

# PATHOLOGY REPORT

US Fish & Wildlife Service  
CA-NV Fish Health Center  
24411 Coleman Hatchery Rd  
Anderson, CA 96007

phone 530-365-4271  
fax 530-365-7150

FHC Case No. : 07-058

Submittal date: 05/11/2007

Sample Collector: J. Anderson, cramer assoc.  
209-847-7786 phone

Sample Site(s): Stanislaus R, Caswell RST

Histological specimen examiner: J. Scott Foott

Species: Fall-run Chinook smolts

Age: 0-1+

## Tissues:

Four whole fish in sample group. Gill, liver, acinar/pyloric caecae, kidney, lower intestine removed and sectioned

Fixative: Davidson ( x ), PREFER-ETOH ( ), 10%BF ( ), ZFIX ( ), Bouins ( )

Stains: Hematoxylin & eosin ( X ), PAS ( ), Iron ( )

Block No. 5374-5377

Block / slide deposition: FHC

Blood Smear (Number): ND

ND

Bloodsmear Stain: Lieshman-Giemsa ( ), DiffQuick( )

Clinical chemistry: ND

## Summary

*Necrotic gills noted upon dissection showed multifocal necrosis associated with mats of bacteria in the sections. **Suspect columnaris (infection by Flavobacterium columnare) as primary health issue.***

*No external or internal parasites observed in the tissues (includes T.bryosalmonae). Three of 4 fish with following patterns: diffuse necrosis in liver, intestine, and acinar cells – possible endogenous enzyme digestion artifact due to slow fixation or in the case of the liver a result of hypoxia associated with impaired gill function.*

*Kidneys were normal.*