



United States Department of the Interior
U.S. FISH & WILDLIFE SERVICE

Idaho Fish Health Center

276 Dworshak Complex Drive
Orofino, ID 83544-
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Case Information

Case Number	18-090	Report Date	2018-02-22
Case Date	2018-02-22	Reported By	MARILYN BLAIR
Case Type	MONITORING	Title	

Facility Information

Facility	Dworshak National Fish Hatchery	Location	
Address	276 DWORSHAK COMPLEX DRIVE OROFINO, ID 83544	Contact	ADAM IZBICKI
		Phone	208-476-4591
		Fax	

Comments

Background	Gas bubble monitoring for steelhead in System 3. TDGs in North Fork Clearwater River: 122.2% at 10:00 hours on 2/22/18. TDGs in Hatchery Collection Channel: 104.5% at 10:00 hours on 2/22/18.
Remarks	

Species Information: steelhead (Clearwater)

Sample Information

Lot/Other Id		Water Source	Clearwater River
Container	BP-54	Age Class	JUVENILE
Number	10	Age(months)	
Condition	Live	Size(mm)	

Species Comments

Remarks	All fish were collected arbitrarily from the general population of the pond. One fish was precocious.
Internal Obs.	All fish had normal full levels of food in stomachs. All fish had 50% visceral fat. Kidney and gill samples were taken to test for the parasite <i>Nucleospora salmonis</i> by PCR.

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Species Comments	
External Obs.	<p>Gills: Entire gill arches were excised for examination. Five fish had gas bubbles in the gills. Of these, 3 fish each had 1 bubble in the gills. The fourth fish had one bubble in each of 2 gill filaments and 4 bubbles in each of 2 additional filaments. The fifth fish had one bubble in each of 2 gill filaments, 3 bubbles in each of 2 additional filaments, and 4 bubbles in a fifth filament.</p> <p>Lateral lines: One fish had 2 bubbles along the lateral line, of rank 1.</p> <p>3 fish had 1-3 bubbles in unpaired fins. Of these, one fish had one bubble in the caudal fin, a second fish had 2 bubbles in the caudal fin, and the third fish had 3 bubbles in the caudal fin, all of rank 1.</p> <p>No bubbles were observed in eyes, but one fish had 1 cataract in an eye.</p>
Recommendations	Continue to watch for increases in mortalities or fish going off of feed.

Assay Results				
# Tested	Pathogen/Syndrome Tested	Tissue Tested	Result	Result Comments
10	Nucleospora Salmonis	Kidney/Gill	Pending	5 2p PCR.
10	Gas Bubble Trauma	Eye	Not Detected	Both eyes of each fish.
10	Gas Bubble Trauma	Fin clip	Detected	Three fish had 1-3 bubbles in the caudal fin, all of rank 1.
10	Gas Bubble Trauma	Skin	Detected	One fish had 2 bubbles along the lateral line, of rank 1.
10	Gas Bubble Trauma	Gill	Detected	Five fish had 1-12 bubbles in the gills.