

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: 9107-2013****RECEIVED ON: 3/11/2013****COMPLETED ON: 3/26/2013****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>	<u>Date Placed</u>
1	Bryda	W112	CD	F	Adults	3A	12/17/2012
2			CD			3A	
3			CD			3B	
4			CD			3B	
5			CD			4A	
6			CD			4A	
7			CD			4B	
8			CD			4B	
9			CD			5A	
10			CD			5A	
11			CD			5B	
12			CD			5B	
13			CD			6A	
14			CD			6A	
15			CD			6B	
16			CD			6B	
17			CD			7A	
18			CD			7A	
19			CD			7B	
20			CD			7B	
21			CD			8A	
22			CD			8A	
23			CD			8B	
24			CD			8B	

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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 sp.*, *Helicobacter troglontum*, *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 animals placed 12/17/12.

SUMMARY: No conclusive evidence of serious, naturally occurring infectious disease was found.

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

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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: 3/15/2013	1	2	3	4	5	6	7	8	9	10	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>	-	-	-	-	-	-	-	-	-	-	-	-
Rat IgG	N	N	N	N	N	N	N	N	N	N	N	N

	13	14	15	16	17	18	19	20	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>	-	-	-	-	-	-	-	-	-	-	-	-	-

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Serology (continued)

	13	14	15	16	17	18	19	20	21	22	23	24
Rat IgG	N	N	N	N	N	N	N	N	N	N	N	N

Serology Detail Report:

		1	2	3	4	5	6	7	8	9	10	11	12
CAR bacillus													
CAR bacillus purified bacteria	MFI (> 3.750)	-	-	-	-	-	-	-	-	-	-	-	-
Hantaan													
Hantaan purified virus	MFI (> 0.712)	-	-	-	-	-	-	-	-	-	-	-	-
LCMV													
LCMV purified virus	MFI (> 0.200)	-	-	-	-	-	-	-	-	-	-	-	-
<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)	-	-	-	-	-	-	-	-	-	-	-	-

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Serology (continued)

		1	2	3	4	5	6	7	8	9	10	11	12
Sendai													
Sendai purified virus	MFI (> 2.800)	-	-	-	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>													
<i>Clostridium piliforme</i> purified bacteria	MFI (> 4.950)	-	-	-	-	-	-	-	-	-	-	-	-
		13	14	15	16	17	18	19	20	21	22	23	24
CAR bacillus													
CAR bacillus purified bacteria	MFI (> 3.750)	-	-	-	-	-	-	-	-	-	-	-	-
Hantaan													
Hantaan purified virus	MFI (> 0.712)	-	-	-	-	-	-	-	-	-	-	-	-
LCMV													
LCMV purified virus	MFI (> 0.200)	-	-	-	-	-	-	-	-	-	-	-	-
<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)	-	-	-	-	-	-	-	-	-	-	-	-

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Serology (continued)

		13	14	15	16	17	18	19	20	21	22	23	24
RTV													
RTV purified virus	MFI (> 1.100)	-	-	-	-	-	-	-	-	-	-	-	-
TMEV purified virus	MFI (> 1.100)	-	-	-	-	-	-	-	-	-	-	-	-

Sendai

Sendai purified virus MFI (> 2.800) - - - - - - - - - - - - - - - -

Clostridium piliforme

Clostridium piliforme 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	11	12
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter trogontum</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter sp.</i>	-	-	-	-	-	-	-	-	-	-	-	-
	13	14	15	16	17	18	19	20	21	22	23	24
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter trogontum</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter sp.</i>	-	-	-	-	-	-	-	-	-	-	-	-

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PCR (continued)

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

<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-	-	-
Specimen: oral swab	1	2	3	4	5	6	7	8	9	10	11	12
<i>Streptobacillus moniliformis</i>	-	-	-	-	-	-	-	-	-	-	-	-
	13	14	15	16	17	18	19	20	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 using a generic *Helicobacter* PCR assay that detects all bacteria in the *Helicobacter* genus. Samples testing negative on this assay are reported negative for all helicobacters. Samples testing positive on the generic assay are subsequently tested with PCR assays specific for *H. bilis*, *H. ganmani*, *H. hepaticus*, *H. rodentium*, *H. trogontum* and *H. typhlonius* and positive results are reported. If the sample is positive on the generic *Helicobacter* assay, but negative on the six *Helicobacter* species-specific assays, the sample is reported positive for *Helicobacter* sp.

PARASITOLOGY:

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

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MICROBIOLOGY:

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

(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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CASE NUMBER: 9109-2013

RECEIVED ON: 3/11/2013

COMPLETED ON: 3/22/2013

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:** 4**BUILDING/FACILITY:** w113

<u>ID</u>	<u>Investigator</u>	<u>Room #</u>	<u>Strain</u>	<u>Sex</u>	<u>Age</u>	<u>Rack</u>	<u>Date Placed</u>
1	Bryda	W113	CD	F	Adults	1A	12/17/2012
2			CD			1A	
3			CD			1B	
4			CD			1B	

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 sp.*, *Helicobacter trogontum*, *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: Sentinels placed 12/17/12 for W113**SUMMARY:** No conclusive evidence of serious, naturally occurring infectious disease was found.

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: 9109-2013

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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: 3/15/2013	1	2	3	4
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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
CAR bacillus				
CAR bacillus purified bacteria MFI (> 3.750)	-	-	-	-
Hantaan				
Hantaan purified virus MFI (> 0.712)	-	-	-	-
LCMV				
LCMV purified virus MFI (> 0.200)	-	-	-	-
<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)	-	-	-	-

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Serology (continued)

	1	2	3	4
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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RTV

RTV purified virus	MFI (> 1.100)	-	-	-	-
TMEV purified virus	MFI (> 1.100)	-	-	-	-

Sendai

Sendai purified virus	MFI (> 2.800)	-	-	-	-
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Clostridium piliforme

<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
<i>Helicobacter bilis</i>	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-

Case Number: 9109-2013

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PCR (continued)

Specimen: feces	1	2	3	4
<i>Helicobacter rodentium</i>	-	-	-	-
<i>Helicobacter trogontum</i>	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-
<i>Helicobacter</i> sp.	-	-	-	-

Specimen: lung	1	2	3	4
<i>Pneumocystis carinii</i>	-	-	-	-

Specimen: nasopharyngeal swab	1	2	3	4
<i>Mycoplasma pulmonis</i>	-	-	-	-

Specimen: oral swab	1	2	3	4
<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 using a generic *Helicobacter* PCR assay that detects all bacteria in the *Helicobacter* genus. Samples testing negative on this assay are reported negative for all helicobacters. Samples testing positive on the generic assay are subsequently tested with PCR

assays specific for *H. bilis*, *H. ganmani*, *H. hepaticus*, *H. rodentium*, *H. trogontum* and *H. typhlonius* and positive results are reported. If the sample is positive on the generic *Helicobacter* assay, but negative on the six *Helicobacter* species-specific assays, the sample is reported positive for *Helicobacter* sp.

PARASITOLOGY:

	1	2	3	4
parasites	-	-	-	-

MICROBIOLOGY:

cecum	1	2	3	4
<i>Klebsiella oxytoca</i>	-	-	-	-
<i>Klebsiella pneumoniae</i>	-	-	-	-
<i>Salmonella enterica</i>	-	-	-	-
nasopharynx	1	2	3	4
<i>Corynebacterium kutscheri</i>	-	p	p	-
<i>Pasteurella multocida</i>	-	p	p	-
<i>Pasteurella pneumotropica</i>	-	p	p	-
<i>Streptococcus pneumoniae</i>	-	p	p	-

Case Number: 9109-2013

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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)

IDEXX RADIL™

FINAL REPORT OF LABORATORY EXAMINATION
 4011 Discovery Drive, Columbia MO 65201
 1-800-669-0825 1-573-499-5700
idx-radil@idexx.com www.idexxradil.com

CASE NUMBER: 9110-2013

RECEIVED ON: 3/11/2013

COMPLETED ON: 3/26/2013

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: 4
BUILDING/FACILITY: W114

<u>ID</u>	<u>Investigator</u>	<u>Room #</u>	<u>Strain</u>	<u>Sex</u>	<u>Age</u>	<u>Rack</u>	<u>Date Placed</u>
1	Bryda	W114	CD	F	Adults	2A	12/17/2012
2			CD			2A	
3			CD			2B	
4			CD			2B	

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 sp.*, *Helicobacter trogontum*, *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: Sentinels placed 12/17/12 for W114

SUMMARY: No conclusive evidence of serious, naturally occurring infectious disease was found.

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

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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: 3/15/2013	1	2	3	4
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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
CAR bacillus				
CAR bacillus purified bacteria MFI (> 3.750)	-	-	-	-
Hantaan				
Hantaan purified virus MFI (> 0.712)	-	-	-	-
LCMV				
LCMV purified virus MFI (> 0.200)	-	-	-	-
<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)	-	-	-	-

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Serology (continued)

	1	2	3	4
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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RTV

RTV purified virus	MFI (> 1.100)	-	-	-	-
TMEV purified virus	MFI (> 1.100)	-	-	-	-

Sendai

Sendai purified virus	MFI (> 2.800)	-	-	-	-
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Clostridium piliforme

<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
<i>Helicobacter bilis</i>	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-

Case Number: 9110-2013

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PCR (continued)

Specimen: feces	1	2	3	4
<i>Helicobacter rodentium</i>	-	-	-	-
<i>Helicobacter trogontum</i>	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-
<i>Helicobacter</i> sp.	-	-	-	-

Specimen: lung	1	2	3	4
<i>Pneumocystis carinii</i>	-	-	-	-

Specimen: nasopharyngeal swab	1	2	3	4
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<i>Klebsiella pneumoniae</i>	-	-	-	-
<i>Salmonella enterica</i>	-	-	-	-
nasopharynx				
<i>Corynebacterium kutscheri</i>	-	p	p	p
<i>Pasteurella multocida</i>	-	p	p	p
<i>Pasteurella pneumotropica</i>	-	p	p	p
<i>Streptococcus pneumoniae</i>	-	p	p	p

Case Number: 9110-2013

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Microbiology (continued)

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