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APPENDIX TABLES



TABLE A.2

SUMMARY OF THE FARROWING DATA FROM SOWS HOUSED IN CUBICLES AND CRATES

DATA MISSING	FARROWING REFERENCE	BREED	PARITY	DURATION OF PREGNANCY	DATE FARROWED	INDUCED	LITTER SIZE BORN ALIVE	LITTER SIZE BORN DEAD	COMMENTS
*	I	LW x L	5th	113	24.4.80	✓	15	0	
*	II	L x LW	4th	114	2.5.80	✓	12	2	Pigs ③ & ⑨ S.B.
*	III	LW	9th	?	2.5.80	✓	11	0	
*	IV	L x LW	1st	114	9.5.80	x	10	0	
*	V	Hx x L	1st	108	16.7.80	x	10	0	
*	VI	?	3rd	114	25.7.80	✓	4	0	
*	VII	?	3rd	114	30.7.80	x	15	1	Pig ③ S.B.
*	VIII	?	8th	115	8.8.80	✓	11	4	Pigs ⑤ ⑪ ⑭ ⑮ S.B.
*	IX	LW	4th	115	14.8.80	✓	10	1	Pig ① S.B.
*	X	?	Gilt	116	15.8.80	✓	10	0	One bad cleft palate
*	XI	?	12th	117	15.8.80	✓	9	1	Pig ③ S.B.
*	XII	L x H/LW/L	6th	117	22.8.80	✓	11	0	
*	XIII	LW x L	6th	116	22.8.80	✓	10	1	Pig ④ S.B.
*	XIV	LW x L	2nd	114	29.8.80	✓	9	0	
*	XV	L x LW	3rd	114	4.9.80	✓	14	0	
*	XVI	?	2nd	114	3.9.80	x	12	0	
*	XVII	L x LW	6th	116	3.10.80	✓	12	0	
*	XVIII	L x LW	1st	114	4.10.80	x	12	0	
*	XIX	L x LW	2nd	115	10.10.80	✓	9	1	Pig ⑥ S.B.
*	XX	L x LW	2nd	117	15.10.80	x	12	0	
*	XXI	L x LW	3rd	114	5.11.80	✓	11	0	
*	XXII	L x LW	Gilt	117	12.11.80	x	13	0	
*	XXIII	H/LW x $\frac{1}{2}$ LW	6th	117	14.11.80	✓	15	0	
*	XXIV	L x LW	2nd	114	28.11.80	x	9	0	
*	XXV	L x LW	Gilt	116	4.12.80	x	10	1	Pig ① S.B.
*	XXVII	?	9th	116	5.12.80	x	11	1	Pig ⑨ S.B.

DURATION OF FARROWING (min)	MEAN BIRTH INTERVAL (min)	MEAN TIME TO SUCKLE (min)	MEAN TIME TO CORD BREAKAGE (min)	% BORN HEAD FIRST	% BORN WITH INTACT CORDS	APPEARANCE OF PLACENTA AFTER LAST PIG (min)
172	12.3 ± 11.0	?	6.9 ± 3.8	53.3	100	29
357	27.5 ± 35.3	?	3.4 ± 1.2	50.0	87.5	14
91	9.1 ± 6.9	13.4 ± 4.8	3.3 ± 1.2	45.5	90.9	?
144	16.0 ± 10.5	12.9 ± 6.3	5.0 ± 2.6	60.0	100	?
151	16.7 ± 9.0	15.0 ± 8.0	6.5 ± 3.0	70.0	90.0	?
150	50.0 ± 22.7	21.3 ± 9.1	9.7 ± 5.1	100	100	?
151	10.1 ± 9.7	?	2.2 ± 1.6	92.9	42.9	?
131	9.4 ± 16.9	?	2.5 ± 0.7	100	30.3	?
191	19.1 ± 31.8	15.6 ± 6.8	3.2 ± 1.8	70.0	50.0	?
124	13.7 ± 7.1	16.2 ± 6.3	2.8 ± 0.9	100	80.0	?
196	21.8 ± 39.3	58.0 ± 5.7	2.0 ± 1.0	89.5	10.5	52
89	8.9 ± 7.0	19.0 ± 5.1	5.1 ± 4.8	90.9	72.7	10
111	11.1 ± 3.2	?	4.0 ± 4.2	100	63.6	?
164	20.5 ± 15.1	7.7 ± 5.3	13.3 ± 6.4	88.9	100	?
145	11.2 ± 14.8	?	3.9 ± 1.8	92.9	71.4	?
133	12.5 ± 12.4	9.0 ± 4.4	5.7 ± 4.7	91.7	91.7	?
151	8.3 ± 7.9	17.7 ± 11.7	2.8 ± 1.5	83.3	58.3	?
172	15.6 ± 16.8	9.6 ± 5.1	5.2 ± 2.6	50.0	91.7	?
104	11.6 ± 9.7	17.7 ± 12.8	5.4 ± 1.6	60.0	80.0	69
242	22.0 ± 37.4	19.5 ± 25.5	5.5 ± 2.1	58.3	100	1
89	8.9 ± 10.5	19.2 ± 5.6	6.5 ± 3.3	90.9	100	57
78	6.5 ± 4.4	9.1 ± 3.4	3.4 ± 2.1	76.9	59.2	37
278	19.9 ± 35.4	10.7 ± 4.7	4.0 ± 1.8	46.7	66.6	49
99	12.4 ± 8.1	12.7 ± 6.6	7.3 ± 4.8	77.8	22.2	35
107	10.7 ± 7.4	19.1 ± 11.8	4.3 ± 3.2	42.9	42.9	8
127	11.5 ± 7.1	10.5 ± 7.8	5.0 ± 1.4	58.3	16.7	57

TABLE A.2 (contd.)

SUMMARY OF THE FARROWING DATA FROM SOWS HOUSED IN CUBICLES AND CRATES

DATA MISSING	FARROWING REFERENCE	BREED	PARITY	DURATION OF PREGNANCY	DATE FARROWED	INDUCED	LITTER SIZE BORN ALIVE	LITTER SIZE BORN DEAD	COMMENTS
	XXVIII	L x LW	Gilt	116	3.12.80	x	9	0	
	XXIX	H/LW x LW/L	10th	115	23.1.81	✓	8	2	Pigs ① & ⑤ S.B.
*	XXX	L/H/L/LW x LW	4th	117	12.2.81	✓	8	0	
	XXXI	L x LW	2nd	118	6.3.81	✓	12	1	Pig ⑬ S.B.
	XXXII	?	1st	114	30.3.81	x	16	0	
	XXXIII	L x LW	2nd	118	8.5.81	✓	10	0	
	XXXIV	?	10th	115	12.5.81	✓	13	0	
	XXXV	LW x ½ LW	3rd	115	19.5.81	x	10	1	Pig ⑪ S.B.
	XXXVI	LW x LW/L	10th	115	19.5.81	✓	10	1	Pig ⑪ S.B.
	XXXVII	LW x LW/L/LW	8th	117	11.6.81	✓	11	0	
	XXXVIII	?	5th	114	12.6.81	✓	10	2	Pigs ③ & ⑫ S.B.
	XXXIX	L x LW	3rd	114	21.8.81	x	11	0	
	XXXX	L x LW	4th	116	14.8.81	✓	11	0	
	XXXXI	L x LW	3rd	116	7.8.81	✓	12	0	
	XXXXII	LW x H/LW x L/LW	8th	115	13.8.81	✓	10	0	
	XXXXIII	LW x LW	2nd	114	31.8.81	✓	16	1	One of last 5 S.B.
	XXXXIV	L x LW	3rd	114	4.9.81	✓	15	0	① crushed shortly after
	XXXXV	LW x LW x L/LW	9th	113	16.9.81	x	11	1	Pig ⑫ S.B.
	XXXXVI	L x LW	5th	114	17.9.81	✓	14	1	Pig ⑬ S.B.
	XXXXVII	H/LW x LW	8th	114	25.9.81	✓	14	3	⑨ S.B. ⑭ & ⑮ m. ⑥ and ⑦ died shortly after birth
	XXXXVIII	LW x L	8th	116	1.10.81	x	13	3	③ & ⑮ S.B. ⑧ m.
	XXXXIX	L x LW	3rd	113	8.10.81	x	16	0	3 hrs 40 mins birth interval pig ① and ②. then rapid deliveries
	L	Hx	11th	117	16.10.81	✓	16	1	Pig ⑥ S.B. m
	LI	L x LW	3rd	?	21.10.81	x	8	0	
	LII	?	?	115	2.11.81	x	5	2	Pigs ③ & ④ mummified

DURATION OF FARROWING (min)	MEAN BIRTH INTERVAL (min)	MEAN TIME TO SUCKLE (min)	MEAN TIME TO CORD BREAKAGE (min)	% BORN HEAD FIRST	% BORN WITH INTACT CORDS	APPEARANCE OF PLACENTA AFTER LAST PIG (min)
57	7.1 ± 6.5	19.2 ± 10.9	7.8 ± 6.7	66.6	66.6	17
91	10.1 ± 13.6	17.9 ± 6.0	5.0 ± 1.9	100	88.9	87
101	14.4 ± 23.4	7.4 ± 2.7	2.2 ± 0.8	62.5	75.0	?
105	8.8 ± 6.5	13.8 ± 5.0	6.9 ± 4.0	46.1	100	26
199	13.2 ± 11.9	19.6 ± 8.3	3.6 ± 3.0	87.5	87.5	107
122	13.5 ± 9.0	21.1 ± 15.3	4.9 ± 2.7	60.0	100	?
130	10.8 ± 8.8	29.5 ± 14.2	8.1 ± 5.9	77.0	100	24
102	11.3 ± 8.0	27.4 ± 20.9	3.3 ± 1.2	40.0	60.0	4
103	10.3 ± 8.4	28.5 ± 16.7	6.0 ± 8.0	45.5	60.0	3
175	17.5 ± 21.3	14.2 ± 13.8	3.8 ± 3.1	72.7	72.7	8
303	27.6 ± 70.3	20.7 ± 24.6	6.4 ± 4.2	60.0	80.0	239
148	14.8 ± 13.0	10.3 ± 6.8	4.3 ± 2.5	54.5	90.9	10
163	16.3 ± 13.7	28.0 ± 25.6	5.2 ± 2.1	60.0	90.9	With last two pigs.
138	12.5 ± 23.4	21.3 ± 10.5	4.2 ± 2.1	72.7	75.0	13
218	24.2 ± 26.1	15.4 ± 7.8	4.4 ± 3.2	70.0	90.0	?
172	15.6 ± 15.8	28.4 ± 31.7	3.4 ± 3.0	58.0	91.7	Appearing with pig 12
120	8.6 ± 8.6	29.9 ± 18.7	6.1 ± 2.8	34.0	93.4	With last pig
177	16.1 ± 17.5	25.2 ± 16.3	5.7 ± 4.7	58.3	91.7	53
54	3.9 ± 3.5	29.8 ± 21.1	4.9 ± 3.5	29.0	92.3	90
95	6.79 ± 6.2	45.7 ± 67.2	5.1 ± 2.6	20.0	66.6	125
314	20.9 ± 55.6	50.3 ± 46.3	?	50.0	13.3	124
116	7.3 ± 10.6	32.3 ± 21.8	3.6 ± 2.4	50.0	82.0	80
175	25.0 ± 12.9	23.6 ± 7.2	34.0 ± 4.2	28.0	100	35
127	18.1 ± 12.9	6.0 ± 11.9	7.0 ± 7.3	50.0	83.0	1

Table A.3. Summary of the Farrowing Data from Free-Range Sows

Data missing	Sow reference	Date Farrowed	Parity	Induced	Litter size born alive	Litter size born dead	Comments	Duration of farrowing (minutes)	Mean birth interval (minutes)	Mean time to cord breakage (minutes)	Mean time to suckle (minutes)	(%) born with intact first cord	(%) born with intact last pig cord	Appearance of placenta after last pig (minutes)
	1	5.5.80	3rd	X	12	0		226	20.5±32.1	5.5±4.0	8.8±5.2	91.7	100	65
	2	7.5.80	3rd	X	10	0		189	21.0±25.6	5.4±3.8	15.7±16.8	80.0	100	54
*	3	13.6.80	4th	X	10	0		130	14.4±10.4	3.0±0.7	14.0±10.0	60.0	90.0	52
	4	23.7.80	?	X	13	0		156	13.0±16.0	6.2±3.6	14.6±13.4	53.8	76.9	21
*	5	23.7.80	?	X	14	0		92	7.1±5.0	5.3±3.4	15.1±9.6	51.1	85.7	66
	6	23.7.80	?	X	19	0		135	7.5±5.3	2.8±1.4	6.7±2.9	53.8	63.6	25
	7	24.7.80	?	X	13	0		227	18.9±33.1	3.3±1.3	5.8±1.9	46.2	69.2	8
	8	25.7.80	?	X	7	0		222	37.0±46.4	5.4±2.1	6.6±2.0	42.9	100	35
	9	25.7.80	?	X	11	0		97	9.7±7.2	5.5±2.7	10.8±5.1	27.3	100	74
	10	26.7.80	?	X	13	1	Pig 10 S.B.	283	21.8±23.8	3.5±2.0	7.5±3.1	76.9	100	9
	11	30.9.80	2nd	X	14	0		102	7.8±7.4	5.9±4.0	15.4±12.0	57.1	85.7	7
	12	30.9.80	2nd	X	13	0		158	13.2±10.0	5.1±3.7	31.0±27.0	46.2	69.2	49
	13	1.10.80	2nd	X	12	1	Pig 7 S.B.	114	9.5±8.7	3.0±1.3	11.9±4.6	53.8	87.5	64
*	14	25.10.80	4th	X	10	0		69	7.7±5.1	5.1±3.0	13.4±7.5	0.0	90.0	158
*	15	26.10.80	4th	X	15	1	Pig 10 S.B.	145	9.7±7.6	7.1±3.3	12.6±4.2	46.7	100	38
*	16	27.10.80	4th	X	13	1	Pig 14 S.B.	111	8.5±12.0	1.6±0.6	14.0±10.2	69.2	84.6	68
	17	27.10.80	4th	X	11	2	Pigs 6 & 13 S.B.	144	12.0±11.0	4.0±?	8.2±3.4	80.0	100	50
	18	25.6.81	7th	X	12	2	Pigs 6 & 7 S.B.	266	20.5±28.4	9.3±9.5	15.5±9.0	83.0	100	14
	19	23.9.81	3rd	X	17	0		81	5.1±3.4	4.0±2.6	8.2±4.1	52.9	70.6	20

Table A.4 Ancestry of Animals used in Experiment 3

Batch	Sow	Sire		Dam		Date of Birth
		No.	Breed	No.	Breed	
1	A	10	LW	183	LW x L/LW	8.1.81
	B	50	LW	138	L x LW	9.1.81
	C	10	LW	183	LW x L/LW	8.1.81
	D	50	LW	141	L x LW	9.1.81
2	E	50	LW	65	L x LW	5.2.81
	F	20	L	249	L x LW	4.2.81
	H	50	LW	65	L x LW	5.2.81
	K	32	LW	89	L x LW	26.3.81
3	I	10	LW	144	L x LW	26.3.81
	J	10	LW	144	L x LW	26.3.81
	L	32	LW	89	L x LW	26.3.81
	N	32	LW	89	L x LW	26.3.81
4	P	50	LW	214	LW x L/LW	12.3.81
	Q	50	LW	214	LW x L/LW	12.3.81
	R	50	LW	92	L x LW	11.3.81
	S	50	LW	246	L x LW	20.3.81
5	T	60	L	351	LW	28.4.81
	U	10	LW	35	LW x L/LW	24.4.81
	V	10	LW	35	LW x L/LW	24.4.81
	W	10	LW	50	L x L/LW	22.4.81

Table A.5 Composition of Sow Ration

812	kg	barley
125	kg	soya
25	kg	fishmeal
25	kg	meat and bone meal
12.5	kg	sow supplement (see below)
1000.0	kg	

Table A.6 Sow Supplement

Vitamin A	15 m.i.u.	
Vitamin D ₃	2 m.i.u.	
Vitamin E	10 g	
Vitamin B ₂	4 g	
Vitamin K	2 g	
Vitamin B ₁	1 g	
Vitamin B ₆	1 g	
Vitamin B ₁₂	8 mg	
Nicotinic acid	10 g	
Pantothenic acid	8 g	18% salt
		29% calcium
Iron	100 g	
Cobalt	0.25 g	
Manganese	60 g	
Copper	10 g	
Zinc	80 g	
Iodine	1 g	
Selenium	0.1 g	

Table A.7

Composition of Creep Ration

"Maxestart" J. N. Miller, Wolverhampton.

Oil	8%	
Protein	26%	
Fibre	2.5%	+ vitamins and minerals and
Ash	7%	growth promoters.

Table A.8

Composition of Grower Ration

"Super Grow" J. N. Miller, Wolverhampton.

Oil	4.5%	
Protein	20%	
Fibre	4%	+ vitamins and minerals and
Ash	6%	growth promoters

Table A.9

Sow

Gestation Day No.

Parity

Observation Period No.

[illegible]

Table A.10

Sow
Parity

Post-partum Day No.
Observation Period No.

[illegible]

Table A.11

CONTINUOUS OBSERVATION OF LOCOMOTOR ACTIVITY

SOW

DATE

PREGNANCY DAY

To

TIME

RIGHT HIND LEG MOVEMENT WITHIN DUNGING AREA	PACE		
RIGHT HIND LEG MOVEMENT WITHIN CUBICLE/ TETHER AREA	PACE		
STANDING UP FROM DOG SITTING	OTHER		
STANDING UP FROM LYING			
DOG SITTING FROM LYING			
DOG SITTING MOVING			
LYING MOVING			
ROLLING OVER			
DOG SITTING FROM STANDING			
LYING DOWN FROM STANDING			
LYING DOWN FROM DOG SITTING			

Table A.12

Key for Sow Behaviour as shown in Farrowing Records

a. Sow movements

- 1 = vigorous leg movements.
- 2 = squatting on haunches ("dog sitting"), rolling over.
- 3 = standing up.

b. Sow behaviour

- B = bar biting
- Bg = barking grunt
- C = chewing straw
- Ch = "chomping"
- D = drinking
- E = exploring
- Et = eating
- F = defaecating
- G = grunting
- Gn = gnawing
- Gro = groaning
- L = lying
- N = nest building
- P = panicking
- Ps = playing with straw
- Q = quivering
- R = rooting
- S = straining
- Scr = scratching
- Si = sitting
- T = tail twitching
- U = passing urine/amniotic fluid.

[illegible]

(i.e. _____ days)

[illegible]

Summary of sow behaviour during gestation		(Parity 1) (% time spent in particular activities)
SOW	F	
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
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41	41	41
42	42	42
43	43	43
44	44	44
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72	72	72
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85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

Treatment	SOW B	SOW F	SOW I	SOW Q	SOW W
Tether/Pen DAY	22 30 52 83 106 110	24 32 52 82 - 109	25 32 53 82	23 33 51 82 107 110	24 32 52 82 109 110
standing only	1 6 2 1 1	2	1 4 38	1	1 3 5 19 1 2 3 2
st. vocalising soft	2 1 1 1 1	5 9	7 2 8 1 15	2 15	12 1 6 7 2 3
st. voc. loudly		4			3
sitting only		4 1 10	2		
sit. voc. softly	3 1 1	8 1	7 1	1	3 17 2
sit. voc. loudly		1			2 8 6 1
lying only	77 12 48 26 71 9	9 17 25 7	19 53		
lying end restless	5 2 17 6 7 13	9 4 6 21	4 5	48 62 60 66 65 32 26 29	34 26 24 18 10
lying voc. softly	2 8 15 8 23 6 3 2	11 12	4	12 16 23 9 3 1 16 2 10 4 1 6	
lying voc. loudly	1	1		2 16 11 6 17 11 8 7 9 24 20	
pulling on tether	6 1	1	7	2	
P.O.T. voc. softly	2	6	1	1	8
P.O.T. voc. loudly	1	22			8
manipulating straw	37 8 32 5 50	1 34 49 47	6 28 12 71	26 3 5 19 21 15 19	3
gnawing chain/bare	1	2	43		21 28 18 47 66
drinking	18 10 18	5 3 14 7 1	4 11 19 2 6		
eating	13 5 13	8 9	7 1	1 4 1 5 3	8 3 3
urination	4 1	1 3	1	6 5 2 6 6 12 7 3	
defecation				1 1 1 1 1 1 2	
scratching	6	1 1	1		
exploring	3	3	7	1 1 5	1
interaction -				1 13 2	1 8
aggressive					
passive					
only					
voc. softly					
voc. loudly					

Table A.15.d

Treatment	SOW D	SOW K	SOW J	SOW R	SOW T
Cubicle/Pen DAY	23 31	52 83 107 111	24 32 52 81	24 32 52 81 109 110	26 33 54 82 109 110
standing only	1 29	2 4	1 8 7 6 9	4 13 14 1	5 4 5 2 1 7 1
st. vocalising soft	1 10	1 1	9 3	1 8 11 5	17 6 17 5 3 1
st. voc. loudly					
sitting only	2 1				
st. voc. softly					
st. voc. loudly					
lying only	77 15	36 39 6 23			
lying end restless	2 2	1 1			
lying voc. softly	2 1	21			
lying voc. loudly	3				
pulling on tether					
P.O.T. voc. softly					
P.O.T. voc. loudly					
manipulating straw	7 38 43	37 75 16 20 60 38 49			
gnawing chain/bare	1				
drinking	6 1 8 5 9 3	10 4 5 2			
eating		6 2			
urination	1 1	2 1			
defaecation					
scratching	1 1				
exploring	5	3 26 10 2 2 2			
interaction -					
aggressive		3			
passive		6			
only					
vac. softly					
vac. loudly					

Table A.16.a

Summary of Sow Behaviour during Gestation

(PARITY 2)

[illegible]

(Figures show % time spent in particular activities)

Table A.16.b

Summary of Sow Behaviour during Gestation

(PARITY 2)

Treatment Tether pen		SOW B			P.P.			SOW F			P.P.			SOW I			P.P.			SOW Q			P.P.			SOW W			P.P.		
Parity	Day	24	65	108	109	7		23	65	107	110	5		24	65	108	109	6		24	65	108	109	6		25	64	109	110	5	
standing	only	5	1					5	1	1				2	1		4			9	2	1	1	1		5					
	voc. softly	2		1				14	2	2	4						12			3	1	6	2	1		9				6	
standing	voc. loudly								1																					4	1
	only			3						2												1									
sitting	voc. softly	1		1						1	3	1											2			8	5	8	5		
	voc. loudly																							2		12	2				
sitting	piglets nosing																					1									
	only																														
Lying (sternal recumbency)	restless	36	54	68	20	83		22	21	12		41		73	47	74	4	45		64	27	28	56	48		18	25	55	24	10	
	voc. softly	3	6	12	53	5		7	4	4	2	2		2	15	20		4		3	9	3	5	1		2		3			
Lying (suckling position)	voc. loudly	7	7	2	2	3		1	5			4		5	6			3				9	5	18		17			14		
	piglets nosing							1																							
Lying (suckling position)	only																					1									3
	restless																														
Lying (suckling position)	piglets nosing																														
	voc. piglets squealing																														1
Lying (suckling position)	voc. piglets silent																														36
	suckling grunting						4					7																			4
Lying (suckling position)	suckling no grunting																														
	suckling						5					13																			
Lying (suckling position)	suckling chewing straw																														
	chewing straw																														
pulling	only																														
	voc. softly							2	1																						
pulling	voc. loudly							3	5																						
	manipulating straw																														
pulling	gnawing bars/chain	24	14	11	10			38	34	59	86	17		14	25	3	19			12	5	26	5			23	42	20	38	2	
	drinking																														
pulling	eating	11	4	6	5			5	3	12	2	4		1	5	2	2														
	urination	6	12						24	1		8		10	16					2	25	11	4			27	13		18		
pulling	defaecation			2				1																					2	13	
	scratching																														
pulling	exploring							1		1		1																			
	trying to get out	2			5						3																				
pulling	sniffing/playing with piglets																														
	aggressive																														
pulling	passive	3		1																											

(Figures show % time spent in particular activities)

Summary of Sow Behaviour during Gestation

Summary of Sow Behaviour during Gestation

(Figures show % time spent in particular activities)

Summary of Sow Behaviour during Gestation

Behaviour during Gestation

(Figures show % time spent in particular activities)

Summary of Sow Behaviour during Gestation (Parity 3)

(Figures show % time spent in particular activities)

Table A.17.b

Summary of Sow Behaviour during Gestation (Parity 3)

Treatment TETHER PEN		SOW B				SOW F				SOW I				SOW Q				SOW W			
Parity 3	Day	23	65	108	111	5	24	65	108	111	5	24	65	108	111	5	25	64	109	110	8
standing	only	4					11			2	2	5	4		3		2		7	1	2
	vac. softly									3	2		3				1				
	vac. loudly																4		2		
sitting	only	1					1				13		10	10					7		4
	vac. softly	1									2		9	4							1
	vac. loudly	3									1							18			
lying (alternating)	pigllets nosing																				
	only	72	74	64	79		39	49	29	25	4	68	10	45	56	7	25	23	12	20	1
	restless	4	3				3				2	1	1			1					
lying (suckling position)	vac. softly		1	6			9	11	1			6	3	5	1	1			2	2	3
	vac. loudly						2												38	6	1
	pigllets nosing																				
pulling teether	only					25					1										
	restless										11										
	pigllets nosing										1										
lying (suckling position)	vac. piglets squealing					42					17					47					31
	vac. piglets silent					8					1					1					3
	suckling grunting										19					13					18
pulling teether	suckling no grunting																				11
	suckling																				
	suckling chewing straw																				
manipulating straw	chewing straw																				
	only																				
	vac. softly						1												1		
grawling bars/chain	vac. loudly																				
	manipulating straw	11	25	16	6		27	37	65	60	1	13	39	29	33	16	56	60	15	20	
	drinking																				
eating	drinking																				
	only																				
	vac. softly																				
urination	drinking	4					1	2	3	4	1	15	7	4	4	4	10	7	7	11	
	urination						3				17	7				2	5	5	7	35	
	defaecation																				
scratching	defaecation																				
	only																				
	vac. softly																				
exploring	scratching																				
	only																				
	vac. softly																				
trying to get out	scratching																				
	only																				
	vac. softly																				
sniffing/playing with piglets	scratching																				
	only																				
	vac. softly																				
aggressive	trying to get out						3				1	1	3	2					2	8	
	only																				
	vac. softly																				
passive	sniffing/playing with piglets																				
	only																				
	vac. softly																				

(Figures show % time spent in particular activities)

Table A.17.c

Summary of Sow Behaviour during Gestation (Parity 3)

Summary of Sow Behaviour during Gestation (Parity 3)																																	
Treatment	CUBICLE CRATE	SOW C			P.P.			SOW E			P.P.			SOW L			P.P.			SOW S			P.P.			SOW U							
Parity 3	Day	23	65		107	110	5		24	65	108	109	5		24	66	109	110	6		24	65	108	111	5		23	65	110	111	5	P.P.	
standing	only	7			2	3			2	12	7	13			13	20			10				1	22	1	2							
	voc. softly						2																										
standing	voc. loudly									9	6	4			5	1			13				1	3	12	5							
	only																																
sitting	voc. softly						1		2				5						2	10		1											25
	voc. loudly												2					5	7						3								
lying (recumbency)	piglets nosing												10		2										2								
	only																																
lying (sternal)	restless																																
	voc. softly																																
lying (suckling position)	voc. loudly																																
	piglets nosing																																
lying (suckling position)	only																																
	restless																																
lying (suckling position)	piglets nosing																																
	voc. piglets squealing																																
lying (suckling position)	voc. piglets silent																																
	suckling grunting																																
lying (suckling position)	suckling no grunting																																
	suckling																																
lying (suckling position)	suckling chewing straw																																
	chewing straw																																
pulling	only																																
	voc. softly																																
pulling	voc. loudly																																
	manipulating straw																																
pulling	gnawing bars/chain																																
	drinking																																
pulling	eating																																
	urination																																
pulling	defaecation																																
	scratching																																
pulling	exploring																																
	trying to get out																																
pulling	sniffing/playing with piglets																																
	aggressive																																
pulling	passive																																

(Figures show % time spent in particular activities)

Table A.17.d

Summary of Sow Behaviour during Gestation (Parity 3)

Treatment		CUBICLE PEN		SOW D		SOW K		SOW J		SOW R		SOW T		P.P.	
Parity	3	Day		24	65	108	111	5	24	65	108	111	5	24	65
standing	only			3	6			1	3		4	12	3	2	
	vac. softly														
sitting	vac. loudly				1				5		9	6	15		
	only														
lying (recumbency)	vac. softly				6										
	vac. loudly				2										
lying (suckling position)	piglets nosing														
	only														
pulling on tether	restless			25	38	35	49	30	20	41	26				
	vac. softly								4						
manipulating straw	vac. loudly			5		3	1	3	1						
	piglets nosing														
gnawing bars/chain	vac. piglets squealing														
	vac. piglets silent														
drinking	suckling grunting														
	suckling no grunting														
eating	suckling														
	suckling chewing straw														
urination	chewing straw														
	only														
defaecation	vac. softly														
	vac. loudly														
scratching	manipulating straw			36	38	39	36	4	43	37	9	2	11	25	31
	gnawing bars/chain			1		2									
exploring	drinking			4	7	16									
	eating														
trying to get out	urination														
	defaecation														
sniffing/playing with piglets	scratching			1	2	1	1	1							
	exploring			9	1	13	13	3	16	29	7				
aggressive	trying to get out														
	sniffing/playing with piglets														
passive	aggressive			2											
	passive			8											

(Figures show % time spent in various activities)

SUMMARY OF CONTINUOUS OBSERVATION OF LOCOMOTOR ACTIVITY 0 - 2 hour

(TETHERS)

BOV	A	B	F	H	I	P	Q	V	W	MEAN
PREGNANCY DAY	85	85	70	72	71	85	83	75	85	79±2.2
DATE	27.2.83	23.2.83	28.2.83	3.3.83	20.3.83	10.5.83	25.5.83	26.7.83	26.5.83	--
RECORDING PERIOD	10.32-12.32	10.25-12.25	10.22-12.22	10.00-12.00	10.00-12.00	10.30-12.30	10.05-12.05	10.00-12.00	10.00-12.00	10.13-12.12
TEMPERATURE / °C	6	7	10	12	12	14	21	25	18	14±2.0
TIME SPENT STANDING / MIN	120	85	96	65	46	60	88	65	111	82±7.8
MOVEMENTS										
PACE	-	-	-	-	-	-	-	-	-	--
OTHER	-	-	-	-	-	-	-	-	-	--
PACE	141	18	32	28	9	7	6	.42	1	32±13.7
OTHER	682	437	264	582	116	554	309	235	596	420±62
SUBTOTAL	823	455	296	610	125	566	315	277	517	452±69
STANDING UP FROM DOG SITTING	-	-	-	1	-	2	-	2	-	0.6±0.5
STANDING UP FROM LYING	-	-	-	-	-	2	1	-	-	0.3±0.5
DOG SITTING FROM LYING	-	-	-	1	1	2	-	2	-	0.7±0.5
DOG SITTING FROM MOVING	-	-	-	-	2	3	-	4	-	1±0.9
LYING MOVING	-	2	6	55	33	40	5	12	4	17±6.7
ROLLING OVER	-	-	-	-	-	-	-	-	-	--
DOG SITTING FROM STANDING	-	-	-	-	-	-	-	-	-	--
LYING DOWN FROM STANDING	-	1	1	2	1	5	-	2	1	1.7±0.5
LYING DOWN FROM DOG SITTING	-	-	-	-	1	-	-	-	-	0.1±0.3
SUBTOTAL	0	3	7	59	38	54	0	22	5	22±7.2
TOTAL	823	458	303	669	163	620	323	299	602	473±69

POSTURAL CHANGES

Table A.18.b

SUMMARY OF CONTINUOUS OBSERVATION OF LOCOMOTOR ACTIVITY 2 - 4 hour

(TETHERS)										
SOW	A	B	F	H	I	P	Q	V	W	MEAN
PREGNANCY DAY	85	85	70	72	71	85	83	75	85	79±2.2
DATE	22.2.83	23.2.83	28.2.83	3.3.83	20.3.83	10.5.83	25.5.83	26.7.83	26.5.83	--
RECORDING PERIOD	12.32-14.32	12.25-14.25	12.22-14.22	12.00-14.00	12.00-14.00	12.30-14.30	12.05-14.05	12.00-14.00	12.00-14.00	12.13-14.13
CUBICLE HOUSE TEMPERATURE / °C	6	7	10	12	12	14	21	25	18	14±2.0
TIME SPENT STANDING/ MINUTES	116	0	62	73	43	4	18	39	29	43 ±11.6
RIGHT HIND LEG MOVEMENTS										
PACE	-	-	-	-	-	-	-	-	-	-
OTHER	-	-	-	-	-	-	-	-	-	-
CUBICLE AREA TETHER AREA	90	-	9	86	5	2	-	8	2	22±13.2
PACE	703	-	214	827	175	25	119	165	173	267±98
OTHER	-	-	-	-	-	-	-	-	-	-
SUBTOTAL	793	0	223	913	180	27	119	173	175	289±104
STANDING UP FROM DOG SITTING	-	-	1	1	1	-	1	1	1	0.7± 0.2
STANDING UP FROM LYING	-	-	-	-	1	2	-	1	-	0.4±0.4
DOG SITTING FROM LYING	-	-	1	1	2	-	2	1	1	0.9±0.3
DOG SITTING FROM MOVING	-	-	-	-	4	-	2	2	5	2±0.9
LYING MOVING	-	62	23	30	27	66	30	19	34	32±7.0
ROLLING OVER	-	-	-	-	-	1	-	-	-	0.1±0.3
DOG SITTING FROM STANDING	1	-	-	-	-	1	-	-	-	0.2±0.3
LYING DOWN FROM STANDING	-	-	1	-	1	-	1	2	-	0.6±0.4
LYING DOWN FROM DOG SITTING	-	-	-	-	1	1	1	-	-	0.3±0.3
SUBTOTAL	1	62	26	32	37	71	37	26	41	37±6.6
TOTAL	794	62	249	945	217	98	156	199	216	326±100

POSTURAL CHANGES

Table A.18.c

SUMMARY OF CONTINUOUS OBSERVATION OF LOCOMOTOR ACTIVITY 4 - 6 hour

SOW	A	B	F	H	I	P	Q	V	W	MEAN
PREGNANCY DAY	85	85	70	72	71	85	83	75	85	79±2.2
DATE	22.2.83	23.2.83	28.2.83	3.3.83	29.3.83	10.5.83	25.5.83	26.7.83	26.5.83	--
RECORDING PERIOD	14.32-16.32	14.25-16.25	14.22-16.22	14.00-16.00	14.00-16.00	14.30.16.30	14.05-16.05	14.00-16.00	14.00-16.00	14.13-16.00
CUBICLE HOUSE TEMPERATURE / °C	6	7	10	12	12	14	21	25	18	14±2.0
TIME SPENT STANDING/ MINUTE	37	51	77	65	62	19	5	23	21	40±7.9
RIGHT HIND LEG MOVEMENTS										
CUBICLE DURING										
AREA										
PACE	-	-	-	-	-	-	-	-	-	--
OTHER	-	-	-	-	-	-	-	-	-	--
CUBICLE TETHER										
AREA										
PACE	12	11	16	17	8	1	3	2	2	8±2.0
OTHER	194	290	276	637	215	177	22	99	116	225±56
SUBTOTAL	206	301	292	654	223	178	25	101	118	233±57
STANDING UP FROM DOG SITTING	1	1	1	1	1	-	1	1	-	0.8±0.1
STANDING UP FROM LYING	-	-	-	-	1	-	-	-	-	0.1±0.3
DOG SITTING FROM LYING	1	1	1	1	2	1	4	1	-	1.3±0.4
DOG SITTING FROM MOVING	7	-	2	6	2	4	2	2	-	2.8±0.8
LYING MOVING	46	57	25	65	14	47	15	69	41	42±6.5
ROLLING OVER	-	-	-	-	-	1	-	-	-	0.1±0.3
DOG SITTING FROM STANDING	-	-	-	-	-	-	-	-	-	--
LYING DOWN FROM STANDING	-	-	-	1	2	1	1	1	1	0.8±0.3
LYING DOWN FROM DOG SITTING	1	-	-	-	1	1	3	-	-	0.7±0.5
SUBTOTAL	56	59	29	74	23	55	26	74	42	49±6.3
TOTAL	262	360	321	728	246	233	51	175	160	282±60.4

POSTURAL CHANGES

Table A.19.a

SUMMARY OF CONTINUOUS OBSERVATION OF LOCOMOTOR ACTIVITY 0-2 hr

SOW	C	D	E	J	L	R	S	T	U	MEAN
PREGNANCY DAY	69	86	77	84	85	79	83	81	83	81 ± 1.6
DATE	1.3.83	24.2.83	10.3.83	6.6.83	7.6.83	18.5.83	9.5.83	20.5.83	23.5.83	-
RECORDING PERIOD	1000-1200	1020-1220	1000-1200	1120-1320	9.30-1130	1000-1200	1030-1230	1000-1200	1015-1215	1020-1220
CUBICLE HOUSE TEMPERATURE $^{\circ}\text{C}$	12	9	15	19	20	14	17	14	14	15 ± 1.0
TIME SPENT STANDING/ MINUTE	51	120	120	120	98	114	73	107	120	103 ± 7.9
MOVEMENTS	61	157	117	151	116	39	128	76	102	105 ± 12.7
RIGHT HIND LEG	103	143	116	587	226	268	230	153	162	221 ± 47
CUBICLE DURING AREA	9	38	44	13	42	5	10	35	39	26 ± 5.1
PACE	42	141	71	156	186	141	113	350	120	147 ± 28
OTHER	215	479	348	907	570	453	481	614	423	499 ± 61
SUBTOTAL	-	-	-	-	-	1	-	1	-	0.2 ± 0.3
STANDING UP FROM DOG SITTING	-	-	-	-	-	-	-	-	-	0
LYING	-	-	-	-	-	-	-	-	-	0
DOG SITTING FROM LYING	-	-	-	-	-	1	-	1	-	0.2 ± 0.3
MOVING	-	-	-	-	-	-	-	7	-	0.8 ± 2.3
LYING	51	-	-	-	5	-	25	1	-	9.1 ± 8.9
MOVING	-	-	-	-	-	-	-	-	-	0
ROLLING OVER	-	-	-	-	-	-	-	-	-	0
DOG SITTING FROM STANDING	-	-	-	-	-	-	-	-	-	0
LYING DOWN FROM STANDING	1	-	-	-	1	2	1	1	-	0.7 ± 0.3
LYING DOWN FROM DOG SITTING	-	-	-	-	-	-	-	-	-	0
SUBTOTAL	52	0	0	0	6	4	26	11	0	11 ± 5.6
TOTAL	267	479	348	907	576	457	507	625	423	510 ± 58

POSTURAL CHANGES

Table A.19.b

SUMMARY OF CONTINUOUS OBSERVATION OF LOCOMOTOR ACTIVITY 2-4 HR

SOW	C	D	E	J	L	R	S	T	U	MEAN
PREGNANCY DAY	69	86	77	84	85	79	83	81	83	81 ± 1.6
DATE	1.3.83	24.2.83	10.3.83	6.6.83	7.6.83	18.5.83	9.5.83	20.5.83	23.5.83	-
RECORDING PERIOD	1200-1400	1220-1420	1200-1400	1320-1520	1130-1330	1200-1400	1230-1430	1200-1400	1215-1415	1220-1420
CUBICLE HOUSE TEMPERATURE / °C	12	9	15	19	20	14	17	14	14	15 ± 1.0
TIME SPENT STANDING/ MINUTE	19	20	23	5	72	53	43	31	90	40 ± 89
RIGHT HIND LEG MOVEMENTS	38	31	25	5	23	49	102	27	74	42 ± 9.5
PACE	37	42	56	-	200	100	106	68	120	81 ± 19.7
OTHER	5	2	7	-	3	2	10	11	6	5 ± 1.3
PACE	14	14	14	14	90	28	96	82	37	43 ± 11.4
OTHER	94	89	102	19	316	179	314	188	237	171 ± 32.9
SUBTOTAL	-	1	1	-	1	2	2	-	-	0.8 ± 0.4
STANDING UP FROM DOG SITTING	1	-	1	-	2	-	-	-	1	0.6 ± 0.4
STANDING UP FROM LYING	-	1	1	-	1	2	2	-	-	0.8 ± 0.4
DOG SITTING FROM LYING	-	1	1	-	-	2	6	-	-	1 ± 0.9
DOG SITTING MOVING	142	77	29	59	24	10	17	19	8	43 ± 13.9
LYING MOVING	-	-	-	1	-	-	-	-	-	0.1 ± 0.3
ROLLING OVER	-	-	-	-	-	-	-	-	-	0
DOG SITTING FROM STANDING	1	2	3	1	2	1	2	1	2	1.7 ± 0.2
LYING DOWN FROM STANDING	-	-	-	-	-	-	-	-	-	0
LYING DOWN FROM DOG SITTING	144	82	35	61	30	17	29	20	11	48 ± 13.6
SUBTOTAL	238	171	137	80	346	196	343	208	248	219 ± 28
TOTAL										

POSTURAL CHANGES

SUMMARY OF CONTINUOUS OBSERVATION OF LOCOMOTOR ACTIVITY 4-6 hr

SOW	C	D	E	J	L	R	S	T	U	MEAN
PREGNANCY DAY	69	86	77	84	85	79	83	81	83	81 ± 1.6
DATE	1.3.83	24.2.83	10.3.83	6.6.83	7.6.83	18.5.83	9.5.83	20.5.83	23.5.83	-
RECORDING PERIOD	1400-1600	1420-1620	1400-1600	1520-1720	1330-1530	1400-1600	1430-1630	1400-1600	1415-1615	1420-
CUBICLE HOUSE TEMPERATURE / °C	12	9	15	19	20	14	17	14	14	15 ± 1.0
TIME SPENT STANDING / MINUTE	51	0	42	7	8	35	36	0	0	20 ± 6.6
MOVEMENTS	PACE	-	22	2	23	41	35	-	-	17 ± 6.4
AREA	OTHER	-	38	77	44	40	57	-	-	37 ± 12.1
CUBICLE AREA	PACE	-	2	-	-	10	3	-	-	2 ± 1.5
FATHER AREA	OTHER	-	41	4	6	35	12	-	-	15 ± 7.4
SUBTOTAL	158	0	103	83	73	126	107	0	0	72 ± 18.7
STANDING UP FROM DOG SITTING	1	-	1	1	2	1	2	-	-	0.9 ± 0.3
STANDING UP FROM LYING	-	-	-	-	1	-	1	-	-	0.2 ± 0.3
DOG SITTING FROM LYING	1	-	1	3	2	4	3	1	-	1.7 ± 0.5
DOG SITTING MOVING	2	-	-	3	10	3	3	6	-	3 ± 1.3
LYING MOVING	154	144	51	50	45	18	42	39	39	65 ± 15.5
ROLLING OVER	-	1	-	-	-	-	-	1	-	0.2 ± 0.3
DOG SITTING FROM STANDING	-	-	-	-	-	-	-	-	-	0
LYING DOWN FROM STANDING	1	-	-	-	4	1	3	-	-	1 ± 0.6
LYING DOWN FROM DOG SITTING	-	-	-	2	-	3	1	1	-	0.8 ± 0.6
SUBTOTAL	159	145	53	59	64	30	55	48	39	72 ± 14.6
TOTAL	317	145	156	142	137	156	162	48	39	145 ± 25.3

Table A.22.d Summary of intra partum sow behaviour (figures refer to number of times the activity occurred in standardised 2 hour period)

Treatment	Sow D Parity				Sow K Parity				Sow J Parity				Sow R Parity				Sow T Parity			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Cubicle pen	16	11	15	16	2	44	1		12	17	39	7	24	26	15	22	9			
Vigorous leg movements	3	1	2	4		3			2	13	10	6	2	41	6	7	2		8	17
"Dog sitting"/rolling over	7	7	1	3		1	1		1	12	9	5	3	14	4	3	7	2	9	7
Standing	7	6	1	1	1	2			2	5	8	3	3	9	5	3	3	4	6	7
Nesting																				
Bar biting/gnawing														2						
Bar biting/gnawing	3		3	2		1	2		1	14	11	8	2	70	15	19	2	8	9	14
Vocalising										1	1					3				2
Straining			4	3			2			2	1			3						
Quivering		2	7	1	1	1	5			5	1	1		8		1				
Chewing	2																			
Tail twitching	4	11	8	17	5	38	13		3	30	20	7	11	12	22	13	5	16	7	3
Passing urine/amniotic fluid							1			1										
Scratching																				
"Chomping"																				
Groaning			1								8					3	1			
Defaecating																				
Eating	1																			
Manipulating Straw																				
Drinking																				
Rooting	2																			
Penlicking										1				8	1					
Snapping																				
Exploring									5			4								

Table A.23

Summary of Post Partum Behaviour (Parity 4)

Activity	Tether Crate				Tether Pen				Cubicle Crate				Cubicle Pen				
	A	H	P	B	F	I	Q	W	C	E	L	S	U	D	J	R	T
Standing	Sow																
	Only	1		1		5	3			10		1			3	1	
	Vocalising Softly			2		2	1								3	3	
	Vocalising Loudly																
Sitting	Only			1		1	1	5			6	2	3				
	Vocalising Softly	2			1	1					5					1	3
	Vocalising Loudly																
	Piglets Nosing Sow																
Lying - Sternal Recumbency	Only	12	34		15	23	2	2				4	2	11			
	Restless		4	16		13	5	1		7	9	20	4		15	21	17
	Vocalising Softly			1	2	4	2	1		4	2	1	1		4	6	6
	Manipulating Straw		11	7		1	1	1						1		1	2
Lying - Suckling Postion	Piglets Nosing Sow																
	Only	1	33	18	17	3	15	35	43	46	37	45	19	22	5	26	10
	Restless		3	1	4		2	4	4	1	2	7	3	4	1	1	2
	Piglets Nosing Sow	23	14	6	30	18	40	39	21	9	18	4	37	30	6	11	28
	Grunting																
	Piglets Squealing	6		1	12		10	5		11	9	2	3	24			2
	Grunting																
	Piglets Silent	40			18	10	15	12	7	33	16	6	1	7	4	4	12
	Manipulating Straw	10		28	1	11	2		18	9		14	9				10
	Gnawing Bars etc.											1					
	Drinking	1		13		1					6	3	5	1	1	9	1
	Eating																
	Urination																
	Defaecation			1		1									58	12	4
	Scratching			1												3	
	Exploring	2					4										
	Sniffing Piglets	2	1	3		2	2	2	2			1					3

(figures refer to % time spent in a particular activity)

(figures refer to % time spent in a particular activity)

Table A.24 Time before farrowing colostrum first detected (hr)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	21	46	102	67
	H	4	79	79	80
	N	2	1	-	-
	P	-	35	108	71
	V	22	96	30	-
Tether-Pen	B	-	113	86	45
	F	27	69	113	96
	I	148	23	117	56
	Q	38	16	95	90
	W	26	29	75	37
Cubicle-Crate	C	2	91	71	105
	E	4	76	73	77
	L	46	64	108	85
	S	15	57	130	48
	U	48	22	17	98
Cubicle-Pen	D	113	109	116	104
	K	9	39	99	-
	J	122	50	77	87
	R	67	73	70	75
	T	48	67	76	94

Table A.25 Day of gestation when farrowing occurred

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	115	115	116	115
	H	114	116	115	115
	N	112	114	-	-
	P	116	113	115	116
	V	113	114	112	-
Tether-Pen	B	124	115	115	113
	F	116	116	116	116
	I	117	116	117	115
	J	112	114	115	115
	W	113	112	114	113
Cubicle-Crate	C	116	116	116	115
	E	117	116	115	115
	L	115	115	116	116
	S	115	115	117	114
	U	114	114	113	115
Cubicle-Pen	D	117	117	116	116
	K	116	115	116	-
	J	115	114	115	116
	R	115	115	114	115
	T	113	114	115	116

Table A.26

Total duration of farrowing (min)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	645	148*	177	890*
	H	272	207	152	247
	N	163	234*	-	-
	P	-	119	190	201
	V	73	375	322	-
Tether-Pen	B	-	166*	372	255
	F	182	320	355	382
	I	114	190	148	195
	Q	89	125	116	122
	W	210*	273	234	713*
Cubicle-Crate	C	80	243	458*	400
	E	77	400*	449	403
	L	99	346	295	5700*
	S	165	295	35	178
	U	260	223*	180*	164
Cubicle-Pen	D	228	272	268	538
	K	475	191	391	-
	J	247	235	282	303
	R	105	79	97	193
	T	70	63	110	70

* represents some data missing

Table A.27

Mean interval between successive births (min)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	37.8 $\pm$ 14.2*	13.3 $\pm$ 3.1 *	16.1 $\pm$ 4.9	-
	H	22.7 $\pm$ 7.1	14.8 $\pm$ 3.6	11.0 $\pm$ 3.0	17.6 $\pm$ 4.7
	N	20.4 $\pm$ 3.1	29.3 $\pm$ 7.4*	-	-
	P	-	10.8 $\pm$ 2.7	12.7 $\pm$ 3.1	28.7 $\pm$ 6.1
	V	18.3 $\pm$ 6.5	187.5 $\pm$ 103.5	43.7 $\pm$ 12.8	-
Tether-Pen	B	-	19.6 $\pm$ 10.2*	26.6 $\pm$ 8.4	19.6 $\pm$ 5.6
	F	16.5 $\pm$ 8.7	35.0 $\pm$ 11.1*	35.5 $\pm$ 9.4	23.9 $\pm$ 5.4
	I	19.0 $\pm$ 5.5	15.8 $\pm$ 2.5	13.5 $\pm$ 2.9	17.7 $\pm$ 6.4*
	Q	7.4 $\pm$ 2.2	9.6 $\pm$ 2.0	8.9 $\pm$ 3.1	8.7 $\pm$ 4.1
	W	8.3 $\pm$ 2.4*	29.9 $\pm$ 6.4*	23.4 $\pm$ 12.7	50.2 $\pm$ 26.2
Cubicle-Crate	C	7.3 $\pm$ 2.3	20.3 $\pm$ 5.5	49.8 $\pm$ 16.8*	39.9 $\pm$ 20.3
	E	6.4 $\pm$ 1.5	40.0 $\pm$ 19.9*	32.1 $\pm$ 12.5*	40.3 $\pm$ 19.9
	L	14.1 $\pm$ 6.9	38.4 $\pm$ 11.7	21.1 $\pm$ 5.0	383.8 $\pm$ 211.2*
	S	23.6 $\pm$ 13.1	22.7 $\pm$ 8.4	17.5 $\pm$ 13.5	19.8 $\pm$ 8.1*
	U	26.0 $\pm$ 7.4	17.2 $\pm$ 4.7 *	16.0 $\pm$ 3.1*	12.6 $\pm$ 5.7
Cubicle-Pen	D	25.3 $\pm$ 7.2	24.7 $\pm$ 8.5	22.3 $\pm$ 7.6	35.9 $\pm$ 13.8
	K	39.6 $\pm$ 23.4	15.9 $\pm$ 4.5	27.9 $\pm$ 10.4	-
	J	61.5 $\pm$ 20.3	26.1 $\pm$ 3.4	20.2 $\pm$ 5.9*	25.3 $\pm$ 5.4
	R	15.0 $\pm$ 4.7	7.9 $\pm$ 1.6	7.5 $\pm$ 1.9	19.3 $\pm$ 5.0
	T	7.8 $\pm$ 2.7	9.0 $\pm$ 2.1	12.2 $\pm$ 2.9	7.6 $\pm$ 2.9

* represents some data missing

Table

A.28

Numbers of piglets born alive

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	8	10	12	6
	H	13	14	14	13
	N	9	9	-	-
	P	12	12	16	8
	V	5	3	7	-
Tether-Pen	B	0	14	15	12
	F	12	13	11	17
	I	7	13	12	12
	Q	12	14	14	14
	W	8	10	11	11
Cubicle-Crate	C	11	13	10	11
	E	13	13	13	11
	L	8	10	14	12
	S	8	12	2	10
	U	7	15	12	14
Cubicle-Pen	D	10	12	13	16
	K	11	11	11	-
	J	5	10	15	12
	R	8	10	14	11
	T	10	8	10	12

Table A.29

Numbers of piglets born dead

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	3	2	0	8
Tether-Crate	H	0	1	0	2
	N	0	0	-	-
	P	0	0	0	0
	V	0	0	0	-
Tether-Pen	B	1	1	0	2
	F	0	0	0	0
	I	0	0	0	0
	Q	1	0	0	1
	W	3	0	0	3
Cubicle-Crate	C	1	0	0	0
	E	0	0	2	0
	L	0	0	1	3
	S	0	0	1	0
	U	4	0	0	0
Cubicle-Pen	D	0	0	0	0
	K	2	2	4	-
	J	0	0	0	0
	R	0	0	0	0
	T	0	0	0	0

Table A.30 No. of stillbirths (% total births)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	27.3	16.7	0	57.1
	H	0	6.7	0	13.3
	N	0	0	-	-
	P	0	0	0	0
	V	0	0	0	-
Tether-Pen	B	100	6.7	0	14.3
	F	0	0	0	0
	I	0	0	0	0
	Q	7.7	0	0	6.7
	W	27.3	0	0	21.4
Cubicle-Crate	C	8.3	0	0	0
	E	0	0	13.3	0
	L	0	0	7.1	20
	S	0	0	33.3	0
	U	36.4	0	0	0
Cubicle-Pen	D	0	0	0	0
	K	15.4	15.4	26.6	-
	J	0	0	0	0
	R	0	0	0	0
	T	0	0	0	0

Table A.31

Presentation of piglets (%born head first)

	Sow	Parity 1		Parity 2		Parity 3		Parity 4	
Tether-Crate	A	88.8	*	71.4	*	58.3		-	
	H	61.5		53.3		64.3		66.7	
	N	66.7		62.5	*	-		-	
	P	-		50.0		37.5		50.0	
	V	40.0		33.0		57.1		-	
Tether-Pen	B	-		57.1	*	80.0		7.1	
	F	54.5	*	50.0	*	63.6		76.5	
	I	57.1		75.0	*	83.3		72.7	*
	Q	50.0	*	50.0		50.0		50.0	
	W	66.7	*	60.0		60.0	*	58.3	*
Cubicle-Crate	C	45.5		53.9		44.4	*	27.3	
	E	61.5		36.4	*	64.3	*	72.7	
	L	62.5		60.0		71.4		77.8	*
	S	37.5		66.7		66.7		28.6	*
	U	42.9		69.2		66.7	*	35.7	
Cubicle-Pen	D	87.5	*	58.3		53.9		50.0	
	K	75.0	*	46.2		60.0		-	
	J	80.0		70.0		21.4	*	83.3	*
	R	42.8		77.8		71.4		30.0	*
	T	50.0		87.5		70.0		41.7	*

* represents some data missing

Table A.32

State of umbilical cord
(% piglets born with intact cords)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	87.5*	100*	100	-
	H	92.3	93.3	100	66.7
	N	66.7	100	-	-
	P	-	75	93.8	75
	V	100	100	100	-
Tether-Pen	B	-	87.5*	73.3	35.7
	F	100	100*	100	100*
	I	71.4	66.6*	58.3	72.7*
	Q	91.7	85.7	50	57.1
	W	57.1*	44.4	80	66.7*
Cubicle-Crate	C	100	100	100	81.8
	E	92	63.6*	93.3	90.9
	L	87.5	100	50	88.9*
	S	87.5	83.3	66.7	42.9*
	U	83.3*	100*	44.4	57.1
Cubicle-Pen	D	90	91.7	84.6	100
	K	92	69.2	92.3*	-
	J	80	90	85.7*	84.6
	R	100*	90	85.7	90*
	T	100	87.5	80	100

* represents some data missing.

Table A.33

Incidence of meconium staining - 0 amount
(% piglets in litter affected)

	Sow	Parity 1		Parity 2		Parity 3		Parity 4	
Tether-Crate	A	0		0	*	0		-	
	H	15.4		20.0		14.3		21.4	
	N	0		11.1		-		-	
	P	-		50.0		0		12.5	
	V	20.0		33.3		0		-	
Tether-Pen	B	-		45.5	*	46.7		71.4	
	F	58.4		30.0	*	9.1		23.5	
	I	71.4		33.3	*	33.3		9.1	*
	Q	100		42.9		42.9		35.7	
	W	87.5	*	0		18.1		8.3	*
Cubicle-Crate	C	18.1		16.7	*	0	*	0	
	E	7.7		9.1	*	13.3		18.2	
	L	0		30.0		21.4		22.2	*
	S	25.0		0		0		0	*
	U	14.2		0	*	11.1	*	0	
Cubicle-Pen	D	0	*	33.3		0		12.5	
	K	7.7		23.1		6.7		-	
	J	80.0		30.0		7.1	*	30.8	
	R	0	*	40.0		21.4		10.0	*
	T	60.0		12.5		0		8.3	

* represents some data missing

Table A.34

Incidence of meconium staining ++ amount
 (% piglets in litter affected)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	22.2	42.9 *	33.3	-
	H	7.7	0	7.1	7.1
	N	22.2	0	-	-
	P	-	0	6.2	12.5
	V	0	0	0	-
Tether-Pen	B	-	18.1 *	6.6	7.2
	F	0	20.0 *	9.1	5.8
	I	0	0 *	0	0 *
	Q	0	0	7.1	0
	W	0 *	0	9.1	16.7 *
Cubicle-Crate	C	18.2	8.3 *	11.1 *	0
	E	15.4	36.3	0	9.1
	L	25.0	0	14.3	11.1 *
	S	0	8.3	100	12.5 *
	U	14.2	7.1 *	0	7.2
Cubicle-Pen	D	0 *	0	15.4	0
	K	0	0	13.3	-
	J	0	0	7.1 *	0
	R	14.3 *	0	7.1	0 *
	T	0	0	40.0	0

* represents some data missing.

Table A.35

Mean time taken to achieve regular breathing
(sec.)

	Sow	Parity 1		Parity 2		Parity 3		Parity 4	
Tether-Crate	A	51 ± 10.0	*	60 ± 9.6	*	34 ± 3.2			
	H	42 ± 3.6	*	50 ± 3.5		38 ± 4.1			
	N	51 ± 5.5		32 ± 1.9	*	-			
	P	-		26 ± 4.0		82 ± 16.0			D
	V	24 ± 2.9		60 ± 20.4		65 ± 8.8			E
Tether-Pen	B			155 ± 89.4	*	59 ± 2.7			D
	F	42 ± 2.8		28 ± 2.7	*	52 ± 9.5			R
	I	31 ± 5.1	*	26 ± 3.2	*	53 ± 4.4			D
	Q	30 ± 3.4		29 ± 3.1		55 ± 5.4			U
	W	49 ± 4.0	*	136 ± 37.4	*	42 ± 5.0	*		E
Cubicle-Crate	C	58 ± 19.1	*	56 ± 16.1	*	48 ± 2.5	*		R
	E	36 ± 4.5	*	28 ± 3.7	*	45 ± 5.2	*		
	L	42 ± 5.3		57 ± 4.2		63 ± 5.4			T
	S	41 ± 2.0		21 ± 2.6		48 ± 12.5			D
	U	32 ± 7.0		28 ± 3.1	*	44 ± 10.0	*		Z
Cubicle-Pen	D	45 ± 3.6	*	48 ± 3.6		38 ± 6.8			
	K	41 ± 5.8		60 ± 9.7		70 ± 13.9			
	J	38 ± 2.6		57 ± 7.4		53 ± 18.4			
	R	36 ± 5.2	*	33 ± 4.6	*	48 ± 3.7			
	T	56 ± 2.1	*	52 ± 1.6		65 ± 9.3			

* represents some data missing.

Table A.36

Mean time taken to attempt standing (sec.)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	60 $\pm$ 0*	106 $\pm$ 24.1*	45 $\pm$ 4.7	
	H	92 $\pm$ 16.1	56 $\pm$ 5.6	50 $\pm$ 6.2	
	N	71 $\pm$ 6.8	53 $\pm$ 5.1*	-	
	P	-	47 $\pm$ 4.3	85 $\pm$ 19.9	
	V	51 $\pm$ 12.3	39 $\pm$ 30.6	68 $\pm$ 10.6	
Tether-Pen	B	-	42 $\pm$ 6.0*	123 $\pm$ 28.3	
	F	56 $\pm$ 7.3*	69 $\pm$ 6.2*	85 $\pm$ 19.3	
	I	58 $\pm$ 14.8	72 $\pm$ 9.8*	77 $\pm$ 10.6	
	Q	46 $\pm$ 6.4	65 $\pm$ 4.5	106 $\pm$ 13.6	
	W	79 $\pm$ 6.0*	132 $\pm$ 34.2*	110 $\pm$ 12.0*	
Cubicle-Crate	C	53 $\pm$ 13.7	61 $\pm$ 12.3	41 $\pm$ 3.1*	
	E	77 $\pm$ 97.5*	56 $\pm$ 6.2*	72 $\pm$ 7.0*	
	L	45 $\pm$ 6.1	59 $\pm$ 5.3	87 $\pm$ 9.7	
	S	43 $\pm$ 4.6	39 $\pm$ 3.8	53 $\pm$ 17.5	
	U	101 $\pm$ 18.3*	36 $\pm$ 5.7*	54 $\pm$ 10.9*	
Cubicle-Pen	D	85 $\pm$ 11.1*	47 $\pm$ 3.3	63 $\pm$ 12.2	
	K	51 $\pm$ 7.6	73 $\pm$ 11.7	86 $\pm$ 18.5	
	J	58 $\pm$ 17.9	64 $\pm$ 8.8	62 $\pm$ 7.5*	
	R	64 $\pm$ 5.4*	53 $\pm$ 8.7*	102 $\pm$ 18.0	
	T	46 $\pm$ 8.5*	54 $\pm$ 3.8	101 $\pm$ 24.2	

* represents some data missing

Table A.37

Mean time taken to break cord (min)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	1.6 $\pm$ 0.6*	5.9 $\pm$ 1.5*	6.7 $\pm$ 1.3	—
	H	5.2 $\pm$ 0.7	7.9 $\pm$ 1.5*	5.1 $\pm$ 1.0	4.6 $\pm$ 0.6*
	N	4.8 $\pm$ 0.6	13.1 $\pm$ 2.5*	—	—
	P	—	6.4 $\pm$ 1.6	5.7 $\pm$ 1.5	3.5 $\pm$ 1.1
	V	7.3 $\pm$ 2.3	7.0 $\pm$ 4.0	16.4 $\pm$ 12.4	—
Tether-Pen	B	—	9.0 $\pm$ 1.3*	4.6 $\pm$ 0.8	3.6 $\pm$ 1.2
	F	11.5 $\pm$ 4.8	3.3 $\pm$ 1.3*	4.8 $\pm$ 0.8	3.8 $\pm$ 0.8
	I	6.8 $\pm$ 3.0	3.6 $\pm$ 1.2*	3.6 $\pm$ 0.8	3.9 $\pm$ 0.8*
	Q	3.6 $\pm$ 1.8	3.9 $\pm$ 0.7	3.1 $\pm$ 0.5	3.8 $\pm$ 1.0
	W	9.5 $\pm$ 5.5*	9.5 $\pm$ 4.4*	3.4 $\pm$ 1.1	3.3 $\pm$ 1.3*
Cubicle-Crate	C	4.8 $\pm$ 1.3	7.9 $\pm$ 1.7	10.7 $\pm$ 5.8*	2.1 $\pm$ 0.5
	E	6.4 $\pm$ 1.5*	6.9 $\pm$ 1.7*	7.7 $\pm$ 2.0*	8.2 $\pm$ 2.4
	L	4.4 $\pm$ 0.8	4.5 $\pm$ 1.1	4.1 $\pm$ 0.5	4.1 $\pm$ 1.5*
	S	7.6 $\pm$ 1.2	7.2 $\pm$ 1.6	5.0 $\pm$ 2.0	5.7 $\pm$ 1.9*
	U	9.6 $\pm$ 3.5*	6.0 $\pm$ 1.5*	5.8 $\pm$ 1.4*	4.0 $\pm$ 0.7
Cubicle-Pen	D	5.1 $\pm$ 0.7*	5.1 $\pm$ 0.8	5.8 $\pm$ 1.0	3.6 $\pm$ 0.6
	K	5.8 $\pm$ 1.1	6.3 $\pm$ 3.4*	7.8 $\pm$ 1.3	—
	J	9.3 $\pm$ 6.6	7.3 $\pm$ 1.2	11.5 $\pm$ 3.5*	11.5 $\pm$ 2.8
	R	3.3 $\pm$ 0.9*	4.1 $\pm$ 1.0	5.2 $\pm$ 1.8	3.9 $\pm$ 0.5*
	T	2.9 $\pm$ 0.6	3.9 $\pm$ 0.6	5.4 $\pm$ 0.9	3.3 $\pm$ 0.5

* represents some data missing

Table A.38

Mean time taken to suckle successfully (min)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	-	19.4 $\pm$ 2.5*	15.5 $\pm$ 1.2	-
	H	33.6 $\pm$ 8.2	34.8 $\pm$ 13.2*	23.9 $\pm$ 3.3	45.1 $\pm$ 6.1
	N	15.6 $\pm$ 2.2*	28.6 $\pm$ 3.9*	-	-
	P	-	24.1 $\pm$ 4.7	44.1 $\pm$ 9.7	20.3 $\pm$ 4.3
	V	16.8 $\pm$ 5.6	11.0 $\pm$ 1.5	22.3 $\pm$ 10.8	-
Tether-Pen	B	-	30.0 $\pm$ 5.5*	41.6 $\pm$ 8.3	39.6 $\pm$ 4.9
	F	68.7 $\pm$ 16.1*	14.6 $\pm$ 2.5*	13.7 $\pm$ 2.4	25.4 $\pm$ 4.1
	I	20.8 $\pm$ 6.0	25.8 $\pm$ 4.3	28.0 $\pm$ 5.1	21.7 $\pm$ 2.5*
	Q	74.1 $\pm$ 14.1	24.9 $\pm$ 3.2	51.6 $\pm$ 10.4	29.4 $\pm$ 3.9
	W	62.9 $\pm$ 14.3*	29.5 $\pm$ 5.7*	38.5 $\pm$ 5.7	15.9 $\pm$ 3.0*
Cubicle-Crate	C	22.8 $\pm$ 5.0	24.2 $\pm$ 5.8	17.6 $\pm$ 2.5*	28.1 $\pm$ 6.8
	E	31.9 $\pm$ 7.7*	29.6 $\pm$ 6.5*	51.2 $\pm$ 19.5*	62.3 $\pm$ 22.8
	L	45.1 $\pm$ 29.4*	19.5 $\pm$ 2.6	87.4 $\pm$ 25.0*	23.2 $\pm$ 4.7*
	S	54.1 $\pm$ 16.3*	19.8 $\pm$ 3.1	10.0 $\pm$ 0	33.6 $\pm$ 9.2*
	U	30.7 $\pm$ 17.8*	15.6 $\pm$ 2.4*	84.1 $\pm$ 13.4*	51.0 $\pm$ 12.1
Cubicle-Pen	D	51.1 $\pm$ 16.9*	30.8 $\pm$ 7.8	72.9 $\pm$ 26.8	36.1 $\pm$ 3.9
	K	17.6 $\pm$ 2.3	17.4 $\pm$ 1.8	32.9 $\pm$ 6.1	-
	J	31.0 $\pm$ 7.7	25.7 $\pm$ 4.4	75.6 $\pm$ 22.0*	51.3 $\pm$ 7.2*
	R	25.8 $\pm$ 5.0	29.8 $\pm$ 3.7	45.1 $\pm$ 16.3	36.9 $\pm$ 5.4*
	T	49.5 $\pm$ 9.5	15.4 $\pm$ 1.8	42.2 $\pm$ 9.6*	26.4 $\pm$ 5.6

* represents some data missing

Table A.39

Mean serum lactic acid level at birth (m.I.U./ml.)

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A				-
Tether-Crate	H				180 $\pm$ 17.5
	N				-
	P				133 $\pm$ 12.6
	V				-
Tether-Pen	B				154 $\pm$ 11.2
	F				132 $\pm$ 7.8
	I				145 $\pm$ 9.8
	Q				145 $\pm$ 6.6
	W				127 $\pm$ 6.0
Cubicle-Crate	C				164 $\pm$ 8.4
	E				180 $\pm$ 15.3
	L				136 $\pm$ 10.2
	S				160 $\pm$ 6.8
	U				150 $\pm$ 7.3
Cubicle-Pen	D				146 $\pm$ 6.5
	K				-
	J				145 $\pm$ 7.1
	R				141 $\pm$ 4.6
	T				125 $\pm$ 6.6

NOT RECORDED

Table A.40

Mean haematocrit value at 36 hr p.p. (% r.b.c.)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	32.4 $\pm$ 1.3	33.6 $\pm$ 1.3	34.8 $\pm$ 0.9	
	H	29.8 $\pm$ 1.4	31.4 $\pm$ 0.4	31.3 $\pm$ 0.7*	
	N	28.8 $\pm$ 2.4	29.9 $\pm$ 0.8	-	
	P	25.7 $\pm$ 1.4	30.0 $\pm$ 1.0	30.7 $\pm$ 1.7	
	V	30.6 $\pm$ 1.9	29.7 $\pm$ 3.0	28.0 $\pm$ 0.9	
Tether-Pen	B	-	39.1 $\pm$ 1.5	30.2 $\pm$ 0.8	
	F	28.1 $\pm$ 0.7	29.7 $\pm$ 0.6	26.4 $\pm$ 0.7	
	I	30.9 $\pm$ 2.3	32.2 $\pm$ 1.0	30.4 $\pm$ 0.5	
	Q	32.0 $\pm$ 0.9	30.5 $\pm$ 1.0	28.3 $\pm$ 2.7	
	W	29.1 $\pm$ 2.3	29.5 $\pm$ 1.7	27.4 $\pm$ 1.1	
Cubicle-Crate	C	32.6 $\pm$ 1.5	32.2 $\pm$ 0.8	33.4 $\pm$ 0.6	
	E	30.6 $\pm$ 0.6	31.1 $\pm$ 1.9	28.4 $\pm$ 1.0	
	L	28.6 $\pm$ 0.9	26.9 $\pm$ 1.2	25.6 $\pm$ 1.6	
	S	30.5 $\pm$ 1.2	37.0 $\pm$ 1.2	35.5 $\pm$ 1.5	
	U	30.0 $\pm$ 1.2	31.9 $\pm$ 1.0	32.6 $\pm$ 1.0	
Cubicle-Pen	D	31.6 $\pm$ 0.9	31.6 $\pm$ 1.0*	32.3 $\pm$ 0.8	
	K	25.9 $\pm$ 0.8	31.7 $\pm$ 1.1	27.9 $\pm$ 2.1*	
	J	26.6 $\pm$ 1.5	25.7 $\pm$ 2.7	25.7 $\pm$ 0.9	
	R	30.1 $\pm$ 1.0	29.0 $\pm$ 1.7	27.8 $\pm$ 1.3	
	T	32.6 $\pm$ 1.5	32.0 $\pm$ 0.7	29.1 $\pm$ 1.1	

* represents some data missing

Table A.41 Mean plasma Ig G Concentration at 36 hr p.p. (mg/cm³)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	24.7 $\pm$ 3.3	33.0 $\pm$ 4.1	67.1 $\pm$ 8.0	
	H	8.3 $\pm$ 1.8	59.5 $\pm$ 8.2	73.0 $\pm$ 6.9*	
	N	35.7 $\pm$ 10.1	48.7 $\pm$ 8.6	-	
	P	7.8 $\pm$ 1.0	34.6 $\pm$ 5.2	55.7 $\pm$ 8.1	
	V	7.7 $\pm$ 5.8	19.2 $\pm$ 4.7	78.8 $\pm$ 10.9	
Tether-Pen	B	-	16.8 $\pm$ 1.7	59.1 $\pm$ 3.8	
	F	8.9 $\pm$ 1.9	36.2 $\pm$ 1.9	91.2 $\pm$ 6.5	
	I	4.2 $\pm$ 0.8	38.6 $\pm$ 2.6	62.4 $\pm$ 4.1	
	Q	9.7 $\pm$ 2.1	22.4 $\pm$ 2.9	85.6 $\pm$ 16.5	
	W	11.9 $\pm$ 1.5	18.4 $\pm$ 3.5	45.3 $\pm$ 7.0	
Cubicle-Crate	C	9.5 $\pm$ 2.0	18.7 $\pm$ 1.5	68.7 $\pm$ 5.4	
	E	11.0 $\pm$ 1.1	31.1 $\pm$ 4.7*	99.6 $\pm$ 10.2	
	L	6.6 $\pm$ 1.1	30.7 $\pm$ 2.8	60.6 $\pm$ 10.0	
	S	17.3 $\pm$ 3.2	56.0 $\pm$ 6.0	90.3 $\pm$ 13.7	
	U	63.2 $\pm$ 9.8	32.4 $\pm$ 7.9	58.3 $\pm$ 13.4	
Cubicle-Pen	D	12.2 $\pm$ 2.1*	22.7 $\pm$ 2.3	71.7 $\pm$ 5.7	
	K	7.9 $\pm$ 1.1	41.5 $\pm$ 1.8	74.0 $\pm$ 5.9*	
	J	12.9 $\pm$ 2.9	41.4 $\pm$ 7.0	65.9 $\pm$ 4.5	
	R	57.1 $\pm$ 12.8*	46.0 $\pm$ 9.8	92.1 $\pm$ 14.6	
	T	10.3 $\pm$ 1.4	29.5 $\pm$ 6.3	107.1 $\pm$ 21.2	

* represents some data missing

Table A.42

Total weight of placenta (g)

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	1961	2506	3017	-
Tether-Crate	H	2507	2238	3015	2677
	N	1643	3196	-	-
	P	2250	2625	2930	2057
	V	1106	1229	2240	-
Tether-Pen	B	-	2492	3577	4124
	F	1530	-	2435	3338
	I	1150	2299	(1338)	-
	Q	2130	2946	2483	2690
	W	1400	3465	2338	2559
Cubicle-Crate	C	3100	4800	3103	2850
	E	2145	2309	3321	2886
	L	1801	2004	2283	-
	S	1385	1751	801	2420
	U	840	2798	2102	2408
Cubicle-Pen	D	1424	1243	2379	2430
	K	3043	1839	3887	-
	J	790	1697	2357	2309
	R	-	1664	(1078)	-
	T	2100	1762	2016	-

() figures not included in analysis

Table A.43

Weight of placenta / piglet (g)

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
Tether-Crate	A	178	209	251	-
	H	193	149	215	179
	N	183	355	-	-
	P	188	219	183	257
	V	221	410	320	-
Tether-Pen	B	-	166	238	295
	F	128	-	221	196
	I	164	177	(112)	-
	J	164	210	177	179
	W	127	347	212	183
Cubicle-Crate	C	258	369	310	259
	E	165	178	221	262
	L	225	200	152	-
	S	173	146	267	242
	U	76	187	175	172
Cubicle-Pen	D	142	104	183	152
	K	234	142	259	-
	J	158	170	157	192
	R	-	166	(77)	-
	T	210	220	202	-

() figures not included in analysis

Table A.44

Birth Weight of Litter (kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A				8.15
	H				15.15
	N				-
	P				13.3
	V				-
Tether-Pen	B				16.95
	F				20.45
	I				15.1
	Q				17.25
	W				16.1
Cubicle-Crate	C				16.7
	E				14.05
	L				18.7
	S				16.1
	U				17.3
Cubicle-Pen	D				16.7
	K				-
	J				17.55
	R				12.05
	T				18.85

Table A.45

Mean Piglet birthweight (Kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A				1.36 ± 0.182
	H				1.38 ± 0.073
	N				-
	P				1.66 ± 0.075
	V				-
Tether-Pen	B				1.41 ± 0.080
	F				1.46 ± 0.072
	I				1.52 ± 0.070
	Q				1.23 ± 0.050
	W				1.61 ± 0.089
Cubicle-Crate	C				1.52 ± 0.083
	E				1.41 ± 0.054
	L				1.56 ± 0.118
	S				1.61 ± 0.125
	U				1.24 ± 0.081
Cubicle-Pen	D				1.11 ± 0.083
	K				-
	J				1.46 ± 0.076
	R				1.72 ± 0.129
	T				1.57 ± 0.076

Table A.46 WEIGHT OF LITTER AT 36hr p.p. (kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A		14.6	21.85	
	H		14.5	17.85	
	N		18.3	-	
	P		21.3	21.85	
	V		6.7	13.2	
Tether-Pen	B		18.5	22.95	
	F		20.0	16.35	
	I		20.3	15.25	
	Q		18.7	14.4	
	W		17.8	19.1	
Cubicle-Crate	C		20.5	20.2	
	E		16.1	19.0	
	L		20.7	16.65	
	S		16.9	4.75	
	U		16.5	11.65	
Cubicle-Pen	D		14.1	20.35	
	K		16.3	17.05	
	J		-	12.3	
	R		16.3	20.05	
	T		17.3	15.35	

Table A.47

Mean piglet weight at 40hr p.p. (kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A		1.62 ± 0.060	1.82 ± 0.050	
	H		1.21 ± 0.093	1.28 ± 0.076	
	N		2.03 ± 0.069	-	
	P		1.93 ± 0.035	1.46 ± 0.082	
	V		2.22 ± 0.060	1.89 ± 0.090	
Tether-Pen	B		1.54 ± 0.070	2.09 ± 0.090	
	F		1.67 ± 0.110	1.82 ± 0.070	
	I		1.56 ± 0.059	1.27 ± 0.071	
	Q		1.70 ± 0.044	1.20 ± 0.092	
	W		1.78 ± 0.072	1.91 ± 0.056	
Cubicle-Crate	C		1.58 ± 0.062	2.02 ± 0.049	
	E		1.61 ± 0.056	1.46 ± 0.109	
	L		2.07 ± 0.088	1.39 ± 0.107	
	S		1.41 ± 0.093	2.38 ± 0.025	
	U		1.38 ± 0.044	1.06 ± 0.061	
Cubicle-Pen	D		1.18 ± 0.100	1.70 ± 0.083	
	K		2.04 ± 0.053	1.71 ± 0.102	
	J		—	1.37 ± 0.065	
	R		2.03 ± 0.085	1.67 ± 0.085	
	T		2.16 ± 0.105	1.71 ± 0.119	

Table A.48

Weight of litter at day 7 p.p. (Kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	15.5	19.1	31.9	13.05
	H	24.5	26.8	27.7	27.55
	N	11.5	9.1	-	-
	P	22.0	32.0	8.4	24.9
	V	9.1	11.5	23.7	-
Tether-Pen	B	-	25.1	36.1	27.6
	F	16.0	34.2	23.65	32.0
	I	10.5	28.1	23.5	24.25
	J	18.2	28.8	21.25	23.05
	L	16.0	26.5	30.45	28.55
Cubicle-Crate	C	22.1	32.3	33.8	26.3
	E	26.0	12.6	31.4	24.95
	L	21.8	33.3	29.75	24.8
	S	25.5	28.1	38.2	30.9
	U	6.0	24.0	16.85	30.1
Cubicle-Pen	D	19.5	27.4	31.65	21.1
	K	27.0	24.9	-	-
	J	11.1	-	25.15	30.45
	R	14.0	19.7	29.7	18.9
	T	18.0	22.0	24.65	31.15

Table A.49 Mean piglet weight at 7 days p.p. (kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	2.21	2.12 ± 0.091	2.66 ± 0.069	2.61 ± 0.273
	H	2.23	2.23 ± 0.172	2.30 ± 0.082	2.51 ± 0.138
	N	2.30	3.03 ± 0.145	-	-
	P	2.20	3.20 ± 0.099	2.73 ± 0.196	3.11 ± 0.093
	V	1.82	3.83 ± 0.145	3.39 ± 0.161	-
Tether-Pen	B	-	2.51 ± 0.129	3.28 ± 0.215	2.51 ± 0.230
	F	2.29	2.85 ± 0.152	2.96 ± 0.225	2.46 ± 0.136
	I	1.75	2.16 ± 0.089	2.14 ± 0.154	2.43 ± 0.152
	Q	1.82	2.62 ± 0.112	2.29 ± 0.208	2.31 ± 0.123
	W	2.29	2.65 ± 0.094	3.05 ± 0.096	2.86 ± 0.148
Cubicle-Crate	C	2.21	2.49 ± 0.123	3.38 ± 0.128	2.39 ± 0.192
	E	2.36	2.52 ± 0.208	2.42 ± 0.195	2.77 ± 0.112
	L	3.11	3.33 ± 0.126	2.71 ± 0.198	2.26 ± 0.222
	S	3.19	2.56 ± 0.215	4.20 ± 0.100	3.43 ± 0.115
	U	1.50	2.00 ± 0.097	1.87 ± 0.122	2.32 ± 0.123
Cubicle-Pen	D	2.17	2.28 ± 0.228	2.64 ± 0.179	1.76 ± 0.147
	K	2.46	3.11 ± 0.064	-	-
	J	2.22	-	2.79 ± 0.165	2.77 ± 0.173
	R	2.00	2.81 ± 0.148	2.48 ± 0.160	3.15 ± 0.131
	T	2.25	2.74 ± 0.124	3.08 ± 0.111	2.83 ± 0.159

Table A.50

Mean piglet DLWG from day 7 p.p. - weaning (kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	.161	.304 $\pm$.012	.273 $\pm$.008	.303 $\pm$.020
	H	.180	.288 $\pm$.011	.259 $\pm$.008	.261 $\pm$.009
	N	.227	.354 $\pm$.023	-	-
	P	.213	.242 $\pm$.010	.223 $\pm$.013	.294 $\pm$.012
	V	-	.397 $\pm$.008	.315 $\pm$.014	-
Tether-Pen	B	-	.308 $\pm$.025	.264 $\pm$.017	.290 $\pm$.025
	F	.248	.231 $\pm$.017	.303 $\pm$.011	.216 $\pm$.014
	I	.178	.232 $\pm$.009	.266 $\pm$.017	.239 $\pm$.027
	Q	.176	.245 $\pm$.017	.272 $\pm$.012	.284 $\pm$.018
	W	.234	.213 $\pm$.013	.240 $\pm$.009	.286 $\pm$.008
Cubicle-Crate	C	.152	.240 $\pm$.013	.296 $\pm$.014	.229 $\pm$.026
	E	.194	.321 $\pm$.013	.189 $\pm$.019	.260 $\pm$.009
	L	.212	.259 $\pm$.010	.245 $\pm$.012	.239 $\pm$.028
	S	.202	.231 $\pm$.020	.366 $\pm$.026	.314 $\pm$.010
	U	.107	.178 $\pm$.016	.213 $\pm$.008	.256 $\pm$.013
Cubicle-Pen	D	.210	.249 $\pm$.022	.260 $\pm$.021	.196 $\pm$.020
	K	.219	.305 $\pm$.007	-	-
	J	.180	-	.281 $\pm$.014	.273 $\pm$.011
	R	.182	.235 $\pm$.015	.277 $\pm$.022	.365 $\pm$.026
	T	.285	.260 $\pm$.022	.315 $\pm$.013	.290 $\pm$.015

Table A.51

Litter size at day 7 p.p.

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	7	9	12	5
	H	11	12	12	11
	N	5	3	-	-
	P	10	11	14	8
	V	5	3	7	-
Tether-Pen	B	-	10	11	11
	F	7	12	8	13
	I	6	13	11	10
	Q	10	11	9	10
	W	7	10	10	10
Cubicle-Crate	C	10	13	10	11
	E	11	5	13	9
	L	7	10	11	11
	S	8	11	2	9
	U	4	12	9	13
Cubicle-Pen	D	9	12	12	12
	K	11	8	-	-
	J	5	9	9	11
	R	7	7	12	6
	T	8	8	8	11

Table A.52

Litter size at weaning

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
Tether-Crate	A	7	9	11	5
	H	11	12	11	11
	N	5	3	-	-
	P	10	11	13	8
	V	-	3	7	-
Tether-Pen	B	-	8	11	10
	F	7	12	8	13
	I	6	13	11	10
	Q	9	10	9	10
	W	6	10	10	10
Cubicle-Crate	C	10	13	10	11
	E	11	5	10	9
	L	7	10	11	11
	S	8	11	2	9
	U	2	12	9	13
Cubicle-Pen	D	9	12	12	12
	K	11	8	-	-
	J	5	9	9	11
	R	7	7	11	6
	T	8	8	8	11

Table A.53

Piglet mortality from birth - weaning (% live pigs born)

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
Tether-Crate	A	12.5	10.0	8.3	16.7
	H	15.4	14.3	21.4	15.4
	N	44.4	66.7	-	-
	P	16.7	8.3	18.8	0
	V	-	0	0	-
Tether-Pen	B	-	28.6	26.7	16.7
	F	41.7	7.7	27.3	23.5
	I	14.3	0	8.3	16.7
	Q	25.0	28.6	35.7	28.6
	W	25.0	0	16.6	9.0
Cubicle-Crate	C	9.1	0	0	0
	E	15.4	61.5	23.1	18.2
	L	12.5	0	21.4	8.3
	S	0	8.3	33.3	10.0
	U	71.4	20.0	25.0	7.1
Cubicle-Pen	D	10.0	0	7.7	25.0
	K	0	27.3	-	-
	J	0	10.0	40.0	8.3
	R	12.5	30.0	21.4	45.5
	T	20.0	0	20.0	8.3

Table A.54

Weight increase of sows over period day 24-day 110 (KG)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	50	23	37	29
	H	32	44	47	35
	N	-	-	-	-
	P	30	50	51	44
	V	40	19	38	-
Tether-Pen	B	35	31	43	34
	F	40	30	25	55
	I	-	35	37	30
	Q	35	53	47	55
	W	45	50	49	43
Cubicle-Crate	C	18	13	45	36
	E	30	58	40	31
	L	25	54	36	67
	S	10	43	32	49
	U	35	41	66	51
Cubicle-Pen	D	45	24	54	43
	K	45	40	33	-
	J	35	51	48	58
	R	53	58	46	54
	T	-	46	64	44

Table A.55 Condition score of sows at day 110

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	4	3	3.5	2.5
Tether-Crate	H	4	3	3	3.5
	N	3	3.5	-	-
	P	4	3.5	3	2.5
	V	2.5	3	2.5	-
Tether-Pen	B	3.5	4.5	3.5	2.5
	F	3.5	3	2.5	3
	I	3.5	3.5	3.5	3.5
	Q	3	3.5	3	2.5
	W	3.5	3.5	2.5	2.5
Cubicle-Crate	C	3	2.5	3	2.5
	E	2.5	3	3	3
	L	3	3	3	3
	S	3	3	3	3
	U	3	3	2.5	3
Cubicle-Pen	D	4.5	4	3	3
	K	2.5	3.5	2.5	-
	J	3	3.5	2.5	3
	R	4	3.5	3	3
	T	4.5	3.5	3	3

Table A.56

Weight loss of sow over suckling period (day 110 - weaning)(Kg)

Tether-Crate	Sow	Parity 1	Parity 2	Parity 3	Parity 4
	A	10	3	32	38
	H	10	-	35	55
	N	-	-	-	-
	P	23	34	53	26
	V	-	25	36	-
Tether-Pen	B	-	1	47	30
	F	15	11	21	19
	I	-	-	19	24
	Q	27	34	31	31
	W	14	47	32	24
Cubicle-Crate	C	15	3	47	49
	E	0	11	31	56
	L	27	36	52	41
	S	15	36	21	38
	U	2	26	24	30
Cubicle-Pen	D	40	35	48	5
	K	23	34	-	-
	J	0	27	39	55
	R	18	29	40	38
	T	-	24	35	26

Table A.57

Sow condition score at weaning

	Sow	Parity 1	Parity 2	Parity 3	Parity 4
Tether-Crate	A	2.5	3	3	2.5
	H	2	3	2	3
	N	3	3.5	-	-
	P	3	2.5	2	2.5
	V	-	2.5	2.5	-
Tether-Pen	B	-	4	3	2.5
	F	3	2.5	2.5	2
	I	4	3	3.5	3
	Q	2.5	2.5	3	2.5
	W	2.5	2.5	2.5	2
Cubicle-Crate	C	3	2	2.5	2.5
	E	3	3	2	2.5
	L	3	2.5	2.5	3
	S	3	2	2.5	2.5
	U	3	3.5	3.5	3
Cubicle-Pen	D	3	3	3	3
	K	2.5	2	-	-
	J	3.5	3	3	3
	R	3.5	3.5	3	3
	T	3	3	3	3

Table A.58 Weaning - service intervals (days)

	Sow	Parity 1-2	Parity 2-3	Parity 3-4
Tether-Crate	A	12	4	4
	H	7	6	5
	N	7	4	-
	P	4	7	4
	V	-	8	-
Tether-Pen	B	-	5	5
	F	6	5	4
	I	5	5	4
	Q	7	7	7
	W	7	5	6
Cubicle-Crate	C	5	6	6
	E	7	4	7
	L	5	8	4
	S	4	5	5
	U	5	6	5
Cubicle-Pen	D	5	5	5
	K	7	5	-
	J	5	5	4
	R	4	5	4
	T	7	4	4

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Crate

Total Duration of Farrowing: 645 minutes.

Gilt: A

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 51 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	1	20	60	?	++	31	45.7
2	0	R	B	—	35	60	?	++	32	13.2
3	25	H	I	5	30	?	?	++	—	—
4	0	H	I	0.5	90	?	?	++	30	21.9
5(M)	30	?	?	—	—	—	?	—	—	—
6	80	H	I	1	70	?	?	+	28	27.5
7	6	H	I	1	40	?	?	+++	35	13.2
8(SB)	129	H	I	2	—	—	—	++	—	—
9	25	H	I	1	75	?	?	+++	34	27.5
10	45	H	?	?	?	?	?	++	30	27.5
11(SB)	?	?	?	—	—	—	—	—	—	—

(SB) = Still born.

(M) = Mummified.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Crate

Total Duration of Farrowing: 272 minutes.

Gilt: H

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	10	30	60	69	0	34	7.94
2	46	R	I	8	40	200	37	+	—	—
3	16	R	I	6	60	90	72	++	36	1.10
4	33	H	I	4	65	175	49	+	24	3.02
5	6	H	B	—	35	80	8	+	22	6.31
6	5	R	I	3	50	15	5	+	30	1.66
7	5	H	I	8	30	40	13	0	34	19.95
8	3	H	I	5	?	90	11	+++	—	—
9	8	R	I	4	55	90	17	+	—	—
10	16	H	I	3	40	45	91	+	30	9.55
11	6	H	I	5	30	180	47	+	30	12.02
12	83	H	I	3	30	85	10	+	26	10.96
13	45	R	I	3	40	45	8	+	32	10.47

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Crate

Total Duration of Farrowing: 163 minutes.

Gilt: N

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	5	45	55	10	+	26	54.48
2	27	H	I	3	40	50	17	+	—	—
3	11	R	I	4	50	65	11	+	38	(436.52)
4	8	H	I	6	35	50	8	+	—	—
5	15	H	I	7	50	65	16	++	25	34.48
6	17	H	I	4	45	70	21	+	27	45.71
7	30	R	B	—	40	85	23	++	28	7.94
8	31	R	B	—	60	90	19	+++	—	—
9	24	H	B	—	90	110	?	+++	—	—

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Crate

Total Duration of Farrowing: (Manually assisted)

Gilt: P

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1									24.5	3.89
2									22.5	10.47
3									24	5.75
4									28	7.94
5									28	7.24
6									22	12.02
7									33	7.24
8									18.5	2.09
9									25	10.47
10									31	10.47

AVAILABLE

DATA NOT AVAILABLE

DATA NOT

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Crate

Total Duration of Farrowing: 73 minutes.

Gilt: V

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	R	I	2	30	95	9	++	33	10.47
2	2	R	I	(0.5)	30	50	38	++	25.5	13.18
3	34	H	I	24	20	20	7	+	36	5.75
4	19	R	I	5	15	50	13	0	27.5	2.75
5	18	H	I	5	25	40	17	++	31	6.31

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Pen

Total Duration of Farrowing: 181 minutes.

Gilt: F

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	R	I	(0)	40	60	140	+	30	13.18
2	15	H	I	(12)	45	75	134	0	30	1.02
3	16	R	I	(0)	47	60	—	0	—	—
4	0	H	I	(0)	45	48	?	0	27	12.02
5	7	H	I	11	50	70	11	0	—	—
6	0	?	I	27	50	70	32	0	—	—
7	18	R	I	8	55	?	73	0	26	12.02
8	0	H	I	4	40	10	18	0	—	—
9	9	H	I	4	25	35	34	++	26	7.24
10	101	H	I	42	35	56	?	+	—	—
11	6	R	I	3	50	90	75	+	28	3.80
12	9	R	I	27	25	40	101	+	30	13.18

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Pen

Total Duration of Farrowing: 114 minutes

Gilt: I

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	18	45	60	—	0	—	—
2	10	R	I	8	40	120	23	0	29	4.90
3	5	H	I	3	15	50	10	+	26	3.80
4	23	H	I	2	25	90	9	0	36	7.24
5	12	H	I	3	?	20	10	0	30	4.90
6	43	R	B	—	20	60	26	0	39.5	1.82
7	21	R	B	—	40	5	47	++	25	2.40

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Pen

Total Duration of Farrowing: 89 minutes.

Gilt: Q

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	(0)	40	40	140	0	28	4.90
2	30	H	I	(1)	5	60	25	0	34	13.18
3	10	H	I	(0)	35	95	160	0	30	1.66
4	5	?	B	—	—	—	—	0	—	—
5	5	R	I	5	40	40	35	0	38	1.82
6	4	H	I	(1)	30	20	36	0	29	6.31
7	10	H	I	15	25	30	87	0	33	12.02
8	5	R	I	7	35	50	67	0	31.5	13.18
9	1	R	I	5	35	60	95	0	35	13.18
10(M)	9	R	—	—	—	—	—	0	—	—
11	1	H	I	3	35	50	84	0	32	3.09
12	5	R	I	1	20	25	75	0	30	12.02
13	4	R	I	1	15	30	11	0	31	25.12

Treatment:- Tether Pen

Total Duration of Farrowing: > 66 minutes

Gilt: W

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	R	I	(?)	35	55	25	0	39	15.49
2	6	H	B	—	40	60	124	0	26	7.24
3	8	R	I	(?)	45	80	76	0	29	12.02
4(M)	6	H	—	—	—	—	—	++	—	—
5(SB)	0	H	—	—	—	—	—	?	—	—
6	7	H	B	—	60	95	> 123	0	26	13.18
7	3	H	B	—	50	95	14	0	29	12.02
8	15	R	I	(15)	45	85	50	0	—	—
9	21	H	I	4	65	80	28	0	20.5	16.98
10	?	?	?	?	?	?	?	?	34	6.31
11(SB) \	?	?	?	?	—	—	—	?	—	—

Treatment: Cubicle Crate

Total Duration of Farrowing: 80 minutes.

Gilt: C

Parity: 1

[illegible]

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Crate

Total Duration of Farrowing: 77 minutes.

Gilt: E

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	R	I	5	45	70	7	+	31	12.02
2	9	H	I	5	45	60	17	+	32	10.47
3	12	H	I	4	48	55	20	+	28.5	5.75
4	5	H	I	5	55	120	12	+	29	6.31
5	14	H	B	—	60	180	100	+	—	—
6	4	R	I	?	20	120	26	+	34	13.18
7	3	R	I	18	45	15	51	+	32	9.55
8	2	H	I	6	?	120	25	+	30	10.47
9	3	R	I	3	15	20	50	0	28	17.39
10	3	H	I	4	25	90	57	+	31	15.49
11	6	R	I	?	20	?	7	+++	—	—
12	16	H	I	11	20	10	9	++	33	12.02
13	0	H	I	3	30	60	34	++ +	28.5	7.94

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Crate

Total Duration of Farrowing: 99 minutes.

Gilt: L

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	R	I	4	55	80	22	+++	30	10.47
2	12	H	B	—	60	40	>250	+++	30	2.69
3	55	H	I	4	25	30	11	++	28	4.90
4	5	R	I	5	60	60	27	++	30	4.90
5	8	H	I	3	30	40	5	+	24	6.31
6	5	H	I	2	40	35	11	+	27	4.90
7	7	R	I	5	40	45	19	+	32	12.02
8	7	H	I	8	25	30	16	+	28	6.31

Table A.59 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Pen

Total Duration of Farrowing: 228 minutes.

Gilt: D

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	7	45	80	119	+	35	17.37
2	64	?	I	(0)	?	?	?	?	34	17.37
3	0	?	I	(0)	?	?	87	?	—	—
4	56	H	I	8	35	70	18	+	28	15.14
5	10	H	I	4	40	85	62	+	—	—
6	11	H	I	(12)	60	70	9	++	—	—
7	24	H	I	5	46	75	13	+	32	4.37
8	14	H	B	—	30	60	90	+	30	13.18
9	19	H	I	5	45	80	11	+	30	13.18
10	30	R	I	?	55	160	?	+	32	4.90

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Pen

Total Duration of Farrowing: 475 minutes.

Gilt: K

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	4	35	40	17	0	25.5	10.47
2	13	H	I	5	40	40	12	+	26.5	4.90
3	12	H	I	5	30	35	11	+	30.0	7.24
4	19	R	I	4	40	45	13	+	25.0	15.14
5	14	H	I	6	35	50	20	++	24.0	4.37
6	8	H	I	1	50	60	16	+	28.0	4.37
7	17	H	I	3	25	30	24	+	26.5	12.02
8	9	H	I	14	40	45	35	++	24.5	10.47
9	44	H	I	11	40	65	24	+	29.0	3.89
10	20	R	I	5	95	120	12	++	24.0	7.24
11(SB)	6	R	I	—	—	—	—	++	—	—
12	18	H	B	—	25	35	10	++	21.5	7.24
13(SB)	295	?	I	—	—	—	—	+	—	—

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Pen

Total Duration of Farrowing: 245 minutes.

Gilt: J

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	B	—	40	85	23	0	22	15.14
2	45	R	I	15	30	35	46	0	29	17.38
3	22	H	I	8	45	30	28	0	28	5.75
4	118	H	I	10	40	115	50	++	24	6.31
5	60	H	I	4	35	25	8	0	30	19.95

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Pen

Total Duration of Farrowing: 105 minutes

Gilt: R

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	?	?	?	?	?	45	?	31.5	(158.49)
2	25	H	I	1	30	60	24	+++	29.0	(158.49)
3	18	R	I	3	20	70	12	++	27.0	72.44
4	17	R	I	4	60	80	12	++	28.5	64.56
5	4	R	I	1	25	40	33	++	28.0	72.44
6	2	H	I	2	45	65	24	++	—	—
7	4	H	I	4	30	55	45	++	34.5	(177.83)
8	35	R	I	8	40	80	11	+	32.0	19.06

Table A.59 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Pen

Total Duration of Farrowing: 70 minutes.

Gilt: T

Parity: 1

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	5	60	15	18	0	29	15.49
2	21	R	I	(0)	50	60	58	+	31	17.39
3	0	R	I	(0)	65	70	118	++	—	—
4	9	H	I	4	60	10	56	0	29	7.94
5	5	R	I	(0)	55	40	31	0	36	10.47
6	6	R	I	4	55	70	76	0	30	10.47
7	1	H	I	1	60	80	27	+	41	7.24
8	1	R	I	4	?	?	51	0	36	3.47
9	6	H	I	6	50	35	46	0	28	12.02
10	21	H	I	5	45	30	14	+	33	7.94

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Crate

Total Duration of Farrowing: 148 min.

Sow: A

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 40 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	?	?	?	?	?	?	?	?	33.5	37.4
2	?	?	?	?	?	?	?	?	30.5	37.4
3	?	?	?	?	?	?	?	?	—	—
4	—	R	I	14	60	165	18	+++	40	17.1
5	15	H	I	2	35	60	18	+	30	37.4
6	8	H	I	3	20	90	12	+++	29.5	33.4
7	5	R	I	7	90	210	16	+++	37.5	10.9
8(M)	17	—	—	—	—	—	—	—	—	—
9	9	H	I	5	85	20	29	++	32	29.9
10	4	H	I	5	70	110	15	+	32	46.7
11	30	H	I	5	60	90	28	+	37.5	46.7
12(M)	18	—	—	—	—	—	—	—	—	—

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Crate

Total Duration of Farrowing: 207 mins.

Sow: H

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	—	H	I	4	40	45	24	+	30	67.6
2	10	H	I	3	45	55	22	0	31.5	67.6
3	17	H	I	5	55	70	13	+	32.5	28.4
4	22	R	I	20	80	85	32	+	30	125.5
5	14	H	I	14	65	75	47	++	30	41.2
6	0	H	I	5	40	45	6	0	30.5	86.6
7	9	H	I	8	40	45	13	+	30.5	76.5
8	0	R	I	8	45	55	33	+	32	32.2
9	13	H	I	10	40	40	25	+	30.5	32.2
10	7	H	B	—	40	30	>202	+	—	—
11(SB)	12	R	I	7	—	—	—	+	—	—
12	0	R	I	4	40	45	15	0	31	59.7
13	50	R	I	1	70	25	9	+	—	—
14	30	R	I	6	55	70	31	++	33	36.4
15	23	R	I	14	50	85	15	+	35	59.7

Table A.60 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER CRATE

Total Duration of Farrowing: 234 min

Sow: N

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	?	I	11*	?	?	26*	+	31	29.9
2	19*	H	I	29	35	45	47	+	27	29.9
3	6	H	I	11	25	35	20	++	33	19.1
4	23	H	I	19	35	60	22	0	31	58.4
5	50	R	I	17	40	70	38	+	26	102.2
6	7	H	I	10	30	35	13	+	29	73.1
7	67	H	I	4	35	62	25	++	32	46.7
8	33	R	I	9	31	70	44	+	30	41.8
9	29	R	I	8	25	50	22	++	30	37.4

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/CRATE

Total Duration of Farrowing: 119 min

Sow: P

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 39 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	11	20	50	30	0	34	26.7
2	7	H	B	-	30	60	38	0	-	-
3	18	H	I	5	35	20	20	+	30	29.9
4	4	H	I	7	22	65	8	0	33.5	58.4
5	9	R	I	6	55	45	61	0	32	52.3
6	5	R	I	1	15	35	13	0	32	33.4
7	7	H	B	-	15	70	37	+	27.5	37.4
8	6	R	I	12	35	55	23	0	33	65.4
9	3	R	I	13	45	55	31	+	23.3	23.9
10	34	R	B	-	10	35	10	+	30.2	19.1
11	11	H	I	2	20	30	9	+	26.6	12.2
12	15	R	I	1	15	45	9	+	28	21.4

Table A.60 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/CRATE

Total Duration of Farrowing: 375 min

Sow: V

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	4	34	12	10	+	29.5	9.8
2	84	R	I	2	45	5	14	+	24.5	23.9
3	291	R	I	15	100	100	9	0	35.0	23.9

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Pen

Total Duration of Farrowing: 166 min.

Sow: B

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 40 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	?	?	?	?	?	?	50*	?	39	19.1
2	?	?	?	?	?	?	34*	?	-	-
3	?	?	?	?	?	?	53*	0	46	9.77
4	?	?	?	?	?	?	52*	0	33	23.9
5	?	?	?	?	?	?	65*	0	46	19.1
6	?	?	?	?	?	?	?	?	48	13.7
7	-	?	I	9	?	?	29	0	35.5	19.1
8	12	R	I	12	20	30	14	0	38.5	21.4
9(SB)	25	R	B	-	-	-	-	+	-	-
10	19	H	I	11	20	60	16	++	38	19.1
11	1	R	I	9	20	60	39	+++	33	4.47
12	0	H	I	15	30	40	74	+	40	17.1
13	77	H	I	(5)	300	30	4	++	38.5	10.9
14	3	H	I	(2)	540	30	34	+++	33.5	23.9

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Pen

Total Duration of Farrowing: 320 mins.

Sow: F

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	(0)	40	70	10	0	29.5	37.4
2	29	R	I	7	30	60	6	+++	28.5	33.4
3	11	R	I	?	30	50	<20*	+	32.0	41.8
4	<20	?	?	?	?	?	<20*	?	32.5	46.7
5	?	R	I	3	30	90	15	+	30.5	37.4
6	18	H	I	3	15	40	-	+++	-	-
7	7	R	I	10	10	90	18	+	25	33.4
8	16	R	I	4	30	90	19	+	29.5	37.4
9	39	H	I	1	30	60	30	0	30.5	41.8
10	?	?	?	?	?	?	?	?	30.5	41.8
11	?	?	?	?	?	?	?	?	27	29.9
12	<110	H	I	(0)	30	50	?	0	29	23.9
13	65	H	I	2	30	90	4	+	31.5	29.9

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether Pen

Total Duration of Farrowing: 190 mins.

Sow: I

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 40 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	?	?	?	?	?	16	+	34	50.3
2	12	H	I	5	50	60	32	0	33.5	33.4
3	11	H	B	-	35	75	12	+	31	37.4
4	0	H	B	-	25	45	29	+	33.5	37.4
5	17	H	I	9	40	63	17	+	37	46.7
6	20	H	I	4	25	65	19	+	34	52.3
7	12	R	B	-	25	45	21	+	32	37.4
8	28	H	I	3	15	65	13	0	37	29.9
9	30	H	I	(0.5)	20	60	71	0	26	41.8
10	18	R	I	(1)	10	30	22	0	31	33.4
11	12	R	I	3	20	160	17	?	25.5	37.4
12	6	H	I	?	20	100	31	++	32.5	17.1
13	24	H	B	-	25	90	35	+	31.5	46.7

Table A.60 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER: PEN

Total Duration of Farrowing: 125 min.

Sow: Q

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	2	15	30	51	0	36.5	37.4
2	17	R	I	2	45	80	23	0	31	29.9
3	7	R	I	5	45	60	9	+	30.5	23.9
4	7	H	I	2	30	65	20	0	27	23.9
5	5	R	I	3	25	75	30	+	29.5	33.4
6	4	R	I	3	25	50	26	0	29.5	29.9
7	4	H	I	3	20	55	31	+	26.5	19.1
8	13	R	I	11	15	60	-	+	-	-
9	2	H	I	4	40	80	38	0	-	-
10	3	H	B	-	35	70	9	++	27	7.8
11	4	R	I	4	25	65	20	0	30.5	13.7
12	16	H	I	5	25	100	13	+	35	12.2
13	21	R	B	-	35	65	30	+	32	15.3
14	22	H	I	3	30	50	24	+	-	-

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Tether/Pen

Total Duration of Farrowing: 273 minutes

Sow: W

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 40hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	R	I	2	40	50	24*	+	32	21.4
2	4	H	B	-	?	?	22*	+	16.5	9.8
3 (M)	?	-	-	-	-	-	-	-	-	-
4	32*	H	I	9	260	240	11	+	35	7.0
5	28	H	B	-	35	25	32	+	31	4.5
6	22	H	B	-	50	65	20	+	30	19.1
7	34	R	I	5	65	70	17	+	30.5	19.1
8	12	H	B	-	60	70	10	+	24.5	41.8
9	73	R	B	-	300	330	48	+	33	29.9
10	32	H	I	22	130	155	28	++	34	12.2
11	32	R	?	?	280	180	70	+	28	19.1

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Crate

Total Duration of Farrowing: 243 min.

Sow: C

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 42 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	19	25	30	8	++	39.5	19.6
2	65	R	I	4	35	105	83	++	35.0	25.1
3	12	H	I	2	20	15	9	?	28.5	25.1
4	34	H	I	13	25	40	16	+	35.0	19.6
5	41	R	I	18	?	40	51	0	31.5	19.6
6	2	R	I	2	10	15	20	0	31	13.5
7	5	H	I	14	30	50	24	++	33	15.3
8	7	H	I	6	30	95	20	++	28	13.5
9	16	R	I	2	135	60	24	+++	31	19.6
10	27	R	I	9	200	180	14	+	32	17.3
11	5	H	I	4	55	60	24	+	31.5	25.1
12	4	H	I	4	55	50	10	++	30	22.2
13	25	R	I	6	50	50	12	+	32.6	7.29

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Crate

Total Duration of Farrowing: > 400 mins.

Sow: E

Parity: 2

[illegible]

Table A.60 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Total Duration of Farrowing: 346 min

Sow: L

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 39 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	4	40	50	19	0	31	33.4
2	42	H	I	4	90	75	20	+	25	46.7
3	29	H	I	4	55	100	21	+	25	26.7
4	74	R	I	8	60	50	10	0	27.5	37.4
5	5	H	I	2	50	45	16	0	18.25	37.4
6	8	H	I	2	50	55	15	+	27	23.9
7	16	R	I	3	55	50	19	+	30	29.9
8	16	H	I	1	60	60	20	+	24.5	29.9
9	44	R	I	13	50	50	41	+	29.5	13.7
10	112	R	I	4	60	55	14	+	31	27.7

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Total Duration of Farrowing: 295 mins.

Sow: S

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	13	10	25	22	+	38.8	102.2
2	5	H	I	4	25	45	13	+	36.5	58.4
3	58	R	I	7	20	55	15	+	38	52.3
4	41	R	I	4	35	50	10	+	41	37.4
5	6	H	I	3	30	45	32	++	38.5	29.9
6 (M)	11	-	-	-	-	-	-	-	-	-
7	6	H	I	1	20	40	46	+++	37.5	73.1
8	107	H	I	6	15	20	22	+	35	58.4
9	1	H	B	-	10	25	14	+	35	41.8
10	16	R	I	5	20	40	10	+	45	37.4
11	5	H	I	17	25	60	20	++	29	52.3
12 (M)	0	-	-	-	-	-	-	-	-	-
13	22	R	I	12	35	35	10	+	37	46.7
14	17	H	B	-	10	25	24	+	32.5	81.7

Table A.60 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Total Duration of Farrowing: 223 min.

Sow: U

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 37 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	?	?	?	?	?	15	+	35	21.4
2	69	R	I	12	25	6	12	+	36	12.2
3	26	R	I	5	18	8	34	+	34	15.3
4	11	R	I	5	15	25	12	+++	-	-
5	7	H	I	3	10	25	?	+	29	33.4
6	17	H	I	(4)	35	70	?	++	-	-
7	6	H	I	16	45	75	17	++	30	73.1
8	5	H	I	5	25	50	14	+	31.5	102.2
9	21	H	I	?	20	35	?	+	30.5	26.7
10	10	H	I	1	23	40	?	+	26	23.9
11	11	R	I	3	35	33	13	+	29.5	29.9
12	18	H	I	15	33	24	16	+	32	23.9
13	8	H	I	1	37	33	4	+	-	-
14	14	H	I	2	44	39	19	+	39	17.1
15	?	?	?	?	?	?	?	?	30	9.8

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle Pen

Total Duration of Farrowing: 272 mins.

Sow: D

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 41 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	3	70	60	15	0	32.5	17.3
2	91	H	I	6	40	50	31	++	36	19.6
3	11	H	I	3	35	45	102	0	28.5	10.6
4	23	R	I	4	50	50	22	0	30	22.2
5	5	R	I	4	60	65	11	+	26.5	28.4
6	62	R	I	4	55	40	65	0	?	28.4
7	0	H	I	2	60	50	19	+	31	28.4
8	13	H	B	-	30	35	17	+	28	36.4
9	2	R	I	5	35	30	25	+	31.5	25.1
10	18	R	I	10	45	50	35	+	34.5	22.2
11	14	H	I	6	40	30	11	++	31.5	25.1
12	33	H	I	9	55	60	16	+	37	8.25

Table A.60 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE PEN

Total Duration of Farrowing: 191 min

Sow: K

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 37 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	?	55	60	17	0	33	46.7
2	13	H	I	(10)	50	70	16	0	35	41.8
3	6	H	I	(5)	60	60	15	+	35	37.4
4	8	H	I	18	60	90	14	0	-	-
5	10	R	I	6	30	60	24	+	29.5	46.7
6	14	R	B	-	40	45	14	+	32	46.7
7	32	R	I	2	40	45	29	+	26.5	33.4
8	8	R	B	-	150	180	25	+	-	-
9 (SB)	14	H	I	-	-	-	-	+	-	-
10	17	H	I	2	60	60	15	+	-	-
11	5	R	B	-	70	90	8	+	29	41.8
12 (SB)	59	R	B	-	-	-	-	++	-	-
13	5	R	I	1	40	45	14	+	33.5	37.4

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: Cubicle/Pen

Total Duration of Farrowing: 235 mins.

Sow: J

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 39 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	12	120	135	44	+	26	41.8
2	33	H	I	14	60	70	11	+	30	73.1
3	36	H	I	(1)	50	55	39	0	24	73.1
4	19	R	I	11	50	75	19	0	26.5	65.4
5	29	R	I	7	45	50	8	0	30	29.9
6	25	R	I	4	40	50	45	+	27	41.8
7	33	H	I	2	55	60	12	+	30	23.9
8	5	H	I	8	45	50	18	+	30	29.9
9	20	H	I	7	60	65	33	+	31	10.9
10	35	H	B	-	40	30	29	+	24	23.9

Table A.60 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/PEN

Total Duration of Farrowing: 79 mins.

Sow: R

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	?	I	(1)	?	?	37	0	20	12.2
2	19	H	I	8	25	30	21	0	28	58.4
3	10	H	I	(2)	60	55	34	0	30.5	102.2
4(M)	12	-	-	-	-	-	-	-	-	-
5	4	H	I	(10)	20	95	50	+	33	29.9
6	8	H	I	(2)	40	70	21	+	28	46.7
7	0	H	I	(2)	30	65	18	+	25.5	33.4
8	7	R	B	-	25	10	-	+	-	-
9	9	H	I	5	25	45	20	+	32	58.4
10	4	R	I	3	50	75	41	0	-	-
11	6	H	I	4	25	35	26	+	35	26.7

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/PEN

Total Duration of Farrowing: 63 Min

Sow: T

Parity: 2

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 40 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	4	50	45	21	0	35	58.4
2	8	H	I	3	50	60	12	+	31.5	46.7
3	11	H	I	4	50	45	13	+	34	19.1
4	1	H	I	2	55	50	10	+	30	29.9
5	3	H	I	2	60	60	23	+	31.5	41.8
6	16	H	B	-	45	50	16	+	31	10.9
7	15	R	I	6	55	75	19	+	33	13.7
8	9	H	I	6	50	45	9	++	30	15.3

Table A.61

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/CRATE

Total Duration of Farrowing: 177

Sow: A

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	(4)	25	35	15	+++	37	56.4
2	8	H	I	4	25	50	13	+++	37	48.4
3	12	H	I	7	20	40	14	+++	31.5	104.0
4	7	R	I	4	40	25	20	++	37.5	104.0
5	3	R	I	6	35	75	23	+++	35	56.4
6	13	R	I	3	15	30	12	++	29.5	56.4
7	37	R	I	4	35	50	8	+	33	89.2
8	5	H	I	3	40	30	12	+	32.5	19.3
9	5	R	I	10	55	70	15	++	38	35.6
10	5	H	I	13	35	45	19	+	37	104.0
11	30	H	I	5	35	35	17	++	30.5	65.7
12	52	H	I	17	45	60	18	++	38.5	65.7

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/CRATE

Total Duration of Farrowing: 152 min.

Sow: H

Parity: 3

[illegible]

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/CRATE

Total Duration of Farrowing: 190 min.

Sow: P

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	B	-	45	50	84	+	24	56.4
2	36	R	I	9	70	90	73	+	29.5	41.5
3	4	R	I	6	60	60	18	++	31.5	56.4
4	40	H	I	9	50	40	45	+	28.5	41.5
5	15	R	I	25	55	60	-	+	-	-
6	8	R	I	3	50	45	7	+	28.5	41.5
7	7	H	I	5	55	55	15	+	28	56.4
8	4	H	I	3	50	45	16	+	52	14.2
9	10	R	I	2	65	60	56	+++	32.5	65.7
10	0	H	I	6	65	60	26	+	29	121.2
11	11	R	I	3	55	60	10	+	32	65.7
12	8	H	I	1	120	90	85	+	25	104.0
13	26	R	I	3	240	300	141	+	27	6.6
14	1	R	I	6	45	40	16	+	30.5	89.2
15	14	R	I	1	50	40	33	+	32	48.4
16	6	R	I	4	240	270	36	+	31	26.2

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/CRATE

Total Duration of Farrowing: 322 min

Sow: V

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	91	65	115	87	+	30.5	48.4
2	59	R	I	4	55	40	9	+	30	104.0
3	29	R	I	2	80	85	15	++	23.5	104.6
4	40	H	I	3	45	40	10	+	27	104.0
5	16	R	I	7	45	45	14	+	29.75	65.7
6	19	H	I	4	55	70	10	++	27.25	89.2
7	99	H	I	4	110	80	11	+	27.9	35.6

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/PEN

Total Duration of Farrowing: 373

Sow: B

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	4	40	50	41	0	35.5	48.4
2	68	R	B	-	60	80	111	0	29.6	48.4
3	60	H	B	-	50	70	42	0	28.5	48.4
4	107	H	B	-	55	210	10	0	-	-
5	9	H	I	7	70	480	-	0	-	-
6	6	R	I	1	55	70	70	0	-	-
7	4	H	I	(1)	50	60	9	0	30	76.6
8	17	R	I	4	60	125	42	+	-	-
9	3	H	I	1	60	120	12	+	28.7	56.4
10	7	H	I	5	80	160	87	+	33	56.4
11	0	H	I	6	70	150	53	+	32	76.6
12	34	H	I	6	70	105	51	+	27	76.6
13	2	H	I	8	60	70	21	+++	38	48.4
14	30	H	B	-	45	40	25	+	28	65.7
15	25	H	I	8	55	60	9	+	31.5	48.4

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/PEN

Total Duration of Farrowing: 355 min.

Sow: F

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 41 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	12	120	240	17	+	26	76.6
2	107	R	I	5	50	90	5	+	24	89.2
3	13	H	I	(1)	35	40	29	+	24	121.2
4	32	H	I	5	60	90	10	+	-	-
5	16	H	I	5	60	90	18	+	30.5	104.0
6	51	H	I	5	1	5	11	++	26	104.0
7	59	R	I	4	55	70	7	+	25.5	89.2
8	13	H	I	5	30	15	12	+	-	-
9	21	H	I	3	35	65	4	+++	25.5	104.0
10	26	R	I	4	40	85	12	0	28.5	56.4
11	17	R	I	4	90	140	26	+	28	76.6

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/PEN

Total Duration of Farrowing: 148 min.

Sow: I

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	8	65	85	29	0	32.5	65.7
2	30	H	I	2	50	55	11	0	29.5	56.4
3	18	H	I	2	60	95	16	+	32.5	89.2
4	18	R	B	-	65	135	25	0	31.5	56.4
5	4	H	I	2	35	50	18	0	27	76.6
6	16	H	I	4	75	15	31	+	30	56.4
7	12	H	B	-	70	95	15	+	28	56.4
8	11	H	B	-	40	90	37	+	28.5	65.7
9	0	H	B	-	25	50	48	+	30.5	65.7
10	7	H	B	-	40	50	29	+	32.5	48.4
11	28	R	I	4	55	140	70	+	32	76.6
12	4	H	I	3	50	65	7	+	30.5	35.6

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER PEN

Total Duration of Farrowing: 116 minute

Sow: Q

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	(1)	40	50	88	0	27.5	65.7
2	11	H	I	4	45	175	59	0	26.5	191.8
3	21	R	I	3	45	150	36	0	27	121.2
4	3	H	I	2	55	100	-	0	-	-
5	2	R	B	-	20	35	136	0	33.5	0.5
6	10	R	B	-	35	180	9	0	27	141.2
7	42	H	I	3	65	80	50	+++	30	121.2
8	4	R	I	4	80	140	-	+	-	-
9	3	H	B	-	35	60	17	+	26.5	89.2
10	7	R	I	5	50	50	38	+	36	76.6
11	5	R	B	-	70	90	78	+	41.5	0.1
12	2	H	B	-	80	100	14	++	32	104.0
13	3	R	B	-	90	180	39	+	31	26.2
14	3	H	B	-	60	100	55	+	29	89.2

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: TETHER/PEN

Total Duration of Farrowing: 234 minute

Sow:	W
------	---

arity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	?	?	(1)	?	?	37	0	30	65.7
2	4	H	I	(0)	70	115	39	+	23	56.4
3	5	H	I	(1)	25	195	52	0	29	56.4
4	4	R	I	(10)	45	120	81	++	-	-
5	4	H	I	(6)	30	80	44	++	26	89.2
6	10	R	I	(1)	60	105	47	+	27	30.6
7	26	R	I	4	55	85	36	+	29.5	16.6
8	6	R	I	2	25	75	21	+	30	19.3
9	32	H	B	-	35	80	29	+	28	41.5
10	9	H	I	6	45	90	6	++	31	41.5
11	134	H	B	-	30	150	31	+++	20.5	35.6

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Total Duration of Farrowing: > 458 min.

Sow: C

Parity: 3

[illegible]

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Sov: E

Parity: 3

Total Duration of Farrowing: 449 min.

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	(3)	25	35	89	0	35	65.7
2	26	H	I	6	20	40	24	0	28	89.2
3(SB)	55	H	I	(6)	-	-	-	+	-	-
4	0	H	I	4	55	40	275	+	21	121.2
5	7	H	I	6	55	85	14	+	32.5	76.6
6	10	R	I	5	45	105	21	+	29.5	65.7
7	1	R	I	9	60	95	23	+	26	104.0
8	154	R	I	3	45	50	24	+	28.5	89.2
9	4	H	I	3	35	80	22	+	26.5	121.2
10(SB)	14	H	I	30	-	-	-	+	-	-
11	26	R	B	-	30	75	48	+	24.5	104.0
12	15	R	I	6	70	95	23	++	26.5	191.8
13	≈ 118	?	I	?	?	?	≈ 25	+	31.5	121.2
14	≈ 14	H	I	6	75	85	56	++	30.5	41.5
15	5	H	I	13	30	75	22	++	29.5	104.0

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Sow: L

Parity: 3

Total Duration of Farrowing: 295 min.

[illegible]

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Total Duration of Farrowing: 35 minute

Sow: S

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	3	60	35	10	+++	34	104.0
2	4	R	I	7	35	70	10	+++	37	76.6
3 (M)	31	H	B	-	-	-	-	-	-	-

(M) = Mummified

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/CRATE

Total Duration of Farrowing: ~ 180 min

Sow: U

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	?	?	?	?	?	≈ 102	?	35.5	26.2
2	≈ 23	?	?	?	?	?	≈ 126	?	36	48.4
3	≈ 12	?	?	?	?	?	≈ 101	?	35	56.4
4	≈ 5	H	B	-	40	35	124	+	31	104.0
5	11	R	I	4	25	30	147	0	30.5	35.6
6	38	R	I	5	20	35	62	+	35	48.4
7	6	H	B	-	50	45	8	++	-	-
8	24	H	B	-	45	60	56	+	30.5	65.7
9	25	H	I	10	30	50	122	++	38	0.4
10	9	R	B	-	35	75	9	+	29.5	164.6
11	15	H	I	4	35	25	50	+	31	26.2
12	8	H	B	-	120	130	102	+	27	65.7

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/PEN

Total Duration of Farrowing: 268 min.

Sow: D

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 39 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	R	I	(1)	40	75	49	+	33.5	39.2
2	23	H	I	6	40	25	63	+	32	48.4
3	6	H	I	4	30	65	40	+	31	89.2
4	35	R	B	-	35	10	353	+	32	89.2
5	20	H	I	3	25	50	54	+	31	76.6
6	21	H	B	-	25	130	19	++	27.5	65.7
7	2	R	I	5	35	45	129	++	37.5	41.5
8	1	R	I	5	20	35	34	+	35	76.6
9	2	H	I	7	110	150	36	+++	34	76.6
10	9	R	I	5	25	30	25	++	32.5	76.6
11	56	R	I	5	40	90	37	++	33	104.0
12	88	H	I	12	-	-	-	+++	-	-
13	5	H	I	11	30	50	36	+	28	76.6

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/PEN

Total Duration of Farrowing: 391 min.

Sow: K

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1(SB)	-	R	I	-	-	-	-	+	-	-
2	26	R	I	-	DEAD	-	-	-	-	-
3	0	H	I	7	45	45	8	+	?	?
4	4	H	I	6	50	55	50	+	29.5	89.2
5	4	H	I	14	50	55	71	+	39.5	89.2
6	31	H	I	2	55	65	25	++	21.5	76.6
7	5	H	I	6	50	65	27	+	22	76.6
8	105	R	I	6	180	240	30	+	29.5	89.2
9	7	R	B	-	50	60	25	++	20	76.6
10(SB)	60	H	?	-	-	-	-	+	-	-
11(SB)	0	H	?	-	-	-	-	+++	-	-
12	7	R	I	14	45	65	22	+	27	56.4
13	24	R	I	7	115	125	17	+++	33	76.6
14	1	H	I	8	60	80	54	+	29	35.6
15(SB)	117	H	I	-	-	-	-	+	-	-

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/PEN

Total Duration of Farrowing: 282 min.

Sow: J

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	R	I	6	45	65	22	0	27.5	76.6
2	7	R	I	17	40	65	17	+	27.5	48.4
3	25	R	I	(8)	35	60	32	+	27	56.4
4	5	R	I	2	55	90	271	++	-	-
5	11	R	I	37	35	80	54	+	-	-
6	12	R	I	5	30	60	250	+	25	65.7
7	1	R	I	22	30	25	107	+	-	-
8	21	H	B	-	25	15	19	++	22.5	76.6
9	14	H	I	29	35	40	73	+	20.5	65.7
10	0	H	I	3	40	80	19	++	24.5	48.4
11	10	R	I	6	25	40	52	++	-	-
12	21	R	I	(2)	20	115	46	+	28.5	65.7
13	36	R	B	-	290	-	-	+++	-	-
14	33	R	I	(1)	30	65	67	+	-	-
15	87	?	?	?	?	?	29	?	28	89.2

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/PEN

Total Duration of Farrowing: 97 minute

Sow: R

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	(5)	35	50	47	0	34	141.2
2	0	R	I	(5)	75	150	-	0	-	-
3	10	H	B	-	45	75	29	0	26	121.2
4	14	H	I	3	50	90	31	+	32	89.2
5	13	H	I	3	35	240	30	++	35	19.3
6	0	H	I	4	55	215	23	++	25	164.6
7	5	H	I	4	30	60	29	++	21.5	65.7
8	4	H	I	7	50	95	21	++	-	-
9	6	R	I	1	55	70	23	+	29	65.7
10	4	H	I	3	25	75	47	+	28	76.6
11	6	R	I	24	60	150	236	++	21	19.3
12	0	R	I	2	50	70	51	++	31.5	56.3
13	24	H	I	1	65	45	10	+	25	121.2
14	11	H	B	-	45	50	9	+++	26	164.6

Table A.61 cont.

VIABILITY AT BIRTH AND COLOSTRAL UPTAKE

Treatment: CUBICLE/PEN

Total Duration of Farrowing: 110 minutes

Sow: T

Parity: 3

Piglet No.	Interval between birth of piglets(mins)	Presentation	State of cord	Time to cord breakage (mins)	Time to regular breathing (secs)	Time to attempt standing (secs)	Time to suckle (mins)	Degree of meconium staining	Blood Analysis at 36 hrs Post Partum	
									Mean Haematocrit Value (% RBC)	Mean IgG conc (mg/ml plasma)
1	-	H	I	(8)	50	35	36	+	28.5	65.7
2	23	H	I	(5)	30	45	54	+++	30	65.7
3	16	R	I	6	60	180	21	+++	28	260.5
4	10	H	B	-	120	130	113	+	24	65.7
5	0	H	I	4	40	45	25	+++	31.5	89.2
6	6	R	I	3	40	45	18	+	29	121.2
7	3	H	I	4	90	120	55	+++	29	141.2
8	25	H	I	3	55	85	28	+	26	65.7
9	11	R	I	10	60	50	11	++	36	89.2
10	16	H	B	-	100	270	61?	+	-	-

Table A.62 contd.

Viability at birth and serum lactate levels - Parity 4

Treatment Tether-pen

Sow B

Duration of farrowing 255 min.

Piglet No.	Interval between births (min.)	Presentation	State of Cord	Time to cord breakage (min.)	Time to first suckle (min.)	Degree of meconium staining	Serum lactate level mIU/ml
1	-	R	B	-	46	0	161
2	0	R	I	(2)	63	+++	182
3	26	R	B	-	36	0	119
4	19	R	B	-	18	0	91
5	5	R	B	-	21	0	N.A.
6	15	H	I	7	62	0	203
7	32	R	B	-	17	0	102
8	6	R	B	-	60	0	171
9	4	R	I	3	39	+	142
10	18	R	B	-	23	0	151
11	4	R	I	1	49	0	179
12 (SB)	29	R	B	-	-	0	-
13	20	R	I	5	41	++	193
14 (SB)	77	R	B	-	-	+	-

Table A.62 contd.

Viability at birth and serum lactate levels - Parity 4

Treatment Tether-pen

Sow F

Duration of farrowing 382 min.

Piglet No.	Interval between births (min.)	Presentation	State of Cord	Time to cord breakage (min.)	Time to first suckle (min.)	Degree of meconium staining	Serum lactate level mIU/ml
1	-	H	I	(1)	15	0	82
2	0	H	I	(1)	23	0	100
3	28	H	I	(2)	17	0	121
4	70	H	I	6	11	0	146
5	49	H	I	5	63	+	188
6	15	H	I	1	45	+	N.A.
7	13	R	I	1	21	+	135
8	23	R	I	7	62	+	174
9	5	R	I	5	15	+	159
10	26	H	?	-	37	++	141
11	15	R	I	3	22	+	136
12	12	H	I	1	20	+++	N.A.
13	61	H	I	3	11	++	110
14	4	H	I	11	19	++	N.A.
15	0	H	I	6	29	++	129
16	47	H	I	3	7	+	99
17	14	H	I	4	14	++	126

Table A.62 Contd.

Viability at birth and serum lactate levels - Parity 4

Treatment TETHER/CRATE

Sow I

Duration of farrowing 195 min.

Piglet No.	Interval between births (min.)	Presentation	State of Cord	Time to cord breakage (min.)	Time to first suckle (min.)	Degree of meconium staining	Serum lactate level mIU/ml
1	-	?	?	?	≈ 21	?	113
2	≈ 69	R	I	2	16	0	119
3	9	R	I	3	29	+	130
4	6	R	I	2	27	+	151
5	8	H	I	4	20	+	155
6	7	H	I	4	12	+	N.A.
7	17	H	I	2	32	+	133
8	7	H	I	6	8	+	107
9	10	H	I	8	15	+	131
10	5	H	B	-	26	++	175
11	7	H	B	-	Never suckled	++	220
12	50	H	B	-	33	+	159

Table A.62 contd.

Viability at birth and serum lactate levels - Parity 4

Treatment Tether/Pen

Sow Q

Duration of farrowing 122 min.

Piglet No.	Interval between births (min.)	Presentation	State of Cord	Time to cord breakage (min.)	Time to first suckle (min.)	Degree of meconium staining	Serum lactate level mIU/ml
1	-	H	I	3	34	0	112
2	11	R	I	3	50	0	141
3	12	H	I	2	26	0	123
4	7	H	I	2	12	0	131
5	4	H	I	9	37	0	139
6	60	H	I	1	31	++	N.A.
7 (m)	4	-	-	-	-	-	-
8	0	H	I	7	15	++	166
9	1	H	B	-	60	++	181
10	10	R	B	-	43	++	153
11	0	R	I	3	7	++	N.A.
12	7	R	B	-	26	+	167
13	1	R	B	-	27	+	133
14	0	R	B	-	18	+	120
15	5	R	B	-	25	+	174

Table A.62 contd.

Viability at birth and serum lactate levels - Parity 4

Treatment CUBICLE/PEN

Sow D

Duration of farrowing 538 min.

Piglet No.	Interval between births (min.)	Presentation	State of Cord	Time to cord breakage (min.)	Time to first suckle (min.)	Degree of meconium staining	Serum lactate level mIU/ml
1	-	H	I	(1)	43	+	120
2	57	H	I	3	26	0	115
3	119	R	I	2	32	++	118
4	0	H	I	3	45	+	133
5	0	H	I	4	35	+	N.A.
6	165	R	I	1	42	+	159
7	7	H	I	1	21	+	141
8	32	H	I	7	22	+	163
9	0	R	I	8	30	++	N.A.
10	5	R	I	5	72	+	160
11	9	R	I	4	64	+	188
12	20	R	I	2	45	+	167
13	0	R	I	3	19	+	N.A.
14	2	R	I	6	38	+	N.A.
15	8	H	I	4	29	+	141
16	114	H	I	4	15	0	148

Table A.62 contd.

Viability at birth and serum lactate levels - Parity 4

Treatment CUBICLE/PEN

Sow J

Duration of farrowing 303 min.

Piglet No.	Interval between births (min.)	Presentation	State of Cord	Time to cord breakage (min.)	Time to first suckle (min.)	Degree of meconium staining	Serum lactate level mIU/ml
1	-	H	I	(31)	60	0	117
2	13	H	I	11	36	0	105
3	27	H	I	6	15	++	126
4	27	R	I	9	35	+	142
5	10	H	I	4	37	++	163
6	10	H	I	26	89	+	171
7	11	R	I	5	79	0	165
8	11	H	I	10	66	+	152
9	29	H	B	-	41	0	148
10(SB)	62	H	I	(9)	-	+	-
11	21	H	I	14	55	+	161
12	62	H	I	(1)	?	+	N.A.
13	20	?	B	-	?	+	N.A.

Table	A.63	Indiv/dual piglet growth rates (kg)	Sow V	Treatment	Tether - Crate
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[illegible]

FARM REGION CODE	
FARM UNIT CODE (2 digits)	
SOW No.	
Month of farrowing	
Born alive	
Born dead	
Born mummified	
No. weaned	

PIGLET	BIRTH (Days)	WEANING	CODED REASON FOR DEATH (see below)
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			

LIST OF CODED REASONS OF DEATH:

01 = Small non-viable	14 = Joint-ill and Meningitis
02 = Other non-viable	
03 = Starved (Otherwise ok)	15 = White pig
04 = Chilled (Otherwise ok)	16 = Bloated but anus ok.
05 = Blind anus	17 = Unknown
06 = Splay legs	
07 = Shaking/tremor	
08 = Other Deformity	
09 = Savaged	
10 = Crushed (injury by sow)	
11 = Other injury (not sow)	
12 = Scour (Otherwise ok)	
13 = Runt (viable at birth but did not survive)	

Appendix Table A.65

(Farrowing records of sows:
parity 1 - 4)

PARTY[illegible]

Sow A Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
17.00	1 1 1 2	TT										
17.03	311111112 3111111	NDUN S										
17.40	1111123 1111112 11	TIN TTTT										irregular panting
18.10	3121111 111232 211	NID NIT NNN									C++	26/min breathing irregular
18.40	23132 11	TNNN DN										28/min - irregular breathing
19.00	112111 12311	TTS S Gro									C+++	
19.30	1111111	TTTT S Gro										
19.40	1112111 223	TTTT TD										
20.00	111111111 2231123	TINT NDNT NTGroTS										Agitated when another sows piglet squealed
20.30	2112311 231212 123232123	TUNTT NNNT NTTTNNIT										Very unsteady on his legs when attempting to stand
21.00	211232 31212 3	NIT										40/min-irregular thick blood stained mucous leaking from vulva

Sheet 4

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow A Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
21.30	22322 3323	NUNT T										leapt up when another piglet squealed
22.00	23222 311	NIT TNT T										28/min - irregular
22.12	11	TTTT TTTT										pushing hard, lots mucous seeping and
22.25	11	TTTT TTTT TTTT										still pushing and straining very hard piglets probably coming sideways? meconium being
22.30		TTTT TTTT TTTT										passed 2 pigs passed together she leapt up, eat them in a panic
22.35		P	①	H	I	20	30-60s when sow stood up		++	≈ 60		
22.35	2 3	P	②	R	B	35	-		++	≈ 60		did not intervene until she bit ①
23.00	3 3 3	P	③	H	I	30	23.05		++			then placed both in Cord remained intact as sow stood up B
23.00	3 3 2 2 3	P	④	H	I	90	broke when sow stood ≈ 30s		++			membrane over mouth placed in box after bitten, ④ stood on
23.30	3 2 2 3 1 2 2 2 3	TTTTT TTTTT TTTTT	⑤	Mummified at very early stage - hardly recognisable as a piglet								Gilt going demented can see piglets in trying to eat at eat them - extreme ferocious standing foaming at mouth.

Sow A Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
24.00	1 2 2 3 1 2 2	TPPT TTTP										trying to get at box
19.11.81 00.45	2 1	TTTT TT										much quieter for last 20 min
00.50	1 1 2		⑥	H	I	70	~1min		+			After each piglet gilt sat up, then stood up so break- cord. Still very agitated
00.56	2 2 3 2 3 2 1 1	PTTT	⑦	H	I	40	1min when she stood up		+++			piglets removed to different pen
01.25	2331 1223	TTTT TTTT										passed some placen gilt jumped up bec I went up to get pl
01.50	232112 323212	UPPTTT TTTTTT TTTTTT										
03.00	1 2	TTT TT										
03.05	3 2 3	TTTT T	⑧	H	I	STILL BORN		-	++	-		Healthy looking piglet
03.30		TTTT TT	⑨	H	I	75	when gilt stood up 03.46	-	+++			Since ⑦ sow has bee very much quieter does not seem to b making an effort t have any more pig resp 22/min.

Sow A Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
03.46	2 3	P										Stood up and stood piglet, removed pl as gilt was already twisting round to grab him
03.55		TTTT										more placenta passed
04.15	2 3		⑩	H	?	?	?	-	++	-		eat on ⑩ large amount of placenta passed with ⑩
04.40	2 2 2	UG										
04.50	2		CONTINUOUS OBSERVATION ENDED									Attempted to reint duce piglets but still savage
07.30												Piglets successful re-introduced after number of abortive attempts
09.20			⑪			STILL BORN						

Sow H Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
14.00	1211311111 113	L N T N S T T G G		CONTINUOUS	OBSERVATION STARTED						C++/ C+++	Panting 88/min - 120/min "Paddling" movement with back legs, making truncated grunts. Lying quiet
14.30	111112311 12	N N D F										
15.00	111122313	N N										
15.30	11123121	N N L									C++	
16.00	311	L N L F N										
16.30	3112	D T										
17.00	11112311 11111	T N Gro										Hind leg drawn up
17.30	11111123 111	N T T T S T T T T T										Squealing, violent tail swishing.
18.01	1111111111 1111213111 2123	T F N N	①	H	I	30	18.11	19.10	—	60		Mucous plug passed just before ①
18.47			②	R	I	40	18.55	19.24	+	200		Cord tied in a complete knot

Sow H Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
19.03	1	T	③	R	I	60	19.09	20.15	++	90		
19.36	1		④	H	I	65	19.40	20.25	+	175		
19.42			⑤	H	B	35	—	19.50	+	80		
19.47			⑥	R	I	50	19.50	20.02	+	15		
19.52	11		⑦	H	I	30	20.00	20.05	—	40		
19.55	11		⑧	H	I	?	20.00	20.06	+++	90		
20.03	1		⑨	R	I	55	20.07	20.20	+	90		
20.19	1		⑩	H	I	40	20.22	21.50	+	45		Some placenta passed
20.25	1111111111 11111111		⑪	H	I	30	20.30	21.12	+	180		
20.35	1111111111 11111111	T S T S T										More placenta passed
21.48	1111111111 1111	Gro	⑫	H	I	30	21.51	21.58	+	85		

[illegible]

[illegible][illegible]

Sheet 2
TRIAL ANIMALS

[illegible]

Sow P Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
09.00			DISCONTINUED WATCH IN ORDER TO FEED									Fed
10.30	11	L S Q	WATCH RECOMMENCED									
11.15		L S S G										
11.45	12	L Q Gro										
12.10	232		DISTURBANCE								C+++	
12.30	3111	L										
12.45	11111	S S S										
13.00	111211											
13.30		S										Still straining - at this point felt necessary to intervene
		GIVEN 2 mls OF OXYTOCIN - NO HELP PULLED PIGLETS OUT MANUALLY - 12 DELIVERED - NO. 4 DEFORMED, ALL PIGLETS BORN MECONIUM STAINED										
15.30		PLACENTA	COULD NOT PASS SO DELIVERED MANUALLY									

PARITY 1

[illegible]

PARITY

[illegible]

[illegible][illegible]

Sheet 4

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARTY

[illegible]

[illegible]

Sheet 6

[illegible]

[illegible][illegible]

[illegible][illegible]

Farrowed (i.e. _____ days)

PARTY

[illegible]

Farrowed (i.e. _____ days)

PARTY

[illegible]

[illegible]

[illegible][illegible]

[illegible]

[illegible][illegible]

Sow I Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
22.15											C+	Still only 1 teat
18.1.81 00.45											C-	
03.15											C+	1 teat
06.20											C-	
08.30		N									C-	evidence of nest building
10.30		N									C-	will not roll over
12.00		L									C+	
14.00		L N									C+	in 2 teats
17.00		L N									C+	in 1 teat panting
21.30		L									?	Lying panting 20/min will not present teats
23.30		L										Asleep

Sow I Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
19.1.82 00.30		L									C+++	Asleep
01.00	111111111 1	L T T S T T T T T T T T T Gro	CONTINUOUS	WATCH	STARTED							
01.25			①	H	I	45	0143	—	—	60		
01.35	1		②	R	I	40	0143	0158	—	120		
01.40	31	N C T	③	H	I	15	0143	0150	+	50		Lay on piglet ①
02.03			④	H	I	25	0205	0212	—	90		Blood stained piglet
02.15	1231	G N	⑤	H	I	?	0218	0225	—	20		Blood stained piglet
02.58			⑥	R	B	20	—	0324	—	60		
03.19			⑦	R	B	40	—	0406	++	5		Tiny runt
03.45												Starting to pass placenta

Sow Q Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2.2.82 20.00											C+	
3.2.82 05.00											C+	
10.30											C++	Mastitis?
12.00											C+	
15.30											C++	
20.00		L									C++	
23.00		L									C++	
4.8.82 02.00		L									C++	
04.00		L									C++	
06.00		L									C++	
08.00		L									C+++	No sign of expected prefarrowing behavi

Sow Q Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
09.30												Fed and cleaned out
10.05	3123 1111111	DNRLT TIT	①	H	I	40	10.05	12.25	-	40		Bedding down when ① born. Gilt got up and started next build
												Very calm - didn't appear to be in la
10.35	11123111 112	NGN	②	H	I	5	10.36	11.00	-	60		lay on ① responded screams and got up
10.45	23	N	③	H	I	35	10.45	13.25	-	95		lay on ② response screams and got up
10.50	2		④	?	B	-	-	-	-	-		moving head left right quickly - acting strangely
10.55			⑤	R	I	40	11.00	11.30	-	40		
10.59	231	NL	⑥	H	I	30	11.00	11.35	-	20		
11.09		G	⑦	H	I	25	11.24	12.36	-	30		
11.14		G	⑧	R	I	35	11.21	12.21	-	50		
11.15		G	⑨	R	I	35	11.20	12.50	-	60		

[illegible]

Sheet 2 TRIAL ANIMALS	Farrowed (i.e. _____ days)	PARITY
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[illegible]

[illegible]

Sow E Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
09.00											C++	Fed
10.00		L									C+++	
10.35	323111 1233	CLCNL NLT	CONTINUOUS OBSERVATION STARTED									Lying, restless Deep exhalations 28/min
11.00	1111111111 1111111112 11111	LTTTN Gro										Piglet from next crate jumped over E rolled over to it suckle
11.30	11123111 111	L										
12.00	2111211 1	LTS										
12.24	1	T	①	R	I	45	12.29	12.31	+	70		
12.33	21	T	②	H	I	45	12.38	12.50	+	60		
12.45			③	H	I	48	12.49	13.05	+	55		
12.50	111	G	④	H	I	55	12.55	13.02	+	120		
13.04	11	T	⑤	H	B	60	-	?	+	180		Tiny piglet

Sow E Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
13.08	1		⑥	R	I	20	?	13.34	+	120		
13.11			⑦	R	I	45	13.29	14.02	+	15		
13.13			⑧	H	I	?	13.19	13.38	+	120		
13.16	11		⑨	R	I	15	13.19	14.06	-	20		3 attached still and 2 others - difficult to obtain readings
13.19	1	T	⑩	H	I	25	13.23	14.16	+	90		
13.25	11111	GTTT	⑪	R	I	20	?	13.32	+++	?		Smallish piglet - having great difficulty in breathing suckled whilst still inta
13.41			⑫	H	I	20	13.52	13.50	++	10		
13.41	111111	G	⑬	H	I	30	13.44	14.15	+++	60		
14.30	1											Started to pass placenta Piglet ⑪ lying in straw - has not stood up, looks like it will die Piglet ⑤ squashed under back leg - hasn't suckled yet

[illegible]

Sheet 1
TRIAL ANIMALS

Farrowed (i.e. 115 days)

PARTY 1

19.1.82

[illegible]

Sheet 2
TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

[illegible]

Sow S Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -,+,++,+++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
6.2.82 0930											C+	In 1 teat
1230											C-	
1700											M+++	
1730	32111323 112323 2112	LNBNB NNBNB BFDNB BNN	Continuous observation started									Pacing back and forwards, has rubbed a sore on rump, vocalising
1800	1232311 113123 213	NBNBNB NDNBNLNNBN BNDNBNBNB										Panting 78/min seems to have green difficulty in lying down easily
1830	312312 111222	NLBBB										
1900	311113 21	DUNNBNBNB NNBNBNB										
1930	1131111 22323	NNBN DNNN										30/min respn -
2000	223111 233	DFBNB										
2030	113111111 1123	NNDU NBN Gro										Lying quietly but making groaning/mumbling noises. Clear fluid dripping from vulva.

Sow S Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -,+,++,+++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2100	1111121	DNB										Resp rate 20/min Deep exhalations
2130	32123	NCNBD N										
2200	1111111 1111111	BNVL										16/min
2230	1111111 1111111	LQ										24/min
2300	11121123 111111121 121111111	NNBN Gro Q									M+	Some meconium and mucous passed. exhalations in 1
2300	111123 111	N										
7.2.82 0000	13131111 111111111	NNSS SSS										Lifting rump off ground and straining
0030	1111111 111	SSSTT SSSS TT										
0035	121111		①	R	B	45	-	0100	+	30		Gilt agitated by approach of ①
0040	11	ST	②	H	I	45	0046	0050	++	55		Many meconium pellets over body
0050	1111111 1111111	STST	③	H	I	45	0058	0142	-	45		Small piglet, gilt did not respond to squeals of ③

TRIAL ANIMALS

18.3.82

PARITY 1

[illegible]

TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

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[illegible][illegible]

14.12.81

[illegible][illegible]

Sow D Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
21.15		L									C++	
22.00		L									C++	
23.00	1	L									C+++	Asleep
23.30	311113	GUNGN	CONTINUOUS WATCH RESTARTED								C+++	
13.12.81												
00.30	1	L										18 fairly deep exhalations/min.
01.00												36/min.
01.30	1	Q									C++ /C+++	26/min.
02.00	11111111	QQ										
02.30		Q										lying quietly
03.00	111111											kicking back legs
04.00	1111111										C++	20/min.

Sow D Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
04.30	111											
05.00	11											resp. 14/min.
05.30	1111											
06.00	11											
06.30	1133	GCDCDC										
07.00		NR										Banging door and trying to lift it its hinges.
07.30	3	NRLGRNRRNN										Lying grunting and puffing
08.00	3	RNDGCDRLNG										Resp. 18/min.
08.30	113	LULG										Slow dripping clear fluid from vulva
09.00		CRC										
09.30		D										FED - ate voraciously

Sow D Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
03.00	1111111 121123	TTTGNDNU										84/min.
03.30	13	CNGNGLTNGU NDNUNFGN										Vigorous nesting activity again. Still passing small quantities of fluid
04.00		GNGN										
04.30	1111111	GMLT										40/min
05.00	3111	NGLG										
05.30	13	NFNGN										
06.00	1111113	LTMTTNU										
06.30		NL										
07.00	1131	GNGML										28/min.
07.30	1											
08.00	13	LN										

Sow D Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
08.30	13	LFEND										Resp. 16/min.
09.00	111111	NLU										
09.30	1213111	TTTTLTT										Gilt very restless
09.56	1		①	H	I	45	10.03	11.55	+	80		long delivery
10.09												piglet trapped behind door of p Gilt became very agitated at squealing and b down door before piglet rescued a 10.45
11.00			②	?	I	?	broken as gilt stood up		?	?		② and ③ born in dunging pass
11.00	3		③	?	I	?	"	12.27	?	?		
11.15	13	LNETCNL										
11.30	1131233	LCNLNL										
11.56		T	④	H	I	35	12.04	12.14	+	70		some placenta passed with piglet ④

[illegible]

PARITY 1

[illegible]

PARTY

[illegible]

[illegible]

[illegible][illegible]

[illegible][illegible]

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[illegible][illegible]

[illegible][illegible]

TRIAL ANIMALS

PARTY 1

[illegible]

TRIAL ANIMALS

PARITY

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Sheet 4
TRIAL ANIMALS

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[illegible][illegible]

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Sow p Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
16.18	2323223	LB Ps NBNN NLNTT Ps NTT										
16.26	12321232	BBDD Ps LG TLFLTBCBCB BBB										
16.36	2323	BBBNN Scr BNLBCNBTNE										Vulva dilated
16.43	2	DB Ps LGG BC										
16.49	223	LBFBNNB Ps BLBC St B										Respiration-98/min
17.00		St B		BREAK								
17.25		L		HALF-HOURLY	CHECKS							Sow panting. Temperature of house 84°F
17.55		L									M++/ M+++	

Sow p Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
18.15		L										Panting
18.45		L									M++/ M+++	Panting
19.15		St N										Panting
19.45		L									M+++	Panting 152/ minute
20.24		LU										Panting 112/ minute
20.36		Si									M+++	Temperature of house 83°F
20.40		LSG		CONTINUOUS WATCH RESTARTED								
20.45		L	①	H	I	20	20.56	21.15	-	50		
20.52	23222222	G	②	H	B	30	-	21.30	-	60		
21.06	211	Si G Gro S										Sow not exposing her teats to piglets
21.10	1		③	H	I	35	21.15	21.30	+	20		

[illegible][illegible]

Sow V Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1.10.82 01.37		StGN									M++	
04.03		St									M++	
05.25		Sl										
07.06		L									M++ /M+++	
07.55	111111111 111111111	LNQ		RECORDING BEGAN	IN DETAIL							Meconium passed
08.15	111111311 3113111 31111123	LGGGQU TGUGG SN										Meconium passed
08.33	111111111 1111	GNQGSSQ									M++	Meconium passed
08.57	111111223 3111211	QTSGroU SQScrU NUUL										Hind legs drawn up
09.10	111111121 12112112 311111	GroTUQS UTQST LBNLN										Sow restless Meconium passed
09.40	111	LDSUQG ULQLUU										Meconium passed
10.10	11111123 111	USGroQT GroNNUL										Respiration - 19/m sow attempting to stand, but unable to do so.

Sow V Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
10.30	11111	QSSGS TSTS										
10.52	11111111 11	GGroQUG QSUSGQ SGU	①	H	I	34	10.56	11.02	+	12		Large piglet, sow struggled to push piglet out of vulva
11.25	1111111	USSUSGro SUGroSU										Meconium passed
11.40	11111111 11	Gro SGroSUQ USSUSUSQ										Sow attempting to sit but unable to do so
12.16	1111111	TSUQSUU	②	R	I	45	12.18	12.30	+	5		Large piglet Some blood passed
12.33	11111111 1	LGroSQSGro SQS										Some placenta and blood passed
13.00	11111111 1	GroQSQG SQGGQS										Blood dripping from vulva
13.34	1111	QSSQSSGU										Placenta passed
14.00	11111111 1	BaBaQGGQSS QSGSGro										Sow agitated for a short while
14.30	111111	QSSSSSG GGChGroGG GGSS										Near constant quivering
15.00	1112211111 11111	QSSUCHL UQSSQ										Sow very restless, appears to be very uncomfortable.

Sow Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
15.30	1111111111 11111111	GQSSGSG GroSGGroG GQSTG										Meconium passed
16.00	1111111111 1111	SSSQGGT SGQSGSG GSTGUC										
16.30	22111111 111	GQGGroG GQUBaBa SUSQGBa										
16.53	122	CLBaQUBaBa ChGU										
17.00		Q										Hind leg drawn up
17.02		QTTTT										Leg appeared from vulva - little straining-then dis- appeared
17.07	11111111 11111111 11	GQSGGroQ GQTS	(3)	R	I	100	17.22	17.16	-	100		Unbilical cord slightly swollen
18.22	11111111 112231	SIQQ										Sow agitated and snapping, making barking-grunting lying in sternal recumbency.
19.00	1	GSQGST										Convulsive twitching all over body for about 1 m
20.10	1	G										More placenta pass

Sow Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
20.35	11	T T T T T T T T T T G										Making 'paddling' motions with legs.
21.05			OBSERVATION ENDED	TEMPORARILY								
21.41			RESTARTED - NO CHANGE									
22.05			OBSERVATION ENDED									8 ml depomycin injected. Intern examination carried out.
2.10.82 02.35		L Q										Still lying with hind leg drawn up.
												No further change. Quivering constan
07.14		L										Quivering constantly.
08.30												FED
09.00												Injected 1 ml oxytocin - no response, still quivering.

PARITY

[illegible]

[illegible][illegible]

[illegible][illegible]

Sheet 1
TRIAL ANIMALS

Farrowed (i.e. 116 days)
23.5.82

PARITY 2

[illegible]

Sheet 2
TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

[illegible][illegible]

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[illegible]

Sow Q Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -,+,++,+++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
16.8.82 11.30		St									M+	In 2 rear teats
14.30		L N									M+	In 2 rear teats
16.30		L									M+/C+	In most teats
18.30		L N									C+/M++	In most teats
20.26		L									C+/M++	In most teats Bedding very wet
22.20												Cleaned out wet straw, rebedded.
22.28		N									C++/M++ /M+++	
22.47	23	L G N G N G	CONTINUOUS OBSERVATION STARTED									Respiration- 28/min; irregular
23.00	2	G N N U D C Scr C N										Active nest building
23.30	2	N D R L G										ditto.
24.00		L	HOURLY CHECKS									Sow very quiet.

Sow Q Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -,+,++,+++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
17.8.82 00.56	3	L									M++	In most teats
02.00	2	L U N D N G										Lying quietly Hind leg drawn up
03.00	232323 23	L N T N N N G G Ch Ch									M+++	Respiration- 36/min; irregular
04.00	232	L D N G T T S T T T T	CONTINUOUS WATCH RESTARTED									
04.10	1221232 321	G R Ch N T T T Ch G T S	①	H	I	15	04.12	05.01	-	30		Long delivery Hind leg drawn up
04.27	23	Ch R	②	R	I	45	04.29	04.50	-	80		Piglet ① dis-orientated by sow's activity, became inactive after indigorous search for teat. Sow paid no attention to piglet ① during her recovery. buried it under straw.
04.33												Lay on piglet ① responded to squeal
04.34	2	Ch R T	③	R	I	45	04.39	04.43	+	60		
04.41		G R	④	H	I	30	04.43	05.01	-	65		

[illegible][illegible]

[illegible][illegible]

[illegible][illegible]

PARITY

10

Sheet 1

TRIAL ANIMALS

PARITY 2

[illegible]

TRIAL ANIMALS

PARITY

[illegible]

Sow C	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
12.06		T T T	(6)	R	I	10	12.08	12.26	-	15		
12.11	lllll	T T T T T	(7)	H	I	30	12.25	12.35	++	50		Very twisted umbilical cord
12.18		T U U U	(8)	H	I	30	12.24	12.38	++	95		
12.34		S S S U Q	(9)	R	I	135	12.36	12.58	+++	60		Born encased in sac and placenta - large piglet, took 120s to free membrane from its mouth
13.00		Q S U S U Q S S										
13.01			(10)	R	I	200	13.10	13.15	+	180		Membranes passed with (10)
13.06			(11)	H	I	55	13.10	13.30	+	60		
13.10	llll	Q Q Q S T T T T T	(12)	H	I	55	13.14	13.20	++	50		
13.35		Q Q	(13)	R	I	50	13.41	13.47	+	50		
14.10		OBSERVATION ENDED										More placenta being passed.

TRIAL ANIMALS

15.6.82

PARITY 2

[illegible]

TRIAL ANIMALS

PARTY

[illegible]

Sheet 4

TRIAL ANIMALS	Farrowed (i.e. _____ days)	PARITY
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[illegible]

6.8.82

[illegible][illegible]

PARITY

[illegible]

Sheet 1

TRIAL ANIMALS

Farrowed (i.e. 115 days)

PARITY 2

6.8.82

Sow S Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
5.8.82 0938		St Ps									M+	In some teats
1233		Si									M+	In one teat only
1515		St									M+	
1616		Si G									M+	
1756		L G B									M-	Not all teats exposed.
1938		Si B N									M+	In one teat only
2112		L									M++/ M+++	
2122	123223233 2111123232	L G ro G N B L G N B N B N D N N N		CONTINUOUS OBSERVATION STARTED								Respiration - 32/min; irregular. Hind leg drawn up.
2157	3221111111 11232123	N G G N C N C										Erratic breathing.
2240	21123112 3	N L G G N G N G ro										Respiration - 56/min; irregular.
2310	123211	G G ro D N G G										

Sheet 2

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow S Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2330	111222211	G ro N G T										Sow restless
2348	111	S T G ro										Very small amount of mucus passed.
2354	11111111	S T T T G ro S T										ditto
5.8.82 0015	111	G										
0023	11	G	①	H	I	10	0036	0045	+	25		Respiration - 34/min
0028	11111111	G G ro G G G G S G G G	②	H	I	25	0032	0041	+	45		Vigorous piglet.
0100	111	G ro G G ro S T S S G ro S G S										
0125												Small amount of blood passed.
0126	1111	S G ro G G G	③	R	I	20	0133	0141	+	55		Slightly blood stained piglet - small but vigorous.
0140	111111222 21	G G ro S										Trapped piglet ① under hind leg, re- sponded to squeals.
0156	111	G G ro S										Sow seems very uncomfortable, small amount of blood passed. Respiration - 24/min; irregular.

Sheet 1

TRIAL ANIMALS

Farrowed (i.e. 114 days)
19-8-82

PARITY 2

Sow U Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
18.8.82												
11.30		L									M+	In one test only
18.05		SI									M+	In some tests
20.11		L									M+	In some tests
21.01	3	SIGPS									M+	In some tests
19.8.82											M+	In some tests
02.56		NB									M+	In most tests
17.46	2	L									M+	In all tests
09.35	1	LQT	①	?	?	?	?	09.50	+	?		Hind leg drawn up - whining
10.13	1121212 2211	NTT										Small amount of meconium passed. Lying quietly, tail unexposed.
10.44	231111111 21111111	PaLPaL	②	R	I	25	10.56	10.56	+	6		Small piglet
11.10	1111122111	CTT	③	R	I	18	11.15	11.44	+	8		Drawing hind leg up

Sheet 2

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow U Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
11.21	1	T	④	R	I	15	11.26	11.33	+++	25		
11.28	111111111 22	C Gro T	⑤	H	I	10	11.31	?	+	25		Sow whining and puffing
11.45	223	N	⑥	H	I	35	11.49 as sow stood up	?	++	70		
11.50												Lay on piglet ④ no response to squeals
11.51	1		⑦	H	I	45	12.07	12.08	++	75		Blood stained piglet
11.56	1	Gro	⑧	H	I	25	12.01	12.10	+	50		Blood stained piglet Mucus and blood passed
2.03	1111	GroTT										Blood/mucus being passed, also mecon
2.17			⑨	H	I	20	?	?	+	35		
2.27	1111111111	GroT	⑩	H	I	23	12.28	?	+	40		
2.38	1111111111	LGroGro	⑪	R	I	35	12.41	12.51	+	33		Small amount of blood dripping from vulva.

Farrowed (i.e. _____ days)

PARITY

[illegible]

Sheet 1

TRIAL ANIMALS

Farrowed (i.e. 117 days)
15.5.82

PARITY 2

[illegible]

Sheet 2
TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

[illegible][illegible]

Sheet 6
TRIAL ANIMALS

[illegible]

11.7.82

Sow K Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
9.7.82 20.30		N									C+	In rear tests
22.43											C+	In some tests
23.55											C+	In some tests
10.7.82 00.16											C+	In most tests
06.20											C-	Even after vigorous massage.
12.15											C-	
12.45		L									C+	
15.00		L									C+	
18.30		L									C+	
21.30		L									C+	
23.30		St Ps/N									C++	

Sow K Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
11.7.82 03.30		L									C+	
07.00		St									C-	Fed
09.20		N									C+/M+	
10.35		L									M++	
11.14		T	①	H	I	55	?	11.31	--	60		Large piglet
11.27	11	TTT	②	H	I	50	11.37	11.43	--	70		
11.33	121	TT	③	H	I	60	11.38	11.48	+	60		
11.41	11	TTTTT	④	H	I	60	11.59	11.55	--	90		
11.51	111	TTT	⑤	R	I	30	11.57	12.15	+	60		
12.05	111111111 2311	TTTTTTGNN TTTTTTT	⑥	R	B	40	---	12.19	+	45		Sow disturbed by squealing of piglet ⑥ as she partially squashed it

[illegible]

Sow J Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
26.8.82 16.15	2	LG									C+/M+	In some tests
21.14		St									C-	
27.8.82 03.22		L									C-	
07.46		St									C-	
12.18		St									M+	In some tests
15.06		St									M+/C+	In some tests
18.33		L									C+	In one test only
22.28		L									C+/M+	In some tests. No evidence of nest building
28.8.82 03.45		L									C+	In some tests
08.38		LG									M+/C+	In some tests
11.45		St									M++/C+	In most tests

Sow J Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
13.36		St									M+/M++	In most tests
14.52		L									M+/M++	In most tests
15.21		N										
16.05		L									M+/M++	
17.05	11223	LDN	CONTINUOUS OBSERVATION STARTED								M++	In one test only Respiration-80/mi
17.30	2211222	NCU										Restless-frequent lies in sternal recumbency.
18.00	23	NTTTTT TT									M++	
18.16	1123	Ba CTTTTT TTTS	①	H	I	120	18.28	19.00	+	135		Long delivery. Sn very good at lift hind leg and push piglet towards u
18.49	2232	NCR Sn	②	H	I	60	19.03	19.00	+	70		Snapped at piglet as it approached head.
19.25	3223	CCTTTTT TTTT Sn	③	H	I	50	19.26 when sow stood up	20.03	-	55		Delivered in sitt position. Sow still restles

Sow J Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
19.44	23	Sn Sn Sn Sn UGTTTTT	④	R	I	50	19.55	20.03	-	75		Attempted snapping just before piglet born. Frequently lies in sternal recumbency
20.13	111	GTTT Gro T TT	⑤	R	I	45	20.20	20.21	-	50		
20.38	1123	CN	⑥	R	I	40	20.42	21.23	+	50		Partly encased and some placenta appeared with piglet ⑥. Lying in sternal recumbency and refusing to let the piglets suckle again
21.11			⑦	H	I	55	21.13	21.23	+	60		Blood stained
21.16	2	QST	⑧	H	I	45	21.24	21.34	+	50		Sow allowing suckling, but slightly agitated.
21.36	1111123	Ba Ba NQ Gro Gro Gro TT	⑨	H	I	60	21.43	22.09	+	65		Sow agitated by piglets squealing on udder. Lay down in sternal recumbency. Wheezes
20.00	2											Some placenta appearing

[illegible]

TRIAL ANIMALS

Farrowed (i.e. 115 days)
19.8.82

PARITY 2

Sow R Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
18.8.82 19.15		L									M+/ M++	
20.00		L									M++	
20.57		L									M++	
22.20		St C									M+	
23.46		St RG									M++	
19.8.82 00.53		LCG									M++	
02.08	23	LGN										
02.59		LG										
03.48		L										
04.47		LCG									M+	
06.02		St GC										

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow R Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
07.43		St G									M+	
10.00	3	SI									M+/ M++	
11.04	2	L									M+/ M++	
11.45		N									M+++	
12.30		L										
13.43	2	LTT		CONTINUOUS WATCH STARTED							M+++	
13.44	23	GGCR	①	?	I	?	13.45 as sow stood up	15.21	-	?		Sow sniffed piglet ate umbilical cord
13.50	23	LNGGRCGR CTT										Lay on piglet ① responded to its squeals.
14.03	122122	LGGro G	②	H	I	25	14.11	14.24	-	30		Small amount of fluid passed with piglet ② Drawing hind leg sat on piglet ②
14.13	23	GGR	③	H	I	60	14.15 as sow stood up	14.47	-	55		Blood stained pig- let, mucus passed

Sheet 1
TRIAL ANIMALS

Farrowed (i.e. 114 days)
21.8.82

PARITY 2

Sow T Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
21.8.82 0110		L G									M+/M++	
0314		L N									M+/M++	
0539		L									M+/M++	
0705											M++	
0900		L									M++	
1100		L									M++/ M+++	
1217		L									M++/ M+++	
1222			OBSERVATION STARTED IN DETAIL									Respiration - 56/minute
1230	1112223	L N D N L G to										Respiration - 44/minute. Reacted to suckling noises in farrowing house
1300	3111	T T N S										32/min

Sheet 2
TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow T Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1330	22	T T T T S T T T T S S T T T T										Mucus being passed
1340		T	①	H	I	50	1344	1401	-	45		
1348	23	N	②	H	I	50	1351	1400	+	60		Sow has piled up straw to height of over 2 feet. sat on piglet ② but responded to squeal exhaling deeply.
1359			③	H	I	50	1403	1412	+	45		
1400			④	H	I	55	1402	1410	+	50		
1403		T T	⑤	H	I	60	1405	1426	+	60		
1419		T T	⑥	H	B	45	-	1435	+	50		Blood passed.
1434		G T T T	⑦	R	I	55	1440	1453	+	75		
1443	3	Q G N G L G	⑧	H	I	50	1449	1452	++	45		Large piglet.
1715												Placenta being passed.

Farrowed (i.e. _____ days)

PARITY

[illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow A Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1732		St B G									M+/M++	
1823		L G									M++	
1900		L										
1952		L Q										
2000	1	T T S	CONTINUOUS WATCH RESTARTED									
2000	2 3 3 1 2 2	G L G G Ch L G G Ch G	①	H	I	25	Sow stood 2004	2015	+++	35		Long delivery. Sow agitated, attempting to turn around to investigate piglet. Piglet trapped between side and bar for short while.
2008	1 1 1 1	L G S T T T Q G T T T	②	H	I	25	2012	2021	+++	50		Born whilst sow sitting.
2020	1 1	Q T T T	③	H	I	20	2027	2034	+++	40		
2027		T T	④	R	I	40	2031	2047	++	25		
2030	1 1 1 1 1	S G G-ro Q T Q T T T T T T	⑤	R	I	35	2036	2053	++	75		Blood passed with piglet ⑤

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow A Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2043	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Q G Q T T T T Q T T G T T T T T T T	⑥	R	I	15	2046	2055	++	30		
2106												Blood stained mucus passed.
2120		T T T T T T	⑦	R	I	35	2124	2128	+	50		
2125		Q	⑧	H	I	40	2128	2137	+	30		Large piglet. Some placenta appearing.
2130	1 1 1 1	T T T	⑨	R	I	55	2140	2145	++	70		Encased in amnion.
2135	1 1 1 1 1 1 1 1 1 1 1 1	Q G T T Q T T	⑩	H	I	35	2148	2154	+	45		
2205	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Q T T T Q T T T T T T T T T T	⑪	H	I	35	2210	2222	++	35		Partly encased in amnion. More placenta passed.
	1 1 1											Sow agitated.
2226												Sow very restless.
2257		Q	⑫	H	I	45	2314	2315	++	60		Partly encased in membranes.
2315												Large mass of placenta passed.

PARITY

[illegible]

TRIAL ANIMALS

Farrowed (i.e. 115 days)
13.11.82

PARITY 3

[illegible]

TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow H Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1045		St									C+	
1222		St									M+	
1314		St B									C+/M++	
1458		Si B									M+	
1543		L B									M+/C+	
1752		St L G									M+/M++	Has rubbed sores on tail and snout, due to bar biting etc.
1843		L									M+++	
1934		St									M++/ M+++	
2018	2 2	L G ro	CONTINUOUS OBSERVATION STARTED									
2051		G	①	H	I	20	2058	2113	+	55		
2052	2		②	H	I	45	2105	2112	+	60		

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow H Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
055	2 2 1 1	G	③	H	I	15	2100	2115	-	25		Hind leg drawn up.
05	1 2 2	G G T	④	H	I	40	2107	2140	++	65		Tiny piglet. Mucus and blood passed.
08	2 1	T Q T T G ro	⑤	H	I	45	2115	2201	+	25		Lying in sternal recumbency.
18		G	⑥	R	I	35	2122	2137	-	25		
18	1	G ro Q T	⑦	H	I	15	2120	2133	+	35		
28	1	Q S G ro G Ba G S T T	⑧	R	I	40	2131	2142	+	25		
41	1 1 1 1 1 2 2 2 1 1 1 1	G Ba Ba N Q G ro T T	⑨	R	I	45	2149	2159	+	60		Lay on piglet ③ twice responded each time to squeals. Lying in sternal recumbency. Keeps kicking out with legs and knocking piglets.
6		T T T										Blood passed.
1	1 1	Ba G Q G ro T	⑩	R	I	55	2213	2225	++	45		

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow H Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2248		G T T	(11)	R	I	25	2250	2303	++	65		Meconium passed with piglet.
2252	1	G ro Q G Ch	(12)	H	I	60	2254	2311	+++	110		
2307	1	Q	(13)	H	I	60	2318	2330	++	45		Meconium passed.
2323			(14)	H	I	30	2326	0011	++	55		
2323		Q	(15)	Mummified piglet - early stage of development								
2334		Q										Placenta being passed.
2349	1 1 1 2 3	Ba L G ro Q										More placenta passed. Lay on piglets, resulting
												in skin lesions on piglets (1) (3)
												and (14) Unable to lay down with- out lying on
												piglets, responds to squeals.
4.11.82 0049				CONTINUOUS OBSERVATION ENDED								
306												More placenta had been passed.

PARITY

[illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow P Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -,+,++,+++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2300	3	B N G ro B N B N B										
		G ro B N B N B N N B										
		U B N										
2330	3	B N B N B B N N B N										
		B B N B N G ro B N B N B										
9.1.83 0000		B F N B N B B N N B N B N N B										28/minute.
		N B D										
0030	2 3 3 3 3 2 3 2	N B N B N B G ro B N										
		B B B N G ro N B B G ro B										
0100	3 2 2 3 2 3	B B B B D U B N B N B N B										
0130	3 2 3	N N B G ro N B B G ro N B										
0200	3 2	B N B B N G ro B B B										

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow P Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -,+,++,+++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
0210	2 1 2 2 2 2 3 1 2	G ro N Q Q Q Q Q	(1)	H	B	45	-	0334	+	50		Still very rest- less after birth of (1)
0246	1 1	Q	(2)	R	I	70	0255	0359	+	90		Sow exhaling deeply.
0250	1 1 1 2 1 1 1 2 2 2 2 2 1 2 3	Q Q G ro B G ro Q G ro N S	(3)	R	I	60	0256	0308	++	60		Sow rather agitated by piglets.
0330	1 2 1 1	S S S Q S S S	(4)	H	I	50	0339	0415	+	40		
0345	1 1 2 1 1		(5)	R	I	55	0410	-	+	60		Very small 0420 lain on.
0353	1 2 1 1 2		(6)	R	I	50	0356	0400	+	45		
0400	1 2	Q	(7)	H	I	55	0405	0415	+	55		
0404	1 1 2 2 1		(8)	H	I	50	0407	0420	+	45		
0414			(9)	R	I	65	0416	0510	+++	60		
0414	1 1 2	Q G ro	(10)	H	I	65	0420	0440	+	60		
0425	1	G ro Q	(11)	R	I	55	0428	0435	+	60		

[illegible]

TRIAL ANIMALS 25/3/83 Farrowed (i.e. 112 days)

Sheet 1

PARITY 3

Sow V Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
24-3-83 15.10		St									C+	
25-3-83 14.15		N B									M+++	
14.35	3232323 2323	S1 BNNN BNNBN	CONTINUOUS OBSERVATION STARTED									M+/M++ /M+++
15.00	232323	N N G N B										
15.30	23123	N N										
16.00	2323213	N N B N S Q S Q N N									M+++	Lying hind leg drawn up
16.30	1232323 231	N N Q N B N										Respiration - 32/minute
17.00	1231111 23	S Q N N										
17.30	21131111	B N T Q T S S S S										
18.00	1111231111 1231111123	N S Q N Q N Q										

TRIAL ANIMALS

Sheet 2

Farrowed (i.e. ____ days)

PARITY

Sow V Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
18.30	111111211 311111123 111	Q S T S S Gro N N Q										
19.00	11111111 1123	S Q S Gro S S S Gro Q S Gro S Gro Gro N										Having difficul moving into sitting positio
19.30	112111111 1111	S Gro SS S Q S S Q										
20.00	11111	S Q										Mucous appearin at vulva
20.30	11111111 1111111	S Gro Gro Q Gro S T S S Gro S T Q T T T T T T T T S										
20.52	111111111 111111111 111111111 111111111 111111111 111111111 111111111 111111111 111111111 111111111	Q Gro S Q S T S S S T S Q Gro T S T S T Q Gro S S Q T T T Q S S T S S T T T T T T T T T	①	H	I	65	2223	2219	+	115		
22.51	111111111 11	Q Gro T	②	R	I	55	2255	2300	+	40		Vigorous piglet

[illegible]

TRIAL ANIMALS

PARITY 3

[illegible]

TRIAL ANIMALS

PARITY

[illegible]

Sow B Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1215	1										M+/ M++	
1230	1 1 1 1 3	L N N C N L T T N G									M+/ M+++	
1255	1 1 1 1	T T T T										
1300			CONTINUOUS OBSERVATION ENDED TEMPORARILY								M+/ M++	
1413												
1434		St N										
1507		N									M+/ M+++	
1548		N									M+/ M+++	
1714		L									M+/ M+++	
1932		L N									M+/ M++	
2047		L									M+/ M++	

Sow B Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2300		L									M++	
2.10.82 0025		L									M++	
0235		L N									M++	
0358		L	CONTINUOUS WATCH RESTARTED								M+++	Restless
0400	1 1 2 3	N G r o N L N L Q S T T										
0429	2 3 2 3 2 3 1 1 3	N G G r o N N G S N G r o T T	①	H	I	40	0433	0510	-	50		Respiration - 20/min. Hind leg slightly drawn up.
0537	2 3 2 3	N Q G Q G r o N	②	R	B	60	-	0728	-	80		Respiration - 24/min; deep exhalations.
												Sow grinding teeth.
0637	2 3 3 1 1 1 2 2 3 1	N N N N G G Q N	③	H	B	50	-	0719	-	70		Lying with hind leg drawn up.
0820												FED - ate a little
0824			④	H	B	55	-	0834	-	210		Small piglet, born whilst sow standing.

Farrowed (i.e. ____ days)

PARITY

Sow B Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
0833		G Q G ro	(5)	H	I	70	0840	DEAD	-	480		Small piglet.
0839	1 3		(6)	R	I	55	0840	0949	-	70		
0843	3	S Q	(7)	H	I	50	sow stood 0844	0852	-	60		
0845												Sow lay on piglet (5)
0900			(8)	R	I	60	0904	0942	+	125		
0903		Ba	(9)	H	I	60	0904	0915	+	120		
0910			(10)	H	I	80	0915	1037	+	160		Small piglet
0910	1	G S	(11)	H	I	70	0916	1003	+	150		Large piglet
0925	1 1 1 1 2 1 1 2 3	S G G N G N Ba L G G										Small amount of blood passed. Sow agitated by piglet
												squealing, sow very active, trod
												on piglet (9), attempting to lie down, but keeps
												lying on piglets. Finally lay down okay.

Farrowed (i.e. ____ days)

PARITY

Sow B Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
0943		T										Small amount of blood and meconium passed.
0944		T	(12)	H	I	70	0950	1035	+	105		Blood stained piglet, completely encased in
												membrane, struggle broke sac around mouth.
												Some placenta passed.
0946	1 1 1 2	G G T S Ba	(13)	H	I	60	0953	1007	+++	70		Large piglet
0956	2 3	Ba Ba G N L G S Q G N T T										Again unable to roll over without lying on piglet - sow agitated.
1016		G S G	(14)	H	B	45	-	1041	+	40		Blood stained piglet.
1024		S										Placenta being passed.
1040												Passing placenta.
1041	1 1	L G	(15)	H	I	55	1049	1050	+	60		Blood stained piglet - encased in membrane.
1051	1 1 3	Et										Sow lay on piglet - responded to squeals.

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow B Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1055	1 1 1 1 1 3 3	L G G G Et C										More placenta passed. Lay on pi lets.
1106	1 1 1 1	L G C G										Lay on piglet ⑥ not responded to squeals.
1112	1 1 1	G L										Lay on another piglet, responded to squeals.
1122	1 1 1 1 1 3	L L G Q G C										ditto
1134		L G										More placenta passed.
1146												More placenta passed.
1154	1 1 2 3	N G Et N										More placenta passed.
1200	2	L G										Lay on a number of piglets, responded but trapped
												piglet ⑥ not respond to squeals
1210			CONTINUOUS WATCH ENDED									
1303		L										More placenta passed.

Sow F Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
22.10.82 09.11		St N									M+/C+	
11.11		L									M+/C+	
12.20		St N									M+/C+	
14.22		L C									M+/C+/ M++	
15.31		L									M+/C+/ M++	
16.33		St C									M+	
18.18		L G									M+/C+	
19.00		L G										
19.53		Si									M+/M++	
21.45		N										Vigorous nesting activity
23.30		N									M+?	Vigorous nesting activity - would not stand for milk testing.

Sow F Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
23.40												Pen rebedded as damp - now eating straw
23.10.82 01.30	232	L G N L G		CONTINUOUS	OBSERVATION	STARTED						Respiration - 58/min; irregular.
02.00	2322	N L G N T									M++/ M+++	
02.30	223222	L T D L T G D D N										
03.00	323	N L G N										
03.30	23	N L G F D L										
04.00		T T T										
04.30	232	T Gro T N										
05.00	23	N										
05.30	232	L N N										
06.00		U L Gro										Respiration - 20/minute.

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow F Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
07.00	3	Gro S										
07.11	2222221 1231	Gro Gro N G N T T	①	H	I	120	07.23	07.28	+	240		Sow turned round to look at piglet ① - agitated. Not exposing udder.
08.30												Sow rolled over on to ① - seems O.K.
08.58	2223	N C	②	R	I	50	09.03	09.03	+	90		
09.11	3	E N	③	H	I	35	sow stood 09.12	09.40	+	40		Fed-ate up. Trod on ① and ③ not badly
09.43		T	④	H	I	60	09.48	09.53	+	90		
09.49	122223	U G Ba G Gro E N L Gro Q Gro	⑤	H	I	60	10.04	10.17	+	90		sow making deep exhalations. suddenly agitated.
10.35	2123	Ch Gro Ba Ba Gr Gr E N C										Rolled over onto let ② responded agitated. suddenly agitated.
10.48	2											Rolled over onto lets, responded all piglets able move away.
10.50	121	Gro Q G S Ba Gr Gro G Q Gr Gro T	⑥	H	I	1	10.55	11.01	++	5		Long delivery. breathed regularly before completely born.

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow F Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
11.40		L Q G T										Hind leg drawn up
11.49	1	G Gr Gro Gr	⑦	R	I	55	11.53	11.56	+	70		Hind leg drawn up
12.02	1	G Gr	⑧	H	I	30	12.07	12.14	+	15		
12.07	2	Q T N										Some placenta passed
12.16	2211	Gro Gro										Lay on piglet ⑥ - trapped by head, able to free it after about 2 min
12.23	22	Gro Gr Gro G Q T	⑨	H	I	35	12.26	12.27	+++	65		Sow agitated, lying in sternal recumbent
12.49		Gro Gr G Q	⑩	R	I	40	12.53	13.01	-	85		Placenta passed
13.06		Gro G	⑪	R	I	90	13.10	13.32	+	140		Head encased in membrane, struggle broke membrane Blood stained pig
13.13		Q G G Q										Placenta being passed.

Farrowed (i.e. ____ days)

PARITY

[illegible]

Sheet 2

TRIAL ANIMALS	Farrowed (i.e. _____ days)	PARITY
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[illegible]

Farrowed (i.e. _____ days)

PARITY

[illegible]

TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

Sow I Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time regular breathing (secs)	Time cord break-age	Time first successful suck-ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
12.12.82 00.31	2 3	L G N L	CONTINUOUS WATCH	RESTARTED								
01.00		L Gro.										
01.30	2 3 2 2 3	L N Gro G										
02.00	2 3	L										
02.30		L T T										
02.41	1 1 1 2 3	Gro U Ch N L S T T	①	H	I	65	02.49	03.10	-	85		
03.11	1	G Gro T	②	H	I	50	03.13	03.22	-	55		
03.29	1 1		③	H	I	60	03.31	03.45	+	95		
03.47	1		④	R	B	65	-	04.12	-	135		
03.51	1 1	G	⑤	H	I	35	03.53	04.09	-	50		Trapped piglet (under hind leg - agitated by its squeals. Blood passed.
04.07		G	⑥	H	I	75	04.11	04.38	+	15		

Farrowed (i.e. _____ days)

PARITY

[illegible]

Farrowed (i.e. _____ days)

PARITY

[illegible]

Parrowed (i.e. _____ days)

PARITY

[illegible]

PARITY 3

TRIAL ANIMALS

23.1.83

Farrowed

(i.e. 114 days)

PARITY 3

[illegible]

Sheet 2

TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

FAV ANIMALS

Farrowed (i.e. 116 days)

14.11.82

[illegible]

TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow C Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
22.00		L									C++	In one test
23.51		L									C+	
14.11.82 00.50		L									M+/C+	
03.12		L									C+	
07.58		L									C+/M+	
09.46		St B										
10.42		St B N									C+/M++	
11.40	3	L N G									M++/ M+++	
12.17		L									M+/M++ /M+++	In different test
12.20	232322	N L G	CONTINUOUS OBSERVATION STARTED									
12.30	22332112 1112312223	N G										Very restless - making many small movements

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow C Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
13.00	2223233 3311112 11	BNTTT TSSTT TT										Lying with hind legs drawn up. Raising back end up and down
13.30	1222222 23111222 1122323 212223	GQGQG TTQQ GGGQ TTTTTT	①	H	I	50	14.26	13.57	+	45		
5.13	123332	QGTST TTSST TTTS	②	R	I	45	15.24	15.31	++	35		
5.53	221	GGTTT TTT	③	H	I	35	15.54	16.07	+	40		
6.16	12	TTTQT TTTTTTTTT TTSSTTS	④	H	I	50	16.21	16.35	+	35		
6.52		STTT	⑤	R	I	40	16.54	17.17	++	25		
7.02		QTGQ GroTTTTT	⑥	H	I	50	17.05	17.25	++	45		
7.15			⑦	R	I	45	17.17	17.20	+	35		
7.18		TTTTTGT TTTQTUUQ GUQFT USQUS	⑧	R	I	55	17.30	17.26	+	50		

[illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow E Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1023		L									C+/M+ /M++	
1200		L									C+/M+ /M++	
1230	2 2 3 1 2 3	L G Ch N G ro N	①	H	I	25	Sow stood 1233	1359	-	35	M+++	Long delivery, small piglet.
1239	2 3 1 1	T L										Lay on piglet ① sat up squashing piglet. Not respond to squeal. Piglet badly bruised.
1256	1 1 1 1	T G L	②	H	I	20	1302	1320	-	40		Blood stained, small piglet.
1308	1 1 1 1											Piglet ① non active. Sow keeps kicking piglet ② away from teats.
1314	1 1 1											
1318	1 1 2 1 3 1 1 1 1 1 1 1 2 1 2	T N L G G ro L G ro L G G ro N										Sow passing blood lying in sternal
	3 2	L T G ro T T										recumbency with rear pressed agai- nst crate, so obstructing vulva.

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow E Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1351			③	H	I	STILL- BORN	Sow stood 1357	-	+	-		Blood stained, small piglet.
1351	2 3	L G ro T T	④	H	I	55	1355	1826	+	40		Blood stained, small piglet, low activity.
1358	1	G ro U T G ro S	⑤	H	I	55	1404	1412	+	85		
1408			⑥	R	I	45	1413	1429	+	105		
1409	1 2 2 1 2 3 2 3	G ro T G ro G N U G ro G N G ro	⑦	R	I	60	1418	1432	+	95		Long delivery. Hind leg drawn up.
1535	1 1 2 3 1	G ro L G Ps										Sow restless, keeps kicking out with legs.
1623	1	G ro S Q G T S G ro										
1643	1 1	G S T S	⑧	R	I	45	1646	1707	+	50		
1647		G ro G ro Q	⑨	H	I	35	1650	1709	+	80		Large piglet.
1701	1 1	G ro Q T G ro G S U T S	⑩	H	I	STILLBORN	1731	-	+	-		Long delivery - piglets head bent round so snout within vulva although head ex- posed. Blood passed. Drawing hind leg up.

TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

Farrowed (i.e. 116 days)
1.2.83

PARITY 3

Sow L Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
31.1.83 0109		L									-	
0424		L									-	
0739		L									-	
1026		St									M+	
1207		BGN										
1304	3111123 111111	BNBNB BNBNB BNBNB		RECORDING BEGAN IN DETAIL							C+/M+	M++ in 1 test
	23	BNBNB BNBNB BNBNB										Quite frenzied biting and nesti alternating
		NGBGNB NBNNB BNBNC										
		BNBNB N										
1330	112331 2311111	BNBNB NBDBN BNBON										
	23232 3	BNBNG NBNNB GBGNB										Deep exhalation 48/minute

TRIAL ANIMALS

Parrowed (i.e. _____ days)

PARITY

[illegible]

Sow L Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1730	2311111 23	GNTUN										
1800	232323 1123	GDBNB BNDFB TTQUN										
1830	2											Sow quiet.
1900	23	DFN									M+	
1930	233223	DUNFN BD										Drawing hind leg up
2000	11											Responding to suckling noises in farrowing house.
2030	23232 311	UGDFN TTGDN B										Raising hind quarter slightly.
2100	223	NB										
2130	2	GS										
2200		TSSS										Raising hind quarter
2230	112323 1111111 231	SDFN Q										

Sow L Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present-ation	State of oord	Time regular breathing (secs)	Time oord break-age	Time first successful suck-ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
2300		QQQSS									M+ /M++	Quivering becoming more noticeable
2330	23	D									M+ /M++ /M+++	
1.2.83 0000	223	Q										
0030	311	BDF										
0100	111122	QST										
0130	2	STTT										
0134	23113 112	Q	①	H	I	40	0137	0246	+	35		
0144	1121111	QTTTT	②	H	I	50	0149	0443	-	55		
0220	11111121 11111111 21111112	QGTT	③	H	I	50	0225	0339	+	100		
0324		Q	④	R	I	55	0327	0515	+	80		
0327	1	QT	⑤	H	B	60	-	0500	+	90		Umbilical cord pulsing strongly after delivery

Parrowed (i.e. _____ days)

PARITY

[illegible]

Farrowed (i.e. 117 days)
9.1.83

PARITY 3

[illegible]

TRIAL ANIMALS

Farrowed (i.e. _____ days)

PARITY

[illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow S Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
9.1.83 0000		L									-	
0233		L									-	
0612		L									-	
0836		Sl									-	
1059		Sl									M+ /M++	
1213		StN									M++ /M+++	
1247		N										
1326	332323323	SIGNBNB NBNGBN	CONTINUOUS WATCH STARTED									
1400	2333	NNGDUD DFDNN										
1500			BREAK									
1520	23	LNBN										

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow S Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1605		LQ										
1641	3	NLUN	CONTINUOUS WATCH RESTARTED									
1700	2233	NUQUN										Meconium being passed
1730		LUGro										
1742	2	QGQUUGSGro										
1800	112223	LSUQUSUGro QSQNQU										
1830	2	LUQSQ										
1900	11	LGQSSU										Sow apparently having difficulty expelling first piglet - purring struggling, lifting rear off floor
1910		Q	①	H	I	60	1913	1920	+++	35		Large piglet
1914	111	QGGUGGrog QSGQ	②	R	I	35	1921	1924	+++	70		Large piglet Blood and meconium passed

Sow S Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
19 45	111	G Q U Gro G Q U G S Q G G G Q	③	H	B	Mummified						Completely encased in brown membrane near full term. No let, umbilical cord and sac degenerated. Large piglet.
20 40		Q G										Apparently in diffi- culty - quivering and grunting and straining a lot. Little success. Passed brown pla- centa and meconium.
20 45												Passed small amt. of healthy placenta.
21 00		L G Q										Sow lying period- ically quivering grunting contin-
22 00		L G Q										
22 15												Sow moved out of crate, allowed to wander around yard.
22 35												Moved back into crate.
22 49												2 ml oxytocin injected intramuscularly.
10.1.83 00 21		Si										Sow settled, no more placentas.

[illegible][illegible]

23.10.82

[illegible]

Sow D Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -, +, ++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
09.08		St N									M++	
11.12		Si									M+/ M++	
12.21		St N									M+/ M++	
14.20		L									M+ / M++ / M+++	
15.28		L									M++ / M+++	
16.32		L									M++	
18.21		L									M+ / M++	
19.00		L G										
21.45		N										Vigorous nesting activity
23.30											M++	Vigorous nesting activity
23.10.82 01.28	3	N L T C N		CONTINUOUS	OBSERVATION	STARTED						Respiration - 56/min; deep, reg.

Sow Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
02.00	22321	L T G N L T T G										Sow occasionally rubbing nose along door and biting wall, also throwing straw into air.
02.23	2322	N L T N U F									M++/ M+++	Drawing hind leg up
03.00		N L T										
03.30	223	L G N D										
04.00		C S c r T										Respiration - 40/min.
04.30	3233	N G n T U N T										Banging door - throwing straw into air.
05.00	3	N										
05.30	333	L N N U										Frantic nesting
06.00		T T										Respiration - 24/min.
07.00	3223	N N N									M++/ M+++	

Sow Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
07.30	233	N										Lying with hind leg drawn up.
08.00	3323	N										
08.30	23232323 3	N N N										
09.00	32	N E N N										
09.12												Fed - sta nearly all feed.
09.30	231											Lying hind leg drawn up
09.00	32323	E N N Gr Ch E Q G N L										Small amount of blood passed.
09.30	2223	L T Gro T T T E N L T T T										Small amount of blood passed. Hind leg drawn up
09.53	23211	N L G Gro T T	①	R	I	40	Sow stood. 10.54	11.42	+	75		Stood up and sniffed piglet.
10.16	11	Ch T T	②	H	I	40	11.22	12.19	+	25		Drawing hind leg up.
10.22	11123111	Q N L Q T T	③	H	I	30	11.26	12.02	+	65		Piglet disorientat ed as sow moved to opposite end of pen

[illegible][illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow K Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
0450			BREAK								C++	
0729		L									C+	
0848		L									M++/ M+++	Tail twitching as 1 teat udder massaged
0850	2 3	T T S T T S T T T T T T T T T U T T	CONTINUOUS OBSERVATION			RE-STARTED						Breathing in short gasps
		T T										
0900			①	R	I	STILLBORN			+			Some placenta passed. Very large piglet
0915	3	T T										Fed - ate up
0926			②	R	I	gaspd 2 x then no more			-			Small piglet
0926	1		③	H	I	45	0933	0934	+	45		
0930		T	④	H	I	50	0936	1020	+	55		
0934		Q Q T T T T T Q T T	⑤	H	I	50	0938	1045	+	55		
1005		T T T	⑥	H	I	55	1007	1030	++	65		

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow K Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time regular breath- ing (secs)	Time cord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1010	1	Q Q S T T Q T T Q T Q Q S T Q Q G T T	⑦	H	I	50	1016	1037	+	65		
1155		T	⑧	R	I	180	1201	1225	+	240		
1202		T S Q T T T T	⑨	R	B	50	-	1227	++	60		Haematoma of cord
1302			⑩	H	?	STILLBORN			+			
1302			⑪	H	?	STILLBORN			+++			Haematoma. Encased in mem- branes
1309		T T G S T T	⑫	R	I	45	1323	1331	+	65		
1316												Some placenta passed
1330												More placenta passed
1333			⑬	R	I	115	1340	1350	+++	125		
1334		Q S T T U G Q S T T	⑭	H	I	60	1342	1428	+	80		Placenta being passed

PARITY

[illegible]

[illegible][illegible]

TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow J Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
0330	1 1	L T T T T T										
0352	1 1	T T T	(1)	R	I	45	0358	0414	-	65		
0359	1 1 1 1	T T	(2)	R	I	40	0416	0416	+	65		
0424	1 1	T T	(3)	R	I	35	sow stood 0432	0456	+	60		Trapped piglet (2) under foreleg-slow to respond to squeeze
0429	1 1 1 1 2 3 2	N T T	(4)	R	I	55	0431	0900	++	90		Small piglet - buried itself under STRAW
0440	1	T	(5)	R	I	35	0517	0534	+	80		
0452	1	T T T	(6)	R	I	30	0457	0902	+	60		Low activity
0453	1 1	Gro T	(7)	R	I	30	0515	0640	+	25		
0514	1 1 1 1 1 1	Gro Ba T	(8)	H	B	25	-	0533	++	15		
0528			(9)	H	I	35	0557	0641	+	40		
0528		Gro T	(10)	H	I	40	0531	0547	++	80		

Sheet 4
TRIAL ANIMALS

Farrowed (i.e. ____ days)

PARITY

Sow J Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
0538	1 1 1 1	G Gro Q T	(11)	R	I	25	0544	0630	++	40		
0559	1 1 1 1 1 2 3 2 3 2 3 1	Ba N Gro Ba Ba N Gro Ba N Gro S	(12)	R	I	20	sow stood 0601	0645	+	115		Some placenta passed Lying in sternal recumbency-agitated.
0635	1 1 2 3 2 1 1 1 2 3 3	N Gro Ba Ba Ba T N T	(13)	R	B	290	-	-	++	-		Piglet (4) trod on Tiny piglet-gasped several times - no attempt to stand Placenta passed
0708	2 3 2 3	C Ba N Ba N	(14)	R	I	30	sow stood 6709	0815	+	65		Lying in sternal recumbency-rolled over. Agitated. Trod on piglet (1) head. Piglet (11) trod on - badly bruised.
0817			WATCH ENDED									
estimate 0835			(15)	?	?	?	?	0904	?	?		Laid on piglet (1)
1000												More placenta had been passed

Sow R Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
17.1.83 1641		St									M+/C+	
18.1.83 1309		L									M+/C+	
1703		L									M+	
2203		L									-	
19.1.83 0342		L									-	
0752		St									-	
1259		Sl									M+/C+	
1744		L									M+/C+	
2013		L									M+/M++	
20.1.83 0204		N									M+/M++	
0906											M++	

Sow R Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1059		N									M+/M++	M+++ in two teat
1130	22323	LGNLBa NONL	CONTINUOUS OBSERVATION STARTED									Respiration - 25/minute
1200	3323	LNLNGNG										Drawing hind leg up. Deep exhalations 24/minute
1230	2223	NL										Drawing hind leg
1300	2311	LNDNL										
1330	2223	NL										
1400	11122	LGroTT Gro										
1430	2323111	NLGNGTTT										Drawing hind leg
1500		TT										
1501			①	H	I	35	sow stood 1506	1548	-	50		
1501	1123	NLT	②	R	I	75	sow stood 1506	DEAD	-	150		Very tiny piglet gasping to breathe Sow sniffing pig- lets

Sow R Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first succee- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
1511	2123	GNNBaT	(3)	H	B	45	-	1540	-	75		Buried piglet (2) under straw - crushed. Trapped piglet (3) against wall - not response to squeals, final piglet able to get away
1525	223	NBaR LT	(4)	H	I	50	1528	1556	+	90		Sow eating umbilical cords
1538			(5)	H	I	35	1541	1608	++	240		
1538	1	GTBaT	(6)	H	I	55	1542	1601	++	215		
1543	11	BaT	(7)	H	I	30	1547	1612	++	60		
1547	1	GroTT	(8)	H	I	50	1554	1608	++	95		Blood passed
1553		TGGGrT	(9)	R	I	55	1554	1616	+	70		
1557	1	GTT	(10)	H	I	25	1600	1644	+	75		Passing blood/films
1603			(11)	R	I	60	1627	1959	++	150		Low activity Keeps getting trapped under sow's fore legs (1930)
1603	11	GGTTT	(12)	R	I	50	1605	1654	++	70		

[illegible]

[illegible][illegible]

TRIAL ANIMALS

Parrowed (i.e. ____ days)

PARITY

Sow T Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
08.40		N									M+++	
09.15												Fed - ate up cleaned out.
10.24		N										
11.00	22223	St G Ps G T T C N U		CONTINUOUS	WATCH	STARTED						
11.30	22323	N F N D N L N D N F N D N L										Respiration - 30/minute.
12.00	22223	L G G N										Lying with rear corner and hind legs pressed against wall.
12.30	223222	Gro G G N N L N										Respiration - 24/ minute; deep exhalations.
13.00	22222	L G N L										Sow restless
13.30	2223	G N										
14.00	111223	L G Gro N										
14.30		L U T T										

TRIAL ANIMALS

Parrowed (i.e. ____ days)

PARITY

Sow T Time	Sow movement 1,2,3.	Sow behaviour	Piglet birth order	Present- ation	State of oord	Time regular breath- ing (secs)	Time oord break- age	Time first success- ful suck- ling	Amount of meconium -,+,++, +++.	Attempts to stand (secs)	Presence of milk or colostrum	Comments
14.40	23231	G N L N L G T T	①	H	I	50	sow stood 14.48	15.16	+	35		Sow lying on pig responded immedi- ately to squeals. Laying across pig with rear pressed against wall.
15.03	23232	N	②	H	I	30	sow stood 15.08	15.57	+++	45		Piglet born while sows rear pressed against wall-sow rolled over.
15.19	121	N T T	③	R	I	60	15.25	15.40	+++	180		
15.29			④	H	B	120	-	17.22	+	130		very small piglet
15.29	2	G T	⑤	H	I	40	15.33	15.54	+++	45		
15.35	1	G	⑥	R	I	40	15.38	15.53	+	45		
15.38	11231	G G N G Q T	⑦	H	I	90	15.42	16.33	+++	120		Stood and rested for 4 minutes.
16.03		G	⑧	H	I	55	16.06	16.31	+	85		
16.14		Q	⑨	R	I	60	16.24	16.25	++	50		Rotating abdomen expose tests.
16.30	111323 3	G Q G Q N G F G N N	⑩	H	B	100	-	17.31	+	270		Very small piglet Rotating abdomen

[illegible]

TRIAL ANIMALS

Farrowed: 24.3.83

PARITY 4

Sheet 1

(i.e. 115 days)

Sow A Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
21.3.83 16.17		Si							C+	
20.21		L							C+	
22.29		L							C+	
22.3.83 11.42		St							C+	
14.34		L							C+	
16.25		L							C+	
18.40		L							C+	
20.17		L							C+	
23.17		L							C+	
23.3.83 02.10		L							C+	
07.50		St							C+	

TRIAL ANIMALS

Farrowed

PARITY 4

Sheet 2

(i.e. _____ days)

Sow A Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
11.25		L							M+	
12.49		LB							M+	Quiet
14.15		L							C+/ M+	
14.41		BN								
20.22		L							C+	Bouts of vigorous nesting and bar biting.
21.35		St N B							C+/ M+	
22.50		L							C+/ M++	
24.3.83 01.11		L Q							C+/ M+	Hind leg drawn up
01.18	11111	Q S G S T S S S S Q S Q		OBSERVATION BEGAN IN DETAIL						Continuous quivering
01.30	1123232323 111	U B B N N B N B S								Respiration rate: 20/minute.
02.00	11	S Q Q S Q S G S S Gro Q S Gro Q S							M++	

Sow A Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
02.30	111123111111 112311111111	G G S S Gro S Gro S S T N N N B N B N B N B N S S Q S B G Q							M+++	Respond to suckling noises in house.
03.00	1123111111	N B N S G Q Q G Q								Respiration rate:28/minute.
03.30	1111	G Q Q S Q								
04.00	1	Q G								
04.30	111112231123 1	G Gro S B Q N Gro Q								Respiration rate:24/minute
05.00	11112	Q G Q								
05.30	111	Q G Q								
06.00	1	S T Q S S S S Q T Q S T S S T S S T T S S T Q S T T S S T T S Q T S S S T T Q S T Q								Respiration rate:20/minute Continuous quivering.

Sow A Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
06.30	1111	S T S T Q S T S T T S Q T S Q T S T T T S T T S T T Q S T G T T T Q T S T T T S T T S T T S Q S S T S T T S S Q S								
07.00	11111121112 11123	T G S Q S T S Q D N B N D								Has great difficulty in sitting up
07.30	1	G Q Q G								Respiration rate: 22/minute
08.00	13	Q G								FED - ate up.
08.30	111	G Q S G S							M+++	Lying quietly quivering.
09.00	111	Q G S Q T S S S Q S								Respiration rate:24/minute Blood and meconium dripping from vulva.
09.30	111	S S S S Q S G S S Q T S								

Sheet 5

Sow A Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
10.00	1111	S Q S Q S Q S T S T T S S T Q S S T								
10.30	111	S Q S T G S S G S T T S T S S S T G S S T S T								
11.00	11	S T T S G T T T T T S T T T Gro S T								
11.10	11111111111	S Q Gro S S T S Q S S T G T S T G S T T S	①	H	I	12.48	still born	+++		Slow delivery.
		T T T T G S T T T T U T Q T T T S T T S T								
		T S T T T T T T T T T T T S T T T G T T G								
		T T T T T T T T T T S T T T T T T T S T T								
(13.00)		T S T T T T T S T T S T T T								
		T S T T T T S T T T S S T Q S S T T T T T S T T Q S T T T T S Q T T S T T T S Gro T S T T T T S T T T S Q T T T S T S T T T T								Respiration rate: 34/minute.

Sheet 6

Sow A Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
		S S S T S T T T T T S S T T T T T S T T T								
		T S T T S T T T S T T T S S T T T T S S T								Blood meconium and fluids dripping from vulva.
		T T S T T T S T T S T T T T T T T T S T T								
		T T S T T T S S T T T T T T T T T T T T T								
(14.00)		T S T T T T S T T T T T S S T T T T T T T							M+++	
		T S T G T T T S T T T S T T T S T T T S T								
		T T S T T T T S T T T T T S T T T T S T T								
		T S T T T T S T T S G S T T T S T T T T T								
		S T T T S T T T S T T T S T T T S T T T S								
		T T T S T T T T T T T T T T S T T T S T T T S T T T S T								

TRIAL ANIMALS

Farrowed 15.4.83

PARITY 4

Sheet 1

(i.e. 115 days)

Sow H Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
13.4.83 12.08		L							C+	
19.04		L							C+	
22.03		L							-	
14.4.83 03.23		L							C+	
07.26		L							C+	
11.19		St							C+/M+	
14.24		Si							C+/M+	
20.40		L							C+/M+	
22.20		L							C+/M+	M++ in one test
15.4.83 02.06		L							C+/M+	
05.09		Si							C+/M+	

TRIAL ANIMALS

Farrowed

PARITY 4

Sheet 2

(i.e. _____ days)

Sow H Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
08.01		St							M+/ M++	
10.32		St N B							M+/ M++	
12.20		St N B							M+/ M++/ M+++	
12.26		Si B							M++	Sow has rubbed sores on snout and tail, restlessness.
13.40	31	G B B N B B G		CONTINUOUS OBSERVATION STARTED						Respiration rate:86/minute.
14.00	23111123	B G N N B N B N B N B N B N B N B N B N B N B N B B N B N B N B N								Bar biting/rubbing and nesting alternately.
14.30	113231	B B N B N B N N								
14.46				INTERMITTENT OBSERVATION						
14.52	323	Si G N F B N N B N B		CONTINUOUS WATCH STARTED						Mucus discharge. Respiration rate:60/minute.
15.00	12311123231	N B N B N B N B N B N B N G B N B N B N B N B N								Rubbing nose along floor and bars.

TRIAL ANIMALS

Sheet 3

Farrowed
(i.e. _____ days)

PARITY 4

Sow H Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
15.30	123223	B N G N								Drawing up hind leg.
16.00	12313	Gro T N Gro N								
16.30	21123112123	F B N B B N							M+++	
17.00										
17.42		L Gro								Sow restless.
18.00	1231	F B N Gro								
18.30	111112	T Gro T Gro								
19.10	3		①	?	?	?	20.43	+		Small piglet.
19.11	1	T T T	②	?	?	?	19.33	+		
19.18			③	R	I	19.23	19.50	+		
19.18	1111	G Gro S G S G S T	④		MUMIFIED	early stage of development.				

TRIAL ANIMALS

Sheet 4

Farrowed
(i.e. _____ days)

PARITY 4

Sow H Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
19.52	1	Gro T	⑤	H	I	19.55	20.50	-		Blood stained.
20.00	1111111121	G S S U T T U T U T Q T T U T S T U T T S G T	⑥	H	I	20.06	20.39	++		
20.30	111	T S S T G	⑦	H	B	STILL BORN				Deformed - undeveloped head.
20.51			⑧	R	I	20.59	21.50	++		
20.52	2	Q U	⑨	H	I	20.56	21.22	++		
21.02	1	T	⑩	H	I	21.05	21.44	-		
21.07	11	S S Q S T T	⑪	R	B	-	22.09	++		Umbilical cord pulsating.
21.17	111123	Q S T G Q G	⑫	R	I	21.20	22.12	+		Placenta being passed Stood on 2 piglets legs
22.18			⑬	H	B	--	never suckled	+		Very small piglet.
22.48	1111	T Q T T G Q	⑭	H	I	22.53	23.08	+++		Placenta passed.

[illegible]

TRIAL ANIMALS

Farrowed 10.6.83
(i.e. 116 days)

PARITY 4

Sheet 1

Sow P Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
8.6.83 03.24		L							C+	
07.50		L							C+	
10.31		L							C+	
12.53		St							C+	
15.15		L							C+/M+	
18.03		L							C+/M+	
19.54		L							C++/M+	
22.14		L							C+/M+	
9.6.83 00.16		L							C+/M+	
04.07		L							C++/M+	
07.52		St							C++/M+	

TRIAL ANIMALS

Farrowed
(i.e. _____ days)

PARITY 4

Sheet 2

Sow P Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
11.19		L							C++/M+	
15.00		L							M++	
16.24		B								
18.00		L							M++	
19.30		L							M++	
21.15		L							M++	
22.36		L							M++	
10.6.83 02.09		SI B							M++/M+++	
03.16		B N							M+++	
03.30	123123	N B N B N B N B B B N B N B N B N B N B N B N B N B N B N B B N B N B N	CONTINUOUS OBSERVATION STARTED							Kicking trough and bars. Frenzied activity. Respiration rate 44/minute.

TRIAL ANIMALS

Farrowed

PARITY 4

Sheet 3

(i.e. _____ days)

Sow p Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
		B N B N B N B N B N B N B N B N B N								
04.00	1323331 23123	B N B N B N B N N B B N B N B N B N								Still frenetic activity
		B N B N G B B N B B N B N T T N B								respiration 72/minute
		N B D N B N B N B N B N B N B B B								Mucus appearing from vulva.
		N B N B N B N B N B N B B N B N B D N B								
04.30	11232323123	N B N B B N N B N B N B N B N B N B								
		N B F D N B B N B N B N B N B B N B								
		N B N B N B N B N B N B N B								
05.00	11232323112	N B N B N B N B N B D N B N B N B N								
		B N B N B N B N N B N B D N B B N B								
		N B N B								

TRIAL ANIMALS

Farrowed

PARITY 4

Sheet 4

(i.e. _____ days)

Sow p Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
05.30	1231123123	N B N N B N B N B N B B N B N B N B N B N N B B N B N B N B N B N B N								Respiration 44/minute
		Gro B N B N								
06.00	231123	N B N B N N B N B B N B N B B N B N B N B N N								
06.30	231231	B N B N B N B N B B N B N Gro								Deep exhalations 14/minute.
07.00	232323111111 111111111111	N B N B D N B B B N B N B B N B D								Responding to suckling noises in house.
	212232323	N Gro Gro B N B N N N N								
07.30	231111111111	N Gro Gro S								Has rubbed sores on snout and rump.
08.00	111111212223	G B B N C B C							M+++	Lying drawing hind leg up 08.20 Fed, ate up.
08.30	233111111111	N N S U								

Sow P Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
08.54	2112211211111 1211122	Q G Q Q G G G Q N N	①	R	I	08.55	09.03	-		09.11 blood and meconium pellets passed.
09.35	1111211111211 2111111211111 2	Q G Ch Gr N Q Ch N Q Ba Q Gro S G N N	②	H	I	09.39	09.50	++		
10.11	3121122212111 21	N Ba Q U Q U Q G Ba N U Q S U Q G B	③	H	I	sow stood 10.12	10.56	+		Trod on ①'s leg. Born whilst sow dog sitting.
10.38	111	Q	④	R	B	---	10.58	+++		
10.47	11211211211 111111	B N Ba G Q G Q Gro Q Gro S S T	⑤	H	I	10.54	10.59	++		11.13 small amount of placenta passed.
11.29	1	Gro S T	⑥	H	B	---	11.54	+		
11.33	1121111111111 1111211121	Q Ba G Gro G U G G Q U G Gro S S G Q S G S Gro G G	⑦	R	I	11.39	11.42	+		
12.15	1111211111111 1111111111111 111112	G G Q Gro G Q G Q G G G G Q G G Q G G G G G Q G G G	⑧	R	I	12.17	12.42	+		Placenta passed.
14.01 15.00			OBSERVATION ENDED							Placenta passed. More placenta passed.

Sow B Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
21-3-83 2018		L							C+/M+	C+++ in one teat
2227		L							C+/M+	
22-2-83 1137		St							M+ /M++	
1436		L							C+/M+	
1627		St							C+	
1838		L							C+	
2030		L							C+/M+	
2320		St							M+/M++ /M+++	Evidence of nesting
23-3-83 0205		Si							M+/M++ /M+++	Restless
0728		St							M+/M++ /M+++	
1130		L							M+/M++ /M+++	

Sow B Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
1247		L								Lying quietly
1411		L							M++ /M+++	Lying quietly
1615	111122	L S T S Gro S U S G S Q S T U	CONTINUOUS WATCH STARTED						M+++	Mucus discharge
1645		S Gro S U T T T								
1649			①	R	B	-	1735	-		
1649	2323311	Gro	②	R	I	Sow stood 1651	1752	+++		Blood sample taken at 1653
1715	111	G S	③	R	B	-	1751	-		
1734	111	T	④	R	B	-	1752	-		
1739	111111		⑤	R	B	-	1800	-		
1754	11	Gro Q U T T Gro	⑥	H	I	1801	1856	-		
1826	1	Gro S	⑦	R	B	-	1843	-		

[illegible]

Sow F		Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium - , +, ++, +++.	Presence of milk or colostrum	Comments
13.4.83	0810		L						C+	
	1140		St						C+	
	1430		St						C+	
	1600		L						C+	
	1858		L						C+	
	2159		L						C+	
14.4.83	0319		L						-	
	0720		L						C+	
	0932		St						C+/M+	M++ in one teat.
	1125		St						C+/M+	M++ in one teat.
	1250		Si						C+/M+	

[illegible]

Sow P Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
1135		St N							M+ /M++	M+++ in one teat.
1223		Si N							M+ /M++	M+++ in one teat.
1323		L							M+/M++ /M+++	Signs of vigorous nesting.
1340		G G	CONTINUOUS OBSERVATION STARTED							
1400	2 3	N N								Prolonged nesting.
1430		T T							M++ /M+++	Lying quietly.
1444			(1)	H	I	Sow stood 1445	1459	-		
1444	3 2 2	G N G N G G T T	(2)	H	I	Sow stood 1445	1507	-		Small piglet.
1512	2 1 1 1 2 2 2 3 1 2	G G G G G G N G	(3)	H	I	Sow rolled over 1514	1529	-		Crushed piglet (2) Seems agitated after birth of every piglet.
1622	2 1 1 2 2 1	G S G N G G G G G	(4)	H	I	1628	1633	-		
1711	1 1 2	G	(5)	H	I	1716	1814			Small piglet.

Sow P Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
1726	11	G T	(6)	H	I	1727	1811	+		
1739	11	Q	(7)	R	I	1740	1800	+		Large, vigorous piglet.
1802	1	T	(8)	R	I	1809	2004	+		Respiration rate 12/minute Small piglet.
1807	111	Q Q G G	(9)	R	I	1812	1822	+		Responding to piglets squeals.
1833	212	G G	(10)	H	?	-	1910	++		Vigorous piglet.
1848	22	G	(11)	R	I	1851	1910	+		1840 Some placenta appearing.
										1855 Sow lying in sternal recumbency - not allowing suckling.
1900	213111 11	G N Gro G Q Q	(12)	H	I	1901	1920	+++		
2001			(13)	H	I	2004	2012	++		
2005			(14)	H	I	2016	2024	++		
2005	11		(15)	H	I	2011	2034	++		Large piglet, in membranes.

[illegible]

TRIAL ANIMALS

Farrowed 12.5.83
(i.e. 115 days)

PARITY 4

Sheet 1

Sow I Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
10.5.83 09.35		L							C+	
15.16		L							--	
21.55		L							--	
11.5.83 03.22		L							--	
07.52		St							--	
11.56		St							C+/M+	
15.49		L							C+	
20.05		L							C+	
22.08		L							C+	
12.5.83 07.08		St N							C+/M+	
10.22		St							C+/M+ /M++	

TRIAL ANIMALS

Farrowed
(i.e. _____ days)

PARITY 4

Sheet 2

Sow I Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
11.32		N							C++/ C+++	Vigorous nesting.
12.31		L							C++/ C+++	
15.25		L							C++/ C+++	
16.00		L	①	?	?	?	16.21	?		No blood sample.
16.08	111111	G G Ch G T Gro G S S S G S T		CONTINUOUS	OBSERVATION	STARTED				Raising hind leg to belly. Respiration 20/min.
17.09	1	S S T T T	②	R	I	17.11	17.25	-		Deep exhalations.
17.18	1	T T S T T	③	R	I	17.21	17.47	+		Didn't bleed very readily.
17.24	111	S	④	R	I	17.26	17.51	+		Didn't bleed very readily. Deep exhalations of sow.
17.32	111	G S S	⑤	H	I	17.36	17.52	+		Didn't bleed very readily.
17.39	111111111	G G G Gro S	⑥	H	I	17.43	17.51	+		Big piglet, didn't bleed very readily. Respiration 20 minutes
17.56	1111	G G S S	⑦	H	I	17.58	18.28	+		

Sow I Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
18.03	11	G S G S	(8)	H	I	18.09	18.11	+		Big piglet.
18.13	11	Gro S	(9)	H	I	18.21	18.28	+		
18.18	11111	G G G	(10)	H	B	---	18.44	++		No blood sample. Big piglet.
18.25	111111231111 11123111	N G G G Q Ba C N	(11)	H	B	---	---	++		Sow seems agitated. 10.40 lay down and crushed (11) 19.07 ate placenta passed.
19.15	1123311232311 2231232323311 1111123231123 211233	N Ba N G N Ba N G N Ba N N G Ba Ba G G N G N Ba Ba N G C N G G Ba Ba Ba G Ba G Ba C N G Ba Ba Ba Ba N G	(12)	H	B	---	19.48	+		Sow still very agitated. Some placenta with (12) Respiration 32/minute. 17.25 sternal recumbency, not allowing suckling. 19.45 still agitated when they attempt to suckle, almost snapping at piglets. 20.25 still very restless. 20.55 (7) crushed. 21.22 Trod on 3's legs - broken.

[illegible]

TRIAL ANIMALS

Sheet 1

Farrowed 26.6.83

(i.e. 115 days)

PARITY 4

Sow Q	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first succes- ful suckling	Amount of meconium -, +, ++, +++.	Presence of Bile or colostrum	Comments
Time										
16.83 1020									C+	
1609		L							C+	
2209		St							C+/M+	
16.83 0341		L							C+	
0848		Si							C+	
1322		L							C+/M+	
1758		N							C+/M+	
2030		N							C+/M+	
2240		N							M+/M++	
16.83 0228		L/N							M+/M++	

TRIAL ANIMALS

Sheet 2

Farrowed

(i.e. ____ days)

PARITY 4

Sow Q	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first succes- ful suckling	Amount of meconium -, +, ++, +++.	Presence of Bile or colostrum	Comments
Time										
0425		N	CONTINUOUS OBSERVATION STARTED						M+++	
0430	311	QGN								
0500	1	ST								
0511	1	S	①	H	I	0514	0545	-		
0522		SG	②	R	I	0525	0612	-		Smaller piglet
0534	1	T	③	H	I	0536	0600	-		Sow lying quietly
0541	1	SQST	④	H	I	0543	0553	-		
0545	111111	QGQG GroGGG II	⑤	H	I	0554	0622	-		Sow lying nosing straw
0645	1	S	⑥	H	I	0646	0716	++		
0649			⑦	Mummified		-	-	-		
0649			⑧	H	I	0656	0704	++		

[illegible]

[illegible]

Sow C Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
14.4.83 0326		L							C+	
0731		L							C+	
1123		L							C+/M+	
1425		L							C+/M+	
2041		L							C+	
15.4.83 0208		L							C+	
0802		St							C+	
1328		L							?	Would not roll over
2027		N B							M+/M++	
2244		L							M+	
16.4.83 0412		L							M+	

Sow C Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
1112		St							M+/M++	M+++ in two teats
1305		L							M++/ M+++	
1432									M+/M++	M+++ in several teats
1500	3 3 2 2 3 3 3 1 3	B N B N G N N B D N B B B N B B D G	CONTINUOUS OBSERVATION STARTED						M+/M++ /M+++	
1530	3 2 3 1 1 1 3 2 3 2 3	G B N B F B N B N G N B N B B R U N								Making tremendous noise by biting and banging
1600	1 3 1 3 2 3 1 1 2	N B G B N B G N G								Lying with hind leg drawn up
1630	3 2 3 3 2 3 2 3 3 1 2 2 3 1 1 1 2	B B N N B D N N B N N G								
1700	2 3 1 2 3 2 3 3 3 2 3 2 1 1 2	N N G B N N N B G								
1730	3 1 2 3 1 2 3 2 3 2 3	D N B N N D								Lying with hind leg drawn up
1800	1 1 2 1 2 1 1 1 1 1 2 1 2 3	Q G Q B								
1830	2 1 1 2 3 2 1 1 1 1 1 2 2	G N N Q G S S C								

Sow C Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
1900	3 1 1 2 3 1 1 2	C N C D Q								
1930	2 3 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1	N T T T T T T S S S T T S S								Deep exhalations. Milk being freely expressed from teats
	1 2 3									
2000	1	C T T S T T T S T T								
2001	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1	G S G G S T T S S S T T S T G T T S	①	H	I	2006	2011	++		
	2 2 3 1 1 1 1 1 1 1 1 1 1 1	S T T S G N S T T T Q S								
	2 1 2 1 1 1 2 3 1 1 1	G r o T T S T S T T G T T								
		S T T T S S T S T T S T T T T T T S T S S T T S T T S T T S T T S T T T T T T T T T S T T								
2125	1 1 1 1 1 1 1 1	Q S G T T S T T S T T T	②	R	I	2128	2135	+		Sow agitated when piglet ② approached head

Sow C Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
		T T T S T T S S T T T T T Q G T S S								
		T G T								
	1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1	G Q S T T S T T S T T T S T T Q S								
	1 1 1 1 1 1 1 1 1 1 1 1 2 2									
		T T S T G S T T T S T T G T T T T T								
		S T T S T T G S S T G T								
		T T S Q T S T S T S T S Q T T T T T								
		G T T T S T S T T T G T T Q S Q Q S								
		G T T S S T T S T G F T T U T T S T								
		T T S								
17.4.83 0052	1 1 1 1 1 1 1 1 1	Q G G Q G T T U	③	R	I	0055	0100	++		Vigorous piglet

Farrowed
(1.e. _____ days)

PARITY 4

Sheet 6
TRIAL ANIMALS

Farrowed
(i.e. _____ days)

PARITY 4

[illegible]

TRIAL ANIMALS
Sheet 1

Farrowed 17.4.83
(i.e. 115 days)

PARITY 4

Sow E	Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
	14.4.83 0900		L							C+	
	15.4.83 1331		L							C+	
	16.4.83 1307		St							C+	
	1800		St							C+	
	17.4.83 0307		B							C+	
	0430		St							C+	
	0911		Sl							C+	
	1137		St							C+/C++ /C+++	
	1200 - 1300		N								
	1310		L							M++ /M+++	
	1333		L							M++ /M+++	

TRIAL ANIMALS
Sheet 2

Farrowed
(i.e. _____ days)

PARITY 4

Sow E	Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
	1355		L							M++ /M+++	
	1400	1 2 3 1 2 1 1 3 1 3 2	N N T T T S T T	CONTINUOUS OBSERVATION STARTED							Mucus appearing from vulva.
	1422			①	R	I	1423	1447	+		Delivered in dog sitting position.
	1424	1	S T T S S	②	R	I	1432	1541	+		
	1437	1	S S T S S	③	H	I	1438	1454	-		
	1447	1	Gro S T S T S	④	H	I	1507	1520	-		
	1453	1111111111 11111	S S S S G S S G S S S T S	⑤	H	I	1458	1927	+		Small piglet. Sow not exposing many teats.
	1514	1111111111 1111111111 1111111111 1111	Gro S S Gro S T S Gro Gro S Q S G Gro Gro G S Gro S S S S Gro S S T T	⑥	R	I	1533	1540	++		
	1635	1111	Gro S Gro S T T	⑦	H	I	1641	1724	++		
	1643	111	S Gro Gro Gro S S Gro T	⑧	H	I	1647	1802	++		

[illegible]

Sow L Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
6.7.83 0320		L							C+	
0744		L							C+	
1203		L							C+	
1410		L							C+	
1559		L							C+/M+	
2030		L							C+	
2252		L							C+/M+	
7.7.83 0211		L							C+/M+	
0743		St							C+/M+	
1235		St B							C+	
1417		L							C+	

Sow L Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
1552		Si G							C+	C+++ in 1 teat
1839		L							C+	
2008		Si							C+	
2130		L							C+	
2235		Si							M+	
8.7.83 0054		L							M+/ M++/ M+++	Lying with back leg drawn up otherwise quiet
0055	1 1	S T T	CONTINUOUS OBSERVATION STARTED							
0107	1 2 1 1 1 1 1 1 1 1 1 2 1 1	G S S S S S S G S S S S S G S S S T S S	①	H	I	0108	0119	-		
	2 1 2 1 2 1 1 1 2 1 1 1 2 3 1	S S S G S G Q S S G S S								
		S T T T S B R N T S T S T S T								
0255		T S S	②	H	I	0257	0348	-		

Sow L Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first succes- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
0317	1 1 1 1 1 1 2 1 1 1 1 1 1 2	S T S T S T T G Q S G Co	③	H	I	0320	0328	+		
	1 1	T T S S Q G S T G S S S G S T S S S								
		S S S S S G G T T T T S S S S S T G								
		S T S T G S S S G G S S T T T T								
0503		G S Q S G S T G Q S T T S	④	R	I	0505	0538	+		
0530	1 1 1 1 2 1 1 1 1 1 1 1 1 1	S Co G S T S S T S G T T S T S Q S S S	⑤	H	I	0534	0547	++		
		T T G S S G S S S S T S								
		T S S T S S S T S S T S								
		S S T T T S G T G S S G S T T T T T								
0650	1 1 1 1 2	G T S S T S S T T	⑥	R	I	0654	0711	++		
0710		T S S	⑦	H	I	0723	0741	++		

Sow L Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first succes- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
0715		G T S S T G G S	⑧	H	B	-	0724	++		
0730	1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 3 2 1 1	G Q S Q G S Q G Q S	⑨	H	I	0734	0750	+++		Sow finds it very difficult to get up from lying
0930			CONTINUOUS OBSERVATION STOPPED							
1230										No more piglets or placenta
1330			⑩	?	?	?	?	?		Checked at 1345, still damp piglet
1430			⑪	?	?	?	?	?		Checked at 1500, 2 still damp piglets
1440			⑫	?	?	?	?	?		
9.7.83 0900			⑬	?	?	STILL BORN				Some placenta
10.7.83 0930			⑭	?	?	STILL BORN				Decomposing piglet and placenta had been passed
12.7.83 0900			⑮	?	?	STILL BORN				Decomposing piglet passed

TRIAL ANIMALS

Farrowed 9.6.83
(i.e. 114 days)

PARITY 4

Test 1

Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium - , +, ++, +++.	Presence of milk or colostrum	Comments
5.83 6.11		L							-	
7.16		L							-	
8.01		St							C+	
9.06		L							C+	
10.83 11.20		L							C+	
12.54		L							C+	
13.33		St							C+	
14.17		L							C+	
15.05		L							C+	
16.44		L							C+	
17.16		St							C+	

TRIAL ANIMALS

Farrowed
(i.e. _____ days)

PARITY 4

Test 2

Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium - , +, ++, +++.	Presence of milk or colostrum	Comments
16.83 17.18		L							C+	
18.09		L							C+/M+	
19.58		St							C+	
21.17		St N							C++/M++	
22.15		St							C++/M++	
23.00		L	THREE PIGLETS BORN							
24.40			①	?	?	?	13.00	?		
25.48			②	?	?	?	13.08	?		
26.56			③	?	?	?	13.19	++		
27.00	111									
28.06	1		④	R	B	-	14.27	+		

Sheet 3

Farrowed
(i.e. _____ days)

PARITY 4

Sow S	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
Time										
13.10	11111111111111 11111	G S S G S S	⑤	H	B	-	13.30	+		
13.20	11111111111111 11111111111111 11111111111111 11111111111111 11111111111111 11111111111111	G G G G G G G S S G G G G G G G G G G S S G S G Q S G G G Q G Q S Gro G Q S G S Q G S G Q G S G S S	⑥	R	I	13.27	13.29	+		
14.31	1		⑦	R	B	-	14.59	++		Large piglet
14.32	11111111	G Q G S G S Q S Gro S S Gro G Q S	⑧	R	I	14.34	15.58	+		Tiny piglet. Placenta appearing.
14.46	11111111111111 11111111111111 11111111111111 1111	G Q G Q G G G G G Q G G Q S Gro G Q G Q S Gro G Q G G Q S S G G Q S S S Q S G S S S Q G G G Q G G G Q G S	⑨	R	B	-	15.03	++		Large piglet, completely encased in membrane.
15.38	11111111111111 11111112111111	G Q S G G G G Gr G Gr G S S Gr G Gro G	⑩	H	I	15.46	16.10	+++		Large piglet. Placenta passed.

TRIAL ANIMALS

Sheet 4

Farrowed
(i.e. _____ days)

PARITY 4

[illegible]

TRIAL ANIMALS

Farrowed 24.6.83
(i.e. 115 days)

PARITY 4

Sheet 1

Sow U Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
22.6.83 03.28		L							-	
07.54		L							C+	
11.21		L							C+	
14.41		L							C+	Mucus discharge
18.01		L							C+	
19.53		L							C+/ M+	
21.32		L							C+	
23.6.83 00.17		L							C+	
04.14		L							C+	
08.03		St							C+	
13.08		L							C+	

TRIAL ANIMALS

Farrowed
(i.e. _____ days)

PARITY 4

Sheet 2

Sow U Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
16.57		L							C+	
20.40									C+	
24.6.83 03.55									C+	
06.14									C+	
10.16		Si							C+	
11.00		N B K								
11.59		B N K							M+/ M++	
13.05		B N K							M+	
15.10		L							M++/ M+++	
15.15		L Gro								Respiration - 24/minute deep exhalations.
15.45	2311111111	N Gro S								

Sow D Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
24.3.83 0016		L							C+	
0430		L							M+	
0840		St							M+	M++ in one teat
1430									C+	
2007		L							C+/M+	
25.3.83 0214		L							M+	
0749		L							M+	M++ in one teat
1210		St Ps							M+/M++	
1620		L							M+/M++	
1830		N							M+/M++	
26.3.83 0240		L							M+/M++	

Sow D Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
0905		St							M+/M++	
1040		St							M+/M++	
1250		L							M++	
1550		N							N++	Signs of frantic nesting
1707		L							M+	
1756		N							M+/M+++	Vigorous nesting
1855		N	CONTINUOUS OBSERVATION STARTED						M+/M++	
1900	2 3 1 2 3 2 3 1 1 1	N T T T T T T T T T T								Respiration rate 56/minute
1930	1 1 1 2 3	N								
2000	3 1 1 2 3 2 2 3 2	N N C T T T N N U N T T T								
2030	1 2 3 1 1	T D T T T N T T T								Making frequent small move- ments of hind legs.

Sow D Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
2100	1 1 1 1 1 1 1 1 1 1 3 1 1 1	S T T T T N								Throwing straw up in the air
2130	1 1 1 2 3 1 1 1	C N F								
2200	1	T T T T								
2207	3 2 2 1 1 2 3 2 1 2 3 2 3 1 1 1 1 1 1 1 1	N N T T T T T T T T T T T T T	①	H	I	sow stood 2208	2250	+		Sow disturbed by observer
	1									
2304	1 1 1 1 1 1 1 2 1 2 3 1 1 1 1 2 3 2 3 1 1	G N N N N G T T N T T S	②	H	I	2307	2330	-		Small piglet
	1 1 2 3 2 3 1 1 1 1 1 1 1 1	T S T T S T T T								0015 sow trod on ① and ② several times
	2 2 3 2 3 1 1 1									
27.3.83 0103			③	R	I	0105	0135	++		
0103			④	H	I	0106	0148	+		Small piglet All in membranes
0103	1 1 1 2 3 1 1 1 1 1 1 1 1 1	N T T S G S S S T T T Q	⑤	H	I	0107	0138	+		Blood samples muddled Small piglet

Sow D Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
	1 1 1 1 1 1 1 1 1 1 1 2 3 1	T T T T T T T T T T T T T T T T T T S T T S T T								
	1 1 1 1 1 1 1 2 3 2	S T T T S T T T T T S T T T T T T S T S T T T T								
		T T T								
0348		T T	⑥	R	I	0349	0430	+		
0355		G Q G T T T	⑦	H	I	0356	0416	+		
0427			⑧	H	I	0434	0449	+		
0427		T T T	⑨	R	I	0435	0457	++		
0432		T T T T T T	⑩	R	I	0437	0444	+		
0441			⑪	R	I	0445	0545	+		
0501			⑫	R	I	0503	0546	+		
0501			⑬	R	I	0504	0520	+		Crushed and killed @ 0635

Farrowed
(i.e. _____ days)

PARITY 4

[illegible]

Parrowed 8.7.83
(i.e. 116 days)

PARITY 4

Sow Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first succes- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
7.83 0323		L							C+	
7.44		L							C+	
8.00		Si							C+	
8.408		L							C+	
8.55		Si N							C+/M+	
7.83 0809		L							C+	
7.40		St							C+/M+	
8.33		St Ps							C+	
8.43		L							C+	
8.34		N							M+	
9.003		St							M+/M++	

Parrowed
(i.e. _____ days)

PARITY 4

Sow Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first succes- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
2125		L							M+	
2230		L							C+/M++	Some teats
8.7.83 0050		L							M+	
0130		N								
0215		L							M++	Some teats
0245		L							M++	
0307	1	T T	①	H	I	Sow stood 0338	0407	-		Lying very quiet
0320	1 1 1 2 3 2 1	T T G N T	②	H	I	0331	0356	-		Slow delivery
0347	1 1 1	G C T T	③	H	I	0353	0402	++		
0414	1	T	④	R	I	0423	0449	+		
0424	1 2 3	N T	⑤	H	I	0428	0501	++		Chewing umbilical cords. Trapped ⑤ against wall

Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
134		T T T	(6)	H	I	0500	0603	+		Born whilst sow lying S.R. Small piglet
145		Gro T	(7)	R	I	0450	0604	-		Born whilst sow still lying S.R. (4) trying hard to suckle but no exposed teats
156	2 1 1 1 2 3 2 3	G Gr Sn N Sn Ba C N Sn	(8)	H	I	0506	0602	+		Agitated - snapping at piglets. Settled to lying S.R. Stood on (6) 's side.
										Lying S.R. again.
25	2 3 2 3 2 1 1 1 1	N N G Gr Ba U Gr Ch Sn T Gr T Ba Ba T Sn	(9)	H	B	-	0606	-		Born whilst sow lying S.R. Large piglet. Lay S.R. on piglet (6), not respond to squeals. Stood up, to lay S.R. again. Grumbling as piglets suckle.
27	1 2 3 2 3	Ba Gr Ch Gr Sn Gr N N C T	(10)	H	I	Sow sat 0636	STILL BORN	+		Umbilical cord knotted, membranes passed.
48	2 3 2 2 3 2 3	Sn Sn Sn Gr Sn Gr N T Gr Ba G	(11)	H	I	0702	0743	+		Lying S.R. Blood stained large piglet. Stood on piglet (8). Placenta appearing. Lying S.R. 0740 sow rubbed to make her expose teats, however, as soon as piglets suckle she sits up.

[illegible]

Sow R Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
21.6.83 0759		L							C+	
1245		C							C+/M+	
1610		L							C+	
1955		L							-	
2303		L							C+	
22.6.83 0321		L							C+	
0748		L							C+	
1125		St							C+/M+	
2136		L							C+/M+	
23.6.83 0016		St							M+	
0409		Si							M+	

Sow R Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present- ation	State of cord	Time to cord breakage	Time to first success- ful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
0801		St							M+ /M++	Evidence at nesting
1112		N							M+ /M++	
1303		L							M++ /M+++	
~ 1350			(1)	?	?	?	1428	?		
1400	2 2 3	G N	1 piglet born, continuous observation started							
1409	1 1	G T T	(2)	H	I	1410	1429	-		Lying very quiet, occasionally drawing hind leg up
1421	1112111122311	GNGGNC NGTS	(3)	R	I	1425	NEVER SUCKLED	++		Sow sniffing piglets
1446	1	TS	(4)	H	I	1451	1546	+		
1451	1 1 2 2 2 1	G T	(5)	R	B	-	1547	+		Sow agitated by piglets squeals
1458	1111	Gr T G G Ba	(6)	R	I	1503	1549	+		Inactive piglet trapped (4) between sow and wall
1514	11222	G	(7)	R	I	1518	NEVER SUCKLED	+		Sat up in response to (4)'s squeals Lay on (3)

[illegible]

Sheet 3

(i.e. _____ days)

PARITY 4

Time	Sow movement 1, 2, 3.	Sow behaviour	Piglet birth order	Present-ation	State of cord	Time to cord breakage	Time to first successful suckling	Amount of meconium -, +, ++, +++.	Presence of milk or colostrum	Comments
07	23	GNS	①	H	I	0900	0923	-		
07	131112 122311	NGTG NNG	③	H	I	0908	0926	+		Rest of house being fed - considerable disturbance
07	131112 122311	NGTG NNG	③	H	I	sow stood 0910	0935	++		0929 trod on ③'s leg
41	1	G	④	R	I	0945	0959	+		Scooping action - pushing piglets towards ud
45	31	GT	⑤	H	I	sow stood 0947	1108	+		
52			⑥	R	I	0959	1026	+		
00			⑦	R	I	1001	1022	+		
00			⑧	R	I	1004	1032	++		
05	1	G	⑨	R	I	1009	1014	+		
15			⑩	R	I	1019	1033	+		
15		G	⑪	H	I	1017	1028	+		

heet 4

Farrowed
(i.e. _____ days)

PARITY 4

[illegible]

Appendix A.66 Utilisation of a device to provide early warning of farrowing

After the completion of experiment 2, it was realised that the time involved in observing sows both before and during farrowing would cause the greatest practical difficulty in experiment 3. Thus, an attempt was made to fit an early warning device involving the use of a strain gauge attached to a bell. This was designed to work on the principle that, when the vulva opened with the delivery of the first piglet, the strain gauge was triggered which activated the bell and so warned the observer that farrowing had commenced.

There were, however, problems in attaching the strain gauge since the electronic circuitry needed to be encased in waterproof material (to prevent damage from the passage of urine and/or amniotic fluid) and the whole apparatus became so bulky that it could not easily be fixed in position. There are reports in the literature (e.g. Bueno, Tainturier and Ruckesbusch, 1981) of similar devices designed to provide early warning of calving, based on the elevation of the tail just prior to parturition. These were of no use in this trial, however, as they were far too cumbersome and would have impeded free movement (particularly in the penned sows); additionally, there is no comparable elevation of the tail occurring before farrowing in sows.