

**Addendum 5-5. Estrus cycle - individual findings following the time course at 7 months
continued**

BPA 50 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	M	D	D	P	P	P	P	P	P	P	P	P	D	P	CE
218	P	E	P	P	P	P	P	P							CE
219	D	D	E	M	D	P	E	M	D	P					N
220	D	E	M	D	P	E	M	D	D	E	M	D	P	E	N
223	P	P	P	P	P	E	P	P	P	P	P	P	P	P	CE
224	P	P	P	P	E	P	P	P	E	P	P	P	P	P	CE
226	D	P	E	M	D	P	E	M	D	P					N
227	E	M	D	P	E	M	D	P							N
229	D	D	P	E	M	D	D	E	M	D	D	E	M	D	N
230	M	D	E	M	D	M	M	M	M	M	M	M	M	D	IE
232	E	M	D	P	E	M	D	P							N
233	D	P	E	M	D	P	E	M	D	P					N
235	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
236	M	D	D	E	M	D	P	E	M	D	D	E	M	D	N
237	E	M	D	P	E	M	P	E	M	D	D	P	M	D	N
238	M	D	P	M	D	D	D	P							N
241	P	P	P	E	P	P	P	P							CE
242	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
243	D	P	E	M	D	D	P	E	M	D	D	D	D	D	PD
244	M	D	P	E	M	D	D	E	M	D	D	D	P	E	N
245	P	E	M	D	D	P	E	M	D	D	P				N
248	E	M	D	P	E	M	D	P	D	D	D	E	M	P	N
250	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N
251	M	D	D	E	M	D	D	P							N
252	D	P	E	M	D	D	E	M	D	P					N
254	M	D	P	E	M	M	M	D	D	D	D	P	M	D	N
256	P	E	M	D	P	E	M	D	P	E	M	D	P	E	N
258	P	P	P	P	P	P	P	P							CE
260	E	M	D	D	D	P	E	M	D	D	D	D	D	E	PD
261	D	D	P	E	M	D	D	D	E	M	D	D	E	M	N
Total														30	
Normal														21	
Abnormal														9	
PD														2	
CD														0	
PE														0	
CE														6	
IE														1	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-6. Estrus cycle - individual findings following the time course at 8 months

Vehicle control

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N
104	M	M	P	P	P	P	P	P	P	M	P	P	P	P	PE
105	D	P	M	D	P	M	D	D	P	M	D	D	D	D	N
109	D	P	P	M	D	P	E	M	D	P	M	D	D	D	N
111	P	E	M	D	P	E	M	D	D	D	P	M	D	D	N
112	D	P	E	M	D	D	P	E	M	D	D	D	E	M	N
114	M	D	P	E	M	D	P	P	M	D	P	P	M	D	N
117	D	D	D	D	D	D	D	D	D	D	D	D	D	P	CD
118	E	M	D	D	D	D	D	D	D	D	D	P	E	M	PD
124	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
125	D	M	M	M	M	M	M	M	P	P	M	D	D	D	IE
129	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
131	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
133	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
138	D	E	M	D	D	E	M	D	D	D	P	P	M	D	N
142	D	D	D	D	D	D	D	D	P	P	M	D	D	E	PD
143	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
145	P	M	D	D	E	M	D	D	D	D	D	D	D	D	PD
146	P	M	D	D	D	P	M	D	D	E	M	D	D	P	N
Total														19	
Normal														11	
Abnormal														8	
PD														3	
CD														2	
PE														1	
CE														1	
IE														1	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-6. Estrus cycle - individual findings following the time course at 8 months continued

BPA 0.5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	E	M	D	D	P	M	D	P	M	D	P	M	M	D	N
149	M	D	D	E	M	D	P	P	P	M	D	P	P	P	PE
150	P	E	M	D	D	E	E	M	D	D	D	E	M	D	N
151	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
152	P	P	P	P	P	P	P	P	P	P	P	P	M	M	CE
154	P	P	D	D	P	P	P	P	P	P	P	M	D	D	PE
155	P	M	M	M	M	P	M	M	D	D	P	M	M	D	N
157	D	E	M	D	D	E	M	D	D	D	E	M	D	D	N
159	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
160	M	D	P	M	D	P	M	D	D	P	M	D	P	M	N
162	M	D	D	P	M	D	D	D	P	P	M	D	E	M	N
164	M	D	D	P	P	M	P	P	P	P	P	P	P	P	CE
165	D	P	E	M	D	D	D	E	M	D	D	E	E	M	N
166	P	M	D	D	P	E	M	D	D	D	E	M	D	D	N
167	E	M	D	D	D	D	P	E	M	D	P	M	D	D	N
170	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
171	P	P	P	P	P	P	P	P	P	P	M	P	P	P	CE
172	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
173	D	D	D	D	D	D	P	E	M	M	M	D	D	D	PD
175	D	E	M	D	D	E	M	D	D	D	E	M	D	D	N
176	M	D	D	P	E	M	D	P	M	D	P	M	D	D	N
177	P	M	D	P	M	D	D	P	M	D	P	M	D	D	N
180	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
Total														23	
Normal														13	
Abnormal														10	
PD														1	
CD														0	
PE														2	
CE														7	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum 5-6. Estrus cycle - individual findings following the time course at 8 months
continued**

BPA 5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	M	D	D	E	M	D	D	D	P	E	M	D	D	P	N
182	D	D	E	M	D	D	D	D	D	D	E	M	D	P	PD
184	D	D	E	M	D	P	E	M	D	D	P	E	M	D	N
185	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
189	M	D	D	E	M	D	P	E	M	D	P	E	M	D	N
190	D	D	E	M	D	D	E	M	D	D	P	E	M	D	N
191	P	M	D	D	D	P	M	M	P	M	D	P	E	M	N
193	M	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
194	D	D	D	D	D	D	D	D	D	P	M	D	D	D	PD
195	D	D	D	D	D	D	D	D	D	D	D	D	D	P	CD
198	D	D	D	D	D	D	D	D	D	D	D	D	D	P	CD
199	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
201	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
202	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
204	D	E	M	D	D	E	M	D	D	E	M	D	D	P	N
206	M	D	D	E	M	D	D	E	M	D	P	M	D	D	N
208	P	P	P	P	P	P	P	P	P	P	P	M	P	P	CE
209	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
210	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
212	D	D	P	M	D	D	E	M	D	D	E	M	D	D	N
213	D	E	M	D	D	E	M	D	D	D	D	E	M	D	N
214	D	D	P	E	M	D	D	D	E	M	D	D	P	E	N
														Total	22
														Normal	13
														Abnormal	9
														PD	2
														CD	5
														PE	0
														CE	2
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-6. Estrus cycle - individual findings following the time course at 8 months continued

BPA 50 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
220	P	P	P	M	M	M	M	M	P	P	P	P	P	P	PE
223	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
224	P	P	P	CV	P	P	P	P	P	P	P	P	P	P	CE
229	P	P	M	P	P	P	P	P	P	P	P	M	P	P	CE
230	M	D	M	P	M	M	P	P	P	P	M	M	D	D	PE
235	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
236	P	P	P	P	P	P	P	P	P	P	D	D	D	D	CE
237	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
242	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
243	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
244	E	M	D	D	P	E	M	D	D	D	D	D	D	D	PD
248	D	D	P	P	P	P	P	P	P	P	P	P	D	D	CE
250	D	D	P	E	M	D	D	E	M	D	P	E	M	D	N
254	P	P	P	P	P	P	P	P	M	D	D	D	P	M	CE
256	P	M	D	D	D	D	D	D	D	D	D	D	D	D	CD
260	P	E	M	D	D	D	E	M	D	D	E	E	M	D	N
261	P	M	M	M	D	P	E	M	D	D	P	M	D	D	N
														Total	18
														Normal	6
														Abnormal	12
														PD	1
														CD	1
														PE	2
														CE	8
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus, CV; common variable

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-7. Estrus cycle - individual findings following the time course at 9 months

Vehicle control

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	M	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
104	P	P	M	D	P	P	M	D	P	M	D	D	D	P	N
105	M	D	D	D	D	D	D	P	M	D	D	D	D	D	PD
109	M	D	P	P	M	D	D	D	P	M	D	P	M	D	N
111	D	D	D	P	P	P	P	P	P	M	P	P	P	P	PE
112	D	D	D	P	E	M	D	D	E	M	D	D	D	P	N
114	E	M	D	P	M	D	D	P	E	M	D	P	M	D	N
117	E	M	D	P	E	M	D	D	E	M	D	P	M	D	N
118	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
124	M	D	P	M	D	D	D	D	E	M	D	E	M	D	N
125	M	D	D	D	D	D	D	D	E	M	D	D	D	D	PD
129	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
131	D	D	D	D	D	D	D	D	D	D	D	D	D	P	CD
133	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
138	D	D	P	E	M	D	P	E	M	D	D	E	M	D	N
142	D	D	D	D	D	D	P	M	D	D	D	D	D	D	PD
143	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
145	M	D	D	D	D	D	D	D	D	D	D	D	P	P	CD
146	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
														Total	19
														Normal	10
														Abnormal	9
														PD	3
														CD	5
														PE	1
														CE	0
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-7. Estrus cycle - individual findings following the time course at 9 months continued

BPA 0.5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	P	P	P	M	D	D	D	P	E	M	D	P	M	D	PE
149	D	D	P	E	M	D	P	P	M	D	P	P	E	M	N
150	D	D	D	P	E	M	D	D	E	E	M	D	D	D	N
151	P	M	D	D	D	P	E	M	D	D	P	M	D	D	N
152	P	P	P	P	P	P	P	P	P	P	D	P	P	P	CE
154	P	P	P	M	D	D	D	D	D	P	P	P	D	D	PE
155	D	D	P	M	D	D	D	D	P	M	D	D	D	D	N
157	M	D	D	E	M	D	D	D	E	M	D	D	D	D	N
159	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
160	P	M	D	D	D	D	P	M	D	D	D	P	E	M	N
162	M	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
164	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
165	D	D	D	E	M	D	D	E	M	D	D	E	E	M	N
166	P	P	P	P	P	P	P	P	P	M	P	E	E	P	CE
167	P	M	P	P	P	P	P	P	P	P	P	P	P	P	CE
170	M	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
171	P	P	P	P	D	D	P	P	P	P	P	P	P	P	CE
172	P	M	P	P	P	P	M	M	P	M	D	D	D	P	PE
173	P	E	E	E	M	M	M	D	D	D	D	D	E	E	PE
175	M	D	D	E	E	M	D	D	E	M	D	D	D	E	N
176	P	P	P	P	P	P	P	P	P	P	P	E	P	P	CE
177	M	D	P	M	D	D	P	M	D	D	P	M	D	D	N
180	D	E	M	D	P	E	M	D	P	E	M	D	D	E	N
Total														23	
Normal														10	
Abnormal														13	
PD														0	
CD														1	
PE														4	
CE														8	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum 5-7. Estrus cycle - individual findings following the time course at 9 months
continued**

BPA 5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	D	P	E	M	D	D	P	E	M	D	D	P	E	M	N
182	D	E	M	D	D	E	M	D	D	D	P	E	M	D	N
184	D	D	D	D	D	P	P	P	P	M	D	D	D	P	PE
185	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
189	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
190	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
191	P	P	P	P	P	P	P	P	P	M	D	D	D	D	CE
193	M	D	D	D	D	D	P	M	D	D	D	D	D	D	PD
194	M	D	D	D	D	D	P	P	P	M	D	D	P	M	PE
195	M	D	P	E	M	D	D	E	M	D	D	D	E	M	N
198	E	M	D	P	E	M	D	D	E	M	D	D	D	D	N
199	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
201	E	M	D	D	E	M	D	D	E	M	D	D	D	E	N
202	M	D	P	E	E	E	M	D	P	P	M	D	E	M	PE
204	D	E	M	D	D	P	E	M	D	D	E	E	M	D	N
206	P	P	P	P	P	M	D	D	D	P	M	D	P	M	PE
208	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
209	D	D	P	D	D	D	D	D	D	D	D	D	D	E	CD
210	M	D	P	M	D	P	M	D	D	P	P	P	P	M	PE
212	M	D	D	D	E	M	D	D	E	M	D	D	E	E	N
213	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
214	M	D	D	E	M	D	D	E	M	D	D	D	D	D	PD
Total														22	
Normal														11	
Abnormal														11	
PD														2	
CD														2	
PE														5	
CE														2	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum 5-7. Estrus cycle - individual findings following the time course at 9 months
continued**

BPA 50 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	M	D	D	D	D	D	D	D	D	P	P	M	D	D	PD
220	M	D	P	P	D	D	D	P	M	D	P	M	D	D	N
223	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
224	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
229	P	P	P	P	M	D	D	D	D	D	D	D	D	D	PE
230	P	D	D	D	D	D	P	M	D	D	D	D	D	P	PD
235	D	D	D	E	M	D	D	E	M	D	D	E	M	D	N
236	P	P	P	P	P	M	D	P	E	M	D	P	M	D	PE
237	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
242	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
243	E	M	D	D	P	P	M	D	D	D	D	D	D	D	PD
244	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
248	D	D	D	D	D	D	D	D	P	M	D	P	M	D	PD
250	P	D	D	E	M	D	D	D	E	M	D	D	D	P	N
254	M	D	P	M	P	P	P	P	P	P	P	P	P	P	CE
256	D	D	D	D	D	D	D	D	D	P	M	D	P	E	PD
260	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
261	E	M	D	D	D	P	E	M	D	D	P	E	M	D	N
Total														18	
Normal														6	
Abnormal														12	
PD														5	
CD														1	
PE														2	
CE														4	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-8. Estrus cycle - individual findings following the time course at 10 months

Vehicle control

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
104	D	P	M	D	P	M	D	P	P	P	P	P	P	P	PE
105	M	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
109	M	D	D	D	D	P	M	D	P	M	D	D	P	P	N
111	M	M	D	P	P	M	D	P	P	M	D	P	M	D	N
112	P	E	M	D	D	D	E	M	D	D	P	E	M	D	N
114	P	M	D	P	M	D	D	P	E	M	D	D	D	D	N
117	D	D	D	D	P	M	D	P	M	D	P	P	M	D	N
118	D	D	D	D	E	M	D	D	P	E	M	D	D	D	N
124	P	E	M	D	P	M	D	P	E	M	D	P	P	M	N
125	M	D	P	M	D	D	D	P	M	D	D	D	P	P	N
129	P	E	M	D	D	E	M	D	D	E	M	D	P	E	N
131	D	D	D	D	D	D	D	P	M	D	D	D	D	D	PD
133	D	D	D	P	E	M	D	D	E	M	D	D	D	D	N
138	D	D	D	D	P	E	M	D	D	E	M	D	D	E	N
142	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
143	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
145	D	D	D	D	D	D	D	D	D	D	D	D	D	P	CD
146	P	P	M	D	D	P	E	M	M	D	D	D	P	P	N
														Total	19
														Normal	13
														Abnormal	6
														PD	1
														CD	4
														PE	1
														CE	0
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-8. Estrus cycle - individual findings following the time course at 10 months continued

BPA 0.5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	P	M	D	D	D	D	D	D	P	E	M	D	P	M	PD
149	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
150	M	D	D	D	E	M	D	D	D	D	D	D	D	D	PD
151	D	D	P	P	P	P	P	P	M	D	P	E	M	D	PE
152	D	P	M	D	P	M	D	P	P	M	D	P	M	D	N
154	D	D	D	D	P	P	P	P	P	P	P	P	P	P	CE
155	D	D	D	D	D	D	D	D	P	M	D	D	D	D	PD
157	D	D	D	P	M	D	D	P	M	D	D	D	D	P	N
159	D	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
160	D	D	D	D	P	M	D	D	P	P	M	D	D	D	N
162	D	D	D	D	P	M	D	D	P	M	D	P	P	M	N
164	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
165	D	D	P	E	M	D	D	D	P	M	D	D	D	P	N
166	P	E	P	P	P	P	P	P	P	P	P	P	P	P	CE
167	P	M	P	P	P	P	P	P	P	P	P	P	P	P	CE
170	D	D	D	E	M	D	P	M	D	D	D	D	D	D	PD
171	D	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
172	D	P	D	D	D	P	P	P	P	P	P	P	P	P	CE
173	P	M	D	P	M	D	D	D	P	E	M	D	P	M	N
175	D	D	E	M	D	D	E	M	D	D	D	E	M	D	N
176	P	E	P	P	P	P	P	P	P	P	P	P	P	P	CE
177	M	D	P	M	D	D	P	M	D	D	D	D	D	D	PD
180	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
Total														23	
Normal														7	
Abnormal														16	
PD														5	
CD														0	
PE														1	
CE														10	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum 5-8. Estrus cycle - individual findings following the time course at 10 months
continued**

BPA 5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	D	D	D	P	E	M	D	D	D	P	M	D	D	P	N
182	D	D	D	E	M	D	D	D	D	P	M	D	D	D	N
184	D	P	M	D	D	D	D	D	D	D	D	D	D	D	CD
185	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
189	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
190	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
191	D	P	M	D	P	P	M	D	P	P	P	M	D	D	PE
193	D	D	D	P	M	D	D	P	M	D	D	P	M	D	N
194	D	D	D	D	E	M	D	P	P	M	D	P	M	D	N
195	D	P	M	D	D	E	M	D	D	E	M	D	D	D	N
198	P	M	D	D	E	M	D	D	E	M	D	D	P	M	N
199	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N
201	M	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
202	P	E	M	D	D	P	E	E	M	D	P	P	E	M	N
204	D	D	D	P	E	M	M	D	D	D	D	P	P	M	N
206	D	D	D	D	P	M	D	P	M	D	P	P	M	D	N
208	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
209	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
210	P	P	P	P	P	P	P	P	P	P	P	P	P	E	CE
212	D	D	D	D	P	M	D	P	P	M	D	D	E	M	N
213	M	D	D	E	M	D	D	D	D	D	D	D	D	D	PD
214	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
Total														22	
Normal														12	
Abnormal														10	
PD														1	
CD														5	
PE														1	
CE														3	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum 5-8. Estrus cycle - individual findings following the time course at 10 months
continued**

BPA 50 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	P	M	D	D	D	P	P	P	P	P	P	P	P	P	CE
220	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
223	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
224	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
229	M	D	P	P	P	P	P	P	M	D	D	D	P	P	PE
230	D	D	D	D	D	D	D	D	D	P	M	D	D	D	CD
235	M	D	D	E	M	D	P	E	M	D	D	E	M	D	N
236	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
237	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
242	E	M	D	D	E	M	D	D	D	D	P	E	M	D	N
243	P	E	P	P	P	E	M	D	P	E	M	D	D	E	PE
244	E	M	D	P	P	M	D	D	D	E	M	D	P	P	N
248	M	D	P	P	P	M	D	P	P	M	D	D	P	P	PE
250	D	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
254	P	P	P	P	P	P	P	P	M	P	E	E	M	D	CE
256	M	D	D	P	E	M	D	D	D	D	D	D	D	D	PD
260	D	E	M	D	D	E	M	D	D	E	E	M	D	D	N
261	P	P	P	P	P	P	P	P	P	P	M	D	D	D	CE
Total														18	
Normal														4	
Abnormal														14	
PD														1	
CD														1	
PE														3	
CE														9	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum5-9. Estrus cycle - individual findings following the time course at 11 months

Vehicle control

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
104	D	P	P	P	P	M	D	P	P	P	P	P	P	P	PE
105	P	E	M	D	D	D	D	D	D	P	M	D	D	P	PD
109	P	E	M	D	D	D	P	P	M	D	P	P	M	D	N
111	P	E	M	D	D	D	P	M	D	E	E	M	D	D	N
112	D	D	P	E	M	D	D	P	E	M	D	D	P	E	N
114	P	P	M	D	D	D	D	P	E	M	D	P	E	M	N
117	P	M	D	D	D	P	P	M	D	D	P	P	P	M	N
118	P	M	D	D	E	M	D	D	D	D	D	D	D	D	PD
124	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
125	D	P	M	D	D	P	P	M	D	D	D	P	P	M	N
129	D	P	M	D	D	E	M	D	D	P	M	D	D	P	N
131	P	E	M	D	D	D	D	D	D	D	D	D	D	P	CD
133	P	D	D	P	P	M	D	D	E	M	D	P	E	M	N
138	D	D	D	D	D	D	E	M	D	P	E	M	D	D	PD
142	P E Dead														
143	D	D	D	D	D	D	D	D	D	D	D	P	P	M	CD
145	D	P	E	M	D	D	D	D	D	D	D	D	D	D	CD
146	D	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
														Total	18
														Normal	8
														Abnormal	10
														PD	3
														CD	4
														PE	1
														CE	2
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum5-9. Estrus cycle - individual findings following the time course at 11 months
continued**

BPA 0.5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	D	D	P	E	M	D	P	M	D	D	D	P	P	M	N
149	P	E	M	D	P	P	P	P	P	E	P	P	P	P	CE
150	D	D	D	D	D	D	D	D	D	D	D	P	M	D	CD
151	D	D	D	D	D	P	P	M	D	P	P	M	D	D	PD
152	D	P	M	D	P	P	P	P	P	P	P	P	P	P	CE
154	D	P	D	D	D	D	P	P	P	P	P	P	P	P	CE
155	D	D	D	E	M	D	D	D	D	D	D	D	D	P	PD
157	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
159	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
160	D	P	D	D	P	M	D	D	D	P	P	M	D	D	N
162	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
164	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
165	D	D	D	D	P	P	M	D	P	M	D	D	D	D	IE
166	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
167	P	E	M	D	D	D	P	M	D	P	P	P	P	P	PE
170	P	P	P	P	M	D	D	D	D	D	P	E	M	D	PE
171	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
172	D	D	D	D	P	P	M	D	P	M	D	P	M	D	N
173	D	D	P	E	E	M	D	D	D	D	D	D	D	P	PD
175	M	D	D	E	E	M	D	D	E	M	D	D	D	E	N
176	P	E	P	P	P	P	P	P	P	P	P	P	P	P	CE
177	P	M	D	D	D	D	E	M	D	P	M	D	P	M	N
180	P	M	D	D	D	P	P	M	D	P	M	D	D	P	N
Total														23	
Normal														6	
Abnormal														17	
PD														3	
CD														3	
PE														2	
CE														8	
IE														1	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum5-9. Estrus cycle - individual findings following the time course at 11 months
continued**

BPA 5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
182	P	E	M	D	D	P	P	M	D	D	D	D	D	D	PD
184	P	D	D	D	D	D	P	M	D	P	M	D	D	D	PD
185	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
189	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
190	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
191	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
193	P	P	P	D	P	P	P	P	M	D	D	P	M	D	PE
194	P	E	P	P	P	P	M	D	P	D	D	P	P	P	PE
195	D	E	M	D	D	E	M	D	D	P	M	D	D	P	N
198	P	E	M	D	D	E	M	D	D	D	P	P	M	D	N
199	D	D	D	E	M	D	D	E	M	D	P	E	M	D	N
201	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
202	D	P	E	E	P	P	P	P	P	P	E	P	P	P	CE
204	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
206	P	P	P	P	P	P	P	M	P	P	P	P	P	P	CE
208	P	P	P	P	P	P	P	M	D	P	P	P	P	P	PE
209	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
210	P	P	P	P	P	P	P	P	P	P	P	P	M	P	CE
212	E	M	D	D	E	M	D	D	E	M	D	P	M	D	N
213	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
214	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
Total														22	
Normal														5	
Abnormal														17	
PD														2	
CD														6	
PE														3	
CE														6	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum5-9. Estrus cycle - individual findings following the time course at 11 months
continued**

BPA 50 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
220	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
223	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
224	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
229	P	P	P	P	P	P	D	D	P	M	P	P	P	P	PE
230	P	M	P	P	M	D	P	M	D	D	D	D	P	P	IE
235	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
236	P	P	P	P	M	D	P	P	P	P	D	P	P	M	PE
237	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
242	D	D	P	E	M	D	D	D	E	M	D	D	E	M	N
243	P	E	P	P	P	P	M	D	P	P	P	P	P	E	PE
244	D	D	D	D	D	P	P	P	P	P	M	D	P	E	PE
248	P	M	D	D	P	P	M	D	D	P	M	D	P	M	N
250	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
254	P	M	P	P	M	D	D	P	M	E	M	D	P	M	IE
256	D	D	D	D	D	D	D	D	D	D	D	P	M	D	CD
260	D	D	D	P	E	M	D	D	P	E	M	D	D	P	N
261	D	D	D	E	E	M	D	P	P	M	D	P	P	M	N
Total														18	
Normal														4	
Abnormal														14	
PD														0	
CD														2	
PE														4	
CE														6	
IE														2	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

Addendum 5-10. Estrus cycle - individual findings following the time course at 12 months

Vehicle control

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	D	D	D	D	D	D	D	D	D						CD
104	M	D	D	P	P	E	M	P	E						N
105	D	P	E	M	D	P	M	M	D	P	P				N
109	M	D	P	P	E	M	D	P	M	D	P				N
111	D	D	P	P	M	D	P	E	M	D	P				N
112	D	E	M	D	D	D	E	M	D	D	P				N
114	D	D	P	E	M	D	P	P	M	D	D	D	P		N
117	D	P	P	M	D	D	D	P	M	D	D	P			N
118	D	D	D	D	D	D	D	D	D	D	D	D	D	P	CD
124	P	P	P	E	P	P	P	P	P						CE
125	D	D	P	M	D	D	D	E	M	D	P				N
129	D	P	M	D	D	D	P	D	D	D	D	P			N
131	D	D	D	P	P	M	D	D	D	D	D	P			PD
133	E	M	D	P	E	M	D	P	E	M	D	P			N
138	D	D	P	E	M	D	P	E	M	D	D	P			N
142	Dead														
143	D	P	E	M	D	D	E	M	D						N
145	P	M	D	D	D	D	D	D	D	D	D	D	D	P	CD
146	E	M	D	P	M	D	D	P	E						N
												Total	18		
												Normal	13		
												Abnormal	5		
												PD	1		
												CD	3		
												PE	0		
												CE	1		
												IE	0		

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum 5-10. Estrus cycle - individual findings following the time course at 12 months
continued**

BPA 0.5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	D	D	P	E	M	D	P	M	D	D	P				N
149	P	P	P	P	P	P	P	E							CE
150	D	D	D	D	D	D	E	M							PD
151	P	P	P	M	D	D	D	D	D	P					PE
152	D	D	D	D	P	P	P	M							PE
154	P	P	M	P	P	D	D	P							IE
155	D	D	D	D	D	D	P	E	M	D	P				PD
157	D	D	D	D	D	D	D	D							PD
159	P	E	M	P	P	P	P	P							PE
160	P	P	M	D	P	M	D	D	D	D	D	P			PD
162	D	P	M	D	P	M	D	D	D	D	D	P			PD
164	P	P	P	P	P	P	P	P							CE
165	M	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
166	P	P	P	P	P	E	P	P	P						CE
167	M	D	D	P	P	E	M	M	M	D	D	P			N
170	P	M	D	P	P	M	D	D	D	D	D	P			PD
171	P	P	P	P	P	P	P	P	P						CE
172	P	P	P	P	M	D	P	P	P	P	D	P			PE
173	P	M	D	D	D	D	D	D	P	P	E	P	D	P	PE
175	E	M	D	D	D	E	M	D	D	D	D	P			N
176	P	P	P	P	P	P	P	P	P						CE
177	M	D	D	P	M	M	D	P	M	D	D	D	D	P	N
180	P	P	P	P	M	D	E	P	P	P	P	P			PE
												Total	23		
												Normal	4		
												Abnormal	19		
												PD	6		
												CD	1		
												PE	6		
												CE	5		
												IE	1		

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)

**Addendum 5-10. Estrus cycle - individual findings following the time course at 12 months
continued**

BPA 5 µg/kg/day

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	D	D	D	D	D	D	D	D	D						PD
182	M	D	D	D	D	E	M	D	D	D	P				N
184	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
185	D	D	D	D	D	D	D	D	D						PD
189	P	P	P	P	P	E	P	P	P	P	P	P			CE
190	D	D	D	D	D	D	D	D	D						PD
191	D	P	E	M	P	P	P	P	P						PE
193	P	P	P	M	D	P	P	P	P	P	P	P			PE
194	P	P	M	P	P	D	D	D	D						IE
195	P	P	P	P	M	D	D	D	D	E	M	D	D	E	PE
198	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
199	M	D	D	P	P	M	D	D	E	M	D	D	P		N
201	M	D	D	D	D	D	D	D	D						PD
202	D	D	D	D	D	D	D	D	P						PD
204	P	P	P	P	P	P	P	P	P						CE
206	P	P	P	M	D	D	D	D	P						PE
208	P	P	P	P	P	P	P	P	P						CE
209	D	D	D	D	D	D	D	D	D						PD
210	P	P	P	P	P	P	P	P	P						CE
212	P	P	P	P	P	P	P	P	P	P	P	P			CE
213	D	P	E	M	D	D	D	D	D	D	D	D	D	D	CD
214	D	D	D	D	D	D	D	D	P						PD
														Total	22
														Normal	2
														Abnormal	20
														PD	7
														CD	3
														PE	4
														CE	5
														IE	1

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

PD; persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD; constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE; persistent estrus (prolonged estrus periods lasting 3-7 days)

CE; constant estrus (prolonged estrus periods lasting 8 days or more)

IE; irregular estrus cycle (unclassifiable)