



BIORESOURCES

Health Monitoring Report

Based on FELASA Recommendations

Name and address of the breeder: Marshall BioResources, North Rose, NY

Date of issue: October 2019

Unit N°: Barriers P1, P2 and P3

Examination date: Quarter 3, 2019

Species: Porcine

Strain: Göttingen Minipig

Populated*: P1 August 2003, P3 October 2016

	CUMULATIVE RESULTS			CURRENT TEST RESULTS			LABORATORY	METHOD
	P1	P2	P3	P1	P2	P3		
VIRAL INFECTIONS								
Aujeszky's Disease (Pseudorabies)	0/290	0/90	0/60	0/10	0/10	0/10	PU	ELISA (Blood)
Classical Swine Fever (hog cholera)	NA	NA	NA	NE	NE	NE	NA	NA (U.S. free of Hog Cholera)
Porcine Epidemic Diarrhea ³	0/70	0/50	0/20	NE	NE	NE	Iowa	PCR (Fecal)
PEDV/PDCoV	0/48	0/56	0/48	0/10	0/10	0/10	Iowa	Multiplex PCR (Fecal)
Encephalomyocarditis Virus	0/300	0/90	0/60	0/10	0/10	0/10	UM	SN (Blood)
Haemagglutinating Encephalomyelitis	0/300	0/90	0/60	0/10	0/10	0/10	UM	HI (Blood)
Porcine Circovirus II	0/300	0/90	0/60	0/10	0/10	0/10	PU	IFA (Blood)
Porcine Influenza								
A ⁴	0/90	0/90	0/60	0/10	0/10	0/10	PU	ELISA (Blood)
H1N1	0/220	NE	NE	NE	NE	NE	PU	ELISA (Blood)
H3N2	0/220	NE	NE	NE	NE	NE	PU	ELISA (Blood)
Porcine Parvovirus	0/300	0/90	0/60	0/10	0/10	0/10	UM	HI (Blood)
Porcine Reproduct. & Resp. Syndrome	0/308	0/106	0/68	0/10	0/10	0/10	Iowa	ELISA (Blood)
Porcine Respiratory Coronavirus	0/300	0/90	0/60	0/10	0/10	0/10	PU	ELISA (Blood)
Porcine Rotavirus	170/300	60/90	31/60	10/10	7/10	6/10	PU	IFF (Blood)
Transmissible Gastroenteritis	0/300	0/90	0/60	0/10	0/10	0/10	PU	ELISA (Blood)
BACTERIAL INFECTIONS								
Actinobacillus pleuropneumoniae								
Serotypes 1, 5, 7	0/300	0/90	0/60	0/10	0/10	0/10	UM	ELISA (Blood)
Bordetella bronchiseptica	5/330	0/90	3/149	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Brachyspira (Serpulina) hyodysenteriae	0/300	0/90	0/60	0/10	0/10	0/10	PU	PCR (Fecal)
Brucella abortus	0/300	0/90	0/60	0/10	0/10	0/10	PU	Agglutination (Blood)
Campylobacter spp.	3/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
Clostridium perfringens Type C ²	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
Erysipelothrix rhusiopathiae	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Skin Swab)
Eubacterium suis	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Urine)
Haemophilus parasuis	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Lawsonia intracellularis	0/300	0/90	0/60	0/10	0/10	0/10	PU	PCR (Fecal)
Leptospira spp.	0/300	0/90	0/60	0/10	0/10	0/10	PU	MA (Blood)
(pomona, grippotyphosa, hardjo, canicola, icterohemorrhagiae, bratislava)								
Mycoplasma hyopneumoniae	0/230	0/90	0/60	0/10	0/10	0/10	PU	ELISA (Blood)
P. multocida (toxin producing)	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
P. haemolytica	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
P. pneumotropica	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
other pasteurellae	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Salmonella spp.	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
Staphylococcus hyicus ¹	43/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Skin Swab)
β-haemolytic Streptococci	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Streptococcus suis-type 2	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Streptococcus suis-other	4/300	4/90	5/60	0/10	1/10	0/10	PU	Culture (Nasal Swab)
Yersinia enterocolitica	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
FUNGAL INFECTIONS								
Candida albicans	5/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Skin Swab)
Microsporium spp.	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
Trichophyton spp.	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
PARASITOLOGICAL INFECTIONS								
Arthropods	0/300	0/90	0/60	0/10	0/10	0/10	In-house	Micr. Insp. (Skin Swab)
Helminths	0/300	0/90	0/60	0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)
Coccidia (Eimeria, Isospora)	0/300	0/90	0/60	0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)
Giardia	0/300	0/90	0/60	0/10	0/10	0/10	In-house	Zinc Sulfate (Fecal)
Toxoplasma gondii	0/300	0/90	0/60	0/10	0/10	0/10	PU	IFA (Blood)

NA=not applicable

NE=not examined

*P3 was populated with animals from P1 in October 2016. Animals can flow in one direction from P3 to P2. First migration of animals into P2 occurred in November 2014.

Laboratories:

PU: Purdue University, Animal Disease Diagnostic Laboratory, 406 S. University Street, West Lafayette, IN 47907
Iowa: Iowa State University, Veterinary Diagnostic Laboratory, 1850 Christensen Dr, Ames, Iowa 50011
UM: University of Minnesota, Veterinary Diagnostic Laboratory, 1333 Gortner Avenue, St. Paul, MN 55108

1. Until January 2006, *Staphylococcus* isolates were reported as *Staphylococcus hyicus*. Subsequently, isolates were further characterized, and identified as *Staphylococcus hyicus* subspecies *chromogenes*. In keeping with more recent standards of nomenclature, *Staphylococcus hyicus* and *Staphylococcus chromogenes* are now considered taxonomically distinct. Therefore, *Staphylococcus chromogenes* will no longer be reported under *Staphylococcus hyicus*.
2. In February 2009, the presence of *Clostridium perfringens* Type C enteric disease was confirmed in 0-3 day old piglets. This is a disease specific to newborns and affected piglets died within 12-24 hours of onset or were culled immediately when symptoms consistent with this disease were displayed. There is no carrier state associated with this bacterium. Subsequent to this incidence, pregnant sows are now prophylactically vaccinated with *Clostridium perfringens* Types C and D toxoid twice during pregnancy.
3. The presence of Porcine Epidemic Diarrhea Virus (PEDV) was first confirmed in pork production herds in the US on May 17, 2013. PEDV is a coronavirus related to Transmissible Gastroenteritis Virus (TGEV) that causes similar enteric disease in pigs of all ages. Diagnostic tests for TGEV will not detect PEDV. Surveillance testing was implemented in our colony beginning in March 2014.
4. As of February 2015, Influenza A will replace the test for H1N1 and H3N2.

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Bambi Jasmin, DVM

10/25/2019
Date