

Fish Health Inspection Report

Company: Blackwater Creek Koi Farms
Facility : Eustis Facility
Location: 30540 State Rd 44
 Eustis, FL 32736
 US

Site Manager: Joe Pawlak
Phone: (352) 357-4563
Water Source: Well
Water Treatment: None

Current Inspection: 14-Nov-12 **Prior Inspections:** 31-Jan-12

Type of Fish Examined: Hatchery

Lab Accession: M12111501

Species	Lot ID	Age	Number in Lot	Eggs (E) or Fish (F) Origin	Sample Date(s)	*Pathogens - Methods and Results									
						Virus							Parasite		
						EHNV	INHV	IPNV	ISAV	KHV	RSIV	SVCV	VHSV	EUS	Gyro
<i>Cyprinus carpio koi</i>	M12-640	~12 mo	110,000	(E) Blackwater Creek Koi Farms (FL)	14-Nov-12			P24B		P9B		P43B	P43B	D	
								120		120		120	120	120	
								neg		neg		neg	neg	neg	
<i>Carassius auratus</i> goldfish	M12-641	~12 mo	5,000	(E) Blackwater Creek Koi Farms (FL)	14-Nov-12			P24B				P43B	P43B	D	
								30				30	30	30	
								neg				neg	neg	neg	

Notes: * See other side of sheet for explanations of Pathogens - Methods and Results coding
 All lots were tested according to World Organization for Animal Health (OIE) "Manual of Diagnostic Tests for Aquatic Animals" (2009) protocols. At the time of collection, all fish were visually examined by Kathleen Hartman, DVM (USDA/APHIS/VS) for the presence of gross clinical signs consistent with Epizootic Ulcerative Syndrome (EUS). None of the fish examined from lot M12-640 or M12-641 had clinical signs of EUS.

Samples Collected By: Kathleen Hartman , DVM
Affiliation: USDA, APHIS, VS
Telephone: (813) 671-5230
Client Reference #:
Inspecting Biologist: *William Keleher*
 William R. Keleher, Jr., Fish Health Inspector

FOOTNOTES:

PATHOGEN ABBREVIATIONS

EHNV	Epizootic Hematopoietic Necrosis virus	
IHNV	Infectious Hematopoietic Necrosis virus	Infectious
IPNV	Pancreatic Necrosis virus	
ISAV	Infectious Salmon Anemia virus	
KHV	Koi Herpes virus	
RSIV	Red Sea Bream iridovirus	
SVCV	Spring Viremia of Carp virus	
VHSV	Viral Hemorrhagic Septicemia virus	
EUS	Epizootic ulcerative syndrome	
GYRO	Gyrodactylus salaris	

In lots of fish less than one year of age, the age is listed in arabic numerals followed by mo. for month; for fish older than one year, the age is expressed in arabic numerals followed by a plus sign to indicate "older than".

Findings are reported in columns from top to bottom for each lot as follows: number of fish examined; methods used; results. Positive results include the number of positive individuals (or pools).

RESULTS ARE REPORTED AS (-) IF NEGATIVE AND AS # +/- # SAMPLED IF POSITIVE.

FOR BKD, APPROXIMATE LEVELS OF INFECTION ARE ALSO REPORTED (e.g., 10/ 50 fields)

VIRAL PATHOGENS:

First letter = sampling method

A = whole fry homogenates (minus head, tail, yolk sac if present)
B = whole visceral homogenates
C = kidney/spleen
D = ovarian fluids
E = kidney/spleen/heart
F = kidney/spleen/liver
G = kidney/spleen/heart/liver/pyloric caeca/gill
H = kidney/spleen/swim bladder
I = kidney/spleen/heart/liver
J = brain/eye
K = kidney/spleen/pyloric caeca/gill
L = kidney/spleen/heart/swim bladder
M = kidney/spleen/liver/swim bladder
N = kidney/spleen/heart/liver/swim bladder
O = kidney/spleen/heart/pyloric caeca/gill
P = kidney/spleen/heart/liver/gill

Numbers = continuous cell lines used

1 = GF-1 (grunt fin)
2 = CHSE-214 (chinook salmon embryo)
3 = FHM (fathead minnow)
4 = EPC (epithelioma papillosum cyprini)
5 = BF-2 (bluegill fry)
6 = CCO (channel catfish ovary)
7 = ASK (atlantic salmon kidney)
8 = SSN-1 (striped snake head)
9 = KF-1 (koi fin)

Last letter = Pooling of samples

A = individual fish
B = five fish pools
C = other _____

PARASITIC PATHOGENS

Encoded as follows:

A = digestion method
B = plankton centrifuge method
C = examination of stained smear
D = gross examination
E = PCR
F = microscopic examination

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 USA

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Phone: (352) 357-4563
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Water Treatment: None

Current Inspection: 31-Jan-12 **Prior Inspections:**

Type of Fish Examined: Hatchery

Lab Accession: M12020105

Species	Lot ID	Age	Number in Lot	Eggs (E) or Fish (F) Origin	Sample Date(s)	*Pathogens - Methods and Results									
						Viruses				Bacteria		Parasites			
						IPNV	KHV	SVCV	VHSV	VNNV	BF	BRM	HSP	B. ach.	
<i>Cyprinus carpio koi</i>	M12-049	~12 mo	102,000	(E) Blackwater Creek Koi Farms (FL)	31-Jan-12	P24B	P9B	P42B	P42B						
						120	120	120	120						
<i>Carassius auratus</i> goldfish	M12-050	~12 mo	5,000	(E) Blackwater Creek Koi Farms (FL)	31-Jan-12	P24B		P42B	P42B						
						30		30	30						
						neg	neg	neg	neg						

Notes: * See other side of sheet for explanations of Pathogens - Methods and Results coding

All lots were tested according to World Organization for Animal Health (OIE) "Manual of Diagnostic Tests for Aquatic Animals" (2009) protocols. At the time of collection, all fish were visually examined by Kathleen Hartman, DVM (USDA/APHIS/VS) for the presence of gross clinical signs consistent with Epizootic Ulcerative Syndrome (EUS). None of the fish examined from lot M12-049 or M12-050 had clinical signs of EUS.

Samples Collected By: Kathleen Hartman, DVM

Affiliation: USDA, APHIS, VS

Telephone: (813) 671-5230

Client Reference #:

Inspecting Biologist: *William Keleher*

William R. Keleher, Jr., Fish Health Official



* Notes are located on the last Page of this report

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FOOTNOTES:

PATHOGEN ABBREVIATIONS

IPNV Infectious Pancreatic Necrosis virus
 IHNV Infectious Hematopoietic Necrosis virus
 VHSV Viral Hemorrhagic Septicemia virus
 VEN Viral Erythrocytic Necrosis virus
 HPV Herpesvirus salmonis
 SVCV Spring Viremia Carp virus
 YTV Yamame Tumor virus
 EEV Epizootic Epitheliotropic virus
 ISAV Infectious Salmon Anemia virus
 EHNV Epizootic Haematopoietic Necrosis virus
 BF Aeromonas salmonicida
 BRM Yersinia ruckeri
 BKD Renibacterium salmoninarum
 WD Myxobolus cerebralis
 CS Ceratomyxa shasta
 PKD Proliferative Kidney Disease
 HSP Heterosporis spp.
 B. ach. Bothriocephalis acheilognathi (Asian Tapeworm)

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 I = kidney/spleen/heart/liver
 J = brain/eye
 K = kidney/spleen/pyloric caeca/gill
 L = kidney/spleen/heart/swim bladder
 M = kidney/spleen/liver/swim bladder
 N = kidney/spleen/heart/liver/swim bladder
 O = kidney/spleen/heart/pyloric caeca/gill
 P = kidney/spleen/heart/liver/gill

Numbers = continuous cell lines used

1 = RTG-2 (rainbow trout gonad)
 2 = CHSE-214 (chinook salmon embryo)
 3 = FHM (fathead minnow)
 4 = EPC (epithelioma papillosum cyprini)
 5 = BF-2 (bluegill fry)
 6 = SHK 1/3 (salmon head kidney)
 7 = ASK (atlantic salmon kidney)
 8 = SSN-1 (striped snake head)
 9 = KF-1 (koi fin)
 10 = CCO (Channel Catfish Ovary)

Last letter = Pooling of samples

A = individual fish
 B = five fish pools
 C = Other _____

PROTOZOAN/PARASITIC PATHOGENS:

A = Digestion method
 B = Plankton centrifuge method
 C = Examination of stained smear
 D = Gross Examination
 E = PCR (Polymerase Chain Reaction)
 F = Microscopic Examination

BACTERIAL PATHOGENS:

Encoded as follows:

First letter = Health of fish sampled

A = Live, healthy fish
 B = Moribund fish
 C = Mortalities

Number = Material sampled

1 = kidney
 2 = hindgut
 3 = lesion
 4 = gill
 5 = ovarian fluid
 6 = seminal fluid
 7 = Other _____

Last letter = technique used for:

Primary Isolation

A = Standard culture medium TSA/BHI
 B = Cytophaga agar
 C = KDM2/SKDM2
 D = Kidney smear/impression

Presumptive Diagnosis

E = Gram stain, kidney smears (BKD)
 F = Standard biochemical/physical testing
 G = Giemsa stain

Confirmatory diagnosis

H = Slide agglutination
 I = Direct fluorescent antibody test
 J = Indirect fluorescent antibody test
 K = ELISA
 L = Immunodot
 M = Fluorescent immunoassay
 N = PCR