

Table 5
Average PFOA Concentrations in the Serum ($\mu\text{g/mL}$) of Treated Animals

	0 mg/kg/day	3 mg/kg/day	10 mg/kg/day	30/20 mg/kg/day
Time Point				
Day 9	0.0613 \pm 0.0472	126 \pm 36.1	189 \pm 48.9	1597 \pm 2392
Week 4	0.0206 \pm 0.0105	98.4 \pm 42.7	172 \pm 71.9	1084 \pm 1839
Week 6	0.103 \pm 0.0113	102 \pm 33.6	95.8 \pm 20.6	145 \pm 21.6
Week 8	<LOQ	94.7 \pm 27.3	97.6 \pm 23.5	166 \pm 98.9
Week 10	0.126 \pm 0.0348	105 \pm 37.7	93.6 \pm 13.7	237 \pm 158
Week 12	0.123 \pm 0.0507	79.6 \pm 25.9	90.6 \pm 24.5	140 \pm 77.5
Week 14	0.162 \pm 0.0643	90.0 \pm 28.9	92.2 \pm 27.6	79.4 \pm 28.3
Week 16	0.128 \pm 0.0721	68.6 \pm 26.0	98.5 \pm 42.3	83.9 \pm 58.5
Week 18	0.183 \pm 0.0637	29.4 \pm 25.4	17.4 \pm 14.3	36.2 \pm 21.2
Week 20	0.224 \pm 0.0730	33.0 \pm 26.0	96.6 \pm 26.6	97.7 \pm 129
Week 22	0.232 \pm 0.131	77.6 \pm 24.9	105 \pm 36.3	58.6 \pm 45.6
Week 24	<LOQ	72.2 \pm 68.8	90.9 \pm 21.2	62.7 \pm 74.3
Week 26	0.209 \pm 0.156	118 \pm 27.5	77.4 \pm 16.9	77.8 \pm 126
Week 26/27	0.223 \pm 0.105	52.5 \pm 9.14	74.1 \pm 33.1	51.5 \pm 77.6
Week 28	0.181 \pm 0.0391	NS	25.9 \pm 7.07	NS
Week 30	0.144 \pm 0.0238	NS	11.3 \pm 5.11	NS
Week 32	0.110 \pm 0.0216	NS	7.60 \pm 3.90	NS
Week 34	0.0861 \pm 0.0256	NS	3.97 \pm 2.09	NS
Week 36	0.111 \pm 0.0445	NS	2.75 \pm 1.88	NS
Week 38	0.0941 \pm 0.0324	NS	1.84 \pm 1.40	NS
Week 40	0.0738 \pm 0.00256	NS	1.18 \pm 0.827	NS

LOQ = Limit of Quantitation; NS = No Sample; Results are expressed as group averages \pm the standard deviation associated with that group. Data are accurate to within one SD of the average fortified sample recovery. The average fortified sample recovery was 94% with an SD of 11%.

Table 6
Average PFOA Concentrations in the Liver ($\mu\text{g/g}$) of Treated Animals

	0 mg/kg/day	3 mg/kg/day	10 mg/kg/day	30/20 mg/kg/day
Time Point				
Week 20	NS	18.3	NS	NS
Week 27	0.117 ± 0.0730	15.3 ± 3.02	14.0 ± 7.55	42.8 ± 63.3
Week 40	<LOQ	NS	0.114 ± 0.0441	NS

LOQ = Limit of Quantitation; NS = No Sample
 Results are expressed as group averages \pm the standard deviation associated with that group.
 Data are accurate to within one SD of the average fortified sample recovery. The average fortified sample recovery was 90% with an SD of 26%.

Table 7. Average PFOA Concentrations in the Urine ($\mu\text{g/mL}$) of Treated Animals

	0 mg/kg/day	3 mg/kg/day	10 mg/kg/day	30/20 mg/kg/day
Time Point				
Week 2	< LOQ	73.5 \pm 38.1	221 \pm 124	909 \pm 269
Week 4	0.152 \pm 0.337	54.9 \pm 4.62	190 \pm 91.6	240 \pm 161
Week 6	0.0587 \pm 0.0716	65.7 \pm 46.9	128 \pm 50.0	272 \pm 140
Week 8	0.0161 \pm 0.00940	47.6 \pm 20.6	206 \pm 73.1	180 \pm 109
Week 10	0.0177 \pm 0.00114	39.9 \pm 18.7	175 \pm 92.3	359 \pm 449
Week 12	0.0141 \pm 0.00648	48.8 \pm 18.8	201 \pm 92.7	118 \pm 111
Week 14	7.96 \pm 19.5	63.1 \pm 47.2	139 \pm 52.5	72.9 \pm 84.0
Week 16	0.0299 \pm 0.0339	50.2 \pm 21.0	139 \pm 57.0	50.2 \pm 67.9
Week 18	0.0256 \pm 0.0248	37.7 \pm 19.3	186 \pm 63.9	43.1 84.6
Week 20	0.0211 \pm 0.0130	52.1 \pm 9.63	144 \pm 135	44.0 \pm 59.9
Week 22	0.0231 \pm 0.00688	95.8 \pm 80.8	158 \pm 78.4	98.5 \pm 134
Week 24	0.0125 \pm 0.00749	46.3 \pm 8.52	157 \pm 63.3	56.0 \pm 77.2
Week 26	0.0268 \pm 0.0265	51.6 \pm 13.7	109 \pm 75.2	19.2 \pm 27.0
Week 28	0.118 \pm 0.142	NS	0.327 \pm 0.0182	NS
Week 30	<LOQ	NS	0.361 \pm 0.118	NS
Week 32	<LOQ	NS	0.114 \pm 0.0608	NS
Week 34	<LOQ	NS	0.121 \pm 0.0305	NS
Week 36	0.0117 \pm 0.00841	NS	0.0502 \pm 0.0166	NS
Week 38	<LOQ	NS	0.0284 \pm 0.0102	NS
Week 40	<LOQ	NS	0.0254 \pm 0.0101	NS

LOQ = Limit of Quantitation; NS = No Sample; Results are expressed as group averages \pm the standard deviation associated with that group. Data are accurate to within one SD of the average fortified sample recovery. The average fortified sample recovery was 88% with an SD of 17%.

Table 8
Average PFOA Concentrations in the Feces ($\mu\text{g/g}$) of Treated Animals

	0 mg/kg/day	3 mg/kg/day	10 mg/kg/day	30/20 mg/kg/day
Time Point				
Week 2	<LOQ	7.43 \pm 6.54	15.4 \pm 10.2	56.6 \pm 73.7
Week 4	0.0214 \pm 0.0178	10.4 \pm 12.0	23.4 \pm 10.6	22.0 \pm 6.23
Week 6	0.108 \pm 0.00192	12.1 \pm 14.1	23.3 \pm 8.46	101 \pm 86.7
Week 8	0.0782 \pm 0.103	9.46 \pm 9.21	41.0 \pm 25.0	36.7 \pm 34.2
Week 10	<LOQ	3.96 \pm 3.68	26.0 \pm 17.4	48.0 \pm 34.0
Week 12	0.0498 \pm 0.0894	7.15 \pm 5.65	10.3 \pm 6.07	32.0 \pm 42.9
Week 14	0.139 \pm 0.308	7.50 \pm 2.43	27.2 \pm 29.4	19.2 \pm 25.2
Week 16	0.0572 \pm 0.0762	6.88 \pm 2.62	31.4 \pm 23.3	18.2 \pm 28.8
Week 18	0.258 \pm 0.654	5.72 \pm 7.15	17.3 \pm 13.3	22.1 \pm 31.7
Week 20	0.405 \pm 1.08	6.81 \pm 4.89	52.4 \pm 39.5	37.8 \pm 58.1
Week 22	15.5 \pm 36.9	13.8 \pm 5.22	39.5 \pm 21.0	25.2 \pm 36.0
Week 24	0.517 \pm 1.13	6.22 \pm 5.45	40.5 \pm 21.8	34.6 \pm 47.7
Week 26	0.0172 \pm 0.00892	2.92 \pm 1.35	43.0 \pm 36.9	10.3 \pm 20.8
Weeks 28-34	0.279 \pm 0.732	NS	0.387 \pm 0.372	NS
Weeks 36-40	0.0103 \pm 0.00684	NS	0.0336 \pm 0.0313	NS

LOQ = Limit of Quantitation; NS = No Sample

Results are expressed as group averages \pm the standard deviation associated with that group. Data are accurate to within one SD of the average fortified sample recovery. The average fortified sample recovery was 117% with an SD of 22%.

3.6 Developmental Toxicity Studies in Animals

Three prenatal developmental toxicity studies of APFO have been conducted, one inhalation and two oral studies.

The first of these studies was an oral developmental toxicity study in rats (Gortner, 1981). Based on the results of a range-finding study, an upper dose level of 150 mg/kg/day was set for the definitive study in which five groups of 22 time-mated Sprague-Dawley rats were administered 0, 0.05, 1.5, 5, and 150 mg/kg/day APFO in distilled water by gavage on gestation days (GD) 6-15. Doses were adjusted according to body weight. Dams were monitored on GD 3-20 for clinical signs of toxicity. Individual body weights were recorded on GD 3, 6, 9, 12, 15, and 20.