

April 24, 2023

Robert M. Gibbens, D.V.M.
Director, Animal Welfare Operations
Animal Care
Animal and Plant Health Inspection Service
U.S. Department of Agriculture

Via e-mail: Robert.M.Gibbens@usda.gov; ac.complaints@usda.gov

Dear Dr. Gibbens:

I'm writing on behalf of People for the Ethical Treatment of Animals—PETA entities have more than 9 million members and supporters globally—to respectfully request that the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) investigate possible violations of the federal Animal Welfare Act (AWA) and the Animal Welfare Regulations (AWRs) related to the breeding and maintenance of animals at facilities operated by Marshall Farms Group Ltd. (USDA Certificate Nos. 21-A-0008, 21-R-0242) in North Rose and Waverly, New York.

Concerns Related to the Breeding and Maintenance of Ferrets

PETA has received reports that in 2022, an outbreak of canine distemper swept through a Marshall Farms warehouse in North Rose in which ferrets were being bred and held. According to one insider, the outbreak affected a quarter million baby ferrets. Reportedly—although no evidence was offered—the outbreak resulted from a bad batch of canine distemper vaccine, which allegedly gave the ferrets distemper instead of preventing it. Canine distemper can be transmitted through airborne exposure as well as through shared food and water bowls, and the virus spread quickly through the facility.

It's unclear whether Marshall Farms took adequate steps to prevent the transmission of canine distemper through its facility once the company discovered that some ferrets were ill. It's also unclear whether the outbreak has now been vanquished. However, according to a December 2022 report posted by the Association of Exotic Mammal Veterinarians, it seems that Marshall Farms shipped ferrets with canine distemper to many locations in the U.S. and Canada—including to large pet store chains that reported receiving "acutely sick and dying kits" from Marshall Farms. The report states that symptoms from this particular canine distemper virus include diarrhea, loss of appetite, discharge from the eyes and nose, open-mouth breathing, dehydration, fever, and death. The company also sells ferrets for use in laboratories, which may have endangered other animals and compromised research.

We believe Marshall Farms' actions are out of compliance with several AWRs. In particular, Section 2.40(b)(2) of the AWRs states, "Each dealer or exhibitor shall establish and maintain programs of adequate veterinary care that include ... [t]he use of appropriate methods to prevent, control, diagnose, and treat diseases

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- PETA France
- PETA Australia
- PETA GermanyPETA Switzerland
- PETA Netherlands
- PETA Foundation (U.K.)

and injuries." Additionally, Section 2.40(b)(3) of the AWRs requires that each dealer ensure "[d]aily observation of all animals to assess their health and well-being [along with] a mechanism of direct and frequent communication ... so that timely and accurate information on problems of animal health, behavior, and well-being is conveyed to the attending veterinarian."

However, the allegation that a quarter million baby ferrets were affected by the outbreak suggests that Marshall Farms failed to monitor the health and well-being of ferrets in its facility sufficiently to contain the outbreak when the first animals became infected with canine distemper. Indeed, health monitoring reports of Marshall Farms' ferret colony in North Rose—prepared by the company itself and obtained by PETA—indicate that while Marshall Farms vaccinates ferrets against canine distemper, it does not appear to test ferrets for the virus. Interestingly, reports from Marshall Farms' facilities in the UK indicate that the company *does* conduct routine annual testing of ferrets in its colony for canine distemper virus. ²

Additionally, reports that Marshall Farms shipped out ferrets who became sick and died span several months, which suggests that the company failed to ensure that the animals it was selling to customers were free of canine distemper—possibly even as it was aware of the outbreak. This failure jeopardized the health and well-being of animals who were transported with the sick ferrets to many destinations, animals who were exposed to sick ferrets at pet stores and potentially laboratories, and animals in the homes of individuals who unwittingly purchased sick ferrets. Indeed, numerous online reports describe such scenarios.

Concerns Related to the Breeding and Maintenance of Cats

PETA has obtained records pertaining to the health of the cat colonies held in Marshall's Waverly facilities.³ Three colonies are maintained in three separate buildings—two of them, so-called "barrier buildings" that attempt to limit the entry of pathogens and even promise "specific pathogen free" cats; and the third, a conventional building. According to Marshall's "Health Monitoring Reports," cats in all three buildings have tested positive for various bacterial infections. In particular, over the four-year period from January 2019 to January 2023, in Marshall's barrier buildings:

- 70 of 340 cats (20.6%) tested positive for *Bordetella brochiseptica*;
- 185 of 340 cats (54.4%) tested positive for *Pasteurellaccae*; and
- 85 of 340 cats (25%) tested positive for *Streptococci β-hemolytic Group G*.

Over the three-year-and-nine-month period from April 2019 to January 2023, in Marshall's conventional building:

- 55 of 90 cats (61%) tested positive for *Bordetella brochiseptica*;
- 83 of 90 cats (92.2%) tested positive for *Pasteurellaccae*; and
- 28 of 90 cats (31%) tested positive for Streptococci β -hemolytic Group G.

Bordetella brochiseptia can cause upper respiratory disease in cats, resulting in sneezing, coughing, nasal and ocular discharge and fever. In some cases—in kittens or when animals are severely stressed—the infection can result in life-threatening pneumonia. Confining large groups of cats in crowded conditions—as is done in Marshall's facilities—exacerbates the spread of *B. brochiseptia*.

¹ Ex. 1, Health Monitoring Reports for Ferrets at Marshall Farms, North Rose, NY, 2016-2021

² Ex. 2, Health Monitoring Reports for Ferrets at Marshall UK, East Yorkshire, UK, 2017-2021

³ Ex. 3, Health Monitoring Reports for Cats at Marshall Farms, Waverly, NY, 2018-2022

Pasteurallaccae can cause ear infections, eye infections, nasal and sinus infections, joint infections, infection of the membrane covering of the brain and spinal cord, and lower respiratory-tract infection (pneumonia), which is often fatal. When aerosolized, the bacteria can spread through coughing or sneezing, and is also transmitted through bite wounds via the cats' saliva. The cats may suffer abscesses or septicemia, which can be fatal. Fighting among cats—as would be common in the stressed conditions in Marshall's facilities—increases the likelihood of transmission.

Streptococci β -hemolytic Group G can cause upper respiratory tract disease, abscesses, pneumonia, osteomyelitis, polyarthritis, urogenital infections, septicemia, sinusitis and meningitis. Contamination of the umbilical vein may lead to a generalized infection resulting in neonatal septicemia. Confining large groups of cats in crowded conditions—as is done in Marshall's facilities—exacerbates the spread of Streptococci β -hemolytic Group G.

It seems to us that the prevalence of these bacteria in the company's cat colonies—as documented in the company's own records—suggests that Marshall Farms is out of compliance with several AWRs. In particular, Section 2.40(b)(1) of the AWRs states, "Each dealer or exhibitor shall establish and maintain programs of adequate veterinary care that include ... [t]he availability of appropriate facilities, personnel, equipment, and services to comply with the provisions of this subchapter." Additionally, Section 2.40(b)(2) requires that each dealer ensure "[t]he use of appropriate methods to prevent, control, diagnose, and treat diseases and injuries." And Section 2.40(b)(3) requires that each dealer ensure "[d]aily observation of all animals to assess their health and well-being [along with] a mechanism of direct and frequent communication ... so that timely and accurate information on problems of animal health, behavior, and well-being is conveyed to the attending veterinarian."

However, the alarming prevalence of *Bordetella brochiseptia*, *Pasteurallaccae*, and *Streptococci* β -hemolytic Group G in Marshall's cat colonies—including in the two barrier buildings—indicates that the company has failed to adequately prevent the spread of these pathogens. Marshall confines hundreds of cats in each of its buildings—resulting in conditions of close confinement that necessarily cause profound stress in the animals. This increases the likelihood that the bacteria would find a welcoming home in these quarters and that the cats would succumb to infection and exhibit symptoms of the diseases associated with infection. That substantial percentages of cats tested positive suggests that Marshall failed to adequately assess the health and well-being of the cats in its colonies through daily observation to be able to then implement measures to stem the transmission of the pathogens.

Concerns Related to the Breeding and Maintenance of Göttingen Minipigs

PETA has obtained records pertaining to the health of the minipig colonies held in Marshall's North Rose facilities.⁴ Three colonies are maintained in three separate buildings. According to Marshall's "Health Monitoring Reports," minipigs in all three buildings have tested positive for *Porcine Rotavirus*. The cumulative results across the three buildings indicate that 326 out of 540 pigs—or 60.4%—tested positive for the virus.

Porcine Rotavirus can cause diarrhea in pigs who are nursing and have just been weaned. The diarrhea associated with this virus continues for a few days and can cause moderate dehydration—which is a significant concern for piglets. Vomiting may also occur. According to veterinary

⁴ Ex. 4. Health Monitoring Reports for Göttingen Minipigs at Marshall Farms, North Rose, NY, 2016-2021

reports, "Morbidity is variable but mortality usually is low or none when good housing and husbandry is present."

The overwhelming prevalence of *Porcine Rotavirus* in the company's minipig colonies—as documented in the company's own records—suggests that Marshall Farms is out of compliance with several AWRs. In particular, it appears that Marshall failed to ensure that conditions its facilities would keep viral infection in check and failed to use appropriate methods to prevent and control the spread of the virus—in violation of Sections 2.40(b)(1) and (2). The data also suggests that Marshall failed to adequately assess the health and well-being of the minipigs in its colonies through daily observation to be able to then implement measures to stem the transmission of the pathogens.

We urge you to investigate the concerns outlined in this letter and, if the claims are substantiated, take swift and decisive action against Marshall Farms. We believe the severity of the allegations merits formal administrative action against the company, including levying fines and/or suspension of its license.

I look forward to hearing from you. Thank you for your time and thoughtful consideration.

Sincerely,

Alka Chandna, Ph.D.

Vice President

Laboratory Investigations Cases

Alka Chela

Exhibit 1



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

Date of issue: July 2021	Unit: R1		Collection date: Quarter 2, 2021		
Species: Mustela putorius furo	Breed: Ferret		Populated	d: November 2015	
VID AV VANDOGRADAS	CUMULATIVE RESULTS	CURRENT TEST RESULTS	LABF	METHOD	
VIRAL INFECTIONS Aleutians Canine Distemper Virus	0/146 Vaccinated†	NE Vaccinated†	Blue Cross	PCR (Blood)	
Ferret Coronavirus (Enteric) Rabies Virus	36/36 Vaccinated†	NE Vaccinated†	NA	PCR	
Rotavirus A	0/146	NE	MSU	PCR (Fecal)	
Human Influenza (Current Circulating B/Phuket/3073/2013	Strains)**	0/15	MUK	HAL(Dl1)	
B/Washington/02/2019	0/1181	0/15	MUK MUK	HAI (Blood) HAI (Blood)	
A/Tasmania/503/2020 V1	0/45	0/15	MUK	HAI (Blood)	
A/Victoria/1/2020 V7	0/45	0/15	MUK	HAI (Blood)	
BACTERIAL INFECTIONS					
Bordetella bronchiseptica	0/225	NE	Cornell	Culture (Pharyngeal/Nasal Swab)	
Campylobacter species	0/271	NE	Cornell	Culture (Rectal Swab)	
Helicobacter species	0/271	NE	CRL	PCR (Fecal)	
Lawsonia intracellularis	0/271	NE	CRL	PCR (Blood)	
Pasteurella multocida	0/235	NE	Cornell	Culture (Pharyngeal Swab)	
Salmonella species	0/271	NE	Cornell	Culture (Rectal Swab)	
Staphylococcus aureus	28/235	NE	Cornell	Culture (Rectal Swab) Yersinia	
enterocolitica	0/235	NE	Cornell	Culture (Rectal Swab)	
PARASITOLOGICAL INFECTIONS					
Coccidia	0/1631	0/10	In House	Sodium Nitrate (Fecal)	
Dirofilaria immitis	0/110	NE	In House	Snap 4Dx (Blood)	
Otodectes cynotis	0/885	NE	In House	Microscopy	
Protozoan Parasites:				17	
Cryptosporidium parvum	0/110	NE	Cornell	PCR (Fecal)	
Giardia	0/220	0/10	In House	Zinc Sulfate (Fecal)	

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Laboratories:

Blue Cross: Blue Cross Animal Hospital, 401 North Miller, Burley, Idaho 83318

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910

MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

Cornell: Cornell University, Animal Health Diagnostic Center, 240 Farrier Road, Ithaca, NY 14853

CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.

^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014, B/Brisbane/60/2008, A/Singapore/Infimh-16-0019/2016, A/Slovenia/2903/2015, A/Kansas/14/2017, A/Switzerland/3330/2017, B/Colorado/06/2017, A/Hawaii/66/2019 and A/Hong Kong/2671/2019.



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

Date of issue: April 2021	Unit: R1		Collection	ı date: Quart	ter 1, 2021
Species: Mustela putorius furo	Breed: Ferret	et Populated: November 2015			2015
	270001701101		Topulated	1. TYO VEHIDEI	2013
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
	RESULTS	RESULTS	RESULTS*		EIIIOB
VIRAL INFECTIONS		TESCETS	RESCEIS		
Aleutians	0/146	0/10	0/36	Blue Cross	PCR (Blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA	Dide Cross	1 CR (Blood)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA	INA	FCK
Rotavirus A	0/146	0/10	0/36	MSU	PCR (Fecal)
	0/110	0/10	0/30	MSO	FCK (Fecal)
Human Influenza (Current Circulatin	g Strains)**				
A/Hawaii/66/2019	0/90	0/15	NA	MUK	HAI (Blood)
A/Hong Kong/2671/2019	0/90	0/15	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/1166	0/45	NA	MUK	HAI (Blood)
B/Washington/02/2019	0/120	0/45	NA	MUK	HAI (Blood)
A/Tasmania/503/2020 V1	0/30	0/30	NA	MUK	HAI (Blood)
A/Victoria/1/2020 V7	0/30	0/30	NA	MUK	HAI (Blood)
					11.11 (21000)
BACTERIAL INFECTIONS					
Bordetella bronchiseptica	0/225	0/10	0/125	Cornell	Culture (Pharyngeal/Nasal
Campylobacter species	0/271	0/10	0/161	Cornell	Culture (Rectal Swab)
Helicobacter species	0/271	0/10	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/271	0/10	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/235	0/10	0/125	Cornell	Culture (Pharyngeal Swab)
Salmonella species	0/271	0/10	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	28/235	1/10	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/235	0/10	0/125	Cornell	Culture (Rectal Swab)
PARASITOLOGICAL INFECTIONS					,
Coccidia	0/1621	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/110	0/10	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis	0/885	0/10	0/785	In House	
Protozoan Parasites:	5.500	0/10	0/783	in nouse	Microscopy
Cryptosporidium parvum	0/110	0/10	0/1411 NA	Cornell	DCD (Feed)
Giardia	0/210	0/10	NA NA	In House	PCR (Fecal)
Ciarulu	0/210	0/10	NA	in House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Laboratories:

Blue Cross: Blue Cross Animal Hospital, 401 North Miller, Burley, Idaho 83318

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910

MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

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^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014, B/Brisbane/60/2008, A/Singapore/Infimh-16-0019/2016, A/Slovenia/2903/2015, A/Kansas/14/2017, A/Switzerland/3330/2017 and B/Colorado/06/2017.



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

Date of issue: January 2021	Unit: R1		Collection	date: Quart	er 4, 2020
Species: Mustela putorius furo	Breed: Ferret		Populated	l: November	2015
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
	RESULTS	RESULTS	RESULTS*	LABI	METHOD
VIRAL INFECTIONS	RESCETS	RESOLIS	RESULTS		
Aleutians	0/136	NE	0/36	Blue Cross	PCR (Blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA	Dide Closs	TCR (Blood)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA	1421	TCK
Rotavirus A	0/136	NE	0/36	MSU	PCR (Fecal)
Human Influenza (Current Circulati	na Straine)**				
A/Hawaii/66/2019	0/75	0/30	NA	MUK	IIAI (Disad)
A/Hong Kong/2671/2019	0/75	0/30	NA NA	MUK	HAI (Blood) HAI (Blood)
B/Phuket/3073/2013	0/1121	0/30	NA	MUK	HAI (Blood)
B/Washington/02/2019	0/75	0/30	NA	MUK	HAI (Blood)
DACTEDIAL MICONI ACIDA AND	EVINCAT DIVINO CONTO				(====)
BACTERIAL, MYCOPLASMA AND Bordetella bronchiseptica			0.44.0		
Campylobacter species	0/215 0/261	NE	0/125	Cornell	Culture (Pharyngeal/Nasa
Helicobacter species	0/261	NE NE	0/161	Cornell	Culture (Rectal Swab)
Lawsonia intracellularis	0/261	NE NE	0/161	CRL	PCR (Fecal)
Pasteurella multocida	0/201	NE NE	0/161 0/125	CRL	PCR (Blood)
Salmonella species	0/223	NE NE	0/123	Cornell Cornell	Culture (Pharyngeal Swal
Staphylococcus aureus	27/225	NE NE	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/225	NE NE	0/125	Cornell	Culture (Rectal Swab) Culture (Rectal Swab)
			0,120	Comen	Culture (Rectal Swall)
PARASITOLOGICAL INFECTIONS	•				
Coccidia	0/1611	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/100	NE	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis	0/875	NE	0/785	In House	Microscopy
Protozoan Parasites:			0/1411		
Cryptosporidium parvum	0/100	NE	NA	Cornell	PCR (Fecal)
Giardia	0/200	0/10	NA	In House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

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Blue Cross: Blue Cross Animal Hospital, 401 North Miller, Burley, Idaho 83318

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910

MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

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CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

$\dagger Vaccinations:$

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

Date of issue: October 2020	Unit: R1	· · · · · · · · · · · · · · · · · · ·	Collection	date: Quart	er 3, 2020
Species: Mustela putorius furo	Breed: Ferret		Populated: November 2015		
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
	RESULTS	RESULTS	RESULTS*		
VIRAL INFECTIONS					
Aleutians	0/136	0/10	0/36	Blue Cross	PCR (Blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA		` ,
Ferret Coronavirus (Enteric)	36/36	NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA		
Rotavirus A	0/136	0/10	0/36	MSU	PCR (Fecal)
Human Influenza (Current Circulat	ing Strains)**				
A/Hawaii/66/2019	0/45	0/15	NA	MUK	HAI (Blood)
A/Hong Kong/2671/2019	0/45	0/15	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/1091	0/15	NA	MUK	HAI (Blood)
B/Washington/02/2019	0/45	0/15	NA	MUK	HAI (Blood)
BACTERIAL, MYCOPLASMA ANI	D FUNGAL INFECTION	NS.			
Bordetella bronchiseptica	0/215	0/10	0/125	Cornell	Culture (Pharyngeal/Nasal
Campylobacter species	0/261	0/10	0/123	Cornell	Culture (Rectal Swab)
Helicobacter species	0/261	0/10	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/261	0/10	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/225	0/10	0/101	Cornell	Culture (Pharyngeal Swab)
Salmonella species	0/261	0/10	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	27/225	1/10	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/225	0/10	0/125	Cornell	Culture (Rectal Swab)
PARASITOLOGICAL INFECTIONS	S				,
Coccidia	0/1601	0/10	0/1411	In House	C-P - N' (C)
Dirofilaria immitis	0/1001	0/10	0/1411 NA		Sodium Nitrate (Fecal)
Otodectes cynotis	0/875	0/10	NA 0/785	In House	Snap 4Dx (Blood)
Protozoan Parasites:	01013	0/10	0//85	In House	Microscopy
Cryptosporidium parvum	0/100	0/10		C11	DOD (F. 1)
Giardia	0/100	0/10	NA NA	Cornell	PCR (Fecal)
Giardia	0/190	0/10	NA	In House	Zinc Sulfate (Fecal)

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NA=Not applicable NE=Not examined

Laboratories:

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MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910 MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

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

Date of issue: July 2020	Unit: R1		Collection	date: Quart	er 2, 2020
Species: Mustela putorius furo	Breed: Ferret	-	Populator	la Mayyamah am	2015
Species. Musicia patorius juro	Dicea. Terret		Populated	l: November	2015
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
	RESULTS	RESULTS	RESULTS*	LADI	WETHOD
VIRAL INFECTIONS	RESCEID	RESCEIS	KESOLIS		
Aleutians	0/126	NE	0/36	Blue Cross	PCR (Blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA	Dide Closs	FCR (B1000)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA	IVA	rck
Rotavirus A	0/126	NE	0/36	MSU	PCR (Fecal)
					1 Cit (1 Ccai)
<u> Human Influenza (Current Circulatii</u>	ng Strains)**				
A/Hawaii/66/2019	0/30	0/30	NA	MUK	HAI (Blood)
A/Hong Kong/2671/2019	0/30	0/30	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/1076	0/30	NA	MUK	HAI (Blood)
B/Washington/02/2019	0/30	0/30	NA	MUK	HAI (Blood)
					()
BACTERIAL, MYCOPLASMA AND		<u>NS</u>			
Bordetella bronchiseptica	0/205	NE	0/125	Cornell	Culture (Pharyngeal/Nasa
Campylobacter species	0/251	NE	0/161	Cornell	Culture (Rectal Swab)
Helicobacter species	0/251	NE	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/251	NE	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/215	NE	0/125	Cornell	Culture (Pharyngeal Swab
Salmonella species	0/251	NE	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	26/215	NE	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/215	NE	0/125	Cornell	Culture (Rectal Swab)
BARAGEROLOGICAL PURE					
PARASITOLOGICAL INFECTIONS	0/1/501	0.14.0			
Coccidia	0/1591	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/90	NE	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis Protozoan Parasites:	0/865	NE	0/785	In House	Microscopy
	0.000		0/1411		
Cryptosporidium parvum Giardia	0/90	NE	NA	Cornell	PCR (Fecal)
Giardia	0/180	0/10	NA	In House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Laboratories:

Blue Cross: Blue Cross Animal Hospital, 401 North Miller, Burley, Idaho 83318

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910 MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

Cornell: Cornell University, Animal Health Diagnostic Center, 240 Farrier Road, Ithaca, NY 14853

CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.

^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014, B/Brisbane/60/2008, A/Singapore/Infimh-16-0019/2016, A/Slovenia/2903/2015, A/Kansas/14/2017, A/Switzerland/3330/2017 and B/Colorado/06/2017.



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

Date of issue: April 2020	Unit: R1		Collection	date: Quart	er 1, 2020
Species: Mustela putorius furo	Breed: Ferret		Populated: November 2015		
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
	RESULTS	RESULTS	RESULTS*	L/ IDI	METHOD
VIRAL INFECTIONS			1000210		
Aleutians	0/126	0/10	0/36	Blue Cross	PCR (Blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA		(=100 a)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA		
Rotavirus A	0/126	0/10	0/36	MSU	PCR (Fecal)
Human Influenza (Current Circulation	ng Strains)**				
A/Kansas/14/2017	0/150	0/45	NA	MUK	HAI (Blood)
A/Switzerland/3330/2017	0/135	0/45	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/1046	0/45	NA	MUK	HAI (Blood)
B/Colorado/06/2017	0/286	0/45	NA	MUK -	HAI (Blood)
BACTERIAL, MYCOPLASMA AND	FUNGAL INFECTION	NS			
Bordetella bronchiseptica	0/205	0/10	0/125	Cornell	Culture (Pharyngeal/Nasa
Campylobacter species	0/251	0/10	0/161	Cornell	Culture (Rectal Swab)
Helicobacter species	0/251	0/10	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/251	0/10	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/215	0/10	0/125	Cornell	Culture (Pharyngeal Swab
Salmonella species	0/251	0/10	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	26/215	0/10	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/215	0/10	0/125	Cornell	Culture (Rectal Swab)
PARASITOLOGICAL INFECTIONS					
Coccidia	0/1581	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/90	0/10	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis	0/865	0/10	0/785	In House	Microscopy
Protozoan Parasites:			0/1411		·r/
Cryptosporidium parvum	0/90	0/10	NA	Cornell	PCR (Fecal)
Giardia	0/170	0/10	NA	In House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

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MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910 MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

Cornell: Cornell University, Animal Health Diagnostic Center, 240 Farrier Road, Ithaca, NY 14853

CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.

^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014, B/Brisbane/60/2008, A/Singapore/Infimh-16-0019/2016 and A/Slovenia/2903/2015.



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

Date of issue: January 2020	Unit: R1		Collection	date: Quart	er 4, 2019
Species: Mustela putorius furo	Breed: Ferret		Populated: November 2015		
	CHAIR ATRE	CUIDDENT TEST	HISTORICAL	LADE	METHOD
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
VID AT INFECTIONS	RESULTS	RESULTS	RESULTS*		
VIRAL INFECTIONS Aleutians	0/116	NE	0/36	Blue Cross	DCD (D1d)
Canine Distemper Virus	Vaccinated†	Vaccinated†	0/36 NA	Blue Cross	PCR (Blood)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA	INA	PCR
Rotavirus A	0/116	NE	0/36	MSU	PCR (Fecal)
			0.50	1.100	T CIT (I coul)
Human Influenza (Current Circulatin	g Strains)**				
A/Kansas/14/2017	0/105	0/60	NA	MUK	HAI (Blood)
A/Switzerland/3330/2017	0/90	0/60	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/1001	0/60	NA	MUK	HAI (Blood)
B/Colorado/06/2017	0/241	0/60	NA	MUK	HAI (Blood)
BACTERIAL, MYCOPLASMA AND	FUNGAL INFECTION	NS			
Bordetella bronchiseptica	0/195	NE	0/125	Cornell	Culture (Pharyngeal/Nasal
Campylobacter species	0/241	NE	0/161	Cornell	Culture (Rectal Swab)
Helicobacter species	0/241	NE	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/241	NE	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/205	NE	0/125	Cornell	Culture (Pharyngeal Swab
Salmonella species	0/241	NE	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	26/205	NE	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/205	NE	0/125	Cornell	Culture (Rectal Swab)
PARASITOLOGICAL INFECTIONS					
Coccidia	0/1571	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/80	NE	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis	0/855	NE	0/785	In House	Microscopy
Protozoan Parasites:			0/1411	11.110000	оговоору
Cryptosporidium parvum	0/80	NE	NA	Cornell	PCR (Fecal)
Giardia	0/160	0/10	NA	In House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Laboratories:

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Cornell: Cornell University, Animal Health Diagnostic Center, 240 Farrier Road, Ithaca, NY 14853

CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.

^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014, B/Brisbane/60/2008, A/Singapore/Infimh-16-0019/2016 and A/Slovenia/2903/2015.



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

Date of issue: December 2019	Unit: R1		Collection	date: Quart	er 3, 2019
Species: Mustela putorius furo	Breed: Ferret		Populated	2015	
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
	RESULTS	RESULTS	RESULTS*	LADI	METHOD
VIRAL INFECTIONS	RESULTS	KESUL IS	KESUL 13		
Aleutians	0/116	0/10	0/36	Blue Cross	PCR (Blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA	Blue Closs	FCR (Blood)
Ferret Coronavirus (Enteric)	36/36	NE NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA	11/21	TCK
Rotavirus A	0/116	0/10	0/36	MSU	PCR (Fecal)
Human Influenza (Current Circulatin	g Strains)**				(4)
A/Kansas/14/2017	0/45	0/15	NA	MUK	HAI (Blood)
A/Switzerland/3330/2017	0/30	0/15	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/941	0/15	NA	MUK	HAI (Blood)
B/Colorado/06/2017	0/181	0/15	NA	MUK	HAI (Blood)
BACTERIAL, MYCOPLASMA AND	FUNGAL INFECTION	NS		ğ	
Bordetella bronchiseptica	0/195	NE	0/125	Cornell	Culture (Pharyngeal/Nasal Swa
Campylobacter species	0/241	0/10	0/161	Cornell	Culture (Rectal Swab)
Helicobacter species	0/241	0/10	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/241	0/10	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/205	0/10	0/125	Cornell	Culture (Pharyngeal Swab)
Salmonella species	0/241	0/10	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	26/205	0/10	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/205	0/10	0/125	Cornell	Culture (Rectal Swab)
PARASITOLOGICAL INFECTIONS					
Coccidia	0/1561	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/80	0/10	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis	0/855	0/10	0/785	In House	Microscopy
Protozoan Parasites:		0,10	0/1411	111 110 430	тистовоору
Cryptosporidium parvum	0/80	0/10	NA	Cornell	PCR (Fecal)
Giardia	0/150	0/10	NA	In House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Laboratories:

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Cornell: Cornell University, Animal Health Diagnostic Center, 240 Farrier Road, Ithaca, NY 14853

CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

†Vaccinations

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.

^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014, B/Brisbane/60/2008, A/Singapore/Infimh-16-0019/2016 and A/Slovenia/2903/2015.



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

Date of issue: December 2019	Unit: R1	9 ×	Collection	date: Quart	er 2, 2019
Species: Mustela putorius furo	Breed: Ferret		Populated: November 2015		
VIDAL INDECTIONS	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LABF	METHOD
VIRAL INFECTIONS Aleutians Canine Distemper Virus	0/106 Vaccinated†	NE Vaccinated†	0/36 NA	Blue Cross	PCR (Blood)
Ferret Coronavirus (Enteric) Rabies Virus	36/36 Vaccinated†	NE Vaccinated†	36/36 NA	NA	PCR
Rotavirus A	0/106	NE	0/36	MSU	PCR (Fecal)
Human Influenza (Current Circulation					
A/Kansas/14/2017	0/30	0/30	NA	MUK	HAI (Blood)
A/Slovenia/2903/2015	0/241	0/15	NA	MUK	HAI (Blood)
A/Switzerland/3330/2017	0/15	0/15	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/926	0/30	NA	MUK	HAI (Blood)
B/Colorado/06/2017	0/166	0/30	NA	MUK	HAI (Blood)
BACTERIAL, MYCOPLASMA AND	FUNGAL INFECTION	<u>NS</u>			
Bordetella bronchiseptica	0/195	NE	0/125	Cornell	Culture (Pharyngeal/Nasal S
Campylobacter species	0/231	NE	0/161	Cornell	Culture (Rectal Swab)
Helicobacter species	0/231	NE	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/231	.NE	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/195	NE	0/125	Cornell	Culture (Pharyngeal Swab)
Salmonella species	0/231	NE	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	26/195	NE	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/195	NE	0/125	Cornell	Culture (Rectal Swab)
PARASITOLOGICAL INFECTIONS		* · · · · · · · · · · · · · · · · · · ·			
Coccidia	0/1551	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/70	NE	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis Protozoan Parasites:	0/845	NE	0/785	In House	Microscopy
·	0/70	NIE	0/1411	C 11	DCD (E. 1)
Cryptosporidium parvum Giardia		NE 0/10	NA	Cornell	PCR (Fecal)
Giardia	0/140	0/10	NA	In House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable

NE=Not examined

Laboratories:

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MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910

MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

Cornell: Cornell University, Animal Health Diagnostic Center, 240 Farrier Road, Ithaca, NY 14853

CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.

Banto 4 Oamin		12/20/2019
Bambi Jasmin, DVM, DACLAM	* X	Date

^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014, B/Brisbane/60/2008 and A/Singapore/Infimh-16-0019/2016.



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

Date of issue: April 2019	Unit: R1		Collection	date: Quart	er 1, 2019
Species: Mustela putorius furo	Breed: Ferret		Populated: November 2015		
	CUMULATIVE	CURRENT TEST	HISTORICAL	LABF	METHOD
	RESULTS	RESULTS	RESULTS*	LADI	METHOD
VIRAL INFECTIONS	RESULTS	RESULTS	KESULIS.		
Aleutians	0/106	0/10	0/36	Blue Cross	PCR (Blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA	Dide Closs	1 CR (Blood)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	NA	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA	1421	TCR
Rotavirus A	0/106	0/10	0/36	MSU	PCR (Fecal)
		•	-		(^/
Human Influenza (Current Circulatin	g Strains)**				
A/Singapore/Infimh-16-0019/2016	0/135	0/60	NA	MUK	HAI (Blood)
A/Slovenia/2903/2015	0/226	0/61	NA	MUK	HAI (Blood)
B/Phuket/3073/2013	0/896	0/61	NA	MUK	HAI (Blood)
B/Colorado/06/2017	0/136	0/61	NA	MUK	HAI (Blood)
BACTERIAL, MYCOPLASMA AND	FUNGAL INFECTION	NS			
Bordetella bronchiseptica	0/195	0/10	0/125	Cornell	Culture (Pharyngeal/Nasal
Campylobacter species	0/231	0/10	0/161	Cornell	Culture (Rectal Swab)
Helicobacter species	0/231	0/10	0/161	CRL	PCR (Fecal)
Lawsonia intracellularis	0/231	0/10	0/161	CRL	PCR (Blood)
Pasteurella multocida	0/195	0/10	0/125	Cornell	Culture (Pharyngeal Swab)
Salmonella species	0/231	0/10	0/161	Cornell	Culture (Rectal Swab)
Staphylococcus aureus	26/195	0/10	26/125	Cornell	Culture (Rectal Swab)
Yersinia enterocolitica	0/195	0/10	0/125	Cornell	Culture (Rectal Swab)
PARASITOLOGICAL INFECTIONS					
Coccidia	0/1541	0/10	0/1411	In House	Sodium Nitrate (Fecal)
Dirofilaria immitis	0/70	0/10	NA	In House	Snap 4Dx (Blood)
Otodectes cynotis	0/845	0/10	0/785	In House	Microscopy
Protozoan Parasites:			0/1411		
Cryptosporidium parvum	0/70	0/10	NA	Cornell	PCR (Fecal)
Giardia	0/130	0/10	NA	In House	Zinc Sulfate (Fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Laboratories:

Blue Cross: Blue Cross Animal Hospital, 401 North Miller, Burley, Idaho 83318

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4125 Beaumont Road, Lansing, MI 48910 MUK: Marshall UK Laboratories, The Field Station, Grimston, Aldbrough, Hull, East Yorkshire, HU11 4QE

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CRL: Charles River Research Animal Diagnostic Services, 261 Ballardvale Street, Receiving Dock, Bldg 22, Wilmington, MA 01887

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.

Banks & Oasmin	04/24/2019
Bambi Jasmin, DVM, DACLAM	Date

^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014 and B/Brisbane/60/2008.



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

Date of issue: September 2018	Unit: R1		Collection	date: Quart	er 3, 2018		
Species: Mustela putorius furo	stela putorius furo Breed: Ferret			Populated: November 2015			
	CUMULATIVE	CURRENT TEST	HISTORICAL	LAB	METHOD		
	RESULTS	RESULTS	RESULTS*				
VIRAL INFECTIONS							
Aleutians	0/96	0/10	0/36	Blue Cross ¹	PCR (blood)		
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA				
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR		
Rabies Virus	Vaccinated†	Vaccinated†	NA	2			
Rotavirus A	0/96	0/10	0/36	MSU^2	PCR (fecal)		
Human Influenza (Current Circulatin	g Strains)**						
A/Singapore/Infimh-16-0019/2016	0/45	0/15	NA	MUK^7	HAI (blood)		
A/Slovenia/2903/2015	0/135	0/15	NA	MUK	HAI (blood)		
B/Phuket/3073/2013	0/805	0/15	NA	MUK	HAI (blood)		
B/Colorado/06/2017	0/45	0/15	NA	MUK	HAI (blood)		
BACTERIAL, MYCOPLASMA AND	ELINCAL INFECTION	IC.					
Bordetella bronchiseptica	0/185	0/10	0/125	Cornell ⁴	Culture (nasal/pharyngeal		
Campylobacter species	0/221	0/10	0/123	Cornell	Culture (rectal swab)		
Helicobacter species	0/221	0/10	0/161	CRL ⁵	PCR (fecal)		
Lawsonia intracellularis	0/221	0/10	0/161	CRL	PCR (blood)		
Pasteurella multocida	0/185	0/10	0/101	Cornell	Culture (pharyngeal swab		
Salmonella species	0/221	0/10	0/123	Cornell	Culture (rectal swab)		
Staphylococcus aureus	26/185	0/10	26/125	Cornell	Culture (rectal swab)		
Yersinia enterocolitica	0/185	0/10	0/125	Cornell	Culture (rectal swab)		
					contact (cottact bit do)		
PARASITOLOGICAL INFECTIONS							
Coccidia	0/1521	0/10	0/1411	In house ⁶	Sodium nitrate (fecal)		
Dirofilaria immitis	0/60	0/10	NA	In house	Snap 4Dx (blood)		
Otodectes cynotis	0/835	0/10	0/785	In house	Microscopy		
Protozoan Parasites:			0/1411				
Cryptosporidium parvum	0/60	0/10	NA	Cornell	PCR (fecal)		
Giardia	0/110	0/10	NA	In house	Zinc sulfate (fecal)		

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable

NE=Not examined

Abbreviations for methods:

HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

LABs

¹Blue Cross Animal Hospital, Burley Idaho

²Diagnostic Center for Population and Animal Health, Michigan State University

³Southern Research Institute

⁴NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

⁵Charles River Laboratories

⁶Marshall Farms

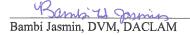
⁷Marshall UK

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.





^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014 and B/Brisbane/60/2008.



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

Date of issue: June 2018	Unit: R1		Collection	ter 2, 2018	
Species: Mustela putorius furo	Breed: Ferret		Populated	2015	
	CUMULATIVE	CURRENT TEST	HISTORICAL	LAB	METHOD
	RESULTS	RESULTS	RESULTS*	2.12	MEINOD
VIRAL INFECTIONS			IESCEIS		
Aleutians	0/86	NE	0/36	Blue Cross ¹	PCR (blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA	Dide Cross	Tex (blood)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA		Tek
Rotavirus A	0/86	NE	0/36	MSU^2	PCR (fecal)
Human Influenza (Current Circulatin	g Strains)**				
A/Singapore/Infimh-16-0019/2016	0/30	0/30	NA	MUK^7	HAI (blood)
A/Slovenia/2903/2015	0/120	0/30	NA	MUK	HAI (blood)
B/Phuket/3073/2013	0/790	0/30	NA	MUK	HAI (blood)
B/Colorado/06/2017	0/30	0/30	NA	MUK	HAI (blood)
BACTERIAL, MYCOPLASMA AND 1	FUNGAL INFECTION	JS			
Bordetella bronchiseptica	0/175	NE	0/125	Cornell ⁴	Culture (nasal/pharyngeal swab)
Campylobacter species	0/211	NE	0/161	Cornell	Culture (rectal swab)
Helicobacter species	0/211	NE	0/161	CRL ⁵	PCR (fecal)
Lawsonia intracellularis	0/211	NE	0/161	CRL	PCR (blood)
Pasteurella multocida	0/175	NE	0/125	Cornell	Culture (pharyngeal swab)
Salmonella species	0/211	NE	0/161	Cornell	Culture (rectal swab)
Staphylococcus aureus	26/175	NE	26/125	Cornell	Culture (rectal swab)
Yersinia enterocolitica	0/175	NE	0/125	Cornell	Culture (rectal swab)
PARASITOLOGICAL INFECTIONS					
Coccidia	0/1511	0/10	0/1411	In house ⁶	Sadisma mitmata (far-1)
Dirofilaria immitis	0/50	NE	NA	In house	Sodium nitrate (fecal) Snap 4Dx (blood)
Otodectes cynotis	0/825	NE	0/785	In house	1
Protozoan Parasites:	., o <u>-</u>	112	0/783	iii iiouse	Microscopy
Cryptosporidium parvum	0/50	NE	NA	Cornell	PCR (fecal)
Giardia	0/100	0/10	NA NA	In house	,
	00	OI X O	1 7/1	III HOUSE	Zinc sulfate (fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Abbreviations for methods:

HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

LABs

¹Blue Cross Animal Hospital, Burley Idaho

²Diagnostic Center for Population and Animal Health, Michigan State University

³Southern Research Institute

⁴NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

⁵Charles River Laboratories

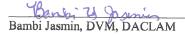
⁶Marshall Farms

⁷Marshall UK

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.





^{**}Previous influenza strains screened with no positive results: A/Switzerland/9715293/2013 (H3N2), A/California/2009 (H1N1) pdm09, A/Hong Kong/4801/2014, A/New Caledonia/71/2014 and B/Brisbane/60/2008.



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

Date of issue: April 2018	Unit: R1		Collection date: Quarter 1, 2018			
Species: Mustela putorius furo	Breed: Ferret		Populated	2015		
	CUMULATIVE	CURRENT TECT	HIGHORICAL	Y 4 D	VETTION	
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD	
VIRAL INFECTIONS	1000210	TESCETS	RESCEIS			
Aleutians	0/86	0/10	0/36	Blue Cross1	PCR (blood)	
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA		,	
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR	
Rabies Virus	Vaccinated†	Vaccinated†	NA			
Rotavirus A	0/86	0/10	0/36	MSU^2	PCR (fecal)	
Human Influenza (Current Circulatin	g Strains)					
A/New Caledonia/71/2014	0/90	0/60	NA	MUK^7	HAI (blood)	
A/Slovenia/2903/2015	0/90	0/60	NA	MUK	HAI (blood)	
B/Phuket/3073/2013	0/760	0/60	NA	MUK	HAI (blood)	
B/Brisbane/60/2008	0/281	0/60	NA	MUK	HAI (blood)	
Screened Dec 2015-April 2017						
A/California/2009 (H1N1) pdm09	0/670	NE	NA	SRI^3	HAI (blood)	
A/Hong Kong/4801/2014	0/287	NE	NA	SRI	HAI (blood)	
Screened Dec 2015-July 2016					((((((((((((((((((
A/Switzerland/9715293/2013 (H3N2)	0/383	NE	NA	SRI	HAI (blood)	
BACTERIAL, MYCOPLASMA AND	FUNGAL INFECTION	NS				
Bordetella bronchiseptica	0/175		0/125	Cornell ⁴	Culture (nasal/pharyngeal swab)	
Campylobacter species	0/211	0/10	0/161	Cornell	Culture (rectal swab)	
Helicobacter species	0/211	0/10	0/161	CRL ⁵	PCR (fecal)	
Lawsonia intracellularis	0/211	0/10	0/161	CRL	PCR (blood)	
Pasteurella multocida	0/175	0/10	0/125	Cornell	Culture (pharyngeal swab)	
Salmonella species	0/211	0/10	0/161	Cornell	Culture (rectal swab)	
Staphylococcus aureus	26/175	0/10	26/125	Cornell	Culture (rectal swab)	
Yersinia enterocolitica	0/175	0/10	0/125	Cornell	Culture (rectal swab)	
PARASITOLOGICAL INFECTIONS		J				
Coccidia	0/1501	0/10	0/1411	In house ⁶	Sodium nitrate (fecal)	
Dirofilaria immitis	0/50	0/10	NA	In house	Snap 4Dx (blood)	
Otodectes cynotis	0/825	0/10	0/785	In house	Microscopy	
Protozoan Parasites:			0/1411		1.0	
Cryptosporidium parvum	0/50	0/10	NA	Cornell	PCR (fecal)	
Giardia	0/90	0/10	NA	In house	Zinc sulfate (fecal)	

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Abbreviations for methods:

HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

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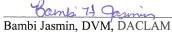
⁶Marshall Farms

⁷Marshall UK

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.







Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: December 2017	Unit: Influenza –Free		Collection	date: Oct-D	Dec 2017
Species: Mustela putorius furo	Breed: Ferret		Populated	2015	
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD
VIRAL INFECTIONS Aleutians	0/76	NE	0/26	DI C I	DCD (II I)
Canine Distemper Virus	Vaccinated†	NE Vaccinated†	0/36 NA	Blue Cross ¹	PCR (blood)
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	DCD.
Rabies Virus	Vaccinated†	Vaccinated†	NA	N/A	PCR
Rotavirus A	0/76	NE	0/36	MSU^2	PCR (fecal)
Rotavirus A	0//0	INE	0/30	MSU	PCR (lecal)
Human Influenza (Current Circulation	o Strains)				
A/New Caledonia/71/2014	0/30	0/30	NA	MUK^7	HAI (blood)
A/Slovenia/2903/2015	0/30	0/30	NA	MUK	HAI (blood)
B/Phuket/3073/2013	0/700	0/30	NA	MUK	HAI (blood)
B/Brisbane/60/2008	0/221	0/30	NA	MUK	HAI (blood)
					()
Screened Dec 2015-April 2017					
A/California/2009 (H1N1) pdm09	0/670	NE	NA	SRI^3	HAI (blood)
A/Hong Kong/4801/2014	0/287	NE	NA	SRI	HAI (blood)
Screened Dec 2015-July 2016					,
A/Switzerland/9715293/2013 (H3N2)	0/383	NE	NA	SRI	HAI (blood)
n. company					
BACTERIAL, MYCOPLASMA AND					
Bordetella bronchiseptica	0/165	NE	0/125	Cornell ⁴	Culture (nasal/pharyngeal swab)
Campylobacter species	0/201	NE	0/161	Cornell	Culture (rectal swab)
Helicobacter species Lawsonia intracellularis	0/201	NE	0/161	CRL ⁵	PCR (fecal)
	0/201	NE	0/161	CRL	PCR (blood)
Pasteurella multocida	0/165	NE	0/125	Cornell	Culture (pharyngeal swab)
Salmonella species	0/201	NE	0/161	Cornell	Culture (rectal swab)
Staphylococcus aureus Yersinia enterocolitica	26/165	NE	26/125	Cornell	Culture (rectal swab)
Y ersinia enterocolitica	0/165	NE	0/125	Cornell	Culture (rectal swab)
PARASITOLOGICAL INFECTIONS					
Coccidia	0/1491	0/10	0/1411	In house ⁶	Sodium nitrate (fecal)
Dirofilaria immitis	0/40	NE	0/1411 NA	In house	Snap 4Dx (blood)
Otodectes cynotis	0/815	NE	0/785	In house	Microscopy
Protozoan Parasites:	0,015	112	0/783	III House	wherescopy
Cryptosporidium parvum	0/40	NE	NA	Cornell	PCR (fecal)
Giardia	0/80	0/10	NA NA	In house	Zinc sulfate (fecal)
J161 616	0,00	0/10	1147	III IIOUSC	Zane surface (recar)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable

NE=Not examined

Abbreviations for methods:

HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

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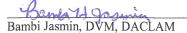
⁷Marshall UK

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.







Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: August 2017	Unit: Influenza –Free		Collection	date: June, .	Jul & Aug 2017
Species: Mustala nutarius fura	D d. F				
Species: Mustela putorius furo	Breed: Ferret		Populated	l: November 2	2015
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD
<u>VIRAL INFECTIONS</u>	0.00				
Aleutians	0/76	0/10	0/36	Blue Cross	PCR (blood)
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA		
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA		
Rotavirus A	0/76	0/10	0/36	MSU^2	PCR (fecal)
Human Influenza (Current Circu	lating Strains)				
A/California/2009 (H1N1) pdm09	0/670	NE	NA	SRI ³	II A I (1-1 1)
B/Phuket/3073/2013	0/670	NE	NA NA	SRI	HAI (blood)
A/Hong Kong/4801/2014	0/287	NE	NA NA	SRI	HAI (blood) HAI (blood)
B/Brisbane/60/2008	0/191	NE	NA NA	SRI	
: :_ :::::::::::::::::::::::::::::::	0/191	NL	IVA	SICI	HAI (blood)
A/Switzerland/9715293/2013 (H3N	2) 0/383	NE	NA	SRI	HAI (blood)
(Screened Dec 2015-July 2016)					11.11 (01004)
BACTERIAL, MYCOPLASMA A		CTIONS			
Bordetella bronchiseptica	0/165	0/10	0/125	Cornell ⁴	Culture (nasal/pharyngeal swab)
Campylobacter species	0/201	0/10	0/161	Cornell	Culture (rectal swab)
Helicobacter species	0/201	0/10	0/161	CRL ⁵	PCR (blood)
Lawsonia intracellularis	0/201	0/10	0/161	CRL	PCR (blood)
Pasteurella multocida	0/165	0/10	0/125	Cornell	Culture (pharyngeal swab)
Salmonella species	0/201	0/10	0/161	Cornell	Culture (rectal swab)
Staphylococcus aureus	26/165	0/10	26/125	Cornell	Culture (rectal swab)
Yersinia enterocolitica	0/165	0/10	0/125	Cornell	Culture (rectal swab)
PARASITOLOGICAL INFECTIO	NNIC				
Coccidia	0/1481	0/10	0/1411		
Dirofilaria immitis		0/10	0/1411		Sodium nitrate (fecal)
Otodectes cynotis	0/40 0/815	0/10	NA 0/705		Snap 4Dx (blood)
Protozoan Parasites:	0/013	0/10	0/785	In house	Microscopy
	0/40	0/10	0/1411		7.57
Cryptosporidium parvum Giardia	0/40 0/70	0/10	NA		PCR (fecal)
Giaiuia	0/ / 0	0/10	NA	In house	Zinc sulfate (fecal)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Abbreviations for methods:

EIA: Enzyme Immunoassay; HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

LABs

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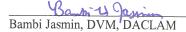
⁵Charles River Laboratories

⁶Marshall Farms

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine. Rabies: Killed rabies virus vaccine.





Date



Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: May 2017	Unit: Influenza –Free		Collection date: Apr 2017			
Species: Mustela putorius furo	Breed: Ferret	Breed: Ferret		Populated: November 2015		
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD	
VIRAL INFECTIONS						
Aleutians	0/66	NE	0/36	Blue Cross ¹	PCR (blood)	
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA			
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR	
Rabies Virus	Vaccinated†	Vaccinated†	NA			
Rotavirus A	0/66	NE	0/36	MSU ²	PCR (fecal)	
Human Influenza (Current Circu	ılating Strains)					
A/California/2009 (H1N1) pdm09	0/670	0/95	NA	SRI ³	HAI (blood)	
B/Phuket/3073/2013	0/670	0/95	NA	SRI	HAI (blood)	
A/Hong Kong/4801/2014	0/287	0/95	NA	SRI	HAI (blood)	
B/Brisbane/60/2008	0/191	0/95	NA	SRI	HAI (blood)	
A/Switzerland/9715293/2013 (H3N (Screened Dec 2015-July 2016)	V2) 0/383	NE	NA	SRI	HAI (blood)	
(Screened Dec 2015-July 2016)			NA	SRI	HAI (blood)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A	AND FUNGAL INFE	CTIONS				
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica	AND FUNGAL INFE 0/155	CCTIONS NE	0/125	Cornell ⁴	Culture (nasal/pharyng	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species	AND FUNGAL INFE 0/155 0/191	CCTIONS NE NE	0/125 0/161	Cornell ⁴	Culture (nasal/pharyng Culture (rectal swab)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species	AND FUNGAL INFE 0/155 0/191 0/191	CCTIONS NE NE NE NE	0/125 0/161 0/161	Cornell ⁴ Cornell CRL ⁵	Culture (nasal/pharyng Culture (rectal swab) PCR (blood)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis	AND FUNGAL INFE 0/155 0/191	CCTIONS NE NE	0/125 0/161 0/161 0/161	Cornell ⁴ Cornell CRL ⁵ CRL	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida	AND FUNGAL INFE 0/155 0/191 0/191 0/191	NE NE NE NE NE NE NE NE	0/125 0/161 0/161 0/161 0/125	Cornell ⁴ Cornell CRL ⁵ CRL Cornell	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw	
(Screened Dec 2015-July 2016)	AND FUNGAL INFE 0/155 0/191 0/191 0/191 0/155	NE	0/125 0/161 0/161 0/161	Cornell ⁴ Cornell CRL ⁵ CRL	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw Culture (rectal swab)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species	AND FUNGAL INFE 0/155 0/191 0/191 0/191 0/155 0/191	NE N	0/125 0/161 0/161 0/161 0/125 0/161	Cornell ⁴ Cornell CRL ⁵ CRL Cornell Cornell	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica	0/155 0/191 0/191 0/191 0/191 0/155 0/191 26/155 0/155	NE N	0/125 0/161 0/161 0/161 0/125 0/161 26/125	Cornell ⁴ Cornell CRL ⁵ CRL Cornell Cornell	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO	0/155 0/191 0/191 0/191 0/191 0/155 0/191 26/155 0/155	NE N	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell ⁴ Cornell CRL ⁵ CRL Cornell Cornell Cornell	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw Culture (rectal swab) Culture (rectal swab) Culture (rectal swab)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO Coccidia	AND FUNGAL INFE 0/155 0/191 0/191 0/191 0/155 0/191 26/155 0/155	NE N	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell ⁴ Cornell CRL ⁵ CRL Cornell Cornell Cornell Cornell	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw Culture (rectal swab) Culture (rectal swab) Culture (rectal swab)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO Coccidia Dirofilaria immitis	0/155 0/191 0/191 0/191 0/191 0/155 0/191 26/155 0/155 0/155	NE N	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell ⁴ Cornell CRL ⁵ CRL Cornell Cornell Cornell Cornell In house ⁶ In house	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal) Snap 4Dx (blood)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO Coccidia Dirofilaria immitis Otodectes cynotis	0/155 0/191 0/191 0/191 0/191 0/155 0/191 26/155 0/155 0/155 0/1471 0/30	NE N	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell ⁴ Cornell CRL ⁵ CRL Cornell Cornell Cornell Cornell	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw Culture (rectal swab) Culture (rectal swab) Culture (rectal swab)	
(Screened Dec 2015-July 2016) BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus	0/155 0/191 0/191 0/191 0/191 0/155 0/191 26/155 0/155 0/155 0/1471 0/30	NE N	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125 0/1411 NA 0/785	Cornell ⁴ Cornell CRL ⁵ CRL Cornell Cornell Cornell Cornell In house ⁶ In house	Culture (nasal/pharyng Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal sw Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal) Snap 4Dx (blood)	

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable

NE=Not examined

Abbreviations for methods:

EIA: Enzyme Immunoassay; HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

¹Blue Cross Animal Hospital, Burley Idaho

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Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.





²Diagnostic Center for Population and Animal Health, Michigan State University

³Southern Research Institute

⁴NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

⁵Charles River Laboratories

⁶Marshall Farms



Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: Mar 2017	Unit: Influenz	Unit: Influenza – Free		Collection date: Feb 2017		
Species: Mustela putorius furo	Breed: Ferret	Breed: Ferret		Populated: November 2015		
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD	
VIRAL INFECTIONS						
Aleutians	0/66	0/10	0/36	Blue Cross	PCR (blood)	
Canine Distemper Virus	Vaccinated†	Vaccinated†	NA			
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR	
Rabies Virus	Vaccinated†	Vaccinated†	NA			
Rotavirus A	0/66	0/10	0/36	MSU^2	PCR (fecal)	
Human Influenza (Current Circu	lating Strains)					
A/California/2009 (H1N1) pdm09	0/575	0/96	NA	SRI^3	HAI (blood)	
B/Phuket/3073/2013	0/575	0/96	NA	SRI	HAI (blood)	
A/Hong Kong/4801/2014	0/192	0/96	NA	SRI	HAI (blood)	
B/Brisbane/60/2008	0/96	0/96	NA	SRI	HAI (blood)	
A/Switzerland/9715293/2013 (H3N	J2) 0/383	NE	NA	SRI	HAI (blood)	
(Screened Dec 2015-July 2016)	,	- 1-		Sid	That (blood)	
DACTEDIAL MANCODI ACMA	AND EURICAL DIEG	CETTONS				
BACTERIAL, MYCOPLASMA A			0/105	C 114		
Bordetella bronchiseptica Campylobacter species	0/1 <i>55</i> 0/191	0/10	0/125	Cornell ⁴	Culture (nasal/pharyngeal s	
Helicobacter species	0/191	0/10	0/161	Cornell	Culture (rectal swab)	
Lawsonia intracellularis		0/10	0/161	CRL ⁵	PCR (blood)	
Pasteurella multocida	0/191	0/10	0/161	CRL	PCR (blood)	
	0/155 0/191	0/10	0/125	Cornell	Culture (pharyngeal swab)	
Salmonella species		0/10	0/161	Cornell	Culture (rectal swab)	
Staphylococcus aureus Yersinia enterocolitica	26/155	0/10	26/125	Cornell	Culture (rectal swab)	
i ersinia enterocolitica	0/155	0/10	0/125	Cornell	Culture (rectal swab)	
PARASITOLOGICAL INFECTIO						
Coccidia	0/1471	0/10	0/1411	In house ⁶	Sodium nitrate (fecal)	
Dirofilaria immitis	0/30	0/10	NA	In house	Snap 4Dx (blood)	
Otodectes cynotis	0/805	0/10	0/785	In house	Microscopy	
Protozoan Parasites:			0/1411			
Cryptosporidium parvum	0/30	0/10	NA	Cornell	PCR (fecal)	
Giardia	0/60	0/10	NA	In house	Zinc sulfate (fecal)	

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable

NE=Not examined

Abbreviations for methods:

EIA: Enzyme Immunoassay; HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

¹Blue Cross Animal Hospital, Burley Idaho

²Diagnostic Center for Population and Animal Health, Michigan State University

³Southern Research Institute

⁴NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

⁵Charles River Laboratories

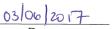
†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.





⁶Marshall Farms



Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: Nov 2016	Unit: Influenza –Free		Collection	16	
Species: Mustela putorius furo	Breed: Ferret	ret Populated: November 2015			2015
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD
VIRAL INFECTIONS Aleutians	0/56	NIE.	0/06	·	
Canine Distemper Virus	Vaccinated†	NE Vaccinated†	0/36	Blue Cross	PCR (blood)
Ferret Coronavirus (Enteric)	36/36	NE	NA	37/4	D.C.D.
Rabies Virus	Vaccinated†	NE Vaccinated†	36/36 NA	N/A	PCR
Rotavirus A	0/56	NE	0/36	MSU ⁶	PCR (fecal)
H 10 (6)					1 511 (10011)
Human Influenza (Current Circu		0.10.6	37.4	c= x2	
A/California/2009 (H1N1) pdm09 B/Phuket/3073/2013	0/479 0/479	0/96	NA	SRI ³	HAI (blood)
		0/96	NA	SRI	HAI (blood)
A/Hong Kong/4801/2014	0/96	0/96	NA	SRI	HAI (blood)
A/Switzerland/9715293/2013 (H3N	(2) 0/383	NE	NA	SRI	HAI (blood)
(Screened Dec 2015-July 2016)			1421	SICI	min (blood)
• ,	,		TVI	SKI	Title (olood)
BACTERIAL, MYCOPLASMA A	ND FUNGAL INFE	CTIONS			
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica	ND FUNGAL INFE	CTIONS NE	0/125	Cornell ²	Culture (nasal/pharyngeal swał
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species	ND FUNGAL INFE 0/145 0/181	CTIONS NE NE	0/125 0/161	Cornell ² Cornell	Culture (nasal/pharyngeal swal Culture (rectal swab)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species	ND FUNGAL INFE 0/145 0/181 0/181	CTIONS NE NE NE NE	0/125 0/161 0/161	Cornell ² Cornell CRL ⁴	Culture (nasal/pharyngeal swab Culture (rectal swab) PCR (blood)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis	ND FUNGAL INFE 0/145 0/181 0/181 0/181	CTIONS NE NE NE NE NE	0/125 0/161 0/161 0/161	Cornell ² Cornell CRL ⁴ CRL	Culture (nasal/pharyngeal swał Culture (rectal swab) PCR (blood) PCR (blood)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida	0/145 0/181 0/181 0/181 0/181 0/145	CTIONS NE NE NE NE NE NE NE NE	0/125 0/161 0/161 0/161 0/125	Cornell ² Cornell CRL ⁴ CRL Cornell	Culture (nasal/pharyngeal swał Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species	ND FUNGAL INFE 0/145 0/181 0/181 0/181 0/145 0/181	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell	Culture (nasal/pharyngeal swab Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus	ND FUNGAL INFE 0/145 0/181 0/181 0/181 0/145 0/181 26/145	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell	Culture (nasal/pharyngeal swab Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species	ND FUNGAL INFE 0/145 0/181 0/181 0/181 0/145 0/181	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell	Culture (nasal/pharyngeal swab Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO	0/145 0/181 0/181 0/181 0/181 0/181 0/145 0/181 26/145 0/145	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell	Culture (nasal/pharyngeal swab Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO Coccidia	0/145 0/181 0/181 0/181 0/181 0/181 0/145 0/181 26/145 0/145	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell Cornell	Culture (nasal/pharyngeal swab) Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO	0/145 0/181 0/181 0/181 0/181 0/181 0/145 0/181 26/145 0/145	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell Cornell Cornell	Culture (nasal/pharyngeal swab) Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO Coccidia	0/145 0/181 0/181 0/181 0/181 0/181 0/145 0/181 26/145 0/145 0/145 0/145	CTIONS NE NE NE NE NE NE NE NE NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell Cornell Cornell In house ⁵ In house	Culture (nasal/pharyngeal swał Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal) Snap 4Dx (blood)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO Coccidia Dirofilaria immitis Otodectes cynotis Protozoan Parasites:	0/145 0/181 0/181 0/181 0/181 0/181 0/145 0/181 26/145 0/145 0/145 0/1461 0/20	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell Cornell Cornell In house ⁵ In house	Culture (nasal/pharyngeal swab) Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal)
BACTERIAL, MYCOPLASMA A Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Yersinia enterocolitica PARASITOLOGICAL INFECTIO Coccidia Dirofilaria immitis Otodectes cynotis	0/145 0/181 0/181 0/181 0/181 0/181 0/145 0/181 26/145 0/145 0/145 0/1461 0/20	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125 0/1411 NA 0/785	Cornell ² Cornell CRL ⁴ CRL Cornell Cornell Cornell Cornell In house ⁵ In house In house	Culture (nasal/pharyngeal swał Culture (rectal swab) PCR (blood) PCR (blood) Culture (pharyngeal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal) Snap 4Dx (blood)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Abbreviations for methods:

EIA: Enzyme Immunoassay; HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

LABs:

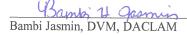
¹Blue Cross Animal Hospital, Burley Idaho

†Vaccinations:

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Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.





Date

²NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

³Southern Research Institute

⁴Charles River Laboratories

Marshall Farms

⁶Diagnostic Center for Population and Animal Health, Michigan State University



Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: Sep 2016	Unit: Influenza –Negative		Collection	date: Aug 20	016
Species: Mustela putorius furo	Breed: Ferret		Populated	015	
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD
VIRAL INFECTIONS Aleutians	0/56	0/10	0/36	Diva Casal	PCR (blood)
			0/36 NA	Blue Cross	PCR (blood)
Canine Distemper Virus Ferret Coronavirus (Enteric)	Vaccinated† 36/36	Vaccinated† NE	NA 36/36	N/A	PCR
Rabies Virus	Vaccinated†	Vaccinated†	NA	IN/A	rck
Rotavirus A	0/56	0/10	0/36	MSU ⁶	PCR (fecal)
Rotavirus A	0/30	0/10	0/30	MSU	rck (lecal)
Human Influenza (Current Circula	ting Strains)				
A/California/2009 (H1N1)pdm09	0/383	NE	NA	SRI ³	HAI (blood)
A/Switzerland/9715293/2013 (H3N2		NE	NA	SRI	HAI (blood)
B/Phuket/3073/2013	0/383	NE	NA	SRI	HAI (blood)
B/1 Huke(/30/3/2013	0/303	NL	1471	SKI	That (blood)
BACTERIAL, MYCOPLASMA AN	ID ELINCAL INDE	CTIONS			
Bordetella bronchiseptica	0/145	0/10	0/125	Cornell ²	Culture (nasal/pharyngeal swab
Campylobacter species	0/143	0/10	0/123	Cornell	Culture (rectal swab)
Helicobacter species	0/181	0/10	0/161	CRL ⁴	PCR (blood)
Lawsonia intracellularis	0/181	0/10	0/161	CRL	PCR (blood)
Pasteurella multocida	0/181	0/10	0/101	Cornell	
	0/143		0/125	Cornell	Culture (pharyngeal swab)
Salmonella species		0/10			Culture (rectal swab)
Staphylococcus aureus	26/145	0/10	26/125	Cornell	Culture (rectal swab)
Yersinia enterocolitica	0/145	0/10	0/125	Cornell	Culture (rectal swab)
PARASITOLOGICAL INFECTION	NS				
Coccidia	0/1461	NE	0/1411	In house ⁵	Sodium nitrate (fecal)
Dirofilaria immitis	0/20	0/10	NA	In house	Snap 4Dx (blood)
Otodectes cynotis	0/795	NE	0/785	In house	Microscopy
Protozoan Parasites:	0,770	112	0/1411	III IIOUSC	метовору
Cryptosporidium parvum	0/20	0/10	NA	CRL	PCR (fecal)
Giardia	0/50	NE	NA	In house	Zinc sulfate (fecal)
Jiaidia	0,00	111	1111	III IIUuse	Zine surface (recar)

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable

NE=Not examined

Abbreviations for methods:

EIA: Enzyme Immunoassay; HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

LABs

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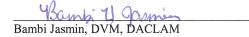
⁶Diagnostic Center for Population and Animal Health, Michigan State University

†Vaccinations

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Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.







Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: July, 2016	Unit: Influenza -Negative		Collection	Collection date: July, 2016		
Species: Mustela putorius furo	Breed: Ferret		Populated: November 2015			
	CUMULATIVE	CURRENT TEST	HISTORICAL	LAB	METHOD	
	RESULTS	RESULTS	RESULTS*	LIND	METHOD	
VIRAL INFECTIONS		1440111	1000215			
Aleutians	0/46	NE	0/36	Blue Cross ¹	PCR (blood)	
Canine Distemper Virus	Vaccinated [†]	Vaccinated [†]	NA	Diag Cross	1011 (01000)	
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR	
Rabies Virus	Vaccinated†	Vaccinated [†]	NA		1 011	
Rotavirus A	0/46	NE	0/36	Cornell ²	PCR (fecal)	
Human Influenza (Current Circulat	ing Strains)					
A/California/2009 (H1N1)pdm09	0/383	0/96	NA	SRI ³	HAI (blood)	
\Switzerland/9715293/2013 (H3N2)		0/96	NA	SRI	HAI (blood)	
	0/383	0/96	NA	SRI	HAI (blood)	
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN	<u>D FUNGAL INFE</u>	CTIONS				
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica	<u>D FUNGAL INFE</u> 0/135	CTIONS NE	0/125	Cornell	Culture (nasal/pharyngeal	
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species	D FUNGAL INFE 0/135 0/171	CTIONS NE NE	0/125 0/161	Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab)	
3/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species	D FUNGAL INFE 0/135 0/171 0/171	CTIONS NE NE NE NE	0/125 0/161 0/161	Cornell CRL ⁴	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood)	
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis	D FUNGAL INFE 0/135 0/171 0/171 0/171	CTIONS NE NE NE NE NE	0/125 0/161 0/161 0/161	Cornell Cornell CRL ⁴ CRL	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood)	
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135	CTIONS NE NE NE NE NE NE NE NE	0/125 0/161 0/161 0/161 0/125	Cornell CorL CRL Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab)	
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135 0/171	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161	Cornell Cornell CRL CRL Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab)	
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135 0/171 26/135	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125	Cornell Cornell CRL ⁴ CRL Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab) Culture (rectal swab)	
BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Calmonella species Etaphylococcus aureus	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135 0/171	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161	Cornell Cornell CRL CRL Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab)	
BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species delicobacter species awsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Versinia enterocolitica	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/171 0/135 0/171 26/135 0/135	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell Cornell CRL ⁴ CRL Cornell Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab)	
3/Phuket/3073/2013 3ACTERIAL MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Persinia enterocolitica	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135 0/171 26/135 0/135 0/135 S 0/1461	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125	Cornell Cornell CRL ⁴ CRL Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab) Culture (rectal swab)	
BACTERIAL, MYCOPLASMA AN BORDERIAL, MYCOPLASMA AN BORDERIAL MYCOPLASMA AND BORDERIAL	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/171 0/135 0/171 26/135 0/135	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell Cornell CRL ⁴ CRL Cornell Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab)	
BACTERIAL MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species delicobacter species awsonia intracellularis dalmonella species daphylococcus aureus dersinia enterocolitica CARASITOLOGICAL INFECTION Coccidia Dirofilaria immitis biodectes cynotis	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135 0/171 26/135 0/135 0/135 S 0/1461	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125 0/1411 NA 0/785	Cornell Cornell CRL CRL Cornell Cornell Cornell Cornell	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab)	
BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species delicobacter species awsonia intracellularis dalmonella species dampylococcus aureus dersinia enterocolitica PARASITOLOGICAL INFECTION Coccidia Dirofilaria immitis Diodectes cynotis rrotozoan Parasites:	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135 0/171 26/135 0/135 0/135 S 0/1461 0/10 0/795	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125	Cornell Cornell CRL ⁴ CRL Cornell Cornell Cornell Cornell In house ⁵ In house	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal) Snap 4Dx (blood)	
B/Phuket/3073/2013 BACTERIAL, MYCOPLASMA AN Bordetella bronchiseptica Campylobacter species Helicobacter species Lawsonia intracellularis Pasteurella multocida Salmonella species Staphylococcus aureus Parasitica enterocolitica PARASITOLOGICAL INFECTION Coccidia Dirofilaria immitis Diodectes cynotis Protozoan Parasites: Cryptosporidium parvum	D FUNGAL INFE 0/135 0/171 0/171 0/171 0/135 0/171 26/135 0/135 0/135 S 0/1461 0/10	CTIONS NE	0/125 0/161 0/161 0/161 0/125 0/161 26/125 0/125 0/1411 NA 0/785	Cornell Cornell CRL ⁴ CRL Cornell Cornell Cornell Cornell In house ⁵ In house	Culture (nasal/pharyngeal Culture (rectal swab) PCR (blood) PCR (blood) Culture (tracheal swab) Culture (rectal swab) Culture (rectal swab) Culture (rectal swab) Sodium nitrate (fecal) Snap 4Dx (blood)	

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Distemper: Monovalent modified live distemper virus vaccine.

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Jeff DiMayo, DVM, Date

¹Blue Cross Animal Hospital, Burley Idaho

²NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

³Southern Research Institute

⁴Charles River Laboratories

⁵Marshall Farms



Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: May, 2016	Unit: Influenza - Negative Collection			date: May, 2	2016	
Species: Mustela putorius furo	Breed: Ferret	Breed: Ferret		Populated: November 2015		
	CUMULATIVE RESULTS	CURRENT TEST RESULTS	HISTORICAL RESULTS*	LAB	METHOD	
VIRAL INFECTIONS						
Aleutians	0/46	NE	0/36	Blue Cross ¹	PCR (blood)	
Canine Distemper Virus	Vaccinated [†]	Vaccinated [†]	NA			
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR	
Rabies Virus	Vaccinated [†]	Vaccinated [†]	NA			
Rotavirus A	0/46	NE	0/36	Cornell ²	PCR (fecal)	
Human Influenza (Current Circula	ting Strains)					
A/California/2009 (H1N1)pdm09	0/287	0/96	NA	SRI ³	HAI (blood)	
A/Switzerland/9715293/2013 (H3N2)	0/287	0/96	NA	SRI	HAI (blood)	
B/Phuket/3073/2013	0/287	0/96	NA	SRI	HAI (blood)	
					,	
BACTERIAL, MYCOPLASMA AN	D FUNGAL INFE	<u>CTIONS</u>				
Bordetella bronchiseptica	0/135	NE	0/125	Cornell	Culture (nasal/pharyngeal swab)	
Campylobacter species	0/171	NE	0/161	Cornell	Culture (rectal swab)	
Helicobacter species	0/171	NE	0/161	CRL ⁴	PCR (blood)	
Lawsonia intracellularis	0/171	NE	0/161	CRL	PCR (blood)	
Pasteurella multocida	0/135	NE	0/125	Cornell	Culture (tracheal swab)	
Salmonella species	0/171	NE	0/161	Cornell	Culture (rectal swab)	
Staphylococcus aureus	26/135	NE	26/125	Cornell	Culture (rectal swab)	
Yersinia enterocolitica	0/135	NE	0/125	Cornell	Culture (rectal swab)	
PARASITOLOGICAL INFECTION	IS					
Coccidia	0/1441	0/20	0/1411	In house ⁵	Sodium nitrate (fecal)	
Dirofilaria immitis	0/10	NE	NA	In house	Snap 4Dx (blood)	
Otodectes cynotis	0/795	NE	0/785	In house	Microscopy	
Protozoan Parasites:	-		0/1411	III HOUSE	минестру	
Cryptosporidium parvum	0/10	NE	NA	Cornell	PCR (fecal)	
Giardia	0/30	0/20	NA	In house	Zinc sulfate (fecal)	
		J J	* ***	AL HOUSE	Zano surtate (total)	

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Abbreviations for methods:

EIA: Enzyme Immunoassay; HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

¹Blue Cross Animal Hospital, Burley Idaho

²NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

³Southern Research Institute

Charles River Laboratories

⁵Marshall Farms

†Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.

7/27/2016



Name and address of the breeder: Marshall Farms Group, Ltd., North Rose NY

Date of issue: February, 2016	Unit: Influenza - Negative		Collection	Collection date: January 5, 2016		
Species: Mustela putorius furo	Breed: Ferret		Populated	2015		
	CUMULATIVE	CURRENT TEST	HISTORICAL	LAB	METHOD	
	RESULTS	RESULTS	RESULTS*		WEITIOD	
VIRAL INFECTIONS		1-1-1-1	1230215			
Aleutians	0/46	0/10	0/36	Blue Cross ¹	PCR (blood)	
Ferret Coronavirus (Enteric)	36/36	NE	36/36	N/A	PCR	
Rotavirus A	0/46	0/10	0/36	Cornell ²	PCR (fecal)	
Human Influenza (Current Circula	ting Strains)					
A/California/2009 (H1N1)pdm09	0/191	NE	NA	SRI ³	HAI (blood)	
A/Switzerland/9715293/2013 (H3N2)) 0/191	NE	NA	SRI	HAI (blood)	
B/Phuket/3073/2013	0/191	NE	NA	SRI	HAI (blood)	
BACTERIAL, MYCOPLASMA AN	ID FUNGAL INFE	CTIONS				
Bordetella bronchiseptica	0/135	0/10	0/125	Cornell	Culture (nasal/pharyngeal swab	
Campylobacter species	0/171	0/10	0/161	Cornell	Culture (rectal swab)	
Helicobacter species	0/171	0/10	0/161	CRL ⁴	PCR (blood)	
Lawsonia intracellularis	0/171	0/10	0/161	CRL	PCR (blood)	
Pasteurella multocida	0/135	0/10	0/125	Cornell	Culture (tracheal swab)	
Salmonella species	0/171	0/10	0/161	Cornell	Culture (rectal swab)	
Staphylococcus aureus	26/135	0/10	26/125	Cornell	Culture (rectal swab)	
Yersinia enterocolitica	0/135	0/10	0/125	Cornell	Culture (rectal swab)	
PARASITOLOGICAL INFECTION	<u>IS</u>					
Coccidia	0/1421	0/10	0/1411	In house ⁵	Sodium nitrate (fecal)	
Dirofilaria immitis	0/10	0/10	NA	In house	Snap 4Dx (blood)	
Otodectes cynotis	0/795	0/10	0/785	In house	Microscopy	
Protozoan Parasites:			0/1411		• •	
Cryptosporidium parvum	0/10	0/10	NA	Cornell	PCR (fecal)	
Giardia	0/10	0/10	NA	In house	Zinc sulfate (fecal)	

^{*}Historical Results are those reported before the colony was established at our facilities in New York.

NA=Not applicable NE=Not examined

Abbreviations for methods:

EIA: Enzyme Immunoassay; HAI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

I A Re

¹Blue Cross Animal Hospital, Burley Idaho

²NYS Animal Health Diagnostic Laboratory, College of Veterinary Medicine, Cornell University

³Southern Research Institute

⁴Charles River Laboratories

⁵Marshall Farms

Vaccinations:

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. Product designation, lot number/expiration date, age/frequency of administration and dosage, as applicable, are noted. A description of the current immunization regimen is included in the Routine Vaccination and Treatment Procedures document.

Distemper: Monovalent modified live distemper virus vaccine.

Rabies: Killed rabies virus vaccine.





Exhibit 2





Customer/NVS Demetris Markou Order Number:

Requesting Site : Marshall UK Testing Laboratory: Marshall UK

> The Field Station Laboratories,

Grimston Grimston

Aldbrough, Hull Aldbrough, Hull East Yorkshire East Yorkshire

HU11 4QE HU11 4QE

M,21.0000638.F Animal Source UNIT 5+6 Lab No Species MUSTELA PUTORIUS FURO 06.04.2021 Collected :

Animal Ref FERRET Received : 06.04.2021

No. of Animals : Specimen HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months.

Monthly testing indicates negative for antibodies against A/Tasmania/503/2020 V1 A/Victoria/1/2020 V7 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings

Colony screens have identified a historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.





Lab No M,21.0000638.F Animal Source : UNIT 5+6 06.04.2021 Animal Ref FERRET Collected

Species MUSTELA PUTORIUS FURO Received 06.04.2021 :

No. of Animals : 15 Specimen HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 06.04.2021

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 06.04.2021

Screened Annually: Aleutians, Canine Distemper Virus, Ferret Coronavirus.

Date of last Screen: 05.01.2021





Customer/NVS

: Demetris Markou

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station Grimston

Laboratories, Grimston

Aldbrough, Hull

Aldbrough, Hull

East Yorkshire

East Yorkshire HU11 4QE

HU11 40E

Animal Source

UNIT 5+6

Lab No

M,21.0000378.J

Species

MUSTELA PUTORIUS FURO

Collected :

01.03.2021

Animal Ref

FERRET

Received

01.03.2021

No. of Animals : 15 Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months.

Monthly testing indicates negative for antibodies against A/Hawaii/66/2019 A/Hong Kong/2671/2019 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings

Colony screens have identified a historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.





Animal Source : UNIT 5+6 Lab No M,21.0000378.J Animal Ref : FERRET Collected : 01.03.2021

Species MUSTELA PUTORIUS FURO Received : 01.03.2021

No. of Animals : HEALTH MONITORING Specimen

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 01.03.2021

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 05.01.2021

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 05.01.2021





Customer/NVS Demetris Markou Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station Grimston

Laboratories, Grimston

Aldbrough, Hull

Aldbrough, Hull East Yorkshire

East Yorkshire

HU11 4QE

HU11 40E

UNIT 5+6

Lab No

M,21.0000162.V

Species

MUSTELA PUTORIUS FURO

Collected :

01.02.2021

Animal Ref

Animal Source

Received

01.02.2021

No. of Animals

FERRET 15

Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months.

Monthly testing indicates negative for antibodies against A/Hawaii/66/2019 A/Hong Kong/2671/2019 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified a historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.



Animal Source UNIT 5+6 Lab No M,21.0000162.V Animal Ref FERRET Collected : 01.02.2021

Species MUSTELA PUTORIUS FURO 01.02.2021 Received

No. of Animals : HEALTH MONITORING 15 Specimen

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/225	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 01.02.2021

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 05.01.2021

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 05.01.2021







Customer/NVS

: Demetris Markou

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK Laboratories,

The Field Station Grimston

Grimston

HU11 4QE

Aldbrough, Hull

Aldbrough, Hull

East Yorkshire

East Yorkshire

HU11 4QE

Animal Source :

UNIT 5+6

Lab No

M,21.0000104.B

Species

MUSTELA PUTORIUS FURO

Collected :

05.01.2021

Animal Ref

FERRET

Received

05.01.2021

No. of Animals : 15 Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months

Monthly testing indicates negative for antibodies against A/Hawaii/66/2019 A/Hong Kong/2671/2019 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified a historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.

Final Report



BIORESOURCES

Animal Source : UNIT 5+6 Lab No M,21.0000104.B Animal Ref FERRET Collected : 05.01.2021

: MUSTELA PUTORIUS FURO Received 05.01.2021 :

No. of Animals : 15 HEALTH MONITORING Specimen :

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/225	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 05.01.2021

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 05.01.2021

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 05.01.2021







: Demetris Markou

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station Grimston

Laboratories, Grimston

Aldbrough, Hull East Yorkshire

Aldbrough, Hull East Yorkshire

HU11 4QE

HU11 4QE

Animal Source

UNIT 5+6

Lab No

M,20.0001651.Q

Species

MUSTELA PUTORIUS FURO :

Collected :

02.11.2020

Animal Ref

FERRET

Received

02.11.2020

No. of Animals :

Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months.

Monthly testing indicates negative for antibodies against A/Hawaii/66/2019 A/Hong Kong/2671/2019 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings

Colony screens have identified a historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.



Animal Source : UNIT 5+6 Lab No M,20.0001651.Q Collected : Animal Ref : FERRET 02.11.2020

Species : MUSTELA PUTORIUS FURO Received 02.11.2020

No. of Animals : 15 Specimen HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	NT	0/10	PCR
Canine Distemper Virus	0/10	NT	0/10	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 02.11.2020

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 06.10.2020

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 07.01.2020





: Demetris Markou

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station

Laboratories, Grimston

Grimston Aldbrough, Hull

Aldbrough, Hull

HU11 4QE

East Yorkshire

East Yorkshire

HU11 4QE

Animal Source

UNIT 5+6

Lab No

M,20.0001538.B

Species

MUSTELA PUTORIUS FURO

Collected :

06.10.2020

Animal Ref

FERRET 15

Received

06.10.2020

No. of Animals :

Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months.

Monthly testing indicates negative for antibodies against A/Hawaii/66/2019 A/Hong Kong/2671/2019 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings

Colony screens have identified a historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.



Animal Source : UNIT 5+6 Lab No M,20.0001538.B : FERRET Animal Ref Collected : 06.10.2020 Species MUSTELA PUTORIUS FURO Received : 06.10.2020

No. of Animals : 15 Specimen HEALTH MONITORING :

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	NT	0/10	PCR
Canine Distemper Virus	0/10	NT	0/10	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 06.10.2020

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 06.10.2020

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 07.01.2020





Customer/NVS Demetris Markou Order Number:

Requesting Site : Marshall UK Testing Laboratory: Marshall UK

> The Field Station Laboratories,

Grimston Grimston

Aldbrough, Hull Aldbrough, Hull East Yorkshire East Yorkshire

HU11 40E HU11 40E

Animal Source UNIT 5+6 Lab No M,20.0001380.B

Species MUSTELA PUTORIUS FURO Collected : 01.09.2020 Animal Ref FERRET Received 01.09.2020

No. of Animals 15 Specimen HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months.

Monthly testing indicates negative for antibodies against A/Hawaii/66/2019 A/Hong Kong/2671/2019 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified a historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.

M,20.0001380.B



BIORESOURCES

Animal Source : UNIT 5+6 Lab No FERRET Collected : Animal Ref

01.09.2020 Species MUSTELA PUTORIUS FURO Received : 01.09.2020

No. of Animals : 15 Specimen : HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	NT	0/10	PCR
Canine Distemper Virus	0/10	NT	0/10	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 01.09.2020

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella

bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species.

Date of last Screen 30.06.2020

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 07.01.2020





Demetris Markou

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station

Laboratories, Grimston

HU11 4QE

Grimston Aldbrough, Hull

Aldbrough, Hull

East Yorkshire

East Yorkshire

HU11 4QE

Animal Source

UNIT 5+6

Lab No

M,20.0000964.A

Species

MUSTELA PUTORIUS FURO

Collected :

02.06.2020

Animal Ref

FERRET

Received

02.06.2020

No. of Animals

Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony Cumulative data upto 18 months.

Monthly testing indicates negative for antibodies against A/Hawaii/66/2019 A/Hong Kong/2671/2019 B/Phuket/3073/2013 B/Washington/02/2019

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.





Animal Source : UNIT 5+6 Lab No M,20.0000964.A Animal Ref Collected : FERRET 02.06.2020 Species MUSTELA PUTORIUS FURO Received : 02.06.2020

No. of Animals : Specimen HEALTH MONITORING :

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/225	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 02.06.2020

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 02.04.2020

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 07.01.2020





: Demetris Markou

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK Laboratories,

The Field Station

Grimston

Grimston Aldbrough, Hull

Aldbrough, Hull East Yorkshire

East Yorkshire HU11 4QE

HU11 4QE

Animal Source

: UNIT 5+6

Lab No

M,20.0000679.C

Species

: MUSTELA PUTORIUS FURO

Collected :

Received :

:

02.04.2020 02.04.2020

Animal Ref : FERRET No. of Animals : 15

Specimen :

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months

Monthly testing indicates negative for antibodies against A/Kansas/14/2017 A/Switzerland/3330/2017 B/Colorado/06/2017 B/Phuket/3073/2013

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.



Animal Source : UNIT 5+6 Lab No M,20.0000679.C Animal Ref : FERRET Collected : 02.04.2020

Species : MUSTELA PUTORIUS FURO Received 02.04.2020

No. of Animals : 15 Specimen HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 02.04.2020

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 02.04.2020

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 07.01.2020







: Demetris Markou

Order Number:

Requesting Site : Marshall UK

Testing Laboratory:

Marshall UK

The Field Station

Laboratories, Grimston

Grimston

Aldbrough, Hull

Aldbrough, Hull East Yorkshire

East Yorkshire

HU11 4QE

HU11 4QE

Animal Source :

UNIT 5+6

Lab No

M,20.0000596.W

Species

MUSTELA PUTORIUS FURO :

Collected :

03.03.2020

Received

03.03.2020

Animal Ref No. of Animals :

FERRET

Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months

Monthly testing indicates negative for antibodies against A/Kansas/14/2017 A/Switzerland/3330/2017 B/Colorado/06/2017 B/Phuket/3073/2013

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.





Animal Source : UNIT 5+6

Animal Ref FERRET

Species MUSTELA PUTORIUS FURO

No. of Animals : 15

Lab No M,20.0000596.W

Collected 03.03.2020 Received 03.03.2020 :

Specimen HEALTH MONITORING :

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi Helicobacter species	0/10	0/50	0/60	DCD
Lawsonia intracellularis	0/10	0/50	0/60	PCR PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 03.03.2020

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 07.01.2020

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 07.01.2020





: Duncan Miller NVS

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station

Laboratories, Grimston

Grimston Aldbrough, Hull

Aldbrough, Hull

East Yorkshire

East Yorkshire

HU11 4QE

HU11 40E

Animal Source :

UNIT 5+6

Lab No

M, 19.0002023.G

Species

MUSTELA PUTORIUS FURO

Collected :

03.12.2019

Animal Ref

FERRET

Received

03.12.2019

No. of Animals :

:

:

15

. Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months

Monthly testing indicates negative for antibodies against A/Kansas/14/2017 A/Switzerland/3330/2017 B/Colorado/06/2017 B/Phuket/3073/2013

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.





BIORESOURCES

Animal Source : UNIT 5+6 Lab No M,19.0002023.G : FERRET Collected : Animal Ref

03.12.2019 Species MUSTELA PUTORIUS FURO Received : 03.12.2019

No. of Animals : 15 Specimen HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 03.12.2019

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 01.10.2019

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 03.01.2019



BIORESOURCES

Customer/NVS

Duncan Miller NVS

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station

Laboratories,

Grimston

Grimston

Aldbrough, Hull East Yorkshire

Aldbrough, Hull East Yorkshire

HU11 4QE

HU11 4QE

Animal Source :

UNIT 5+6

Lab No

M, 19.0001791.R

Species

: MUSTELA PUTORIUS FURO

Collected :

05.11.2019

Animal Ref

FERRET

Received :

05.11.2019

No. of Animals :

Specimen :

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months

Monthly testing indicates negative for antibodies against A/Kansas/14/2017 A/Switzerland/3330/2017 B/Colorado/06/2017 B/Phuket/3073/2013

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.





Animal Source UNIT 5+6 Lab No M,19.0001791.R : Animal Ref : FERRET Collected : 05.11.2019

: MUSTELA PUTORIUS FURO Species Received : 05.11.2019

No. of Animals : 15 Specimen : HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 05.11.2019

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 01.10.2019

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 03.01.2019







Customer/NVS Duncan Miller NVS Order Number: :

Marshall UK Requesting Site : Testing Laboratory: Marshall UK

> The Field Station Laboratories,

Grimston Grimston

Aldbrough, Hull Aldbrough, Hull East Yorkshire East Yorkshire

HU11 4QE HU11 4QE

UNIT 5+6 Animal Source Lab No M,19.0001647.B Species MUSTELA PUTORIUS FURO Collected : 01.10.2019

Animal Ref FERRET Received 01.10.2019

No. of Animals : HEALTH MONITORING Specimen

ANIMAL HEALTH MONITORING REPORT

Colony cumulative data up to 18 months

Monthly testing indicates negative for antibodies against A/Kansas/14/2017 A/Switzerland/3330/2017 B/Colorado/06/2017 B/Phuket/3073/2013

Summary of Recent Colony Screen: No Significant Findings.

Colony screens have identified historical presence of Bordetella bronchiseptica last isolated 13/02/2018. Ferret Coronavirus present since colony establishment.

Final Report



Animal Source : UNIT 5+6 Lab No M,19.0001647.B : : FERRET Animal Ref Collected : 01.10.2019

Species MUSTELA PUTORIUS FURO Received : 01.10.2019 No. of Animals : 15 Specimen : HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
Human Influenza Virus	0/15	0/255	0/270	Haemagglutination Inhibition
Rotavirus A	0/10	0/50	0/60	EIA
Aleutians	0/10	0/10	0/20	PCR
Canine Distemper Virus	0/10	0/10	0/20	ELISA
Bacteria, Parasites and Fungi Helicobacter species	0/10	0/50	0/60	PCR
Lawsonia intracellularis	0/10	0/50	0/60	PCR
Pasteurella multocida	0/10	0/50	0/60	Culture
Bordetella bronchiseptica	0/10	0/50	0/60	Culture
Yersinia enterocolitica	0/10	0/50	0/60	Culture
Campylobacter species	0/10	0/50	0/60	Culture .
Salmonella species	0/10	0/50	0/60	Culture
Coccidia	0/10	0/50	0/60	Microscopy
Otodectes cynotis	0/10	0/50	0/60	Microscopy
Cryptosporidium parvum/Giardia	a 0/10	0/50	0/60	EIA

Screened Monthly: Human Influenza Virus. Date of Last screen: 01.10.2019

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 01.10.2019

Screened Annually: Aleutians, Canine Distemper Virus.

Date of last Screen: 03.01.2019







Duncan Miller

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station Grimston

Laboratories, Grimston

Aldbrough, Hull

Aldbrough, Hull

East Yorkshire

East Yorkshire

HU11 4QE

HU11 40E

Animal Source :

UNIT 5+6

Lab No

M,17.0000939.M

Species

MUSTELA PUTORIUS FURO

Collected :

04.07.2017

Animal Ref

FERRET

Received :

04.07.2017

No. of Animals :

15

:

Specimen : HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Monthly testing indicates negative for antibodies against A/New Caledonia/71/2014
A/Slovenia/2903/2015
B/Brisbane/60/2008
B/Phuket/3073/2013

Summary Report : No Significant Findings.





M,17.0000939.M Animal Source UNIT 5+6 Lab No

Animal Ref FERRET Collected 04.07.2017 : 04.07.2017 Species MUSTELA PUTORIUS FURO Received ٠

HEALTH MONITORING No. of Animals : Specimen 15

		_			
Ī	Viruses	Latest	Historical	Cumulative	
		Results	Results	Results	Method
	Human Influenza Virus	0/15	0/514	0/529	Haemagglutination Inhibition
	Rotavirus A	0/6	0/70	0/76	EIA
	Aleutians	0/10	0/30	0/40	PCR
	Canine distemper virus	0/10	0/30	0/40	ELISA
	Ferret Coronavirus	NT	9/10	9/10	PCR
	Bacteria, Parasites and Fungi				2
	Helicobacter species	0/10	0/110	0/120	PCR
	Lawsonia intracellularis	0/10	0/110	0/120	PCR
	Pasteurella multocida	0/10	0/125	0/135	Culture
	Bordetella bronchiseptica	0/10	0/120	0/130	Culture
	Yersinia enterocolitica	0/10	0/120	0/130	Culture
	Campylobacter species	0/10	0/120	0/130	Culture
	Salmonella species	0/10	0/120	0/130	Culture
	Coccidia	0/10	0/110	0/120	Microscopy
	Otodectes cynotis	0/10	0/120	0/130	Microscopy
	Cryptosporidium parvum/Giardia	0/10	0/110	0/120	EIA
	Dirofilaria immitis	0/10	0/30	0/40	Knott's Test

Screened Monthly: Human Influenza Virus. Date of Last screen: 04.07.2017

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species. Date of last Screen 04.07.2017

Screened Annually: Aleutians, Canine Distemper Virus, Dirofilaria immitis.

Date of last Screen: 11.01.2017





: Duncan Miller

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station

Laboratories,

Grimston

Grimston

Aldbrough, Hull East Yorkshire Aldbrough, Hull East Yorkshire

HU11 40E

HU11 4QE

Animal Source

UNIT 5+6

Lab No

M, 17.0000529.Y

Species

No. of Animals :

MUSTELA PUTORIUS FURO

Collected :

04.04.2017

Animal Ref : FERRET

:

Received

04.04.2017

14

Specimen

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Monthly testing indicates negative for antibodies against A/New Caledonia/71/2014
A/Solvenia/2903/2015
B/Brisbane/60/2008
B/Phuket/3073/2013

Summary Report : No Significant Findings.





BIORESOURCES

Animal Source : UNIT 5+6 Animal Ref

Species MUSTELA PUTORIUS FURO

FERRET

No. of Animals : 14

M,17.0000529.Y

Collected : 04.04.2017 Received 04.04.2017

Specimen HEALTH MONITORING

Viruses	Latest Results	Historical Results	Cumulative Results	Method
	-1000000		RODULOD	neonou.
Human Influenza Virus	0/14	0/470	0/484	Haemagglutination Inhibition
Rotavirus A	0/11	0/470	0/70	EIA
Aleutians	1000.00 4000			
	0/10	0/30	0/40	PCR
Canine distemper virus	0/10	0/30	0/40	ELISA
Ferret Coronavirus	NT	9/10	9/10	PCR
Bacteria, Parasites and Fungi				
Helicobacter species	0/10	0/100	0/110	PCR
Lawsonia intracellularis	0/10	0/100	0/110	PCR
Pasteurella multocida	0/10	0/115	0/125	Culture
Bordetella bronchiseptica	0/10	0/110	0/120	Culture
Yersinia enterocolitica	0/10	0/110	0/120	Culture
Campylobacter species	0/10	0/110	0/120	Culture
Salmonella species	0/10	0/110	0/120	Culture
Staphylococcus aureus	0/10	25/115	25/125	Culture
Coccidia	0/10	0/100	0/110	Microscopy
Otodectes cynotis	0/10	0/110	0/120	Microscopy
Cryptosporidium parvum/Giardia	0/10	0/100	0/110	EIA
Dirofilaria immitis	0/10	0/30	0/40	Knott's Test

Screened Monthly: Human Influenza Virus. Date of Last screen: 04.04.2017

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species, Staphylococcus aureus. Date of last Screen 04.04.2017

Screened Annually: Aleutians, Canine Distemper Virus, Dirofilaria immitis.

Date of last Screen: 11.01.2017





Duncan Miller

Order Number:

Requesting Site :

Marshall UK

Testing Laboratory:

Marshall UK

The Field Station

Laboratories,

Grimston

Grimston

Aldbrough, Hull East Yorkshire

Aldbrough, Hull East Yorkshire

HU11 4QE

HU11 4QE

Animal Source :

UNIT 5+6

:

:

Lab No

M,17.0000266.H

Species

MUSTELA PUTORIUS FURO

Collected : Received :

08.02.2017

Animal Ref

FERRET

08.02.2017

No. of Animals : 15

Specimen :

HEALTH MONITORING

ANIMAL HEALTH MONITORING REPORT

Monthly testing indicates negative for antibodies against A/Bolivia/559/2013 A/New Caledonia/71/2014 B/Brisbane/60/2008 B/Phuket/3073/2013

Summary Report : No Significant Findings.



Animal Source : UNIT 5+6 Animal Ref : FERRET

Species MUSTELA PUTORIUS FURO

No. of Animals : 1.5 Lab No M, 17.0000266.H Collected 08.02.2017 :

Received 08.02.2017 . Specimen HEALTH MONITORING

_					
	Viruses	Latest Results	Historical Results	Cumulative Results	Method
	Human Influenza Virus	0/15	0/440	0/455	Haemagglutination Inhibition
	Rotavirus A	0/3	0/58	0/61	EIA
	Aleutians	0/10	0/30	0/40	PCR
	Canine distemper virus	0/10	0/30	0/40	ELISA
	Ferret Coronavirus	NT	9/10	9/10	PCR
	Bacteria, Parasites and Fungi				
	- and the state of				
	Helicobacter species	0/10	0/90	0/100	PCR
	Lawsonia intracellularis	0/10	0/90	0/100	PCR
	Pasteurella multocida	0/10	0/105	0/115	Culture
	Bordetella bronchiseptica	0/10	0/100	0/110	Culture
	Yersinia enterocolitica	0/10	0/100	0/110	Culture
	Campylobacter species	0/10	0/100	0/110	Culture
	Salmonella species	0/10	0/100	0/110	Culture
	Staphylococcus aureus	0/10	25/105	25/115	Culture
	Coccidia	0/10	0/90	0/100	Microscopy
	Otodectes cynotis	0/10	0/100	0/110	Microscopy
	Cryptosporidium parvum/Giardia	0/10	0/90	0/100	EIA
	Dirofilaria immitis	0/10	0/30	0/40	Knott's Test

Screened Monthly: Human Influenza Virus. Date of Last screen: 08.02.2017

Screened Quarterly: Coccidia, Otodectes cynotis, Helicobacter species, Lawsonia intracellularis, Cryptosporidium parvum, Giardia lamblia, Rotavirus A, Pasteurella multocidia, Bordetella bronchiseptica, Yersinia enterocolitica, Campylobacter species, Salmonella species, Staphylococcus aureus. Date of last Screen 11.01.2017

Screened Annually: Aleutians, Canine Distemper Virus, Dirofilaria immitis.

Date of last Screen: 11.01.2017

Exhibit 3



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: January 2023 Unit No: Barriers and Conventional Buildings Examination date: Quarter 4, 2022 Species: Feline **Breed:** Domestic Shorthair Cat Populated[†]: Colony acquired June 2018 ---BARRIER BUILDINGS*-----CONVENTIONAL BUIDLING*----1" BARRIER 2nd BARRIER BUTLER CUM CURR CUM CURR CUM **CURR** METHOD LAB VIRAL INFECTIONS **Compulsory Agents:** Feline Calicivirus 0/170 0/10 0/170 0/10 Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/170 0/10 0/170 0/10 10/90 NE. MSU PCR (Whole blood) Feline Coronavirus 0/170 0/10 0/170 0/10 18/90 NE MSU PCR (Fecal) Feline Herpesvirus 0/170 0/10 PCR (Conjunctival swab) 0/170 0/10 Vaccinated NΑ MSU FeLV/FIV 0/170 0/90 0/10 0/170 0/10 ELISA (Whole blood) NE MSU Feline Panleukopenia 0/170 0/10 0/170 0/10 Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/170 0/10 0/170 0/10 Vaccinated NΑ MSU HI (Serum) **BACTERIAL INFECTIONS** Compulsory Agents: Bartonella spp. 0/170 0/10 0/170 0/10 0/90 NE MSU PCR (Whole Blood) Bordetella bronchiseptica 43/170 4/10 27/170 0/10 55/90 NE MSU Culture (Oropharyngeal swab) Campylobacter spp. 1/170 0/10 1/170 0/10 0/90 NE MSU Culture (Rectal swab) Chlamydophilia 0/170 0/10 0/170 0/10 0/90 NE MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/170 0/170 0/10 0/10 0/90 NE MSU PCR (Whole Blood) Mycoplasma Culture 0/170 0/10 0/170 0/10 0/90 NE MSU Culture (Oropharyngeal swab) Pasteurellaceae 137/170 10/10 48/170 10/10 83/90 NE MSU Culture (Oropharyngeal swab) Salmonella spp. 0/170 0/10 0/170 0/10 0/90 MSU Culture (Rectal swab) NE Streptococci β-hemolytic Group G 39/170 3/10 46/170 0/10 28/90 NE MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/170 0/10 0/170 0/10 0/90 NE MSU Culture (Rectal swab) FUNGAL INFECTIONS **Compulsory Agents:** Microsporum spp. 0/170 0/10 0/170 0/100/90 NE MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/170 0/10 0/170 0/10 0/90 NE Fungal Culture (Hair pluck) PARASITOLOGICAL Compulsory Agents: Helminths 0/170 0/10 0/170 0/10 0/90 NE MSU Sodium Nitrate (Fecal) Isospora spp. 11/170 0/10 11/170 0/10 2/90 NE MSU Sodium Nitrate (Fecal) Giardia sp. 0/170 0/10 2/90 0/170 0/10 NE MSU Zinc Sulfate (Fecal) Sarcocvetis spp. 0/170 0/10 0/170 0/10 0/90 NE Zinc Sulfate (Fecal) MSU Toxoplasma gondii 0/170 0/10 0/170 0/10 0/90 NE MSU IgG IFA (Serum)

NA=not applicable

CUM=cumulative

NE=not examined

CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

[†]Colony was established by Liberty Research in 1975 and acquired by Marshall in June 2018. Conventional animals originated from barriers,

^{*}Barrier buildings are tested quarterly. Conventional building is tested semi-annually.



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: October 2022 Unit No: Barriers and Conventional Buildings Examination date: Quarter 3, 2022 Species: Feline **Breed:** Domestic Shorthair Cat Populated[†]: Colony acquired June 2018 BARRIER BUILDINGS*---CONVENTIONAL BUIDLING*----1st BARRIER 2nd BARRIER BUTLER CUM CURR CUM CURR CUM **CURR** LAB METHOD VIRAL INFECTIONS Compulsory Agents: Feline Calicivirus 0/160 0/10 0/160 0/10 Vaccinated MSU PCR (Oropharyngeal swab) NA 0/160 0/10 Feline Coronavirus 0/160 0/10 10/90 0/10 MSU PCR (Whole blood) Feline Coronavirus 0/150 0/10 0/150 0/10 18/90 0/10 MSU PCR (Fecal) Feline Herpesvirus 0/160 0/10 0/160 0/10 Vaccinated NA MSU PCR (Conjunctival swab) FeLV/FIV 0/160 0/10 0/160 0/10 0/90 0/10 MSU ELISA (Whole blood) Feline Panleukopenia 0/160 0/10 0/160 0/10 Vaccinated NA MSII PCR (Feces) Feline Panleukopenia 0/160 0/10 0/160 0/10 Vaccinated MSU HI (Serum) NA **BACTERIAL INFECTIONS** Compulsory Agents: Bartonella spp. 0/160 0/10 0/10 0/90 0/10 0/160 MSU PCR (Whole Blood) Bordetella bronchiseptica 39/160 0/10 27/160 0/10 55/90 6/10 Culture (Oropharyngeal swab) MSU Campylobacter spp. 1/160 0/10 1/160 0/10 0/90 0/10 MSII Culture (Rectal swab) Chlamydophilia 0/160 0/10 0/160 0/10 0/90 0/10 MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/160 0/10 0/160 0/10 0/90 0/10 MSU PCR (Whole Blood) Mycoplasma Culture 0/160 0/10 0/160 0/900/10 0/10 MSU Culture (Oropharyngeal swab) Pasteurellaceae 127/160 4/10 38/160 10/10 83/90 7/10 MSU Culture (Oropharyngeal swab) Salmonella spp. 0/160 0/10 0/160 0/10 0/90 0/10MSU Culture (Rectal swab) Streptococci B-hemolytic Group G 36/160 3/10 46/160 4/10 28/90 1/10 MSU Culture (Oropharyngeal swab) 0/160 0/160 Yersinia enterocolitica 0/10 0/10 0/90 0/10 MSU Culture (Rectal swab) **FUNGAL INFECTIONS** Compulsory Agents: 0/10 Microsporum spp. 0/160 0/160 0/100/90 0/10 MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/160 0/10 0/160 0/10 0/90 0/10 MSU Fungal Culture (Hair pluck) **PARASITOLOGICAL** Compulsory Agents: 0/160 0/10 0/10 0/90 Helminths 0/160 0/10 MSU Sodium Nitrate (Fecal) 11/160 4/10 11/160 0/10 2/90 1/10 Isospora spp. MSU Sodium Nitrate (Fecal) Giardia sp. 0/160 0/10 0/160 0/10 2/90 0/10 MSU Zinc Sulfate (Fecal) 0/160 0/10 0/10 0/160 Sarcocystis spp. 0/900/10 Zinc Sulfate (Fecal) MSU Toxoplasma gondii 0/160 0/10 0/160 0/10 0/90 0/10 MSU IgG IFA (Serum)

NA=not applicable NE=not examined CUM=cumulative CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories;

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM Date

[†]Colony was established by Liberty Research in 1975 and acquired by Marshall in June 2018. Conventional animals originated from barriers.

^{*}Barrier buildings are tested quarterly. Conventional building is tested semi-annually,



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: August 2022	Uni	t Nº: Ba	rriers an	d Conventio	nal Buildings	Examination date: Quarter 2, 2022			
Species: Feline	Bre	ed: Don	nestic Sh	orthair Cat		Populated†: Colony acquired June 2018			
	BARRIER BUILDINGS*				CONVENTIONAL BUIDLING*				
	1 st BARRIER 2 nd BARRIER			RRIER	BUTLER				
	CUM	CURR	CUM	CURR	CUM	CURR	LAB	METHOD	
VIRAL INFECTIONS									
Compulsory Agents:									
Feline Calicivirus	0/150	0/10	0/150	0/10	Vaccinated	NE	MSU	PCR (Oropharyngeal swab)	
Feline Coronavirus	0/150	0/10	0/150	0/10	10/80	NE	MSU	PCR (Whole blood)	
Feline Coronavirus	0/140	0/10	0/140	0/10	18/80	NE	MSU	PCR (Fecal)	
Feline Herpesvirus	0/150	0/10	0/150	0/10	Vaccinated	NE	MSU	PCR (Conjunctival swab)	
FeLV/FIV	0/150	0/10	0/150	0/10	0/80	NE	MSU	ELISA (Whole blood)	
Feline Panleukopenia	0/150	0/10	0/150	0/10	Vaccinated	NE	MSU	PCR (Feces)	
Feline Panleukopenia	0/150	0/10	0/150	0/10	Vaccinated	NE	MSU	HI (Serum)	
BACTERIAL INFECTIONS Compulsory Agents:									
Bartonella spp.	0/150	0/10	0/150	0/10	0/80	NE	MSU	PCR (Whole Blood)	
Bordetella bronchiseptica	39/150	0/10	27/150	0/10	49/80	NE	MSU	Culture (Oropharyngeal swab)	
Campylobacter spp.	1/150	0/10	1/150	0/10	0/80	NE	MSU	Culture (Rectal swab)	
Chlamydophilia	0/150	0/10	0/150	0/10	0/80	NE	MSU	PCR (Conjunctival swab)	
Mycoplasma haemofelis	0/150	0/10	0/150	0/10	0/80	NE	MSU	PCR (Whole Blood)	
Mycoplasma Culture	0/150	0/10	0/150	0/10	0/80	NE	MSU	Culture (Oropharyngeal swab)	
Pasteurellaceae	123/150	8/10	28/150	5/10	76/80	NE	MSU	Culture (Oropharyngeal swab)	
Salmonella spp.	0/150	0/10	0/150	0/10	0/80	NE	MSU	Culture (Rectal swab)	
Streptococci β-hemolytic Group G	33/150	0/10	42/150	2/10	27/80	NE	MSU	Culture (Oropharyngeal swab)	
Yersinia enterocolitica	0/150	0/10	0/150	0/10	0/80	NE	MSU	Culture (Rectal swab)	
FUNGAL INFECTIONS Compulsory Agents:									
Microsporum spp.	0/150	0/10	0/150	0/10	0/80	NE	MSU	Fungal Culture (Hair pluck)	
Trichophyton spp.	0/150	0/10	0/150	0/10	0/80	NE	MSU	Fungal Culture (Hair pluck)	
PARASITOLOGICAL Compulsory Agents:									
Helminths	0/150	0/10	0/150	0/10	0/80	NE	MSU	Sodium Nitrate (Fecal)	
Isospora spp.	7/150	0/10	11/150	1/10	1/80	NE	MSU	Sodium Nitrate (Fecal)	
Giardia sp.	0/150	0/10	0/150	0/10	2/80	NE	MSU	Zinc Sulfate (Fecal)	
Sarcocystis spp.	0/150	0/10	0/150	0/10	0/80	NE	MSU	Zinc Sulfate (Fecal)	
Toxoplasma gondii	0/150	0/10	0/150	0/10	0/80	NE	MSU	IgG IFA (Serum)	

NA=not applicable

CUM=cumulative

NE=not examined

CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM Date

[†]Colony was established by Liberty Research in 1975 and acquired by Marshall in June 2018. Conventional animals originated from barriers.

^{*}Barrier buildings are tested quarterly. Conventional building is tested semi-annually.



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: April 2022 Unit No: Barriers and Conventional Buildings Examination date: Quarter 1, 2022

Species: Feline	Breed: Domestic Shorthair CatBARRIER BUILDINGS*				Populated [†] : Colony acquired June 2018				
					CONVENTIONAL BUIDLING*				
	1st BARRIER		2 nd BARRIER		BUTLER				
	CUM	CURR	CUM	CURR	CUM	CURR	LAB	METHOD	
VIRAL INFECTIONS									
Compulsory Agents:									
Feline Calicivirus	0/140	0/10	0/140	0/10	Vaccinated	NA	MSU	PCR (Oropharyngeal swab)	
Feline Coronavirus	0/140	0/10	0/140	0/10	10/80	0/10	MSU	PCR (Whole blood)	
Feline Coronavirus	0/130	0/10	0/130	0/10	18/80	3/10	MSU	PCR (Fecal)	
Feline Herpesvirus	0/140	0/10	0/140	0/10	Vaccinated	NA	MSU	PCR (Conjunctival swab)	
FeLV/FIV	0/140	0/10	0/140	0/10	0/80	0/10	MSU	ELISA (Whole blood)	
Feline Panleukopenia	0/140	0/10	0/140	0/10	Vaccinated	NA	MSU	PCR (Feces)	
Feline Panleukopenia	0/140	0/10	0/140	0/10	Vaccinated	NA	MSU	HI (Serum)	
BACTERIAL INFECTIONS									
Compulsory Agents:									
Bartonella spp.	0/140	0/10	0/140	0/10	0/80	0/10	MSU	PCR (Whole Blood)	
Bordetella bronchiseptica	39/140	0/10	27/140	0/10	49/80	2/10	MSU	Culture (Oropharyngeal swab)	
Campylobacter spp.	1/140	1/10	1/140	1/10	0/80	0/10	MSU	Culture (Rectal swab)	
Chlamydophilia	0/140	0/10	0/140	0/10	0/80	0/10	MSU	PCR (Conjunctival swab)	
Mycoplasma haemofelis	0/140	0/10	0/140	0/10	0/80	0/10	MSU	PCR (Whole Blood)	
Mycoplasma Culture	0/140	0/10	0/140	0/10	0/80	0/10	MSU	Culture (Oropharyngeal swab)	
Pasteurellaceae	115/140	8/10	23/140	10/10	76/80	10/10	MSU	Culture (Oropharyngeal swab)	
Salmonella spp.	0/140	0/10	0/140	0/10	0/80	0/10	MSU	Culture (Rectal swab)	
Streptococci β-hemolytic Group G	33/140	2/10	40/140	3/10	27/80	2/10	MSU	Culture (Oropharyngeal swab)	
Yersinia enterocolitica	0/140	0/10	0/140	0/10	0/80	0/10	MSU	Culture (Rectal swab)	
FUNGAL INFECTIONS									
Compulsory Agents: Microsporum spp.	0/140	0/10	0/140	0/10	0/80	0/10	MSU	Fungal Culture (Hair pluck)	
Trichophyton spp.	0/140	0/10	0/140	0/10	0/80	0/10	MSU	Fungal Culture (Hair pluck)	
PARASITOLOGICAL									
Compulsory Agents:	0/1.40	0/10	0.11.40	0/10	0.000	0.41.0) (CI)	6 1 37 (0) 1	
Helminths	0/140	0/10	0/140	0/10	0/80	0/10	MSU	Sodium Nitrate (Fecal)	
Isospora spp.	7/140	0/10	10/140	0/10	1/80	0/10	MSU	Sodium Nitrate (Fecal)	
Giardia sp.	0/140	0/10	0/140	0/10	2/80	2/10	MSU	Zinc Sulfate (Fecal)	
Sarcocystis spp.	0/140	0/10	0/140	0/10	0/80	0/10	MSU	Zinc Sulfate (Fecal)	
Toxoplasma gondii	0/140	0/10	0/140	0/10	0/80	0/10	MSU	IgG IFA (Serum)	

NA=not applicable

CUM=cumulative

NE=not examined

CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104





[†]Colony was established by Liberty Research in 1975 and acquired by Marshall in June 2018. Conventional animals originated from barriers.

^{*}Barrier buildings are tested quarterly. Conventional building is tested semi-annually.



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: October 2021 Unit No: Barriers and Conventional Buildings Examination date: Quarter 3, 2021 **Species:** Feline Breed: Domestic Shorthair Cat Populated[†]: Colony acquired June 2018 -----BARRIER BUILDINGS----------CONVENTIONAL BUIDLING-----1st BARRIER 2nd BARRIER **BUTLER** CUM CURR CUM CURR **CUM CURR** LAB METHOD VIRAL INFECTIONS Compulsory Agents: Feline Calicivirus 0/120 0/10 0/120 0/10 Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/120 0/10 0/120 0/10 10/70 0/10MSU PCR (Whole blood) Feline Coronavirus 0/110 0/10 0/110 0/10 15/70 6/10 MSU PCR (Fecal) Feline Herpesvirus 0/120 0/10 0/120 0/10 Vaccinated NA MSU PCR (Conjunctival swab) FeLV/FIV 0/120 0/10 0/120 0/10 0/70 0/10MSU ELISA (Whole blood) Feline Panleukopenia 0/120 0/120 0/100/10 Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/10 0/120 0/120 0/10 Vaccinated MSU NA HI (Serum) **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/120 0/10 0/120 0/10 0/70 0/10 MSU PCR (Whole Blood) Bordetella bronchiseptica 38/120 1/10 27/120 0/10 47/70 8/10 MSU Culture (Oropharyngeal swab) Campylobacter spp. 0/120 0/10 0/120 0/100/70 0/10 MSU Culture (Rectal swab) Chlamydophilia 0/120 0/10 0/120 0/10 0/70 0/10 MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/120 0/10 0/120 0/10 0/70 0/10 PCR (Whole Blood) MSU Mycoplasma Culture 0/120 0/10 0/120 0/10 0/70 0/10MSU Culture (Oropharyngeal swab) Pasteurellaceae 97/120 10/10 3/120 0/10 66/70 9/10 MSU Culture (Oropharyngeal swab) Salmonella spp. 0/120 0/10 0/120 0/10 0/70 0/10 MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 29/120 0/10 34/120 1/10 25/70 3/10 MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/120 0/10 0/120 0/10 0/70 0/10MSU Culture (Rectal swab) **FUNGAL INFECTIONS Compulsory Agents:** Microsporum spp. 0/120 0/10 0/120 0/10 0/70 0/10 MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/120 0/10 0/120 0/10 0/700/10 Fungal Culture (Hair pluck) MSU **PARASITOLOGICAL Compulsory Agents:** Helminths 0/10 0/120 0/120 0/10 0/70 0/10 MSU Sodium Nitrate (Fecal) Isospora spp. Sodium Nitrate (Fecal) 7/120 0/10 10/120 1/10 1/70 1/10 MSU Giardia sp. 0/120 0/10 0/10 0/1200/70 0/10 MSU Zinc Sulfate (Fecal) Sarcocystis spp. 0/120 0/10 0/120 0/10 0/70 0/10 MSU Zinc Sulfate (Fecal) Toxoplasma gondii 0/120 0/10 0/120 0/100/70 0/10MSU IgG IFA (Serum)

NA=not applicable

CUM=cumulative

NE=not examined

CURR=current

[†]Colony was established by Liberty Research in 1975 and acquired by Marshall in June 2018. Conventional animals originated from barriers.

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

10/13/2021

Date



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: July 2021 Unit No: Barriers and Conventional Buildings Examination date: Quarter 2, 2021 **Species:** Feline Breed: Domestic Shorthair Cat Populated[†]: Colony acquired June 2018 -----BARRIER BUILDINGS----------CONVENTIONAL BUIDLING-----1st BARRIER 2nd BARRIER **BUTLER** CUM CURR CUM CURR CUM **CURR** LAB **METHOD** VIRAL INFECTIONS **Compulsory Agents:** Feline Calicivirus 0/110 0/10 0/110 0/10 Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/110 0/10 0/110 0/10 10/60 NE PCR (Whole blood) MSU Feline Coronavirus 0/100 0/10 0/100 0/10 9/60 NE MSU PCR (Fecal) Feline Herpesvirus 0/110 0/10 0/110 0/10 Vaccinated NA MSU PCR (Conjunctival swab) FeLV/FIV 0/110 0/10 0/110 0/10 0/60 NE MSU ELISA (Whole blood) Feline Panleukopenia 0/110 0/10 0/110 0/10 Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/110 0/10 0/110 0/10 Vaccinated NA MSU HI (Serum) **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/110 0/10 0/110 0/10 0/60 NE MSU PCR (Whole Blood) Bordetella bronchiseptica 37/110 3/10 27/110 0/10 39/60 NE MSU Culture (Oropharyngeal swab) Campylobacter spp. 0/110 0/10 0/110 0/10 0/60 NE MSU Culture (Rectal swab) Chlamydophilia 0/110 0/100/110 0/10 0/60 NE MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/110 0/10 0/110 0/10 0/60 NE MSU PCR (Whole Blood) Mycoplasma Culture 0/110 0/10 0/110 0/10 0/60 NE MSU Culture (Oropharyngeal swab) Pasteurellaceae 87/110 9/10 Culture (Oropharyngeal swab) 3/110 0/10 57/60 NE. MSU Salmonella spp. 0/110 0/10 0/110 0/10 0/60 NE MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 29/110 4/10 33/110 2/10 22/60 NE MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/110 0/10 0/110 0/10 0/60 NE MSU Culture (Rectal swab) **FUNGAL INFECTIONS Compulsory Agents:** Microsporum spp. 0/10 0/110 0/110 0/10 0/60 NE MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/110 0/10 0/110 0/10 0/60 NE MSU Fungal Culture (Hair pluck) **PARASITOLOGICAL Compulsory Agents:** Helminths 0/110 0/10 0/110 0/10 0/60 NE MSU Sodium Nitrate (Fecal) Isospora spp. 7/1100/10 9/110 2/10 0/60 NE MSU Sodium Nitrate (Fecal) Sarcocystis spp. 0/110 0/10 0/110 0/10 0/60 NE MSU Zinc Sulfate (Fecal) Toxoplasma gondii 0/110 0/10 0/110 0/10 0/60 NE MSU IgG IFA (Serum) Agents on Request: Giardia sp. 0/10 NE 0/10 NE NE NE MSU Zinc Sulfate (Fecal)

NA=not applicable

CUM=cumulative

NE=not examined CURR=current

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104





Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: April 2021 Unit No: Barriers and Conventional Buildings Examination date: Quarter 1, 2021 Species: Feline **Breed:** Domestic Shorthair Cat **Populated**[†]: Colony acquired June 2018 -----BARRIER BUILDINGS----------CONVENTIONAL BUIDLING-----1st BARRIER 2nd BARRIER BUTLER CUM CURR CUM CURR CUM **CURR** LAB **METHOD** VIRAL INFECTIONS Compulsory Agents: 0/100 0/10 0/100 0/10 Feline Calicivirus Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/100 0/10 0/100 0/10 10/60 10/10 MSU PCR (Whole blood) 0/90 0/10 0/90 Feline Coronavirus 0/10 9/60 0/10 MSU PCR (Fecal) 0/100 Feline Herpesvirus 0/100 0/10 0/10 Vaccinated NA MSU PCR (Conjunctival swab) FeLV/FIV 0/100 0/10 0/100 0/10 0/60 0/10 MSU ELISA (Whole blood) Feline Panleukopenia 0/100 0/10 0/100 0/10 Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/100 0/10 0/100 0/10 Vaccinated HI (Serum) NA MSU **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/100 0/10 0/100 0/10 0/60 0/10 MSU PCR (Whole Blood) Bordetella bronchiseptica 34/100 0/10 27/100 0/10 39/60 9/10 MSU Culture (Oropharyngeal swab) 0/100 0/100 Campylobacter spp. 0/10 0/10 0/60 0/10 MSU Culture (Rectal swab) Chlamydophilia 0/100 0/10 0/100 0/10 0/60 0/10 MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/100 0/10 0/100 0/10 0/60 0/10 PCR (Whole Blood) MSU Mycoplasma Culture 0/100 0/10 0/100 0/10 0/60 0/10 MSU Culture (Oropharyngeal swab) Pasteurellaceae 78/100 9/10 3/100 0/10 57/60 10/10 MSU Culture (Oropharyngeal swab) Salmonella spp. 0/100 0/10 0/100 0/10 0/60 0/10 MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 25/100 0/10 31/100 1/10 22/60 6/10 MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/100 0/10 0/100 0/10 0/60 0/10 MSU Culture (Rectal swab) **FUNGAL INFECTIONS Compulsory Agents:** 0/100 0/10 Microsporum spp. 0/100 0/10 0/60 0/10 MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/100 0/10 0/100 0/10 0/60 0/10 Fungal Culture (Hair pluck) **PARASITOLOGICAL Compulsory Agents:** Helminths 0/100 0/10 0/100 0/10 0/60 0/10 MSU Sodium Nitrate (Fecal) 7/100 7/100 Isospora spp. 0/10 1/10 0/60 0/10 MSU Sodium Nitrate (Fecal) 0/100 0/10 0/100 0/10 Sarcocystis spp. 0/60 0/10 MSU Zinc Sulfate (Fecal) Toxoplasma gondii 0/100 0/10 0/100 0/10 0/60 0/10MSU IgG IFA (Serum) **Agents on Request:** Giardia sp. 0/10 NE 0/10 NE NE NE MSU Zinc Sulfate (Fecal)

NA=not applicable

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CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

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MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: January 2021 Unit No: Barriers and Conventional Buildings Examination date: Quarter 4, 2020 Species: Feline Breed: Domestic Shorthair Cat Populated[†]: Colony acquired June 2018 -----BARRIER BUILDINGS----------CONVENTIONAL BUIDLING-----1st BARRIER 2nd BARRIER BUTLER CUM CURR CUM CURR **CUM CURR** LAB **METHOD** VIRAL INFECTIONS **Compulsory Agents:** Feline Calicivirus 0/90 0/10 0/90 0/10 Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/90 0/10 0/900/10 0/50 NE MSU PCR (Whole blood) Feline Coronavirus 0/80 0/10 0/80 0/10 9/50 NE MSU PCR (Fecal) Feline Herpesvirus 0/900/10 0/900/10 Vaccinated NA MSU PCR (Conjunctival swab) FeLV/FIV 0/90 0/10 0/90 0/10 0/50 NE ELISA (Whole blood) MSU Feline Panleukopenia 0/90 0/10 0/90 0/10 Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/90 0/10 0/90 0/10 Vaccinated NA MSU HI (Serum) **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/90 0/10 0/90 0/10 0/50 NE MSU PCR (Whole Blood) Bordetella bronchiseptica 34/90 7/10 27/90 0/10 30/50 NE MSU Culture (Oropharyngeal swab) Campylobacter spp. 0/900/10 0/90 0/10 0/50 NE. MSU Culture (Rectal swab) Chlamydophilia 0/90 0/10 0/90 0/10 0/50 NE MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/90 0/10 0/90 0/10 0/50 NE MSU PCR (Whole Blood) Mycoplasma Culture 0/90 0/10 0/90 0/10 0/50 NE MSU Culture (Oropharyngeal swab) Pasteurellaceae 69/90 10/10 3/90 0/10 47/50 NE Culture (Oropharyngeal swab) MSU Salmonella spp. 0/90 0/10 0/90 0/10 0/50 NE MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 25/90 2/10 30/90 3/10 16/50 NE MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/90 0/10 0/90 0/10 0/50 NE MSU Culture (Rectal swab) **FUNGAL INFECTIONS Compulsory Agents:** Microsporum spp. 0/90 0/10 0/90 0/10 0/50 NE MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/90 0/10 0/90 0/10 0/50 NE MSU Fungal Culture (Hair pluck) PARASITOLOGICAL **Compulsory Agents:** Helminths 0/90 0/10 0/900/10 0/50 NE MSU Sodium Nitrate (Fecal) Isospora spp. 7/90 2/10 6/90 1/10 0/50 NE MSU Sodium Nitrate (Fecal) Sarcocystis spp. 0/90 0/10 0/90 0/10 0/50 NE MSU Zinc Sulfate (Fecal) Toxoplasma gondii 0/90 0/10 0/90 0/10 0/50NE MSU IgG IFA (Serum) Agents on Request: Giardia sp. 0/10 NE 0/10 NE NE NE MSU Zinc Sulfate (Fecal)

NA=not applicable CUM=cumulative NE=not examined CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

Date

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.

MARSHALL BIORESOURCES

Health Monitoring Report

Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: March 2021 Unit Nº: Barriers and Conventional Buildings Examination date: Quarter 3, 2020 Species: Feline Breed: Domestic Shorthair Cat Populated[†]: Colony acquired June 2018 ----BARRIER BUILDINGS----------CONVENTIONAL BUIDLING-----1st BARRIER $2^{nd}\,BARRIER$ **BUTLER** CUM CURR CUM CURR CUM **CURR** LAB METHOD VIRAL INFECTIONS **Compulsory Agents:** Feline Calicivirus 0/80 0/10 0/80 0/10 Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/80 0/10 0/80 0/10 0/50 0/10MSII PCR (Whole blood) Feline Coronavirus 0/70 0/10 0/70 0/10 9/50 9/10 MSU PCR (Fecal) Feline Herpesvirus 0/80 0/10 0/80 0/10 Vaccinated NA MSII FeLV/FIV PCR (Conjunctival swab) 0/80 0/10 0/80 0/10 0/50 0/10 MSU ELISA (Whole blood) Feline Panleukopenia 0/80 0/10 0/80 0/10 Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/80 0/10 0/80 0/10 Vaccinated NA MSU HI (Serum) **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/80 0/10 0/80 0/10 0/50 0/10 MSU PCR (Whole Blood) Bordetella bronchiseptica 27/80 1/10 27/80 0/10 30/50 6/10 Culture (Oropharyngeal swab) MSU Campylobacter spp. 0/80 0/10 0/80 0/10 0/50 0/10 MSU Culture (Rectal swab) Chlamydophilia 0/80 0/10 0/80 0/10 0/50 0/10 PCR (Conjunctival swab) MSU Mycoplasma haemofelis 0/80 0/10 0/80 0/10 0/500/10 MSU Mycoplasma Culture PCR (Whole Blood) 0/80 0/10 0/80 0/10 0/50 0/10 Culture (Oropharyngeal swab) MSU Pasteurellaceae 59/80 6/10 3/80 0/10 47/50 9/10 MSU Culture (Oropharyngeal swab) Salmonella spp. 0/80 0/10 0/80 0/10 0/50 0/10 Culture (Rectal swab) MSU Streptococci β-hemolytic Group G 23/80 1/10 27/80 4/10 16/50 6/10 MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/80 0/10 0/80 0/10 0/50 0/10 MSU Culture (Rectal swab) **FUNGAL INFECTIONS Compulsory Agents:** Microsporum spp. 0/80 0/10 0/80 0/10 0/50 0/10 MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/80 0/10 0/80 0/10 0/500/10 MSU Fungal Culture (Hair pluck) PARASITOLOGICAL **Compulsory Agents:** Helminths 0/80 0/10 0/80 0/10 0/50 0/10 MSU Sodium Nitrate (Fecal) Isospora spp. 7/80 0/106/80 0/10 0/50 0/10 MSU Sodium Nitrate (Fecal) Sarcocystis spp. 0/80 0/10 0/80 0/100/50 0/10 MSU Zinc Sulfate (Fecal) Toxoplasma gondii 0/80 0/10 0/80 0/10 0/500/10 MSU IgG IFA (Serum) **Agents on Request:** Giardia sp. 0/10 NE 0/10 NE NE NE MSU Zinc Sulfate (Fecal) NA=not applicable CUM=cumulative

NE=not examined

CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bamb 4 gasmin Bambi Jasmin, DVM, DACLAM

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: July 2020 Unit No: Barriers and Conventional Buildings Examination date: Quarter 2, 2020 **Species:** Feline Breed: Domestic Shorthair Cat **Populated**[†]: Colony acquired June 2018 -----BARRIER BUILDINGS----------CONVENTIONAL BUIDLING-----1st BARRIER 2nd BARRIER BUTLER CUM CURR CUM CURR CUM **CURR** LAB **METHOD** VIRAL INFECTIONS Compulsory Agents: Feline Calicivirus 0/70 0/10 0/70 0/10 Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/70 0/10 0/70 0/100/40 PCR (Whole blood) NE MSU Feline Coronavirus 0/60 0/10 0/60 0/10 0/40 NE. MSU PCR (Fecal) Feline Herpesvirus 0/70 0/10 0/70 0/10 Vaccinated PCR (Conjunctival swab) NA MSU FeLV/FIV 0/70 0/10 0/70 0/10 0/40 NE MSU ELISA (Whole blood) Feline Panleukopenia 0/70 0/10 0/70 0/10 Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/70 0/10 0/70 0/10 Vaccinated NA MSU HI (Serum) **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/70 0/10 0/70 0/10 0/40 NE MSU PCR (Whole Blood) Bordetella bronchiseptica 26/70 3/10 27/70 0/10 24/40 NE MSU Culture (Oropharyngeal swab) Campylobacter spp. 0/70 0/10 0/70 0/10 0/40 NE MSU Culture (Rectal swab) Chlamydophilia 0/70 0/10 0/70 0/10 0/40NE MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/70 0/10 0/70 0/10 0/40 NE MSU PCR (Whole Blood) Mycoplasma Culture 0/70 0/10 0/70 0/10 0/40 NE MSU Culture (Oropharyngeal swab) Pasteurellaceae 53/70 9/10 3/70 0/10 38/40 NE MSU Culture (Oropharyngeal swab) Salmonella spp. 0/70 0/10 0/70 0/10 0/40NE MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 22/70 2/10 23/70 2/10 10/40 NE MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/70 0/10 0/70 0/10 0/40 NE MSU Culture (Rectal swab) FUNGAL INFECTIONS **Compulsory Agents:** Microsporum spp. 0/70 0/10 0/70 0/10 0/40NE MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/70 0/10 0/70 0/10 0/40 NE MSU Fungal Culture (Hair pluck) PARASITOLOGICAL

NA=not applicable

Compulsory Agents:

Helminths

Isospora spp.

Sarcocystis spp.

Toxoplasma gondii

Agents on Request: Giardia sp.

CUM=cumulative

0/70

7/70

0/70

0/70

0/10

0/10

2/10

0/10

0/10

NE

0/70

6/70

0/70

0/70

0/10

0/10

1/10

0/10

0/10

NE

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

07/20/2020

Date

0/40

0/40

0/40

0/40

NE

NE

NE

NE

NE

NE

MSU

MSU

MSU

MSU

MSU

Sodium Nitrate (Fecal)

Sodium Nitrate (Fecal)

Zinc Sulfate (Fecal)

IgG IFA (Serum)

Zinc Sulfate (Fecal)

NE=not examined CURR=current



Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: July 2020 Unit Nº: Barriers and Conventional Buildings Examination date: Quarter 1, 2020 Species: Feline Breed: Domestic Shorthair Cat Populated[†]: Colony acquired June 2018 -----BARRIER BUILDINGS----------CONVENTIONAL BUIDLING-----2nd BARRIER 1st BARRIER **BUTLER** CUM CURR CUM CURR CUM **CURR** LAB METHOD VIRAL INFECTIONS Compulsory Agents: Feline Calicivirus 0/60 0/10 0/60 0/10 Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/60 0/10 0/60 0/10 0/400/10 MSU PCR (Whole blood) Feline Coronavirus 0/50 0/10 0/50 0/10 0/40 0/10 MSU PCR (Fecal) Feline Herpesvirus 0/60 0/10 0/60 0/10 Vaccinated NA MSII PCR (Conjunctival swab) FeLV/FIV 0/60 0/10 0/60 0/10 0/40 0/10 MSU ELISA (Whole blood) Feline Panleukopenia 0/60 0/10 0/60 0/10 Vaccinated MSU NA PCR (Feces) Feline Panleukopenia 0/10 0/60 0/60 0/10 Vaccinated NA MSU HI (Serum) **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/60 0/10 0/60 0/10 0/40 0/10 MSU PCR (Whole Blood) Bordetella bronchiseptica 23/60 2/10 27/60 5/10 24/40 6/10 MSU Culture (Oropharyngeal swab) Campylobacter spp. 0/60 0/10 0/60 0/10 0/40 0/10 MSU Culture (Rectal swab) Chlamydophilia 0/60 0/10 0/60 0/10 0/40 0/10 MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/60 0/10 0/60 0/10 0/40 0/10 MSU PCR (Whole Blood) Mycoplasma Culture 0/60 0/10 0/60 0/10 0/40 0/10 MSU Culture (Oropharyngeal swab) Pasteurellaceae 44/60 10/10 3/60 0/10 38/40 10/10 MSU Culture (Oropharyngeal swab) Salmonella spp. 0/60 0/10 0/10 0/60 0/40 0/10 MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 20/60 1/10 21/60 5/10 10/40 2/10 MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/60 0/10 0/60 0/10 0/40 0/10 MSU Culture (Rectal swab) **FUNGAL INFECTIONS Compulsory Agents:** Microsporum spp. 0/60 0/10 0/60 0/10 0/40 0/10 MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/60 0/10 0/60 0/10 0/400/10 MSU Fungal Culture (Hair pluck) PARASITOLOGICAL **Compulsory Agents:** Helminths 0/60 0/10 0/60 0/10 0/40 0/10 MSU Sodium Nitrate (Fecal) Isospora spp. 5/60 0/10 5/60 0/10 0/40 0/10 MSU Sodium Nitrate (Fecal) Sarcocystis spp. 0/60 0/10 0/60 0/10 0/40 0/10 MSU Zinc Sulfate (Fecal) Toxoplasma gondii 0/60 0/10 0/60 0/10 0/40 0/10MSU IgG IFA (Serum) **Agents on Request:** Giardia sp. 0/10 NE 0/10 NE NE NE MSU Zinc Sulfate (Fecal)

NA=not applicable

CUM=cumulative

CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

NE=not examined

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.



Examination date: Quarter 4, 2019

Health Monitoring Report

Based on FELASA Recommendations

Date of issue: December 2019

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Species: Feline Breed: Domestic Shorthair Cat Populated†: Colony acquired June 2018

Unit No: Barriers and Conventional Buildings

	BARRIER BUILDINGS					IAL BUIDLIN				
		RRIER		RRIER	WAVE		BUTL			
VIRAL INFECTIONS	CUM	CURR	CUM	CURR	CUM	CURR	CUM	CURR	LAB	METHOD
Compulsory Agents:										
Feline Calicivirus	0/50	0/10	0/50	0/10	**					
Feline Coronavirus	0/50		0/50	0/10	Vaccinated	NA	Vaccinated	NA	MSU	PCR (Oropharyngeal swab)
Feline Coronavirus	0/30	0/10 0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	PCR (Whole blood)
			0/40	0/10	0/30	NE	0/30	0/10	MSU	PCR (Fecal)
Feline Herpesvirus FeLV/FIV	0/50	0/10	0/50	0/10	Vaccinated	NA	Vaccinated	NA	MSU	PCR (Conjunctival swab)
	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	ELISA (Whole blood)
Feline Panleukopenia	0/50	0/10	0/50	0/10	Vaccinated	NA	Vaccinated	NA	MSU	PCR (Feces)
Feline Panleukopenia	0/50	0/10	0/50	0/10	Vaccinated	NA	Vaccinated	NA	MSU	HI (Serum)
BACTERIAL INFECTIONS										
Compulsory Agents:										
Bartonella spp.	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	PCR (Whole Blood)
Bordetella bronchiseptica	21/50	4/10	22/50	1/10	15/40	NE	18/30	4/10	MSU	Culture (Oropharyngeal swab
Campylobacter spp.	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	Culture (Rectal swab)
Chlamydophilia	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	PCR (Conjunctival swab)
Aycoplasma haemofelis	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	PCR (Whole Blood)
Aycoplasma Culture	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	Culture (Oropharyngeal swab
asteurellaceae	34/50	9/10	3/50	0/10	36/40	NE	28/30	8/10	MSU	Culture (Oropharyngeal swab
almonella spp.	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	Culture (Rectal swab)
treptococci β-hemolytic Group G	19/50	2/10	16/50	2/10	11/40	NE	8/30	5/10	MSU	Culture (Oropharyngeal swab
ersinia enterocolitica	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	Culture (Rectal swab)
UNGAL INFECTIONS										
Compulsory Agents:										
ficrosporum spp.	0/50	0/10	0/50	0/10	0/40	NIE	0/20	0/10	3.607.	
richophyton spp.	0/50	0/10	0/50	0/10		NE	0/30	0/10	MSU	Fungal Culture (Hair pluck)
nenopnyton spp.	0/30	0/10	0/30	0/10	0/40	NE	0/30	0/10	MSU	Fungal Culture (Hair pluck)
ARASITOLOGICAL										
ompulsory Agents:	0.455	0.44.0								
elminths	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	Sodium Nitrate (Fecal)
ospora spp.	5/50	0/10	5/50	0/10	2/40	NE	0/30	0/10	MSU	Sodium Nitrate (Fecal)
arcocystis spp.	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	Zinc Sulfate (Fecal)
oxoplasma gondii	0/50	0/10	0/50	0/10	0/40	NE	0/30	0/10	MSU	IgG IFA (Serum)
gents on Request:										
iardia sp.	0/10	NE	0/10	NE	0/10	NE	NE	NE		Zinc Sulfate (Fecal)

NA=not applicable

CUM=cumulative CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.

Bambi Jasmin, DVM, DACLAM

12/20/2019

Date

NE=not examined CURR=current



Health Monitoring Report

Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: September 2019 Unit N°: Barriers and Conventional Buildings Examination date: Quarter 3, 2019

Species: Feline Breed: Domestic Shorthair Cat **Populated**[†]: Colony acquired June 2018 -----BARRIER BUILDINGS-------CONVENTIONAL BUIDLINGS-----1st BARRIER 2nd BARRIER WAVERLY **BUTLER** CUM CURR CUM CURR CUM **CURR CUM CURR** LAB **METHOD** VIRAL INFECTIONS Compulsory Agents: Feline Calicivirus 0/40 0/10 0/40 0/10 Vaccinated NA Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE MSU PCR (Whole blood) Feline Coronavirus 0/30 0/10 0/30 0/10 0/30 NE 0/20 NE MSU PCR (Fecal) Feline Herpesvirus 0/400/100/400/10 Vaccinated NA Vaccinated NA MSU PCR (Conjunctival swab) FeLV/FIV 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE MSU ELISA (Whole blood) Feline Panleukopenia 0/40 0/10 0/40 0/10 Vaccinated NA Vaccinated NA MSU PCR (Feces) Feline Panleukopenia 0/40 0/100/40 0/10 Vaccinated NA Vaccinated NA MSU HI (Serum) **BACTERIAL INFECTIONS** Compulsory Agents: Bartonella spp. 0/40 0/10 0/40 0/10 0/40NE 0/20 NE MSU PCR (Whole Blood) Bordetella bronchiseptica 17/40 9/10 21/40 7/10 15/40 NE 14/20 NE MSU Culture (Oropharyngeal swab) Campylobacter spp. 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE MSU Culture (Rectal swab) Chlamydophilia 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE MSU PCR (Whole Blood) Mycoplasma Culture 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE MSU Culture (Oropharyngeal swab) Pasteurellaceae 25/40 8/10 3/40 0/10 36/40 NE 20/20 NE MSU Culture (Oropharyngeal swab) Salmonella spp. 0/40 0/10 0/400/100/40 NE 0/20 NE MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 17/40 1/10 14/40 5/10 11/40 NE 3/20 NE MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE. MSU Culture (Rectal swab) FUNGAL INFECTIONS Compulsory Agents: Microsporum spp. 0/400/10 0/40 0/10 0/40 NE 0/20 NE MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/40 0/10 0/40 0/10 0/40 NE 0/20NE MSU Fungal Culture (Hair pluck) PARASITOLOGICAL **Compulsory Agents:** Helminths 0/40 0/10 0/40 0/10 0/40 NE 0/20 NE Sodium Nitrate (Fecal) MSU Isospora spp. 5/40 4/10 5/40 0/10 2/40 NE 0/20 NE MSU Sodium Nitrate (Fecal) Sarcocystis spp. 0/400/10 0/40 0/10 0/40NE 0/20NE MSU Zinc Sulfate (Fecal) Toxoplasma gondii 0/40 0/100/40 0/10 0/40NE 0/20NE MSU IgG IFA (Serum) Agents on Request: Giardia sp. 0/10 NE 0/10 NE 0/10 NE NE NE MSU Zinc Sulfate (Fecal)

NA=not applicable

CUM=cumulative

NE=not examined CURR=current

†Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

Date

MARSHALL BIORESOURCES

Examination date: Ouarter 1, 2019

Health Monitoring Report

Based on FELASA Recommendations

Date of issue: May 2019

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Species: Feline Breed: Domestic Shorthair Cat. Populated[†]: Colony acquired June 2018

Unit No: Barriers and Conventional Buildings

----BARRIER BUILDINGS----------CONVENTIONAL BUIDLINGS-----1st BARRIER 2nd BARRIER WAVERLY **BUTLER** CUM CURR CUM CURR CUM **CURR CUM CURR** LAB **METHOD** VIRAL INFECTIONS Compulsory Agents: Feline Calicivirus 0/20 0/10 0/20 0/10 Vaccinated NA Vaccinated NA MSU PCR (Oropharyngeal swab) Feline Coronavirus 0/2.00/10 0/200/10 0/10NE 0/10 0/10 MSU PCR (Whole blood) Feline Coronavirus 0/10 0/10 0/10 0/10 NE NE 0/10 0/10 MSU PCR (Fecal) Feline Herpesvirus 0/200/10 0/200/10 Vaccinated NA Vaccinated NA MSU PCR (Conjunctival swab) FeLV/FIV 0/200/10 0/200/10 0/10 NE. 0/10 0/10MSU ELISA (Whole blood) Feline Panleukopenia 0/20 0/100/200/10 Vaccinated NA Vaccinated NA PCR (Feces) MSU Feline Panleukopenia 0/20 0/10 0/20 0/10 NA Vaccinated Vaccinated NA MSU HI (Serum) **BACTERIAL INFECTIONS Compulsory Agents:** Bartonella spp. 0/20 0/10 0/2.00/10 0/10 NE 0/10 0/10 MSU PCR (Whole Blood) Bordetella bronchiseptica 6/20 1/10 10/20 0/10 1/10 NE 7/10 7/10 MSU Culture (Oropharyngeal swab) Campylobacter spp. 0/20 0/10 0/20 0/10 0/10 NE 0/10 0/10 MSU Culture (Rectal swab) Chlamydophilia 0/20 0/10 0/20 0/10 0/10 NE 0/10 0/10 MSU PCR (Conjunctival swab) Mycoplasma haemofelis 0/20 0/10 0/20 0/10 0/10 0/10 NE 0/10 MSU PCR (Whole Blood) Mycoplasma Culture 0/20 0/10 0/20 0/100/10 NE 0/10 0/10 MSU Culture (Oropharyngeal swab) Pasteurellaceae 9/20 7/10 3/20 0/10 8/10 NE 10/10 10/10 Culture (Oropharyngeal swab) MSU Salmonella spp. 0/200/10 0/200/10 0/10 NE 0/10 0/10 MSU Culture (Rectal swab) Streptococci β-hemolytic Group G 12/20 5/10 9/20 4/10 2/10 NE 0/10 0/10 MSU Culture (Oropharyngeal swab) Yersinia enterocolitica 0/200/10 0/20 0/10 0/10 NE 0/10 0/10 MSU Culture (Rectal swab) **FUNGAL INFECTIONS Compulsory Agents:** Microsporum spp. 0/20 0/10 0/200/10 0/10 NE 0/10 0/10 MSU Fungal Culture (Hair pluck) Trichophyton spp. 0/20 0/10 0/200/10 0/10 NE 0/10 0/10 MSU Fungal Culture (Hair pluck) **PARASITOLOGICAL Compulsory Agents:** Helminths 0/20 0/10 0/20 0/10 0/10NE 0/10 0/10 MSU Sodium Nitrate (Fecal) Isospora spp. 1/20 1/10 3/20 3/10 0/10 NE 0/10 0/10 Sodium Nitrate (Fecal) MSU Sarcocystis spp. 0/2.00/10 0/200/10 0/10 NE 0/10 0/10 Zinc Sulfate (Fecal) MSU Toxoplasma gondii 0/200/100/200/10 0/10 NE 0/10 0/10MSU IgG IFA (Serum) Agents on Request: Giardia sp. 0/10 NE 0/10 NE 0/10 NE NE NE MSU Zinc Sulfate (Fecal)

NA=not applicable

CUM=cumulative

NE=not examined

CURR=current

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

***Because Streptococcus canis is recognized as a beta-hemolytic group G, we have updated this report from the original issued in Mar 2019 to retroactively include this data in the Streptococci Beta-hemolytic Group G column.

Bambi Jasmin, DVM, DACLAM

05/03/2019

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.



Health Monitoring Report

Based on FELASA Recommendations

Name and address of the breeder: MBR Waverly, LLC (a Marshall Company), Waverly, NY

Date of issue: Dec 2018 Unit No: Barriers and Conventional Building Examination date: Quarter 4, 2018

Species: Feline Breed: Domestic Shorthair Cat Populated†: Colony acquired June 2018

		BARRIEF	R BUILDINGS		CONVENTION	IAL BUIDLING		
	1st BARI	RIER	2 nd BAR	RIER				
	CUMULATIVE	CURRENT	CUMULATIVE	CURRENT	CUMULATIVE	CURRENT	LAB	METHOD
VIRAL INFECTIONS								
Compulsory Agents:								
Feline Calicivirus	0/10	0/10	0/10	0/10	Vaccinated	NA		PCR (Nasal/Oropharyngeal swab)
Feline Coronavirus	0/10	0/10	0/10	0/10	0/10	0/10		PCR (Whole blood)
Feline Herpesvirus	0/10	0/10	0/10	0/10	Vaccinated	NA		PCR (Nasal/Conjunctival swab)
FeLV/FIV	0/10	0/10	0/10	0/10	0/10	0/10		ELISA (Whole blood)
Feline Panleukopenia	0/10	0/10	0/10	0/10	Vaccinated	NA		PCR (Feces)
Feline Panleukopenia	0/10	0/10	0/10	0/10	Vaccinated	NA	MSU	HI (Serum)
BACTERIAL INFECTIONS								
Compulsory Agents:								
Bartonella spp.	0/10	0/10	0/10	0/10	0/10	0/10	MSU	PCR (Whole Blood)
Bordetella bronchiseptica	5/10	5/10	10/10	10/10	1/10	1/10		Culture (Nasal/Oropharyngeal swab)
Campylobacter spp.	0/10	0/10	0/10	0/10	0/10	0/10		Culture (Rectal swab)
Chlamydophilia	0/10	0/10	0/10	0/10	0/10	0/10	MSU	PCR (Nasal/Conjunctival swab)
Mycoplasma haemofelis	0/10	0/10	0/10	0/10	0/10	0/10		PCR (Whole Blood)
Mycoplasma Culture	0/10	0/10	0/10	0/10	0/10	0/10	MSU	Culture (Nasal/Oropharyngeal swab)
Pasteurellaceae	2/10	2/10	3/10	3/10	8/10	8/10		Culture (Nasal/Oropharyngeal swab)
Salmonella spp.	0/10	0/10	0/10	0/10	0/10	0/10		Culture (Rectal swab)
Streptococci β-hemolytic Group G	0/10	0/10	0/10	0/10	0/10	0/10	MSU	Culture (Nasal/Oropharyngeal swab)
Yersinia enterocolitica	0/10	0/10	0/10	0/10	0/10	0/10	MSU	Culture (Rectal swab)
FUNGAL INFECTIONS								
Compulsory Agents:								
Microsporum spp.	0/10	0/10	0/10	0/10	0/10	0/10	MSU	Fungal Culture (Hair pluck)
Trichophyton spp.	0/10	0/10	0/10	0/10	0/10	0/10		Fungal Culture (Hair pluck)
PARASITOLOGICAL								
Compulsory Agents:								
Helminths	0/10	0/10	0/10	0/10	0/10	0/10	MSII	Sodium Nitrate (Fecal)
Isospora spp.	0/10	0/10	0/10	0/10	0/10	0/10		Sodium Nitrate (Fecal)
Sarcocystis spp.	0/10	0/10	0/10	0/10	0/10	0/10		Zinc Sulfate (Fecal)
Toxoplasma gondii	0/10	0/10	0/10	0/10	0/10	0/10		IgG IFA (Serum)
Toxopiasina gonun	0/10	0/10	0/10	0/10	0/10	0/10	IVIDO	igo ii /i (beruiii)
Agents on Request:	0/10	0/10	0/10	0/10	0/10	0/10	MOTT	7' - G 16-4- (T- 1)
Giardia sp.	0/10	0/10	0/10	0/10	0/10	0/10	MSU	Zinc Sulfate (Fecal)
NA=not applicable								

NE=not examined

The vaccination program is administered in accordance with current veterinary practice procedures and is documented accordingly. A description of the current immunization regimen is available upon request.

Abbreviations for laboratories:

MSU: Michigan State University, Veterinary Diagnostic Laboratory, 4152 Beaumont Road, Lansing, MI 48910-8104

Bambi Jasmin, DVM, DACLAM

Date

[†]Colony was established by Liberty Research in 1975, and acquired by Marshall in June 2018. Conventional animals originated from barriers.

Exhibit 4



Health Monitoring Report

Based on FELASA Recommendations

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

Date of issue: May 2021 Unit N°: Barriers P1, P2 and P3 Examination date: Quarter 2, 2021

Species: Porcine Strain: Göttingen Minipig Populated*: P1 August 2003, P3 October 2016 CUMULATIVE CURRENT TEST LABORATORY METHOD RESULTS RESULTS VIRAL INFECTIONS P1 P2 P1 P2 **P3** Aujeszky's Disease (Pseudorabies) 0/320 0/120 0/90 NE NE PU ELISA (Blood) Classical Swine Fever (hog cholera) NA (U.S. free of Hog Cholera) NA NA NA NE NE NE NA Porcine Epidemic Diarrhea3 0/70 0/50 0/20 NE NE NE Iowa PCR (Fecal) PEDV/PDCoV 0/86 0/102 0/86 0/2 0/4 0/2 Multiplex PCR (Fecal) Iowa Encephalomyocarditis Virus 0/330 0/120 0/90 NE NE NE UM SN (Blood) Haemagglutinating Encephalomyelitis 0/330 0/120 0/90 NE NF. NE UM HI (Blood) Porcine Circovirus II 0/330 0/120 0/90 NE NE NE PU IFA (Blood) Porcine Influenza A^4 0/120 0/120 NE NE PUELISA (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 0/330 0/120 0/90 NE NE UM HI (Blood) Porcine Reproduct. & Resp. Syndrome 0/346 0/152 0/106 0/20/4 0/2ELISA (Blood) Iowa Porcine Respiratory Coronavirus 0/330 0/120 0/90 NE NE NE PU ELISA (Blood) Porcine Rotavirus 193/330 79/120 54/90 NE NE NE PU IFF (Blood) Transmissible Gastroenteritis 0/330 0/120 0/90 NE NE PU ELISA (Blood) BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 0/330 0/120 0/90 NE NE NE IJМ ELISA (Blood) Bordetella bronchiseptica 5/360 1/120 4/179 NE NE NE PU Culture (Nasal Swab) Brachyspira (Serpulina) hyodysenteriae 0/330 0/120 0/90 NE NE NE PU PCR (Fecal) Brucella abortus 0/330 0/120 NE NE NE PU Agglutination (Blood) Campylobacter spp. 3/330 0/120 0/90 NE. NE PU NE Culture (Fecal) Clostridium perfringens Type C² 0/330 0/120 0/90 NE NE NE PU Culture (Fecal) Erysipelothrix rhusiopathiae 0/330 0/120 0/90 NE NE NE PU Culture (Skin Swab) Eubacterium suis 0/330 0/120 0/90 NE NE PU NF. Culture (Urine) Haemophilus parasuis 0/330 0/120 0/90 NE NE NE PU Culture (Nasal Swab) Lawsonia intracellularis 0/330 0/120 0/90 NE NE NE PCR (Fecal) 0/330 Leptospira spp. 0/120 NE NE NE PU MA (Blood) (pomona, grippotyphosa, hardjo, canicola, icterohemorrhagiae, bratislava) Mycoplasma hyopneumoniae 0/260 0/120 0/90 NE NE NE PU ELISA (Blood) P. multocida (toxin producing) 0/330 0/120 0/90 NE NE NE PU Culture (Nasal Swab) P. haemolytica 0/330 0/120 0/90 NE NE NE PU Culture (Nasal Swab) P. pneumotropica 0/330 0/120 0/90 NE NE NE PU Culture (Nasal Swab) Salmonella spp. 0/330 0/120 0/90 NE NE. NF. PU Culture (Fecal) Staphylococcus hyicus1 43/330 0/120 0/90 NE NE NE PU Culture (Skin Swab) β-haemolytic Streptococci 0/330 0/120 0/90 NE NE NE PU Culture (Nasal Swab) Streptococcus suis-type 2 0/330 0/120 0/90 NE NE NE PU Culture (Nasal Swab) Streptococcus suis-other 6/330 7/120 6/90 NE NE NE PU Culture (Nasal Swab) Yersinia enterocolitica 0/330 0/120 0/90 NE NE NE PU Culture (Fecal) **FUNGAL INFECTIONS** Candida albicans 5/330 0/120 0/90 NE NE NE PU Culture (Skin Swab) Microsporum spp. 0/330 0/120 0/90 NE NE NE PU Culture (Fecal) Trichophyton spp. 0/330 0/120 0/90 NE. NE PU NE Culture (Fecal) PARASITOLOGICAL INFECTIONS Arthropods 0/330 0/120 0/90 NE NE NE In-house Micr. Insp. (Skin Swab) Helminths 0/330 0/120 0/90 NE NE NE In-house Sodium Nitrate (Fecal) Coccidia (Eimeria, Isospora) 0/330 0/120 0/90 NE NE NE In-house Sodium Nitrate (Fecal) Giardia 0/330 0/120 0/90 NE NE NE Zinc Sulfate (Fecal) In-house Toxoplasma gondii 0/330 0/120 0/90 NE NF. NE PU IFA (Blood)

^{*}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.

- 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.

Banki y Com	05/20/2021
Bambi Jasmin, DVM	Date



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

Date of issue: April 2021 Unit Nº: Barriers P1, P2 and P3 Examination date: Quarter 1, 2021

Species: Porcine Strain: Göttingen Minipig Populated*: P1 August 2003, P3 October 2016

	CUMULATIV	E		CURRENT TEST LABORATORY METHOD RESULTS				
VIRAL INFECTIONS	RESULTS P1 P2	Р3	RESU	LTS P2	Р3			
Aujeszky's Disease (Pseudorabies)	0/320 0/12		0/10	0/10	0/10	PU	ELISA (Blood)	
Classical Swine Fever (hog cholera)	NA NA		NE	NE	NE	NA	NA (U.S. free of Hog Cholera)	
Porcine Epidemic Diarrhea ³	0/70 0/5		NE	NE	NE	Iowa	PCR (Fecal)	
PEDV/PDCoV	0/84 0/9		0/10	0/10	0/10	Iowa	Multiplex PCR (Fecal)	
Encephalomyocarditis Virus	0/330 0/12		0/10	0/10	0/10	UM	SN (Blood)	
Haemagglutinating Encephalomyelitis	0/330 0/12		0/10	0/10	0/10	UM	HI (Blood)	
Porcine Circovirus II	0/330 0/12		0/10	0/10	0/10	PU	IFA (Blood)	
Porcine Influenza	0/550 0/12	0 0/70	0/10	0/10	0/10	10	II'A (Blood)	
A ⁴	0/120 0/12	0 0/90	0/10	0/10	0/10	PU	ELISA (Blood)	
H1N1	0/220 NE		NE	NE	NE	PU	ELISA (Blood)	
H3N2	0/220 NE	NE	NE	NE	NE	PU	ELISA (Blood)	
Porcine Parvovirus		20 0/90	0/10	NE	NE	UM	` ,	
Porcine Reproduct. & Resp. Syndrome		48 0/104	0/10	0/10			HI (Blood)	
Porcine Respiratory Coronavirus		20 0/90	0/10	0/10	0/10 0/10	Iowa	ELISA (Blood)	
Porcine Rotavirus	193/330 79/12		9/10	1/10		PU	ELISA (Blood)	
Transmissible Gastroenteritis	0/330 0/12				3/10	PU	IFF (Blood)	
Transmissible dastroenteritis	0/330 0/12	20 0/90	0/10	0/10	0/10	PU	ELISA (Blood)	
BACTERIAL INFECTIONS								
Actinobacillus pleuropneumoniae								
Serotypes 1, 5, 7		20 0/90	0/10	0/10	0/10	UM	ELISA (Blood)	
Bordetella bronchiseptica	5/360 1/12	20 4/179	0/10	0/10	0/10	PU	Culture (Nasal Swab)	
Brachyspira (Serpulina) hyodysenteriae	0/330 0/12	20 0/90	0/10	0/10	0/10	PU	PCR (Fecal)	
Brucella abortus	0/330 0/12	0 0/90	0/10	0/10	0/10	PU	Agglutination (Blood)	
Campylobacter spp.	3/330 0/12	0 0/90	0/10	0/10	0/10	PU	Culture (Fecal)	
Clostridium perfringens Type C ²	0/330 0/12	0 0/90	0/10	0/10	0/10	PU	Culture (Fecal)	
Erysipelothrix rhusiopathiae	0/330 0/12	0 0/90	0/10	0/10	0/10	PU	Culture (Skin Swab)	
Eubacterium suis	0/330 0/12	0 0/90	0/10	0/10	0/10	PU	Culture (Urine)	
Haemophilus parasuis	0/330 0/12	0 0/90	0/10	0/10	0/10	PU	Culture (Nasal Swab)	
Lawsonia intracellularis		0 0/90	0/10	0/10	0/10	PU	PCR (Fecal)	
Leptospira spp.		0 0/90	0/10	0/10	0/10	PU	MA (Blood)	
(pomona, grippotyphosa,		,,,	0, 10	0,10	0/10	10	Will (Blood)	
hardjo, canicola, icterohemorrhagiae,								
bratislava)								
Mycoplasma hyopneumoniae	0/260 0/12	0 0/90	0/10	0/10	0/10	PU	ELISA (Blood)	
P. multocida (toxin producing)		0 0/90	0/10	0/10	0/10	PU	Culture (Nasal Swab)	
P. haemolytica		0 0/90	0/10	0/10	0/10	PU	` ,	
P. pneumotropica		0 0/90	0/10	0/10	0/10	PU PU	Culture (Nasal Swab) Culture (Nasal Swab)	
Salmonella spp.		0 0/90	0/10	0/10	0/10	PU	Culture (Fecal)	
Staphylococcus hyicus ¹		0 0/90	0/10	0/10	0/10	PU		
β-haemolytic Streptococci		0 0/90	0/10	0/10			Culture (Skin Swab)	
Streptococcus suis-type 2					0/10	PU	Culture (Nasal Swab)	
Streptococcus suis-type 2 Streptococcus suis-other		0 0/90	0/10	0/10	0/10	PU	Culture (Nasal Swab)	
Yersinia enterocolitica		0 6/90 0 0/90	0/10 0/10	0/10 0/10	0/10 0/10	PU PU	Culture (Nasal Swab) Culture (Fecal)	
	0.000 0/12	- 0,,0	0, 10	0,10	0/10	10	Culture (Fecal)	
FUNGAL INFECTIONS								
Candida albicans		0/90	0/10	0/10	0/10	PU	Culture (Skin Swab)	
Microsporum spp.		0/90	0/10	0/10	0/10	PU	Culture (Fecal)	
Trichophyton spp.	0/330 0/12	0 0/90	0/10	0/10	0/10	PU	Culture (Fecal)	
PARASITOLOGICAL INFECTIONS								
Arthropods	0/330 0/120	0/90	0/10	0/10	0/10	In-house	Micr. Insp. (Skin Swab)	
Helminths		0/90	0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)	
Coccidia (Eimeria, Isospora)		0/90	0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)	
Giardia		0/90	0/10	0/10	0/10	In-house	Zinc Sulfate (Fecal)	
Toxoplasma gondii		0/90	0/10	0/10	0/10	PU	IFA (Blood)	
z over branching Porteri	0/330 0/120	, 0170	0/10	0/10	0/10	10	IFA (DIOOU)	

^{*}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.

- 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.

Bamb VI Jasmin	04/20/2021	
Bambi Jasmin, DVM	Date	



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

Date of issue: October 2020 Unit No: Barriers P1, P2 and P3 Examination date: Quarter 3, 2020

Species: Porcine Strain: Göttingen Minipig Populated*: P1 August 2003, P3 October 2016

Decree 1 crome	Diram. Got	unger	i wimpig	Pig Topulated . 11 August 2003, 13 Octob						
	RESUL			RESU			LABORATORY	METHOD		
VIRAL INFECTIONS	P1	P2	P3	P1	P2	P3				
Aujeszky's Disease (Pseudorabies)		0/110		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/PDC ₀ V	0/72	0/84	0/72	0/10	0/10	0/10	Iowa	Multiplex PCR (Fecal)		
Encephalomyocarditis Virus		0/110		0/10	0/10	0/10	UM	SN (Blood)		
Haemagglutinating Encephalomyelitis		0/110		0/10	0/10	0/10	UM	HI (Blood)		
Porcine Circovirus II	0/320	0/110	0/80	0/10	0/10	0/10	PU	IFA (Blood)		
Porcine Influenza										
A^4		0/110		0/10	0/10	0/10	PU	ELISA (Blood)		
HINI	0/220		NE	NE	NE	NE	PU	ELISA (Blood)		
H3N2	0/220		NE	NE	NE	NE	PU	ELISA (Blood)		
Porcine Parvovirus	0/320	0/110	0/80	0/10	0/10	0/10	UM	HI (Blood)		
Porcine Reproduct. & Resp. Syndrome	0/332	0/134	0/92	0/10	0/10	0/10	Iowa	ELISA (Blood)		
Porcine Respiratory Coronavirus	0/320	0/110	0/80	0/10	0/10	0/10	PU	ELISA (Blood)		
Porcine Rotavirus	184/320	78/110	51/80	10/10	8/10	10/10	PU	IFF (Blood)		
Transmissible Gastroenteritis	0/320	0/110	0/80	0/10	0/10	0/10	PU	ELISA (Blood)		
BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae								()		
Serotypes 1, 5, 7	0/320	0/110		0/10	0/10	0/10	UM	ELISA (Blood)		
Bordetella bronchiseptica	5/350		4/169	0/10	1/10	0/10	PU	Culture (Nasal Swab)		
Brachyspira (Serpulina) hyodysenteriae	0/320	0/110		0/10	0/10	0/10	PU	PCR (Fecal)		
Brucella abortus	0/320	0/110	0/80	0/10	0/10	0/10	PU	Agglutination (Blood)		
Campylobacter spp.	3/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Fecal)		
Clostridium perfringens Type C ²	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Fecal)		
Erysipelothrix rhusiopathiae	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Skin Swab)		
Eubacterium suis	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Urine)		
Haemophilus parasuis	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Nasal Swab)		
Lawsonia intracellularis	0/320	0/110	0/80	0/10	0/10	0/10	PU	PCR (Fecal)		
Leptospira spp.	0/320	0/110	0/80	0/10	0/10	0/10	PU	MA (Blood)		
(pomona, grippotyphosa, hardjo, canicola, icterohemorrhagiae, bratislava)								,		
Mycoplasma hyopneumoniae	0/250	0/110	0/80	0/10	0/10	0/10	PU	ELISA (Blood)		
P. multocida (toxin producing)	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Nasal Swab)		
P. haemolytica	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Nasal Swab)		
P. pneumotropica	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Nasal Swab)		
Salmonella spp.	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Fecal)		
Staphylococcus hyicus ¹	43/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Skin Swab)		
β-haemolytic Streptococci	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Nasal Swab)		
Streptococcus suis-type 2	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Nasal Swab)		
Streptococcus suis-other	6/320	7/110	6/80	0/10	1/10	1/10	PU	Culture (Nasal Swab)		
Yersinia enterocolitica	0/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Fecal)		
FUNGAL INFECTIONS										
Candida albicans	5/320	0/110	0/80	0/10	0/10	0/10	PU	Culture (Skin Swab)		
Microsporum spp.	0/320	0/110		0/10	0/10	0/10	PU	Culture (Fecal)		
Trichophyton spp.	0/320	0/110		0/10	0/10	0/10	PU	Culture (Fecal)		
PARASITOLOGICAL INFECTIONS								` '		
Arthropods		0/110	0/80	0/10	0/10	0/10	In-house	Micr. Insp. (Skin Swab)		
Helminths		0/110		0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)		
Coccidia (Eimeria, Isospora)		0/110		0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)		
Giardia		0/110		0/10	0/10	0/10	In-house	Zinc Sulfate (Fecal)		
Toxoplasma gondii		0/110		0/10	0/10	0/10	PU	IFA (Blood)		
	0/320	5/110	5/00	3/10	0/10	0/10	10	11 (11 (D1000)		

^{*}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.

- 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.

Banki 4 Jasmis	10/12/20
Bambi Jasmin, DVM	Date



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

Date of issue: July 2020 Examination date: Quarter 2, 2020 Unit Nº: Barriers P1, P2 and P3

Populated*: P1 August 2003, P3 October 2016 Species: Porcine Strain: Göttingen Minipig

			. •					
	CUMUI RESUL	LATIVE TS		CURF RESU	RENT TES	ST	LABORATORY	METHOD
VIRAL INFECTIONS	P1	P2	P3	P1	P2	P3		
Aujeszky's Disease (Pseudorabies)		0/100		NE	NE	NE	PU	ELISA (Blood)
Classical Swine Fever (hog cholera)	NA	NA	NA	NE	NE	NE	NA	NA (U.S. free of Hog Choler
Porcine Epidemic Diarrhea ³	0/70	0/50	0/20	NE	NE	NE	Iowa	PCR (Fecal)
PEDV/PDCoV	0/62	0/74	0/62	0/2	0/4	0/2	Iowa	Multiplex PCR (Fecal)
Encephalomyocarditis Virus		0/100		NE	NE	NE	UM	SN (Blood)
Haemagglutinating Encephalomyelitis		0/100		NE	NE	NE	UM	HI (Blood)
Porcine Circovirus II		0/100		NE	NE	NE	PU	IFA (Blood)
Porcine Influenza	0,510	0,100	0,70	112	1,2	112		1111 (B1000)
A ⁴	0/100	0/100	0/70	NE	NE	NE	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	0/220	0/100		NE	NE	NE	UM	HI (Blood)
Porcine Reproduct. & Resp. Syndrome	0/310	0/100		0/2	0/4	0/2	Iowa	ELISA (Blood)
Porcine Respiratory Coronavirus	0/310	0/124		NE	NE	NE	PU	ELISA (Blood)
Porcine Rotavirus	174/310			NE	NE	NE	PU	IFF (Blood)
Transmissible Gastroenteritis	0/310			NE	NE	NE	PU	ELISA (Blood)
Transmissible Gastroenterius	0/310	0/100	0//0	NE	NE	NE	PU	ELISA (Blood)
BACTERIAL INFECTIONS								
Actinobacillus pleuropneumoniae								
Serotypes 1, 5, 7	0/310	0/100		NE	NE	NE	UM	ELISA (Blood)
Bordetella bronchiseptica	5/340		4/159	NE	NE	NE	PU	Culture (Nasal Swab)
Brachyspira (Serpulina) hyodysenteriae	0/310	0/100		NE	NE	NE	PU	PCR (Fecal)
Brucella abortus	0/310	0/100		NE	NE	NE	PU	Agglutination (Blood)
Campylobacter spp.	3/310	0/100	0/70	NE	NE	NE	PU	Culture (Fecal)
Clostridium perfringens Type C ²	0/310	0/100	0/70	NE	NE	NE	PU	Culture (Fecal)
Erysipelothrix rhusiopathiae	0/310	0/100	0/70	NE	NE	NE	PU	Culture (Skin Swab)
Eubacterium suis	0/310	0/100		NE	NE	NE	PU	Culture (Urine)
Haemophilus parasuis	0/310	0/100		NE	NE	NE	PU	Culture (Nasal Swab)
Lawsonia intracellularis	0/310	0/100	0/70	NE	NE	NE	PU	PCR (Fecal)
Leptospira spp.	0/310	0/100	0/70	NE	NE	NE	PU	MA (Blood)
(pomona, grippotyphosa, hardjo, canicola, icterohemorrhagiae, bratislava)								
Mycoplasma hyopneumoniae	0/240	0/100	0/70	NE	NE	NE	PU	ELISA (Blood)
P. multocida (toxin producing)	0/310	0/100		NE	NE	NE	PU	Culture (Nasal Swab)
P. haemolytica	0/310	0/100		NE	NE	NE	PU	Culture (Nasal Swab)
P. pneumotropica	0/310	0/100		NE	NE	NE	PU	Culture (Nasal Swab)
other pasteurellae	0/310	0/100		NE	NE -	NE	PU	Culture (Nasal Swab)
Salmonella spp.	0/310	0/100		NE	NE	NE	PU	Culture (Fecal)
Staphylococcus hyicus ¹	43/310	0/100		NE	NE	NE	PU	Culture (Skin Swab)
β-haemolytic Streptococci	0/310	0/100		NE	NE	NE	PU	Culture (Nasal Swab)
Streptococcus suis-type 2		0/100		NE NE	NE NE	NE NE	PU	` ,
	0/310 6/310					NE NE	PU PU	Culture (Nasal Swab)
Streptococcus suis-other Yersinia enterocolitica	6/310 0/310	6/100 0/100		NE NE	NE NE	NE NE	PU PU	Culture (Nasal Swab) Culture (Fecal)
FUNGAL INFECTIONS Candida albicans	5/210	0/100	0/70	NE	NE	NE	PU	Culture (Skin Swab)
								` /
Microsporum spp. Trichophyton spp.		0/100 0/100		NE NE	NE NE	NE NE	PU PU	Culture (Fecal) Culture (Fecal)
								` '
PARASITOLOGICAL INFECTIONS Arthropods	0/310	0/100	0/70	NE	NE	NE	In-house	Micr. Insp. (Skin Swab)
Helminths		0/100		NE	NE	NE	In-house	Sodium Nitrate (Fecal)
Coccidia (Eimeria, Isospora)		0/100		NE	NE	NE	In-house	Sodium Nitrate (Fecal)
Giardia (Emieria, Isospora)	0/310			NE	NE	NE	In-house	Zinc Sulfate (Fecal)
Toxoplasma gondii		0/100		NE	NE	NE	PU	IFA (Blood)
Toropiasina gondii	0/310	0/100	0110	NE	1417	1417	10	II A (Dioou)

^{*}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.

- 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.

Banto 4 Jagnin	Othober
Bambi Jasmin, DVM	Date



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

Date of issue: April 2020 Unit Nº: Barriers P1, P2 and P3 Examination date: Quarter 1, 2020

Species: Porcine Strain: Göttingen Minipig Populated*: P1 August 2003, P3 October 2016

	CUMU: RESUL	LATIVE TS		CURR RESU	ENT TES	ST.	LABORATORY	METHOD
VIRAL INFECTIONS	P1	P2	P3	P1	P2	P3		
Aujeszky's Disease (Pseudorabies)	0/300	0/100	0/70	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 Choler
Porcine Epidemic Diarrhea ³	0/70	0/50	0/20	NE	NE	NE	Iowa	PCR (Fecal)
PEDV/PDCoV	0/60	0/70	0/60	0/10	0/10	0/10	Iowa	Multiplex PCR (Fecal)
Encephalomyocarditis Virus		0/100		0/10	0/10	0/10	UM	SN (Blood)
Haemagglutinating Encephalomyelitis		0/100		0/10	0/10	0/10	UM	HI (Blood)
Porcine Circovirus II		0/100	0/70	0/10	0/10	0/10	PU	IFA (Blood)
Porcine Influenza	0,510	0/100	0//0	0/10	0/10	0/10	10	If A (Blood)
A ⁴	0/100	0/100	0/70	0/10	0/10	0/10	PU	ELICA (Dissa)
HINI	0/220		NE	NE	NE	NE	PU	ELISA (Blood)
H3N2	0/220		NE	NE	NE	NE NE	PU	ELISA (Blood)
Porcine Parvovirus	0/220							ELISA (Blood)
Porcine Reproduct. & Resp. Syndrome				0/10	0/10	0/10	UM	HI (Blood)
		0/120		0/10	0/10	0/10	Iowa	ELISA (Blood)
Porcine Respiratory Coronavirus		0/100		0/10	0/10	0/10	PU	ELISA (Blood)
Porcine Rotavirus	174/310			4/10	10/10	10/10	PU	IFF (Blood)
Transmissible Gastroenteritis	0/310	0/100	0/70	0/10	0/10	0/10	PU	ELISA (Blood)
BACTERIAL INFECTIONS								
Actinobacillus pleuropneumoniae								
Serotypes 1, 5, 7	0/310	0/100	0/70	0/10	0/10	0/10	UM	ELISA (Blood)
Bordetella bronchiseptica	5/340	0/100	4/159	0/10	0/10	1/10	PU	Culture (Nasal Swab)
Brachyspira (Serpulina) hyodysenteriae	0/310	0/100	0/70	0/10	0/10	0/10	PU	PCR (Fecal)
Brucella abortus	0/310	0/100	0/70	0/10	0/10	0/10	PU	Agglutination (Blood)
Campylobacter spp.	3/310	0/100		0/10	0/10	0/10	PU	Culture (Fecal)
Clostridium perfringens Type C ²	0/310	0/100		0/10	0/10	0/10	PU	Culture (Fecal)
Erysipelothrix rhusiopathiae	0/310	0/100		0/10	0/10	0/10	PU	Culture (Skin Swab)
Eubacterium suis	0/310	0/100		0/10	0/10	0/10	PU	Culture (Urine)
Haemophilus parasuis	0/310	0/100		0/10	0/10	0/10	PU	
Lawsonia intracellularis	0/310	0/100		0/10	0/10	0/10	PU	Culture (Nasal Swab)
Leptospira spp.	0/310	0/100		0/10	0/10			PCR (Fecal)
(pomona, grippotyphosa,	0/310	0/100	0//0	0/10	0/10	0/10	PU	MA (Blood)
hardjo, canicola, icterohemorrhagiae, bratislava)								
Mycoplasma hyopneumoniae	0/240	0/100	0/70	0/10	0/10	0/10	PU	ELISA (Blood)
P. multocida (toxin producing)	0/240	0/100		0/10	0/10	0/10	PU	
P. haemolytica	0/310	0/100		0/10	0/10	0/10		Culture (Nasal Swab)
P. pneumotropica							PU	Culture (Nasal Swab)
	0/310	0/100		0/10	0/10	0/10	PU	Culture (Nasal Swab)
other pasteurellae	0/310	0/100		0/10	0/10	0/10	PU	Culture (Nasal Swab)
Salmonella spp.	0/310	0/100		0/10	0/10	0/10	PU	Culture (Fecal)
Staphylococcus hyicus ¹	43/310	0/100		0/10	0/10	0/10	PU	Culture (Skin Swab)
β-haemolytic Streptococci	0/310	0/100		0/10	0/10	0/10	PU	Culture (Nasal Swab)
Streptococcus suis-type 2	0/310	0/100	0/70	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Streptococcus suis-other	6/310	6/100	5/70	2/10	2/10	0/10	PU	Culture (Nasal Swab)
Yersinia enterocolitica	0/310	0/100	0/70	0/10	0/10	0/10	PU	Culture (Fecal)
FUNGAL INFECTIONS								
Candida albicans	5/310	0/100	0/70	0/10	0/10	0/10	PU	Culture (Skin Swab)
Microsporum spp.		0/100		0/10	0/10	0/10	PU	Culture (Fecal)
Trichophyton spp.		0/100		0/10	0/10	0/10	PU	Culture (Fecal)
PARASITOLOGICAL INFECTIONS								
Arthropods	0/310	0/100	0/70	0/10	0/10	0/10	In house	Mion Inon (Clair C. 1)
Helminths							In-house	Micr. Insp. (Skin Swab)
		0/100		0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)
Coccidia (Eimeria, Isospora)		0/100		0/10	0/10	0/10	In-house	Sodium Nitrate (Fecal)
Giardia		0/100		0/10	0/10	0/10	In-house	Zinc Sulfate (Fecal)
Toxoplasma gondii	0/310	0/100	0/70	0/10	0/10	0/10	PU	IFA (Blood)

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- 4. As of February 2015, Influenza A will replace the test for H1N1 and H3N2.

Bans 4 garmin	04/10/1020
Bambi Jasmin, DVM	Date



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

Date of issue: October 2019 Unit Nº: Barriers P1, P2 and P3 Examination date: Quarter 3, 2019

Species: Porcine Strain: Göttingen Minipig Populated*: P1 August 2003, P3 October 2016

Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	RESUI P1 0/290 NA 0/70 0/48 0/300 0/300 0/300 0/220 0/220 0/300 0/308 0/300 0/300 0/300	P2 0/90 NA 0/50 0/56 0/90 0/90 0/90 NE NE 0/90 0/106 0/90 60/90	P3 0/60 NA 0/20 0/48 0/60 0/60 0/60 NE NE 0/60 5 0/68 0/60 31/60	P1 0/10 NE NE 0/10 0/10 0/10 0/10 NE NE 0/10 0/10 0/10 0/10 0/10 NE NE 0/10 0/10 0/10 0/10 0/10 0/10 0/10 0/1	P2 0/10 NE NE 0/10 0/10	NE NE 0 0/10 0 0/10 0 0/10 0 0/10	PU NA Iowa Iowa UM UM PU PU	ELISA (Blood) NA (U.S. free of Hog Choler PCR (Fecal) Multiplex PCR (Fecal) SN (Blood) HI (Blood) IFA (Blood) ELISA (Blood) ELISA (Blood)
Classical Swine Fever (hog cholera) Porcine Epidemic Diarrhea³ PEDV/PDCoV Encephalomyocarditis Virus Haemagglutinating Encephalomyelitis Porcine Circovirus II Porcine Influenza A⁴ H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C² Erysipelothrix rhusiopathiae	NA 0/70 0/48 0/300 0/300 0/300 0/220 0/220 0/300 0/308 0/300 70/300	NA 0/50 0/56 0/90 0/90 0/90 NE NE 0/90 0/106 0/90 60/90	NA 0/20 0/48 0/60 0/60 0/60 NE NE 0/60 0/68 0/68	NE NE 0/10 0/10 0/10 0/10 NE NE 0/10	NE NE 0/10 0/10 0/10 0/10 NE NE	NE NE NE O/10 O/10 O/10 O/10 O/10 NE	NA Iowa Iowa UM UM PU PU PU	NA (U.S. free of Hog Choler PCR (Fecal) Multiplex PCR (Fecal) SN (Blood) HI (Blood) IFA (Blood) ELISA (Blood)
Porcine Epidemic Diarrhea³ PEDV/PDCoV Encephalomyocarditis Virus Haemagglutinating Encephalomyelitis Porcine Circovirus II Porcine Influenza A⁴ H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C² Erysipelothrix rhusiopathiae	0/70 0/48 0/300 0/300 0/300 0/90 0/220 0/220 0/300 0/308 0/300 70/300	0/50 0/56 0/90 0/90 0/90 0/90 NE NE 0/90 0/106 0/90 60/90	0/20 0/48 0/60 0/60 0/60 0/60 NE NE 0/60 5 0/68 0/60	NE 0/10 0/10 0/10 0/10 0/10 NE NE 0/10	0/10 0/10 0/10 0/10 0/10 0/10 NE NE	NE 0 0/10 0 0/10 0 0/10 0 0/10 0 0/10 NE	Iowa Iowa UM UM PU PU PU	PCR (Fecal) Multiplex PCR (Fecal) SN (Blood) HI (Blood) IFA (Blood) ELISA (Blood)
PEDV/PDCoV Encephalomyocarditis Virus Haemagglutinating Encephalomyelitis Porcine Circovirus II Porcine Influenza A ⁴ H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/48 0/300 0/300 0/300 0/90 0/220 0/220 0/300 0/308 0/300 70/300	0/56 0/90 0/90 0/90 0/90 NE NE 0/90 0/106 0/90 60/90	0/48 0/60 0/60 0/60 0/60 NE NE 0/60 6 0/68 0/60	0/10 0/10 0/10 0/10 0/10 NE NE 0/10	0/10 0/10 0/10 0/10 0/10 NE NE	0 0/10 0 0/10 0 0/10 0 0/10 0 0/10 0 0/10 NE	Iowa UM UM PU PU PU	PCR (Fecal) Multiplex PCR (Fecal) SN (Blood) HI (Blood) IFA (Blood) ELISA (Blood)
Encephalomyocarditis Virus Haemagglutinating Encephalomyelitis Porcine Circovirus II Porcine Influenza A ⁴ H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300 0/300 0/300 0/90 0/220 0/220 0/300 0/308 0/300 70/300	0/90 0/90 0/90 0/90 NE NE 0/90 0/106 0/90 60/90	0/60 0/60 0/60 0/60 NE NE 0/60 6 0/68 0/60	0/10 0/10 0/10 0/10 NE NE 0/10	0/10 0/10 0/10 0/10 NE NE	0 0/10 0 0/10 0 0/10 0 0/10 0 0/10 NE	UM UM PU PU PU	SN (Blood) HI (Blood) IFA (Blood) ELISA (Blood)
Haemagglutinating Encephalomyelitis Porcine Circovirus II Porcine Influenza A ⁴ H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300 0/300 0/90 0/220 0/220 0/300 0/308 0/300 70/300	0/90 0/90 0/90 NE NE 0/90 0/106 0/90 60/90	0/60 0/60 0/60 NE NE 0/60 6 0/68 0/60	0/10 0/10 0/10 NE NE 0/10	0/10 0/10 0/10 NE NE	0 0/10 0 0/10 0 0/10 NE	UM PU PU PU	SN (Blood) HI (Blood) IFA (Blood) ELISA (Blood)
Porcine Circovirus II Porcine Influenza A ⁴ H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300 0/90 0/220 0/220 0/300 0/308 0/300 70/300	0/90 NE NE 0/90 0/106 0/90 60/90	0/60 0/60 NE NE 0/60 6 0/68 0/60	0/10 0/10 NE NE 0/10	0/10 0/10 NE NE	0 0/10 0 0/10 NE	PU PU PU	IFA (Blood) ELISA (Blood)
Porcine Influenza A ⁴ H1N1 H3N2 Porcine Parvovirus Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/90 0/220 0/220 0/300 0/308 0/300 70/300	0/90 NE NE 0/90 0/106 0/90 60/90	0/60 NE NE 0/60 6 0/68 0/60	0/10 NE NE 0/10	0/10 NE NE	0/10 NE	PU PU	ELISA (Blood)
A ⁴ H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/220 0/220 0/300 0/308 0/300 70/300	NE NE 0/90 0/106 0/90 60/90	NE NE 0/60 6 0/68 0/60	NE NE 0/10	NE NE	NE	PU	
H1N1 H3N2 Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C² Erysipelothrix rhusiopathiae	0/220 0/220 0/300 0/308 0/300 70/300	NE NE 0/90 0/106 0/90 60/90	NE NE 0/60 6 0/68 0/60	NE NE 0/10	NE NE	NE	PU	
Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/220 0/300 0/308 0/300 70/300	NE 0/90 0/106 0/90 60/90	NE 0/60 6 0/68 0/60	NE 0/10	NE			ELISA (Blood)
Porcine Parvovirus Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300 0/308 0/300 70/300	0/90 0/106 0/90 60/90	0/60 5 0/68 0/60	0/10		ME	DY I	
Porcine Reproduct. & Resp. Syndrome Porcine Respiratory Coronavirus Porcine Rotavirus 11' Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/308 0/300 70/300	0/106 0/90 60/90	0/68 0/60		0/10	INE	PU	ELISA (Blood)
Porcine Respiratory Coronavirus Porcine Rotavirus 1' Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/ 30 0 70/ 3 00	0/90 60/90	0/60	0/10	0/10	0/10	UM	HI (Blood)
Porcine Rotavirus Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	70/300	60/90			0/10	0/10	Iowa	ELISA (Blood)
Transmissible Gastroenteritis BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae			31/60	0/10	0/10	0/10	PU	ELISA (Blood)
BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300	0/90	21/00	10/10	7/10	6/10	PU	IFF (Blood)
Actinobacillus pleuropneumoniae Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae			0/60	0/10	0/10	0/10	PU	ELISA (Blood)
Serotypes 1, 5, 7 Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae								
Bordetella bronchiseptica Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae								
Brachyspira (Serpulina) hyodysenteriae Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300	0/90	0/60	0/10	0/10	0/10	UM	ELISA (Blood)
Brucella abortus Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	5/330	0/90	3/149	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Campylobacter spp. Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300	0/90	0/60	0/10	0/10	0/10	PU	PCR (Fecal)
Clostridium perfringens Type C ² Erysipelothrix rhusiopathiae	0/300	0/90	0/60	0/10	0/10	0/10	PU	Agglutination (Blood)
Erysipelothrix rhusiopathiae	3/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
Eubacterium suis	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Skin Swab)
	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)								()
	0/230	0/90	0/60	0/10	0/10	0/10	PU	ELISA (Blood)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
_	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
	3/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Skin Swab)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Nasal Swab)
	4/300	4/90	5/60	0/10	1/10	0/10	PU	Culture (Nasal Swab)
*	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
FUNGAL INFECTIONS								
	5/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Skin Swab)
	0/300	0/90	0/60	0/10	0/10	0/10	PU	Culture (Fecal)
, ,,	0/300		0/60	0/10		0/10	PU	Culture (Fecal)
PARASITOLOGICAL INFECTIONS								
	0/300	0/90	0/60	0/10	0/10	0/10	In-house	Micr. Insp. (Skin Swab)
* .		0/90	0/60		0/10	0/10	In-house	Sodium Nitrate (Fecal)
		0/90	0/60		0/10	0/10	In-house	Sodium Nitrate (Fecal)
		0/90	0/60				III-IIO USC	boundin Millale (1.ecal)
Toxoplasma gondii 0		0/90	0.00		0/10	0/10	In-house	Zinc Sulfate (Fecal)

^{*}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.

- 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.

Banks H gasnin	10/25/2019
Bambi Jasmin, DVM	Date



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

Date of issue: May 2018 Unit No: Galen Rd – P1, P2 & P3 Examination date: Quarter 2, 2018

Species: Porcine S	Strain: Göttingen Minipig				Populated [†] : P1 August 2003, P3 October 2016					
		CUMULATIVE RESULTS			RENT TE	ST	LABORATORY	METHOD		
VIRAL INFECTIONS	P1	P2	P3	P1	P2	P3				
Aujeszky's Disease (Pseudorabies)	0/260			NE	NE	NE	PU	ELISA (Blood)		
Classical Swine Fever (hog cholera)		NA	NA	NE	NE	NE	NA	NA (U.S. free of Hog Cholera)		
Porcine Epidemic Diarrhea****	0/70	0/50	0/20	NE	NE	NE	Iowa	PCR (Fecal)		
PEDV/PDCoV	0/14	0/18	0/14	0/2	0/4	0/2	Iowa	Multiplex PCR (Fecal)		
Encephalomyocarditis Virus	0/270		0/30	NE	NE	NE	UM	SN (Blood)		
Haemagglutinating Encephalomyelit			0/30	NE	NE	NE	UM	HI (Blood)		
Porcine Circovirus II	0/270	0/60	0/30	NE	NE	NE	PU	IFA (Blood)		
Porcine Influenza										
A ****	0/60	0/60	0/30	NE	NE	NĖ	PU	ELISA (Blood)		
HINI	0/220		NE	NE	NE	NE	PU	ELISA (Blood)		
H3N2	0/220		NE	NE	NE	NE	PU	ELISA (Blood)		
Porcine Parvovirus	0/270		0/30	NE	NE	NE	UM	HI (Blood)		
Porcine Reproduct. & Resp. Syndron			0/34	0/2	0/4	0/2	Iowa	ELISA (Blood)		
Porcine Respiratory Coronavirus	0/270		0/30	NE	NE	NE	PU	ELISA (Blood)		
Porcine Rotavirus	147/270		11/30	NE	NE	NE	PU	IFF (Blood)		
Transmissible Gastroenteritis	0/270	0/60	0/30	NE	NE	NE	PU	ELISA (Blood)		
BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae										
Serotypes 1, 5, 7	0/270	0/60	0/30	NE	NE	NE	UM	ELISA (Blood)		
Bordetella bronchiseptica	1/270	0/60	0/30	NE	NE	NE	PU	Culture (Nasal Swab)		
Brachyspira (Serpulina) hyodysenteri		0/60	0/30	NE	NE	NE	PU	PCR (Fecal)		
Brucella abortus	0/260	0/60	0/30	NE	NE	NE	PU	Agglutination (Blood)		
Campylobacter spp.	3/270	0/60	0/30	NE	NE	NE	PU	Culture (Fecal)		
Clostridium perfringens Type C***	0/270	0/60	0/30	NE	NE	NE	PU	Culture (Fecal)		
Erysipelothrix rhusiopathiae	0/270	0/60	0/30	NE	NE	NE	PU	Culture (Skin Swab)		
Eubacterium suis	0/270	0/60	0/30	NE	NE	NE	PU	Culture (Urine)		
Haemophilus parasuis	0/270	0/60	0/30	NE	NE	NE	PU	Culture (Nasal Swab)		
Lawsonia intracellularis	0/270	0/60	0/30	NE	NE	NE	PU	PCR (Fecal)		
Leptospira spp.	0/270	0/60	0/30	NE	NE	NE	PU	MA (Blood)		
(pomona, grippotyphosa, hardjo, canicola, icterohemorrhagia bratislava)	e,							1.2.1 (2.1004)		
*	0/070	0100	0/20							
Mycoplasma hyopneumoniae P. multocida (toxin producing)	0/270	0/60	0/30	NE	NE	NE	PU	ELISA (Blood)		
P. haemolytica	0/270	0/60	0/30	NE	NE	NE	PU	Culture (Nasal Swab)		
P. pneumotropica	0/270 0/270	0/60	0/30	NE	NE	NE	PU	Culture (Nasal Swab)		
other pasteurellae	0/270	0/60 0/60	0/30 0/30	NE NE	NE	NE	PU	Culture (Nasal Swab)		
Salmonella spp.	0/270	0/60	0/30	NE NE	NE NE	NE NE	DII			
Staphylococcus hyicus**	43/270	0/60	0/30	NE	NE	NE NE	PU	Culture (Fecal)		
β-haemolytic Streptococci	0/270	0/60	0/30	NE			PU	Culture (Skin Swab)		
Streptococcus suis-type 2	0/270	0/60	0/30		NE	NE	PU	Culture (Nasal Swab)		
Streptococcus suis-other	3/270	1/60	2/30	NE NE	NE NE	NE NE	PU PU	Culture (Nasal Swab)		
Yersinia enterocolitica	0/270	0/60	0/30	NE	NE	NE	PU	Culture (Nasal Swab) Culture (Fecal)		
ELINICAL INDECTIONS								` /		
FUNGAL INFECTIONS Candida albicans	5/270	0/60	0/20	NIT?	NE	NIC	DII			
Microsporum spp.	5/2/0 0/270	0/60 0/60	0/30	NE	NE	NE	PU	Culture (Skin Swab)		
Trichophyton spp.	0/270	0/60	0/30 0/30	NE NE	NE NE	NE NE	PU PU	Culture (Fecal) Culture (Fecal)		
PARASITOLOGICAL INFECTIO								,		
Arthropods	0/270	0/60	0/30	NE	NE	NE	In-house	Micr. Insp. (Skin Swab)		
Helminths	0/270	0/60	0/30	NE	NE	NE	In-house	Flotation* (Fecal)		
Coccidia (Eimeria, Isospora)	0/270	0/60	0/30	NE	NE	NE	In-house	Flotation* (Fecal)		
Giardia	0/270	0/60	0/30	NE	NE	NE	In-house	Flotation* (Fecal)		
Toxoplasma gondii	0/270	0/60	0/30	NE	NE	NE	PU	IFA (Blood)		
-							-	(=====)		

NA=not applicable

NE=not examined

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

Abbreviations for laboratories:

PU Purdue University Animal Disease Diagnostic Laboratory

IDEXX Production Animal Services, Idexx Laboratories

UM University of Minnesota, Minnesota Veterinary Diagnostic Laboratory

Iowa State University of Iowa, Veterinary Diagnostic Laboratory

Abbreviations for methods:

ELISA: Enzyme Linked Immuno-Sorbent Assay; IFA: Immuno Fluorescence Assay; VN: Virus Neutralization; MA: Microagglutination; SN: Serum Neutralization:

HI: Hemagglutination Inhibition; PCR: Polymerase Chain Reaction

* Sodium Nitrate

- ** 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.
- *** 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.
- **** 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.

**** As of February 2015, Influenza A will replace the test for H1N1 and H3N2.

Bambi Jasmin, DVM Date



Health Monitoring Report

Based on FELASA Recommendations

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

Date of issue: March 2017 Unit No: Galen Rd – P1, P2 & P3 Examination date: February 2017

	CUMULATIVE RESULTS			CURRENT TEST			LABORATORY	METHOD
VIRAL INFECTIONS	P1	P2	Р3	RESU P1	P2	Р3		
Aujeszky's Disease (Pseudorabies)	0/240			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****	0/60	0/40	0/10	0/10	0/10		Iowa	IFA (Blood)
Encephalomyocarditis Virus	0/250	0/40		0/10	0/10		UM	SN (Blood)
Haemagglutinating Encephalomyelitis	0/250	0/40	0/10	0/10	0/10		UM	HI (Blood)
Porcine Circovirus II	0/250	0/40	0/10	0/10	0/10		PU	IFA (Blood)
Porcine Influenza								III (Block)
A ****	0/40	0/40	0/10	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	0/250	0/40	0/10	0/10	0/10		UM	HI (Blood)
Porcine Reproduct. & Resp. Syndrome	0/250	0/40	0/10	0/10	0/10		PU	ELISA (Blood)
Porcine Respiratory Coronavirus	0/250	0/40	0/10	0/10	0/10		PU	ELISA (Blood)
Porcine Rotavirus	130/250		0/10	7/10	9/10		PU	IFF (Blood)
Fransmissible Gastroenteritis	0/250		0/10	0/10	0/10	0/10	PU	ELISA (Blood)
					0.10	0.10	10	ELIST (Blood)
BACTERIAL INFECTIONS Actinobacillus pleuropneumoniae								
Serotypes 1, 5, 7	0/250	0/40	0/10	0/10	0/10	0/10	UM	ELICA (Dlood)
Bordetella bronchiseptica	1/250	0/40	0/10	0/10	0/10	0/10	PU	ELISA (Blood)
Brachyspira (Serpulina) hvodysenteriae	0/250	0/40	0/10	0/10	0/10	0/10	PU	Culture (Nasal Swab)
Brucella abortus	0/240	0/40	0/10	0/10	0/10	0/10	PU PU	PCR (Fecal)
Campylobacter spp.	3/250	0/40	0/10	0/10	0/10	0/10	PU PU	Agglutination (Blood)
Clostridium perfringens Type C***	0/250	0/40	0/10	0/10	0/10	0/10	PU PU	Culture (Fecal)
Erysipelothrix rhusiopathiae	0/250	0/40	0/10	0/10	0/10	0/10	PU PU	Culture (Fecal)
Subacterium suis	0/250	0/40	0/10	0/10	0/10	0/10	PU PU	Culture (Skin Swab)
Jaemophilus parasuis	0/250	0/40	0/10	0/10	0/10	0/10	PU	Culture (Urine)
awsonia intracellularis	0/250	0/40	0/10	0/10	0/10	0/10		Culture (Nasal Swab)
eptospira spp.	0/250	0/40	0/10	0/10	0/10	0/10	PU PU	PCR (Fecal)
(pomona, grippotyphosa, hardjo, canicola, icterohemorrhagiae, bratislava)	0/230	0/40	0/10	, 0/10	0/10	0/10	FU	MA (Blood)
Tycoplasma hyopneumoniae	0/250	0/40	0/10	0/10	0/10	0/10	DIT	FILICA (DI 1)
. multocida (toxin producing)	0/250	0/40	0/10	0/10	0/10	0/10	PU	ELISA (Blood)
. haemolytica	0/250	0/40	0/10	0/10 0/10	0/10	0/10	PU	Culture (Nasal Swab)
. pneumotropica	0/250	0/40	0/10		0/10 0/10	0/10	PU	Culture (Nasal Swab)
ther pasteurellae	0/250	0/40	0/10	0/10 0/10		0/10	PU	Culture (Nasal Swab)
almonella spp.	0/250	0/40	0/10	0/10	0/10 0/10	0/10	DIT	O I: OF D
taphylococcus hyicus**	43/250	0/40	0/10	0/10	0/10	0/10 0/10	PU	Culture (Fecal)
-haemolytic Streptococci	0/250	0/40					PU	Culture (Skin Swab)
treptococcus suis-type 2			0/10	0/10	0/10	0/10	PU	Culture (Nasal Swab)
treptococcus suis-type 2	0/250	0/40	0/10	0/10	0/10	0/10	PU	Culture (Nasal Swab)
ersinia enterocolitica	3/250	0/40	0/10	0/10	0/10	0/10	PU	Culture (Nasal Swab)
ersinia enterocontica	0/250	0/40	0/10	0/10	0/10	0/10	PU	Culture (Fecal)
UNGAL INFECTIONS								
andida albicans	4/250	0/40	0/10	0/10	0/10	0/10	DII	C-1 (61 : 2 : 1)
licrosporum spp.	0/250	0/40	0/10		0/10	0/10	PU	Culture (Skin Swab)
richophyton spp.	0/250	0/40	0/10	0/10 0/10	0/10 0/10	0/10 0/10	PU PU	Culture (Fecal) Culture (Fecal)
ARASITOLOGICAL INFECTIONS								. ,
rthropods	0/250	0/40	0/10	0/10	0/10	0/10	In-house	Mior Inon (Clair Caralla)
elminths	0/250	0/40	0/10		0/10	0/10	In-house	Micr. Insp. (Skin Swab) Flotation* (Fecal)
occidia (Eimeria, Isospora)	0/250	0/40	0/10		0/10	0/10	In-house	Flotation* (Fecal)
oxoplasma gondii	0/250	0/40	0/10		0/10	0/10	PU	IFA (Blood)

NA=not applicable

NE=not examined

[†]Continuous flow of animals in one direction from P1 into P2. First migration of animals into P2 occurred in November 2014.
P3 was populated with animals from P1 in October of 2016, but has since remained isolated with no flow of animals to or from the building since then.

Abbreviations for laboratories:

PU Purdue University Animal Disease Diagnostic Laboratory

IDEXX Production Animal Services, Idexx Laboratories

UM University of Minnesota, Minnesota Veterinary Diagnostic Laboratory

Iowa State University of Iowa, Veterinary Diagnostic Laboratory

Abbreviations for methods:

ELISA: Enzyme Linked Immuno-Sorbent Assay; IFA:Immuno Fluorescence Assay; NE: Not examined; NA: Not Applicable; VN: Virus Neutralization; MA: Microagglutination; SN: Serum Neutralization;

HI: Heamagglutination Inhibition; PCR: Polymerase Chain Reaction

* Sodium Nitrate

- ** 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.
- *** 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.
- **** 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.

***** As of February 2015, Influenza A will replace the test for H1N1 and H3N2

Barney 11 Jamin	03/31/2017	
Bambi Jasmin ,DVM	Date	



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

Date of issue: March 2016 Unit Nº: Galen Rd – P1& P2 **Examination date:** February 2016

Species: Porcine	Strai	n: Götting	en Minipig	5	Populated: August 2003 [†]		
	HISTO		CURF RESU	LENT TEST	LABORATORY	METHOD	
VIRAL INFECTIONS	Pl	P2	P1	P2			
Aujeszky's Disease (Pseudorabies)	0/220	0/20	0/10	0/10	PU	ELISA	
Classical Swine Fever (hog cholera)	NA	NA	NE	NE	NA	NA	
Porcine Epidemic Diarrhea****	0/40	0/20	0/10	0/10	Iowa	IFA	
Encephalomyocarditis Virus	0/230	0/20	0/10	0/10	UM	SN	
Haemagglutinating Encephalomyelitis	0/230	0/20	0/10	0/10	·UM	HI	
Porcine Circovirus II	0/230	0/20	0/10	0/10	PU	IFA	
Porcine Influenza							
A *****	0/20	0/20	0/10	0/10	PU	ELISA	
H1N1	0/220	NE	NE	NE	PU	ELISA	
H3N2	0/220	NE	NE	NE	PÜ	ELISA	
Porcine Parvovirus	0/230	0/20	0/10	0/10	UM	HI	
Porcine Reproduct. & Resp. Syndrome	0/230	0/20	0/10	0/10	PU	ELISA	
Porcine Respiratory Coronavirus	0/230	0/20		0/10	PU	ELISA	
Porcine Rotavirus	119/230			9/10	PU	IFA	
Transmissible Gastroenteritis	0/230			0/10	PU	ELISA	
BACTERIAL INFECTIONS							
Actinobacillus pleuropneumoniae							
Serotypes 1, 5, 7	0/230	0/20	0/10	0/10	UM	ELISA	
Bordetella bronchiseptica	1/230	0/20	0/10	0/10	PU	Culture	
Brachyspira (Serpulina) hyodysenteriae	0/230	0/20	0/10	0/10	PU	PCR	
Brucella abortus	0/220	0/20	0/10	0/10	PU	Agglutination	
Campylobacter spp.	3/230	0/20	0/10	0/10	PU	Culture	
Clostridium perfringens Type C***	0/230	0/20	0/10	0/10	PU	Culture	
Erysipelothrix rhusiopathiae	0/230	0/20	0/10	0/10	PU	Culture	
Eubacterium suis	0/230	0/20	0/10	0/10	PU	Culture	
Haemophilus parasuis	0/230	0/20	0/10	0/10	PU	Culture	
Lawsonia intracellularis	0/230	0/20	0/10	0/10	PU	PCR	
Leptospira spp.	0/230	0/20	0/10	0/10	PU	MA	
(pomona, grippotyphosa, hardjo, canicola, icterohemorrhagiae,							
bratislava)	0/220	0/00	0/10	0/10	TNI T	ELISA	
Mycoplasma hyopneumoniae	0/230	0/20 0/20	0/10	0/10 0/10	P U PU	Culture	
P. multocida (toxin producing)	0/230 0/230				PU	Culture	
P. haemolytica	0/230	0/20		0/10 0/10	PU PU	Culture	
P. pneumotropica	0/230				FO	Cuitale	
other pasteurellae		0/20 0/20		0/10	PU	Culture	
Salmonella spp.	0/230			0/10 0/10	PU	Culture	
Staphylococcus hyicus**	43/230				-	Culture	
β-haemolytic Streptococci	0/230			0/10	PU		
Streptococcus suis-type 2	0/230	0/20		0/10	PU	Culture	
Streptococcus suis-other Yersinia enterocolitica	3/230 0/230	0/20 0/20		0/10 0/10	PU PU	Culture Culture	
i ersina enterocontica	0/230	0/20	0/10	0/10	ru	Culture	
FUNGAL INFECTIONS	4/020	0/20	0/10	0/10	DII	Cultura	
Candida albicans	4/230	0/20	0/10		PU	Culture	
Microsporum spp. Trichophyton spp.	0/230 0/230	0/20 0/20	0/10 0/10	0/10 0/10	PU PU	Culture Culture	
PARASITOLOGICAL INFECTIONS							
Arthropods	0/230	0/20	0/10	0/10	In-house	Micr. Insp.	
	0/230	0/20	[3/11]	0/10	In-house	Flotation*	
Helminths Coccidia (Eimeria, Isospora)	0/230 0/230	0/20 0/20	0/10 0/10	0/10 0/10	In-house In-house	Flotation* Flotation*	

NA=not applicable

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Bambi Jasmin, DVM Date