

Sponsor:

3M Corporate Toxicology
Building 220-2E-02, 3M Center
St. Paul, MN 55144-1000

FINAL REPORT

Study Title:

Cell Proliferation Study with N-Ethyl Perfluorooctanesulfonamido Ethanol (N-EtFOSE; 3M T-6316.11), Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; 3M T-6295.16), and N-Ethyl Perfluorooctanesulfonamide (PFOSA 3M T-7091.1) in Rats

Test Articles:

N-EtFOSE
PFOS
PFOSA

Authors:

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Study Completion Date:

May 2, 2000

Performing Laboratory:

TherImmune Research Corporation
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Gaithersburg, MD 20878

TRC Study Number:

1132-100

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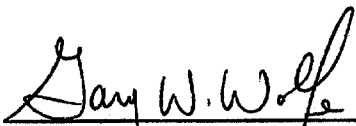
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COMPLIANCE STATEMENT

Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

This study was conducted in the spirit of the Good Laboratory Practice Regulations as set forth in Title 21 of the U.S. Code of Federal Regulations Part 58, issued December 22, 1978 (effective June 20, 1979) and was not reviewed by Quality Assurance. There were no deviations from the aforementioned regulations which affected the quality or integrity of the study or the interpretation of the results in the report.

Study Director:

 5/2/00

Gary W. Wolfe, Ph.D., D.A.B.T./Date

STUDY IDENTIFICATION**Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats**

TRC Study Number: 1132-100

Test Articles: N-Ethyl Perfluorooctanesulfonamido Ethanol (N-EtFOSE)
Perfluorooctane Sulfonic Acid Potassium Salt (PFOS)
N-Ethyl Perfluorooctanesulfonamide (PFOSA)

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Study Monitor/Principal Investigator: Sandra R. Eldridge, Ph.D.
Pathology Associates International
Phone: 301-663-2036

Study Timetable

Study Initiation:	January 12, 1999
Initiation of Dosing:	February 23, 1999
48-Hour Post-Dose Sacrifice:	February 25, 1999
7-Day Post-Dose Sacrifice:	March 2, 1999
14-Day Post-Dose Sacrifice:	March 9, 1999
1-Week Recovery	March 16, 1999
4-Week Recovery	April 6, 1999
Study Termination:	April 6, 1999

STUDY PERSONNEL

Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

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SUMMARY

This study was designed to assess cell proliferation and peroxisome proliferation in rats administered N-Ethyl Perfluorooctanesulfonamido, Perfluorooctane Sulfonic Acid Potassium Salt, N-Ethyl Perfluorooctanesulfonamide and Wy-14,643 in the diet. Animals in Groups 1, 2, and 3 received the test articles in the feed for 48 hours, 7 days, and 14 days, respectively, and were necropsied immediately following completion of exposure. Animals in Groups 4 and 5 received the test articles in the feed for 14 days followed by a 1-week and 4-week recovery period, respectively, and were necropsied following the recovery period. All Groups were divided into Subgroups. Subgroups 1, 2, 3, 4, 5, 6, and 7 received 0, 300, 100, and 30 ppm of N-EtFOSE, 20 ppm of PFOS, 100 ppm of PFOSA, and 100 ppm Wy 14,643 respectively. In Group 1, each Subgroup contained 10 animals with the exception of Subgroup 7 with only 5 animals. In Groups 2, 3, 4, and 5, Subgroup 1 contained 10 animals and received the control diet. The remaining Subgroups contained 5 animals each. Criteria evaluated for test article effect included mean body weights and body weight gains, feed and test material consumption, clinical observations, clinical pathology, organ weights, gross pathology, histopathology, cell proliferation, immunohistochemistry, palmitoyl-CoA oxidase activity, and electron microscopy.

There were no treatment related findings for feed consumption, test material consumption, and clinical observations. However, there were treatment-related effects found in the mean body weights and mean body weight gains of the recovery animals. There were decreases seen in mean body weights on Study Day (SD) 15 for the 1-week recovery animals in the 300 ppm N-EtFOSE, PFOSA, and Wy-14,643 groups. In addition, there were decreases seen in mean body weight gains on SD 8-15 for the 1-week recovery animals in the 300 and 100 ppm N-EtFOSE, PFOSA, and Wy-14,643 groups and for the 4-week recovery animals on SD 8-15 in the 300 ppm N-EtFOSE group and on SD 22-29 in the 30 ppm N-EtFOSE group.

Treatment related findings were also seen in absolute and relative (g liver weight/g body weight) liver weights. Increases were seen in the absolute liver weights of the 48-hour post dose sacrifice animals in the 100 ppm N-EtFOSE and 100 ppm Wy-14, 643 groups and an increase in

the relative liver weight in the 100 ppm Wy-14,643 group. For the 7-day post-dose sacrifice animals, absolute liver weights were increased in the 100 ppm PFOSA and 100 ppm Wy-14,643 groups and relative organ weights were increased in the 300 ppm N-EtFOSE, 100 ppm PFOSA, and 100 ppm Wy-14,643 groups. Absolute and relative liver weights of the 14-Day post-dose sacrifice animals were increased in the 300 ppm N-EtFOSE (relative only), 100 ppm PFOSA, and 100 ppm Wy-14,643 groups. Terminal body weights of the one week recovery animals were decreased in the 300 ppm N-EtFOSE, 100 ppm PFOSA, and 100 ppm Wy-14,643 groups. Absolute liver weights were increased in the 300 ppm N-EtFOSE group of these animals. Also, relative liver weights were increased in the 300 ppm N-EtFOSE, 100 ppm PFOSA, and 100 ppm Wy-14,643 groups. In addition, absolute and relative liver weights of the four week recovery animals were increased in the 300 ppm N-EtFOSE and 100 ppm PFOSA (relative only) groups.

Results of clinical pathology, histopathology, cell proliferation, immunohistochemistry, palmitoyl-CoA oxidase activity, and electron microscopy will be reported separately.

INTRODUCTION

This study was designed to assess cell proliferation and peroxisome proliferation in rats administered N-EtFOSE, PFOS, PFOSA and Wy-14,643. The design of this study included 5 groups of animals. Each Group contained 7 Subgroups. Subgroups 1, 2, 3, 4, 5, 6, and 7 received the following: Control (0 ppm), N-EtFOSE (300 ppm, 100 ppm, 30 ppm), PFOS (20 ppm), PFOSA (100 ppm) and Wy-14,643 (1000 ppm), respectively. Dosing was initiated on February 23, 1999 for all groups. Groups 1, 2, and 3 each received the test diets for 48 hours, 7 days, and 14 days, respectively and interim necropsies occurred on February 25, March 1, and March 8, 1999, respectively. Groups 4 and 5 received the same test diets for 14 days and terminal necropsies occurred after a 1 and 4-week recovery period on March 16 and April 6, 1999, respectively. In Group 1, the test diets were administered to 10 animals/Subgroup with the exception of Subgroup 7 with 5 animals. In Groups 2, 3, 4, and 5, the test diets were administered to 5 animals/Subgroup, with the exception of Subgroup 1 with 10 animals which received the control diet.

TEST AND CONTROL ARTICLES

One 34.88 g sample of N-EtFOSE T-6316 (Lot No. 30035, 30037, and 30039 combined), a waxy solid, was received from Covance Laboratories, Inc., Madison, WI, on December 31, 1998 and stored at ambient temperature. The purity was 98.1% and was stable for greater than 5 years. One 81.97 g sample of Fx12 Fluorad T-7091 (PFOSA) (Lot No. not provided), an amber waxy solid, and one 97.13 g sample of FC-95 Fluorad T6295 (PFOS) (Lot No. Not provided), a white powder, were received from 3M, St. Paul, MN, on December 31, 1998 and stored at ambient temperature. Both test articles had a purity assumed to be 100 % and were both stable for greater than 5 years. A 1 gram sample of Wy-14,643 (Lot No. 11990d), a white powder, was received from Cayman Chemical, Ann Arbor, MI, on February 22, 1999 and stored at ambient temperature. The purity was greater than 98% and was stable for at least two years.

A reserve sample of each lot was taken and stored at ambient temperature. These samples were transferred to the Sponsor after the completion of the in-life phase. Any remaining test material will be returned to the Sponsor's representative.

TEST ANIMALS AND HUSBANDRY

Rats were used because of the extensive historical data base, and FDA requirements for a rodent species. Two hundred forty-eight male approximately five weeks old CrI:CD®(SD) IGS BR rats were received from Charles River Laboratories, Raleigh, North Carolina on February 9, 1999. The animals were assigned temporary animal numbers upon receipt. The rats were acclimated to laboratory conditions for thirteen days prior to initiation of treatment. Each rat was identified by an ear tag and cage card bearing a unique animal number.

Animals were housed one per cage from receipt to termination. During the study, all animals were housed in stainless steel suspended wire cages on stainless-steel racks equipped with plastic backed polyliners. Animals were provided with filtered tap water *ad libitum* via an Edstrom automatic watering system or water bottle. Teklad™ 7012 Certified Rodent diet was available *ad libitum* in glass jars with stainless steel lids and followers. Fresh food was provided weekly. The water is analyzed at least two times per year for contaminants and specific microbes. The feed is analyzed by the manufacturer for concentrations of specified heavy metals, aflatoxin, chlorinated hydrocarbons, organophosphates, and specified nutrients. The results of the feed and water analyses are on file at TherImmune Research Corporation. No contaminants were known to be present in the diet or water at levels which might interfere with achieving the objectives of the study.

During the study period, the temperature and relative humidity of the study room were recorded twice daily. In addition, the animal room temperature and humidity were continuously monitored by a Rees™ Scientific Monitoring System. The animal room was set to maintain temperatures at 64 and 79°F and relative humidity between 30% and 70%. A 12-hour light/12-hour dark cycle was maintained through the acclimation and study periods.

METHODS

Group Assignment and Dose Levels

Following examination by a staff veterinarian for physical condition, the rats were assigned to the study:

	Number of Male Rats							
Group Number (Time Point)	Control (0 ppm)	N-EtFOSE			PFOS (20 ppm)	PFOSA (100 ppm)	Wy-14,643 (1000 ppm)	Total No. of Animals
		300 ppm	100 ppm	30 ppm				
Subgroup	1	2	3	4	5	6	7	
1 (48 Hours)	10	10	10	10	10	10	5	65
2 (7 Days)	10	5	5	5	5	5	5	40
3 (14 Days)	10	5	5	5	5	5	5	40
4 (1 wk recovery)	10	5	5	5	5	5	5	40
5 (4 wk recovery)	10	5	5	5	5	5	5	40
Total No. Of Animals	50	30	30	30	30	30	25	225

Computer-generated random numbers were used for assignment to groups. At the time of randomization, the weight variation of the animals used did not exceed ± 2 S.D. of the mean weight, and the mean body weights for each group and sex were not statistically different. The body weights at initiation of treatment ranged from 175.2 g to 271.1 g. Extra animals were removed and discarded without necropsy.

Test Article Formulation and Administration

Dietary formulations of the test articles and Teklad 7012C Feed were prepared using the following procedure:

For Group 1, the appropriate amount of feed was weighed into a plastic container and stored at ambient temperature and protected from light. For each dose level, the appropriate

quantity of Teklad 7012C feed was accurately weighed into plastic containers. The proper amount of the test article was weighed, using a stainless steel spatula, into a glass beaker. The appropriate amount of acetone was added to allow the test material to go into solution. A dietary premix was prepared for each dose level of each test article by adding the appropriate amount of feed with the test article with a stainless steel spatula until no feed/chemical agglomerates remained. Additional feed was added in increments that approximately doubled the amount of premix until an adequate premix was achieved. Following each addition, the formulation was mixed thoroughly with a stainless steel spatula. When the test article/feed mix was transferred from one container to other, the container was rinsed at least three times with premix feed. All feed used for rinsing and preparing the premix was taken from the preweighed feed in the plastic containers for each dose level.

From the preweighed feed, 10 kilograms was layered evenly into the Patterson-Kelly Blender. The premix was then poured in equal amounts into the right and left blender ports and spread evenly. The premix container was then rinsed three times with the vehicle, from the preweighed feed. Each rinse was poured evenly into the blender. The remaining preweighed feed was evenly poured into the blender. The blender was sealed and the dietary formulation was blended for approximately 30 minutes.

Dietary formulations were stored in sealed plastic containers and were stable for 21 days at room temperature. The formulations were dispensed into glass jars with stainless steel followers and lids. Diets were prepared for the entire study in one Mix.

Two 100 g samples of each batch (per mix) of each dose level of the test article formulation and stored were stored in heat sealable foil bags protected from light at room temperature. At the request of the Sponsor, samples will be returned for analysis. Unless used for analysis, samples will be discarded at least one month after the completion of the in-life phase.

Observations and Records

Each animal was observed twice daily (a.m. and p.m.) for mortality and moribundity. Findings were recorded as they were observed.

Individual body weights and physical examinations were recorded prior to treatment (at randomization (physical examinations not reported) and weekly for Week 1 through 4 weeks of recovery, starting on Study Day (SD) 1. Body weights and physical examinations were also recorded prior to SD 1 and not used or reported because of a delay in the start of the study. Food consumption was measured weekly for Week 1 through 4 weeks of recovery, starting on SD 1.

Clinical Chemistry and Compound Level Analysis

Samples were taken for clinical chemistry evaluation and compound level analysis from all animals immediately prior to scheduled sacrifices. Blood was collected from the jugular vein into a serum-separator tube. Serum enzyme levels of alanine aminotransferase (ALT), alkaline phosphatase, aspartate aminotransferase (AST), cholesterol and triglycerides were determined. Serum samples for clinical chemistry were sent to PAI in Chevy Chase, MD for analysis. Serum sample for compound level analysis are being stored in a freezer at approximately -80° C until shipped to Dr. Kris J. Hansen, 3M E.T. & S., St. Paul, MN. The results will be reported separately.

Termination

Interim sacrifices were conducted after 48 hours, 7 days, and 14 days of exposure to the test diets, following blood collection. The animals scheduled for interim sacrifices were anesthetized with CO₂, weighed, and exsanguinated. The abdominal cavity of each animal was opened, the liver removed, weighed and liver samples collected. The animals were discarded after liver collection.

Terminal necropsies were conducted, following blood collection, on animals scheduled for 1 and 4 week recovery after 14 days of exposure to the test diets. The animals were anesthetized with CO₂, weighed, exsanguinated, and necropsied. Necropsies included examination of the external features of the carcass, all external body orifices, and the cranial, thoracic, and abdominal cavities, organs and tissues. In addition, the liver was removed, weighed and liver samples collected.

Organ Weights

The liver was weighed for all surviving scheduled necropsy animals.

Cell Proliferation Tissue Collection and Immunohistochemical Evaluation

Representative samples of the left lateral lobe of the liver and any microscopic lesions of the liver were collected and preserved in formalin. After fixation, the samples were delivered to Dr. Sandra Eldridge at Pathology Associates International, Frederick, MD. Proliferation cell nuclear antigen (PNCA) evaluation was performed on the samples. In addition, liver sections prepared from the same tissue block were stained with hematoxylin and eosin and examined microscopically. The results will be reported separately.

Palmitoyl-CoA Oxidase Tissue Collection and Analyses

A sample (approximately 500 mg) of the right lateral lobe of the liver was also collected from select animals and flash-frozen in liquid nitrogen. The liver tissue was stored frozen at approximately -80°C until they were shipped on dry ice to Dr. Ron Markevitch, Covance Laboratories, Madison, WI for palmitoyl-CoA Oxidase activity. The liver samples analyzed included all study animals, with the exception of the Wy-14,643 animals and the 4-week recovery Group. The results will be reported separately.

Tissue Collection for Electron Microscopic Evaluation

Sections of the left lateral lobe of the liver from all animals were collected, minced to approximately one millimeter cubes and placed in a fixative appropriate for electron microscopy. The containers and fixative were provided by PAI, Frederick, MD. Samples were shipped to Sharon Ambrose, Pathology Associates International, Durham, NC. Electron microscopy was performed on one animal per treatment group exhibiting the highest cell proliferative response as well as one control animal at the discretion of the Sponsor, from one time point as well as the 4-week recovery. Thus, EM will be performed on one animal from the control, N-EtFOSE (one dose only to be determined), PFOS, PFOSA, and the Wy-14,643 Subgroups at one of the time

points, as well as the 4-week recovery, for a total of ten animals. The results will be reported separately.

Remaining Liver Tissue

The remaining liver tissue was frozen and stored at approximately -80°C at Pathology Associates International, Frederick, MD in the long-term archive for possible future analysis.

Histopathology

Livers from each animal that was examined for cell proliferation were stained with hematoxylin and eosin, and examined microscopically for histopathological changes. The results will be reported separately.

Record Retention

All raw data, documentation, records, protocol, specimens, and final report generated as a result of this study will be archived in the storage facilities of PAI for a period of one year following submission of the final report to the Sponsor. One year after submission of the final report, all of the aforementioned materials will be sent to the Sponsor and a return fee will be charged. All raw data stored on magnetic media will remain at PAI.

RESULTS

Body Weights and Body Weight Gains

Mean body weights are summarized in Table 1 and presented individually in Appendix Table 1. Mean body weight gains are summarized in Table 1A and presented individually in Appendix 1A.

Mean body weights and body weight gains were comparable in all groups throughout the study with the exception of the 1-Week recovery animals on SD 15. There was a 14, 8, and 12% decrease in mean body weights in the 300 ppm N-EtFOSE, PFOSA, and Wy-14,643 groups, respectively. Mean body weight gains were decreased by 62, 32, 36, and 35 % in the 300 and 100 ppm N-EtFOSE, PFOSA, and Wy-14,643 groups, respectively on SD 8-15. In addition, mean body weight gains were decreased in the 4-Week recovery animals by 40% in the 300 ppm N-EtFOSE group on SD 8-15 and by 38% in the 30 ppm N-EtFOSE group on SD 22-29.

Feed Consumption

Mean feed consumption is summarized in Table 2 and presented individually in Appendix Table 2.

Mean feed consumption was comparable in all groups with the exception of decreases of 16 % in the 14-Day PFOSA group animals on SD 14 and 20 % and 14 % in the 1-Week recovery 30 ppm N-EtFOSE and PFOSA groups, respectively on SD 15.

Test Material Consumption

Mean test material consumption is summarized in Table 4 and presented individually in Appendix Table 4.

Test article consumption averaged 31.6 mg/kg for 300 ppm N-EtFOSE, 11.1 mg/kg for 100 ppm N-EtFOSE, 3.3 ppm for 30 ppm N-EtFOSE, 2.2 mg/kg for PFOS, 10.8 mg/kg for PFOSA, and 10.9 mg/kg for Wy-14,643.

Clinical Observations

Clinical observations are summarized in Table 3, and presented individually in Appendix Table 3.

No treatment-related clinical observations were noted, however the following clinical observations were seen during SD 2-15 in most of the Groups: thinness, abrasions, alopecia, rough haircoat, lacrimation, soft feces, and diarrhea. One 48-Hour PFOSA animal had paraphimosis on SD 3. One 1-Week recovery control animal was moribund killed due to a dislocated nasal bone on SD 21.

Terminal Body Weights and Liver Weights

Terminal body weights and absolute and relative liver weights are summarized in Table 5, and presented individually in Appendix Table 5.

Terminal body weights of the 48-hour, 7-day, and 14-day post dose sacrifice and 4-week recovery animals were comparable to the controls. Decreases were seen in the terminal body weights in the 300 ppm N-EtFOSE (14%), 100 ppm PFOSA (9%), and 100 ppm Wy-14,643 (15%) groups of the 1-Week recovery animals.

For the 48-hour post-dose animals, absolute liver weights were increased by 13% and 27% in the 100 ppm N-EtFOSE and 100 ppm Wy-14,643 groups, respectively. Relative liver weights were also increased by 22% in the 100 ppm Wy-14,643 group. The 100 ppm PFOSA and 100 ppm Wy-14,643 groups of the 7-day post dose animals had absolute liver weight increases of 20% and 90%, respectively. Relative liver weights for these animals were increased in the 300 ppm N-EtFOSE (20%), 100 ppm PFOSA (16%), and 100 ppm Wy-14,643 (86%) groups. Increases were seen in the absolute liver weights in the 300 ppm N-EtFOSE (44%) and 100 ppm Wy-14,643 (104%) groups of the 14-day post dose sacrifice animals. Relative liver weights were increased 12-49% in the 30, 100, and 300 ppm N-EtFOSE groups, 22% in the 100 ppm PFOSA group and 114% in the 100 ppm Wy-14,643 group. Increases of 25% and 44% were seen in the absolute and relative liver weights of the 1-Week recovery animals in the 300 ppm N-EtFOSE group. Relative liver weight increases of 23-25% were seen in the 100 ppm PFOSA and 100 ppm Wy-14,643

groups. For the 4-Week recovery animals in the 300 ppm N-EtFOSE group, increases were seen in the absolute and relative liver weights of 34% and 29%, respectively. Relative liver weights were increased in the 100 ppm PFOSA group by 27%.

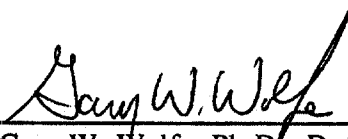
Gross Observations

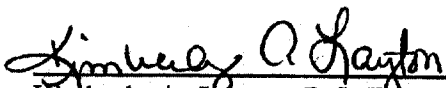
No treatment-related gross findings were seen. The following incidental findings were noted: an enlarged spleen in the 100 ppm WY-14,643 group of 1-week recovery animals, a mottled liver in the 20 ppm PFOS group, and a small right testis and focus on the left cauda epididymis in the 100 ppm Wy-14,643 group of the 4-week recovery animals.

SIGNATURE PAGE

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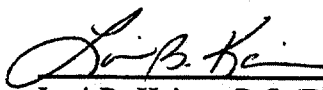
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TABLE 1
SUMMARY OF BODY WEIGHTS (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE	GROUP: 1 (48-Hour Post Dose Sacrifice)					
PERIOD	DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 1	MEAN	231.4	229.1	243.0	230.0	233.0	235.1	240.2
	S.D.	15.84	16.30	9.08	10.76	15.13	21.52	6.04
	N	10	10	10	10	10	10	5
STUDY: 1132-100		SEX: MALE	GROUP: 2 (7-Day Post Dose Sacrifice)					
PERIOD	DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 1	MEAN	229.2	228.4	244.8	227.1	229.9	242.6	237.3
	S.D.	10.06	13.74	12.06	10.09	5.75	15.37	17.24
	N	10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE	GROUP: 3 (14-Day Post Dose Sacrifice)					
PERIOD	DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 1	MEAN	229.0	241.0	224.9	230.5	227.8	222.0	233.3
	S.D.	18.70	26.37	15.78	14.12	12.98	12.44	14.48
	N	10	5	5	5	5	5	5
DAY 8	MEAN	273.7	286.3	276.2	286.3	276.9	261.6	276.5
	S.D.	13.71	27.35	15.55	10.79	12.31	10.43	19.55
	N	10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE	GROUP: 4 (1-Week Recovery)					
PERIOD	DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 1	MEAN	234.8	223.5	230.7	237.0	227.6	232.8	216.5
	S.D.	11.72	15.66	13.49	12.19	9.90	11.18	15.95
	N	10	5	5	5	5	5	5
DAY 8	MEAN	281.9	261.0	279.2	279.5	279.1	277.8	261.4
	S.D.	23.79	9.12	14.93	10.22	11.95	8.68	19.20
	N	10	5	5	5	5	5	5
DAY 15	MEAN	344.7	*295.9	321.6	327.4	330.2	*317.8	*302.4
	S.D.	23.28	16.07	19.72	12.47	15.28	10.88	19.57
	N	10	5	5	5	5	5	5

* = P less than .05

Analysis of Variance using DUNNETT'S Procedure

NOTE: Terminal body weights for all Groups were food-fasted weights and will be reported separately.

- (1) = Control 0 ppm
 (2) = N-EtFOSE 300 ppm
 (3) = N-EtFOSE 100 ppm
 (4) = N-EtFOSE 30 ppm
 (5) = PFOS 20 ppm
 (6) = PFOSA 100 ppm
 (7) = Wy-14,643 100 ppm

TABLE 1(Continued)
SUMMARY OF BODY WEIGHTS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE	GROUP: 5 (4-Week Recovery)					
PERIOD	DOSE: SUBGROUP:	(1) 1-M	(2) 2-M	(3) 3-M	(4) 4-M	(5) 5-M	(6) 6-M	(7) 7-M
DAY 1	MEAN	232.4	239.7	229.7	234.0	230.7	216.4	224.1
	S.D.	16.93	7.52	7.60	8.87	14.41	24.23	16.63
	N	10	5	5	5	5	5	5
DAY 8	MEAN	278.0	273.1	270.5	284.0	283.1	264.6	274.0
	S.D.	24.62	10.13	5.10	14.47	17.94	12.93	18.07
	N	10	5	5	5	5	5	5
DAY 15	MEAN	332.9	305.9	312.8	331.0	333.5	307.1	319.1
	S.D.	27.44	9.64	11.07	30.35	20.67	8.32	22.02
	N	10	5	5	5	5	5	5
DAY 22	MEAN	364.8	340.2	340.6	362.4	366.2	334.0	342.2
	S.D.	28.98	7.04	15.55	38.96	24.02	15.52	25.79
	N	9	5	5	5	5	5	5
DAY 29	MEAN	395.7	376.0	372.1	381.6	396.3	366.9	377.2
	S.D.	30.90	11.36	21.27	36.41	27.87	15.72	31.93
	N	9	5	5	5	5	5	5
DAY 36	MEAN	417.4	402.0	390.1	401.1	414.3	391.6	404.1
	S.D.	34.65	13.87	23.25	33.87	35.80	16.31	35.66
	N	9	5	5	5	5	5	5

* P less than .05

Analysis of Variance using DUNNETT'S Procedure

NOTE: Terminal body weights for all Groups were food-fasted weights and will be reported separately.

- (1) = Control 0 ppm
 (2) = N-EtFOSE 300 ppm
 (3) = N-EtFOSE 100 ppm
 (4) = N-EtFOSE 30 ppm
 (5) = PFOS 20 ppm
 (6) = PFOSA 100 ppm
 (7) = Wy-14,643 100 ppm

TABLE 1A
SUMMARY OF BODY WEIGHT GAINS (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE		GROUP: 3 (14-Day Post Dose Sacrifice)				
PERIOD	DOSE: SUBGROUP:	(1) 1-M	(2) 2-M	(3) 3-M	(4) 4-M	(5) 5-M	(6) 6-M	(7) 7-M
DAY 8	MEAN	44.7	45.2	51.3	* 55.8	49.1	39.6	43.2
	S.D.	8.03	1.58	5.44	9.23	8.29	4.84	8.01
	N	10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE		GROUP: 4 (1-Week Recovery)				
PERIOD	DOSE: SUBGROUP:	(1) 1-M	(2) 2-M	(3) 3-M	(4) 4-M	(5) 5-M	(6) 6-M	(7) 7-M
DAY 8	MEAN	47.1	37.5	48.6	42.4	51.5	45.0	44.9
	S.D.	13.98	8.65	6.12	2.92	4.78	9.06	3.99
	N	10	5	5	5	5	5	5
DAY 15	MEAN	62.8	* 34.9	* 42.4	47.9	51.1	* 39.9	* 41.0
	S.D.	13.62	15.25	9.50	3.43	7.96	4.39	8.06
	N	10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE		GROUP: 5 (4-Week Recovery)				
PERIOD	DOSE: SUBGROUP:	(1) 1-M	(2) 2-M	(3) 3-M	(4) 4-M	(5) 5-M	(6) 6-M	(7) 7-M
DAY 8	MEAN	45.5	33.4	40.7	50.0	52.3	48.2	49.9
	S.D.	13.67	5.79	6.19	8.34	4.26	14.43	6.54
	N	10	5	5	5	5	5	5
DAY 15	MEAN	54.9	* 32.8	42.3	47.1	50.4	42.6	45.1
	S.D.	7.26	3.60	11.83	16.86	8.13	6.70	6.88
	N	10	5	5	5	5	5	5
DAY 22	MEAN	29.1	34.3	27.9	31.4	32.7	26.8	23.1
	S.D.	5.40	5.44	6.01	9.52	4.63	11.61	8.45
	N	9	5	5	5	5	5	5
DAY 29	MEAN	30.9	35.8	31.5	* 19.1	30.1	32.9	35.0
	S.D.	5.27	5.45	6.49	8.87	5.03	6.00	7.87
	N	9	5	5	5	5	5	5
DAY 36	MEAN	21.7	26.1	18.0	19.5	18.0	24.8	26.9
	S.D.	5.45	5.80	11.13	2.62	8.93	5.17	7.06
	N	9	5	5	5	5	5	5

* P less than .05

Analysis of Variance using DUNNETT'S Procedure

Note: Animals in Groups 1(48-Hour Post Dose Sacrifice) and 2(7-Day Post Dose Sacrifice) were not reported due to only one body weight taken and the terminal body weights being excluded due to food fasting.

(1) = Control 0 ppm

(2) = N-EtFOSE 300 ppm

(3) = N-EtFOSE 100 ppm

(4) = N-EtFOSE 30 ppm

(5) = PFOS 20 ppm

(6) = PFOSA 100 ppm

(7) = Wy-14,643 100 ppm

TABLE 2
SUMMARY OF FEED CONSUMPTION (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE	GROUP: 1 (48-Hour Post Dose Sacrifice)						
PERIOD	DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 2	MEAN		22.9	26.1	26.7	25.0	23.9	26.9	25.2
	S.D.		2.86	2.00	3.64	2.18	3.81	4.29	1.99
	N		10	10	10	10	10	10	5
STUDY: 1132-100		SEX: MALE	GROUP: 2 (7-Day Post Dose Sacrifice)						
PERIOD	DOSE: (mg/kg)		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 7	MEAN		163.4	155.6	171.8	159.0	156.0	165.9	157.1
	S.D.		12.65	8.77	17.12	7.97	5.38	14.06	13.61
	N		10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE	GROUP: 3 (14-Day Post Dose Sacrifice)						
PERIOD	DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 8	MEAN		181.4	190.0	189.9	196.4	188.5	171.9	189.3
	S.D.		10.78	14.43	4.50	9.75	11.11	11.91	19.22
	N		10	5	5	5	5	5	5
DAY 14	MEAN		178.7	163.0	163.8	178.9	166.9	*150.4	166.9
	S.D.		20.78	14.68	5.42	13.77	9.60	11.64	13.65
	N		10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE	GROUP: 4 (1-Week Recovery)						
PERIOD	DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 8	MEAN		195.2	174.5	194.6	190.4	191.0	187.6	180.1
	S.D.		17.45	12.37	10.37	11.29	6.19	5.85	18.58
	N		10	5	5	5	5	5	5
DAY 15	MEAN		212.8	*170.6	190.7	193.8	193.4	*183.7	189.4
	S.D.		21.73	18.96	15.24	12.15	9.63	6.65	17.61
	N		10	5	5	5	5	5	5
DAY 21	MEAN		185.4	160.6	173.0	176.1	167.6	171.8	169.8
	S.D.		15.82	17.74	15.01	7.34	9.91	8.45	16.25
	N		10	5	5	5	5	5	5
* P less than 05									

* P less than .05

Analysis of Variance using DUNNETT'S Procedure

Note = Feed consumption measured for 6 days on SD 7, 14, 21.

Note = Control feed given to all Groups during the recovery period (SD 21-SD 42).

- (1) = Control 0 ppm
 (2) = N-EtFOSE 300 ppm
 (3) = N-EtFOSE 100 ppm
 (4) = N-EtFOSE 30 ppm
 (5) = PFOS 20 ppm
 (6) = PFOSA 100 ppm
 (7) = Wy 14,643 100 ppm

TABLE 2 (Continued)
SUMMARY OF FEED CONSUMPTION (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100	SEX: MALE	GROUP: 5 (4-Week Recovery)						
DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M	
DAY 8								
MEAN	189.4	182.7	190.1	197.6	192.7	185.3	186.1	
S.D.	19.09	17.16	8.55	6.65	12.11	15.74	12.03	
N	10	5	5	5	5	5	5	
DAY 15								
MEAN	199.0	176.5	192.4	197.4	192.6	180.4	192.0	
S.D.	20.01	14.22	14.71	18.74	14.90	9.32	10.39	
N	10	5	5	5	5	5	5	
DAY 22								
MEAN	196.7	189.7	197.4	203.2	204.9	188.7	198.0	
S.D.	14.88	6.21	12.00	18.27	14.75	14.03	13.81	
N	9	5	5	5	5	5	5	
DAY 29								
MEAN	196.5	191.8	194.0	180.1	193.0	189.7	207.7	
S.D.	14.41	14.17	17.53	12.70	17.90	14.67	17.83	
N	9	5	5	5	5	5	5	
DAY 36								
MEAN	198.0	201.6	196.6	181.8	191.8	198.9	209.8	
S.D.	18.25	9.36	17.68	17.07	21.42	12.70	21.30	
N	9	5	5	5	5	5	5	
DAY 42								
MEAN	163.6	166.0	161.2	158.9	163.2	162.9	166.6	
S.D.	19.66	8.50	13.10	8.91	20.71	16.13	18.64	
N	9	5	5	5	5	5	5	

* P less than .05

Analysis of Variance using DUNNETT'S Procedure

Note = Feed consumption measured for 6 days on SD 42.

Note = Control feed given to all Groups during the recovery period (SD 21-SD 42).

- (1) = Control 0 ppm
 (2) = N-EtFOSE 300 ppm
 (3) = N-EtFOSE 100 ppm
 (4) = N-EtFOSE 30 ppm
 (5) = PFOS 20 ppm
 (6) = PFOSA 100 ppm
 (7) = Wy-14,643 100 ppm

TABLE 3
SUMMARY OF CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100	SEX: MALE	GROUP: 1 (48-Hour Post Dose Sacrifice)						
PERIOD	DOSE: SUBGROUP:	(1) 1-M	(2) 2-M	(3) 3-M	(4) 4-M	(5) 5-M	(6) 6-M	(7) 7-M
DAY 1								
No. Observed		10	10	10	10	10	10	5
Normal		10 100%	10 100%	9 90%	10 100%	10 100%	10 100%	5 100%
Discharge		0	0	1 10%	0	0	0	0
DAY 3								
No. Observed		10	10	10	10	10	10	5
Terminal Kill		10 100%	10 100%	10 100%	10 100%	10 100%	10 100%	5 100%
Normal		3 30%	6 60%	8 80%	6 60%	4 40%	8 80%	2 40%
Thin		7 70%	4 40%	2 20%	4 40%	4 40%	2 20%	2 40%
Alopecia		0	0	0	0	0	0	1 20%
Rough Haircoat		0	0	0	1 10%	0	0	0
Lacrimation		1 10%	0	0	0	0	0	0
Paraphimosis		0	0	0	0	1 10%	0	0
Soft Feces		1 10%	0	0	0	0	0	1 20%
STUDY: 1132-100	SEX: MALE	GROUP: 2 (7-Day Post Dose Sacrifice)						
PERIOD	DOSE: SUBGROUP:	(1) 1-M	(2) 2-M	(3) 3-M	(4) 4-M	(5) 5-M	(6) 6-M	(7) 7-M
DAY 1								
No. Observed		10	5	5	5	5	5	5
Normal		10 100%	5 100%	5 100%	5 100%	5 100%	4 80%	5 100%
Lacrimation		0	0	0	0	0	1 20%	0
DAY 8								
No. Observed		10	5	5	5	5	5	5
Terminal Kill		10 100%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%
Normal		9 90%	4 80%	5 100%	4 80%	5 100%	5 100%	5 100%
Thin		1 10%	1 20%	0	1 20%	0	0	0
STUDY: 1132-100	SEX: MALE	GROUP: 3 (14-Day Post Dose Sacrifice)						
PERIOD	DOSE: SUBGROUP:	(1) 1-M	(2) 2-M	(3) 3-M	(4) 4-M	(5) 5-M	(6) 6-M	(7) 7-M
DAY 1								
No. Observed		10	5	5	5	5	5	5
Normal		10 100%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%
DAY 8								
No. Observed		10	5	5	5	5	5	5
Normal		9 90%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%
Soft Feces		1 10%	0	0	0	0	0	0
DAY 15								
No. Observed		10	5	5	5	5	5	5
Terminal Kill		10 100%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%
Normal		9 90%	5 100%	4 80%	5 100%	4 80%	3 60%	5 100%
Thin		1 10%	0	1 20%	0	1 20%	2 40%	0
Soft Feces		0	0	0	0	1 20%	0	0

- (1) = Control 0 ppm
 (2) = N-EtFOSE 300 ppm
 (3) = N-EtFOSE 100 ppm
 (4) = N-EtFOSE 30 ppm
 (5) = PFOS 20 ppm
 (6) = PFOSA 100 ppm
 (7) = Wy-14,643 100 ppm

TABLE 3 (continued)
SUMMARY OF CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE		GROUP: 4 (1-Week Recovery)				
PERIOD	DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 1								
No. Observed		10	5	5	5	5	5	5
Normal		10 100%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%
DAY 8								
No. Observed		10	5	5	5	5	5	5
Normal		10 100%	5 100%	5 100%	5 100%	4 80%	4 80%	4 80%
Abrasion		0	0	0	0	0	1 20%	1 20%
Lacrimation		0	0	0	0	1 20%	0	0
DAY 15								
No. Observed		10	5	5	5	5	5	5
Normal		10 100%	3 60%	5 100%	5 100%	5 100%	4 80%	4 80%
Thin		0	1 20%	0	0	0	0	0
Abrasion		0	0	0	0	0	1 20%	1 20%
Diarrhea		0	1 20%	0	0	0	0	0
DAY 22								
No. Observed		10	5	5	5	5	5	5
Terminal Kill		10 100%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%
Normal		7 70%	2 40%	4 80%	5 100%	4 80%	4 80%	2 40%
Thin		1 10%	3 60%	1 20%	0	0	1 20%	2 40%
Abrasion		0	0	0	0	0	0	1 20%
Lacrimation		0	0	0	0	1 20%	0	0
Diarrhea		1 10%	0	0	0	0	0	0
STUDY: 1132-100		SEX: MALE		GROUP: 5 (4-Week Recovery)				
PERIOD	DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 1								
No. Observed		10	5	5	5	5	5	5
Normal		10 100%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%
DAY 8								
No. Observed		10	5	5	5	5	5	5
Normal		8 80%	5 100%	5 100%	5 100%	4 80%	5 100%	4 80%
Thin		0	0	0	0	1 20%	0	0
Abrasion		1 10%	0	0	0	0	0	0
Lacrimation		1 10%	0	0	0	0	0	1 20%
DAY 15								
No. Observed		10	5	5	5	5	5	5
Normal		9 90%	5 100%	5 100%	4 80%	2 40%	5 100%	5 100%
Thin		0	0	0	1 20%	2 40%	0	0
Abrasion		1 10%	0	0	0	0	0	0
Lacrimation		0	0	0	0	1 20%	0	0

(1) = Control 0 ppm
(2) = N-EtFOSE 300 ppm
(3) = N-EtFOSE 100 ppm
(4) = N-EtFOSE 30 ppm
(5) = PFOS 20 ppm
(6) = PFOSA 100 ppm
(7) = Wy-14,643 100 ppm

TABLE 3 (continued)
SUMMARY OF CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100	DOSE:	SEX: MALE	GROUP: 5 (4-Week Recovery)						
	SUBGROUP:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
		1-M	2-M	3-M	4-M	5-M	6-M	7-M	
DAY 21									
No. Observed		1	0	0	0	0	0	0	
Moribund Kill		1 100%	0	0	0	0	0	0	
DAY 22									
No. Observed		9	5	5	5	5	5	5	
Normal		8 88%	5 100%	5 100%	5 100%	4 80%	4 80%	5 100%	
Thin		0	0	0	0	0	1 20%	0	
Abrasion		1 11%	0	0	0	0	0	0	
Alopecia		1 11%	0	0	0	0	0	0	
Lacrimation		0	0	0	0	1 20%	0	0	
DAY 29									
No. Observed		9	5	5	5	5	5	5	
Normal		7 77%	5 100%	5 100%	2 40%	4 80%	5 100%	5 100%	
Thin		0	0	0	2 40%	0	0	0	
Abrasion		2 22%	0	0	0	0	0	0	
Alopecia		1 11%	0	0	0	0	0	0	
Lacrimation		0	0	0	1 20%	1 20%	0	0	
DAY 36									
No. Observed		9	5	5	5	5	5	5	
Normal		6 66%	5 100%	5 100%	3 60%	4 80%	5 100%	5 100%	
Thin		0	0	0	1 20%	0	0	0	
Reddened		1 11%	0	0	0	0	0	0	
Abrasion		2 22%	0	0	0	0	0	0	
Alopecia		1 11%	0	0	0	1 20%	0	0	
Lacrimation		0	0	0	1 20%	1 20%	0	0	
DAY 43									
No. Observed		9	5	5	5	5	5	5	
Terminal Kill		9 100%	5 100%	5 100%	5 100%	5 100%	5 100%	5 100%	
Normal		7 77%	5 100%	5 100%	3 60%	4 80%	5 100%	3 60%	
Thin		0	0	0	1 20%	0	0	2 40%	
Abrasion		1 11%	0	0	0	0	0	0	
Alopecia		1 11%	0	0	0	1 20%	0	0	
Lacrimation		0	0	0	1 20%	1 20%	0	0	

(1) = Control 0 ppm
 (2) = N-EtFOSE 300 ppm
 (3) = N-EtFOSE 100 ppm
 (4) = N-EtFOSE 30 ppm
 (5) = PFOS 20 ppm
 (6) = PFOSA 100 ppm
 (7) = Wy-14,643 100 ppm

TABLE 4
SUMMARY OF TEST MATERIAL CONSUMPTION (PPM)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE	GROUP: 1 (48-Hour Post Dose Sacrifice)						
PERIOD	DOSE:	SUBGROUP:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 2									
	MEAN		0.0	34.3	11.0	3.0	2.1	11.4	10.5
	S.D.		0.00	3.18	1.56	0.31	0.35	1.69	1.01
	N		10	10	10	10	10	10	5
STUDY: 1132-100		SEX: MALE	GROUP: 2 (7-Day Post Dose Sacrifice)						
PERIOD	DOSE:	SUBGROUP:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 7									
	MEAN		0.0	34.2	11.7	3.5	2.2	11.4	11.1
	S.D.		0.00	2.85	0.90	0.13	0.09	0.55	0.08
	N		10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE	GROUP: 3 (14-Day Post Dose Sacrifice)						
PERIOD	DOSE:	SUBGROUP:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 8									
	MEAN		0.0	33.9	12.1	3.7	2.3	11.1	11.6
	S.D.		0.00	2.36	0.79	0.28	0.04	0.58	0.55
	N		10	5	5	5	5	5	5
DAY 14									
	MEAN		0.0	28.5	9.9	3.1	2.0	9.6	10.0
	S.D.		0.00	0.85	0.65	0.27	0.08	0.55	0.19
	N		10	5	5	5	5	5	5
STUDY: 1132-100		SEX: MALE	GROUP: 4 (1-Week Recovery)						
PERIOD	DOSE:	SUBGROUP:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 8									
	MEAN		0.0	33.6	12.1	3.4	2.4	11.5	11.9
	S.D.		0.00	3.60	0.68	0.09	0.16	0.65	0.55
	N		10	5	5	5	5	5	5
DAY 15									
	MEAN		0.0	28.0	9.8	3.0	2.0	9.4	10.3
	S.D.		0.00	3.28	0.53	0.09	0.11	0.22	0.38
	N		10	5	5	5	5	5	5

(1) = Control 0 ppm
 (2) = N-EtFOSE 300 ppm
 (3) = N-EtFOSE 100 ppm
 (4) = N-EtFOSE 30 ppm
 (5) = PFOS 20 ppm
 (6) = PFOSA 100 ppm
 (7) = Wy 14,643 100 ppm

TABLE 4 (Continued)
SUMMARY OF TEST MATERIAL CONSUMPTION (PPM)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE	GROUP: 5 (4 Week Recovery Animals)					
PERIOD	DOSE:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SUBGROUP:	1-M	2-M	3-M	4-M	5-M	6-M	7-M
DAY 8								
	MEAN	0.0	32.7	11.8	3.6	2.3	12.4	11.8
	S.D.	0.00	3.22	0.88	0.15	0.05	1.96	0.35
	N	10	5	5	5	5	5	5
DAY 15								
	MEAN	0.0	27.7	10.2	3.0	2.0	9.8	10.0
	S.D.	0.00	1.79	0.88	0.15	0.11	0.55	0.48
	N	10	5	5	5	5	5	5

- (1) = Control 0 ppm
(2) = N-EtFOSE 300 ppm
(3) = N-EtFOSE 100 ppm
(4) = N-EtFOSE 30 ppm
(5) = PFOS 20 ppm
(6) = PFOSA 100 ppm
(7) = Wy 14,643 100 ppm

TABLE 5
SUMMARY OF ABSOLUTE LIVER WEIGHTS (GRAMS) AND ORGAN TO BODY WEIGHT RATIOS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100	SEX: MALE	GROUP: 1 (48-Hour Post Dose Sacrifice)						
DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
BODY WEIGHT (G)								
MEAN		207.6	208.7	221.1	207.9	208.9	213.7	217.2
S.D.		13.59	16.57	8.72	9.22	13.37	20.61	6.30
N		10	10	10	10	10	10	5
Liver (G)(ABSOLUTE)								
MEAN		7.514	7.878	* 8.515	7.788	7.748	7.982	* 9.555
S.D.		0.6364	0.8943	0.5893	0.5117	0.7929	0.9430	0.4102
N		10	10	10	10	10	10	5
Liver (% BODY WEIGHT)								
MEAN		3.620	3.769	3.850	3.749	3.703	3.731	* 4.400
S.D.		0.1979	0.2273	0.1845	0.2424	0.2152	0.1968	0.1559
N		10	10	10	10	10	10	5
STUDY: 1132-100	SEX: MALE	GROUP: 2 (7-Day Post Dose Sacrifice)						
DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
BODY WEIGHT (G)								
MEAN		248.1	235.1	258.6	244.2	243.4	257.5	253.6
S.D.		14.52	12.65	17.66	12.86	9.94	18.54	17.88
N		10	5	5	5	5	5	5
Liver (G)(ABSOLUTE)								
MEAN		8.475	9.642	9.665	8.541	8.830	* 10.193	* 16.087
S.D.		0.9646	0.7004	0.8252	0.7364	0.3776	1.2284	1.2524
N		10	5	5	5	5	5	5
Liver (% BODY WEIGHT)								
MEAN		3.409	* 4.105	3.740	3.496	3.630	* 3.949	* 6.349
S.D.		0.2353	0.2972	0.2463	0.2157	0.1349	0.2018	0.3791
N		10	5	5	5	5	5	5
STUDY: 1132-100	SEX: MALE	GROUP: 3 (14-Day Post Dose Sacrifice)						
DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
BODY WEIGHT (G)								
MEAN		297.4	287.7	284.4	300.0	285.8	268.1	283.1
S.D.		25.14	26.80	12.60	12.82	14.93	10.83	15.81
N		10	5	5	5	5	5	5
Liver (G)(ABSOLUTE)								
MEAN		9.795	* 14.148	11.272	11.053	10.002	10.766	* 19.975
S.D.		1.0821	1.9481	0.8740	1.0243	0.8465	0.9285	1.3302
N		10	5	5	5	5	5	5
Liver (% BODY WEIGHT)								
MEAN		3.290	* 4.903	* 3.967	* 3.684	3.495	* 4.013	* 7.058
S.D.		0.1816	0.3177	0.3149	0.3060	0.1243	0.2723	0.3263
N		10	5	5	5	5	5	5
Subgroup 1 = 0 ppm (Control)		Subgroup 5 = PFOS 20 ppm						
Subgroup 2 = N-EtFOSE 300 ppm		Subgroup 6 = PFOSA 100 ppm						
Subgroup 3 = N-EtFOSE 100 ppm		Subgroup 7 = Wy-14,643 100 ppm						
Subgroup 4 = N-EtFOSE 30 ppm								

TABLE 5 (Continued)
SUMMARY OF ABSOLUTE LIVER WEIGHTS (GRAMS) AND ORGAN TO BODY WEIGHT RATIOS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100	SEX: MALE	GROUP: 4 (1-Week Recovery)						
DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
BODY WEIGHT (G)								
MEAN		339.3	* 293.3	318.0	321.9	320.5	* 309.8	* 289.2
S.D.		23.50	15.15	22.33	12.76	16.88	12.25	24.15
N		10	5	5	5	5	5	5
Liver (G)(ABSOLUTE)								
MEAN		11.321	* 14.118	11.966	10.549	11.095	12.681	11.991
S.D.		1.8076	2.3810	1.2780	0.7992	0.9263	0.7755	1.7505
N		10	5	5	5	5	5	5
Liver (% BODY WEIGHT)								
MEAN		3.320	* 4.794	3.764	3.278	3.460	* 4.094	* 4.142
S.D.		0.3244	0.5861	0.3017	0.2359	0.1768	0.1785	0.4693
N		10	5	5	5	5	5	5
STUDY: 1132-100	SEX: MALE	GROUP: 5 (4-Week Recovery)						
DOSE:		(1)	(2)	(3)	(4)	(5)	(6)	(7)
SUBGROUP:		1-M	2-M	3-M	4-M	5-M	6-M	7-M
BODY WEIGHT (G)								
MEAN		407.3	395.5	385.0	393.6	401.9	382.7	392.7
S.D.		37.62	12.11	22.75	34.06	33.28	19.84	37.67
N		9	5	5	5	5	5	5
Liver (G)(ABSOLUTE)								
MEAN		12.800	* 17.146	12.785	13.103	13.457	15.152	13.480
S.D.		3.1700	1.9137	1.3292	0.5906	1.1267	1.6710	2.2220
N		9	5	5	5	5	5	5
Liver (% BODY WEIGHT)								
MEAN		3.115	* 4.333	3.316	3.346	3.351	* 3.956	3.417
S.D.		0.5079	0.4281	0.1849	0.2701	0.1470	0.3258	0.2545
N		9	5	5	5	5	5	5

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE 300 ppm
 Subgroup 3 = N-EtFOSE 100 ppm
 Subgroup 4 = N-EtFOSE 30 ppm
 Subgroup 5 = PFOS 20 ppm
 Subgroup 6 = PFOSA 100 ppm
 Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 1
INDIVIDUAL BODY WEIGHTS (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 SEX: MALE									
GROUP: 1 (48-Hour Post Dose Sacrifice)									
SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5	
ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1
R10381	226.0	R10391	215.5	R10401	245.0	R10411	217.9	R10421	241.6
R10382	258.4	R10392	244.9	R10402	242.7	R10412	242.4	R10422	237.2
R10383	229.9	R10393	221.6	R10403	254.8	R10413	215.7	R10423	240.1
R10384	241.5	R10394	193.7	R10404	253.8	R10414	234.2	R10424	229.9
R10385	221.0	R10395	246.0	R10405	236.9	R10415	223.6	R10425	243.1
R10386	207.7	R10396	229.4	R10406	247.6	R10416	230.7	R10426	239.8
R10387	222.6	R10397	238.9	R10407	232.3	R10417	225.4	R10427	196.9
R10388	216.9	R10398	243.3	R10408	228.5	R10418	222.3	R10428	243.1
R10389	238.7	R10399	223.1	R10409	251.1	R10419	242.7	R10429	216.4
R10390	251.0	R10400	234.4	R10410	237.2	R10420	245.4	R10430	242.0
GROUP: 2 (7-Day Post Dose Sacrifice)									
SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5	
ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1
R10446	221.6	R10456	229.3	R10461	250.3	R10466	212.5	R10471	232.7
R10447	219.5	R10457	215.7	R10462	243.1	R10467	236.3	R10472	221.0
R10448	244.4	R10458	214.2	R10463	258.4	R10468	226.2	R10473	229.7
R10449	231.8	R10459	246.5	R10464	246.4	R10469	236.9	R10474	229.4
R10450	218.4	R10460	236.4	R10465	225.8	R10470	223.5	R10475	236.6
R10451	217.1								
R10452	232.0								
R10453	226.6								
R10454	238.5								
R10455	241.7								
GROUP: 3 (14-Day Post Dose Sacrifice)									
SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5	
ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1	ANIMAL #	DAY 1
R10486	223.5	R10496	271.1	R10501	227.3	R10506	242.1	R10511	211.0
R10487	214.9	R10497	198.8	R10502	237.8	R10507	239.0	R10512	219.9
R10488	230.4	R10498	244.0	R10503	223.7	R10508	210.3	R10513	240.0
R10489	247.1	R10499	241.0	R10504	237.0	R10509	221.0	R10514	226.7
R10490	199.9	R10500	250.3	R10505	198.9	R10510	240.1	R10515	241.2
R10491	239.6								
R10492	212.1								
R10493	248.7								
R10494	257.3								
R10495	216.6								

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE, 300 ppm
Subgroup 3 = N-EtFOSE, 100 ppm
Subgroup 4 = N-EtFOSE, 30 ppm
Subgroup 5 = PFOS, 20 ppm
Subgroup 6 = PFOS, 100 ppm
Subgroup 7 = PFOSA, 100 ppm

APPENDIX TABLE 1 (Continued)
INDIVIDUAL BODY WEIGHTS (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 SEX: MALE GROUP: 3 (14-Day Post Dose Sacrifice)									
SUBGROUP 6					SUBGROUP 7				
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8
R10516	211.7	255.4	R10521	218.7	260.5				
R10517	206.4	247.6	R10522	234.4	268.9				
R10518	228.0	272.1	R10523	246.4	302.7				
R10519	228.1	261.9	R10524	218.4	258.9				
R10520	236.0	271.1	R10525	248.5	291.3				

STUDY: 1132-100 SEX: MALE GROUP: 4 (1-Week Recovery)									
SUBGROUP 1					SUBGROUP 2				
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8
R10526	238.9	269.0	335.3		R10536	219.3	254.5	284.5	
R10527	245.9	314.0	385.7		R10537	246.9	276.1	303.7	
R10528	242.2	301.7	371.7		R10538	229.6	262.9	293.7	
R10529	213.4	244.8	336.3		R10539	216.4	254.3	278.6	
R10530	224.3	273.4	321.8		R10540	205.4	257.3	319.1	
R10531	228.9	264.3	321.0						
R10532	239.3	297.0	354.6						
R10533	240.6	286.2	330.2						
R10534	223.6	256.9	323.6						
R10535	250.9	311.5	366.4						

STUDY: 1132-100 SEX: MALE GROUP: 4 (1-Week Recovery)									
SUBGROUP 5					SUBGROUP 6				
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8
R10551	234.2	279.6	319.2		R10556	232.5	280.0	324.7	
R10552	223.0	272.8	319.3		R10557	220.9	263.1	299.3	
R10553	213.5	263.2	318.9		R10558	250.4	283.9	318.3	
R10554	238.9	294.5	349.0		R10559	226.0	284.4	326.7	
R10555	228.4	285.5	344.8		R10560	234.4	277.8	319.8	

STUDY: 1132-100 SEX: MALE GROUP: 4 (1-Week Recovery)									
SUBGROUP 7					SUBGROUP 8				
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 8
R10561	223.9	268.2	309.4		R10566	223.5	272.0	312.0	
R10562	223.5	272.0	312.0		R10567	191.7	233.6	268.2	
R10563	191.7	233.6	268.2		R10568	210.5	250.9	305.3	
R10564	210.5	250.9	305.3		R10569	232.7	282.2	317.0	
R10565	232.7	282.2	317.0						

Note: Animals in Groups 1(48-Hour Post Dose Sacrifice) and 2(7-Day Post Dose Sacrifice) were not reported due to only one body weight taken and the terminal body weights being excluded due to food fasting.

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE, 300 ppm
Subgroup 3 = N-EtFOSE, 100 ppm
Subgroup 4 = N-EtFOSE, 30 ppm
Subgroup 5 = PFOS, 20 ppm
Subgroup 6 = PFOSA, 100 ppm
Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 1 (Continued)
INDIVIDUAL BODY WEIGHTS (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)													
SUBGROUP 1													
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10566	233.8	290.1	346.7	369.0	408.0	435.5	R10576	231.8	257.5	290.3	331.9	368.4	399.7
R10567	240.1	266.5	332.3	363.0	401.6	417.4	R10577	241.7	278.1	307.3	337.9	369.8	398.5
R10568	240.6	294.0	347.6	384.6	411.9	437.8	R10578	231.9	269.1	304.4	339.3	374.4	392.3
R10569	266.6	334.8	393.8	421.1	450.9	480.5	R10579	244.7	283.6	313.0	340.6	371.4	393.5
R10570	201.7	247.7	294.2	319.0	341.7	360.9	R10580	248.3	277.1	314.5	351.3	395.9	426.2
R10571	217.8	262.7	307.6	a	a	a							
R10572	230.6	257.0	311.7	337.2	367.2	385.3							
R10573	222.3	278.5	337.7	375.9	408.4	433.0							
R10574	234.4	268.1	331.1	360.6	391.2	405.1							
R10575	236.4	280.2	326.2	353.1	380.5	401.2							
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)													
SUBGROUP 3													
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10581	228.9	272.0	321.4	350.9	384.0	412.4	R10586	243.5	287.0	322.8	359.6	385.4	403.7
R10582	232.4	275.7	312.2	337.5	362.6	365.4	R10587	232.8	289.3	343.2	376.4	402.3	420.5
R10583	218.1	262.5	317.9	355.3	395.4	405.1	R10588	239.7	295.9	346.7	380.3	399.7	418.7
R10584	230.1	273.3	318.5	343.9	378.1	403.3	R10589	220.2	258.8	278.5	297.3	317.7	341.8
R10585	239.1	268.8	293.9	315.6	340.5	364.5	R10590	233.9	288.9	354.0	398.6	402.8	420.6
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)													
SUBGROUP 5													
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10591	214.4	260.6	312.0	338.1	360.2	367.1	R10596	217.6	263.6	307.9	339.2	379.9	397.0
R10592	220.5	271.7	324.2	353.9	386.7	399.1	R10597	228.0	265.6	304.1	332.9	360.7	390.3
R10593	235.5	287.0	323.4	359.1	387.5	405.6	R10598	238.0	284.2	321.2	349.4	375.5	404.2
R10594	251.6	307.8	364.5	399.6	432.1	454.9	R10599	175.2	248.1	301.6	340.1	376.2	402.5
R10595	231.6	288.2	343.4	380.4	415.1	445.0	R10600	223.3	261.4	300.9	308.3	342.0	364.1
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)													
SUBGROUP 7													
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10601	241.1	290.7	343.0	365.4	398.9	419.7							
R10602	231.7	286.8	338.5	374.0	422.5	459.7							
R10603	210.6	250.5	292.7	317.9	352.1	374.2							
R10604	234.6	283.1	319.2	331.4	360.6	383.8							
R10605	202.5	258.9	301.9	322.1	351.7	383.0							

a - Animal was moribund killed on Day 21.

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE 300 ppm
Subgroup 3 = N-EtFOSE 100 ppm
Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 5 = PFOS 20 ppm
Subgroup 6 = PFOSA 100 ppm
Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 1A
INDIVIDUAL BODY WEIGHT GAINS (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100										
SUBGROUP 1		SEX: MALE		SUBGROUP 2		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP 4		
ANIMAL #	DAY 8	ANIMAL #	DAY 8	ANIMAL #	DAY 8	ANIMAL #	DAY 8	ANIMAL #	DAY 8	
R10486	53.9	R10496	44.7	R10501	41.7	R10506	54.6	R10511	62.7	
R10487	45.4	R10497	42.7	R10502	53.4	R10507	56.7	R10512	40.3	
R10488	52.3	R10498	46.0	R10503	52.8	R10508	60.4	R10513	48.2	
R10489	44.9	R10499	46.7	R10504	53.4	R10509	66.0	R10514	45.7	
R10490	54.6	R10500	46.0	R10505	55.2	R10510	41.2	R10515	48.7	
R10491	34.9									
R10492	46.4									
R10493	36.6									
R10494	31.6									
R10495	46.3									
STUDY: 1132-100										
SUBGROUP 1		SEX: MALE		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		
ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	
R10526	30.1	66.3	R10536	35.2	30.0	R10541	54.1	47.6	R10546	39.9
R10527	68.1	71.7	R10537	29.2	27.6	R10542	49.4	42.6	R10547	45.7
R10528	59.5	70.0	R10538	33.3	30.8	R10543	41.6	27.1	R10548	41.6
R10529	31.4	91.5	R10539	37.9	24.3	R10544	43.0	42.1	R10549	39.6
R10530	49.1	48.4	R10540	51.9	61.8	R10545	54.8	52.4	R10550	45.3
R10531	35.4	56.7								
R10532	57.7	57.6								
R10533	45.6	44.0								
R10534	33.3	66.7								
R10535	60.6	54.9								
STUDY: 1132-100										
SUBGROUP 6		SEX: MALE		SUBGROUP 7		GROUP: 4 (1-Week Recovery)		SUBGROUP 5		
ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	
R10556	47.5	44.7	R10561	44.3	41.2					
R10557	42.2	36.2	R10562	48.5	40.0					
R10558	33.5	34.4	R10563	41.9	34.6					
R10559	58.4	42.3	R10564	40.4	54.4					
R10560	43.4	42.0	R10565	49.5	34.8					

Note: Animals in Groups 1(48-Hour Post Dose Sacrifice) and 2(7-Day Post Dose Sacrifice) were not reported due to only one body weight taken and the terminal body weights being excluded due to food fasting.

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE, 300 ppm
Subgroup 3 = N-EtFOSE, 100 ppm
Subgroup 4 = N-EtFOSE, 30 ppm
Subgroup 5 = PFOS, 20 ppm
Subgroup 6 = PFOSA, 100 ppm
Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 1A (Continued)
INDIVIDUAL BODY WEIGHT GAINS (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)												
SUBGROUP 1						SUBGROUP 2						
ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	
R10566	56.3	56.6	22.3	39.0	27.5	R10576	25.7	32.8	41.6	36.5	31.3	
R10567	26.4	65.8	30.7	38.6	15.8	R10577	36.4	29.2	30.6	31.9	28.7	
R10568	53.4	53.6	37.0	27.3	25.9	R10578	37.2	35.3	34.9	35.1	17.9	
R10569	68.2	59.0	27.3	29.8	29.6	R10579	38.9	29.4	27.6	30.8	22.1	
R10570	46.0	46.5	24.8	22.7	19.2	R10580	28.8	37.4	36.8	44.6	30.3	
R10571	44.9	44.9	a	a	a							
R10572	26.4	54.7	25.5	30.0	18.1							
R10573	56.2	59.2	38.2	32.5	24.6							
R10574	33.7	63.0	29.5	30.6	13.9							
R10575	43.8	46.0	26.9	27.4	20.7							
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)												
SUBGROUP 1						SUBGROUP 4						
ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	
R10581	43.1	49.4	29.5	33.1	28.4	R10586	43.5	45.8	26.8	25.8	18.3	
R10582	43.3	36.5	25.3	25.1	2.8	R10587	56.5	53.9	33.2	25.9	18.2	
R10583	44.4	55.4	37.4	40.1	9.7	R10588	56.2	50.8	33.6	19.4	19.0	
R10584	43.2	45.2	25.4	34.2	25.2	R10589	38.6	19.7	18.8	20.4	24.1	
R10585	29.7	25.1	21.7	24.9	24.0	R10590	55.0	65.1	44.6	4.2	17.8	
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)												
SUBGROUP 5						SUBGROUP 6						
ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	
R10591	46.2	51.4	26.1	22.1	6.9	R10596	46.0	44.3	31.3	40.7	17.1	
R10592	51.2	52.5	29.7	32.8	12.4	R10597	37.6	38.5	28.8	27.8	29.6	
R10593	51.5	36.4	35.7	28.4	18.1	R10598	46.2	37.0	28.2	26.1	28.7	
R10594	56.2	56.7	35.1	32.5	22.8	R10599	72.9	53.5	38.5	36.1	26.3	
R10595	56.6	55.2	37.0	34.7	29.9	R10600	38.1	39.5	7.4	33.7	22.1	
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)												
SUBGROUP 7						SUBGROUP 7						
ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	
R10601	49.6	52.3	22.4	33.5	20.8	R10601	49.6	52.3	22.4	33.5	20.8	
R10602	55.1	51.7	35.5	48.5	37.2	R10602	55.1	51.7	35.5	48.5	37.2	
R10603	39.9	42.2	25.2	34.2	22.1	R10603	39.9	42.2	25.2	34.2	22.1	
R10604	48.5	36.1	12.2	29.2	23.2	R10604	48.5	36.1	12.2	29.2	23.2	
R10605	56.4	43.0	20.2	29.6	31.3	R10605	56.4	43.0	20.2	29.6	31.3	

a - Animal was moribund killed on Day 21.

Note: Animals in Groups 1(48-Hour Post Dose Sacrifice) and 2(7-Day Post Dose Sacrifice) were not reported due to only one body weight taken and the terminal body weights being excluded due to food fasting.

Subgroup 1 = 0 ppm (Control) Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 2 = N-EtFOSE 300 ppm Subgroup 5 = PFOS 20 ppm
Subgroup 3 = N-EtFOSE 100 ppm Subgroup 6 = PFOSA 100 ppm

Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 2
INDIVIDUAL FEED CONSUMPTION (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 SEX: MALE										
GROUP: 1 (48-Hour Post Dose Sacrifice)					GROUP: 2 (7-Day Post Dose Sacrifice)					
SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5		
ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2	
R10381	27.4	R10391	24.5	R10401	28.1	R10411	26.1	R10421	27.5	
R10382	26.1	R10392	24.2	R10402	29.8	R10412	26.1	R10422	27.3	
R10383	23.1	R10393	23.5	R10403	27.6	R10413	25.5	R10423	27.5	
R10384	22.0	R10394	26.4	R10404	28.2	R10414	23.5	R10424	27.3	
R10385	22.3	R10395	26.4	R10405	29.6	R10415	26.5	R10425	23.8	
R10386	23.6	R10396	25.7	R10406	27.1	R10416	24.8	R10426	22.0	
R10387	22.6	R10397	30.1	R10407	27.3	R10417	25.3	R10427	22.7	
R10388	22.9	R10398	28.6	R10408	26.0	R10418	19.6	R10428	16.5	
R10389	16.5	R10399	25.3	R10409	28.1	R10419	27.5	R10429	25.1	
R10390	22.4	R10400	26.2	R10410	25.6	R10420	25.5	R10430	19.4	
SEX: MALE										
SUBGROUP 1					SUBGROUP 2					
ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7	
R10446	149.8	R10456	142.7	R10461	176.6	R10466	146.5	R10471	155.4	
R10447	156.1	R10457	155.3	R10462	181.4	R10467	168.3	R10472	154.7	
R10448	184.2	R10458	163.3	R10463	192.2	R10468	162.3	R10473	160.8	
R10449	173.3	R10459	164.1	R10464	150.2	R10469	159.3	R10474	147.9	
R10450	152.7	R10460	152.5	R10465	158.6	R10470	158.4	R10475	161.0	
R10451	154.5									
R10452	164.8									
R10453	149.9									
R10454	168.9									
R10455	179.6									
SEX: MALE										
SUBGROUP 1					SUBGROUP 2					
ANIMAL #	DAY 1	DAY 8	ANIMAL #	DAY 1	DAY 8	ANIMAL #	DAY 1	DAY 8	ANIMAL #	
R10486	196.2	190.2	R10496	189.1	171.7	R10501	186.7	155.2	R10506	199.6
R10487	173.2	169.6	R10497	166.2	138.1	R10502	188.5	162.5	R10507	198.1
R10488	199.3	209.5	R10498	192.9	167.7	R10503	189.9	164.9	R10508	186.1
R10489	179.0	160.6	R10499	198.0	162.6	R10504	197.6	169.2	R10509	210.2
R10490	170.5	161.6	R10500	203.9	175.0	R10505	186.8	167.2	R10510	188.0
R10491	179.8	203.1								
R10492	171.2	150.8								
R10493	178.7	181.0								
R10494	192.9	199.1								
R10495	173.1	161.2								
SEX: MALE										
SUBGROUP 1					SUBGROUP 2					
ANIMAL #	DAY 1	DAY 8	ANIMAL #	DAY 1	DAY 8	ANIMAL #	DAY 1	DAY 8	ANIMAL #	
R10486	196.2	190.2	R10496	189.1	171.7	R10501	186.7	155.2	R10506	199.6
R10487	173.2	169.6	R10497	166.2	138.1	R10502	188.5	162.5	R10507	198.1
R10488	199.3	209.5	R10498	192.9	167.7	R10503	189.9	164.9	R10508	186.1
R10489	179.0	160.6	R10499	198.0	162.6	R10504	197.6	169.2	R10509	210.2
R10490	170.5	161.6	R10500	203.9	175.0	R10505	186.8	167.2	R10510	188.0
R10491	179.8	203.1								
R10492	171.2	150.8								
R10493	178.7	181.0								
R10494	192.9	199.1								
R10495	173.1	161.2								

Subgroup 1 = 0 ppm (Control)

Subgroup 2 = N-EtFOSE, 300 ppm

Subgroup 3 = N-EtFOSE, 100 ppm

Subgroup 4 = N-EtFOSE, 30 ppm

Subgroup 5 = PFOS, 20 ppm

Subgroup 6 = PFOSA, 100 ppm

Subgroup 7 = Wy-14,643, 100 ppm

N-EtFOSE, PFOS, PFOSA

APPENDIX TABLE 2 (Continued)
 INDIVIDUAL FEED CONSUMPTION (Grams)
 Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 SEX: MALE GROUP: 3 (14-Day Post Dose Sacrifice)

SUBGROUP 6		SUBGROUP 7	
ANIMAL #	DAY 1	ANIMAL #	DAY 8
R10516	170.1	R10521	178.6
R10517	154.0	R10522	159.8
R10518	137.8	R10523	163.6
R10519	186.9	R10524	208.7
R10520	162.7	R10525	184.0
	138.9		167.9
	164.4		150.0
			177.2

STUDY: 1132-100 SEX: MALE GROUP: 4 (1-Week Recovery)

SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4	
ANIMAL #	DAY 1	ANIMAL #	DAY 15	ANIMAL #	DAY 1	ANIMAL #	DAY 15
R10526	175.5	R10536	169.2	R10541	204.9	R10546	187.1
R10527	222.6	R10537	206.7	R10542	203.9	R10547	179.0
R10528	212.5	R10538	209.2	R10543	182.0	R10548	183.3
R10529	182.0	R10539	193.5	R10544	185.9	R10549	207.6
R10530	185.7	R10540	165.1	R10545	196.3	R10550	195.2
R10531	181.0		178.2				201.8
R10532	209.2		183.0				175.8
R10533	191.1		172.8				169.0
R10534	178.3		176.9				168.6
R10535	213.2		199.7				182.9

STUDY: 1132-100 SEX: MALE GROUP: 4 (1-Week Recovery)

SUBGROUP 5		SUBGROUP 6		SUBGROUP 7	
ANIMAL #	DAY 1	ANIMAL #	DAY 15	ANIMAL #	DAY 1
R10551	180.7	R10556	165.0	R10561	176.6
R10552	192.0	R10557	158.9	R10562	189.3
R10553	190.9	R10558	154.4	R10563	197.3
R10554	194.4	R10559	174.6	R10564	156.5
R10555	196.9	R10560	180.9	R10565	169.7
					190.4
					212.3
					188.7

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 2 (Continued)
INDIVIDUAL FEED CONSUMPTION (Grams)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)													
SUBGROUP 1							SUBGROUP 2						
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10566	206.1	214.4	198.2	206.8	209.7	175.0	R10576	157.5	153.3	183.3	185.4	193.7	168.4
R10567	171.1	204.3	192.7	195.0	193.8	154.4	R10577	193.8	174.8	191.0	175.8	198.0	157.5
R10568	201.1	199.6	212.4	204.2	204.4	167.3	R10578	199.5	191.0	199.5	206.3	207.9	167.5
R10569	229.2	236.2	216.4	213.3	231.3	201.3	R10579	189.4	182.4	185.8	184.3	193.8	158.4
R10570	171.3	179.6	176.1	173.5	175.1	139.0	R10580	173.1	181.2	189.0	207.3	214.8	178.3
R10571	170.0	168.9	a	a	a	a							
R10572	182.1	188.8	185.7	185.4	190.2	149.6							
R10573	198.7	214.3	215.1	213.9	212.3	182.6							
R10574	182.8	202.4	191.3	196.0	188.9	153.1							
R10575	181.9	191.1	182.4	180.5	175.9	150.5							
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)													
SUBGROUP 3							SUBGROUP 4						
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10581	191.0	196.1	204.0	202.4	206.7	172.6	R10586	191.4	199.5	200.1	193.7	199.3	170.8
R10582	187.4	182.2	188.3	176.0	170.7	144.1	R10587	205.3	205.5	212.2	183.6	185.7	163.4
R10583	199.0	207.2	214.7	217.5	211.8	174.4	R10588	201.9	205.1	207.3	189.5	193.7	151.6
R10584	195.9	204.1	194.5	196.5	208.1	163.0	R10589	190.0	164.9	173.9	164.5	173.9	148.8
R10585	177.0	172.6	185.5	177.4	185.9	151.9	R10590	199.3	212.2	222.4	169.3	156.5	159.7
STUDY: 1132-100 SEX: MALE GROUP: 5 (4-Week Recovery)													
SUBGROUP 5							SUBGROUP 6						
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10591	181.8	180.8	188.6	168.0	161.5	146.8	R10596	186.8	187.1	201.3	203.5	209.2	180.1
R10592	177.3	184.3	189.9	182.5	178.8	147.6	R10597	161.8	168.8	179.3	182.0	186.2	148.0
R10593	201.8	180.2	209.9	197.5	197.2	149.9	R10598	205.4	191.0	199.5	201.2	210.7	172.5
R10594	201.1	210.3	216.4	204.2	210.5	186.5	R10599	190.1	181.8	194.3	193.8	203.9	170.3
R10595	201.5	207.2	219.8	213.0	211.0	185.2	R10600	182.3	173.4	168.9	168.2	184.3	143.5
STUDY: 1132-100 SEX: MALE GROUP: 5													
SUBGROUP 7							SUBGROUP 7						
ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36	ANIMAL #	DAY 1	DAY 8	DAY 15	DAY 22	DAY 29	DAY 36
R10601	196.4	202.5	196.6	205.0	198.9	152.1							
R10602	193.4	189.4	214.6	234.7	246.9	197.1							
R10603	170.2	187.3	209.4	214.5	208.7	169.9							
R10604	194.4	202.5	183.7	194.6	199.3	161.9							
R10605	176.2	178.5	185.7	189.9	195.4	151.9							
a - Animal was moribund killed on Day 21.													

a - Animal was moribund killed on Day 21.

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 3
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100 GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 1	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC TIME OCCURRED
R10381	Normal Terminal Kill		DAY 1-DAY 3 DAY 3
R10382	Normal Terminal Kill		DAY 1-DAY 3 DAY 3
R10383	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
R10384	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
R10385	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
R10386	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
R10387	Normal Soft Feces Thin Terminal Kill		DAY 1 DAY 3 DAY 3 DAY 3
R10388	Normal Terminal Kill		DAY 1-DAY 3 DAY 3
R10389	Normal Lacrimation Thin Terminal Kill	R7, L7	DAY 1 DAY 3 DAY 3 DAY 3
R10390	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
STUDY: 1132-100 GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP 2	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC TIME OCCURRED
R10391	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
R10392	Normal Terminal Kill		DAY 1-DAY 3 DAY 3
R10393	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
R10394	Normal Thin Terminal Kill		DAY 1 DAY 3 DAY 3
Subgroup 1 = 0 ppm (Control)			
Subgroup 2 = N-EtFOSE, 300 ppm			
Subgroup 3 = N-EtFOSE, 100 ppm			
Subgroup 4 = N-EtFOSE, 30 ppm			
Subgroup 5 = PFOS, 20 ppm			
Subgroup 6 = PFOSA, 100 ppm			
Subgroup 7 = Wy-14,643, 100 ppm			
R7 = Right Eye			
L7 = Left Eye			

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 2
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED
R10395	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10396	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10397	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10398	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10399	Normal Thin Terminal Kill			DAY 1 DAY 3 DAY 3
R10400	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
STUDY: 1132-100		GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 3
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED
R10401	Discharge, Red Normal Terminal Kill		M7	DAY 1 DAY 3 DAY 3
R10402	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10403	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10404	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10405	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10406	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10407	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10408	Normal Thin Terminal Kill			DAY 1 DAY 3 DAY 3
R10409	Normal Terminal Kill			DAY 1-DAY 3 DAY 3
R10410	Normal Thin Terminal Kill			DAY 1 DAY 3 DAY 3

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

M7 = Nose

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 4	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10411	Normal			DAY 1	
	Thin			DAY 3	
	Terminal Kill			DAY 3	
R10412	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
R10413	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
R10414	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
R10415	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
R10416	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
R10417	Normal			DAY 1	
	Thin			DAY 3	
	Terminal Kill			DAY 3	
R10418	Normal			DAY 1	
	Thin			DAY 3	
	Terminal Kill			DAY 3	
R10419	Normal			DAY 1	
	Rough Haircoat			DAY 3	
	Thin			DAY 3	
	Terminal Kill			DAY 3	
R10420	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
STUDY: 1132-100		GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 5	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10421	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
R10422	Normal			DAY 1	
	Paraphimosis			DAY 3	
	Terminal Kill			DAY 3	
R10423	Normal			DAY 1	
	Thin			DAY 3	
	Terminal Kill			DAY 3	
R10424	Normal			DAY 1	
	Thin			DAY 3	
	Terminal Kill			DAY 3	
R10425	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	
R10426	Normal			DAY 1-DAY 3	
	Terminal Kill			DAY 3	

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS

Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 5	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10427	Normal				DAY 1
	Thin				DAY 3
	Terminal Kill				DAY 3
R10428	Normal				DAY 1
	Thin				DAY 3
	Terminal Kill				DAY 3
R10429	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10430	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
STUDY: 1132-100		GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 6	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10431	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10432	Normal				DAY 1
	Thin				DAY 3
	Terminal Kill				DAY 3
R10433	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10434	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10435	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10436	Normal				DAY 1
	Thin				DAY 3
	Terminal Kill				DAY 3
R10437	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10438	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10439	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3
R10440	Normal				DAY 1-DAY 3
	Terminal Kill				DAY 3

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 3 (Continued)
 INDIVIDUAL CLINICAL OBSERVATIONS
 Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 1 (48-Hour Post Dose Sacrifice)		SUBGROUP: 7	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10441	Normal Terminal Kill				DAY 1-DAY 3 DAY 3
R10442	Alopecia Normal Terminal Kill		V1		DAY 3 DAY 1 DAY 3
R10443	Normal Terminal Kill				DAY 1-DAY 3 DAY 3
R10444	Normal Soft Feces Thin Terminal Kill				DAY 1 DAY 3 DAY 3 DAY 3
R10445	Normal Thin Terminal Kill				DAY 1 DAY 3 DAY 3
STUDY: 1132-100		GROUP: 2 (7-Day Post Dose Sacrifice)		SUBGROUP: 1	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10446	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10447	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10448	Normal Thin Terminal Kill				DAY 1 DAY 8 DAY 8
R10449	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10450	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10451	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10452	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10453	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10454	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10455	Normal Terminal Kill				DAY 1-DAY 8 DAY 8

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

V1 = Ventral Front Right Area

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 2 (7-Day Post Dose Sacrifice)		SUBGROUP: 2	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10456	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10457	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10458	Normal Thin Terminal Kill				DAY 1 DAY 8 DAY 8
R10459	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10460	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
STUDY: 1132-100		GROUP: 2 (7-Day Post Dose Sacrifice)		SUBGROUP: 3	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10461	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10462	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10463	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10464	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10465	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
STUDY: 1132-100		GROUP: 2 (7-Day Post Dose Sacrifice)		SUBGROUP: 4	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10466	Normal Thin Terminal Kill				DAY 1 DAY 8 DAY 8
R10467	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10468	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10469	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10470	Normal Terminal Kill				DAY 1-DAY 8 DAY 8

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS

Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 2 (7-Day Post Dose Sacrifice)		SUBGROUP: 5	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10471	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10472	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10473	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10474	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10475	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
STUDY: 1132-100		GROUP: 2 (7-Day Post Dose Sacrifice)		SUBGROUP: 6	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10476	Lacrimation		M7	DAY 1	
	Normal Terminal Kill				DAY 8 DAY 8
R10477	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10478	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10479	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10480	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
STUDY: 1132-100		GROUP: 2 (7-Day Post Dose Sacrifice)		SUBGROUP: 7	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10481	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10482	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10483	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10484	Normal Terminal Kill				DAY 1-DAY 8 DAY 8
R10485	Normal Terminal Kill				DAY 1-DAY 8 DAY 8

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

M7 = Both Eyes

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP: 1	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10486	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10487	Normal Soft Feces Normal Terminal Kill			DAY 1 DAY 8 DAY 15 DAY 15	
R10488	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10489	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10490	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10491	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10492	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10493	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10494	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10495	Normal Thin Terminal Kill			DAY 1-DAY 8 DAY 15 DAY 15	
STUDY: 1132-100		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP: 2	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10496	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10497	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10498	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10499	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	
R10500	Normal Terminal Kill			DAY 1-DAY 15 DAY 15	

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE 300 ppm
Subgroup 3 = N-EtFOSE 100 ppm
Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 5 = PFOS 20 ppm
Subgroup 6 = PFOSA 100 ppm
Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP: 3	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10501	Normal			DAY 1-DAY 8	
	Thin			DAY 15	
	Terminal Kill			DAY 15	
R10502	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10503	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10504	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10505	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
STUDY: 1132-100		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP: 4	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10506	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10507	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10508	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10509	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10510	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
STUDY: 1132-100		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP: 5	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10511	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10512	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10513	Normal			DAY 1-DAY 8	
	Soft Feces			DAY 15	
	Thin			DAY 15	
	Terminal Kill			DAY 15	
R10514	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	
R10515	Normal			DAY 1-DAY 15	
	Terminal Kill			DAY 15	

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS

Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP: 6	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10516	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
R10517	Normal Thin Terminal Kill				DAY 1-DAY 8 DAY 15 DAY 15
R10518	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
R10519	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
R10520	Normal Thin Terminal Kill				DAY 1-DAY 8 DAY 15 DAY 15
STUDY: 1132-100		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP: 7	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10521	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
R10522	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
R10523	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
R10524	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
R10525	Normal Terminal Kill				DAY 1-DAY 15 DAY 15
STUDY: 1132-100		GROUP: 4 (1-Week Recovery)		SUBGROUP: 1	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME	OCCURRED
R10526	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10527	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10528	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10529	Normal Diarrhea Terminal Kill				DAY 1-DAY 15 DAY 22 DAY 22
R10530	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10531	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10532	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10533	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10534	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
R10535	Normal Terminal Kill				DAY 1-DAY 22 DAY 22
Subgroup 1 = 0 ppm (Control)		Subgroup 4 = N-EtFOSE, 30 ppm		Subgroup 7 = Wy-14,643, 100 ppm	
Subgroup 2 = N-EtFOSE, 300 ppm		Subgroup 5 = PFOS, 20 ppm			
Subgroup 3 = N-EtFOSE, 100 ppm		Subgroup 6 = PFOSA, 100 ppm			

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 4 (1-Week Recovery)		SUBGROUP: 2	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10536	Normal			DAY 1-DAY 8	
	Thin			DAY 15	
	Thin			DAY 22	
	Terminal Kill			DAY 22	
R10537	Normal			DAY 1-DAY 8	
	Diarrhea			DAY 15	
	Normal			DAY 22	
	Terminal Kill			DAY 22	
R10538	Normal			DAY 1-DAY 15	
	Thin			DAY 22	
	Terminal Kill			DAY 22	
R10539	Normal			DAY 1-DAY 15	
	Thin			DAY 22	
	Terminal Kill			DAY 22	
R10540	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
STUDY: 1132-100		GROUP: 4 (1-Week Recovery)		SUBGROUP: 3	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10541	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
R10542	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
R10543	Normal			DAY 1-DAY 15	
	Thin			DAY 22	
	Terminal Kill			DAY 22	
R10544	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
R10545	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
STUDY: 1132-100		GROUP: 4 (1-Week Recovery)		SUBGROUP: 4	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10546	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
R10547	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
R10548	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
R10549	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	
R10550	Normal			DAY 1-DAY 22	
	Terminal Kill			DAY 22	

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 4 (1-Week Recovery)		SUBGROUP: 5	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10551	Normal Lacrimation Normal Terminal Kill		R7	DAY 1 DAY 8 DAY 15-DAY 22 DAY 22	
R10552	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
R10553	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
R10554	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
R10555	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
STUDY: 1132-100		GROUP: 4 (1-Week Recovery)		SUBGROUP: 6	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10556	Normal Terminal Kill			DAY 1-DAY 15 DAY 22	
R10557	Normal Abrasion Thin Terminal Kill		M1	DAY 1 DAY 8-DAY 15 DAY 22 DAY 22	
R10558	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
R10559	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
R10560	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
STUDY: 1132-100		GROUP: 4 (1-Week Recovery)		SUBGROUP: 7	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10561	Normal Abrasion Terminal Kill		M1	DAY 1 DAY 8-DAY 22 DAY 22	
R10562	Normal Thin Terminal Kill			DAY 1-DAY 15 DAY 22 DAY 22	
R10563	Normal Thin Terminal Kill			DAY 1-DAY 15 DAY 22 DAY 22	
R10564	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	
R10565	Normal Terminal Kill			DAY 1-DAY 22 DAY 22	

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE, 300 ppm
 Subgroup 3 = N-EtFOSE, 100 ppm
 Subgroup 4 = N-EtFOSE, 30 ppm
 Subgroup 5 = PFOS, 20 ppm
 Subgroup 6 = PFOSA, 100 ppm
 Subgroup 7 = Wy-14,643, 100 ppm

R7 = Right Eye
 M1 = Ventral side of Neck

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 5 (4-Week Recovery)		SUBGROUP: 1	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10566	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10567	Normal Abrasion Alopecia Alopecia Terminal Kill		M1 R7 M7	DAY 1 DAY 8-DAY 36 DAY 22-DAY 36 DAY 43 DAY 43	
R10568	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10569	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10570	Normal Lacrimation Normal Terminal Kill		R7,L7	DAY 1 DAY 8 DAY 15- DAY 43 DAY 43	
R10571	Normal Moribund Kill			DAY 1-DAY 15 DAY 21	
R10572	Normal Reddened Normal Terminal Kill		M6	DAY 1-DAY 29 DAY 36 DAY 43 DAY 43	
R10573	Normal Abrasion Terminal Kill		M1	DAY 1-DAY 22 DAY 29-DAY 43 DAY 43	
R10574	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10575	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
STUDY: 1132-100		GROUP: 5 (4-Week Recovery)		SUBGROUP: 2	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10576	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10577	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10578	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10579	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10580	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE, 300 ppm
Subgroup 3 = N-EtFOSE, 100 ppm
Subgroup 4 = N-EtFOSE, 30 ppm
Subgroup 5 = PFOS, 20 ppm
Subgroup 6 = PFOSA, 100 ppm
Subgroup 7 = Wy-14,643, 100 ppm

M1 = Ventral Side of Neck
M6 = Inguinal Ventral side
M7 = Dorsal Side of Neck
R7 = Right Eye, Right Front Leg
L7 = Left Eye

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 5 (4-Week Recovery)		SUBGROUP: 3	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10581	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10582	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10583	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10584	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10585	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
STUDY: 1132-100		GROUP: 5 (4-Week Recovery)		SUBGROUP: 4	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10586	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10587	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10588	Normal Thin Normal Terminal Kill			DAY 1-DAY 22 DAY 29 DAY 36-DAY 43 DAY 43	
R10589	Normal Thin Normal Thin Terminal Kill			DAY 1-DAY 8 DAY 15 DAY 22 DAY 29-DAY 43 DAY 43	
R10590	Normal Lacrimation Lacrimation Lacrimation Terminal Kill		L7 R7 R7	DAY 1-DAY 22 DAY 29 DAY 29-DAY 36 DAY 43 DAY 43	
STUDY: 1132-100		GROUP: 5 (4-Week Recovery)		SUBGROUP: 5	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10591	Normal Thin Normal Terminal Kill			DAY 1 DAY 8-DAY 15 DAY 22-DAY 43 DAY 43	
R10592	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10593	Normal Lacrimation Lacrimation Lacrimation Lacrimation Alopecia Alopecia Terminal Kill		R7 R7 L7 L7 R7,L7 R7,L7	DAY 1-DAY 8 DAY 15 DAY 22 DAY 22-DAY 36 DAY 43 DAY 36 DAY 43 DAY 43	
R10594	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10595	Normal Thin Normal Terminal Kill			DAY 1-DAY 8 DAY 15 DAY 22-DAY 43 DAY 43	
Subgroup 1 = 0 ppm (Control)		Subgroup 4 = N-EtFOSE, 30 ppm		Subgroup 7 = Wy-14,643, 100 ppm	
Subgroup 2 = N-EtFOSE, 300 ppm		Subgroup 5 = PFOS, 20 ppm			
Subgroup 3 = N-EtFOSE, 100 ppm		Subgroup 6 = PFOSA, 100 ppm			
R7 = Right Eye, Right Front Leg					
L7 = Left Eye, Left Front Leg					

APPENDIX TABLE 3 (Continued)
INDIVIDUAL CLINICAL OBSERVATIONS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		GROUP: 5 (4-Week Recovery)		SUBGROUP: 6	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10596	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10597	Normal Thin Normal Terminal Kill			DAY 1-DAY 15 DAY 22 DAY 29-DAY 43 DAY 43	
R10598	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10599	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10600	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
STUDY: 1132-100		GROUP: 5 (4-Week Recovery)		SUBGROUP: 7	
ANIMAL #	OBSERVATIONS	SEVERITY	LOC	TIME OCCURRED	
R10601	Normal Lacrimation Normal Terminal Kill		R7	DAY 1 DAY 8 DAY 15-DAY 43 DAY 43	
R10602	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	
R10603	Normal Thin Terminal Kill			DAY 1-DAY 36 DAY 43 DAY 43	
R10604	Normal Thin Terminal Kill			DAY 1-DAY 36 DAY 43 DAY 43	
R10605	Normal Terminal Kill			DAY 1-DAY 43 DAY 43	

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE 300 ppm
 Subgroup 3 = N-EtFOSE 100 ppm
 Subgroup 4 = N-EtFOSE 30 ppm
 Subgroup 5 = PFOS 20 ppm
 Subgroup 6 = PFOSA 100 ppm
 Subgroup 7 = Wy-14,643 100 ppm

R7 = Right Eye

APPENDIX TABLE 4
INDIVIDUAL TEST MATERIAL CONSUMPTION (PPM)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100															
SEX: MALE		GROUP: 1 (48-Hour Post Dose Sacrifice)													
SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5		SUBGROUP 6		SUBGROUP 7			
ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2	ANIMAL #	DAY 2		
R10381	0.0	R10391	34.1	R10401	11.5	R10411	3.6	R10421	2.3	R10431	11.8	R10441	11.0		
R10382	0.0	R10392	29.6	R10402	12.3	R10412	3.2	R10422	2.3	R10432	10.8	R10442	9.8		
R10383	0.0	R10393	31.8	R10403	10.8	R10413	3.5	R10423	2.3	R10433	11.9	R10443	9.1		
R10384	0.0	R10394	40.9	R10404	11.1	R10414	3.0	R10424	2.4	R10434	11.1	R10444	11.1		
R10385	0.0	R10395	32.2	R10405	12.5	R10415	3.6	R10425	2.0	R10435	11.1	R10445	11.5		
R10386	0.0	R10396	33.6	R10406	6.9	R10416	3.2	R10426	1.8	R10436	8.2				
R10387	0.0	R10397	37.8	R10407	11.8	R10417	3.4	R10427	2.3	R10437	10.7				
R10388	0.0	R10398	35.3	R10408	11.4	R10418	2.6	R10428	1.4	R10438	14.9				
R10389	0.0	R10399	34.0	R10409	11.2	R10419	3.4	R10429	2.3	R10439	11.2				
R10390	0.0	R10400	33.5	R10410	10.8	R10420	3.1	R10430	1.6	R10440	12.7				

STUDY: 1132-100				SEX: MALE				GROUP: 2 (7-Day Post Dose Sacrifice)							
SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5		SUBGROUP 6		SUBGROUP 7			
ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7	ANIMAL #	DAY 7		
R10446	0.0	R10456	31.1	R10461	11.8	R10466	3.4	R10471	2.2	R10476	10.8	R10481	10.2		
R10447	0.0	R10457	36.0	R10462	12.4	R10467	3.6	R10472	2.3	R10477	11.3	R10482	10.8		
R10448	0.0	R10458	38.1	R10463	10.2	R10468	3.6	R10473	2.3	R10478	12.2	R10483	10.9		
R10449	0.0	R10459	33.3	R10464	10.2	R10469	3.3	R10474	2.1	R10479	11.0	R10484	12.0		
R10450	0.0	R10460	32.3	R10465	11.7	R10470	3.5	R10475	2.3	R10480	11.6	R10485	11.4		

STUDY: 1132-100		SEX: MALE		GROUP: 3 (14-Day Post Dose Sacrifice)		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5	
SUBGROUP 1	ANIMAL #	DAY 8	DAY 14	SUBGROUP 2	ANIMAL #	DAY 8	DAY 14	SUBGROUP 3	ANIMAL #	DAY 8	DAY 14
R10486	0.0	R10496	29.9	R10501	11.7	9.6	3.1	R10506	3.5	R10511	2.3
R10487	0.0	R10497	35.8	R10502	11.3	9.3	2.8	R10507	3.6	R10512	2.2
R10488	0.0	R10498	33.9	R10503	12.1	9.9	3.3	R10508	3.8	R10513	2.3
R10489	0.0	R10499	35.2	R10504	11.9	9.7	3.5	R10509	4.1	R10514	2.3
R10490	0.0	R10500	34.9	R10505	13.4	11.0	3.0	R10510	3.4	R10515	2.3
R10491	0.0										
R10492	0.0										
R10493	0.0										
R10494	0.0										
R10495	0.0										

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE 300 ppm
Subgroup 3 = N-EtFOSE 100 ppm
Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 5 = PFOS 20 ppm
Subgroup 6 = PFOSA 100 ppm
Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 4 (Continued)
INDIVIDUAL TEST MATERIAL CONSUMPTION (PPM)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100				GROUP: 3 (14-Day Post Dose Sacrifice)			
SUBGROUP 6		SEX: MALE		SUBGROUP 7		DAY 8 DAY 14	
ANIMAL #	DAY 8	DAY 14	ANIMAL #	DAY 8	DAY 14		
R10516	11.5	10.1	R10521	11.7	10.2		
R10517	11.0	9.3	R10522	11.0	10.1		
R10518	11.7	9.6	R10523	12.1	10.1		
R10519	10.2	8.8	R10524	11.0	9.7		
R10520	11.0	10.1	R10525	12.1	10.1		

STUDY: 1132-100				GROUP: 4 (1-Week Recovery)			
SUBGROUP 1		SEX: MALE		SUBGROUP 2		SUBGROUP 3	
ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8 DAY 15
R10526	0.0	0.0	R10536	32.2	25.3	R10541	12.4 10.2
R10527	0.0	0.0	R10537	31.1	25.5	R10542	11.6 9.5
R10528	0.0	0.0	R10538	33.1	28.8	R10543	11.5 9.0
R10529	0.0	0.0	R10539	31.7	27.2	R10544	11.7 9.8
R10530	0.0	0.0	R10540	39.9	33.3	R10545	13.1 10.3
R10531	0.0	0.0					
R10532	0.0	0.0					
R10533	0.0	0.0					
R10534	0.0	0.0					
R10535	0.0	0.0					

STUDY: 1132-100				GROUP: 4			
SUBGROUP: 6		SEX: MALE		SUBGROUP: 7		SUBGROUP 5	
ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8 DAY 15
R10556	11.9	9.7	R10561	11.3	10.1	R10551	2.2 1.8
R10557	11.9	9.4	R10562	12.6	10.1	R10552	2.5 2.0
R10558	10.7	9.1	R10563	11.7	10.0	R10553	2.6 2.1
R10559	12.2	9.5	R10564	11.5	10.8	R10554	2.3 1.9
R10560	11.0	9.4	R10565	12.3	10.7	R10555	2.5 2.0

Subgroup 1 = 0 ppm (Control)
 Subgroup 2 = N-EtFOSE 300 ppm
 Subgroup 3 = N-EtFOSE 100 ppm
 Subgroup 4 = N-EtFOSE 30 ppm
 Subgroup 5 = PFOS 20 ppm
 Subgroup 6 = PFOSA 100 ppm
 Subgroup 7 = Wy-14,643 100 ppm

N-EtFOSE, PFOS, PFOSA

APPENDIX TABLE 4 (Continued)
INDIVIDUAL TEST MATERIAL CONSUMPTION (PPM)
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100				SEX: MALE				GROUP: 5 (4-Week Recovery)				GROUP: 6 (4-Week Recovery)				GROUP: 7 (4-Week Recovery)			
SUBGROUP 1		SUBGROUP 2		SUBGROUP 3		SUBGROUP 4		SUBGROUP 5		SUBGROUP 6		SUBGROUP 7		SUBGROUP 8		SUBGROUP 9		SUBGROUP 10	
ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8	DAY 15	ANIMAL #	DAY 8
R10566	0.0	0.0	R10576	29.1	25.5	R10581	11.9	10.3	R10586	3.4	3.0	R10591	2.4	2.0	R10596	11.6	10.0	R10601	11.6
R10567	0.0	0.0	R10577	34.4	26.9	R10582	11.5	9.4	R10587	3.8	3.0	R10592	2.3	1.9	R10597	10.1	9.1	R10602	11.9
R10568	0.0	0.0	R10578	36.9	30.4	R10583	13.0	11.3	R10588	3.6	3.0	R10593	2.4	1.8	R10598	12.3	9.6	R10603	11.5
R10569	0.0	0.0	R10579	33.2	27.6	R10584	12.2	10.7	R10589	3.7	2.7	R10594	2.3	2.0	R10599	15.5	10.5	R10603	11.8
R10570	0.0	0.0	R10580	29.9	28.0	R10585	10.6	9.2	R10590	3.7	3.1	R10595	2.5	2.1	R10600	11.7	9.5	R10604	12.4
R10571	0.0	0.0																	
R10572	0.0	0.0																	
R10573	0.0	0.0																	
R10574	0.0	0.0																	
R10575	0.0	0.0																	

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE 300 ppm
Subgroup 3 = N-EtFOSE 100 ppm
Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 5 = PFOS 20 ppm
Subgroup 6 = PFOSA 100 ppm
Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 5
INDIVIDUAL ABSOLUTE LIVER WEIGHTS (GRAMS) AND ORGAN TO BODY WEIGHT RATIOS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE		GROUP: 1 (48 Hour Post Dose)											
Subgroup: 1	ANIMAL ID:	R10381	R10382	R10383	R10384	R10385	R10386	R10387	R10388	R10389	R10390				
BODY WEIGHT (G)		211.4	232.2	200.8	214.9	197.1	190.1	199.1	196.5	207.9	225.8				
Liver (G)		8.186	8.454	7.254	6.922	7.356	6.978	6.828	6.914	8.067	8.180				
% BODY WEIGHT		3.872	3.641	3.613	3.221	3.732	3.671	3.429	3.519	3.880	3.623				
STUDY: 1132-100		SEX: MALE		GROUP: 1 (48 Hour Post Dose)											
Subgroup: 2	ANIMAL ID:	R10391	R10392	R10393	R10394	R10395	R10396	R10397	R10398	R10399	R10400				
BODY WEIGHT (G)		195.8	219.3	195.7	176.1	226.2	206.3	224.8	226.9	202.7	213.3				
Liver (G)		7.123	7.703	7.659	6.158	7.902	8.001	8.791	9.397	7.581	8.466				
% BODY WEIGHT		3.638	3.513	3.914	3.497	3.493	3.878	3.911	4.141	3.740	3.969				
STUDY: 1132-100		SEX: MALE		GROUP: 1 (48 Hour Post Dose)											
Subgroup: 3	ANIMAL ID:	R10401	R10402	R10403	R10404	R10405	R10406	R10407	R10408	R10409	R10410				
BODY WEIGHT (G)		224.6	219.5	237.6	228.4	218.3	221.5	208.9	210.0	226.7	215.4				
Liver (G)		8.109	9.187	9.724	8.574	7.972	8.326	7.853	8.260	8.893	8.256				
% BODY WEIGHT		3.610	4.185	4.093	3.754	3.652	3.759	3.759	3.933	3.923	3.833				
STUDY: 1132-100		SEX: MALE		GROUP: 1 (48 Hour Post Dose)											
Subgroup: 4	ANIMAL ID:	R10411	R10412	R10413	R10414	R10415	R10416	R10417	R10418	R10419	R10420				
BODY WEIGHT (G)		196.6	215.9	199.4	215.5	202.2	204.5	203.8	200.0	221.2	219.9				
Liver (G)		7.739	8.269	7.061	7.843	7.953	8.746	7.224	7.268	8.025	7.754				
% BODY WEIGHT		3.936	3.830	3.541	3.639	3.933	4.277	3.545	3.634	3.628	3.526				
STUDY: 1132-100		SEX: MALE		GROUP: 1 (48 Hour Post Dose)											
Subgroup: 5	ANIMAL ID:	R10421	R10422	R10423	R10424	R10425	R10426	R10427	R10428	R10429	R10430				
BODY WEIGHT (G)		220.6	215.0	217.1	210.0	219.0	211.4	175.3	210.0	198.1	212.4				
Liver (G)		8.297	8.427	8.171	8.104	8.128	7.975	6.174	8.364	6.633	7.206				
% BODY WEIGHT		3.761	3.920	3.764	3.859	3.711	3.772	3.522	3.983	3.348	3.393				
Subgroup 1 = 0 ppm (Control)		Subgroup 5 = PFOS 20 ppm													
Subgroup 2 = N-EtFOSE 300 ppm		Subgroup 6 = PFOSA 100 ppm													
Subgroup 3 = N-EtFOSE 100 ppm		Subgroup 7 = Wy-14,643 100 ppm													
Subgroup 4 = N-EtFOSE 30 ppm															

APPENDIX TABLE 5 (Continued)
INDIVIDUAL ABSOLUTE LIVER WEIGHTS (GRAMS) AND ORGAN TO BODY WEIGHT RATIOS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE		GROUP: 1 (48 Hour Post Dose)		R10432		R10433		R10434		R10435		R10436		R10437		R10438		R10439		R10440	
Subgroup: 6		ANIMAL ID:		R10431		R10432		R10433		R10434		R10435		R10436		R10437		R10438		R10439		R10440	
BODY WEIGHT (G)		216.6		167.5		205.0		246.6		209.7		222.6		232.2		210.2		219.2		207.2			
Liver (G)		7.666		5.890		7.391		9.169		7.759		8.067		9.131		8.484		7.910		8.349			
% BODY WEIGHT		3.539		3.516		3.605		3.718		3.700		3.624		3.932		4.036		3.609		4.029			
STUDY: 1132-100		SEX: MALE		GROUP: 1 (48 Hour Post Dose)		R10441		R10442		R10443		R10444		R10445									
Subgroup: 7		ANIMAL ID:		R10441		R10442		R10443		R10444		R10445											
BODY WEIGHT (G)		211.9		223.7		224.2		211.5		214.6													
Liver (G)		9.692		10.169		9.532		9.268		9.114													
% BODY WEIGHT		4.574		4.546		4.252		4.382		4.247													
STUDY: 1132-100		SEX: MALE		GROUP: 2 (7 Day Post Dose)		R10446		R10447		R10448		R10449		R10450		R10451		R10452		R10453		R10454	
Subgroup: 1		ANIMAL ID:		R10446		R10447		R10448		R10449		R10450		R10451		R10452		R10453		R10454		R10455	
BODY WEIGHT (G)		240.7		230.0		270.8		253.3		230.2		236.9		256.6		239.2		258.7		264.3			
Liver (G)		7.397		8.437		10.213		8.259		7.160		7.894		8.914		7.852		9.101		9.526			
% BODY WEIGHT		3.073		3.668		3.771		3.261		3.110		3.332		3.474		3.283		3.518		3.604			
STUDY: 1132-100		SEX: MALE		GROUP: 2 (7 Day Post Dose)		R10456		R10457		R10458		R10459		R10460		R10461		R10462		R10463		R10464	
Subgroup: 2		ANIMAL ID:		R10456		R10457		R10458		R10459		R10460		R10461		R10462		R10463		R10464		R10465	
BODY WEIGHT (G)		232.3		220.7		227.3		252.6		242.7		242.7		275.0		264.0		272.1		249.6		232.4	
Liver (G)		8.632		9.842		9.704		10.572		9.459		3.897		9.288		9.923		10.994		9.144		8.974	
% BODY WEIGHT		3.716		4.459		4.269		4.185		3.897				3.377		3.759		4.040		3.663		3.861	
STUDY: 1132-100		SEX: MALE		GROUP: 2 (7 Day Post Dose)		R10466		R10467		R10468		R10469		R10470		R10471		R10472		R10473		R10474	
Subgroup: 4		ANIMAL ID:		R10466		R10467		R10468		R10469		R10470		R10471		R10472		R10473		R10474		R10475	
BODY WEIGHT (G)		225.5		256.5		253.4		248.8		236.8		236.8		247.1		232.6		237.0		241.9		258.3	
Liver (G)		8.224		9.225		8.820		9.030		7.408		3.128		8.531		8.558		8.575		9.240		9.247	
% BODY WEIGHT		3.647		3.596		3.481		3.629		3.128				3.452		3.679		3.618		3.820		3.580	

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE 300 ppm
Subgroup 3 = N-EtFOSE 100 ppm
Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 5 = PFOS 20 ppm
Subgroup 6 = PFOSA 100 ppm
Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 5 (Continued)

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE 300 ppm
Subgroup 3 = N-EtFOSE 100 ppm
Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 5 = PFOS 20 ppm
Subgroup 6 = PFOSA 100 ppm
Subgroup 7 = Wy-14,643 100 ppm

APPENDIX TABLE 5 (Continued)
INDIVIDUAL ABSOLUTE LIVER WEIGHTS (GRAMS) AND ORGAN TO BODY WEIGHT RATIOS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE		GROUP: 4 (1 Week Recovery)		R10528		R10529		R10530		R10531		R10532		R10533		R10534		R10535	
Subgroup: 1		ANIMAL ID:																			
BODY WEIGHT (G)		320.7		378.4		369.4		338.7		311.9		323.4		351.8		328.1		314.6		356.4	
Liver (G)		9.938		14.030		14.007		11.954		8.511		10.041		11.082		11.224		10.006		12.421	
% BODY WEIGHT		3.099		3.708		3.792		3.529		2.729		3.105		3.150		3.421		3.181		3.485	
STUDY: 1132-100		SEX: MALE		GROUP: 4 (1 Week Recovery)																	
Subgroup: 2		ANIMAL ID:																			
BODY WEIGHT (G)		277.2		294.8		296.3		282.0		316.1		343.0		336.0		287.0		309.6		314.2	
Liver (G)		12.879		13.775		15.268		11.204		17.466		13.108		13.407		11.587		11.404		10.325	
% BODY WEIGHT		4.646		4.673		5.153		3.973		5.525		3.822		3.990		4.037		3.683		3.286	
STUDY: 1132-100		SEX: MALE		GROUP: 4 (1 Week Recovery)																	
Subgroup: 4		ANIMAL ID:																			
BODY WEIGHT (G)		326.1		302.8		315.9		329.9		334.9		315.7		304.8		305.3		339.9		336.7	
Liver (G)		11.798		10.312		9.597		10.642		10.395		10.057		10.876		10.466		11.776		12.298	
% BODY WEIGHT		3.618		3.406		3.038		3.226		3.104		3.186		3.568		3.428		3.465		3.653	
STUDY: 1132-100		SEX: MALE		GROUP: 4 (1 Week Recovery)																	
Subgroup: 6		ANIMAL ID:																			
BODY WEIGHT (G)		324.3		293.2		304.5		318.9		307.9		286.7		300.4		248.2		306.0		304.6	
Liver (G)		13.898		12.498		12.203		12.907		11.899		13.896		13.225		9.352		11.826		11.654	
% BODY WEIGHT		4.286		4.263		4.008		4.047		3.865		4.847		4.402		3.768		3.865		3.826	
STUDY: 1132-100		SEX: MALE		GROUP: 5 (4 Week Recovery)																	
Subgroup: 1		ANIMAL ID:																			
BODY WEIGHT (G)		419.6		410.4		430.1		478.5		349.9		369.6		425.4		391.0		391.1			
Liver (G)		12.914		13.400		12.560		20.255		11.635		9.622		14.000		10.276		10.538			
% BODY WEIGHT		3.078		3.265		2.920		4.233		3.325		2.603		3.291		2.628		2.694			
Subgroup 1 = 0 ppm (Control)																					
Subgroup 2 = N-EtFOSE 300 ppm																					
Subgroup 3 = N-EtFOSE 100 ppm																					
Subgroup 4 = N-EtFOSE 30 ppm																					
Subgroup 5 = PFOS 20 ppm																					
Subgroup 6 = PFOSA 100 ppm																					
Subgroup 7 = Wy-14,643 100 ppm																					

APPENDIX TABLE 5 (Continued)
INDIVIDUAL ABSOLUTE LIVER WEIGHTS (GRAMS) AND ORGAN TO BODY WEIGHT RATIOS
Cell Proliferation Study with N-EtFOSE, PFOS, and PFOSA in Rats

STUDY: 1132-100		SEX: MALE		GROUP: 4 (1 Week Recovery)		Subgroup: 3		Subgroup: 3		Subgroup: 3		Subgroup: 3	
Subgroup: 2		SEX: MALE		GROUP: 4 (1 Week Recovery)		Subgroup: 3		Subgroup: 3		Subgroup: 3		Subgroup: 3	
ANIMAL ID:		R10576	R10577	R10578	R10579	R10580	R10581	R10582	R10583	R10584	R10585	R10586	R10587
BODY WEIGHT (G)	394.9	390.8	389.7	385.6	416.3	404.3	369.6	406.9	390.1	354.1			
Liver (G)	18.930	17.760	14.301	16.167	18.573	13.739	11.940	14.615	12.139	11.490			
% BODY WEIGHT	4.794	4.545	3.670	4.193	4.461	3.398	3.231	3.592	3.112	3.245			
STUDY: 1132-100		SEX: MALE		GROUP: 4 (1 Week Recovery)		Subgroup: 5		Subgroup: 5		Subgroup: 5		Subgroup: 5	
Subgroup: 4		SEX: MALE		GROUP: 4 (1 Week Recovery)		Subgroup: 5		Subgroup: 5		Subgroup: 5		Subgroup: 5	
ANIMAL ID:		R10586	R10587	R10588	R10589	R10590	R10591	R10592	R10593	R10594	R10595	R10596	R10597
BODY WEIGHT (G)	400.3	419.5	403.5	334.1	410.5	359.4	392.8	386.0	432.7	438.5			
Liver (G)	13.786	13.145	13.568	12.480	12.535	11.787	14.189	12.789	14.176	14.346			
% BODY WEIGHT	3.444	3.133	3.363	3.735	3.054	3.280	3.612	3.313	3.276	3.272			
STUDY: 1132-100		SEX: MALE		GROUP: 4 (1 Week Recovery)		Subgroup: 7		Subgroup: 7		Subgroup: 7		Subgroup: 7	
Subgroup: 6		SEX: MALE		GROUP: 4 (1 Week Recovery)		Subgroup: 7		Subgroup: 7		Subgroup: 7		Subgroup: 7	
ANIMAL ID:		R10596	R10597	R10598	R10599	R10600	R10601	R10602	R10603	R10604	R10605	R10606	R10607
BODY WEIGHT (G)	391.6	378.1	397.6	396.2	350.0	409.6	451.5	363.3	370.8	368.4			
Liver (G)	14.315	13.607	17.252	16.640	13.945	14.885	16.676	12.285	11.371	12.182			
% BODY WEIGHT	3.656	3.599	4.339	4.200	3.984	3.634	3.693	3.382	3.067	3.307			

Subgroup 1 = 0 ppm (Control)
Subgroup 2 = N-EtFOSE 300 ppm
Subgroup 3 = N-EtFOSE 100 ppm
Subgroup 4 = N-EtFOSE 30 ppm
Subgroup 5 = PFOS 20 ppm
Subgroup 6 = PFOSA 100 ppm
Subgroup 7 = Wy-14,643 100 ppm