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AMES BIOASSAY OF EXHAUST SOLUBLE ORGANICS EMISSIONS

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Contract No. 68-03-2923

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Prepared for

ENVIRONMENTAL PROTECTION AGENCY
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This report was furnished to the Environmental Protection Agency by Microbiological Associates, 5221 River Road, Bethesda, Maryland 20816, in fulfillment of Contract 68-03-2923. The contents of this report are produced herein as received from Microbiological Associates. The opinions, findings, and conclusions expressed are those of the author and not necessarily those of the Environmental Protection Agency. Mention of company or product names is not to be considered as an endorsement by the Environmental Protection Agency.

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This report summarizes the results obtained from the testing of 201 extracts of engine exhaust particulates in the Salmonella/ Mammalian-Microsome Mutagenicity Assay (Ames Test) from June 1980 to December 1982 by Microbiological Associates (Microbiological Associates purchased EG&G Mason Research Institute's Genetic Toxicology Laboratory in January 1982). The samples have been subdivided into 23 different groups determined by the experimental procedures used to generate the samples.

The workscope for this project consisted of the following segments:

1. The EPA collected methylene chloride soxhlet extracts of exhaust particulate samples captured primarily from diesel engines operated under various experimental conditions.

2. The samples were shipped to Microbiological Associates where they were evaluated for mutagenic activity using the Ames test. The exact experimental protocol used for these studies will be discussed in detail in the body of this report.

3. Once the data from the Ames test was collected it was sent to the Data Management Branch of the EPA's Biometry Division in RTP in North Carolina where it was entered into a computerized data base and was then statistically analyzed using the method of Stead, et al (1,2).

The overall objective of the project was to gather sufficient data to compare the mutagenic activity in exhaust from different engine types under different load conditions using different fuel mixtures.

The Ames test is a logical choice for evaluating the mutagenic activity of exhaust particulate extracts as it has been clearly shown to be a sensitive indicator of such activity and it is economical in terms of time and cost when compared to other mutagenicity test systems.

This report will not attempt to discuss the comparisons of mutagenic activity present in the samples described herein, but will make such comparisons easier by the extensive compilation and tabulation of the key data from the Ames tests and subsequent statistical evaluation.

BACKGROUND

It is recognized that there are well over 50,000 chemicals presently in use in this country with a conservative estimate of 600-800 new chemicals being synthesized each year. The percentage of these chemicals which are potentially genetically active is not known. However, any chemical to which we are exposed in our environment and which exhibits genetic activity should be considered potentially harmful for at least two reasons:

A. the chemical could cause detrimental mutations in germ cells which could increase the genetic load of the human population, and

B. the chemical could cause somatic mutations which are thought to be at least in part the cause of neoplastic transformations in animals and in man.

It is imperative that we have the ability to quickly identify the dangerous chemicals in our environment in order to remove them or control their levels of use. Long term bioassays are not the solution as these assays are extremely time consuming and expensive. The inability of long term in vivo assays to evaluate large numbers of chemicals in a timely manner clearly reinforces the need for rapid, sensitive, and reliable in vitro assays for screening large numbers of compounds for genetic activity. Chemicals found active in these screens could then be further evaluated in test systems utilizing higher organisms.

The Salmonella/Mammalian-Microsome Assay (Ames test, as it is often referred to after its developer, Dr. Bruce Ames) is one in vitro test that has been successfully utilized around the world as a screening tool for the detection of chemicals with potential genetic activity. Its short duration, sensitivity and economy have resulted in its inclusion in almost every comprehensive battery of tests designed to detect genetic activity. Its use as a screening tool by the EPA's ECTD is a good example of the role assigned to this versatile test system.

The induction of mutations, even by very powerful mutagens, is a rare event which requires large test populations in order to be detected at statistically significant levels. Whereas sample sizes rarely exceed 10^3 individuals in in vivo rodent test

systems, target populations in bacterial test systems easily exceed 10^8 individuals and thus provide much greater resolving power in the detection of induced mutations. Of the bacterial test systems currently available, the Ames test is the most widely used for detecting gene mutations. This assay has proven to be an extremely sensitive, reliable and economical assay for the routine screening of environmental samples for mutagenic activity. (3,4,5,6,7)

Ames has developed a number of extremely sensitive tester strains for use in mutagenesis screening. Among the most useful have been strains TA1535, TA1537, TA1538, TA98 and TA100 (8). Each of these strains possesses a mutation in the histidine operon which renders it dependent upon the presence of exogenous histidine for growth. Mutagenic activity is detected by the induced reversion of one or more of these tester strains to histidine prototrophy on selective medium. Since base substitution mutations are reverted only by base substitution mutagens and frame-shift mutations are reverted only by frame-shift mutagens, in a reverse mutation assay like the Ames test, it is necessary to use more than one tester strain in order to detect both base substitution and frame-shift mutagens.

All of the tester strains contain, in addition to a mutation in the histidine operon, two more mutations which enhance their sensitivity to some mutagenic compounds. The <u>rfa</u> mutation causes a loss of one of the enzymes responsible for the synthesis of part of the lipopolysaccharide layer of the cell wall. The

resulting cell wall deficiency increases the permeability of the cell to compounds possessing large ring systems (9).

The second mutation is a deletion in the uvrB gene which results in a deficient DNA excision-repair system (9). This deficiency results in greatly enhanced sensitivity to some mutagens. Since the uvrB deletion extends through the bio gene, all of the tester strains containing this deletion also require the vitamin biotin for growth.

Strain TA1535 possesses a missense mutation, hisG46, that alters one codon of the gene coding for the first enzyme of the histidine biosynthetic pathway (9). This resulting defective protein cannot function normally in the synthesis of histidine.

The hisG46 mutation is a missense mutation where a G-C base pair substitution has occurred for an A-T base pair (10). Reversion to histidine prototrophy presumably occurs primarily by the A-T base pair substitution for the aberrant G-C base pair.

Tester strain TA100 is identical to TA1535 except that TA100 possesses the R-factor plasmid, pKM101. The presence of this plasmid greatly enhances the sensitivity of the tester strains to many chemical mutagens. The mechanism by which this plasmid increases sensitivity to mutagens has been suggested to be due to its coding for an error-prone DNA repair polymerase (11,12).

Strain TA1537 possesses a frame-shift mutation, hisC3076, caused by an addition of a single base pair to the hisC gene (9). Like TA98, it is reverted by compounds which cause base additions

or deletions that are generally of a different class of frame-shift mutagens than those which revert TA98.

Strains TA1538 and TA98 possess a frame-shift mutation, *his*D3052, which is in the gene coding for histidine dehydrogenase. It has been suggested that this frame-shift mutation is located near a repetitive sequence of eight -GC- bases which represents a "hot spot" in the DNA (13). This mutation is reverted by mutagens which cause base pair additions or deletions. Like TA100, TA98 possesses the pKM101 plasmid and is therefore often more sensitive to certain frame-shift mutagens than is TA1538.

TA1535, TA1537, TA1538 and the plasmid containing strains TA98 and TA100 have been used routinely as part of most mutagen screening programs utilizing *Salmonella typhimurium*. In addition, Ames and co-workers have developed additional tester strains which either have specialized applications or exceed the sensitivity of currently used tester strains under the same conditions (14,15,16).

While the basic test system described above is immediately valuable in detecting many direct acting mutagenic compounds, it is ineffective in detecting promutagens, those compounds which require metabolism by NADPH-dependent mammalian microsomal enzymes to become mutagenic. Bacteria lack these enzymes and so are incapable of effecting the metabolic transformations necessary for the conversion of most promutagens to mutagens. To alleviate this deficiency, Ames and co-workers refined the

Salmonella mutagenesis assay to incorporate a mammalian microsomal fraction in the soft agar overlay (17). This system successfully activates a wide range of promutagens.

While most mammalian tissues are capable of activating promutagens, the liver is the body's major site of this type of metabolism. The microsomal multienzymatic complex prepared from liver is capable of catalyzing a variety of reactions necessary for activating different classes of promutagens. As examples, the amino, dimethylamino and acetylamino groups of a variety of compounds are converted to mutagenically active nitroso-hydroxylamino and hydroxylacetylamino derivatives (18). In addition, many polycyclic hydrocarbons are converted to potent mutagenic epoxides (18).

For routine screening of compounds Ames recommends using microsomal preparations (S-9) from the livers of Aroclor 1254 induced rats (8,14). Although a wide variety of compounds will induce microsomal enzymes including drugs, food additives, pesticides and polycyclic hydrocarbons (19), for general screening purposes Ames recommends using Aroclor 1254 because of its induction of a broad spectrum of enzymatic activity including the various P-450 cytochromes. For activating specific known compounds, other inducing agents or other tissues or animals may be more appropriate.

The standard plate incorporation assay using Aroclor 1254 induced rat liver is not effective for detecting all classes of promutagens. Short chained nitrosamines (8,20), safrole (4), and

some azo dyes (4,21) are examples of test materials that are not readily detected in the standard assay.

A number of workers have demonstrated that hamster S-9 is more efficient for certain chemicals such as the nitrosamines (20,22), azo dyes (21), p-rosaniline (3),and phenacetin (23). We have used both Aroclor 1254 induced rat and hamster S-9 routinely in parallel assays for the past four and one-half years and have found the hamster S-9 to be very valuable in clarifying weak mutagenic responses and have in fact found some promutagens that were activated only by hamster S-9 and not rat S-9.

A second modification that has enhanced the sensitivity of the Ames test is the preincubation method, originally described by Yahagi (23). A number of chemicals are more readily or only detected using the preincubation approach. These include many nitrosamines (24,25), azo dyes (21,23) formaldehyde (26) and classical mutagens such as aflatoxin B_1, benzidine, benzopyrene (27) and 2-aminoanthracene (28).

One clear limitation of the preincubation method however, is its sensitivity to the cytotoxic effects of the test article or of some useful solvents such as ethanol or acetone (29). Our laboratory has documented at least one case where a very cytotoxic but weak mutagen would be judged negative using the preincubation method but would be detected as a mutagen in the plate incorporation assay (26). Due to the cytotoxicity of the test article, a lower range of concentrations was tested in the preincubation assay.

There is now little question about the effectiveness of the Ames test as a general screening tool for mutagens. Journals such as Mutation Research and Environmental Mutagenesis are full of examples of the versatility of this test system. To cite the varieties of chemicals and complex mixtures that have been tested is beyond the scope of this document, but the examples include body fluids, cigarette smoke, industrial air and water effluents, foodstuffs, pharmaceuticals, and internal combustion engine by-products.

Much attention has been focused on the potential genetic activity of diesel exhaust in recent years. As early as 1978, Huisingh, et al (30) reported that extracts of diesel exhaust particulates were mutagenic in the Ames tests. With projected dramatic increases in light-duty diesel powered vehicle use in this country coupled with evidence of its potential carcinogenicity (31), the Government and the automotive industry greatly expanded their efforts to determine if diesel exhaust represented a serious genotoxic health threat to the increasingly exposed human population. Since 1978, much effort has been expended in characterizing the emissions from both diesel and gasoline powered vehicles. The Ames test has played a major role in the evaluation of these emissions for the presence of genetic activity. Reports in the literature have indicated the presence of at least 200 different chemical entities in diesel exhaust (32). Many of these chemicals have been demonstrated to be mutagenic in the Ames test or other short-term test systems and some have been identified as animal carcinogens. A large number

of the Ames positive chemicals are nitro substituted polyaromatic hydrocarbons (PAH).

An as yet unresolved dilemma concerns the possible artifactual creation of mutagens in diesel exhaust during the sample collection process. It has been demonstrated that passage of nitrogen oxides across a PAH compound present on a filter can generate a nitroarene that is a direct acting mutagen in the Ames test (33,34).

There is little doubt that regardless of artifactual contributions of mutagens by the collection process, diesel exhaust particulates do contain mutagenic materials that are extractable by organic solvents. A question of interest however is, are these tightly bound mutagens released upon entrapment in the lung or entry into the digestive tract? Weak mutagenic activity has been demonstrated with simulated biological fluid extracts of diesel particulates (35,36). The observed mutagenic activity was greatly decreased over that observed when the same particles were extracted with methylene chloride, however.

METHODOLOGY

General Approach

Exhaust particulates collected on filters were subjected to a 24-hour soxhlet extraction with methylene chloride. After determining the percent organic extractables present in the sample, the solvent was exchanged for dimethyl sulfoxide (DMSO) and the sample was then sent to EG&G/Microbiological Associates to be tested in the *Salmonella*/mammalian-microsome plate incorporation mutagenicity assay (Ames Test).

Each sample was assayed at least twice in the Ames test in two separate experiments conducted over a period of several weeks. Each Ames test was conducted using up to five *Salmonella typhimurium* strains, TA98, TA100, TA1535, TA1537 and TA1538 both with and without metabolic activation by Aroclor induced liver microsomes. Very often, when the amount of available test article was limited, only one or two tester strains were used. Five dose levels of each exhaust sample were tested in triplicate. When possible, the top dose level was toxic to the tester strains to ensure that the highest practical dose level had been tested. Each tester strain was thoroughly checked for the presence of the rfa mutation and the pKM101 plasmid where appropriate was run with appropriate solvent and positive controls.

Media Preparation and Identification

Supplemented Top Agar Preparation

All of the top agar required for the day's assays was melted at the same time and was then maintained in a water bath at approximately 50°C. To those bottles containing top agar to be used on plates without metabolic activation, 25 ml of sterile, deionized distilled water was pipetted aseptically. Two and one-half ml of this agar was added per overlay tube. Those bottles containing top agar to be used with metabolic activation did not receive additional H_2O. Only 2.0 ml of this agar is dispensed per overlay tube. However, 0.5 ml of S-9 mix will also be added to the overlay tube at the time of plating. The procedure just described yields the same total plating volume with or without activation and ensures that the histidine-biotin supplement is the same both with and without metabolic activation. Bottles containing agar for use in the strain titering and characterization procedures was labeled 10XSA by the same method described above.

1XSA Top Agar for Use with Metabolic Activation

On the day of its use, an appropriate number of bottles each containing 100 ml of solidified top agar was sufficiently heated to melt the agar and maintained in a water bath set at approximately 50°C. To each bottle was added 10 ml of 1XSA histidine-biotin supplement. The batch number of the top agar and the batch number of the 1XSA supplement was recorded.

1XSA Top Agar for Use Without Metabolic Activation

On the day of its use, an appropriate number of bottles, each containing 100 ml of solidified top agar, was sufficiently heated to melt the agar and maintained in a water bath at approximately 50°C. To each bottle was added 10 ml of 1XSA histidine-biotin supplement and 25 ml of sterile deionized, distilled H_2O. The batch number of the top agar and the batch number of the 1XSA supplement was recorded.

10XSA Top Agar Preparation

On the day of its use, an appropriate number of bottles, each containing 100 ml of solidified top agar, was sufficiently heated to melt the agar and placed in a 50°C water bath. To each bottle was added 10 ml of 10XSA histidine-biotin supplement. The batch number of the top agar and the batch number of the 10XSA supplement was recorded.

Bottom Agar

Vogel Bonner minimal bottom agar was routinely prepared in 5 liter batches and dispensed in 25 ml aliquots into 15 x 100 mm sterile plastic petri dishes. Each agar batch consisting of approximately 200 plates was given a unique sequential number, and the lid of each plate containing agar from that batch was stamped in permanent ink with that number. Documentation of this procedure was recorded in the appropriate section of the media notebook.

The same agar batch number was used for plating of a given strain throughout the assay, including strain titer, strain characterization, mutagenesis assay both with and without metabolic activation, and positive controls.

Tester Strain Diluent

On the day of its use, the diluent was prepared as follows:

85 ml of sterile, deionized distilled H_2O was decanted into a 100 ml sterile graduated cylinder. The H_2O was then decanted into a sterile 125 ml screw cap bottle. To the bottle was added, by sterile glass pipets, 5.0 ml of a sterile 20X Vogel Bonner salt solution and 10 ml of sterile Oxoid Nutrient Broth No. 2. The contents of the bottle were mixed thoroughly by swirling. The batch numbers of the 20X Vogel Bonner salts and the Nutrient Broth were recorded.

Inoculation Procedure for Overnight Cultures

A frozen aliquot of tester strain to be cultured was removed from the liquid nitrogen freezer and allowed to thaw (approximately 5 minutes). A 250 ml glass Erlenmeyer baffled shake flask, with a stainless steel cap, was filled by aseptically decanting approximately 50 ml of sterile Oxoid Nutrient Broth No. 2 from a 500 ml glass screw cap bottle. A flask was filled for each culture to be inoculated, plus one extra flask which was designated as "control". A loopful of thawed aliquot was

aseptically transferred to the appropriate labeled shake flask. The remainder of each thawed aliquot was discarded. The inoculated shake flasks were transferred to a 37°C shaker incubator.

Cultures were incubated overnight and removed when they had achieved a predetermined optical density as indicated by reading a sample of the culture on a spectrophotometer. The optical density and any manipulations of cultures to be used in the assay were recorded. As each culture reached the proper density, it was transferred to a 4°C refrigerator until its use in the day's assays.

Frozen aliquots of tester strains were identified by strain designation and the freeze date of the aliquot. The source of the inoculum for the frozen aliquots, and all pertinent tester strain and freeze information, was recorded below the freeze date in the Cell Freeze Notebook, WL-31. The freeze date of the aliquot used to inoculate cultures of the tester strains was recorded.

Plate Labeling Procedures

A felt tipped pen containing permanent ink was used to label all plates. All markings were placed on the side of the bottom of the petri dish.

Each tester strain titer plate was labeled with the following information: tester strain, batch number, total

dilution factor, and date of the experiment. An example of this method would be:

TA100 5/25	2×10^7	5/26
batch number	total dilution factor	date of experiment

Tester Strain Characterization

Each tester strain characterization was labeled with the following information: tester stain batch number, the letters "AMP" (abbreviation for ampicillin), a plus sign, the letters "CV" (abbreviation for crystal violet), and the date of the experiment. An example of this method would be:

TA100 5/25	AMP + CV	5/26
tester strain batch	ampicillin crystal violet abbreviation	date of experiment

Mutagenesis Experiment

Each plate in the mutagenesis experiment was labeled with the test article MRI#, an experiment ID, a tester strain code number, a test article dose level code number, and the letter "A" if the plate contained liver microsomes. The code numbers for the tester strains were:

1 - TA98

2 - TA100

3 - TA1535

4 - TA1537

5 - TA1538

The dose level code numbers were:

0 - Solvent

1 - Highest test article concentration

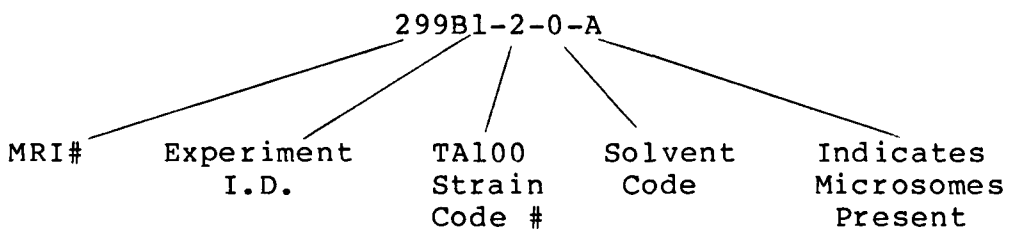
2 - Next highest test article concentration

3 - Intermediate test article concentration

4 - Next lowest test article concentration

5 - Lowest test article concentration

An example of this labeling method would be:



Positive Controls

Each positive control plate was labeled with the positive control chemical code, the tester strain batch number, the word "on", and the date of the experiment. The codes for the standard positive control chemicals were:

- 2AA; 2-Aminoanthracene
- PS; 1,3-propane sultone
- 9-AAD; 9-aminoacridine
- 2NF; 2-nitrofluorene

An example of this labeling method is:

2AA	TA100 5/25	on	5/26
positive control chemical code	tester strain batch #		date of experiment

Preparation and Storage of Liver Homogenate Used in Preparing the Microsomal Enzyme Activation Mixture

Liver homogenate was prepared from livers excised from Fischer 344 male rats. Five days before sacrifice, the animals were injected i.p. at 500 mg/kg with a 200 mg/ml suspension of Aroclor 1254 in corn oil. The animals were given food and water *ad libitum* until 12 hours before sacrifice, when they were denied access to food.

The animals were sacrificed by decapitation. After sacrifice, the animal was immediately transferred to a $4^{o}C$ cold room where the remainder of the extraction procedure was carried out.

The animal was pinned to a dissecting board, swabbed freely with 95% alcohol about the thorax and abdomen, and dissected with sterile scissors.

The liver was usually extracted in three or four pieces, with care being taken not to penetrate the pleural cavity or digestive tract.

The excised liver was placed in a pre-weighed beaker containing approximately 30-40 ml of 0.15 KCl. The livers from two animals were pooled in one beaker. After weighing the livers, the KCl was decanted and the livers were washed again with approximately 40 ml of 0.15M KCl.

The weighed livers were placed in two volumes of 0.15M KCl (2 ml/g tissue) and minced with scissors. The livers from two rats were minced and immediately homogenzied using a 55 ml Bellco homogenizer with a teflon pestle attached to an electric variable speed drill. Each batch of liver was homogenized by two complete cycles of the pestle through the length of the homogenizer tube at low speed. The homogenate was distributed into 50 ml polycarbonate centrifuge tubes and centrifuged at 9000 x g at $4^{o}C$ for 10 minutes.

After removal of the fatty surface layer, the supernatant was decanted into a large sterile bottle. After all supernatants were collected and pooled, aliquots of appropriate size were distributed into freezing ampules which were then stored in liquid nitrogen or in a $-80^{o}C$ ultra low freezer.

Determination of Liver Homogenate Activity

Each new batch of liver homogenate was checked for activity by plating reaction mixtures containing from 10 ul to 100 ul per ml of homogenate with benzo(a)pyrene, 2-aminoanthracene, 2-aminofluorene, and 4-aminobiphenyl.

S-9 Mix Storage

A single batch of S-9 mix was prepared for the day's assays. The S-9 mix was stored in a refrigerator in an ice bath when it was not being dispensed in a plating experiment. The S-9 mix was stored in an ice bath when being dispensed in a plating experiment.

Recipe for 1 ml of S-9 Mix

Before the S-9 mix was formulated, the total volume necessary for the day's assays was determined and recorded in the S-9 mix log. The total volume of each day's ingredients was then calculated and recorded on the form. The sum of the required volume of the the individual ingredients was totaled and verified as being equal to the required total volume originally entered on the form. Once verification was completed, the ingredients were aseptically added in descending order by glass pipets to a 250 ml screw-cap Erlynmeyer flask maintained in an ice bath. Documentation of these procedures was recorded as shown in Figure 1.

deionized distilled H_2O	0.56 ml
1.0M NaH_2PO_4/K_2HPO_4, pH 7.4	0.1 ml
0.05M Glucose-6-phosphate	0.1 ml
0.04M NADP	0.1 ml
1.65M KCl	0.02 ml
0.4M $MgCl_2$	0.02 ml
S-9 liver homogenate	0.1 ml

Figure 1

CHECK LIST - S-9 MIX

Batch No. _____ Date Prepared _____

Ingredients for 1 ml added in the order listed:

	Batch No.	Amount per ml*	Amount added	Initials
Water, sterile deionized		_____	_____	_____
1M sodium-potassium phosphate buffer	_____	0.1	_____	_____
0.05M glucose-6-phosphate	_____	0.1	_____	_____
0.04M NADP	_____	0.1	_____	_____
1.65M KCl	_____	0.02	_____	_____
0.4M $MgCl_2$	_____	0.02	_____	_____
S-9 homogenate	_____	_____	_____	_____
Total Volume		_____	_____	_____

* Total volume in this column must equal 1 ml.

TEST ARTICLE STORAGE AND DILUTIONS

Most of the samples were received as blown down extracts shipped in dry ice. The samples were stored at -80°C after receipt by Microbiological Associates. A small percentage of the samples were received already dissolved in DMSO. These were also stored as described above.

Approximately 70% of the samples were received subdivided into two or three aliquots. This enabled us to dissolve the extract in DMSO and prepare the dosing solutions immediately before they were used in the mutagenicity assay. In those cases where only one aliquot of an extract was received, the entire extract was dissolved in DMSO and the dosing solutions were frozen after their initial use. For the repeat experiment, the frozen dosing solutions were thawed immediately before their use in the repeat assay. We did not notice any consistent reduction in mutagenic activity due to the freeze thaw methodology.

Dose Range Selection

Due to the limited quantities of extracts and due to the fairly consistent toxicity characteristics of the extracts, dose range finding studies were not conducted. Instead, if sufficient extract was available, a top concentration of 2,000 ug per plate was used in the initial mutagenicity assay. When there was insufficient extract available, the dose range was lowered appropriately. In those cases where the sample was cytotoxic at the higher doses, the dose range was lowered appropriately in the

repeat assay. Five dose levels separated by one-half log intervals were routinely plated. Depending upon the amount of extract available, an appropriate number of tester strains, as designated by the Project Officer, would be plated with each sample.

Mutagenesis Plating Procedure

General Description

The mutagenesis assay of each extract was conducted by first plating the appropriate dose levels of the test article on the appropriate tester strains with metabolic activation, and then the same dose levels of the test article were plated on all of the tester strains without metabolic activation. The tester strains used in the experiment were fresh overnight cultures inoculated the previous day. Aliquots of each tester strain culture were pipetted into two capped 13 x 100 mm glass tubes which were stored at $4^{o}C$ until used in the assay. One of the tubes contained cells used in the plating with activation and the other tube contained cells used in the plating without activation. The plating sequence for a test article was to plate the solvent first and then proceed from the lowest test article dose level up to the highest test article dose level.

Plating Procedures with Metabolic Activation

Two ml of 1XSA top agar will be added, using a 5 ml Cornwall Syringe, to an appropriate number of 13 x 100 mm glass culture

tubes maintained in constant temperature blocks preheated to $45^{o}C$, $\pm$ $0.5^{o}C$. One-half ml of S-9 mix was dispensed by Re-Pipettor to six of the glass tubes. To each of the same six tubes was micropipetted 50 ul of an appropriate tester strain culture with a titer of approximately 1×10^{9}/ml. Immediately thereafter, a 50 ul aliquot from the lowest test article concentration was micropipetted to the three remaining inoculated tubes. The first tube inoculated was then vortexed and its contents were poured onto 25 ml of Vogel Bonner minimal bottom agar contained in a sterile plastic petri dish. The remaining tubes were then plated in the same manner. The plating sequence always followed the delivery sequence of solvent or test article dilutions. After all six of the above tubes were plated, the sequence of procedures was repeated using the same S-9 mix and tester strain until all the test article dose levels were plated. The flask containing the S-9 mix was swirled gently immediately before dispensing each group of six aliquots to assure equal distribution of microsomes.

The plating sequence described above will be repeated exactly each time using a different tester strain until all tester strains have been plated with activation.

Plating procedures without metabolic activation were exactly like those with metabolic activation, except that 2.5 ml of 1XSA top agar per plate was used and no liver microsomes were added.

After each plate was poured, it was placed upon a level surface until the top agar had solidified. After all the plates had solidified, they were stacked inverted in an appropriate container and placed in a 37°C incubator for 48 hrs. After the 48 hr. incubation period, the plates were removed from the incubator and the number of colonies on each plate was counted and recorded. If the plates could not be counted immediately, they were stored at 4°C until they could be counted.

Positive Controls

Positive controls were included with each day's assays to show that each tester strain was responding to a known mutagen in an appropriate manner and to show that the S-9 mix was capable of activating a known promutagen to induce an appropriate number of revertants per plate. The positive control/strain combinations are shown below.

2-aminoanthracene	All strains	1 ug/plate
1,3-propane sultone	TA100, TA1535	0.04 ul/plate
2-nitrofluorene	TA98, TA1538	10 ug/plate
9-aminoacridine	TA1537	75 ug/plate

Tester Strain Titer Determination

Determination of the tester strain titers yields results that give a general indication of the health of the overnight cultures. All cultures were harvested at an optical density that yields cultures with titers of approximately 1×10^9/ml. At this density, the cultures are in late log stage of growth. Allowing

the cells to go further into stationary phase could lower the overall sensitivity of the culture to some mutagens due to the lowered physiological state. Titers of much less than 1×10^9/ml are fully viable, but may not allow for optimal test article-tester strain interaction.

Tester Strain Characterization

Each overnight culture was checked to ensure that it possessed the proper genotype. The following characteristics were checked:

(1) Ampicillin Resistance, which indicated that the pKM101 plasmid was present in the TA98 and TA100 cultures.

(2) Crystal Violet Sensitivity, which indicated that the rfa wall mutation was present in the individual cultures.

(3) A spontaneous reversion frequency that was historically characteristic of the respective tester strains of *Salmonella typhimurium* used. This also indicated the presence of the pKM101 plasmid in the TA98 and TA100 cultures.

Modeling the Ames Test

All of the data generated under this contract was forwarded to the Biometry Division of the EPA's Health Effects Research Laboratory in Research Triangle Park, North Carolina. A detailed description of the statistical evaluation conducted by that Division has been published elsewhere (1,2).

For the purposes of this report, I am including excerpts of a memorandum discussing the statistical evaluation used for these studies as originally written by Robert W. Dickinson, CTAB. This communication was dated March 4, 1981 and was sent to Charles L. Gray, Director, ECTD through Karl H. Hellman, Chief, CTAB.

Within the past few months, we received some of the long awaited and much sought after Ames test data. These data were analyzed by Larry Claxton and other HERL personnel using a computer program that produces a statistical model of the Ames test. The following is an explanation of the basis for this computer program and of the data it produces.

The Ames test has become a standard laboratory procedure, but the analyses and reduction of data derived from this test are still rather arbitrary and not consistent from laboratory to laboratory. Results from different laboratories are difficult to compare quantitatively, and results from a single laboratory are considered quantitatively comparable only when the tests are run on the same day.

A detailed discussion of Dr. Claxton's model is contained in an addendum to this paper. Only some general aspects and a definition of specific activity will be given here. Dr. Claxton's model differs from other models by being based on a Poisson distribution instead of a normal distribution. The Poisson distribution is an accepted and established method for describing count data. Its use is valid if the following two criteria are met: 1) each cell has an equal chance of mutating,

and 2) if the variance of the plate counts divided by the means of the plate counts approximates one variance of plate counts = mean of the plate counts. In the majority of cases, this is true of the Ames tests.

For Dr. Claxton's model, the specific activity and slope are essentially the same. The slope value represents the average slope of the curve from the 0 dose level to the maximum dose level (the maximum dose level being the highest dose level that does not show effects of toxicity (explained in addendum), or the rate of formation of revertants.) The specific activity is the number of revertants at a certain dose level as projected by the slope value, i.e., if the slope value is 2 revertants/microgram, the specific activity at 200 ug is 200 times 2 or 400 revertants. Therefore, at a one microgram dose level, the specific activity and slope value are the same. For the rest of this memo, the specific activity dose level is assumed to be one microgram.

When comparing Dr. Claxton's model to a model based on a normal distribution, one should observe the two following events. The specific activities derived by Dr. Claxton's model should be generally higher than those derived by a model based on a normal distribution. This is to be expected since Dr. Claxton's model compensates for toxicity. Toxicity is the lethal effect a substance has on the bacteria used in the Ames test. This lethal effect lowers the specific activity since it reduces the number of bacteria which can mutate. If the toxicity of the sample were negligible, one would expect the specific activities derived by

the two models to be approximately the same. These two events were observed in the Ames data and help substantiate the use of this model.

The computer program also gives 95% confidence limits for the specific activity. A 95% confidence limit means that there is a 95% chance that the actual value falls within the range of the values given as limits. If the confidence limits for specific activities of two samples overlap, they are not statistically different. Unfortunately, the significance is not clear when specific activities of samples do not overlap. In this group of data, 90 tests were repeated. Of these 90 tests, the specific activity confidence limits of 36 samples did not overlap with the specific activity of the repeat test (using the original sample material). This was not due to sample decomposition, since, neither the initial tests nor the repeat tests were consistently higher or lower than the other. This observation leads one to question the assumption that a statistically different Ames test response indicates a significant difference in mutagenicity.

The effect of toxicity on specific activity was mentioned previously. In developing his model, Dr. Claxton uses a parameter he describes as a toxicity parameter. In a classic positive Ames test dose response curve, there is an initial increase in the number of revertant colonies and a following decrease in the number of revertant colonies. The "toxicity parameter" estimates this decrease in the number of revertant

colonies. The parameter is not an actual measure of toxicity but, rather, a measure of the lack of mutagenic response. Further, the "toxicity parameter" uses a decay curve to approximate the decrease in the number of revertants. This approach allows for a rough estimate of the toxicity, but does not generate precise numerical values. The "toxicity" values given in the tables indicate that toxicity is present, but these values should not be used for comparative purposes for reasons already mentioned.

The final value which the computer program calculates is the specific activity calculated by the linear model. It is included as a comparative value to give an idea of the difference between the two models. The linear model value may be used instead of Poisson if a researcher so desires.

ADDENDUM

This discussion of the Ames test data reduction system used by Dr. Claxton shall center around the specific activity it calculates. Microbiological Associates feels justified in using this approach because the specific activity is the focus of interest. An in-depth discussion of the statistics and mathematics underlying the model calculations can be found in a paper entitled "Modeling the Ames Test" by Andrew Stead, et al. This discussion will be limited to the explanation of the subjects which appear as headings on the previous tables.

The discussion will begin with an explanation of the 3 and 4 parameter models and the importance of their convergence to specific activities. It is always best to begin at the beginning, so, the following is a definition of the parameters:

B_o - spontaneous reversion counts
(background counts)

B_1 - scale and noise parameter
(compensates for laboratory variations)

B_2 - rate of revertant colony formation

B_3 - rate at which system becomes toxic

These parameters are used in an equation which mathematically defines the Poisson distribution Dr. Claxton's

model is based upon. This equation is as follows:

$$\gamma_i = \left(B_o + e^{B_1 + B_2 \log x_i}\right)(e^{-B_3 X_i})$$

γ_i = mean of Poisson distribution

X_i = dose level

This equation is solved for the parameters by using the maximum likelihood approach. This approach is to the Poisson distribution as least squares is to normal distribution, except maximum likelihood is much more complex.

The convergence of the 3 and 4 parameter models is related to the way the Poisson equation is solved. The spontaneous revertant count is derived from the actual data, and initial estimates for B_1, B_2, and B_3 are estimated using a linear approach. These initial estimates are plugged into the Poisson equation. The final parameter values are arrived at by repetitive estimations. One of two things may happen; the parameter values may approach and equal the Poisson mean (vergence of the model) or, after 500 estimates, the parameters do not equal the Poisson mean (does not converge). How convergence of the 3 and 4 models relate to specific activity involves the Poisson equation and what shall be called the "toxicity term". The Poisson equation is given below with the "toxicity term" in brackets:

$$\gamma_i = \left(B_o + e^{B_1 + B_2 \log x_i}\right)\left[(e^{-B_3 X_i})\right]$$

This term estimates the downward curve of the classic Ames dose/response curve (as described earlier). In cases where the curve does not exhibit this downward trend, this term (B_3) is not used in the model computations. If the "toxicity term" is not used, only three parameters are used in the model computations, if it is used, 4 parameters are used in the model computations, hence the terms "3 parameter model and 4 parameter model". From the above description, one would expect the 3 parameter model to converge when toxicity is not present and the 4 parameter model to converge when toxicity is present. In interpreting the data, the convergence of the four parameter model is the more important of the two. If the 4 parameter model does not converge and the curve is downturned, the data should be considered spurious. The corollary is true of the 3 parameter model, if it does not converge and the curve is not downturned, the data should be considered spurious.

Two more terms which appear as headings on the previous tables and which are important in the interpretation of the data are the P values for the model and for adequacy. Both these values are chi - square goodness-of-fit derived. i.e. measurements of how well the data fits a hypothesis. In the case of the P value for the model, the P value measures how well the data complies with the Poisson hypothesis (variance of plate counts = mean of plate counts). A low P value signifies a statistically significant departure from the Poisson hypothesis. The P value for adequacy measures how well the calculated Poisson curve

passes through the means of the actual data points. A low P value for adequacy indicates a significant deviation of the calculated Poisson curve from the actual data. If the test shows a low P value for either the model or adequacy, the actual data should be checked for large variations in individual plate counts or data points which don't fit the expected curve. Large variations in individual plate counts render the specific activity ineffectual for comparison.

Data points which do not fit the expected curve may or may not render specific activity invalid for comparison. This decision must be made by the person reviewing the data. If the raw data is checked for these two variations, and neither is found, the data should be assumed to be acceptable and the specific activity valid for comparison.

The specific activity that appears on the preceding tables is not the B_2 value but a value calculated separately from the 4 parameters already discussed. The specific activity is calculated using the B_1 and B_2 values in the following equation:

$$\text{Specific activity} = \frac{e^{B_1 + B_2 X_m}}{X_m}$$

B_1 = scale and noise

B_2 = rate of revertant colony formation

X_m = maximum dose

The use of the B_1 and B_2 values is the reason why the validity of the specific activity depends on the model values discussed above, i.e. 3 and 4 parameter model convergence and the two P values. The maximum dose is the highest dose not showing the gross effects of toxicity. The mathematical description of this dose makes use of the standard deviation of the revertant colonies. A simple example is easier than an explanation. One has the following two truncated data sets:

Set A

dose (ug)	rev./colonies*	Standard deviation
650	750	50
1000	900	25

Set B

dose (ug)	rev./colonies*	Standard deviation
650	775	50
1000	820	25

*Represents the average of three plates.

In data set A, the 1000 ug dose represents the maximum dose since it gives the highest number of revertant colonies. In data set B, the 650 ug dose is the maximum dose because the number of revertant colonies at the 1000 ug dose does not exceed the limits of the number of revertant at 650 ug set by the standard deviation, i.e., the upper limit would be 775 + 50 or 825.

The equation represents the average slope from 0 dose level to the maximum dose level. The slope represents the increase of revertant colonies over background or the specific activity at a one microgram dose level. The 95% confidence limit is calculated from the variance and covariance of B_1 and B_2.

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16. ABSTRACT

This report summarizes the results obtained from testing 201 extracts of engine exhaust particulates in the Salmonella/mammalian-microsome mutagenicity assay (Ames test) from June 1980 to December 1982. Exhaust particulates collected on filters were subjected to a 24 hr soxhlet extraction with methylene chloride. Each blown down sample was shipped to Microbiological Associates where it was assayed at least twice in the Ames test in two separate experiments conducted over a period of several weeks. Each Ames test was conducted in triplicate at five dose levels using up to five Salmonella typhimurium tester strains, TA98, TA100, TA1535, TA1537 and TA1538, both with and without metabolic activation by Aroclor induced Fischer rat liver microsomes. Very often, when the amount of available test article was limited, only one or two tester strains (TA98, TA100) were used. The resulting mutagenicity data was sent to the Data Management Branch of the EPA's Biometry Division in RTP in North Carolina where it was entered into a computerized data base and was statistically analyzed using the method of Stead, et al (1,2).

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution Motor Vehicles Diesel Engines Gasoline Engines Exhaust Emissions Particulates Mutagens	Ames Bioassay Organic Extracts	

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GROUP 1

FUEL EFFECTS

VARIABLE: FUEL PARAMETERS IN DIESEL FUEL

CABS-79-0761	M-B 240D	very oily	(Dl + add.)	C/H FTP
0781	"	"	(Dl	"
0931	"		(Dl + add.)	C/H FTP
0940	"		"	85 kph
0961	"		(Dl + add.)	C/H FTP
0970	blank filter			

Table 1

GROUP ID: 1

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-79-0761	Mercedes Benz 244/D	C/H FTP	D1 + add	28 mg.	
CABS-79-0781	Mercedes Benz 244/D	C/H FTP	D1	25 mg.	
CABS-80-0931	Mercedes Benz 244/D	C/H FTP	D1 + add.	149 mg	
CABS-80-0940	Mercedes Benz 244/D	85 kph	D1 + add	167 mg	
CABS-80-0961	Mercedes Benz 244/D	C/H FTP	D1 + add	122 mg	
CABS-80-0970	—	—	—	4.1 mg	

Group 1

Table 2

SAMPLE ID	TESTER STRAIN															
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-79-0761	2		2		1		1		5		5		4		4		3		3	
CABS-79-0781	2		2		1		1		5		5		4		4		3		3	
CABS-80-0931	2		2		1		1		5		5		4		4		3		3	
CABS-80-0940	2		2		1		1		5		5		4		4		3		3	
CABS-80-0961	2		2		1		1		5		5		4		4		3		3	
CABS-80-0970	2		2		1		1													

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 12/19/80
2 = Experiment Date: 12/22/80
3 = Experiment Date: 12/30/80
4 = Experiment Date: 12/31/80
5 = Experiment Date: 1/13/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-79-0761	12/22/80	TA98	RLI-016	0.9	1.0	1.1	1.023	—	✓	✓		✓	✓	2.5→ 250	278/250			
CABS-79-0781	"	"	"	0.7	0.7	0.8	0.740	—	✓	✓		✓	✓	2.5→ 250	206/250			
CABS-80-0931	"	"	"	0.7	1.1	1.7	0.601	0.00030	✓	✓	✓	✓	✓	20→ 2000	1216/2000			
CABS-80-0940	"	"	"	3.4	4.0	4.7	1.065	0.00067	.0153	.0199	✓	✓	✓	20→ 2000	2122/2000			
CABS-80-0961	"	"	"	*	1.3	*	0.413	0.00056	✓	✓		✓	✓	20→ 2000	846/2000			
CABS-80-0970	"	"	"	0.0	0.0	0.4	0.017	—	✓	✓	✓	✓	✓	20→ 2000	56/2000			
CABS-79-0761	"	"	—	1.1	1.3	1.4	1.288	—	✓	✓	✓	✓	✓	2.5→ 250	337/250			
CABS-79-0781	"	"	—	0.9	1.0	1.1	0.993	—	✓	✓		✓	✓	2.5→ 250	265/250			
CABS-80-0931	"	"	—	3.1	3.7	4.3	0.733	0.00030	✓	✓	✓		✓	20→ 2000	1474/2000			
CABS-80-0940	"	"	—	3.5	3.9	4.2	0.918	0.00071			✓		✓	20→ 2000	1854/2000			
CABS-80-0961	"	"	—	0.4	0.5	1.4	0.539	0.00018	✓	✓	✓	✓	✓	20→ 2000	1047/2000			
CABS-80-970	"	"	—	0.0	0.0	0.7	0.028	0.00008	✓		✓	✓	✓	20→ 2000	21/200			

* Values not on Printout
VDW 12/29/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-79-0761	12/19/80	TA 100	RLI-016	0.4	1.9	8.0	0.985	0.00189	✓	.0251	✓		✓	2.5 → 250	366/250			
CABS-79-0781	"	"	"	0.8	0.9	1.0	0.918	—	.0245	✓		✓	✓	2.5 → 250	357/250			
CABS-80-0931	"	"	"	1.7	2.2	2.9	0.957	0.00041	✓	.0257	✓	✓	✓	20 → 2000	2024/2000			
CABS-80-0940	"	"	"	6.8	7.1	7.4	2.954	0.00126			✓		✓	20 → 2000	2074/650			
CABS-80-0961	"	"	"	0.7	1.2	2.0	0.566	0.00036	✓		✓	✓	✓	20 → 2000	1257/2000			
CABS80-0970	"	"	"	0.0	0.0	0.1	0.036	—	✓	✓		✓	✓	20 → 2000	159/2000			
CABS-79-0761	"	"	—	1.6	4.9	15.1	2.260	0.00264	✓	✓	✓		✓	2.5 → 250	702/250			
CABS-79-0781	"	"	—	1.3	4.4	14.3	1.658	0.00324		✓	✓	✓	✓	2.5 → 250	552/250			
CABS-80-0931	"	"	—	6.5	6.9	7.4	2.725	0.00135		✓	✓		✓	20 → 2000	1907/650			
CABS-80-0940	"	"	—	6.8	7.1	7.4	2.954	0.00126			✓		✓	20 → 2000	2074/650			
CABS-80-0961	"	"	—	2.5	3.0	3.6	1.037	0.00051	.0182	✓	✓	✓	✓	20 → 2000	2210/2000			
CABS-80-0970	"	"	—	0.0	0.3	2.2	0.019	0.00073	✓	✓	✓	✓	✓	20 → 2000	181/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
CABS-79-0761	1/13/81	TA 1535	RLI 016	0.0	0.0	0.0	0.032	—	✓	✓	✓		✓	2.5 → 250	22/250			
CABS-79-0781	"	"	"	0.0	0.1	0.1	0.046	—	✓	✓	✓	✓	✓	2.5 → 250	22/250			
CABS-80-0931	"	"	"	0.0	0.1	0.2	0.037	0.00090	✓	✓	✓	✓	✓	20 → 2000	37/2000			
CABS-80-0940	"	"	"	0.0	0.1	0.2	0.033	0.00100	✓	✓	✓	✓	✓	20 → 2000	34/650			
CABS-80-0961	"	"	"	0.0	0.0	0.0	0.013	—	✓	✓		✓	✓	20 → 2000	38/2000			
CABS-80-0970																		Compound ran out
CABS-79-0761	"	"	—	0.1	0.3	1.2	0.271	—	✓	✓	✓	✓	✓	2.5 → 250	39/250			
CABS-79-0781	"	"	—	0.0	0.1	0.6	-0.219	0.00969	✓	✓	✓	✓	✓	2.5 → 250	34/25			
CABS-80-0931	"	"	—	0.0	0.0	0.6	0.002	—	✓		✓	✓	✓	20 → 2000	35/20			
CABS-80-0940	"	"	—	0.0	0.0	0.2	-0.030	—	✓			✓	✓	20 → 2000	42/65			
CABS-80-0961	"	"	—	0.0	0.0	0.1	-0.001	0.00010	✓	✓	✓	✓	✓	20 → 2000	35/20			
CABS-80-0970																		Compound ran out

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-79-0761	12/31/80	TA 1537	RLI 016	0.2	0.2	0.3	0.237	—	✓	✓		✓	✓	2.5→ 250	69/ 250			
CABS-79-0781	"	"	"	0.2	0.2	0.2	0.183	—	✓	✓		✓	✓	2.5→ 250	54/ 250			
CABS-80-0931	"	"	"	0.2	0.5	1.0	0.172	0.00051	✓	✓	✓	✓	✓	20→ 2000	349/ 2000			
CABS-80-0940	"	"	"	0.7	1.2	2.3	0.248	0.00080	✓	✓	✓	✓	✓	20→ 2000	497/ 2000			
CABS-80-0961	"	"	"	0.1	0.2	0.5	0.089	0.00041	✓	✓	✓	✓	✓	20→ 2000	188/ 2000			
CABS-80-0970																		compound ran out
CABS-79-0761	"	"	—	0.1	0.2	0.4	0.162	—	✓	✓		✓	✓	2.5→ 250	49/ 250			
CABS-79-0781	"	"	—	0.1	0.1	0.2	0.132	—	✓	✓		✓	✓	2.5→ 250	39/ 250			
CABS-80-0931	"	"	—	*	0.7	*	0.118	0.00097	✓	✓		✓	✓	20→ 2000	241/ 2000			
CABS-80-0940	"	"	—	0.5	0.6	0.8	0.154	0.00069		✓	✓	✓	✓	20→ 2000	316/ 2000			
CABS-80-0961	"	"	—	0.1	0.1	0.1	0.086	—	✓	✓	✓	✓	✓	20→ 2000	181/ 2000			
CABS-80-0970																		compound ran out

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-79-0761	12/30/80	TA 1538	RLJ016	0.6	0.7	0.7	0.659	—	.0490	✓		✓	✓	2.5→ 250	186/250			
CABS-79-0781	"	"	"	0.4	0.5	0.5	0.468	—		✓	✓	✓	✓	2.5→ 250	137/250			
CABS-80-0931	"	"	"	0.9	1.1	1.5	0.450	0.00047	.0415	.0102	✓	✓	✓	20→ 2000	904/2000			
CABS-80-0940	"	"	"	1.2	1.8	2.6	0.625	0.00052	✓	✓	✓	✓	✓	20→ 2000	1252/2000			
CABS-80-0961	"	"	"	0.3	0.5	0.7	0.251	0.00033	✓	✓	✓	✓	✓	20→ 2000	516/2000			
CABS-80-0970																		compound ran out
CABS-79-0761	"	"	—	0.6	0.6	0.8	0.653	—	✓	✓		✓	✓	2.5→ 250	176/250			
CABS-79-0781	"	"	—	0.4	0.4	0.6	0.451	—	✓	✓		✓	✓	2.5→ 250	124/250			
CABS-80-0931	"	"	—	1.5	1.7	1.9	0.536	0.00179			✓		✓	20→ 2000	359/650			
CABS-80-0940	"	"	—	6.6	7.1	7.5	1.123	0.00238	.0137		✓		✓	20→ 2000	732/650			
CABS-80-0961	"	"	—	0.1	0.3	0.5	0.194	0.00014	✓	✓	✓	✓	✓	20→ 2000	398/2000			
CABS-80-0970																		

GROUP 2

GASOLINE/DIESEL COMPARISON

CABS-80-0131	HD Chevrolet 366	full power lean	leaded (gasoline)	2300 rpm

Table 1

GROUP ID: 2

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-80-0131	HD Chevrolet 366 CID gasoline truck	2300 RPM + 100% LOAD	EM-433-F 1.69/gal Leaded gasoline	128 mg.	

2)

Group 2

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-80-0131	1	2	1	2	1	2	1	2									1	2	1	2

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 2/6/81

2 = Experiment Date: 2/20/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
CABS-80-0131	2/6/81	TA 98	RLI-16	1.1	1.2	1.3	0.379	0.00055	.0494		✓	✓	✓	20→ 2000	828/ /2000			
"	"	"	NONE											"				INSUFFICIENT DATA FOR STATISTICAL ANALYS
"	2/20/81	"	RLI-16	1.5	1.6	1.7	0.411	0.00063			✓	✓	✓	"	913/ /2000			
"	2/20/81	"	NONE	0.4	6.7	99.3	0.813	0.02649	✓	✓	✓	✓	✓	2.0→ 205	76/ /70			

Entry Error RS 5/12/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-0131	2/6/81	TA 100	RLI-16	1.4	1.6	1.8	0.458	0.00058			✓	✓	✓	20 → 2000	1048/2000			
"	"	"	NONE											"				INSUFFICIENT DATA FOR STATISTICAL ANALYSES
																		~~INSUFFICIENT DATA FOR STATISTICAL ANALYSES~~ Entry Error RS 6/13/81
"	2/20/81	"	RLI-16	1.2	1.4	1.6	0.431	0.00052			✓	✓	✓	"	1006/2000			
"	"	"	NONE	3.8	4.1	4.4	4.042 +	—	.0224	✓	✓	✓	✓	2.0 → 205	413/70			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-0131	2/6/81	TA 1538	RLI-16	1.1	1.3	1.4	0.343	0.00064	✓		✓	✓	✓	20→ 2000	717/ 2000			
"	"	"	NONE											"				INSUFFICIENT DATA FOR STATISTICAL ANALYSIS
"	2/20/81	"	RLI-16	0.9	1.0	1.2	0.362	0.00050			✓	✓	✓	"	765/ 2000			
"	"	"	NONE	0.5	0.7	0.9	0.550	—	✓	✓	✓	✓	✓	2.0→ 205	53/ 70			

GROUP 3

PARTICULATE CONTROL METHODS,

BASE-LINE TESTS

CABS-80-4011	MB 300 SD	(D2)	B/L	C/H FTP
4031	VW Rabbit	(D2)	B/L	C/H FTP
4051	Olds Delta 88	(D2)	B/L	C/H FTP

Table 1

GROUP ID: 3

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-80-4011	Mercedes Benz 300SD	C/H FTP	D_2	109 mg.	
CABS-80-4031	VW Rabbit	C/H FTP	D_2	195 mg.	
CABS-80-4051	Olds Delta 88	C/H FTP	D_2	195 mg	

Group 3 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-80-4011	1		1		1		1										1		1	
CABS-80-4031	1	2	1	2	1	2	1	2									1	2	1	2
CABS-80-4051	1	2	1	2	1	2	1	2									1	2	1	2

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 9/11/80

2 = Experiment Date: 9/23/80

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4011	9/11/80	TA98	RLI016	18.1	18.3	18.5	5.876	0.00166			✓		✓	20→ 2000	3820/650			
CABS-80-4031	"	"	"	7.8	8.1	8.5	1.770	0.00076			✓		✓	20→ 2000	3542/2000			
CABS-80-4051	"	"	"	3.5	3.9	4.4	0.944	0.00071		✓	✓		✓	20→ 2000	1889/2000			
CABS-80-4011	"	"	—	16.0	16.1	16.2	11.577	0.00233			✓		✓	20→ 2000	2364/200			
CABS-80-4031	"	"	—	5.2	5.4	5.6	1.417	0.0065			✓		✓	20→ 2000	2940/2000			
CABS-80-4051	"	"	—	4.0	4.2	4.4	2.173	0.00097	✓		✓		✓	20→ 2000	1494/2000			
CABS-80-4011	"	TA100	RLI016	7.7	7.8	7.9	6.504	0.00193					✓	20→ 2000	1422/200			
CABS-80-4031	"	"	"	3.5	4.0	4.6	1.013	0.00066		✓	✓	✓	✓	20→ 2000	2149/2000			
CABS-80-4051	"	"	"	4.2	4.6	5.0	0.983	0.00079			✓		✓	20→ 2000	1912/2000			
CABS-80-4011	"	"	—	4.5	4.5	4.6	3.667	—				✓	✓	20→ 2000	940/200			
CABS-80-4031	"	"	—	5.5	5.7	5.8	1.929	0.00138	.0410		✓		✓	20→ 2000	1460/650			
CABS-80-4051	"	"	—	8.7	8.8	8.9	4.993	0.00292					✓	20→ 2000	1137/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4011	9/11/80	TA 1538	RLI016	9.4	9.4	9.5	7.488	0.00272					✓	20 → 2000	1464/700			
CABS-80-4031	"	"	"	5.7	6.2	6.8	1.022	0.00091		.0378	✓		✓	20 → 2000	2019/2000			
CABS-80-4051	"	"	"	3.2	3.7	4.2	0.635	0.00088			✓	✓	✓	20 → 2000	1275/2000			
CABS-80-4011	"	"	—	61.8	63.6	65.6	5.089	0.01280			✓		✓	20 → 2000	1017/700			
CABS-80-4031	"	"	—	5.1	5.7	6.3	1.517	0.00225			✓		✓	20 → 2000	496/650			
CABS-80-4051	"	"	—	0.4	0.5	0.5	0.138	0.00058			✓	✓	✓	20 → 2000	318/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4031	9/23/80	TA 98	RLI016	10.9	11.8	12.8	1.790	0.00045		✓	✓		✓	20→ 2000	3538/2000			
CABS-80-4051	"	"	"	3.6	4.0	4.3	1.016	0.00068		✓	✓		✓	20→ 2000	2034/2000			
CABS-80-4031	"	"	—	4.9	5.1	5.2	1.467	0.00060			✓		✓	20→ 2000	3086/2000			
CABS-80-4051	"	"	—	3.0	3.1	3.2	1.306	0.00082			✓		✓	20→ 2000	1265/2000			
CABS-80-4031	"	TA 100	RLI016	3.5	4.0	4.6	0.874	0.00074	✓		✓		✓	20→ 2000	1874/2000			
CABS-80-4051	"	"	"	4.2	4.4	4.7	2.110	0.00106		✓	✓		✓	20→ 2000	1502/650			
CABS-80-4031	"	"	—	6.0	6.2	6.4	1.860	0.00162			✓		✓	20→ 2000	1404/650			
CABS-80-4051	"	"	—	9.2	9.4	9.6	1.801	0.00244			✓		✓	20→ 2000	1409/650			
CABS-80-4031	"	TA 1538	RLI016	5.0	5.6	6.3	0.887	0.00093			✓		✓	20→ 2000	1766/2000			
CABS-80-4051	"	"	"	2.3	2.8	3.5	0.621	0.00075	✓		✓	✓	✓	20→ 2000	1250/2000			
CABS-80-4031	"	"	—	6.8	7.2	7.6	1.527	0.00244			✓		✓	20→ 2000	999/650			
CAB-80-4051	"	"	—	1.2	1.3	1.5	0.547	0.00125	.0142	.0169	✓	✓	✓	20→ 2000	368/650			

GROUP 4

HEAVY DUTY DIESEL CATALYST

VARIABLE: CATALYST/NO CATALYST

CABS-80-4071	HD Caterpillar 3208	w/catalyst
		w/o catalyst

Table 1

GROUP ID: 4

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS 80-4071	HD Caterpillar 3208 w/Catalyst			120mg.	
CABS-80-4081	HD Caterpillar 3208 w/o Catalyst			120mg.	

Group 4 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-80-4071				1			1				1				1				1	
CABS-80-4081				1			1				1				1				1	

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 12/5/80

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4071	12/5/80	TA 98	—	0.2	0.3	0.4	0.222	0.00024	✓	✓	✓	✓	✓	19→ 1200	275/ 1200			
CABS-80-4081	"	"	—	3.4	3.8	4.3	1.750	0.00068	✓	✓	✓	✓	✓	19→ 1200	2043/ 1200			
CABS-80-4071	"	TA 100	—	0.3	0.7	1.5	0.470	0.00031	.0392	✓	✓	✓	✓	19→ 1200	715/ 1200			
CABS-80-4081	"	"	—	*	6.6	*	2.507	0.00152			✓	✓		19→ 1200	1584/ 600			
CABS-80-4071	"	TA 1535	—	0.0	0.1	1.1	0.020	—	✓	✓	✓	✓	✓	19→ 1200	27/ 19			
CABS-80-4081	"	"	—	0.0	0.0	0.0	0.009	—	✓	✓	✓	✓	✓	19→ 1200	37/ 1200			
CABS-80-4071	"	TA 1537	—	0.0	0.0	0.0	0.036	—	✓	.0179	✓	✓	✓	19→ 1200	52/ 1200			
CABS-80-4081	"	"	—	0.3	0.5	0.8	0.375	0.00026	✓		✓	✓	✓	19→ 1200	451/ 1200			
CABS-80-4071	"	TA 1538	—	0.2	0.2	0.2	0.188	—	✓	✓	✓	✓	✓	19→ 1200	237/ 1200			
CABS-80-4081	"	"	—	1.3	2.0	2.1	1.053	0.00053			✓	✓	✓	19→ 1200	1234/ 1200			

* Values not given
VCW 12/29/82

GROUP 5

FUEL EFFECTS

VARIABLE: DIESEL FUEL PARAMETERS

CABS-80-4101	M-B 240 D	various Diesel fuels	FTP
4111	"	"	"
4121	"	"	"
4131	"	"	"
4141	"	"	"
4151	"	"	"
4161	"	"	"
4171	"	"	"
4181	"	"	85 kph
4191	"	"	85 kph

Table 1

GROUP ID: 5

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS Fuel Code
CABS-80-4101	Mercedes Benz 240 D	FTP	H320 Base fuel	Not Provided	EM-395-F
CABS-80-4111	"	FTP	JP-7	"	EM-401-F
CABS-80-4121	"	FTP	Base + Isoquinoline	"	EM-404-F
CABS-80-4131	"	FTP	Base + Isoquinoline	"	EM-405-F
CABS-80-4141	"	FTP	Base + Light Ends	"	EM-448-F
CABS-80-4151	"	FTP	Base + Pure Aromatics	"	EM-460-F
CABS-80-4161	"	FTP	Base + Heavy Ends	"	EM-461-F
CABS-80-4171	"	FTP	Base + "HAN" + DIL-3	"	EM-463-F
CABS-804181	"	85 Km/h	H 320 Base fuel	"	EM-395-F
CABS-80-4191	"	85 Km/h	JP-7	"	EM-401-F

Group 5 Table 2

SAMPLE ID	TESTER STRAIN															
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-80-4101	2		2		1		1		5		5		4		4		3		3	
CABS-80-4111	2		2		1		1		5		5		4		4		3		3	
CABS-80-4121	2		2		1		1		5		5		4		4		3		3	
CABS-80-4131	2		2		1		1		5		5		4		4		3		3	
CABS-80-4141	2		2		1		1		5		5		4		4		3		3	
CABS-80-4151	2		2		1		1		5		5		4		4		3		3	
CABS-80-4161	2		2		1		1		5		5		4		4		3		3	
CABS-80-4171	2		2		1		1		5		5		4		4		3		3	
CABS-80-4181	2		2		1		1		5		5		4		4		3		3	
CABS-80-4191	2		2		1		1		5		5		4		4		3		3	

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 12/19/80
2 = Experiment Date: 12/22/80
3 = Experiment Date: 12/30/80
4 = Experiment Date: 12/31/80 error by
5 = Experiment Date: 1/13/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4101	12/22/80	TA 98	RLI 016	0.5	0.9	1.3	0.465	0.00030	✓	✓	✓	✓	✓	20→ 2000	948/2000			
CABS-80-4111	"	"	"	2.3	3.3	4.9	0.859	0.00068	✓	.0169	✓	✓	✓	20→ 2000	1712/2000			
CABS-80-4121	"	"	"	2.3	3.0	3.9	0.674	0.00074	✓	✓	✓	✓	✓	20→ 2000	1345/2000			
CABS-80-4131	"	"	"	0.6	0.8	1.0	0.563	0.00017	.0497	✓	✓	✓	✓	20→ 2000	1144/2000			
CABS-80-4141	"	"	"	0.5	0.9	1.7	0.652	0.00016	.0469	✓	✓		✓	20→ 2000	1320/2000			
CABS-80-4151	"	"	"	2.3	2.9	3.6	0.700	0.00071		✓	✓	✓	✓	20→ 2000	1377/2000			
CABS-80-4161	"	"	"	2.2	2.7	3.3	0.790	0.00061	✓	✓	✓	✓	✓	20→ 2000	1583/2000			
CABS-80-4171	"	"	"	2.2	2.5	3.0	0.690	0.00065		✓	✓	✓	✓	20→ 2000	1381/2000			
CABS-80-4181	"	"	"	0.5	0.8	1.3	0.549	0.00019	✓	✓	✓	✓	✓	20→ 2000	1119/2000			
CABS-80-4191	"	"	"	1.9	3.5	6.5	0.910	0.00068	✓	✓	✓	✓	✓	20→ 2000	1813/2000			
CABS-80-4101	"	"	—	2.9	3.2	3.6	0.605	0.00084			✓	✓	✓	20→ 2000	1204/2000			
CABS-80-4111	"	"	—	2.3	3.0	3.9	0.887	0.00061	✓	.0179	✓	✓	✓	20→ 2000	1773/2000			
CABS-80-4121	"	"	—	3.0	3.3	3.6	0.694	0.00077			✓		✓	20→ 2000	1396/2000			
CABS-80-4131	"	"	—	1.3	1.9	2.6	0.619	0.00055	✓	✓	✓	✓	✓	20→ 2000	1247/2000			
CABS-80-4141	"	"	—	3.6	4.1	4.7	0.722	0.00087	.0129	.0231	✓		✓	20→ 2000	1439/2000			
CABS-80-4151	"	"	—	3.2	3.5	3.7	0.660	0.00082		✓	✓		✓	20→ 2000	1363/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4161	12/27/80	TA 98	—	3.0	3.6	4.4	0.778	0.00077	.0414	✓	✓	✓	✓	20→ 2000	1554/2000			
CABS-80-4171	"	"	—	5.4	5.7	5.9	2.115	0.00146			✓		✓	20→ 2000	1389/650			
CABS-80-4181	"	"	—	1.4	1.8	2.4	0.596	0.00056	✓	✓	✓	✓	✓	20→ 2000	1201/2000			
CABS-80-4191	"	"	—	*	2.9	*	0.844	0.00062		.0179		✓	✓	20→ 2000	1670/2000			

*Data not on Printout 12/29/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4101	12/19/80	TA 100	RLI016	1.5	1.9	2.5	0.678	0.00049	.0312	✓	✓	✓	✓	20→ 2000	1475/2000			
CABS-80-4111	"	"	"	1.1	1.4	1.9	0.710	0.00033		✓	✓	✓	✓	20→ 2000	1550/2000			
CABS-80-4121	"	"	"	1.4	1.9	2.4	1.040	0.00028	✓	✓	✓	✓	✓	20→ 2000	2212/2000			
CABS-80-4131	"	"	"	1.0	1.3	1.6	0.836	0.00021		✓				20→ 2000	1801/2000			
CABS-80-4141	"	"	"	0.9	1.4	2.0	0.945	0.00018	✓	✓	✓	✓	✓	20→ 2000	2015/2000			
CABS-80-4151	"	"	"	2.2	2.6	3.2	1.100	0.00042	✓	✓	✓		✓	20→ 2000	2333/2000			
CABS-80-4161	"	"	"	1.6	2.3	3.2	1.025	0.00039	✓	✓	✓	✓	✓	20→ 2000	2162/2000			
CABS-80-4171	"	"	"	2.0	2.4	2.7	1.146	0.00035		✓	✓	✓	✓	20→ 2000	2419/2000			
CABS-80-4181	"	"	"	2.0	2.6	3.2	0.799	0.00056	.0437	✓	✓	✓	✓	20→ 2000	1710/2000			
CABS-80-4191	"	"	"	1.3	1.8	2.6	0.954	0.00031	✓	.0164	✓	✓	✓	20→ 2000	2036/2000			
CABS-80-4101	"	"	—	3.4	3.9	4.4	0.939	0.00068			✓		✓	20→ 2000	2036/2000			
CABS-80-4111	"	"	—															Data not on Printout
CABS-80-4121	"	"	—	*	5.1	*	2.612	0.00095	✓	✓			✓	20→ 2000	1865/650			
CABS-80-4131	"	"	—	4.5	5.5	6.8	0.970	0.00084	✓	✓	✓		✓	20→ 2000	1946/2000			
CABS-80-4141	"	"	—	3.0	3.3	3.5	0.889	0.00062			✓	✓	✓	20→ 2000	1946/2000			
CABS-80-4151	"	"	—	8.1	8.7	9.3	2.825	0.00166	✓	✓	✓		✓	20→ 2000	1987/650			

* Data not on Printout UCW 12/29/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4161	12/19/80	TA 100	—	6.2	6.6	7.0	2.706	0.00128	✓		✓		✓	20→ 2000	1888/ 650			
CABS-80-4171	"	"	—	13.5	14.0	14.6	2.773	0.00239		.0121	✓		✓	20→ 2000	1978/ 650			
CABS-80-4181	"	"	—	4.1	4.7	5.4	0.935	0.00079	✓	.0112	✓	✓	✓	20→ 2000	1979/ 2000			
CABS-80-4191	"	"	—	3.1	3.6	4.2	0.991	0.00062	.0315	✓	✓	✓	✓	20→ 2000	2145/ 2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4101	1/13/81	TA 1535	RLJ016	0.0	0.0	0.0	0.031	—	.0230		✓	✓	✓	20→ 2000	36/2000			
CABS-80-4111	"	"	"	0.0	0.1	0.2	0.027	0.00073	✓	✓	✓	✓	✓	20→ 2000	35/2000			
CABS-80-4121	"	"	"	*	0.1	*	0.036	0.00153	✓	✓		✓	✓	20→ 2000	37/650			
CABS-80-4131	"	"	"	0.0	0.2	4.0	0.013	0.00108	✓	✓	✓	✓	✓	20→ 2000	39/2000			
CABS-80-4141	"	"	"	0.0	0.1	0.4	0.035	0.00143	✓	✓	✓	✓	✓	20→ 2000	34/650			
CABS-80-4151	"	"	"	0.0	0.1	0.2	0.028	0.00093	✓	✓	✓		✓	20→ 2000	32/650			
CABS-80-4161	"	"	"	0.0	0.1	0.6	0.014	0.00057	✓	✓	✓	✓	✓	20→ 2000	41/2000			
CABS-80-4171	"	"	"	0.1	0.1	0.3	0.036	0.00156	✓		✓		✓	20→ 2000	37/650			
CABS-80-4181	"	"	"	0.0	0.1	0.1	0.034	0.00059	✓	✓	✓	✓	✓	20→ 2000	37/2000			
CABS-80-4191	"	"	"	0.0	0.1	0.2	0.037	0.00058	✓	✓	✓	✓	✓	20→ 2000	35/2000			
CABS-80-4101	"	"	—	*	0.0	*	-0.006	—	.0102				✓	20→ 2000	41/20			
CABS-80-4111	"	"	—	*	0.0	*	-0.002	0.00006	.0323			✓	✓	20→ 2000	35/20			
CABS-80-4121	"	"	—	0.0	0.0	0.1	-0.037	0.00224	✓	✓	✓	✓	✓	20→ 2000	36/20			
CABS-80-4131	"	"	—	0.0	0.0	100%	-0.018	—	✓		✓	✓	✓	20→ 2000	34/20			
CABS-80-4141	"	"	—	0.0	0.0	0.0	-0.011	—	✓		✓		✓	20→ 2000	32/20			
CABS-80-4151	"	"	—	0.0	0.0	0.0	0.005	—		.0263	✓	✓	✓	20→ 2000	31/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4161	1/13/81	TA 1535	—	0.0	0.0	0.1	0.019	—				✓	✓	20→ 2000	36/20			
CABS-80-4171	"	"	—	0.0	0.0	0.1	−0.008	—			✓	✓	✓	20→ 2000	29/65			
CABS-80-4181	"	"	—	0.0	0.0	179.9	−0.021	—	✓	.0151	✓	✓	✓	20→ 2000	26/20			
CABS-80-4191	"	"	—	0.0	0.0	0.1	0.003	—	✓		✓	✓	✓	20→ 2000	32/20			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4101	12/31/80	TA 1537	RLI 016	0.1	0.3	0.6	0.133	0.00037	✓	✓	✓	✓	✓	20→2000	273/2000			
CABS-80-4111	"	"	"	0.2	0.3	0.3	0.255	—		✓	✓	✓	✓	20→2000	523/2000			
CABS-80-4121	"	"	"	0.3	0.5	0.8	0.188	0.00051	✓	✓	✓	✓	✓	20→2000	382/2000			
CABS-80-4131	"	"	"	0.6	1.1	2.0	0.142	0.00102	✓	✓	✓	✓	✓	20→2000	287/2000			
CABS-80-4141	"	"	"	0.8	1.3	2.2	0.285	0.00077	✓	.0205	✓		✓	20→2000	563/2000			
CABS-80-4151	"	"	"	0.2	0.4	0.8	0.167	0.00042	✓	✓	✓	✓	✓	20→2000	346/2000			
CABS-80-4161	"	"	"	0.3	0.5	0.7	0.196	0.00043	✓	✓	✓	✓	✓	20→2000	378/2000			
CABS-80-4171	"	"	"	*	0.6	*	0.238	0.00047		✓		✓	✓	20→2000	480/2000			
CABS-80-4181	"	"	"	0.2	0.3	0.6	0.190	0.00027	.0202	.0403	✓	✓	✓	20→2000	390/2000			
CABS-80-4191	"	"	"	0.4	0.5	0.8	0.269	0.00035		✓	✓	✓	✓	20→2000	553/2000			
CABS-80-4101	"	"	—	0.1	0.2	0.5	0.113	0.00023	✓	✓	✓	✓	✓	20→2000	235/2000			
CABS-80-4111	"	"	—	0.2	0.2	0.2	0.172	—		✓		✓	✓	20→2000	361/2000			
CABS-80-4121	"	"	—	0.3	0.7	1.4	0.126	0.00084	✓	✓	✓	✓	✓	20→2000	258/2000			
CABS-80-4131	"	"	—	0.1	0.1	0.1	0.130	—	✓	✓		✓	✓	20→2000	269/2000			
CABS-80-4141	"	"	—	0.2	0.4	0.8	0.129	0.00054	✓	.0421	✓		✓	20→2000	263/2000			
CABS-80-4151	"	"	—	0.5	0.7	0.8	0.360	0.00[illegible]4		✓	✓		✓	20→2000	173/2000			

* Data not on Printout VCW 12/29/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
CABS-80-4161	12/31/80	TA 1537	—	0.2	0.3	0.5	0.131	0.00044	✓	✓	✓	✓	✓	20 → 2000	270/2000			
CABS-80-4171	"	"	—	0.6	0.7	1.0	0.293	0.00140		✓	✓	✓	✓	20 → 2000	196/650			
CABS-80-4181	"	"	—	0.1	0.1	0.1	0.112	—	✓	✓	✓	✓	✓	20 → 2000	234/200			
CABS-80-4191	"	"	—	0.2	0.2	0.2	0.168	—	.0202	✓	✓	✓	✓	20 → 2000	344/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4101	12/30/80	TA 1538	RLI016	0.3	0.4	0.4	0.356	—	✓	✓	✓	✓	✓	20 → 2000	731/2000			
CABS-80-4111	"	"	"	0.7	0.9	1.2	0.534	0.00028		✓	✓	✓	✓	20 → 2000	1075/2000			
CABS-80-4121	"	"	"	0.7	1.0	1.5	0.429	0.00042	✓	✓	✓	✓	✓	20 → 2000	871/2000			
CABS-80-4131	"	"	"	0.8	0.9	1.2	0.348	0.00049		✓	✓	✓	✓	20 → 2000	710/2000			
CABS-80-4141	"	"	"	0.5	0.7	1.1	0.436	0.00035	✓	✓	✓		✓	20 → 2000	890/2000			
CABS-80-4151	"	"	"	*	0.9	*	0.440	0.00036	✓	✓		✓	✓	20 → 2000	893/2000			
CABS-80-4161	"	"	"	*	1.0	*	0.453	0.00039		.0179		✓	✓	20 → 2000	919/2000			
CABS-80-4171	"	"	"	0.7	0.9	1.2	0.408	0.00040		.0290	✓	✓	✓	20 → 2000	826/2000			
CABS-80-4181	"	"	"	0.5	0.7	0.8	0.265	0.00044		✓	✓	✓	✓	20 → 2000	551/2000			
CABS-80-4191	"	"	"	0.5	0.8	1.1	0.407	0.00032	✓		✓	✓	✓	20 → 2000	832/2000			
CABS-80-4101	"	"	—	0.3	0.7	1.8	0.155	0.00075	✓	✓	✓	✓	✓	20 → 2000	317/2000			
CABS-80-4111	"	"	—	1.1	1.4	1.9	0.302	0.00078		✓	✓	✓	✓	20 → 2000	611/2000			
CABS-80-4121	"	"	—	1.5	1.7	1.9	0.514	0.00180	✓	.0161	✓	✓	✓	20 → 2000	344/2000			
CABS-80-4131	"	"	—	0.4	0.5	0.7	0.207	0.00047	✓	✓	✓	✓	✓	20 → 2000	431/2000			
CABS-80-4141	"	"	—	*	0.9	*	0.201	0.00076		✓			✓	20 → 2000	411/2000			
CABS-80-4151	"	"	—	1.6	1.7	1.9	0.493	0.00193		.0354	✓	✓	✓	20 → 2000	332/2000			

* Data not on Printout Dow 12/29/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CRBS-80-4161	12/30/80	TA 1538	—	1.0	1.2	1.4	0.205	0.00085		✓	✓	✓	✓	20 → 2000	423 / 2000			
CRBS-80-4171	"	"	—	1.5	1.7	1.9	0.508	0.00184	✓		✓	✓	✓	20 → 2000	343 / 650			
CRBS-80-4181	"	"	—	0.3	0.5	0.7	0.212	0.00040		✓	✓	✓	✓	20 → 2000	435 / 2000			
CRBS-80-4191	"	"	—	0.4	0.5	0.7	0.253	0.00034		✓	✓	✓	✓	20 → 2000	525 / 2000			

GROUP 6

SALT MINE AIR TEST

CABS-81-0010 Windsor Salt Mine Air Sample

Table 1

GROUP ID: 6

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-81-0010	Windsor Salt Mine Air Sample	Not Applicable	Not Applicable	177 mg.	

Group 6 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-81-0010	1		1		1		1		1		1		1		1		1		1	

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 7/9/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
CABS-81-0010	7-9-81	TA98	RLI016	*	0.0	*	-0.021	*	✓	.0376	✓		✓	20 → 2000	41.67 / 65.0			
"	"	TA100	"	0.0	0.0	0.1	-0.003	0.00002	✓	.0257	✓	✓	✓	20 → 2000	150.67 / 65.0			
"	"	TA1535	"	0.0	0.0	1.3	0.001	*	✓	✓	✓	✓	✓	20 → 2000	16.33 / 65.0			
"	"	TA1537	"	0.0	0.0	*	0.001	*	✓	.0134	✓	✓	✓	20 → 2000	11.33 / 20.0			
"	"	TA1538	"	0.0	0.0	0.0	-0.012	0.00008	✓	✓	✓		✓	20 → 2000	22.67 / 65.0			
CABS-81-0010	7-9-81	TA98	—	0.0	0.0	0.1	-0.006	*	✓	.0365		✓	✓	20 → 2000	25.67 / 20			
"	"	TA100	"	0.0	0.0	0.1	-0.003	0.00001	✓	.0187	✓	✓	✓	"	154.33 / 65			
"	"	TA1535	"	0.0	0.0	0.0	0.002	*	.0427	✓	✓	✓	✓	"	27.0 / 65			
"	"	TA1537	"	0.0	0.0	0.5	-0.014	*	✓		✓	✓	✓	"	9.67 / 20			
"	"	TA1538	"	0.0	0.0	0.4	0.0	0.00011	✓		✓	✓	✓	"	9.00 / 2000			

* Not given in print out. PJB 11-30-81

Data recorded by: P.J. Burke 11-30-81

GROUP 7

HEAVY DUTY DUAL FUELED ENGINE COMPARISON

VARIABLE: A) FUELS
B) STRAIGHT DIESEL ENGINE BS DUAL-FUELED ENGINE

CABS-80-4201	HD Volvo
81-0020	"
0021	"
0030	"
0040	"
0050	"
0060	"
0070	"
0080	"
0090	"
0091	"
0100	"
0110	"
0120	"
0130	"
0140	"
0150	"
0171	"
0230	"
0240	"
0241	"
0250	"
0260	"
0270	"
0280	"
0290	"
0300	"
0310	"
SDSB-80-4221	Volvo Diesel + MeOh
4231	Volvo Diesel + MeOH (w/catalyst)
4141	Volvo Diesel + Ethanol
4251	Volvo Diesel + Ethanol (w/catalyst)

Table 1

GROUP ID: 7

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-81-0130	Volvo	2200/100 Mode 5	Methanol + CAT	18 mg.	
CABS-81-0140	Volvo	2200/50 Mode 6	Methanol + CAT	22 mg.	
CABS-81-0150	Volvo	2200/2 Mode 7	Methanol + CAT	76 mg.	
CABS-81-0171	Volvo	Composite Steady State	Ethanol + H_2O	149 mg.	
CABS-81-0230	Volvo	Transient	Pure DF	200 mg.	
CABS-81-0240	Volvo	1400/2 Mode 1	Pure DF	91 mg.	
CABS-81-0241	Volvo	Composite Steady State	Pure DF	179 mg.	
CABS-81-0250	Volvo	1400/50 Mode 2	Pure DF	27 mg.	
CABS-81-0260	Volvo	1400/100 Mode 3	Pure DF	21 mg.	
CABS-81-0270	Volvo	Idle Mode 4	Pure DF	22 mg.	
CABS-81-0280	Volvo	2200/100 Mode 5	Pure DF	24 mg.	
CABS-81-0290	Volvo	2200/50 Mode 6	Pure DF	20 mg.	
CABS-81-0300	Volvo	2200/2. Mode 7	Pure DF	117 mg.	
CABS-81-0310	BLANK FOR VOLVO SAMPLES.			3.053 mg	

Table 1

GROUP ID: 7

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-80-4201	HD. Volvo	Transient	Methanol	150 mg.	
CABS-81-0020	Volvo	1400/2 Mode 1	Methanol	407 mg.	
CABS-81-0021	Volvo	Steady State Composite	Methanol	154 mg.	
CABS-81-0030	Volvo	1400/50 Mode 2	Methanol	81 mg.	
CABS-81-0040	Volvo	1400/100 Mode 3	Methanol	26 mg.	
CABS-81-0050	Volvo	Idle Mode 4	Methanol	150 mg.	
CABS-81-0060	Volvo	2200/100 Mode 5	Methanol	20 mg	
CABS-81-0070	Volvo	2200/50 Mode 6	Methanol	20 mg.	
CABS-81-0080	Volvo	2200/2 Mode 7	Methanol	318 mg.	
CABS-81-0090	Volvo	1400/2 Mode 1	Methanol + CAT	390 mg.	
CABS-81-0091	Volvo	Composite Steady State	Methanol + CAT	151 mg.	
CABS-81-0100	Volvo	1400/50 MODE 2	Methanol + CAT	30 mg.	
CABS-81-0110	Volvo	1400/100 Mode 3	Methanol + CAT	13 mg.	
CABS-81-0120	Volvo	Idle. Mode 4	Methanol + CAT	51 mg.	

Table 1

GROUP ID: 7

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
SOSB-80-4221	Volvo Diesel	Not Available	MeOH	214 mg.	
SOSB-80-4231	Volvo Diesel	"	MeOH w/Catalyst	414 mg.	
SOSB-80-4241	Volvo Diesel	"	Ethanol	329 mg.	7 filters
SOSB-80-4251	Volvo Diesel	"	Ethanol w/Catalyst	204 mg	14 filters

Group 7 Table 2

SAMPLE ID	TESTER STRAIN															
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-80-4201	1		1		2		2		2		2		2		2		2		2	
CABS-81-0020	1		1																	
CABS-81-0021	1		1		2		2		2		2		2		2		2		2	
CABS-81-0030	1		1																	
CABS-81-0040	1		1																	
CABS-81-0050	1		1																	
CABS-81-0060	1		1																	
CABS-81-0070	1		1																	
CABS-81-0080	1		1																	
CABS-81-0090	1		1																	
CABS-81-0091	1		1		2		2		2		2		2		2		2		2	
CABS-81-0100	1		1																	
CABS-81-0110	1		1																	
CABS-81-0120	1		1																	
CABS-81-0130	1		1																	
CABS-81-0140	1		1																	
CABS-81-0150	1		1																	
CABS-81-0171	1		1		2		2		2		2		2		2		2		2	

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 5/21/81
2 = Experiment Date: 5/22/81
3 = Experiment Date: 12/11/80
4 = Experiment Date 1/27/81

Group 7 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-81-0230	1		1		2		2		2		2		2		2		2		2	
CABS-81-0241	1		1		2		2		2		2		2		2		2		2	
CABS-81-0240	1		1																	
CABS-81-0250	1		1																	
CABS-81-0260	1		1																	
CABS-81-0270	1		1																	
CABS-81-0280	1		1																	
CABS-81-0290	1		1																	
CABS-81-0300	1		1																	
CABS-81-0310	1		1																	
SDSB-80-4221	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4
SDSB-80-4231	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4
SDSB-80-4241	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4
SDSB-80-4257	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 5/21/81
2 = Experiment Date: 5/22/81
3 = Experiment Date: 12/11/80
4 = Experiment Date: 1/27/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5/21/81	TA 98	RLI-17	0.3	0.6	1.3	0.377	0.00022	✓	✓	✓	✓	✓	20 → 2000	772/2000			
CABS 81-0020	5/21/81	TA 98	"	0.4	0.5	0.6	0.231	0.00037	.0426		✓	✓	✓	"	495/2000			
CABS-81-0021	"	"	"	2.4	2.8	3.3	0.436	0.00092		✓	✓		✓	"	892/2000			
CABS-81-0030	"	"	"	9.7	9.9	10.1	2.339	0.00204			✓		✓	"	1588/650			
CABS-81-0040	"	"	"	2.0	2.6	3.4	1.544	0.00081	.0125	✓	✓	✓	✓	6.5 → 650	1022/650			
CABS-81-0050	"	"	"	0.3	0.6	0.9	0.174	0.00053	✓	✓	✓	✓	✓	20 → 2000	386/2000			
CABS-81-0060	"	"	"	12.0	12.3	12.6	3.260	0.00198			✓		✓	6.5 → 650	2219/650			
CABS-81-0070	"	"	"	5.0	6.7	9.0	1.927	0.00190		✓	✓		✓	"	1274/650			
CABS-81-0080	"	"	"	0.5	0.7	0.9	0.317	0.00035	✓	✓	✓	✓	✓	20 → 2000	669/2000			
CABS-81-0090	"	"	"	2.6	2.8	2.9	1.076	0.00139			✓		✓	"	730/650			
CABS-81-0091	"	"	"	1.9	2.2	2.6	0.560	0.00067	✓		✓		✓	"	1157/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0100	5/21/81	TA 98	RLI-17	14.6	15.1	16.9	3.097	0.00249	.0171		✓		✓	6.5→ 650	2021/ /650			
CABS-81-0110	"	"	"	0.6	0.9	1.4	0.564	0.00066	✓	.0175	✓	✓	✓	"	391/ /650			
CABS-81-0120	"	"	"	6.0	6.2	6.5	1.644	0.00194			✓		✓	20→ 2000	1113/ /650			
CABS-81-0130	"	"	"	12.8	17.3	23.5	2.189	0.00318	✓	.0290	✓	✓	✓	6.5→ 650	1427/ /650			
CABS-81-0140	"	"	"	15.0	16.5	18.2	2.738	0.00277			✓	✓	✓	"	1772/ /650			
CABS-81-0150	"	"	"	4.4	4.5	4.6	1.997	0.00124		.0233	✓		✓	20→ 2000	1307/ /2000			
CABS-81-0171	"	"	"	0.4	0.6	1.0	0.147	0.00066	.0310	✓	✓	✓	✓	"	319/ /2000			
CABS-81-0230	"	"	"	2.3	2.5	2.9	0.602	0.00071			✓		✓	"	1249/ /2000			
CABS-81-0240	"	"	"	0.6	0.6	0.7	0.226	0.00047			✓	✓	✓	"	515/ /2000			
CABS-81-0241	"	"	"	0.6	0.6	0.7	0.381	0.00021			✓	✓	✓	"	834/ /2000			
CABS-81-0250	"	"	"	1.7	2.2	2.9	1.164	0.00095	✓	✓	✓	✓	✓	6.5→ 650	785/ /650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0260	5/21/81	TA 98	RLI-17	0.6	1.2	2.1	0.560	0.00107	✓	✓	✓	✓	✓	6.5→ 650	388/ /650			
CABS-81-0270	"	"	"	1.3	2.3	4.0	0.499	0.00224	✓	✓	✓	✓	✓	"	352/ /650			
CABS-81-0280	"	"	"	4.1	4.7	5.4	2.240	0.00114		✓	✓	✓	✓	"	1480/ /650			
CABS-81-0290	"	"	"	1.4	1.6	1.9	1.301	0.00032			✓	✓	✓	"	882/ /650			
CABS-81-0300	"	"	"	0.6	0.7	0.7	0.291	0.00037	✓		✓	✓	✓	20→ 2000	645/ /2000			
CABS-81-0310	"	"	"	0.2	0.4	0.9	0.268	—	✓	✓	✓	✓	✓	0.65→ 65	33/ /2.0			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5/21/81	TA 98	NONE	0.3	0.4	0.6	0.379	0.00005	✓	✓	✓	✓	✓	20 → 2000	777/2000			
CABS-81-0020	"	"	"	0.4	0.5	0.7	0.331	0.00023	.0194	✓	✓	✓	✓	"	682/2000			
CABS-81-0021	"	"	"	2.1	2.3	2.5	0.511	0.00074	.0242		✓		✓	"	1054/2000			
CABS-81-0030	"	"	"	9.8	9.9	10.0	5.526	0.00265			✓		✓	"	1158/200			
CABS-81-0040	"	"	"	10.6	11.0	11.4	3.747	0.00550			✓		✓	6.5 → 650	762/200			
CABS-81-0050	"	"	"	0.5	0.6	0.8	0.245	0.00046	✓		✓	✓	✓	20 → 2000	523/2000			
CABS-81-0060	"	"	"	12.4	12.8	13.2	6.742	0.00277		.0119	✓		✓	6.5 → 650	1455/200			
CABS-81-0070	"	"	"	6.2	6.7	7.7	1.704	0.00212			✓	✓	✓	"	1128/650			
CABS-81-0080	"	"	"	0.4	0.5	0.5	0.339	0.00014			✓	✓	✓	20 → 2000	711/2000			
CABS-81-0090	"	"	"	2.5	2.7	3.0	1.063	0.00142		.0186	✓		✓	"	701/650			
CABS-81-0091	"	"	"	1.1	1.3	1.4	0.508	0.00044			✓	✓	✓	"	1040/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0100	5/21/81	TA 98	NONE	6.1	6.8	7.6	2.036	0.00181			✓	✓	✓	6.5→ 650	1367/ /650			
CABS-81-0110	"	"	"	0.7	1.2	2.2	0.512	0.00127	.0153	✓	✓	✓	✓	"	348/ /650			
CABS-81-0120	"	"	"	5.6	5.9	6.2	1.155	0.00242			✓		✓	20→ 2000	816/ /650			
CABS-81-0130	"	"	"	6.9	7.9	9.0	1.620	0.00241	✓		✓	✓	✓	6.5→ 650	1073/ /650			
CABS-81-0140	"	"	"	5.5	6.1	6.8	1.750	0.00190		.0113	✓	✓	✓	"	1152/ /650			
CABS-81-0150	"	"	"	2.2	2.3	2.5	1.254	0.00089		✓	✓		✓	20→ 2000	844/ /650			
CABS-81-0171	"	"	"	0.3	0.4	0.5	0.169	0.00039	.0207		✓	✓	✓	"	368/ /650			
CABS-81-0230	"	"	"	1.7	2.1	2.7	0.544	0.00066	.0159	✓	✓	✓	✓	"	1145/ /2000			
CABS-81-0240	"	"	"	0.5	0.6	0.7	0.296	0.00030	✓		✓	✓	✓	"	641/ /2000			
CABS-81-0241	"	"	"	0.8	0.9	1.0	0.376	0.00042		.0158	✓	✓	✓	"	793/ /2000			
CABS-81-0250	"	"	"	1.4	1.7	2.1	1.219	0.00052	.0183		✓	✓	✓	6.5→ 650	816/ /650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0260	5/21/81	TA 98	None	2.1	2.6	3.3	1.144	0.00126		✓	✓	✓	✓	6.5→ 650	753/650			
CABS-81-0270	"	"	"	0.4	0.9	1.9	0.559	0.00069	✓	✓	✓	✓	✓	"	383/650			
CABS-81-0280	"	"	"	8.9	10.6	12.5	1.690	0.00279	✓	✓	✓		✓	"	1124/650			
CABS-81-0290	"	"	"	2.3	2.8	3.4	1.408	0.00102		✓	✓	✓	✓	"	934/650			
CABS-81-0300	"	"	"	0.6	0.8	0.9	0.233	0.00057	✓		✓	✓	✓	20→ 2000	504/2000			
CABS-81-0310	"	"	"	0.1	0.2	0.4	0.162	—	✓	✓	✓	✓	✓	0.65→ 65	27/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5/22/81	TA 100	RLI-17	1.6	2.2	2.9	0.550	0.00064	.0184	.0258	✓	✓	✓	20 → 2000	1237/2000			
CABS-81-0021	"	"	"	3.3	3.6	3.9	0.664	0.00077	✓		✓		✓	"	1564/2000			
CABS-81-0091	"	"	"	5.1	5.2	5.3	2.020	0.00122			✓		✓	"	1509/650			
CABS-81-0171	"	"	"	1.2	1.4	1.6	0.512	0.00046		✓	✓	✓	✓	"	1165/2000			
CABS-81-0230	"	"	"	5.9	6.2	6.6	2.035	0.00157			✓		✓	"	1498/650			
CABS-81-0241	"	"	"	3.4	3.5	3.7	1.754	0.00092			✓		✓	"	1318/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5/22/81	TA 100	NONE	1.2	1.7	2.4	0.631	0.00046	✓		✓	✓	✓	20 → 2000	1416/2000			
CABS-81-0021	"	"	"	3.4	3.9	4.4	1.546	0.00124	.0183	✓	✓		✓	"	1166/650			
CABS-81-0091	"	"	"	*	4.4	*	1.449	0.00142	✓				✓	"	1115/650			
CABS-81-0171	"	"	"	1.3	1.6	2.0	0.414	0.00062		.0430	✓	✓	✓	"	977/2000			
CABS-81-0230	"	"	"	*	8.8	*	4.238	0.00314		.025			✓	"	1045/650			
CABS-81-0241	"	"	"	*	16.3	*	1.424	0.00352					✓	"	1099/650			

*Low and high values of slope not given on printout RS 7/14/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
CABS-80-4201	5-22-81	TA 1535	RLI-17	0.0	0.5	2.2	0.017	0.00131	✓	✓	✓	✓	✓	2c→ 2000	75/2000			
CABS-81-0021	"	"	"	0.1	0.1	0.3	0.046	0.00116	✓	✓	✓		✓	"	56/650			
CABS-81-0091	"	"	"	0.0	0.1	0.3	0.020	0.00143	✓	✓	✓	✓	✓	"	41/650			
CABS-81-0171	"	"	"	0.0	0.1	0.5	0.028	0.00069	✓	✓	✓	✓	✓	"	39/650			
CABS-81-0230	"	"	"	0.2	0.2	0.4	0.105	0.00186	✓	✓	✓	✓	✓	"	67/200			
CABS-81-0241	"	"	"	0.2	0.3	0.3	0.190	0.00121	✓	✓	✓	✓	✓	"	59/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4301	5-22-81	TA 1535	NONE	0.0	0.0	14.0	-0.014	0.00004	✓	✓	✓	✓	✓	20→ 2000	46/20			
CABS-81-0071	"	"	"	0.0	0.0	0.0	0.007	—		✓	✓	✓	✓	"	45/2000			
CABS-81-0091	"	"	"	0.0	0.0	0.0	-0.023	—	✓		✓	✓	✓	"	33/65			
CABS-81-0171	"	"	"	0.0	0.0	0.0	-0.093	0.00307	✓	✓	✓	✓	✓	"	43/20			
CABS-81-0230	"	"	"	0.0	0.0	0.0	-0.009	—	.0430		✓	✓	✓	"	58/20			
CABS-81-0241	"	"	"	0.0	0.0	—	-0.010	0.00061		✓	✓	✓	✓	"	29/20			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5-22-81	TA 1537	RLI-17	0.0	0.1	0.3	0.072	0.00022	✓	✓	✓	✓	✓	20→ 2000	151/ /2000			
CABS-81-0021	"	"	"	0.3	0.5	0.7	0.113	0.00072	✓	.0112	✓	✓	✓	"	229/ /2000			
CABS-81-0091	"	"	"	*	0.5	*	0.274	0.00031		.0137			✓	"	559/ /2000			
CABS-81-0171	"	"	"	0.0	0.1	0.1	0.033	0.00038	✓	✓	✓	✓	✓	"	79/ /2000			
CABS-81-0230	"	"	"	0.8	1.0	1.2	0.481	0.00111	✓	✓	✓	✓	✓	"	320/ /650			
CABS-81-0241	"	"	"	0.5	0.6	0.7	0.305	0.00102		✓	✓	✓	✓	"	208/ /650			

* low and high values of slope not given on printout RS 7/14/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5-22-81	TA 1537	NONE	0.1	0.1	0.1	0.068	—	✓	✓		✓	✓	20 → 2000	144/2000			
CABS-81-0021	"	"	"	0.2	0.3	0.3	0.134	0.00088	.0309	✓	✓	✓	✓	"	96/650			
CABS-81-0091	"	"	"	0.4	0.5	0.8	0.276	0.00096	.0140	✓	✓	✓	✓	"	194/2000			
CABS-81-0171	"	"	"	0.0	0.0	0.1	0.029	0.00017	✓		✓	✓	✓	"	70/2000			
CABS-81-0230	"	"	"	1.3	1.6	2.0	0.288	0.00261		✓	✓		✓	"	201/650			
CABS-81-0241	"	"	"	0.1	0.2	0.2	0.090	0.00085	.0219	✓	✓	✓	✓	"	70/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5-22-81	TA 1538	RLI-17	0.3	0.4	0.5	0.221	0.00025		✓	✓	✓	✓	20→ 2000	467/2000			
CABS-81-0071	"	"	"	0.7	0.8	1.0	0.414	0.00030	✓		✓	✓	✓	"	880/2000			
CABS-81-0091	"	"	"	2.0	2.3	2.7	0.435	0.00082	.0145		✓	✓	✓	"	894/2000			
CABS-81-0171	"	"	"	0.4	0.5	0.7	0.174	0.00050	.0104		✓	✓	✓	"	379/2000			
CABS-81-0230	"	"	"	2.1	2.4	2.6	0.445	0.00082		✓	✓		✓	"	929/2000			
CABS-81-0241	"	"	"	0.8	0.8	0.9	0.326	0.00043			✓	✓	✓	"	724/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-80-4201	5-22-81	TA 1538	NONE	0.2	0.2	0.2	0.173	—	✓			✓	✓	20→ 2000	354/2000			
CABS-81-0071	"	"	"	1.0	1.2	1.4	0.524	0.00121	✓	✓	✓	✓	✓	"	358/650			
CABS-81-0091	"	"	"	0.7	0.8	0.9	0.184	0.00070		.0102	✓	✓	✓	"	388/650			
CABS-81-0171	"	"	"	0.1	0.2	0.4	0.107	0.00032	✓	✓	✓	✓	✓	"	228/2000			
CABS-81-0230	"	"	"	1.7	1.8	1.9	0.719	0.00139		✓	✓		✓	"	494/650			
CABS-81-0241	"	"	"	1.1	1.2	1.3	0.480	0.00134			✓	✓	✓	"	336/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	12/11/80	TA98	RLI-16	2.7	3.4	4.4	0.917	0.00065	✓	✓	✓	✓	✓	20 → 2000	1862/2000			
SDSB-80-4231	"	"	"	14.0	14.1	14.2	5.557	0.00123			✓		✓	"	3635/650			
SDSB 80-4241	"	"	"	6.6	6.8	7.1	1.369	0.00080			✓		✓	"	2771/2000			
SDSB-80-4251	"	"	"	21.7	21.8	21.8	18.062	0.00220					✓	"	3567/200			
SDSB-80-4221	"	"	none	1.4	1.5	1.7	0.711	0.00037	.0445		✓	✓	✓	"	1471/2000			
SDSB-80-4231	"	"	"	21.5	21.8	22.0	4.761	0.00218					✓	"	3263/650			
SDSB-80-4241	"	"	"	4.1	4.3	4.5	0.757	0.00083	.0160		✓		✓	"	1626/2000			
SDSB-80-4251	"	"	"	37.3	37.5	37.7	17.593	0.00316			✓		✓	"	3727/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	12/11/80	TA100	RLI-16	2.5	2.7	2.9	0.902	0.00051			✓	✓	✓	20→2000	1969/2000			
SDSB-80-4231	"	"	"	8.2	8.3	8.3	9.507	0.00125					✓	"	2067/200			
SDSB-80-4241	"	"	"	7.4	7.8	8.2	2.958	0.00144			✓		✓	"	2071/650			
SDSB-80-4251	"	"	"	17.8	19.2	18.6	7.447	0.00339		.0104	✓		✓	"	1879/200			
SDSB-80-4221	"	"	none	3.1	3.2	3.3	1.635	0.00089		✓	✓		✓	"	1221/650			
SDSB-80-4231	"	"	"	9.1	9.3	9.6	4.127	0.00298			✓		✓	"	1019/200			
SDSB-80-4241	"	"	"	9.2	9.8	10.4	4.844	0.00317	✓	.0149	✓	✓	✓	"	1125/200			
SDSB-80-4251	"	"	"	4.0	4.0	4.1	2.829	—			✓		✓	"	959/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	12/11/80	TA 1535	RLI-16	0.0	0.2	0.8	0.051	0.00147	✓	✓	✓	✓	✓	20 → 2000	43/650			
SDSB-80-4231	"	"	"	0.3	0.4	0.5	0.194	0.00099	✓		✓	✓	✓	"	145/2000			
SDSB-80-4241	"	"	"	0.1	0.2	0.4	0.117	0.00215	✓	✓	✓	✓	✓	"	35/200			
SDSB-80-4251	"	"	"	0.2	0.2	0.2	0.350	—				✓	✓	"	248/650			
SDSB-80-4221	"	"	none	0.0	0.0	0.0	-0.042	—		✓	✓	✓	✓	"	34/20			
SDSB-80-4231	"	"	"	0.0	0.0	0.1	-0.010	—		.0174	✓	✓	✓	"	36/65			
SDSB-80-4241	"	"	"	0.0	0.0	0.0	0.010	—			✓	✓	✓	"	48/200			
SDSB-80-4251	"	"	"	0.0 ~~0.1~~ *	0.0	0.1	-0.080	—	✓			✓	✓	"	35/65			

* Entry of Wrong Number
RS 5/4/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	12/11/80	TA 1537	RLI-16	0.5	0.7	1.0	0.221	0.00058			✓	✓	✓	20 → 2000	451/2000			
SDSB-80-4231	"	"	"	3.0	3.0	3.0	3.891	0.00160					✓	"	755/200			
SDSB-80-4241	"	"	"	2.7	3.0	3.3	1.133	0.00151		✓	✓		✓	"	733/650			
SDSB-80-4251	"	"	"	31.7	33.2	34.7	6.637	0.00803			✓		✓	"	1307/200			
SDSB-80-4221	"	"	none	0.2	0.3	0.4	0.089	0.00054	.0362	✓	✓	✓	✓	"	199/2000			
SDSB-80-4231	"	"	"	18.1	19.2	20.4	4.851	0.00710			✓		✓	"	959/200			
SDSB-80-4241	"	"	"	1.0	1.1	1.2	0.596	0.00079			✓	✓	✓	"	411/2000			
SDSB-80-4251	"	"	"	78.7	87.4	97.1	5.939	0.01326		✓	✓		✓	"	1244/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	12/11/80	TA 1538	R2I-16	3.0	3.4	3.9	0.674	0.00081		✓	✓		✓	20 → 2000	1364/2000			
SDSB-80-4231	"	"	"	6.5	6.5	6.6	7.957	0.00246					✓	"	1571/200			
SDSB-80-4241	"	"	"	5.3	5.4	5.6	2.424	0.00118			✓		✓	"	1587/650			
SDSB-80-4251	"	"	"	36.6	37.1	37.6	9.731	0.00627			✓		✓	"	1980/200			
SDSB-80-4221	"	"	none	1.1	1.1	1.2	0.576	0.00084			✓	✓	✓	"	400/650			
SDSB-80-4231	"	"	"	34.3	35.1	35.8	7.480	0.00790			✓		✓	"	1507/200			
SDSB-80-4241	"	"	"	2.3	2.3	2.3	2.055	0.00130					✓	"	427/200			
SDSB-80-4251	"	"	"	5.7	5.8	5.8	3.708	—			✓		✓	"	1469/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	1/27/81	TA 98	RLI-16	2.5	2.8	3.1	0.918	0.00055		✓	✓	✓	✓	20→ 2000	1861/ 2000			
SDSB-80-4231	"	"	"	19.3	19.6	19.8	5.592	0.00172			✓		✓	20→ 1300	3743/ 650			
SDSB-80-4241	"	"	"	6.5	7.0	7.6	1.085	0.00093		✓	✓		✓	20→ 2000	2208/ 2000			
SDSB-80-4251	"	"	"	65.3	66.3	67.4	19.491	0.00579			✓		✓	6.5→ 400	3847/ 200			
SDSB-80-4221	"	"	NONE	2.0	2.3	2.7	0.708	0.00058	✓	✓	✓	✓	✓	20→ 2000	1454/ 2000			
SDSB-80-4231	"	"	"	16.7	17.2	17.7	4.255	0.00199			✓		✓	20→ 1300	2992/ 650			
SDSB-80-4241	"	"	"	3.2	3.8	4.4	0.743	0.00079	✓	.0311	✓		✓	20→ 2000	1550/ 2000			
SDSB-80-4251	"	"	"	42.0	42.8	43.6	17.827	0.00398			✓		✓	6.5→ 400	3699/ 200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	1/27/81	TA 100	RLI-16	2.6	2.9	3.1	1.405	0.00054	✓		✓	✓	✓	20→ 1300	1924/ /1300			
SDSB-80-4231	"	"	"	37.5	40.1	43.0	10.514	0.00642			✓		✓	6.5→ 400	2226/ /200			
SDSB-80-4241	"	"	"	6.5	6.9	7.3	2.812	0.00131		✓	✓		✓	20→ 1300	1948/ /650			
SDSB-80-4251	"	"	"	*	141.4	*	8.812	0.01386					✓	6.5→ 400	1993/ /200			
SDSB-80-4221	"	"	NONE	4.9	5.1	5.4	2.079	0.00121			✓		✓	20→ 1300	1507/ /650			
SDSB-80-4231	"	"	"	23.2	24.4	25.7	5.443	0.00661	✓		✓		✓	6.5→ 400	1257/ /200			
SDSB-80-4241	"	"	"	10.3	11.8	13.6	3.306	0.00313		✓	✓	✓	✓	6.5→ 400	1389/ /400			
SDSB-80-4251	"	"	"	53.1	57.7	62.7	19.119	0.01575		✓	✓		✓	2.0→ 130	1372/ /65			

* Low and high values of slope not given on printout RS 5/6/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4221	1/27/81	TA 1535	RLI-16	0.0	0.1	0.2	0.043	0.00073	.0108	✓	✓	✓	✓	20→ 1300	43/ 650			
SDSB-80-4231	"	"	"	0.7	2.1	5.9	0.185	0.01083	✓	✓	✓	✓	✓	6.5→ 400	50/ 200			
SDSB-80-4241	"	"	"	0.1	0.4	1.5	0.048	0.00285	✓	✓	✓	✓	✓	20→ 1300	44/ 650			
SDSB-80-4251	"	"	"	0.1	0.6	4.3	0.245	0.00503	✓	✓	✓	✓	✓	2.0→ 130	44/ 130			
SDSB-80-4221	"	"	NONE	0.0	0.0	0.0	0.010	—	✓			✓	✓	20→ 2000	34/ 200			
SDSB-80-4231	"	"	"	0.1	0.2	0.5	0.064	0.00373	.0231	✓	✓	✓	✓	6.5→ 400	33/ 20			
SDSB-80-4241	"	"	"	0.0	0.1	0.9	0.068	0.00200	✓	✓	✓	✓	✓	6.5→ 400	36/ 65			
SDSB-80-4251	"	"	"	0.6	1.1	2.1	0.539	0.01904	✓	✓	✓	✓	✓	2.0→ 130	39/ 20			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	1/27/81	TA 1537	RLI-16	0.4	0.6	0.8	0.190	0.00054	✓	✓	✓	✓	✓	20→ 2000	385/ 2000			
SDSB-80-4231	"	"	"	14.3	16.3	18.7	2.939	0.00441			✓	✓	✓	6.5→ 400	1115/ 400			
SDSB-80-4241	"	"	"	1.0	1.2	1.5	0.642	0.00048	✓	.0110	✓	✓	✓	20→ 1300	830/ 1300			
SDSB-80-4251	"	"	"	407.8	437.9	468.0	7.449	0.02064			✓		✓	6.5→ 400	1459/ 200			
SDSB-80-4221	"	"	NONE	0.3	0.4	0.6	0.207	0.00053	✓	✓	✓	✓	✓	20→ 1300	268/ 1300			
SDSB-80-4231	"	"	"	8.9	10.9	13.4	2.216	0.00413			✓	✓	✓	6.5→ 400	830/ 400			
SDSB-80-4241	"	"	"	0.9	1.0	1.2	0.484	0.00110	✓	✓	✓	✓	✓	20→ 1300	328/ 650			
SDSB-80-4251	"	"	"	72.4	74.7	77.1	6.631	0.01245			✓		✓	6.5→ 400	1332/ 200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4221	1/27/81	TA 1538	RLI-16	3.2	3.8	4.4	0.664	0.00086			✓	✓	✓	20→ 2000	1334/ 2000			
SDSB-80-4231	"	"	"	21.6	22.8	24.1	5.100	0.00387						6.5→ 400	1917/ 400			
SDSB-80-4241	"	"	"	5.5	6.0	6.5	1.221	0.00127			✓		✓	20→ 1300	1489/ 1300			
SDSB-80-4251	"	"	"	297.5	307.9	318.7	8.364	0.01838			✓		✓	6.5→ 400	1658/ 400			
SDSB-80-4221	"	"	NONE	0.5	0.8	1.2	0.659	0.00015	✓	✓	✓	✓	✓	20→ 1300	862/ 1300			
SDSB-80-4231	"	"	"	12.2	12.5	12.9	6.536	0.00356			✓		✓	6.5→ 400	1480/ 400			
SDSB-80-4241	"	"	"	3.6	3.8	4.1	1.140	0.00189			✓		✓	20→ 1300	754/ 650			
SDSB-80-4251	"	"	"	46.6	51.8	57.5	13.777	0.01053			✓	✓	✓	2.0→ 130	1708/ 130			

GROUP 8

FUEL EFFECTS

VARIABLE: BASE FUEL VS SYNTHETIC FUEL BLENDS

CABS-81-0320	VW Rabbit Diesel	Alternate fuels	C/H FUEL
0330	"	"	"
0340	"	"	"
0350	"	"	"
0360	"	"	"
0370	"	"	"
0380	"	"	"
0390	"	"	"

Table 1

GROUP ID: 8

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-81-0320	L-4 VW RABBIT 1.5L.	FTP COLD FTP HOT	DIESEL NO. 2	159.581 mg	
CABS-81-0330	V.W. RABBIT 1.5l. L-4	FTP COLD FTP HOT	DIESEL NO. 2	217.262 mg	
CABS-81-0340	V.W. RABBIT 1.5l L-4	FTP COLD FTP HOT	DIESEL NO. 2	164.497 mg.	
CABS-81-0350	V.W. RABBIT 1.5l. L-4	FTP COLD FTP HOT	DIESEL NO. 2	234.108 mg.	
CABS-81-0360	V.W. RABBIT 1.5 l. L-4	FTP COLD FTP HOT	DIESEL NO. 2	264.447 mg.	
CABS-81-0370	V.W. RABBIT 1.5 l. L-4	FTP COLD FTP HOT	DIESEL NO. 2	263.538 mg.	
CABS-81-0380	V.W. RABBIT 1.5 l. L-4	FTP COLD FTP HOT	DIESEL NO. 2	215.641 mg	
CABS-81-0390	V.W. RABBIT 1.5 l. L-4	FTP COLD FTP HOT	DIESEL NO. 2	172.109 mg.	

Group 8 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-81-0320	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0330	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0340	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0350	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0360	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0370	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0380	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0390	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 9/30/81
2= Experiment Date: 10/2/81
3= Experiment Date: 10/15/81
4= Experiment Date: 10/22/81
5= Experiment Date: 11/3/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0320	9-30-81	TA98	RL1017	3.0	3.1	3.2	.89	.00060			✓		✓	20 → 2000	1899/2000			
CABS-81-0330	"	"	"	6.2	6.3	6.3	3.225	.00079	✓		✓		✓	"	2285/650			
CABS-81-0340	"	"	"	3.9	4.0	4.1	.928	.00068			✓		✓	"	2091/2000			
CABS-81-0350	"	"	"	5.1	5.2	5.4	2.572	.00095			✓		✓	"	1767/650			
CABS-81-0360	"	"	"	4.9	5.0	5.1	2.327	.00105			✓		✓	"	1583/650			
CABS-81-0370	"	"	"	*	5.3	*	2.110	.00131					✓	"	1429/650			
CABS-81-0380	"	"	"	8.6	8.8	8.9	3.915	.00113			✓		✓	"	2699/650			
CABS-81-0390	"	"	"	8.9	9.0	9.1	3.467	.00106			✓		✓	"	2753/650			
CABS-81-0320	"	"	NONE	5.8	6.0	6.1	1.775	.00163			✓		✓	20 → 2000	1269/650			
CABS-81-0330	"	"	"	11.9	12.0	12.1	6.941	.00232			✓		✓	"	1480/200			
CABS-81-0340	"	"	"	5.4	5.5	5.6	1.924	.00129			✓		✓	"	1451/650			
CABS-81-0350	"	"	"	12.8	13.2	13.7	6.028	.00351	✓		✓		✓	"	1257/200			
CABS-81-0360	"	"	"	12.8	13.4	14.0	1.804	.00301	.0417		✓		✓	"	1289/650			
CABS-81-0370	"	"	"	10.1	10.4	10.8	5.229	.00341			✓	✓	✓	"	1083/200			
CABS-81-0380	"	"	"	23.6	24.3	25.0	9.599	.00427			✓		✓	"	2032/200			
CABS-81-0390	"	"	"	19.5	19.8	20.1	8.704	.00355			✓		✓	"	1827/200			

Completed 12-14-81 by PJB

* no data printed out PJB 12-14-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS 81-0320	10/15/81	TA 98	RLT-017	5.4	6.2	7.1	2.007	0.00172		✓	✓	✓	✓	6.5→ 650	1334/ /650			
CABS-81-0330	"	"	"	10.0	10.7	11.5	3.245	0.00181		.0150	✓		✓	6.5→ 650	2161/ /650			
CABS-81-0340	"	"	"	7.8	9.2	10.8	2.883	0.00175		✓	✓		✓	6.5→ 650	1917/ /650			
CABS-81-0350	"	"	"	7.2	9.0	11.4	2.909	0.00172	✓	✓	✓	✓	✓	6.5→ 650	1930/ /650			
CABS-81-0360	"	"	"	9.0	9.4	11.0	2.517	0.00199	✓	✓	✓		✓	6.5→ 650	1680/ /650			
CABS-81-0370	"	"	"	7.2	8.9	11.0	2.358	0.00202	.0467	✓	✓	✓	✓	6.5→ 650	1557/ /650			
CABS-81-0380	"	"	"	10.5	12.2	14.2	3.348	0.00197	✓	✓	✓		✓	6.5→ 650	2218/ /650			
CABS-81-0390	"	"	"	18.1	19.2	20.3	4.142	0.00234			✓		✓	6.5→ 650	2742/ /650			
CABS-81-0320	"	"	NONE	6.8	7.8	9.0	2.191	0.00192	✓	✓	✓		✓	6.5→ 650	1464/ /650			
CABS-81-0330	"	"	"	10.2	10.7	11.2	2.846	0.00196	.0128		✓		✓	6.5→ 650	1970/ /650			
CABS-81-0340	"	"	"	8.2	8.6	8.9	2.678	0.00172			✓		✓	6.5→ 650	1847/ /650			
CABS 81-0350	"	"	"	11.0	11.6	12.3	2.188	0.00247	.0395		✓		✓	6.5→ 650	1518/ /650			
CABS 81-0360	"	"	"	9.9	11.4	13.1	2.088	0.00254	✓		✓		✓	6.5→ 650	1422/ /650			
CABS-81-0370	"	"	"	9.8	10.2	10.6	5.466	0.00308		✓	✓		✓	6.5→ 650	1110/ /200			
CABS-81-0380	"	"	"	15.3	15.7	16.1	7.967	0.00309			✓		✓	6.5→ 650	1613/ /200			
CABS-81-0390	"	"	"	16.0	16.7	17.3	7.931	0.00[illegible]			✓		✓	6.5→ [illegible]	2041/ [illegible]			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0320	9-30-81	TA100	RLI017	6.7	7.2	7.6	2.068	.00180		.0191	✓		✓	20→2000	1322/650			
CABS-81-0330	"	"	"	13.8	14.5	15.4	1.801	.00299	✓		✓		✓	20→2000	1427/650			
CABS-81-0340	"	"	"	5.4	5.7	6.0	2.024	.00136			✓		✓	"	1516/650			
CABS-81-0350	"	"	"	19.7	20.7	21.8	1.753	.00360	.0178		✓		✓	"	1365/650			
CABS-81-0360	"	"	"	14.0	14.2	14.4	5.858	.00358			✓		✓	"	1326/200			
CABS-81-0370	"	"	"	13.4	13.7	14.0	5.193	.00431			✓		✓	"	1154/200			
CABS-81-0380	"	"	"	16.0	16.3	16.6	6.657	.00361			✓		✓	"	1560/200			
CABS-81-0390	"	"	"	8.5	8.6	8.7	4.636	.00213			✓		✓	"	1328/200			
CABS-81-0320	"	"	NONE	16.3	17.1	18.0	6.694	.00431	.0115	✓	✓		✓	20→2000	1482/200			
CABS-81-0330	"	"	"	29.3	30.5	31.8	8.858	.00577		✓	✓		✓	"	1954/200			
CABS-81-0340	"	"	"	14.1	14.3	14.6	6.941	.00335			✓		✓	"	1549/200			
CABS-81-0350	"	"	"	22.7	23.8	24.9	5.619	.00631			✓		✓	"	1325/200			
CABS-81-0360	"	"	"	*	44.6	*	4.485	.01031					✓	"	1157/200			
CABS-81-0370	"	"	"	*	61.3	*	6.823	.01058					✓	"	1526/200			
CABS-81-0380	"	"	"	19.2	19.7	20.2	5.362	.00529			✓		✓	"	1307/200			
CABS-81-0390	"	"	"	16.8	17.4	18.1	5.355	.00494			✓		✓	"	1287/200			

Completed 12-14-81 by PTB

* No data printed out. PTB 12-14-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0320	10/22/81	TA 100	RLI-017	4.9	6.2	7.8	2.034	0.00157	✓	✓	✓	✓	✓	6.5→ 650	1486/ /650			
CABS-81-0330	"	"	"	6.0	7.0	9.3	1.860	0.00187			✓	✓	✓	6.5→ 650	1398/ /650			
CABS-81-0340	"	"	"	4.5	5.0	5.6	1.952	0.00125	.0175		✓	✓	✓	6.5→ 650	1510/ /650			
CABS-81-0350	"	"	"	9.1	9.6	10.1	5.413	0.00244		✓	✓		✓	6.5→ 650	1245/ /200			
CABS-81-0360	"	"	"	8.4	9.1	10.0	1.761	0.00229	✓		✓		✓	6.5→ 650	1383/ /650			
CABS-81-0370	"	"	"	9.2	9.8	10.6	5.150	0.00294	.0231	✓	✓		✓	6.5→ 650	1230/ /650			
CABS-81-0380	"	"	"	13.6	14.3	15.2	6.532	0.00347	✓	.0264	✓		✓	6.5→ 650	1490/ /200			
CABS-81-0390	"	"	"	13.0	13.6	14.2	5.584	0.00378	✓		✓		✓	6.5→ 650	1285/ /200			
CABS-81-0320	"	"	NONE	13.6	14.0	14.5	6.644	0.00318			✓		✓	6.5→ 650	1484/ /200			
CABS-81-0330	"	"	"	21.5	22.1	22.8	8.461	0.00436	.0272		✓		✓	6.5→ 650	1868/ /200			
CABS-81-0340	"	"	"	14.5	14.9	15.3	7.170	0.00303			✓		✓	6.5→ 650	1607/ /200			
CABS-81-0350	"	"	"	33.7	35.9	38.2	9.164	0.00653	✓		✓		✓	6.5→ 650	2027/ /200			
CABS-81-0360	"	"	"	30.7	33.0	35.2	8.860	0.00627	✓		✓		✓	6.5→ 650	1962/ /200			
CABS-81-0370	"	"	"	23.7	25.5	27.4	7.114	0.00595	✓	✓	✓		✓	6.5→ 650	1576/ /200			
CABS-81-0380	"	"	"	22.5	23.3	24.1	6.642	0.00538			✓		✓	6.5→ 650	1574/ /200			
CABS-81-0390	"	"	"	18.5	19.4	20.4	6.047	0.00495	✓		✓		✓	6.5→ 650	1427/ /200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0320	10-2-81	TA1535	RLI017	0.0	0.1	0.2	.039	.00158	✓	✓	✓	✓	✓	20→2000	18/200			
CABS-81-0330	"	"	"	0.0	0.1	0.8	.009	.00283	✓		✓	✓	✓	"	18/650			
CABS-81-0340	"	"	"	0.1	0.2	0.5	.017	.00272	.0327	✓	✓	✓	✓	"	23/650			
CABS-81-0350	"	"	"	0.0	0.1	1.2	.043	.00338	✓	✓	✓	✓	✓	"	22/200			
CABS-81-0360	"	"	"	0.0	0.2	1.2	.068	.00406	.0388	✓	✓	✓	✓	"	24/200			
CABS-81-0370	"	"	"	0.0	0.1	1.3	.051	.00284	✓	✓	✓	✓	✓	"	20/650			
CABS-81-0380	"	"	"	0.1	0.2	1.0	.079	.00407	✓	✓	✓	✓	✓	"	25/200			
CABS-81-0390	"	"	"	0.0	0.1	0.4	.047	.00298	.0235	✓	✓	✓	✓	"	20/200			
CABS-81-0320	"	"	NONE	0.1	0.5	2.1	.045	.00795	✓	✓	✓	✓	✓	20→2000	22/200			
CABS-81-0330	"	"	"	0.2	0.5	1.4	.072	.00733	✓	✓	✓	✓	✓	"	29/200			
CABS-81-0340	"	"	"	0.0	0.0	0.2	.008	*	✓		✓	✓	✓	"	17/65			
CABS-81-0350	"	"	"	0.0	0.0	0.1	.043	*	✓	✓	✓	✓	✓	"	22/200			
CABS-81-0360	"	"	"	0.0	0.0	0.2	.041	*	✓	✓	✓	✓	✓	"	21/200			
CABS-81-0370	"	"	"	0.0	0.6	34.8	.036	.00928	✓	✓	✓	✓	✓	"	20/200			
CABS-81-0380	"	"	"	0.0	0.1	0.2	.040	*	✓	✓	✓	✓	✓	"	20/200			
CABS-81-0390	"	"	"	*	0.0	*	.019	*	.0354	.0240	✓		✓	"	23/65			

Completed 12-14-81 by PJB

* no data printed out. PJB 12-14-81

* no values given for low and high figures RS 12.

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS 81-0320	10/22/81	TA 1535	RLI-017	*	0.1	*	0.040	0.00306	✓	✓		✓	✓	6.5→ 650	28/ 650			
CABS-81-0330	"	"	"	0.1	0.5	1.8	0.072	0.00665	.0194	✓	✓	✓	✓	6.5→ 650	31/ 200			
CABS-81-0340	"	"	"	0.0	0.1	0.4	0.042	0.00236	.0145	✓	✓	✓	✓	6.5→ 650	25/ 200			
CABS-81-0350	"	"	"	0.1	0.2	0.6	0.114	0.00314	✓	✓	✓	✓	✓	6.5→ 650	30/ 200			
CABS-81-0360	"	"	"	*	0.2	*	0.066	0.00297	✓	✓		✓	✓	6.5→ 650	28/ 200			
CABS-81-0370	"	"	"	*	0.1	*	0.037	0.00258	✓	✓		✓	✓	6.5→ 650	24/ 200			
CABS-81-0380	"	"	"	0.1	0.3	0.6	0.072	0.00320	✓	✓	✓	✓	✓	6.5→ 650	36/ 200			
CABS-81-0390	"	"	"	0.0	0.2	0.7	0.071	0.00379	✓	✓	✓	✓	✓	6.5→ 650	22/ 200			
CABS-81-0320	"	"	NONE	0.0	0.1	0.3	-0.023	—	✓			✓	✓	6.5→ 650	23/ 6.5			
CABS-81-0330	"	"	"	0.0	0.0	0.0	-0.008	—	✓		✓	✓	✓	6.5→ 650	26/ 6.5			
CABS-81-0340	"	"	"	0.0	0.0	0.3	-0.049	0.00095	.0363	✓	✓	✓	✓	6.5→ 650	25/ 20			
CABS-81-0350	"	"	"	0.0	0.0	0.0	-0.049	0.00216	✓	✓	✓	✓	✓	6.5→ 650	24/ 6.5			
CABS-81-0360	"	"	"	0.0	0.0	1.0	0.004	0.00024	✓		✓	✓	✓	6.5→ 650	28/ 6.5			
CABS-81-0370	"	"	"	0.0	0.0	0.0	-0.005	—	✓	✓	✓	✓	✓	6.5→ 650	23/ 6.5			
CABS-81-0380	"	"	"	0.0	0.0	0.6	-0.066	—	✓		✓	✓	✓	6.5→ 650	26/ 6.5			
CABS-81-0390	"	"	"	0.0	0.1	34.3	0.005	0.00358	✓	✓	✓	✓	✓	6.5→ 650	25/ 6.5			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0320	10-2-81	TA1537	RLI017	1.2	1.4	1.5	.67	.00106	✓	✓	✓	✓	✓	20 → 2000	446/650			
CABS-81-0330	"	"	"	4.4	4.8	5.2	1.274	.00206	✓		✓		✓	"	852/650			
CABS-81-0340	"	"	"	1.7	1.9	2.0	.792	.00115	✓		✓		✓	"	543/650			
CABS-81-0350	"	"	"	3.7	4.0	4.5	.762	.00256	✓		✓		✓	"	520/650			
CABS-81-0360	"	"	"	3.8	4.2	4.6	.724	.00269	✓		✓		✓	"	494/650			
CABS-81-0370	"	"	"	6.4	7.0	7.7	.788	.00338			✓		✓	"	528/650			
CABS-81-0380	"	"	"	7.7	8.2	8.7	1.044	.00321			✓		✓	"	711/650			
CABS-81-0390	"	"	"	11.6	12.2	12.8	1.397	.00322			✓		✓	"	944/650			
CABS-81-0320	"	"	NONE	1.5	1.9	2.5	.389	.00233		✓	✓	✓	✓	20 → 2000	276/650			
CABS-81-0330	"	"	"	3.6	4.3	5.1	2.244	.00322	✓	✓	✓	✓	✓	"	458/200			
CABS-81-0340	"	"	"	4.5	4.8	5.1	.622	.00316			✓		✓	"	430/650			
CABS-81-0350	"	"	"	4.8	5.8	6.9	1.670	.00613	✓	✓	✓		✓	"	343/200			
CABS-81-0360	"	"	"	4.2	5.5	7.3	1.611	.00618		✓	✓		✓	"	324/200			
CABS-81-0370	"	"	"	5.3	6.3	7.3	1.415	.00754	✓		✓		✓	"	287/200			
CABS-81-0380	"	"	"	11.0	12.5	14.2	2.200	.00875			✓		✓	"	449/200			
CABS-81-0390	"	"	"	12.6	13.2	13.9	3.654	.00650		✓	✓		✓	"	731/200			

Completed 12-14-81 by PJB

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS 81-0320	11/3/81	TA 1537	RLT-017	1.0	1.8	3.4	0.697	0.00148	✓	✓	✓	✓	✓	6.5→ 650	457/ /650			
CABS-81-0330	"	"	"	2.8	3.3	4.0	1.358	0.00137	.0136		✓	✓	✓	6.5→ 650	897/ /650			
CABS-81-0340	"	"	"	2.1	2.9	4.0	0.864	0.00185	✓		✓	✓	✓	6.5→ 650	569/ /650			
CABS-81-0350	"	"	"	1.4	1.8	2.3	0.806	0.00118	✓		✓	✓	✓	6.5→ 650	543/ /650			
CABS-81-0360	"	"	"	1.7	2.3	3.3	0.715	0.00179	✓	✓	✓	✓	✓	6.5→ 650	476/ /650			
CABS-81-0370	"	"	"	0.8	1.4	2.5	0.725	0.00100	✓	✓	✓	✓	✓	6.5→ 650	482/ /650			
CABS-81-0380	"	"	"	2.0	3.0	4.3	0.842	0.00189	✓	✓	✓	✓	✓	6.5→ 650	566/ /650			
CABS-81-0390	"	"	"	9.0	12.2	16.5	1.338	0.00339	✓	✓	✓		✓	6.5→ 650	875/ /650			
CABS-81-0320	"	"	NONE	1.9	3.1	4.9	0.454	0.00293	✓	✓	✓	✓	✓	6.5→ 650	233/ /200			
CABS-81-0330	"	"	"	3.2	3.5	3.8	1.913	0.00278		✓	✓	✓	✓	6.5→ 650	433/ /650			
CABS 81-0340	"	"	"	1.4	2.0	3.0	0.653	0.00170	✓	✓	✓	✓	✓	6.5→ 650	437/ /650			
CABS 81-0350	"	"	"	3.0	3.7	4.5	1.426	0.00478	✓	✓	✓		✓	6.5→ 650	291/ /200 ~~65~~			Entry Error RS 10/28/81
CABS-81-0360	"	"	"	2.1	2.4	2.8	1.152	0.00388	✓		✓	✓	✓	6.5→ 650	239/ /200			
CABS-81-0370	"	"	"	3.7	4.2	4.8	1.193	0.00646			✓	✓	✓	6.5→ 650	242/ /200			
CABS-81-0380	"	"	"	4.4	4.7	5.1	1.720	0.00504		✓	✓	✓	✓	6.5→ 650	351/ /200			
CABS-81-0390	"	"	"	7.6	8.2	8.9	2.764	0.00543		✓	✓		✓	6.5→ [illegible]	554/			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0320	10-15-81	TA1538	RLI017	2.8	3.5	4.5	1.666	.00115	✓	✓	✓	✓	✓	6.5→ 650	1100/650			
CABS-81-0330	"	"	"	10.4	11.0	11.6	5.207	.00379		✓	✓		✓	"	1096/650			
CABS-81-0340	"	"	"	8.5	10.3	12.4	1.630	.00281			✓	✓	✓	"	1075/650			
CABS-81-0350	"	"	"	7.7	8.7	9.7	4.209	.00366		.0246	✓		✓	"	857/650			
CABS-81-0360	"	"	"	9.3	10.6	12.1	1.461	.00302		✓	✓		✓	"	970/650			
CABS-81-0370	"	"	"	9.3	12.0	15.7	1.503	.00318	✓	✓	✓		✓	"	990/650			
CABS-81-0380	"	"	"	10.5	10.9	11.4	5.614	.00335		✓	✓		✓	"	1143/200			
CABS-81-0390	"	"	"	15.0	16.2	17.6	6.208	.00485	✓	✓	✓		✓	"	1251/200			
CABS-81-0320	"	"	NONE	3.0	3.7	4.6	1.765	.00369		✓	✓		✓	6.5→ 650	358/200			
CABS-81-0330	"	"	"	*	6.6	*	2.734	.00432		✓			✓	"	563/200			
CABS-81-0340	"	"	"	6.2	6.8	7.4	3.108	.00396		.0183	✓		✓	"	627/200			
CABS-81-0350	"	"	"	7.8	8.3	9.0	2.036	.00710			✓		✓	"	420/200			
CABS-81-0360	"	"	"	8.3	9.6	11.0	2.336	.00705	✓	.0404	✓		✓	"	480/200			
CABS-81-0370	"	"	"	9.1	10.0	11.1	2.122	.00781			✓		✓	"	432/200			
CABS-81-0380	"	"	"	10.6	11.4	12.3	3.862	.00549	.0182		✓		✓	"	782/200			
CABS-81-0390	"	"	"	17.4	18.5	19.2	4.253	.00758			✓		✓	"	863/200			

Completed 12-14-81 by PJB

* No data printed out PJB 12-14-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS 81-0320	11/3/81	TA 1538	RLI-017	2.3	3.4	5.0	1.640	0.00113	✓	✓	✓	✓	✓	6.5→ 650	1079/ 650			
CABS-81-0330	"	"	"	10.7	12.1	13.6	2.008	0.00275			✓	✓	✓	6.5→ 650	1314/ 650			
CABS-81-0340	"	"	"	6.6	7.6	8.9	1.903	0.00213	.0264	✓	✓	✓	✓	6.5→ 650	1252/ 650			
CABS-81-0350	"	"	"	12.0	14.9	18.4	1.694	0.00333	✓	.0179	✓		✓	6.5→ 650	1110/ 650			
CABS-81-0360	"	"	"	3.4	4.1	4.9	1.453	0.00155			✓	✓	✓	6.5→ 650	980/ 650			
CABS-81-0370	"	"	"	2.8	3.9	5.3	1.615	0.00133	✓	✓	✓	✓	✓	6.5→ 650	1074/ 650			
CABS-81-0380	"	"	"	10.3	10.7	11.2	5.732	0.00321	.0125		✓		✓	6.5→ 650	1246/ 650			
CABS-81-0390	"	"	"	12.4	13.2	14.1	6.075	0.00397			✓		✓	6.5→ 650	1227/ 200			
CABS-81-0320	"	"	NONE	6.0	6.4	6.9	1.833	0.00626		.0253	✓	✓	✓	6.5→ 650	375/ 200			
CABS-81-0350	"	"	"	9.7	10.0	10.4	2.439	0.00683		.0112	✓		✓	6.5→ 650	504/ 200			
CABS 81-0340	"	"	"	5.1	5.6	6.2	1.796	0.00531			✓	✓	✓	6.5→ 650	373/ 200			
CABS-81-0350	"	"	"	7.3	10.6	15.3	4.071	0.01472	✓	.0310	✓	✓	✓	6.5→ 650	273/ 200			
CABS-81-0360	"	"	"	10.0	11.8	14.0	3.993	0.01691	✓	.0161	✓	✓	✓	6.5→ 650	264/ 200			
CABS-81-0370	"	"	"	6.1	9.8	15.7	1.056	0.01080		✓	✓	✓	✓	6.5→ 650	227/ 650			
CABS-81-0380	"	"	"	15.3	16.2	17.1	6.160	0.01493		.0267	✓	✓	✓	6.5→ 650	410/ 65			
CABS-81-0390	"	"	"	18.4	19.6	21.0	6.599	0.01721			✓	✓	✓	6.5→	434/			

GROUP 9

HEAVY DUTY DIESEL EVALUATION

VARIABLES: A) MALFUNCTION VS NO MALFUNCTION
B) TEST CYCLE

CABS-81-0400	DDAD	Baseline S.S. Comp.
0410	"	Baseline C/H trans.
0420	"	Malfunction S.S. Comp.
0430	"	Malfunction C/H trans.

Table 1

GROUP ID: 9

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-81-0400	DDAO 6V71 Coach Baseline Conf	7-mode Composite	No. 1 Diesel	176 mg.	
CABS-81-0410	DDAO 6V71 Coach Baseline Conf	Transient [C+6H]	No. 1 Diesel	197 mg.	
CABS-81-0420	DDAD 6V71 Coach Malfunction	7-mode Composite	NO. 1 Diesel	168 mg.	
CABS-81-0430	DDAD 6V71 Coach-Malfunction	Transient Composite	No 1 Diesel	194 mg.	

Group 9 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-81-0400	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0410	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0420	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5
CABS-81-0430	1	3	1	3	1	4	1	4	2	4	2	4	2	5	2	5	3	5	3	5

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 9/3/81
2 = Experiment Date: 9/9/81
3 = Experiment Date: 9/11/81
4 = Experiment Date 9/21/81
5 = Experiment Date 9/24/81

Data recorded by P.J. Burke 12-1-81
* Data not given on print out. PJB 12-1-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0400	9-3-81	TA98	RLI017	*	1.2	*	0.240	0.00080	✓	✓		✓	✓	20→ 2000	500/2000			
CABS-81-0410	9-3-81	TA98	"	0.2	0.2	0.3	0.194	0.00008		✓	✓	✓	✓	"	413/2000			
CABS-81-0420	"	"	"	0.2	0.5	1.3	0.138	0.00063	✓	✓	✓	✓	✓	"	294/2000			
CABS-81-0430	"	"	"	0.2	0.5	1.1	0.174	0.00047	✓	✓	✓	✓	✓	"	367/2000			
CABS-81-0400	"	"	NONE	0.3	0.4	0.7	0.164	0.00045	✓	✓	✓	✓	✓	"	339/2000			
CABS-81-0410	"	"	"	0.2	0.3	0.6	0.149	0.00035		✓	✓	✓	✓	"	311/2000			
CABS-81-0420	"	"	"	0.2	0.3	0.5	0.136	0.00039	.0254	✓	✓	✓	✓	"	285/2000			
CABS-81-0430	"	"	"	0.3	0.5	0.9	0.175	0.00053	✓	✓	✓	✓	✓	"	362/2000			
CABS-81-0400	9-11-81	"	RLI017	0.3	0.5	0.7	0.294	0.00021		✓	✓	✓	✓	"	615/2000			
CABS-81-0410	"	"	"	0.3	0.5	0.8	0.229	0.00033	✓	✓	✓	✓	✓	"	478/2000			
CABS-81-0420	"	"	"	0.1	0.6	2.8	0.142	0.00066	✓	✓	✓	✓	✓	"	304/2000			
CABS-81-0430	"	"	"	0.1	0.3	0.9	0.161	0.00035	.0257	✓	✓	✓	✓	"	343/2000			
CABS-81-0400	"	"	NONE	0.2	0.2	0.2	0.179	*		✓	✓	✓	✓	"	375/2000			
CABS-81-0410	"	"	"	0.3	0.5	0.7	0.161	0.00051	✓	✓	✓	✓	✓	"	332/2000			
CABS-81-0420	"	"	"	*	0.7	*	0.132	0.00080	✓	✓		✓	✓	"	278/2000			
CABS-81-0430	"	"	"	0.3	0.5	1.0	0.191	0.00049	.0379	✓	✓	✓	✓	"	395/2000			

Data recorded by P.J. Burke 12-1-81
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Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0400	9-3-81	TA100	RLI017	0.4	0.4	0.4	0.404	*		✓	✓	✓	✓	20 → 2000	931/2000			
CABS-81-0410	"	"	"	0.5 ~~1.2~~	0.5 ~~1.8~~	0.5 ~~2.7~~	0.484 ~~0.537~~	* ~~0.00059~~		✓ ~~.0316~~	✓	✓	✓	20 → 2000	~~115~~ 1073/2000			
CABS-81-0420	"	"	"	0.3	0.5	0.9	0.377	0.00014		✓	✓	✓	✓	"	870/2000			
CABS-81-0430	"	"	"	0.6	0.6	0.6	0.633	*	✓	✓	✓	✓	✓	"	1386/2000			
CABS-81-0400	"	"	NONE	1.2	1.8	2.7	0.537	0.00059		.0316	✓	✓	✓	20 → 2000	1156/2000			
CABS-81-0410	"	"	"	0.6	0.6	0.6	0.541	*	.0144	✓	✓	✓	✓	"	1294/2000			
CABS-81-0420	"	"	"	1.0	1.6	2.3	0.595	0.00046	✓	✓	✓	✓	✓	"	1289/2000			
CABS-81-0430	"	"	"	3.5	4.0	4.7	0.744	0.00082		.0263	✓	✓	✓	"	1589/2000			
CABS-81-0400	9-21-81	"	RLI017	0.5	0.5	0.5	0.475	*		✓	✓	✓	✓	20 → 2000	1076/2000			
CABS-81-0410	"	"	"	0.5	0.5	0.5	0.507	*	✓	✓	✓	✓	✓	"	1134/2000			
CABS-81-0420	"	"	"	0.5	0.7	0.9	0.456	0.00017		✓	✓	✓	✓	"	1028/2000			
CABS-81-0430	"	"	"	0.6	0.9	1.2	0.634	0.00015	✓	.0394	✓	✓	✓	"	1380/2000			
CABS-81-0400	"	"	NONE	1.0	1.4	2.0	0.637	0.00037	✓	✓	✓	✓	✓	"	1386/2000			
CABS-81-0410	"	"	"	2.1	2.5	3.0	0.606	0.00069			✓	✓	✓	"	1313/2000			
CABS-81-0420	"	"	"	2.6	3.1	3.6	0.550	0.00082		✓	✓	✓	✓	"	1205/2000			
CABS-81-0[illegible]0	"	"	"	2.3	2.9	3.6	0.626	0.000[illegible]	✓	.0103	✓	✓	✓	"	1354/2000			

Data recorded by P.J. Burke 12-1-81
*Data not given on print out PJB 12-1-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0400	9-9-81	TA1535	RLI017	0.0	0.0	0.0	0.021	*	✓	✓	✓	✓	✓	20→ 2000	56/2000			
CABS-81-0410	"	"	"	0.0	0.0	0.0	0.014	*	✓	✓		✓	✓	"	46/2000			
CABS-81-0420	"	"	"	*	0.1	*	0.009	0.00067	✓	✓		✓	✓	"	36/2000			
CABS-81-0430	"	"	"	0.0	0.0	0.0	0.008	*	✓	✓	✓	✓	✓	"	32/2000			
CABS-81-0400	"	"	NONE	0.0	0.0	0.0	0.001	*	✓	✓	✓	✓	✓	"	22/2000			
CABS-81-0410	"	"	"	0.0	0.0	0.1	0.017	0.00076	✓	✓	✓	✓	✓	20→ 2000	24/650			
CABS-81-0420	"	"	"	0.0	0.0	0.3	0.002	*	✓	✓	✓	✓	✓	"	23/65			
CABS-81-0430	"	"	"	0.0	0.0	0.0	0.004	*	✓			✓	✓	"	26/20			
CABS-81-0400	9-21-81	"	RLI017	0.0	0.1	21.8	0.011	0.00105	✓	✓	✓	✓	✓	"	36/2000			
CABS-81-0410	"	"	"	0.0	0.0	0.0	0.009	*	✓	✓		✓	✓	"	33/2000			
CABS-81-0420	"	"	"	0.0	0.1	0.3	0.023	0.00117	✓	✓	✓		✓	"	27/2000			
CABS-81-0430	"	"	"	0.0	0.1	0.3	0.017	0.00149	✓	✓	✓	✓	✓	"	26/2000			
CABS-81-0400	"	"	NONE	0.0	0.1	0.3	0.010	0.00128	✓	✓	✓	✓	✓	"	22/2000			
CABS-81-0410	"	"	"	0.0	0.0	933.9	0.004	*	✓	✓	✓	✓	✓	"	22/2000			
CABS-81-0420	"	"	"	0.0	0.0	51.4	0.002	*	✓	✓	✓	✓	✓	"	19/2000			
CABS-81-0430	"	"	"	0.0	0.0	0.0	0.005	*	.0342			✓	✓	20→ 2000	19/650			

Data recorded by P. J. Burke 12-1-81
* Data not given on print out. PJB 12-1-81
① 2000 ugs not plated due to insufficient compound volume. PJB 12-1-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0400	9-9-81	TA1537	RLI017	0.0	0.0	0.1	0.048	*	✓	✓		✓	✓	20→ 2000	105/2000			
CABS-81-0410	"	"	"	0.0	0.1	0.1	0.054	*	✓	✓		✓	✓	"	114/2000			
CABS-81-0420	"	"	"	0.0	0.0	0.0	0.032	*	✓	✓	✓	✓	✓	"	69/2000			
CABS-81-0430	"	"	"	0.0	0.4	5.5	0.040	0.00113	✓	✓	✓	✓	✓	"	86/2000			
CABS-81-0400	"	"	NONE	0.0	0.0	0.1	0.044	*	✓	✓	✓	✓	✓	"	96/2000			
CABS-81-0410	"	"	"	0.0	0.1	0.2	0.041	0.00019	✓	✓	✓	✓	✓	"	88/2000			
CABS-81-0420	"	"	"	0.0	0.0	0.0	0.033	*	✓	✓		✓	✓	"	73/2000			
CABS-81-0430	"	"	"	0.0	0.1	0.1	0.049	0.00016	.0150	✓	✓	✓	✓	"	100/2000			
① CABS-81-0400	9-24-81	"	RLI017	0.1	0.1	0.1	0.061	*	✓	✓		✓	✓	20→ 650	46/650			
CABS-81-0410	"	"	"	0.0	0.1	1.6	0.031	0.00061	✓	✓	✓	✓	✓	20→ 2000	69/2000			
① CABS-81-0420	"	"	"	0.0	0.0	0.1	0.043	*	✓	✓	✓	✓	✓	20→ 650	34/650			
CABS-81-0430	"	"	"	0.0	0.0	0.0	0.032	*	✓	✓	✓	✓	✓	20→ 2000	69/2000			
① CABS-81-0400	"	"	NONE	0.0	0.0	0.1	0.048	*	✓	✓		✓	✓	20→ 650	37/650			
① CABS-81-0410	"	"	"	0.0	0.0	0.1	0.039	*	✓	✓	✓	✓	✓	20→ 650	30/650			
① CABS-81-0420	"	"	"	0.0	0.0	0.0	0.035	*	✓	✓	✓	✓	✓	20→ 650	27/650			
CABS-81-0[illegible]	"	"	"	0.0	0.0	0.0	0.040	*	✓	✓	✓	✓	✓	20→ 2000	83/2000			

Data recorded by P.J. Burke 12-1-81
* Data not given on print out. PJB 12-1-81
① 2000 UGS not plated due to insufficient compound volume. PJB 12-1-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0400	9-11-81	TA1538	RLI017	0.4	0.7	1.2	0.229	0.00054	✓	✓	✓	✓	✓	20→ 2000	464/2000			
CABS-81-0410	"	"	"	0.2	0.3	0.4	0.196	0.00018	.0261	✓	✓	✓	✓	"	405/2000			
CABS-81-0420	"	"	"	0.2	0.4	0.7	0.128	0.00050		✓	✓	✓	✓	"	272/2000			
CABS-81-0430	"	"	"	0.3	0.6	1.4	0.122	0.00081		✓	✓	✓	✓	"	255/2000			
CABS-81-0400	"	"	NONE	0.2	0.2	0.3	0.125	0.00030	.0431	✓	✓	✓	✓	"	257/2000			
CABS-81-0410	"	"	"	0.1	0.1	0.3	0.089	0.00021	✓	✓	✓	✓	✓	"	187/2000			
CABS-81-0420	"	"	"	0.0	0.1	0.3	0.078	0.00019	✓	✓	✓	✓	✓	"	166/2000			
CABS-81-0430	"	"	"	0.1	0.1	0.1	0.084	*	.0266	✓	✓	✓	✓	"	174/2000			
CABS-81-0400	9-24-81	"	RLI017	*	0.5	*	0.200	0.00046	✓	✓		✓	✓	"	409/2000			
CABS-81-0410	"	"	"	*	0.5	*	0.183	0.00052	.0129	✓		✓	✓	"	375/2000			
① CABS-81-0420	"	"	"	0.0	0.8	*	0.170	0.00220	✓	✓	✓	✓	✓	20→ 650	123/650			
CABS-81-0430	"	"	"	0.1	0.3	0.5	0.128	0.00037	✓	.0118	✓	✓	✓	20→ 2000	269/2000			
CABS-81-0400	"	"	NONE	0.1	~~0.2~~ 0.1	0.1	0.089	*	✓	✓	✓	✓	✓	"	176/2000			
CABS-81-0410	"	"	"	0.1	0.1	0.1	0.092	*	✓	✓		✓	✓	"	193/2000			
CABS-81-0420	"	"	"	0.1	0.3	0.9	0.078	0.00060	✓	✓	✓	✓	✓	"	162/2000			
CABS-81-0430	"	"	"	0.0	0.1	0.4	0.086	0.00025	✓	✓	✓	✓	✓	"	176/2000			

GROUP 10

PARTICULATE TRAP EVALUATION

VARIABLE: VARIOUS TRAPS VS NO TRAP

CABS-81-0441	Toyota	dummy trap	LA-4s
0501	Mercedes	UOP EX-47 trap	LA-4s
0561	Toyota	NGK #1 trap	LA-4s
0661	Mercedes	NGK #2 trap	LA-4s
0691	Mercedes	NGK #2 trap	HFETs
0721	Mercedes	NGK #2 trap	regeneration

Table 1

GROUP ID: 10

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-81-0441	Toyota Dummy Trap	LA-4 (2)	#2-Diesel	746 mg	
CABS-81-0501	M/B UOP EX-47 Trap	LA-4	#2-Diesel	69 mg	
CABS-81-0561	Toyota NGK#1	LA-4 (4)	#2-Diesel	648 mg	
CABS-81-0661	M/B Diesel NGK #2	LA-4 (3)	#2-Diesel	219 mg	
CABS-81-0691	Diesel M/B NGK #2	F/E (9)	#2-Diesel	141 mg	
CABS-81-0721	Mercedes NGK #2 Trap	Not Available	Not Available	26 mg	

Group 10

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-81-0441	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
CABS-81-0501	2	4	2	4	2		2													
CABS-81-0561	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
CABS-81-0661	2	4	2	4	2	4	2	4	2		2		2	4	2	4	2	4	2	4
CABS-81-0691	2	4	2	4	2	4	2	4									2	4	2	4
CABS-81-0721	2		2																	

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 7/13/82 3= Experiment Date: 7/27/82

2= Experiment Date: 7/15/82 4= Experiment Date: 7/29/82

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/13/82	TA98	RLI017	2.5	3.7	5.6	0.780	0.00078	0.0313	✓	✓	✓	✓	20 → 2000	1566/2000			
CABS-81-0561	7/13/82	"	RLI017	0.6	0.7	1.0	0.370	0.00033	✓	0.0113	✓	✓	✓	20 → 2000	774/2000			
CABS-81-0441	7/13/82	TA98		3.9	4.1	4.4	2.006	0.00109	✓	✓	✓		✓	20 → 2000	1333/650			
CABS-81-0561	7/13/82	TA98		2.1	2.3	2.5	0.841	0.00153		✓	✓		✓	20 → 2000	570/650			

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/13/82	TA100	RLI017	6.3	6.7	7.0	2.733	0.00129		✓	✓		✓	20 → 2000	1962/650			
CABS-81-0561	7/13/82	TA100	RLI017	4.6	4.9	5.3	1.632	0.00156			✓		✓	20 → 2000	1247/650			
CABS-81-0441	7/13/82	TA100		Not Listed	8.8	Not Listed	6.547	0.00167					✓	20 → 2000	1546/200			
CABS-81-0561	7/13/82	TA100		25.2	26.8	28.5	1.177	0.00449	0.0289		✓		✓	20 → 2000	1006/650			

Group #1c

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/13/82	TA1535	RLI017	>0.1	>0.1	0.1	0.028	0.00033	0.0409	✓	✓	✓	✓	20 → 2000	28/650			
CABS-81-0561	7/13/82	TA1535	RLI017	>0.1	>0.1	>0.1	0.006	Not Listed	✓	✓	✓	✓	✓	20 → 2000	21/650			
CABS-81-0441	7/13/82	TA1535		0.1	0.1	0.2	0.043	0.00114		✓	✓	✓	✓	20 → 2000	33/65 and 200			
CABS-81-0561	7/13/82	TA1535		0.0	>0.1	1.0	-0.012	Not Listed	✓		✓	✓	✓	20 → 2000	38/20			

Group #1c

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/13/82	TM1537	RLI017	0.8	1.3	2.1	0.219	0.00091	✓	✓	✓	✓	✓	20 → 2000	436/2000			
CABS-81-0561	7/13/82	"	RLI017	0.4	0.5	0.8	0.088	0.00089	✓	0.0133	✓	✓	✓	20 → 2000	181/2000			
CABS-81-0441	7/13/82	TM1537		0.9	1.5	2.5	0.443	0.00189		✓	✓		✓	20 → 2000	292/650			
CABS-81-0561	7/13/82	"		Not listed	0.6	Not listed	0.174	0.00189		✓		✓	✓	20 → 2000	121/650			

Group #1c

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/13/82	TA1538	RLJ017	2.6	3.3	4.2	0.471	0.00097	✓	✓	✓	✓	✓	20 → 2000	942/2000			
CABS-81-0561	7/13/82	TA1538	RLJ017	0.9	1.3	2.0	0.186	0.00096	✓	✓	✓	✓	✓	20 → 2000	397/2000			
CABS-81-0441	7/13/82	TA1538		3.9	4.6	5.5	0.533	0.00334			✓		✓	20 → 2000	353/650			
CABS-81-0561	7/13/82	TA1538		2.9	3.2	3.6	0.406	0.00318			✓		✓	20 → 2000	274/650			

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0501	7/15/82	TA98	RLI017	19.5	20.1	26.6	3.467	0.00256			✓		✓	20 → 2000	2384/650			
CABS-81-0661	7/15/82	TA98	RLI017	10.2	11.3	12.4	3.185	0.00194	✓	✓	✓		✓	20 → 2000	2096/650			
CABS-81-0691	7/15/82	TA98	RLI017	10.8	10.9	11.0	4.882	0.00112			✓		✓	20 → 2000	3286/650			
CABS-81-0721	7/15/82	TA98	RLI017	13.9	14.1	14.2	4.825	0.00151			✓		✓	20 → 2000	3259/650			
CABS-81-0501	7/15/82	TA98		22.9	24.8	26.9	9.388	0.00470		✓	✓		✓	20 → 2000	1933/200			
CABS-81-0661	7/15/82	TA98		12.8	15.0	17.5	1.977	0.00302	✓	✓	✓		✓	20 → 2000	1369/650			
CABS-81-0691	7/15/82	TA98		13.2	14.2	15.2	4.477	0.00170	0.0311		✓	✓	✓	20 → 2000	3060/650			
CABS-81-0721	7/15/82	TA98		9.2	9.8	10.4	4.497	0.00114	0.0427		✓	✓	✓	20 → 2000	3050/650			

Group # 10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0501	7/15/82	TA100	RLI017	35.9	37.5	39.2	10.366	0.00613		✓	✓		✓	20 → 2000	2253/200			
CABS-81-0661	"	"	RLI017	Not Listed	12.1	Not Listed	6.710	0.00348					✓	20 → 2000	1501/200			
CABS-81-0691	"	"	RLI017	7.9	8.0	8.1	5.875	0.00181			✓		✓	20 → 2000	1351/200			
CABS-81-0501	7/15/82	TA100		7.2	7.2	7.3	4.617	Not Listed			✓	✓	✓	20 → 2000	1834/65			
CABS-81-0661	"	"		73.4	77.2	81.3	6.682	0.01157			✓		✓	20 → 2000	1585/200			
CABS-81-0691	"	"		Not Listed	47.9	Not Listed	5.512	0.01016					✓	20 → 2000	1306/200			

Group # 10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0661	7/15/82	TA1535	RLF017	0.1	0.2	0.3	0.067	0.00231	✓	✓	✓	✓	✓	20 → 2000	36/200			
CABS-81-0661	7/15/82	TA1535		0.0		13.9	−0.047	Not Listed				✓	✓	20 → 2000	44/20			

Group [illegible]

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0661	7/15/82	TA1537	RLF017	7.6	8.8	10.2	0.711	0.00390	0.0403	·	✓		✓	20 → 2000	470/650			
CABS-81-0661	7/15/82	TA1537		3.8	4.6	5.5	1.554	0.00555			✓	✓	✓	20 → 2000	314/200			

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0661	7/15/82	TA1538	RLI017	16.6	18.6	20.9	1.531	0.00382		0.0145	✓		✓	20 → 2000	1026/650			
CABS-81-0691	"	TA1538	RLI017	11.8	12.7	13.6	6.000	0.00380	✓		✓		✓	20 → 2000	1214/200			
CABS-81-0661	7/15/82	TA1538		7.3	7.8	8.3	2.168	0.00626		✓	✓		✓	20 → 2000	448/200			
CABS-81-0691	"	TA1538		19.4	20.1	20.8	6.026	0.00617			✓		✓	20 → 2000	1215/200			

Group # 1c

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/27/82	TA98	RLI017	3.1	3.6	4.1	0.757	0.00077		✓	✓		✓	20 → 2000	1521/2000			
CABS-81-0561	7/27/82	TA98	RLI017	0.4	0.7	1.0	0.418	0.00021	✓	✓	✓	✓	✓	20 → 2000	871/2000			
CABS-81-0441	7/27/82	TA98		4.0	4.2	4.4	2.122	0.00097	✓		✓		✓	20 → 2000	1416/650			
CABS-81-0561	7/27/82	TA98		0.7	1.2	2.1	1.086	0.00020	✓	✓	✓	✓	✓	6.5 → 650	725/650			

Group # 1C

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/27/82	TA100	RLI017	4.3	4.5	4.8	2.028	0.00116			✓		✓	20 → 2000	1500/650			
CABS-81-0561	7/27/82	TA100	RLI017	3.4	3.7	4.0	1.433	0.00131			✓	✓	✓	20 → 2000	1125/650			
CABS-81-0441	7/27/82	TA100		9.9	11.1	12.5	2.642	0.00204	✓		✓		✓	6.5 → 650	1979/650			
CABS-81-0561	7/27/82	TA100		8.5	10.9	13.9	1.767	0.00259	0.0103	✓	✓	✓	✓	6.5 → 650	1349/650			

Group # 10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/27/82	TA1535	RLI017	>0.1	>0.1	0.1	-0.041	0.00147	0.0273	✓	✓	✓	✓	20 → 2000	50/20			
CABS-81-0561	7/27/82	TA1535	RLI017	>0.1	0.1	0.2	0.040	0.00123	✓	0.0456	✓	✓	✓	20 → 2000	49/650			
CABS-81-0441	7/27/82	TA1535		0.0	0.0	0.0	-0.270	None Listed			✓	✓	✓	6.5 → 650	91/6.5			
CABS-81-0561	7/27/82	TA1535		None Listed	0.0	None Listed	0.003	0.00107	✓				✓	6.5 → 650	80/6.5			

Group # 1c

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/27/82	TA1537	RLI017	Not Listed	1.2	Not Listed	0.175	0.00096	✓	✓		✓	✓	20 → 2000	353/2000			
CABS-81-0561	7/27/82	TA1537	RLI017	0.2	1.0	6.5	0.077	0.00126	✓	✓	✓	✓	✓	20 → 2000	161/2000			
CABS-81-0441	7/27/82	TA1537		4.2	4.9	5.7	0.340	0.00412			✓		✓	6.5 → 2000	227/650			
CABS-81-0561	7/27/82	TA1537		0.2	0.4	1.0	0.144	0.00167		✓	✓	✓	✓	2 → 650	101/650			

Group # 10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0441	7/27/82	TA1538	RLI017	3.7	4.2	4.9	1.202	0.00195			✓		✓	20 → 2000	793/650			
CABS-81-0561	7/27/82	TA1538	RLI017	1.6	1.8	2.2	0.589	0.00172	✓	0.0198	✓	✓	✓	20 → 2000	400/650			
CABS-81-0441	7/27/82	TA1538		1.5	2.3	3.5	0.365	0.00280	0.0407	0.0480	✓	✓	✓	6.5 → 650	245/650			
CABS-81-0561	7/27/82	TA1538		1.2	1.5	1.7	0.786	0.00310	✓	✓	✓	✓	✓	6.5 → 650	181/650			

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0501	7/29/82	TA98	RLI017	19.3	20.6	22.1	4.334	0.00239	0.0377		✓		✓	6.5 → 650	2843/650			
CABS-81-0661	7/29/82	TA98	"	6.7	9.1	12.2	3.030	0.00169		✓	✓	✓	✓	6.5 → 650	1981/650			
CABS-81-0691	7/29/82	TA98	" RLI017	14.3	15.1	16.1	5.545	0.00153			✓		✓	6.5 → 650	3650/650			
CABS-81-0501	7/29/82	TA98		16.5	17.0	17.5	7.831	0.00361	✓		✓		✓	6.5 → 650	1585/200			
CABS-81-0661	"	TA98		9.1	10.1	11.1	2.173	0.00233	✓		✓		✓	6.5 → 650	1438/650			
CABS-81-0691	"	TA98		15.1	16.5	17.9	4.501	0.00198	0.0470	✓	✓		✓	6.5 → 650	2968/650			

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0661	7/29/82	TA100	RLI017	13.1	13.9	14.7	5.973	0.00394			✓		✓	6.5→ 650	1377/200			
CABS-81-0691	7/29/82	TA100	RLI017	10.4	11.4	12.5	2.074	0.00243			✓		✓	6.5→ 650	1576/650			
CABS-81-0661	7/29/82	TA100		17.9	18.5	19.1	5.884	0.00496			✓		✓	6.5→ 650	1386/200			
CABS-81-0691	7/29/82	TA100		10.7	11.7	12.8	5.048	0.00364	0.0144	✓	✓		✓	6.5→ 650	1208/200			

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0661	7/29/82	TA1537	RL-I017	2.1	3.2	5.0	0.886	0.00198	0.0188		✓	✓	✓	6.5 → 650	578/650			
CABS-81-0661	7/29/82	TA1537		3.0	3.5	4.2	1.550	0.00418	0.0437	0.0161	✓	✓	✓	6.5 → 650	317/200			

Group #10

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-81-0661	7/29/82	TA1538	RLI017	9.3	13.5	19.7	1.688	0.00320	✓	✓	✓	✓	✓	6.5→ 650	1098/650			
CABS-81-0691	7/29/82	TA1538	RLI017	16.6	17.1	17.5	7.233	0.00442			✓		✓	6.5→ 650	1454/200			
CABS-81-0661	7/29/82	TA1538		11.7	12.5	13.4	3.290	0.00681	0.0147		✓		✓	6.5→ 650	661/200			
CABS-81-0691	7/29/82	TA1538		13.6	14.2	14.8	5.602	0.00476	0.0191		✓		✓	6.5→ 650	1128/200			

GROUP 11

LIGHT DUTY METHANOL EVALUATION

VARIABLES: A) FUELS
B) CATALYSTS

CABS-82-0010	Escort	(cat.)	Indolene	C/H LA-4
0020	Escort	(cat.)	Anafuel	"
0030	Escort	(cat.)	MeOH	"
0040	VW Rabbit	(cat.)	MeOH	"
0050	VW Rabbit	(cat.)	Indolene	"
0060	Escort	(base cat.)	MeOH	"
0070	Escort	(no cat.)	MeOH	"
0080	VW Rabbit	(base cat.)	MeOH	"

Group 1

GROUP ID: //

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-82-0010	1981 Ford Escort 1.6l. L4	Cold UDDS Forced Cold UDDS +7 Hot UDDS	Indolene	46.554 mg.	
CABS-82-0020	1981 Ford Escort 1.6 l. L-4	Cold UDDS Forced Cooled UDDS +7 Hot UDDS	Ana fuel	47.955 mg.	
CABS-82-0030	1981 Ford Escort (methanol fueled) 1.6 l. L-4	Cold UDDS Forced Cooled UDDS 7 Hot UDDS	methanol	50.995 mg.	Catalyst - Factory
CABS-82-0040	1981 Volkswagon RABBIT (methanol fueled) 1.6 l. L-4	Cold UDDS Forced Cooled UDDS 7 Hot UDDS	Methanol	58.718 mg.	Catalyst - Factory
CABS-82-0050	1981 Volkswagon RABBIT 1.7 l. L-4	1 Cold UDDS 1 Forced Cooled UDDS 7 hot UDDS	Indolene	52.485 mg.	
CABS-82-0060	1981 Ford Escort (methanol Fueled) 1.6 l. L-4	Cold UDDS Forced Cooled UDDS 7 Hot UDDS	Methanol	54.060 mg.	Catalyst - Base Metal Catalyst
CABS-82-0070	1981 Ford Escort (methanol Fueled) 1.6 l L-4	Cold UDDS Forced Cooled UDDS 7 Hot UDDS	Methanol	56.305 mg.	No Catalyst
CABS-82-0080	1981 Volkswagon (methanol fueled) 1.6 l. L-4	1 Cold UDDS 1 Forced Cooled UDDS 7 Hot UDDS	Methanol	30.617 mg.	Catalyst Base Metal Catalyst

Group 11 Group 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-82-0010	1	2	1	2																
CABS-82-0020	1	2	1	2																
CABS-82-0030	1	2	1	2																
CABS-82-0040	1	2	1	2																
CABS-82-0050	1	2	1	2																
CABS-82-0060	1	2	1	2																
CABS-82-0070	1	2	1	2																
CABS-82-0080	1	2	1	2																

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1 = Experiment Date: 2/25/82

2 = Experiment Date: 3/4/82

statistics entered by P.J. Burke 8-3-82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0010	2-25-82	TA98			2.4		0.666	.00502		✓		✓	✓	20 → 2000	189/200			
"	3-4-82	"		2.3	2.8	3.3	0.640	.00216			✓	✓	✓	6.5 → 2000	450/650			
CABS-82-0020	2-25-82	"			16.4		3.315	.00243					✓	20 → 2000	2322/650			
"	3-4-82	"		7.8	7.9	8.1	3.346	.00123			✓		✓	6.5 → 2000	2223/650			
CABS-82-0030	2-25-82	"		0.4	0.7	1.1	0.173	.00063	✓	✓	✓	✓	✓	20 → 2000	388/2000			
"	3-4-82	"		0.2	0.3	0.4	0.193	.00022	✓	✓	✓	✓	✓	20 → 2000	416/2000			
CABS-82-0040	2-25-82	"		2.1	2.4	2.7	0.592	.00066	✓	✓	✓		✓	20 → 2000	1259/2000			
"	3-4-82	"		2.6	2.9	3.3	0.666	.00073	0.03		✓	✓	✓	20 → 2000	1357/2000			
CABS-82-0050	2-25-82	"		0.1	0.3	0.6	0.093	.00046	0.03	✓	✓	✓	✓	20 → 2000	222/2000			
"	3-4-82	"		0.1	0.1	0.1	0.069		0.03	✓		✓	✓	20 → 2000	160/2000			
CABS-82-0060	2-25-82	"		0.3	0.5	0.7	0.206	.00040	✓		✓	✓	✓	20 → 2000	440/2000			
"	3-4-82	"		0.4	0.6	0.9	0.203	.00051	✓	✓	✓	✓	✓	20 → 2000	418/2000			
CABS-82-0070	2-25-82	"		2.2	2.6	3.1	0.737	.00063		0.03	✓	✓	✓	20 → 2000	1491/2000			
"	3-4-82	"		1.8	2.0	2.2	0.759	.00047	0.01	0.01	✓	✓	✓	20 → 2000	1539/2000			
CABS-82-0080	2-25-82	"		0.2	0.3	0.4	0.117	.00036	✓	✓	✓	✓	✓	20 → 2000	257/2000	161/650		
"	3-4-82	"		0.2	0.5	1.5	0.154	.001[illegible]	✓	✓	✓	✓	✓	6.5 → 650	115/650			

statistics entered by P.J. Burke 8-3-82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0010	2-25-82	TA98	RLI017	4.8	5.0	5.3	2.146	.00128		0.02	✓		✓	20 → 2000	1419/650			
CABS-82-0010	3-4-82	"	"	4.2	4.6	5.1	2.014	.00130		0.01	✓		✓	20 → 2000	1322/650			
CABS-82-0020	2-25-82	"	"	15.8	16.3	16.9	1.849	.00109	0.02		✓		✓	20 → 2000	3753/2000			
"	3-4-82	"	"	10.7	11.1	11.5	5.411	.00112			✓		✓	20 → 2000	3577/2000			
CABS-82-0030	2-25-82	"	"	0.6	0.9	1.4	0.260	.00060	0.05	✓	✓	✓	✓	20 → 2000	556/2000			
"	3-4-82	"	"	0.3	0.4	0.6	0.167	.00042	✓	✓	✓	✓	✓	20 → 2000	369/2000			
CABS-82-0040	2-25-82	"	"	4.4	5.2	6.0	0.646	.00103	✓	✓	✓		✓	20 → 2000	1314/2000			
"	3-4-82	"	"	2.3	2.9	3.7	0.571	.00081	✓	✓	✓		✓	20 → 2000	1168/2000			
CABS-82-0050	2-25-82	"	"	0.3	0.9	2.9	0.094	.00107	0.03	✓	✓	✓	✓	20 → 2000	225/2000			
"	3-4-82	"	"	0.3	0.6	1.0	0.261	.00113	✓	✓	✓	✓	✓	20 → 2000	201/2000			
CABS-82-0060	2-25-82	"	"	0.3	1.7	9.2	0.160	.00115	✓	✓	✓	✓	✓	20 → 2000	346/2000			
"	3-4-82	"	"	0.4	0.8	1.8	0.178	.00074	✓	✓	✓	✓	✓	20 → 2000	380/2000			
CABS-82-0070	2-25-82	"	"		4.5		1.099	.00071	✓			✓	✓	20 → 2000	2197/2000			
"	3-4-82	"	"	3.1	3.4	3.9	1.037	.00060	0.02		✓	✓	✓	20 → 2000	2078/2000			
CABS-82-0080	2-25-82	"	"	0.8	1.2	1.8	0.150	.00101	✓	✓	✓	✓	✓	20 → 2000	329/2000	304/650		
"	3-4-82	"	"	1.3	5.4	22.4	0.354	.00406	✓	✓	✓	✓	✓	6.5 → 650	251/650			

GROUP 12

HEAVY DUTY METHANOL EVALUATION

VARIABLES: FUEL - TO BE COMPARED TO HD DIESEL AND GASOLINE ENGINES

CABS-82-0090	HD M.A.N. engine	methanol	1600 rpm/2% load
0100	"	"	1600/50
0110	"	"	1600/100
0120	"	"	idle
0130	"	"	2200/100
0140	"	"	2200/50
0150	"	"	2200/2
0160	"	"	cold transient
0170	extract from 3 blank filters		
0180	extract from used oil		

Table 1

GROUP ID: 12

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-82-0090	HD M.A.N.	1600 rpm / 2% load	Methanol	35 mg extract	
CABS-82-0100	MA.N D2566 FMUH	1600 rpm / 50% load	Methanol	30 mg extract	
CABS-82-0110	M.A.N. D2566 FMUH Methanol Engine	1600 rpm / 100% load	Methanol	15 mg extract	
CABS-82-0120	M.A.N. D2566 FMUH Methanol Engine	Idle	Methanol	16 mg extract	
CABS-82-0130	M.A.N. D2566 FMUH Methanol Engine	2200 rpm / 100% load	Methanol	31 mg extract	
CABS-82-0140	M.A.N. D2566 FMUH Methanol Engine	2200 rpm / 50% load	Methanol	35 mg extract	
CABS-82-0150	M.A.N. D2566 FMUH Methanol Engine	2200 rpm / 2% load	Methanol	35 mg extract	
CABS-82-0160	M.A.N. D2566 FMUH Methanol Engine	1/7 cold + 6/7 Hot Transient	Methanol	150 mg extract	
CABS-82-0170	M.A.N. D2566 FMUH Methanol Engine	Extract from 3 blank 20x20 filters	Methanol	7 mg extract	
CABS-82-0180	M.A.N. D2566 FMUH Methanol Engine	Extract of Used Engine Oil on filter	Methanol	30 mg extract	

Group 12 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-82-0090	1	2	1	2																
CABS-82-0100	1		1	2																
CABS-82-0110	1		1																	
CABS-82-0120	1		1																	
CABS-82-0130	1	2	1	2																
CABS-82-0140	1	2	1	2																
CABS-82-0150	1	2	1	2																
CABS-82-0160	1	2	1	2	1	2	1	2	1		1		1		1		1	2	1	
CABS-82-0170	NOT TESTED																			
CABS-82-0180	1		1	2																

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 3/25/82

2= Experiment Date: 4/12/82

Data entered by P.J. Burke on 8-4-82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0090	3-25-82	TA98	RLI017	0.1	0.1	0.2	0.131		✓	✓	✓	✓	✓	20→ 2000	293/2000	115/650		
"	4-12-82	"	"	0.04	0.1	0.2	0.077		✓	✓		✓	✓	6.5→ 650	69/650			
CABS-82-0100	3-25-82	"	"	0.6	1.0	1.7	0.511	.00033	✓	✓	✓	✓	✓	20→ 2000	1038/2000	361/650		
CABS-82-0110	3-25-82	"	"	1.3	1.4	1.4	1.362		✓	✓	✓	✓	✓	6.5→ 650	901/650			
CABS-82-0120	3-25-82	"	"	0.2	0.2	0.3	0.224		✓	✓		✓	✓	6.5→ 650	173/650			
CABS-82-0130	3-25-82	"	"	3.5	3.9	4.4	1.573	.00046			✓	✓	✓	20→ 2000	3134/2000	1238/650		
"	4-12-82	"	"	1.6	2.5	4.0	1.494	.00080		✓	✓	✓	✓	6.5→ 650	980/650			
CABS-82-0140	3-25-82	"	"	0.4	0.4	0.4	0.425		0.04	✓		✓	✓	20→ 2000	872/2000	213/650		
"	4-12-82	"	"	0.3	0.3	0.3	0.333		✓	✓	✓	✓	✓	6.5→ 650	237/650			
CABS-82-0150	3-25-82	"	"	0.1	0.1	0.1	0.070		✓	✓		✓	✓	20→ 2000	165/2000	62/650		
"	4-12-82	"	"	0.04	0.1	0.1	0.059		✓	✓		✓	✓	6.5→ 650	59/650			
CABS-82-0160	3-25-82	"	"	0.4	0.5	0.5	0.463		✓	✓	✓	✓	✓	20→ 2000	947/2000	251/650		
"	4-12-82	"	"	0.5	0.9	1.6	0.378	.00042	✓	✓	✓	✓	✓	20→ 2000	764/2000	259/650		
CABS-82-0180	3-25-82	"	"	0	0	0	0.005		✓	✓	✓	✓	✓	20→ 2000	24/2000	23/650		

Data entered by P. T. Burke on 8-4-82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0090	3-25-82	TA98	—	0.1	0.1	0.1	0.087		✓	✓	✓	✓	✓	20 → 2000	188/2000	68/650		
"	4-12-82	"		0	0.1	0.2	0.087		✓	✓	✓	✓	✓	6.5 → 2000	190/2000	67/650		
CABS-82-0100	3-25-82	"		0.3	0.5	0.8	0.375	.00014	✓	✓	✓	✓	✓	20 → 2000	767/2000	326/650		
"	4-12-82	"		0.4	0.7	1.2	0.401	.00028	✓	✓	✓	✓	✓	20 → 2000	804/2000	363/650		
CABS-82-0110	3-25-82	"		2.0	2.3	2.7	0.661	.00063		✓	✓	✓	✓	6.5 → 2000	1311/2000	847/650		
CABS-82-0120	3-25-82	"		0.1	0.1	0.1	0.092		✓	0.02		✓	✓	6.5 → 2000	202/2000	79/650		
CABS-82-0130	3-25-82	"		3.6	4.0	4.4	1.453	.00050		0.01	✓	✓	✓	20 → 2000	2903/2000	1543/650		
"	4-12-82	"		3.0	3.7	4.4	2.060	.00089		✓	✓	✓	✓	6.5 → 650	1346/650			
CABS-82-0140	3-25-82	"		0.4	0.5	0.5	0.457			0.05	✓	✓	✓	20 → 2000	931/2000	260/650		
"	4-12-82	"		0.3	0.5	0.7	0.421	.00006	✓	✓	✓	✓	✓	6.5 → 2000	852/2000	273/650		
CABS-82-0150	3-25-82	"		0.1	0.1	0.1	0.066		✓	✓		✓	✓	20 → 2000	149/2000	54/650		
"	4-12-82	"		0	0.1	0.1	0.067		✓	✓	✓	✓	✓	6.5 → 2000	147/2000	52/650		
CABS-82-0160	3-25-82	"		0.4	0.4	0.4	0.386		0.01	✓	✓	✓	✓	20 → 2000	786/2000	243/650		
"	4-12-82	"		0.3	0.4	0.4	0.377		✓		✓	✓	✓	20 → 2000	759/2000	233/650		
CABS-82-0180	3-25-82	"		0	0	0	0.006		✓	✓	✓	✓	✓	20 → 2000	19/2000	18/650		
"	4-12-82	"		0	0	0	0.003		✓	0.02	✓		✓	20 → 2000	13/2000	15/650		

Data entered by P.J. Burke on 8-4-82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0160	3-25-82	TA100	RLI017	0.3	0.6	1.1	0.384	.00019	0.02	✓	✓	✓	✓	20→ 2000	911/2000	415/650		
"	4-12-82	"	"	0.4	0.4	0.4	0.420		0.01	0.04	✓	✓	✓	20→ 2000	1005/2000	428/650		
"	3-25-82	"	—	0.5	0.5	0.5	0.517			✓	✓	✓	✓	20→ 2000	1179/2000	508/650		
"	4-12-82	"	—	0	1.2	2888.9	0.491	.00043	✓	✓	✓	✓	✓	20→ 2000	1129/2000	526/650		
CABS-82-0160	3-25-82	TA1535	RLI017	0	0	0	0.006		✓	✓	✓	✓	✓	20→ 2000	32/2000	25/650		
"	"	"	—	0	0	0	0.004		✓	✓	✓	✓	✓	20→ 2000	36/2000	25/650		
CABS-82-0160	3-25-82	TA1537	RLI017	0.1	0.1	0.1	0.088		✓	✓	✓	✓	✓	20→ 2000	183/2000	53/650		
"	"	"	—	0.1	0.1	0.1	0.085		✓	0.02		✓	✓	20→ 2000	176/2000	52/650		
CABS-82-0160	3-25-82	TA1538	RLI017	0.5	0.5	0.5	0.490		✓	0.02	✓	✓	✓	20→ 2000	989/2000	310/650		
"	4-12-82	"	"	0.5	0.5	0.6	0.549			✓	✓	✓	✓	20→ 2000	1111/2000	336/650		
"	3-25-82	"	—	0.4	0.4	0.4	0.410		✓	✓	✓	✓	✓	20→ 2000	830/2000	283/650		

GROUP 13

FUEL EFFECTS (HEAVY DUTY DIESEL)

VARIABLE: BASE FUEL VS SYNTHETIC FUEL BLENDS

CABS-82-0190	HD Mack EM6-300	Alt. Fuels	C/H trans.
0200	"	"	"
0210	"	"	"
0220	"	"	"
0230	"	"	"

Table 1

GROUP ID: 13

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-82-0190	Mack EMG-300 Test Cell Intercooler	1/7 Cold Start 6/7 Hot Start	Baseline (Phillip 2-D Control fuel) EM-509-F	204 mg	
CABS-82-0200	Mack EMG-300 Test Cell Intercooler	1/7 Cold Start 6/7 Hot Start	25% EDS Blend (EM-515-F)	232 mg	
CABS-82-0210	Mack EMG-300 Test Cell Intercooler	1/7 Cold Start 6/7 Hot Start	25% SRC-II Blend (EM-511-F)	281 mg	
CABS-82-0220	Mack EMG-300 Test Cell Intercooler	1/7 Cold Start 6/7 Hot Start	6% Lube Oil Blend (EM-517-F)	214 mg	
CABS-82-0230	Mack EMG-300 Test Cell Intercooler	1/7 Cold Start 6/7 Hot Start	Soybean Oil 145°C (EM-510-F)	280 mg	

Group 13

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-82-0190	6	1	6	1	6	3	6	3					4		4		6	2	6	2
CABS-82-0200	6	1	6	1	6	3	6	3	5		5		4		4		6	2	6	2
CABS-82-0210	6	1	6	1	6	3	6	3	5	6	5	6	4	6	4	6	6	2	6	2
CABS-82-0220	6	1	6	1	6	3	6	3					4	6	4	6	6	2	6	2
CABS-82-0230	6	1	6	1	6	3	6	3	5	6	5	6	4	6	4	6	6	2	6	2

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 8/13/82
2= Experiment Date: 8/19/82
3= Experiment Date: 8/23/82
4= Experiment Date: 8/26/82
5= Experiment Date: 9/01/82
6= Experiment Date: 9/03/82

Group #13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0190	8/13/82	TA98	RLI017	0.2	0.9	3.7	0.356	0.00047	✓	✓	✓	✓	✓	20 → 2000	738/2000			
CABS-82-0200	8/13/82	TA98	RLI017	1.7	2.2	3.0	0.582	0.00067		✓	✓	✓	✓	20 → 2000	1175/2000			
CABS-82-0210	8/13/82	TA98	RLI017	0.4	0.7	1.2	0.491	0.00017	✓	✓	✓	✓	✓	20 → 2000	1008/2000			
CABS-82-0220	8/13/82	TA98	RLI017	0.4	0.5	0.7	0.383	0.00017		✓	✓	✓	✓	20 → 2000	791/2000			
CABS-82-0230	8/13/82	TA98	RLI017	>0.1	0.1	0.1	0.050	None Listed	✓	✓	✓	✓	✓	20 → 2000	133/2000			
CABS-82-0190	8/13/82	TA98		0.7	1.0	1.5	0.498	0.00035	✓	✓	✓	✓	✓	20 → 2000	1010/2000			
CABS-82-0200	8/13/82	TA98		3.1	3.6	4.2	0.792	0.00076		✓	✓		✓	20 → 2000	1585/2000			
CABS-82-0210	8/13/82	TA98		3.0	3.4	3.9	0.677	0.00081	✓	✓	✓		✓	20 → 2000	1353/2000			
CABS-82-0220	8/13/82	TA98		1.9	2.2	2.6	0.562	0.00069		✓	✓	✓	✓	20 → 2000	1129/2000			
CABS-82-0230	8/13/82	TA98		>0.1	>0.1	>0.1	0.026	None Listed	✓	✓		✓	✓	20 → 2000	71/2000			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0190	8/19/82	TA1538	RLI017	0.6	1.3	2.8	0.260	0.00080	✓	✓	✓	✓	✓	20 → 2000	531/2000			
CABS-82-0200	8/19/82	TA1538	RLI017	None Listed	1.0	None Listed	0.492	0.00036	0.0375	✓		✓	✓	"	999/2000			
CABS-82-0210	8/19/82	TA1538	RLI017	0.5	0.7	1.0	0.484	0.00016	✓	✓	✓	✓	✓	"	988/2000			
CABS-82-0220	8/19/82	TA1538	RLI017	0.3	0.6	1.3	0.223	0.00051	✓	✓	✓	✓	✓	"	463/2000			
CABS-82-0230	8/19/82	TA1538	RLI017	>0.1	>0.1	>0.1	0.031	None Listed	✓	✓	✓	✓	✓	"	81/2000			
CABS-82-0190	8/19/82	TA1538		0.6	1.0	1.5	0.137	0.00098	✓		✓	✓	✓	20 → 2000	277/2000			
CABS-82-0200	8/19/82	TA1538		1.1	1.2	1.3	0.490	0.00138		✓	✓		✓	"	326/650			
CABS-82-0210	8/19/82	TA1538		1.1	1.2	1.4	0.466	0.00149		✓	✓	✓	✓	"	313/650			
CABS-82-0220	8/19/82	TA1538		None Listed	0.7	None Listed	0.244	0.00151		✓		✓	✓	"	168/650			
CABS-82-0230	8/19/82	TA1538		>0.1	>0.1	>0.1	0.017	None Listed	✓	✓	✓	✓	✓	"	42/2000			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0190	8/23/82	TA100	RLI017	1.5	1.9	2.4	0.963	0.00034		✓	✓	✓	✓	20 → 2000	2046/2000			
CABS-82-0200	8/23/82	TA100	RLI017	1.7	2.4	3.5	1.056	0.00040	✓	✓	✓	✓	✓	"	2231/2000			
CABS-82-0210	8/23/82	TA100	RLI017	2.0	2.9	4.1	1.006	0.00051	✓	✓	✓	✓	✓	"	2124/2000			
CABS-82-0220	8/23/82	TA100	RLI017	1.4	1.7	2.2	1.017	0.00026	✓	✓	✓	✓	✓	"	2151/2000			
CABS-82-0230	8/23/82	TA100	RLI017	0.1	0.1	0.1	0.120	None Listed	✓	✓	✓	✓	✓	"	365/2000			
CABS-82-0190	8/23/82	TA100		6.2	7.0	8.0	2.664	0.00142			✓		✓	20 → 2000	1880/650			
CABS-82-0200	8/23/82	TA100		8.5	8.9	9.3	3.146	0.00150			✓		✓	"	2214/650			
CABS-82-0210	8/23/82	TA100		8.6	9.1	9.6	3.010	0.00164		✓	✓		✓	"	2099/650			
CABS-82-0220	8/23/82	TA100		7.2	7.5	7.9	3.012	0.00134		✓	✓		✓	"	2103/650			
CABS-82-0230	8/23/82	TA100		0.1	0.1	0.1	0.079	None Listed	✓	✓	✓	✓	✓	"	298/2000			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0190	8/26/82	TA1537	RLI017	>0.1	0.3	1.8	0.097	0.00054	✓	✓	✓	✓	✓	20 → 2000	200/2000			
CABS-82-0200	8/26/82	TA1537	RLI017	0.3	0.5	1.0	0.158	0.00059	✓	✓	✓	✓	✓	20 → 2000	320/2000			
CABS-82-0210	8/26/82	TA1537	RLI017	0.2	0.5	1.8	0.140	0.00067	✓	✓	✓	✓	✓	"	282/2000			
CABS-82-0220	8/26/82	TA1537	RLI017	0.1	0.1	0.1	0.069	Not Listed	✓	✓		✓	✓	"	147/2000			
CABS-82-0230	8/26/82	TA1537	RLI017	>0.1	>0.1	>0.1	0.026	Not Listed	✓	✓	✓	✓	✓	"	58/2000			
CABS-82-0190	8/26/82	TA1537		0.1	0.2	0.5	0.073	0.00058	✓	0.0118	✓	✓	✓	20 → 2000	154/2000			
CABS-82-0200	8/26/82	TA1537		0.4	0.6	0.9	0.251	0.00143	0.0402	✓	✓	✓	✓	"	170/650			
CABS-82-0210	8/26/82	TA1537		0.2	0.4	0.6	0.195	0.00107	✓	✓	✓	✓	✓	"	144/2000			
CABS-82-0220	8/26/82	TA1537		0.1	0.4	2.2	0.063	0.00086	✓	✓	✓	✓	✓	"	131/2000			
CABS-82-0230	8/26/82	TA1537		>0.1	>0.1	>0.1	0.007	Not Listed	✓	✓	✓	✓	✓	"	20/2000			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0200	9/1/82	TA1535	RLI017	None Listed	1.3	None Listed	0.063	0.00141	✓	✓		✓	✓	20 → 2000	157/2000			
CABS-82-0210	9/1/82	TA1535	RLI017	>0.1	0.1	1.2	0.023	0.00081	✓	✓	✓	✓	✓	20 → 2000	62/2000			
CABS-82-0230	9/1/82	TA1535	RLI017	>0.1	>0.1	>0.1	$\bar{0}$.013	Not Listed				✓	✓	20 → 2000	36/20			
CABS-82-0200	9/1/82	TA1535		>0.1	>0.1	0.1	0.012	0.00129	✓	✓	✓	✓	✓	20 → 2000	27/650			
CABS-82-0210	9/1/82	TA1535		0.0	>0.1	0.9	−0.002	Not Listed				✓	✓	20 → 2000	31/20			
CABS-82-0230	9/1/82	TA1535		>0.1	>0.1	>0.1	0.001	0.00005			✓	✓	✓	20 → 2000	79/20			

Group #13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0190	9/3/82	TA98	RLI017	0.6	0.7	0.8	0.569	0.00013			✓	✓	✓	20 → 2000	1176/2000			
CABS-82-0200	9/3/82	TA98	RLI017	2.1	3.4	5.8	0.963	0.00064	✓	✓	✓	✓	✓	"	1945/2000			
CABS-82-0210	9/3/82	TA98	RLI017	2.0	2.7	3.7	0.635	0.00073	✓	✓	✓	✓	✓	"	1283/2000			
CABS-82-0220	9/3/82	TA98	RLI017	0.8	1.4	2.4	0.448	0.00055	✓	✓	✓	✓	✓	"	925/2000			
CABS-82-0230	9/3/82	TA98	RLI017	>0.1	0.3	6.4	0.069	0.00066	✓	✓	✓	✓	✓	"	175/2000			
CABS-82-0190	9/3/82	TA98		0.9	1.1	1.4	0.505	0.00038	✓	✓	✓	✓	✓	20 → 2000	1026/2000			
CABS-82-0200	9/3/82	TA98		2.6	3.0	3.5	0.726	0.00071	✓	✓	✓		✓	"	1464/2000			
CABS-82-0210	9/3/82	TA98		2.4	2.8	3.3	0.635	0.00074	✓	0.0122	✓	✓	✓	"	1268/2000			
CABS-82-0220	9/3/82	TA98		1.0	1.3	1.8	0.520	0.00047	✓	✓	✓	✓	✓	"	1050/2000			
CABS-82-0230	9/3/82	TA98		>0.1	>0.1	>0.1	0.023	Not Listed	✓	✓	✓	✓	✓	"	67/2000			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0190	9/3/82	TA100	RLI017	2.7	3.5	4.7	0.968	0.00063	✓	✓	✓	✓	✓	20 → 2000	2043/2000			
CABS-82-0200	9/3/82	TA100	RLI017	3.3	4.0	4.9	1.049	0.00065	✓	✓	✓	✓	✓	"	2226/2000			
CABS-82-0210	9/3/82	TA100	RLI017	2.4	3.5	5.1	0.782	0.00072	✓	0.0232	✓	✓	✓	"	1665/2000			
CABS-82-0220	9/3/82	TA100	RLI017	2.6	3.4	4.3	0.718	0.00074	✓	✓	✓	✓	✓	"	1554/2000			
CABS-82-0230	9/3/82 ~~9/13~~ JKB	TA100	RLI017	0.1	0.2	0.6	0.129	0.00021	✓	✓	✓	✓	✓	"	387/2000			
CABS-82-0190	9/3/82	TA100		5.1	5.2	5.4	1.860	0.00148		✓	✓		✓	20 → 2000	1345/650			
CABS-82-0200	9/3/82	TA100		10.2	10.8	11.4	3.085	0.00182	✓		✓		✓	"	2139/650			
CABS-82-0210	9/3/82	TA100		5.7	6.0	6.2	2.119	0.00146			✓		✓	"	1504/650			
CABS-82-0220	9/3/82	TA100		3.2	3.4	3.7	1.586	0.00107	✓	✓	✓		✓	"	1160/2000			
CABS-82-0230	9/3/82	TA100		0.1	0.1	0.1	0.070	Not Listed	✓	✓	✓	✓	✓	"	292/2000			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0210	9/3/82	TA1535	RLI017	>0.1	0.3	2.6	0.051	0.00078	✓	✓	✓	✓	✓	20 → 2000	119/2000			
CABS-82-0230	9/3/82	TA1535	RLI017	>0.1	>0.1	>0.1	0.012	Not Listed	0.0121	✓	✓	✓	✓	20 → 2000	33/2000			
CABS-82-0210	9/3/82	TA1535		0.0	0.0	0.0	-0.017	Not Listed	✓		✓	✓	✓	20 → 2000	36/20			
CABS-82-0230	9/3/82	TA1535		0.0	>0.1	3.1	0.035	0.00017	✓	✓	✓	✓	✓	20 → 2000	55/200			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0210	9/3/82	TA1537	RLI017	0.1	0.3	0.7	0.154	0.00037	0.0265	✓	✓	✓	✓	20 → 2000	312/2000			
CABS-82-0220	9/3/82	TA1537	RLI017	>0.1	0.2	1.3	0.099	0.00038	✓	✓	✓	✓	✓	"	209/2000			
CABS-82-0230	9/3/82	TA1537	RLI017	0.0	0.1	94.2	0.026	0.00052	✓	✓	✓	✓	✓	"	63/2000			
CABS-82-0210	9/3/82	TA1537		Not Listed	0.4	Not Listed	0.089	0.00071		✓		✓	✓	20 → 2000	185/2000			
CABS-82-0220	9/3/82	TA1537		Not Listed	0.4	Not Listed	0.069	0.00082	✓	✓		✓	✓	"	145/2000			
CABS-82-0230	9/3/82	TA1537		>0.1	>0.1	0.1	0.009	0.00026	✓	✓	✓	✓	✓	"	26/2000			

Group # 13

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0190	9/3/82	TA1538	RLI017	0.6	0.8	1.1	0.441	0.00031	0.0496	✓	✓	✓	✓	20 → 2000	906/2000			
CABS-82-0200	9/3/82	TA1538	RLI017	2.9	3.4	4.0	0.617	0.00085			✓	✓	✓	"	1238/2000			
CABS-82-0210	9/3/82	TA1538	RLI017	0.8	1.3	2.2	0.540	0.00043	✓	✓	✓	✓	✓	"	1100/2000			
CABS-82-0220	9/3/82	TA1538	RLI017	0.7	1.0	1.5	0.248	0.00070	✓	✓	✓	✓	✓	"	517/2000			
CABS-82-0230	9/3/82	TA1538	RLI017	>0.1	0.1	1.1	0.048	0.00026	✓	✓	✓	✓	✓	"	129/2000			
CABS-82-0190	9/3/82	TA1538		0.4	0.5	0.7	0.254	0.00111	✓	0.0176	✓	✓	✓	20 → 2000	181/650			
CABS-82-0200	9/3/82	TA1538			Incomplete			Data										
CABS-82-0210	9/3/82	TA1538		0.8	1.0	1.3	0.404	0.00143	0.0124	✓	✓	✓	✓	20 → 2000	274/650			
CABS-82-0220	9/3/82	TA1538		0.4	0.7	1.3	0.250	0.00152	✓	✓	✓	✓	✓	"	173/650			
CABS-82-0230	9/3/82	TA1538		>0.1	>0.1	>0.1	0.012	Not Listed	0.1042	✓	✓	✓	✓	"	38/2000			

GROUP 14

PARTICULATE TRAP EVALUATION

VARIABLE: MILEAGE ACCUMULATED ON VEHICLE/TRAP

CABS-82-0240	Mercedes 300 SD	trap	5K	C/H LA-4
0250	"	trap	15K	"
0260	"	trap	25K	"
0270	"	trap	40K	"
0280	"	trap	50K	"
0290	"	w/o trap	5k	"
0300	"	w/o trap	15k	"
0310	"	w/o trap	25k	"
0320	"	w/o trap	40k	"
0330	"	w/o trap	50k	"

Table 1

GROUP ID: 14

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
CABS-82-0240	Car 61 1980- Mercedes 300SD	FTP (2 cold + 14 Hot UDDS)	#2-Diesel	129 mg	
CABS-82-0250	Car 61 1980- Mercedes 300SD	FTP (2 cold + 8 Hot UDDS)	#2-Diesel	70 mg	
CABS-82-0260	Car 61 1980- Mercedes 300 SD	FTP (2 cold + 14 Hot UDDS)	#2-Diesel	140 mg	
CABS-82-0270	Car 61 1980- Mercedes 300 SD	FTP (2 cold + 8 Hot UDDS)	#2-Diesel	74 mg	
CABS-82-0280	Car 61 1980- Mercedes 300 SD	FTP (2 cold + 14 Hot UDDS)	#2-Diesel	114 mg	
CABS-82-0290	Car 61 1980- Mercedes 300SD	FTP (2 cold + 2 Hot UDDS)	#2-Diesel	167 mg	
CABS-82-0300	Car 61 1980- Mercedes 300SD	FTP (2 cold + 2 Hot UDDS)	#2-Diesel	164 mg	
CABS-82-0310	Car 61 1980- Mercedes 300SD	FTP (2 cold + 2 Hot UDDS)	#2-Diesel	165 mg	
CABS-82-0320	Car 61 1980- Mercedes 300SD	FTP (2 cold + 2 Hot UDDS)	#2-Diesel	165 mg	
CABS-82-0330	Car 61 1980- Mercedes 300SD	FTP (2 cold + 2 Hot UDDS)	#2-Diesel	163 mg	

Group 14

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
CABS-82-0240	1	8	1	8	2	7	2	7	5		5		4		4		3	9/6	3	9/6
CABS-82-0250	1	8	1	8	2	7	2	7									9		9	
CABS-82-0260	1	8	1	8	2	7	2	7	5		5		4		4		3	9/6	3	9/6
CABS-82-0270	1	8	1	8	2	7	2	7									9		9	
CABS-82-0280	1	8	1	8	2	7	2	7	5		5		4		4		3	6	3	6
CABS-82-0290	1	8	1	8	2	7	2	7	5		5		4		4		3	9/6	3	9/6
CABS-82-0300	1	8	1	8	2	7	2	7	5		5		4		4		3	9/6	3	9/6
CABS-82-0310	1	8	1	8	2	7	2	7	5		5		4		4		3	9/6	3	9/6
CABS-82-0320	1	8	1	8	2	7	2	7	5		5		4		4		3	9/6	3	9/6
CABS-82-0330	1	8	1	8	2	7	2	7	5		5		4		4		3	9/6	3	9/6

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

For Experiments 1-9 see next page.

GROUP 14

Experiment Number	Date Plated
1	9/24/82
2	10/01/82
3	10/06/82
4	10/08/82
5	10/14/82
6	10/22/82
7	10/27/82
8	11/03/82
9	11/10/82

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	9/24/82	TA98	RLF017	41.0	41.3	41.6	20.737	0.00335			✓		✓	20 → 2000	4229/200			
CABS-82-0250	"	"	"	17.8	17.9	18.1	5.684	0.00159			✓		✓	20 → 2000	3762/650			
CABS-82-0260	"	"	"	40.4	40.7	41.1	19.064	0.00373			✓		✓	20 → 2000	3817/200			
CABS-82-0270	"	"	"	25.6	25.9	26.1	5.937	0.00213			✓		✓	20 → 2000	3895/650			
CABS-82-0280	"	"	"	Not Listed	23.1	Not Listed	6.018	0.00191					✓	20 → 2000	3964/650			
CABS-82-0290	"	"	"	"	12.4	"	13.338	0.00184					✓	20 → 2000	3441/65			
CABS-82-0300	"	"	"	"	25.3	"	18.626	0.00317					✓	20 → 2000	3829/200			
CABS-82-0310	"	"	"	41.2	41.5	41.7	20.074	0.00377			✓		✓	20 → 2000	4056/200			
CABS-82-0320	"	"	"	Not Listed	42.4	Not Listed	20.747	0.00361					✓	20 → 2000	4236/200			
CABS-82-0330	"	"	"	31.8	32.0	32.2	17.563	0.00301			✓		✓	20 → 2000	3593/200			

Group #14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	9/24/82	TA98		92.8	94.3	95.8	18.478	0.00755			✓		✓	20 → 2000	4073/200			
CABS-82-0250	"	"		21.0	23.0	25.0	4.257	0.00249	✓		✓		✓	"	2972/650			
CABS-82-0260	"	"		77.5	78.7	79.9	17.718	0.00692			✓		✓	"	3797/200			
CABS-82-0270	"	"		28.8	29.9	31.0	14.313	0.00366			✓		✓	"	2858/200			
CABS-82-0280	"	"		19.9	22.3	24.9	10.994	0.00348		0.0463	✓		✓	"	2212/200			
CABS-82-0290	"	"		123.8	127.1	130.5	18.214	0.00898			✓		✓	"	4155/200			
CABS-82-0300	"	"		67.9	68.9	69.8	15.372	0.00679	0.0260		✓		✓	"	3326/200			
CABS-82-0310	"	"		61.1	62.1	63.1	17.569	0.00596			✓		✓	"	3638/200			
CABS-82-0320	"	"		73.1	74.4	75.6	16.896	0.00673	0.0124		✓		✓	20 → 2000	3679/200			
CABS-82-0330	"	"		51.9	52.3	52.6	16.655	0.00502			✓		✓	20 → 2000	3496/200			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/1/82	TA100	RLF017	Not Listed	38.9	Not Listed	20.848	0.00930					✓	6.57 650	1529/65			
CABS-82-0250	"	"	"	35.2	37.9	40.7	8.839	0.00707			✓		✓	"	1909/200			
CABS-82-0260	"	"	"	46.7	47.1	47.5	25.181	0.00998			✓		✓	"	1808/65			
CABS-82-0270	"	"	"	20.6	23.0	25.6	8.152	0.00476	0.0239	✓	✓		✓	"	1816/200			
CABS-82-0280	"	"	"	35.2	37.4	39.7	8.823	0.00700	✓		✓		✓	"	1921/200			
CABS-82-0290	"	"	"	Not Listed	77.1	Not Listed	23.726	0.00475					✓	"	1868/65			
CABS-82-0300	"	"	"	Not Listed	14.9	Not Listed	29.397	0.00588					✓	"	2105/65			
CABS-82-0310	"	"	"	31.5	31.9	32.2	22.112	0.00617			✓		✓	"	1613/65			
CABS-82-0320	"	"	"	Not Listed	28.8	Not Listed	26.155	0.00578					✓	"	1843/65			
CABS-82-0330	"	"	"	21.4	21.5	21.7	17.297	0.00572			✓		✓	"	1274/65			

Group #14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/1/82	TA100		41.4	42.9	44.4	15.934	0.01188	✓		✓		✓	6.5→ 650	1301/65			
CABS-82-0250	"	"		31.2	41.8	56.1	5.282	0.00952		✓	✓	✓	✓	"	1277/200			
CABS-82-0260	"	"		55.9	58.5	61.2	19.888	0.01389	0.0438		✓		✓	"	1539/65			
CABS-82-0270	"	"		42.1	43.9	45.7	17.247	0.01334			✓	✓	✓	"	1301/65			
CABS-82-0280	"	"		35.6	38.3	41.3	15.993	0.01222		✓	✓		✓	"	1220/65			
CABS-82-0290	"	"		48.9	49.9	50.9	11.574	0.01636			✓		✓	"	1147/20			
CABS-82-0300	"	"		41.3	42.2	43.2	15.078	0.01137			✓		✓	"	1276/65			
CABS-82-0310	"	"		35.0	36.0	37.0	14.657	0.00978	✓		✓		✓	"	1217/65			
CABS-82-0320	"	"		41.9	43.3	44.7	15.631	0.01254			✓		✓	"	1256/65			
CABS-82-0330	"	"		58.3	63.3	68.7	20.163	0.01579	✓		✓		✓	"	1515/65			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/6/82	TA1538	RLI017	84.8	87.7	90.7	7.499	0.01193	✓		✓		✓	6.5→ 650	1516/200			
CABS-82-0260	"	"	"	94.6	99.8	105.3	10.985	0.01115			✓		✓	"	2198/200			
CABS-82-0280	"	"	"	29.3	30.4	31.5	7.266	0.00729			✓		✓	"	1462/200			
CABS-82-0290	"	"	"	386.3	397.4	408.7	34.464	0.03816			✓		✓	"	2193/65			
CABS-82-0300	"	"	"	Not Listed	48.7	Not Listed	19.211	0.01845					✓	"	1226/65			
CABS-82-0310	"	"	"	23.3	23.5	23.7	17.299	0.00896			✓		✓	"	1107/65			
CABS-82-0320	"	"	"	Not Listed	33.6	Not Listed	19.594	0.01561					✓	"	1248/65			
CABS-82-0330	"	"	"	31.3	32.2	33.1	5.426	0.00858			✓		✓	6.5→ 650	1088/200			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/6/82	TA538		58.5	60.2	61.9	18.459	0.01865			✓		✓	6.5→ 650	1196/65			
CABS-82-0260	"	"		58.2	59.3	60.5	20.379	0.01720			✓		✓	"	1323/65			
CABS-82-0280	"	"		29.1	30.3	31.6	4.936	0.00920			✓		✓	"	1003/200			
CABS-82-0290	"	"		Not Listed	444.1	Not Listed	34.756	0.04076					✓	"	2207/65			
CABS-82-0300	"	"		308.6	327.8	348.2	24.187	0.04076	0.0348		✓		✓	"	1531/65			
CABS-82-0310	"	"		106.0	111.0	116.1	15.622	0.03075			✓		✓	"	999/65			
CABS-82-0320	"	"		325.8	352.3	381.0	24.009	0.04201	✓		✓		✓	"	1519/65			
CABS-82-0330	"	"		Not Listed	84.5	Not Listed	22.194	0.02532					✓	6.5→ 650	1401/65			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/8/82	TA1537	RLF017	63.2	66.8	70.7	5.153	0.01265			✓		✓	6.57 65C	1015/200			
CABS-82-0260	"	"	"	55.8	60.3	65.1	5.351	0.01218		✓	✓		✓	"	1055/200			
CABS-82-0280	"	"	"	27.1	28.8	30.7	4.819	0.00908	0.0289		✓		✓	"	957/200			
CABS-82-0290	"	"	"	Not Listed	54.4	Not Listed	22.283	0.02789	✓				✓	"	1404/65			
CABS-82-0300	"	"	"	"	25.7	"	15.791	0.01438					✓	"	1001/65			
CABS-82-0310	"	"	"	25.0	25.9	26.9	4.726	0.00835			✓		✓	"	944/200			
CABS-82-0320	"	"	"	15.4	15.5	15.6	13.947	0.00790			✓		✓	"	880/65			
CABS-82-0330	"	"	"	62.1	65.1	68.2	6.855	0.01142			✓		✓	"	1353/200			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/8/82	TA1537		61.7	65.5	69.6	17.952	0.02040			✓		✓	6.5→650	1163/65			
CABS-82-0260	"	"		44.4	46.6	48.9	14.551	0.01843			✓		✓	"	937/65			
CABS-82-0280	"	"		44.9	47.6	50.4	3.962	0.01266			✓		✓	"	794/200			
CABS-82-0290	"	"		203.3	210.1	217.1	25.243	0.03336			✓		✓	"	1631/65			
CABS-82-0300	"	"		75.0	78.9	83.1	16.059	0.02519			✓		✓	"	1029/65			
CABS-82-0310	"	"		55.1	58.0	61.0	15.494	0.02094	0.0173		✓		✓	"	989/65			
CABS-82-0320	"	"		74.9	82.4	91.8	17.073	0.02489	✓		✓		✓	"	1087/65			
CABS-82-0330	"	"		40.7	43.0	45.4	13.690	0.01824			✓		✓	"	875/65			

Group # 1'

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/14/82	TA1535	RLI017	1.2	3.1	7.9	0.527	0.02229	✓	✓	✓	✓	✓	6.5 → 650	53/65			
CABS-82-0260	"	"	"	0.9	1.6	2.9	0.514	0.01319	✓	✓	✓	✓	✓	"	51/65			
CABS-82-0280	"	"	"	0.9	1.5	2.6	0.226	0.00801	✓	✓	✓	✓	✓	"	64/200			
CABS-82-0290	"	"	"	0.4	0.6	0.9	0.548	0.00388			✓	✓	✓	"	57/65			
CABS-82-0300	"	"	"	0.5	0.7	1.0	0.731	Not Listed	✓	✓	✓	✓	✓	"	68/65			
CABS-82-0310	"	"	"	1.0	3.5	12.7	0.417	0.02484	✓	✓	✓	✓	✓	"	50/65			
CABS-82-0320	"	"	"	1.0	3.6	13.1	0.307	0.02629	✓	✓	✓	✓	✓	"	49/65			
CABS-82-0330	"	"	"	0.9	2.1	5.1	0.465	0.01817	✓	✓	✓	✓	✓	"	48/65			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/14/82	TA1535		0.5	1.3	2.9	-0.028	0.01995		✓	✓	✓	✓	6.5 → 650	33/20			
CABS-82-0260	"	"		0.5	2.7	13.4	0.176	0.02655	0.0243	✓	✓	✓	✓	"	36/65			
CABS-82-0280	"	"		>0.1	1.2	75.9	-0.025	0.01194	✓	✓	✓	✓	✓	"	29/6.5			
CABS-82-0290	"	"		0.2	1.5	11.2	0.043	0.02402	✓	✓	✓	✓	✓	"	30/20			
CABS-82-0300	"	"		0.2	0.8	2.4	0.099	0.01534	✓	✓	✓	✓	✓	"	27/65			
CABS-82-0310	"	"		>0.1	0.1	0.8	-0.116	Not Listed	✓			✓	✓	"	34/6.5			
CABS-82-0320	"	"		>0.1	0.1	0.2	0.032	Not Listed	✓			✓	✓	"	30/6.5			
CABS-82-0330	"	"		0.4	1.2	4.0	-0.043	0.02074	✓	✓	✓		✓	"	29/6.5			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/22/82	TA1538	RLI017	None Listed	64.5	None Listed	19.277	0.02053					✓	6.5 → 650	1226/65			
CABS-82-0260	"	"	"	68.8	73.1	77.7	5.472	0.01284			✓		✓	"	1102/200			
CABS-82-0280	"	"	"	37.8	39.6	41.5	7.638	0.00835			✓		✓	"	1516/200			
CABS-82-0290	"	"	"	262.4	271.0	280.0	25.372	0.03708			✓		✓	"	1623/65			
CABS-82-0300	"	"	"	Not Listed	39.7	Not Listed	22.427	0.02268					✓	"	1422/65			
CABS-82-0310	"	"	"	Not Listed	21.1	Not Listed	18.623	0.00982					✓	"	1189/65			
CABS-82-0320	"	"	"	Not Listed	28.9	Not Listed	23.932	0.01620	✓				✓	"	1511/65			
CABS-82-0330	"	"	"	Not Listed	23.6	Not Listed	18.022	0.00921					✓	"	1147/65			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/22/82	TA1538		160.7	166.0	171.6	25.702	0.02925			✓		✓	6.5 → 650	1645/65			
CABS-82-0260	"	"		111.6	118.7	126.2	24.461	0.02501			✓		✓	"	1551/65			
CABS-82-0280	"	"		None Listed	94.5	None Listed	6.926	0.01329					✓	"	1397/200			
CABS-82-0290	"	"		556.1	586.2	605.3	34.502	0.04366			✓		✓	"	2243/65			
CABS-82-0300	"	"		218.5	229.3	240.6	27.072	0.03337			✓		✓	"	1727/65			
CABS-82-0310	"	"		339.7	354.8	370.5	27.921	0.03977			✓		✓	"	1767/65			
CABS-82-0320	"	"		221.1	231.0	241.3	25.696	0.03450			✓		✓	"	1624/65			
CABS-82-0330	"			171.4	181.1	191.3	21.724	0.03327			✓		✓	"	1376/65			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/27/82	TA100	RLI017	Not Listed	34.8	Not Listed	29.713	0.01606					✓	6.5 → 650	2107/65			
CABS-82-0250	"	"	"	"	81.7	"	8.898	0.01185	0.0300				✓	"	1918/200			
CABS-82-0260	"	"	"	"	64.6	"	30.861	0.01753	✓				✓	"	2204/65			
CABS-82-0270	"	"	"	"	86.0	"	10.609	0.01199					✓	"	2309/200			
CABS-82-0280	"	"	"	"	88.7	"	8.854	0.01226	✓				✓	"	1931/200			
CABS-82-0290	"	"	"	135.4	141.6	148.2	21.239	0.02596			✓		✓	"	1760/65			
CABS-82-0300	"	"	"	Not Listed	58.5	Not Listed	29.149	0.01905					✓	"	2149/65			
CABS-82-0310	"	"	"	"	37.2	"	28.610	0.00861					✓	"	2063/65			
CABS-82-0320	"	"	"	"	50.3	"	27.756	0.01328	✓				✓	"	1988/65			
CABS-82-0330	"	"	"	"	25.1	"	27.649	0.00864					✓	"	1938/65			

Group #14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	10/27/82	TA100		Not Listed	185.3	Not Listed	14.022	0.03616					✓	6.5 → 650	1150/65			
CABS-82-0250	"	"		43.5	44.8	46.0	15.927	0.01391	✓		✓		✓	"	1172/65			
CABS-82-0260	"	"		149.9	168.4	189.2	9.742	0.03949			✓		✓	"	873/65			
CABS-82-0270	"	"		43.8	45.7	47.8	15.417	0.01563			✓		✓	"	1127/65			
CABS-82-0280	"	"		38.2	41.8	45.8	15.374	0.01464			✓	✓	✓	"	1116/65			
CABS-82-0290	"	"		172.9	197.1	224.7	1.928	0.04926			✓		✓	"	1161/20			
CABS-82-0300	"	"		166.5	174.1	182.1	4.232	0.04498			✓		✓	"	1029/20			
CABS-82-0310	"	"		Not Listed	135.4	Not Listed	11.731	0.03254					✓	"	1161/20			
CABS-82-0320	"	"		207.7	238.6	274.2	8.150	0.04670	✓		✓		✓	"	935/20			
CABS-82-0330	"	"		85.0	88.7	92.5	16.196	0.02327			✓	✓	✓	"	1248/65			

Group #14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	11/3/82	TA98	RLI017	61.5	63.9	66.4	18.615	0.00611			✓		✓	6.5-9 650	3691/200			
CABS-82-0250	"	"	"	43.3	46.0	48.9	4.059	0.00376			✓		✓	"	2588/650			
CABS-82-0260	"	"	"	43.4	43.9	44.4	16.503	0.00488			✓		✓	"	3274/200			
CABS-82-0270	"	"	"	42.8	46.3	50.0	4.656	0.00356		✓	✓		✓	"	2979/650			
CABS-82-0280	"	"	"	40.7	44.5	48.5	4.900	0.00342		0.0124	✓		✓	"	3132/650			
CABS-82-0290	"	"	"	116.4	117.5	118.5	16.351	0.00930			✓		✓	"	3308/200			
CABS-82-0300	"	"	"	66.3	66.9	67.6	15.643	0.00698			✓		✓	"	3103/200			
CABS-82-0310	"	"	"	54.2	54.9	55.6	18.268	0.00538			✓		✓	"	3593/200			
CABS-82-0320	"	"	"	66.3	67.3	68.2	20.621	0.00577			✓		✓	"	4092/200			
CABS-82-0330	"	"	"	51.9	52.5	53.1	20.808	0.00444			✓		✓	"	4093/200			

Group # 14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	11/3/82	TA98		Not Listed	159.6	Not Listed	14.979	0.01173					✓	6.5→ 650	3142/200			
CABS-82-0250	"	"		21.7	22.5	23.4	9.901	0.00402			✓		✓	"	1971/200			
CABS-82-0260	"	"		88.1	89.5	90.9	13.880	0.00935			✓		✓	"	2887/200			
CABS-82-0270	"	"		22.4	22.9	23.4	9.922	0.00415		✓	✓		✓	"	1991/200			
CABS-82-0280	"	"		23.5	24.2	24.8	9.750	0.00442			✓		✓	"	1942/200			
CABS-82-0290	"	"		102.3	103.3	104.2	48.263	0.01109			✓		✓	"	3182/65			
CABS-82-0300	"	"		Not Listed	130.2	Not Listed	13.422	0.01115		✓			✓	"	2783/200			
CABS-82-0310	"	"		67.5	69.3	71.1	13.041	0.00823		✓	✓		✓	"	2678/200			
CABS-82-0320	"	"		96.6	98.4	100.2	13.403	0.00979		0.0392	✓		✓	"	2774/200			
CABS-82-0330	"	"		55.7	56.4	57.1	14.570	0.00641			✓		✓	"	2942/200			

Group #14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	11/10/82	TA1538	RLI017	69.3	75.7	82.7	20.790	0.02036			✓		✓	6.5 → 650	1335/65			
CABS-82-0250	"	"	"	22.8	25.5	28.6	7.285	0.00637			✓		✓	"	1455/200			
CABS-82-0260	"	"	"	124.5	139.4	156.0	5.866	0.01583			✓		✓	"	1192/200			
CABS-82-0270	"	"	"	41.9	43.6	45.4	7.691	0.00883			✓		✓	"	1547/200			
CABS-82-0290	"	"	"	Not listed	2281.5	Not listed	30.853	0.06712					✓	"	1974/65			
CABS-82-0300	"	"	"	819.0	858.3	899.6	24.857	0.05501			✓		✓	"	1584/65			
CABS-82-0310	"	"	"	Not listed	108.5	Not Listed	20.220	0.02946					✓	"	1290/65			
CABS-82-0320	"	"	"	291.7	309.3	328.1	26.133	0.03853			✓		✓	"	1678/65			
CABS-82-0330	"	"	"	16.5	18.4	20.2	18.358	0.02025					✓	"	1170/65			

Group #14

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
CABS-82-0240	11/10/82	TA1538		147.5	149.3	151.0	41.047	0.01904			✓		✓	6.5 → 650	2698/65			
CABS-82-0250	"	"		37.3	39.3	41.4	7.803	0.00828			✓		✓	"	1553/200			
CABS-82-0260	"	"		43.7	45.6	47.5	19.629	0.01350			✓		✓	"	1263/65			
CABS-82-0270	"	"		81.2	83.8	86.5	8.197	0.01183			✓		/	"	1640/200			
CABS-82-0290	"	"		Not listed	74.4	Not listed	39.565	0.02792					/	"	2521/65			
CABS-82-0300	"	"		189.8	197.1	204.8	28.059	0.03075			✓		✓	"	1770/65			
CABS-82-0310	"	"		Not listed	126.4	Not listed	24.878	0.02702					✓	"	1590/65			
CABS-82-0320	"	"		"	314.6	"	26.945	0.03844					✓	"	1714/65			
CABS-82-0330	"	"		81.1	84.3	87.6	22.220	0.02121			✓		/	"	1402/65			

GROUP 15

HEAVY DUTY DIESEL EVALUATION

VARIABLES: ENGINES, TEST CYCLES, FUELS

SDSB-79-0011	DDAD	8V71N	(D2)	C/H trans.
0081	"		(D2)	Cold trans.
0121	"		(D2)	Hot trans.
0161	"		(D1)	C/H trans.
0231	"		(D1)	Cold trans.
0281	"		(D1)	Hot trans.
0331	"		(D1)	Hot bus cycle Cold +
80-4021		1H DTI 466 B	(D2)	Hot trans.
4041		DDAD 6V92 TA	(D1)	C/H trans.
4051		"	(D2)	"
4061		Mack ETAZ	(D2)	C/H
4071		Mack ETSX	(D2)	Cold trans.
4091		"	(D2)	C/H trans.
4101		Cummins VTB-903	(D2)	C/H trans.
4111		"	(D1)	C/H trans.
4131		" malfunction	(D2)	C/H trans.
4151		Caterpillar 3406 DITA	(D2)	C/H trans.
4161		"	(D2)	C/H trans.
4172		Cummins NTC 350	(D2)	C/H trans.
4182		DDAD 8V TITA	(D2)	C/H trans.
4192		IH DT 460	(D2)	C/H trans.
4202		DDAD 6V92 TA	(D2)	C/H trans.
4212		Cummins NTC 290	(D2)	C/H trans.
4173		5-engine composite	(D2)	Cold trans.
4174		5-engine composite	(D2)	Hot trans.

Table 1

GROUP ID: 15

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
SDSB-79-0011	DDAD 8V 71N	Transient	#2	430 mg	
SDSB-79-0081	DDAD 8V 71N	Cold Transient	#2	588 mg	
SDSB-79-0121	DDAD 8V 71N	Hot Transient	D2	591 mg.	
SDSB-79-0161	DDAD 8V 71N	Transient	#1	1006.5 mg.	
SDSB-79-0231	DDAD 8V 71N	Cold Transient	D1	480 mg.	
SDSB-79-0281	DDAD 8V 71N	Hot Transient	D1	716 mg.	
SDSB-79-0331	DDAD 8V 71N	Hot BUS CYCLE COLD +	D1	742 mg.	
SDSB-80-4021	IH DT1 466B	Hot Transient	D2	279.5 mg.	
SDSB-80-4041	DDAD 6V92TA	TRANSIENT	#1	604.8 mg	
SDSB-80-4051	DDAD 6V92TA	Transient	#2	676.2 mg.	
SDSB-80-4061	MACK ETAZ	Transient	#2	392 mg.	
SDSB-80-4071	MACK ETSX	Transient	#2	312 mg.	
SDSB-80-4091	MACK ETSX	Transient	#2	390 mg.	
SDSB-80-4101	CUMMINS VTB-903	Transient	#2	506.3 mg.	

Table 1

GROUP ID: 15

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
SDSB-80-4111	Cummins VTB-903	Transient	D1	329.4 mg.	
SDSB-80-4131	Cummins VTB 903	Transient	#2	924 mg.	Malfunction
SDSB-80-4151	Caterpillar 3406 DITA	C/H Transient	D2	400.11 mg.	
SDSB-80-4161	Caterpillar 3406 DITA	C/H Transient	D2	347 mg	
SDSB-80-4172	Cummins NTC 350	C/H Transient	D2	308 mg	
SDSB-80-4182	IH DT 466	C/H Transient	Emissions D2	181 mg	
SDSB-80-4192	IH DT 466	C/H Transient	D2	350 mg	
SDSB-80-4202	DDAD6V92TA	C/H Transient	D2	530 mg.	
SDSB-80-4212	Cummins NTC 290	C/H Transient	D2	381 mg	
SDSB-80-4173	5 ENGINE COMPOSITE		D2	389.29 mg.	
SDSB-80-4174	5 ENGINE COMPOSITE		D2	3000.82 mg.	

Group 15.

Table 2

SAMPLE ID	TESTER STRAIN																				
	TA98				TA100				TA1535				TA1537				TA1538				
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		
	*																				
SDSB-79-0011	9	11	9	11	9	11	9	11									9	11	9	11	✓
SDSB-79-0081	4	6	4	6	4	6	4	6									4	6	4	6	
SDSB-79-0121	4	6	4	6	4	6	4	6									4	6	4	6	
SDSB-79-0161	12	13	12	13	12	13	12	13									12	13	12	13	✓
SDSB-79-0231	5	7	5	7	5	7	5	7									5	7	5	7	
SDSB-79-0281	5	7	5	7	5	7	5	7									5	7	5	7	
SDSB-79-0331	14	16	14	16	14	16	14	16									14	16	14	16	✓
SDSB-80-4021	14	16	14	16	14	16	14	16									14	16	14	16	✓
SDSB-80-4041	21	22	21	22	21	22	21	22									21	22	21	22	✓
SDSB-80-4051	21	22	21	22	21	22	21	22									21	22	21	22	✓
SDSB-80-4061	8	10	8	10	8	10	8	10									8	10	8	10	✓
SDSB-80-4071	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	3/2	1	3/2	
SDSB-80-4091	8	10	8	10	8	10	8	10									8	10	8	10	✓
SDSB-80-4101	18	22	18	23/22	18	22	18	23/22									18	22	18	23/22	
SDSB-80-4111	18	20	18	20	18	20	18	20									18	20	18	20	
SDSB-80-4131	8	10	8	10	8	10	8	10									8	15/10	8	15/10	✓
SDSB-80-4151	17	20	17	20	19	20	19	20									17	20	17	20	✓
SDSB-80-4161	17	20	17	20	19	20	19	20									17	20	17	20	✓

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

See Following Page for Experiments 1-29

Group 15

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
5DSB-80-4172	26	28	26	28	26	28	26	28									26	28	26	28 ✓
5DSB-80-4182	27	29	27	29	27	29	27	29									27	29	27	29 ✓
5DSB-80-4192	27	29	27	29	27	29	27	29									27	29	27	29 ✓
5DSB-80-4202	26	28	26	28	26	28	26	28									26	28	26	28 ✓
5DSB-80-4212	27	29	27	29	27	29	27	29									27	29	27	29 ✓
5DSB-80-4173	23	25	23	24	23	24	23	24									23	25	23	24 ✓
5DSB-80-4174	23	24	23	24	23	24	23	24									23	24	23	24 ✓

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

See Following Page for Experiments 1-29

Experiment Number	Date Plated
1	6/04/80
2	6/09/80
3	6/13/80
4	7/01/80
5	7/02/80
6	7/07/80
7	7/08/80
8	7/28/80
9	8/05/80
10	8/08/80
11	8/21/80
12	8/26/80
13	8/29/80
14	9/05/80
15	9/08/80
16	9/09/80
17	9/10/80
18	9/12/80
19	9/18/80
20	9/24/80
21	9/25/80
22	10/06/80
23	10/27/80
24	11/07/80
25	11/17/80
26	2/06/81
27	2/10/81
28	2/20/81
29	2/24/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4061	7/28/80	TA98	RLI015	1.0	1.4	2.0	0.536	0.00050	✓	✓	✓	✓	✓	20 → 2000	1082/2000			
SDSB-80-4091	"	"	"	0.3	0.9	3.5	0.210	0.00076		✓	✓	✓	✓	"	440/2000			
SDSB-80-4131	"	"	"	0.4	0.6	0.7	0.185	0.00051			✓	✓	✓	"	421/2000			
SDSB-80-4061	"	"	NONE	2.1	2.6	3.3	0.509	0.00082	✓	✓	✓		✓	20 → 2000	1033/2000			
SDSB-80-4091	"	"	"	0.8	1.1	1.5	0.315	0.00062	✓	✓	✓	✓	✓	20 → 2000	646/2000			
SDSB-80-4131	"	"	"	03	0.4	0.5	0.168	0.00040		.0240	✓	✓	✓	"	364/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4061	7/28/80	TA100	RL1015	2.5	3.2	3.9	0.703	.00072		✓	✓	✓	✓	20 → 2000	1526/2000			
SDSB-80-4091	"	"	"	0.5	0.5	1.4	0.559	0.00019	✓	✓	✓	✓	✓	"	1245/2000			
SDSB-80-4131	"	"	"	0.5	0.5	0.6	0.544			✓	✓	✓	✓	"	1238/2000			
SDSB-80-4061	"	"	NONE	7.8	8.2	8.6	1.682	.00223			✓		✓	20 → 3000	1248/650			
SDSB-80-4091	"	"	"	3.4	3.7	4.0	1.466	.00130	✓	✓	✓		✓	"	1095/650			
SDSB-80-4131	"	"	"	1.4	2.0	3.0	0.459	0.00068		✓	✓	✓	✓	"	1076/3000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4061	7/28/80	TA1538	RJ1015	0.8	1.0	1.3	0.444	0.00043		✓	✓	✓	✓	20 → 2000	897/2000			
SDSB-80-4091	"	"	"	0.5	0.9	1.5	0.178	0.00080	✓	.0263	✓	✓	✓	"	370/2000			
SDSB-80-4131	"	"	"	0.4	0.6	0.9	0.186	0.00058	✓	✓	✓	✓	✓	"	396/2000			
SDSB-80-4061	"	"	NONE	0.7	0.8	0.9	0.361	0.00117	✓	.0412	✓	✓	✓	20 → 2000	246/250			
SDSB-80-4091	"	"	"	0.4	0.6	0.8	0.211	0.00158	✓	✓	✓	✓	✓	"	146/650			
SDSB-80-4131	"	"	"	0.2	0.3	0.5	0.120	0.00042	✓	✓	✓	✓	✓	"	256/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4061	8/8/80	TA98	RLI015	0.7	1.2	1.7	0.504	0.00044	✓	✓	✓	✓	✓	30 → 2000	1021/2000			
SDSB-80-4091	"	"	"	0.1	0.3	1.8	0.191	0.00031	.0451	✓	✓	✓	✓	"	411/2000			
SDSB-80-4131	"	"	"	0.3	0.4	0.6	0.183	0.00038	.0137	✓	✓	✓	✓	"	403/2000			
SDSB-80-4061	"	"	NONE	1.9	2.3	2.6	0.565	0.00069	✓	✓	✓	✓	✓	30 → 2000	1134/2000			
SDSB-80-4091	"	"	"	0.6	0.9	1.3	0.358	0.00047	✓		✓	✓	✓	"	733/2000			
SDSB-80 4131	"	"	"	0.3	0.4	0.6	0.155	0.00048	✓	✓	✓	✓	✓	"	335/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4061	8/8/80	TA100	RLI015	2.2	2.6	30	0.932	0.00049	.0454		✓	✓	✓	20 → ~~2000~~	1991/2000			
SDSB-80-4091	"	"	"	0.4	0.8	1.6	0.578	.00015	✓	✓	✓	✓	✓	"	1289/3000			
SDSB-80-4131	"	"	"	0.9	1.2	1.7	0.598	.00034	.0114	✓	✓	✓	✓	"	1345/3000			
SDSB-80-4061	"	"	NONE	4.9	5.2	5.6	1.972	0.00137			✓		✓	20 → ~~2000~~	1415/650			
SDSB-80-4091	"	"	"	2.9	3.2	3.4	1.503	.00108	✓		✓		✓	"	1108/650			
SDSB-80-4131	"	"	"	1.5	2.1	3.2	0.645	.00057		.0302	✓	✓	✓	"	1428/3000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4061	8/8/80	TA1538	RLI015	0.9	1.3	1.8	0.471	0.00049	✓	✓	✓	✓	✓	20→2000	954/2000			
SDSB-80-4091	"	"	"	0.3	0.8	1.9	0.167	0.00076	✓	.0272	✓	✓	✓	"	347/2000			
SDSB-80-4131	"	"	"	0.2	0.2	0.3	0.129	0.00026	✓	.0135	✓	✓	✓	"	270/2000			
SDSB-80-4061	"	"	NONE	1.1	1.5	2.0	0.519	0.00158	.0423	✓	✓	✓	✓	20→2000	198/2000			
SDSB-80-4091	"	"	"	0.1	0.3	0.6	0.082	0.00060	✓	✓	✓	✓	✓	"	178/2000			
SDSB-4131	"	"	"	0.4	0.5	0.6	0.175	0.00044	✓	.0260	✓	✓	✓	"	372/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4131	9/8/80	TA1538	RL105	0.5	0.7	1.0	0.181	0.00064	✓	.0293	✓	✓	✓	20 → 2000	385/2000			
SDSB-80-4131	"	"	NONE	0.1	0.1	0.2	0.087	0.00018		✓	✓	✓	✓	20 → 2000	186/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0011	8/5/80	TA98	RL1015	0.2	0.5	1.0	0.173	0.00050	✓	✓	✓	✓	✓	30→ ~~2000~~	364/ ~~5000~~			
SDSB-79-0011	"	"	NONE	0.2	0.4	0.7	0.155	0.00041	.0405	✓	✓	✓	✓	"	332/ ~~5000~~			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0011	8/5/80	TA100	RL1015	0.3	0.5	0.7	0.378	0.00012			✓	✓	✓	20 → 2000	893 / 2000			
SDSB-79-0011	"	"	NONE	1.2	1.5	2.0	0.558	0.00148		✓	✓	✓	✓	20 → 2000	1243 / 2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0011	8/5/80	TA1538	RL1015	0.2	0.3	0.4	0.157	0.00026		✓	✓	✓	✓	20 → 2000	327/2000			
SDSB 79-0011	"	"	NONE	0.1	0.1	0.1	0.080		.0409	✓		✓	✓	2 → 2000	172/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0011	8/21/80	TA98	RL1015	0.1	0.2	0.3	0.097	0.00009	✓	✓	✓	✓	✓	65→ 6500	661/6500			
SDSB-79-0011	"		NONE	0.1	0.2	0.2	0.067	0.00008	✓	0.211		✓	✓	65→ 6500	465/6500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0011	8/21/80	TA100	RLI015	0.6	0.8	1.1	0.270	0.00016		.0288	✓	✓	✓	65→ 6500	1906/6500			
SDSB-79-0011	"	"	NONE	0.6	0.7	0.9	0.146	0.00023	✓	.0223	✓	✓	✓	"	1131/6500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0011	8/21/80	TA1538	RLI015	0.2	0.2	0.3	0.072	0.00016			✓	✓	✓	65 → 6500	503/6500			
SDSB 79-0011	"	"	NONE	0.0	0.1	0.2	0.040	0.00012	.0457	✓	✓	✓	✓	"	277/6500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-79-0161	8/26/80	TA98	RL1015	0.3	0.7	1.9	0.170	0.00071	✓	✓	✓	✓	✓	20 → 2000	359/2000			
SDSB-79-0161	"	"	NONE	0.2	0.4	0.6	0.155	0.00040		✓	✓	✓	✓	"	329/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0161	8/26/80	TA100	RL1015	0.5	0.5	0.5	0.469			✓	✓	✓	✓	20-2000	1058/2000			
SDSB-79-0161	"	"	NONE	0.4	0.6	1.0	0.541	0.00008	✓	✓	✓	✓	✓	"	1211/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-79-0161	8/26/80	TA1538	RL1015	0.2	0.5	0.8	0.157	0.00052	✓	✓	✓	✓	✓	20 → 200	330/2000			
SDSB-79-0161	"	"	NONE	0.1	0.1	0.3	0.085	0.00015	✓	.0478	✓	✓	✓	"	183/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0161	8/29/80	TA98	RL115	0.2	0.4	1.0	0.151	0.00045	✓	✓	✓	✓	✓	20 → 2000	322 / 2000			
SDSB-79-0161	"	"	NONE	0.1	0.1	0.1	0.110		✓	✓	✓	–	✓	20 → 2000	234 / 2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0161	8/29/80	TA107	RLI015	0.3	0.3	0.3	0.339		✓	.0106		✓	✓	20→2000	815/2000			
SDSB-79-0161	"	"	NONE	0.3	0.8	2.1	0.411	0.00031	✓	✓	✓	✓	✓	20→2000	954/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-79-0161	8/29/80	TA 1538	RU1015	0.1	0.1	0.1	0.128		.0262	✓	✓	✓	✓	20 → 2000	276/2000			
SDSB-79-0161	"	"	NONE	0.1	0.1	0.1	0.082		✓	✓		✓	✓	20 → 2000	172/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-79-0331	9/5/81	TA98	RL1015	0.2	0.3	0.5	0.131	0.00035	.0206	✓	✓	✓	✓	20→2000	282/2000			
SDSB-80-4021	"	"	"	0.1	0.6	2.3	0.178	0.00058	✓	✓	✓	✓	✓	20→2000	360/2000			
SDSB-79-0331	"	"	NONE	0.1	0.1	0.1	0.079		✓	✓	✓	✓	✓	20→2000	174/2000			
SDSB-80-4021	"	"	"	1.0	1.1	1.3	0.501	0.00040	0.235		✓	✓	✓	20→2000	1036/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-79-0331	9/5/80	TA100	RL1015	0.3	0.3	0.3	0.302		✓	.0442		✓	✓	20→2000	727/2000			
SDSB-80-4021	"	"	"	3.2	3.6	4.1	1.555	0.00123	✓		✓		✓	"	1131/2000			
SDSB-79-0331	"	"	NONE	0.3	0.6	1.2	0.337	0.00024		.0109	✓	✓	✓	20→2000	790/2000			
SDSB-80-4021	"	"	"	2.3	2.3	2.4	1.222	0.00067					✓	"	970/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-79-0331	9/5/80	TA1538	RLI015	0.3	0.6	1.3	0.113	0.00081	✓	.0398	✓	✓	✓	20 → 2000	240/2000			
SDSB-80-4021	"	"	"	2.3	2.7	3.3	0.559	0.00079	✓	✓	✓	✓	✓	"	1125/2000			
SDSB-79-0331	"	"	NONE	0.1	0.1	0.1	0.080		✓	✓	✓	✓	✓	20 → 2000	169/2000			
SDSB-80-4021	"	"	"	5.5	6.4	7.4	0.422	0.00421	.038		✓		✓	"	293/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0331	9/9/81	TA98	RLI016	0.1	0.2	0.3	0.066	0.00014	✓	.0185	✓	✓	✓	65→ 6500	460/6500			
SDSB-80-4021	"	"	"	2.6	3.0	3.5	6.925	0.00051		.0465	✓	✓	✓	20→ 2000	1855/2000			
SDSB-79-0331	"	"	NONE	0.1	0.1	0.2	0.057	0.00012		.0283	✓	✓	✓	65→ 6500	374/6500			
SDSB-80-4021	"	"	"	2.4	2.5	2.6	1.426	0.00283		✓	✓		✓	20→ 2000	987/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0331	9/9/80	TA100	RL1016	0.2	0.3	0.6	0.169	0.00010	.0273	.0404	✓	✓	✓	65→ 6500	1237/6503			
SDSB-80-4021	"	"	"	4.5	5.0	5.5	0.954	0.00080		0.0361	✓		✓	20→ 2000	2029/2000			
SDSB-79-0331	"	"	NONE	0.4	0.5	0.6	0.148	0.00018		✓	✓	✓	✓	65→ 6500	1084/6500			
SDSB-80-4021	"	"	"	23.4	25.0	26.6	1.189	0.00446			✓		✓	20→ 2000	947/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-79-0331	9/9/81	TA1538	RL1016	0.1	0.1	0.2	0.059	0.00014		✓	✓	✓	✓	65 → 6500	407/6500			
SDSB-80-4021	"	"	"	2.7	3.2	3.7	0.576	0.00085		.0170	✓	✓	✓	20 → 2000	1151/2000			
SDSB-79-0331	"	"	"	0.0	0.1	0.2	0.020	0.00021	✓	✓	✓	✓	✓	65 → 6500	147/6500			
SDSB-80-4021	"	"	"	1.5	1.6	1.7	0.736	0.0030	✓		✓		✓	20 → 3000	162/3000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4151	9/10/80	TA98	RLI016	4.0	5.4	7.3	0.992	0.00085	✓	✓	✓		✓	20 → 2000	2000/2000			
SDSB-80-4161	"	"	"	20	2.5	3.2	0.714	0.00064	✓	✓	✓	✓	✓	20 → 2000	1428/2000			
SDSB-80-4157	"	"	NONE	3.2	3.9	4.9	0.666	0.00087	✓	✓	✓		✓	"	1381/2000			
SDSB-80-4161	"	"	"	2.1	2.4	2.7	0.670	0.00064			✓	✓	✓	"	1349/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4151	9/18/80	TA100	RL1016	4.0	4.2	4.5	1.945	0.00115			✓		✓	20 → 2000	1373/650			
SDSB-80-4161	"	"	"	2.8	3.4	4.3	0.719	0.00076	.0306	✓	✓	✓	✓	"	1541/3000			
SDSB 80-4151	"	"	NONE	10.5	11.2	11.8	2.083	0.00238	.0384	✓	✓		✓	20 → 2000	1554/650			
SDSB-80-4161	"	"	"	4.6	4.9	5.2	2.039	0.00123			✓		✓	"	1453/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4151	9/10/82	TA1538	RL1016	3.7	4.5	5.4	0.963	0.00077	.0105		✓	✓	✓	20→2000	1907/2000			
SDSB-80-4161	"	"	"	1.5	2.0	2.7	0.610	0.00060		✓	✓	✓	✓	"	1221/2000			
SDSB-80-4151	"	"	NONE	3.5	3.8	4.0	1.090	0.00192		✓	✓		✓	20→2000	912/650			
SDSB-80-4161	"	"	"	1.1	1.2	1.3	0.557	0.00116		.0377	✓	✓	✓	"	379/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4111	9/24/80	TA98	RL1016	2.2	2.8	3.6	0.447	0.00052	✓		✓	✓	✓	30 → 2000	898/3000			
SDSB-80-4151	"	"	"	3.4	4.4	5.8	1.086	0.00071	.0148	✓	✓		✓	"	2159/3000			
SDSB-80-4161	"	"	"	1.8	2.8	4.3	0.718	0.00068	✓	✓	✓	✓	✓	"	1435/3000			
SDSB-80-4111	"	"	NONE	1.4	1.7	2.2	0.448	0.00066	✓	✓	✓	✓	✓	30 → 2000	923/3000			
SDSB-80-4157	"	"	"	4.7	49	5.1	2.483	0.00096	.0460		✓		✓	"	1650/650			
SDSB-80-4161	"	"	"	1.7	2.1	2.7	0.609	0.00062	✓	✓	✓	✓	✓	"	1234/3000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4111	9/24/80	TA100	RL1016	2.1	2.5	2.9	0.886	0.00049	✓	✓	✓	✓	✓	20 → 2000	1883 / 2000			
SDSB-80-4151	"	"	"	3.1	3.6	4.2	0.883	0.00069	✓		✓	✓	✓	"	1850 / 2000			
SDSB-80-4161	"	"	"	0.9	1.0	1.1	0.711	0.00017		✓	✓	✓	✓	"	1524 / 2000			
SDSB-80-4111	"	"	NONE	4.8	5.0	5.2	1.641	0.00155	.017		✓		✓	20 → 2000	1201 / 650			
SDSB-80-4151	"	"	"	*	6.7	*	1.814	0.00175					✓	"	1384 / 650			
SDSB-80-4161	"	"	"	3.4	3.5	3.7	1.520	0.00110		✓	✓		✓	"	1157 / 2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4111	9/24/80	TA1538	RL1016	2.8	3.3	3.9	0.498	0.00055		✓		✓	✓	20 → 2000	999/2000			
SDSB-80-4151	"	"	"	5.0	5.8	6.8	0.741	0.00104			✓	✓	✓	"	1460/3000			
SDSB-80-4161	"	"	"	0.6	0.7	0.9	0.540	0.00015		✓	✓	✓	✓	"	1093/3000			
SDSB-80-4111	"	"	NONE	0.9	1.0	1.1	0.464	0.00104	.0107	✓	✓	✓	✓	"	317/650			
SDSB-80-4161	"	"	"	1.5	1.6	1.7	0.813	0.00099		✓	✓		✓	"	551/650			
SDSB-80-4161	"	"	"	1.2	1.3	1.4	0.526	0.00124		✓	✓	✓	✓		376/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4044	9/25/80	TA98	RL1016	0.1	0.6	2.3	0.170	0.00058	✓	✓	✓	✓	✓	20→2000	360/2000			
SDSB-80-4051	"	"	"	0.3	0.5	0.8	0.208	0.00039	.0410	✓	✓	✓	✓	"	428/2000			
SDSB-80-4041	"	"	NONE	0.1	0.2	0.2	0.098	0.00019	✓	✓	✓	✓	✓	20→2000	215/2000			
SDSB-80-4051	"	"	"	0.2	0.3	0.5	0.131	0.00046	✓	.0483	✓	✓	✓	"	277/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4041	9/25/80	TA100	RLI016	0.3	0.3	0.3	0.304		✓	✓	✓	✓	✓	20 → 2000	726/2000			
SDSB-80-4051	"	"	"	0.4	0.4	0.4	0.414			✓	✓	✓	✓	"	950/2000			
SDSB-80-4041	"	"	NONE	0.3	0.6	1.1	0.437	0.00013	✓	✓	✓	✓	✓	20 → 2000	987/2000			
SDSB-80-4051	"	"	"	1.2	1.4	1.7	0.638	0.00035		.0164	✓	✓	✓	"	1381/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4041	9/25/80	TA1538	RLI016	0.2	0.4	0.7	0.195	0.00030	✓	✓	✓	✓	✓	20 → 2000	404/3000			
SDSB-80-4051	"	"	"	0.2	0.4	0.8	0.230	0.00030		✓	✓	✓	✓	"	475/3000			
SDSB-80-4041	"	TA1538	NONE	0.1	0.1	0.1	0.106		✓	✓		✓	✓	20 → 2000	222/3000			
SDSB-80-4051	"	"	"	0.1	0.4	1.5	0.145	0.00048	✓	✓	✓	✓	✓	"	297/3000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4041	10/6/80	TA98	RL1016	0.3	0.6	1.5	0.154	0.00066	✓		✓	✓	✓	20 → 2000	331/2000			
SDSB-80-4051	"	"	"	0.1	0.4	1.5	0.163	0.00046	✓	✓	✓	✓	✓	"	349/2000			
SDSB-80-4101	"	"	"	0.5	0.8	1.2	0.212	0.00062	✓	✓	✓	✓	✓	"	448/2000			
SDSB-80-4041	"	"	NONE	0.3	0.6	1.2	0.126	0.00074	✓		✓	✓	✓	20 → 2000	266/2000			
SDSB-80-4051	"	"	"	0.2	0.5	1.0	0.160	0.00051	✓	✓	✓	✓	✓	"	332/2000			
SDSB-80-4101	"	"	"	0.4	0.6	0.8	0.215	0.00045	✓	✓	✓	✓	✓	"	459/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4041	10/6/80	TA100	RL1016	0.3	0.3	0.4	0.343			✓	✓	✓	✓	20→2000	778/3000			
SDSB-80-4051	"	"	"	0.3	0.3	0.3	0.334			.0489	✓	✓	✓	"	786/3000			
SDSB-80-4101	"	"	"	1.9	2.2	2.7	0.659	0.00058			✓	✓	✓	"	1428/3000			
SDSB-80-4041	"	"	NONE	0.3	0.6	1.3	0.377	0.00024	✓	✓	✓	✓	✓	20→2000	872/2000			
SDSB-80-4051	"	"	"	0.4	0.8	1.3	0.432	0.00025	✓	✓	✓	✓	✓	"	983/3000			
SDSB-80-4101	"	"	"	2.7	2.8	3.0	1.518	0.00093			✓	✓	✓		1113/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4041	10/6/80	TA1538	RLS016	0.2	0.2	0.2	0.175		✓	✓		✓	✓	20 → 2000	368/2000			
SDSB-80-4051	"	"	"	0.2	0.2	0.2	0.161		✓	✓	✓	✓	✓	"	337/2000			
SDSB-80-4101	"	"	"	0.6	0.9	1.3	0.240	0.00062	✓	✓	✓	✓	✓	"	504/2000			
SDSB-80-4041	"	"	NONE	0.1	0.1	0.1	0.088		✓	✓	✓	✓	✓	20 → 2000	188/2000			
SDSB-80-4051	"	"	"	0.1	0.2	0.7	0.124	0.00028	✓	✓	✓	✓	✓	"	255/2000			
SDSB-80-4101	"	"	"	0.5	0.6	0.7	0.350	0.00080		✓	✓	✓	✓	"	241/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4101	9/12/80	TA98	RLI016	0.6	0.8	1.1	0.334	0.00045		✓	✓	✓	✓	20→2000	703/2000			
SDSB-80-4111	"	"	"	0.3	3.8	4.9	0.520	0.00099	✓	✓	✓	✓	✓	"	1052/2000			
SDSB-80-4101	"	"	NONE	0.3	0.5	0.4	0.332	0.6733	✓		✓	✓	✓	20→2000	709/2000			
SDSB-80-4111	"	"	"	1.7	2.2	2.7	0.416	0.00080	✓	✓	✓	✓	✓	20→2000	869/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4101	9/12/82	TA100	RL1016	1.3	1.5	1.7	0.691	0.00035			✓	✓	✓	20→~~300~~	1515/2070			
SDSB-80-4111	"	"	"	1.7	2.1	2.7	0.950	0.00039	✓	✓	✓	✓	✓	"	2021/3770			
SDSB-80-4101	"	"	NONE	2.1	2.2	23	1.316	0.00082				✓	✓	20→200	1058/650			
SDSB-80-4111	"	"	"	2.9	3.1	33	1.440	0.00107		.0114	✓		✓	"	1090/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4101	9/12/80	TA153	RCI016	0.7	0.9	1.1	0.383	0.00043	.032	✓	✓	✓	✓	30 → 2000	789/2000			
SDSB-80-4111	"	"	"	0.8	1.5	2.8	0.478	0.00058	✓	✓	✓	✓	✓	"	971/2000			
SDSB-80-4101	"	"	NONE	0.3	0.3	0.4	0.138	0.0004			✓	✓	✓	30 → 2000	295/2000			
SDSB-80-4111	"	"	"	0.8	1.0	1.1	0.486	0.00101	✓	✓	✓	✓	✓	"	332/651			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4173	10/27/80	TA98	RL1016	0.8	1.1	1.6	0.710	0.00022	✓	.0385	✓	✓	✓	20→2000	1437/2000			
SDSB-80-4174	"	"	"	0.4	0.5	0.5	0.461	—	✓	✓	✓	✓	✓	"	946/2000			
SDSB-80-4173	"	"	NONE	2.0	2.2	2.6	0.660	0.00061	✓	✓	✓	✓	✓	"	1338/2000			
SDSB-80-4174	"	"	"	0.6	0.7	0.8	0.459	0.00019	.016		✓	✓	✓	"	940/2000			
SDSB-80-4101	"	"	"	0.5	0.6	0.8	0.238	0.00046	✓	✓	✓	✓	✓	"	505/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4173	10/27/80	TA100	RL1016	2.3	2.8	3.3	0.776	0.00061		✓	✓	✓	✓	20 → 2000	1643/2000			
SDSB-80-4174	"	"	"	0.6	0.6	0.7	0.619	—	✓	.0152	✓	✓	✓	"	1361/2000			
	"																	
SDSB-80-4173	"	"	NONE	4.7	4.9	5.2	1.934	0.00132	.0209		✓		✓	"	1394/650			
SDSB-80-4174	"	"	"	2.6	3.8	5.6	0.520	0.00095	✓	✓	✓		✓	"	1163/2000			
SDSB-80-4101	"	"	"	2.5	2.8	3.1	1.252	0.00115			✓		✓	"	941/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4173	10/27/82	TA1538	RL1016	0.7	0.8	1.0	0.522	0.00023		✓	✓	✓	✓	20 → 2000	1063/2000			
SDSB-80-4174	"	"	"	0.2	0.5	0.9	0.364	0.00012	✓	✓	✓	✓	✓		742/6000			
SDSB-80-4173	"	"	NONE	0.9	1.0	1.2	0.451	0.00126		✓	✓		✓	"	306/650			
SDSB-80-4174	"	"	"	0.2	0.5	1.0	0.143	0.00059	✓	✓	✓	✓	✓	"	297/2000			
SDSB-80-4101	"	"	"	0.2	0.3	0.4	0.112	0.00043	✓	✓	✓	✓	✓	"	241/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4174	11/7/82	TA98	RL1016	0.3	0.7	1.5	0.415	0.00023	✓	✓	✓	✓	✓	30→3000	857/3000			
SDSB-80-4173	"	"	NONE	1.7	2.4	3.4	0.593	0.00069	✓	✓	✓	✓	✓	30→3000	1216/3000			
SDSB-80-4174	"	"	"	0.3	0.5	0.8	0.428	0.00006	✓	✓	✓	✓	✓	"	875/3000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4173	11/7/80	TA100	RL1016	1.6	1.9	2.4	0.976	0.00033	✓	✓	✓	✓	✓	20 → 2000	2066/2000			
SDSB-80-4174	11/7/80	"	"	0.5	0.9	1.6	0.598	0.00018	✓	✓	✓	✓	✓	20 → 2000	1317/2000			
SDSB-80-4173	"	"	NONE	4.6	5.0	5.4	1.855	0.00145	✓		✓		✓	20 → 2000	1345/650			
SDSB-80-4174	"	"	"	4.5	5.1	5.8	0.524	0.0011			✓	✓	✓	20 → 2000	1151/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4174	11/7/80	TA1537	RL1016	0.3	0.4	0.4	0.357		.0496	✓		✓	✓	20 → 2000	737/2000			
SDSB-80-4173	"	"	NONE	1.1	1.2	1.3	0.602	0.00140			✓	✓	✓	20 → 2000	338/650			
SDSB-80-4174	"	"	"	0.4	0.7	1.3	0.157	0.00072	✓	.0465	✓	✓	✓	"	322/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB 80-473	11/17/80	TA98	RL1016	2.7	3.5	4.6	0.882	0.00069	✓	✓	✓	✓	✓	20→2000	1764/2070			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4173	11/17/80	TA1538	RU016	0.6	1.8	5.4	0.650	0.00050	.0412	✓	✓	✓	✓	20 → 2000	1332/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4182	2/10/81	TA98	RLI016	5.4	5.8	6.2	0.916	0.00092			✓		✓	20 → 2000	1834/2000			
SDSB-80-4192	2/10/81	TA98	RLI016	0.4	0.8	1.4	0.509	0.00021			✓	✓	✓	20 → 2000	1040/2000			
SDSB-80-4212	2/10/81	TA98	RLI016	1.0	1.2	1.2	0.403	0.00058			✓	✓	✓	20 → 2000	829/2000			
SDSB-80-4182	2/10/81	TA98	NONE	2.4	2.6	2.7	0.872	0.00053			✓	✓	✓	20 → 2000	1790/2000			
SDSB-80-4192	2/10/81	TA98	NONE	0.7	1.0	1.5	0.491	0.00036	✓	✓	✓	✓	✓	20 → 2000	994/2000			
SDSB-80-4212	2/10/81	TA98	NONE	0.6	0.7	0.8	0.518	0.0004		✓	✓	✓	✓	20 → 2000	1061/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4182	2/10/81	TA100	RL1016	3.5	3.7	3.9	1.985	0.00083			✓		✓	20 → 2000	1416/650			
SDSB-80-4192	2/10/81	TA100	RL1016	1.2	1.5	2.0	0.623	0.00043			✓	✓	✓	20 → 2000	1348/2000			
SDSB-80-4212	2/10/81	TA100	RL1016	2.0	2.4	3.0	0.728	0.00059	✓		✓	✓	✓	20 → 2000	1548/2000			
SDSB-80-4182	2/10/81	TA100	NONE	4.6	4.7	4.9	1.939	0.00111			✓		✓	20 → 2000	1472/650			
SDSB-80-4192	2/10/81	TA100	NONE	3.3	4.2	5.4	0.722	0.00085	✓	✓	✓		✓	20 → 2000	1587/2000			
SDSB-80-4212	2/10/81	TA100	NONE	5.0	5.2	5.5	1.778	0.00157			✓		✓	20 → 2000	1322/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4182	2/10/81	TA 1538	RLI016	4.5	4.7	5.0	0.803	0.00088			✓		✓	20 → 2000	1616/2000			
SDSB-80-4192	2/10/81	TA1538	RLI016	0.4	0.6	0.9	0.405	0.00016			✓	✓	✓	20 → 2000	827/2000			
SDSB-80-4212	2/10/81	TA1538	RLI016	0.5	0.6	0.8	0.427	0.00018		✓	✓	✓	✓	20 → 2000	873/2000			
SDSB-80-4182	2/10/81	TA1538	NONE	2.8	2.9	3.0	1.301	0.00132			✓		✓	20 → 2000	882/650			
SDSB-80-4192	2/10/81	TA1538	NONE	0.2	0.4	0.6	0.220	0.00026	0.0374	✓	✓	✓	✓	20 → 2000	450/2000			
SDSB-80-4212	2/10/81	TA1538	NONE	0.7	0.8	0.8	0.382	0.00099		.0384	✓	✓	✓	20 → 2000	270/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4182	2/24/81	TA98	RLI016	6.0	6.6	7.2	0.839	0.00103			✓		✓	20 → 2000	1676/2000			
SDSB-80-4192	2/24/81	TA98	RLI016	0.6	1.0	1.5	0.437	0.00039		✓	✓	✓	✓	20 → 2000	892/2000			
SDSB-80-4212	2/24/81	TA98	RLI016	0.5	0.7	0.9	0.430	0.00020		✓	✓	✓	✓	20 → 2000	883/2000			
SDSB-80-4182	2/24/81	TA98	NONE	2.8	3.0	3.2	0.758	0.00067			✓		✓	20 → 2000	1584/2000			
SDSB-80-4192	2/24/81	TA98	NONE	0.5	0.6	0.8	0.499	0.00012	✓		✓	✓	✓	20 → 2000	1020/2000			
SDSB-80-4212	2/24/81	TA98	NONE	2.0	2.9	3.4	0.587	0.0007	✓		✓	✓	✓	20 → 2000	1173/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4182	2/24/81	TA100	RL1016	3.6	3.8	3.9	2.067	0.00079			✓		✓	20→2000	1492/2000			
SDSB-80-4192	2/24/81	TA100	RL1016	0.6	0.6	0.6	0.559			✓	✓	✓	✓	20→2000	1250/2000			
SDSB-80-4212	2/24/81	TA100	RL1016	1.5	1.9	2.4	0.725	0.00045		✓	✓	✓	✓	20→2000	1579/2000			
SDSB-80-4182	2/24/81	TA100	NONE	7.5	8.1	8.8	2.759	0.00155	✓	✓	✓		✓	20→2000	1975/650			
SDSB-80-4192	2/24/81	TA100	NONE	2.5	3.0	3.7	0.755	0.00066	✓	.0392	✓	✓	✓	20→2000	1652/2000			
SDSB-80-4212	2/24/81	TA100	NONE	3.7	3.9	4.1	1.776	0.00108			✓		✓	20→2000	1298/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4182	2/24/82	TA1538	RL1016	3.3	3.6	3.9	0.738	0.00079		✓	✓		✓	20→ 2000	486/2000			
SDSB-80-4192	2/24/82	TA1538	RL1016	0.4	0.6	1.1	0.357	0.00029	✓	✓	✓	✓	✓	"	721/2000			
SDSB-80-4212	2/24/82	TA1538	RL1016	0.5	0.7	0.9	0.340	0.00034	✓		✓	✓	✓	"	697/2000			
SDSB-80-4182	2/24/82	TA1538	NONE	2.5	2.6	2.7	0.323	0.00109			✓		✓	"	884/650			
SDSB-80-4192	2/24/82	TA1538	"	0.2	0.2	0.4	0.215	0.00006	.0120	✓	✓	✓	✓	"	438/2000			
SDSB-80-4212	2/24/82	TA1538	"	0.5	0.6	0.7	0.175	0.00057	✓	.0238	✓	✓	✓	"	363/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4472	2/6/81	TA98	RLI016	0.9	1.1	1.4	0.598	0.00032	✓	.0332	✓	✓	✓	20 → 2000	1212/2000			
SDSB-80-4202	2/6/81	"	"	0.0	.2	1.9	0.144	0.00020	✓	✓	✓	✓	✓	"	320/2000			
SDSB-804172	2/6/81	"	NONE	0.8	1.0	1.2	0.571	0.00028	✓	.0428	✓	✓	✓	20 → 2000	1166/2000			
SDSB-80-4202	2/6/81	"	"	0.1	0.1	0.1	0.117	0.9102	0.0345	✓	✓	✓	✓	"	254/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4172	2/6/81	TA100	RL1016	1.6	2.0	2.5	0.928	0.00037			✓	✓	✓	20→2000	1971/2000			
SDSB-80-4202	"	"	"	.3	.3	.3	0.276	0.9867	✓	✓		✓	✓	"	683/2000			
SDSB-80-4172	"	"	NONE	3.3	3.5	3.7	1.775	0.00094	✓		✓		✓	20→2000	1321/650			
SDSB-4202	"	"	"	.4	.4	.4	0.371	1.1177	0.0323	✓	✓	✓	✓	"	904/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4172	2/6/81	TA1538	RL1016	0.7	0.8	1.1	0.497	0.00026	✓	✓	✓	✓	✓	20 → 2000	1008/2000			
SDSB-80-4202	"	"	"	0.1	.3	0.6	0.202	0.00016	✓	✓	✓	✓	✓	"	420/2000			
SDSB-80-4172	"	"	NONE	0.4	0.6	0.9	0.213	0.00050	✓	0.343	✓	✓	✓	20 → 2000	437/2000			
SDSB-80-4202	"	"	"	0.1	01	0.1	0.103	0.8206	✓	✓	✓	✓	✓	"	218/2000			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
SDSB-80-4172	2/20/81	TA98	RLI016	0.7	0.9	1.1	0.575	0.00022	✓	✓	✓	✓	✓	20→2000	1177/2000			
SDSB-80-4202	"	"	"	0.2	0.2	0.3	0.107	0.00010		✓	✓	✓	✓	20→6500	722/6500			
SDSB-80-4172	"	"	NONE	1.1	1.3	1.5	0.546	0.00042	✓		✓	✓	✓	20→2000	1123/2000			
SDSB-80-4202	"	"	"	0.1	0.2	0.2	0.058	0.00014	✓	✓	✓	✓	✓	20→6500	400/6500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4172	2/20/81	TA100	RL1016	2.0	2.5	3.1	0.723	0.00059	✓	✓	✓	✓	✓	20 → 2000	1562 / 2000			
SDSB-804202	"	"	"	.2	.2	.2	0.162	67316			✓	✓	✓	20 → 6500	1180 / 6500			
SDSB-80-4172	"	"	NONE	3.5	3.6	3.7	1.860	0.00086			✓		✓	20 → 2000	1342 / 650			
SDSB-804202	"	"	"	.6	.7	.8	0.157	.00022			✓	✓	✓	20 → 6500	1154 / 6500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
SDSB-80-4172	2/20/81	TA1538	RLI016	0.6	0.8	1.0	0.469	0.00025		✓	✓	✓	✓	30 → 2000	953/2000			
SDSB-80-4202	"	"	"	0.2	0.3	0.3	0.076	0.00018	0.013	✓	✓	✓	✓	30 → 6500	511/6500			
SDSB-80-4172	"	"	NONE	0.4	0.5	0.6	0.171	0.00049		✓	✓	✓	✓	30 → 2000	366/2000			
SDSB-80-4202	"	"	"	0.1	0.1	0.1	0.040	0.00013	✓	✓	✓	✓	✓	30 → 6500	275/6500			

Revertant / Kilowatt-Hour

Calculations

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-79-0011	8/5/80	TA98	+	0.486	61.0	1.09	323141.4
	8/21/80	"	+	0.183			121676.7
	8/5/80	"	−	0.366			243353.4
	8/21/80	"	−	0.119			79123.1
	8/5/80	TA100	+	0.502			333779.8
	8/21/80	"	+	0.814			541228.6
	8/5/80	"	−	1.538			1022616.2
	8/21/80	"	−	0.746			496015.4
	8/5/80	TA1538	+	0.271			180187.9
	8/21/80	"	+	0.219			145613.1
	8/5/80	"	−	0.081			53856.9
	8/21/80	"	−	0.092			61170.8

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-79-0081	7/1/80	TA98	+	0.294	60.0	1.06	186984.0
	7/7/80	"	+	0.379			241044.0
	7/1/80	"	−	0.454			288744.0
	7/7/80	"	−	0.365			232140.0
	7/1/80	TA100	+	0.411			261396.0
	7/7/80	"	+	0.629			400044.0
	7/1/80	"	−	1.398			889128.0
	7/7/80	"	−	1.885			1198860.0
	7/1/80	TA1538	+	0.422			268392.0
	7/7/80	"	+	0.535			340260.0
	7/1/80	"	−	0.533			338988.0
	7/7/80	"	−	0.203			129108.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-79-0121	7/1/80	TA98	+	0.964	61.0	1.04	611561.6
	7/7/80	"	+	0.316			200470.4
	7/1/80	"	−	0.262			166212.8
	7/7/80	"	−	0.263			166847.2
	7/1/80	TA100	+	0.333			211255.2
	7/7/80	"	+	0.598			379371.2
	7/1/80	"	−	0.505			320372.0
	7/7/80	"	−	0.679			430757.6
	7/1/80	TA1538	+	0.459			291189.6
	7/7/80	"	+	0.796			504982.4
	7/1/80	"	−	0.368			233459.2
	7/7/80	"	−	0.095			60268.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-79-0161	8/26/80	TA98	+	0.735	69.0	0.90	456435.0
	8/29/80	"	+	0.386			239706.0
	8/26/80	"	−	0.359			222939.0
	8/29/80	"	−	0.110			68310.0
	8/26/80	TA100	+	0.471			292491.0
	8/29/80	"	+	0.337			209277.0
	8/26/80	"	−	0.645			400545.0
	8/29/80	"	−	0.824			511704.0
	8/26/80	TA1538	+	0.454			281934.0
	8/29/80	"	+	0.128			79488.0
	8/26/80	"	−	0.118			73278.0
	8/29/80	"	−	0.082			50922.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-79-0231	7/2/80	TA98	+	0.871	61.0	0.66	350664.6
	7/8/80	"	+	1.067			429574.2
	7/2/80	"	-	0.319			128429.4
	7/8/80	"	-	0.666			268131.6
	7/2/80	TA100	+	0.408			164260.8
	7/8/80	"	+	0.527			212170.2
	7/2/80	"	-	1.579			635705.4
	7/8/80	"	-	1.562			628861.2
	7/2/80	TA1538	+	0.592			238339.2
	7/8/80	"	+	1.024			412262.4
	7/2/80	"	-	0.290			116754.0
	7/8/80	"	-	0.096			38649.6

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-79-0281	7/2/80	TA98	+	0.514	71.0	0.93	339394.2
	7/8/80	"	+	0.784			517675.2
	7/2/80	"	-	0.297			196109.1
	7/8/80	"	-	0.434			286570.2
	7/2/80	TA100	+	0.380			250914.0
	7/8/80	"	+	0.367			242330.1
	7/2/80	"	-	0.960			633888.0
	7/8/80	"	-	0.465			307039.5
	7/2/80	TA1538	+	0.486			320905.8
	7/8/80	"	+	0.367			242330.1
	7/2/80	"	-	0.450			297135.0
	7/8/80	"	-	0.244			161113.2

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-79-0331	9/5/80	TA98	+	0.276	72.0	1.10	218592.0
	9/9/80	"	+	0.174			137808.0
	9/5/80	"	−	0.079			62568.0
	9/9/80	"	−	0.130			102960.0
	9/5/80	TA100	+	0.301			238392.0
	9/9/80	"	+	0.340			269280.0
	9/5/80	"	−	0.576			456192.0
	9/9/80	"	−	0.530			419760.0
	9/5/80	TA1538	+	0.595			471240.0
	9/9/80	"	+	0.148			117216.0
	9/5/80	"	−	0.082			64944.0
	9/9/80	"	−	0.085			67320.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4021	9/5/80	TA98	+	4.194	22.0	0.48	442886.4
	9/9/80	"	+	3.025			319440.0
	9/5/80	"	−	1.139			120278.4
	9/9/80	"	−	2.530			267168.0
	9/5/80	TA100	+	3.603			380476.8
	9/9/80	"	+	4.961			523881.6
	9/5/80	"	−	2.335			246576.0
	9/9/80	"	−	24.952			2634931.0
	9/5/80	TA1538	+	2.726			287865.6
	9/9/80	"	+	3.151			332745.6
			−				
	9/5/80	"	−	6.404			676262.4
	9/9/80	"	−	1.579			166742.4

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4041	9/25/80	TA98	+	0.560	57.0	0.65	207480.0
	10/6/80	"	+	0.611			226375.5
	9/25/80	"	−	0.150			55575.0
	10/6/80	"	−	0.579			214519.5
	9/25/80	TA100	+	0.306			113373.0
	10/6/80	"	+	0.342			126711.0
	9/25/80	"	−	0.577			213778.5
	10/6/80	"	−	0.640			237120.0
	9/25/80	TA1538	+	0.360			133380.0
	10/6/80	"	+	0.174			64467.0
	9/25/80	"	−	0.106			39273.0
	10/6/80	"	−	0.087			32233.5

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4051	9/25/80	TA98	+	0.460	52.0	0.74	1770081.0
	10/6/80	"	+	0.420			161616.0
	9/25/80	"	-	0.342			131601.6
	10/6/80	"	-	0.457			175853.6
	9/25/80	TA100	+	0.415			159692.0
	10/6/80	"	+	0.336			129292.8
	9/25/80	"	-	1.428			549494.4
	10/6/80	"	-	0.760			292448.0
	9/25/80	TA1538	+	0.422			162385.6
	10/6/80	"	+	0.161			61952.8
	9/25/80	"	-	0.387			148917.6
	10/6/80	"	-	0.220			84656.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4061	7/28/80	TA98	+	1.449	19.0	0.80	220248.0
	8/8/80	"	+	1.226			186352.0
	7/28/80	"	-	2.667			405384.0
	8/8/80	"	-	2.252			342304.0
	7/28/80	TA100	+	3.158			480016.0
	8/8/80	"	+	2.569			390488.0
	7/28/80	"	-	8.179			1243208.0
	8/8/80	"	-	5.204			791008.0
	7/28/80	TA1538	+	1.047			159144.0
	8/8/80	"	+	1.268			192736.0
	7/28/80	"	-	0.824			125248.0
	8/8/80	"	-	1.458			221616.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4071	6/4/80	TA98	+	0.616	18.0	0.86	95356.8
	6/9/80	"	+	1.186			183592.8
	6/4/80	TA100	+	1.261			195202.8
	6/9/80	"	+	1.051			162694.8
	6/4/80	TA1535	+	0.247			38235.6
	6/9/80	"	+	0.239			36997.2
	6/4/80	TA1537	+	0.080			12384.0
	6/9/80	"	+	0.067			10371.6
	6/4/80	TA1538	+	0.402			62229.6
	6/13/80	"	+	0.603			93344.4

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SOSB-80-4071	6/4/80	TA98	-	1.431	18.0	0.86	221518.8
	6/9/80	"	-	0.695			107586.0
	6/4/80	TA100	-	4.942			765021.6
	6/9/80	"	-	3.737			578487.6
	6/4/80	TA1535	-	0.021			3250.8
	6/9/80	"	-	0.012			1857.6
	6/4/80	TA1537	-	0.327			50619.6
	6/9/80	"	-	0.190			29412.0
	6/4/80	TA1538	-	0.657			101703.6
	6/13/80	"	-	0.986			152632.8

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4091	7/28/80	TA98	+	0.994	17.0	0.81	136873.8
	8/8/80	"	+	0.368			50673.6
	7/28/80	"	-	1.109			152709.3
	8/8/80	"	-	0.924			127234.8
	7/28/80	TA100	+	0.846			116494.2
	8/8/80	"	+	0.804			110710.8
	7/28/80	"	-	3.682			507011.4
	8/8/80	"	-	3.182			438161.4
	7/28/80	TA1538	+	0.900			123930.0
	8/8/80	"	+	0.787			108369.9
	7/28/80	"	-	0.603			83033.1
	8/8/80	"	-	0.288			39657.6

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4101	9/12/80	TA98	+	0.848	47.0	0.54	215222.4
	10/6/80	"	+	0.765			194157.0
	9/12/80	TA98	−	0.342			86799.6
	10/6/80	"	−	0.556			141112.8
	10/27/80	"	−	0.625			158625.0
	9/12/80	TA100	+	1.462			371055.6
	10/6/80	"	+	2.244			569527.2
	9/12/80	TA100	−	2.217			562674.6
	10/6/80	"	−	2.848			722822.4
	10/27/80	TA102	−	2.806			712162.8
	9/12/80	TA1538	+	0.914			231973.2
	10/6/80	"	+	0.863			219029.4
	9/12/80	TA1538	−	0.337			85530.6
	10/6/80	"	−	0.621			157609.8
	10/27/80	"	−	0.283			71825.4

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4111	9/12/80	TA98	+	3.802	40.0	0.43	653944.0
	9/24/80	"	+	2.826			486072.0
	9/12/80	"	−	2.150			369800.0
	9/24/80	"	−	1.732			297904.0
	9/12/80	TA100	+	2.133			366876.0
	9/24/80	"	+	2.465			423980.0
	9/12/80	"	−	3.088			531136.0
	9/24/80	"	−	5.014			862408.0
	9/12/80	TA1538	+	1.530			263160.0
	9/24/80	"	+	3.334			573448.0
	9/12/80	"	−	0.951			163572.0
	9/24/80	"	−	0.970			166840.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4131	7/28/80	TA98	+	0.557	63.0	0.53	185982.3
	8/8/80	"	+	0.418			139570.2
	7/28/80	"	−	0.395			131890.5
	8/8/80	"	−	0.426			142241.4
	7/28/80	TA100	+	0.546			182309.4
	8/8/80	"	+	1.243			415037.7
	7/28/80	"	−	2.017			673476.3
	8/8/80	"	−	2.179			727568.1
	7/28/80	TA1538	+	0.618			206350.2
	8/8/80	"	+	0.223			74459.7
	9/8/80	"	+	0.681			227385.9
	7/28/80	"	−	0.292			97498.8
	8/8/80	"	−	0.450			150255.0
	9/8/80	"	−	0.132			44074.8

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4151	9/10/80	TA98	+	5.440	19.4	0.78	823180.8
	9/24/80	"	+	4.410			667321.2
	9/10/80	"	−	3.944			596806.1
	9/24/80	"	−	4.905			742224.6
	9/18/80	TA100	+	4.225			639327.0
	9/24/80	"	+	3.618			547475.8
	9/18/80	"	−	11.151			1687369.3
	9/24/80	"	−	6.682			1011120.2
	9/10/80	TA1538	+	4.481			678064.9
	9/24/80	"	+	5.821			880833.7
	9/10/80	"	−	3.754			568055.3
	9/24/80	"	−	1.607			243171.2

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4161	9/10/80	TA98	+	2.542	21.6	0.49	269045.3
	9/24/80	"	+	2.794			295717.0
	9/10/80	"	−	2.413			255391.9
	9/24/80	"	−	2.107			223004.9
	9/18/80	TA100	+	3.442			364301.3
	9/24/80	"	+	1.029			108909.4
	9/18/80	"	−	4.852			513535.7
	9/24/80	"	−	3.511			371604.2
	9/10/80	TA1538	+	2.021			213902.6
	9/24/80	"	+	0.728			77051.5
	9/10/80	"	−	1.195			126478.8
	9/24/80	"	−	1.275			134946.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4172	2/6/81	TA98	+	1.134	37.8	0.53	227185.6
	2/20/81	"	+	0.892			178703.3
	2/6/81	"	-	1.006			201542.0
	2/20/81	"	-	1.299			260241.7
	2/6/81	TA100	+	1.990			398676.6
	2/20/81	"	+	2.483			497444.2
	2/6/81	"	-	3.521			705397.1
	2/20/81	"	-	3.569			715013.5
	2/6/81	TA1538	+	0.847			169688.0
	2/20/81	"	+	0.773			154862.8
	2/6/81	"	-	0.596			119402.6
	2/20/81	"	-	0.487			97565.6

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4173	10/27/80	TA98	+	1.112	36.4	0.64	259051.5
	11/17/80	"	+	3.525			821184.0
	10/27/80	"	−	2.242			522296.3
	11/7/80	"	−	2.408			560967.7
	10/27/80	TA100	+	2.757			642270.7
	11/7/80	"	+	1.933			450311.7
	10/27/80	"	−	4.925			1147328.0
	11/7/80	"	−	4.980			1160140.8
	10/27/80	TA1538	+	0.824			191959.0
	11/17/80	"	+	1.814			422589.4
	10/27/80	"	−	1.039			242045.4
	11/7/80	"	−	1.227			285841.9

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4174	10/27/80	TA98	+	0.460	43.1	0.63	124903.8
	11/7/80	"	+	0.656			178123.7
	10/27/80	"	−	0.680			184640.4
	11/7/80	"	−	0.490			133049.7
	10/27/80	TA100	+	0.625			169706.3
	11/7/80	"	+				
	10/27/80	"	−	3.817			1036430.0
	11/7/80	"	−	5.095			1383445.4
	10/27/80	TA1538	+	0.463			125718.4
	11/7/80	"	+	0.355			96393.2
	10/27/80	"	−	0.477			129519.8
		"	−	0.680			184640.4

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4182	2/10/81	TA98	+	5.758	17.6	0.72	729653.8
	2/24/81	"	+	6.593			835465.0
	2/10/81	"	−	2.557			324023.0
	2/24/81	"	−	3.008			381173.8
	2/10/81	TA100	+	3.658			463541.8
	2/24/81	"	+	3.755			475833.6
	2/10/81	"	−	4.710			596851.2
	2/24/81	"	−	8.100			1026432.0
	2/10/81	TA1538	+	4.724			598625.3
	2/24/81	"	+	3.587			454544.6
	2/10/81	"	−	2.945			373190.4
	2/24/81	"	−	2.596			328965.1

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4192	2/10/81	TA98	+	0.768	38.1	0.64	187269.1
	2/24/81	"	+	0.959			233842.6
	2/10/81	"	-	1.017			247985.3
	2/24/81	"	-	0.640			156057.6
	2/10/81	TA100	+	1.527			372343.7
	2/24/81	"	+	0.560			136550.4
	2/10/81	"	-	4.215			1027785.6
	2/24/81	"	-	3.030			738835.2
	2/10/81	TA1538	+	0.557			135818.9
	2/24/81	"	+	0.637			155326.1
	2/10/81	"	-	0.372			90708.5
	2/24/81	"	-	0.244			59497.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4202	2/6/81	TA98	+	0.222	41.5	0.50	46065.0
	2/20/81	"	+	0.206			42745.0
	2/6/81	"	-	0.118			24485.0
	2/20/81	"	-	0.150			31125.0
	2/6/81	TA100	+	0.275			57062.5
	2/20/81	"	+	0.164			34030.0
	2/6/81	"	-	0.368			76360.0
	2/20/81	"	-	0.726			150645.0
	2/6/81	TA1538	+	0.279			57892.5
	2/20/81	"	+	0.257			53327.5
	2/6/81	"	-	0.104			21580.0
	2/20/81	"	-	0.096			19920.0

SAMPLE I.D.	EXPERIMENT DATE	TESTER STRAIN	S-9	SLOPE REV/UG	PERCENT EXTRACTABLES	PARTICULATE EMISSION RATE G/KW-HR	REV/KW-HR
SDSB-80-4212	2/10/81	TA98	+	1.243	49.2	0.77	470898.1
	2/24/81	"	+	0.652			247003.7
	2/10/81	"	-	0.666			252307.4
	2/24/81	"	-	2.623			993697.3
	2/10/81	TA100	+	2.442			925127.3
	2/24/81	"	+	1.863			705778.9
	2/10/81	"	-	5.232			1982090.9
	2/24/81	"	-	3.900			1477476.0
	2/10/81	TA1538	+	0.614			232607.8
	2/24/81	"	+	0.681			257990.0
	2/10/81	"	-	0.751			2841508.8
	2/24/81	"	-	0.565			214044.6

GROUP 16

PROTOTYPE VEHICLE EVALUATION

TAEB-80-0180	Prototype Comprex Diesel	HWFE
0230	"	"
0240	"	"

Table 1

GROUP ID: 16

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TAEB-80-0180	Diesel (Comprex)	F/E	#2-Diesel	468 mg	
TAEB-80-0230	Diesel (Comprex)	FE	#2-Diesel	3450 mg	
TAEB-80-0240	Diesel (Comprex)	F/E	#2-Diesel	549 mg	

Group 16 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
TAEB-80-0180	1	2	1	2	1	2	1	2									1	2	1	2
TAEB-80-0230	1	2	1	2	1	2	1	2									1	2	1	2
TAEB-80-0240	1	2	1	2	1	2	1	2									1	2	1	2

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 8/26/80

2= Experiment Date: 8/29/80

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0180	8/26/80	TA 98	RLI-15	2.0	2.6	3.3	0.558	0.00075	✓	✓	✓	✓	✓	20→ 2000	1137/ /2000			
TAEB-80-0230	"	"	"	0.4	0.4	0.4	0.259	0.00012			✓		✓	20→ 2000	666/ /2000			
TAEB-80-0240	"	"	"	9.0	9.2	9.4	4.295	0.00115			✓		✓	20→ 2000	2785/ /650			
TAEB-80-0180	"	"	NONE	1.3	1.4	1.5	0.716	0.00089			✓		✓	20→ 2000	513/ /650			
TAEB-80-0230	"	"	"	0.2	0.2	0.2	0.238	—	.0384		✓	✓	✓	20→ 2000	544/ /2000			
TAEB-80-0240	"	"	"	14.4	14.7	15.0	6.047	0.00403	✓		✓		✓	20→ 2000	1246/ /200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0180	8/29/80	TA 98	RLI-15	2.1	2.6	3.2	0.523	0.00079	✓	✓	✓		✓	20→ 2000	1056/2000			
TAEB-80-0230	"	"	"	1.7	2.0	2.4	0.416	0.00217	✓		✓	✓	✓	6.5→ 650	326/650			
TAEB-80-0240	"	"	"	6.2	8.5	11.7	4.282	0.00107	✓	✓	✓	✓	✓	6.5→ 650	2779/650			
TAEB-80-0180	"	"	NONE	1.5	1.7	1.9	0.515	0.00058	✓		✓		✓	20→ 2000	1058/2000			
TAEB-80-0230	"	"	"	0.2	0.4	0.8	0.269	0.00056	✓	✓	✓	✓	✓	6.5→ 650	194/650			
TAEB-80-0240	"	"	"	13.1	15.2	17.8	2.972	0.00250	✓	.0321	✓		✓	6.5→ 650	1955/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-80-0180	8/26/80	TA 1538	RII-15	0.8	1.0	1.2	0.370	0.00048			✓	✓	✓	20→ 2000	766/ 2000			
TAEB-80-0230	"	"	"	1.5	1.5	1.5	1.335	0.00122			✓	✓	✓	20→ 2000	293/ 200			
TAEB-80-0240	"	"	"	9.6	9.9	10.1	2.529	0.00214			✓		✓	20→ 2000	1655/ 650			
TAEB80-0180	"	"	NONE	1.0	1.4	1.8	0.589	0.00393	✓	✓	✓		✓	20→ 2000	131/ 200			
TAEB-80-0230	"	"	"	0.3	0.4	0.7	0.218	0.00272	✓	✓	✓	✓	✓	20→ 2000	55/ 200			
TAEB-80-0240	"	"	"	7.2	7.6	7.9	2.540	0.00532		✓	✓		✓	20→ 2000	521/ 200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0180	8/29/80	TA 1538	RLT-15	0.8	0.9	1.1	0.360	0.00046	.0119	.0193	✓	✓	✓	20→ 2000	741/ 2000			
TAEB-80-0230	"	"	"	1.8	2.0	2.3	1.069	0.00271	.0216		✓	✓	✓	6.5→ 650	235/ 650			
TAEB-80-0240	"	"	"	5.7	6.8	8.1	2.461	0.00156		.0235	✓	✓	✓	6.5→ 650	1609/ 650			
TAEB-80-0180	"	"	NONE	1.3	1.9	2.8	0.176	0.00352	.0157	✓	✓		✓	20→ 2000	129/ 650			
TAEB-80-0230	"	"	"	0.0	0.1	0.3	0.043	0.00088	✓	✓	✓	✓	✓	6.5→ 650	40/ 650			
TAEB-80-0240	"	"	"	11.0	11.6	12.2	3.446	0.00618			✓		✓	6.5→ 650	694/ 200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0180	8/26/80	TA 100	RLI-15	1.9	2.5	3.1	1.018	0.00042	✓	✓	✓	✓	✓	20→ 2000	2187/ /2000			
TAEB-80-0230	"	"	"	4.6	4.6	4.7	4.275	0.00061				✓	✓	20→ 2000	1081/ /200			
TAEB-80-0240	"	"	"	21.2	22.1	23.1	3.102	0.00295			✓		✓	20→ 2000	2172/ /650			
TAEB-80-0180	"	"	NONE	25.7	27.1	28.6	1.362	0.00437	✓		✓		✓	20→ 2000	1103/ /650			
TAEB-80-0230	"	"	"	2.3	2.5	2.7	1.397	0.00184		✓			✓	20→ 2000	458/ /200			
TAEB-80-0240	"	"	"	16.3	16.5	16.7	6.403	0.00521					✓	20→ 2000	1527/ /200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0180	8/29/80	TA 100	RLI-15	1.9	2.2	2.6	0.916	0.00042		✓	✓	✓	✓	20→ 2000	1969/ /2000			
TAEB-80-0230	"	"	"	2.8	3.4	4.1	0.975	0.00159		.0194	✓	✓	✓	6.5→ 650	832/ /650			
TAEB-80-0240	"	"	"	7.2	9.2	11.9	3.060	0.00164	✓	✓	✓	✓	✓	6.5→ 650	2121/ /650			
TAEB-80-0180	"	"	NONE	3.5	3.8	4.1	1.317	0.00146		.0212	✓	✓	✓	20→ 2000	1027/ /650			
TAEB-80-0230	"	"	"	1.3	1.6	2.0	0.974	0.00153	✓	✓	✓	✓	✓	6.5→ 650	348/ /650			
TAEB-80-0240	"	"	"	20.3	21.2	22.2	6.469	0.00532	.0288		✓		✓	6.5→ 650	1444/ /200			

GROUP 17

GAS-PHASE HC EVALUATION

Sample No.	Initial Loading Vehicle	FR Sample Test Vehicle	Initial Loading Test Type	Sample Loading Test Type	Test Position of Filter	Weight of Organic (gms)	Bap (ng)	Comments
TAEB-80-								
0320	Oldsmobile	N/A	HFET	N/A	N/A	.33005	1252	No baking, sent directly for analysis
0330	Oldsmobile	N/A	HFET	N/A	N/A	.14995	528	No baking, sent directly for analysis
0340	Oldsmobile	N/A	HFET	N/A	N/A	.17259	312	No baking, sent directly for analysis
0350	Oldsmobile	N/A	HFET	N/A	N/A	.0030	BMD*	Baked and sent directly for analysis
0360	Oldsmobile	N/A	HFET	N/A	N/A	.00052	16	Baked and sent directly for analysis
0370	Oldsmobile	N/A	HFET	N/A	N/A	.00140	20	Baked and sent directly for analysis
0380	Oldsmobile	Oldsmobile	HFET	FTP	1st Backup	.16215	48	
0390	Oldsmobile	Oldsmobile	HFET	FTP	2nd Backup	.04655	96	
0400	Oldsmobile	Oldsmobile	HFET	HFET	1st Backup	.12038	BMD	
0410	Oldsmobile	Oldsmobile	HFET	HFET	2nd Backup	.08805	BMD	
0420	Mercedes	Mercedes	HFET	FTP	1st Backup	.05866	BMD	
0430	Mercedes	Mercedes	HFET	FTP	2nd Backup	.04838	BMD	
0440	Mercedes	Mercedes	HFET	FTP	1st Backup	.06837	BMD	
0450	Mercedes	Mercedes	HFET	FTP	2nd Backup	.06070	40	
0460	Mercedes	None	HFET	FTP	1st Backup	.00562	BMD	No test vehicle - 100% Dilute Air
0470	Mercedes	None	HFET	HFET	2nd Backup	.00815	40	No test vehicle - 100% Dilute Air
0480	Mercedes	None	HFET	HFET	1st Backup	.00660	360	No test Vehicle - 100% Dilute Air
0490	Mercedes	None	HFET	HFET	2nd Backup	.00506	BMD*	No test vehicle - 100% Dilute Air

*Below measurable detection

Table 1

GROUP ID: 17

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TEAB - 80 - 0320	NOT PROVIDED				
TEAB - 80 - 0330	Diesel / Oldsmobile Cutlass	F/E (2)	#2 Diesel	150.0 mg	
TEAB - 80 - 0340	Diesel / Oldsmobile Cutlass	F/E (2)	#2 Diesel	173.0 mg	
TEAB - 80 - 0350	Diesel / Oldsmobile	2 HFET's	#2 Diesel	3.0 mg	
TEAB - 80 - 0360	Diesel / Oldsmobile	F/E (2)	#2 Diesel	0.5 mg	
TEAB - 80 - 0370	Diesel / Oldsmobile	F/E (2)	#2 Diesel	1.4 mg	
TEAB - 80 - 0380	Diesel / Oldsmobile	F/E (2)	#2 Diesel	162.0 mg	
TEAB - 80 - 0390	Diesel / Oldsmobile	F/E (2)	#2 Diesel	47.0 mg	
TEAB - 80 - 0400	Diesel / Oldsmobile	F/E (2)	#2 Diesel	120.0 mg	
TEAB - 80 - 0410	Diesel / Oldsmobile	F/E (2)	#2 Diesel	88.0 mg	
TEAB - 80 - 0420	Diesel / Mercedes m/B 5cyl.	2 - HFET	#2 Diesel	59.0 mg	
TEAB - 80 - 0430	Diesel / Mercedes m/B 5cyl.	2 - HFET	#2 Diesel	48.0 mg	
TEAB - 80 - 0440	Diesel / Mercedes m/B 5cyl.	2 - HFET	#2 Diesel	68.0 mg	
TEAB - 80 - 0450	Diesel / Mercedes m/B	F/E (2)	#2 Diesel	61.0 mg	

Table 1

GROUP ID: 17

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TEAB-80-0460	Diesel / Mercedes m/B	F/E (2)	#2 Diesel	5.6 mg	
TEAB-80-0470	Diesel / Mercedes m/B	F/E (2)	#2 Diesel	8.0 mg	
TEAB-80-0480	Diesel / Mercedes m/B	F/E (2)	#2 Diesel	6.6 mg	
TEAB-80-0490	Diesel / Mercedes m/B	F/E (2)	#2 Diesel	5.1 mg	

Group # 18

Group 17

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
TEAB-80-0320	1	3	1	3	1	4	1	4	2		2		2		2		2	4	2	4
TEAB-80-0330	1	3	1	3	1	4	1	4	2		2		2		2		2	4	2	4
TEAB-80-0340	1	3	1	3	1	4	1	4	2		2		2		2		2	4	2	4
TEAB-80-0350			1																	
TEAB-80-0360			1																	
TEAB-80-0370			1																	
TEAB-80-0380	1	3	1	3	1	4	1	4	2		2		2		2		2	4	2	4
TEAB-80-0390	1	3	1	3			1													
TEAB-80-0400	1	3	1	3	1	4	1	4									2	4	2	4
TEAB-80-0410	1	3	1	3	1	4	1	4												
TEAB-80-0420	1	3	1	3	1		1													
TEAB-80-0430	1	3	1	3			1													
TEAB-80-0440	1	3	1	3	1		1													
TEAB-80-0450	1	3	1	3	1		1													
TEAB-80-0460			1																	
TEAB-80-0470			1																	
TEAB-80-0480			1																	
TEAB-80-0490			1																	

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

① 2/27/81 ③ 3/24/81

② 3/6/81 ④ 4/10/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0320	2-27-81	TA 98	—	13.7	14.1	14.5	6.262	0.00434			✓		✓	20→ 2000	1246/200			
" " "	3-24-81	"	"	12.2	13.5	15.0	2.332	0.00269		.0340	✓		✓	6.5→ 650	1533/650			
TAEB-80-0330	2-27-81	"	"	9.3	10.1	11.0	4.391	0.00422			✓		✓	20→ 2000	899/200			
" " "	3-24-81	"	"	*	11.9	*	6.192	0.00329	.0300	.0175			✓	6.5→ 650	1260/200			
TAEB-80-0340	2-27-81	"	"	5.7	5.8	5.9	1.447	0.00197			✓		✓	20→ 2000	973/650			
" " "	3-24-81	"	"	2.6	3.3	4.2	1.813	0.00093	✓	✓	✓	✓	✓	6.5→ 650	1198/650			
TAEB-80-0350	2-27-81	"	"	0.0	0.3	5.9	0.120	0.00136	✓	✓	✓	✓	✓	6.5→ 650	94/650			
TAEB-80-0360	2-27-81	"	"	0.2	0.3	0.6	0.314	—	✓	✓	✓	✓	✓	0.65→ 65	40/65			
TAEB-80-0370	2-27-81	"	"	1.3	1.4	1.4	1.364	—	✓	✓	✓	✓	✓	2.0→ 200	289/200			
TAEB-80-0380	2-27-81	"	"	18.1	18.9	19.7	5.472	0.00610			✓		✓	20→ 2000	1134/200			
" " "	3-24-81	"	"	29.6	36.8	45.8	5.963	0.00916	.0164	✓	✓	✓	✓	2.0→ 200	1183/200			

The 3-24-81 data is recopied from an original, which did not contain the 2-27-81 data. PJB 6-25-81

* Low and High values did not appear on print out.
PJB 6-25-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments.
TAEB-80-0390	2-27-81	TA 98	—	6.1	6.4	6.6	1.348	0.00241			✓		✓	20→ 2000	891/650			
" " "	3-24-81	"	"	10.4	12.5	15.1	1.333	0.00344	✓	.0117	✓		✓	6.5→ 650	870/650			
TAEB-80-0400	2-27-81	"	"	16.7	17.9	19.2	4.622	0.00688			✓		✓	20→ 2000	923/200			
" " "	3-24-81	"	"	9.6	11.0	12.5	4.653	0.00433	✓	✓	✓		✓	6.5→ 650	930/200			
TAEB-80-0410	2-27-81	"	"	7.3	8.5	9.8	2.539	0.00603	✓	✓	✓		✓	20→ 2000	521/200			
" " "	3-24-81	"	"	6.9	8.0	9.4	2.518	0.00584		✓	✓		✓	6.5→ 650	508/200			
TAEB-80-0420	2-27-81	"	"	9.4	10.1	10.8	4.376	0.00430			✓		✓	20→ 2000	840/650			
" " "	3-24-81	"	"	12.6	14.7	17.0	1.475	0.00353		✓	✓		✓	6.5→ 650	965/650			
TAEB-80-0430	2-27-81	"	"	0.4	0.8	1.6	0.296	0.00145	✓	✓	✓	✓	✓	20→ 2000	210/650			
" " "	3-24-81	"	"	0.2	0.3	0.3	0.257	—	✓	✓	✓	✓	✓	6.5→ 650	181/650			
TAEB-80-0440	2-27-81	"	"	26.3	28.3	30.5	5.431	0.00801	1030	.0182	✓		✓	20→ 2000	1129/200			

The 3-24-81 data is recopied from an original, which did not contain the 2-27-81 data. PJB 6-25-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0440	3-24-81	TA 98	—	13.2	18.6	26.0	5.403	0.00576		✓	✓	✓	✓	2.0 → 200	177/200			
TAEB-80-0450	2-27-81	"	"	0.9	1.6	3.1	0.640	0.00429	✓	✓	✓	✓	✓	20 → 2000	143/200			
" " "	3-24-81	"	"	1.6	2.5	4.0	0.298	0.00322		✓	✓	✓	✓	6.5 → 650	202/650			
TAEB-80-0460	2-27-81	"	"	0.3	0.5	1.2	0.154	0.00477	✓	✓	✓	✓	✓	6.5 → 650	49/200			
TAEB-80-0470	2-27-81	"	"	*	0.2	*	0.138	0.00183	✓	✓		✓	✓	6.5 → 650	50/650			
TAEB-80-0480	2-27-81	"	"	1.6	2.0	2.6	1.509	0.00043	✓	.0357	✓	✓	✓	6.5 → 650	947/650			
TAEB-80-0490	2-27-81	"	"	0.0	0.1	0.2	0.039	0.00045	✓	.0455	✓	✓	✓	6.5 → 650	43/650			

The 3-24-81 data is recopied from an original, which did not contain the 2-27-81 data. PTB 6-25-81

* Low and high values not on print out DOW 6/26/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0320	2-27-81	TA 98	RLI #16	7.5	8.1	8.8	3.3	0.00140		✓	✓		✓	20→ 2000	21.34/650			
" " "	3-24-81	"	"	6.7	7.0	7.2	3.071	0.00130			✓		✓	20→ 2000	2051/2000			
TAEB-80-0330	2-27-81	"	"	8.3	9.0	9.7	2.919	0.00173		✓	✓		✓	20→ 2000	1903/650			
" " "	3-24-81	"	"	7.5	7.8	8.2	2.914	0.00152		✓	✓		✓		1897/2000			
TAEB-80-0340	2-27-81	"	"	8.3	9.8	11.5	0.696	0.00133		.0357	✓		✓	20→ 2000	1375/2000			
" " "	3-24-81	"	"	6.1	7.2	8.5	0.721	0.00116	.0210		✓		✓		1422/2000			
TAEB-80-0380	2-27-81	"	"	1.7	2.4	3.5	0.261	0.00110	✓	✓	✓	✓	✓	20→ 2000	540/2000			
" " "	3-24-81	"	"	0.6	0.8	1.0	0.525	0.00018	✓	✓	✓	✓	✓		1070/2000			
TAEB-80-0390	2-27-81	"	"	0.3	0.5	1.2	0.247	0.00038	✓	✓	✓	✓	✓	20→ 2000	522/2000			
" " "	3-24-81	"	"	*	0.6	*	0.325	0.00032	✓	✓		✓	✓		669/2000			
TAEB-80-0400	2-27-81	"	"	0.4	0.6	0.9	0.258	0.00040		✓	✓	✓	✓	20→ 2000	535/2000			

The 3-24-81 data is recopied from an original, which did not contain 2-27-81 data. PJB 6-25-81

* Low and High values did not appear on print out.
PJB 6-25-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0400	3-24-81	TA 98	RLI #16	0.3	0.6	1.0	0.339	0.00028	✓	✓	✓	✓	✓		700/2000			
TAEB-80-0410	2-27-81	"	"	*	0.6	*	0.207	0.00052	✓	✓		✓	✓	20→2000	440/2000			
" " "	3-24-81	"	"	0.0	0.3	2.7	0.196	0.00018	✓	✓	✓	✓	✓		412/2000			
TAEB-80-0420	2-27-81	"	"	0.8	1.4	2.5	0.400	0.00063	✓	✓	✓	✓	✓	20→2000	816/2000			
" " "	3-24-81	"	"	0.1	0.6	2.8	0.432	0.00015		✓	✓	✓	✓		879/2000			
TAEB-80-0430	2-27-81	"	"	0.1	0.4	2.3	0.071	0.00075	.0203	✓	✓	✓	✓	20→2000	171/2000			
" " "	3-24-81	"	"	0.1	0.1	0.1	0.074	—	✓	✓	✓	✓	✓		171/2000			
TAEB-80-0440	2-27-81	"	"	3.6	4.1	4.6	1.188	0.00190			✓		✓	20→2000	785/650			
" " "	3-24-81	"	"	2.1	2.5	3.0	1.065	0.00133	.0202	✓	✓		✓		703/650			
TAEB-80-0450	2-27-81	"	"	0.1	0.4	1.8	0.115	0.00057	✓	✓	✓	✓	✓	20→2000	256/2000			
" " "	3-24-81	"	"	0.1	0.1	0.1	0.124	—	✓	✓	✓	✓	✓		271/2000			

The 3-24-81 data is recopied from an original, which did not contain 2-27-81 data. PJB 6-25-81

* Low and high values not on print out now 6/26/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0320	2-27-81	TA 100	—	26.0	27.0	28.4	4.374	0.00790			✓		✓	20→ 2000	1054/650			
" " "	4-10-81	"	"	17.2	17.7	18.3	5.291	0.00513	.0117		✓		✓	6.5→ 650	1241/200			
TAEB-80-0330	2-27-81	"	"	45.3	47.3	49.4	4.431	0.01049			✓		✓	20→ 2000	1161/65			
TAEB-80-0330	4-10-81	"	"	*	20.7	*	14.611	0.00692					✓	6.5→ 650	1082/65			
TAEB-80-0340	2-27-81	"	"	5.8	5.9	5.9	5.043	0.00129			✓	✓	✓	.02→ 2000	1236/200			
" " "	4-10-81	"	"	11.2	12.2	13.4	4.776	0.00409	✓		✓		✓	6.5→ 650	1106/200			
TAEB-80-0380	2-27-81	"	"	⊕	3.9	⊕	1.939				✓		✓	20→ 2000	1291/65			
TAEB-80-0380	4-10-81	"	"	39.4	44.7	50.7	16.150	0.01450		✓	✓		✓	2.0→ 200	1200/65			
TAEB-80-0390	2-27-81	"	"	⊕	14.8	⊕	4.921	0.00500		.0145			✓	20→ 2000	1122/200			
TAEB-80-0400	2-27-81	"	"	⊕	59.1	⊕	6.043	0.01056					✓	20→ 2000	1368/200			
" " "	4-10-81	"	"	20.0	20.5	21.0	4.991	0.00620			✓		✓	6.5→ 650	1151/200			

The 4-10-81 data is recopied from the original, which did not contain the 2-27-81 data.
PJB 6-25-81

* Low and High values did not appear on the computer print out.
PJB 6-25-81

⊕ Low and High values did not appear on print out
JOW 6/26/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0410	2-27-81	TA 100	—	(+)	18.7	(+)	3.731	0.00759					✓	20→ 2000	581/200			
" " "	4-10-81	"	"	8.4	8.7	9.1	2.954	0.00414	✓		✓	✓	✓	6.5→ 650	749/200			
TAEB-80-0420	2-27-81	"	"	14.5	14.9	15.2	4.171	0.00557			✓		✓	20→ 2000	980/200			
TAEB-80-0430	2-27-81	"	"	2.4	2.6	2.8	0.355	0.00245		✓	✓	✓	✓	20→ 2000	372/650			
TAEB-80-0440	2-27-81	"	"	(+)	2.5	(x)	0.796				✓		✓	20→ 2000	1072/65			
TAEB-80-0450	2-27-81	"	"	.90	1.4	2.1	0.335	0.00155	✓	✓	✓	✓	✓	20→ 2000	369/650			

The 4-10-81 data is recopied from the original, which did not contain the 2-27-81 data. PJB 6-25-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0320	2-27-81	TA 100	RLI #16	*	8.1	*	2.752	.00156		0.024			✓	20 → 2000	1938/650			
" " "	4-10-81	"	"	13.1	13.5	13.8	3.022	0.00222			✓		✓		2128/650			
TAEB-80-0330	2-27-81	"	"	8.3	9.0	9.7	2.919	0.00173		✓	✓		✓	"	1903/650			
" " "	4-10-81	"	"	8.6	9.0	9.3	2.611	0.00174			✓		✓		1888/650			
TAEB-80-0340	2-27-81	"	"	5.4	6.2	6.5	2.040	0.00159			✓		✓	"	1456/650			
" " "	4-10-81	"	"	5.5	6.0	6.6	2.169	0.00148	.0186	✓	✓		✓		1547/650			
TAEB-80-0380	2-27-81	"	"	*	21.9	*	3.015	0.00366					✓	"	2068/650			
" " "	4-10-81	"	"	11.0	11.7	12.4	2.970	0.00204	✓	✓	✓		✓		2069/650			
TAEB-80-0400	2-27-81	"	"	4.0	4.3	4.6	1.821	0.00125		0.0213	✓		✓	"	1303/650			
" " "	4-10-81	"	"	4.2	4.4	4.6	1.796	0.00124			✓		✓		1301/650			
TAEB-80-0410	2-27-81	"	"	5.0	6.1	7.3	0.540	0.00117	.0215	✓	✓		✓	"	1180/2000			

The 4-10-81 data is recopied from the original, which did not contain 2-27-81 data.

PJB 6-25-81

* Low & High Values did not appear on print out [illegible]

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0410	4-10-81	TA 100	RLI #16	2.9	3.3	3.7	1.319	0.00128	.0422	.0349	✓	✓	✓	20 → 2000	1043/2000			
TAEB-80-0420	2-27-81	"	"	3.9	4.3	4.7	1.688	0.00138	.0121	✓	✓		✓	20 → 2000	1189/650			
TAEB-80-0440	2-27-81	"	"	23.5	24.7	25.8	2.911	0.00324			✓		✓	"	2022/650			
TAEB-80-0450	2-27-81	"	"	2.3	3.1	4.1	0.512	0.00045	✓	✓	✓	✓	✓	"	1135/2000			

The 4-10-81 data is recopied from the original, which did not contain the 2-27-81 data.

PJB 6-25-81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0320	3-6-81	TA 1535	—	*	0.1	*	0.094				✓	✓	✓	6.5→ 650	83/650			
TAEB-80-0330	" " "	"	"	0.1	0.6	5.0	0.077	0.01320	✓	✓	✓	✓	✓	6.5→ 650	26/65			
TAEB-80-0340	" " "	"	"	0.0	0.0	0.0	-0.115	0.00147	✓		✓	✓	✓	6.5→ 650	21/65			
TAEB-80-0380	" " "	"	"	0.0	0.8	2320	0.041	0.0109	✓	✓	✓	✓	✓	2.0→ 2000	23/65			
TAEB-80-0320	3-6-81	TA 1535	RLI #16	0.2	0.3	0.6	0.044	0.00258	.0382	✓	✓	✓	✓	20→ 2000	42/650			
TAEB-80-0330	" " "	"	"	0.0	0.1	0.2	0.039	0.00059	✓	✓	✓	✓	✓	20→ 2000	40/650			
TAEB-80-0340	" " "	"	"	0.1	0.3	0.7	0.029	0.00267	✓	✓	✓	✓	✓	20→ 2000	33/650			
TAEB-80-0380	" " "	"	"	0.0	0.0	0.0	0.013			✓	✓	✓	✓	20→ 2000	43/2000			

* Low and high value not on printout VDW 6/26/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-80-0320	3-6-81	TA 1537	—	1.6	1.9	2.3	0.919	0.00372	✓	✓	✓	✓	✓	6.5→ 650	189/200			
TAEB-80-0330	"	"	"	1.4	2.7	5.2	0.306	0.00329	✓	.0170	✓	✓	✓	6.5→ 650	204/650			
TAEB-80-0340	"	"	"	0.6	1.1	2.0	0.339	0.00154	✓	✓	✓	✓	✓	6.5→ 650	225/650			
TAEB-80-0380	"	"	"	0.9	1.7	3.8	0.659	0.01322	✓	✓	✓	✓	✓	2.0→ 200	51/65			
TAEB-80-0320	3-6-81	TA 1537	RLI #16	2.7	3.1	3.6	0.821	0.00205		✓	✓		✓	20→ 2000	533/650			
TAEB-80-0330	"	"	"	1.4	2.5	3.3	0.675	0.00203	.003	✓	✓		✓	20→ 2000	439/650			
TAEB-80-0340	"	"	"	1.2	1.7	2.4	0.171	0.00115	✓	.0374	✓	✓	✓	20→ 2000	340/2000			
TAEB-80-0380	"	"	"	*	0.4	*	0.118	0.00181	✓	✓		✓	✓	20→ 2000	84/650			

* Low and High Values
not on print out
DCW 6/26/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0320	3-6-81	TA 1538	—	5.6	6.3	7.2	2.243	0.00526		✓	✓		✓	6.5→ 650	452/200			
"	4-10-81	"	"	7.2	8.3	9.7	2.354	0.00640	✓	✓	✓		✓	6.5→ 650	470/200			
TAEB-80-0330	3-6-81	"	"	5.9	7.3	8.9	2.057	0.00644			✓	✓	✓	6.5→ 650	413/200			
"	4-10-81	"	"	1.3	3.4	9.5	1.177	0.00523	.0180	✓	✓	✓	✓	6.5→ 650	245/200			
TAEB-80-0340	3-6-81	"	"	1.5	2.5	4.2	0.534	0.00238	.0144	✓	✓	✓	✓	6.5→ 650	354/650			
"	4-10-81	"	"	0.4	2.1	4.7	0.802	0.00460	✓	✓	✓	✓	✓	6.5→ 650	168/200			
TAEB-80-0380	3-6-81	"	"	0.5	0.6	0.7	0.540		✓	✓	✓	✓	✓	20→ 200	118/200			
"	4-10-81	"	"	1.0	5.5	30.8	0.730	0.02856	✓	✓	✓	✓	✓	2.0→ 200	58/65			
TAEB-80-0400	3-6-81	"	"	1.7	2.5	3.6	0.500	0.00781	✓	.0424	✓	✓	✓	6.5→ 650	109/200			
"	4-10-81	"	"	0.8	1.4	2.7	0.285	0.00743	✓	✓	✓	✓	✓	6.5→ 650	64/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0320	4-10-81	TA 1538	RLI #16	9.5	10.1	10.8	2.416	0.00225	✓		✓		✓	20→ 2000	1566/2000			
"	3-6-81	"	"	7.3	7.7	8.1	2.363	0.00186	✓		✓		✓	20→ 2000	1535/650			
TAEB-80-0330	3-6-81	"	"	10.5	10.7	11.0	2.076	0.00257			✓		✓	20→ 2000	1356/650			
"	4-10-81	"	"	9.1	9.6	10.2	1.670	0.00272			✓		✓		1105/650			
TAEB-80-0340	3-6-81	"	"	2.5	2.7	2.9	1.167	0.00132	.0134	.0280	✓		✓	20→ 2000	821/2000			
"	4-10-81	"	"	2.6	2.8	3.0	1.105	0.00144		✓	✓		✓		776/2000			
TAEB-80-0380	3-6-81	"	"	2.0	2.5	3.2	0.379	0.00286	✓	.0391	✓		✓	20→ 2000	262/650			
"	4-10-81	"	"	1.4	1.6	1.9	0.345	0.00233	✓	✓	✓	✓	✓		239/650			
TAEB-80-0400	3-6-81	"	"	0.3	0.9	2.1	0.135	0.00090	✓	✓	✓	✓	✓	20→ 2000	283/2000			
"	4-10-81	"	"	*	1.3	*	0.138	0.00109	✓	✓		✓	✓		287/2000			

The 4-10-81 data is recopied from the original data, which did not contain 3-6-81 data.
PJB 6-25-81

* Low and High values not given on print out.
PJB 6-25-81

GROUP 18

GAS-PHASE HC EVALUATION

TAEB-80-0510 0520	Turbo Buick w/knock sensor (gasoline)

Table 1

GROUP ID: 18

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TAEB-80-0510	Turbo-charged Buick with NOx sensor (Gasoline)	F/E	Unleaded HO	13.4 mg	
TAEB-80-0520	Turbo-charged Buick with NOx sensor (Gasoline	F/E	Unleaded HO	28.8 mg	

Group 18 Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
TREB-80-0510	* 1		1		1		1													
TREB-80-0520	1		1		1		1										1		1	

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 4/16/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0510	4/16/81	TA98	RLI 016	17.2	19.0	20.9	4.325	.00229		.0155	✓	✓	✓	6.50→ 650	2784/650			
TAEB-80-0520	4/16/81	"	RLI 016	19.7	21.6	23.7	4.874	.00231			✓		✓	6.5→ 650	3142/650			
TAEB-80-0510	4/16/81	"	NONE	10.0	11.1	12.2	2.859	.00205	✓		✓		✓	6.5→ 650	1896/650			
TAEB-80-0520	4/16/81	"	"	16.6	17.6	18.7	4.368	.00212			✓		✓	6.5→ 650	2912/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0510	4/16/81	TA100	RLI016	7.8	8.7	9.7	2.176	.00202			✓	✓	✓	6.5→650	1554/650			
TAEB-80-0520	4/16/81	TA100	RLI016	9.0	10.8	13.0	1.898	.00255	✓		✓	✓	✓	6.5→650	1363/650			
TAEB-80-0510	4/16/81	TA100	NONE	12.4	13.3	14.3	5.598	.00409	✓		✓		✓	6.5→650	1263/200			
TAEB-80-0520	4/16/81	TA100	NONE	11.6	12.3	13.0	4.646	.00455			✓	✓	✓	6.5→650	1075/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0520	4/16/81	TA1538	RLI016	21.7	25.3	29.5	2.893	.00335			✓		✓	6.5 → 650	1855/650			
TAEB-80-0520	4/16/81	TA1538	NONE	17.6	18.1	18.6	5.614	.00603			✓		✓	6.5 → 650	1119/200			

GROUP 19

GAS-PHASE HC EVALUATION

TAEB-80-0530 VW E-80 3-cylinder Diesel

Table 1

GROUP ID: 19

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TREB-80-0530	VW E80 3 Cyl.	LA4's (2)	EPA #2 Diesel	311.7 mg	

Group 19

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
TAEB-80-0530	1	2	1	2	1	2	1	2									1	2	1	2

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 4/16/81

2= Experiment Date: 4/21/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0530	4/16/81	TA1538	RLI016	5.1	6.2	7.7	1.348	.00230	✓	✓	✓	✓	✓	20 → 2000	911/650			
TAEB-80-0530	4/16/81	"	NONE	.9	.9	1.0	.748	.5238	✓		✓	✓	✓	20 → 2000	170/200			
TAEB-80-0530	4/21/81	"	RLI016	2.7	3.4	4.4	1.718	.00106		✓	✓	✓	✓	6.5 → 650	1125/650			
TAEB-80-0530	4/21/81	"	NONE	*	13.1	*	1.104	.01237					✓	20 → 200.0	220/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0530	4/16/81	TA98	RLI 016	4.6	4.8	5.1	2.140	.00118	.0121		✓		✓	20 → 2000	1423/650			
TAEB-80-0530	4/16/81	"	NONE	13.2	14.0	14.8	5.727	.00456			✓		✓	20 → 2000	1165/500			
TAEB-80-0530	4/21/81	"	RLI016	4.3	4.4	4.5	2.210	.00092			✓		✓	20 → 2000	1483/650			
TAEB-80-0530	4/21/81	"	NONE	10.3	11.2	12.2	5.868	.00316	.0178	✓	✓		✓	6.5 → 650	1188/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0530	4/16/81	TA100	RLI016	6.8	7.4	8.0	1.596	.00212		✓	✓		✓	20 → 2000	1240/650			
TAEB-80-0530	4/16/81	TA100	NONE	9.8	10.0	10.2	2.546	.00435			✓		✓	20 → 2000	991/65			
TAEB-80-0530	4/21/81	TA100	RLI016	5.3	7.6	11.0	2.124	.00184	✓	.0451	✓	✓	✓	6.50 → 650	1537/650			
TAEB-80-0530	4/21/81	TA100	NONE	30.5	34.2	38.9	13.581	.01300	✓	✓	✓		✓	2.0 → 200.0	1019/65			

GROUP 20

GAS-PHASE HC EVALUATION

TAEB-81-0051 0080	Ford lean-burn (gasoline)

Table 1

GROUP ID: 20

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TAEB-81-0051	Ford lean-burn (gasoline)	LA-4 (4)	IND 15	63 mg	
TAEB-81-0080	Ford lean-burn	HWFE - 6	IND 15	29 mg	

Group 20

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
TAEB-81-CC51	1		1		1		1						1		1					
TAEB-81-CCSO	2		2		2		2						2		2					

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 6/16/81

2= Experiment Date: 7/9/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-81-0051	6/16/81	TA 98	RLI017	18.7	18.9	19.1	7.634	0.00305			✓		✓	20 → 2000	1881/65			
TAEB-81-0080	7/9/81	"	RLI016	26.4	268	27.1	12.006	0.00355			✓		✓	6.5 → 650	2471/200			
TAEB-81-0051	6/16/81	"	NONE	7.5	7.6	7.7	5.049	*	.0476		✓	✓	✓	20 → 2000	1487/65			
TAEB-81-0080	7/9/81	"	"	29.9	32.7	356	7.139	0.00695		.0254	✓	✓	✓	6.5 → 650	1634/200			

* [illegible] POINT OUT

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-81-0051	6/16/82	TA100	RL1017	35.4	31.4	35.9	3.237	0.01033			✓		✓	20 → 2000	1175/65			
TAEB-81-0080	7/9/81	"	RL1016	32.2	33.1	34.0	14.798	0.00966	✓		✓		✓	6.5 → 650	1127/65			
TAEB-81-0051	6/16/82	"	NONE	*	540.6	*	-2.256	*			✓		✓	20 → 2000	941/65			
TAEB-81-0080	7/9/81	"	"	*	163.2	*	11.478	0.03737					✓	6.5 → 650	951/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-81-0051	6-16-81	TA1537	RLI017	10.1	11.0	12.0	2.378	0.0074		✓	✓		✓	20→ 2000	538/200			
TAEB-81-0080	7/9/81	"	RLI016	44.1	48.7	53.1	4.566	0.01176		✓	✓		✓	6.5→ 650	917/200			
TAEB-81-0051	6/16/81	TA1537	NONE	1.0	1.1	1.1	0.124	*	✓		✓	✓	✓	20→ 2000	318/65			
TAEB-81-0080	7/9/81	"	"	14.0	15.2	16.5	6.060	0.01393		✓	✓	✓	✓	6.5→ 650	406/65			

GROUP 21

PROTOTYPE VEHICLES

Sample Number	Test Vehicle	Trap	Test Cycle
TAEB-79-0680	Peugeot	Baseline	HWFE
0691	Peugeot	Baseline	LA-4
0840	Peugeot	JM-4 #1	HWFE
0852	Peugeot	JM-4 #1	LA-4
TAEB-80-0290	Peugeot	JM-4 #2	HWFE
0310	Peugeot	JM-4 #2	LA-4
0260	Mercedes	EX-47 12" non-cat.	LA-4
0280	Mercedes	EX-47 12" non-cat.	LA-4
0011	Mercedes	ICI 4th generation	HWFE
0040	Mercedes	ICI 4th generation	LA-4

Table 1

GROUP ID: 21

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TAEB-79-0650	Diesel Peugeot	LA-4	#2-Diesel	200 mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0691	Peugeot (Diesel)	LA-4 #Two	#2-Diesel	200 mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0840	Diesel Peugeot 504	F/E (4)	#2-Diesel	105 mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0852	Diesel Peugeot 504	F/E (4) LA-4 (2)	#2-Diesel	95 mg	Sample dissolved in DMSO (5mg/ml)
TAEB-80-0260	Mercedes 300	LA4's	#2-Diesel	170 mg	
TAEB-80-0270	M/B 300	LA-4	#2-Diesel	56 mg	
TAEB-80-0280	Mercedes 300D EX-47-12" Trap	LA4's	Diesel 100-2	36 mg	
TAEB-80-0290	Peugeot	F/E (6)	#2-Diesel	39 mg	
TAEB-80-0300	Peugeot	LA-4's (3)	#2-Diesel	13 mg	
TAEB-80-0310	Peugeot	LA-4 (2)	#2-Diesel	12 mg	
TAEB-81-0011	5 cyl. Diesel M/B Trap Vech -	2 HFET 5 HFET	EPA Diesel #2	101 mg	
TAEB-81-0040	Mercedes	LA-4	#2-Diesel	63 mg	

Group 21

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
TAEB-79-0680	2	4	2	4	2	4	2	4									2	4	2	4
TAEB-79-0691	2	4	2	4	2	4	2	4									2	4	2	4
TAEB-79-0840	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
TAEB-79-0852	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
TAEB-80-0260	5	7	5	7	5	7	5	7									5	7	5	7
TAEB-80-0270	8	9	8	9	8	9	8	9									8	9	8	9
TAEB-80-0280	6		6		6		6										6		6	
TAEB-80-0290	6		6		6		6										6		6	
TAEB-80-0300	8		8		8		8										8		8	
TAEB-80-0310	6		6		6		6										6		6	
TAEB-81-0011	10		10		10		10						10		10					
TAEB-81-0040	10		10		10		10						10		10					

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

See next page for Experiments 1-10.

GROUP 21

Experiment Number	Date Plated
1	6/17/80
2	6/19/80
3	6/24/80
4	6/27/80
5	8/04/80
6	8/05/80
7	8/27/80
8	9/08/80
9	9/18/80
10	6/16/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0840	6/17/80	TA 98	RLI015	39.4	41.3	43.3	7.399	0.00345			✓		✓	5→ 500	3698/500			
TAEB-79-0852	"	"	"	29.5	31.9	34.4	5.968	0.00339			✓		✓	5→ 500	2925/500			
TAEB-79-0840	"	"	—	26.5	27.0	27.6	15.112	0.00316			✓		✓	5→ 500	2781/500			
TAEB-79-0852	"	"	—	41.3	44.0	46.9	8.746	0.00945		✓	✓		✓	5→ 500	1515/170			
TAEB-79-0840	"	TA 100	RLI015	18.6	19.2	19.9	9.415	0.00393		✓			✓	5→ 500	1744/170			
TAEB-79-0852	"	"	"	54.9	56.6	58.4	12.116	0.00891			✓		✓	5→ 500	2223/170			
TAEB-79-0840	"	"	—	186.2	206.2	228.3	5.396	0.02072	✓		✓		✓	5→ 500	1072/170			
TAEB-79-0852	"	"	—	69.6	74.0	78.7	21.937	0.02315	.0314	.0426	✓		✓	5→ 500	1219/50			
TAEB-79-0840	"	TA 1535	RLI015	0.3	2.1	12.8	0.274	0.01080	✓	✓	✓	✓	✓	5→ 500	58/170			
TAEB-79-0852	"	"	"	1.8	3.1	5.5	0.254	0.01372	✓	✓	✓	✓	✓	5→ 500	54/170			
TAEB-79-0840	"	"	—	0.4	1.2	3.5	0.274	0.01871	✓	✓	✓	✓	✓	5→ 500	35/50			
TAEB-79-0852	"	"	—	0.0	0.5	7.5	0.111	0.01279	✓	✓	✓	✓	✓	5→ 500	24/50			
TAEB-79-0840	"	TA 1537	RLI015	20.4	22.2	24.1	6.788	0.00706	.0447	✓	✓		✓	5→ 500	1138/170			
TAEB-79-0852	"	"	"	8.5	10.2	12.2	3.284	0.00674			✓	✓	✓	5→ 500	555/170			
TAEB-79-0840	"	"	—	69.2	72.6	76.3	4.303	0.01701			✓		✓	5→ 500	754/170			
TAEB-79-0852	"	"	—	6.4	7.7	9.1	3.002	0.01826	✓		✓		✓	5→ 500	170/170			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0840	6/17/80	TA 1538	RLJ015	31.5	32.4	33.3	14.308	0.00490			✓		✓	5→ 500	2419 / 170			
TAEB-79-0852	"	"	"	27.0	27.8	28.6	8.624	0.00709			✓		✓	5→ 500	1469 / 170			
TAEB-79-0840	"	"	—	129.8	132.8	136.0	9.415	0.01601					✓	5→ 500	1675 / 170			
TAEB-79-0852	"	"	—	17.0	19.2	21.6	6.416	0.02079			✓	✓	✓	5→ 500	349 / 50			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0680	6/19/80	TA 98	RLI015	1.7	2.5	3.3	1.842	0.00065	✓		✓	✓	✓	5→ 500	942/500			
TAEB-79-0691	"	"	"	1.0	1.6	2.7	0.979	0.00101	✓	✓		✓	✓	5→ 500	510/500			
TAEB-79-0680	"	"	—	6.9	8.2	9.9	2.653	0.00229	✓	.0342	✓	✓	✓	5→ 500	1314/500			
TAEB-79-0691	"	"	—	1.9	2.5	3.3	1.810	0.00062	✓	✓	✓	✓	✓	5→ 500	921/500			
TAEB-79-0680	"	TA 100	RLI015	4.0	5.6	7.7	2.467	0.00157	✓		✓	✓	✓	5→ 500	1314/500			
TAEB-79-0691	"	"	"	2.1	2.1	2.2	2.147	—	✓	.0223	✓	✓	✓	5→ 500	1193/500			
TAEB-79-0680	"	"	—	15.5	16.2	17.0	7.103	0.00476			✓		✓	5→ 500	1296/170			
TAEB-79-0691	"	"	—	10.8	11.3	11.9	5.340	0.00416		.0364	✓		✓	5→ 500	1034/500			
TAEB-79-0680	"	TA 1538	RLI015	1.6	1.7	1.7	1.671	—	.0108			✓	✓	5→ 500	860/500			
TAEB-79-0691	"	"	"	0.7	1.1	1.6	0.887	0.00038	.0190	✓	✓	✓	✓	5→ 500	466/500			
TAEB-79-0680	"	"	—	3.6	5.5	8.4	0.624	0.00437		.0142	✓	✓	✓	5→ 500	310/500			
TAEB-79-0691	"	"	—	1.6	2.2	3.1	0.345	0.00365		✓	✓	✓	✓	5→ 500	178/500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0840	6/24/80	TA 98	RLI015	50.1	53.3	54.7	7.726	0.00385	✓		✓		✓	5→500	3843/500			
TAEB-79-0852	"	"	"	33.2	35.6	38.2	6.161	0.00355			✓		✓	5→500	3022/500			
TAEB-79-0840	"	"	—	28.1	28.9	29.8	15.903	0.00339			✓		✓	5→500	2790/500			
TAEB-79-0852	"	"	—	29.5	30.9	32.3	10.149	0.00645		✓	✓		✓	5→500	1741/170			
TAEB-79-0840	"	TA 100	RLI015	20.3	22.3	24.4	8.753	0.00520	✓		✓		✓	5→500	1610/170			
TAEB-79-0852	"	"	"	65.7	67.8	70.1	12.484	0.00982			✓		✓	5→500	2272/170			
TAEB-79-0840	"	"	—	33.6	34.7	35.8	6.031	0.00934		✓	✓		✓	5→500	1214/170			
TAEB-79-0852	"	"	—	68.7	73.8	79.3	25.852	0.01932			✓		✓	5→500	1434/50			
TAEB-79-0840	"	TA 1535	RLI015	1.0	2.0	3.7	0.232	0.01124	✓	✓	✓	✓	✓	5→500	51/170			
TAEB-79-0852	"	"	"	1.1	2.0	3.7	0.174	0.01302	✓	✓	✓	✓	✓	5→500	39/170			
TAEB-79-0840	"	"	—	0.1	0.1	0.1	0.113	—				✓	✓	5→500	85/500			
TAEB-79-0852	"	"	—	0.0	0.1	*	0.018	—	✓		✓	✓	✓	5→500	21/17			
TAEB-79-0840	"	TA 1537	RLI015	10.7	11.5	12.3	4.572	0.00554		✓	✓		✓	5→500	861/500			
TAEB-79-0852	"	"	"	11.7	15.4	20.3	0.919	0.00572		✓	✓	✓	✓	5→500	443/500			
TAEB-79-0840	"	"	—	20.2	21.5	22.8	4.888	0.00873		.0112	✓		✓	5→500	831/170			
TAEB-79-0852	"	"	—	34.6	48.2	58.5	2.019	0.01875			✓		✓	5→500	349/170			

* Data not on Printout 10/24/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0840	6/24/80	TA 1538	RLI-015	27.8	28.5	29.2	12.086	0.00526			✓		✓	5→ 500	2056/170			
TAEB-79-0852	"	"	"	26.9	28.6	30.3	7.932	0.00772	✓		✓		✓	5→ 500	1346/170			
TAEB-79-0840	"	"	—	90.4	92.3	94.2	10.516	0.01301					✓	5→ 500	1831/170			
TAEB-79-0852	"	"	—	11.5	15.6	21.1	5.357	0.00623	✓	✓		✓	✓	5→ 500	920/500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0680	6/27/80	TA 98	RLI015	2.4	2.4	2.4	2.414	—	✓	✓	✓	✓	✓	5→ 500	1222/500			
TAEB-79-0691	"	"	"	0.7	1.7	4.3	1.339	0.00050	.0111	✓	✓	✓	✓	50→ 500	686/500			
TAEB-79-0680	"	"	—	10.4	12.0	13.8	2.624	0.00306	✓		✓	✓	✓	5→ 500	1300/500			
TAEB-79-0691	"	"	—	2.4	3.1	4.2	1.456	0.00153	✓		✓	✓	✓	5→ 500	739/500			
TAEB-79-0680	"	TA 100	RLI015	2.4	2.5	2.7	2.543	—	✓	✓		✓	✓	5→ 500	1380/500			
TAEB-79-0691	"	"	"	2.1	2.3	2.6	2.347	—	✓	✓	✓	✓	✓	5→ 500	1276/500			
TAEB-79-0680	"	"	—	13.7	14.7	15.7	6.134	0.00489		✓	✓		✓	5→ 500	1129/170			
TAEB-79-0691	"	"	—	12.1	13.0	14.0	5.417	0.00495			✓	✓	✓	5→ 500	1015/170			
TAEB-79-0680	"	TA 1538	RLI015	2.0	2.1	2.2	2.131	—	✓		✓	✓	✓	5→ 500	1084/500			
TAEB-79-0691	"	"	"	1.4	1.4	1.5	1.461	—		✓		✓	✓	5→ 500	742/500			
TAEB-79-0680	"	"	—	3.2	3.7	4.4	1.499	0.00539	✓	✓	✓	✓	✓	5→ 500	262/170			
TAEB-79-0691	"	"	—	1.5	2.0	2.6	0.802	0.00510	✓	✓	✓	✓	✓	5→ 500	143/170			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0260	8/4/80	TA 98	RLI015	0.7	0.9	1.1	0.397	0.00038	✓	✓	✓	✓	✓	20→ 2000	820/2000			
TAEB-80-0260	"	"	—	2.1	2.2	2.4	1.254	0.00081			✓		✓	20→ 2000	883/2000			
TAEB-80-0260	"	TA 100	RLI015	2.0	2.4	2.9	0.910	0.00047		✓	✓	✓	✓	20→ 2000	1932/2000			
TAEB-80-0260	"	"	—	6.7	7.2	7.8	1.681	0.00207		✓	✓		✓	20→ 2000	1268/650			
TAEB-80-0260	"	TA 1538	RLI015	0.7	0.9	1.1	0.277	0.00056	.0212	✓	✓	✓	✓	20→ 2000	576/2000			
TAEB-80-0260	"	"	—	0.6	0.9	1.3	0.00170	0.262	.0497	✓	✓	✓	✓	20→ 2000	197/650			
TAEB-80-0260	8/27/80	TA 98	RLI015	*	6.8	*	1.631	0.00189					✓	20→ 2000	1244/650			
TAEB-80-0260	"	"	—	9.4	9.6	9.9	3.623	0.00475			✓		✓	20→ 2000	861/200			
TAEB-80-0260	"	TA 100	RLI015	*	21.9	*	2.246	0.00355					✓	20→ 2000	1816/650			
TAEB-80-0260	"	"	—	*	83.8	*	3.099	0.01493					✓	20→ 2000	1053/65			
TAEB-80-0260	"	TA 1538	RLI015	5.5	5.6	5.6	4.598	0.00178			✓		✓	20→ 2000	944/200			
TAEB-80-0260	"	"	—	13.4	17.9	23.9	−0.066	0.00996	✓		✓		✓	20→ 2000	255/200			

* Data not on Printout now 12/30/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0280	8/5/80	TA 98	RLI015	12.1	13.2	14.4	1.720	0.00169	✓		✓		✓	12 → 1200	2088 / 1200			
TAEB-80-0290	"	"	"	*	24.5	*	3.147	0.00164	.0140				✓	12 → 1200	4265 / 1200			
TAEB-80-0310	"	"	"	12.5	15.7	19.6	6.677	0.00215	.0473	✓	✓	✓	✓	4 → 400	2660 / 400			
TAEB-80-0280	"	"	—	15.7	16.5	17.3	3.660	0.00368			✓		✓	12 → 1200	1549 / 400			
TAEB-80-0290	"	"	—	*	33.4	*	8.136	0.00316					✓	12 → 1200	3695 / 400			
TAEB-80-0310	"	"	—	10.5	11.2	11.9	5.435	0.00179		✓	✓	✓	✓	4 → 400	2194 / 400			
TAEB-80-0280	"	TA 100	RLI015	14.5	15.0	15.6	4.272	0.00303			✓		✓	12 → 1200	1883 / 400			
TAEB-80-0290	"	"	"	*	21.9	*	11.572	0.00467					✓	12 → 1200	1589 / 120			
TAEB-80-0310	"	"	"	6.9	8.3	10.0	3.677	0.00191		✓	✓	✓	✓	4 → 400	1613 / 400			
TAEB-80-0280	"	"	—	17.1	18.0	19.1	7.837	0.00590			✓	✓	✓	12 → 1200	1104 / 120			
TAEB-80-0290	"	"	—	23.4	24.1	24.9	10.370	0.00574			✓		✓	12 → 1200	1463 / 120			
TAEB-80-0310	"	"	—	7.9	11.1	15.8	3.046	0.00303	✓	✓	✓	✓	✓	4 → 400	1366 / 400			
TAEB-80-0280	"	TA 1538	RLI015	10.4	11.0	11.7	3.381	0.00302			✓		✓	12 → 1200	1961 / 400			
TAEB-80-0290	"	"	"	*	28.5	*	16.756	0.00603					✓	12 → 1200	2001 / 120			
TAEB-80-0310	"	"	"	3.9	3.9	4.0	3.944	—		✓	✓	✓	✓	4 → 400	1593 / 400			
TAEB-80-0280	"	"	—	4.4	5.4	6.6	2.598	0.00550	✓	.0166	✓	✓	✓	12 → 1200	329 / 120			

* Data not on Printout VCW 12/30/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-80-0250	8/5/80	TA 1538	—	57.5	60.0	62.7	12.991	0.01258		✓	✓		✓	12→ 1200	1607/120			
TAEB-80-0310	"	"	—	11.1	12.6	14.4	2.798	0.00379			✓	✓	✓	4→ 400	1109/400			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0270	9/03/80	TA 98	RLI015	10.3	10.6	10.9	4.811	0.00155	.0167		✓		✓	4→ 1200	1924/400			
TAEB-80-0300	"	"	"	14.5	18.2	23.0	7.637	0.00219	✓	.0489	✓	✓	✓	4→ 400	3039/400			
TAEB-80-0270	"	"	—	15.7	17.7	19.9	3.069	0.00430	✓		✓		✓	4→ 1200	1268/400			
TAEB-80-0300	"	"	—	14.4	16.9	19.8	5.511	0.00276		✓	✓		✓	4→ 400	2246/400			
TAEB-80-0270	"	TA 100	RLI015	8.3	9.7	11.4	4.612	0.00178		✓	✓	✓	✓	4→ 400	1978/400			
TAEB-80-0300	"	"	"	8.5	9.4	10.5	4.943	0.00152		✓	✓	✓	✓	4→ 400	2133/400			
TAEB-80-0270	"	"	—	*	79.5	*	8.458	0.01785					✓	4→ 400	1161/120			
TAEB-80-0300	"	"	—	17.3	18.1	19.1	5.161	0.00522			✓		✓	4→ 400	1248/135			
TAEB-80-0270	"	TA 1538	RLI015	3.4	4.5	5.9	3.482	0.00065	✓	✓	✓	✓	✓	4→ 400	1407/400			
TAEB-80-0300	"	"	"	11.3	13.1	15.0	4.891	0.00247			✓	✓	✓	4→ 400	1947/400			
TAEB-80-0270	"	"	—	4.6	7.4	12.0	3.193	0.00688	✓	.0232	✓	✓	✓	4→ 400	394/120			
TAEB-80-0300	"	"	—	21.5	22.4	23.3	7.948	0.00784			✓		✓	4→ 400	1678/135			

* Data not on Printout 1000 12/30/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0270	9/18/80	TA 98	RLI016	23.3	29.5	37.4	4.674	0.00461		✓	✓	✓	✓	4 → 400	1875/400			
TAEB-80-0270	"	"	—	17.8	20.5	23.8	3.097	0.00467	.0459	✓	✓		✓	4 → 400	1269/400			
TAEB-80-0270	"	TA 100	RLI016	8.3	9.8	11.6	3.626	0.00236	✓		✓	✓	✓	4 → 400	1560/400			
TAEB-80-0270	"	"	—	29.9	31.1	32.3	8.253	0.01061			✓		✓	4 → 400	1115/120			
TAEB-80-0270	"	TA 1538	RLI016	3.9	8.1	16.7	3.346	0.00221	✓	✓	✓	✓	✓	4 → 400	1346/400			
TAEB-80-0270	"	"	—	9.2	12.2	16.2	2.625	0.01245	.0142	✓	✓	✓	✓	4 → 400	336/120			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-81-0011	6/16/81	TA 98	RLI017	7.0	7.1	7.3	2.817	0.00129			✓		✓	20→ 2000	1864/650			
TAEB-81-0040	"	"	"	4.6	4.8	4.9	2.089	0.00119	.0381		✓		✓	20→ 2000	1390/650			
TAEB-81-0011	"	"	—	*	14.0	*	7.012	0.00319					✓	20→ 2000	1443/200			
TAEB-81-0040	"	"	—	13.0	13.1	13.3	5.763	0.00372			✓		✓	20→ 2000	1201/650			
TAEB-81-0011	"	TA 100	RLI017	23.6	30.0	31.4	1.661	0.00432			✓		✓	20→ 2000	1263/650			
TAEB-81-0040	"	"	"	13.0	15.7	16.5	1.602	0.00333			✓		✓	20→ 2000	1223/650			
TAEB-81-0011	"	"	—	44.5	47.2	50.1	4.365	0.01105		✓	✓		✓	20→ 2000	1060/200			
TAEB-81-0040	"	"	—	82.4	88.8	956	5.730	0.01299		✓	✓		✓	20→ 2000	1343/200			
TAEB-81-0011	"	TA 1537	RLI017	9.6	10.2	11.0	1.338	0.00319	✓		✓		✓	20→ 2000	871/650			
TAEB-81-0040	"	"	"	3.5	4.5	5.8	0.662	0.00298	✓	.0393	✓		✓	20→ 2000	433/650			
TAEB-81-0011	"	"	—	22.7	26.4	30.7	1.786	0.01364	✓		✓		✓	20→ 2000	361/200			
TAEB-81-0040	"	"	—	4.1	5.2	6.4	1.054	0.00796	.0420		✓		✓	20→ 2000	218/200			

* Data not on Printout JCW 12/30/82

GROUP 22

PROTOTYPE VEHICLES

Sample Number	Test Vehicle	Test Cycle
TAEB-79-0721	Mercedes 300 SD 1980 Cert. Vehicle	HWFE
0771	Mercedes 300 TD 1980 Cert. Vehicle	HWFE
0800	Mercedes 300 TD 1980 Cert. Vehicle	HWFE
0891	Peugeot 504 Turbo Diesel 1981 Calif. Prototype 141 CID (EGR)	HWFE
0941	Peugeot 504 Turbo Diesel 1981 Calif. Prototype 141 CID (EGR)	HWFE
0971	Peugeot 504 Turbo Diesel 1981 Calif. Diesel 141 CID (EGR disconnected)	HWFE

Table 1

GROUP ID: 22

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TAEB-79-0721	Diesel - M/B #032 1980 Mercedes 300D Turbocharged, EGR	F/E	#2-Diesel	200mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0771	M/B Diesel #031 1980 Mercedes Benz 300TD, EGR	F/E (2)	#2-Diesel	200mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0800	M/B Diesel 031 1980 Mercedes 300TD EGR	FE 3	#2-Diesel	110mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0891	Turbo Peugeot Prototype 1981 Peugeot 504, Turbocharged, EGR	F/E #3	#2-Diesel	200mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0941	Peugeot Turbo Diesel Prototype 1981 Peugeot 504, Turbocharged, EGR	F/E	#2-Diesel	200mg	Sample dissolved in DMSO (5mg/ml)
TAEB-79-0971	Turbo Peugeot No EGR Prototype 1981 Turbocharged	F/E	#2-Diesel	200mg	Sample dissolved in DMSO (5mg/ml)

Group 22 Table-2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9		+ S9		- S9	
	*																			
TAEB-79-0721	2	4	2	4	2	4	2	4									2	4	2	4
TAEB-79-0771	2	4	2	4	2	4	2	4									2	4	2	4
TAEB-79-0800	2	4	2	4	2	4	2	4									2	4	2	4
TAEB-79-0891	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
TAEB-79-0941	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
TAEB-79-0971	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

1= Experiment Date: 6/18/80

2= Experiment Date: 6/19/80

3= Experiment Date: 6/25/80

4= Experiment Date: 6/27/80

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0941	6/18/80	TA 98	RLI015	3.3	3.4	3.5	3.438	—	✓	.0185	✓	✓	✓	5→500	1736/500			
TAEB-79-0941	"	"	"	1.9	2.1	2.2	2.057	—	✓	✓		✓	✓	5→500	1051/500			
TAEB-79-0971	"	"	"	3.3	3.3	3.3	3.334	—		✓	✓	✓	✓	5→500	1680/500			
TAEB-79-0891	"	"	—	7.8	8.9	10.3	2.946	0.00223			✓	✓	✓	5→500	1475/500			
TAEB-79-0941	"	"	—	5.4	7.1	8.5	2.228	0.00230		✓	✓	✓	✓	5→500	1125/500			
TAEB-79-0971	"	"	—	6.5	8.2	9.9	3.391	0.00178	✓	.0320	✓	✓	✓	5→500	1696/500			
TAEB-79-0891	"	TA 100	RLI015	2.8	5.1	9.4	3.427	0.00078		✓	✓	✓	✓	5→500	1834/500			
TAEB-79-0941	"	"	"	2.3	2.5	2.7	2.518	—	✓			✓	✓	5→500	1396/500			
TAEB-79-0971	"	"	"	3.8	4.7	5.7	2.777	0.00098	✓	✓	✓	✓	✓	5→500	1501/500			
TAEB-79-0891	"	"	—	13.9	14.4	14.8	6.740	0.00392			✓		✓	5→500	1295/170			
TAEB-79-0941	"	"	—	13.8	14.6	15.4	6.535	0.00447		.0156		✓	✓	5→500	1233/170			
TAEB-79-0971	"	"	—	14.0	15.0	15.9	6.710	0.00483		✓	✓		✓	5→500	1171/170			
TAEB-79-0891	"	TA 1535	RLI015	0.0	0.9	64.3	0.084	0.00427	✓	✓	✓	✓	✓	5→500	52/500			
TAEB-79-0941	"	"	"	0.0	0.1	0.1	0.051	—	✓	✓		✓	✓	5→500	37/500			
TAEB-79-0971	"	"	"	0.0	0.6	*	0.063	0.00388	✓	✓	✓	✓	✓	5→500	43/500			
TAEB-79-0891	"	"	—	0.0	0.9	64.3	0.084	0.00427	✓	✓	✓	✓	✓	5→500	52/500			

* Data not on Printout VCW 12/30/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0941	6/19/80	TA 1535	—	0.0	0.1	1.8	0.047	0.00053	✓	✓	✓	✓	✓	5→500	21/5			
TAEB-79-0971	"	"	—	0.0	0.2	4.6	0.015	0.00571	✓	✓	✓	✓	✓	5→500	20/170			
TAEB-79-0891	"	TA 1537	RLI015	0.7	0.7	0.7	0.690	—	✓	✓	✓	✓	✓	5→500	353/500			
TAEB-79-0941	"	"	"	0.4	0.4	0.4	0.424	—	✓	.0171		✓	✓	5→500	220/500			
TAEB-79-0971	"	"	"	0.9	0.9	0.9	0.906	—	✓	✓	✓	✓	✓	5→500	457/500			
TAEB-79-0891	"	"	—	1.2	1.9	2.9	0.441	0.00288		✓	✓	✓	✓	5→500	226/500			
TAEB-79-0941	"	"	—	0.7	1.7	4.1	0.456	0.00266	✓	✓	✓	✓	✓	5→500	233/500			
TAEB-79-0971	"	"	—	2.4	4.0	6.7	0.545	0.00383	✓	✓	✓	✓	✓	5→500	295/500			
TAEB-79-0891	"	TA 1538	RLI015	2.3	2.3	2.3	2.339	—	.0112			✓	✓	5→500	1192/500			
TAEB-79-0941	"	"	"	1.5	1.5	1.6	1.560	—	.0336		✓	✓	✓	5→500	798/500			
TAEB-79-0971	"	"	"	2.5	2.5	2.5	2.522	—		✓	✓	✓	✓	5→500	1275/500			
TAEB-79-0891	"	"	—	5.4	6.1	6.9	2.070	0.00642	.0438	✓	✓		✓	5→500	357/170			
TAEB-79-0941	"	"	—	3.5	3.9	4.3	1.635	0.00523	✓		✓	✓	✓	5→500	282/170			
TAEB-79-0971	"	"	—	4.0	5.0	6.3	2.501	0.00414	✓	✓	✓	✓	✓	5→500	426/500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0891	6/25/80	TA 98	RLI015	3.1	3.1	3.1	3.140	—		✓	✓	✓	✓	5→ 500	1590/500			
TAEB-79-0941	"	"	"	2.7	3.6	4.9	2.159	0.00103		✓	✓	✓	✓	5→ 500	1090/500			
TAEB-79-0971	"	"	"	2.9	3.9	5.1	2.930	0.00056		✓	✓	✓	✓	5→ 500	1471/500			
TAEB-79-0891	"	"	—	6.8	9.2	12.3	3.527	0.00191	✓	✓	✓	✓	✓	5→ 500	1763/500			
TAEB-79-0941	"	"	—	12.3	14.4	16.2	2.600	0.00345		✓	✓	✓	✓	5→ 500	1283/500			
TAEB-79-0971	"	"	—	11.6	13.0	14.5	3.525	0.00262			✓	✓	✓	5→ 500	1746/500			
TAEB-79-0891	"	TA 100	RLI015	3.1	4.4	6.3	3.550	0.00043	.0309	✓	✓	✓	✓	5→ 500	1890/500			
TAEB-79-0941	"	"	"	2.2	2.2	2.3	2.254	—		✓	✓	✓	✓	5→ 500	1242/500			
TAEB-79-0971	"	"	"	2.5	2.5	2.5	2.499	—			✓	✓	✓	5→ 500	1350/500			
TAEB-79-0891	"	"	—	18.8	20.2	21.6	8.196	0.00493	.0229		✓		✓	5→ 500	1507/170			
TAEB-79-0941	"	"	—	14.4	15.8	17.3	5.625	0.00581			✓		✓	5→ 500	1054/170			
TAEB-79-0971	"	"	—	11.6	12.8	14.2	5.883	0.00431	✓	✓	✓		✓	5→ 500	1115/500			
TAEB-79-0891	"	TA 1535	RLI015	0.2	1.4	9.5	0.102	0.00492	✓	✓	✓	✓	✓	5→ 500	61/500			
TAEB-79-0941	"	"	"	0.0	0.2	2.3	0.075	0.00162	✓	✓	✓	✓	✓	5→ 500	47/500			
TAEB-79-0971	"	"	"	0.0	0.2	1.9	0.063	0.00164	✓	✓	✓	✓	✓	5→ 500	42/500			
TAEB-79-0891	"	"	—	0.0	0.0	0.1	-0.109	0.00682	✓	✓	✓	✓	✓	5→ 500	22/17			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0941	6/25/80	TA 1535	—	*	0.0	*	-0.023	0.00295	✓	✓			✓	5→500	22/5			
TAEB-79-0971	"	"	—	0.0	0.3	3.6	0.063	0.00604	✓	✓	✓	✓	✓	5→500	26/170			
TAEB-79-0891	"	TA 1537	RLI015	0.9	1.0	1.1	0.956	—	✓	✓	✓	✓	✓	5→500	480/500			
TAEB-79-0941	"	"	"	0.6	0.6	0.7	0.626	—	✓	✓	✓	✓	✓	5→500	319/500			
TAEB-79-0971	"	"	"	0.9	1.0	1.0	0.961	—	✓	✓	✓	✓	✓	5→500	486/500			
TAEB-79-0891	"	"	—	1.4	1.5	1.7	0.842	0.00343		.0415	✓	✓	✓	5→500	169/500			
TAEB-79-0941	"	"	—	0.3	0.4	0.6	0.229	0.00103		.0401	✓	✓	✓	5→500	123/500			
TAEB-79-0971	"	"	—	3.0	3.6	4.4	1.303	0.00613	✓	✓	✓	✓	✓	5→500	224/170			
TAEB-79-0891	"	TA 1538	RLI015	2.6	2.7	2.7	2.685	—	.0269		✓	✓	✓	5→500	1360/500			
TAEB-79-0941	"	"	"	1.6	1.6	1.7	1.679	—		.0150	✓	✓	✓	5→500	856/500			
TAEB-79-0971	"	"	"	2.1	2.1	2.1	2.144	—		.0264	✓	✓	✓	5→500	1086/500			
TAEB-79-0891	"	"	—	4.1	6.4	10.2	1.990	0.00693		✓	✓		✓	5→500	342/170			
TAEB-79-0941	"	"	—	1.7	2.1	2.6	1.019	0.00420	✓	✓	✓	✓	✓	5→500	183/500			
TAEB-79-0971	"	"	—	3.5	4.7	6.3	2.068	0.00494		✓	✓	✓	✓	5→500	355/170			

* Data not on Printout VOW 12/30/82

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0721	6/19/80	TA 98	RLI015	13.1	15.1	17.4	4.452	0.00246		✓	✓	✓	✓	5→ 500	2211/500			
TAEB-79-0771	"	"	"	7.1	8.7	10.5	4.047	0.00153	✓	.0379	✓	✓	✓	5→ 500	2024/500			
TAEB-79-0800	"	"	"	3.5	7.3	15.5	2.676	0.00203	✓	✓	✓	✓	✓	5→ 500	1340/500			
TAEB-79-0721	"	"	—	14.0	15.1	16.3	3.533	0.00291		.0100	✓		✓	5→ 500	1761/500			
TAEB-79-0771	"	"	—	16.1	17.5	18.9	3.477	0.00324			✓		✓	5→ 500	1725/500			
TAEB-79-0800	"	"	—	6.7	8.0	9.5	2.818	0.00208		✓	✓	✓	✓	5→ 500	1412/500			
TAEB-79-0721	"	TA 100	RLI015	9.2	11.1	13.5	3.140	0.00245		✓	✓	✓	✓	5→ 500	1667/500			
TAEB-79-0771	"	"	"	4.0	5.5	7.6	3.304	0.00110	.0415	✓	✓	✓	✓	5→ 500	1654/500			
TAEB-79-0800	"	"	"	2.5	4.1	6.5	2.464	0.00093	✓	✓	✓	✓	✓	5→ 500	1344/500			
TAEB-79-0721	"	"	—	32.2	33.7	35.3	5.324	0.01005			✓		✓	5→ 500	1031/170			
TAEB-79-0771	"	"	—	20.9	21.7	22.6	5.989	0.00669			✓		✓	5→ 500	1164/170			
TAEB-79-0800	"	"	—	14.8	16.0	17.2	6.825	0.00479	.0185		✓		✓	5→ 500	1725/170			
TAEB-79-0721	"	TA 1538	RLI015	6.9	9.1	12.1	3.525	0.00191	✓	✓	✓	✓	✓	5→ 500	1279/500			
TAEB-79-0771	"	"	"	2.9	3.5	4.3	3.249	0.00017		.0201	✓	✓	✓	5→ 500	1640/500			
TAEB-79-0800	"	"	"	4.6	6.3	8.7	2.334	0.00200			✓	✓	✓	5→ 500	1173/500			
TAEB-79-0721	"	"	—	4.9	7.1	10.5	2.302	0.00651		✓	✓	✓	✓	5→ 500	405/500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-79-0771	6/19/80	TA 1538	—	8.7	9.4	10.1	2.945	0.00689			✓		✓	5→ 500	505/ 170			
TAEB-79-0800	"	"	—	3.8	4.2	4.9	1.892	0.00494			✓		✓	5→ 500	339/ 500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0721	6/27/80	TA98	RLI015	13.8	15.3	17.1	5.565	0.00205		✓	✓	✓	✓	5→ 500	2763/500			
TAEB-79-0771	"	"	"	7.7	8.9	10.3	4.218	0.00151		✓	✓	✓	✓	5→ 500	2103/500			
TAEB-79-0800	"	"	"	6.0	7.5	9.4	3.475	0.00155		✓	✓	✓	✓	5→ 500	1735/500			
TAEB-79-0721	"	"	—	12.7	13.5	14.3	6.736	0.00402		✓	✓		✓	5→ 500	1164/170			
TAEB-79-0771	"	"	—	10.7	11.0	11.5	5.755	0.00380		.0301	✓		✓	5→ 500	1043/500			
TAEB-79-0800	"	"	—	5.4	5.9	6.5	2.578	0.00165			✓	✓	✓	5→ 500	1304/500			
TAEB-79-0721	"	TA 100	RLI015	9.6	11.2	13.0	3.565	0.00222	.0136		✓	✓	✓	5→ 500	1881/500			
TAEB-79-0771	"	"	"	5.4	8.8	14.3	3.392	0.00184	✓	✓	✓	✓	✓	5→ 500	1787/500			
TAEB-79-0800	"	"	"	4.0	5.6	7.6	2.473	0.00154	✓	✓	✓	✓	✓	5→ 500	1345/500			
TAEB-79-0721	"	"	—	21.6	22.5	23.5	5.945	0.00697					✓	5→ 500	1161/170			
TAEB-79-0771	"	"	—	137.6	147.3	157.6	5.765	0.01848			✓		✓	5→ 500	1109/170			
TAEB-79-0800	"	"	—	14.3	16.7	15.5	6.511	0.00484		✓	✓		✓	5→ 500	1204/170			
TAEB-79-0721	"	TA 1538	RLI015	13.7	16.4	19.7	3.916	0.00289	.0361	.0144	✓	✓	✓	5→ 500	1940/500			
TAEB-79-0771	"	"	"	6.4	7.7	9.1	3.401	0.00163		.0158	✓	✓	✓	5→ 500	1693/500			
TAEB-79-0800	"	"	"	2.8	2.8	2.8	2.809	—		✓	✓	✓	✓	5→ 500	1415/500			
TAEB-79-0721	"	"	—	8.9	11.5	14.9	5.037	0.01683	✓	.0269	✓		✓	5→ 500	257/50			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-79-0771	6/27/80	TA 1538	—	42.9	54.8	70.0	1.680	0.02050	.0316		✓		✓	5→ 500	295/170			
TAEB-79-0800	"	"	—	6.9	7.7	8.6	2.105	0.00777			✓		✓	5→ 500	363/170			

GROUP 23

IN-USE VEHICLES

Sample Number	Test Vehicle	Test Cycle
TAEB-79-0911	Delta 88	HWFE
TAEB-80-0011	Delta 88	HWFE
0031	Delta 88	HWFE
0050	Oldsmobile 98	HWFE
0060	Oldsmobile 98	HWFE
0070	Olds Custom Cruiser Wgn	HWFE
0080	Oldsmobile 98	HWFE
0140	Delta 88	HWFE
0150	Oldsmobile 98	HWFE
0160	Oldsmobile 98	HWFE
0170	Oldsmobile 98	HWFE
0190	Delta 88	HWFE
0200	Oldsmobile 98	HWFE
0210	Delta 88	HWFE
0220	Delta 88	HWFE
0250	Delta 88	HWFE

Table 1

GROUP ID: 23

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TAEB-79-0911	Old's Delta 88 Diesel #1 & #2	F/E	#2 Diesel	200mg	Sample dissolved in DMSO (5mg/mL)
TAEB-80-0011	Old's (Hi Mileage) #4	F/E (2)	#2 Diesel	200mg	Sample dissolved in DMSO (5mg/ml)
TAEB-80-0031	Old's (Car #5 & #6) Hi Mileage	F/E 1	#2 Diesel	200mg	Sample dissolved in DMSO (5mg/ml)
TAEB-80-0050	Diesel Car #7	F/E 1	#2 Diesel	682 mg	
TAEB-80-0060	Diesel Car #8	F/E 1	#2 Diesel	678mg	
TAEB-80-0070	Diesel Car #9	FE(1)	#2 Diesel	358mg	
TAEB-80-0080	Diesel Olds (Hi Mi) Car #10	FE	#2 Diesel	413mg	
TAEB-80-0140	Olds (Hi Mileage) Car #11	FE 1	#2 Diesel	903mg	
TAEB-80-0150	Olds (Hi Mileage) Car #12	FE	#2 Diesel	680mg	
TAEB-80-0160	98 Old's Diesel Vehicle 13	F/E	#2-Diesel	507 mg	
TAEB-80-0170	Old's 98 Diesel Car-14	One F/E	#2-Diesel	551 mg	
TAEB-80-0190	Old's Car #15	FE	#2-Diesel	443 mg	
TAEB-80-0200	Old's 98 Diesel Veh-16	F/E #1	#2-Diesel	459 mg	
TAEB-80-0210	Diesel-Delta 88 Veh 18	F/E-1	#2-Diesel	362 mg	

Table 1

GROUP ID: 23

SAMPLE ID	VEHICLE/ ENGINE TYPE	DRIVING CYCLE/MODE	FUEL TYPE/ BLEND	TOTAL MG EXTRACTABLES	COMMENTS
TAEB-80-0220	Delta 88 Veh-17	1-F/E	#2-Diesel	599mg	
TAEB-80-0250	Diesel (88)	F/E	#2-Diesel	386mg	

Group 23

Table 2

SAMPLE ID	TESTER STRAIN																			
	TA98				TA100				TA1535				TA1537				TA1538			
	+	S9	-	S9	+	S9	-	S9	+	S9	-	S9	+	S9	-	S9	+	S9	-	S9
TAEB-79-0911	* 2	8/7	2	8/7	2	8/7	2	8/7									2	8/7	2	8/7
TAEB-80-0011	2	7	2	7	2	7	2	7									2	7	2	7
TAEB-80-0031	2	8	2	8	2	8	2	8									2	8	2	8
TAEB-80-0050	1	6	1	6	1	6	1	6									1	6	1	6
TAEB-80-0060	1	6	1	6	1	6	1	6									1	6	1	6
TAEB-80-0070	1	6	1	6	1	6	1	6									1	6	1	6
TAEB-80-0080	1	7	1	7	1	7	1	7									1	7	1	12/7
TAEB-80-0140	3	9	3	9	3	9	3	9									3	9	3	9
TAEB-80-0150	3	9	3	9	3	9	3	9									3	9	3	9
TAEB-80-0160	3	9	3	9	3	9	3	9									3	9	3	9
TAEB-80-0170	3	9	3	9	3	9	3	9									3	9	3	9
TAEB-80-0190	4	10	4	10	4	10	4	10									4	10	4	13/10
TAEB-80-0200	4	10	4	10	4	10	4	10									4	10	4	13/10
TAEB-80-0210	4	10	4	10	4	10	4	10									4	10	4	10
TAEB-80-0220	5	14/11	5	11	5	14/11	5	11									5	14/11	5	11
TAEB-80-0250	5	14/11	5	11	5	14/11	5	11									5	14/11	5	11

*Experiment Code - This number identifies all strains and activations plated in the same experiment on the specific date noted below. Data generated in the same experiment are comparable.

See next page for Experiments 1-14

Experiment #	Date Plated
1	7/29/80
2	7/30/80
3	7/31/80
4	8/01/80
5	8/04/80
6	8/11/80
7	8/15/80
8	8/18/80
9	8/19/80
10	8/20/80
11	8/27/80
12	9/08/80
13	9/18/80
14	10/27/80

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0050	7/29/80	TA 98	RLI015	10.8	11.3	11.8	1.800	0.00092			✓		✓	20→ 2000	3627/2000			
TAEB-80-0060	"	"	"	9.3	10.1	10.9	1.545	0.00094		✓	✓		✓	20→ 2000	3096/2000			
TAEB-80-0070	"	"	"	10.0	10.7	11.5	1.451	0.00099			✓		✓	20→ 2000	2955/2000			
TAEB-80-0080	"	"	"	6.0	6.6	7.3	1.125	0.00088	✓		✓		✓	20→ 2000	2277/2000			
TAEB-80-0050	"	"	—	10.6	10.8	11.0	2.909	0.00175			✓		✓	20→ 2000	2059/650			
TAEB-80-0060	"	"	—	10.8	11.0	11.3	2.652	0.00211		✓	✓		✓	20→ 2000	1822/650			
TAEB-80-0070	"	"	—	12.3	12.5	12.8	2.796	0.00208	0.042		✓		✓	20→ 2000	1981/650			
TAEB-80-0080	"	"	—	10.1	10.6	11.0	1.909	0.00245			✓		✓	20→ 2000	1361/650			
TAEB-80-0050	"	TA 100	RLI015	7.2	7.5	7.9	2.345	0.00174	.0254		✓		✓	20→ 2000	1658/650			
TAEB-80-0060	"	"	"	3.9	4.1	4.3	2.083	0.00095	.0145	.0198	✓		✓	20→ 2000	1477/650			
TAEB-80-0070	"	"	"	12.3	12.8	13.4	3.007	0.00220			✓		✓	20→ 2000	2072/650			
TAEB-80-0080	"	"	"	8.6	9.7	10.9	2.954	0.00177	✓	✓	✓		✓	20→ 2000	2048/650			
TAEB-80-0050	"	"	—	8.2	8.2	8.3	6.212	0.00191					✓	20→ 2000	1425/200			
TAEB-80-0060	"	"	—	8.5	8.5	8.6	6.787	0.00165					✓	20→ 2000	1542/200			
TAEB-80-0070	"	"	—	7.7	7.8	7.9	6.524	0.00138	.0450			✓	✓	20→ 2000	1504/200			
TAEB-80-0080	"	"	—	11.4	11.5	11.6	6.613	0.00258					✓	20→ 2000	1514/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0050	7/29/80	TA 1538	RLID15	10.9	12.7	14.9	3.417	0.00204		.0134	✓		✓	20→ 2000	2212/650			
TAEB-80-0060	"	"	"	7.0	7.2	7.5	2.883	0.00146			✓		✓	20→ 2000	1875/650			
TAEB-80-0070	"	"	"	12.1	12.4	12.7	3.182	0.00210			✓		✓	20→ 2000	2084/650			
TAEB-80-0080	"	"	"	6.4	6.6	6.9	2.477	0.00155			✓		✓	20→ 2000	1623/650			
TAEB-80-0050	"	"	—	15.8	16.6	17.4	4.489	0.00663		.0123	✓		✓	20→ 2000	894/200			
TAEB-80-0060	"	"	—	13.5	15.0	16.7	4.243	0.00646	.0224		✓		✓	20→ 2000	843/200			
TAEB-80-0070	"	"	—	10.7	11.2	11.7	4.147	0.00487		✓	✓		✓	20→ 2000	841/200			
TAEB-80-0080	"	"	—	4.9	5.3	5.7	2.311	0.00403		✓	✓	✓	✓	20→ 2000	474/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-79-0911	7/30/80	TA98	RLI015	3.8	3.8	3.9	3.875	Not Listed	✓	0.0133	✓	✓	✓	5→500	1963/500			
TAEB-80-0011	"	TA98	"	2.6	3.8	5.6	3.146	0.00040	✓	✓	✓	✓	✓	"	1589/500			
TAEB-80-0031	"	TA98	"	5.6	7.3	9.6	3.733	0.00136	0.0348	✓	✓	✓	✓	"	1876/500			
TAEB-79-0911	7/30/80	TA98		12.3	14.2	16.4	4.098	0.00250	✓	✓	✓	✓	✓	5→500	2044/500			
TAEB-80-0011	"	TA98		9.5	10.6	11.8	3.877	0.00203		✓	✓	✓	✓	"	1929/500			
TAEB-80-0031	"	TA98		11.3	12.5	13.8	3.875	0.00234		✓	✓		✓	"	1943/500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-79-0911	7/30/80	TA100	RLI015	4.5	5.3	6.3	3.777	0.00066			✓	✓	✓	5 → 500	1998/500			
TAEB-80-0011	"	"	"	2.7	3.9	5.7	2.678	0.00071	✓	0.0172	✓	✓	✓	"	1445/500			
TAEB-80-0031	"	"	"	4.5	6.3	8.8	3.060	0.00138	✓	✓	✓	✓	✓	"	1650/500			
TAEB-79-0911	7/30/80	TA100		19.2	19.9	20.6	7.800	0.00496			✓		✓	5 → 500	1464/170			
TAEB-80-0011	"	"		10.7	11.7	12.7	2.746	0.00278					✓	"	1479/500			
TAEB-80-0031	"	"		20.2	21.2	22.3	6.729	0.00599					✓	"	1292/170			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-79-0911	7/30/80	TA1538	RLI015	3.4	3.5	3.5	3.503	NOT LISTED	0.0485			✓	✓	5 → 500	1785/500			
TAEB-80-0011	"	"	"	2.7	2.8	2.8	2.786	Not Listed	✓	✓	✓	✓	✓	"	1416/500			
TAEB-80-0031	"	"	"	3.0	3.2	3.3	3.185	Not Listed	0.0449	0.0237	✓	✓	✓	5 → 500	1617/500			
TAEB-79-0911	7/30/80	TA1538		7.6	8.1	8.6	2.903	0.00598		✓	✓		✓	5 → 500	504/170			
TAEB-80-0011	"	"		2.7	3.1	3.5	1.824	0.00104			✓	✓	✓	"	933/500			
TAEB-80-0031	"	"		3.5	3.9	4.3	2.095	0.00356	✓	✓	✓	✓	✓	5 → 500	371/170			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0140	7/31/80	TA98	RLJ015	5.4	6.0	6.7	1.457	0.00071		✓	✓		✓	20→2000	2891/2000			
TAEB-80-0150	"	"	"	7.8	8.0	8.2	4.131	0.00097	0.0480		✓		✓	"	2754/2000			
TAEB-80-0160	"	"	"	9.7	10.9	12.2	1.527	0.00099		✓	✓		✓	"	3012/2000			
TAEB-80-0170	"	"	"	6.4	6.5	6.6	3.040	0.00122					✓	"	2318/2000			
TAEB-80-0140	7/31/80	TA98		6.2	6.4	6.6	2.599	0.00128			✓		✓	20→2000	1752/650			
TAEB-80-0150	"	"		8.9	9.0	9.1	2.730	0.00153			✓		✓	"	2018/650			
TAEB-80-0160	"	"		6.9	7.1	7.3	2.892	0.00128			✓		✓	"	1960/650			
TAEB-80-0170	"	"		6.6	6.8	6.9	2.379	0.00144	✓		✓		✓	"	1585/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
THEB-80-0140	7/31/80	TA100	RLI015	3.6	3.9	4.1	0.974	0.00066			✓		✓	20 → 2000	2114/2000			
THEB-80-0150	"	TA100	"	13.6	14.2	14.8	3.389	0.00211			✓		✓	20 → 2000	2397/650			
THEB-80-0160	"	"	"	8.6	9.1	9.8	3.042	0.00164			✓		✓	"	2125/650			
THEB-80-0170	"	"	"	7.7	8.1	8.6	2.396	0.00178		✓	✓		✓	"	1704/650			
THEB-80-0140	7/31/80	TA100		7.5	7.5	7.6	6.351	0.00131					✓	20 → 2000	1443/200			
THEB-80-0150	"	"		22.4	23.0	23.6	8.986	0.00421	✓		✓		✓	"	2115/200			
THEB-80-0160	"	"		10.8	11.0	11.3	4.323	0.00375			✓		✓	"	1024/200			
THEB-80-0170	"	"		14.6	15.4	16.2	5.288	0.00494			✓		✓	"	1208/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0140	7/31/80	TA1538	RLI015	7.1	8.1	9.2	0.923	0.00109			✓		✓	20 → 2000	1817/2000			
TAEB-80-0150	"	"	"	12.2	12.5	12.9	2.861	0.00225			✓		✓	20 → 2000	1908/650			
TAEB-80-0160	"	"	"	6.4	6.7	7.0	2.764	0.00142	0.0460		✓		✓	"	1803/650			
TAEB-80-0170	"	"	"	6.0	6.4	6.9	2.351	0.00159	0.0172		✓		✓	"	1536/650			
TAEB-80-0140	7/31/80	TA1538		4.9	5.4	5.9	2.224	0.00449	0.0381		✓	✓	✓	20 → 2000	453/200			
TAEB-80-0150	"	"		7.8	8.2	8.6	1.986	0.00637			✓		✓	"	437/200			
TAEB-80-0160	"	"		6.2	6.4	6.7	2.759	0.00423		✓	✓	✓	✓	"	558/200			
TAEB-80-0170	"	"		4.8	5.2	5.6	2.039	0.00457		✓	✓		✓	"	414/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
				Low	Mean	High												
THEB-80-0190	8/1/80	TA100	RLIC15	STATISTICAL DATA NOT AVAILABLE														
THEB-80-0200	"	"	"	17.2	17.9	18.6	2.976	0.00271			✓		✓	20 → 2000	2076/650			
THEB-80-0210	"	"	"	11.4	11.7	12.0	2.394	0.00224			✓		✓	"	1845/650			
THEB-80-0190	8/1/80	TA100		17.7	18.4	19.2	3.426	0.00663					✓	20 → 2000	1040/65			
THEB-80-0200	"	"		16.0	16.8	17.6	5.763	0.00478			✓		✓	"	1341/200			
THEB-80-0210	"	"		48.8	48.9	49.1	3.601	0.00136					✓	"	1309/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
THEB-80-0190	8/1/80	TA1538	RLIC15	11.5	11.8	12.1	2.657	0.00727		✓	✓		✓	20 → 2000	1754/650			
THEB-80-0200	"	"	"	6.6	6.9	7.1	2.612	0.00153					✓	"	1713/650			
THEB-80-0210	"	"	"	29.4	30.5	31.7	2.758	0.00368			✓		✓	"	1859/650			
THEB-80-0190	8/1/80	TA1538		13.6	14.4	15.2	3.644	0.00674					✓	20 → 2000	743/200			
THEB-80-0200	"	"		7.5	8.1	8.7	2.894	0.00525			✓		✓	"	583/200			
THEB-80-0210	"	"		34.9	36.9	39.0	4.632	0.01259					✓	"	955/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0190	8/1/80	TA98	RLI015	8.8	9.1	9.5	4.065	0.00122			✓		✓	20→ 2000	2650/650			
TAEB-80-0200	"	"	"	7.4	8.0	8.7	1.322	0.00090		✓	✓		✓	"	2654/2000			
TAEB-80-0210	"	"	"	10.7	11.0	11.2	4.987	0.00118			✓		✓	"	3310/650			
TAEB-80-0190	8/1/80	TA98		12.4	12.6	12.8	7.190	0.00248			✓		✓	20→ 2000	1503/200			
TAEB-80-0200	"	"		7.0	7.2	7.3	2.565	0.00145			✓		✓	"	1760/650			
TAEB-80-0210	"	"		25.8	26.3	26.8	10.236	0.00438			✓		✓	"	2101/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	8/4/80	TA 98	RLI-15	1.9	2.8	4.0	1.069	0.00048	✓	✓	✓	✓	✓	20→ 2000	2137/ 2000			
TAEB-80-0250	"	"	"	8.3	8.5	8.8	4.310	0.00104		.0110	✓		✓	"	2915/ 2000			
TAEB-80-0270	9/8/80	"	"	10.3	10.6	10.9	4.811	0.00188	.0167		✓		✓	4.0→ 1200	1924/ 400			
TAEB-80-0300	"	"	"	14.5	18.2	23.0	7.637	0.00219	✓	.0489	✓	✓	✓	4.0→ 400	3037/ 400			
TAEB-80-0220	8/4/80	"	NONE	8.0	8.2	8.4	2.779	0.00154			✓		✓	20→ 2000	1869/ 650			
TAEB-80-0250	"	"	"	18.2	18.7	19.2	3.041	0.00259			✓		✓	"	2187/ 650			
TAEB-80-0270	9/8/80	"	"	15.7	17.7	19.9	3.069	0.00430	✓		✓		✓	4.0→ 1200	1268/ 400			
TAEB-80-0300	"	"	"	14.4	16.9	19.8	5.511	0.00276		✓	✓		✓	4.0→ 400	2246/ 400			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity B_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	8/4/80	TA 100	RLI-15	5.0	5.2	5.4	2.583	0.00101		✓	✓		✓	20→ 2000	1806/ /650			
TAEB-80-0250	"	"	"	11.8	12.5	13.3	2.939	0.00212	✓	✓	✓		✓	"	2090/ /650			
TAEB-80-0270	9/8/80	"	"	8.3	9.7	11.4	4.612	0.00178		✓	✓	✓	✓	4.0→ 400	1978/ /400			
TAEB-80-0300	"	"	"	8.5	9.4	10.5	4.943	0.00152		✓	✓	✓	✓	"	2133/ /400			
TAEB-80-0220	8/4/80	"	NONE	17.8	18.8	19.9	6.892	0.00448			✓		✓	20→ 2000	1566/ /200			
TAEB-80-0250	"	"	"	17.0	17.3	17.6	4.640	0.00508			✓		✓	"	1204/ /200			
TAEB-80-0270	9/8/80	"	"	*	79.5	*	8.458	0.01785					✓	4.0→ 400	1161/ /120			
TAEB-80-0300	"	"	"	17.3	18.1	19.1	8.161	0.00522			✓		✓	"	1248/ /135			

* low and high values of slope not given on printout. RS 5/7/81

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	8/4/80	TA 1538	RLI-15	1.1	1.3	1.6	0.510	0.00048	.0339	✓		✓	✓	20 → 2000	1030/2000			
TAEB-80-0250	"	"	"	12.8	13.2	13.6	2.726	0.00247			✓		✓	"	1790/650			
TAEB-80-0270	9/8/80	"	"	3.4	4.5	5.9	3.482	0.00065	✓	✓	✓	✓	✓	40 → 400	1407/400			
TAEB-80-0300	"	"	"	11.3	13.1	15.0	4.891	0.00247			✓	✓	✓	"	1947/480			
TAEB-80-0220	8/4/80	"	NONE	1.2	1.7	2.3	0.774	0.00111	✓	✓	✓	✓	✓	20 → 2000	530/650			
TAEB-80-0250	"	"	"	2.1	2.1	2.1	1.540	—			✓	✓	✓	"	414/65			
TAEB-80-0270	9/8/80	"	"	4.6	7.4	12.0	3.193	0.00688	✓	.0132	✓	✓	✓	40 → 400	394/120			
TAEB-80-0300	"	"	"	21.5	22.4	23.3	7.948	0.00784			✓		✓	"	1078/135			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0050	3/11/80	TA 1538	RLI015	4.5	6.2	8.5	2.637	0.00132	✓	.0329	✓	✓	✓	6.5 → 650	1714/650			
TAEB-80-0060	"	"	"	2.4	3.2	4.3	2.538	0.00038		✓	✓	✓	✓	6.5 → 650	1656/650			
TAEB-80-0070	"	"	"	3.0	3.1	3.2	3.105	—		✓	✓	✓	✓	6.5 → 650	2028/650			
TAEB-80-0050	"	"	—	15.4	16.5	17.7	3.804	0.00744			✓		✓	6.5 → 650	758/200			
TAEB-80-0060	"	"	—	6.3	8.3	10.8	2.534	0.00595	✓	✓	✓		✓	6.5 → 650	507/200			
TAEB-80-0070	"	"	—	9.1	9.8	10.5	3.061	0.00584		✓	✓		✓	6.5 → 650	617/200			
TAEB-80-0080	3/15/80	TA 98	RLI015	4.5	6.2	8.5	2.866	0.00119	✓	✓	✓	✓	✓	6.5 → 650	1870/650			
TAEB-80-0080	"	"	—	9.7	11.6	13.7	1.930	0.00270	✓	✓	✓		✓	6.5 → 650	1306/650			
TAEB-80-0080	"	TA 100	RLI015	5.3	6.3	7.5	3.267	0.00048		✓	✓	✓	✓	6.5 → 650	2227/650			
TAEB-80-0050	"	"	—	21.4	22.3	23.3	6.748	0.00554		.0406	✓		✓	6.5 → 650	1483/200			
TAEB-80-0080	"	TA 1538	RLI015	2.1	2.2	2.3	2.192	—	✓	✓	✓	✓	✓	6.5 → 650	1445/650			
TAEB-80-0080	"	"	—	20.0	29.2	42.7	1.447	0.01478			✓		✓	6.5 → 650	304/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0050	8/11/80	TA 98	RLI015	8.7	10.4	12.6	4.347	0.00136		✓	✓	✓	✓	6.5→ 650	2812/650			
TAEB-80-0060	"	"	"	7.1	8.6	10.5	3.743	0.00130		✓	✓	✓	✓	6.5→ 650	2426/650			
TAEB-80-0070	"	"	"	11.1	13.6	16.6	4.513	.00171		.0403	✓	✓	✓	6.5→ 650	2912/650			
TAEB-80-0050	"	"	—	18.0	19.3	20.8	2.845	0.00291			✓		✓	6.5→ 650	1899/650			
TAEB-80-0060	"	"	—	12.2	13.7	15.3	2.672	0.00250	.0499	✓	✓		✓	6.5→ 650	1755/650			
TAEB-80-0070	"	"	—	12.7	13.3	13.9	2.850	0.00230			✓		✓	6.5→ 650	1946/650			
TAEB-80-0050	"	TA 100	RLI015	4.7	6.8	9.9	2.915	0.00124	✓	✓	✓	✓	✓	6.5→ 650	2047/650			
TAEB-80-0060	"	"	"	4.1	5.1	6.4	3.045	0.00076		✓	✓	✓	✓	6.50→ 650	2128/650			
TAEB-80-0070	"	"	"	7.2	8.3	9.6	3.230	0.00139	.0117	✓	✓	✓	✓	6.5→ 650	2247/650			
TAEB-80-0050	"	"	—	14.8	15.4	15.9	4.897	0.00483	✓		✓		✓	6.5→ 650	1145/200			
TAEB-80-0060	"	"	—	20.4	21.8	23.2	6.804	0.00539		.0127			✓	6.5→ 650	1510/200			
TAEB-80-0070	"	"	—	31.2	32.1	33.0	8.889	0.00604		✓	✓		✓	6.5→ 650	1958/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-79-0911	8/15/80	TA98	RLI015	5.0	5.1	5.2	5.133	Not Listed	✓	✓	✓	✓	✓	2.5 → 250	1306/250			
TAEB-80-0011	"	"	"	3.6	3.7	3.7	3.720	Not Listed			✓	✓	✓	5 → 500	1884/500			
TAEB-80-0080	"	"	"	4.5	6.2	8.5	2.866	0.00119	✓	✓	✓	✓	✓	6.5 → 650	1870/650			
TAEB-79-0911	8/15/80	TA98		11.9	14.0	16.4	5.779	0.00354	✓		✓	✓	✓	2.5 → 250	1453/250			
TAEB-80-0011	"	"		8.1	10.0	12.4	3.910	0.00189	✓	✓	✓	✓	✓	5 → 500	1954/500			
TAEB-80-0080	"	"		9.7	11.6	13.7	1.930	0.00270	✓	✓	✓		✓	6.5 → 650	1306/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
THEB-79-0911	8/15/80	TA100	RLI015	4.7	4.8	4.9	4.785	Not Listed		0.0169	✓	✓	✓	2.5 → 250	1324/250			
THEB-80-0011	"	"	"	5.3	7.0	9.2	2.910	0.00167	✓	✓	✓	✓	✓	5 → 500	1557/500			
THEB-80-0080	"	"	"	5.4	6.3	7.5	3.267	0.00098		✓	✓		✓	6.5 → 650	2227/650			
THEB-79-0911	8/15/80	TA100		23.0	26.0	29.3	5.298	0.00612			✓		✓	2.5 → 250	1430/250			
THEB-80-0011	"	"		11.3	12.5	13.9	3.691	0.00244		✓	✓		✓	5 → 500	1874/500			
THEB-80-0080	"	"		21.4	22.3	23.3	6.748	0.00554		0.0406	✓		✓	6.5 → 650	1483/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
THEB-79-0911	8/15/80	TA1538	RLF015	3.8	3.9	3.9	3.900	Not Listed		0.0381	✓	✓	✓	2.5 → 250	992/250			
THEB-80-0011	"	"	"	2.7	2.8	3.0	2.831	Not Listed	✓	✓	✓	✓	✓	5 → 500	1430/500			
THEB-80-0080	"	"	"	2.1	2.2	2.3	2.192	Not Listed	✓	✓	✓	✓	✓	6.5 → 650	1445/650			
THEB-79-0911	8/15/80	TA1538		5.5	7.4	10.0	2.784	0.00393		✓	✓	✓	✓	2.5 → 250	699/250			
THEB-80-0011	"	"		3.5	4.3	5.1	1.893	0.0163		✓		✓	✓	5 → 500	947/500			
THEB-80-0080	"	"		20.0	29.2	42.7	1.447	0.01478			✓		✓	6.5 → 650	309/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-79-0911	8/18/80	TA98	RLI015	6.2	8.4	11.2	4.034	0.00147	✓	✓	✓	✓	✓	5→500	2015/500			
TAEB-80-0031	8/18/80	"	"	7.6	10.0	12.4	4.052	0.00175		✓	✓	✓	✓	"	2019/500			
TAEB-79-0911	8/18/80	TA98		12.6	14.0	15.4	3.764	0.00263		✓	✓		✓	5→500	1885/500			
TAEB-80-0031	8/18/80	"		11.6	13.0	14.6	2.982	0.00295		✓	✓		✓	"	1498/500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-79-0911	8/18/80	TA100	RLI015	5.9	6.9	8.1	3.793	0.00114	✓	0.0262	✓	✓	✓	5 → 500	1999/500			
TAEB-80-0031	8/18/80	"	"	6.2	7.2	8.3	3.378	0.00144	✓		✓	✓	✓	"	1793/500			
TAEB-79-0911	8/18/80	TA100		20.0	20.6	21.2	7.517	0.00532			✓		✓	5 → 500	1426/170			
TAEB-80-0031	8/18/80	"		5.2	6.5	7.8	6.500	0.00662			✓		✓	"	1260/170			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-79-0911	8/18/80	TA1538	RLI015	3.1	3.8	4.7	3.214	0.00034	0.0323	0.0191	✓	✓	✓	5→500	1620/500			
TAEB-80-0631	8/18/80	"	"	3.2	3.2	3.3	3.235	Not Listed		✓	✓	✓	✓	"	1636/500			
TAEB-79-0911	8/18/80	TA1538		6.0	6.4	6.9	2.664	0.00515		✓	✓		✓	5→500	459/170			
TAEB-80-0631	8/18/80	"		3.5	3.7	4.0	2.080	0.00321		✓	✓	✓	✓	"	417/500			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0140	8/19/80	TA98	RLI015	6.3	6.9	7.5	1.566	0.00075	✓		✓		✓	6.5→ 2000	3073/2000			
TAEB-80-0150	"	"	"	8.1	11.2	15.5	4.142	0.00154		✓	✓	✓	✓	6.5→ 650	2695/650			
TAEB-80-0160	"	"	"	3.8	5.1	6.9	3.753	0.00049		✓	✓	✓	✓	"	2444/650			
TAEB-80-0170	"	"	"	5.8	7.4	9.4	3.155	0.00132		✓	✓	✓	✓	"	2042/650			
TAEB-80-0140	8/19/80	TA98		5.8	5.9	6.1	2.318	0.00134			✓		✓	6.5→ 2000	1518/650			
TAEB-80-0150	"	"		11.0	11.6	12.1	2.619	0.00220	0.0453		✓		✓	6.5→ 650	1824/650			
TAEB-80-0160	"	"		7.9	9.3	10.9	3.019	0.00171	0.0208	✓	✓		✓	"	1997/650			
TAEB-80-0170	"	"		8.1	9.5	11.2	2.769	0.00189	✓	✓	✓	✓	✓	"	1820/650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0140	8/19/80	TA100	RLI015	5.9	6.4	6.9	2.794	0.00122		✓	✓		✓	6.5→ 2000	1934/650			
TAEB-80-0150	"	"	"	7.8	8.6	9.4	3.051	0.00150	0.0168		✓	✓	✓	6.5→ 650	2148/650			
TAEB-80-0160	"	"	"	2.7	3.3	4.1	2.987	0.00014	0.0375	✓	✓	✓	✓	"	2073/650			
TAEB-80-0170	"	"	"	4.0	5.3	7.1	3.036	0.00083	✓	0.0452	✓	✓	✓	"	2088/650			
TAEB-80-0140	8/19/80	TA100		14.5	14.9	15.4	5.568	0.00462			✓		✓	6.5→ 2000	1217/200			
TAEB-80-0150	"	"		21.9	22.5	23.2	6.864	0.00518			✓		✓	6.5→ 650	1523/200			
TAEB-80-0160	"	"		12.0	12.5	13.1	5.718	0.00341	0.0150		✓		✓	"	1280/200			
TAEB-80-0170	"	"		11.9	12.6	13.3	5.215	0.00401		✓	✓		✓	"	1173/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0140	8/19/80	TA1538	RLJ015	4.1	4.3	4.5	1.999	0.00122			✓		✓	6.5→ 2000	1365/2000			
TAEB-80-0150	8/19/80	"	"	9.3	12.3	16.2	2.298	0.00258	✓	0.0310	✓	✓	✓	6.5→ 650	1497/650			
TAEB-80-0160	"	"	"	2.6	2.7	2.7	2.706	NOT LISTED	0.0112		✓	✓	✓	"	1775/650			
TAEB-80-0170	"	"	"	2.3	2.4	2.5	2.400	"	✓	✓	✓	✓	✓	"	1572/650			
TAEB-80-0140	8/19/80	TA1538		7.6	8.1	8.7	0.730	0.00372		✓	✓		✓	6.5→ 2000	482/650			
TAEB-80-0150	"	"		11.2	12.5	14.0	2.733	0.00749	0.0161	✓	✓		✓	6.5→ 650	557/200			
TAEB-80-0160	"	"		11.4	12.4	13.4	3.606	0.00627	0.0279		✓		✓	"	724/200			
TAEB-80-0170	"	"		5.8	7.3	9.1	2.425	0.00555	✓	0.0139	✓		✓	"	487/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0190	8/20/80	TA100	RLIC15	7.8	9.2	10.8	3.108	0.00160		0.0103	✓	✓	✓	6.5→ 650	2146/650			
TAEB-80-0200	"	"	"	4.0	4.9	6.1	3.186	0.00064	0.0426		✓	✓	✓	"	2195/650			
TAEB-80-0210	"	"	"	13.1	15.8	18.9	2.654	0.00264		0.0373	✓		✓	"	1871/650			
TAEB-80-0190	8/20/80	TA100		37.3	38.4	39.5	15.743	0.01270			✓		✓	6.5→ 650	1165/65			
TAEB-80-0200	"	"		18.3	19.3	20.3	6.204	0.00506	✓		✓		✓	"	1389/200			
TAEB-80-0210	"	"		38.7	39.5	40.3	17.073	0.01242			✓		✓	"	1262/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0190	8/20/80	TA1538	RLIC15	11.1	13.4	16.1	2.313	0.00270	✓		✓	✓	✓	6.5 → 650	1505/650			
TAEB-80-0200	"	"	"	2.8	2.8	2.8	2.800	NOT LISTED	✓	0.0150	✓	✓	✓	"	1834/650			
TAEB-80-0210	"	"	"	17.3	18.4	19.5	2.558	0.00303			✓		✓	"	1665/650			
TAEB-80-0190	8/20/80	TA1538		10.6	11.4	12.3	4.025	0.01389					✓	6.5 → 650	281/65			
TAEB-80-0200	"	"		13.5	14.7	16.1	1.463	0.01142			✓		✓	"	301/200			
TAEB-80-0210	"	"		15.7	17.7	19.8	6.508	0.01538	0.0231	✓	✓		✓	"	430/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
THEB-80-0190	8/20/80	TA98	RLIC15	8.7	10.3	12.1	3.460	0.00167	✓	0.0181	✓	✓	✓	6.5→ 650	2259/650			
THEB-80-0200	"	"	"	7.1	7.7	8.4	1.422	0.00086	✓		✓		✓	6.5→ 2000	2789/2000			
THEB-80-0210	"	"	"	13.2	14.6	16.1	4.819	0.00171		✓	✓		✓	6.5→ 650	3132/650			
THEB-80-0190	8/20/80	TA98		15.1	15.4	15.8	7.011	0.00357			✓		✓	6.5→ 650	1435/200			
THEB-80-0200	"	"		10.6	10.9	11.1	2.196	0.00231			✓		✓	6.5→ 2000	1459/650			
THEB-80-0210	"	"		22.6	23.3	24.1	9.458	0.00427			✓		✓	6.5→ 650	1941/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	8/27/80	TA 1538	RLI-15	4.1	4.3	4.4	1.667	0.00147			✓		✓	20→ 2000	1085/ /650			
TAEB-80-0250	"	"	"	9.8	11.7	14.1	2.980	0.00211			✓	✓	✓	6.5→ 650	1937/ /650			
TAEB-80-0270	9/18/80	"	RLI-16	3.9	8.1	16.7	3.346	0.00221	✓	✓	✓	✓	✓	4.0→ 400	1346/ /400			
TAEB-80-0300																		COMPOUND RAN OUT AFTER B1
TAEB-80-0220	8/27/80	"	NONE	3.2	3.5	3.8	1.491	0.00407					✓	20→ 2000	306/ /20			
TAEB-80-0250	"	"	"	13.3	13.7	14.1	4.384	0.00584			✓		✓	6.5→ 660	888/ /200			
TAEB-80-0270	9/18/80	"	"	9.2	12.2	16.2	2.625	0.01245	.0192	✓	✓	✓	✓	4.0→ 400	330/ /120			
TAEB-80-0300																		COMPOUND RAN OUT AFTER B1

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity B_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	8/27/80	TA 100	RLI-15	6.8	7.2	7.6	2.777	0.00140		✓	✓		✓	20→ 2000	1923/ 650			
TAEB-80-0250	"	"	"	7.4	8.7	10.2	2.878	0.00161		✓	✓	✓	✓	6.5→ 650	2028/ 650			
TAEB-80-0270	9/18/80	"	RLI-16	8.3	9.8	11.6	3.626	0.00236	✓		✓	✓	✓	4.0→ 400	1560/ 400			
TAEB-80-0300																		COMPOUND RAN OUT AFTER "B1"
TAEB-80-0220	8/27/80	"	NONE	15.2	15.6	16.0	5.330	0.00475			✓		✓	20→ 2000	1227/ 200			
TAEB-80-0250	"	"	"	22.6	23.0	23.3	14.322	0.00728			✓		✓	6.5→ 650	1203/ 200			
TAEB-80-0270	9/18/80	"	"	29.9	31.1	32.3	8.253	0.01061			✓		✓	4.0→ 400	1115/ 120			
TAEB-80-0300																		COMPOUND RAN OUT AFTER "B1"

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	8/27/80	TA 98	RLI-15	5.2	5.8	6.4	1.106	0.00083	✓		✓		✓	20→ 2000	2201/ 2000			
TAEB-80-0250	"	"	"	9.8	11.1	12.5	4.835	0.00128		✓	✓	✓	✓	6.5→ 650	3150/ 650			
TAEB-80-0270	9/18/80	"	RLI-16	23.3	29.5	37.4	4.674	0.00461		✓	✓	✓	✓	4.0→ 400	1875/ 400			
TAEB-80-0300																		COMPOUND RAN OUT ON "B1"
TAEB-80-0220	8/27/80	"	NONE	7.0	7.2	7.4	1.927	0.00184	✓		✓		✓	20→ 2000	1358/ 650			
TAEB-80-0250	"	"	"	17.1	19.7	20.2	9.440	0.00355			✓		✓	6.5→ 650	1906/ 200			
TAEB-80-0270	9/18/80	"	"	17.8	20.5	23.8	3.097	0.00467	.0459	✓	✓		✓	4.0→ 400	1269/ 400			
TAEB-80-0300																		COMPOUND RAN OUT ON "B1"

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-80-0080	9/8/80	TA1538	—	7.2	8.7	10.4	3.111	0.01575	✓		✓	✓	✓	6.5→ 650	212/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope			Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
				Low	Mean	High												
TAEB-80-C080	9/8/80	TA1538	—	7.2	8.7	10.4	3.111	0.01575		✓	✓	✓	✓	6.5 → 650	212/65			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_3 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model	3 Parameter Model	2 Parameter Model	Dose Range Tested	Max Rev/ Dose			Comments
TAEB-80-0190	9/18/80	TA1538		13.6	14.9	16.4	5.838	0.01489			✓	✓	✓	6.5→ 650	381/65			
TAEB-80-0200	9/18/80	TA1538		7.8	8.8	9.8	3.739	0.00437			✓		✓	"	753/200			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	10/27/80	TA 98	RLI-16	3.4	4.1	4.9	1.340	0.00056		.0394		✓	✓	20→ 2000	2669/ 2000			
TAEB-80-0250	"	"	"	9.4	11.5	14.0	5.045	0.00128	✓	✓	✓	✓	✓	6.5→ 650	3265/ 650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	10/27/80	TA 100	RLI-16	6.5	7.2	7.9	2.315	0.00168			✓		✓	20→ 2000	1619/ /650			
TAEB-80-0250	"	"	"	10.3	14.2	19.6	2.146	0.00280	✓	✓	✓		✓	6.5→ 650	1514/ /650			

Sample I.D.	Date Tested	Strain	Activation Lot Number	Model Predicted Slope Low	Model Predicted Slope Mean	Model Predicted Slope High	Linear Regression Predicted Slope (Mean)	Toxicity β_1 Value	Poisson Assumption Valid	Adequacy Criteria Met	4 Parameter Model Converged	3 Parameter Model Converged	2 Parameter Model Converged	Dose Range Tested (UGS)	Max Rev/ Dose			Comments
TAEB-80-0220	10/27/80	TA 1538	RLI-16	3.8	5.3	7.3	0.493	0.00118		.0118	✓		✓	20→ 2000	983/2000			
TAEB-80-0250	"	"	"	6.6	8.3	10.4	2.955	0.00158				✓	✓	6.5→ 650	1922/650			

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO. EPA 460/3-84-003	2.	3. RECIPIENT'S ACCESSION NO.
4. TITLE AND SUBTITLE Ames Bioassay of Exhaust Soluble Organics Emissions		5. REPORT DATE April 1984
		6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Steve R. Haworth, Timothy E. Lawlor		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Microbiological Associates, 5221 River Road, Bethesda, Maryland 20816		10. PROGRAM ELEMENT NO.
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15. SUPPLEMENTARY NOTES		

16. ABSTRACT

This report summarizes the results obtained from testing 201 extracts of engine exhaust particulates in the Salmonella/mammalian-microsome mutagenicity assay (Ames test) from June 1980 to December 1982. Exhaust particulates collected on filters were subjected to a 24 hr soxhlet extraction with methylene chloride. Each blown down sample was shipped to Microbiological Associates where it was assayed at least twice in the Ames test in two separate experiments conducted over a period of several weeks. Each Ames test was conducted in triplicate at five dose levels using up to five Salmonella typhimurium tester strains, TA98, TA100, TA1535, TA1537 and TA1538, both with and without metabolic activation by Aroclor induced Fischer rat liver microsomes. Very often, when the amount of available test article was limited, only one or two tester strains (TA98, TA100) were used. The resulting mutagenicity data was sent to the Data Management Branch of the EPA's Biometry Division in RTP in North Carolina where it was entered into a computerized data base and was statistically analyzed using the method of Stead, et al (1,2).

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution Motor Vehicles Diesel Engines Gasoline Engines Exhaust Emissions Particulates Mutagens	Ames Bioassay Organic Extracts	

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