

IDEXX RADIL™**FINAL REPORT OF LABORATORY EXAMINATION**

4011 Discovery Drive, Columbia MO 65201

1-800-669-0825 1-573-499-5700

idx-radil@idexx.comwww.idexxradil.com**CASE NUMBER: 13884-2013****RECEIVED ON: 6/4/2013****COMPLETED ON: 6/13/2013****SUBMITTED BY:**

Sentinels
 University of Missouri-RCA
 Columbia, MO 65201
 United States
 573-884-7970

SPECIMEN DESCRIPTION:**SPECIES:** rat**DESCRIPTION:** Live Rats**NUMBER OF SPECIMENS:** 12**BUILDING/FACILITY:** W114

<u>ID</u>	<u>Investigator</u>	<u>Room #</u>	<u>Strain</u>	<u>Sex</u>	<u>Age</u>	<u>Rack</u>
1	Bryda	W114	CD	F	Adults	1A
2			CD			1A
3			CD			1B
4			CD			1B
5			CD			2A
6			CD			2A
7			CD			2B
8			CD			2B
9			CD			3A
10			CD			3A
11			CD			3B
12			CD			3B

SERVICES/TESTS PERFORMED Rederivation Necropsy Profile - rat

Serologic evaluation for antibodies to: *Clostridium piliforme*, *Mycoplasma pulmonis*, CAR bacillus, H1, Hantaan, KRV, LCMV, MAD1, PVM, RCV/SDAV, REO3, RMV, RPV, RTV, Sendai

PCR evaluation for: *Helicobacter bilis*, *Helicobacter ganmani*, *Helicobacter hepaticus*, *Helicobacter rodentium*, *Helicobacter* spp., *Helicobacter typhlonius*, *Mycoplasma pulmonis*, *Pneumocystis carinii*, *Streptobacillus moniliformis*

Parasitologic evaluation for: fur mites, mesostigmatid mites, lice, Spironucleus muris, Giardia muris, large intestinal flagellates and amoeba, pinworms and tapeworms

Microbiologic evaluation for: *Corynebacterium kutscheri*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Pasteurella multocida*, *Pasteurella pneumotropica*, *Salmonella enterica*, *Streptococcus pneumoniae*

GENERAL COMMENTS: CB: Sentinel rats placed in room on 3/19/2013.**SUMMARY:** All test results were negative.

If you have questions, please call our toll free number at 1-800-669-0825 or e-mail us at idx-radil@idexx.com.

Case Number: 13884-2013

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NECROPSY:

No gross lesions were detected in any of the body systems and organs examined.

SEROLOGY:**MFI² Serology Summary Report:**

Date: 6/7/2013	1	2	3	4	5	6	7	8	9	10
CAR bacillus	-	-	-	-	-	-	-	-	-	-
Hantaan	-	-	-	-	-	-	-	-	-	-
LCMV	-	-	-	-	-	-	-	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-
MAD1	-	-	-	-	-	-	-	-	-	-
RPV	-	-	-	-	-	-	-	-	-	-
RMV	-	-	-	-	-	-	-	-	-	-
KRV	-	-	-	-	-	-	-	-	-	-
H1	-	-	-	-	-	-	-	-	-	-
PVM	-	-	-	-	-	-	-	-	-	-
RCV/SDAV	-	-	-	-	-	-	-	-	-	-
REO3	-	-	-	-	-	-	-	-	-	-
RTV	-	-	-	-	-	-	-	-	-	-
Sendai	-	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>	-	-	-	-	-	-	-	-	-	-
Rat IgG	N	N	N	N	N	N	N	N	N	N

	11	12
CAR bacillus	-	-
Hantaan	-	-
LCMV	-	-
<i>Mycoplasma pulmonis</i>	-	-
MAD1	-	-
RPV	-	-
RMV	-	-
KRV	-	-
H1	-	-
PVM	-	-
RCV/SDAV	-	-
REO3	-	-
RTV	-	-
Sendai	-	-
<i>Clostridium piliforme</i>	-	-

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Serology (continued)

	11	12
Rat IgG	N	N

Serology Detail Report:

1 2 3 4 5 6 7 8 9 10

CAR bacillus

CAR bacillus purified bacteria

MFI (> 3.750)

- - - - - - - - - -

Hantaan

Hantaan purified virus

MFI (> 0.725)

- - - - - - - - - -

LCMV

LCMV purified virus

MFI (> 0.300)

- - - - - - - - - -

Mycoplasma pulmonis*M. pulmonis* purified bacteria

MFI (> 2.750)

- - - - - - - - - -

MAD1

MAD1 purified virus

MFI (> 2.550)

- - - - - - - - - -

RPV

RPV purified virus

MFI (> 1.100)

- - - - - - - - - -

NS1¹

MFI (> 3.820)

- - - - - - - - - -

RMV

RMV VP2 recombinant

MFI (> 0.845)

- - - - - - - - - -

NS1¹

MFI (> 3.820)

- - - - - - - - - -

KRV

KRV purified virus

MFI (> 2.250)

- - - - - - - - - -

NS1¹

MFI (> 3.820)

- - - - - - - - - -

H1

H1 purified virus

MFI (> 1.200)

- - - - - - - - - -

NS1¹

MFI (> 3.820)

- - - - - - - - - -

PVM

PVM purified virus

MFI (> 1.500)

- - - - - - - - - -

RCV/SDAV

RCV/SDAV purified virus

MFI (> 3.750)

- - - - - - - - - -

RCV/SDAV NC recombinant

MFI (> 4.950)

- - - - - - - - - -

REO3

REO3 purified virus

MFI (> 4.500)

- - - - - - - - - -

RTV

RTV purified virus

MFI (> 1.100)

- - - - - - - - - -

TMEV purified virus

MFI (> 1.100)

- - - - - - - - - -

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Serology (continued)

		1	2	3	4	5	6	7	8	9	10
Sendai											
Sendai purified virus	MFI (> 2.800)	-	-	-	-	-	-	-	-	-	-
Clostridium piliforme											
<i>Clostridium piliforme</i> purified bacteria	MFI (> 4.950)	-	-	-	-	-	-	-	-	-	-
		11	12								
CAR bacillus											
CAR bacillus purified bacteria	MFI (> 3.750)	-	-								
Hantaan											
Hantaan purified virus	MFI (> 0.725)	-	-								
LCMV											
LCMV purified virus	MFI (> 0.300)	-	-								
Mycoplasma pulmonis											
<i>M. pulmonis</i> purified bacteria	MFI (> 2.750)	-	-								
MAD1											
MAD1 purified virus	MFI (> 2.550)	-	-								
RPV											
RPV purified virus	MFI (> 1.100)	-	-								
NS1 ¹	MFI (> 3.820)	-	-								
RMV											
RMV VP2 recombinant	MFI (> 0.845)	-	-								
NS1 ¹	MFI (> 3.820)	-	-								
KRV											
KRV purified virus	MFI (> 2.250)	-	-								
NS1 ¹	MFI (> 3.820)	-	-								
H1											
H1 purified virus	MFI (> 1.200)	-	-								
NS1 ¹	MFI (> 3.820)	-	-								
PVM											
PVM purified virus	MFI (> 1.500)	-	-								
RCV/SDAV											
RCV/SDAV purified virus	MFI (> 3.750)	-	-								
RCV/SDAV NC recombinant	MFI (> 4.950)	-	-								
REO3											
REO3 purified virus	MFI (> 4.500)	-	-								

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Serology (continued)

		11	12
RTV			
RTV purified virus	MFI (> 1.100)	-	-
TMEV purified virus	MFI (> 1.100)	-	-
Sendai			
Sendai purified virus	MFI (> 2.800)	-	-
<i>Clostridium piliforme</i>			
<i>Clostridium piliforme</i> purified bacteria	MFI (> 4.950)	-	-

NS1¹ = NS1 protein is highly conserved among rodent parvoviruses and thus serves as a generic assay for parvovirus seroconversion.

(LEGEND: * = borderline + = positive - = negative blank = test not performed EQ = equivocal HE = hemolysis precluded testing I = insufficient L = less than 10% normal IgG N = normal IgG NS = non-specific reactivity W = weak positive WB = Western Blot confirmatory analysis pending)

Positive MFI results are reported as "+" followed by a number from 1 to 33 in thousands rounded off to the nearest thousand.

PCR EVALUATION:

Specimen: feces	1	2	3	4	5	6	7	8	9	10
<i>Helicobacter</i> spp.	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-	-
	11	12								
<i>Helicobacter</i> spp.	-	-								
<i>Helicobacter bilis</i>	-	-								
<i>Helicobacter ganmani</i>	-	-								
<i>Helicobacter hepaticus</i>	-	-								
<i>Helicobacter rodentium</i>	-	-								
<i>Helicobacter typhlonius</i>	-	-								

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PCR (continued)

Specimen: lung	1	2	3	4	5	6	7	8	9	10
<i>Pneumocystis carinii</i>	-	-	-	-	-	-	-	-	-	-
	11	12								
<i>Pneumocystis carinii</i>	-	-								
Specimen: nasopharyngeal swab	1	2	3	4	5	6	7	8	9	10
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-
	11	12								
<i>Mycoplasma pulmonis</i>	-	-								
Specimen: oral swab	1	2	3	4	5	6	7	8	9	10
<i>Streptobacillus moniliformis</i>	-	-	-	-	-	-	-	-	-	-
	11	12								
<i>Streptobacillus moniliformis</i>	-	-								

(LEGEND: + = positive - = negative id:id = pooled sample blank = test not performed equ = equivocal NT or blank = no test performed sus = suspect wps = weak positive)

All samples are first tested by the *Helicobacter* spp. PCR assay; a generic *Helicobacter* PCR assay that detects all bacteria in the *Helicobacter* genus. Samples testing negative on this assay are reported negative for *Helicobacter* spp. and all species-specific helicobacters. Samples testing positive on the *Helicobacter* spp. assay are subsequently retested on the *Helicobacter* spp. assay and tested with PCR assays specific for *H. bilis*, *H. ganmani*, *H. hepaticus*, *H. rodentium* and *H. typhlonius* and positive results are reported.

PARASITOLOGY:

	1	2	3	4	5	6	7	8	9	10
parasites	-	-	-	-	-	-	-	-	-	-
	11	12								
parasites	-	-								

MICROBIOLOGY:

cecum	1	2	3	4	5	6	7	8	9	10
<i>Klebsiella oxytoca</i>	-	-	-	-	-	-	-	-	-	-
<i>Klebsiella pneumoniae</i>	-	-	-	-	-	-	-	-	-	-
<i>Salmonella enterica</i>	-	-	-	-	-	-	-	-	-	-

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Microbiology (continued)

cecum	11	12								
<i>Klebsiella oxytoca</i>	-	-								
<i>Klebsiella pneumoniae</i>	-	-								
<i>Salmonella enterica</i>	-	-								
nasopharynx	1	2	3	4	5	6	7	8	9	10
<i>Corynebacterium kutscheri</i>	-	-	-	-	-	-	-	-	-	-
<i>Pasteurella multocida</i>	-	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i>	-	-	-	-	-	-	-	-	-	-
<i>Streptococcus pneumoniae</i>	-	-	-	-	-	-	-	-	-	-
	11	12								
<i>Corynebacterium kutscheri</i>	-	-								
<i>Pasteurella multocida</i>	-	-								
<i>Pasteurella pneumotropica</i>	-	-								
<i>Streptococcus pneumoniae</i>	-	-								

(LEGEND: + = agent recovered - = agent not recovered blank = test not performed n = no growth p = Proteus overgrowth, which may interfere with the identification of other bacteria)

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idx-radil@idexx.comwww.idexxradil.com**CASE NUMBER: 13883-2013****RECEIVED ON: 6/4/2013****COMPLETED ON: 6/13/2013****SUBMITTED BY:**

Sentinels
 University of Missouri-RCA
 Columbia, MO 65201
 United States
 573-884-7970

SPECIMEN DESCRIPTION:**SPECIES:** rat**DESCRIPTION:** Live Rats**NUMBER OF SPECIMENS:** 3**BUILDING/FACILITY:** W113

ID	Investigator	Room #	Strain	Sex	Age	Rack	
1	Bryda	W113	CD	F	Adults	1A	
2			CD			1A	
3			CD			1B	
4			CD			1B	Not in cage

SERVICES/TESTS PERFORMED Rederivation Necropsy Profile - rat

Serologic evaluation for antibodies to: *Clostridium piliforme*, *Mycoplasma pulmonis*, CAR bacillus, H1, Hantaan, KRV, LCMV, MAD1, PVM, RCV/SDAV, REO3, RMV, RPV, RTV, Sendai

PCR evaluation for: *Helicobacter bilis*, *Helicobacter ganmani*, *Helicobacter hepaticus*, *Helicobacter rodentium*, *Helicobacter* spp., *Helicobacter typhlonius*, *Mycoplasma pulmonis*, *Pneumocystis carinii*, *Streptobacillus moniliformis*

Parasitologic evaluation for: fur mites, mesostigmatid mites, lice, Spironucleus muris, Giardia muris, large intestinal flagellates and amoeba, pinworms and tapeworms

Microbiologic evaluation for: *Corynebacterium kutscheri*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Pasteurella multocida*, *Pasteurella pneumotropica*, *Salmonella enterica*, *Streptococcus pneumoniae*

GENERAL COMMENTS: CB: Sentinel rats placed in room on 3/19/13.**SUMMARY:** All test results were negative.

If you have questions, please call our toll free number at 1-800-669-0825 or e-mail us at idx-radil@idexx.com.

Case Number: 13883-2013

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NECROPSY:

No gross lesions were detected in any of the body systems and organs examined.

SEROLOGY:**MFI² Serology Summary Report:**

Date: 6/7/2013	1	2	3
CAR bacillus	-	-	-
Hantaan	-	-	-
LCMV	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-
MAD1	-	-	-
RPV	-	-	-
RMV	-	-	-
KRV	-	-	-
H1	-	-	-
PVM	-	-	-
RCV/SDAV	-	-	-
REO3	-	-	-
RTV	-	-	-
Sendai	-	-	-
<i>Clostridium piliforme</i>	-	-	-
Rat IgG	N	N	N

Serology Detail Report:

		1	2	3
CAR bacillus				
CAR bacillus purified bacteria	MFI (> 3.750)	-	-	-
Hantaan				
Hantaan purified virus	MFI (> 0.725)	-	-	-
LCMV				
LCMV purified virus	MFI (> 0.300)	-	-	-
<i>Mycoplasma pulmonis</i>				
<i>M. pulmonis</i> purified bacteria	MFI (> 2.750)	-	-	-
MAD1				
MAD1 purified virus	MFI (> 2.550)	-	-	-
RPV				
RPV purified virus	MFI (> 1.100)	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-

Case Number: 13883-2013

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Serology (continued)

		1	2	3
RMV				
RMV VP2 recombinant	MFI (> 0.845)	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-
KRV				
KRV purified virus	MFI (> 2.250)	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-
H1				
H1 purified virus	MFI (> 1.200)	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-
PVM				
PVM purified virus	MFI (> 1.500)	-	-	-
RCV/SDAV				
RCV/SDAV purified virus	MFI (> 3.750)	-	-	-
RCV/SDAV NC recombinant	MFI (> 4.950)	-	-	-
REO3				
REO3 purified virus	MFI (> 4.500)	-	-	-
RTV				
RTV purified virus	MFI (> 1.100)	-	-	-
TMEV purified virus	MFI (> 1.100)	-	-	-
Sendai				
Sendai purified virus	MFI (> 2.800)	-	-	-
<i>Clostridium piliforme</i>				
<i>Clostridium piliforme</i> purified bacteria	MFI (> 4.950)	-	-	-

NS1¹ = NS1 protein is highly conserved among rodent parvoviruses and thus serves as a generic assay for parvovirus seroconversion.

(LEGEND: * = borderline + = positive - = negative blank = test not performed EQ = equivocal HE = hemolysis precluded testing I = insufficient L = less than 10% normal IgG N = normal IgG NS = non-specific reactivity W = weak positive WB = Western Blot confirmatory analysis pending)

Positive MFI results are reported as "+" followed by a number from 1 to 33 in thousands rounded off to the nearest thousand.

PCR EVALUATION:

Specimen: feces	1	2	3
<i>Helicobacter</i> spp.	-	-	-
<i>Helicobacter bilis</i>	-	-	-
<i>Helicobacter ganmani</i>	-	-	-

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PCR (continued)

Specimen: feces	1	2	3
<i>Helicobacter hepaticus</i>	-	-	-
<i>Helicobacter rodentium</i>	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-
Specimen: lung	1	2	3
<i>Pneumocystis carinii</i>	-	-	-
Specimen: nasopharyngeal swab	1	2	3
<i>Mycoplasma pulmonis</i>	-	-	-
Specimen: oral swab	1	2	3
<i>Streptobacillus moniliformis</i>	-	-	-

(LEGEND: + = positive - = negative id:id = pooled sample blank = test not performed equ = equivocal NT or blank = no test performed sus = suspect wps = weak positive)

All samples are first tested by the *Helicobacter* spp. PCR assay; a generic *Helicobacter* PCR assay that detects all bacteria in the *Helicobacter* genus. Samples testing negative on this assay are reported negative for *Helicobacter* spp. and all species-specific helicobacters. Samples testing positive on the *Helicobacter* spp. assay are subsequently retested on the *Helicobacter* spp. assay and tested with PCR assays specific for *H. bilis*, *H. ganmani*, *H. hepaticus*, *H. rodentium* and *H. typhlonius* and positive results are reported.

PARASITOLOGY:

	1	2	3
parasites	-	-	-

MICROBIOLOGY:

cecum	1	2	3
<i>Klebsiella oxytoca</i>	-	-	-
<i>Klebsiella pneumoniae</i>	-	-	-
<i>Salmonella enterica</i>	-	-	-
nasopharynx	1	2	3
<i>Corynebacterium kutscheri</i>	-	-	-
<i>Pasteurella multocida</i>	-	-	-
<i>Pasteurella pneumotropica</i>	-	-	-
<i>Streptococcus pneumoniae</i>	-	-	-

(LEGEND: + = agent recovered - = agent not recovered blank = test not performed n = no growth p = Proteus overgrowth, which may interfere with the identification of other bacteria)

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idx-radil@idexx.comwww.idexxradil.com**CASE NUMBER: 13882-2013****RECEIVED ON: 6/4/2013****COMPLETED ON: 6/13/2013****SUBMITTED BY:**

Sentinels
 University of Missouri-RCA
 Columbia, MO 65201
 United States
 573-884-7970

SPECIMEN DESCRIPTION:**SPECIES:** rat**DESCRIPTION:** Live Rats**NUMBER OF SPECIMENS:** 24**BUILDING/FACILITY:** W112

<u>ID</u>	<u>Investigator</u>	<u>Room #</u>	<u>Strain</u>	<u>Sex</u>	<u>Age</u>	<u>Rack</u>
1	Bryda	W112	CD	F	Adults	1A
2			CD			1A
3			CD			1B
4			CD			1B
5			CD			2A
6			CD			2A
7			CD			2B
8			CD			2B
9			CD			3A
10			CD			3A
11			CD			3B
12			CD			3B
13			CD			4A
14			CD			4A
15			CD			4B
16			CD			4B
17			CD			5A
18			CD			5A
19			CD			5B
20			CD			5B
21			CD			6A
22			CD			6A
23			CD			6B
24			CD			6B

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SERVICES/TESTS PERFORMED Rederivation Necropsy Profile - rat

Serologic evaluation for antibodies to: *Clostridium piliforme*, *Mycoplasma pulmonis*, CAR bacillus, H1, Hantaan, KRV, LCMV, MAD1, PVM, RCV/SDAV, REO3, RMV, RPV, RTV, Sendai

PCR evaluation for: *Helicobacter bilis*, *Helicobacter ganmani*, *Helicobacter hepaticus*, *Helicobacter rodentium*, *Helicobacter* spp., *Helicobacter typhlonius*, *Mycoplasma pulmonis*, *Pneumocystis carinii*, *Streptobacillus moniliformis*

Parasitologic evaluation for: fur mites, mesostigmatid mites, lice, *Spiroplasma muris*, *Giardia muris*, large intestinal flagellates and amoeba, pinworms and tapeworms

Microbiologic evaluation for: *Corynebacterium kutscheri*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Pasteurella multocida*, *Pasteurella pneumotropica*, *Salmonella enterica*, *Streptococcus pneumoniae*

GENERAL COMMENTS: CB: Sentinel rats placed on 3/19/2013.

SUMMARY: All test results were negative.

If you have questions, please call our toll free number at 1-800-669-0825 or e-mail us at idx-radil@idexx.com.

Case Number: 13882-2013

Page 3

NECROPSY:

No gross lesions were detected in any of the body systems and organs examined.

SEROLOGY:**MFI² Serology Summary Report:**

Date: 6/7/2013	1	2	3	4	5	6	7	8	9	10
CAR bacillus	-	-	-	-	-	-	-	-	-	-
Hantaan	-	-	-	-	-	-	-	-	-	-
LCMV	-	-	-	-	-	-	-	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-
MAD1	-	-	-	-	-	-	-	-	-	-
RPV	-	-	-	-	-	-	-	-	-	-
RMV	-	-	-	-	-	-	-	-	-	-
KRV	-	-	-	-	-	-	-	-	-	-
H1	-	-	-	-	-	-	-	-	-	-
PVM	-	-	-	-	-	-	-	-	-	-
RCV/SDAV	-	-	-	-	-	-	-	-	-	-
REO3	-	-	-	-	-	-	-	-	-	-
RTV	-	-	-	-	-	-	-	-	-	-
Sendai	-	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>	-	-	-	-	-	-	-	-	-	-
Rat IgG	N	N	N	N	N	N	N	N	N	N

	11	12	13	14	15	16	17	18	19	20
CAR bacillus	-	-	-	-	-	-	-	-	-	-
Hantaan	-	-	-	-	-	-	-	-	-	-
LCMV	-	-	-	-	-	-	-	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-
MAD1	-	-	-	-	-	-	-	-	-	-
RPV	-	-	-	-	-	-	-	-	-	-
RMV	-	-	-	-	-	-	-	-	-	-
KRV	-	-	-	-	-	-	-	-	-	-
H1	-	-	-	-	-	-	-	-	-	-
PVM	-	-	-	-	-	-	-	-	-	-
RCV/SDAV	-	-	-	-	-	-	-	-	-	-
REO3	-	-	-	-	-	-	-	-	-	-
RTV	-	-	-	-	-	-	-	-	-	-
Sendai	-	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>	-	-	-	-	-	-	-	-	-	-

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Serology (continued)

	11	12	13	14	15	16	17	18	19	20
Rat IgG	N	N	N	N	N	N	N	N	N	N

	21	22	23	24
CAR bacillus	-	-	-	-
Hantaan	-	-	-	-
LCMV	-	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-	-
MAD1	-	-	-	-
RPV	-	-	-	-
RMV	-	-	-	-
KRV	-	-	-	-
H1	-	-	-	-
PVM	-	-	-	-
RCV/SDAV	-	-	-	-
REO3	-	-	-	-
RTV	-	-	-	-
Sendai	-	-	-	-
<i>Clostridium piliforme</i>	-	-	-	-
Rat IgG	N	N	N	N

Serology Detail Report:

		1	2	3	4	5	6	7	8	9	10
CAR bacillus											
CAR bacillus purified bacteria	MFI (> 3.750)	-	-	-	-	-	-	-	-	-	-
Hantaan											
Hantaan purified virus	MFI (> 0.725)	-	-	-	-	-	-	-	-	-	-
LCMV											
LCMV purified virus	MFI (> 0.300)	-	-	-	-	-	-	-	-	-	-
<i>Mycoplasma pulmonis</i>											
<i>M. pulmonis</i> purified bacteria	MFI (> 2.750)	-	-	-	-	-	-	-	-	-	-
MAD1											
MAD1 purified virus	MFI (> 2.550)	-	-	-	-	-	-	-	-	-	-

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Serology (continued)

		1	2	3	4	5	6	7	8	9	10
RPV											
RPV purified virus	MFI (> 1.100)	-	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-	-	-	-	-	-	-
RMV											
RMV VP2 recombinant	MFI (> 0.845)	-	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-	-	-	-	-	-	-
KRV											
KRV purified virus	MFI (> 2.250)	-	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-	-	-	-	-	-	-
H1											
H1 purified virus	MFI (> 1.200)	-	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-	-	-	-	-	-	-
PVM											
PVM purified virus	MFI (> 1.500)	-	-	-	-	-	-	-	-	-	-
RCV/SDAV											
RCV/SDAV purified virus	MFI (> 3.750)	-	-	-	-	-	-	-	-	-	-
RCV/SDAV NC recombinant	MFI (> 4.950)	-	-	-	-	-	-	-	-	-	-
REO3											
REO3 purified virus	MFI (> 4.500)	-	-	-	-	-	-	-	-	-	-
RTV											
RTV purified virus	MFI (> 1.100)	-	-	-	-	-	-	-	-	-	-
TMEV purified virus	MFI (> 1.100)	-	-	-	-	-	-	-	-	-	-
Sendai											
Sendai purified virus	MFI (> 2.800)	-	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>											
<i>Clostridium piliforme</i> purified bacteria	MFI (> 4.950)	-	-	-	-	-	-	-	-	-	-
		11	12	13	14	15	16	17	18	19	20
CAR bacillus											
CAR bacillus purified bacteria	MFI (> 3.750)	-	-	-	-	-	-	-	-	-	-
Hantaan											
Hantaan purified virus	MFI (> 0.725)	-	-	-	-	-	-	-	-	-	-
LCMV											
LCMV purified virus	MFI (> 0.300)	-	-	-	-	-	-	-	-	-	-

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Serology (continued)

		21	22	23	24
Hantaan					
Hantaan purified virus	MFI (> 0.725)	-	-	-	-
LCMV					
LCMV purified virus	MFI (> 0.300)	-	-	-	-
<i>Mycoplasma pulmonis</i>					
<i>M. pulmonis</i> purified bacteria	MFI (> 2.750)	-	-	-	-
MAD1					
MAD1 purified virus	MFI (> 2.550)	-	-	-	-
RPV					
RPV purified virus	MFI (> 1.100)	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-
RMV					
RMV VP2 recombinant	MFI (> 0.845)	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-
KRV					
KRV purified virus	MFI (> 2.250)	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-
H1					
H1 purified virus	MFI (> 1.200)	-	-	-	-
NS1 ¹	MFI (> 3.820)	-	-	-	-
PVM					
PVM purified virus	MFI (> 1.500)	-	-	-	-
RCV/SDAV					
RCV/SDAV purified virus	MFI (> 3.750)	-	-	-	-
RCV/SDAV NC recombinant	MFI (> 4.950)	-	-	-	-
REO3					
REO3 purified virus	MFI (> 4.500)	-	-	-	-
RTV					
RTV purified virus	MFI (> 1.100)	-	-	-	-
TMEV purified virus	MFI (> 1.100)	-	-	-	-
Sendai					
Sendai purified virus	MFI (> 2.800)	-	-	-	-
<i>Clostridium piliforme</i>					
<i>Clostridium piliforme</i> purified bacteria	MFI (> 4.950)	-	-	-	-

NS1¹ = NS1 protein is highly conserved among rodent parvoviruses and thus serves as a generic assay for parvovirus seroconversion.

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Serology (continued)

(LEGEND: * = borderline + = positive - = negative blank = test not performed EQ = equivocal HE = hemolysis precluded testing I = insufficient L = less than 10% normal IgG N = normal IgG NS = non-specific reactivity W = weak positive WB = Western Blot confirmatory analysis pending)

Positive MFI results are reported as "+" followed by a number from 1 to 33 in thousands rounded off to the nearest thousand.

PCR EVALUATION:

Specimen: feces	1	2	3	4	5	6	7	8	9	10
<i>Helicobacter</i> spp.	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-	-
	11	12	13	14	15	16	17	18	19	20
<i>Helicobacter</i> spp.	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-	-
	21	22	23	24						
<i>Helicobacter</i> spp.	-	-	-	-						
<i>Helicobacter bilis</i>	-	-	-	-						
<i>Helicobacter ganmani</i>	-	-	-	-						
<i>Helicobacter hepaticus</i>	-	-	-	-						
<i>Helicobacter rodentium</i>	-	-	-	-						
<i>Helicobacter typhlonius</i>	-	-	-	-						
Specimen: lung	1	2	3	4	5	6	7	8	9	10
<i>Pneumocystis carinii</i>	-	-	-	-	-	-	-	-	-	-

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PCR (continued)

	11	12	13	14	15	16	17	18	19	20
<i>Pneumocystis carinii</i>	-	-	-	-	-	-	-	-	-	-
	21	22	23	24						
<i>Pneumocystis carinii</i>	-	-	-	-						
Specimen: nasopharyngeal swab	1	2	3	4	5	6	7	8	9	10
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-
	11	12	13	14	15	16	17	18	19	20
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-
	21	22	23	24						
<i>Mycoplasma pulmonis</i>	-	-	-	-						
Specimen: oral swab	1	2	3	4	5	6	7	8	9	10
<i>Streptobacillus moniliformis</i>	-	-	-	-	-	-	-	-	-	-
	11	12	13	14	15	16	17	18	19	20
<i>Streptobacillus moniliformis</i>	-	-	-	-	-	-	-	-	-	-
	21	22	23	24						
<i>Streptobacillus moniliformis</i>	-	-	-	-						

(LEGEND: + = positive - = negative id:id = pooled sample blank = test not performed equ = equivocal NT or blank = no test performed sus = suspect wps = weak positive)

All samples are first tested by the *Helicobacter* spp. PCR assay; a generic *Helicobacter* PCR assay that detects all bacteria in the *Helicobacter* genus. Samples testing negative on this assay are reported negative for *Helicobacter* spp. and all species-specific helicobacters. Samples testing positive on the *Helicobacter* spp. assay are subsequently retested on the *Helicobacter* spp. assay and tested with PCR assays specific for *H. bilis*, *H. ganmani*, *H. hepaticus*, *H. rodentium* and *H. typhlonius* and positive results are reported.

PARASITOLOGY:

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Parasitology (continued)

	1	2	3	4	5	6	7	8	9	10
parasites	-	-	-	-	-	-	-	-	-	-
	11	12	13	14	15	16	17	18	19	20
parasites	-	-	-	-	-	-	-	-	-	-
	21	22	23	24						
parasites	-	-	-	-						

MICROBIOLOGY:

cecum				1	2	3	4	5	6	7	8	9	10
<i>Klebsiella oxytoca</i>				-	-	-	-	-	-	-	-	-	-
<i>Klebsiella pneumoniae</i>				-	-	-	-	-	-	-	-	-	-
<i>Salmonella enterica</i>				-	-	-	-	-	-	-	-	-	-
				11	12	13	14	15	16	17	18	19	20
<i>Klebsiella oxytoca</i>				-	-	-	-	-	-	-	-	-	-
<i>Klebsiella pneumoniae</i>				-	-	-	-	-	-	-	-	-	-
<i>Salmonella enterica</i>				-	-	-	-	-	-	-	-	-	-
				21	22	23	24						
<i>Klebsiella oxytoca</i>				-	-	-	-						
<i>Klebsiella pneumoniae</i>				-	-	-	-						
<i>Salmonella enterica</i>				-	-	-	-						
nasopharynx				1	2	3	4	5	6	7	8	9	10
<i>Corynebacterium kutscheri</i>				-	-	-	-	-	-	-	-	-	-
<i>Pasteurella multocida</i>				-	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i>				-	-	-	-	-	-	-	-	-	-
<i>Streptococcus pneumoniae</i>				-	-	-	-	-	-	-	-	-	-
				11	12	13	14	15	16	17	18	19	20
<i>Corynebacterium kutscheri</i>				-	-	-	-	-	-	-	-	-	-
<i>Pasteurella multocida</i>				-	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i>				-	-	-	-	-	-	-	-	-	-
<i>Streptococcus pneumoniae</i>				-	-	-	-	-	-	-	-	-	-
				21	22	23	24						
<i>Corynebacterium kutscheri</i>				-	-	-	-						
<i>Pasteurella multocida</i>				-	-	-	-						
<i>Pasteurella pneumotropica</i>				-	-	-	-						

Streptococcus pneumoniae

- - - -

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Microbiology (continued)

(LEGEND: + = agent recovered - = agent not recovered blank = test not performed n = no growth p = Proteus overgrowth, which may interfere with the identification of other bacteria)