PROSPERITY
A Gold-Copper Project of Taseko Mines Limited

Taseko Prosperity Gold-Copper Project

Appendix 3-8-D

Taseko Mines Limited

APPENDIX 3-8-D

FISH LAKE RAINBOW TROUT FISH HEALTH ASSESSMENT

FRESHWATER FISHERIES SOCIETY OF BC

Freshwater Fisheries Society of BC

Fish Health Unit
Schedule II
Fish Health Summary Diagnostic Report

Case Number:	**2008-1049**
Client:	**Triton Environmental Project: Fish Lake Survey - Martine Long**
Submission Date:	**June 12, 2008**
Stock:	**Fish Lake- Inlet sample**
Species:	**Rainbow Trout-Mature and immature males and females, majority adult male fish.**

Background: Outside agency project: Fish Lake Fish Health Survey: Sampling done by Triton Environmental. Samples processed by the Freshwater Fisheries Society Fish Health Lab.
Fish for this sample were collected from the "Inlet creek entering into the lake."

Behaviour: Fish submitted "fresh dead" on ice within 48 hours of collection.
Origin: Wild fish sample.
Salminicola spp. reported in most gills.
Many fish with nematode spp. in swim bladder.
Sample was predominantly male fish sampled.

Methods: Spleen, Gill, Pyloric Ceaca and Kidney tissue were taken for virology

Kidney tissue from 60 fish was plated onto TSA and HS media for bacteriology.

Intestinal smears were placed on slides and stained with Methylene blue.

Heads were taken for whirling disease work and frozen. These were processed as a 60 pool lot using the Pepsin digest method.

All methods used for processing are as described in the 'Canadian Fish Health Protection Regulations'

More detailed report papers are available from the lab on request.

Results:

Schedule II listed pathogen	Procedure	Test medium	Test Tissue	Result
Viral Hemorrhagic Septicemia	Virus assay	EPC/ CHSE-214	Kidney/ Spleen	No viral agent detected
Infectious Hematopoietic Necrosis	Virus assay	EPC/ CHSE-214	Kidney/ Spleen	No viral agent detected
Infectious Pancreatic Necrosis	Virus assay	EPC/CHSE-214	Kidney/ Spleen	No viral agent detected
Whirling disease (*Myxobolus cerebralis)*	Parasitic test	Pepsin digest	Head cartilage	No spores detected
Ceratomyxosis (*Ceratomyxa shasta)*	Parasitic test	Methylene Blue stain	Intestinal smear	Negative
Furunculosis ***(Aeromonas salmonicida)***	Bacterial test	Tryptic Soy Agar	Kidney	Negative
Enteric Redmouth *(Yersinia ruckeri*)	Bacterial test	Tryptic Soy Agar	Kidney	**2/60 positive**
Other findings:				
Vibriosis *(Vibrio anguillarium)*	Bacterial test	Tryptic Soy Agar	Kidney	**3/60 positive**
Yellow pigmented colonies *(Flavobacterium*	Bacterial test	Sheih's medium	Kidney	**15/60 positive**

psychrophilium)				

Comments

Of the findings depicted in the table above, the *Yersinia ruckeri* is a notable finding as it is listed as a pathogen of concern in the Schedule II processing as dictated by the Canadian Fish Health Protection Regulations.
***Vibrio anguillarium and Flavobacterium psychrophilum,* although they can cause problems in rearing fish are not considered listed "Pathogens of concern."**

Related cases:

2008-1050 Triton project Fish Lake Outlet
2008-1069 Triton project Fish Lake Inlet – emerging fry
2008-1070 Triton Project Fish lake Outlet- emerging fry

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Freshwater Fisheries
Society *of* BC

Fish Health Unit
Schedule II
Fish Health Summary Diagnostic Report

Case Number: 2008-1069

Client: Triton Environmental Project: Fish Lake Survey - Martine Long

Submission Date: July 24, 2008

Stock: Fish Lake- Inlet sample

Species: Rainbow Trout-emerging fry

Background: Outside agency project: Fish Lake Fish Health Survey: Sampling done by Triton Environmental. Samples processed by the Freshwater Fisheries Society Fish Health Lab.
Fish for this sample were collected from the "Inlet creek entering into the lake." Fish sampled were emerging fry.
Fry were captured using electro-fishing technique.

Behaviour: Fish submitted "fresh dead" on ice within 48 hours of collection.

Methods: Spleen, Gill, Pyloric ceaca and Kidney tissue were taken for virology

Kidney tissue from 60 fish was plated onto TSA and HS media for bacteriology.
The tests for *Myxobolus cerebralis* and *Ceratomya shasta* were not run at this time as emerging fry were estimated to be less that 4 months old which is the minimum age requirement selected for the parasitic tests according to the methods laid out in the CFHPR.

All methods used for processing are as described in the 'Canadian Fish Health Protection Regulations –(CFHPR)'

More detailed report papers are available from the lab on request.

Results:

Schedule II listed pathogen	Procedure	Test medium	Test Tissue	Result
Viral Hemorrhagic Septicemia	**Virus assay**	**EPC/ CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Infectious Hematopoietic Necrosis	**Virus assay**	**EPC/ CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Infectious Pancreatic Necrosis	**Virus assay**	**EPC/CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Whirling disease (*Myxobolus cerebralis)*	**Parasitic test**	**Pepsin digest**	**Head cartilage**	**No spores detected**
Ceratomyxosis (*Ceratomyxa shasta)*	**Parasitic test**	**Methylene Blue stain**	**Intestinal smear**	**Negative**
Furunculosis *(Aeromonas salmonicida)*	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**Negative**
Enteric Redmouth *(Yersinia ruckeri*)	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**1/60 presumptive positive**
Other findings:				
Vibriosis *(Vibrio anguillarium)*	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**Neg**
Yellow pigmented colonies *(Flavobacterium psychrophilium*)	**Bacterial test**	**Sheih's medium**	**Kidney**	**Neg**

Comments

Of the findings depicted in the table above, the *Yersinia ruckeri* is a notable finding as it is listed as a pathogen of concern in the Schedule II processing as dictated by the Canadian Fish Health Protection Regulations.

There was a repeat run on the EPC cell line due to a problem with contamination in the cell line or media. The repeat was re-inoculated on new EPC cell lines August 14th, 2008 and was terminated Sep 22nd, 2008. Frozen original filtrates were used for the inoculums'. Repeat assay was negative.

Related cases:

2008-1050 Triton project Fish Lake Outlet
2008-1049 Triton project Fish lake Inlet
2008-1070 Triton Project Fish lake Outlet-emerging fry

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Freshwater Fisheries
Society *of* BC

Fish Health Unit
Schedule II
Fish Health Summary Diagnostic Report

Case Number: 2008-1050

Client: Triton Environmental Project: Fish Lake Survey - Martine Long

Submission Date: June 13, 2008

Stock: Fish Lake- Outlet sample

Species: Rainbow Trout-immature or mature adults.

Background: Outside agency project: Fish Lake Fish Health Survey: Sampling done by Triton Environmental. Samples processed by the Freshwater Fisheries Society Fish Health Lab.

Fish for this sample were collected from the "Outlet creek leaving the lake.

Behaviour: Fish submitted "fresh dead" on ice within 48 hours of collection.
Origin of sample: Wild fish sample
Salminicola spp. recorded on gills in approximately 96% of fish in sample.
Nematodes observed in most of the swim bladders.
Majority of sample was made up of mature or immature males. Three female kelts only recorded out of 60 fish.

Methods: Spleen, Gill, Pyloric ceaca and Kidney tissue were taken for virology

Kidney tissue from 60 fish was plated onto TSA and HS media for bacteriology.

Intestinal smears were placed on slides and stained with Methylene blue.

Heads were taken for whirling disease work and frozen. These were processed as a 60 pool lot using the Pepsin digest method.

All methods used for processing are as described in the 'Canadian Fish Health Protection Regulations'

More detailed report papers are available from the lab on request.

Results:

Schedule II listed pathogen	Procedure	Test medium	Test Tissue	Result
Viral Hemorrhagic Septicemia	**Virus assay**	**EPC/ CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Infectious Hematopoietic Necrosis	**Virus assay**	**EPC/ CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Infectious Pancreatic Necrosis	**Virus assay**	**EPC/CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Whirling disease (*Myxobolus cerebralis)*	**Parasitic test**	**Pepsin digest**	**Head cartilage**	**No spores detected**
Ceratomyxosis (*Ceratomyxa shasta)*	**Parasitic test**	**Methylene Blue stain**	**Intestinal smear**	**Negative**
Furunculosis *(Aeromonas salmonicida)*	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**Negative**
Enteric Redmouth (Yersinia ruckeri)	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**1/60 positive**
Other findings:				
Yellow pigmented colonies (Flavobacterium psychrophilium)	**Bacterial test**	**Sheih's medium**	**Kidney**	**17/60 positive**

Comments:	**Of the findings depicted in the table above, the *Yersinia ruckeri* is a notable finding as it is listed as a pathogen of concern in the Schedule II processing as dictated by the Canadian Fish Health Protection Regulations.** ***Flavobacterium psychrophilum,* although can cause problems in rearing fish are not considered listed "Pathogens of concern."**
Related cases:	2008-1049 Triton project Fish Lake Outlet 2008-1069 Triton project Fish Lake Inlet –emerging fry 2008-1070 Triton Project Fish lake Outlet- emerging fry

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Freshwater Fisheries
Society *of* BC

Fish Health Unit
Schedule II
Fish Health Summary Diagnostic Report

Case Number: 2008-1070

Client: Triton Environmental Project: Fish Lake Survey - Martine Long

Submission Date: July 24, 2008

Stock: Fish Lake- Outlet sample

Species: Rainbow Trout-emerging fry

Background: Outside agency project: Fish Lake Fish Health Survey: Sampling done by Triton Environmental. Samples processed by the Freshwater Fisheries Society Fish Health Lab.
Fish for this sample were collected from the "Outlet creek leaving the lake."
Fish sampled were emerging fry.
Fry were captured using electro-fishing technique.

Behaviour: Fish submitted "fresh dead" on ice within 48 hours of collection.

Methods: Spleen, Gill, Pyloric ceaca and Kidney tissue were taken for virology

Kidney tissue from 60 fish was plated onto TSA and HS media for bacteriology.
The tests for *Myxobolus cerebralis* and *Ceratomyxa shasta* were not run at this time as emerging fry were estimated to be less that 4 months old which is the minimum age requirement selected for the parasitic tests according to the methods laid out in the CFHPR.

All methods used for processing are as described in the 'Canadian Fish Health Protection Regulations –(CFHPR)'

More detailed report papers are available from the lab on request.

Results:

Schedule II listed pathogen	**Procedure**	**Test medium**	**Test Tissue**	**Result**
Viral Hemorrhagic Septicemia	**Virus assay**	**EPC/ CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Infectious Hematopoietic Necrosis	**Virus assay**	**EPC/ CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Infectious Pancreatic Necrosis	**Virus assay**	**EPC/CHSE-214**	**Kidney/ Spleen**	**No viral agent detected**
Whirling disease (*Myxobolus cerebralis)*	**Parasitic test**	**Pepsin digest**	**Head cartilage**	**No spores detected**
Ceratomyxosis (*Ceratomyxa shasta)*	**Parasitic test**	**Methylene Blue stain**	**Intestinal smear**	**Negative**
Furunculosis *(Aeromonas salmonicida)*	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**Negative**
Enteric Redmouth *(Yersinia ruckeri*)	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**Neg**
Other findings:				
Vibriosis *(Vibrio anguillarium)*	**Bacterial test**	**Tryptic Soy Agar**	**Kidney**	**Neg**
Yellow pigmented colonies *(Flavobacterium psychrophilium*)	**Bacterial test**	**Sheih's medium**	**Kidney**	**Neg**

Comments	**Non of the "pathogens of concern" in the Schedule II processing as dictated by the Canadian Fish Health Protection Regulations were detected in the sample.** **There was a repeat run on the EPC cell line due to a problem with contamination in the cell line or media. The repeat was re-inoculated on new EPC cell lines August 14th, 2008 and was terminated Sep 22nd, 2008. Frozen original filtrates were used for the inoculums'. Repeat assay was negative.**
Related cases:	2008-1050 Triton project Fish Lake Outlet 2008-1049 Triton project Fish lake Inlet 2008-1069 Triton Project Fish lake Outlet-emerging fry

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