FINAL REPORT

Study Title

In Vivo-In Vitro Rat Peripheral Lymphocyte Sister Chromatid Exchange Assay

Test Substance

Gasoline TBA Vapor Condensate

Author

Ramadevi Gudi, Ph.D.
Caren M. Brown, M.S.

Study Completion Date

September 16, 2008

Performing Laboratory

BioReliance
9630 Medical Center Drive
Rockville, Maryland 20850

BioReliance Study Number

AA40PA.130.BTL

Client

Huntingdon Life Sciences
Princeton Research Center (PRC)
Mettlers Road
East Millstone, New Jersey 08875-2360

HLS Study Number

00-6131

STATEMENT OF COMPLIANCE

The Sister Chromatid Exchange Assay, BioReliance Study No. AA40PA.130.BTL, was conducted in compliance with 79.60, CFR Vol. 59, No. 122, 27 June 1994. This study was performed according to protocol and BioReliance's Standard Operating Procedure for Sister Chromatid Exchange Assay with the following exceptions:

The identity, strength, purity and composition or other characteristics to define the positive control article has not been determined by the testing facility. The positive control article has been characterized as per the Certificate of Analysis on file with the testing facility.

The stability of the positive control article has not been determined by the testing facility.

Analyses to determine the uniformity (as applicable) or concentration of the positive control mixture were not performed by the testing facility.

The stability of the positive control article mixture has not been determined by the testing facility.

Ramadevi Gudi — 16 Sept 2008

Ramadevi Gudi, Ph.D.
Principal Investigator
BioReliance

Date

Gary M. Hoffman, B.A., D.A.B.T.
Study Director
Huntingdon Life Sciences

September 2013
Date

Quality Assurance Statement

Study Title: IN VIVO-IN VITRO RAT PERIPHERAL LYMPHOCYTE SISTER CHROMATID EXCHANGE ASSAY

Study Number: AA40PA.130.BTL

Principal Investigator: Ramadevi Gudi, Ph.D.

Study Director: Gary Hoffman

Quality Assurance performed the inspections listed below for this study. Verification of the study protocol was also performed and documented by QA. Procedures, documentation, equipment records, etc., were examined in order to assure that the study was performed in accordance with the U.S. EPA Good Laboratory Practice Regulations (79.60, CFR Vol. 59, No. 122, 27 June 1994), and to assure that the study was conducted according to the protocol and relevant Standard Operating Procedures.

The following are the inspection dates, phases inspected, and report dates of QA inspections of this study.

Inspect On:	26-Aug-02 - 26-Aug-02 To Study Dir 26-Aug-02 To Mgmt 29-Aug-02
Phase:	Harvest of cells
Inspect On:	20-Dec-02 - 22-Dec-02 To Study Dir 12-Jan-03 To Mgmt 24-Jan-03
Phase:	Draft Report
Inspect On:	11-Sep-08 - 11-Sep-08 To Study Dir 11-Sep-08 To Mgmt 16-Sep-08
Phase:	Draft to Final Report

This report describes the methods and procedures used in the study and the reported results accurately reflect the raw data of the study.

Allison Schaefer 16 Sept 2008

Allison Schaefer, BS — DATE
QUALITY ASSURANCE

PRC - QUALITY ASSURANCE STATEMENT

Listed below are the dates that this study was inspected by the Quality Assurance Unit of Huntingdon Life Sciences, East Millstone, New Jersey, and the dates that findings were reported to the Study Director and Management. This report reflects the raw data as far as can be reasonably established.

Type of Inspection	Date(s) of Inspection	Reported to Study Director and Management
General Facility Inspection	08 Nov 00	11 Nov 00[a]
GLP Protocol Review	9 Apr 02	9 Apr 02
Positive Control Genotoxicity Dose Prep & Adm	21 Aug 02	22 Aug 02
Genotoxicity Necropsy	22 Aug 02	22 Aug 02
Draft SCE Report & In-Life Study Data	15-19, 22 Aug 03 & 2 Dec 03	2 Dec 03

1 MAR 2013

Kathleen Stilwell, AS, BS, LATg, SRS
Quality Assurance Auditor

Date

[a]General Facility Inspection reported to Testing Facility Management.

SIGNATURE PAGE

SCIENTIST

The following Scientist was responsible for the overall conduct of the SCE portion of this study:

Ramadevi Gudi, Ph.D.
Principal Investigator
BioReliance

16 Sep 2008
Date

SCIENTIFIC REVIEW

The following Scientists have reviewed and approved this report:

Study Management
BioReliance

16 Sept 2008
Date

Gary M. Hoffman, B.A., DABT
Study Director
Huntingdon Life Sciences

September 2013
Date

In Vivo-In Vitro Rat Peripheral Lymphocyte Sister Chromatid Exchange Assay

FINAL REPORT

Client:	**Huntingdon Life Sciences** **Princeton Research Center (PRC)** **Mettlers Road** **East Millstone, New Jersey 08875-2360**
Study Director:	**Gary Hoffman, B.A., DABT**
Performing Laboratory (Subcontractor):	**BioReliance** **9630 Medical Center Drive** **Rockville, Maryland 20850**
BioReliance Principal Investigator:	**Ramadevi Gudi, Ph.D.**
Test Substance I.D.:	**Gasoline TBA Vapor Condensate**
Sponsor Project Number:	**00-6131**
BioReliance Study No.:	**AA40PA.130.BTL**
Experimental Start Date for SCE:	**23 August 2002**
Experimental Completion Date for SCE:	**21 October 2002**

TABLE OF CONTENTS

Page

SUMMARY 8

PURPOSE 9

CHARACTERIZATION OF TEST AND CONTROL SUBSTANCES 9

MATERIALS AND METHODS 9

RESULTS AND DISCUSSION 12

CONCLUSION 13

REFERENCES 13

DATA TABLES 14

APPENDIX A: CONTRACTING SPONSOR'S EXPOSURE DATA AND ANIMAL DATA 21

SUMMARY

The test substance, Gasoline TBA Vapor Condensate, was tested in the rat peripheral lymphocyte sister chromatid exchange (SCE) assay following inhalation exposure of rats.

Information on test system, experimental design and methodology will be provided by Huntingdon Life Sciences. All in vivo portions of the study, including inhalation exposures were performed by Huntingdon Life Sciences.

Rats were exposed by inhalation to negative (air) control, 2,000, 10,000 or 20,000 mg/m^3 of Gasoline TBA Vapor Condensate for 4 weeks (5 days exposure per week). One additional group of animals (5 males and 5 females) was dosed with 5 mg/kg of cyclophosphamide (CP, positive control) by intraperitoneal injection 24 hours prior to blood collection. BioReliance personnel collected rat blood samples at 24 hours after the end of a 4 week (5 days per week) exposure period. Rat blood samples were cultured and processed for the SCE assay at the BioReliance facility.

A minimum of 25 second division metaphases per animal were scored for SCEs. At least 100 consecutive metaphases per animal were scored for the number of cells in first-, second-, or third-division metaphase for each animal as an indictor of toxicity (cell cycle delay). At least 1000 cells were scored for mitotic index per animal. A regression analysis (trend analysis) and a one-tailed Dunnett's t test for multiple comparisons was performed to compare the SCE frequency of test exposure levels to the negative control frequency. No statistically significant increase ($p>0.05$) in average SCE frequency was observed in males or females in any groups exposed to Gasoline TBA Vapor Condensate. Regression analysis (trend analysis) was negative for a dose response in both males and females. The positive control fulfilled the requirements for a valid test.

Based on the findings of this study, the test substance, Gasoline TBA Vapor Condensate, was concluded to be negative for the induction of sister chromatid exchanges in rat peripheral lymphocytes.

PURPOSE

The purpose of this study was to evaluate the potential of Gasoline TBA Vapor Condensate to induce SCEs in rat peripheral lymphocytes following inhalation exposures.

CHARACTERIZATION OF TEST AND CONTROL SUBSTANCES

Information regarding test substance and negative control and their characterizations will be provided by Huntingdon Life Sciences.

Cyclophosphamide (CP, CAS No. 6055-19-2, lot number 91K1176, expiration date 30 September 2004, white powder, storage 2-8°C, purity 99.5% by HPLC), was obtained from the Sigma Chemical Company St. Louis, MO (responsible for its characterization). CP was shipped overnight on 19 August 2002 from BioReliance to Huntingdon Life Sciences. CP was dissolved and diluted in sterile distilled water at Huntingdon Life Sciences to a stock concentration of 0.5 mg/mL for use as the positive control for the SCE study.

CP has been characterized as per the Certificate of Analysis on file with the testing facility. The stability of CP and of the CP mixtures used in this assay was demonstrated by acceptable results that met the criteria for a valid test.

MATERIALS AND METHODS

Test System

Information on the test system will be provided by Huntingdon Life Sciences.

Sister Chromatid Exchange Assay

Peripheral blood lymphocytes were obtained from Sprague-Dawley rats that were exposed with negative (air) control, 2,000, 10,000 or 20,000 mg/m^3 of Gasoline TBA Vapor Condensate, or positive control (5 mg/kg of CP injected IP at 10 mL/kg, 24 hours prior to sacrifice). Animals were anesthetized with isoflurane by inhalation exposure. Blood samples were collected into sodium heparin tubes from the abdominal aorta by BioReliance personnel on site at Huntingdon Life Sciences. The blood samples were transported to BioReliance on the day of collection on wet ice.

Cell Culture and Collection of Metaphase Cells

Within 24 hours after blood collection, the whole blood samples were cultured in duplicates per animal in RPMI 1640 culture medium with 25 mM Hepes buffer supplemented, 10% fetal bovine serum, antibiotics (pencillin G, 100 u/ml and streptomycin sulfate, 0.1 mg/mL), 20 µg/mL phytohemagglutinin and an additional 2 mM L-glutamine. Cultures were initiated by inoculating 0.5 mL of whole blood per 5 mL of complete medium

in T-25 sterile disposable tissue culture flasks and incubated at 37°C. Approximately 21 hours after initiation of the cultures, the cells were exposed to 5 µg/mL of bromodeoxyuridine (BrdU, Sigma Co., St. Louis, MO). At approximately 68 hours, 0.2 µg/mL of colcemid was added to each flask and incubated for approximately 4 hours. At approximately 72 hours (51 hours after initiating the BrdU exposure), the cells were collected by centrifugation at approximately 1200 rpm for about 5 minutes. The cell pellet was resuspended in 5 mL 0.075 M KCl and incubated at 37±1°C for 20 minutes. At the end of the KCl treatment and immediately prior to centrifuging, the cells were gently mixed and approximately 0.5 mL of fixative (methanol:glacial acetic acid, 3:1 v/v) was added to each tube. The cells were collected by centrifugation, the supernatant aspirated, and the cells were fixed with two washes with approximately 3-5 mL of fixative and stored in fixative overnight or longer at approximately 2-8°C.

Slide Preparation

To prepare slides, the fixed cells were centrifuged at approximately 1200 rpm for 5 minutes, the supernatant was aspirated, and the cells were resuspended in 1 mL fresh fixative. The cells were collected by centrifugation and the supernatant aspirated, leaving 0.1 to 0.3 mL fixative above the cell pellet. One to two drops of the cell suspension was dropped onto a glass slide and allowed to air dry overnight. Slides were identified by the study number, animal number, replicate tube designation and date prepared. The dried slides were then stained.

Slide Staining

The slides were stained by using a modified flourescence-plus-Giemsa technique. Hoechst 33258 stain, 5 µg/mL, was prepared fresh by diluting 40 mL of Hoechst 33258 stock stain 50 µg/mL in distilled water, with 360 mL phosphate buffer, pH 6.8. The slides were stained in Hoechst, 5 µg/mL, for 10 minutes, rinsed in deionized water and dried between sheets of bibulous paper. Three drops of phosphate buffer was placed on each slide and the buffer covered with a coverslip. The slides were then placed on a slide warmer maintained at approximately 60±2°C and covered with a "Black Ray" lamp with 15 watt tubes for 4-6 minutes. The coverslips were removed, the slides rinsed in deionized water and counterstained with 5% Giemsa solution (freshly prepared by diluting 20 mL Giemsa in 380 mL deionized water) for 6-10 minutes. The slides were rinsed in deionized water and left to air dry.

Evaluation of SCEs

Slides were coded using random numbers by an individual not involved with the scoring process. Metaphase cells were examined under oil immersion without prior knowledge of treatment groups. Whenever possible, a minimum of 25 second division metaphases per animal were scored for SCEs. At least 100 consecutive metaphase cells were scored for the number of cells in first-, second- or third-division metaphase for each animal as an indicator of toxicity (cell cycle delay). At least 1000 cells were scored for mitotic index per animal.

Evaluation of Test Results

The number of SCEs per second-division metaphase cell were presented for each group along with the range of SCEs/metaphase for animals within a group. SCE frequencies as the grand mean ± standard deviation were presented for each group. The Average Generation Time (AGT) is estimated as: = Number of hours in BrdU X 100/ [(number M_1 cells x 1)+(number M_2 cells x 2)+(number M_3 cells x 3)]. A regression analysis (trend analysis), and analysis of variance and a one-tailed Dunnett's t test for multiple comparisons was performed to compare the SCE frequency of test exposure levels to the negative control frequency, and if $p \leq 0.05$, that exposure level was considered significant. The conclusion of the study was based on the Principal Investigator's evaluation of all the data, including the biological as well as statistical significance. The following criteria were used as guidelines in evaluation of this study:

The test substance was considered positive if an exposure-level responsive and statistically significant increase is observed over a minimum of two exposure levels. A statistically significant increase at the high exposure level with an exposure-level responsive although not statistically significant increase at lower exposure levels was assessed as suspect. A statistically significant increase at one or more exposure levels with no evidence of an exposure level response was assessed as equivocal or as negative according to the magnitude of the response and the number of exposure levels affected.

Criteria for Determination of a Valid Test

The mean SCEs/cell/animal for the positive control animals must be statistically increased relative to the negative control.

Deviations

No known deviations from the protocol or assay-method SOPs occurred during the conduct of this study.

Archives

All raw data, the protocol and all reports generated at BioReliance will be maintained according to Standard Operating Procedure OPQP3040 by the BioReliance RAQA unit headquartered at: BioReliance, 14920 Broschart Road, Rockville, MD 20850. After submission of the final report, all of the above will be shipped to Huntingdon Life Sciences to be archived. All study materials returned to Huntingdon Life Sciences will first be copied and the copy will be retained in the BioReliance archives for a minimum of 10 years. All specimens, such as microscope slides, will be held in storage as long as the quality affords evaluation at BioReliance until the final report is issued in accordance with the relevant Good Laboratory Practice Regulations.

RESULTS AND DISCUSSION

Sister chromatid exchanges involve a symmetrical exchange at one locus, between sister chromatids of the chromosomes. Giemsa method for the differential staining of sister chromatids by Perry and Wolff (1974a) Wolff and Perry (1974) have made it possible to distinguish between sister chromatids. These techniques involve exposing cells to 5-bromodeoxyuridine (BrdU) for at least 2 rounds of replication so that M2 chromosomes consist of one chromatid unifilarly substituted with BrdU and the other bifilarly substituted. The chromatids of such chromosomes stain differentially with Giemsa stain. The observed SCE represents a recombination between DNA helices in the replicating chromosomes and used as a sensitive cytological end point which correlates with DNA damage. The test substance, Gasoline TBA Vapor Condensate, was tested in the rat peripheral lymphocyte sister chromatid exchange (SCE) assay following inhalation exposure of rats.

Information on test system, experimental design and methodology will be provided by Huntingdon Life Sciences. All in vivo portions of the study, including inhalation exposures, were performed by Huntingdon Life Sciences.

Rats were exposed by inhalation to negative (air) control, 2,000, 10,000 or 20,000 mg/m^3 of Gasoline TBA Vapor Condensate for 4 weeks (5 days exposure per week). One additional group of animals (5 males and 5 females) was dosed with 5 mg/kg cyclophosphamide (CP, positive control) by intraperitoneal injection 24 hours prior to blood collection. Animals dosed at 5 mg/kg of CP were used as the positive control group for the SCE assay. BioReliance personnel collected rat blood samples at 24 hours after the end of a 4 week (5 days per week) exposure period. Rat blood samples were cultured and processed for the SCE assay at BioReliance.

A minimum of 25 second division metaphases per animal were scored for SCEs. At least 100 consecutive metaphases per animal were scored for the number of cells in first-, second-, or third-division metaphase for each animal as an indictor of toxicity (cell cycle delay). At least 1000 cells are scored for mitotic index per animal. The number of SCEs per second-division metaphase cell were presented for each animal (both males and females) in Tables 1 to 5. The number of M1, M2 and M3 cells out of 100 metaphases and the mitotic index out of 1000 cells per animal are also presented in Tables 1 to 5. The range and the average SCEs per animal and the SCE frequencies as the grand mean ± standard deviation per group for males are presented in Table 6 and for females in Table 7. The Average Generation Time (AGT) and the mitotic index per group for males are presented in Table 6 and for females in Table 7. A regression analysis (trend analysis) and a one-tailed Dunnett's t test for multiple comparisons was performed to compare the average SCE frequency of test exposure levels to the negative control frequency. No statistically significant increase in average SCE frequency ($p>0.05$) was observed in males or females in any groups exposed to Gasoline TBA Vapor Condensate. Regression analysis (trend analysis) was negative for a dose response in both males and females. The positive control group (CP, 5 mg/kg) induced statistically significant increases in SCE frequency ($p \leq 0.05$) in both males and females. No appreciable difference was observed in AGT and in mitotic index in the test substance groups relative to the negative control group.

CONCLUSION

The positive control fulfilled the requirements for a valid test.

Under the conditions of the assay described in this report, based on the findings of this study, the test substance, Gasoline TBA Vapor Condensate, was concluded to be negative for the induction of sister chromatid exchanges in rat peripheral lymphocytes.

REFERENCES

Evans, H.J. (1976) Cytological methods for detecting chemical mutagens, in: A. Hollaender (Ed.), Chemical Mutagens, Principles and Methods for their Detection, vol. 4. Plenum Press, New York, NY.

MINITAB User's guide 2: data Analysis and Quality Tools, Release 12 for Windows® 95 WindowsNT™ February 1998 Chapter 3: Analysis of Variance, 3-1 to3-7.

Perry P. and Wolff S. (1974a) New Giemsa method for the differential staining of sister chromatid, Nature (London) 251, 156-158

Wolff S. and Perry P. (1974) Differential Giemsa staining of sister chromatid and the study of sister chromatid exchanges without autoradiography. Chromosoma 48, 341-353

TABLE 1

Number of Sister Chromatid Exchanges per cell in Negative Air Control Group
Air only
Male and Female Rats

Number of SCE's Counted										
	Animal Number									
Cell No.	1081	1082	1083	1084	1085	1591	1592	1593	1594	1595
1	6	6	7	6	10	6	6	6	6	8
2	8	7	6	5	6	8	7	5	7	5
3	5	6	4	7	8	8	8	6	5	6
4	9	7	8	8	5	6	9	5	4	5
5	6	8	4	9	6	5	6	6	8	7
6	6	5	8	10	6	4	5	8	8	6
7	5	4	9	6	7	9	4	8	5	7
8	10	5	6	7	8	8	3	7	6	4
9	6	6	6	6	8	6	5	8	7	5
10	7	6	7	6	9	6	6	8	7	8
11	8	3	8	7	10	7	7	3	6	5
12	8	7	9	10	5	8	5	4	8	6
13	8	8	10	11	5	6	8	8	1	7
14	6	4	8	8	6	7	5	7	5	6
15	7	2	6	5	8	9	6	6	8	7
16	7	5	7	6	6	4	6	7	5	6
17	5	4	8	6	9	4	7	8	6	8
18	6	6	11	6	5	0	8	9	6	6
19	7	3	8	7	4	5	5	6	7	7
20	7	7	6	5	8	3	4	10	8	6
21	7	2	6	6	5	6	3	6	7	6
22	8	8	7	7	6	3	5	7	7	7
23	8	8	5	1	7	6	6	6	6	6
24	9	9	6	5	7	6	5	8	5	6
25	6	5	6	6	5	5	8	7	7	6
# M1 Cells	35	33	41	33	36	40	36	35	34	40
# M2 Cells	30	30	30	20	30	30	33	31	30	30
# M3 Cells	35	37	29	47	34	30	31	34	36	30
Mitotic Index	6.1	5.0	4.0	3.3	4.8	6.0	5.2	4.1	4.0	3.2

[1] Animal numbers 1081-1085 are males and 1591-1595 are females.

[2] Number of M1, M2 and M3 cells are obtained from 100 metaphases.

Mitotic index; number mitotic figures x 100/1000 cells counted/animal.

TABLE 2

Number of Sister Chromatid Exchanges per cell at 2,000 mg/m^3 of Gasoline TBA Vapor Condensate Male and Female Rats

Number of SCE's Counted										
	Animal Number									
Cell No.	2071	2072	2073	2074	2075	2581	2582	2583	2584	2585
1	8	9	5	6	4	8	5	4	8	8
2	8	6	4	6	10	6	4	8	5	6
3	5	6	6	7	6	5	6	6	6	4
4	6	5	7	5	8	7	8	10	9	5
5	4	7	8	6	5	5	6	5	4	6
6	3	8	7	7	10	8	7	7	8	5
7	4	9	6	6	6	6	4	8	6	6
8	5	6	4	5	6	6	3	6	7	5
9	6	6	8	4	7	8	2	9	8	4
10	5	7	5	5	7	5	6	5	9	8
11	4	7	6	4	8	4	5	4	5	6
12	6	5	9	6	5	9	1	4	6	6
13	7	4	11	6	8	6	4	8	6	5
14	8	8	6	7	6	8	5	8	5	4
15	9	6	10	6	8	4	4	6	7	9
16	6	7	8	5	7	8	6	7	7	11
17	7	5	6	6	6	4	4	9	8	5
18	6	6	9	5	7	9	3	10	7	6
19	5	7	9	6	8	5	6	9	8	7
20	4	4	6	6	8	6	6	8	9	7
21	3	8	7	7	6	8	5	8	6	8
22	6	5	8	8	9	8	7	6	8	6
23	5	6	9	9	7	7	4	7	8	7
24	7	5	7	6	7	7	8	6	8	8
25	6	6	8	7	6	5	4	7	9	6
# M1 Cells	31	30	34	35	35	35	32	36	36	36
# M2 Cells	38	31	30	30	31	35	30	30	30	30
# M3 Cells	31	39	36	35	34	30	38	34	34	34
Mitotic Index	5.4	3.0	3.0	6.0	5.1	4.8	6.1	5.1	4.0	6.0

[1] Animal numbers 2071-2075 are males and 2581-2585 are females.

[2] Number of M1, M2 and M3 cells are obtained from 100 metaphases.

Mitotic index; number mitotic figures x 100/1000 cells counted/animal.

TABLE 3

Number of Sister Chromatid Exchanges per cell at 10,000 mg/m^3 of Gasoline TBA Vapor Condensate Male and Female Rats

Number of SCE's Counted										
	Animal Number									
Cell No.	3071	3072	3073	3074	3075	3581	3582	3583	3584	3585
1	6	4	6	7	8	6	7	9	10	8
2	5	6	7	8	8	7	8	6	4	5
3	4	5	6	6	5	8	3	6	5	6
4	7	7	6	6	6	10	6	5	6	8
5	8	8	6	8	7	10	5	6	8	6
6	11	8	5	7	8	6	3	6	7	6
7	8	7	4	5	8	7	4	7	6	10
8	6	7	8	8	9	6	8	8	10	8
9	5	8	4	6	4	5	5	6	5	9
10	4	7	5	6	8	4	9	8	6	10
11	3	8	6	7	8	6	4	6	6	9
12	2	7	6	8	6	7	5	6	7	9
13	6	6	5	5	6	8	6	5	6	8
14	7	6	6	6	5	10	3	6	6	5
15	8	6	7	7	4	5	5	7	5	4
16	6	7	8	7	8	5	4	8	6	6
17	7	7	5	6	9	4	5	9	5	10
18	9	6	6	7	5	6	8	6	7	10
19	6	8	7	6	9	6	3	6	6	11
20	6	6	8	8	6	7	6	5	7	8
21	5	7	9	8	5	6	9	6	6	8
22	8	8	6	6	4	8	5	7	6	6
23	8	8	4	7	8	8	4	8	5	5
24	9	9	3	8	10	6	3	8	4	8
25	7	6	0	10	4	4	5	8	6	5
# M1 Cells	34	33	41	38	37	30	36	31	30	35
# M2 Cells	30	30	30	30	30	38	36	31	30	34
# M3 Cells	36	37	28	32	33	32	28	38	40	33
Mitotic Index	5.0	6.0	4.0	4.1	4.0	4.0	6.0	4.1	6.0	5.0

[1] Animal numbers 3071-3075 are males and 3581-3585 are females.

[2] Number of M1, M2 and M3 cells are obtained from at least 100 metaphases.

Mitotic index; number mitotic figures x 100/1000 cells counted/animal.

TABLE 4

Number of Sister Chromatid Exchanges per cell at 20,000 mg/m^3 of Gasoline TBA Vapor Condensate Male and Female Rats

Number of SCE's Counted										
	Animal Number									
Cell No.	4081	4082	4083	4084	4085	4591	4592	4593	4594	4595
1	9	6	7	8	4	7	7	6	7	5
2	6	7	5	8	4	10	5	7	6	6
3	9	8	11	5	3	7	6	8	7	5
4	6	8	6	6	5	6	7	6	8	7
5	7	9	10	5	4	7	7	8	6	6
6	8	10	6	6	3	8	5	8	9	8
7	6	6	5	5	2	6	8	9	7	9
8	7	5	6	7	0	5	4	5	6	5
9	8	5	6	9	4	7	8	10	5	8
10	6	4	6	10	6	6	6	5	6	6
11	6	8	7	8	5	6	6	5	6	4
12	5	4	6	9	6	4	8	10	7	8
13	4	9	8	10	7	4	4	8	6	5
14	6	5	9	6	4	5	8	8	7	4
15	5	6	5	8	3	4	6	5	8	8
16	6	7	6	5	5	3	5	8	7	6
17	5	7	7	5	6	1	7	6	6	3
18	5	8	8	4	7	6	7	7	6	8
19	8	5	6	8	6	5	4	5	7	4
20	10	4	7	5	7	4	3	7	6	9
21	6	5	5	6	7	4	8	8	6	5
22	6	9	6	5	6	6	6	6	5	6
23	5	9	7	6	5	6	5	7	6	8
24	4	5	6	6	4	5	8	7	7	5
25	5	4	5	6	8	6	5	6	6	8
# M1 Cells	38	31	28	37	38	40	42	35	30	33
# M2 Cells	40	30	30	37	30	31	30	30	31	30
# M3 Cells	28	39	42	26	32	29	28	35	39	37
Mitotic Index	3.0	6.0	6.0	5.0	5.2	4.4	3.0	3.4	3.0	3.0

[1] Animal numbers 4081-4085 are males and 4591-4595 are females.

[2] Number of M1, M2 and M3 cells are obtained from 100 metaphases.

Mitotic index; number mitotic figures x 100/1000 cells counted/animal.

TABLE 5

Number of Sister Chromatid Exchanges per cell at 5 mg/kg Cyclophosphamide Male and Female Rats

Number of SCE's Counted										
	Animal Number									
Cell No.	5051	5052	5053	5054	5055	5561	5562	5563	5564	5565
1	25	20	28	17	20	30	20	21	30	25
2	20	21	20	15	24	21	15	20	20	20
3	21	23	25	16	28	23	16	18	25	31
4	22	24	26	20	29	24	18	20	26	28
5	26	21	23	14	20	26	20	24	25	26
6	20	24	26	18	22	24	21	20	24	23
7	19	25	25	19	22	28	20	17	26	22
8	20	20	18	20	21	31	20	14	28	23
9	21	21	26	16	20	20	24	16	31	21
10	18	26	19	17	26	19	20	20	28	20
11	20	24	28	18	28	21	21	21	25	20
12	21	28	17	18	27	22	20	22	25	21
13	20	29	20	16	24	24	21	24	20	22
14	21	26	20	23	24	25	18	20	24	22
15	26	22	21	20	20	26	19	21	22	24
16	26	23	28	19	21	22	20	20	24	20
17	19	21	26	19	19	21	20	20	23	20
18	20	20	25	20	22	27	24	21	24	21
19	22	21	26	21	20	26	25	20	24	22
20	20	22	25	20	21	22	26	19	25	24
21	18	23	24	17	20	23	22	17	26	20
22	19	20	28	16	21	24	18	18	26	20
23	20	21	26	19	20	25	16	20	20	20
24	22	20	30	20	24	24	16	20	21	21
25	30	20	31	20	20	20	16	21	22	22
# M1 Cells	41	30	35	34	40	31	40	30	35	38
# M2 Cells	30	33	20	30	31	30	31	40	35	30
# M3 Cells	29	37	45	36	29	39	29	30	30	32
Mitotic Index	5.0	4.0	4.0	2.4	4.0	4.0	2.0	3.8	3.4	6.0

[1] Animal numbers 5051-5055 are males and 5561-5565 are females.

[2] Number of M1, M2 and M3 cells are obtained from 100 metaphases.

Mitotic index; number mitotic figures x 100/1000 cells counted/animal.

TABLE 6

Summary of Sister Chromatid Exchange Data – Gasoline TBA Vapor Condensate Male Rats

Sister Chromatid Exchange data												AGT		MI
Treatment	Animal #	# of Metaphases Scored	Total # of SCEs per Animal	Range of SCEs per Animal Min	Max	Mean SCEs per cell	Group Range Min	Max	Group Mean ± Std. Dev.*			per Animal	per Group	per Group
Air	1081	25	175	5	10	7.0						26		
	1082	25	141	2	9	5.6						25		
	1083	25	176	4	11	7.0	1	to 11	6.6	±	1.8	27	25	4.6
	1084	25	166	1	11	6.6						24		
	1085	25	169	4	10	6.8						26		
Gasoline TBA Vapor Condensate 2,000 mg/m^3	2071	25	143	3	9	5.7						26		
	2072	25	158	4	9	6.3						24		
	2073	25	179	4	11	7.2	3	to 11	6.4	±	1.6	25	25	4.5
	2074	25	151	4	9	6.0						26		
	2075	25	175	4	10	7.0						26		
Gasoline TBA Vapor Condensate 10,000 mg/m^3	3071	25	161	2	11	6.4						25		
	3072	25	172	4	9	6.9						25		
	3073	25	143	0	9	5.7	0	to 11	6.5	±	1.7	28	26	4.6
	3074	25	173	5	10	6.9						26		
	3075	25	168	4	10	6.7						26		
Gasoline TBA Vapor Condensate 20,000 mg/m^3	4081	25	158	4	10	6.3						25		
	4082	25	163	4	10	6.5						25		
	4083	25	166	5	11	6.6	0	to 11	6.2	±	1.8	24	25	5.0
	4084	25	166	4	10	6.6						27		
	4085	25	121	0	8	4.8						26		
Cyclophosphamide 5 mg/kg	5051	25	536	18	30	21.4						27		
	5052	25	565	20	29	22.6						25		
	5053	25	611	17	31	24.4	14	to 31	21.9*	±	3.5	24	26	3.9
	5054	25	458	14	23	18.3						25		
	5055	25	563	19	29	22.5						27		

* The standard deviation was calculated using the data of all 125 metaphases scored.

‡ = Dunnett's t test ($p \leq 0.05$)

MI = Mitotic Index: (Number of cells in mitosis out of 1000 cells)

AGT=Average generation time: Number of hours in BrdU X 100/ (number M_1 cells x 1)+(number M_2 cells x 2)+(number M_3 cells x 3)

TABLE 7

Summary of Sister Chromatid Exchange Data – Gasoline TBA Vapor Condensate Female Rats

| Sister Chromatid Exchange data | | |

Appendix A: Contracting Sponsor's Exposure Data and Animal Data

	Animal Exposure and Animal Data Preface	Appendix A

INTRODUCTION: The following is data generated at Huntingdon Life Sciences, East Millstone, NJ. The separately issued main study report should be referenced for details of the procedures used for test atmosphere generation/characterization and animal evaluations.

STUDY DATES:

Date of Animal Receipt:	15 July 2002
Experimental Initiation Date:	26 July 2002 (in-life)
Experimental Completion Date:	22 August 2002 (in-life)

EXPOSURES AND IN-LIFE SUMMARY: The actual measured results during the exposures were comparable to the targeted exposure levels. There were no exposure-related effects seen in the test animals with regards to body weights and feed consumption.

TABLE OF CONTENTS

TABLES

A. Chamber Monitoring Results....1208
B. Summary of Clinical Observations (pretest only)....1216
C. Mean Body Weights (grams)....1218
D. Mean Body Weight Change from Baseline (grams)....1220
E. Mean Feed Consumption Values (grams/kg/day)....1222
F. Individual Clinical Observations (pretest only)....1224
G. Individual Body Weights (grams)....1234
H. Individual Body Weight Change from Baseline (grams)....1244
I. Individual Feed Consumption Values (grams/kg/day)....1254
J. Animal Termination History....1264

Chamber Monitoring Results
Cumulative Exposure Record
Group IA - 0 (air only) mg/m^3

Day	Date	Exposure Number	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
			Nominal	Mean	Individual				MMAD	GSD	TMC	Mean Temperature	Humidity
			(mg/m^3)	(mg/m^3)	(mg/m^3)				(μm)		(mg/m^3)	(°C)	(%)
0	26-Jul-02	1	0	0	0	0	0	0				25	53
1	27-Jul-02	2	0	0	0	0	0	0				25	53
4	29-Jul-02	3	0	0	0	0	0	0				25	51
5	30-Jul-02	4	0	0	0	0	0	0				24	51
6	31-Jul-02	5	0	0	0	0	0	0	2.423	2.755	4.95E-03	24	54
7	1-Aug-02	6	0	0	0	0	0	0				24	54
8	2-Aug-02	7	0	0	0	0	0	0				24	55
11	5-Aug-02	8	0	0	0	0	0	0				24	51
12	6-Aug-02	9	0	0	0	0	0	0				25	43
13	7-Aug-02	10	0	0	0	0	0	0				26	47
14	8-Aug-02	11	0	0	0	0	0	0	3.669	2.135	7.68E-03	25	48
15	9-Aug-02	12	0	0	0	0	0	0				25	51
18	12-Aug-02	13	0	0	0	0	0	0				26	50
19	13-Aug-02	14	0	0	0	0	0	0	0.7598	1.887	2.19E-02	25	51
20	14-Aug-02	15	0	0	0	0	0	0				25	52
21	15-Aug-02	16	0	0	0	0	0	0				24	55
22	16-Aug-02	17	0	0	0	0	0	0				24	54
25	19-Aug-02	18	0	0	0	0	0	0				25	51
26	20-Aug-02	19	0	0	0	0	0	0				25	52
27	21-Aug-02	20	0	0	0	0	0	0				25	55
		Mean	**0**		**0**				**2.284**	**2.259**	**1.15E-02**	**24.8**	**51.6**
		S.D.	**0**		**0**				**1.460**	**0.447**	**7.43E-03**	**0.6**	**3.0**

Chamber Monitoring Results
Cumulative Exposure Record
Group IB - 0 (air only) mg/m^3

Day	Date	Exposure Number	Nominal	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
				Mean	Individual								Mean Temperature	Humidity
			(mg/m^3)	(mg/m^3)	(mg/m^3)					MMAD (μm)	GSD	TMC (mg/m^3)	(°C)	(%)
0	26-Jul-02	1	0	0	0	0	0	0					23	55
1	27-Jul-02	2	0	0	0	0	0	0					24	55
4	29-Jul-02	3	0	0	0	0	0	0					24	53
5	30-Jul-02	4	0	0	0	0	0	0					25	53
6	31-Jul-02	5	0	0	0	0	0	0		3.102	2.358	7.27E-03	25	56
7	1-Aug-02	6	0	0	0	0	0	0					25	56
8	2-Aug-02	7	0	0	0	0	0	0					25	56
11	5-Aug-02	8	0	0	0	0	0	0					25	53
12	6-Aug-02	9	0	0	0	0	0	0					24	45
13	7-Aug-02	10	0	0	0	0	0	0					24	49
14	8-Aug-02	11	0	0	0	0	0	0		2.850	1.972	5.51E-03	24	50
15	9-Aug-02	12	0	0	0	0	0	0					24	52
18	12-Aug-02	13	0	0	0	0	0	0					24	53
19	13-Aug-02	14	0	0	0	0	0	0		0.7383	1.341	2.12E-02	25	54
20	14-Aug-02	15	0	0	0	0	0	0					25	54
21	15-Aug-02	16	0	0	0	0	0	0					25	56
22	16-Aug-02	17	0	0	0	0	0	0					25	54
25	19-Aug-02	18	0	0	0	0	0	0					25	52
26	20-Aug-02	19	0	0	0	0	0	0					24	56
27	21-Aug-02	20	0	0	0	0	0	0					23	56
		Mean	**0**		**0**					**2.230**	**1.890**	**1.13E-02**	**24.4**	**53.4**
		S.D.	**0**		**0**					**1.298**	**0.513**	**7.02E-03**	**0.7**	**2.8**

Chamber Monitoring Results
Cumulative Exposure Record
Group IIA - 2,000 mg/m^3

Day	Date	Exposure Number	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
			Nominal	Mean	Individual				MMAD	GSD	TMC	Mean Temperature	Humidity
			(mg/m^3)	(mg/m^3)	(mg/m^3)				(μm)		(mg/m^3)	(°C)	(%)
0	26-Jul-02	1	1830	1840	1850	1750	1780	1980				23	50
1	27-Jul-02	2	2090	2000	2070	1860	2060	2010				23	50
4	29-Jul-02	3	2070	1935	2120	1860	1860	1900				24	48
5	30-Jul-02	4	1990	1933	1770	1980	1890	2090				23	49
6	31-Jul-02	5	2010	1953	1940	1990	2010	1870	2.312	2.133	4.69E-03	23	51
7	1-Aug-02	6	2150	1975	1930	1960	2030	1980				23	51
8	2-Aug-02	7	2110	2005	2090	1810	1840	2280				23	50
11	5-Aug-02	8	2080	1970	2080	2070	2080	1650				23	48
12	6-Aug-02	9	1950	1963	2010	1990	1980	1870				24	40
13	7-Aug-02	10	2020	2135	2370	2050	2060	2060				24	44
14	8-Aug-02	11	2160	2188	2400	2470	1800	2080	4.144	2.109	9.38E-03	24	44
15	9-Aug-02	12	2020	1953	1770	1870	2120	2050				24	46
18	12-Aug-02	13	2020	1845	2130	1780	1700	1770				24	47
19	13-Aug-02	14	2190	2043	1750	1850	2340	2230	0.7525	1.783	2.35E-02	23	47
20	14-Aug-02	15	2090	2023	1980	2030	2020	2060				23	48
21	15-Aug-02	16	2090	2013	1850	2170	2000	2030				23	50
22	16-Aug-02	17	2140	2070	1890	2030	2020	2340				23	49
25	19-Aug-02	18	2200	2090	2070	2030	2210	2050				23	48
26	20-Aug-02	19	2070	2068	2120	2040	2170	1940				24	48
27	21-Aug-02	20	2130	2183	2400	2280	2040	2010				24	52
		Mean	**2071**		**2009**				**2.403**	**2.008**	**1.25E-02**	**23.4**	**48.0**
		S.D.	**88**		**170**				**1.698**	**0.196**	**7.99E-03**	**0.5**	**2.8**

Chamber Monitoring Results
Cumulative Exposure Record
Group IIB - 2,000 mg/m^3

Day	Date	Exposure Number	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
			Nominal	Mean	Individual				MMAD	GSD	TMC	Mean Temperature	Humidity
			(mg/m^3)	(mg/m^3)	(mg/m^3)				(μm)		(mg/m^3)	(°C)	(%)
0	26-Jul-02	1	1830	1928	1800	1910	1970	2030				22	52
1	27-Jul-02	2	2090	2105	2130	2110	2100	2080				22	53
4	29-Jul-02	3	2070	2060	1920	1960	2010	2350				23	50
5	30-Jul-02	4	1990	1935	1820	2000	1890	2030				23	52
6	31-Jul-02	5	2010	1830	1730	1790	2000	1800	3.582	2.537	6.02E-03	23	54
7	1-Aug-02	6	2150	2048	2030	2010	2080	2070				23	55
8	2-Aug-02	7	2110	2123	2400	2130	2140	1820				23	55
11	5-Aug-02	8	2080	2020	1940	1940	1800	2400				23	51
12	6-Aug-02	9	1950	2018	2010	1990	1980	2090				23	43
13	7-Aug-02	10	2020	1970	2050	1950	1900	1980				23	46
14	8-Aug-02	11	2160	2203	1720	2610	2200	2280	2.398	2.155	2.09E-03	23	45
15	9-Aug-02	12	2020	1968	2170	1780	1980	1940				22	50
18	12-Aug-02	13	2020	2088	1870	1980	2220	2280				23	49
19	13-Aug-02	14	2190	2165	2180	1890	2310	2280	0.7703	2.300	1.73E-02	24	50
20	14-Aug-02	15	2090	2008	2050	2010	1960	2010				23	52
21	15-Aug-02	16	2090	1995	2000	1990	2030	1960				23	53
22	16-Aug-02	17	2140	2028	2110	2020	2080	1900				23	53
25	19-Aug-02	18	2200	2073	2050	2090	2180	1970				24	50
26	20-Aug-02	19	2070	2023	1970	1960	1910	2280				22	54
27	21-Aug-02	20	2130	2025	1980	1950	2090	2080				22	56
		Mean	**2071**		**2031**				**2.250**	**2.331**	**8.47E-03**	**22.9**	**51.2**
		S.D.	**88**		**160**				**1.412**	**0.193**	**6.45E-03**	**0.6**	**3.4**

Table A GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS 00-6131

Chamber Monitoring Results
Cumulative Exposure Record
Group IIIA - 10,000 mg/m^3

Day	Date	Exposure Number	Nominal	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
				Mean	Individual								Mean Temperature	Humidity
			(mg/m^3)	(mg/m^3)	(mg/m^3)					MMAD (μm)	GSD	TMC (mg/m^3)	(°C)	(%)
0	26-Jul-02	1	10100	10490	11200	10700	10100	9950					23	50
1	27-Jul-02	2	9960	9908	9130	9480	11100	9920					24	50
4	29-Jul-02	3	10200	10130	10900	9770	9920	9920					24	50
5	30-Jul-02	4	10400	10380	10100	10500	10500	10400					23	50
6	31-Jul-02	5	10300	10780	10300	10900	11800	10100		8.779	2.634	7.41E-03	23	52
7	1-Aug-02	6	10400	10000	10500	10000	9800	9700					23	52
8	2-Aug-02	7	9790	10500	9800	10700	10500	11000					23	52
11	5-Aug-02	8	10000	9818	10100	9610	9160	10400					23	49
12	6-Aug-02	9	9580	10210	8650	10100	11500	10600					24	40
13	7-Aug-02	10	10500	10580	10500	10900	10700	10200					24	44
14	8-Aug-02	11	9910	10200	9920	10900	10100	9860		2.937	2.122	3.72E-03	24	44
15	9-Aug-02	12	9770	10010	10400	9950	10000	9700					24	47
18	12-Aug-02	13	9770	9763	10000	9610	9610	9830					24	47
19	13-Aug-02	14	10000	10190	10700	10100	10000	9950		0.7457	1.589	2.45E-02	23	49
20	14-Aug-02	15	9560	10220	9580	9390	12000	9920					23	51
21	15-Aug-02	16	9660	9463	10000	8700	8650	10500					23	52
22	16-Aug-02	17	9850	10180	10500	10200	9700	10300					23	52
25	19-Aug-02	18	10100	10020	10000	9290	10300	10500					23	48
26	20-Aug-02	19	10600	10440	11200	9770	10200	10600		0.8931	1.546	2.23E-03	24	50
27	21-Aug-02	20	10000	9868	9700	8870	10200	10700					24	51
		Mean	**10020**		**10160**					**3.339**	**1.973**	**9.47E-03**	**23.5**	**49.0**
		S.D.	**302**		**641**					**3.762**	**0.513**	**8.88E-03**	**0.5**	**3.2**

Table A GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS 00-6131

Chamber Monitoring Results
Cumulative Exposure Record
Group IIIB - 10,000 mg/m^3

Day	Date	Exposure Number	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
			Nominal	Mean	Individual				MMAD	GSD	TMC	Mean Temperature	Humidity
			(mg/m^3)	(mg/m^3)	(mg/m^3)				(μm)		(mg/m^3)	(°C)	(%)
0	26-Jul-02	1	10100	10010	10200	10100	10100	9640				23	47
1	27-Jul-02	2	9960	10500	10700	10100	11000	10200				23	48
4	29-Jul-02	3	10200	10020	9260	11200	9920	9700				23	49
5	30-Jul-02	4	10400	10000	9450	10600	10100	9860				24	47
6	31-Jul-02	5	10300	10090	9540	10100	10400	10300	1.403	1.947	2.32E-03	24	48
7	1-Aug-02	6	10400	10160	10500	10100	10100	9920				24	48
8	2-Aug-02	7	9790	10100	9390	10000	10500	10500				24	48
11	5-Aug-02	8	10000	10240	10100	10700	10900	9260				24	46
12	6-Aug-02	9	9580	10620	9990	11100	11000	10400				24	39
13	7-Aug-02	10	10500	10750	10500	11100	10600	10800				24	42
14	8-Aug-02	11	9910	11150	10900	11800	11300	10600	2.459	1.985	2.80E-03	24	41
15	9-Aug-02	12	9770	10260	10500	9950	10400	10200				23	44
18	12-Aug-02	13	9770	10680	10400	9920	11000	11400				24	45
19	13-Aug-02	14	10000	10280	10300	10300	10200	10300	0.7601	2.395	2.68E-02	24	45
20	14-Aug-02	15	9560	10240	10400	9420	11200	9920				24	46
21	15-Aug-02	16	9660	9605	10300	9200	8420	10500				24	47
22	16-Aug-02	17	9850	10330	10400	10300	10000	10600				24	48
25	19-Aug-02	18	10100	9880	9610	8810	10500	10600				24	45
26	20-Aug-02	19	10600	10380	10600	9800	10600	10500	0.9700	1.968	3.03E-03	24	47
27	21-Aug-02	20	10000	9955	10000	9320	10500	10000				23	48
		Mean	**10020**		**10260**				**1.398**	**2.074**	**8.74E-03**	**23.8**	**45.9**
		S.D.	**302**		**588**				**0.756**	**0.215**	**1.04E-02**	**0.4**	**2.7**

Chamber Monitoring Results
Cumulative Exposure Record
Group IVA - 20,000 mg/m^3

Day	Date	Exposure Number	Nominal	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
				Mean	Individual								Mean	
			(mg/m^3)	(mg/m^3)	(mg/m^3)					MMAD (μm)	GSD	TMC (mg/m^3)	Temperature (°C)	Humidity (%)
0	26-Jul-02	1	18900	20500	20600	20400	20500	20500					26	51
1	27-Jul-02	2	19100	20650	21300	20700	19800	20800					26	52
4	29-Jul-02	3	18400	19800	20000	18900	20100	20200					26	52
5	30-Jul-02	4	18500	20380	19600	20300	20600	21000					25	51
6	31-Jul-02	5	18900	19500	19500	18900	19800	19800		1.689	2.289	2.75E-03	25	52
7	1-Aug-02	6	19100	19480	19100	19400	19100	20300					25	52
8	2-Aug-02	7	18900	19250	19600	20000	18900	18500					25	53
11	5-Aug-02	8	18800	19530	19300	20000	19100	19700					25	51
12	6-Aug-02	9	19100	19950	18900	20400	20600	19900					26	43
13	7-Aug-02	10	19700	21380	20600	21400	21700	21800					26	45
14	8-Aug-02	11	18800	20530	18000	21300	21600	21200		2.505	2.034	3.68E-03	26	46
15	9-Aug-02	12	18700	19480	19500	19400	19000	20000					26	49
18	12-Aug-02	13	18800	19200	19400	19700	19200	18500					26	49
19	13-Aug-02	14	19000	18500	18200	20000	19400	16400		0.7685	1.346	1.81E-02	25	50
20	14-Aug-02	15	19500	19000	18500	19000	18600	19900					25	53
21	15-Aug-02	16	19400	19430	19200	19600	19200	19700					25	55
22	16-Aug-02	17	19100	20630	20000	21400	20500	20600					25	53
25	19-Aug-02	18	19300	19500	20000	18300	19100	20600					25	50
26	20-Aug-02	19	19200	20250	21600	19700	19700	20000					26	51
27	21-Aug-02	20	18800	20300	20200	20000	20600	20400					26	54
		Mean	**19000**		**19860**					**1.654**	**1.890**	**8.18E-03**	**25.5**	**50.6**
		S.D.	**321**		**954**					**0.869**	**0.488**	**7.03E-03**	**0.5**	**3.0**

Table A GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS 00-6131

Chamber Monitoring Results
Cumulative Exposure Record
Group IVB - 20,000 mg/m^3

Day	Date	Exposure Number	Analytical Chamber Concentration						Particle Size Determinations			Chamber Environment	
			Nominal	Mean	Individual				MMAD	GSD	TMC	Mean Temperature	Humidity
			(mg/m^3)	(mg/m^3)	(mg/m^3)				(μm)		(mg/m^3)	(°C)	(%)
0	26-Jul-02	1	18900	19550	19000	19000	20400	19800				24	52
1	27-Jul-02	2	19100	19650	19300	19600	19500	20200				24	54
4	29-Jul-02	3	18400	20080	19900	20200	20100	20100				24	52
5	30-Jul-02	4	18500	19400	18700	18600	19700	20600				26	51
6	31-Jul-02	5	18900	20250	20200	20400	20400	20000	1.032	1.790	1.88E-03	26	51
7	1-Aug-02	6	19100	20180	20300	19800	19900	20700				25	53
8	2-Aug-02	7	18900	19600	19500	19500	18900	20500				26	52
11	5-Aug-02	8	18800	19880	20000	19900	19600	20000				26	51
12	6-Aug-02	9	19100	19880	20000	20500	19300	19700				25	43
13	7-Aug-02	10	19700	20650	20600	20300	20600	21100				25	47
14	8-Aug-02	11	18800	19330	17400	19500	20300	20100	1.793	1.769	2.30E-03	24	46
15	9-Aug-02	12	18700	20300	20700	20300	19600	20600				24	48
18	12-Aug-02	13	18800	20050	19900	20200	20200	19900				25	50
19	13-Aug-02	14	19000	19750	20100	20200	19800	18900	0.7982	2.481	2.51E-02	26	50
20	14-Aug-02	15	19500	19980	19600	20200	19500	20600				25	51
21	15-Aug-02	16	19400	20580	20700	20300	20100	21200				25	55
22	16-Aug-02	17	19100	20650	19700	21000	21000	20900				25	53
25	19-Aug-02	18	19300	20330	19700	20300	20000	21300				26	50
26	20-Aug-02	19	19200	20030	21300	19700	20200	18900	0.9155	1.711	3.08E-03	25	52
27	21-Aug-02	20	18800	20500	20200	20600	20600	20600				24	55
		Mean	**19000**		**20030**				**1.135**	**1.938**	**8.09E-03**	**25.0**	**50.8**
		S.D.	**321**		**662**				**0.449**	**0.364**	**9.83E-03**	**0.8**	**3.0**

TABLE B

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

MALES — SUMMARY OF CLINICAL OBSERVATIONS

	GROUP#	DAY OF STUDY -4	TOTAL
# OF ANIMALS EXAMINED	1	5	
	2	5	
	3	5	
	4	5	
	5	5	
NORMAL			
WITHIN NORMAL LIMITS	1	5	5
	2	5	5
	3	5	5
	4	5	5
	5	5	5

TABLE B

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

FEMALES — SUMMARY OF CLINICAL OBSERVATIONS

	GROUP#	DAY OF STUDY -4	TOTAL
# OF ANIMALS EXAMINED	1	5	
	2	5	
	3	5	
	4	5	
	5	5	
NORMAL			
WITHIN NORMAL LIMITS	1	5	5
	2	5	5
	3	5	5
	4	5	5
	5	5	5

TABLE C

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

MALES

MEAN BODY WEIGHTS (GRAMS)

	DOSE GROUP:	I	II	III	IV	V
	DOSE LEVEL (MG/M3):	0	2000	10000	20000	SCE+CONTROL
DAY -3	MEAN	148	147	145	146	146
	S.D.	13.8	12.5	12.2	9.3	7.6
	N	5	5	5	5	5
DAY 4	MEAN	204	205	200	210	208
	S.D.	18.5	11.9	17.3	15.3	12.2
	N	5	5	5	5	5
DAY 11	MEAN	257	259	253	267	262
	S.D.	22.3	14.4	22.5	22.3	16.3
	N	5	5	5	5	5
DAY 18	MEAN	311	309	307	322	316
	S.D.	26.9	16.2	22.4	29.2	19.2
	N	5	5	5	5	5
DAY 25	MEAN	355	349	350	363	358
	S.D.	30.9	22.2	26.8	31.7	23.0
	N	5	5	5	5	5

No statistically significant differences

TABLE C

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

FEMALES

MEAN BODY WEIGHTS (GRAMS)

	DOSE GROUP:	I	II	III	IV	V
	DOSE LEVEL (MG/M3):	0	2000	10000	20000	SCE+CONTROL
DAY -3	MEAN	129	128	127	128	129
	S.D.	8.2	8.4	6.6	5.5	6.1
	N	5	5	5	5	5
DAY 4	MEAN	161	158	167	163	165
	S.D.	13.3	10.6	10.8	7.8	11.1
	N	5	5	5	5	5
DAY 11	MEAN	194	184	193	188	193
	S.D.	18.1	15.1	12.7	8.0	15.9
	N	5	5	5	5	5
DAY 18	MEAN	218	208	223	219	216
	S.D.	23.6	18.3	28.0	10.3	17.0
	N	5	5	5	5	5
DAY 25	MEAN	237	222	235	235	235
	S.D.	22.9	22.0	15.0	10.2	22.3
	N	5	5	5	5	5

No statistically significant differences

TABLE D

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

MALES — MEAN BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

DOSE GROUP:		I	II	III	IV	V
DOSE LEVEL (MG/M3):		0	2000	10000	20000	SCE+CONTROL
DAY -3 TO 4	MEAN	56	58	55	64	62
	S.D.	5.0	3.5	5.6	9.7	6.8
	N	5	5	5	5	5
DAY -3 TO 11	MEAN	109	112	108	121	116
	S.D.	9.1	3.3	10.7	15.9	11.4
	N	5	5	5	5	5
DAY -3 TO 18	MEAN	164	162	162	176	170
	S.D.	13.8	4.9	10.8	22.7	15.0
	N	5	5	5	5	5
DAY -3 TO 25	MEAN	207	202	205	217	212
	S.D.	18.3	11.0	16.2	25.5	18.9
	N	5	5	5	5	5

No statistically significant differences

TABLE D

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

FEMALES — MEAN BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

DOSE GROUP:		I	II	III	IV	V
DOSE LEVEL (MG/M3):		0	2000	10000	20000	SCE+CONTROL
DAY -3 TO 4	MEAN	32	30	40	34	36
	S.D.	6.7	8.0	9.5	5.8	8.1
	N	5	5	5	5	5
DAY -3 TO 11	MEAN	65	56	67	60	65
	S.D.	13.9	10.3	6.8	6.8	12.0
	N	5	5	5	5	5
DAY -3 TO 18	MEAN	88	80	96	90	87
	S.D.	19.1	16.2	24.8	9.3	11.8
	N	5	5	5	5	5
DAY -3 TO 25	MEAN	107	94	109	107	107
	S.D.	16.8	20.8	12.3	6.0	16.9
	N	5	5	5	5	5

No statistically significant differences

TABLE E

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

MALES — MEAN FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

		DOSE GROUP:	I	II	III	IV	V
		DOSE LEVEL (MG/M3):	0	2000	10000	20000	SCE+CONTROL
DAY	4	MEAN	126	126	124	128	128
		S.D.	3.8	8.8	2.9	8.1	6.5
		N	5	5	5	5	5
DAY	11	MEAN	106	110	102	107	106
		S.D.	3.1	3.1	3.2	4.4	6.0
		N	5	5	5	5	5
DAY	18	MEAN	97	98	95	93	98
		S.D.	4.0	3.8	1.8	1.5	7.7
		N	5	5	3	5	5
DAY	25	MEAN	85	88	83	83	84
		S.D.	3.8	3.7	3.7	1.8	4.0
		N	5	5	5	5	5

No statistically significant differences

TABLE E

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

FEMALES — MEAN FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

	DOSE GROUP:	I	II	III	IV	V
	DOSE LEVEL (MG/M3):	0	2000	10000	20000	SCE+CONTROL
DAY 4	MEAN	128	125	127	122	128
	S.D.	14.3	10.3	8.8	3.3	6.0
	N	5	5	4	5	5
DAY 11	MEAN	105	108	114	105	106
	S.D.	7.7	6.4	17.6	3.9	3.9
	N	5	5	5	5	2
DAY 18	MEAN	93	100	102	99	103
	S.D.	2.7	6.3	6.1	5.0	5.3
	N	5	5	4	5	2
DAY 25	MEAN	89	94	92	92	93
	S.D.	3.9	5.6	3.4	2.8	3.8
	N	5	5	5	5	4

No statistically significant differences

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

MALES GROUP 1 0 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
1081	WITHIN NORMAL LIMITS	P
1082	WITHIN NORMAL LIMITS	P
1083	WITHIN NORMAL LIMITS	P
1084	WITHIN NORMAL LIMITS	P
1085	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

MALES GROUP 2 2000 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
2071	WITHIN NORMAL LIMITS	P
2072	WITHIN NORMAL LIMITS	P
2073	WITHIN NORMAL LIMITS	P
2074	WITHIN NORMAL LIMITS	P
2075	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

MALES GROUP 3 10000 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
3071	WITHIN NORMAL LIMITS	P
3072	WITHIN NORMAL LIMITS	P
3073	WITHIN NORMAL LIMITS	P
3074	WITHIN NORMAL LIMITS	P
3075	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

MALES GROUP 4 20000 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
4081	WITHIN NORMAL LIMITS	P
4082	WITHIN NORMAL LIMITS	P
4083	WITHIN NORMAL LIMITS	P
4084	WITHIN NORMAL LIMITS	P
4085	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

Huntingdon Life Sciences 00-6131G
SPONSOR STUDY NO. 211-TBA-S

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

MALES GROUP 5 SCE 5 MG/KG

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
5051	WITHIN NORMAL LIMITS	P
5052	WITHIN NORMAL LIMITS	P
5053	WITHIN NORMAL LIMITS	P
5054	WITHIN NORMAL LIMITS	P
5055	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

FEMALES GROUP 1 0 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
1591	WITHIN NORMAL LIMITS	P
1592	WITHIN NORMAL LIMITS	P
1593	WITHIN NORMAL LIMITS	P
1594	WITHIN NORMAL LIMITS	P
1595	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

FEMALES GROUP 2 2000 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
2581	WITHIN NORMAL LIMITS	P
2582	WITHIN NORMAL LIMITS	P
2583	WITHIN NORMAL LIMITS	P
2584	WITHIN NORMAL LIMITS	P
2585	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

FEMALES GROUP 3 10000 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
3581	WITHIN NORMAL LIMITS	P
3582	WITHIN NORMAL LIMITS	P
3583	WITHIN NORMAL LIMITS	P
3584	WITHIN NORMAL LIMITS	P
3585	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

FEMALES GROUP 4 20000 MG/M3

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
4591	WITHIN NORMAL LIMITS	P
4592	WITHIN NORMAL LIMITS	P
4593	WITHIN NORMAL LIMITS	P
4594	WITHIN NORMAL LIMITS	P
4595	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE F

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL CLINICAL OBSERVATIONS

FEMALES GROUP 5 SCE 5 MG/KG

ANIMAL#	OBSERVATIONS	DAY OF STUDY - 4
5561	WITHIN NORMAL LIMITS	P
5562	WITHIN NORMAL LIMITS	P
5563	WITHIN NORMAL LIMITS	P
5564	WITHIN NORMAL LIMITS	P
5565	WITHIN NORMAL LIMITS	P

CODE: 1-SLIGHT 2-MODERATE 3-MARKED P-PRESENT

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

MALES GROUP I 0 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
1081	143	200	250	304	342
1082	141	197	252	309	357
1083	155	211	263	321	363
1084	167	230	290	349	398
1085	132	181	229	275	314
MEAN	148	204	257	311	355
S.D.	13.8	18.5	22.3	26.9	30.9
N	5	5	5	5	5

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

MALES GROUP II 2000 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
2071	132	187	240	291	331
2072	163	219	275	328	376
2073	156	212	271	322	369
2074	142	203	257	307	341
2075	140	203	250	295	328
MEAN	147	205	259	309	349
S.D.	12.5	11.9	14.4	16.2	22.2
N	5	5	5	5	5

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

MALES GROUP III 10000 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
3071	140	194	238	293	329
3072	145	195	253	313	365
3073	132	183	236	288	330
3074	165	229	291	344	390
3075	142	198	245	298	336
MEAN	145	200	253	307	350
S.D.	12.2	17.3	22.5	22.4	26.8
N	5	5	5	5	5

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

MALES GROUP IV 20000 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
4081	143	210	262	323	362
4082	138	186	233	275	312
4083	147	222	285	343	389
4084	162	225	289	350	390
4085	141	205	266	319	362
MEAN	146	210	267	322	363
S.D.	9.3	15.3	22.3	29.2	31.7
N	5	5	5	5	5

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

MALES GROUP V SCE+CONTROL

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
5051	158	220	277	327	369
5052	142	208	264	319	359
5053	144	205	268	323	370
5054	138	189	234	282	318
5055	149	218	269	329	374
MEAN	146	208	262	316	358
S.D.	7.6	12.2	16.3	19.2	23.0
N	5	5	5	5	5

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

FEMALES GROUP I 0 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
1591	140	181	208	227	256
1592	131	164	214	246	254
1593	133	162	183	212	231
1594	126	149	197	221	242
1595	118	149	170	182	200
MEAN	129	161	194	218	237
S.D.	8.2	13.3	18.1	23.6	22.9
N	5	5	5	5	5

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

FEMALES GROUP II 2000 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
2581	133	159	184	202	215
2582	139	162	193	212	222
2583	117	140	158	182	194
2584	126	161	186	215	226
2585	127	168	197	232	255
MEAN	128	158	184	208	222
S.D.	8.4	10.6	15.1	18.3	22.0
N	5	5	5	5	5

Huntingdon Life Sciences 00-6131G
Genotoxicity Sub-Group

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

FEMALES GROUP III 10000 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
3581	131	169	200	219	241
3582	127	161	188	197	221
3583	135	181	212	270	258
3584	124	153	188	208	222
3585	117	169	180	220	235
MEAN	127	167	193	223	235
S.D.	6.6	10.8	12.7	28.0	15.0
N	5	5	5	5	5

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

FEMALES GROUP IV 20000 MG/M3

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
4591	132	165	193	224	241
4592	127	152	179	204	225
4593	136	173	195	227	250
4594	123	161	180	212	230
4595	124	162	194	227	231
MEAN	128	163	188	219	235
S.D.	5.5	7.8	8.0	10.3	10.2
N	5	5	5	5	5

Huntingdon Life Sciences 00-6131G
Genotoxicity Sub-Group

TABLE G

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHTS (GRAMS)

FEMALES GROUP V SCE+CONTROL

	DAY OF STUDY				
ANIMAL#	-3	4	11	18	25
5561	124	165	192	216	233
5562	133	158	187	221	240
5563	131	168	195	223	240
5564	135	181	218	232	263
5565	121	152	175	187	201
MEAN	129	165	193	216	235
S.D.	6.1	11.1	15.9	17.0	22.3
N	5	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

MALES GROUP I 0 MG/M3

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
1081	56	107	161	198
1082	55	111	167	215
1083	55	108	165	207
1084	63	123	182	231
1085	49	98	143	182
MEAN	56	109	164	207
S.D.	5.0	9.1	13.8	18.3
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

MALES GROUP II 2000 MG/M3

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
2071	55	108	159	199
2072	56	112	165	213
2073	56	115	166	213
2074	61	116	166	200
2075	63	109	155	187
MEAN	58	112	162	202
S.D.	3.5	3.3	4.9	11.0
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

MALES GROUP III 10000 MG/M3

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
3071	54	99	153	189
3072	50	108	168	220
3073	51	104	156	198
3074	64	126	179	225
3075	56	103	156	193
MEAN	55	108	162	205
S.D.	5.6	10.7	10.8	16.2
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

MALES GROUP IV 20000 MG/M3

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
4081	67	119	180	219
4082	48	95	137	174
4083	75	138	196	242
4084	63	127	188	229
4085	64	124	178	221
MEAN	64	121	176	217
S.D.	9.7	15.9	22.7	25.5
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

MALES GROUP V SCE+CONTROL

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
5051	62	119	169	211
5052	66	122	177	217
5053	61	124	179	226
5054	51	96	144	180
5055	69	120	180	225
MEAN	62	116	170	212
S.D.	6.8	11.4	15.0	18.9
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

FEMALES GROUP I 0 MG/M3

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
1591	41	68	87	117
1592	34	83	116	124
1593	29	50	79	98
1594	23	71	94	115
1595	31	52	64	82
MEAN	32	65	88	107
S.D.	6.7	13.9	19.1	16.8
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

FEMALES GROUP II 2000 MG/M3

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
2581	26	52	69	82
2582	23	54	73	83
2583	24	42	65	78
2584	35	60	88	100
2585	41	70	105	128
MEAN	30	56	80	94
S.D.	8.0	10.3	16.2	20.8
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

FEMALES GROUP III 10000 MG/M3

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
3581	39	69	88	110
3582	34	61	70	94
3583	46	78	135	123
3584	28	64	84	98
3585	52	63	102	118
MEAN	40	67	96	109
S.D.	9.5	6.8	24.8	12.3
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

FEMALES GROUP IV 20000 MG/M3

ANIMAL#	DAY OF STUDY -3-4	-3-11	-3-18	-3-25
4591	33	61	92	109
4592	25	52	77	98
4593	37	59	91	115
4594	38	57	89	106
4595	39	70	103	107
MEAN	34	60	90	107
S.D.	5.8	6.8	9.3	6.0
N	5	5	5	5

TABLE H

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL BODY WEIGHT CHANGE FROM BASELINE (GRAMS)

FEMALES GROUP V SCE+CONTROL

	DAY OF STUDY			
ANIMAL#	-3-4	-3-11	-3-18	-3-25
5561	41	68	92	109
5562	25	54	88	107
5563	37	65	92	110
5564	46	83	97	128
5565	31	54	67	81
MEAN	36	65	87	107
S.D.	8.1	12.0	11.8	16.9
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

MALES GROUP I 0 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
1081	125	104	96	82
1082	131	111	102	91
1083	122	103	92	84
1084	124	105	94	83
1085	130	107	100	87
MEAN	126	106	97	85
S.D.	3.8	3.1	4.0	3.8
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

MALES GROUP II 2000 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
2071	132	110	96	87
2072	112	108	97	88
2073	122	111	97	86
2074	134	115	104	95
2075	128	108	95	87
MEAN	126	110	98	88
S.D.	8.8	3.1	3.8	3.7
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

MALES GROUP III 10000 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
3071	125	104	SF	86
3072	120	102	93	82
3073	125	105	95	87
3074	122	104	SF	78
3075	128	97	96	82
MEAN	124	102	95	83
S.D.	2.9	3.2	1.8	3.7
N	5	5	3	5

SF=Spilled Feeder

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

MALES GROUP IV 20000 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
4081	136	105	95	82
4082	120	102	91	84
4083	136	111	92	81
4084	120	104	93	83
4085	131	112	94	86
MEAN	128	107	93	83
S.D.	8.1	4.4	1.5	1.8
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

MALES GROUP V SCE+CONTROL

	DAY OF STUDY			
ANIMAL#	4	11	18	25
5051	122	100	91	84
5052	132	112	108	86
5053	132	108	94	83
5054	121	99	92	79
5055	135	109	104	90
MEAN	128	106	98	84
S.D.	6.5	6.0	7.7	4.0
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

FEMALES GROUP I 0 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
1591	151	94	90	86
1592	132	111	92	89
1593	118	98	95	85
1594	115	110	94	90
1595	125	109	97	95
MEAN	128	105	93	89
S.D.	14.3	7.7	2.7	3.9
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

FEMALES GROUP II 2000 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
2581	116	97	91	84
2582	114	110	98	94
2583	140	111	103	98
2584	129	112	103	98
2585	128	111	107	94
MEAN	125	108	100	94
S.D.	10.3	6.4	6.3	5.6
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

FEMALES GROUP III 10000 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
3581	122	105	97	91
3582	118	106	98	97
3583	130	105	110	88
3584	SF	145	SF	92
3585	138	108	103	93
MEAN	127	114	102	92
S.D.	8.8	17.6	6.1	3.4
N	4	5	4	5

SF=Spilled Feeder

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

FEMALES GROUP IV 20000 MG/M3

	DAY OF STUDY			
ANIMAL#	4	11	18	25
4591	119	104	92	88
4592	119	101	94	89
4593	124	107	101	93
4594	123	103	101	95
4595	127	111	104	93
MEAN	122	105	99	92
S.D.	3.3	3.9	5.0	2.8
N	5	5	5	5

TABLE I

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

INDIVIDUAL FEED CONSUMPTION VALUES (GRAMS/KG/DAY)

FEMALES GROUP V SCE+CONTROL

	DAY OF STUDY			
ANIMAL#	4	11	18	25
5561	134	SF	SF	92
5562	125	104	107	98
5563	123	109	99	92
5564	135	SF	SF	89
5565	123	SF	SF	SF
MEAN	128	106	103	93
S.D.	6.0	3.9	5.3	3.8
N	5	2	2	4

SF=Spilled Feeder

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

MALES GROUP I 0 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
1081	TERMINAL SACRIFICE	22-AUG-02	3	27
1082	TERMINAL SACRIFICE	22-AUG-02	3	27
1083	TERMINAL SACRIFICE	22-AUG-02	3	27
1084	TERMINAL SACRIFICE	22-AUG-02	3	27
1085	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

MALES GROUP II 2000 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
2071	TERMINAL SACRIFICE	22-AUG-02	3	27
2072	TERMINAL SACRIFICE	22-AUG-02	3	27
2073	TERMINAL SACRIFICE	22-AUG-02	3	27
2074	TERMINAL SACRIFICE	22-AUG-02	3	27
2075	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

MALES GROUP III 10000 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
3071	TERMINAL SACRIFICE	22-AUG-02	3	27
3072	TERMINAL SACRIFICE	22-AUG-02	3	27
3073	TERMINAL SACRIFICE	22-AUG-02	3	27
3074	TERMINAL SACRIFICE	22-AUG-02	3	27
3075	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

MALES GROUP IV 20000 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
4081	TERMINAL SACRIFICE	22-AUG-02	3	27
4082	TERMINAL SACRIFICE	22-AUG-02	3	27
4083	TERMINAL SACRIFICE	22-AUG-02	3	27
4084	TERMINAL SACRIFICE	22-AUG-02	3	27
4085	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

MALES GROUP V SCE+CONTROL

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
5051	TERMINAL SACRIFICE	22-AUG-02	3	27
5052	TERMINAL SACRIFICE	22-AUG-02	3	27
5053	TERMINAL SACRIFICE	22-AUG-02	3	27
5054	TERMINAL SACRIFICE	22-AUG-02	3	27
5055	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

FEMALES GROUP I 0 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
1591	TERMINAL SACRIFICE	22-AUG-02	3	27
1592	TERMINAL SACRIFICE	22-AUG-02	3	27
1593	TERMINAL SACRIFICE	22-AUG-02	3	27
1594	TERMINAL SACRIFICE	22-AUG-02	3	27
1595	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

FEMALES GROUP II 2000 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
2581	TERMINAL SACRIFICE	22-AUG-02	3	27
2582	TERMINAL SACRIFICE	22-AUG-02	3	27
2583	TERMINAL SACRIFICE	22-AUG-02	3	27
2584	TERMINAL SACRIFICE	22-AUG-02	3	27
2585	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

FEMALES GROUP III 10000 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
3581	TERMINAL SACRIFICE	22-AUG-02	3	27
3582	TERMINAL SACRIFICE	22-AUG-02	3	27
3583	TERMINAL SACRIFICE	22-AUG-02	3	27
3584	TERMINAL SACRIFICE	22-AUG-02	3	27
3585	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

FEMALES GROUP IV 20000 MG/M3

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
4591	TERMINAL SACRIFICE	22-AUG-02	3	27
4592	TERMINAL SACRIFICE	22-AUG-02	3	27
4593	TERMINAL SACRIFICE	22-AUG-02	3	27
4594	TERMINAL SACRIFICE	22-AUG-02	3	27
4595	TERMINAL SACRIFICE	22-AUG-02	3	27

TABLE J

GASOLINE TBA VAPOR CONDENSATE: A 13-WEEK WHOLE-BODY INHALATION TOXICITY STUDY IN RATS WITH NEUROTOXICITY ASSESSMENTS AND 4-WEEK IN VIVO GENOTOXICITY AND IMMUNOTOXICITY ASSESSMENTS

ANIMAL TERMINATION HISTORY

FEMALES GROUP V SCE+CONTROL

ANIMAL#	TYPE OF DEATH	DATE OF DEATH	WEEK OF STUDY	STUDY DAY
5561	TERMINAL SACRIFICE	22-AUG-02	3	27
5562	TERMINAL SACRIFICE	22-AUG-02	3	27
5563	TERMINAL SACRIFICE	22-AUG-02	3	27
5564	TERMINAL SACRIFICE	22-AUG-02	3	27
5565	TERMINAL SACRIFICE	22-AUG-02	3	27