	0.00	0.32
5656	JE	QMI	57	07/06/89	0.744	0.00	111.00	0.00	3.31
5656	PT	QNI	57	07/06/89	0.787	0.00	112.00	0.00	0.92
5656	SF	QN6	57	07/06/89	1.293	0.00	125.00	0.00 >	0.07
5656	VE	QMU	57	07/07/89	1.014	0.00	129.00	0.00	0.00
5656	YF	QM6	57	07/03/89	0.967	0.00	95.00	0.00	0.10
5657	JE	QMI	57	07/06/89	0.744	0.00	166.00	0.00	2.22
5657	PT	QNI	57	07/06/89	0.787	0.00	175.00	0.00 >	1.55
5657	SF	QN6	57	07/06/89	1.293	0.00	180.00	0.00 >	0.53
5657	VE	QMU	57	07/07/89	1.014	0.00	67.50	0.00	0.00
5657	YF	QM6	57	07/03/89	0.967	0.00	217.00	0.00	0.40
5658	JE	QMJ	57	07/06/89	0.790	0.00	90.60	0.00	5.41
5658	PT	QNJ	57	07/06/89	0.787	0.00	173.00	0.00	1.77
5658	SF	QN7	57	07/06/89	1.101	0.00	200.00	0.00	0.00
5658	VE	QMV	57	07/07/89	0.989	0.00	199.00	0.00	0.09
5658	YF	QM7	57	07/03/89	1.135	0.00	215.00	0.00	0.46
5660	JE	QO3	57	07/07/89	0.671	0.00	154.00	0.00	0.60
5660	PT	QP3	57	07/07/89	0.643	0.00	125.00	0.00 >	3.80
5660	SF	QOR	57	07/06/89	1.094	0.00	100.00	0.00	0.00
5660	VE	ROU	57	08/04/89	1.151	0.00 >	320.00	0.00	0.00
5660	YF	QNR	57	07/06/89	0.931	0.00	90.30	0.00	0.00
5661	JE	QO4	57	07/07/89	0.774	0.00 >	320.00	0.00	3.79
5661	PT	QP4	57	07/07/89	0.657	0.00 >	320.00	0.00	0.20
5661	SF	QOS	57	07/06/89	1.145	0.00	91.50	0.00	0.00
5661	VE	ROV	57	08/04/89	1.245	0.00	33.70	0.00	0.00
5661	YF	QNS	57	07/06/89	0.905	0.00 >	320.00	0.00	0.00
5662	JE	QO4	57	07/07/89	0.774	0.00	53.20	0.00	2.25
5662	PT	QP4	57	07/07/89	0.657	0.00	58.10	0.00	0.00
5662	SF	QOS	57	07/06/89	1.145	0.00	27.10	0.00	0.00
5662	VE	ROV	57	08/04/89	1.245	0.00	147.00	0.00	0.00
5662	YF	QNS	57	07/06/89	0.905	0.00	31.20	0.00	0.00
5663	JE	QO5	57	07/07/89	0.700	0.00	253.00	0.00 >	4.09
5663	PT	QP5	57	07/07/89	0.680	0.00	171.00	0.00	0.12
5663	SF	QOT	57	07/06/89	1.045	0.00	79.20	0.00	0.10
5663	VE	ROW	57	08/04/89	1.273	0.00 >	320.00	0.00	0.00
5663	YF	QNT	57	07/06/89	0.887	0.00	201.00	0.00	0.00
5664	JE	QO5	57	07/07/89	0.700	0.00 >	320.00	0.00	1.40
5664	PT	QP5	57	07/07/89	0.680	0.00 >	320.00	0.00	1.60
5664	SF	QOT	57	07/06/89	1.045	0.00 >	320.00	0.00	1.03
5664	VE	ROW	57	08/04/89	1.273	0.00	320.00	0.00	0.00
5664	YF	QNT	57	07/06/89	0.887	0.00 >	320.00	0.00	0.00
5665	JE	QO6	57	07/07/89	0.705	0.00 >	320.00	0.00	1.60
5665	PT	QP6	57	07/07/89	0.694	0.00 >	320.00	0.00	1.63
5665	SF	QOU	57	07/06/89	1.089	0.00	286.00	0.00	2.29
5665	VE	ROX	57	08/04/89	1.253	0.00 >	320.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	TC 50	TC 25	SI	TAI
5665	YF	QNU	57	07/06/89	0.825	0.00	> 320.00	0.00	> 0.10
5666	JE	QO6	57	07/07/89	0.705	0.00	> 320.00	0.00	0.40
5666	PT	QP6	57	07/07/89	0.694	0.00	> 320.00	0.00	> 2.90
5666	SF	QOU	57	07/06/89	1.089	0.00	258.00	0.00	1.40
5666	VE	ROX	57	08/04/89	1.253	0.00	> 320.00	0.00	0.00
5666	YF	QNU	57	07/06/89	0.825	0.00	> 320.00	0.00	0.00
5667	JE	QO7	57	07/07/89	0.805	0.00	320.00	0.00	2.34
5667	PT	QP7	57	07/07/89	0.725	0.00	> 320.00	0.00	> 2.17
5667	SF	QOV	57	07/06/89	1.155	0.00	26.70	0.00	0.00
5667	VE	ROY	57	08/04/89	1.175	0.00	> 320.00	0.00	0.00
5667	YF	QNV	57	07/06/89	0.895	0.00	192.00	0.00	0.00
5668	JE	QRE	57	07/11/89	0.785	0.00	43.30	0.00	> 0.84
5668	PT	QSE	57	07/11/89	0.954	0.00	27.00	0.00	> 0.26
5668	SF	QS2	57	07/12/89	1.045	0.00	0.96	0.00	0.00
5668	VE	QRQ	57	07/14/89	1.307	0.00	175.00	0.00	0.31
5668	YF	QR2	57	07/10/89	0.919	0.00	74.50	0.00	0.00
5669	JE	QRF	57	07/11/89	0.841	0.00	> 320.00	0.00	> 1.81
5669	PT	QSF	57	07/11/89	0.861	0.00	> 320.00	0.00	> 2.38
5669	SF	QS3	57	07/12/89	0.924	0.00	> 320.00	0.00	5.32
5669	VE	QRR	57	07/14/89	1.313	0.00	296.00	0.00	2.20
5669	YF	QR3	57	07/10/89	0.939	0.00	> 320.00	0.00	> 0.10
5670	JE	QRF	57	07/11/89	0.841	0.00	> 320.00	0.00	0.00
5670	PT	QSF	57	07/11/89	0.861	0.00	> 320.00	0.00	0.60
5670	SF	QS3	57	07/12/89	0.924	0.00	210.00	0.00	0.00
5670	VE	QRR	57	07/14/89	1.313	0.00	0.96	0.00	0.11
5670	YF	QR3	57	07/10/89	0.939	0.00	> 320.00	0.00	0.00
5671	JE	QRG	57	07/11/89	0.774	0.00	24.70	0.00	0.00
5671	PT	QSG	57	07/11/89	0.781	0.00	29.30	0.00	> 0.23
5671	SF	QS4	57	07/12/89	1.005	0.00	24.20	0.00	0.03
5671	VE	QRS	57	07/14/89	1.248	0.00	> 320.00	0.00	0.51
5671	YF	QR4	57	07/10/89	0.928	0.00	77.90	0.00	0.00
5672	JE	QRG	57	07/11/89	0.774	0.00	3.20	0.00	0.00
5672	PT	QSG	57	07/11/89	0.781	0.00	> 320.00	0.00	> 2.40
5672	SF	QS4	57	07/12/89	1.005	0.00	> 320.00	0.00	0.00
5672	VE	QRS	57	07/14/89	1.248	0.00	> 320.00	0.00	0.40
5672	YF	QR4	57	07/10/89	0.928	0.00	> 320.00	0.00	0.00
5673	JE	QRH	57	07/11/89	0.821	0.00	106.00	0.00	0.00
5673	PT	QSH	57	07/11/89	0.756	0.00	38.30	0.00	0.00
5673	SF	QS5	57	07/12/89	1.033	0.00	46.40	0.00	0.00
5673	VE	QRT	57	07/14/89	1.084	0.00	27.70	0.00	> 0.20
5673	YF	QR5	57	07/10/89	0.926	0.00	46.60	0.00	0.00
5674	JE	QRH	57	07/11/89	0.821	0.00	168.00	0.00	0.00
5674	PT	QSH	57	07/11/89	0.756	0.00	107.00	0.00	> 0.30
5674	SF	QS5	57	07/12/89	1.033	0.00	107.00	0.00	0.00
5674	VE	QRT	57	07/14/89	1.084	0.00	180.00	0.00	3.05
5674	YF	QR5	57	07/10/89	0.926	0.00	174.00	0.00	> 0.08
5675	JE	QRI	57	07/11/89	0.775	0.00	81.50	0.00	0.00
5675	PT	QSI	57	07/11/89	0.726	0.00	3.77	0.00	0.00
5675	SF	QS6	57	07/12/89	0.941	0.00	47.40	0.00	0.00
5675	VE	QRU	57	07/14/89	1.162	0.00	178.00	0.00	0.00
5675	YF	QR6	57	07/10/89	0.862	0.00	51.40	0.00	0.00
5676	JE	QRJ	57	07/11/89	0.811	0.00	10.00	0.00	0.00
5676	PT	QSJ	57	07/11/89	0.605	0.00	6.34	0.00	0.00
5676	SF	QS7	57	07/12/89	0.724	0.00	16.20	0.00	0.00
5676	VE	QRV	57	07/14/89	1.423	0.00	15.20	0.00	0.00
5676	YF	QR7	57	07/10/89	0.940	0.00	47.50	0.00	0.00
5677	JE	QRI	57	07/11/89	0.775	0.00	151.00	0.00	0.00
5677	PT	QSI	57	07/11/89	0.726	0.00	111.00	0.00	> 1.47
5677	SF	QS6	57	07/12/89	0.941	0.00	139.00	0.00	2.65
5677	VE	QRU	57	07/14/89	1.162	0.00	147.00	0.00	0.00
5677	YF	QR6	57	07/10/89	0.862	0.00	177.00	0.00	0.00
5678	JE	QSW	57	07/18/89	0.866	0.00	> 320.00	0.00	0.15
5678	JE	R76	57	08/16/89	0.820	0.00	128.00	0.00	0.00
5678	PT	QTK	57	07/19/89	0.702	0.00	111.00	0.00	0.00
5678	PT	R89	57	08/16/89	0.766	0.00	149.00	0.00	0.00
5678	SF	QTW	57	07/18/89	1.173	288.00	218.00	0.76	> 9.02

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5678	SF	R7W	57	08/16/89	0.699	64.50	173.00	2.69	18.63
5678	VE	QT8	57	07/17/89	1.150	0.00	> 320.00	0.00	0.00
5678	VE	R7J	57	08/18/89	1.039	0.00	304.00	0.00	> 0.71
5678	YF	QSK	57	07/17/89	1.088	0.00	> 320.00	0.00	> 0.36
5678	YF	R6T	57	08/15/89	1.120	0.00	168.00	0.00	> 0.00
5679	JE	QSX	57	07/18/89	1.062	0.00	16.30	0.00	> 0.59
5679	JE	R8T	57	08/22/89	0.677	0.00	23.50	0.00	> 0.41
5679	PT	QTL	57	07/19/89	0.747	0.00	40.70	0.00	> 0.00
5679	PT	R9Q	57	08/22/89	0.544	0.00	35.50	0.00	> 0.00
5679	SF	QTX	57	07/18/89	0.976	0.00	23.80	0.00	> 0.00
5679	SF	R9F	57	08/22/89	0.738	0.00	42.70	0.00	> 0.90
5679	VE	QT9	57	07/17/89	1.122	0.00	18.60	0.00	> 0.00
5679	YF	QSL	57	07/17/89	1.202	0.00	44.00	0.00	> 0.00
5679	YF	R8I	57	08/21/89	1.125	0.00	40.70	0.00	> 0.00
5681	JE	QSX	57	07/18/89	1.062	0.00	2.47	0.00	> 0.00
5681	JE	R8U	57	08/22/89	0.702	0.00	26.50	0.00	> 2.40
5681	PT	QTL	57	07/19/89	0.747	0.00	5.92	0.00	> 0.00
5681	PT	R9R	57	08/22/89	0.502	0.00	37.80	0.00	> 1.61
5681	SF	QTX	57	07/18/89	0.976	0.00	10.90	0.00	> 2.70
5681	SF	R9G	57	08/22/89	0.903	0.00	16.50	0.00	> 9.03
5681	VE	QT9	57	07/17/89	1.122	0.00	14.30	0.00	> 0.00
5681	YF	QSL	57	07/17/89	1.202	0.00	11.40	0.00	> 0.00
5681	YF	R8J	57	08/21/89	1.066	0.00	41.00	0.00	> 0.08
5682	JE	QSY	57	07/18/89	1.002	0.00	0.86	0.00	> 0.00
5682	PT	QTM	57	07/19/89	0.700	0.00	33.50	0.00	> 0.31
5682	SF	QTY	57	07/18/89	1.062	0.00	39.80	0.00	> 0.00
5682	VE	QTA	57	07/17/89	1.072	0.00	30.30	0.00	> 0.00
5682	YF	QSM	57	07/17/89	1.257	0.00	35.50	0.00	> 0.01
5683	JE	QSY	57	07/18/89	1.002	0.00	4.05	0.00	> 0.00
5683	JE	R8U	57	08/22/89	0.702	0.00	16.00	0.00	> 6.80
5683	PT	QTM	57	07/19/89	0.700	0.00	6.50	0.00	> 0.00
5683	PT	R9R	57	08/22/89	0.502	0.00	15.60	0.00	> 0.58
5683	SF	QTY	57	07/18/89	1.062	0.00	12.80	0.00	> 0.99
5683	SF	R9G	57	08/22/89	0.903	0.00	> 32.00	0.00	> 2.60
5683	VE	QTA	57	07/17/89	1.072	0.00	22.80	0.00	> 0.00
5683	YF	QSM	57	07/17/89	1.257	0.00	7.03	0.00	> 0.18
5683	YF	R8J	57	08/21/89	1.066	0.00	15.00	0.00	> 0.04
5684	JE	QSZ	57	07/18/89	0.935	0.00	5.03	0.00	> 0.00
5684	PT	QTN	57	07/19/89	0.676	0.00	48.10	0.00	> 0.23
5684	SF	QTZ	57	07/18/89	1.086	0.00	17.70	0.00	> 0.00
5684	VE	QTB	57	07/17/89	1.095	0.00	26.20	0.00	> 0.00
5684	YF	QSN	57	07/17/89	1.235	0.00	60.50	0.00	> 0.86
5685	JE	QSZ	57	07/18/89	0.935	0.00	3.04	0.00	> 0.00
5685	PT	QTN	57	07/19/89	0.676	0.00	> 320.00	0.00	> 0.00
5685	SF	QTZ	57	07/18/89	1.086	0.00	> 320.00	0.00	> 0.00
5685	VE	QTB	57	07/17/89	1.095	0.00	320.00	0.00	> 0.00
5685	YF	QSN	57	07/17/89	1.235	0.00	> 320.00	0.00	> 0.00
5686	JE	QTO	57	07/18/89	0.818	0.00	1.67	0.00	> 0.00
5686	PT	QTO	57	07/19/89	0.686	0.00	8.64	0.00	> 0.00
5686	SF	QUO	57	07/18/89	0.994	0.00	14.50	0.00	> 0.00
5686	VE	QTC	57	07/17/89	1.072	0.00	2.26	0.00	> 0.00
5686	YF	QSO	57	07/17/89	1.215	0.00	14.90	0.00	> 0.01
5688	JE	QTO	57	07/18/89	0.818	0.00	247.00	0.00	> 0.00
5688	PT	QTO	57	07/19/89	0.686	0.00	100.00	0.00	> 0.00
5688	SF	QUO	57	07/18/89	0.994	0.00	105.00	0.00	> 0.07
5688	VE	QTC	57	07/17/89	1.072	0.00	110.00	0.00	> 0.00
5688	YF	QSO	57	07/17/89	1.215	0.00	241.00	0.00	> 0.00
5689	JE	QT1	57	07/18/89	0.640	0.00	3.00	0.00	> 0.00
5689	PT	QTP	57	07/19/89	0.709	0.00	> 320.00	0.00	> 0.00
5689	SF	QU1	57	07/18/89	1.133	0.00	> 320.00	0.00	> 0.00
5689	YF	QSP	57	07/17/89	1.218	0.00	> 320.00	0.00	> 0.00
5690	JE	QT1	57	07/18/89	0.640	0.00	23.20	0.00	> 0.00
5690	JE	R77	57	08/16/89	0.754	0.00	26.50	0.00	> 0.00
5690	PT	QTP	57	07/19/89	0.709	0.00	88.70	0.00	> 0.00
5690	PT	R8A	57	08/16/89	0.753	0.00	111.00	0.00	> 0.00
5690	SF	QU1	57	07/18/89	1.133	0.00	63.80	0.00	> 4.11

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5690	SF	R7X	57	08/16/89	0.653	0.00	121.00	0.00	3.04
5690	VE	QTD	57	07/17/89	0.833	306.00	62.90	0.21 >	0.10
5690	VE	R7K	57	08/18/89	1.091	0.00	73.50	0.00	0.00
5690	YF	QSP	57	07/17/89	1.218	0.00	81.70	0.00	0.00
5690	YF	R6U	57	08/15/89	1.114	0.00	83.00	0.00	0.00
5691	JE	QT2	57	07/18/89	0.760	0.00 >	320.00	0.00	1.00
5691	JE	R77	57	08/16/89	0.754	0.00	249.00	0.00 >	4.80
5691	PT	QTQ	57	07/19/89	0.548	56.60 >	320.00 >	5.66 >	28.90
5691	PT	R8A	57	08/16/89	0.753	0.00	188.00	0.00	0.88
5691	SF	QU2	57	07/18/89	1.129	0.00	210.00	0.00 >	2.20
5691	SF	R7X	57	08/16/89	0.653	0.00	281.00	0.00	5.25
5691	VE	QTE	57	07/17/89	1.056	0.00	100.00	0.00	0.00
5691	VE	R7K	57	08/18/89	1.091	200.00	469.00	2.35	11.52
5691	YF	QSQ	57	07/17/89	0.989	144.00 >	320.00 >	2.22 >	14.36
5691	YF	R6U	57	08/15/89	1.114	254.00	206.00	0.81	3.01
5692	JE	QT2	57	07/18/89	0.760	0.00 >	320.00	0.00	0.00
5692	PT	QTQ	57	07/19/89	0.548	0.00 >	320.00	0.00 >	5.91
5692	SF	QU2	57	07/18/89	1.129	0.00	320.00	0.00	0.00
5692	VE	QTE	57	07/17/89	1.056	0.00 >	320.00	0.00	0.00
5692	YF	QSQ	57	07/17/89	0.989	0.00 >	320.00	0.00 >	0.20
5693	JE	QT3	57	07/18/89	0.816	0.00	196.00	0.00	0.71
5693	JE	R78	57	08/16/89	0.625	0.00	91.10	0.00	1.27
5693	PT	QTR	57	07/19/89	0.660	0.00	162.00	0.00	0.77
5693	PT	R8B	57	08/16/89	0.762	0.00	118.00	0.00	0.00
5693	SF	QU3	57	07/18/89	1.002	141.00	274.00	1.94 >	10.84
5693	SF	R7Y	57	08/16/89	0.611	0.00	72.00	0.00	0.00
5693	VE	QTF	57	07/17/89	0.996	0.00	0.86	0.00	0.00
5693	VE	R7L	57	08/18/89	0.962	0.00	338.00	0.00	0.59
5693	YF	QSR	57	07/17/89	1.155	0.00	176.00	0.00	0.72
5693	YF	R6V	57	08/15/89	1.114	0.00	84.30	0.00	0.00
5694	JE	QT3	57	07/18/89	0.816	0.00	72.80	0.00	0.00
5694	JE	R80	57	08/22/89	0.610	0.00	83.00	0.00 >	0.42
5694	PT	QTR	57	07/19/89	0.660	0.00	29.60	0.00	0.00
5694	PT	R9L	57	08/22/89	0.551	0.00	72.80	0.00	0.00
5694	SF	QU3	57	07/18/89	1.002	0.00	75.70	0.00	2.80
5694	SF	R9A	57	08/22/89	1.002	0.00	59.20	0.00	3.73
5694	VE	QTF	57	07/17/89	0.996	0.00	82.10	0.00	0.00
5694	VE	R8Z	57	08/21/89	1.003	0.00	208.00	0.00	0.49
5694	YF	QSR	57	07/17/89	1.155	0.00	55.50	0.00	0.00
5694	YF	R8D	57	08/21/89	1.117	0.00	41.70	0.00	0.00
5695	JE	QT4	57	07/18/89	0.800	1.79	6.41	3.58 >	16.14
5695	JE	R8V	57	08/22/89	0.605	21.70 >	32.00 >	1.47 >	18.09
5695	PT	QTS	57	07/18/89	0.942	0.00	5.52	0.00 >	4.11
5695	PT	R9S	57	08/22/89	0.504	0.00 >	32.00	0.00 >	2.96
5695	SF	QU4	57	07/18/89	1.011	0.00	6.60	0.00	0.00
5695	SF	R9H	57	08/22/89	0.810	0.00 >	32.00	0.00 >	3.63
5695	VE	QTG	57	07/17/89	1.092	0.00	17.50	0.00	0.00
5695	YF	QSS	57	07/17/89	1.074	0.00	7.06	0.00	0.09
5695	YF	R8K	57	08/21/89	1.025	0.00 >	32.00	0.00 >	0.65
5696	JE	QT4	57	07/18/89	0.800	0.00	1.60	0.00 >	1.08
5696	JE	R8V	57	08/22/89	0.605	0.00 >	10.00	0.00	0.00
5696	PT	QTS	57	07/18/89	0.942	0.00	1.43	0.00	0.00
5696	PT	R9S	57	08/22/89	0.504	0.00	8.09	0.00 >	0.07
5696	SF	QU4	57	07/18/89	1.011	0.00	1.65	0.00	0.00
5696	SF	R9H	57	08/22/89	0.810	0.00 >	10.00	0.00 >	2.11
5696	VE	QTG	57	07/17/89	1.092	0.00	4.66	0.00	0.00
5696	YF	QSS	57	07/17/89	1.074	0.00	4.15	0.00	0.00
5696	YF	R8K	57	08/21/89	1.025	0.00 >	10.00	0.00	0.00
5697	JE	QT5	57	07/18/89	0.806	0.00 <	1.00	0.00	0.00
5697	JE	R8W	57	08/22/89	0.573	0.00 >	10.00	0.00 >	6.71
5697	PT	QTT	57	07/18/89	0.723	0.00 <	1.00	0.00	0.00
5697	PT	R9T	57	08/22/89	0.514	0.00 >	10.00	0.00 >	2.88
5697	SF	QU5	57	07/18/89	0.592	0.00 <	1.00	0.00	0.00
5697	SF	R9I	57	08/22/89	0.772	0.00 >	10.00	0.00 >	6.78
5697	VE	QTH	57	07/17/89	0.568	0.00	2.57	0.00 >	0.28
5697	YF	QST	57	07/17/89	0.916	0.00	1.59	0.00 >	0.02

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SJ	TAI
5697	YF	R8L	57	08/21/89	1.085	0.00 >	10.00	0.00 >	0.01
5699	JE	QT5	57	07/13/89	0.806	0.00 <	1.00	0.00	0.00
5699	JE	R8W	57	08/22/89	0.573	0.00 >	32.00	0.00 >	2.50
5699	PT	QTT	57	07/18/89	0.723	0.00	2.20	0.00 >	1.22
5699	PT	R9T	57	08/22/89	0.514	0.00 >	32.00	0.00 >	2.40
5699	SF	QU5	57	07/18/89	0.592	0.00	2.15	0.00	0.00
5699	SF	R9I	57	08/22/89	0.772	0.00 >	32.00	0.00 >	0.97
5699	VE	QTH	57	07/17/89	0.568	0.00	15.50	0.00	0.00
5699	YF	QST	57	07/17/89	0.916	0.00	2.57	0.00 >	0.01
5699	YF	R8L	57	08/21/89	1.085	0.00 >	32.00	0.00	0.00
5700	JE	QT6	57	07/18/89	0.784	0.00	94.30	0.00	0.00
5700	PT	QTU	57	07/19/89	0.642	0.00	199.00	0.00	0.00
5700	SF	QU6	57	07/18/89	0.963	0.00	144.00	0.00	0.00
5700	VE	QTI	57	07/17/89	0.708	0.00	300.00	0.00	0.00
5700	YF	QSU	57	07/17/89	1.068	0.00	225.00	0.00	0.12
5701	JE	QT6	57	07/18/89	0.784	0.00 >	320.00	0.00	0.00
5701	PT	QTU	57	07/19/89	0.642	0.00 >	320.00	0.00	0.47
5701	SF	QU6	57	07/18/89	0.963	0.00	240.00	0.00 >	8.62
5701	VE	QTI	57	07/17/89	0.708	0.00	287.00	0.00	0.00
5701	YF	QSU	57	07/17/89	1.068	0.00 >	320.00	0.00	0.07
5702	JE	QT7	57	07/18/89	0.853	0.00	172.00	0.00	0.00
5702	PT	QTV	57	07/19/89	0.670	0.00	168.00	0.00	0.14
5702	SF	QU7	57	07/18/89	0.979	0.00	169.00	0.00 >	1.70
5702	VE	QTJ	57	07/17/89	0.628	0.00	100.00	0.00 >	0.42
5702	YF	QSV	57	07/17/89	1.195	0.00	179.00	0.00	0.24
5703	JE	QUD	57	07/19/89	0.949	0.00	62.50	0.00	0.00
5703	PT	QUN	57	07/19/89	0.899	0.00	68.00	0.00	0.00
5703	SF	QUS	57	07/19/89	1.265	0.00	51.90	0.00	0.00
5703	VE	QUI	57	07/21/89	1.059	0.00	69.30	0.00	0.00
5703	YF	QU8	57	07/17/89	1.072	0.00	83.70	0.00	0.00
5704	JE	QUE	57	07/19/89	0.993	0.00	3.20	0.00	0.00
5704	JE	R8P	57	08/22/89	0.682	0.00	527.00	0.00 >	0.20
5704	PT	QUO	57	07/19/89	0.843	0.00 >	320.00	0.00 >	4.24
5704	PT	R9M	57	08/22/89	0.517	0.00	554.00	0.00	0.83
5704	SF	QUT	57	07/19/89	1.185	0.00	302.00	0.00	0.00
5704	SF	R9B	57	08/22/89	0.984	0.00	420.00	0.00 >	0.96
5704	VE	QUJ	57	07/21/89	0.926	0.00 >	320.00	0.00	0.00
5704	VE	R90	57	08/21/89	1.051	0.00	437.00	0.00 >	0.01
5704	YF	QU9	57	07/17/89	1.018	0.00 >	320.00	0.00 >	0.32
5704	YF	R8E	57	08/21/89	0.973	0.00	547.00	0.00 >	0.13
5705	JE	QUE	57	07/19/89	0.993	0.00	1.55	0.00	0.00
5705	JE	R8X	57	08/22/89	0.691	0.00	3.39	0.00 >	1.78
5705	PT	QUO	57	07/19/89	0.843	0.00	4.69	0.00	0.00
5705	PT	R9U	57	08/22/89	0.545	0.00	4.41	0.00	0.00
5705	SF	QUT	57	07/19/89	1.185	0.00 <	1.00	0.00	0.00
5705	SF	R9J	57	08/22/89	0.802	0.00	4.81	0.00 >	1.01
5705	VE	QUJ	57	07/21/89	0.926	0.00	3.50	0.00	0.00
5705	YF	QU9	57	07/17/89	1.018	0.00	5.66	0.00	0.00
5705	YF	R8M	57	08/21/89	1.136	0.00	2.22	0.00	0.00
5706	JE	QUF	57	07/19/89	0.852	0.00	16.10	0.00	0.00
5706	PT	QUP	57	07/19/89	0.685	0.00	55.60	0.00 >	2.39
5706	SF	QUU	57	07/19/89	1.158	0.00	38.30	0.00	0.00
5706	VE	QUK	57	07/21/89	0.710	0.00	45.60	0.00	0.13
5706	YF	QUA	57	07/17/89	1.032	0.00	55.20	0.00	0.00
5707	JE	QUF	57	07/19/89	0.852	0.00	6.29	0.00	0.00
5707	PT	QUP	57	07/19/89	0.685	0.00	230.00	0.00	0.15
5707	SF	QUU	57	07/19/89	1.158	0.00	49.00	0.00	0.00
5707	VE	QUK	57	07/21/89	0.710	0.00	95.00	0.00	0.10
5707	YF	QUA	57	07/17/89	1.032	0.00	78.50	0.00	0.00
5708	JE	QUG	57	07/19/89	0.851	0.00	24.00	0.00	0.00
5708	PT	QUQ	57	07/19/89	0.891	0.00 >	320.00	0.00	0.00
5708	SF	QUV	57	07/19/89	1.150	0.00	240.00	0.00	0.00
5708	VE	QUL	57	07/21/89	0.685	0.00	21.00	0.00	0.00
5708	YF	QUB	57	07/17/89	1.070	0.00 >	320.00	0.00	0.00
5709	JE	QUG	57	07/19/89	0.851	0.00	5.60	0.00	0.00
5709	PT	QUQ	57	07/19/89	0.891	0.00	188.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5709	SF	QUV	57	07/19/89	1.150	0.00 >	320.00	0.00	0.00
5709	VE	QUL	57	07/21/89	0.685	0.00	26.90	0.00	0.00
5709	YF	QUB	57	07/17/89	1.070	0.00 >	320.00	0.00	0.00
5710	JE	QUH	57	07/19/89	0.899	0.00	14.30	0.00	0.00
5710	PT	QUR	57	07/19/89	0.911	0.00	15.50	0.00	0.00
5710	SF	QUW	57	07/19/89	0.973	0.00	42.00	0.00	0.00
5710	VE	QUM	57	07/21/89	0.461	0.00	22.80	0.00 >	0.10
5710	YF	QUC	57	07/17/89	1.153	0.00	38.40	0.00	0.00
5711	JE	QYP	58	08/01/89	0.624	0.00	92.70	0.00	0.20
5711	JE	S2P	58	10/17/89	0.842	0.00	50.20	0.00	0.00
5711	PT	QZD	58	08/01/89	0.632	0.00	139.00	0.00	2.34
5711	SF	QZP	58	08/01/89	1.201	0.00	32.00	0.00	0.00
5711	SF	S32	58	10/17/89	1.023	0.00	7.03	0.00	0.00
5711	VE	QZ1	58	07/31/89	1.019	0.00	9.58	0.00 >	0.00
5711	VE	RY9	58	10/09/89	1.245	0.00	9.15	0.00	0.00
5711	VV	OGJ	58	10/05/89	1.399	0.00	26.70	0.00	0.00
5711	YF	QYD	58	07/31/89	1.136	0.00	53.30	0.00	0.00
5711	YF	RXW	58	10/09/89	0.908	0.00	37.20	0.00 >	0.14
5712	JE	QYP	58	08/01/89	0.624	0.00	53.00	0.00	0.10
5712	JE	S2Q	58	10/17/89	0.905	0.00	137.00	0.00	0.00
5712	PT	QZD	58	08/01/89	0.632	0.00	116.00	0.00 >	1.68
5712	SF	QZP	58	08/01/89	1.201	0.00	80.60	0.00	0.00
5712	SF	S33	58	10/17/89	0.971	0.00	136.00	0.00	0.00
5712	VE	QZ1	58	07/31/89	1.019	0.00	58.70	0.00	0.00
5712	VE	RYA	58	10/09/89	0.988	0.00	160.00	0.00	1.47
5712	VV	OGJ	58	10/05/89	1.399	0.00	166.00	0.00	0.00
5712	YF	QYD	58	07/31/89	1.136	0.00	71.70	0.00	0.00
5712	YF	RXX	58	10/09/89	0.873	0.00	168.00	0.00 >	0.62
5713	JE	QYQ	58	08/01/89	0.731	0.00	93.20	0.00 >	0.01
5713	PT	QZE	58	08/01/89	0.641	0.00	190.00	0.00	1.44
5713	SF	QZQ	58	08/01/89	1.223	0.00	100.00	0.00	0.00
5713	VE	QZ2	58	07/31/89	0.916	0.00	83.00	0.00	0.00
5713	VV	OGK	58	10/05/89	1.456	0.00	127.00	0.00	0.00
5713	YF	QYE	58	07/31/89	1.137	0.00	172.00	0.00	0.00
5714	JE	QYQ	58	08/01/89	0.731	0.00	2.85	0.00	0.00
5714	JE	RUW	58	10/03/89	0.668	0.00	3.63	0.00 >	4.63
5714	JE	S2Q	58	10/17/89	0.905	0.00	1.79	0.00 >	0.45
5714	PT	QZE	58	08/01/89	0.641	0.00	4.52	0.00	0.00
5714	SF	QZQ	58	08/01/89	1.223	2.06 <	1.00 <	0.48	4.78
5714	SF	RVM	58	10/03/89	0.943	0.00	1.57	0.00	5.98
5714	SF	S33	58	10/17/89	0.971	0.00	1.46	0.00	0.33
5714	VE	QZ2	58	07/31/89	0.916	0.00	3.46	0.00	0.00
5714	VE	RV9	58	10/02/89	1.007	2.54	4.33	1.71	7.15
5714	VE	RYA	58	10/09/89	0.988	1.49	4.53	3.04	20.06
5714	VV	OGK	58	10/05/89	1.456	0.00	3.93	0.00	0.00
5714	YF	QYE	58	07/31/89	1.137	0.00	4.52	0.00	0.00
5714	YF	RUJ	58	10/02/89	0.906	0.00	4.14	0.00	0.00
5714	YF	RXX	58	10/09/89	0.873	0.00	3.70	0.00 >	0.22
5715	JE	QYR	58	08/01/89	0.708	0.00	69.20	0.00 >	0.70
5715	PT	QZF	58	08/01/89	0.622	0.00	92.20	0.00 >	1.70
5715	SF	QZR	58	08/01/89	1.042	0.00	38.60	0.00	0.00
5715	VE	QZ3	58	07/31/89	0.971	0.00	41.70	0.00	0.00
5715	VV	OGL	58	10/05/89	1.285	0.00	90.30	0.00	0.00
5715	YF	QYF	58	07/31/89	0.964	0.00	108.00	0.00	1.02
5716	JE	QYR	58	08/01/89	0.708	0.00	5.96	0.00 >	0.20
5716	JE	RWE	58	10/04/89	0.767	0.00	6.60	0.00 >	6.96
5716	PT	QZF	58	08/01/89	0.622	0.00	11.80	0.00 >	1.80
5716	PT	RX4	58	10/04/89	0.662	0.00	2.65	0.00	0.00
5716	SF	QZR	58	08/01/89	1.042	0.00	4.38	0.00	0.00
5716	SF	RWR	58	10/04/89	0.750	0.00	9.20	0.00 >	0.15
5716	VE	QZ3	58	07/31/89	0.971	0.00	6.01	0.00	0.00
5716	VE	RYK	58	10/09/89	0.905	0.00	5.69	0.00	0.30
5716	VV	OGL	58	10/05/89	1.285	0.00	10.60	0.00	0.00
5716	YF	QYF	58	07/31/89	0.964	0.00 <	1.00	0.00	0.00
5716	YF	RW1	58	10/03/89	0.585	0.00	4.31	0.00 >	1.71
5717	JE	QYS	58	08/01/89	0.646	0.00	2.96	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5717	PT	QZG	58	08/01/89	0.582	0.00	10.00	0.00	0.00
5717	SF	QZS	58	08/01/89	1.080	0.00	3.20	0.00	0.00
5717	VE	QZ4	58	07/31/89	1.227	0.00	7.67	0.00	0.00
5717	VV	OGM	58	10/05/89	1.313	0.00	2.06	0.00	0.00
5717	YF	QYG	58	07/31/89	1.128	0.00	5.26	0.00	0.00
5718	JE	QYS	58	08/01/89	0.646	0.00	> 320.00	0.00	0.13
5718	PT	QZG	58	08/01/89	0.582	0.00	> 320.00	0.00	0.00
5718	SF	QZS	58	08/01/89	1.020	0.00	172.00	0.00	0.41
5718	VE	QZ4	58	07/31/89	1.227	0.00	224.00	0.00	0.00
5718	VV	OIO	58	11/02/89	1.311	0.00	> 32.00	0.00	0.00
5718	YF	QYG	58	07/31/89	1.128	0.00	310.00	0.00	0.00
5719	JE	QYT	58	08/01/89	0.551	0.00	15.50	0.00	0.00
5719	JE	RWF	58	10/04/89	0.760	0.00	19.20	0.00	> 1.20
5719	PT	QZH	58	08/01/89	0.649	0.00	14.40	0.00	0.09
5719	PT	RX5	58	10/04/89	0.647	0.00	17.00	0.00	> 1.10
5719	SF	QZT	58	08/01/89	1.034	0.00	45.70	0.00	0.00
5719	SF	RWS	58	10/04/89	0.805	0.00	18.00	0.00	0.00
5719	VE	QZ5	58	07/31/89	1.153	0.00	14.20	0.00	0.00
5719	VE	RYL	58	10/09/89	0.863	0.00	14.90	0.00	0.00
5719	VV	OGN	58	10/05/89	1.285	0.00	14.30	0.00	1.18
5719	YF	QYH	58	07/31/89	1.126	0.00	11.90	0.00	0.00
5719	YF	RW2	58	10/03/89	0.633	0.00	15.50	0.00	0.48
5720	JE	QYT	58	08/01/89	0.551	0.00	3.94	0.00	0.00
5720	JE	RWF	58	10/04/89	0.760	0.00	> 10.00	0.00	0.00
5720	PT	QZH	58	08/01/89	0.649	0.00	4.02	0.00	> 0.76
5720	PT	RX5	58	10/04/89	0.647	0.00	> 10.00	0.00	0.12
5720	SF	QZT	58	08/01/89	1.034	0.00	4.36	0.00	0.00
5720	SF	RWS	58	10/04/89	0.805	0.00	> 10.00	0.00	0.25
5720	VE	QZ5	58	07/31/89	1.153	0.00	2.85	0.00	0.00
5720	VE	RYL	58	10/09/89	0.863	0.00	> 10.00	0.00	0.00
5720	VV	OGN	58	10/05/89	1.285	0.00	13.00	0.00	0.00
5720	YF	QYH	58	07/31/89	1.126	0.00	4.53	0.00	0.00
5720	YF	RW2	58	10/03/89	0.633	0.00	> 10.00	0.00	0.00
5721	JE	QYU	58	08/01/89	0.715	0.00	2.27	0.00	0.00
5721	JE	RWG	58	10/04/89	0.907	0.00	1.00	0.00	0.00
5721	PT	QZI	58	08/01/89	0.651	0.00	5.53	0.00	0.00
5721	PT	RX6	58	10/04/89	0.616	0.00	7.73	0.00	> 3.12
5721	SF	QZU	58	08/01/89	1.040	0.00	4.90	0.00	0.00
5721	SF	RWT	58	10/04/89	0.793	0.00	19.60	0.00	> 0.68
5721	VE	QZ6	58	07/31/89	1.161	0.00	5.32	0.00	0.00
5721	VE	RYM	58	10/09/89	0.899	0.00	7.73	0.00	0.00
5721	VV	OIP	58	11/02/89	1.406	0.00	0.71	0.00	0.00
5721	YF	QYI	58	07/31/89	1.109	0.00	3.91	0.00	0.00
5721	YF	RW3	58	10/03/89	0.724	0.00	4.60	0.00	0.00
5722	JE	QYU	58	08/01/89	0.715	0.00	8.64	0.00	0.00
5722	JE	RWG	58	10/04/89	0.907	0.00	> 3.20	0.00	0.00
5722	PT	QZI	58	08/01/89	0.651	0.00	11.60	0.00	0.00
5722	PT	RX6	58	10/04/89	0.616	0.00	> 3.20	0.00	> 3.31
5722	SF	QZU	58	08/01/89	1.040	0.00	14.40	0.00	1.00
5722	SF	RWT	58	10/04/89	0.793	0.00	> 3.20	0.00	> 1.51
5722	VE	QZ6	58	07/31/89	1.161	0.00	17.30	0.00	1.14
5722	VE	RYM	58	10/09/89	0.899	0.00	> 3.20	0.00	0.00
5722	YF	QYI	58	07/31/89	1.109	0.00	11.40	0.00	0.00
5722	YF	RW3	58	10/03/89	0.724	0.00	> 3.20	0.00	0.49
5723	JE	QYV	58	08/01/89	0.823	0.00	1.31	0.00	0.00
5723	JE	RWH	58	10/04/89	0.883	0.00	0.66	0.00	0.00
5723	PT	QZJ	58	08/01/89	0.636	0.00	2.62	0.00	> 0.04
5723	PT	RX7	58	10/04/89	0.656	0.00	1.73	0.00	0.00
5723	SF	QZV	58	08/01/89	0.953	0.00	1.43	0.00	0.00
5723	SF	RWU	58	10/04/89	0.820	0.00	0.86	0.00	0.00
5723	VE	QZ7	58	07/31/89	1.158	0.00	1.54	0.00	0.00
5723	VE	RYN	58	10/09/89	0.813	0.00	4.92	0.00	1.60
5723	VV	OGP	58	10/05/89	1.342	0.00	8.54	0.00	0.00
5723	YF	QYJ	58	07/31/89	1.154	0.00	1.40	0.00	0.00
5723	YF	RW4	58	10/03/89	0.679	0.00	1.90	0.00	0.00
5724	JE	QYV	58	08/01/89	0.823	0.00	228.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5724	JE	S2R	58	10/17/89	0.868	0.00	64.40	0.00 >	0.05
5724	PT	QZJ	58	08/01/89	0.636	0.00	222.00	0.00	8.38
5724	SF	QZV	58	08/01/89	0.953	0.00	207.00	0.00 >	2.97
5724	SF	S34	58	10/17/89	1.040	0.00	43.30	0.00	0.00
5724	VE	QZ7	58	07/31/89	1.158	0.00	126.00	0.00	0.00
5724	VE	RYB	58	10/09/89	1.055	204.00 >	1000.00 >	4.90 >	19.40
5724	VV	OIQ	58	11/02/89	1.344	0.00	16.00	0.00	0.00
5724	YF	QYJ	58	07/31/89	1.154	0.00	216.00	0.00	0.00
5724	YF	RXY	58	10/09/89	0.857	0.00	10.00	0.00 >	1.40
5725	JE	QYW	58	08/01/89	0.772	0.00	176.00	0.00	0.04
5725	PT	QZK	58	08/01/89	0.674	0.00	189.00	0.00	0.23
5725	SF	QZW	58	08/01/89	0.936	0.00	152.00	0.00	3.75
5725	VE	QZ8	58	07/31/89	1.100	0.00	139.00	0.00	0.00
5725	VV	OGQ	58	10/05/89	1.262	0.00	169.00	0.00	0.00
5725	YF	QYK	58	07/31/89	1.057	0.00	202.00	0.00	0.30
5726	JE	R08	58	08/02/89	0.822	0.00	5.92	0.00	0.00
5726	PT	ROD	58	08/02/89	0.740	0.00	19.10	0.00	0.00
5726	SF	ROI	58	08/02/89	0.494	0.00	45.10	0.00 >	7.27
5726	VE	QZX	58	08/04/89	1.174	0.00	49.00	0.00 >	0.10
5726	VV	OGQ	58	10/05/89	1.262	0.00	37.90	0.00	0.00
5726	YF	R03	58	07/31/89	1.101	0.00	37.10	0.00 >	0.03
5727	JE	R09	58	08/02/89	0.817	0.00	1.11	0.00	0.00
5727	PT	ROE	58	08/02/89	0.707	0.00	4.08	0.00	0.00
5727	SF	ROJ	58	08/02/89	0.415	0.00	4.65	0.00	0.00
5727	VE	QZY	58	08/04/89	1.333	0.00	1.61	0.00	0.00
5727	VV	UGR	58	10/05/89	1.304	0.00	4.02	0.00	0.00
5727	YF	R04	58	07/31/89	1.103	0.00	4.92	0.00	0.00
5728	JE	R09	58	08/02/89	0.817	0.00	3.20	0.00	0.00
5728	JE	RWH	58	10/04/89	0.883	0.00	0.07	0.00	0.00
5728	PT	ROE	58	08/02/89	0.707	0.00	87.60	0.00	0.00
5728	PT	RX7	58	10/04/89	0.656	0.00 >	10.00	0.00	0.45
5728	SF	ROJ	58	08/02/89	0.415	0.00	166.00	0.00 >	0.30
5728	SF	RWU	58	10/04/89	0.820	0.00 >	10.00	0.00	0.00
5728	VE	QZY	58	08/04/89	1.333	0.00	162.00	0.00	0.00
5728	VE	RYN	58	10/09/89	0.813	0.00 >	10.00	0.00	1.60
5728	VV	OID	58	11/02/89	1.232	0.00	186.00	0.00	0.00
5728	YF	R04	58	07/31/89	1.103	0.00	183.00	0.00	0.00
5728	YF	RW4	58	10/03/89	0.679	0.00 >	10.00	0.00	0.60
5729	JE	ROA	58	08/02/89	0.680	0.00	2.34	0.00	0.00
5729	PT	ROF	58	08/02/89	0.655	0.00	69.40	0.00	0.00
5729	SF	ROK	58	08/02/89	0.586	0.00	63.40	0.00	0.00
5729	VE	QZZ	58	08/04/89	1.211	0.00	88.70	0.00	0.00
5729	VV	OIE	58	11/02/89	1.104	0.00	304.00	0.00	0.00
5729	YF	R05	58	07/31/89	1.060	0.00	124.00	0.00	0.00
5730	JE	ROA	58	08/02/89	0.680	0.00	2.52	0.00	0.00
5730	PT	ROF	58	08/02/89	0.655	0.00	236.00	0.00	0.00
5730	SF	ROK	58	08/02/89	0.586	0.00	241.00	0.00	0.00
5730	VE	QZZ	58	08/04/89	1.211	0.00	192.00	0.00	0.00
5730	VV	OIE	58	11/02/89	1.104	0.00 >	320.00	0.00	0.00
5730	YF	R05	58	07/31/89	1.060	0.00	289.00	0.00	0.00
5731	JE	ROA	58	08/02/89	0.703	0.00	5.29	0.00	0.00
5731	PT	ROG	58	08/02/89	0.709	0.00	79.60	0.00	0.00
5731	SF	ROL	58	08/02/89	0.587	0.00	67.40	0.00	0.00
5731	VE	ROO	58	08/04/89	1.165	0.00	8.87	0.00	0.00
5731	VV	OIF	58	11/02/89	1.317	0.00	14.00	0.00	0.00
5731	YF	R06	58	07/31/89	1.117	0.00	120.00	0.00	0.00
5765	SF	RPI	59	10/10/89	0.586	0.00	217.00	0.00 >	18.73
5770	SF	RPJ	59	10/10/89	0.488	0.00	58.20	0.00	4.05
5772	SF	RPJ	59	10/10/89	0.488	0.00	23.80	0.00	0.00
5773	SF	RPK	59	10/10/89	0.548	0.00	82.00	0.00 >	3.11
5774	SF	RPK	59	10/10/89	0.548	100.00	19.70	0.20 >	2.30
5778	SF	RPL	59	10/10/89	0.576	0.00	100.00	0.00 >	2.20
5780	SF	RPL	59	10/10/89	0.576	54.90	161.00	2.94 >	19.44
5781	SF	RPM	59	10/10/89	0.547	0.00 <	1.00	0.00	0.00
5782	SF	RPM	59	10/10/89	0.547	65.70	158.00	2.40 >	18.50
5783	SF	RPN	59	10/10/89	0.596	0.00	7.15	0.00 >	2.10

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	3I	TAI
5784	SF	RPN	59	10/10/89	0.596	0.00	58.20	0.00 >	0.80
5784	VSV	O5T	59	09/15/89	1.207	0.00	18.00	0.00	0.00
5784	VV	OIF	59	11/02/89	1.317	0.00	10.00	0.00	0.00
5787	SF	RPO	59	10/10/89	0.571	0.00	38.80	0.00 >	3.22
5788	SF	RPO	59	10/10/89	0.571	0.00	2.74	0.00	0.00
5789	SF	RPP	59	10/10/89	0.570	0.00	67.40	0.00 >	8.10
5790	SF	RPP	59	10/10/89	0.570	56.60	76.00	1.34 >	19.27
5791	SF	RPQ	59	10/10/89	0.566	32.00	74.90	2.34 >	20.48
5792	SF	RPQ	59	10/10/89	0.566	0.00	9.32	0.00 >	0.01
5793	SF	RPR	59	10/10/89	0.542	58.50 >	320.00 >	5.47 >	35.69
5794	SF	RPR	59	10/10/89	0.542	34.50 >	320.00 >	9.28 >	42.19
5795	SF	RPS	59	10/10/89	0.619	9.11	50.90	5.58 >	19.57
5796	SF	RPS	59	10/10/89	0.619	0.00	80.60	0.00	2.58
5797	SF	RPT	59	10/10/89	0.656	312.00	20.70	0.07 >	2.85
5798	JE	RQL	59	09/26/89	0.648	0.00	4.56	0.00	0.00
5824	YF	PTA	59	09/26/89	0.395	0.00	0.69	0.00	0.00
5825	YF	PTA	59	09/26/89	0.395	0.00	55.30	0.00	0.00
5836	JE	RS8	59	09/27/89	0.841	0.00 >	320.00	0.00	0.00
5836	SF	RSX	59	10/11/89	0.895	0.00 >	320.00	0.00 >	0.74
5836	VE	RTO	59	10/06/89	0.323	0.00	73.50	0.00	0.00
5836	YF	S24	59	10/10/89	0.863	0.00 >	320.00	0.00	0.00
5837	JE	RS9	59	09/27/89	0.766	0.00	10.90	0.00	0.00
5837	SF	RSY	59	10/11/89	1.016	0.00	14.10	0.00	4.61
5837	VE	RTP	59	10/06/89	0.350	0.00	10.90	0.00	0.00
5837	YF	S25	59	10/10/89	0.793	0.00	137.00	0.00	0.00
5838	JE	S2R	60	10/17/89	0.868	0.00	54.70	0.00	0.00
5838	SF	S34	60	10/17/89	1.040	0.00	18.00	0.00	0.00
5838	VE	RYB	60	10/09/89	1.055	0.00	96.80	0.00	0.31
5838	YF	RXY	60	10/09/89	0.857	0.00	131.00	0.00 >	3.60
5839	JE	S2S	60	10/17/89	0.914	0.00	21.80	0.00 >	0.06
5839	SF	S35	60	10/17/89	1.061	0.00	7.96	0.00 >	0.26
5839	VE	RYC	60	10/09/89	1.092	0.00	69.10	0.00	0.73
5839	YF	RXZ	60	10/09/89	0.839	0.00	32.00	0.00 >	2.05
5840	JE	S2S	60	10/17/89	0.914	0.00	75.30	0.00 >	1.54
5840	SF	S35	60	10/17/89	1.061	0.00	21.70	0.00	0.00
5840	VE	RYC	60	10/09/89	1.092	0.00	75.70	0.00	0.72
5840	YF	RXZ	60	10/09/89	0.839	0.00	51.40	0.00 >	2.81
5841	JE	S2T	60	10/17/89	0.864	0.00 >	320.00	0.00 >	0.03
5841	SF	S36	60	10/17/89	1.049	0.00	295.00	0.00 >	2.94
5841	VE	RYD	60	10/09/89	1.222	0.00	142.00	0.00	0.00
5841	YF	RYO	60	10/09/89	0.733	0.00 >	320.00	0.00 >	2.31
5842	JE	S2T	60	10/17/89	0.864	0.00	108.00	0.00	0.00
5842	SF	S36	60	10/17/89	1.049	0.00	136.00	0.00 >	3.60
5842	VE	RYD	60	10/09/89	1.222	0.00	8.06	0.00	0.00
5842	YF	RYO	60	10/09/89	0.733	0.00	179.00	0.00	0.00
5843	JE	S2U	60	10/17/89	0.932	0.00	41.40	0.00 >	0.05
5843	SF	S37	60	10/17/89	1.073	0.00	77.30	0.00	2.96
5843	VE	RYE	60	10/09/89	1.091	0.00	60.10	0.00	0.04
5843	YF	RY1	60	10/09/89	0.869	0.00	18.60	0.00 >	1.98
5844	JE	S2U	60	10/17/89	0.932	0.00	45.60	0.00	0.00
5844	SF	S37	60	10/17/89	1.073	0.00	36.50	0.00	0.00
5844	VE	RYE	60	10/09/89	1.091	0.00	93.20	0.00	0.00
5844	YF	RY1	60	10/09/89	0.869	0.00	173.00	0.00	0.00
5845	JE	S2V	60	10/17/89	0.840	0.00	21.60	0.00 >	0.04
5845	SF	S38	60	10/17/89	1.031	0.00	8.98	0.00	0.00
5845	VE	RYF	60	10/09/89	1.065	0.00	16.10	0.00	0.00
5845	YF	RY2	60	10/09/89	1.031	0.00	2.98	0.00	0.00
5846	JE	S2V	60	10/17/89	0.840	0.00	3.20	0.00	0.00
5846	SF	S38	60	10/17/89	1.031	0.00	2.73	0.00	0.00
5846	VE	RYF	60	10/09/89	1.065	0.00	6.60	0.00	0.00
5846	YF	RY2	60	10/09/89	1.031	0.00 <	1.00	0.00	0.00
5847	JE	S2W	60	10/17/89	0.905	0.00	24.10	0.00	0.00
5847	SF	S39	60	10/17/89	0.977	0.00	179.00	0.00 >	1.37
5847	VE	RYG	60	10/09/89	1.027	0.00	42.60	0.00 >	0.22
5847	YF	RY4	60	10/09/89	0.865	0.00	147.00	0.00	0.00
5848	JE	S2W	60	10/17/89	0.905	0.00	38.00	0.00 >	0.01

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5848	SF	S39	60	10/17/89	0.977	0.00	10.00	0.00	0.00
5848	VE	RYG	60	10/09/89	1.027	0.00	100.00	0.00 >	1.15
5848	YF	RY3	60	10/09/89	0.979	0.00	1.00	0.00	0.00
5849	JE	S2X	60	10/17/89	0.387	0.00	55.90	0.00	0.00
5849	SF	S3A	60	10/17/89	1.058	0.00	62.80	0.00 >	1.14
5849	YF	RY3	60	10/09/89	0.979	0.00	119.00	0.00	0.00
5850	JE	S2X	60	10/17/89	0.887	0.00	29.10	0.00	0.00
5850	SF	S3A	60	10/17/89	1.058	0.00	26.50	0.00	0.00
5850	YF	RY4	60	10/09/89	0.865	0.00	26.10	0.00	0.00
5851	JE	S3Q	60	11/02/89	0.515	0.00	10.00	0.00	0.00
5851	PT	SE0	60	11/03/89	0.902	0.00	8.12	0.00	0.00
5851	SF	S4G	60	11/02/89	0.803	0.00	27.60	0.00 >	0.02
5851	VE	S43	60	10/20/89	1.124	0.00	125.00	0.00	0.00
5851	YF	S3D	60	10/17/89	0.941	0.00	14.70	0.00	0.00
5852	JE	S3F	60	11/02/89	0.611	0.00	155.00	0.00	0.00
5852	PT	SE1	60	11/03/89	0.628	0.00	195.00	0.00 >	6.00
5852	SF	S4H	60	11/02/89	1.025	0.00	149.00	0.00	0.00
5852	VE	S44	60	10/20/89	1.097	0.00	176.00	0.00	0.11
5852	YF	S3E	60	10/17/89	0.939	0.00	142.00	0.00	0.00
5853	JE	S3R	60	11/02/89	0.611	0.00	72.80	0.00	0.00
5853	PT	SE1	60	11/03/89	0.628	0.00	80.60	0.00	4.46
5853	SF	S4H	60	11/02/89	1.025	0.00	20.30	0.00	0.00
5853	VE	S44	60	10/20/89	1.097	0.00	121.00	0.00 >	0.08
5853	YF	S3E	60	10/17/89	0.939	0.00	55.50	0.00	0.00
5854	JE	S3S	60	11/02/89	0.508	0.00	13.40	0.00	0.00
5854	PT	SE2	60	11/03/89	0.798	0.00	6.44	0.00	0.00
5854	SF	S4I	60	11/02/89	0.932	0.00	4.90	0.00	0.00
5854	VE	S45	60	10/20/89	1.140	62.60 <	1.00 <	0.02 >	6.22
5854	YF	S3F	60	10/17/89	0.913	0.00	5.05	0.00	0.00
5855	JE	S3S	60	11/02/89	0.508	0.00 >	320.00	0.00	0.00
5855	PT	SE2	60	11/03/89	0.798	83.10 >	320.00 >	3.85 >	18.47
5855	SF	S4I	60	11/02/89	0.932	0.00 >	320.00	0.00 >	0.11
5855	VE	S45	60	10/20/89	1.140	0.00 >	320.00	0.00	0.09
5855	YF	S3F	60	10/17/89	0.913	0.00 >	320.00	0.00	0.12
5856	JE	S3T	60	11/02/89	0.596	0.00	1.72	0.00	0.00
5856	PT	SE3	60	11/03/89	0.797	0.00	1.56	0.00 >	0.34
5856	SF	S4J	60	11/02/89	0.982	0.00	1.24	0.00	0.00
5856	VE	S46	60	10/20/89	1.103	0.00	1.46	0.00	0.00
5856	YF	S3G	60	10/17/89	0.963	0.00	1.30	0.00	0.00
5857	JE	S3T	60	11/02/89	0.596	0.00	13.50	0.00	0.00
5857	PT	SE3	60	11/03/89	0.797	0.00	9.50	0.00	1.83
5857	SF	S4J	60	11/02/89	0.982	0.00	11.10	0.00	0.03
5857	VE	S46	60	10/20/89	1.103	0.00	12.40	0.00	0.00
5857	YF	S3G	60	10/17/89	0.963	0.00	9.27	0.00	0.00
5858	JE	S3U	60	11/02/89	0.514	0.00	28.30	0.00	0.00
5858	PT	SE4	60	11/03/89	0.893	0.00	21.50	0.00	0.15
5858	SF	S4K	60	11/02/89	0.956	0.00	6.60	0.00	0.00
5858	VE	S47	60	10/20/89	1.063	0.00	46.60	0.00 >	0.01
5858	YF	S3H	60	10/17/89	0.886	0.00	15.20	0.00	0.00
5859	JE	S3U	60	11/02/89	0.514	0.00	191.00	0.00	0.00
5859	PT	SE4	60	11/03/89	0.893	0.00	92.70	0.00	2.97
5859	SF	S4K	60	11/02/89	0.956	0.00	44.80	0.00	0.00
5859	VE	S47	60	10/20/89	1.063	0.00	186.00	0.00	0.21
5859	YF	S3H	60	10/17/89	0.886	0.00	122.00	0.00	0.26
5860	JE	S3V	60	11/02/89	0.541	0.00	55.40	0.00	0.00
5860	PT	SE5	60	11/03/89	0.992	0.00	60.30	0.00	0.17
5860	SF	S4L	60	11/02/89	0.980	0.00	24.70	0.00	0.00
5860	VE	S48	60	10/20/89	1.231	0.00	86.40	0.00	0.00
5860	YF	S3I	60	10/17/89	0.818	0.00	45.90	0.00	0.00
5861	JE	S3V	60	11/02/89	0.541	0.00	60.30	0.00	0.00
5861	PT	SE5	60	11/03/89	0.992	0.00	26.50	0.00 >	0.08
5861	SF	S4L	60	11/02/89	0.980	0.00	21.00	0.00	0.00
5861	VE	S48	60	10/20/89	1.231	0.00	40.20	0.00	0.00
5861	YF	S3I	60	10/17/89	0.818	0.00	46.40	0.00 >	2.81
5862	JE	S3W	60	11/02/89	0.665	0.00	17.50	0.00	0.00
5862	PT	SE6	60	11/03/89	0.799	0.00	11.50	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
5862	SF	S4M	60	11/02/89	0.658	0.00	12.20	0.00	0.00
5862	VE	S49	60	10/20/89	1.058	0.00	26.50	0.00	0.00
5862	YF	S3J	60	10/17/89	0.866	0.00	11.30	0.00	0.00
5863	JE	S3W	60	11/02/89	0.665	0.00	155.00	0.00 >	0.01
5863	PT	SE6	60	11/03/89	0.799	0.00	133.00	0.00 >	4.41
5863	SF	S4M	60	11/02/89	0.658	0.00	124.00	0.00 >	0.53
5863	VE	S49	60	10/20/89	1.058	0.00	179.00	0.00	0.00
5863	YF	S3J	60	10/17/89	0.866	0.00	46.20	0.00	0.00
5864	JE	S3X	60	11/02/89	0.516	0.00	80.30	0.00 >	0.50
5864	PT	SE7	60	11/03/89	0.792	0.00	59.20	0.00	0.27
5864	SF	S4N	60	11/02/89	0.941	0.00	40.30	0.00	0.00
5864	VE	S4A	60	10/20/89	1.163	0.00	32.00	0.00	0.00
5864	YF	S3K	60	10/17/89	0.807	0.00	41.40	0.00	0.00
5865	JE	S3X	60	11/02/89	0.516	0.00	27.60	0.00 >	1.01
5865	PT	SE7	60	11/03/89	0.792	0.00	18.40	0.00	0.00
5865	SF	S4N	60	11/02/89	0.941	0.00	14.20	0.00	0.00
5865	VE	S4A	60	10/20/89	1.163	0.00	18.30	0.00	0.00
5865	YF	S3K	60	10/17/89	0.807	0.00	19.60	0.00	1.31
5866	JE	S3Y	60	11/02/89	0.614	0.00	97.40	0.00	0.00
5866	PT	SE		11/03/89	0.754	0.00	50.40	0.00 >	4.39
5866	SF	S40		11/02/89	0.974	0.00	47.30	0.00	0.00
5866	VE	S4B	60	10/20/89	1.110	0.00	86.40	0.00 >	0.29
5866	YF	S3L	60	10/17/89	0.869	0.00	34.10	0.00	0.85
5867	JE	S3Y	60	11/02/89	0.614	0.00	84.90	0.00	0.00
5867	PT	SE8	60	11/03/89	0.754	0.00	62.40	0.00	9.63
5867	SF	S40	60	11/02/89	0.974	0.00	50.70	0.00	0.00
5867	VE	S4B	60	10/20/89	1.110	0.00	39.80	0.00	0.00
5867	YF	S3L	60	10/17/89	0.869	0.00	53.00	0.00 >	0.30
5868	JE	S3Z	60	11/02/89	0.704	0.00	197.00	0.00	0.43
5868	PT	SE9	60	11/03/89	0.722	0.00	180.00	0.00 >	8.16
5868	SF	S4P	60	11/02/89	0.907	0.00	136.00	0.00	0.00
5868	VE	S4C	60	10/20/89	1.115	0.00	147.00	0.00	0.00
5868	YF	S3M	60	10/17/89	0.903	0.00	163.00	0.00	0.00
5869	JE	S3Z	60	11/02/89	0.704	0.00	1.00	0.00	0.00
5869	PT	SE9	60	11/03/89	0.722	133.00 >	320.00 >	2.41 >	18.81
5869	SF	S4P	60	11/02/89	0.907	0.00	100.00	0.00	0.00
5869	VE	S4C	60	10/20/89	1.115	0.00 >	320.00	0.00	0.00
5869	YF	S3M	60	10/17/89	0.903	0.00	223.00	0.00	10.52
5870	JE	SA0	61	10/31/89	0.678	0.00	53.30	0.00	0.11
5870	SF	SAW	61	10/31/89	0.918	0.00	21.40	0.00	0.48
5870	VE	SBC	61	11/03/89	0.929	0.00	75.30	0.00	0.00
5870	YF	S9K	61	10/30/89	0.662	0.00	56.90	0.00	0.00
5871	JE	SA1	61	10/31/89	0.727	0.00	171.00	0.00	0.00
5871	SF	SAX	61	10/31/89	0.921	0.00	9.03	0.00	0.00
5871	VE	SBD	61	11/03/89	0.981	0.00	30.00	0.00	0.00
5871	YF	S9L	61	10/30/89	0.648	0.00	39.80	0.00 >	0.10
5872	JE	SA1	61	10/31/89	0.727	0.00	194.00	0.00	0.00
5872	SF	SAX	61	10/31/89	0.921	0.00	27.80	0.00	0.00
5872	VE	SBD	61	11/03/89	0.981	0.00	123.00	0.00	0.03
5872	YF	S9L	61	10/30/89	0.648	0.00	177.00	0.00	0.00
5873	JE	SA2	61	10/31/89	0.737	0.00	136.00	0.00	0.00
5873	SF	SAY	61	10/31/89	0.954	0.00	51.90	0.00	0.00
5873	VE	SBE	61	11/03/89	0.954	0.00	143.00	0.00	0.00
5873	YF	S9M	61	10/30/89	0.659	0.00	150.00	0.00	0.00
5874	JE	SA2	61	10/31/89	0.737	0.00	40.50	0.00	0.00
5874	SF	SAY	61	10/31/89	0.954	0.00	14.60	0.00	0.00
5874	VE	SBE	61	11/03/89	0.954	0.00	66.00	0.00	0.00
5874	YF	S9M	61	10/30/89	0.659	0.00	53.60	0.00	0.00
5875	JE	SA2	61	10/31/89	0.805	0.00	76.70	0.00 >	1.71
5875	SF	SAZ	61	10/31/89	0.938	0.00	73.20	0.00	3.82
5875	VE	SBF	61	11/03/89	0.939	0.00	136.00	0.00	0.00
5875	YF	S9N	61	10/30/89	0.708	0.00	135.00	0.00	0.00
5876	JE	SA3	61	10/31/89	0.805	0.00	21.30	0.00 >	0.05
5876	SF	SAZ	61	10/31/89	0.938	0.00	16.00	0.00	0.00
5876	VE	SBF	61	11/03/89	0.939	0.00	22.20	0.00	0.00
5876	YF	S9N	61	10/30/89	0.708	0.00	32.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5877	JE	SA4	61	10/31/89	0.759	0.00	71.50	0.00 >	0.80
5877	SF	SB0	61	10/31/89	0.933	0.00	76.20	0.00	0.00
5877	VE	SBG	61	11/03/89	0.925	0.00	207.00	0.00	0.00
5877	YF	S90	61	10/30/89	0.701	0.00	198.00	0.00	0.00
5878	JE	SA4	61	10/31/89	0.759	0.00	183.00	0.00	0.44
5878	SF	SB0	61	10/31/89	0.933	0.00	179.00	0.00	0.31
5878	VE	SBG	61	11/03/89	0.925	0.00	171.00	0.00	0.00
5878	YF	S90	61	10/30/89	0.701	0.00	222.00	0.00	0.32
5879	JE	SA5	61	10/31/89	0.781	0.00	37.70	0.00	0.00
5879	SF	SB1	61	10/31/89	0.860	27.50	93.50	3.41	15.99
5879	VE	SBH	61	11/03/89	0.968	0.00	111.00	0.00	0.00
5879	YF	S9P	61	10/30/89	0.675	0.00	58.90	0.00	0.00
5880	JE	SA5	61	10/31/89	0.781	0.00	115.00	0.00	0.00
5880	SF	SB1	61	10/31/89	0.860	0.00	62.20	0.00	0.00
5880	VE	SBH	61	11/03/89	0.968	0.00	54.70	0.00	0.00
5880	YF	S9P	61	10/30/89	0.675	0.00	76.70	0.00 >	0.10
5881	JE	SA6	61	10/31/89	0.732	0.00 >	320.00	0.00	0.11
5881	SF	SB2	61	10/31/89	0.894	0.00 >	320.00	0.00 >	18.28
5881	VE	SBI	61	11/03/89	0.930	0.00 >	320.00	0.00	0.00
5881	YF	S9Q	61	10/30/89	0.704	0.00 >	320.00	0.00 >	6.50
5882	JE	SA6	61	10/31/89	0.732	0.00	166.00	0.00	1.52
5882	SF	SB2	61	10/31/89	0.894	0.00	149.00	0.00	0.00
5882	VE	SBI	61	11/03/89	0.930	0.00	176.00	0.00	0.00
5882	YF	S9Q	61	10/30/89	0.704	0.00	173.00	0.00	0.00
5883	JE	SA7	61	10/31/89	0.847	0.00	180.00	0.00 >	0.25
5883	SF	SB3	61	10/31/89	0.939	0.00	174.00	0.00	0.74
5883	VE	SBJ	61	11/03/89	1.022	0.00	205.00	0.00	0.00
5883	YF	S9R	61	10/30/89	0.707	0.00	187.00	0.00	0.00
5884	JE	SA7	61	10/31/89	0.847	0.00	52.90	0.00	0.00
5884	SF	SB3	61	10/31/89	0.939	0.00	74.90	0.00	0.85
5884	VE	SBJ	61	11/03/89	1.022	0.00	151.00	0.00	0.00
5884	YF	S9R	61	10/30/89	0.707	0.00	138.00	0.00	0.00
5885	JE	SA8	61	10/31/89	0.655	0.00	290.00	0.00 >	6.60
5885	SF	SB4	61	10/31/89	0.894	0.00	181.00	0.00	1.71
5885	VE	SBK	61	11/03/89	0.790	0.00	192.00	0.00	0.00
5885	YF	S9S	61	10/30/89	0.613	0.00	190.00	0.00	0.00
5886	JE	SA8	61	10/31/89	0.655	0.00 >	320.00	0.00 >	8.60
5886	SF	SB4	61	10/31/89	0.894	0.00 >	320.00	0.00	0.00
5886	VE	SBK	61	11/03/89	0.790	0.00 >	320.00	0.00	0.00
5886	YF	S9S	61	10/30/89	0.613	0.00 >	320.00	0.00 >	0.10
5887	JE	SA9	61	10/31/89	0.662	0.00	42.30	0.00	0.00
5887	SF	SB5	61	10/31/89	0.813	0.00	11.90	0.00	0.22
5887	VE	SBL	61	11/03/89	0.873	0.00	61.10	0.00	0.00
5887	YF	S9T	61	10/30/89	0.732	0.00	23.80	0.00	0.00
5888	JE	SA9	61	10/31/89	0.662	0.00	59.40	0.00	0.40
5888	SF	SB5	61	10/31/89	0.813	0.00	53.70	0.00	0.00
5888	VE	SBL	61	11/03/89	0.873	0.00	45.30	0.00	0.00
5888	YF	S9T	61	10/30/89	0.732	0.00	40.40	0.00 >	0.07
5889	JE	SAA	61	10/31/89	0.769	0.00	265.00	0.00	0.00
5889	SF	SB6	61	10/31/89	0.861	0.00 >	320.00	0.00	0.64
5889	VE	SBM	61	11/03/89	0.966	0.00	255.00	0.00	0.00
5889	YF	S9U	61	10/30/89	0.697	0.00 >	320.00	0.00 >	0.04
5890	JE	SAA	61	10/31/89	0.769	0.00	320.00	0.00 >	0.25
5890	SF	SB6	61	10/31/89	0.861	0.00 >	320.00	0.00 >	0.58
5890	VE	SBM	61	11/03/89	0.966	0.00	163.00	0.00	0.00
5890	YF	S9U	61	10/30/89	0.697	0.00 >	320.00	0.00	0.00
5891	JE	SAB	61	10/31/89	0.714	0.00	81.80	0.00 >	2.68
5891	SF	SB7	61	10/31/89	0.839	0.00	45.40	0.00	0.00
5891	VE	SBN	61	11/03/89	0.954	0.00	1.00	0.00	0.00
5891	YF	S9V	61	10/30/89	0.642	0.00	164.00	0.00 >	0.10
5892	JE	SAB	61	10/31/89	0.714	0.00	18.50	0.00 >	0.20
5892	SF	SB7	61	10/31/89	0.839	0.00	9.74	0.00 >	1.50
5892	VE	SBN	61	11/03/89	0.954	0.00	8.76	0.00	0.00
5892	YF	S9V	61	10/30/89	0.642	0.00	17.90	0.00 >	1.30
5905	JE	SAC	61	10/31/89	0.787	7.06	12.60	1.78 >	8.02
5905	SF	SB8	61	10/31/89	0.821 <	1.00	8.06 >	8.06 >	27.06

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5905	VE	SBO	61	11/03/89	0.897	7.41	12.40	1.68	7.83
5905	VSV	06M	61	10/24/89	1.245	0.00	5.18	0.00	0.00
5905	YF	S9W	61	10/30/89	0.706	8.85	8.30	0.94 >	3.03
5906	JE	SAC	61	10/31/89	0.787	2.12	4.25	2.00	11.52
5906	SF	SB8	61	10/31/89	0.821 <	1.00	2.72 >	2.72 >	9.54
5906	VE	SBO	61	11/03/89	0.897	5.52	49.00	8.87	34.69
5906	VSV	06N	61	10/24/89	1.078	0.00	15.50	0.00 >	2.92
5906	YF	S9W	61	10/30/89	0.706	0.00	2.77	0.00 >	0.10
5907	JE	SAD	61	10/31/89	0.758	0.00	53.30	0.00 >	0.34
5907	SF	SB9	61	10/31/89	0.813	0.00	17.00	0.00 >	1.12
5907	VE	SBP	61	11/03/89	0.953	0.00	32.00	0.00	0.00
5907	VSV	06N	61	10/24/89	1.078	199.00 >	320.00 >	1.61 >	8.85
5907	YF	S9X	61	10/30/89	0.691	0.00	0.83	0.00	0.00
5908	JE	SAD	61	10/31/89	0.758	0.00	4.46	0.00	0.00
5908	SF	SB9	61	10/31/89	0.813	0.00	1.76	0.00 >	0.02
5908	VE	SBP	61	11/03/89	0.953	0.00	1.91	0.00	0.00
5908	VSV	06O	61	10/24/89	1.150	0.00	5.84	0.00 >	0.99
5908	YF	S9X	61	10/30/89	0.691	0.00	2.14	0.00	0.00
5910	JE	SAE	61	10/31/89	0.798	0.00	32.00	0.00	12.44
5910	SF	SBA	61	10/31/89	0.748	0.00	231.00	0.00 >	5.10
5910	VE	SBQ	61	11/03/89	0.974	0.00 >	320.00	0.00	0.00
5910	VSV	06O	61	10/24/89	1.150	238.00 >	320.00 >	1.34 >	8.75
5910	YF	S9Y	61	10/30/89	0.681	0.00 >	320.00	0.00 >	6.03
5911	JE	SC8	61	11/01/89	0.632	0.00	40.70	0.00	0.00
5911	SF	SD4	61	11/01/89	0.766	0.00	18.30	0.00	0.00
5911	VE	SCO	61	11/03/89	0.944	0.00	44.50	0.00	0.00
5911	VSV	06P	61	10/24/89	1.148	0.00	45.70	0.00	0.66
5911	YF	SBS	61	10/31/89	0.481	0.00	53.40	0.00	1.65
5912	JE	SC9	61	11/01/89	0.742	0.00	66.00	0.00	0.00
5912	SF	SD5	61	11/01/89	0.970	0.00	33.90	0.00	0.00
5912	VE	SCP	61	11/03/89	0.887	0.00	52.90	0.00	0.00
5912	VSV	06P	61	10/24/89	1.148	0.00	163.00	0.00	3.89
5912	YF	SBT	61	10/31/89	0.547	0.00	79.20	0.00	0.00
5913	JE	S40	60	11/02/89	0.668	0.00	1.90	0.00	0.00
5913	PT	SEA	60	11/03/89	0.719	0.00	1.77	0.00	0.00
5913	SF	S4Q	60	11/02/89	0.937	0.00	1.47	0.00	0.00
5913	VE	S4D	60	10/20/89	1.136	0.00	1.99	0.00	0.00
5913	VSV	05W	60	10/13/89	1.570	0.00	2.14	0.00	0.00
5913	VV	OIG	60	11/02/89	1.314	0.00	1.05	0.00	0.00
5913	YF	S3N	60	10/17/89	0.857	0.00	1.66	0.00	0.00
5914	JE	S40	60	11/02/89	0.668	0.00	4.20	0.00	0.00
5914	PT	SEA	60	11/03/89	0.719	0.00	1.58	0.00	0.00
5914	SF	S4Q	60	11/02/89	0.937	0.00	1.52	0.00	0.00
5914	VE	S4D	60	10/20/89	1.136	0.00	3.85	0.00	0.00
5914	VSV	05W	60	10/13/89	1.570	0.00	5.37	0.00	0.00
5914	VV	OIH	60	11/02/89	1.228	0.00	1.94	0.00	0.00
5914	YF	S3N	60	10/17/89	0.857	0.00	1.35	0.00	0.00
5915	JE	S41	60	11/02/89	0.882	0.00	11.10	0.00	0.43
5915	PT	SEB	60	11/03/89	0.709	0.00	4.92	0.00	0.00
5915	SF	S4R	60	11/02/89	0.623	0.00	6.67	0.00	1.21
5915	VE	S4E	60	10/20/89	1.077	0.00	12.40	0.00	0.01
5915	VSV	05X	60	10/13/89	1.560	0.00	33.80	0.00	0.14
5915	VV	OIH	60	11/02/89	1.228	0.00 <	1.00	0.00	0.00
5915	YF	S3O	60	10/17/89	0.751	0.00	4.92	0.00	0.75
5916	JE	S5R	60	10/24/89	0.949	0.00	7.84	0.00	0.00
5916	SF	S6H	60	10/24/89	1.103	0.00	8.11	0.00	0.00
5916	VE	S64	60	10/23/89	1.075	0.00	12.50	0.00	0.00
5916	VSV	05X	60	10/13/89	1.560	0.00	43.60	0.00	1.62
5916	VV	OII	60	11/02/89	1.313	0.00	11.10	0.00	0.00
5916	YF	S5E	60	10/23/89	0.874	8.85	24.20	2.73 >	14.50
5917	JE	S5S	60	10/24/89	1.017	0.00	1.09	0.00	0.00
5917	SF	S6I	60	10/24/89	0.983	0.00	1.56	0.00 >	0.17
5917	VE	S65	60	10/23/89	0.998	0.00	1.28	0.00	0.00
5917	VSV	06E	60	10/20/89	1.085	0.00	15.50	0.00 >	0.09
5917	VV	OII	60	11/02/89	1.313	0.00	1.46	0.00	0.00
5917	YF	S5F	60	10/23/89	0.969	0.00	1.30	0.00 >	0.05

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC50	TC 25	SI	TAI
5918	JE	S5S	60	10/24/89	1.017	0.00 <	1.00	0.00	0.00
5918	SF	S6I	60	10/24/89	0.983	0.00 <	1.00	0.00	0.00
5918	VE	S6S	60	10/23/89	0.998	0.00 <	1.00	0.00	0.00
5918	VSV	O6E	60	10/20/89	1.085	0.00	0.79	0.00	0.00
5918	VV	OIJ	60	11/02/89	1.496	0.00 <	1.00	0.00	0.00
5918	YF	S5F	60	10/23/89	0.969	0.00 <	1.00	0.00	0.00
5919	JE	S5T	60	10/24/89	1.046	0.00 <	1.00	0.00	0.00
5919	SF	S6J	60	10/24/89	1.003	0.00 <	1.00	0.00	0.00
5919	VE	S66	60	10/23/89	1.022	0.00 <	1.00	0.00	0.00
5919	VSV	O5Z	60	10/13/89	1.561	0.00	1.55	0.00	0.00
5919	VV	OIJ	60	11/02/89	1.496	0.00 <	1.00	0.00	0.00
5919	YF	S5G	60	10/23/89	0.923	0.00 <	1.00	0.00	0.00
5920	JE	S5T	60	10/24/89	1.046	0.00	1.30	0.00	0.00
5920	SF	S6J	60	10/24/89	1.003	0.00	1.73	0.00 >	0.13
5920	VE	S66	60	10/23/89	1.022	0.00	1.46	0.00	0.00
5920	VSV	O5Z	60	10/13/89	1.561	0.00	13.10	0.00	0.00
5920	VV	OIK	60	11/02/89	1.404	0.00	1.31	0.00	0.00
5920	YF	S5G	60	10/23/89	0.923	0.00	1.68	0.00	0.00
5921	JE	S5U	60	10/24/89	0.963	0.00 <	1.00	0.00	0.00
5921	SF	S6K	60	10/24/89	0.986	0.00 <	1.00	0.00	0.00
5921	VE	S67	60	10/23/89	1.013	0.00 <	1.00	0.00	0.00
5921	VSV	O60	60	10/13/89	1.677	0.00	4.57	0.00	0.00
5921	VV	OIK	60	11/02/89	1.404	0.00 <	1.00	0.00	0.00
5921	YF	S5H	60	10/23/89	0.993	0.00 <	1.00	0.00	0.00
5922	JE	S5U	60	10/24/89	0.963	0.00	12.00	0.00	0.00
5922	SF	S6K	60	10/24/89	0.986	0.00	14.00	0.00 >	0.85
5922	VE	S67	60	10/23/89	1.013	0.00	5.69	0.00	0.00
5922	VSV	O60	60	10/13/89	1.677	0.00	22.80	0.00	0.02
5922	VV	OIL	60	11/02/89	1.214	0.00	17.10	0.00	0.00
5922	YF	S5H	60	10/23/89	0.993	0.00	10.30	0.00 >	0.35
5923	JE	S5V	60	10/24/89	0.972	0.00	1.39	0.00	0.00
5923	SF	S6L	60	10/24/89	0.915	0.00 <	1.00	0.00	0.00
5923	VE	S68	60	10/23/89	0.977	0.00 <	1.00	0.00	0.00
5923	VSV	O61	60	10/13/89	1.524	0.00	4.24	0.00	0.00
5923	VV	OIL	60	11/02/89	1.214	0.00 <	1.00	0.00	0.00
5923	YF	S5I	60	10/23/89	1.008	0.00	1.11	0.00	0.00
5924	JE	S5V	60	10/24/89	0.972	0.00	1.54	0.00	0.00
5924	SF	S6L	60	10/24/89	0.915	0.00	1.67	0.00	0.00
5924	VE	S68	60	10/23/89	0.977	0.00	1.53	0.00	0.00
5924	VSV	O61	60	10/13/89	1.524	0.00	14.30	0.00 >	0.15
5924	VV	OIM	60	11/02/89	1.236	0.00	2.13	0.00	0.00
5924	YF	S5I	60	10/23/89	1.008	0.00	1.59	0.00 >	0.14
5925	JE	S5W	60	10/24/89	0.977	0.00	1.28	0.00	0.00
5925	SF	S6M	60	10/24/89	0.842	0.00	1.34	0.00	0.00
5925	VE	S69	60	10/23/89	1.036	0.00 <	1.00	0.00	0.00
5925	VSV	O62	60	10/13/89	1.570	0.00	2.57	0.00	0.00
5925	VV	OIM	60	11/02/89	1.236	0.00	1.19	0.00	0.00
5925	YF	S5J	60	10/23/89	1.187	0.00 <	1.00	0.00	0.00
5926	JE	S5W	60	10/24/89	0.977	0.00	3.63	0.00 >	0.07
5926	SF	S6M	60	10/24/89	0.842	0.00	5.80	0.00 >	0.62
5926	VE	S69	60	10/23/89	1.036	0.00	2.20	0.00	0.00
5926	VSV	O62	60	10/13/89	1.570	0.00	16.30	0.00	0.00
5926	VV	OIN	60	11/02/89	1.088	0.00	4.77	0.00	0.00
5926	YF	S5J	60	10/23/89	1.187	0.00	1.59	0.00	0.00
5927	JE	S5X	60	10/24/89	1.116	0.00	3.20	0.00	0.00
5927	SF	S6N	60	10/24/89	0.838	0.00	4.08	0.00	0.00
5927	VE	S6A	60	10/23/89	1.089	0.00	2.24	0.00	0.00
5927	VSV	O63	60	10/13/89	1.555	0.00	11.60	0.00 >	0.01
5927	VV	OIN	60	11/02/89	1.088	0.00	1.84	0.00	0.00
5927	YF	S5K	60	10/23/89	0.691	0.00	3.63	0.00 >	1.15
5928	JE	S5X	60	10/24/89	1.116	0.00	45.20	0.00	0.00
5928	SF	S6N	60	10/24/89	0.838	0.00	52.00	0.00	0.00
5928	VE	S6A	60	10/23/89	1.089	0.00	34.90	0.00	0.00
5928	VSV	O63	60	10/13/89	1.555	0.00	43.60	0.00	0.00
5928	VV	OIO	60	11/02/89	1.311	0.00	47.00	0.00	0.00
5928	YF	S5K	60	10/23/89	0.691	0.00	42.00	0.00 >	2.20

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5929	JE	S5Y	60	10/24/89	0.937	0.00	4.36	0.00 >	0.07
5929	SF	S6O	60	10/24/89	0.933	0.00	3.20	0.00	0.00
5929	VE	S6B	60	10/23/89	0.924	0.00	1.64	0.00	0.00
5929	VSV	065	60	10/20/89	1.385	0.00	10.40	0.00	0.00
5929	YF	S5L	60	10/23/89	0.975	0.00	1.86	0.00 >	0.25
5930	JE	S5Y	60	10/24/89	0.937	0.00	1.49	0.00	0.00
5930	SF	S6O	60	10/24/89	0.933	0.00	2.81	0.00	0.00
5930	VE	S6B	60	10/23/89	0.924	0.00	1.22	0.00	0.00
5930	VSV	065	60	10/20/89	1.385	0.00	2.10	0.00	0.00
5930	YF	S5L	60	10/23/89	0.975	0.00	1.28	0.00	0.00
5931	JE	S5Z	60	10/24/89	1.007	0.00	1.41	0.00	0.00
5931	SF	S6P	60	10/24/89	0.793	0.00 <	1.00	0.00	0.00
5931	VE	S6C	60	10/23/89	1.036	0.00	1.33	0.00	0.00
5931	VSV	066	60	10/20/89	1.194	0.00	1.57	0.00 >	0.08
5931	YF	S5M	60	10/23/89	0.946	0.00 <	1.00	0.00	0.00
5932	JE	S5Z	60	10/24/89	1.007	0.00	1.54	0.00	0.00
5932	SF	S6P	60	10/24/89	0.793	0.00	2.10	0.00 >	0.06
5932	VE	S6C	60	10/23/89	1.036	0.00	1.46	0.00	0.00
5932	VSV	066	60	10/20/89	1.194	0.00	1.60	0.00 >	0.00
5932	YF	S5M	60	10/23/89	0.946	0.00	1.15	0.00	0.00
5933	JE	S6O	60	10/24/89	1.043	0.00	1.75	0.00	0.00
5933	SF	S6Q	60	10/24/89	0.816	0.00	2.15	0.00	0.00
5933	VE	S6D	60	10/23/89	1.034	0.00	1.72	0.00	0.00
5933	VSV	067	60	10/20/89	1.166	0.00	4.25	0.00	0.00
5933	YF	S5N	60	10/23/89	0.541	0.00	3.64	0.00 >	0.33
5934	JE	S6O	60	10/24/89	1.043	0.00	5.30	0.00 >	1.35
5934	SF	S6Q	60	10/24/89	0.816	0.00	6.47	0.00 >	0.10
5934	VE	S6D	60	10/23/89	1.034	0.00	6.11	0.00	0.00
5934	VSV	067	60	10/20/89	1.166	0.00	10.30	0.00 >	0.23
5934	YF	S5N	60	10/23/89	0.541	0.00	6.90	0.00 >	5.70
5935	JE	S61	60	10/24/89	0.945	0.00	1.93	0.00	0.00
5935	SF	S6R	60	10/24/89	0.933	0.00	2.00	0.00 >	0.26
5935	VE	S6E	60	10/23/89	1.041	0.00	1.47	0.00	0.00
5935	VSV	068	60	10/20/89	1.164	0.00	1.55	0.00	0.00
5935	YF	S5C	60	10/23/89	1.035	0.00	1.54	0.00	0.00
5936	JE	S61	60	10/24/89	0.945	0.00	14.40	0.00	0.00
5936	SF	S6R	60	10/24/89	0.933	21.40	34.70	1.62 >	11.35
5936	VE	S6E	60	10/23/89	1.041	0.00	13.10	0.00	0.00
5936	VSV	068	60	10/20/89	1.164	0.00	16.40	0.00	0.00
5936	YF	S5O	60	10/23/89	1.035	0.00	11.90	0.00 >	2.10
5937	JE	S62	60	10/24/89	0.968	0.00	9.73	0.00	1.24
5937	SF	S6S	60	10/24/89	0.982	0.00	6.89	0.00	0.00
5937	VE	S6F	60	10/23/89	1.063	0.00	5.72	0.00	0.57
5937	VSV	069	60	10/20/89	1.088	0.00	204.00	0.00	0.00
5937	YF	S5P	60	10/23/89	1.035	0.00	4.30	0.00 >	0.43
5938	JE	S77	60	10/25/89	0.679	0.00	1.47	0.00	0.00
5938	SF	S7X	60	10/25/89	0.954	0.00	1.19	0.00	0.00
5938	VE	S7K	60	10/27/89	1.076	0.00	1.11	0.00	0.00
5938	VSV	069	60	10/20/89	1.088	0.00	1.63	0.00	0.00
5938	YF	S6U	60	10/24/89	0.665	0.00	1.64	0.00 >	0.11
5939	JE	S78	60	10/25/89	0.825	0.00	1.13	0.00	0.00
5939	SF	S7Y	60	10/25/89	0.949	0.00	4.15	0.00	0.00
5939	VE	S7L	60	10/27/89	1.010	0.00	3.63	0.00	0.00
5939	VSV	06A	60	10/20/89	1.075	0.00	4.12	0.00	0.00
5939	YF	S6V	60	10/24/89	0.862	0.00	3.11	0.00	0.00
5940	JE	S78	60	10/25/89	0.825	0.00	27.10	0.00	0.00
5940	SF	S7Y	60	10/25/89	0.949	0.00	27.70	0.00 >	5.74
5940	VE	S7L	60	10/27/89	1.010	0.00	79.40	0.00	6.41
5940	VSV	06A	60	10/20/89	1.075	0.00	28.30	0.00	0.00
5940	YF	S6V	60	10/24/89	0.862	0.00	35.40	0.00 >	5.51
5941	JE	S79	60	10/25/89	0.819	0.00	11.10	0.00	0.00
5941	SF	S7Z	60	10/25/89	1.018	0.00	12.20	0.00 >	4.34
5941	VE	S7M	60	10/27/89	0.862	0.00	15.60	0.00 >	0.32
5941	VSV	06B	60	10/20/89	1.119	0.00	44.50	0.00	0.00
5941	YF	S6W	60	10/24/89	0.895	0.00	13.70	0.00	4.46
5942	JE	S79	60	10/25/89	0.819	0.00	4.22	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5942	SF	S7Z	60	10/25/89	1.018	0.00	4.35	0.00	0.00
5942	VE	S7M	60	10/27/89	0.862	0.00	4.14	0.00	0.00
5942	VSV	O6B	60	10/20/89	1.119	0.00	8.23	0.00	0.00
5942	YF	S6W	60	10/24/89	0.895	0.00	3.54	0.00	0.00
5943	JE	S7A	60	10/25/89	0.809	0.00	40.00	0.00	0.62
5943	SF	S80	60	10/25/89	1.109	0.00	11.10	0.00	0.59
5943	VE	S7L	60	10/27/89	0.936	0.00	14.10	0.00	0.00
5943	VSV	O6C	60	10/20/89	1.108	0.00	46.20	0.00	0.43
5943	YF	S6X	60	10/24/89	0.904	0.00	13.30	0.00	0.00
5944	JE	S7A	60	10/25/89	0.809	0.00	4.46	0.00	0.00
5944	SF	S80	60	10/25/89	1.109	0.00	3.20	0.00	0.00
5944	VE	S7N	60	10/27/89	0.936	0.00	3.75	0.00 >	0.02
5944	VSV	O6C	60	10/20/89	1.108	0.00	14.10	0.00	0.00
5944	YF	S6X	60	10/24/89	0.904	0.00	4.36	0.00	0.00
5945	JE	S7B	60	10/25/89	0.798	0.00	1.55	0.00	0.00
5945	SF	S81	60	10/25/89	1.072	0.00	1.37	0.00 >	0.00
5945	VE	S7O	60	10/27/89	0.971	0.00	1.47	0.00	0.00
5945	VSV	O6D	60	10/20/89	1.164	0.00	1.47	0.00	0.00
5945	YF	S6Y	60	10/24/89	0.893	0.00	1.50	0.00	0.00
5946	JE	S7B	60	10/25/89	0.798	0.00	3.78	0.00 >	0.11
5946	SF	S81	60	10/25/89	1.072	0.00	2.83	0.00 >	0.41
5946	VE	S7O	60	10/27/89	0.971	0.00	1.75	0.00	0.00
5946	VSV	O6D	60	10/20/89	1.164	0.00	4.92	0.00	0.00
5946	YF	S6Y	60	10/24/89	0.893	0.00	1.59	0.00	0.00
5947	JE	S7C	60	10/25/89	0.779	0.00	4.90	0.00	0.00
5947	SF	S82	60	10/25/89	1.115	0.00	5.39	0.00	0.00
5947	VE	S7P	60	10/27/89	1.097	0.00	3.29	0.00	0.93
5947	VSV	O6G	60	10/24/89	1.221	0.00	5.82	0.00	0.00
5947	YF	S6Z	60	10/24/89	0.963	0.00	4.40	0.00	0.00
5948	JE	S7C	60	10/25/89	0.779	0.00	1.46	0.00	0.00
5948	SF	S82	60	10/25/89	1.115	0.00	1.37	0.00	0.00
5948	VE	S7P	60	10/27/89	1.097	0.00	1.41	0.00 >	0.02
5948	VSV	O6G	60	10/24/89	1.221	0.00	1.66	0.00 >	0.00
5948	YF	S6Z	60	10/24/89	0.963	0.00	1.43	0.00	0.00
5949	JE	S7D	60	10/25/89	0.935	0.00	1.44	0.00	0.00
5949	SF	S83	60	10/25/89	0.999	0.00	1.73	0.00	0.00
5949	VE	S7Q	60	10/27/89	0.841	0.00	1.79	0.00 >	0.38
5949	VSV	O6H	60	10/24/89	1.252	0.00	1.65	0.00 >	0.00
5949	YF	S7O	60	10/24/89	0.652	0.00	1.70	0.00	0.00
5950	JE	S7D	60	10/25/89	0.935	0.00	6.83	0.00	0.00
5950	SF	S83	60	10/25/89	0.999	0.00	7.92	0.00 >	3.46
5950	VE	S7Q	60	10/27/89	0.841	0.00	11.70	0.00	0.00
5950	VSV	O6H	60	10/24/89	1.252	0.00	3.90	0.00 >	3.43
5950	YF	S7O	60	10/24/89	0.652	0.00	13.90	0.00 >	0.84
5951	JE	S7E	60	10/25/89	0.877	0.00	1.50	0.00 >	0.01
5951	SF	S84	60	10/25/89	0.829	0.00	1.98	0.00	0.00
5951	VE	S7R	60	10/27/89	1.019	0.00	1.53	0.00	0.00
5951	VSV	O6I	60	10/24/89	1.169	0.00 <	1.00	0.00	0.00
5951	YF	S7I	60	10/24/89	0.860	0.00	1.98	0.00	0.00
5952	JE	S7E	60	10/25/89	0.877	0.00	2.02	0.00 >	0.08
5952	SF	S84	60	10/25/89	0.829	0.00	3.81	0.00 >	0.11
5952	VE	S7R	60	10/27/89	1.019	0.00	3.00	0.00	0.00
5952	VSV	O6I	60	10/24/89	1.169	0.00	1.63	0.00 >	0.03
5952	YF	S7I	60	10/24/89	0.860	0.00	3.81	0.00 >	0.01
5953	JE	S7F	60	10/25/89	0.879	0.00 <	1.00	0.00	0.00
5953	SF	S85	60	10/25/89	0.990	0.00 <	1.00	0.00	0.00
5953	VE	S7S	60	10/27/89	0.971	0.00 <	1.00	0.00	0.00
5953	VSV	O6J	60	10/24/89	0.986	0.00	2.30	0.00	0.00
5953	YF	S72	60	10/24/89	0.849	0.00 <	1.00	0.00	0.00
5954	JE	S7F	60	10/25/89	0.879	0.00	36.00	0.00 >	0.81
5954	SF	S85	60	10/25/89	0.990	0.00	33.40	0.00	0.00
5954	VE	S7S	60	10/27/89	0.971	0.00	1.80	0.00	0.17
5954	VSV	O6J	60	10/24/89	0.986	0.00	143.00	0.00	0.00
5954	YF	S72	60	10/24/89	0.849	0.00	49.00	0.00	0.00
5955	JE	S7G	60	10/25/89	0.773	0.00	12.80	0.00 >	0.03
5955	SF	S86	60	10/25/89	0.980	0.00	6.18	0.00 >	0.09

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5955	VE	S7T	60	10/27/89	0.977	0.00	18.90	0.00	0.00
5955	VSV	06K	60	10/24/89	1.096	0.00	12.10	0.00	0.00
5955	YF	S73	60	10/24/89	0.789	0.00	39.10	0.00	0.00
5956	JE	S7G	60	10/25/89	0.773	0.00	14.50	0.00	0.00
5956	SF	S86	60	10/25/89	0.980	0.00	14.20	0.00	2.00
5956	VE	S7T	60	10/27/89	0.977	0.00	14.10	0.00	> 0.15
5956	VSV	06K	60	10/24/89	1.096	0.00	> 320.00	0.00	> 0.20
5956	YF	S73	60	10/24/89	0.789	0.00	41.50	0.00	2.36
5957	JE	S7H	60	10/25/89	0.861	0.00	> 320.00	0.00	> 0.87
5957	SF	S87	60	10/25/89	0.955	0.00	> 320.00	0.00	0.00
5957	VE	S7U	60	10/27/89	1.012	0.00	268.00	0.00	0.00
5957	VSV	06L	60	10/24/89	1.197	0.00	> 320.00	0.00	> 2.87
5957	YF	S74	60	10/24/89	0.801	0.00	> 320.00	0.00	> 0.23
5958	JE	S7H	60	10/25/89	0.861	0.00	5.99	0.00	0.32
5958	SF	S87	60	10/25/89	0.955	0.00	8.09	0.00	0.00
5958	VE	S7U	60	10/27/89	1.012	0.00	18.80	0.00	0.00
5958	VSV	06L	60	10/24/89	1.197	0.00	11.50	0.00	> 0.42
5958	YF	S74	60	10/24/89	0.801	0.00	18.90	0.00	0.00
5968	JE	SC9	61	11/01/89	0.742	0.00	100.00	0.00	0.00
5968	SF	SD5	61	11/01/89	0.970	0.00	49.30	0.00	0.00
5968	VE	SCP	61	11/03/89	0.887	0.00	78.10	0.00	0.00
5968	VSV	06Q	61	10/24/89	1.120	0.00	148.00	0.00	1.88
5968	YF	SBT	61	10/31/89	0.547	0.00	57.90	0.00	0.00
5969	JE	SCA	61	11/01/89	0.732	0.00	4.33	0.00	0.13
5969	SF	SD6	61	11/01/89	0.836	0.00	2.61	0.00	0.00
5969	VE	SCQ	61	11/03/89	0.886	0.00	5.30	0.00	0.00
5969	VSV	06Q	61	10/24/89	1.120	0.00	18.10	0.00	> 3.63
5969	YF	SEU	61	10/31/89	0.509	0.00	5.26	0.00	0.00
5970	JE	SCA	61	11/01/89	0.732	0.00	< 1.00	0.00	0.00
5970	SF	SD6	61	11/01/89	0.836	0.00	< 1.00	0.00	0.00
5970	VE	SCQ	61	11/03/89	0.886	0.00	< 1.00	0.00	0.00
5970	VSV	06R	61	10/24/89	1.000	0.00	< 1.00	0.00	0.00
5970	YF	SBU	61	10/31/89	0.509	0.00	1.60	0.00	0.00
5971	JE	SCB	61	11/01/89	0.759	0.00	< 1.00	0.00	0.00
5971	SF	SD7	61	11/01/89	0.864	0.00	1.00	0.00	0.00
5971	VE	SCR	61	11/03/89	0.924	0.00	4.40	0.00	0.00
5971	VSV	06R	61	10/24/89	1.000	0.00	2.41	0.00	0.00
5971	YF	SBV	61	10/31/89	0.692	0.00	4.53	0.00	0.00
5972	JE	SCB	61	11/01/89	0.759	0.00	< 1.00	0.00	0.00
5972	SF	SD7	61	11/01/89	0.864	0.00	< 1.00	0.00	0.00
5972	VE	SCR	61	11/03/89	0.924	0.00	2.65	0.00	0.00
5972	VSV	06S	61	10/24/89	1.155	0.00	2.77	0.00	0.00
5972	YF	SBV	61	10/31/89	0.692	0.00	2.55	0.00	0.00
5973	JE	SCC	61	11/01/89	0.791	0.00	3.67	0.00	0.00
5973	SF	SD8	61	11/01/89	0.888	0.00	2.24	0.00	0.00
5973	VE	SCS	61	11/03/89	0.885	0.00	3.92	0.00	> 0.25
5973	VSV	06S	61	10/24/89	1.155	0.00	17.00	0.00	> 0.40
5973	YF	SBW	61	10/31/89	0.660	0.00	3.04	0.00	> 0.44
5974	JE	SCC	61	11/01/89	0.791	0.00	< 1.00	0.00	0.00
5974	SF	SD8	61	11/01/89	0.888	0.00	< 1.00	0.00	0.00
5974	VE	SCS	61	11/03/89	0.885	0.00	< 1.00	0.00	0.00
5974	VSV	06U	61	10/27/89	1.003	< 1.00	> 1.35	> 1.35	> 2.78
5974	YF	SBW	61	10/31/89	0.660	0.00	< 1.00	0.00	0.00
5975	JE	SCD	61	11/01/89	0.786	0.00	2.18	0.00	0.00
5975	SF	SD9	61	11/01/89	0.928	0.00	1.96	0.00	0.00
5975	VE	SCT	61	11/03/89	0.916	0.00	3.37	0.00	0.00
5975	VSV	06U	61	10/27/89	1.003	8.78	13.20	1.50	> 7.89
5975	YF	SBX	61	10/31/89	0.616	0.00	2.96	0.00	0.00
5976	JE	SCD	61	11/01/89	0.786	0.00	< 1.00	0.00	0.00
5976	SF	SD9	61	11/01/89	0.928	0.00	< 1.00	0.00	0.00
5976	VE	SCT	61	11/03/89	0.916	0.00	< 1.00	0.00	0.00
5976	YF	SBX	61	10/31/89	0.616	0.00	1.58	0.00	0.00
5977	JE	SCE	61	11/01/89	0.772	0.00	< 1.00	0.00	0.00
5977	SF	SDA	61	11/01/89	0.884	0.00	1.06	0.00	0.00
5977	VE	SCU	61	11/03/89	0.972	0.00	1.30	0.00	0.00
5977	VSV	06V	61	10/27/89	0.977	0.00	1.89	0.00	> 0.25

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5977	YF	SBY	61	10/31/89	0.620	0.00	1.50	0.00	0.00
5978	JE	SCE	61	11/01/89	0.772	0.00 <	1.00	0.00	0.00
5978	SF	SDA	61	11/01/89	0.884	0.00 <	1.00	0.00	0.00
5978	VE	SCU	61	11/03/89	0.972	0.00 <	1.00	0.00	0.00
5978	YF	SBY	61	10/31/89	0.620	0.00 <	1.00	0.00	0.00
5979	JE	SCF	61	11/01/89	0.811	0.00 <	1.00	0.00	0.00
5979	SF	SDB	61	11/01/89	0.829	0.00 <	1.00	0.00	0.00
5979	VE	SCV	61	11/03/89	0.888	0.00 <	1.00	0.00	0.00
5979	VSV	06V	61	10/27/89	0.977	0.00 <	1.00	0.00	0.00
5979	YF	SBZ	61	10/31/89	0.646	0.00 <	1.00	0.00	0.00
5980	JE	SCF	61	11/01/89	0.811	0.00 <	1.00	0.00	0.00
5980	SF	SDB	61	11/01/89	0.829	0.00 <	1.00	0.00	0.00
5980	VE	SCV	61	11/03/89	0.888	0.00	1.83	0.00	0.00
5980	VSV	06W	61	10/27/89	0.962	< 1.00	2.07 >	2.07 >	3.28
5980	YF	SBZ	61	10/31/89	0.646	0.00	1.89	0.00	0.00
5981	JE	SCG	61	11/01/89	0.614	0.00 <	1.00	0.00	0.00
5981	SF	SDC	61	11/01/89	0.626	0.00	1.94	0.00	0.00
5981	VE	SCW	61	11/03/89	0.865	0.00 <	1.00	0.00	0.00
5981	YF	SCO	61	10/31/89	0.603	0.00	1.49	0.00	0.00
5982	JE	SCG	61	11/01/89	0.614	0.00 <	1.00	0.00	0.00
5982	SF	SDC	61	11/01/89	0.626	0.00 <	1.00	0.00	0.00
5982	VE	SCW	61	11/03/89	0.865	0.00 <	1.00	0.00	0.00
5982	YF	SCO	61	10/31/89	0.603	0.00 <	1.00	0.00	0.00
5983	JE	SCH	61	11/01/89	0.715	0.00	1.61	0.00	0.00
5983	SF	SDD	61	11/01/89	0.877	0.00 <	1.00	0.00	0.00
5983	VE	SCX	61	11/03/89	0.961	0.00 <	1.00	0.00	0.00
5983	YF	SCI	61	10/31/89	0.638	0.00	3.69	0.00	0.00
5984	JE	SCH	61	11/01/89	0.715	0.00 <	1.00	0.00	0.00
5984	SF	SDD	61	11/01/89	0.877	0.00 <	1.00	0.00	0.00
5984	VE	SCX	61	11/03/89	0.961	0.00 <	1.00	0.00	0.00
5984	VSV	06W	61	10/27/89	0.962	0.00 <	1.00	0.00	0.00
5984	YF	SCI	61	10/31/89	0.638	0.00	1.69	0.00	0.00
5985	JE	SCI	61	11/01/89	0.739	0.00	1.30	0.00	0.00
5985	SF	SDE	61	11/01/89	0.828	0.00	1.45	0.00	0.00
5985	VE	SCY	61	11/03/89	0.953	0.00 <	1.00	0.00	0.00
5985	VSV	06X	61	10/27/89	0.960	0.00 <	1.00	0.00	0.00
5985	YF	SC2	61	10/31/89	0.650	0.00	1.79	0.00	0.00
5986	JE	SCI	61	11/01/89	0.739	0.00 <	1.00	0.00	0.00
5986	SF	SDE	61	11/01/89	0.828	0.00 <	1.00	0.00	0.00
5986	VE	SCY	61	11/03/89	0.953	0.00 <	1.00	0.00	0.00
5986	VSV	06X	61	10/27/89	0.960	0.00 <	1.00	0.00	0.00
5986	YF	SC2	61	10/31/89	0.650	0.00 <	1.00	0.00	0.00
5987	JE	SC7	61	11/01/89	0.710	0.00	10.00	0.00	0.00
5987	SF	SDF	61	11/01/89	0.759	0.00	12.30	0.00	0.00
5987	VE	SCZ	61	11/03/89	0.931	0.00 <	1.00	0.00	0.00
5987	VSV	06Y	61	10/27/89	0.899	0.00	3.04	0.00	0.00
5987	YF	SC3	61	10/31/89	0.662	0.00	13.30	0.00	0.00
5988	JE	SCJ	61	11/01/89	0.710	0.00	1.37	0.00	0.00
5988	SF	SDF	61	11/01/89	0.759	0.00	2.43	0.00	0.00
5988	VE	SCZ	61	11/03/89	0.931	0.00	1.55	0.00	0.00
5988	VSV	06Y	61	10/27/89	0.899	23.00	7.45	0.32 >	10.82
5988	YF	SC3	61	10/31/89	0.662	0.00	4.44	0.00	0.00
5989	JE	SCK	61	11/01/89	0.748	0.00	1.00	0.00	0.00
5989	SF	SDG	61	11/01/89	0.867	0.00	1.35	0.00	0.00
5989	VE	SD0	61	11/03/89	0.934	0.00 <	1.00	0.00	0.00
5989	YF	SC4	61	10/31/89	0.662	0.00	1.69	0.00	0.00
5990	JE	SCK	61	11/01/89	0.748	0.00 <	1.00	0.00	0.00
5990	SF	SDG	61	11/01/89	0.867	0.00 <	1.00	0.00	0.00
5990	VE	SD0	61	11/03/89	0.934	0.00 <	1.00	0.00	0.00
5990	YF	SC4	61	10/31/89	0.662	0.00	1.26	0.00	0.00
5991	JE	SCL	61	11/01/89	0.737	0.00 <	1.00	0.00	0.00
5991	SF	SDH	61	11/01/89	0.785	0.00	1.29	0.00	0.00
5991	VE	SD1	61	11/03/89	0.889	0.00 <	1.00	0.00	0.00
5991	VSV	06Z	61	10/27/89	0.955	0.00 <	1.00	0.00 >	0.00
5991	YF	SC5	61	10/31/89	0.635	0.00	1.64	0.00	0.00
5992	JE	SCL	61	11/01/89	0.737	0.00	1.14	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
5992	SF	SDH	61	11/01/89	0.785	0.00	1.37	0.00	0.00
5992	VE	SL1	61	11/03/89	0.889	0.00	1.12	0.00	0.00
5992	YF	SC5	61	10/31/89	0.635	0.00	1.90	0.00	0.00
5993	JE	SCM	61	11/01/89	0.727	0.00	13.80	0.00	0.00
5993	SF	SDI	61	11/01/89	0.809	0.00	9.38	0.00	0.00
5993	VE	SD2	61	11/03/89	0.902	0.00	6.15	0.00	0.00
5993	YF	SC6	61	10/31/89	0.597	0.00	17.70	0.00	0.00
5994	JE	SEQ	61	11/07/89	0.862	0.00 >	320.00	0.00 >	15.89
5994	PT	SFG	61	11/07/89	0.472	0.00	257.00	0.00 >	0.50
5994	SF	SF3	61	11/07/89	0.838	256.00	257.00	1.00 >	7.66
5994	VE	SFT	61	11/10/89	0.981	0.00 >	320.00	0.00	0.00
5994	VSV	06Z	61	10/27/89	0.955	0.00 >	320.00	0.00 >	7.19
5994	YF	SED	61	11/07/89	0.837	0.00 >	320.00	0.00	0.00
5995	JE	SER	61	11/07/89	0.868	0.00	8.68	0.00 >	8.28
5995	PT	SFH	61	11/07/89	0.434	0.00	10.00	0.00 >	0.30
5995	SF	SF4	61	11/07/89	0.891	0.00	4.29	0.00	0.00
5995	VE	SFU	61	11/10/89	1.063	0.00	5.71	0.00	0.00
5995	VSV	070	61	10/27/89	0.944	0.00	3.20	0.00 >	0.15
5995	YF	SEE	61	11/07/89	0.795	8.19	8.87	1.08 >	7.66
5996	JE	SER	61	11/07/89	0.868	0.00 >	320.00	0.00 >	26.29
5996	PT	SJH	61	11/07/89	0.494	0.00	320.00	0.00	0.40
5996	SF	SF4	61	11/07/89	0.891	0.00 >	320.00	0.00	0.00
5996	VE	SFU	61	11/10/89	1.063	0.00	188.00	0.00	0.00
5996	VSV	070	61	10/27/89	0.944	29.00	29.60	1.02 >	9.42
5996	YF	SEE	61	11/07/89	0.795	0.00 >	320.00	0.00	0.00
5997	JE	SES	61	11/07/89	0.919	3.51	18.30	5.23 >	25.75
5997	PT	SFI	61	11/07/89	0.636	0.00	7.12	0.00	0.07
5997	SF	SF5	61	11/07/89	0.918	2.88	6.91	2.40 >	11.40
5997	VE	SFV	61	11/10/89	1.014 <	1.00	3.20 >	3.20 >	14.84
5997	VSV	071	61	10/27/89	1.008	2.73	3.20	1.17 >	16.83
5997	YF	SEF	61	11/07/89	0.712	4.43	14.10	3.18 >	17.81
5998	JE	SES	61	11/07/89	0.919	1.08	4.77	4.41 >	14.27
5998	PT	SFI	61	11/07/89	0.636	0.00	2.38	0.00	0.00
5998	SF	SF5	61	11/07/89	0.918 <	1.00	2.29 >	2.29 >	7.02
5998	VE	SFV	61	11/10/89	1.014 <	1.00	1.55 >	1.55 >	7.49
5998	YF	SEF	61	11/07/89	0.712 <	1.00	3.12 >	3.12 >	11.86
5999	JE	SET	61	11/07/89	0.754	0.00 >	320.00	0.00 >	19.39
5999	PT	SFJ	61	11/07/89	0.619	0.00	144.00	0.00	0.00
5999	SF	SF6	61	11/07/89	0.956	0.00 >	320.00	0.00	0.11
5999	VE	SFW	61	11/10/89	0.950	0.00 >	320.00	0.00	0.35
5999	VSV	071	61	10/27/89	1.008	201.00	310.00	1.54 >	10.25
5999	YF	SEG	61	11/07/89	0.812	0.00 >	320.00	0.00	0.00
6006	JE	SET	61	11/07/89	0.754	0.00	177.00	0.00 >	16.02
6006	PT	SFJ	61	11/07/89	0.619	0.00	168.00	0.00	0.00
6006	SF	SF6	61	11/07/89	0.956	0.00	90.30	0.00	0.00
6006	VE	SFW	61	11/10/89	0.950	0.00	143.00	0.00 >	0.20
6006	VSV	072	61	10/27/89	0.840	0.00 >	320.00	0.00	0.22
6006	YF	SEG	61	11/07/89	0.812	0.00	171.00	0.00	0.00
6007	JE	SEU	61	11/07/89	0.944	0.00	52.20	0.00 >	18.10
6007	PT	SFK	61	11/07/89	0.521	0.00	52.00	0.00	0.00
6007	SF	SF7	61	11/07/89	0.982	0.00	43.30	0.00	0.11
6007	VE	SFX	61	11/10/89	1.005	0.00	48.20	0.00	0.00
6007	VSV	072	61	10/27/89	0.840	0.00	312.00	0.00	0.00
6007	YF	SEH	61	11/07/89	0.881	0.00	53.00	0.00	0.00
6008	JE	SEU	61	11/07/89	0.944	0.00	213.00	0.00 >	19.53
6008	PT	SFK	61	11/07/89	0.521	0.00	146.00	0.00	0.00
6008	SF	SF7	61	11/07/89	0.982	0.00	106.00	0.00	0.00
6008	VE	SFX	61	11/10/89	1.005	0.00 >	320.00	0.00	0.00
6008	VSV	07J	61	11/10/89	1.514	0.00 >	320.00	0.00 >	3.12
6008	YF	SEH	61	11/07/89	0.881	0.00	197.00	0.00	0.00
6009	JE	SEV	61	11/07/89	0.873	0.00	156.00	0.00 >	24.47
6009	PT	SFL	61	11/07/89	0.548	0.00	104.00	0.00	0.00
6009	SF	SF8	61	11/07/89	1.031	0.00	95.50	0.00	0.00
6009	VE	SFY	61	11/10/89	1.043	0.00	159.00	0.00	1.76
6009	VSV	07J	61	11/10/89	1.514	0.00	195.00	0.00	0.00
6009	YF	SEI	61	11/07/89	1.014	0.00	27.30	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
6010	JE	SEV	61	11/07/89	0.873	0.00	19.20	0.00 >	9.43
6010	PT	SFL	61	11/07/89	0.548	0.00	12.20	0.00	0.00
6010	SF	SF8	61	11/07/89	1.031	0.00	10.90	0.00	0.00
6010	VE	SFY	61	11/10/89	1.043	0.00	20.00	0.00 >	0.58
6010	VSV	075	61	11/03/89	1.437	0.00	35.00	0.00	0.00
6010	YF	SEI	61	11/07/89	1.014	0.00	10.00	0.00	0.00
6011	JE	SEW	61	11/07/89	0.936	0.00	234.00	0.00 >	23.86
6011	PT	SFM	61	11/07/89	0.675	0.00	158.00	0.00	0.00
6011	SF	SF9	61	11/07/89	0.930	0.00	184.00	0.00	0.53
6011	VE	SFZ	61	11/10/89	1.008	0.00	212.00	0.00	0.33
6011	VSV	075	61	11/03/89	1.437	0.00 >	320.00	0.00	0.00
6011	YF	SEJ	61	11/07/89	0.863	0.00	223.00	0.00	0.00
6012	JE	SEW	61	11/07/89	0.936	0.00	82.00	0.00 >	15.56
6012	PT	SFM	61	11/07/89	0.675	0.00	27.30	0.00	0.00
6012	SF	SF9	61	11/07/89	0.930	0.00	67.50	0.00	0.00
6012	VE	SFZ	61	11/10/89	1.008	0.00	104.00	0.00 >	0.10
6012	VSV	076	61	11/03/89	1.240	0.00	220.00	0.00 >	0.36
6012	YF	SEJ	61	11/07/89	0.863	0.00	54.70	0.00	0.00
6013	JE	SEX	61	11/07/89	0.776	0.00 >	320.00	0.00 >	27.30
6013	PT	SFN	61	11/07/89	0.460	0.00 >	320.00	0.00	0.06
6013	SF	SFA	61	11/07/89	0.945	0.00 >	320.00	0.00	0.00
6013	VE	SG0	61	11/10/89	1.029	0.00 >	320.00	0.00	0.00
6013	VSV	076	61	11/03/89	1.240	0.00 >	320.00	0.00 >	1.10
6013	YF	SEK	61	11/07/89	0.781	0.00 >	320.00	0.00	0.00
6014	JE	SEX	61	11/07/89	0.776	0.00	168.00	0.00 >	19.79
6014	PT	SFN	61	11/07/89	0.460	0.00	100.00	0.00	0.86
6014	SF	SFA	61	11/07/89	0.945	0.00	86.40	0.00	0.00
6014	VE	SG0	61	11/10/89	1.028	0.00	122.00	0.00	0.04
6014	VSV	077	61	11/03/89	1.327	0.00	227.00	0.00 >	0.81
6014	YF	SEK	61	11/07/89	0.781	0.00	121.00	0.00	0.00
6015	JE	SEY	61	11/07/89	0.787	0.00	159.00	0.00 >	22.28
6015	PT	SFO	61	11/07/89	0.512	0.00	141.00	0.00	2.22
6015	SF	SFB	61	11/07/89	0.938	0.00	131.00	0.00	0.00
6015	VE	SG1	61	11/10/89	0.948	0.00	157.00	0.00	0.90
6015	VSV	077	61	11/03/89	1.327	0.00	196.00	0.00	0.95
6015	YF	SEL	61	11/07/89	0.796	0.00	147.00	0.00	0.00
6016	JE	SEY	61	11/07/89	0.787	0.00	261.00	0.00 >	13.98
6016	PT	SFO	61	11/07/89	0.512	0.00	76.50	0.00	0.00
6016	SF	SFB	61	11/07/89	0.938	0.00	56.10	0.00	0.00
6016	VE	SG1	61	11/10/89	0.948	0.00	253.00	0.00	0.73
6016	VSV	078	61	11/03/89	1.468	0.00	212.00	0.00	3.14
6016	YF	SEL	61	11/07/89	0.796	0.00	93.80	0.00	0.00
6017	JE	SEZ	61	11/07/89	0.729	0.00 >	320.00	0.00 >	15.99
6017	PT	SFP	61	11/07/89	0.520	0.00 >	320.00	0.00	0.00
6017	SF	SFC	61	11/07/89	0.912	0.00	177.00	0.00	0.00
6017	VE	SG2	61	11/10/89	0.951	0.00	234.00	0.00	0.20
6017	VSV	078	61	11/03/89	1.468	0.00 >	320.00	0.00	5.64
6017	YF	SEM	61	11/07/89	0.796	0.00	200.00	0.00	0.00
6018	JE	SEZ	61	11/07/89	0.729	0.00 >	320.00	0.00 >	13.09
6018	PT	SFP	61	11/07/89	0.520	0.00	172.00	0.00	0.00
6018	SF	SFC	61	11/07/89	0.912	0.00	155.00	0.00	0.00
6018	VE	SG2	61	11/10/89	0.951	0.00	216.00	0.00 >	0.43
6018	VSV	079	61	11/03/89	1.405	0.00	185.00	0.00	0.89
6018	YF	SEM	61	11/07/89	0.796	0.00	151.00	0.00	0.00
6019	JE	SFO	61	11/07/89	0.682	0.00	175.00	0.00 >	7.40
6019	PT	SFQ	61	11/07/89	0.515	0.00	162.00	0.00 >	0.90
6019	SF	SFD	61	11/07/89	0.882	0.00	126.00	0.00	0.00
6019	VE	SG3	61	11/10/89	1.002	0.00	142.00	0.00	0.20
6019	VSV	079	61	11/03/89	1.405	0.00	188.00	0.00	2.26
6019	YF	SEN	61	11/07/89	0.813	0.00	155.00	0.00	0.00
6020	JE	SFO	61	11/07/89	0.682	0.00	198.00	0.00 >	7.29
6020	PT	SFQ	61	11/07/89	0.515	0.00	127.00	0.00	0.00
6020	SF	SFD	61	11/07/89	0.882	0.00	148.00	0.00	0.65
6020	VE	SG3	61	11/10/89	1.002	0.00	145.00	0.00	0.20
6020	VSV	07A	61	11/03/89	1.337	0.00	127.00	0.00	0.00
6020	YF	SEN	61	11/07/89	0.813	0.00	117.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
6021	JE	SF1	61	11/07/89	0.745	0.00	> 320.00	0.00	> 17.68
6021	PT	SFR	61	11/07/89	0.488	0.00	261.00	0.00	0.00
6021	SF	SFE	61	11/07/89	0.922	0.00	181.00	0.00	0.00
6021	VE	SG4	61	11/10/89	1.019	0.00	> 320.00	0.00	1.24
6021	VSV	07A	61	11/03/89	1.337	219.00	304.00	1.38	> 5.14
6021	YF	SEO	61	11/07/89	0.812	0.00	267.00	0.00	0.00
6022	JE	SGQ	61	11/09/89	0.883	0.00	214.00	0.00	0.00
6022	PT	SHG	61	11/09/89	0.663	0.00	144.00	0.00	> 0.17
6022	SF	SH3	61	11/09/89	0.659	0.00	228.00	0.00	> 0.25
6022	VE	SHT	61	11/10/89	1.107	0.00	286.00	0.00	> 0.70
6022	VSV	07B	61	11/03/89	1.148	0.00	231.00	0.00	> 0.00
6022	YF	SGD	61	11/09/89	0.705	0.00	> 320.00	0.00	0.02
6023	JE	SGR	61	11/09/89	0.792	0.00	4.71	0.00	0.00
6023	PT	SHH	61	11/09/89	0.681	0.00	3.43	0.00	0.00
6023	SF	SH4	61	11/09/89	0.650	0.00	2.62	0.00	0.00
6023	VE	SHU	61	11/10/89	1.081	0.00	2.41	0.00	0.00
6023	VSV	07B	61	11/03/89	1.148	0.00	8.70	0.00	0.00
6023	YF	SGE	61	11/09/89	0.783	0.00	2.42	0.00	0.00
6024	JE	SGR	61	11/09/89	0.792	0.00	> 320.00	0.00	0.00
6024	PT	SHH	61	11/09/89	0.681	0.00	> 320.00	0.00	> 3.78
6024	SF	SH4	61	11/09/89	0.650	0.00	> 320.00	0.00	> 1.65
6024	VE	SHU	61	11/10/89	1.081	0.00	> 320.00	0.00	0.00
6024	VSV	07C	61	11/03/89	1.371	0.00	> 320.00	0.00	0.20
6024	YF	SGE	61	11/09/89	0.783	0.00	> 320.00	0.00	0.00
6025	JE	SGS	61	11/09/89	0.832	0.00	43.50	0.00	0.00
6025	PT	SHI	61	11/09/89	0.646	0.00	37.20	0.00	0.00
6025	SF	SH5	61	11/09/89	0.644	0.00	43.10	0.00	> 2.34
6025	VE	SHV	61	11/10/89	1.179	0.00	35.90	0.00	0.00
6025	VSV	07C	61	11/03/89	1.371	0.00	170.00	0.00	0.00
6025	YF	SGF	61	11/09/89	0.866	0.00	32.00	0.00	0.00
6026	JE	SGS	61	11/09/89	0.832	0.00	108.00	0.00	0.09
6026	PT	SHI	61	11/09/89	0.646	0.00	23.80	0.00	0.00
6026	SF	SH5	61	11/09/89	0.644	0.00	161.00	0.00	> 1.87
6026	VE	SHV	61	11/10/89	1.179	0.00	188.00	0.00	0.00
6026	VSV	07D	61	11/03/89	1.262	0.00	220.00	0.00	> 4.71
6026	YF	SGF	61	11/09/89	0.866	0.00	29.60	0.00	0.00
6027	JE	SGT	61	11/09/89	0.863	0.00	> 320.00	0.00	0.00
6027	PT	SHJ	61	11/09/89	0.662	0.00	> 320.00	0.00	> 5.33
6027	SF	SH6	61	11/09/89	0.693	0.00	> 320.00	0.00	0.00
6027	VE	SHW	61	11/10/89	1.108	0.00	> 320.00	0.00	0.00
6027	VSV	07D	61	11/03/89	1.262	0.00	> 320.00	0.00	> 5.44
6027	YF	SGG	61	11/09/89	0.894	0.00	> 320.00	0.00	> 0.01
6028	JE	SGT	61	11/09/89	0.863	0.00	> 320.00	0.00	0.00
6028	PT	SHJ	61	11/09/89	0.662	0.00	> 320.00	0.00	2.49
6028	SF	SH6	61	11/09/89	0.693	0.00	> 320.00	0.00	0.00
6028	VE	SHW	61	11/10/89	1.108	0.00	> 320.00	0.00	0.00
6028	VSV	07E	61	11/03/89	1.356	222.00	> 320.00	> 1.44	> 7.73
6028	YF	SGG	61	11/09/89	0.894	0.00	> 320.00	0.00	0.00
6029	JE	SGU	61	11/09/89	0.810	0.00	133.00	0.00	> 0.23
6029	PT	SHK	61	11/09/89	0.731	0.00	73.40	0.00	> 3.00
6029	SF	SH7	61	11/09/89	0.710	0.00	114.00	0.00	1.55
6029	VE	SHX	61	11/10/89	1.123	86.50	> 320.00	> 3.70	> 16.40
6029	VSV	07E	61	11/03/89	1.356	0.00	152.00	0.00	0.40
6029	YF	SGH	61	11/09/89	0.854	0.00	81.50	0.00	0.15
6030	JE	SGU	61	11/09/89	0.810	0.00	74.70	0.00	0.00
6030	PT	SHK	61	11/09/89	0.731	0.00	63.80	0.00	0.66
6030	SF	SH7	61	11/09/89	0.710	0.00	38.40	0.00	0.00
6030	VE	SHX	61	11/10/89	1.123	0.00	91.10	0.00	> 0.65
6030	VSV	07F	61	11/03/89	1.218	0.00	171.00	0.00	7.27
6030	YF	SGH	61	11/09/89	0.854	0.00	44.10	0.00	1.00
6031	JE	SGV	61	11/09/89	0.872	0.00	177.00	0.00	0.00
6031	PT	SHL	61	11/09/89	0.746	82.30	181.00	2.20	14.42
6031	SF	SH8	61	11/09/89	0.780	0.00	172.00	0.00	0.00
6031	VE	SHY	61	11/10/89	1.178	0.00	157.00	0.00	0.00
6031	VSV	07F	61	11/03/89	1.218	0.00	200.00	0.00	> 1.90
6031	YF	SGI	61	11/09/89	0.834	0.00	171.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff-rntl.	IC 50	TC 25	SI	TAI
6032	JE	SGV	61	11/09/89	0.872	0.00	> 320.00	0.00	0.00
6032	PT	SHL	61	11/09/89	0.746	0.00	167.00	0.00	0.00
6032	SF	SH8	61	11/09/89	0.780	0.00	283.00	0.00	> 0.19
6032	VE	SHY	61	11/10/89	1.178	0.00	234.00	0.00	0.08
6032	VSV	07G	61	11/03/89	1.372	0.00	> 320.00	0.00	> 1.98
6032	YF	SGI	61	11/09/89	0.834	0.00	154.00	0.00	0.48
6033	JE	SGW	61	11/09/89	0.973	0.00	94.10	0.00	> 0.31
6033	PT	SHM	61	11/09/89	0.699	0.00	97.40	0.00	0.00
6033	SF	SH9	61	11/09/89	0.720	0.00	71.20	0.00	> 0.10
6033	VE	SHZ	61	11/10/89	1.008	0.00	164.00	0.00	1.55
6033	VSV	07G	61	11/03/89	1.372	0.00	210.00	0.00	> 1.22
6033	YF	SGJ	61	11/09/89	0.720	0.00	89.80	0.00	0.00
6034	JE	SGW	61	11/09/89	0.973	0.00	296.00	0.00	> 2.95
6034	PT	SHM	61	11/09/89	0.699	0.00	283.00	0.00	> 8.69
6034	SF	SH9	61	11/09/89	0.720	0.00	217.00	0.00	> 4.63
6034	VE	SHZ	61	11/10/89	1.008	0.00	218.00	0.00	0.70
6034	VSV	07H	61	11/03/89	1.381	0.00	222.00	0.00	> 3.22
6034	YF	SGJ	61	11/09/89	0.720	0.00	> 320.00	0.00	0.00
6035	PT	SHN	61	11/09/89	0.647	0.00	43.10	0.00	> 0.47
6035	SF	SHA	61	11/09/89	0.650	0.00	30.70	0.00	0.00
6035	VE	SIO	61	11/10/89	1.023	0.00	46.80	0.00	0.20
6035	VSV	07H	61	11/03/89	1.381	0.00	> 100.00	0.00	> 1.43
6035	YF	SGK	61	11/09/89	0.715	0.00	41.60	0.00	0.00
6036	PT	SHN	61	11/09/89	0.647	0.00	15.70	0.00	0.80
6036	SF	SHA	61	11/09/89	0.650	0.00	15.20	0.00	> 6.84
6036	VE	SIO	61	11/10/89	1.023	0.00	17.30	0.00	1.13
6036	VSV	07K	61	11/10/89	1.406	0.00	49.40	0.00	> 1.51
6036	YF	SGK	61	11/09/89	0.715	0.00	15.60	0.00	> 5.28
6037	JE	SGY	61	11/09/89	0.867	0.00	62.20	0.00	> 0.20
6037	PT	SHO	61	11/09/89	0.684	0.00	62.90	0.00	> 11.54
6037	SF	SHB	61	11/09/89	0.733	0.00	0.83	0.00	0.00
6037	VE	SI1	61	11/10/89	1.045	0.00	207.00	0.00	0.67
6037	VSV	07K	61	11/10/89	1.406	0.00	> 320.00	0.00	0.00
6037	YF	SGL	61	11/09/89	0.768	0.00	29.10	0.00	3.93
6038	JE	SGY	61	11/09/89	0.867	0.00	8.73	0.00	0.00
6038	PT	SHO	61	11/09/89	0.684	0.00	7.66	0.00	> 0.21
6038	SF	SHB	61	11/09/89	0.733	0.00	4.52	0.00	> 0.15
6038	VE	SI1	61	11/10/89	1.045	0.00	12.20	0.00	> 0.03
6038	VSV	07L	61	11/10/89	1.617	0.00	46.90	0.00	> 2.77
6038	YF	SGL	61	11/09/89	0.768	0.00	8.82	0.00	0.00
6039	JE	SGZ	61	11/09/89	0.850	0.00	13.50	0.00	0.00
6039	PT	SHP	61	11/09/89	0.645	0.00	32.00	0.00	0.00
6039	SF	SHC	61	11/09/89	0.713	0.00	3.20	0.00	0.00
6039	VE	SI2	61	11/10/89	1.017	0.00	9.51	0.00	> 0.78
6039	VSV	07L	61	11/10/89	1.617	0.00	115.00	0.00	0.00
6039	YF	SGM	61	11/09/89	0.801	0.00	21.00	0.00	0.00
6040	JE	SGZ	61	11/09/89	0.850	0.00	143.00	0.00	0.00
6040	PT	SHP	61	11/09/89	0.645	0.00	153.00	0.00	> 3.09
6040	SF	SHC	61	11/09/89	0.713	0.00	106.00	0.00	0.00
6040	VE	SI2	61	11/10/89	1.017	0.00	149.00	0.00	0.00
6040	VSV	07M	61	11/10/89	1.571	0.00	> 320.00	0.00	0.25
6040	YF	SGM	61	11/09/89	0.801	0.00	133.00	0.00	0.00
6041	JE	SHO	61	11/09/89	0.776	0.00	> 320.00	0.00	0.93
6041	PT	SHQ	61	11/09/89	0.668	282.00	> 320.00	> 1.13	> 11.64
6041	SF	SHD	61	11/09/89	0.642	0.00	> 320.00	0.00	> 2.03
6041	VE	SI3	61	11/10/89	1.078	0.00	> 320.00	0.00	0.00
6041	VSV	07M	61	11/10/89	1.571	0.00	> 320.00	0.00	0.58
6041	YF	SGN	61	11/09/89	0.736	0.00	> 320.00	0.00	> 7.79
6042	JE	SHO	61	11/09/89	0.776	0.00	191.00	0.00	1.58
6042	PT	SHQ	61	11/09/89	0.668	0.00	100.00	0.00	> 1.70
6042	SF	SHD	61	11/09/89	0.642	0.00	119.00	0.00	> 0.01
6042	VE	SI3	61	11/10/89	1.078	0.00	61.10	0.00	0.00
6042	VSV	07N	61	11/10/89	1.469	0.00	56.10	0.00	0.00
6042	YF	SGN	61	11/09/89	0.736	0.00	135.00	0.00	8.12
6043	JE	SH1	61	11/09/89	0.880	0.00	14.60	0.00	0.00
6043	PT	SHR	61	11/09/89	0.697	0.00	14.60	0.00	> 0.08

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
6043	SF	SHE	61	11/09/89	0.779	0.00	6.80	0.00	0.00
6043	VE	SI4	61	11/10/89	1.055	0.00	24.10	0.00	0.66
6043	VSV	07N	61	11/10/89	1.469	0.00	5.87	0.00	0.00
6043	YF	SGO	61	11/09/89	0.716	0.00	18.50	0.00	0.31
6044	VSV	07O	61	11/10/89	1.506	0.00	20.80	0.00	0.00
6045	VSV	07O	61	11/10/89	1.506	0.00 >	320.00	0.00 >	0.40
6046	VSV	07P	61	11/10/89	1.408	0.00 >	320.00	0.00 >	0.10
6047	VSV	07P	61	11/10/89	1.408	0.00 >	320.00	0.00 >	5.73
6048	VSV	07Q	61	11/10/89	1.589	0.00 >	320.00	0.00 >	0.75
6049	VSV	07Q	61	11/10/89	1.589	0.00	48.00	0.00 >	0.50
6050	VSV	07R	61	11/10/89	1.526	0.00	11.70	0.00 >	0.10
6051	VSV	07R	61	11/10/89	1.526	0.00	22.80	0.00	1.66
6052	VSV	07S	61	11/10/89	1.607	0.00	27.30	0.00	0.00
6053	VSV	07S	61	11/10/89	1.607	0.00 >	320.00	0.00	0.00
6054	VSV	07T	61	11/10/89	1.626	0.00	27.20	0.00	0.00
6108	VSV	06M	61	10/24/89	1.245	0.00 >	320.00	0.00 >	0.65
6108	VV	OIG	61	11/02/89	1.314	0.00	320.00	0.00	0.00
6241	JE	SIJ	1P	11/14/89	0.815	0.00	477.00	0.00	0.00
6241	PT	SJ7	1P	11/14/89	0.838	0.00	394.00	0.00 >	0.94
6241	SF	SIV	1P	11/14/89	0.641	0.00	370.00	0.00 >	0.01
6241	YF	SI7	1P	11/14/89	0.614	0.00	566.00	0.00	0.00
6242	JE	SIJ	1P	11/14/89	0.815	0.00	475.00	0.00	0.00
6242	PT	SJ7	1P	11/14/89	0.838	0.00	405.00	0.00 >	0.02
6242	SF	SIV	1P	11/14/89	0.641	0.00	137.00	0.00	0.00
6242	YF	SI7	1P	11/14/89	0.614	0.00	734.00	0.00	0.10
6243	JE	SIK	1P	11/14/89	0.838	0.00 >	1000.00	0.00	0.00
6243	PT	SJ8	1P	11/14/89	0.803	840.00	955.00	1.14 >	2.85
6243	SF	SIW	1P	11/14/89	0.646	0.00	606.00	0.00	0.00
6243	YF	SI8	1P	11/14/89	0.589	0.00	974.00	0.00	6.16
6244	JE	SIK	1P	11/14/89	0.838	0.00	74.50	0.00	0.00
6244	PT	SJ8	1P	11/14/89	0.803	0.00	41.70	0.00	0.00
6244	SF	SIW	1P	11/14/89	0.646	0.00	13.70	0.00	0.00
6244	YF	SI8	1P	11/14/89	0.589	0.00	106.00	0.00	1.20
6245	JE	SIL	3P	11/14/89	0.891	0.00	749.00	0.00	0.00
6245	PT	SJ9	3P	11/14/89	0.751	0.00	695.00	0.00 >	0.12
6245	SF	SIX	3P	11/14/89	0.609	0.00	351.00	0.00 >	0.35
6245	YF	SI9	3P	11/14/89	0.595	0.00	950.00	0.00	0.22
6246	JE	SIL	1P	11/14/89	0.891	0.00	154.00	0.00	0.00
6246	PT	SJ9	1P	11/14/89	0.761	0.00	181.00	0.00	3.64
6246	SF	SIX	1P	11/14/89	0.649	0.00	2.39	0.00	0.00
6246	YF	SI9	1P	11/14/89	0.595	0.00	195.00	0.00	4.39
6247	JE	SIM	1P	11/14/89	0.834	0.00	174.00	0.00	0.40
6247	PT	SJA	1P	11/14/89	0.837	0.00	173.00	0.00	2.90
6247	SF	SIY	1P	11/14/89	0.632	0.00	8.30	0.00	0.00
6247	YF	SIA	1P	11/14/89	0.660	0.00	182.00	0.00	4.59
6248	JE	SIM	1P	11/14/89	0.834	0.00	915.00	0.00	0.03
6248	PT	SJA	1P	11/14/89	0.837	0.00	694.00	0.00 >	0.09
6248	SF	SIY	1P	11/14/89	0.632	0.00	4.17	0.00	0.00
6248	YF	SIA	1P	11/14/89	0.660	0.00	893.00	0.00	0.61
6249	JE	SIN	1P	11/14/89	0.976	0.00	187.00	0.00	1.29
6249	PT	SJB	1P	11/14/89	0.925	72.50	185.00	2.55	14.05
6249	SF	SIZ	1P	11/14/89	0.757	0.00	0.96	0.00	0.00
6249	YF	SIB	1P	11/14/89	0.669	0.00	195.00	0.00	0.00
6250	JE	SIN	1P	11/14/89	0.976	0.00	155.00	0.00	0.14
6250	PT	SJB	1P	11/14/89	0.925	0.00	78.40	0.00	0.00
6250	SF	SIZ	1P	11/14/89	0.757	0.00 <	1.00	0.00	0.00
6250	YF	SIB	1P	11/14/89	0.669	88.50	193.00	2.18 >	17.65
6251	JE	SIO	1P	11/14/89	0.879	0.00	1.73	0.00	0.00
6251	PT	SJC	1P	11/14/89	0.649	0.00	2.76	0.00 >	2.00
6251	SF	SJO	1P	11/14/89	0.442	0.00	1.00	0.00	0.00
6251	YF	SIC	1P	11/14/89	0.577	0.00	0.67	0.00 >	0.37
6252	JE	SIO	1P	11/14/89	0.879	0.00	5.66	0.00	0.00
6252	PT	SJC	1P	11/14/89	0.649	0.00	8.35	0.00	1.29
6252	SF	SJO	1P	11/14/89	0.442	0.00	5.62	0.00	0.00
6252	YF	SIC	1P	11/14/89	0.577	0.00	7.92	0.00 >	3.02
6253	JE	SIP	1P	11/14/89	0.876	0.00	302.00	0.00	0.00

AVS No.	VIRUS	Plt #	Ship #	Test Date	Diff- rntl.	IC 50	TC 25	SI	TAI
6253	PT	SJD	1P	11/14/89	0.829	0.00	232.00	0.00	2.10
6253	SF	SJ1	1P	11/14/89	0.521	0.00 >	320.00	0.00	3.27
6253	YF	SID	1P	11/14/89	0.610	0.00 >	320.00	0.00	10.29
6254	JE	SIP	1P	11/14/89	0.876	0.00	26.50	0.00	0.00
6254	PT	SJD	1P	11/14/89	0.829	0.00	0.32	0.00	0.00
6254	SF	SJ1	1P	11/14/89	0.521	0.00	24.20	0.00	0.11
6254	YF	SID	1P	11/14/89	0.610	0.00	28.20	0.00	13.83
6255	JE	SIQ	1P	11/14/89	0.914	0.00 >	100.00	0.00 >	0.04
6255	PT	SJE	1P	11/14/89	0.712	0.00 >	100.00	0.00 >	2.70
6255	SF	SJ2	1P	11/14/89	0.635	0.00 >	100.00	0.00	0.00
6255	YF	SIE	1P	11/14/89	0.598	0.00 >	100.00	0.00	4.61
6256	JE	SIQ	1P	11/14/89	0.914	0.00	8.64	0.00	0.00
6256	PT	SJE	1P	11/14/89	0.712	0.00	13.10	0.00	0.00
6256	SF	SJ2	1P	11/14/89	0.635	0.00	0.29	0.00	0.00
6256	YF	SIE	1P	11/14/89	0.598	7.41	26.00	3.51	16.55
6257	JE	SIR	1P	11/14/89	0.926	0.00	8.87	0.00 >	0.10
6257	PT	SJF	1P	11/14/89	0.811	0.00	11.00	0.00	0.00
6257	SF	SJ3	1P	11/14/89	0.627	0.00	14.40	0.00 >	0.37
6257	YF	SIF	1P	11/14/89	0.597	0.00	21.70	0.00	5.99
6258	JE	SIR	1P	11/14/89	0.926	0.00	56.70	0.00	0.00
6258	PT	SJF	1P	11/14/89	0.811	0.00	34.30	0.00	1.55
6258	SF	SJ3	1P	11/14/89	0.627	0.00	26.30	0.00	0.00
6258	YF	SIF	1P	11/14/89	0.597	0.00	74.50	0.00	8.24
6259	JE	SIS	1P	11/14/89	0.790	0.00	30.30	0.00	0.12
6259	PT	SJG	1P	11/14/89	0.696	0.00	23.50	0.00 >	1.20
6259	SF	SJ4	1P	11/14/89	0.599	0.00	9.70	0.00	0.00
6259	YF	SIG	1P	11/14/89	0.605	0.00	41.20	0.00	9.04
0001	SF	QA5	1	06/28/89	1.102	11.80	74.50	6.29 >	32.15

SUMMARY OF ANTIVIRAL TEST RESULTS
WITH ADENOVIRUS TYPE 2

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-0001	CPE	AD2	2.30	0.77	20.04	HEP2	100.00	4.99	11/17/88
AVS-0001	CPE	AD2	2.20	0.73	22.26	HEP2	100.00	4.49	12/01/88
AVS-0001	CPE	AD2	2.25	0.75	19.58	HEP2	100.00	5.11	12/08/88
AVS-0001	CPE	AD2	2.60	0.87	14.74	HEP2	100.00	6.79	12/15/88
AVS-0001	CPE	AD2	1.55	0.52	41.11	HEP2	100.00	2.43	12/29/88
AVS-0001	CPE	AD2	3.10	1.03	15.35	HEP2	320.00	20.07	01/05/89
AVS-0001	CPE	AD2	2.70	0.90	26.19	HEP2	320.00	12.22	01/12/89
AVS-0001	CPE	AD2	1.90	0.63	29.76	HEP2	100.00	3.36	01/26/89
AVS-0001	CPE	AD2	2.10	0.70	26.19	HEP2	100.00	3.82	02/02/89
AVS-0001	CPE	AD2	2.90	0.97	20.02	HEP2	320.00	15.99	02/09/89
AVS-0001	CPE	AD2	2.40	0.80	17.89	HEP2	100.00	5.59	02/16/89
AVS-0001	CPE	AD2	2.40	0.80	17.89	HEP2	100.00	5.59	02/23/89
AVS-0001	CPE	AD2	2.10	0.70	26.19	HEP2	100.00	3.82	03/09/89
AVS-0001	CPE	AD2	2.10	0.70	14.74	HEP2	100.00	6.79	03/23/89
AVS-0001	CPE	AD2	2.10	0.70	26.19	HEP2	100.00	3.82	03/30/89
AVS-0001	CPE	AD2	2.05	0.68	25.39	HEP2	100.00	3.94	04/06/89
AVS-0001	CPE	AD2	2.10	0.70	8.309	HEP2	32.000	3.85	04/13/89
AVS-0001	CPE	AD2	2.10	0.70	14.74	HEP2	32.000	2.17	05/04/89
AVS-0001	CPE	AD2	1.40	0.47	15.92	HEP2	32.000	2.01	05/11/89
AVS-0001	CPE	AD2	1.80	0.60	17.48	HEP2	32.000	1.83	05/18/89
AVS-0001	CPE	AD2	2.10	0.70	24.85	HEP2	100.00	4.02	06/01/89
AVS-0001	CPE	AD2	1.65	0.55	24.14	HEP2	32.000	1.33	06/08/89
AVS-0001	CPE	AD2	2.00	0.67	15.92	HEP2	32.000	2.01	06/15/89
AVS-0001	CPE	AD2	2.05	0.68	25.39	HEP2	100.00	3.94	07/13/89
AVS-0001	CPE	AD2	2.25	0.75	20.33	HEP2	100.00	4.92	07/27/89
AVS-0001	CPE	AD2	1.85	0.62	24.57	HEP2	100.00	4.07	08/10/89
AVS-0001	CPE	AD2	1.55	0.52	57.82	HEP2	100.00	1.73	09/07/89
AVS-0001	CPE	AD2	1.45	0.48	57.68	HEP2	100.00	1.73	09/15/89
AVS-0001	CPE	AD2	2.45	0.82	15.56	HEP2	100.00	6.43	10/05/89
AVS-0001	CPE	AD2	1.70	0.57	33.45	HEP2	100.00	2.99	11/02/89
AVS-0001	CPE	AD2	2.05	0.68	25.39	HEP2	100.00	3.94	11/30/89
AVS-0070	CPE	AD2	0.65	0.22	-0-	HEP2	1.000	-0-	09/15/89
AVS-0223	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	04/06/89
AVS-0253	CPE	AD2	1.45	0.48	32.00	HEP2	100.00	3.13	11/17/88
AVS-0253	CPE	AD2	2.20	0.73	19.19	HEP2	100.00	5.21	12/01/88
AVS-0253	CPE	AD2	2.15	0.72	21.61	HEP2	100.00	4.63	12/08/88
AVS-0253	CPE	AD2	2.90	0.97	7.733	HEP2	100.00	12.93	12/15/88
AVS-0253	CPE	AD2	1.50	0.50	45.08	HEP2	100.00	2.22	12/29/88
AVS-0253	CPE	AD2	2.15	0.72	18.80	HEP2	100.00	5.32	01/05/89
AVS-0253	CPE	AD2	2.10	0.70	12.89	HEP2	100.00	7.76	01/12/89
AVS-0253	CPE	AD2	2.50	0.83	15.72	HEP2	100.00	6.36	01/26/89
AVS-0253	CPE	AD2	2.25	0.75	11.55	HEP2	32.000	2.77	02/02/89
AVS-0253	CPE	AD2	2.60	0.87	7.736	HEP2	32.000	4.14	02/09/89
AVS-0253	CPE	AD2	2.35	0.78	9.589	HEP2	32.000	3.34	02/16/89
AVS-0253	CPE	AD2	2.20	0.73	10.73	HEP2	32.000	2.98	02/23/89
AVS-0253	CPE	AD2	1.85	0.62	7.702	HEP2	32.000	4.15	03/09/89
AVS-0253	CPE	AD2	2.00	0.67	8.860	HEP2	32.000	3.61	03/23/89
AVS-0253	CPE	AD2	1.70	0.57	10.39	HEP2	32.000	3.08	03/30/89
AVS-0253	CPE	AD2	2.15	0.72	6.792	HEP2	32.000	4.71	04/06/89
AVS-0253	CPE	AD2	2.90	0.97	2.423	HEP2	32.000	13.21	04/13/89
AVS-0253	CPE	AD2	2.00	0.67	4.471	HEP2	32.000	7.16	05/04/89
AVS-0253	CPE	AD2	2.25	0.75	2.351	HEP2	32.000	13.61	05/11/89
AVS-0253	CPE	AD2	1.95	0.65	2.625	HEP2	10.000	3.81	05/13/89
AVS-0253	CPE	AD2	1.55	0.52	9.525	HEP2	32.000	3.36	06/01/89
AVS-0253	CPE	AD2	1.10	0.37	15.99	HEP2	10.000	0.63	06/08/89
AVS-0253	CPE	AD2	2.40	0.80	1.796	HEP2	10.000	5.57	06/15/89
AVS-0253	CPE	AD2	2.10	0.70	4.443	HEP2	32.000	7.20	07/13/89
AVS-0253	CPE	AD2	1.55	0.52	13.58	HEP2	32.000	2.36	07/27/89
AVS-0253	CPE	AD2	1.85	0.62	10.01	HEP2	32.000	3.20	08/10/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	TD50	CELL	ATC	TINDEX	DATE
AVS-0253	CPE	AD2	1.95	0.65	31.95	HEP2	100.00	3.13	09/07/89
AVS-0253	CPE	AD2	1.70	0.57	10.00	HEP2	32.000	3.20	09/15/89
AVS-0253	CPE	AD2	2.20	0.73	2.559	HEP2	10.000	3.91	10/05/89
AVS-0253	CPE	AD2	2.40	0.80	17.89	HEP2	100.00	5.59	11/02/89
AVS-0253	CPE	AD2	2.35	0.78	6.881	HEP2	10.000	1.45	11/30/89
AVS-0349	CPE	AD2	0.00	0.00	-0-	HEP2	0.100	-0-	09/15/89
AVS-0360	CPE	AD2	1.35	0.45	0.468	HEP2	0.320	0.68	01/26/89
AVS-0361	CPE	AD2	1.35	0.45	0.057	HEP2	0.100	1.75	01/26/89
AVS-0919	CPE	AD2	0.00	0.00	-0-	HEP2	< 10.000	-0-	03/23/89
AVS-1210	CPE	AD2	0.80	0.27	31.27	HEP2	< 100.00	< 3.20	09/15/89
AVS-1211	CPE	AD2	0.00	0.00	-0-	HEP2	< 32.000	-0-	09/15/89
AVS-1214	CPE	AD2	0.45	0.15	-0-	HEP2	10.000	-0-	03/23/89
AVS-1217	CPE	AD2	0.30	0.10	-0-	HEP2	< 100.00	-0-	03/23/89
AVS-1983	CPE	AD2	0.30	0.10	-0-	HEP2	> 320.00	-0-	11/02/89
AVS-1984	CPE	AD2	0.35	0.12	-0-	HEP2	320.00	-0-	09/15/89
AVS-2034	CPE	AD2	1.90	0.63	0.290	HEP2	0.320	1.10	06/08/89
AVS-2034	CPE	AD2	0.75	0.25	6.340	HEP2	3.200	0.50	07/13/89
AVS-2034	CPE	AD2	0.70	0.23	5.371	HEP2	10.000	1.86	07/27/89
AVS-2151	CPE	AD2	0.45	0.15	21.70	HEP2	32.000	1.47	03/23/89
AVS-2277	CPE	AD2	0.00	0.00	-0-	HEP2	100.00	-0-	09/15/89
AVS-2318	CPE	AD2	1.00	0.33	0.320	HEP2	3.200	10.00	09/15/89
AVS-2529	CPE	AD2	0.95	0.32	0.094	HEP2	0.100	1.06	09/15/89
AVS-2563	CPE	AD2	0.85	0.28	38.70	HEP2	10.000	0.26	01/26/89
AVS-2702	CPE	AD2	0.00	0.00	-0-	HEP2	32.000	-0-	01/26/89
AVS-2703	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	01/26/89
AVS-2707	CPE	AD2	0.45	0.15	-0-	HEP2	1000.0	-0-	12/08/88
AVS-2715	CPE	AD2	0.00	0.00	-0-	HEP2	< 0.001	-0-	01/12/89
AVS-2812	CPE	AD2	1.30	0.43	0.046	HEP2	0.032	0.70	01/26/89
AVS-2964	CPE	AD2	0.00	0.00	-0-	HEP2	320.00	-0-	09/15/89
AVS-2979	CPE	AD2	1.50	0.50	4.678	HEP2	10.000	2.14	01/26/89
AVS-2980	CPE	AD2	1.70	0.57	1.474	HEP2	3.200	2.17	01/26/89
AVS-2985	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	09/15/89
AVS-2985	CPE	AD2	0.00	0.00	-0-	HEP2	< 100.00	-0-	09/15/89
AVS-3527	CPE	AD2	0.00	0.00	-0-	HEP2	< 10.000	-0-	09/15/89
AVS-3529	CPE	AD2	1.45	0.48	3.200	HEP2	3.200	1.00	09/15/89
AVS-3577	CPE	AD2	0.55	0.18	-0-	HEP2	320.00	-0-	09/15/89
AVS-3592	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	01/05/89
AVS-3310	CPE	AD2	1.15	0.38	70.12	HEP2	100.00	1.43	09/15/89
AVS-4026	CPE	AD2	0.00	0.00	-0-	HEP2	0.000	-0-	02/23/89
AVS-4070	CPE	AD2	1.65	0.55	1.787	HEP2	3.200	1.79	01/26/89
AVS-4070	CPE	AD2	1.30	0.43	1.083	HEP2	1.000	0.92	03/23/89
AVS-4074	CPE	AD2	1.60	0.53	2.228	HEP2	10.000	4.49	01/26/89
AVS-4074	CPE	AD2	1.35	0.45	1.799	HEP2	3.200	1.78	03/23/89
AVS-4074	CPE	AD2	0.90	0.30	1.474	HEP2	3.200	2.17	09/15/89
AVS-4097	CPE	AD2	0.20	0.07	-0-	HEP2	< 0.010	-0-	02/23/89
AVS-4098	CPE	AD2	0.00	0.00	-0-	HEP2	0.000	-0-	02/23/89
AVS-4099	CPE	AD2	0.00	0.00	-0-	HEP2	0.000	-0-	02/23/89
AVS-4105	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	01/26/89
AVS-4106	CPE	AD2	0.00	0.00	-0-	HEP2	0.010	-0-	02/23/89
AVS-4113	CPE	AD2	0.40	0.13	3.195	HEP2	3.200	1.00	01/26/89
AVS-4222	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	01/26/89
AVS-4785	CPE	AD2	3.15	1.05	3.824	HEP2	32.000	8.37	11/17/88
AVS-4793	CPE	AD2	0.00	0.00	-0-	HEP2	< 0.032	-0-	11/17/88
AVS-4796	CPE	AD2	2.40	0.80	32.00	HEP2	320.00	10.00	11/17/88
AVS-4798	CPE	AD2	2.25	0.75	0.569	HEP2	3.200	5.63	11/17/88
AVS-4810	CPE	AD2	0.00	0.00	-0-	HEP2	10.000	-0-	12/15/88
AVS-4813	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	12/15/88
AVS-4814	CPE	AD2	1.15	0.38	100.0	HEP2	320.00	3.20	12/08/88
AVS-4814	CPE	AD2	1.25	0.42	100.0	HEP2	100.00	1.00	02/02/89
AVS-4814	CPE	AD2	0.75	0.25	-0-	HEP2	32.000	-0-	09/15/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4815	CPE	AD2	0.15	0.05	-0-	HEP2	- 100.00	-0-	12/08/88
AVS-4816	CPE	AD2	0.95	0.32	- 56.56	HEP2	- 100.00	- 1.77	12/08/88
AVS-4817	CPE	AD2	0.00	0.00	-0-	HEP2	- 32 000	-0-	12/08/88
AVS-4818	CPE	AD2	0.45	0.15	-0-	HEP2	- 100.00	-0-	12/08/88
AVS-4819	CPE	AD2	0.15	0.05	-0-	HEP2	- 320.00	-0-	12/08/88
AVS-4820	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/08/88
AVS-4821	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/08/88
AVS-4822	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/08/88
AVS-4823	CPE	AD2	0.00	0.00	-0-	HEP2	< 3.200	-0-	12/15/88
AVS-4824	CPE	AD2	0.00	0.00	-0-	HEP2	< 100.00	-0-	12/08/88
AVS-4825	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/08/88
AVS-4826	CPE	AD2	0.00	0.00	-0-	HEP2	< 32.000	-0-	12/15/88
AVS-4827	CPE	AD2	0.00	0.00	-0-	HEP2	- 320.00	-0-	12/15/88
AVS-4828	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/15/88
AVS-4829	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	12/15/88
AVS-4830	CPE	AD2	0.00	0.00	-0-	HEP2	< 100.00	-0-	12/15/88
AVS-4831	CPE	AD2	0.45	0.15	-0-	HEP2	- 100.00	-0-	12/15/88
AVS-4832	CPE	AD2	0.00	0.00	-0-	HEP2	< 100.00	-0-	12/15/88
AVS-4833	CPE	AD2	0.30	0.10	-0-	HEP2	> 320.00	-0-	12/15/88
AVS-4834	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/15/88
AVS-4835	CPE	AD2	0.00	0.00	-0-	HEP2	- 32.000	-0-	12/15/88
AVS-4836	CPE	AD2	0.15	0.05	-0-	HEP2	- 100.00	-0-	12/29/88
AVS-4837	CPE	AD2	0.70	0.23	- 169.7	HEP2	- 320.00	- 1.89	12/15/88
AVS-4838	CPE	AD2	0.50	0.17	-0-	HEP2	> 320.00	-0-	12/15/88
AVS-4839	CPE	AD2	0.30	0.10	-0-	HEP2	- 100.00	-0-	12/29/88
AVS-4840	CPE	AD2	0.30	0.10	-0-	HEP2	> 320.00	-0-	12/29/88
AVS-4841	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/29/88
AVS-4842	CPE	AD2	0.00	0.00	-0-	HEP2	< 10.000	-0-	01/26/89
AVS-4842	CPE	AD2	0.00	0.00	-0-	HEP2	- 3.200	-0-	02/02/89
AVS-4843	CPE	AD2	0.00	0.00	-0-	HEP2	- 100.00	-0-	12/29/88
AVS-4844	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	12/29/88
AVS-4845	CPE	AD2	0.00	0.00	-0-	HEP2	- 32.000	-0-	12/29/88
AVS-4846	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	12/29/88
AVS-4847	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	12/29/88
AVS-4848	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	12/29/88
AVS-4849	CPE	AD2	0.10	0.03	-0-	HEP2	> 320.00	-0-	12/29/88
AVS-4850	CPE	AD2	0.45	0.15	-0-	HEP2	- 100.00	-0-	12/29/88
AVS-4851	CPE	AD2	0.00	0.00	-0-	HEP2	- 320.00	-0-	12/29/88
AVS-4852	CPE	AD2	0.00	0.00	-0-	HEP2	- 100.00	-0-	12/29/88
AVS-4853	CPE	AD2	0.00	0.00	-0-	HEP2	< 32.000	-0-	12/29/88
AVS-4854	CPE	AD2	0.20	0.07	-0-	HEP2	- 10.000	-0-	12/29/88
AVS-4855	CPE	AD2	0.00	0.00	-0-	HEP2	- 320.00	-0-	12/29/88
AVS-4856	CPE	AD2	0.30	0.10	-0-	HEP2	> 320.00	-0-	01/12/89
AVS-4857	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	01/12/89
AVS-4858	CPE	AD2	0.15	0.05	-0-	HEP2	- 32.000	-0-	01/12/89
AVS-4859	CPE	AD2	0.90	0.30	- 32.00	HEP2	< 100.00	< 3.13	01/12/89
AVS-4860	CPE	AD2	0.80	0.27	-0-	HEP2	> 320.00	-0-	01/12/89
AVS-4861	CPE	AD2	0.30	0.10	-0-	HEP2	> 320.00	-0-	01/12/89
AVS-4862	CPE	AD2	0.60	0.20	- 100.0	HEP2	< 320.00	< 3.20	01/12/89
AVS-4863	CPE	AD2	0.30	0.10	-0-	HEP2	< 100.00	-0-	01/12/89
AVS-4866	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	11/17/88
AVS-4871	CPE	AD2	2.50	0.83	- 29.76	HEP2	- 320.00	- 10.75	12/01/88
AVS-4887	CPE	AD2	0.00	0.00	-0-	HEP2	< 32.000	-0-	11/17/88
AVS-4888	CPE	AD2	0.00	0.00	-0-	HEP2	> 320.00	-0-	11/17/88
AVS-4889	CPE	AD2	0.15	0.05	-0-	HEP2	- 100.00	-0-	12/01/88
AVS-4890	CPE	AD2	0.00	0.00	-0-	HEP2	< 100.00	-0-	11/17/88
AVS-4891	CPE	AD2	0.15	0.05	-0-	HEP2	- 3.200	-0-	12/01/88
AVS-4892	CPE	AD2	0.20	0.07	-0-	HEP2	< 100.00	-0-	12/01/88
AVS-4893	CPE	AD2	0.10	0.03	-0-	HEP2	> 320.00	-0-	12/01/88
AVS-4894	CPE	AD2	0.00	0.00	-0-	HEP2	< 320.00	-0-	12/01/88

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4895	CPE	AD2	0.25	0.08	- -0-	HEP2	- 32.000	-0-	12/01/88
AVS-4896	CPE	AD2	0.00	0.00	- -0-	HEP2	< 100.00	-0-	12/01/88
AVS-4897	CPE	AD2	0.00	0.00	- -0-	HEP2	- 32.000	-0-	11/17/88
AVS-4898	CPE	AD2	0.15	0.05	- -0-	HEP2	- 1.000	-0-	11/17/88
AVS-4899	CPE	AD2	0.30	0.10	- -0-	HEP2	- 1.000	-0-	11/17/88
AVS-4900	CPE	AD2	0.30	0.10	- -0-	HEP2	< 3.200	-0-	11/17/88
AVS-4901	CPE	AD2	0.65	0.22	- 6.283	HEP2	- 10.000	- 1.59	11/17/88
AVS-4902	CPE	AD2	0.60	0.20	- 1.000	HEP2	< 3.200	< 3.20	11/17/88
AVS-4903	CPE	AD2	0.00	0.00	- -0-	HEP2	< 3.200	-0-	11/17/88
AVS-4904	CPE	AD2	0.35	0.12	- -0-	HEP2	- 3.200	-0-	11/17/88
AVS-4905	CPE	AD2	0.70	0.23	- -0-	HEP2	< 32.000	-0-	12/01/88
AVS-4906	CPE	AD2	0.30	0.10	- -0-	HEP2	< 32.000	-0-	11/17/88
AVS-4907	CPE	AD2	0.30	0.10	- 1.000	HEP2	- 1.000	- 1.00	12/01/88
AVS-4908	CPE	AD2	0.30	0.10	- -0-	HEP2	- 3.200	-0-	11/17/88
AVS-4909	CPE	AD2	0.00	0.00	- -0-	HEP2	- 32.000	-0-	12/01/88
AVS-4910	CPE	AD2	0.20	0.07	- -0-	HEP2	< 320.00	-0-	11/17/88
AVS-4911	CPE	AD2	0.85	0.28	- 14.37	HEP2	- 32.000	- 2.23	11/17/88
AVS-4912	CPE	AD2	0.00	0.00	- -0-	HEP2	> 320.00	-0-	11/17/88
AVS-4913	CPE	AD2	0.30	0.10	- -0-	HEP2	< 320.00	-0-	11/17/88
AVS-4914	CPE	AD2	0.25	0.08	- -0-	HEP2	- 32.000	-0-	11/17/88
AVS-4915	CPE	AD2	0.40	0.13	- 100.0	HEP2	- 100.00	- 1.00	11/17/88
AVS-4916	CPE	AD2	0.00	0.00	- -0-	HEP2	- 1.000	-0-	12/01/88
AVS-4917	CPE	AD2	0.00	0.00	- -0-	HEP2	< 3.200	-0-	12/01/88
AVS-4918	CPE	AD2	0.30	0.10	- -0-	HEP2	> 320.00	-0-	12/01/88
AVS-4919	CPE	AD2	0.00	0.00	- -0-	HEP2	< 32.000	-0-	12/01/88
AVS-4920	CPE	AD2	0.00	0.00	- -0-	HEP2	< 100.00	-0-	12/01/88
AVS-4921	CPE	AD2	0.00	0.00	- -0-	HEP2	< 10.000	-0-	12/01/88
AVS-4922	CPE	AD2	0.15	0.05	- -0-	HEP2	- 320.00	-0-	12/01/88
AVS-4923	CPE	AD2	0.00	0.00	- -0-	HEP2	> 320.00	-0-	12/01/88
AVS-4924	CPE	AD2	0.00	0.00	- -0-	HEP2	< 3.200	-0-	12/01/88
AVS-4925	CPE	AD2	0.00	0.00	- -0-	HEP2	- 10.000	-0-	11/17/88
AVS-4926	CPE	AD2	0.30	0.10	- -0-	HEP2	> 320.00	-0-	11/17/88
AVS-4927	CPE	AD2	0.00	0.00	- -0-	HEP2	- 32.000	-0-	12/01/88
AVS-4928	CPE	AD2	0.10	0.03	- -0-	HEP2	> 320.00	-0-	11/17/88
AVS-4932	CPE	AD2	0.45	0.15	- 68.36	HEP2	- 100.00	- 1.46	02/02/89
AVS-4933	CPE	AD2	0.45	0.15	- 6.836	HEP2	- 10.000	- 1.46	02/02/89
AVS-4934	CPE	AD2	0.30	0.10	- -0-	HEP2	- 32.000	-0-	02/02/89
AVS-4935	CPE	AD2	0.60	0.20	- -0-	HEP2	< 100.00	-0-	02/02/89
AVS-4936	CPE	AD2	0.00	0.00	- -0-	HEP2	> 320.00	-0-	02/02/89
AVS-4937	CPE	AD2	1.50	0.50	- 14.74	HEP2	- 32.000	- 2.17	02/02/89
AVS-4937	CPE	AD2	1.35	0.45	- 21.70	HEP2	- 100.00	- 4.61	03/23/89
AVS-4938	CPE	AD2	0.00	0.00	- -0-	HEP2	> 320.00	-0-	02/02/89
AVS-4939	CPE	AD2	0.00	0.00	- -0-	HEP2	- 32.000	-0-	02/02/89
AVS-4940	CPE	AD2	0.05	0.02	- -0-	HEP2	- 32.000	-0-	02/02/89
AVS-4941	CPE	AD2	0.00	0.00	- -0-	HEP2	> 320.00	-0-	02/02/89
AVS-4942	CPE	AD2	0.05	0.02	- -0-	HEP2	- 10.000	-0-	02/02/89
AVS-4943	CPE	AD2	0.70	0.23	- 3.200	HEP2	< 32.000	< 10.00	02/02/89
AVS-4944	CPE	AD2	0.20	0.07	- -0-	HEP2	> 320.00	-0-	03/23/89
AVS-4945	CPE	AD2	0.00	0.00	- -0-	HEP2	< 3.200	-0-	02/02/89
AVS-4946	CPE	AD2	0.30	0.10	- -0-	HEP2	< 10.000	-0-	03/23/89
AVS-4947	CPE	AD2	0.00	0.00	- -0-	HEP2	< 10.000	-0-	02/02/89
AVS-4948	CPE	AD2	0.20	0.07	- -0-	HEP2	> 320.00	-0-	02/02/89
AVS-4949	CPE	AD2	0.45	0.15	- 6.836	HEP2	- 10.000	- 1.46	02/02/89
AVS-4951	CPE	AD2	0.90	0.30	- 6.559	HEP2	- 10.000	- 1.50	02/02/89
AVS-4951	CPE	AD2	1.20	0.40	- 3.200	HEP2	< 32.000	< 10.00	02/09/89
AVS-4951	CPE	AD2	0.00	0.00	- -0-	HEP2	< 32.000	-0-	09/15/89
AVS-4952	CPE	AD2	0.40	0.13	- -0-	HEP2	< 100.00	-0-	02/23/89
AVS-4953	CPE	AD2	0.20	0.07	- -0-	HEP2	- 32.000	-0-	02/23/89
AVS-4954	CPE	AD2	0.90	0.30	- 9.203	HEP2	< 32.000	< 3.48	02/09/89
AVS-4955	CPE	AD2	0.00	0.00	- -0-	HEP2	- 10.000	-0-	02/09/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4956	CPE	AD2	0.40	0.13	- -0-	HEP2 <	100.00	-0-	02/09/89
AVS-4957	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	02/09/89
AVS-4958	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	02/09/89
AVS-4959	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	02/09/89
AVS-4960	CPE	AD2	0.00	0.00	- -0-	HEP2 <	100.00	-0-	02/09/89
AVS-4961	CPE	AD2	0.90	0.30	- 93.36	HEP2 <	320.00	< 3.43	02/09/89
AVS-4962	CPE	AD2	0.15	0.05	- -0-	HEP2 -	32.000	-0-	02/09/89
AVS-4963	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	02/09/89
AVS-4964	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	02/09/89
AVS-4965	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	02/09/89
AVS-4966	CPE	AD2	0.30	0.10	- -0-	HEP2 <	32.000	-0-	02/09/89
AVS-4967	CPE	AD2	0.00	0.00	- -0-	HEP2 <	100.00	-0-	02/09/89
AVS-4968	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	02/09/89
AVS-4969	CPE	AD2	0.40	0.13	- -0-	HEP2 <	10.000	-0-	02/16/89
AVS-4970	CPE	AD2	0.70	0.23	- 31.94	HEP2 <	100.00	< 3.13	02/16/89
AVS-4972	CPE	AD2	0.30	0.10	- 100.0	HEP2 -	100.00	- 1.00	02/16/89
AVS-4973	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	02/16/89
AVS-4974	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	02/16/89
AVS-4975	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	02/16/89
AVS-4976	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	02/16/89
AVS-4977	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	02/16/89
AVS-4978	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	02/16/89
AVS-4979	CPE	AD2	0.60	0.20	- 56.54	HEP2 -	100.00	- 1.77	02/16/89
AVS-4980	CPE	AD2	0.00	0.00	- -0-	HEP2 -	1.000	-0-	03/23/89
AVS-4981	CPE	AD2	0.75	0.25	- 178.1	HEP2 -	320.00	- 1.80	02/16/89
AVS-4982	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	02/16/89
AVS-4983	CPE	AD2	1.20	0.40	- 56.54	HEP2 <	320.00	< 5.66	02/16/89
AVS-4983	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	09/15/89
AVS-4985	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	02/16/89
AVS-4986	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	02/16/89
AVS-4987	CPE	AD2	0.60	0.20	- 100.0	HEP2 <	320.00	< 3.20	02/16/89
AVS-4992	CPE	AD2	0.20	0.07	- -0-	HEP2 -	100.00	-0-	02/16/89
AVS-4993	CPE	AD2	0.15	0.05	- -0-	HEP2 -	100.00	-0-	03/09/89
AVS-4994	CPE	AD2	1.05	0.35	- 0.083	HEP2 -	0.100	- 1.20	03/23/89
AVS-4994	CPE	AD2	0.90	0.30	- 0.147	HEP2 -	0.320	- 2.17	05/04/89
AVS-4994	CPE	AD2	1.05	0.35	- 0.111	HEP2 -	0.320	- 2.87	05/18/89
AVS-4995	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	03/09/89
AVS-4996	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	03/09/89
AVS-4996	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	04/06/89
AVS-4997	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	03/09/89
AVS-4998	CPE	AD2	0.40	0.13	- -0-	HEP2 <	100.00	-0-	03/09/89
AVS-5029	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	01/12/89
AVS-5030	CPE	AD2	0.40	0.13	- -0-	HEP2 <	100.00	-0-	01/05/89
AVS-5031	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	01/12/89
AVS-5032	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	01/12/89
AVS-5033	CPE	AD2	0.90	0.30	- 77.40	HEP2 <	320.00	< 4.13	01/12/89
AVS-5034	CPE	AD2	0.40	0.13	- 230.2	HEP2 -	320.00	- 1.34	01/12/89
AVS-5035	CPE	AD2	0.40	0.13	- -0-	HEP2 <	100.00	-0-	01/05/89
AVS-5036	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	01/12/89
AVS-5037	CPE	AD2	0.10	0.03	- -0-	HEP2 -	320.00	-0-	01/05/89
AVS-5038	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	01/05/89
AVS-5047	CPE	AD2	0.00	0.00	- -0-	HEP2 <	100.00	-0-	01/26/89
AVS-5043	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	01/26/89
AVS-5049	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	01/12/89
AVS-5050	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	01/12/89
AVS-5051	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	01/12/89
AVS-5052	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	01/05/89
AVS-5052	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	01/05/89
AVS-5058	CPE	AD2	0.90	0.30	- 217.0	HEP2 >	320.00	> 1.47	01/05/89
AVS-5059	CPE	AD2	0.60	0.20	- 178.8	HEP2 -	320.00	- 1.79	01/05/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-5060	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	01/05/89
AVS-5061	CPE	AD2	0.45	0.15	- -0-	HEP2 -	320.00	-0-	01/05/89
AVS-5062	CPE	AD2	0.20	0.07	- -0-	HEP2 >	320.00	-0-	01/12/89
AVS-5063	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	01/05/89
AVS-5064	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	01/05/89
AVS-5065	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	01/12/89
AVS-5066	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	01/05/89
AVS-5067	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	01/26/89
AVS-5068	CPE	AD2	0.50	0.17	- -0-	HEP2 -	100.00	-0-	01/12/89
AVS-5069	CPE	AD2	0.30	0.10	- -0-	HEP2 <	100.00	-0-	01/12/89
AVS-5070	CPE	AD2	0.15	0.05	- -0-	HEP2 -	32.0000	-0-	01/12/89
AVS-5071	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.0000	-0-	01/12/89
AVS-5072	CPE	AD2	0.30	0.10	- -0-	HEP2 <	100.00	-0-	01/12/89
AVS-5075	CPE	AD2	2.40	0.80	- 53.71	HEP2 >	320.00	> 5.96	01/12/89
AVS-5075	CPE	AD2	0.45	0.15	- 320.0	HEP2 -	100.00	- 0.31	09/15/89
AVS-5080	CPE	AD2	0.30	0.10	- -0-	HEP2 <	320.00	-0-	03/09/89
AVS-5081	CPE	AD2	0.50	0.17	- -0-	HEP2 <	320.00	-0-	03/09/89
AVS-5082	CPE	AD2	0.30	0.10	- 3.200	HEP2 -	3.200	- 1.00	03/09/89
AVS-5083	CPE	AD2	0.00	0.00	- -0-	HEP2 <	0.100	-0-	03/23/89
AVS-5084	CPE	AD2	0.00	0.00	- -0-	HEP2 <	0.032	-0-	03/23/89
AVS-5085	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	03/09/89
AVS-5086	CPE	AD2	0.00	0.00	- -0-	HEP2 <	0.032	-0-	03/23/89
AVS-5134	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.0000	-0-	07/13/89
AVS-5135	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	07/27/89
AVS-5136	CPE	AD2	0.45	0.15	- -0-	HEP2 -	32.0000	-0-	07/27/89
AVS-5137	CPE	AD2	0.30	0.10	- -0-	HEP2 <	320.00	-0-	07/27/89
AVS-5138	CPE	AD2	0.50	0.17	- -0-	HEP2 -	100.00	-0-	07/27/89
AVS-5139	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.0000	-0-	07/27/89
AVS-5140	CPE	AD2	1.60	0.53	- 180.9	HEP2 >	320.00	> 1.77	07/13/89
AVS-5140	CPE	AD2	0.80	0.27	- 317.2	HEP2 >	320.00	> 1.01	07/27/89
AVS-5141	CPE	AD2	0.10	0.03	- -0-	HEP2 >	320.00	-0-	07/13/89
AVS-5142	CPE	AD2	0.20	0.07	- -0-	HEP2 -	32.0000	-0-	07/13/89
AVS-5144	CPE	AD2	0.70	0.23	- 27.09	HEP2 <	100.00	< 3.69	07/13/89
AVS-5145	CPE	AD2	0.10	0.03	- -0-	HEP2 <	100.00	-0-	07/27/89
AVS-5146	CPE	AD2	0.75	0.25	- 5.560	HEP2 -	10.0000	- 1.80	07/13/89
AVS-5147	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	07/13/89
AVS-5148	CPE	AD2	0.40	0.13	- -0-	HEP2 <	32.0000	-0-	07/27/89
AVS-5149	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	07/13/89
AVS-5150	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	07/13/89
AVS-5151	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	07/13/89
AVS-5152	CPE	AD2	0.10	0.03	- -0-	HEP2 -	32.0000	-0-	07/27/89
AVS-5153	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	07/27/89
AVS-5154	CPE	AD2	0.60	0.20	- -0-	HEP2 <	100.00	-0-	07/27/89
AVS-5155	CPE	AD2	0.20	0.07	- -0-	HEP2 -	3.200	-0-	07/27/89
AVS-5156	CPE	AD2	0.15	0.05	- -0-	HEP2 -	3.200	-0-	07/27/89
AVS-5157	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	07/27/89
AVS-5158	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.0000	-0-	07/13/89
AVS-5159	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	07/13/89
AVS-5160	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	07/13/89
AVS-5161	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	07/13/89
AVS-5162	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	07/27/89
AVS-5163	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	07/13/89
AVS-5164	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	07/27/89
AVS-5165	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	07/27/89
AVS-5165	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	08/10/89
AVS-5167	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	08/10/89
AVS-5168	CPE	AD2	0.10	0.03	- -0-	HEP2 -	3.200	-0-	08/10/89
AVS-5169	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	08/10/89
AVS-5170	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	08/10/89
AVS-5171	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	08/10/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-5172	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	08/10/89
AVS-5173	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	08/10/89
AVS-5174	CPE	AD2	0.20	0.07	- -0-	HEP2 -	32.000	-0-	08/10/89
AVS-5175	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	08/10/89
AVS-5176	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	08/10/89
AVS-5177	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	08/10/89
AVS-5178	CPE	AD2	0.40	0.13	- -0-	HEP2 >	320.00	-0-	08/10/89
AVS-5179	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	08/10/89
AVS-5180	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	08/10/89
AVS-5181	CPE	AD2	0.30	0.10	- -0-	HEP2 -	10.000	-0-	08/10/89
AVS-5182	CPE	AD2	0.15	0.05	- -0-	HEP2 -	100.00	-0-	08/10/89
AVS-5183	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	08/10/89
AVS-5184	CPE	AD2	0.20	0.07	- -0-	HEP2 -	320.00	-0-	08/10/89
AVS-5185	CPE	AD2	0.00	0.00	- -0-	HEP2 <	100.00	-0-	08/10/89
AVS-5186	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	08/10/89
AVS-5187	CPE	AD2	0.00	0.00	- -0-	HEP2 <	1.000	-0-	11/30/89
AVS-5188	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	09/07/89
AVS-5189	CPE	AD2	0.30	0.10	- -0-	HEP2 <	10.000	-0-	09/07/89
AVS-5190	CPE	AD2	0.00	0.00	- -0-	HEP2	3.200	-0-	09/07/89
AVS-5191	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	09/07/89
AVS-5192	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	09/07/89
AVS-5194	CPE	AD2	0.10	0.03	- -0-	HEP2 <	3.200	-0-	09/07/89
AVS-5195	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	09/07/89
AVS-5196	CPE	AD2	0.00	0.00	- -0-	HEP2 -	10.000	-0-	09/07/89
AVS-5197	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	09/07/89
AVS-5198	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	09/07/89
AVS-5199	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	09/07/89
AVS-5200	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	09/07/89
AVS-5201	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	09/07/89
AVS-5202	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	09/07/89
AVS-5203	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	09/07/89
AVS-5204	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	09/07/89
AVS-5205	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	09/07/89
AVS-5206	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	09/07/89
AVS-5207	CPE	AD2	0.00	0.00	- -0-	HEP2 -	10.000	-0-	09/07/89
AVS-5208	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	09/07/89
AVS-5208	CPE	AD2	0.10	0.03	- -0-	HEP2 -	320.00	-0-	10/05/89
AVS-5210	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	10/05/89
AVS-5211	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	10/05/89
AVS-5213	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	10/05/89
AVS-5214	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	10/05/89
AVS-5215	CPE	AD2	0.15	0.05	- -0-	HEP2 -	320.00	-0-	10/05/89
AVS-5216	CPE	AD2	0.00	0.00	- -0-	HEP2 -	320.00	-0-	10/05/89
AVS-5219	CPE	AD2	0.75	0.25	- 46.78	HEP2 -	32.000	- 0.68	03/09/89
AVS-5220	CPE	AD2	0.30	0.10	- -0-	HEP2 -	320.00	-0-	03/09/89
AVS-5221	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	03/09/89
AVS-5223	CPE	AD2	0.15	0.05	- -0-	HEP2 -	32.000	-0-	03/09/89
AVS-5224	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	03/09/89
AVS-5225	CPE	AD2	0.50	0.17	- -0-	HEP2 >	320.00	-0-	03/09/89
AVS-5312	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	04/06/89
AVS-5314	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	04/06/89
AVS-5315	CPE	AD2	0.30	0.10	- -0-	HEP2 >	320.00	-0-	04/06/89
AVS-5316	CPE	AD2	0.20	0.07	- -0-	HEP2 >	320.00	-0-	04/06/89
AVS-5405	CPE	AD2	0.80	0.27	- 1.592	HEP2 -	3.200	- 2.01	03/30/89
AVS-5438	CPE	AD2	0.30	0.10	- -0-	HEP2 <	32.000	-0-	04/06/89
AVS-5439	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	04/06/89
AVS-5440	CPE	AD2	1.20	0.40	- 10.00	HEP2 <	100.00	< 10.00	04/06/89
AVS-5440	CPE	AD2	0.90	0.30	- 29.36	HEP2 <	100.00	< 3.41	05/04/89
AVS-5440	CPE	AD2	1.20	0.40	- 23.93	HEP2 -	100.00	- 4.18	05/18/89
AVS-5441	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	04/06/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-5442	CPE	AD2	0.50	0.17	- -0-	HEP2	- 32.000	-0-	05/04/89
AVS-5443	CPE	AD2	1.10	0.37	- 0.684	HEP2	< 3.200	< 4.68	05/04/89
AVS-5444	CPE	AD2	1.50	0.50	- 0.262	HEP2	- 1.000	- 3.82	05/04/89
AVS-5444	CPE	AD2	2.10	0.70	- 0.159	HEP2	< 3.200	< 20.12	05/18/89
AVS-5445	CPE	AD2	2.00	0.67	- 0.159	HEP2	- 1.000	- 6.28	05/04/89
AVS-5445	CPE	AD2	2.70	0.90	- 0.083	HEP2	< 3.200	< 38.37	05/18/89
AVS-5446	CPE	AD2	0.00	0.00	- -0-	HEP2	- 1.000	-0-	05/04/89
AVS-5447	CPE	AD2	0.00	0.00	- -0-	HEP2	- 0.320	-0-	05/04/89
AVS-5448	CPE	AD2	0.00	0.00	- -0-	HEP2	- 100.00	-0-	05/04/89
AVS-5449	CPE	AD2	0.00	0.00	- -0-	HEP2	< 32.000	-0-	05/04/89
AVS-5450	CPE	AD2	0.15	0.05	- -0-	HEP2	- 10.000	-0-	05/04/89
AVS-5451	CPE	AD2	0.20	0.07	- -0-	HEP2	- 32.000	-0-	05/04/89
AVS-5452	CPE	AD2	0.00	0.00	- -0-	HEP2	- 32.000	-0-	05/04/89
AVS-5453	CPE	AD2	0.00	0.00	- -0-	HEP2	< 32.000	-0-	05/04/89
AVS-5454	CPE	AD2	0.60	0.20	- 1.788	HEP2	- 3.200	- 1.79	05/11/89
AVS-5455	CPE	AD2	0.40	0.13	- -0-	HEP2	> 320.00	-0-	05/11/89
AVS-5457	CPE	AD2	0.00	0.00	- -0-	HEP2	- 10.000	-0-	05/11/89
AVS-5459	CPE	AD2	0.00	0.00	- -0-	HEP2	< 32.000	-0-	05/11/89
AVS-5460	CPE	AD2	0.30	0.10	- -0-	HEP2	< 10.000	-0-	05/11/89
AVS-5461	CPE	AD2	0.00	0.00	- -0-	HEP2	- 10.000	-0-	05/18/89
AVS-5462	CPE	AD2	0.00	0.00	- -0-	HEP2	< 32.000	-0-	05/11/89
AVS-5463	CPE	AD2	0.00	0.00	- -0-	HEP2	< 100.00	-0-	05/18/89
AVS-5464	CPE	AD2	0.00	0.00	- -0-	HEP2	< 100.00	-0-	05/11/89
AVS-5465	CPE	AD2	0.30	0.10	- 32.00	HEP2	- 32.000	- 1.00	05/11/89
AVS-5468	CPE	AD2	0.00	0.00	- -0-	HEP2	- 3.200	-0-	05/11/89
AVS-5470	CPE	AD2	0.30	0.10	- -0-	HEP2	< 1.000	-0-	06/01/89
AVS-5473	CPE	AD2	0.20	0.07	- -0-	HEP2	- 1.000	-0-	06/15/89
AVS-5474	CPE	AD2	0.50	0.17	- -0-	HEP2	> 320.00	-0-	05/11/89
AVS-5476	CPE	AD2	0.70	0.23	- 3.200	HEP2	< 10.000	< 3.13	05/11/89
AVS-5479	CPE	AD2	0.15	0.05	- -0-	HEP2	- 3.200	-0-	05/11/89
AVS-5480	CPE	AD2	0.00	0.00	- -0-	HEP2	< 100.00	-0-	03/30/89
AVS-5520	CPE	AD2	2.10	0.70	- 11.85	HEP2	< 320.00	< 27.01	06/15/89
AVS-5522	CPE	AD2	0.60	0.20	- 3.200	HEP2	< 10.000	< 3.13	06/08/89
AVS-5524	CPE	AD2	0.50	0.17	- -0-	HEP2	< 320.00	-0-	06/08/89
AVS-5528	CPE	AD2	0.00	0.00	- -0-	HEP2	- 10.000	-0-	06/08/89
AVS-5529	CPE	AD2	1.20	0.40	- 24.33	HEP2	< 100.00	< 4.11	06/08/89
AVS-5529	CPE	AD2	0.00	0.00	- -0-	HEP2	< 320.00	-0-	07/13/89
AVS-5532	CPE	AD2	0.00	0.00	- -0-	HEP2	< 320.00	-0-	06/08/89
AVS-5534	CPE	AD2	0.00	0.00	- -0-	HEP2	- 100.00	-0-	06/08/89
AVS-5535	CPE	AD2	0.90	0.30	- 100.0	HEP2	- 320.00	- 3.20	06/08/89
AVS-5537	CPE	AD2	0.00	0.00	- -0-	HEP2	- 32.000	-0-	06/08/89
AVS-5540	CPE	AD2	0.00	0.00	- -0-	HEP2	- 100.00	-0-	06/08/89
AVS-5541	CPE	AD2	0.25	0.08	- -0-	HEP2	- 32.000	-0-	06/08/89
AVS-5543	CPE	AD2	0.00	0.00	- -0-	HEP2	< 10.000	-0-	06/08/89
AVS-5545	CPE	AD2	0.15	0.05	- -0-	HEP2	- 100.00	-0-	06/08/89
AVS-5546	CPE	AD2	0.00	0.00	- -0-	HEP2	< 320.00	-0-	06/08/89
AVS-5548	CPE	AD2	0.00	0.00	- -0-	HEP2	- 100.00	-0-	06/08/89
AVS-5556	CPE	AD2	0.50	0.17	- -0-	HEP2	- 320.00	-0-	03/30/89
AVS-5557	CPE	AD2	0.00	0.00	- -0-	HEP2	< 0.100	-0-	04/13/89
AVS-5558	CPE	AD2	0.00	0.00	- -0-	HEP2	< 32.000	-0-	03/30/89
AVS-5561	CPE	AD2	0.45	0.15	- -0-	HEP2	- 100.00	-0-	03/30/89
AVS-5567	CPE	AD2	0.70	0.23	- -0-	HEP2	< 100.00	-0-	06/15/89
AVS-5568	CPE	AD2	0.35	0.12	- 270.9	HEP2	- 320.00	- 1.18	06/08/89
AVS-5569	CPE	AD2	0.60	0.20	- 178.1	HEP2	- 100.00	- 0.56	06/08/89
AVS-5570	CPE	AD2	0.05	0.02	- -0-	HEP2	- 320.00	-0-	06/15/89
AVS-5571	CPE	AD2	1.00	0.33	- 221.9	HEP2	> 320.00	> 1.44	06/15/89
AVS-5572	CPE	AD2	1.50	0.50	- 182.9	HEP2	> 320.00	> 1.75	06/15/89
AVS-5573	CPE	AD2	0.95	0.32	- -0-	HEP2	- 32.000	-0-	06/15/89
AVS-5574	CPE	AD2	0.30	0.10	- -0-	HEP2	> 320.00	-0-	06/15/89
AVS-5575	CPE	AD2	0.25	0.08	- -0-	HEP2	- 32.000	-0-	07/13/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-5576	CPE	AD2	0.00	0.00	- -0-	HEP2 <	0.032	-0-	07/13/89
AVS-5577	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	06/15/89
AVS-5578	CPE	AD2	0.00	0.00	- -0-	HEP2 >	100.00	-0-	07/13/89
AVS-5580	CPE	AD2	0.20	0.07	- -0-	HEP2 -	32.000	-0-	05/11/89
AVS-5583	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	06/15/89
AVS-5584	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	06/15/89
AVS-5585	CPE	AD2	0.05	0.02	- -0-	HEP2 -	320.00	-0-	06/15/89
AVS-5586	CPE	AD2	0.00	0.00	- -0-	HEP2 <	100.00	-0-	06/15/89
AVS-5587	CPE	AD2	0.30	0.10	- -0-	HEP2 -	320.00	-0-	06/08/89
AVS-5711	CPE	AD2	0.00	0.00	- -0-	HEP2 -	10.000	-0-	10/05/89
AVS-5712	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	10/05/89
AVS-5713	CPE	AD2	0.00	0.00	- -0-	HEP2 <	320.00	-0-	10/05/89
AVS-5714	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	10/05/89
AVS-5715	CPE	AD2	0.00	0.00	- -0-	HEP2 -	100.00	-0-	10/05/89
AVS-5716	CPE	AD2	0.00	0.00	- -0-	HEP2 -	10.000	-0-	10/05/89
AVS-5717	CPE	AD2	0.10	0.03	- -0-	HEP2 -	10.000	-0-	10/05/89
AVS-5718	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	11/30/89
AVS-5719	CPE	AD2	0.50	0.17	- -0-	HEP2 <	32.000	-0-	10/05/89
AVS-5720	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	10/05/89
AVS-5721	CPE	AD2	0.00	0.00	- -0-	HEP2 -	10.000	-0-	10/05/89
AVS-5722	CPE	AD2	0.00	0.00	- -0-	HEP2 -	10.000	-0-	10/05/89
AVS-5724	CPE	AD2	0.60	0.20	- -0-	HEP2 <	100.00	-0-	10/05/89
AVS-5725	CPE	AD2	0.10	0.03	- -0-	HEP2 -	320.00	-0-	10/05/89
AVS-5726	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	10/05/89
AVS-5727	CPE	AD2	0.30	0.10	- -0-	HEP2 -	32.000	-0-	10/05/89
AVS-5728	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	11/02/89
AVS-5729	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	11/02/89
AVS-5730	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	11/02/89
AVS-5731	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	11/02/89
AVS-5784	CPE	AD2	0.15	0.05	- -0-	HEP2 -	32.000	-0-	11/02/89
AVS-5913	CPE	AD2	0.30	0.10	- 0.320	HEP2 -	0.320	- 1.00	11/30/89
AVS-5914	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	11/02/89
AVS-5915	CPE	AD2	0.20	0.07	- -0-	HEP2 -	3.200	-0-	11/30/89
AVS-5916	CPE	AD2	0.00	0.00	- -0-	HEP2 -	32.000	-0-	11/02/89
AVS-5917	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	11/02/89
AVS-5918	CPE	AD2	0.15	0.05	- -0-	HEP2 -	1.000	-0-	11/30/89
AVS-5919	CPE	AD2	0.00	0.00	- -0-	HEP2 <	1.000	-0-	11/30/89
AVS-5920	CPE	AD2	0.30	0.10	- -0-	HEP2 <	10.000	-0-	11/02/89
AVS-5921	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	11/02/89
AVS-5922	CPE	AD2	0.45	0.15	- 21.70	HEP2 -	32.000	- 1.47	11/02/89
AVS-5923	CPE	AD2	0.00	0.00	- -0-	HEP2 -	0.320	-0-	11/30/89
AVS-5924	CPE	AD2	0.00	0.00	- -0-	HEP2 -	10.000	-0-	11/02/89
AVS-5925	CPE	AD2	0.00	0.00	- -0-	HEP2 <	1.000	-0-	11/30/89
AVS-5926	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	11/02/89
AVS-5927	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	11/02/89
AVS-5928	CPE	AD2	0.45	0.15	- 21.70	HEP2 -	32.000	- 1.47	11/02/89
AVS-5929	CPE	AD2	0.00	0.00	- -0-	HEP2 <	100.00	-0-	11/30/89
AVS-5930	CPE	AD2	0.15	0.05	- -0-	HEP2 -	3.200	-0-	11/30/89
AVS-5932	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	11/30/89
AVS-5933	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	11/30/89
AVS-5934	CPE	AD2	0.85	0.28	- 178.8	HEP2 -	320.00	- 1.79	11/30/89
AVS-5935	CPE	AD2	0.35	0.12	- -0-	HEP2 -	10.000	-0-	11/30/89
AVS-5936	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	11/30/89
AVS-5937	CPE	AD2	0.90	0.30	- -0-	HEP2 >	320.00	-0-	11/20/89
AVS-5938	CPE	AD2	0.15	0.05	- -0-	HEP2 -	3.200	-0-	11/30/89
AVS-5939	CPE	AD2	0.10	0.03	- -0-	HEP2 <	3.200	-0-	11/30/89
AVS-5940	CPE	AD2	0.05	0.02	- -0-	HEP2 -	10.000	-0-	11/30/89
AVS-5941	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	11/30/89
AVS-5942	CPE	AD2	0.00	0.00	- -0-	HEP2 -	3.200	-0-	11/30/89
AVS-5943	CPE	AD2	0.00	0.00	- -0-	HEP2 <	32.000	-0-	11/30/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-5944	CPE	AD2	0.00	0.00	- -0-	HEP2 <	10.000	-0-	11/30/89
AVS-5945	CPE	AD2	0.00	0.00	- -0-	HEP2 <	3.200	-0-	11/30/89
AVS-6108	CPE	AD2	0.00	0.00	- -0-	HEP2 >	320.00	-0-	11/02/89

SUMMARY OF ANTIVIRAL TEST RESULTS
WITH PICHINDE VIRUS

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-0001	PR	PIC	-0-	-0-	- 6.468	VERO	- 100.00	- 15.46	10/25/88
AVS-0001	PR	PIC	-0-	-0-	- 7.927	VERO	- 32.000	- 4.04	10/28/88
AVS-0001	PR	PIC	-0-	-0-	- 18.68	VERO	- 100.00	- 5.35	10/31/88
AVS-0001	PR	PIC	-0-	-0-	- 6.706	VERO	- 100.00	- 14.91	11/01/88
AVS-0001	PR	PIC	-0-	-0-	- 9.493	VERO	- 32.000	- 3.37	11/04/88
AVS-0001	PR	PIC	-0-	-0-	- 9.665	VERO	- 100.00	- 10.35	11/07/88
AVS-0001	PR	PIC	-0-	-0-	- 8.399	VERO	- 100.00	- 11.91	11/08/88
AVS-0001	PR	PIC	-0-	-0-	- 4.962	VERO	- 100.00	- 20.15	11/11/88
AVS-0001	PR	PIC	-0-	-0-	- 4.099	VERO	- 1.000	- 0.24	11/15/88
AVS-0001	PR	PIC	-0-	-0-	- 8.130	VERO	- 100.00	- 12.30	11/18/88
AVS-0001	PR	PIC	-0-	-0-	- 8.575	VERO	> 100.00	> 11.66	12/05/88
AVS-0001	PR	PIC	-0-	-0-	- 5.438	VERO	> 100.00	> 18.39	12/06/88
AVS-0001	PR	PIC	-0-	-0-	- 7.585	VERO	- 32.000	- 4.22	12/09/88
AVS-0001	PR	PIC	-0-	-0-	- 14.74	VERO	- 10.000	- 0.68	12/13/88
AVS-0001	PR	PIC	-0-	-0-	- 15.03	VERO	- 32.000	- 2.13	12/16/88
AVS-0001	PR	PIC	-0-	-0-	- 10.16	VERO	- 10.000	- 0.98	12/19/88
AVS-0001	PR	PIC	-0-	-0-	- 5.674	VERO	- 10.000	- 1.76	01/09/89
AVS-0001	PR	PIC	-0-	-0-	- 9.604	VERO	- 10.000	- 1.04	01/13/89
AVS-0001	PR	PIC	-0-	-0-	- 5.050	VERO	- 32.000	- 6.34	01/16/89
AVS-0001	PR	PIC	-0-	-0-	- 7.894	VERO	- 100.00	- 12.67	01/23/89
AVS-0001	PR	PIC	-0-	-0-	- 14.05	VERO	- 32.000	- 2.28	01/27/89
AVS-0001	PR	PIC	-0-	-0-	- 6.860	VERO	- 100.00	- 14.58	01/27/89
AVS-0001	PR	PIC	-0-	-0-	- 12.13	VERO	- 10.000	- 0.82	01/31/89
AVS-0001	PR	PIC	-0-	-0-	- 10.17	VERO	- 100.00	- 9.83	02/03/89
AVS-0001	PR	PIC	-0-	-0-	- 6.221	VERO	- 100.00	- 16.07	02/07/89
AVS-0001	PR	PIC	-0-	-0-	- 6.407	VERO	- 32.000	- 4.99	02/10/89
AVS-0001	PR	PIC	-0-	-0-	- 9.704	VERO	- 10.000	- 1.03	02/13/89
AVS-0001	PR	PIC	-0-	-0-	- 9.515	VERO	- 100.00	- 10.51	02/14/89
AVS-0001	PR	PIC	-0-	-0-	- 8.973	VERO	- 10.000	- 1.11	02/17/89
AVS-0001	PR	PIC	-0-	-0-	- 6.491	VERO	- 32.000	- 4.93	02/20/89
AVS-0001	PR	PIC	-0-	-0-	- 35.28	VERO	- 100.00	- 2.83	02/21/89
AVS-0001	PR	PIC	-0-	-0-	- 10.05	VERO	- 10.000	- 1.00	02/24/89
AVS-0001	PR	PIC	-0-	-0-	- 9.392	VERO	- 100.00	- 10.65	02/27/89
AVS-0001	PR	PIC	-0-	-0-	- 10.34	VERO	- 100.00	- 9.67	02/28/89
AVS-0001	PR	PIC	-0-	-0-	- 7.845	VERO	- 100.00	- 12.75	03/03/89
AVS-0001	PR	PIC	-0-	-0-	- 8.456	VERO	- 32.000	- 3.78	03/06/89
AVS-0001	PR	PIC	-0-	-0-	- 9.399	VERO	- 100.00	- 10.64	03/07/89
AVS-0001	PR	PIC	-0-	-0-	- 17.22	VERO	- 10.000	- 0.58	03/07/89
AVS-0001	PR	PIC	-0-	-0-	- 5.806	VERO	- 100.00	- 17.22	03/14/89
AVS-0001	PR	PIC	-0-	-0-	- 8.742	VERO	- 100.00	- 11.44	03/17/89
AVS-0001	PR	PIC	-0-	-0-	- 8.234	VERO	- 100.00	- 12.14	03/20/89
AVS-0001	PR	PIC	-0-	-0-	- 10.12	VERO	- 100.00	- 9.88	03/21/89
AVS-0001	PR	PIC	-0-	-0-	- 10.01	VERO	- 100.00	- 9.99	03/24/89
AVS-0001	PR	PIC	-0-	-0-	- 8.616	VERO	- 100.00	- 11.61	03/27/89
AVS-0001	PR	PIC	-0-	-0-	- 8.780	VERO	- 100.00	- 11.39	03/28/89
AVS-0001	PR	PIC	-0-	-0-	- 8.296	VERO	- 100.00	- 12.05	03/28/89
AVS-0001	PR	PIC	-0-	-0-	- 9.554	VERO	- 100.00	- 10.47	03/31/89
AVS-0001	PR	PIC	-0-	-0-	- 8.473	VERO	- 100.00	- 11.80	04/03/89
AVS-0001	PR	PIC	-0-	-0-	- 8.838	VERO	- 32.000	- 3.62	04/04/89
AVS-0001	PR	PIC	-0-	-0-	- 8.747	VERO	- 32.000	- 3.66	04/04/89
AVS-0001	PR	PIC	-0-	-0-	- 10.71	VERO	- 32.000	- 2.99	04/07/89
AVS-0001	PR	PIC	-0-	-0-	- 10.91	VERO	- 100.00	- 9.17	04/10/89
AVS-0001	PR	PIC	-0-	-0-	- 9.273	VERO	- 100.00	- 10.78	04/11/89
AVS-0001	PR	PIC	-0-	-0-	- 10.91	VERO	- 100.00	- 9.17	04/14/89
AVS-0001	PR	PIC	-0-	-0-	- 11.63	VERO	- 32.000	- 2.75	04/17/89
AVS-0001	PR	PIC	-0-	-0-	- 9.824	VERO	- 32.000	- 3.26	04/18/89
AVS-0001	PR	PIC	-0-	-0-	- 8.029	VERO	- 100.00	- 12.45	04/18/89
AVS-0001	PR	PIC	-0-	-0-	- 9.881	VERO	- 32.000	- 3.24	04/21/89
AVS-0001	PR	PIC	-0-	-0-	- 9.876	VERO	- 100.00	- 10.20	04/24/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-0001	PR	PIC	-0-	-0-	-	10.35	VERO	- 100.00 -	9.66 04/25/89
AVS-0001	PR	PIC	-0-	-0-	-	9.881	VERO	- 32.000 -	3.24 04/28/89
AVS-0001	PR	PIC	-0-	-0-	-	10.81	VERO	- 100.00 -	9.25 05/01/89
AVS-0001	PR	PIC	-0-	-0-	-	13.21	VERO	- 100.00 -	7.57 05/02/89
AVS-0001	PR	PIC	-0-	-0-	-	9.696	VERO	- 100.00 -	10.31 05/05/89
AVS-0001	PR	PIC	-0-	-0-	-	9.167	VERO	- 100.00	10.91 05/08/89
AVS-0001	PR	PIC	-0-	-0-	-	9.376	VERO	- 100.00 -	10.67 05/09/89
AVS-0001	PR	PIC	-0-	-0-	-	7.870	VERO	- 100.00 -	12.71 05/09/89
AVS-0001	PR	PIC	-0-	-0-	-	10.80	VERO	- 32.000 -	2.96 05/12/89
AVS-0001	PR	PIC	-0-	-0-	-	13.14	VERO	- 100.00 -	7.61 05/15/89
AVS-0001	PR	PIC	-0-	-0-	-	17.62	VERO	- 100.00 -	5.68 05/15/89
AVS-0001	PR	PIC	-0-	-0-	-	9.948	VERO	- 32.000 -	3.22 05/16/89
AVS-0001	PR	PIC	-0-	-0-	-	8.133	VERO	- 100.00 -	12.30 05/16/89
AVS-0001	PR	PIC	-0-	-0-	-	12.11	VERO	- 100.00 -	8.26 05/16/89
AVS-0001	PR	PIC	-0-	-0-	-	7.634	VERO	- 32.000 -	4.19 05/16/89
AVS-0001	PR	PIC	-0-	-0-	-	7.634	VERO	- 32.000 -	4.19 05/19/89
AVS-0001	PR	PIC	-0-	-0-	-	9.948	VERO	- 32.000 -	3.22 05/22/89
AVS-0001	PR	PIC	-0-	-0-	-	7.634	VERO	- 32.000 -	4.19 05/23/89
AVS-0001	PR	PIC	-0-	-0-	-	8.978	VERO	- 32.000 -	3.56 05/23/89
AVS-0001	PR	PIC	-0-	-0-	-	12.88	VERO	- 100.00 -	7.76 06/02/89
AVS-0001	PR	PIC	-0-	-0-	-	49.31	VERO	- 100.00 -	2.03 06/02/89
AVS-0001	PR	PIC	-0-	-0-	-	7.949	VERO	- 100.00 -	12.58 06/05/89
AVS-0001	PR	PIC	-0-	-0-	-	6.488	VERO	- 32.000 -	4.93 06/05/89
AVS-0001	PR	PIC	-0-	-0-	-	10.86	VERO	- 100.00 -	9.21 06/06/89
AVS-0001	PR	PIC	-0-	-0-	-	38.72	VERO	- 100.00 -	2.58 06/06/89
AVS-0001	PR	PIC	-0-	-0-	-	7.263	VERO	- 100.00 -	13.77 06/09/89
AVS-0001	PR	PIC	-0-	-0-	-	12.71	VERO	- 100.00 -	7.87 06/12/89
AVS-0001	PR	PIC	-0-	-0-	-	10.77	VERO	- 100.00 -	9.29 06/13/89
AVS-0001	PR	PIC	-0-	-0-	-	9.049	VERO	- 100.00 -	11.05 06/13/89
AVS-0001	PR	PIC	-0-	-0-	-	17.88	VERO	- 100.00 -	5.59 06/16/89
AVS-0001	PR	PIC	-0-	-0-	-	8.807	VERO	- 32.000 -	3.63 06/19/89
AVS-0001	PR	PIC	-0-	-0-	-	11.26	VERO	- 10.000 -	0.89 06/20/89
AVS-0001	PR	PIC	-0-	-0-	-	12.52	VERO	- 100.00 -	7.99 06/20/89
AVS-0001	PR	PIC	-0-	-0-	-	11.70	VERO	- 100.00 -	8.55 06/23/89
AVS-0001	PR	PIC	-0-	-0-	-	14.17	VERO	- 100.00 -	7.06 06/26/89
AVS-0001	PR	PIC	-0-	-0-	-	13.32	VERO	- 100.00 -	7.51 06/27/89
AVS-0001	PR	PIC	-0-	-0-	-	7.525	VERO	- 100.00 -	13.29 06/30/89
AVS-0001	PR	PIC	-0-	-0-	-	16.90	VERO	- 100.00 -	5.92 07/03/89
AVS-0001	PR	PIC	-0-	-0-	-	9.688	VERO	- 10.000 -	1.03 07/07/89
AVS-0001	PR	PIC	-0-	-0-	-	8.446	VERO	- 100.00 -	11.84 07/10/89
AVS-0001	PR	PIC	-0-	-0-	-	11.23	VERO	- 32.000 -	2.85 07/11/89
AVS-0001	PR	PIC	-0-	-0-	-	10.06	VERO	- 100.00 -	9.94 07/11/89
AVS-0001	PR	PIC	-0-	-0-	-	11.16	VERO	- 100.00 -	8.96 07/14/89
AVS-0001	PR	PIC	-0-	-0-	-	10.82	VERO	> 100.00 >	9.24 07/17/89
AVS-0001	PR	PIC	-0-	-0-	-	7.157	VERO	- 32.000 -	4.47 07/21/89
AVS-0001	PR	PIC	-0-	-0-	-	9.490	VERO	- 32.000 -	3.37 07/24/89
AVS-0001	PR	PIC	-0-	-0-	-	11.41	VERO	- 100.00 -	8.76 07/25/89
AVS-0001	PR	PIC	-0-	-0-	-	8.493	VERO	- 32.000 -	3.77 07/25/89
AVS-0001	PR	PIC	-0-	-0-	-	12.20	VERO	- 100.00 -	8.19 07/28/89
AVS-0001	PR	PIC	-0-	-0-	-	9.096	VERO	- 100.00 -	10.99 07/31/89
AVS-0001	PR	PIC	-0-	-0-	-	12.65	VERO	- 100.00 -	7.91 08/01/89
AVS-0001	PR	PIC	-0-	-0-	-	12.95	VERO	- 100.00 -	7.72 08/01/89
AVS-0001	PR	PIC	-0-	-0-	-	9.009	VERO	- 100.00 -	11.10 08/04/89
AVS-0001	PR	PIC	-0-	-0-	-	12.02	VERO	- 100.00 -	8.32 08/07/89
AVS-0001	PR	PIC	-0-	-0-	-	6.555	VERO	- 100.00 -	15.26 08/08/89
AVS-0001	PR	PIC	-0-	-0-	-	12.05	VERO	- 32.000 -	2.66 08/08/89
AVS-0001	PR	PIC	-0-	-0-	-	9.530	VERO	- 100.00 -	10.49 08/11/89
AVS-0001	PR	PIC	-0-	-0-	-	9.275	VERO	- 100.00 -	10.78 08/14/89
AVS-0001	PR	PIC	-0-	-0-	-	10.94	VERO	- 100.00 -	9.14 08/15/89
AVS-0001	PR	PIC	-0-	-0-	-	12.43	VERO	- 100.00 -	8.05 08/18/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-0001	PR	PIC	-0-	-0-	- 11.88	VERO	- 100.00	- 8.42	08/21/89
AVS-0001	PR	PIC	-0-	-0-	- 12.86	VERO	- 100.00	- 7.78	08/22/89
AVS-0001	PR	PIC	-0-	-0-	- 9.835	VERO	- 100.00	- 10.17	08/25/89
AVS-0001	PR	PIC	-0-	-0-	- 10.63	VERO	- 100.00	- 9.41	08/28/89
AVS-0001	PR	PIC	-0-	-0-	- 11.67	VERO	- 100.00	- 8.57	08/29/89
AVS-0001	PR	PIC	-0-	-0-	- 8.629	VERO	- 100.00	- 11.59	09/08/89
AVS-0001	PR	PIC	-0-	-0-	- 7.113	VERO	- 100.00	- 14.06	09/11/89
AVS-0001	PR	PIC	-0-	-0-	- 8.149	VERO	- 100.00	- 12.27	09/12/89
AVS-0001	PR	PIC	-0-	-0-	- 3.133	VERO	- 100.00	- 12.30	09/15/89
AVS-0001	PR	PIC	-0-	-0-	- 7.936	VERO	- 100.00	- 12.60	09/18/89
AVS-0001	PR	PIC	-0-	-0-	- 11.73	VERO	- 100.00	- 8.53	09/19/89
AVS-0001	PR	PIC	-0-	-0-	- 9.118	VERO	- 100.00	- 10.97	09/22/89
AVS-0001	PR	PIC	-0-	-0-	- 11.73	VERO	- 100.00	- 8.53	09/25/89
AVS-0001	PR	PIC	-0-	-0-	- 11.72	VERO	- 100.00	- 8.53	10/02/89
AVS-0001	PR	PIC	-0-	-0-	- 15.01	VERO	- 100.00	- 6.66	10/03/89
AVS-0001	PR	PIC	-0-	-0-	- 12.82	VERO	- 100.00	- 7.80	10/06/89
AVS-0002	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	10/02/89
AVS-0094	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	06/02/89
AVS-0094	PR	PIC	-0-	-0-	- 294.5	VERO	- 32.000	- 0.11	06/12/89
AVS-0095	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	10/02/89
AVS-0111	PR	PIC	-0-	-0-	- 39.87	VERO	- 100.00	- 2.51	07/14/89
AVS-0136	PR	PIC	-0-	-0-	- 147.8	VERO	- 32.000	- 0.22	06/02/89
AVS-0136	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	06/12/89
AVS-0140	PR	PIC	-0-	-0-	- 0.198	VERO	- 0.100	- 0.51	06/02/89
AVS-0140	PR	PIC	-0-	-0-	- 0.848	VERO	- 0.320	- 0.38	06/12/89
AVS-0225	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	10/02/89
AVS-0303	PR	PIC	-0-	-0-	- 9.789	VERO	- 1.000	- 0.10	10/02/89
AVS-0343	PR	PIC	-0-	-0-	- 10.00	VERO	- 10.000	- 1.00	03/21/89
AVS-0580	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	11/08/88
AVS-0581	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	11/08/88
AVS-0582	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	11/08/88
AVS-0583	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	11/08/88
AVS-0584	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	11/08/88
AVS-0585	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	11/07/88
AVS-0586	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	11/11/88
AVS-0587	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	11/11/88
AVS-0588	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	11/11/88
AVS-0598	PR	PIC	-0-	-0-	- 234.6	VERO	- 100.00	- 0.43	11/11/88
AVS-0599	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	11/11/88
AVS-0600	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	11/11/88
AVS-0697	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	11/11/88
AVS-0698	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	11/11/88
AVS-0700	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	11/11/88
AVS-0702	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	11/11/88
AVS-0704	PR	PIC	-0-	-0-	- 2.475	VERO	- 1.000	- 0.40	12/06/88
AVS-0705	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	12/06/88
AVS-0706	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	12/06/88
AVS-0707	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	12/06/88
AVS-0708	PR	PIC	-0-	-0-	- 50.20	VERO	- 100.00	- 1.99	12/06/88
AVS-0709	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	12/06/88
AVS-0710	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	12/06/88
AVS-0712	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	12/06/88
AVS-0713	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	12/06/88
AVS-0714	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	12/06/88
AVS-0715	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	11/15/88
AVS-0913	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	03/21/89
AVS-1116	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	08/22/89
AVS-1117	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	08/22/89
AVS-1176	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	10/02/89
AVS-1307	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	03/21/89

COMPOJND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-1308	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	03/21/89
AVS-1312	PR	PIC	-0-	-0-	- 0-	VERO -	320.00	-0-	03/21/89
AVS-1315	PR	PIC	-0-	-0-	- 0-	VERO -	320.00	-0-	03/21/89
AVS-1333	PR	PIC	-0-	-0-	- 0-	VERO >	100.00	-0-	08/22/89
AVS-1337	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	03/21/89
AVS-1371	PR	PIC	-0-	-0-	- 0-	VERO <	320.00	-0-	08/22/89
AVS-1372	PR	PIC	-0-	-0-	- 0-	VERO <	32.000	-0-	08/22/89
AVS-1378	PR	PIC	-0-	-0-	- 38.89	VERO -	100.00	- 2.57	08/22/89
AVS-1380	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	08/22/89
AVS-1381	PR	PIC	-0-	-0-	- 0-	VERO <	320.00	-0-	09/18/89
AVS-1392	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	03/24/89
AVS-1645	PR	PIC	-0-	-0-	- 35.84	VERO -	10.000	- 0.28	03/24/89
AVS-1654	PR	PIC	-0-	-0-	- 31.22	VERO -	10.000	- 0.32	10/02/89
AVS-1666	PR	PIC	-0-	-0-	- 0-	VERO >	100.00	-0-	09/18/89
AVS-1676	PR	PIC	-0-	-0-	- 160.1	VERO -	100.00	- 0.62	09/18/89
AVS-1689	PR	PIC	-0-	-0-	- 0-	VERO >	100.00	-0-	09/18/89
AVS-1704	PR	PIC	-0-	-0-	- 0-	VERO >	100.00	-0-	03/24/89
AVS-1725	PR	PIC	-0-	-0-	- 0-	VERO >	320.00	-0-	09/18/89
AVS-1727	PR	PIC	-0-	-0-	- 0-	VERO >	320.00	-0-	09/18/89
AVS-1728	PR	PIC	-0-	-0-	- 72.86	VERO -	32.000	- 0.44	09/18/89
AVS-1729	PR	PIC	-0-	-0-	- 66.20	VERO -	100.00	- 1.51	09/18/89
AVS-1730	PR	PIC	-0-	-0-	- 305.8	VERO -	320.00	- 1.05	09/18/89
AVS-1731	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	09/18/89
AVS-1732	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	08/25/89
AVS-1733	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	08/25/89
AVS-1734	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	08/25/89
AVS-1735	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	08/25/89
AVS-1736	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	08/25/89
AVS-1737	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	08/25/89
AVS-1738	PR	PIC	-0-	-0-	- 87.26	VERO -	100.00	- 1.15	08/25/89
AVS-1739	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	08/25/89
AVS-1740	PR	PIC	-0-	-0-	- 0-	VERO -	320.00	-0-	08/25/89
AVS-1741	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	08/25/89
AVS-1742	PR	PIC	-0-	-0-	- 30.05	VERO -	10.000	- 0.33	09/11/89
AVS-1743	PR	PIC	-0-	-0-	- 0-	VERO >	100.00	-0-	09/11/89
AVS-1744	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	09/11/89
AVS-1745	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	09/11/89
AVS-1746	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	09/11/89
AVS-1747	PR	PIC	-0-	-0-	- 0-	VERO >	320.00	-0-	09/11/89
AVS-1748	PR	PIC	-0-	-0-	- 234.0	VERO -	100.00	- 0.43	09/11/89
AVS-1749	PR	PIC	-0-	-0-	- 43.91	VERO -	32.000	- 0.73	09/11/89
AVS-1750	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	09/11/89
AVS-1751	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	09/11/89
AVS-1752	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	10/02/89
AVS-1801	PR	PIC	-0-	-0-	- 0-	VERO >	320.00	-0-	02/17/89
AVS-1811	PR	PIC	-0-	-0-	- 0-	VERO >	320.00	-0-	09/12/89
AVS-1820	PR	PIC	-0-	-0-	- 247.1	VERO -	100.00	- 0.40	03/24/89
AVS-1819	PR	PIC	-0-	-0-	- 0-	VERO >	320.00	-0-	02/17/89
AVS-1835	PR	PIC	-0-	-0-	- 0-	VERO >	320.00	-0-	02/17/89
AVS-1841	PR	PIC	-0-	-0-	- 80.72	VERO -	32.000	- 0.40	03/24/89
AVS-1843	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	03/24/89
AVS-1846	PR	PIC	-0-	-0-	- 0-	VERO -	320.00	-0-	03/24/89
AVS-1850	PR	PIC	-0-	-0-	- 260.7	VERO -	320.00	- 1.23	02/17/89
AVS-1899	PR	PIC	-0-	-0-	- 61.57	VERO -	32.000	- 0.52	03/24/89
AVS-1900	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	03/24/89
AVS-1901	PR	PIC	-0-	-0-	- 82.29	VERO -	100.00	- 1.22	03/24/89
AVS-1902	PR	PIC	-0-	-0-	- 0-	VERO -	32.000	-0-	03/27/89
AVS-2108	PR	PIC	-0-	-0-	- 0-	VERO -	320.00	-0-	02/28/89
AVS-2111	PR	PIC	-0-	-0-	- 31.37	VERO -	32.000	- 1.02	02/28/89
AVS-2148	PR	PIC	-0-	-0-	- 0-	VERO -	100.00	-0-	02/28/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-2173	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/28/89
AVS-2177	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	02/28/89
AVS-2185	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/28/89
AVS-2187	PR	PIC	-0-	-0-	-0-	VERO	> 10.000	-0-	02/28/89
AVS-2203	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/28/89
AVS-2208	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/28/89
AVS-2214	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	01/27/89
AVS-2215	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	01/27/89
AVS-2216	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	01/27/89
AVS-2227	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	01/27/89
AVS-2230	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	01/27/89
AVS-2279	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/20/89
AVS-2282	PR	PIC	-0-	-0-	-0-	VERO	< 320.00	-0-	03/20/89
AVS-2292	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	01/27/89
AVS-2298	PR	PIC	-0-	-0-	2.533	VERO	1.000	0.39	01/27/89
AVS-2400	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	01/23/89
AVS-2401	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	01/23/89
AVS-2403	PR	PIC	-0-	-0-	30.38	VERO	32.000	1.05	01/23/89
AVS-2404	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	01/23/89
AVS-2405	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	01/23/89
AVS-2406	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/23/89
AVS-2407	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	01/23/89
AVS-2408	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	01/23/89
AVS-2408	PR	PIC	-0-	-0-	192.0	VERO	320.00	1.66	01/27/89
AVS-2433	PR	PIC	-0-	-0-	192.0	VERO	100.00	0.52	01/09/89
AVS-2434	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	02/07/89
AVS-2437	PR	PIC	-0-	-0-	163.6	VERO	100.00	0.61	01/09/89
AVS-2474	PR	PIC	-0-	-0-	-0-	VERO	> 10.000	-0-	01/23/89
AVS-2509	PR	PIC	-0-	-0-	-0-	VERO	0.010	-0-	12/16/88
AVS-2509	PR	PIC	-0-	-0-	-0-	VERO	< 0.100	-0-	03/20/89
AVS-2515	PR	PIC	-0-	-0-	-0-	VERO	> 0.320	-0-	12/16/88
AVS-2543	PR	PIC	-0-	-0-	25.12	VERO	10.000	0.40	02/07/89
AVS-2563	PR	PIC	-0-	-0-	23.26	VERO	32.000	1.38	02/17/89
AVS-2566	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	01/16/89
AVS-2567	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/16/89
AVS-2568	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	01/16/89
AVS-2569	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	01/16/89
AVS-2619	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	01/23/89
AVS-2620	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	03/20/89
AVS-2624	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	03/20/89
AVS-2627	PR	PIC	-0-	-0-	122.6	VERO	100.00	0.82	03/20/89
AVS-2628	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	03/20/89
AVS-2641	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	01/27/89
AVS-2642	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	01/16/89
AVS-2643	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/16/89
AVS-2663	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	01/16/89
AVS-2667	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/13/89
AVS-2668	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	01/13/89
AVS-2669	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/13/89
AVS-2670	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	01/13/89
AVS-2671	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	01/13/89
AVS-2672	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/13/89
AVS-2673	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/13/89
AVS-2674	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/13/89
AVS-2675	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/13/89
AVS-2686	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	12/16/88
AVS-2692	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/01/89
AVS-2693	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/01/89
AVS-2694	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/07/89
AVS-2695	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/07/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-2696	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	02/07/89
AVS-2697	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	02/07/89
AVS-2698	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	02/07/89
AVS-2699	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	02/10/89
AVS-2700	PR	PIC	-0-	-0-	- -0-	VERO	- 1.000	-0-	02/10/89
AVS-2701	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	02/10/89
AVS-2715	PR	PIC	-0-	-0-	- -0-	VERO	> 0.003	-0-	01/13/89
AVS-2716	PR	PIC	-0-	-0-	- 9.390	VERO	- 3.200	- 0.34	10/02/89
AVS-2788	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	12/13/88
AVS-2871	PR	PIC	-0-	-0-	- -0-	VERO	- 0.032	-0-	12/16/88
AVS-2871	PR	PIC	-0-	-0-	- -0-	VERO	- 0.010	-0-	01/09/89
AVS-2920	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	02/17/89
AVS-2921	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	02/17/89
AVS-2922	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	02/20/89
AVS-2923	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	02/20/89
AVS-2924	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	02/20/89
AVS-2925	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	02/20/89
AVS-2961	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/16/88
AVS-2980	PR	PIC	-0-	-0-	- 0.868	VERO	- 1.000	- 1.15	12/16/88
AVS-3037	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	12/16/88
AVS-3039	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/20/89
AVS-3042	PR	PIC	-0-	-0-	- 14.95	VERO	- 1.000	- 0.07	02/28/89
AVS-3043	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	02/07/89
AVS-3044	PR	PIC	-0-	-0-	- -0-	VERO	> 10.000	-0-	01/09/89
AVS-3048	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	01/27/89
AVS-3049	PR	PIC	-0-	-0-	- -0-	VERO	> 10.000	-0-	12/16/88
AVS-3086	PR	PIC	-0-	-0-	- -0-	VERO	> 10.000	-0-	12/16/88
AVS-3142	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	12/13/88
AVS-3143	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	12/13/88
AVS-3144	PR	PIC	-0-	-0-	- 9.935	VERO	- 3.200	- 0.32	12/13/88
AVS-3145	PR	PIC	-0-	-0-	- -0-	VERO	- 1.000	-0-	12/13/88
AVS-3146	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/13/88
AVS-3147	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	12/13/88
AVS-3148	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	12/13/88
AVS-3162	PR	PIC	-0-	-0-	- -0-	VERO	- 1.000	-0-	12/13/88
AVS-3163	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	12/13/88
AVS-3176	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	12/19/88
AVS-3178	PR	PIC	-0-	-0-	- -0-	VERO	- 22.000	-0-	12/19/88
AVS-3179	PR	PIC	-0-	-0-	- -0-	VERO	> 100.00	-0-	12/19/88
AVS-3180	PR	PIC	-0-	-0-	- -0-	VERO	< 42.000	-0-	12/19/88
AVS-3181	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/19/88
AVS-3183	PR	PIC	-0-	-0-	- -0-	VERO	- 1.000	-0-	12/19/88
AVS-3184	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	12/19/88
AVS-3185	PR	PIC	-0-	-0-	- -0-	VERO	- 0.100	-0-	12/19/88
AVS-3186	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	12/19/88
AVS-3187	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	12/19/88
AVS-3188	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	10/25/88
AVS-3189	PR	PIC	-0-	-0-	- 0.938	VERO	- 100.00	- 106.55	10/25/88
AVS-3190	PR	PIC	-0-	-0-	- 13.80	VERO	- 32.000	- 2.32	10/25/88
AVS-3191	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	10/25/88
AVS-3193	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	10/25/88
AVS-3194	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	10/25/88
AVS-3195	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	10/25/88
AVS-3196	PR	PIC	-0-	-0-	- -0-	VERO	< 100.00	-0-	10/25/88
AVS-3197	PR	PIC	-0-	-0-	- -0-	VERO	> 1.000	-0-	10/25/88
AVS-3199	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	10/25/88
AVS-3200	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	10/28/88
AVS-3202	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	10/28/88
AVS-3203	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	10/28/88
AVS-3204	PR	PIC	-0-	-0-	- 2.325	VERO	- 3.200	- 1.38	10/28/88

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE	
AVS-3205	PR	PIC	-0-	-0-	-	2.778	VERO -	3.200 -	1.15	10/28/88
AVS-3206	PR	PIC	-0-	-0-	-	1.152	VERO -	3.200 -	2.78	12/16/88
AVS-3207	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	10/28/88
AVS-3208	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	10/31/88
AVS-3209	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	10/31/88
AVS-3211	PR	PIC	-0-	-0-	-	-0-	VERO -	320.00	-0-	10/31/88
AVS-3213	PR	PIC	-0-	-0-	-	-0-	VERO -	10.000	-0-	10/31/88
AVS-3215	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	10/31/88
AVS-3216	PR	PIC	-0-	-0-	-	-0-	VERO -	3.200	-0-	11/01/88
AVS-3217	PR	PIC	-0-	-0-	-	-0-	VERO -	1.000	-0-	11/01/88
AVS-3218	PR	PIC	-0-	-0-	-	23.06	VERO -	10.000 -	0.43	11/01/88
AVS-3219	PR	PIC	-0-	-0-	-	-0-	VERO -	10.000	-0-	11/01/88
AVS-3221	PR	PIC	-0-	-0-	-	-0-	VERO -	1.000	-0-	11/01/88
AVS-3222	PR	PIC	-0-	-0-	-	-0-	VERO -	3.200	-0-	11/01/88
AVS-3223	PR	PIC	-0-	-0-	-	-0-	VERO -	320.00	-0-	11/01/88
AVS-3224	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/01/88
AVS-3225	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/01/88
AVS-3226	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/01/88
AVS-3227	PR	PIC	-0-	-0-	-	-0-	VERO -	320.00	-0-	10/31/88
AVS-3227	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/04/88
AVS-3228	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	10/31/88
AVS-3228	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/04/88
AVS-3229	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	10/31/88
AVS-3229	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/04/88
AVS-3230	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/04/88
AVS-3231	PR	PIC	-0-	-0-	-	-0-	VERO >	320.00	-0-	11/04/88
AVS-3232	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/04/88
AVS-3233	PR	PIC	-0-	-0-	-	30.08	VERO -	10.000 -	0.33	11/04/88
AVS-3234	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/04/88
AVS-3235	PR	PIC	-0-	-0-	-	-0-	VERO -	320.00	-0-	11/04/88
AVS-3236	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	10/31/88
AVS-3236	PR	PIC	-0-	-0-	-	-0-	VERO -	10.000	-0-	11/04/88
AVS-3237	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	10/31/88
AVS-3237	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/07/88
AVS-3238	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/07/88
AVS-3239	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/07/88
AVS-3240	PR	PIC	-0-	-0-	-	-0-	VERO -	320.00	-0-	11/07/88
AVS-3241	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/07/88
AVS-3242	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/07/88
AVS-3243	PR	PIC	-0-	-0-	-	-0-	VERO -	3.200	-0-	11/07/88
AVS-3244	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/07/88
AVS-3245	PR	PIC	-0-	-0-	-	-0-	VERO -	320.00	-0-	11/07/88
AVS-3246	PR	PIC	-0-	-0-	-	-0-	VERO -	10.000	-0-	11/15/88
AVS-3247	PR	PIC	-0-	-0-	-	63.08	VERO -	32.000 -	0.51	11/15/88
AVS-3248	PR	PIC	-0-	-0-	-	-0-	VERO	0.320	-0-	11/15/88
AVS-3250	PR	PIC	-0-	-0-	-	-0-	VERO -	10.000	-0-	11/15/88
AVS-3251	PR	PIC	-0-	-0-	-	16.97	VERO -	10.000	0.59	11/15/88
AVS-3252	PR	PIC	-0-	-0-	-	13.00	VERO -	10.000	0.77	11/15/88
AVS-3254	PR	PIC	-0-	-0-	-	-0-	VERO -	3.200	-0-	11/15/88
AVS-3256	PR	PIC	-0-	-0-	-	54.69	VERO -	10.000 -	0.18	11/15/88
AVS-3263	PR	PIC	-0-	-0-	-	-0-	VERO -	10.000	-0-	11/18/88
AVS-3265	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/18/88
AVS-3269	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/18/88
AVS-3270	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/18/88
AVS-3271	PR	PIC	-0-	-0-	-	-0-	VERO -	100.00	-0-	11/18/88
AVS-3272	PR	PIC	-0-	-0-	-	-0-	VERO -	32.000	-0-	11/18/88
AVS-3274	PR	PIC	-0-	-0-	-	30.06	VERO -	10.000 -	0.33	11/18/88
AVS-3277	PR	PIC	-0-	-0-	-	62.83	VERO -	32.000 -	0.51	11/18/88
AVS-3278	PR	PIC	-0-	-0-	-	11.15	VERO -	3.200 -	0.29	11/18/88
AVS-3279	PR	PIC	-0-	-0-	-	204.7	VERO -	3.200 -	0.02	11/18/88

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-3280	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/09/88
AVS-3284	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	12/09/88
AVS-3286	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/09/88
AVS-3288	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	12/09/88
AVS-3290	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	12/09/88
AVS-3292	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	12/09/88
AVS-3293	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/09/88
AVS-3294	PR	PIC	-0-	-0-	- 27.38	VERO	- 10.000	- 0.37	12/05/88
AVS-3295	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	12/05/88
AVS-3296	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/05/88
AVS-3297	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	12/05/88
AVS-3299	PR	PIC	-0-	-0-	- -0-	VERO	< 320.00	-0-	12/05/88
AVS-3303	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	12/05/88
AVS-3305	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	12/05/88
AVS-3306	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	12/05/88
AVS-3308	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/05/88
AVS-3309	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/05/88
AVS-3314	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/09/88
AVS-3315	PR	PIC	-0-	-0-	- -0-	VERO	< 32.000	-0-	12/09/88
AVS-3316	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	12/09/88
AVS-3348	PR	PIC	-0-	-0-	- 3.071	VERO	- 3.200	- 1.04	01/27/89
AVS-3349	PR	PIC	-0-	-0-	- 2.781	VERO	- 1.000	- 0.36	01/27/89
AVS-3350	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	01/27/89
AVS-3351	PR	PIC	-0-	-0-	- 29.99	VERO	- 32.000	- 1.07	01/27/89
AVS-3352	PR	PIC	-0-	-0-	- -0-	VERO	- 1.000	-0-	01/27/89
AVS-3353	PR	PIC	-0-	-0-	- -0-	VERO	- 1.000	-0-	01/27/89
AVS-3354	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	01/27/89
AVS-3355	PR	PIC	-0-	-0-	- 6.043	VERO	- 10.000	- 1.65	01/27/89
AVS-3356	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	01/27/89
AVS-3357	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	01/27/89
AVS-3368	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	01/31/89
AVS-3368	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	02/27/89
AVS-3369	PR	PIC	-0-	-0-	- 57.19	VERO	- 32.000	- 0.56	01/31/89
AVS-3369	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	02/27/89
AVS-3370	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	01/31/89
AVS-3370	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	02/27/89
AVS-3371	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	01/31/89
AVS-3371	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	02/27/89
AVS-3372	PR	PIC	-0-	-0-	- -0-	VERO	< 32.000	-0-	01/31/89
AVS-3372	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	02/27/89
AVS-3373	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	01/31/89
AVS-3373	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	02/27/89
AVS-3374	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	01/31/89
AVS-3374	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	02/27/89
AVS-3375	PR	PIC	-0-	-0-	- -0-	VERO	- 1.000	-0-	01/31/89
AVS-3375	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	02/27/89
AVS-3376	PR	PIC	-0-	-0-	- -0-	VERO	> 100.00	-0-	03/03/89
AVS-3377	PR	PIC	-0-	-0-	- 15.76	VERO	- 10.000	- 0.63	03/03/89
AVS-3379	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/03/89
AVS-3380	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/03/89
AVS-3381	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/03/89
AVS-3382	PR	PIC	-0-	-0-	- -0-	VERO	> 100.00	-0-	03/03/89
AVS-3383	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/03/89
AVS-3384	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	03/03/89
AVS-3385	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/03/89
AVS-3386	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/03/89
AVS-3387	PR	PIC	-0-	-0-	- 167.5	VERO	- 32.000	- 0.19	03/05/89
AVS-3393	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/05/89
AVS-3399	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/06/89
AVS-3403	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	03/06/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-3412	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	03/06/89
AVS-3421	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	02/20/89
AVS-3422	PR	PIC	-0-	-0-	2.382	VERO	10.000	4.20	02/20/89
AVS-3423	PR	PIC	-0-	-0-	39.40	VERO	32.000	0.81	02/20/89
AVS-3424	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/20/89
AVS-3425	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/20/89
AVS-3426	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/20/89
AVS-3427	PR	PIC	-0-	-0-	60.45	VERO	32.000	0.53	02/21/89
AVS-3429	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	02/21/89
AVS-3430	PR	PIC	-0-	-0-	63.49	VERO	3.200	0.05	02/21/89
AVS-3431	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/21/89
AVS-3432	PR	PIC	-0-	-0-	-0-	VERO	< 3.200	-0-	02/21/89
AVS-3433	PR	PIC	-0-	-0-	-0-	VERO	< 10.000	-0-	02/21/89
AVS-3450	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/21/89
AVS-3462	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/27/89
AVS-3482	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	03/27/89
AVS-3485	PR	PIC	-0-	-0-	-0-	VERO	0.032	-0-	03/27/89
AVS-3486	PR	PIC	-0-	-0-	0.221	VERO	0.032	0.14	03/27/89
AVS-3487	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/27/89
AVS-3488	PR	PIC	-0-	-0-	2.789	VERO	3.200	1.15	03/27/89
AVS-3489	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/27/89
AVS-3490	PR	PIC	-0-	-0-	9.248	VERO	32.000	3.46	03/28/89
AVS-3491	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	03/28/89
AVS-3492	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/28/89
AVS-3493	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/28/89
AVS-3494	PR	PIC	-0-	-0-	103.8	VERO	100.00	0.96	03/28/89
AVS-3495	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/28/89
AVS-3496	PR	PIC	-0-	-0-	25.29	VERO	32.000	1.27	03/28/89
AVS-3497	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/28/89
AVS-3498	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	03/28/89
AVS-3499	PR	PIC	-0-	-0-	9.135	VERO	10.000	1.09	03/28/89
AVS-3501	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	03/27/89
AVS-3502	PR	PIC	-0-	-0-	213.8	VERO	32.000	0.15	03/27/89
AVS-3503	PR	PIC	-0-	-0-	15.94	VERO	32.000	2.01	03/31/89
AVS-3508	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/31/89
AVS-3509	PR	PIC	-0-	-0-	2.110	VERO	3.200	1.52	03/31/89
AVS-3510	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	03/31/89
AVS-3511	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	03/31/89
AVS-3512	PR	PIC	-0-	-0-	6.765	VERO	3.200	0.47	03/31/89
AVS-3513	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	04/03/89
AVS-3520	PR	PIC	-0-	-0-	8.727	VERO	3.200	0.37	01/31/89
AVS-3520	PR	PIC	-0-	-0-	-0-	VERO	> 10.000	-0-	02/27/89
AVS-3521	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	01/31/89
AVS-3521	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/27/89
AVS-3522	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	02/03/89
AVS-3523	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/03/89
AVS-3524	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	02/03/89
AVS-3525	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/03/89
AVS-3526	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/03/89
AVS-3527	PR	PIC	-0-	-0-	28.11	VERO	3.200	0.11	02/03/89
AVS-3528	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/03/89
AVS-3529	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	02/03/89
AVS-3530	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	02/03/89
AVS-3531	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/03/89
AVS-3532	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/10/89
AVS-3533	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/10/89
AVS-3534	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	02/10/89
AVS-3535	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	02/10/89
AVS-3536	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/10/89
AVS-3537	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	02/10/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-3538	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/10/89
AVS-3539	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/13/89
AVS-3540	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/13/89
AVS-3541	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/13/89
AVS-3542	PR	PIC	-0-	-0-	20.00	VERO	32.000	1.60	02/13/89
AVS-3543	PR	PIC	-0-	-0-	-0-	VERO	0.320	-0-	02/13/89
AVS-3544	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	02/13/89
AVS-3545	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	02/13/89
AVS-3546	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/13/89
AVS-3547	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	02/13/89
AVS-3548	PR	PIC	-0-	-0-	-0-	VERO	< 100.00	-0-	02/13/89
AVS-3549	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/14/89
AVS-3550	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/14/89
AVS-3551	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	02/14/89
AVS-3552	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	02/14/89
AVS-3554	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	11/08/88
AVS-3555	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	11/08/88
AVS-3556	PR	PIC	-0-	-0-	82.79	VERO	32.000	0.39	02/14/89
AVS-3557	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/14/89
AVS-3558	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/14/89
AVS-3559	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/14/89
AVS-3560	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	02/14/89
AVS-3561	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	02/14/89
AVS-3562	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	02/17/89
AVS-3563	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	02/17/89
AVS-3564	PR	PIC	-0-	-0-	0.010	VERO	0.010	0.96	02/21/89
AVS-3565	PR	PIC	-0-	-0-	5.065	VERO	10.000	1.97	02/21/89
AVS-3566	PR	PIC	-0-	-0-	0.550	VERO	0.100	0.18	02/21/89
AVS-3567	PR	PIC	-0-	-0-	4.320	VERO	3.200	0.74	03/17/89
AVS-3568	PR	PIC	-0-	-0-	0.544	VERO	0.032	0.06	03/17/89
AVS-3569	PR	PIC	-0-	-0-	10.62	VERO	3.200	0.30	03/17/89
AVS-3570	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	03/17/89
AVS-3571	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	03/17/89
AVS-3572	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	03/17/89
AVS-3573	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	03/17/89
AVS-3574	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	03/17/89
AVS-3575	PR	PIC	-0-	-0-	26.34	VERO	10.000	0.38	03/17/89
AVS-3576	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/17/89
AVS-3577	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	02/17/89
AVS-3578	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/06/89
AVS-3579	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	03/06/89
AVS-3580	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/06/89
AVS-3581	PR	PIC	-0-	-0-	6.966	VERO	10.000	1.44	03/06/89
AVS-3582	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	03/06/89
AVS-3583	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/07/89
AVS-3584	PR	PIC	-0-	-0-	203.1	VERO	100.00	0.49	03/07/89
AVS-3586	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	03/07/89
AVS-3587	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	03/07/89
AVS-3588	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	03/07/89
AVS-3589	PR	PIC	-0-	-0-	27.38	VERO	32.000	1.17	03/07/89
AVS-3590	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/07/89
AVS-3592	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	01/13/89
AVS-3593	PR	PIC	-0-	-0-	0.252	VERO	0.320	1.27	03/07/89
AVS-3602	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	11/08/88
AVS-3603	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	11/08/88
AVS-3604	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	11/08/88
AVS-3605	PR	PIC	-0-	-0-	287.3	VERO	100.00	0.35	03/07/89
AVS-3606	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	03/07/89
AVS-3607	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/07/89
AVS-3608	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	03/07/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-3609	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	03/07/89
AVS-3610	PR	PIC	-0-	-0-	- 6.280	VERO	- 3.200	0.51	03/07/89
AVS-3611	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	03/07/89
AVS-3612	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	03/07/89
AVS-3613	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	03/07/89
AVS-3614	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	03/07/89
AVS-3615	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/07/89
AVS-3616	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/07/89
AVS-3617	PR	PIC	-0-	-0-	- 246.0	VERO	- 100.00	0.41	04/14/89
AVS-3618	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/01/89
AVS-3619	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	03/20/89
AVS-3620	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	03/20/89
AVS-3621	PR	PIC	2.11	0.70	- -0-	VERO	> 32.000	-0-	04/10/89
AVS-3622	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	04/10/89
AVS-3623	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/10/89
AVS-3624	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	04/10/89
AVS-3677	PR	PIC	-0-	-0-	- 2.674	VERO	- 3.200	1.20	05/01/89
AVS-3678	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	04/10/89
AVS-3679	PR	PIC	-0-	-0-	- 33.01	VERO	- 32.000	0.97	05/01/89
AVS-3680	PR	PIC	-0-	-0-	- 81.58	VERO	- 100.00	1.23	04/11/89
AVS-3690	PR	PIC	-0-	-0-	- 104.2	VERO	- 32.000	0.31	04/11/89
AVS-3698	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/11/89
AVS-3699	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/01/89
AVS-3700	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	04/11/89
AVS-3701	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	04/11/89
AVS-3702	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	04/11/89
AVS-3703	PR	PIC	-0-	-0-	- 151.5	VERO	- 100.00	0.66	04/11/89
AVS-3704	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	04/11/89
AVS-3705	PR	PIC	-0-	-0-	- -0-	VERO	> 100.00	-0-	04/10/89
AVS-3706	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/11/89
AVS-3707	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/01/89
AVS-3708	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/11/89
AVS-3709	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	04/11/89
AVS-3710	PR	PIC	-0-	-0-	- 231.6	VERO	- 32.000	0.14	04/11/89
AVS-3711	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/01/89
AVS-3712	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/01/89
AVS-3713	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/01/89
AVS-3714	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	03/14/89
AVS-3715	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	04/11/89
AVS-3716	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	03/14/89
AVS-3717	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	05/01/89
AVS-3720	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	03/14/89
AVS-3721	PR	PIC	-0-	-0-	- 25.39	VERO	- 10.000	0.39	04/14/89
AVS-3722	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/14/89
AVS-3723	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	03/14/89
AVS-3724	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	03/14/89
AVS-3725	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	03/21/89
AVS-3726	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	03/21/89
AVS-3727	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/03/89
AVS-3728	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/03/89
AVS-3729	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/03/89
AVS-3730	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/03/89
AVS-3731	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	04/03/89
AVS-3732	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/03/89
AVS-3733	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/04/89
AVS-3734	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	04/04/89
AVS-3735	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	04/04/89
AVS-3736	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	04/04/89
AVS-3737	PR	PIC	-0-	-0-	- -0-	VERO	> 32.000	-0-	04/04/89
AVS-3738	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	04/04/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-3739	PR	PIC	-0-	-0-	- -0-	VERO >	100.00	-0-	04/04/89
AVS-3740	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	04/04/89
AVS-3741	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	04/04/89
AVS-3742	PR	PIC	-0-	-0-	- -0-	VERO -	100.00	-0-	04/04/89
AVS-3743	PR	PIC	-0-	-0-	- -0-	VERO >	32.000	-0-	04/07/89
AVS-3747	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	04/07/89
AVS-3749	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	04/07/89
AVS-3750	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	04/07/89
AVS-3751	PR	PIC	-0-	-0-	- -0-	VERO >	32.000	-0-	04/07/89
AVS-3752	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	04/07/89
AVS-3753	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	05/01/89
AVS-3756	PR	PIC	-0-	-0-	- -0-	VERO >	32.000	-0-	04/18/89
AVS-3757	PR	PIC	-0-	-0-	- -0-	VERO >	100.00	-0-	05/02/89
AVS-3758	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	05/05/89
AVS-3759	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	04/18/89
AVS-3761	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	05/05/89
AVS-3762	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	06/06/89
AVS-3763	PR	PIC	-0-	-0-	- -0-	VERO -	100.00	-0-	05/05/89
AVS-3764	PR	PIC	-0-	-0-	- -0-	VERO -	100.00	-0-	06/06/89
AVS-3765	PR	PIC	-0-	-0-	- 61.40	VERO -	100.00	- 1.63	04/18/89
AVS-3766	PR	PIC	-0-	-0-	- -0-	VERO >	100.00	-0-	04/18/89
AVS-3767	PR	PIC	-0-	-0-	- 18.02	VERO -	10.000	- 0.55	05/02/89
AVS-3769	PR	PIC	-0-	-0-	- 8.330	VERO -	3.200	- 0.38	04/14/89
AVS-3770	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	06/06/89
AVS-3771	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	04/03/89
AVS-3772	PR	pic	-0-	-0-	- -0-	VERO -	10.000	-0-	04/03/89
AVS-3773	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	04/03/89
AVS-3774	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	04/04/89
AVS-3776	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	04/04/89
AVS-3776	PR	PIC	-0-	-0-	- -0-	VERO -	100.00	-0-	04/07/89
AVS-3777	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	04/07/89
AVS-3778	PR	PIC	-0-	-0-	- -0-	VERO >	100.00	-0-	04/07/89
AVS-3779	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	04/07/89
AVS-3780	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	05/05/89
AVS-3781	PR	PIC	-0-	-0-	- 0.991	VERO -	1.000	- 1.01	04/18/89
AVS-3782	PR	PIC	-0-	-0-	- 2.467	VERO -	1.000	- 0.41	04/18/89
AVS-3783	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	05/05/89
AVS-3784	PR	PIC	-0-	-0-	- -0-	VERO -	1.000	-0-	04/18/89
AVS-3785	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	05/22/89
AVS-3786	PR	PIC	-0-	-0-	- -0-	VERO <	10.000	-0-	05/22/89
AVS-3787	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	04/21/89
AVS-3788	PR	PIC	-0-	-0-	- 20.87	VERO -	32.000	- 1.53	04/21/89
AVS-3788	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	05/22/89
AVS-3789	PR	PIC	-0-	-0-	- 8.236	VERO -	10.000	- 1.21	05/22/89
AVS-3790	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	05/22/89
AVS-3791	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	05/22/89
AVS-3792	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	04/21/89
AVS-3793	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	04/21/89
AVS-3794	PR	PIC	-0-	-0-	- -0-	VERO -	1.000	-0-	05/22/89
AVS-3796	PR	PIC	-0-	-0-	- -0-	VERO -	1.000	-0-	04/24/89
AVS-3797	PR	PIC	-0-	-0-	- 7.665	VERO -	10.000	- 1.30	04/24/89
AVS-3798	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	04/24/89
AVS-3799	PR	PIC	-0-	-0-	- 0.565	VERO -	10.000	- 17.69	04/24/89
AVS-3800	PR	PIC	-0-	-0-	- 0.160	VERO -	10.000	- 62.46	04/24/89
AVS-3801	PR	PIC	-0-	-0-	- 0.317	VERO -	3.200	- 10.11	04/24/89
AVS-3802	PR	PIC	-0-	-0-	- 0.566	VERO -	10.000	- 17.67	04/24/89
AVS-3803	PR	PIC	-0-	-0-	- 0.491	VERO -	3.200	- 6.52	04/24/89
AVS-3805	PR	PIC	-0-	-0-	- 6.996	VERO -	10.000	- 1.43	04/24/89
AVS-3828	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	06/19/89
AVS-3829	PR	PIC	-0-	-0-	- 20.70	VERO -	10.000	- 0.48	06/19/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-3830	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/19/89
AVS-3832	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/19/89
AVS-3833	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/20/89
AVS-3834	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/20/89
AVS-3835	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	06/20/89
AVS-3836	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/20/89
AVS-3837	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/20/89
AVS-3842	PR	PIC	-0-	-0-	-0-	VERO	1.000	-0-	06/20/89
AVS-3849	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/20/89
AVS-3850	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	06/20/89
AVS-3851	PR	PIC	-0-	-0-	7.334	VERO	10.000	1.36	06/20/89
AVS-3852	PR	PIC	-0-	-0-	5.690	VERO	3.200	0.56	06/20/89
AVS-3854	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/12/89
AVS-3855	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	06/23/89
AVS-3856	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/23/89
AVS-3857	PR	PIC	-0-	-0-	1.021	VERO	1.000	0.98	06/23/89
AVS-3858	PR	PIC	-0-	-0-	0.851	VERO	1.000	1.18	06/23/89
AVS-3860	PR	PIC	-0-	-0-	22.89	VERO	32.000	1.40	06/23/89
AVS-3861	PR	PIC	-0-	-0-	20.98	VERO	32.000	1.53	06/23/89
AVS-3862	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	06/23/89
AVS-3863	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	06/23/89
AVS-3864	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	06/23/89
AVS-3865	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/19/89
AVS-3866	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/30/89
AVS-3867	PR	PIC	-0-	-0-	22.15	VERO	32.000	1.44	06/30/89
AVS-3869	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	07/03/89
AVS-3870	PR	PIC	-0-	-0-	308.8	VERO	100.00	0.32	07/03/89
AVS-3871	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	06/30/89
AVS-3872	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/30/89
AVS-3873	PR	PIC	-0-	-0-	170.0	VERO	100.00	0.59	06/30/89
AVS-3875	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	06/30/89
AVS-3876	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	06/30/89
AVS-3879	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	06/30/89
AVS-3880	PR	PIC	-0-	-0-	5.693	VERO	3.200	0.56	06/30/89
AVS-3881	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/03/89
AVS-3882	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/03/89
AVS-3883	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/03/89
AVS-3886	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	07/03/89
AVS-3887	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	07/03/89
AVS-3888	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	07/03/89
AVS-3889	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/03/89
AVS-3890	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/03/89
AVS-3891	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	07/07/89
AVS-3892	PR	PIC	-0-	-0-	6.702	VERO	3.200	0.48	07/07/89
AVS-3893	PR	PIC	-0-	-0-	28.40	VERO	10.000	0.35	07/07/89
AVS-3894	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/07/89
AVS-3896	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/07/89
AVS-3897	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	07/07/89
AVS-3898	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/07/89
AVS-3899	PR	PIC	-0-	-0-	310.3	VERO	320.00	1.03	07/07/89
AVS-3902	PR	PIC	-0-	-0-	9.459	VERO	10.000	1.06	07/07/89
AVS-3905	PR	PIC	-0-	-0-	79.86	VERO	10.000	0.13	03/21/89
AVS-3906	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	04/14/89
AVS-3907	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/31/89
AVS-3908	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	03/31/89
AVS-3909	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	03/31/89
AVS-3910	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	03/31/89
AVS-3911	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	04/17/89
AVS-3912	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	04/17/89
AVS-3913	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	06/06/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-3914	PR	PIC	-0-	-0-	- 31.34	VERO	- 32.000	- 1.02	04/17/89
AVS-3915	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	05/02/89
AVS-3916	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	06/06/89
AVS-3917	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	04/17/89
AVS-3918	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	04/17/89
AVS-3919	PR	PIC	-0-	-0-	- 9.389	VERO	- 10.000	- 1.07	04/17/89
AVS-3920	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	04/17/89
AVS-3921	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/02/89
AVS-3922	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/02/89
AVS-3923	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	04/18/89
AVS-3924	PR	PIC	-0-	-0-	- -0-	VERO	> 100.00	-0-	06/06/89
AVS-3935	PR	PIC	-0-	-0-	- 25.43	VERO	- 10.000	- 0.39	04/24/89
AVS-3936	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/25/89
AVS-3937	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/25/89
AVS-3938	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/25/89
AVS-3939	PR	PIC	-0-	-0-	- 128.1	VERO	- 100.00	- 0.78	04/25/89
AVS-3940	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	04/25/89
AVS-3941	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	04/25/89
AVS-3942	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/25/89
AVS-3943	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/25/89
AVS-3944	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	04/25/89
AVS-3945	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	04/25/89
AVS-3946	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	04/28/89
AVS-3947	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/28/89
AVS-3963	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	04/28/89
AVS-3967	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/08/89
AVS-3968	PR	PIC	-0-	-0-	- -0-	VERO	< 100.00	-0-	05/08/89
AVS-3971	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/08/89
AVS-3972	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/08/89
AVS-3973	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/08/89
AVS-3974	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/08/89
AVS-3976	PR	PIC	-0-	-0-	- -0-	VERO	> 260.00	-0-	06/09/89
AVS-3977	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/09/89
AVS-3978	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3979	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	06/09/89
AVS-3980	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	05/09/89
AVS-3981	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3982	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3983	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	05/09/89
AVS-3984	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3985	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3986	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3987	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3988	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/09/89
AVS-3989	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3990	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	06/09/89
AVS-3991	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3992	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/09/89
AVS-3993	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/09/89
AVS-3994	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	06/09/89
AVS-3995	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	05/09/89
AVS-3996	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	06/09/89
AVS-3997	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	05/12/89
AVS-3998	PR	PIC	-0-	-0-	- 4.327	VERO	- 1.000	- 0.23	06/09/89
AVS-3999	PR	PIC	-0-	-0-	- 5.141	VERO	- 1.000	- 0.19	06/09/89
AVS-4000	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	05/12/89
AVS-4001	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	05/12/89
AVS-4002	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	06/09/89
AVS-4003	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	06/09/89
AVS-4004	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/12/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4005	PR	PIC	-0-	-0-	- 79.19	VERO	- 32.000	- 0.40	06/09/89
AVS-4006	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	06/20/89
AVS-4015	PR	PIC	-0-	-0-	- 0.965	VERO	0.100	0.10	06/06/89
AVS-4017	PR	PIC	-0-	-0-	- -0-	VERO >	0.100	-0-	02/24/89
AVS-4018	PR	PIC	-0-	-0-	- 0.500	VERO	- 0.320	- 0.64	06/20/89
AVS-4019	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	05/15/89
AVS-4020	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	06/20/89
AVS-4021	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/15/89
AVS-4022	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/15/89
AVS-4023	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	06/20/89
AVS-4024	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/15/89
AVS-4025	PR	PIC	-0-	-0-	- -0-	VERO <	100.00	-0-	05/16/89
AVS-4026	PR	PIC	-0-	-0-	- -0-	VERO >	.10E-5	-0-	02/24/89
AVS-4027	PR	PIC	-0-	-0-	- -0-	VERO	0.320	-0-	05/16/89
AVS-4028	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	05/16/89
AVS-4029	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/16/89
AVS-4030	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/16/89
AVS-4031	PR	PIC	-0-	-0-	- 51.48	VERO	- 32.000	- 0.62	05/16/89
AVS-4032	PR	PIC	-0-	-0-	- 13.23	VERO	- 10.000	- 0.76	05/16/89
AVS-4033	PR	PIC	-0-	-0-	- 185.0	VERO	- 100.00	- 0.54	05/16/89
AVS-4034	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/16/89
AVS-4035	PR	PIC	-0-	-0-	- 6.872	VERO	- 32.000	- 4.66	05/16/89
AVS-4036	PR	PIC	-0-	-0-	- 14.41	VERO	- 10.000	- 0.69	05/16/89
AVS-4037	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/16/89
AVS-4038	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/16/89
AVS-4039	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/16/89
AVS-4040	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/16/89
AVS-4041	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/16/89
AVS-4042	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/16/89
AVS-4043	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/16/89
AVS-4044	PR	PIC	-0-	-0-	- 105.0	VERO	- 32.000	- 0.30	05/16/89
AVS-4045	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/16/89
AVS-4046	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/19/89
AVS-4047	PR	PIC	-0-	-0-	- 7.885	VERO	- 10.000	- 1.27	06/20/89
AVS-4048	PR	PIC	-0-	-0-	- -0-	VERO	- 0.320	-0-	05/19/89
AVS-4049	PR	PIC	-0-	-0-	- 7.784	VERO	- 10.000	- 1.28	05/19/89
AVS-4050	PR	PIC	-0-	-0-	- -0-	VERO <	10.000	-0-	05/19/89
AVS-4051	PR	PIC	-0-	-0-	- -0-	VERO <	10.000	-0-	05/15/89
AVS-4052	PR	PIC	-0-	-0-	- -0-	VERO <	10.000	-0-	05/15/89
AVS-4053	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	06/20/89
AVS-4057	PR	PIC	-0-	-0-	- -0-	VERO >	32.000	-0-	04/28/89
AVS-4062	PR	PIC	-0-	-0-	- 128.3	VERO	- 100.00	- 0.78	05/16/89
AVS-4063	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	04/28/89
AVS-4064	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	04/28/89
AVS-4065	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	04/28/89
AVS-4066	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	04/28/89
AVS-4067	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	04/28/89
AVS-4068	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/05/89
AVS-4070	PR	PIC	-0-	-0-	- 8.186	VERO	- 3.200	- 0.39	05/05/89
AVS-4071	PR	PIC	-0-	-0-	- 52.70	VERO	- 100.00	- 1.90	05/08/89
AVS-4073	PR	PIC	-0-	-0-	- 119.3	VERO	- 320.00	- 2.68	05/19/89
AVS-4076	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	05/19/89
AVS-4077	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/05/89
AVS-4078	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/22/89
AVS-4079	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/22/89
AVS-4080	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	05/22/89
AVS-4081	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/23/89
AVS-4082	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/23/89
AVS-4083	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	05/23/89
AVS-4084	PR	PIC	-0-	-0-	- 302.9	VERO	- 100.00	- 0.33	05/23/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4085	PR	PIC	-0-	-0-	253.7	VERO	320.00	1.26	05/23/89
AVS-4086	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	05/23/89
AVS-4087	PR	PIC	-0-	-0-	153.3	VERO	100.00	0.65	05/23/89
AVS-4088	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	05/23/89
AVS-4089	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	05/23/89
AVS-4090	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	05/23/89
AVS-4092	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	05/23/89
AVS-4093	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	05/23/89
AVS-4094	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/12/89
AVS-4095	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/12/89
AVS-4097	PR	PIC	-0-	-0-	-0-	VERO	< 0.032	-0-	02/24/89
AVS-4098	PR	PIC	-0-	-0-	-0-	VERO	> .10E-5	-0-	02/24/89
AVS-4099	PR	PIC	-0-	-0-	-0-	VERO	> .10E-5	-0-	02/24/89
AVS-4103	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	05/23/89
AVS-4104	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	05/23/89
AVS-4105	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	05/23/89
AVS-4106	PR	PIC	-0-	-0-	-0-	VERO	0.100	-0-	02/24/89
AVS-4108	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	05/23/89
AVS-4109	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	06/02/89
AVS-4110	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/20/89
AVS-4111	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/20/89
AVS-4112	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/20/89
AVS-4113	PR	PIC	-0-	-0-	1.351	VERO	3.200	2.37	06/02/89
AVS-4114	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/26/89
AVS-4115	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/26/89
AVS-4116	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/26/89
AVS-4117	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/26/89
AVS-4118	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/26/89
AVS-4119	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/26/89
AVS-4120	PR	PIC	-0-	-0-	230.2	VERO	320.00	1.39	06/26/89
AVS-4121	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/26/89
AVS-4122	PR	PIC	-0-	-0-	202.0	VERO	100.00	0.50	06/26/89
AVS-4123	PR	PIC	-0-	-0-	311.8	VERO	100.00	0.32	06/26/89
AVS-4124	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/27/89
AVS-4125	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/27/89
AVS-4126	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/27/89
AVS-4127	PR	PIC	-0-	-0-	89.33	VERO	100.00	1.12	06/27/89
AVS-4128	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/27/89
AVS-4129	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/27/89
AVS-4130	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	06/27/89
AVS-4131	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/27/89
AVS-4135	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	06/27/89
AVS-4136	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	06/27/89
AVS-4137	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/07/89
AVS-4138	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/28/89
AVS-4139	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/21/89
AVS-4140	PR	PIC	-0-	-0-	-0-	VERO	< 100.00	-0-	08/11/89
AVS-4141	PR	PIC	-0-	-0-	238.5	VERO	32.000	0.13	07/31/89
AVS-4149	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/10/89
AVS-4150	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/10/89
AVS-4151	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/10/89
AVS-4152	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/10/89
AVS-4153	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/10/89
AVS-4154	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/10/89
AVS-4155	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/10/89
AVS-4156	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/10/89
AVS-4159	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/11/89
AVS-4160	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/11/89
AVS-4161	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/11/89
AVS-4162	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/11/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4163	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/11/89
AVS-4166	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/11/89
AVS-4167	PR	PIC	-0-	-0-	-0-	VERO -	100.00	-0-	07/11/89
AVS-4168	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4169	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4171	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/11/89
AVS-4172	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4173	PR	PIC	-0-	-0-	-0-	VERO -	32.000	-0-	06/02/89
AVS-4174	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/02/89
AVS-4175	PR	PIC	-0-	-0-	-0-	VERO -	3.200	-0-	06/02/89
AVS-4176	PR	PIC	-0-	-0-	14.12	VERO -	10.000	0.71	06/02/89
AVS-4177	PR	PIC	-0-	-0-	3.597	VERO -	5.000	1.39	06/05/89
AVS-4178	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/05/89
AVS-4179	PR	PIC	-0-	-0-	229.1	VERO -	100.00	0.44	06/05/89
AVS-4180	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	06/05/89
AVS-4181	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/05/89
AVS-4182	PR	PIC	-0-	-0-	258.2	VERO -	100.00	0.39	06/05/89
AVS-4183	PR	PIC	-0-	-0-	-0-	VERO -	32.000	-0-	06/05/89
AVS-4184	PR	PIC	-0-	-0-	-0-	VERO -	32.000	-0-	06/05/89
AVS-4185	PR	PIC	-0-	-0-	-0-	VERO -	10.000	-0-	06/05/89
AVS-4186	PR	PIC	-0-	-0-	-0-	VERO -	32.000	-0-	06/05/89
AVS-4187	PR	PIC	-0-	-0-	-0-	VERO -	32.000	-0-	06/06/89
AVS-4188	PR	PIC	-0-	-0-	67.08	VERO -	32.000	0.48	06/06/89
AVS-4189	PR	PIC	-0-	-0-	146.0	VERO -	100.00	0.69	06/06/89
AVS-4190	PR	PIC	-0-	-0-	15.52	VERO -	32.000	2.06	06/06/89
AVS-4191	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/06/89
AVS-4192	PR	PIC	-0-	-0-	8.210	VERO -	10.000	1.22	06/06/89
AVS-4193	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/06/89
AVS-4194	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/06/89
AVS-4195	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	06/06/89
AVS-4196	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	06/06/89
AVS-4197	PR	PIC	-0-	-0-	93.89	VERO -	100.00	1.07	06/06/89
AVS-4198	PR	PIC	-0-	-0-	-0-	VERO <	320.00	-0-	06/06/89
AVS-4199	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/06/89
AVS-4200	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	05/19/89
AVS-4201	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	06/12/89
AVS-4202	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/12/89
AVS-4203	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	06/12/89
AVS-4204	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4205	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/11/89
AVS-4206	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4207	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4208	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4209	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/11/89
AVS-4210	PR	PIC	-0-	-0-	-0-	VERO -	10.000	-0-	07/11/89
AVS-4211	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/11/89
AVS-4213	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/11/89
AVS-4214	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/14/89
AVS-4215	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/14/89
AVS-4216	PR	PIC	-0-	-0-	84.68	VERO -	100.00	1.18	07/14/89
AVS-4217	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/14/89
AVS-4218	PR	PIC	-0-	-0-	-0-	VERO -	32.000	-0-	07/14/89
AVS-4219	PR	PIC	-0-	-0-	-0-	VERO -	10.000	-0-	07/10/89
AVS-4220	PR	PIC	-0-	-0-	16.31	VERO -	10.000	0.61	07/10/89
AVS-4221	PR	PIC	-0-	-0-	17.64	VERO -	10.000	0.57	07/14/89
AVS-4222	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	08/07/89
AVS-4224	PR	PIC	-0-	-0-	-0-	VERO -	320.00	-0-	07/14/89
AVS-4225	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/14/89
AVS-4226	PR	PIC	-0-	-0-	-0-	VERO >	320.00	-0-	07/14/89
AVS-4227	PR	PIC	-0-	-0-	-0-	VERO -	100.00	-0-	07/17/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTI	TINDEX	DATE
AVS-4228	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	07/17/89
AVS-4229	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	07/17/89
AVS-4230	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	07/17/89
AVS-4231	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/17/89
AVS-4232	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/17/89
AVS-4233	PR	PIC	-0-	-0-	- 238.1	VERO	- 320.00	- 1.34	07/17/89
AVS-4234	PR	PIC	-0-	-0-	- 34.75	VERO	- 100.00	- 2.88	07/17/89
AVS-4235	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/17/89
AVS-4236	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	07/17/89
AVS-4237	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/21/89
AVS-4238	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	07/21/89
AVS-4239	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	06/13/89
AVS-4240	PR	PIC	-0-	-0-	- 2.531	VERO	< 10.000	< 3.95	06/13/89
AVS-4241	PR	PIC	-0-	-0-	- 17.88	VERO	- 10.000	- 0.56	06/13/89
AVS-4241	PR	PIC	-0-	-0-	- 7.824	VERO	- 10.000	- 1.28	10/02/89
AVS-4242	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	06/13/89
AVS-4243	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	06/13/89
AVS-4244	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	06/13/89
AVS-4245	PR	PIC	-0-	-0-	- 224.5	VERO	- 100.00	- 0.45	06/13/89
AVS-4246	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	06/13/89
AVS-4247	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	06/13/89
AVS-4248	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	06/13/89
AVS-4249	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	06/13/89
AVS-4250	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	06/13/89
AVS-4251	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	06/13/89
AVS-4252	PR	PIC	-0-	-0-	- 29.10	VERO	- 10.000	- 0.34	06/13/89
AVS-4253	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	06/13/89
AVS-4254	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	06/13/89
AVS-4255	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	06/13/89
AVS-4256	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	06/13/89
AVS-4257	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	06/13/89
AVS-4258	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	06/13/89
AVS-4259	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	06/16/89
AVS-4260	PR	PIC	-0-	-0-	-0-	VERO	< 10.000	-0-	06/16/89
AVS-4261	PR	PIC	-0-	-0-	- 8.056	VERO	- 10.000	- 1.24	06/16/89
AVS-4262	PR	PIC	-0-	-0-	-0-	VERO	- 100.00	-0-	06/16/89
AVS-4263	PR	PIC	-0-	-0-	-0-	VERO	< 10.000	-0-	06/16/89
AVS-4264	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	06/16/89
AVS-4265	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	06/16/89
AVS-4266	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	06/16/89
AVS-4267	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	06/16/89
AVS-4268	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	06/16/89
AVS-4269	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	06/19/89
AVS-4270	PR	PIC	-0-	-0-	-0-	VERO	< 32.000	-0-	06/19/89
AVS-4271	PR	PIC	-0-	-0-	-0-	VERO	- 10.000	-0-	06/19/89
AVS-4272	PR	PIC	-0-	-0-	- 55.90	VERO	- 100.00	- 1.79	06/19/89
AVS-4273	PR	PIC	-0-	-0-	- 17.22	VERO	- 32.000	- 1.86	06/19/89
AVS-4274	PR	PIC	-0-	-0-	-0-	VERO	- 320.00	-0-	07/21/89
AVS-4276	PR	PIC	-0-	-0-	- 12.55	VERO	- 10.000	- 0.80	07/21/89
AVS-4277	PR	PIC	-0-	-0-	- 15.05	VERO	- 10.000	- 0.66	07/21/89
AVS-4278	PR	PIC	-0-	-0-	- 12.56	VERO	- 10.000	- 0.80	07/21/89
AVS-4279	PR	PIC	-0-	-0-	- 4.768	VERO	- 3.200	- 0.67	07/21/89
AVS-4280	PR	PIC	-0-	-0-	- 11.77	VERO	- 10.000	- 0.85	07/21/89
AVS-4281	PR	PIC	-0-	-0-	- 2.798	VERO	- 3.200	- 1.14	07/21/89
AVS-4288	PR	PIC	-0-	-0-	-0-	VERO	- 32.000	-0-	08/15/89
AVS-4289	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/15/89
AVS-4290	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	09/08/89
AVS-4291	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	09/08/89
AVS-4292	PR	PIC	-0-	-0-	-0-	VERO	- 3.200	-0-	09/15/89
AVS-4296	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	09/15/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4299	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/15/89
AVS-4300	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/29/89
AVS-4302	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/29/89
AVS-4303	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/29/89
AVS-4304	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	08/29/89
AVS-4305	PR	PIC	-0-	-0-	-0-	VERO	< 10.000	-0-	08/29/89
AVS-4306	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/29/89
AVS-4307	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/29/89
AVS-4308	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	08/29/89
AVS-4309	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	08/29/89
AVS-4310	PR	PIC	-0-	-0-	9.620	VERO	10.000	1.04	08/29/89
AVS-4311	PR	PIC	-0-	-0-	-0-	VERO	< 320.00	-0-	07/24/89
AVS-4312	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/24/89
AVS-4313	PR	PIC	-0-	-0-	-0-	VERO	< 320.00	-0-	07/24/89
AVS-4314	PR	PIC	-0-	-0-	-0-	VERO	1.000	-0-	07/24/89
AVS-4315	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/24/89
AVS-4316	PR	PIC	-0-	-0-	23.65	VERO	32.000	1.35	07/24/89
AVS-4337	PR	PIC	-0-	-0-	143.1	VERO	100.00	0.70	07/24/89
AVS-4339	PR	PIC	-0-	-0-	19.88	VERO	32.000	1.61	07/24/89
AVS-4340	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/24/89
AVS-4342	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/25/89
AVS-4343	PR	PIC	-0-	-0-	14.00	VERO	10.000	0.71	07/25/89
AVS-4359	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	07/25/89
AVS-4360	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/25/89
AVS-4361	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/25/89
AVS-4362	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/25/89
AVS-4363	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/25/89
AVS-4364	PR	PIC	-0-	-0-	31.83	VERO	32.000	1.01	07/25/89
AVS-4366	PR	PIC	-0-	-0-	8.130	VERO	3.200	0.39	07/25/89
AVS-4367	PR	PIC	-0-	-0-	-0-	VERO	< 320.00	-0-	07/28/89
AVS-4369	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/28/89
AVS-4370	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/28/89
AVS-4372	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/28/89
AVS-4373	PR	PIC	-0-	-0-	21.11	VERO	32.000	1.52	07/28/89
AVS-4374	PR	PIC	-0-	-0-	-0-	VERO	< 320.00	-0-	07/28/89
AVS-4375	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/28/89
AVS-4376	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/28/89
AVS-4377	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/28/89
AVS-4379	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/28/89
AVS-4382	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	07/31/89
AVS-4383	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	07/31/89
AVS-4384	PR	PIC	-0-	-0-	7.875	VERO	10.000	1.27	07/31/89
AVS-4388	PR	PIC	-0-	-0-	7.556	VERO	3.200	0.42	07/31/89
AVS-4389	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	07/31/89
AVS-4390	PR	PIC	-0-	-0-	18.48	VERO	32.000	1.73	08/01/89
AVS-4391	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/31/89
AVS-4392	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/01/89
AVS-4393	PR	PIC	-0-	-0-	-0-	VERO	< 32.000	-0-	07/31/89
AVS-4394	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	07/31/89
AVS-4395	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/01/89
AVS-4396	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/01/89
AVS-4397	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	08/07/89
AVS-4398	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/07/89
AVS-4399	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/07/89
AVS-4400	PR	PIC	-0-	-0-	8.629	VERO	3.200	0.37	08/07/89
AVS-4401	PR	PIC	-0-	-0-	-0-	VERO	< 32.000	-0-	08/07/89
AVS-4402	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/07/89
AVS-4403	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/08/89
AVS-4404	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/08/89
AVS-4405	PR	PIC	-0-	-0-	0.127	VERO	0.100	0.79	08/08/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4406	PR	PIC	-0-	-0-	-0-	VEPO	10.000	-0-	08/08/89
AVS-4407	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/08/89
AVS-4408	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/08/89
AVS-4409	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/08/89
AVS-4410	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	08/08/89
AVS-4411	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/08/89
AVS-4412	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/08/89
AVS-4413	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	08/08/89
AVS-4414	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/08/89
AVS-4415	PR	PIC	-0-	-0-	-0-	VERO	< 32.000	-0-	08/08/89
AVS-4416	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	08/08/89
AVS-4417	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/08/89
AVS-4418	PR	PIC	-0-	-0-	-0-	VEPO	> 32.000	-0-	08/08/89
AVS-4419	PR	PIC	-0-	-0-	-0-	VERO	< 32.000	-0-	08/08/89
AVS-4420	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/08/89
AVS-4422	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/08/89
AVS-4423	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/08/89
AVS-4424	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/11/89
AVS-4426	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/11/89
AVS-4427	PR	PIC	-0-	-0-	25.05	VERO	32.000	1.28	08/11/89
AVS-4428	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/11/89
AVS-4429	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/11/89
AVS-4430	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/11/89
AVS-4431	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/11/89
AVS-4432	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/11/89
AVS-4433	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/11/89
AVS-4434	PR	PIC	-0-	-0-	13.33	VERO	32.000	2.40	08/14/89
AVS-4435	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/14/89
AVS-4436	PR	PIC	-0-	-0-	30.27	VERO	10.000	0.33	08/14/89
AVS-4437	PR	PIC	-0-	-0-	8.718	VERO	10.000	1.15	08/14/89
AVS-4438	PR	PIC	-0-	-0-	-0-	VERO	1.000	-0-	08/14/89
AVS-4439	PR	PIC	-0-	-0-	6.788	VERO	0.320	0.05	08/14/89
AVS-4440	PR	PIC	-0-	-0-	-0-	VERO	> 32.000	-0-	08/14/89
AVS-4441	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	08/14/89
AVS-4442	PR	PIC	-0-	-0-	-0-	VERO	< 3.200	-0-	08/14/89
AVS-4443	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/14/89
AVS-4444	PR	PIC	-0-	-0-	-0-	VERO	< 3.200	-0-	08/15/89
AVS-4445	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/15/89
AVS-4447	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/15/89
AVS-4448	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/15/89
AVS-4450	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/15/89
AVS-4451	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/15/89
AVS-4452	PR	PIC	-0-	-0-	10.57	VERO	100.00	9.46	08/15/89
AVS-4453	PR	PIC	-0-	-0-	13.63	VERO	10.000	0.73	09/12/89
AVS-4454	PR	PIC	-0-	-0-	7.074	VERO	10.000	1.41	09/12/89
AVS-4455	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/12/89
AVS-4458	PR	PIC	-0-	-0-	0.988	VERO	1.000	1.01	09/12/89
AVS-4459	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/12/89
AVS-4460	PR	PIC	-0-	-0-	-0-	VERO	3.200	-0-	09/12/89
AVS-4461	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	09/12/89
AVS-4462	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/12/89
AVS-4463	PR	PIC	-0-	-0-	-0-	VERO	< 10.000	-0-	09/12/89
AVS-4464	PR	PIC	-0-	-0-	0.164	VERO	0.320	1.95	09/15/89
AVS-4465	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/15/89
AVS-4466	PR	PIC	-0-	-0-	-0-	VERO	< 3.200	-0-	09/15/89
AVS-4468	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/15/89
AVS-4471	PR	PIC	-0-	-0-	6.377	VERO	3.200	0.50	09/15/89
AVS-4472	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/15/89
AVS-4473	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	09/15/89
AVS-4474	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/08/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4475	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/08/89
AVS-4476	PR	PIC	-0-	-0-	-0-	VEPO	32.000	-0-	09/08/89
AVS-4477	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	09/08/89
AVS-4524	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	09/08/89
AVS-4526	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/24/89
AVS-4528	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/25/89
AVS-4529	PR	PIC	-0-	-0-	281.1	VERO	100.00	0.36	07/25/89
AVS-4530	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/25/89
AVS-4531	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	07/25/89
AVS-4532	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/25/89
AVS-4533	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/25/89
AVS-4587	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	07/25/89
AVS-4588	PR	PIC	-0-	-0-	66.48	VERO	32.000	0.48	07/25/89
AVS-4589	PR	PIC	-0-	-0-	9.132	VERO	10.000	1.10	07/25/89
AVS-4592	PR	PIC	-0-	-0-	13.45	VERO	10.000	0.74	07/25/89
AVS-4598	PR	PIC	-0-	-0-	-0-	VERO	0.320	-0-	07/25/89
AVS-4600	PR	PIC	-0-	-0-	15.60	VERO	100.00	6.41	08/01/89
AVS-4601	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/01/89
AVS-4602	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	08/01/89
AVS-4603	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/01/89
AVS-4604	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/01/89
AVS-4605	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/01/89
AVS-4606	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/01/89
AVS-4607	PR	PIC	-0-	-0-	20.00	VERO	3.200	0.16	08/01/89
AVS-4608	PR	PIC	-0-	-0-	31.79	VERO	32.000	1.01	08/01/89
AVS-4610	PR	PIC	-0-	-0-	155.1	VERO	> 320.00	2.06	08/01/89
AVS-4611	PR	PIC	-0-	-0-	103.8	VERO	> 320.00	3.08	08/01/89
AVS-4612	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/01/89
AVS-4613	PR	PIC	-0-	-0-	264.3	VERO	32.000	0.12	08/01/89
AVS-4614	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/01/89
AVS-4615	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/01/89
AVS-4618	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/01/89
AVS-4619	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/04/89
AVS-4620	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/04/89
AVS-4621	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	08/04/89
AVS-4622	PR	PIC	-0-	-0-	-0-	VERO	> 320.00	-0-	08/04/89
AVS-4623	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/04/89
AVS-4624	PR	PIC	-0-	-0-	15.27	VERO	10.000	0.65	08/04/89
AVS-4720	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/04/89
AVS-4721	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/04/89
AVS-4722	PR	PIC	-0-	-0-	-0-	VERO	> 100.00	-0-	08/04/89
AVS-4723	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/04/89
AVS-4724	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/07/89
AVS-4725	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/07/89
AVS-4727	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/07/89
AVS-4737	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	08/15/89
AVS-4738	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/28/89
AVS-4739	PR	PIC	-0-	-0-	70.07	VERO	100.00	1.43	08/28/89
AVS-4740	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/28/89
AVS-4741	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/28/89
AVS-4742	PR	PIC	-0-	-0-	63.06	VERO	32.000	0.51	08/28/89
AVS-4743	PR	PIC	-0-	-0-	-0-	PIC	3.200	-0-	08/28/89
AVS-4744	PR	PIC	-0-	-0-	21.71	VERO	10.000	0.46	08/28/89
AVS-4745	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/28/89
AVS-4746	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/28/89
AVS-4747	PR	PIC	-0-	-0-	15.15	VERO	10.000	0.66	08/28/89
AVS-4748	PR	PIC	-0-	-0-	-0-	VERO	320.00	-0-	08/18/89
AVS-4749	PR	PIC	-0-	-0-	-0-	VERO	100.00	-0-	08/18/89
AVS-4750	PR	PIC	-0-	-0-	-0-	VERO	32.000	-0-	09/18/89
AVS-4751	PR	PIC	-0-	-0-	-0-	VERO	10.000	-0-	08/18/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MIC	TINDEX	DATE
AVS-4752	PR	PIC	-0-	-0-	- 18.57	VERO	- 10.000	- 0.54	08/18/89
AVS-4753	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	08/18/89
AVS-4754	PR	PIC	-0-	-0-	- 9.589	VERO	- 10.000	- 1.04	08/18/89
AVS-4755	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	08/18/89
AVS-4756	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	08/18/89
AVS-4757	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	08/18/89
AVS-4758	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	08/21/89
AVS-4759	PR	PIC	-0-	-0-	- -0-	VERO	- 3.200	-0-	08/21/89
AVS-4760	PR	PIC	-0-	-0-	- 4.211	VERO	- 3.200	- 0.76	08/21/89
AVS-4761	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	08/21/89
AVS-4762	PR	PIC	-0-	-0-	- 22.37	VERO	- 10.000	- 0.45	08/21/89
AVS-4763	PR	PIC	-0-	-0-	- 3.681	VERO	- 3.200	- 0.87	08/21/89
AVS-4764	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	08/21/89
AVS-4765	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	08/21/89
AVS-4766	PR	PIC	-0-	-0-	- -0-	VERO	> 100.00	-0-	08/21/89
AVS-4767	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	08/21/89
AVS-4768	PR	PIC	-0-	-0-	- 30.99	VERO	- 100.00	- 3.23	08/22/89
AVS-4769	PR	PIC	-0-	-0-	- 18.55	VERO	- 32.000	- 1.73	08/22/89
AVS-4770	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	08/22/89
AVS-4771	PR	PIC	-0-	-0-	- 13.37	VERO	- 10.000	- 0.75	10/02/89
AVS-4798	PR	PIC	-0-	-0-	< 0.320	VERO	0.320	> 1.00	09/19/89
AVS-4799	PR	PIC	-0-	-0-	- 8.095	VERO	- 3.200	- 0.40	09/19/89
AVS-4800	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	09/19/89
AVS-4801	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	09/19/89
AVS-4802	PR	PIC	-0-	-0-	- 19.59	VERO	- 32.000	- 1.63	09/19/89
AVS-4803	PR	PIC	-0-	-0-	- -0-	VERO	- 10.000	-0-	09/19/89
AVS-4804	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	09/19/89
AVS-4805	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	09/19/89
AVS-4806	PR	PIC	-0-	-0-	- -0-	VERO	> 100.00	-0-	09/19/89
AVS-4807	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	09/19/89
AVS-4808	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	09/22/89
AVS-4809	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	09/22/89
AVS-4810	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	09/22/89
AVS-4811	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	09/22/89
AVS-4812	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	09/22/89
AVS-4813	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	09/22/89
AVS-4814	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	09/22/89
AVS-4865	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	09/22/89
AVS-4871	PR	PIC	-0-	-0-	- 21.76	VERO	- 100.00	- 4.60	09/22/89
AVS-4872	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	09/22/89
AVS-4873	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	09/25/89
AVS-4874	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	09/25/89
AVS-4877	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	09/25/89
AVS-4878	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	09/25/89
AVS-4879	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	09/25/89
AVS-4880	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	09/25/89
AVS-4881	PR	PIC	-0-	-0-	- -0-	VERO	< 32.000	-0-	09/25/89
AVS-4882	PR	PIC	-0-	-0-	- 213.1	VERO	- 10.000	- 0.15	09/25/89
AVS-4883	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	10/03/89
AVS-4884	PR	PIC	-0-	-0-	- -0-	VERO	- 320.00	-0-	10/03/89
AVS-4885	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	10/03/89
AVS-4886	PR	PIC	-0-	-0-	- -0-	VERO	- 32.000	-0-	10/03/89
AVS-4887	PR	PIC	-0-	-0-	- 1.464	VERO	- 3.200	- 2.19	10/03/89
AVS-4888	PR	PIC	-0-	-0-	- -0-	VERO	> 320.00	-0-	10/03/89
AVS-4889	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	10/03/89
AVS-4890	PR	PIC	-0-	-0-	- 25.27	VERO	- 32.000	- 1.27	10/03/89
AVS-4891	PR	PIC	-0-	-0-	- -0-	VERO	0.100	-0-	10/03/89
AVS-4892	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	10/03/89
AVS-4893	PR	PIC	-0-	-0-	- -0-	VERO	- 100.00	-0-	10/06/89
AVS-4894	PR	PIC	-0-	-0-	- 129.2	VERO	- 100.00	- 0.77	10/06/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4895	PR	PIC	-0-	-0-	- -0-	VERO -	10.000	-0-	10/05/89
AVS-4896	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	10/06/89
AVS-4897	PR	PIC	-0-	-0-	- -0-	VERO -	3.200	-0-	10/06/89
AVS-4898	PR	PIC	-0-	-0-	- -0-	VERO -	1.000	-0-	10/06/89
AVS-4899	PR	PIC	-0-	-0-	- -0-	VERO -	0.320	-0-	10/06/89
AVS-4900	PR	PIC	-0-	-0-	- -0-	VERO -	0.320	-0-	10/06/89
AVS-4901	PR	PIC	-0-	-0-	- -0-	VERO -	0.320	-0-	10/06/89
AVS-4902	PR	PIC	-0-	-0-	- -0-	VERO -	1.000	-0-	10/06/89
AVS-5006	PR	PIC	-0-	-0-	- -0-	VERO -	65.000	-0-	09/08/89
AVS-5007	PR	PIC	-0-	-0-	- -0-	VERO -	100.00	-0-	09/08/89
AVS-5008	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	09/08/89
AVS-5405	PR	PIC	-0-	-0-	- 0.429	VERO	0.320	0.75	03/28/89
AVS-5480	PR	PIC	-0-	-0-	- 60.29	VERO -	320.00	- 5.31	03/28/89
AVS-5481	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	04/04/89
AVS-5482	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	04/04/89
AVS-5484	PR	PIC	-0-	-0-	- 100.2	VERO -	100.00	- 1.00	04/04/89
AVS-5485	PR	PIC	-0-	-0-	- 13.92	VERO -	3.200	- 0.23	04/04/89
AVS-5487	PR	PIC	-0-	-0-	- -0-	VERO -	100.00	-0-	04/04/89
AVS-5488	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	04/04/89
AVS-5489	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	04/04/89
AVS-5490	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	04/04/89
AVS-5491	PR	PIC	-0-	-0-	- 23.81	VERO -	32.000	- 1.34	04/10/89
AVS-5492	PR	PIC	-0-	-0-	- -0-	VERO >	320.00	-0-	04/10/89
AVS-5493	PR	PIC	-0-	-0-	- -0-	VERO -	320.00	-0-	04/10/89
AVS-5555	PR	PIC	-0-	-0-	- 209.4	VERO >	320.00	> 1.53	03/28/89
AVS-5556	PR	PIC	-0-	-0-	- 163.2	VERO -	100.00	- 0.61	03/28/89
AVS-5557	PR	PIC	-0-	-0-	- 2.153	VERO -	3.200	- 1.49	03/28/89
AVS-5558	PR	PIC	-0-	-0-	- 18.70	VERO -	32.000	- 1.71	03/28/89
AVS-5559	PR	PIC	-0-	-0-	- -0-	VERO -	32.000	-0-	03/28/89
AVS-5560	PR	PIC	-0-	-0-	- -0-	VERO >	100.00	-0-	03/28/89
AVS-5561	PR	PIC	-0-	-0-	- -0-	VERO -	100.00	-0-	03/28/89
AVS-5562	PR	PIC	-0-	-0-	- 69.78	VERO -	100.00	- 1.43	03/28/89

SUMMARY OF ANTIVIRAL TEST RESULTS
WITH VACCINIA VIRUS

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-0253	CPE	VV	2.75	0.92	7.056	VERO	32.000	4.53	11/17/88
AVS-0253	CPE	VV	3.05	1.02	5.673	VERO	32.000	5.64	12/01/88
AVS-0253	CPE	VV	2.55	0.85	10.03	VERO	32.000	3.19	12/08/88
AVS-0253	CPE	VV	2.65	0.85	9.824	VERO	100.00	10.18	12/15/88
AVS-0253	CPE	VV	2.25	0.75	10.43	VERO	32.000	3.07	02/16/89
AVS-1752	CPE	VV	3.00	1.00	3.188	VERO	32.000	10.04	11/17/88
AVS-1752	CPE	VV	3.50	1.17	2.020	VERO	32.000	15.84	12/01/88
AVS-1752	CPE	VV	3.20	1.07	2.723	VERO	32.000	11.75	12/08/88
AVS-1752	CPE	VV	3.05	1.01	2.423	VERO	32.000	13.21	12/15/88
AVS-1752	CPE	VV	2.90	0.97	3.857	VERO	32.000	8.30	02/16/89
AVS-1752	CPE	VV	2.50	0.83	4.982	VERO	32.000	6.42	02/23/89
AVS-1985	CPE	VV	9.09	3.03	0.010	VERO	10.000	1000.0	02/23/89
AVS-3940	CPE	VV	5.10	1.70	3.227	VERO	> 320.00	> 99.15	02/23/89
AVS-4235	CPE	VV	1.35	0.45	99.30	VERO	320.00	3.22	02/16/89
AVS-4532	CPE	VV	1.10	0.37	118.1	VERO	320.00	2.71	02/23/89
AVS-4785	CPE	VV	0.85	0.28	122.0	VERO	10.000	0.08	11/17/88
AVS-4793	CPE	VV	0.00	0.00	-	VERO	0.032	-	11/17/88
AVS-4798	CPE	VV	1.00	0.33	1.000	VERO	1.000	1.00	11/17/88
AVS-4810	CPE	VV	0.00	0.00	-	VERO	10.000	-	12/15/88
AVS-4866	CPE	VV	0.00	0.00	-	VERO	> 320.00	-	11/17/88
AVS-4871	CPE	VV	1.20	0.40	320.0	VERO	> 320.00	> 1.00	12/01/88
AVS-4872	CPE	VV	1.30	0.43	157.7	VERO	> 320.00	> 2.03	12/01/88
AVS-4874	CPE	VV	4.60	1.53	6.205	VERO	> 320.00	> 51.57	12/01/88
AVS-4875	CPE	VV	1.65	0.55	60.90	VERO	320.00	5.25	12/01/88
AVS-4887	CPE	VV	1.15	0.38	-	VERO	10.000	-	11/17/88
AVS-4888	CPE	VV	0.20	0.07	-	VERO	> 320.00	-	11/17/88
AVS-4889	CPE	VV	0.05	0.02	-	VERO	100.00	-	12/01/88
AVS-4890	CPE	VV	0.05	0.02	-	VERO	32.000	-	11/17/88
AVS-4891	CPE	VV	0.10	0.03	-	VERO	< 3.200	-	12/01/88
AVS-4892	CPE	VV	0.25	0.08	-	VERO	100.00	-	12/01/88
AVS-4893	CPE	VV	0.00	0.00	-	VERO	> 320.00	-	12/01/88
AVS-4894	CPE	VV	0.25	0.08	-	VERO	320.00	-	12/01/88
AVS-4895	CPE	VV	0.10	0.03	-	VERO	32.000	-	12/01/88
AVS-4896	CPE	VV	0.30	0.10	-	VERO	32.000	-	12/01/88
AVS-4897	CPE	VV	0.00	0.00	-	VERO	10.000	-	11/17/88
AVS-4898	CPE	VV	0.00	0.00	-	VERO	< 10.000	-	12/08/88
AVS-4899	CPE	VV	0.00	0.00	-	VERO	< 1.000	-	12/08/88
AVS-4900	CPE	VV	0.00	0.00	-	VERO	1.000	-	11/17/88
AVS-4901	CPE	VV	0.00	0.00	-	VERO	3.200	-	11/17/88
AVS-4902	CPE	VV	0.00	0.00	-	VERO	< 1.000	-	11/17/88
AVS-4903	CPE	VV	0.00	0.00	-	VERO	< 1.000	-	11/17/88
AVS-4904	CPE	VV	0.65	0.22	23.87	VERO	32.000	1.34	11/17/88
AVS-4905	CPE	VV	0.40	0.13	-	VERO	32.000	-	12/01/88
AVS-4906	CPE	VV	0.30	0.10	10.00	VERO	10.000	1.00	11/17/88
AVS-4908	CPE	VV	0.00	0.00	-	VERO	10.000	-	12/08/88
AVS-4909	CPE	VV	0.25	0.08	-	VERO	32.000	-	12/01/88
AVS-4910	CPE	VV	0.10	0.03	-	VERO	100.00	-	11/17/88
AVS-4911	CPE	VV	0.00	0.00	-	VERO	10.000	-	11/17/88
AVS-4912	CPE	VV	0.20	0.07	-	VERO	100.00	-	11/17/88
AVS-4913	CPE	VV	0.60	0.20	225.5	VERO	320.00	1.42	11/17/88
AVS-4914	CPE	VV	0.25	0.08	-	VERO	32.000	-	11/17/88
AVS-4915	CPE	VV	0.45	0.15	320.0	VERO	100.00	0.31	11/17/88
AVS-4916	CPE	VV	0.15	0.05	-	VERO	10.000	-	12/01/88
AVS-4917	CPE	VV	0.10	0.03	-	VERO	10.000	-	12/01/88
AVS-4918	CPE	VV	0.15	0.05	-	VERO	320.00	-	12/01/88
AVS-4919	CPE	VV	0.45	0.15	68.36	VERO	100.00	1.46	12/01/88
AVS-4920	CPE	VV	0.15	0.05	-	VERO	32.000	-	12/01/88
AVS-4921	CPE	VV	0.30	0.10	-	VERO	32.000	-	12/01/88
AVS-4922	CPE	VV	0.30	0.10	-	VERO	320.00	-	12/01/88

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4923	CPE	VV	0.00	0.00	-	VERO	100.00	-	12/01/88
AVS-4924	CPE	VV	0.00	0.00	-	VERO <	1.000	-	12/01/88
AVS-4925	CPE	VV	0.00	0.00	-	VERO <	32.000	-	11/17/88
AVS-4926	CPE	VV	0.15	0.05	-	VERO	100.00	-	11/17/88
AVS-4927	CPE	VV	1.20	0.40	30.37	VERO	32.000	1.05	12/01/88
AVS-4928	CPE	VV	0.30	0.10	-	VERO >	320.00	-	11/17/88

SUMMARY OF ANTIVIRAL TEST RESULTS
WITH VESICULAR STOMATITIS VIRUS

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-0002	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-0095	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-0225	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-0303	CPE	VSV	2.95	0.98	1.788	L929	3.200	1.79	11/16/88
AVS-0303	CPE	VSV	2.90	0.97	1.000	L929	3.200	3.20	11/18/88
AVS-0303	CPE	VSV	3.10	1.03	2.610	L929	10.000	3.83	11/18/88
AVS-0303	CPE	VSV	2.90	0.97	1.867	L929	3.200	1.71	11/22/88
AVS-0303	CPE	VSV	2.25	0.75	2.958	L929	3.200	1.08	12/07/88
AVS-0303	CPE	VSV	2.25	0.75	3.869	L929	10.000	2.58	12/09/88
AVS-0303	CPE	VSV	2.75	0.92	1.439	L929	3.200	2.22	12/13/88
AVS-0303	CPE	VSV	2.40	0.80	2.613	L929	3.200	1.22	12/16/88
AVS-0303	CPE	VSV	2.65	0.88	1.883	L929	3.200	1.70	01/03/89
AVS-0303	CPE	VSV	2.70	0.90	1.658	L929	3.200	1.93	01/06/89
AVS-0303	CPE	VSV	2.05	0.68	1.673	L929	3.200	1.91	01/13/89
AVS-1160	CPE	VSV	2.25	0.75	0.831	L929	1.000	1.20	11/16/88
AVS-1160	CPE	VSV	2.90	0.97	0.320	L929	1.000	3.13	11/18/88
AVS-1160	CPE	VSV	2.30	0.77	0.531	L929	1.000	1.88	11/22/88
AVS-1160	CPE	VSV	2.10	0.70	0.522	L929	1.000	1.92	12/07/88
AVS-1160	CPE	VSV	1.95	0.65	0.634	L929	1.000	1.58	12/09/88
AVS-1160	CPE	VSV	2.40	0.80	0.445	L929	1.000	2.25	12/13/88
AVS-1160	CPE	VSV	2.15	0.72	0.440	L929	1.000	2.28	12/16/88
AVS-1160	CPE	VSV	2.60	0.87	0.387	L929	1.000	2.58	01/03/89
AVS-1160	CPE	VSV	1.95	0.65	0.779	L929	1.000	1.28	01/06/89
AVS-1160	CPE	VSV	1.55	0.52	0.932	L929	1.000	1.07	01/13/89
AVS-1176	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-1654	CPE	VSV	2.80	0.93	10.00	L929	100.00	10.00	11/18/88
AVS-1654	CPE	VSV	2.35	0.78	8.951	L929	32.000	3.58	12/07/88
AVS-1732	CPE	VSV	0.85	0.28	100.0	L929	32.000	0.32	11/16/88
AVS-1745	CPE	VSV	0.15	0.05	-	L929	3.200	-	11/16/88
AVS-1746	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/16/88
AVS-1747	CPE	VSV	0.00	0.00	-	L929	3.200	-	11/16/88
AVS-1748	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/16/88
AVS-1749	CPE	VSV	0.10	0.02	-	L929	32.000	-	11/16/88
AVS-1751	CPE	VSV	1.00	0.33	88.60	L929	32.000	0.36	11/16/88
AVS-1752	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/18/88
AVS-1850	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/18/88
AVS-2707	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/16/88
AVS-2715	CPE	VSV	0.00	0.00	-	L929	0.000	-	01/13/89
AVS-2716	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/18/88
AVS-3592	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	01/06/89
AVS-4241	CPE	VSV	0.00	0.00	-	L929	< 100.00	-	11/18/88
AVS-4727	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/06/89
AVS-4771	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/18/88
AVS-4772	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-4773	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-4774	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-4775	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-4776	CPE	VSV	0.10	0.03	-	L929	320.00	-	11/18/88
AVS-4777	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/18/88
AVS-4778	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-4779	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-4780	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/18/88
AVS-4781	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/18/88
AVS-4782	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/18/88
AVS-4783	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/18/88
AVS-4784	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	11/18/88
AVS-4785	CPE	VSV	0.55	0.18	71.31	L929	10.000	0.14	11/18/88
AVS-4786	CPE	VSV	0.00	0.00	-	L929	3.200	-	11/18/88
AVS-4787	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/18/88

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4788	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/22/88
AVS-4789	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/22/88
AVS-4790	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/22/88
AVS-4791	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4792	CPE	VSV	0.15	0.05	-	L929	320.00	-	11/22/88
AVS-4793	CPE	VSV	0.00	0.00	-	L929	0.320	-	11/22/88
AVS-4794	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/22/88
AVS-4795	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4796	CPE	VSV	0.55	0.18	71.31	L929	10.000	0.14	11/22/88
AVS-4798	CPE	VSV	1.35	0.45	1.287	L929	1.000	0.78	11/22/88
AVS-4799	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/22/88
AVS-4800	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4801	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/22/88
AVS-4802	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/22/88
AVS-4803	CPE	VSV	0.00	0.00	-	L929	3.200	-	11/22/88
AVS-4804	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4805	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/22/88
AVS-4806	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4807	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/22/88
AVS-4808	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4809	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/22/88
AVS-4810	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/22/88
AVS-4811	CPE	VSV	0.00	0.00	-	L929	32.000	-	11/22/88
AVS-4812	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4813	CPE	VSV	0.00	0.00	-	L929	10.000	-	11/22/88
AVS-4813	CPE	VSV	0.00	0.00	-	L929	10.000	-	12/16/88
AVS-4814	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/16/88
AVS-4815	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/16/88
AVS-4816	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/16/88
AVS-4817	CPE	VSV	0.30	0.10	320.0	L929	32.000	0.10	12/16/88
AVS-4818	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/16/88
AVS-4819	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/16/88
AVS-4820	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/16/88
AVS-4821	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/16/88
AVS-4822	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/16/88
AVS-4823	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/16/88
AVS-4824	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/16/88
AVS-4825	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/16/88
AVS-4826	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/16/88
AVS-4827	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/16/88
AVS-4828	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/16/88
AVS-4829	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89
AVS-4830	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4931	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4832	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89
AVS-4833	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4834	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89
AVS-4835	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4836	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4837	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4838	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4839	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4840	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4841	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4842	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4843	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89
AVS-4844	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4845	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4846	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89
AVS-4847	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MTC	TINDEX	DATE
AVS-4848	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4849	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	01/03/89
AVS-4850	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4851	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/03/89
AVS-4852	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4853	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4854	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89
AVS-4855	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/03/89
AVS-4856	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/03/89
AVS-4857	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/06/89
AVS-4858	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/06/89
AVS-4859	CPE	VSV	0.25	0.08	-	L929	32.000	-	01/06/89
AVS-4860	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/06/89
AVS-4861	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/06/89
AVS-4862	CPE	VSV	0.60	0.20	178.8	L929	100.00	0.56	01/06/89
AVS-4863	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/06/89
AVS-4864	CPE	VSV	0.00	0.00	-	L929	100.00	-	11/22/88
AVS-4865	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4866	CPE	VSV	0.00	0.00	-	L929	320.00	-	11/22/88
AVS-4871	CPE	VSV	0.37	0.12	-	L929	100.00	-	12/07/88
AVS-4872	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	12/07/88
AVS-4873	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	12/07/88
AVS-4874	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/07/88
AVS-4875	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/07/88
AVS-4876	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	12/07/88
AVS-4877	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4878	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4879	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	12/07/88
AVS-4880	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/07/88
AVS-4881	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4882	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4883	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	12/07/88
AVS-4884	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	12/07/88
AVS-4885	CPE	VSV	0.00	0.00	-	L929	< 100.00	-	12/07/88
AVS-4886	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/07/88
AVS-4887	CPE	VSV	0.00	0.00	-	L929	1.000	-	12/07/88
AVS-4888	CPE	VSV	0.00	0.00	-	L929	> 320.00	-	12/07/88
AVS-4889	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/07/88
AVS-4890	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4891	CPE	VSV	0.00	0.00	-	L929	3.200	-	12/07/88
AVS-4892	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4893	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/07/88
AVS-4894	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/07/88
AVS-4895	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4896	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/07/88
AVS-4897	CPE	VSV	0.00	0.00	-	L929	10.000	-	12/07/88
AVS-4898	CPE	VSV	0.00	0.00	-	L929	< 10.000	-	12/09/88
AVS-4899	CPE	VSV	0.00	0.00	-	L929	3.200	-	12/09/88
AVS-4900	CPE	VSV	0.00	0.00	-	L929	< 3.200	-	12/09/88
AVS-4901	CPE	VSV	0.00	0.00	-	L929	3.200	-	12/09/88
AVS-4902	CPE	VSV	0.00	0.00	-	L929	< 10.000	-	12/09/88
AVS-4903	CPE	VSV	0.00	0.00	-	L929	3.200	-	12/09/88
AVS-4904	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/09/88
AVS-4905	CPE	VSV	0.00	0.00	-	L929	10.000	-	12/13/88
AVS-4906	CPE	VSV	0.00	0.00	-	L929	3.200	-	12/13/88
AVS-4907	CPE	VSV	2.55	0.85	4.678	L929	3.200	0.68	12/13/88
AVS-4908	CPE	VSV	0.10	0.03	-	L929	32.000	-	12/13/88
AVS-4909	CPE	VSV	0.00	0.00	-	L929	10.000	-	12/13/88
AVS-4910	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/13/88
AVS-4911	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/13/88

COMPOUND	PROTOCOL	VIRUS	VR	VR*	ID50	CELL	MFC	TINDEX	DATE
AVS-4912	CPE	VSV	0.00	0.00	-	L929	320.00	-	12/13/88
AVS-4913	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/13/88
AVS-4914	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/13/88
AVS-4915	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/13/88
AVS-4916	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/13/88
AVS-4917	CPE	VSV	0.55	0.18	59.54	L929	10.000	0.17	12/13/88
AVS-4918	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/13/88
AVS-4919	CPE	VSV	0.00	0.00	-	L929	10.000	-	12/13/88
AVS-4920	CPE	VSV	0.00	0.00	-	L929	10.000	-	12/13/88
AVS-4921	CPE	VSV	0.00	0.00	-	L929	3.200	-	12/13/88
AVS-4922	CPE	VSV	0.00	0.00	-	L929	32.000	-	12/13/88
AVS-4923	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/13/88
AVS-4924	CPE	VSV	0.00	0.00	-	L929 <	3.200	-	12/16/88
AVS-4925	CPE	VSV	0.00	0.00	-	L929 <	32.000	-	12/16/88
AVS-4926	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/16/88
AVS-4927	CPE	VSV	0.00	0.00	-	L929	100.00	-	12/16/88
AVS-4928	CPE	VSV	0.00	0.00	-	L929 >	320.00	-	12/16/88
AVS-5029	CPE	VSV	0.60	0.20	178.8	L929	100.00	0.56	01/06/89
AVS-5030	CPE	VSV	0.00	0.00	-	L929	3.200	-	01/06/89
AVS-5031	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/06/89
AVS-5032	CPE	VSV	0.15	0.05	-	L929	32.000	-	01/06/89
AVS-5033	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/06/89
AVS-5034	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/06/89
AVS-5035	CPE	VSV	0.90	0.30	147.4	L929	320.00	2.17	01/06/89
AVS-5036	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/06/89
AVS-5037	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/06/89
AVS-5038	CPE	VSV	0.00	0.00	-	L929 >	320.00	-	01/06/89
AVS-5047	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/06/89
AVS-5048	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/06/89
AVS-5049	CPE	VSV	1.40	0.47	42.55	L929	3.200	0.08	01/06/89
AVS-5050	CPE	VSV	1.20	0.40	17.88	L929	10.000	0.56	01/06/89
AVS-5051	CPE	VSV	0.00	0.00	-	L929	10.000	-	01/06/89
AVS-5052	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/06/89
AVS-5053	CPE	VSV	1.90	0.60	16.97	L929	32.000	1.89	01/06/89
AVS-5058	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/06/89
AVS-5059	CPE	VSV	1.15	0.30	88.64	L929	100.00	1.13	01/06/89
AVS-5060	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/13/89
AVS-5061	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/13/89
AVS-5062	CPE	VSV	0.30	0.10	320.0	L929	100.00	0.31	01/13/89
AVS-5063	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5064	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5065	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/13/89
AVS-5066	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5067	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5068	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5069	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5070	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5071	CPE	VSV	0.00	0.00	-	L929	32.000	-	01/13/89
AVS-5072	CPE	VSV	0.00	0.00	-	L929	100.00	-	01/13/89
AVS-5075	CPE	VSV	0.00	0.00	-	L929	320.00	-	01/13/89

APPENDIX C

Cumulative Summary of *In Vivo* Antiviral Results

CUMULATIVE SUMMARY OF IN VIVO TEST RESULTS
-JAPANESE ENCEPHALITIS (JE) VIRUS IN C57BL/6 MICE-

EXP. NO.	CMPD NO.	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			P VALUE
				DEAD/TOTAL	ADD	% DEAD	ADD	% T/C	
30	AVS-0111	320	SC;Q1D X 7, DAY-1	0/5	--	100	10.5	78	
30		100	SC;Q1D X 7, DAY-1	0/5	--	100	11.4	84	
30		32	SC;Q1D X 7, DAY-1	0/5	--	90	12.1	90	
30	AVS-0111	320	IP;Q1D X 7, DAY-1	0/5	--	100	10.7	78	
30		100	IP;Q1D X 7, DAY-1	0/5	--	100	10.5	77	
30		32	IP;Q1D X 7, DAY-1	0/5	--	100	10.7	78	
34	AVS-0215	100	SC;Q1D X 7, DAY-1	2/5	15.0	100	12.1	85	TOXIC
34		64	SC;Q1D X 7, DAY-1	0/5	--	100	11.9	83	TOXIC
34		32	SC;Q1D X 7, DAY-1	0/5	--	90	13.3	93	0.2
30	AVS-0257	320	SC;Q1D X 7, DAY-1	0/5	--	100	10.9	81	
30		100	SC;Q1D X 7, DAY-1	0/5	--	100	10.4	77	
30		32	SC;Q1D X 7, DAY-1	0/5	--	100	12.9	96	
34	AVS-0272	53	SC;Q1D X 7, DAY-1	0/5	--	90	11.8	83	TOXIC
34		34	SC;Q1D X 7, DAY-1	0/5	--	100	12.6	88	0.017
34		17	SC;Q1D X 7, DAY-1	0/5	--	90	14.0	98	0.6
34	AVS-0360	300	SC;Q1D X 7, DAY-1	0/5	--	70	13.6	95	(0.29)
32		250	SC;Q1D X 7, DAY-1	0/5	--	70	12.0	98	(0.29)
34		150	SC;Q1D X 7, DAY-1	0/5	--	80	13.5	94	(0.5)
26	AVS-0361	6	SC;Q1D X 7, DAY-1	3/5	2.7	70	4.0	31	TOXIC
33		6	SC;Q1D X 7, DAY-1	0/5	--	10	15.0	121	(0.00006)
26		4	SC;Q1D X 7, DAY-1	0/5	--	0	--	--	(0.000005)
33		4	SC;Q1D X 7, DAY-1	0/5	--	70	15.4	124	0.02
26		2	SC;Q1D X 7, DAY-1	0/5	--	80	16.3	127	0.00034
33		2	SC;Q1D X 7, DAY-1	1/5	28.0	90	11.6	94	
34	AVS-2563	45	IP;Q1D X 7, DAY-1	0/5	--	70	13.9	104	(0.11)
34		30	IP;Q1D X 7, DAY-1	0/5	--	100	13.1	98	(1.0)
34		15	IP;Q1D X 7, DAY-1	0/5	--	90	13.0	97	(0.5)
26		12	SC;Q1D X 7, DAY-1	0/5	--	100	13.6	106	
26		6	SC;Q1D X 7, DAY-1	0/5	--	90	13.7	107	
26		3	SC;Q1D X 7, DAY-1	0/5	--	90	12.0	94	
26	AVS-2811	25	SC;Q1D X 7, DAY-1	4/5	4.8	40	10.5	82	TOXIC
33		20	SC;Q1D X 7, DAY-1	5/5	2.6	100	3.5	28	TOXIC
26		12.5	SC;Q1D X 7, DAY-1	0/5	--	80	14.0	109	
33		10	SC;Q1D X 7, DAY-1	0/5	--	40	13.3	106	(0.0054)
26		6.25	SC;Q1D X 7, DAY-1	0/5	--	80	13.5	105	
33		5	SC;Q1D X 7, DAY-1	0/5	--	90	13.4	106	
26	AVS-2812	6	SC;Q1D X 7, DAY-1	4/5	6.0	56	6.4	50	TOXIC
33		6	SC;Q1D X 7, DAY-1	3/5	7.0	100	6.9	56	TOXIC
26		3	SC;Q1D X 7, DAY-1	0/5	--	20	17.5	137	(0.00036)
33		3	SC;Q1D X 7, DAY-1	0/5	--	10	15.0	121	(0.00006)
26		1	SC;Q1D X 7, DAY-1	0/5	--	60	15.7	123	(0.04)
33		1	SC;Q1D X 7, DAY-1	0/5	--	90	15.1	122	0.01
34	AVS-2979	200	SC;Q1D X 7, DAY-1	5/5	1.2	100	1.4	10	TOXIC
34		100	SC;Q1D X 7, DAY-1	5/5	1.8	100	2.0	14	TOXIC
34		50	SC;Q1D X 7, DAY-1	4/4	6.0	80	5.9	41	TOXIC
38		30	SC;Q1D X 7, DAY-1	0/5	--	40	14.3	105	0.55
38		15	SC;Q1D X 7, DAY-1	0/5	--	30	16.0	118	0.08
38		15	IP;Q1D X 7, DAY-1	0/5	--	60	11.8	78	0.01
41		10	SC;Q1D X 7, DAY-1	0/5	--	100	12.2	90	0.013

EXP. NO.	CMPD NO.	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			P VALUE
				DEAD/TOTAL	ADD	% DEAD	ADD	% T/C	
41		5	SC;Q1D X 7, DAY-1	0/5	--	100	14.6	108	0.237
41		2.5	SC;Q1D X 7, DAY-1	0/5	--	90	13.3	99	0.766
41		1.25	SC;Q1D X 7, DAY-1	0/5	--	100	12.9	96	0.491
33	AVS-2980	40	SC;Q1D X 7, DAY-1	0/5	--	20	9.5	75	(0.00036)
33		20	SC;Q1D X 7, DAY-1	0/5	--	40	15.0	119	(0.0054)
33		10	SC;Q1D X 7, DAY-1	0/5	--	90	13.6	108	
33	AVS-4113	32	SC;Q1D X 7, DAY-1	N/A	--	90	13.6	110	
33		16	SC;Q1D X 7, DAY-1	0/5	--	90	11.8	95	
33		8	SC;Q1D X 7, DAY-1	0/5	--	90	13.3	107	
41	AVS-5587	200	SC;Q1D X 7, DAY-1	0/5	--	10	17.0	126	(0.00006)
41		100	SC;Q1D X 7, DAY-1	0/5	--	20	20.0	148	0.00002
41		50	SC;Q1D X 7, DAY-1	0/5	--	10	18.0	133	(0.00006)
41		10	SC;Q1D X 7, DAY-1	0/5	--	90	14.2	105	0.2
41		5	SC;Q1D X 7, DAY-1	0/5	--	100	13.9	103	0.55
41		1	SC;Q1D X 7, DAY-1	0/5	--	100	14.0	104	0.45
41		0.5	SC;Q1D X 7, DAY-1	0/5	--	70	14.4	107	(0.11)
41		0.1	SC;Q1D X 7, DAY-1	0/5	--	90	13.1	97	0.61
26	UNTREATED CONTROL		--	0/5	--	100	14.0		
30	UNTREATED CONTROL		--	0/5	--	70	13.6		
32	UNTREATED CONTROL		--	0/5	--	100	13.6		
33	UNTREATED CONTROL		--	0/5	--	100	12.2		
34	UNTREATED CONTROL		--	0/5	--	100	12.1		
41	UNTREATED CONTROL		--	0/5	--	100	13.4		
38	UNTREATED CONTROL		--	0/5	--	90	12.1		
26	SHAM-INFECTED		--	0/10	--	--	--		
26	ALC-SALINE CONTROL		SC;Q1D X 7, DAY-1	0/5	--	100	12.8		
33	ALC-SALINE CONTROL		SC;Q1D X 7, DAY-1	0/5	--	100	12.4		
30	PBS		SC;Q1D X 7, DAY-1	0/5	--	100	13.5		
30	PBS		IP;Q1D X 7, DAY-1	0/5	--	100	13.7		
32	0.4%CMC + PBS		SC;Q1D X 7, DAY-1	0/5	--	100	12.3		
34	0.4%CMC + PBS		SC;Q1D X 7, DAY-1	0/5	--	90	14.3		
34	0.4%CMC + PBS		IP;Q1D X 7, DAY-1	0/5	--	100	13.4		
38	0.4%CMC + PBS		SC;Q1D X 7, DAY-1	0/5	--	80	13.6		
38	0.4%CMC + PBS		IP;Q1D X 7, DAY-1	0/5	--	77.8	15.1		
41	0.4%CMC + PBS		SC;Q1D X 7, DAY-1	0/5	--	100	13.5		
33	HPC (FROM NCI)		SC;Q1D X 7, DAY-1	0/5	--	100	12.6		

ADD = Average Day of Death (survivors not included in calculations)

% T/C (Percent Test/Control) = ADD of treated divided by ADD of the diluent control group

P VALUE derived from Student's t-test comparison of the ADD for drug-treated, virus-infected to diluent-treated, virus-infected control mice.

Figures in parentheses are derived from Fisher's Exact test comparison of the mortality rates of drug-treated, virus-infected to diluent-treated, virus-infected control mice.

CONTRACT DAMD17-86-C-6013
SOUTHERN RESEARCH INSTITUTE
FILENAME: JE.SUM
UPDATED: 10/17/89:ADB

CUMULATIVE SUMMARY OF IN VIVO TEST RESULTS
-PICHINDE VIRUS IN MHA HAMSTERS-

EXP. NO.	CMPD #	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			
				DEAD/TOTAL	ADD	DEAD/TOTAL	ADD	GMTD	VR
15	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	0/10	--	21.0	1.3
18	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	4/10	17.3	19.4	2.1
19	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	6/10	16.7	18.1	1.7
20	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	8/10	16.9	18.5	1.7
21	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	7/10	16.3	19.1	1.8
23	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	8/10	18.4	19.9	2.0
24	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	7/9	15.9	17.7	1.7
28	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	5/10	16.2	21.2	1.8
29	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	7/10	18.7	20.5	1.9
35	AVS-0001	100	SC; Q1D X 7, DAY -1	0/6	--	2/6	13.5	22.2	2.2
35	AVS-0001	100	SC; Q1D X 7, DAY 4	0/6	--	0/6	--	28.0	2.9
35	AVS-0001	100	SC; Q1D X 7, DAY 5	0/6	--	6/6	15.7	16.3	1.8
35	AVS-0001	100	SC; Q1D X 7, DAY 6	0/6	--	5/6	11.2	13.0	1.3
38	AVS-0001	100	SC; Q1D X 7, DAY 0	0/5	--	6/10	17.8		P=0.001
39	AVS-0001	125	SC; Q1D X 7, DAY 0	0/5	--	3/10	22.7		P=0.043
33	AVS-0001	150	SC; Q1D X 8, DAY 0	0/5	--	1/10	13.0	25.9	2.8
33	AVS-0001	100	SC; Q1D X 8, DAY 0	0/5	--	6/10	18.5	21.5	2.3
33	AVS-0001	50	SC; Q1D X 8, DAY 0	0/5	--	8/10	14.5	16.4	1.7
33	AVS-0001	25	SC; Q1D X 8, DAY 0	0/5	--	10/10	13.6	13.6	1.4
31	AVS-0001	1000	SC; Q1D X10, DAY-1	5/5	3.6	--	--	--	--
31	AVS-0001	500	SC; Q1D X10, DAY-1	5/5	5.2	10/10	5.7	5.6	0.6
31	AVS-0001	250	SC; Q1D X10, DAY-1	5/5	7.6	--	--	--	--
31	AVS-0001	200	SC; Q1D X10, DAY-1	3/5	10.7	8/10	12.8	14.4	1.6
31	AVS-0001	100	SC; Q1D X10, DAY-1	0/5	--	3/10	18.7	24.4	2.7
32	AVS-0001	100	SC; Q1D X10, DAY-1	0/5	--	2/10	20.5	26.1	2.1
30	AVS-0001	50	SC; Q1D X10, DAY-1	0/5	--	8/10	14.5	16.4	1.3
27	AVS-0001	50	SC; Q1D X10, DAY-1	0/5	--	9/10	16.4	17.1	1.7
33	AVS-0001	150	SC; Q1D X11, DAY-3	1/5	14.0	3/10	16.0	23.7	2.6
33	AVS-0001	100	SC; Q1D X11, DAY-3	0/5	--	1/10	14.0	26.1	2.9
34	AVS-0001	100	SC; Q1D X11, DAY 0	0/5	--	4/10	20.8	24.8	2.4
33	AVS-0001	50	SC; Q1D X11, DAY-3	0/3	--	10/10	16.2	15.9	1.8
34	AVS-0001	50	SC; Q1D X11, DAY 0	0/5	--	9/10	19.2	19.4	1.9
33	AVS-0001	25	SC; Q1D X11, DAY-3	0/5	--	10/10	13.0	13.0	1.4
25	AVS-0001	100	SC; Q1D X12, DAY-1	1/5	18.0	3/10	21.7	25.8	2.7
26	AVS-0001	100	SC; Q1D X12, DAY-1	0/5	--	10/10	12.5	12.3	1.3
34	AVS-0001	100	SC; Q1D X18, DAY-1	0/5	--	3/10	17.0	24.1	2.3
34	AVS-0001	50	SC; Q1D X18, DAY-1	0/5	--	7/10	18.3	20.7	2.0
18	AVS-0052	100	SC; Q1D X 7, DAY 0	5/5	4.2	10/10	4.2	4.2	0.5
18		32		5/5	6.8	10/10	6.6	6.6	0.7
18		10		0/5	--	10/10	8.9	8.6	0.9
18		3.2		0/5	--	9/10	10.6	10.9	1.2
25		3.2	SC; Q1D X12, DAY-1	0/5	--	10/10	7.0	7.0	0.7
25		1.0	SC; Q1D X12, DAY-1	0/5	--	10/10	9.2	9.2	0.9
27		3.2	SC; Q1D X10, DAY-1	0/5	--	10/10	7.7	7.7	0.8
27		1.0	SC; Q1D X10, DAY-1	0/5	--	10/10	10.5	10.2	1.0
27	1)AVS-0052	1) 3.2	SC; Q1D X10, DAY-1	0/5	--	10/10	17.0	16.9	1.7
	2)AVS-0001	2) 50	SC; Q1D X10, DAY-1						
27		1) 1.0		0/5	--	9/10	17.6	18.1	1.8
		2) 50							
15	AVS-0079	100	SC; Q1D X 7, DAY 0	0/5	--	8/8	14.0	13.5	0.9
15		32		0/5	--	1/10	11.0	19.7	1.2
18		32		--	--	10/10	8.6	7.0	0.8
15		10		0/5	--	5/10	9.8	14.3	0.9
15		3.2		0/5	--	7/10	13.0	14.5	0.9

UNINFECTED

INFECTED

EXP. NO.	CMPD NO.	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			P VALUE
				DEAD/TOTAL	ADD	% DEAD	ADD	% T/C	
38	AVS-0094	100	SC; Q1D X 7, DAY 0	0/5		--	9/10	10.4	P=0.408
38		32		0/5		--	10/10	10.3	P=0.458
38		10		0/5		--	10/10	10.1	P=0.713
38		3.2		0/5		--	10/10	9.9	P=1.0
19	AVS-0111	100	SC; Q1D X 7, DAY 0	0/5		--	9/10	11.9	12.5 1.2
19		32		0/5		--	9/10	10.7	11.4 1.1
19		10		0/5		--	8/10	11.4	12.6 1.2
19		3.2		0/5		--	9/10	9.0	9.7 0.9
32	AVS-0111	150	SC; Q1D X10, DAY 0	0/3		--	5/05	14.0	14.0 1.1
32		32		0/5		--	10/10	13.0	12.3 1.2
32		10		0/5		--	10/10	10.8	10.6 0.8
19	AVS-0148	10	SC; Q1D X 7, DAY 0	0/5		--	10/10	12.0	11.7 1.1
19		3.2		0/5		--	10/10	11.2	11.1 1.1
19		1.0		0/5		--	10/10	10.4	10.3 1.0
19		0.32		0/5		--	10/10	11.7	11.5 1.1
19		0.1		0/5		--	10/10	11.3	10.9 1.1
27	AVS-0148	3.2	SC; Q1D X10, DAY-1	0/5		--	10/10	10.3	10.3 1.1
27		1.0		0/5		--	10/10	11.3	11.1 1.1
30		0.5		0/5		--	10/10	12.2	12.0 1.0
30		0.25		0/5		--	10/10	12.1	11.9 1.0
25	AVS-0148	20	SC; Q1D X12, DAY-1	5/5	8.8		10/10	7.0	6.9 0.7
25		10		5/5	20.0		10/10	9.5	9.5 1.0
25		3.2		2/5	14.0		10/10	9.8	9.8 1.0
27	1)AVS-0148	1) 3.2	SC; Q1D X10, DAY-1	0/5		--	10/10	16.6	16.5 1.7
27	2)AVS-0001	2) 50.0	SC; Q1D X10, DAY-1	0/5		--	9/9	16.2	17.1 1.7
30		1) 1.0		0/5		--	10/10	16.5	16.3 1.3
30		2) 50.0		0/5		--	10/10	16.5	16.4 1.3
20	AVS-0167	32	SC; Q1D X 7, DAY 0	0/5		--	10/10	10.0	10.0 0.9
20		10		0/5		--	9/10	9.8	10.8 1.0
20		3.2		0/5		--	9/10	10.4	11.5 1.0
20		1.0		0/5		--	10/10	11.4	10.9 1.0
26	AVS-0167	10	SC; Q1D X12, DAY-1	0/5		--	10/10	11.3	10.8 1.2
26		3.2		0/5		--	10/10	9.6	9.6 1.0
26		1.0		0/5		--	10/10	10.3	10.1 1.1
21	AVS-0206	100	SC; Q1D X 7, DAY 0	0/5		--	8/10	15.3	17.1 1.6
21		32		0/5		--	9/10	14.0	14.9 1.4
21		10		0/5		--	9/10	13.1	13.9 1.3
21		3.2		0/5		--	10/10	10.4	10.3 1.0
31	AVS-0206	1000	SC; Q1D X10, DAY-1	4/4	5.0		10/10	5.0	4.9 0.6
31		500	SC; Q1D X10, DAY-1	4/4	8.5		10/10	8.4	8.3 0.9
31		250	SC; Q1D X10, DAY-1	0/5		--	1/10	23.0	27.5 3.1
31		200	SC; Q1D X10, DAY-1	0/5		--	2/10	25.0	27.4 3.1
25	AVS-0206	200	SC; Q1D X12, DAY-1	0/5		--	4/10	18.8	23.8 2.5
37	AVS-0215	100	SC; Q1D X 7, DAY 0	5/5	6.2		10/10	10.0	5.9 0.6
37		50		3/4	13.0		10/10	10.4	10.3 1.0
24		32		0/5		--	10/10	9.7	9.6 0.9
37		25		0/5		--	10/10	9.4	9.2 0.9
24		10		0/5		--	10/10	9.7	9.7 0.9
24		3.2		0/5		--	10/10	11.1	10.8 1.0

EXP. NO.	CMPD NO.	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			P VALUE
				DEAD/TOTAL	ADD	% DEAD	ADD	% T/C	
24		1.0		0/5	--	10/10	9.5	9.5	0.9
15	AVS-0253	100	SC; Q1D X 7, DAY 0	2/5	9.5	9/10	9.3	10.1	0.6
15	AVS-0253	32		0/5	--	1/10	11.0	19.7	1.2
18	AVS-0253	32		0/5	--	10/10	10.1	9.9	1.1
21	AVS-0253	32		0/5	--	8/10	8.3	10.4	1.3
39	AVS-0253	32		0/5	--	10/10	10.8	P=0.277	
39	AVS-0253	16		1/5	8.0	10/10	14.9	P=0.447	
15	AVS-0253	10		0/5	--	5/10	11.2	15.3	0.9
15	AVS-0253	3.2		0/5	--	8/10	11.3	12.6	0.8
39	AVS-0253	32	SC; Q2D X 10, DAY 0	5/5	10.6	10/10	8.7	P=0.04	
39	AVS-0253	16		0/5	--	10/10	12.6	P=0.809	
23	AVS-0272	100	SC; Q1D X 7, DAY 0	4/5	10.5	10/10	10.5	10.3	0.9
28		32		0/5	--	10/10	9.8	9.7	0.8
28		10		1/5	16.0	10/10	11.6	11.2	0.9
28		3.2		0/5	--	10/10	11.5	11.2	0.9
20	AVS-0332	100	SC; Q1D X 7, DAY 0	0/5	--	10/10	11.5	11.1	1.0
20		32		0/5	--	10/10	11.1	10.8	1.0
20		10		0/5	--	10/10	9.9	9.7	0.9
20		3.2		0/5	--	9/10	11.2	11.8	1.1
26	AVS-0332	3.2	SC; Q1D X12, DAY-1	0/5	--	10/10	9.3	9.2	1.0
26		1.0		0/5	--	10/10	11.1	10.9	1.2
28	AVS-0346	60	SC; Q1D X 7, DAY 0	0/5	--	10/10	11.1	10.7	0.9
28		30		0/5	--	10/10	11.9	11.4	0.9
28		15		0/5	--	9/10	11.8	12.7	1.1
28		7.5		0/5	--	8/10	14.4	15.7	1.3
32	AVS-0346	7.5	SC; Q1D X10, DAY 0	0/5	--	10/10	10.7	10.6	0.8
32		5.0		0/5	--	9/10	10.4	11.4	0.9
32		2.5		0/5	--	10/10	11.2	11.1	0.9
32		1.0		0/5	--	9/10	10.9	11.3	0.9
38	AVS-0347	100	SC; Q1D X 7, DAY 0	5/5	1.0	10/10	1.0	P=<10-6	
38		32		5/5	1.2	10/10	1.3	P=<10-6	
39		20		5/5	1.4	10/10	1.1	P=0.000008	
39		10		5/5	1.8	10/10	2.0	P=0.00002	
39		5		5/5	2.6	10/10	2.8	P=0.00006	
23	AVS-0360	100	SC; Q1D X 7, DAY 0	5/5*	--	10/10	8.2	8.2	0.8
23		32		5/5**	--	9/10***	9.9	10.8	1.1
23		10		0/5	--	10/10	11.1	10.6	1.1
23		3.2		0/5	--	10/10	10.3	10.2	1.0
21	AVS-0646	100	SC; Q1D X 7, DAY 0	5/5	6.4	10/10	6.1	6.1	0.6
21		32		1/5	11.0	10/10	7.0	6.7	0.6
21		10		0/5	--	9/10	7.8	8.4	0.3
21		3.2		0/5	--	10/10	12.6	11.8	1.1
26	AVS-0646	3.2	SC; Q1D X 7, DAY-1	0/5	--	10/10	7.9	8.0	0.9
26		1.0		0/5	--	10/10	9.5	9.5	1.0
29	AVS-0925	100	SC; Q1D X 7, DAY 0	0/5	--	10/10	8.0	7.6	0.7
29		32		0/5	--	10/10	9.2	9.1	0.9
29		10		0/5	--	10/10	10.3	10.2	1.0
29		3.2		0/5	--	10/10	9.9	9.8	0.9
24	AVS-1046	100	SC; Q1D X 7, DAY 0	0/5	--	10/10	13.7	13.4	1.3
24		32		0/5	--	9/10	12.3	13.1	1.3
24		10		0/5	--	10/10	12.4	11.8	1.1
24		3.2		0/5	--	9/10	10.9	11.8	1.1
23	AVS-1250	100	SC; Q1D X 7, DAY 0	0/5	--	10/10	10.2	9.8	1.0
23		32		0/5	--	10/10	9.2	9.2	0.9
23		10		0/5	--	9/10	9.6	10.6	1.1
23		3.2		0/5	--	10/10	9.7	9.7	1.0
9	UNTREATED	CONTROL	--	0/4	--	3/5	10.0	--	--
15	UNTREATED	CONTROL	--	0/5	--	4/10	10.0	15.6	1.0
18	UNTREATED	CONTROL	--	0/5	--	8/10	9.9	11.4	1.2
19	UNTREATED	CONTROL	--	0/5	--	9/10	10.2	10.7	1.0
20	UNTREATED	CONTROL	--	0/5	--	9/10	9.0	10.1	0.9
21	UNTREATED	CONTROL	--	0/5	--	10/10	10.1	10.1	0.9
23	UNTREATED	CONTROL	--	0/5	--	10/10	10.9	10.6	1.1
24	UNTREATED	CONTROL	--	0/5	--	10/10	10.5	10.4	1.0

EXP. NO.	CMPD NO.	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			P VALUE
				DEAD/TOTAL	ADD	% DEAD	ADD	% T/C	
25	UNTREATED	CONTROL	--	0/5	--	10/10	9.5	9.4	1.0
26	UNTREATED	CONTROL	--	0/5	--	10/10	8.9	8.9	1.0
27	UNTREATED	CONTROL	--	0/5	--	10/10	10.0	--	--
28	UNTREATED	CONTROL	--	0/5	--	10/10	10.2	10.1	0.8
29	UNTREATED	CONTROL	--	0/5	--	10/10	13.4	12.4	1.2
30	UNTREATED	CONTROL	--	0/5	--	8/10	9.0	11.2	0.9
31	UNTREATED	CONTROL	--	0/10	--	10/10	9.8	9.8	1.1
32	UNTREATED	CONTROL	--	0/5	--	7/10	10.9	14.1	1.3
33	UNTREATED	CONTROL	--	0/5	--	10/10	10.3	10.2	1.0
34	UNTREATED	CONTROL	--	0/5	--	10/10	10.1	9.8	--
35	UNTREATED	CONTROL	--	0/3	--	3/3	9.7	9.6	--
37	UNTREATED	CONTROL	--	0/5	--	10/10	10.0	9.9	--
38	UNTREATED	CONTROL	--	0/5	--	9/9	--	--	--
39	UNTREATED	CONTROL	--	0/5	--	10/10	9.8	P=0.105	--
9	SHAM-INFECTED		--	0/5	--	--	--	--	--
18	SHAM-INFECTED		--	0/5	--	--	--	--	--
24	SHAM-INFECTED		--	0/5	--	--	--	--	--
38	0.9% SALINE		--	0/5	--	10/10	9.9	--	--
38	2% ETHANOL SALINE		--	0/5	--	10/10	10.4	--	--
37	0.4% CMC/PBS		--	0/5	--	10/10	13.2	--	--
9	PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	8.1	--	--
15	PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	5/10	12.2	15.6	1.0
18	PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	9.1	9.2	1.0
19	PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	10.5	10.4	1.0
20	CMC + PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	11.0	10.7	1.0
21	PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	10.8	10.4	1.0
23	PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	10.1	9.9	1.0
24	CMC + PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	10.8	10.4	1.0
28	CMC + PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	9/10	11.4	12.1	1.0
29	CMC + PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	11.3	10.7	1.0
35	FBS CONTROL		SC; Q1D X 7, DAY-1	0/3	--	3/3	10.3	10.3	1.0
35	PBS CONTROL		SC; Q1D X 7, DAY 4	0/3	--	3/3	9.7	9.6	1.0
35	PBS CONTROL		SC; Q1D X 7, DAY 5	0/3	--	3/3	9.3	9.3	1.0
35	PBS CONTROL		SC; Q1D X 7, DAY 6	0/3	--	3/3	10.3	10.3	1.0
33	PBS CONTROL		SC; Q1D X 8, DAY 0	0/5	--	10/10	9.3	9.4	1.0
27	PBS CONTROL		SC; Q1D X10, DAY-1	0/5	--	10/10	9.9	9.8	1.0
30	PBS CONTROL		SC; Q1D X10, DAY-1	0/5	--	10/10	13.0	12.3	1.0
31	PBS CONTROL		SC; Q1D X10, DAY-1	0/10	--	10/10	9.0	8.9	1.0
33	PBS CONTROL		SC; Q1D X11, DAY-3	0/5	--	10/10	9.0	9.0	1.0
34	PBS CONTROL		SC; Q1D X11, DAY-7	0/5	--	10/10	10.5	10.3	--
32	CMC CONTROL		SC; Q1D X10, DAY 0	0/5	--	10/10	12.6	12.5	1.0
25	PBS CONTROL		SC; Q1D X12, DAY-1	0/5	--	10/10	9.7	9.7	1.0
26	CMC + PBS CONTROL		SC; Q1D X12, DAY-1	0/5	--	10/10	9.3	9.2	1.0
34	PBS CONTROL		SC; Q1D X18, DAY 0	0/5	--	10/10	10.5	10.4	--
37	PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	9/10	9.7	10.7	--

ADD= AVERAGE DAY OF DEATH(SURVIVORS NOT INCLUDED IN CALCULATIONS).

GMTD=GEOMETRIC MEAN TIME TO DEATH = $(d_1 \times d_2 \times \dots \times d_n)$ where d_n is the day of death for each animal and surviving animals are assigned a value of 28 days).

VR= GMTD of experimental treated/ GMTD of PBS treated controls.

* = FOUR ANIMALS SACRIFICED DUE TO SEVERE ULCERATIONS AT THE INJECTION SITE.

**= FIVE ANIMALS SACRIFICED DUE TO SEVERE ULCERATIONS AT THE INJECTION SITE.

***= ONE ANIMAL SACRIFICED DUE TO SEVERE ULCERATION AT THE INJECTION SITE.

NOTE: EXPT. #26. DUE TO THE INCONSISTENT RESULTS OBTAINED WITH RIBAVIRIN CONTROL, WE SUSPECT THAT THE COMPOUND WAS IMPROPERLY PREPARED FOR USE.

EXPT. #31. DUE TO SKIN LESIONS, THE ROUTE OF INJECTION WAS CHANGED FROM SC TO IP ON DAY 3 (POSTINFECTION). BLOOD WAS COLLECTED FOR HEMATOCRIT DETERMINATIONS FOR AVS-0206.RESULTS: DECREASE IN HEMATOCRITS FOR AVS-0206 BUT NOT AS SEVERE AS THAT INDUCED BY RIBAVIRIN.

CONTRACT DAMD17-86-C-6013
SOUTHERN RESEARCH INSTITUTE
FILENAME: PIC.SUM
UPDATED: 03/28/89:ADB

CUMULATIVE SUMMARY OF IN VIVO TEST RESULTS
 -VENEZUELAN EQUINE ENCEPHALOMYELITIS (VEE) VIRUS IN CD-1 MICE-

EXP. NO.	CMPD #	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			
				DEAD/TOTAL	ADD	DEAD/TOTAL	ADD	GMTD	VR
18	AVS-0079	320	SC; Q1D X 7, DAY-1	5/5	3.0	10/10	3.3	3.3	0.3
18		100		0/5	--	8/10	5.3	8.3	0.7
18		32		0/5	--	9/10	8.6	9.5	0.8
18		10		0/5	--	9/10	7.0	8.0	0.6
18		3.2		0/5	--	10/10	8.0	7.9	0.6
20	AVS-0079	32	SC; Q1D X10, DAY-1	0/5	--	6/10	8.8	12.4	1.3
22	AVS-0079	32	SC; Q1D X10, DAY-1	0/5	--	9/10	8.5	8.5	1.0
20	AVS-0079	16	SC; Q1D X10, DAY-1	0/5	--	5/5	9.2	8.8	0.9*
22	AVS-0079	16	SC; 2XD X10, DAY-1	ND	ND	10/10	7.8	7.8	1.0
9	AVS-0206	1000	SC; Q1D X 7, DAY-1	0/5	--	8/10	7.1	9.2	1.2
9		320		0/5	--	8/10	8.3	10.5	1.3
9		100		0/5	--	5/5	8.0	7.8	1.0
9		32		0/5	--	10/10	7.8	7.8	1.0
9		10		0/5	--	7/10	8.1	11.7	1.5
18	AVS-0272	100	SC; Q1D X 7, DAY-1	0/5	--	9/10	6.9	7.8	0.6
18		32		0/5	--	10/10	8.6	8.4	0.7
18		10		0/5	--	7/10	8.3	11.9	1.0
18		3.2		0/5	--	9/10	7.9	8.9	0.7
18		1.0		0/5	--	9/10	2.1	9.1	0.7
20	AVS-0272	10	SC; Q1D X10, DAY-1	0/5	--	10/10	8.3	8.2	0.9
20	AVS-0272	5	SC; Q1D X10, DAY-1	0/5	--	10/10	7.8	7.7	0.8*
19	AVS-0347	32	SC; Q1D X 7, DAY-1	0/4	--	8/10	7.5	9.2	1.1
19		10		0/5	--	9/10	9.8	10.5	1.2
19		3.2		0/5	--	9/10	9.0	10.0	1.2
19		1.0		0/5	--	9/10	7.6	8.5	1.0
19		0.32		0/5	--	7/10	9.4	13.0	1.5
20	AVS-0347	5	SC; Q1D X10, DAY-1	0/5	--	10/10	8.4	8.3	0.9*
20	AVS-0347	0.32	SC; Q1D X10, DAY-1	0/5	--	10/10	8.2	8.1	0.9
20	AVS-0347	0.16	SC; Q1D X10, DAY-1	0/5	--	8/10	9.3	10.7	1.1*
9	AVS-0360	100	SC; Q1D X 7, DAY 0	0/5	--	7/10	8.0	11.2	1.4
5		32		0/5	--	7/10	7.4	10.6	1.3
5		10		0/5	--	9/10	8.0	8.8	1.1
5		3.2		0/5	--	6/10	8.7	13.2	1.6
13	AVS-0360	100	SC; Q1D X 7, DAY-1	0/5	--	8/10	8.4	10.6	1.1
13		32		0/4	--	10/10	8.0	7.9	0.8
13		10		0/4	--	8/10	9.6	11.6	1.2
13		3.2		0/4	--	8/10	9.5	11.6	1.2
13		1.0		0/4	--	8/10	8.5	10.7	1.1
13	AVS-0360	3.2	SC; Q1D X12, DAY-1	0/5	--	9/10	8.8	9.8	0.9
13		1.0		0/5	--	9/10	8.4	9.5	0.9
9	AVS-0646	100	SC; Q1D X 7, DAY-1	0/5	--	7/7	6.7	5.9	0.7
9		32		0/5	--	8/10	8.3	10.4	1.3
9		10		0/5	--	9/10	8.3	9.4	1.2
9		3.2		0/5	--	7/7	8.6	8.4	1.1
9		1.0		0/5	--	8/10	7.9	10.1	1.3
13	AVS-0646	32	SC; Q1D X12, DAY-1	0/5	--	10/10	8.2	8.2	0.8

EXP. NO.	CMPD NO.	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			
				DEAD/TOTAL	% ADD	% DEAD	% T/C	P VALUE	
13		10		0/5	--	8/10	8.1	10.4	1.0
13		3.2		0/5	--	9/10	8.1	9.1	0.9
13		1.0		0/5	--	8/10	8.8	11.0	1.1
13		0.5		0/5	--	9/10	9.1	10.0	1.0
9	UNTREATED	CONTROL	--	0/4	--	3/5	10.0	--	--
5	UNTREATED	CONTROL	--	0/10	--	7/10	8.4	11.6	1.4
13	UNTREATED	CONTROL	--	0/4	--	9/10	9.0	9.5	0.9
18	UNTREATED	CONTROL	--	0/5	--	7/10	7.7	11.2	0.9
19	UNTREATED	CONTROL	--	0/5	--	6/10	8.7	13.7	1.6
20	UNTREATED	CONTROL	--	0/5	--	9/9	8.9	--	--
22	UNTREATED	CONTROL	--	0/5	--	7.7	7.6	--	--
9	SHAM-INFECTED		--	0/5	--	--	--	--	--
5	SHAM-INFECTED		--	0/10	--	--	--	--	--
9	PBS CONTROL		SC; Q1D X 7, DAY-1	0/5	--	10/10	8.1	--	--
18	PBS CONTROL		SC; Q1D X 7, DAY-1	0/5	--	6/10	7.3	12.5	1.0
20	PBS CONTROL		SC; Q1D X10, DAY-1	0/5	--	9/10	8.4	9.2	1.0
20	PBS CONTROL		SC; Q1D X10, DAY-1	0/5	--	9/10	8.8	9.5	1.0*
22	PBS CONTROL		SC; Q1D X10, DAY-1	0/5	--	9/10	7.0	8.0	--
22	PBS CONTROL		SC; 2XD X10, DAY-1	0/5	--	9/10	7.4	8.2	--
5	CMC + PBS CONTROL		SC; Q1D X 7, DAY 0	0/5	--	10/10	8.2	8.1	1.0
13	CMC + PBS CONTROL		SC; Q1D X12, DAY-1	0/5	--	8/10	8.3	10.4	1.0
19	CMC CONTROL		SC; Q1D X 7, DAY-1	0/5	--	10/10	8.7	8.5	1.0

ADD= AVERAGE DAY OF DEATH(SURVIVORS NOT INCLUDED IN CALCULATION).

GMTD= GEOMETRIC MEAN TIME TO DEATH = (d1 X d2 Xdn where dn is the day of death for each animal and surviving animals are assigned a value of 28 days).

VR= GMTD of experimental treated/ GMTD of DILUENT treated controls.

* DOSE LISTED WAS DIVIDED IN HALF AND ADMINISTERED TWICE EACH DAY.

CONTRACT DAMD17-86-C-6013
SOUTHERN RESEARCH INSTITUTE
FILENAME: VEE.SUM
UPDATED: 12/14/87 : ADB

CUMULATIVE SUMMARY OF IN VIVO TEST RESULTS
 -VACCINIA VIRUS INFECTED IV: TAILPOX MODEL-

EXPT NO.	AVS NO.	DOSE (MG/KG)	RTE & SCHEDULE	TOX. DEAD/TOTAL	INFECTED			PERCENT REDUCT. (T/C)	
					NO.	MED	POX COUNTS MEAN		
1	0001	150	IP: Q1D X 7, DAY-1	0/5	18	23.5	29.9	30.0	50
11	1752	400	SC: Q1D X 7, DAY-1	0/5	20	7.5	24.4	29.8	57
11	1752	400	IP: Q1D X 7, DAY-1	0/5	18	30.0	46.2	52.3	20*
8	1752	300	SC: Q1D X 7, DAY-1	0/5	20	13.0	24.3	31.8	58
10	1752	300	IP: Q1D X 7, DAY-1	0/5	19	6.0	20.1	29.5	52
12	1752	300	IP: Q1D X 7, DAY-1	0/5	20	34.5	33.1	19.1	44
16	1752	300	IP: Q1D X 7, DAY-1	0/5	18	36.5	41.9	36.4	44
8	1985	293	IP: Q1D X 7, DAY-1	0/5	20	24.5	26.1	23.0	55
10	1985	325	IP: Q1D X 7, DAY-1	0/5	19	20.0	42.2	48.5	5
11	1985	325	IP: Q1D X 7, DAY-1	0/5	19	30.0	36.0	24.1	37*
10	1986	300	IP: Q1D X 7, DAY-1	2/5	11	5.0	19.5	26.1	54**
8	1986	250	IP: Q1D X 7, DAY-1	0/5	18	21.0	35.7	36.3	38
11	1986	100	SC: Q1D X 7, DAY-1	0/5	20	14.0	18.5	19.8	69
16	2875	300	IP: Q1D X 7, DAY-1	0/5	19	47.5	47.3	22.5	50
16	4225	300	IP: Q1D X 7, DAY-1	0/5	19	31.0	41.0	32.4	43
8	H2O CONTROL		IP: Q1D X 7, DAY-1	0/5	19	54.0	58.3	24.1	-
10	H2O CONTROL		IP: Q1D X 7, DAY-1	0/5	17	36.0	42.2	30.4	-
11	H2O CONTROL		IP: Q1D X 7, DAY-1	0/5	19	57.0	57.4	28.1	-
11	H2O CONTROL		SC: Q1D X 7, DAY-1	0/5	15	60.0	60.3	26.8	-
12	H2O CONTROL		IP: Q1D X 7, DAY-1	0/5	17	62.0	59.5	20.7	-
16	DMSO CONTROL		IP: Q1D X 7, DAY-1	0/5	18	95.0	94.6	19.5	-
16	UNTREATED		IP: Q1D X 7, DAY-1	0/5	19	104.0	101.0	37.0	-

TOX = TOXICITY; NUMBER DEAD/TOTAL NUMBER OF UNINFECTED ANIMALS AT START OF RX.

NO. = NUMBER OF ANIMALS ALIVE ON DAY OF EVALUATION (i.e. 24hrs POST RX)--TEST ROUTINELY BEGINS WITH 20 ANIMALS.

MED = MEDIAN POX COUNT PER ANIMAL.

SD = STANDARD DEVIATION.

PERCENT REDUCTION = $\frac{\text{MEAN POX CT OF TEST (T)} - \text{MEAN POX CT OF DILUENT CONTROL (C)}}{\text{MEAN POX CT OF DILUENT CONTROL}}$

(EXPRESS T/C REDUCTION IN PERCENT.)

* = COMPOUND FOR IP TREATMENT WAS PREPARED AND ADMINISTERED AS 0.2ML/10 GM. OF BODY WEIGHT.

** = DOSE OF 350 WAS TOXIC AND REDUCED TO 300 MG/KG ON DAY 0.

CONTRACT DAMD17-86-C-6013
 SOUTHERN RESEARCH INSTITUTE
 FILENAME: VVPOX.SUM
 UPDATED: 03/28/89 : ADB

CUMULATIVE SUMMARY OF IN VIVO TEST RESULTS

-VACCINIA(VV) VIRUS IN CD-1 MICE-
(INTRACEREBRAL INOCULATION)

EXP. NO.	CMPD #	DOSE (MG/KG)	RX RTE & SCHEDULE	UNINFECTED		INFECTED			
				DEAD/TOTAL	ADD	DEAD/TOTAL	ADD	GMTD	VR
4	AVS-1752	150	SC; Q1D X 7, DAY-1	0/5	--	1/10	8.0	24.7	4.1
4	AVS-1752	150	IP; Q1D X 9, DAY-1	0/5	--	1/10	8.0	24.7	4.9
4	AVS-1985	293	IP; Q1D X 9, DAY-1	0/5	--	10/10	5.2	5.0	1.0
4		146.5		0/5	--	10/10	5.0	5.0	1.0
4		73.3		0/5	--	10/10	5.0	5.0	1.0
4	AVS-1987	320	IP; Q1D X 9, DAY-1	0/5	--	10/10	5.1	5.1	1.0
4		100		0/5	--	10/10	5.1	5.1	1.0
4		32		0/5	--	10/10	5.4	5.4	1.1
4		10		0/5	--	10/10	5.2	5.2	1.0
4	UNTREATED CONTROL		--	0/5	--	9/10	5.1	6.0	1.2
4	SHAM-INFECTED		--	0/10	--	--	--	--	--
4	PBS CONTROL		SC; Q1D X 7, DAY-1	0/5	--	9/10	5.1	6.0	1.0
4	H2O CONTROL		IP; Q1D X 9, DAY-1	0/5	--	10/10	5.1	5.0	1.0

EXPT #4--IC CHALLENGE; CD-1 MICE ARE INFECTED INTRACEREBRALLY WITH AN LD90 DOSE OF VACCINIA VIRUS -STRAIN IHD.

ADD= AVERAGE DAY OF DEATH(SURVIVORS NOT INCLUDED IN CALCULATIONS).

GMTD= GEOMETRIC MEAN TIME TO DEATH = (d1 X d2 Xdn where dn is the day of death for each animal and surviving animals are assigned a value of 28 days).

VR= GMTD of experimental treated/ GMTD of DILUENT treated controls.

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