# FISH HEALTH MANAGEMENT
# GRANT F-75-R-14

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## ABSTRACT

This report contains a description of the activities of the Eagle Fish Health Laboratory (EFHL), operated by the Idaho Department of Fish and Game (IDFG), for the calendar year 1997. The primary charge of this program is to monitor, inspect, and improve the health of fish raised at 13 resident hatcheries, 11 anadromous hatcheries and satellites, and Eagle Hatchery, which rears ESA-listed salmon captive broodstocks. Results of these diagnostic cases are presented in the text by program and facility. The most significant pathogens encountered in the resident and anadromous programs were cold water disease (CWD), bacterial kidney disease (BKD), infectious hematopoietic necrosis virus (IHNV), bacterial gill disease (BGD), and furunculosis. A high prevalence of tumors and anomalies occurred in the sockeye salmon *Oncorhynchus nerka* captive broodstocks. The IDFG fisheries managers, researchers, hatcheries, and EFHL pathologists utilized the newly completed wet laboratory during the year.

Wild salmonids from all regions of the state were examined for the parasite that causes whirling disease (WD). The only new occurrence of WD this year was cutthroat trout *O. clarki* broodstocks from Henrys Lake in the IDFG Upper Snake River region. The IDFG initiated research to determine the impact of WD on wild salmonid populations in four drainages previously demonstrated positive for *Myxobolus cerebralis.* The staffs of both the EFHL and Eagle Hatchery supported this research.

The EFHL staff remained active participants in regional and national fish health issues. This included administering the Investigational New Animal Drug (INAD) program through the United States Fish and Wildlife Service (USFWS) INAD Program. Examples of additional liaison activities are included in the text.

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## PERIOD COVERED BY THIS REPORT

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## FISH HEALTH MONITORING AND MANAGEMENT ACTIVITIES OF THE IDAHO DEPARTMENT OF FISH AND GAME

### Resident Hatchery Activities

The Resident Fish Pathologist, stationed at the EFHL provides service for hatcheries which rear and plant resident species. Duties include collection of samples from diagnostic and inspection cases for 11 culture facilities and their associated captive and feral broodstocks, monitoring diagnostic results, reporting results to hatchery management, recommending and supervising treatments, and preparing and maintaining files for INAD reporting for each station. Samples were also obtained as part of a survey of wild salmonids of Idaho waters. In 1997, these activities generated 6 laboratory accessions for the wild fish survey, 30 diagnostic, 63 inspection, and 7 research cases for the resident program. The specific results for these cases are included in Appendix 1 and are listed by IDFG region and for each fish culture facility. A brief summary of those results and activities for each resident station follows.

#### American Falls Hatchery

No clinical disease episodes occurred at American Falls Hatchery in 1997, nor were any pathogens detected in two separate inspections of rainbow trout *Oncorhynchus mykiss*. Changes in the management strategy at this hatchery are primarily responsible for this improvement in fish health. Specifically, fry are now directly ponded from incubators to the outside raceways instead of using the inside vats for early rearing. This eliminates a handling step and associated stress that typically occurs when the fish are at a stage most susceptible to bacterial CWD, caused by *Flavobacterium psychrophilum*. Loading densities have also been kept low to further reduce stress.

#### Ashton Hatchery

Ashton Hatchery was visually inspected twice in 1997, but no fish were sacrificed for laboratory analysis. Hatchery personnel reported outbreaks of *Gyrodactylus*, an external trematode parasite, which were routinely treated with flushes of formalin under the existing label.

The proximity of Ashton Fish Hatchery to waters containing *Myxobolus cerebralis*, the causative agent of WD is a disease risk. Enclosure of the hatchery intake would limit threats to the hatchery water supply of *M. cerebralis* and the means to fund such reconstruction need serious consideration.

#### Cabinet Gorge Hatchery

Late-spawning kokanee salmon *O. nerka kennerlyi* production at Cabinet Gorge Hatchery originate primarily from eggs taken at Sullivan Springs on Lake Pend Oreille. Spawning adults at that site are sampled annually for fish pathogens. Positive results from adults in 1997 included

*Renibacterium salmoninarum* (RS), the causative agent of BKD, antigen by the enzyme-linked immunosorbent assay (ELISA) at low-levels. No viable RS organisms were detected by the fluorescent antibody test (FAT). No replicating viruses, *Ceratomyxa shasta* spores, or *M. cerebralis* spores were detected. Insufficient numbers of adults returned to the Clark Fork River ladder to warrant sampling.

Production fish at the hatchery were visually inspected but were not sampled in 1997, primarily because the fish were very small at the time of the pathologist's only visit. Installation of baffles in the raceways and changes in feeding and cleaning patterns have helped to avoid clinical bacterial gill disease for a second consecutive year. No clinical BKD has been observed on the facility since the captive kokanee broodstock program was discontinued in 1994.

**Clark Fork Hatchery**

Infectious pancreatic necrosis virus and RS are the primary pathogens of concern at Clark Fork Hatchery. No IPNV was isolated from fish in 1997, due primarily to the timing of sampling rather than to the absence of the virus. Clinical BKD seemed to be less prevalent in cutthroat trout *O. clarki* and brook trout *Salvelinus fontinalis* populations, although samples from the cutthroat broodstock populations continue to test high for RS antigen by ELISA. The hatchery water supply is drawn from an open spring creek harboring wild brook trout that are proven carriers of both IPNV and RS. Until major engineering changes can be made in the water intake system, Clark Fork Hatchery will continue to have problems with these pathogens.

Fingerling Kamloops trout *O. mykiss* and cutthroat trout were both diagnosed with CWD during 1997. Concomitant infections by different species of *Pseudomonas* bacteria, one of the causative agents of motile aeromonad septicemia (MAS), required treatment with oxytetracycline (OTC) when water temperatures were above 48° F.

**Clearwater Hatchery Resident Program**

Kamloops and rainbow trout were sampled three times at Clearwater Hatchery. Diagnosis from one inspection was MAS (*Pseudomonas aureofaciens*) while the other two inspections detected no viral or bacterial pathogens.

**Grace Hatchery**

Three diagnostic cases were examined at Grace Hatchery in 1997, all involving Hayspur-strain rainbow trout. The first episode involved MAS and CWD (concomitant heavy infections of *Aeromonas hydrophila* and *F. psychrophilum*). Overloading of the small raceways was a precursor to this situation. Thinning followed by treatment with OTC in the feed was fairly successful in alleviating losses. The second episode was diagnosed as CWD only, which required use of an INAD protocol to treat the fish with OTC. Results of the treatment were not very satisfactory, so the same lot of fish were examined a second time. Only a few colonies of a *Flavobacterium* species and of *P. fluorescens* were found in the follow-up, so no further treatment was applied.

**Hagerman State Hatchery**

Seven inspection cases and nine diagnostic cases were examined at Hagerman State Hatchery in 1997. Better survival of swim-up rainbow trout fry in the hatchery vats was achieved by eliminating the belt feeders and returning to hand-feeding until the fish were well established in their feeding behavior. Better utilization of the feed resulted in improved nutrition and less waste. However, this did not completely eliminate the dropout syndrome that still occurs randomly in the vats. Specifically, fry on feed for 5-7 days suddenly become lethargic, stop feeding, and drop to the bottom of the vat. Mortalities in individual vats can be as high as 70-80%, but are not necessarily consistent within a given lot. No virus or internal bacteria have been isolated. The one common pathologic change is a swelling of the gill lamellae, often with external fungus or filamentous bacteria. It has not been determined if the gill problem is primary or secondary to the syndrome.

Losses in the outside raceways were attributed to IHNV, bacterial infections, or a combination thereof. Frequent episodes of virus were experienced in 1997 (some confirmed by the Lab and some not), but the overall percentage of fish lost was down. This may be attributed to a combination of bird exclusion nets over the large raceways, reconstruction of the Tucker Springs portion of the large raceway headrace, and management efforts to grow the fish to larger size before transfer to the large raceways supplied with Riley Creek water.

Two lots of fish were treated for CWD (*F. psychrophilum*) with INAD 9332 protocols. Success of the OTC-treatments was reduced by subsequent episodes of IHNV. Motile aeromonad septicemia, (*A. hydrophila* and *P. fluorescens*), was the other significant bacterial disease detected at Hagerman State Hatchery in 1997. When appropriate, it was treated with OTC-medicated feed under the existing label.

**Hayspur Hatchery**

Hayspur Hatchery is the IDFG's major source of rainbow trout eggs, with 1997 production of nearly 15 million green eggs. Fish production at this facility is limited to broodstock replacement, reared on specific pathogen-free spring/well water. No fish were reared on surface water (Loving Creek) or in the earthen ponds, due to the presence of *M. cerebralis* in those systems. No clinical diseases were observed on the facility in 1997.

The major focus of the pathologist's work at Hayspur Hatchery was inspection of the brood populations and replacement lots. No replicating viruses were detected from 720 individual adult and juvenile fish sampled from all populations over the course of the year. The ELISA test detected a carrier state of RS from every population, at low levels in juvenile replacement fish and at moderate to high levels (optical density values as high as 0.65) in spawning adults. Direct FAT of both kidney tissue imprints and ovarian fluid cell pellets (OCP-FAT) did not detect RS, but membrane filtration of ovarian fluids did detect RS organisms from the Colorado River and the Kamloops spawning populations. No clinical BKD has ever been observed on this hatchery and both prevalence and levels of bacteria have been reduced over time by culling the eggs from positive females in the broodstock replacement groups.

Female fish from spawning populations were injected with either 5 mg/kg OTC or 3000 IU/lb Penicillin-G approximately one month prior to spawning. The goal of this work was to reduce the possibility of transmitting *F. psychrophilum* bacteria to the next generation via the eggs. Injected fish are never released for sport fishing or human consumption. A program using both chemical and vaccination therapies to control this pathogen will continue as a priority at this hatchery.

## Henrys Lake Hatchery

Gametes taken from spawning cutthroat and brook trout at Henrys Lake Hatchery were fertilized and incubated at Ashton Hatchery. Ovarian fluid samples were collected by hatchery personnel and shipped to the Eagle Lab where they were tested for viruses and for RS by OCP-FAT. A group of 60 adults from each run was also sacrificed to obtain tissue samples that were tested for BKD (ELISA and FAT), viruses, and WD. Cutthroat ovarian fluids and tissue samples were negative for viruses. Two of 300 ovarian fluid pools were positive for RS by OCP-FAT, and 7 of 12 pooled kidney samples tested positive (low) for RS antigen by ELISA. Eggs from those females whose ovarian fluids tested positive were discarded. No *Myxobolus* spores were detected from the cutthroat samples, although this population was confirmed WD-positive in 1996.

No replicating viruses or RS were detected in the ovarian fluid samples from adult brook trout. Tissue tests were also negative for viruses, but ELISA detected RS antigen in 2 of 12 pooled kidney samples at low levels. Bacterial samples detected two species of *Flavobacterium*, (*F. psychrophilum* and *F. odoratum*) from the brook trout, but A. *salmonicida* was not detected as it has been in past years. After three consecutive years of detecting *Myxobolus* spores in the brook trout by the digest method, *M. cerebralis* was finally confirmed by histology in 1997.

The presence of RS, *A. salmonicida*, and *M. cerebralis* in fish from Henrys Lake Hatchery require that the greatest care be taken to disinfect all eggs and equipment that leave the facility.

## Kootenai Hatchery

The Kootenai Tribe of Idaho operates Kootenai Hatchery and rears ESA-listed white sturgeon *Acipenser transmontanus* for release to the Kootenai River. Fish health at the facility was reportedly excellent in 1997. No outbreaks of bacterial gill disease or white sturgeon iridovirus were reported, and no fish samples were analyzed by EFHL. The IDFG's contract with the Tribe to operate this facility expired at the end of June.

## Mackay Hatchery

No clinical diseases were reported at Mackay Hatchery in 1997. The only pathogen detected by routine inspection of production fish was *A. hydrophila* (carrier) in the Saratoga-strain brown trout *Salmo trutta*. The proximity to the hatchery of waters from which *M. cerebralis* has been detected continues to pose a threat. Hatchery personnel must continue to be alert to the possibility of contamination from adjacent waters, although the parasite has never been detected in fish reared on station. Effective exclusion of piscivorous birds and fish-eating mammals would greatly reduce concern over this situation and should be given high priority.

Mackay Hatchery received green kokanee eggs from a spawning operation on the Payette River above Payette Lake. Inspection of the feral spawning adults detected no replicating viruses or *Myxobolus* spores. A high prevalence of RS antigen was detected by ELISA (25 of 29 five-fish pools, or 86%) but optical densities were all in the low range. No RS organisms were detected by FAT in 75 kidney imprints, nor were any clinical signs of BKD observed.

### McCall Hatchery Resident Program

The Fish Lake cutthroat egg production for the McCall Hatchery Resident Program was low this year due to a reduced number of adults returning to the trap. Ovarian fluids were collected from 51 females for pathogen screening, and 20 males were sacrificed for tissue sample tests (ELISA and kidney FAT, virology, WD, and *C. shasta*). The only positive results from these tests were RS by ELISA (14 of 20, 13 lows and 1 high). No clinical signs of BKD were observed. The prevalence of RS by ELISA in this population has remained fairly constant over five years of testing, ranging from 70% to 90%. Much of the IDFG's resident cutthroat program is based on eggs from this feral fish population. The majority of the progeny are destined for high mountain lake stocking throughout most of Southern Idaho, with the remainder returned to Fish Lake to maintain the program. It might be beneficial to give an erythromycin treatment to these fry prior to stocking. A policy decision on the cost effectiveness of a feral, potentially diseased brood population versus a clean captive source needs to be made.

### Nampa Hatchery

Bacterial CWD and MAS (primarily caused by *A. hydrophila*) continued to be the two most common diseases diagnosed in rainbow trout at Nampa Hatchery, while a number of bacteria were found in the brown trout which may not have been definite causes of disease. Not all episodes were severe enough to warrant treatment. Oxytetracycline-medicated feed was used to treat the fish, under either INAD or existing approved label, when losses became unacceptable. Response to such treatment was generally satisfactory.

Maintenance of the bird and animal exclusion structures and care in importing eggs from certified sources should be successful in maintaining healthy fish at this hatchery. Priority should be given to reducing CWD through both chemical therapy and hatchery management.

### Sandpoint Hatchery

No fish were reared at Sandpoint Hatchery during 1997 due to the collapse of the water supply line on December 31, 1996. Funds to repair the line are available and reconstruction will begin in 1998.

## Anadromous Hatcheries

The IDFG hatchery facilities and associated satellite release and adult capture stations for steelhead trout *O. mykiss* and chinook salmon *O. tshawytscha* are funded through Lower Snake River Compensation Plan (LSRCP) and Idaho Power Corporation (IPC) contributions. The annual summary of results for the hatcheries and satellite stations is presented in Appendix 1. In 1997, a total of 178 inspection and diagnostic cases were done by the EFHL for the Anadromous Hatchery Program.

### Clearwater Hatchery and Crooked River, Powell, and Red River Satellite Facilities

The Clearwater Hatchery produces steelhead and chinook in conjunction with Crooked River, Powell, and Red River satellite facilities.

**Clearwater Hatchery**-Dworshak National Hatchery (DNFH) provides eggs for Clearwater Hatchery's steelhead program. A total of 57 inspection and diagnostic cases were attributed to these facilities. In 1997, disease conditions included BKD, CWD and MAS in juvenile chinook. Broodstock examinations did not detect IHNV in DNFH steelhead. In adult samples, WD was not confirmed.

The production of steelhead was virtually free of pathogens during this past brood year (Appendix 1). Steelhead health was exceptional, as no pathogens were detected during most of 1997. Acute losses in spring chinook salmon from BKD were experienced in the high BKD segregation groups from Lookingglass and Rapid River hatcheries. Although three applications of erythromycin medicated feed were fed to these fish, morbidity and mortality due to BKD continued at a lesser intensity until release at Hell's Canyon. The IDFG and the Nez Perce Tribe decided to release these fish at Hell's Canyon to reduce the risk of horizontal transmission of *Renibacterium* to Rapid River Hatchery fish.

**Crooked River Satellite Facility**-Juvenile fish were not reared at this facility during 1997. All brood fish trapped at this facility were transported to and spawned at Red River Satellite. To facilitate management, the South Fork of the Clearwater River spring chinook salmon was created from combining Crooked River fish and Red River fish.

**Powell Satellite Facility**-Juvenile fish were not reared at this facility during 1997. Brood fish were trapped, spawned and sampled for disease during 10 spawning days. Samples were sent to Eagle Fish Health Laboratory and examined for virology, WD, and BKD segregation by ELISA.

**Red River Satellite Facility**-During 1997 juveniles were not reared at this facility. Brood fish trapped at Red River and Crooked River satellites were spawned and sampled for BKD, utilizing ELISA technology. Viral and WD samples were also examined.

**Magic Valley Hatchery**

Dworshak, East Fork, Pahsimeroi, and Sawtooth steelhead stocks required 18 inspection trips during 1997 at the Magic Valley Hatchery. By mid-June 1997, the Dworshak steelhead group B (STB) experienced mortalities similar to those caused by IHNV. Viral replicating agents were not detected, but *F. psychrophilum,* the causative agent of CWD, was cultured in numbers too numerous to count (TNTC). Oxytetracycline (OTC) medicated feed was applied for 14 days at 10g/100lb of biomass/day of active drug. Daily mortality was at times greater than 3000+ fish/day/raceway.

Furunculosis, caused by *A. salmonicida,* was detected in three out of four Pahsimeroi Hatchery STA examined. This strain of furunculosis was susceptible to OTC. Romet-30 was not used since the release date was less than 42 days away. Thus OTC medicated feed was applied. Morbidity and mortality caused by this epizootic was minimal and these fish were released on schedule.

The organosomatic index demonstrated a very robust fish, with plenty of stored energy (fat index of four). No IPNV or *M. cerebralis* was detected in 1997 from Magic Valley Hatchery. A stringent disinfection program has been applied to this hatchery on an annual basis.

## McCall Hatchery

Six inspection and diagnostic cases were processed from the McCall Hatchery anadromous program during 1997. No serious pathogens were detected at McCall Hatchery during this calendar year.

A benefit of the BKD segregation program is that production fish were not exposed to RS transmitted horizontally from carrier fish. Fish health programs have been successful at McCall Hatchery. The BKD high segregation groups should be reared at lower density, given fortified feed, and longer and more frequent prophylactic treatments of erythromycin-medicated feed. With better care, high BKD segregation groups can produce returning adults.

The South Fork Trap, which is a satellite of McCall Hatchery, had 18 accessions logged into the EFHL during 1997. Brood South Fork summer chinook were examined for RS, *M. cerebralis*, and viral replicating agents. No *M. cerebralis* or viral replicating agents were detected. The RS pathogen was detected using ELISA. The ELISA optical density data was utilized to choose which egg lots were to be culled. Egg lots from high optical density females represent the greatest risk for horizontal transmission of *Renibacterium*. The egg lots from females with optical density 0.4 or above were culled from the hatchery program. The EFHL is able to make a culling or segregation program to fit the needs of each IDFG chinook hatchery.

## Niagara Springs Hatchery

Fifteen inspection or diagnostic cases were attributed to Niagara Springs Hatchery during 1997. Hells Canyon and Pahsimeroi steelhead stocks were examined and IHNV, CWD, and *Yersinia ruckeri,* causative agent of enteric redmouth disease (ERM) were responsible for mortality.

In order to improve fish health at Niagara Springs Hatchery, several improvements to fish culture are being made. The nursery has been expanded and improved, thus drastically reducing suffocation during early rearing. Furthermore, a near-complete exclusion of piscivorous birds from the hatchery (by installing netting/wire) has been completed. An aggressive immunization program against furunculosis has kept mortalities to this infectious agent to a minimum. Future endeavors should focus on inventory manipulations to maintain densities below stressful levels and to manage around opportunistic pathogens such as *Flavobacterium*.

## Oxbow Hatchery

Six inspections were made to Oxbow Hatchery. Steelhead group A (STA) adults were examined during spawning for IHNV, IPNV, RS, and WD. Only RS was detected via ELISA during 1997 in returning steelhead adults.

## Pahsimeroi Hatchery

Samples of steelhead and chinook from Pahsimeroi Hatchery resulted in 24 laboratory accessions to the EFHL in 1997.

Adult STA and adult and juvenile summer chinook were sampled for pathogens. No evidence of virus was detected in any adult group. The RS antigen could be detected by ELISA, but typically at low levels. The WD is endemic to the drainage and juvenile chinook will become positive

for WD when reared on river water. Clinical signs became apparent during the fall and winter months. The parasite was detected in adult chinook, but not adult steelhead. The IHNV was detected in steelhead fry reared on river water at the lower facility raceways. These fish were destroyed.

Salmonids reared at Pahsimeroi Hatchery have been positive for WD for almost a decade and 1997 was no different. All of the fish were early-reared at Sawtooth Hatchery to avoid early challenges of the parasite *M. cerebralis*. Once the fish reached a minimum length of 7 cm, they were ponded at the upper facility at Pahsimeroi Hatchery supplied with Pahsimeroi River water. By preliberation sample, these fish had low levels of *M. cerebralis* infection by the Pepsin/Trypsin digest method.

Prophylactic treatments of erythromycin-medicated feed were administered twice, in accordance with Pahsimeroi Hatchery's INAD protocols. The disease RS was not found via FAT methods. Pooled samples examined via ELISA methods were 2/4 positive both with low optical density.

Fish reared at early-rearing facilities at the lower raceways at Pahsimeroi Hatchery had chronic problems with environmental gill disease, while those ponded at the upper facility experienced no loss to gill disease. Acute losses were not experienced at Pahsimeroi Hatchery this year.

In conjunction with IPC, the hatchery staff and EFHL staff are exploring options to manage *M. cerebralis* infection. The primary focus of this investigation is to develop a better water source for early rearing. Local springs are being analyzed for water chemistry, temperature, volume, gas saturation, and many other parameters. This is an opportunity for IDFG and IPC to work together with the local residents to overcome this problem.

**Rapid River Hatchery**

Forty-three inspection and diagnostic cases were made with samples from Rapid River Hatchery during 1997. The majority of these cases were adult female chinook salmon samples to establish BKD titers for ELISA-based segregation and culling.

Pathogens and diseases detected in juvenile spring chinook include RS by ELISA, CWD, and MAS. External mycosis, "Fuzzy-tail," which had been a perennial problem at this hatchery in the late 1980s and early 1990s was virtually non-existent. Pooled kidney samples, examined via ELISA methods, had two of four pools positive for RS (all low titers) for preliberation samples. No fish were found to be positive for RS via FAT. *Flavobacterium psychrophilum* was found in routine examinations during random inspection sampling.

The BKD culling and/or a segregation program should be continued to maintain fundamental fish health conditions. Fish should also be fin-clipped when water conditions have low sediment load and temperature. A September mortality of juvenile fish was caused by MAS. Mortality was controlled with one treatment of OTC at the standard rate (3.75 grams/100lb/day).

**Sawtooth Hatchery**

Eighty-two cases were made to check juvenile and brood fish at Sawtooth Hatchery in 1997. Juvenile stocks examined at this facility were Sawtooth and Pahsimeroi chinook stocks, and Redfish Lake sockeye. Only one diagnostic trip was made in 1997 to examine steelhead smolts, which were

acclimating at Sawtooth Hatchery. In addition, samples were taken or obtained from adult East Fork stock steelhead and Sawtooth steelhead. No evidence of virus resulted. While BKD antigen was detectable in adults of both species, clinical BKD did not cause mortality in juvenile chinook this year. This may be due to prolonged rearing on well water. This has also resulted in decreased detection of WD in chinook, since the river water supply has been demonstrated to carry the infectious stage of *M. cerebralis*.

Fish health at Sawtooth Hatchery was excellent for most of the 1997 Sawtooth spring chinook. A chronic disease situation caused by loading and transport trauma was investigated by the EFHL. The only pathogen found was *F. psychrophilum* (CWD).

Organosomatic indices of randomly collected fish were excellent. Mesenteric fat index averaged 3.22 and the gills of these fish were in good condition.

## Sockeye and Chinook Captive Broodstock

The IDFG facilities at Eagle include both the EFHL and the Eagle Hatchery, which is dedicated to rearing ESA-listed Redfish Lake sockeye salmon *O. nerka* captive broodstock to maturity and the resulting progeny for release. This program began in 1991 and continues to the present.

A similar experimental project was initiated in 1995 to include rearing ESA-listed chinook from collections of wild parr. The site selected for the freshwater rearing portion of this project was Eagle Hatchery, which shares grounds with the EFHL. The marine site was the National Marine Fisheries Service's (NMFS) Manchester Marine Laboratory. Both the sockeye and chinook programs generate considerable case workload for the EFHL. Program activities for 1997 are reported by species.

### Redfish Lake Sockeye Salmon Captive Broodstock

A total of 68 cases at EFHL were generated from brood years 1993, 1994, and 1996 of the sockeye broodstock program. Important findings include continuing to document a high prevalence of lymphosarcoma tumors; the lack of replicating virus and BKD, indicating that quarantining efforts were successful; optic aplasia; a motile aeromonad in progeny which caused loss; and an undetermined condition or syndrome which may have a nutritional or water chemistry cause.

The BKD control efforts have been applied to broodstock at both Eagle Hatchery and Manchester. All adult spawners and males used for cryopreservation were sampled for the presence of virus and BKD. This totaled 218 adults for Eagle Hatchery alone. The Stanley Basin Sockeye Technical Oversight Committee (SBSTOC) developed a management plan for rearing progeny, based on the ELISA optical density of kidney tissue of the female parent. Cut-off optical density values were employed to prevent the reintroduction of BKD positive eggs into Eagle Hatchery and Sawtooth Hatchery. These ELISA-based segregation and rearing practices are designed to reduce the risk of having BKD in returning adults. The IDFG believes that by these practices, there will be an advantage toward recovery if the returning adults are free of BKD.

The EFHL staff participated in evaluation and documentation of optic aplasia, an anomaly of the eyes in the progeny of the single female anadromous return. There were two different conditions observed: progeny that lacked a single eye and those missing both eyes. These conditions occurred regardless of which male was used to fertilize the eggs. The prevalence of the bilateral optic aplasia was 9.5 % and 20% for the single optic aplasia. Histological examination of each condition indicated those fish missing a single eye lacked all optic structures internal to the

comea while those with the bilateral condition had all optic structures but the eyes were not inflated with vitreous humor.

**Salmon River Chinook Captive Rearing**

This marked the third year in which collections of wild parr were made for Idaho ESA-listed spring chinook for an experiment to test the feasibility of raising chinook parr to maturity in fish culture facilities. During 1997, BY96 parr were collected from the Lemhi River, East Fork Salmon River, and West Fork Yankee Fork within the evolutionarily significant genetic unit of the species. Collected parr were initially reared at Sawtooth Hatchery and subsequently transferred to Eagle Hatchery. When smolted, the groups will be divided into those destined for saltwater rearing at Manchester Marine Laboratory and those retained at Eagle Hatchery for freshwater culture. The EFHL continued to participate in this program in the capacity of lending fish health support and in processing and storing samples for genetic analysis.

Important pathology findings included the presence of BKD, *M. cerebralis,* and the copepod gill parasite, *Salmincola californiensis,* when parr were collected. Fin erosion progressed in fish which continued to be reared in freshwater following smoltification. An attempt to control the fin erosion with Chloramine T was not successful. Some males that matured from both the freshwater and saltwater locations as three-year-olds were released back to their natal streams. Additionally, sperm of males from two stocks was cryopreserved at EFHL. The fish health problems with these wild-origin parr has forced a reconsideration of starting similar programs from eggs which can be surface disinfected with iodine.

## IDAHO WILD FISH HEALTH SURVEY

An examination of samples obtained from wild fish in the State of Idaho has been ongoing at the EFHL since the mid-1980s. The distribution of *M. cerebralis* and the impact of the parasite on wild and hatchery salmonid populations has been a concern of the IDFG since 1987, when it was detected in trout which contracted the infection from Idaho waters. Efforts in 1997 were to support IDFG fisheries research on whether WD-related population effects are present in wild salmonids in Idaho. This research examined trout population structure from the Teton and South Fork Snake rivers. We employed a quantitative spore-load estimated protocol to the live-boxed trout. This research demonstrated that infections resulted from exposing rainbow and cutthroat trout to the Teton River for ten days during July. The population structure of wild rainbow trout may be impacted by *M. cerebralis*. However, while Yellowstone cutthroat trout became infected at a rate similar to that of rainbow in the live box studies, wild cutthroat populations appear to be doing well (Elle and Schill 1999, Dillon and Gamblin 1999).

The only new location for *M. cerebralis* in Idaho waters was from wild cutthroat trout from the mainstem of the Middle Fork Salmon River and from the lower reach of Big Creek. Both *M. cerebralis* spores and those of neurotropic *Myxobolus spp.* (possibly *M. neurobius*) were found in fish taken at the two locations.

Yellow perch from Cascade Reservoir were examined to investigate whether there was a fish health explanation to a severe population decline. Multiple parasitism was identified in the samples of young fish but probably was not responsible for the decline.

The lab shared its fish health database with the USFWS Wild Fish Disease Survey for inclusion in their data. This is an important effort in cooperation between state agencies and the

federal service. There are extensive data from fish health observations made over many years, which would be useful at the national level to understand how pathogens operate in wild fish populations. Some of these historic observations are from species that are currently ESA-listed, such as bull trout in Idaho.

## TRANSPORTATION AND IMPORTATION PERMITS

The EFHL issued 57 transport or import permits for the IDFG Fisheries Bureau during 1997. These permits are required when non-aquaculture species are released to public waters of the State of Idaho. Most of these dealt with grass carp, white amur, (*Ctenopharyngodon idella)* to be used for biological control of aquatic vegetation. The IDFG policy requires that these be certified free of Asian tapeworm and to be sterile triploids. The United States Department of Agriculture Laboratory at Stuttgardt, Arkansas generated the certification for both conditions. Other permits were issued to the NMFS for importation of Redfish Lake sockeye smolts for release and adults for volitional spawning; to the USFWS for research activities in the Clearwater River system; to the Kootenai Tribe of Idaho for culture and release actions with endangered white sturgeon; to the Nez Perce Tribe for fish culture activities; and to the University of Idaho Aquaculture Research Institute.

## REPORTS AND PRESENTATIONS

Reports generated by the EFHL include the Annual Resident Hatchery report for 1997 and the monthly LSRCP and disease summary reports. Presentations were given on the fish disease status in Idaho at the anadromous fish management meeting; at the IDFG hatchery managers' meeting; at the PNFHPC semi-annual meetings and symposium entitled Pathogens and Diseases in Aquatic Ecosystems; to the Western Fish Disease Workshop and American Fishery Society (AFS) Fish Health Section meeting; and Northwest Fish Culture Conference.

The EFHL personnel attended seven meetings of the Snake River Sockeye Technical Oversight Committee and five meetings of the Chinook Captive Rearing Technical Oversight Committee during 1997. Training in cryopreservation of salmonid sperm was also obtained through a workshop and seminar at the University of Idaho. We also participated in a seminar at Oregon State University, Whirling Disease Symposium, and Idaho Chapter of AFS.

The wet lab at EFHL was used by IDFG research biologists to evaluate triploid induction techniques with rainbow trout, studies on WD, safety of Azithromycin with chinook salmon, passage of tumors by injection of tissues, and investigation of vertical transmission of BKD in rainbow trout.

## PRODUCTION STUDIES AND SURVEYS TO ENHANCE FISH HEALTH

For several years, OTC injections have been given to brood rainbow trout at Hayspur Hatchery to inhibit possible vertical transmission of *F. psychrophilum*, which is a problem at hatcheries receiving eggs from Hayspur Hatchery. The primary recipients of these eggs are American Falls, Grace, Nampa, and Hagerman hatcheries. No control groups have been available to test the efficacy of these injections.

Beginning in 1993, a RS culling program, using a membrane fluorescent antibody test (MFAT), was begun at Hayspur. It is hoped that this sensitive method will allow more adequate detection of RS at low levels in ovarian fluids, thereby reducing the transmission of RS to progeny. To date, this test has proven more sensitive than direct fluorescent antibody tests and approximately the same as ELISA; however, the results do not correlate well with ELISA.

Progeny from one Hayspur rainbow female that had high RS levels in kidney ELISA and progeny from one Hayspur rainbow female that had high RS levels in ovarian fluid were reared in the Eagle wet lab and tested periodically to evaluate vertical transmission of RS. The RS was not detected in any of these test groups. A second group, consisting of progeny from one high ELISA female, is currently on hand.

Staff of the EFHL have cooperated during 1997 with cohorts in the fish health and fisheries management fields through the forum of the Pacific Northwest Fish Health Protection Committee (California, Oregon, Washington, Montana, British Columbia, Alaska); Rocky Plains Fish Health Committee (Arizona, Nebraska, Colorado, Nevada, Utah, New Mexico, North Dakota, and South Dakota); membership in the American Fisheries Society, Fish Health Section; cooperative ESA broodstock efforts (U. S. Fish and Wildlife Service, National Marine Fisheries Service, Shoshone-Bannock, and Nez Perce tribes, Bonneville Power Administration); universities (University of Idaho, Washington State University, University of Washington, Oregon State University, University of California-Davis, University of British Columbia, Malaspina College, and the College of Southern Idaho); and with the Whirling Disease Foundation.

Staff of the Eagle Fish Health Laboratory performed inspections of three private aquaculture facilities that import live fish into Canada. This service is provided free of charge and enhances export of Idaho aquaculture products.

## RECOMMENDATIONS

The close proximity of surface waters which have been demonstrated to contain the infectious stage of *M. cerebralis* to waters used for fish culture at IDFG hatcheries requires diligence of all culture personnel to ensure that contamination does not occur. This is true for Ashton, Hayspur, Henrys Lake, and MacKay hatcheries.

Cold water disease is the most universally encountered pathogen in IDFG hatcheries, including Hayspur Hatchery broodstocks. Pathologists with the California Department of Fish and Game have demonstrated that the pathogen can be vertically transmitted and that Penicillin G can be effective in preventing vertical transmission. We recommend that the practices developed in California be tried at Hayspur Hatchery for CWD control. We will try an autogenous CWD vaccine to see if it could also be useful.

Considerable progress has been made in the control of BKD in chinook cultured at all anadromous stations. This has occurred through diligent application of a four-pronged program including injection of all adult females with Erythromycin, 100% sampling of females by ELISA, segregation or culling of eggs from females deemed "highs" by ELISA, and two treatments of progeny with Erythromycin. This program has been very effective. Clinical BKD in progeny has been restricted to those of "high" females and the prevalence of BKD "high" adult females has been gradually decreasing over the last two generations. In general, pre-spawning mortality of all adults has been reduced. This program must continue as the highest fish health priority for chinook hatcheries into the future.

Expansion of the pathogen-free well water at Pahsimeroi Hatchery needs to be given a high priority for funding by Idaho Power Company. The current program by which Pahsimeroi chinook are reared at Sawtooth Hatchery until a length of 7 cm has created considerable competition for well-water between programs. This has been exacerbated by additional demand for eyed-eggs for egg-box programs that IDFG cooperates with the Shoshone-Bannock Tribe. Development of additional pathogen-free water at Pahsimeroi Hatchery would alleviate the competition between programs.

The practice of collecting naturally produced parr to initiate broodstocks of the chinook captive rearing program needs to be re-evaluated. Losses to BKD and the handling stress from *Salmincola* control efforts have been unacceptably high and has limited the number of mature adults produced. The Washington Department of Fish and Wildlife has been successful in removing eyed-eggs from naturally-produced redds by hydraulic pumping. This technique should be tried on an experimental basis by IDFG and could avoid health-related problems in this program.

The Department has cooperated with the International Association of Fish and Wildlife Agencies program for registration of additional therapeutic agents for aquaculture. Progress toward FDA registration has been slow although there has been expansion of label claims for several compounds. Funding from IDFG has come from license sources and is in short supply. We continue to support the participation of IDFG in this process but this participation will need to be scrutinized annually for measured progress toward realistic goals of registrations by FDA.

## ACKNOWLEDGEMENTS

The staff of the Eagle Fish Health Laboratory would like to express our appreciation to the Lower Snake River Compensation Plan, Idaho Power Company, Sport Fish Restoration, and the sportsmen of the State of Idaho for the financial support of our programs. We also greatly appreciate the assistance provided by the fish culture personnel of all the IDFG hatcheries in obtaining samples when our staff could not be present. This has been a big help and has helped to keep costs down. The cooperative INAD programs of the USFWS and University of Idaho have allowed access to therapeutic compounds while they are in the process of registration by the FDA. The help of the hatchery staffs in the INAD process has likewise been appreciated.

## LITERATURE CITED

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APPENDICES

Report Date: 12/7/99

# FISH HEALTH SUMMARY REPORT 1997

**Idaho Department of Fish and Game**

**Eagle Fish Health Laboratory**

**1/1/97 TO 12/31/97**



| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 PANHANDLE REGION** | | D | | | | | | | | | | | | | | |
| WILD | COEUR D'ALENE LAKE | FALL CHINOOK | 97-211 | 7/18/97 | | | | | | | | | | | WILD FISH | GASTROINTESTINAL CARCINOMA |
| BROOD | WOLF LODGE CREEK | FALL CHINOOK | 97-358 | 9/23/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 (o.d.=0.083), WHD 0/1 |
| BROOD | WOLF LODGE CREEK | FALL CHINOOK | 97-359 | 9/26/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 (o.d.=0.095), WHD 0/1 |
| **2 CLEARWATER REGION** | | D | | | | | | | | | | | | | | |
| ADULT | LOCHSA | SOCKEYE SALMON | 97-274 | 8/20/97 | - | - | | + | | | | - | | | WILD FISH | BKD; ELISA 1/1 (O.D. = 0.440), VIRO 0/1, WHD 0/1 |
| WILD | CROOKED RIVER | BULL TROUT | 97-275 | 7/9/97 | | | | + | | | | - | | | WILD FISH | BKD; ELISA 1/1 (O.D. = 1.612), FAT 0/1, WHD 0/1. |
| WILD | BRUSHY FORK CREEK (CLEARWATER) | CUTTHROAT TROUT | 98-026 | 9/8/97 | | | | | | | | - | | | WILD FISH | NO PATHOGENS DETECTED; WHD 0/59 (DIGEST ONLY) |
| **3 SOUTHWEST REGION** | | D | | | | | | | | | | | | | | |
| WILD | S.F. BOISE RIVER | WHITEFISH | 97-458 | 12/4/97 | - | - | | | - | - | - | - | | | WILD FISH | MOTILE AEROMONAD SEPTICEMIA; VIRO 0/4, WHD 0/4, AEROMONAS HYDROPHILA 4/4 |
| **7 SALMON REGION** | | D | | | | | | | | | | | | | | |
| WILD | MIDDLE FORK, SALMON RVR | CUTTHROAT TROUT | 97-231 | 8/9/97 | | | | | | | | - | | | WILD FISH | MYXOBOLUS; MYXOBOLUS SPP. 1/4 BY DIGEST--HISTO. DID NOT INDICATE M. CEREBRALIS. |
| WILD | MIDDLE FORK, SALMON RVR | CUTTHROAT TROUT | 97-232 | 8/9/97 | | | | | | | | + | | | WILD FISH | WHD; M. CEREBRALIS 2/4 BY DIGEST METHOD, HISTO CONFIRMED IN 1/1 |
| WILD | MIDDLE FORK, SALMON RVR | CUTTHROAT TROUT | 97-233A | 8/11/97 | | | | | | | | - | | | WILD FISH | MYXOBOLUS SPP.; WHD 0/6, MYXOBOLUS SPP. 1/6 (DIGEST ONLY, SPORE TOO LARGE FOR M. CEREBRALIS) |
| WILD | MIDDLE FORK, SALMON RVR | STEELHEAD | 97-233B | 8/11/97 | | | | | | | | - | | | WILD FISH | NO PATHOGENS DETECTED; WHD 0/1 |
| **AMERICAN FALLS HATCHERY** | | A | | | | | | | | | | | | | | |
| 1996 | HAYSPUR | RAINBOW TROUT | 97-021 | 2/3/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60, BACTE NSG |
| 1997 | TROUT LODGE | KAMLOOPS RBT | 97-323 | 9/18/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE-NSG |
| **CABINET GORGE HATCHERY** | | A | | | | | | | | | | | | | | |
| BROOD | SULLIVAN SPRINGS | KOKANEE, LATE SPAWNER | 97-464 | 12/9/97 | - | - | | + | | | | - | - | | INSPECTION | RS; VIRO 0/60, FAT 0/60, C. SHASTA 0/20, WHD 0/60, ELISA 6/12 (5-fish pools, all bw). |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CLARK FORK HATCHERY** | | C | | | | | | | | | | | | | | |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-095 | 4/8/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/10, BACTE - NO SIGNIFICANT GROWTH |
| 1993 | WESTSLOPE | CUTTHROAT TROUT | 97-172 | 5/20/97 | - | - | | + | | | | - | | | INSPECTION | RS; ELISA 3/10 (2-fish pools; 2 low, 1 high), VIRO 0/60, WHD 0/20, NUCLEOSPORA 0/8 |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-173 | 5/20/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, PSEUDOMONAS; VIRO 0/10, F. PSYCHROPHILUM 3/4, P. CHLORORAPHIS, 3/4, P. SPECIES 2/4 |
| 1996 | HENRY'S LAKE | BROOK TROUT | 97-174 | 5/20/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/10 |
| 1996 | HAYSPUR | KAMLOOPS RBT | 97-175 | 5/20/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/5, BACTE 0/4 |
| 1996 | WESTSLOPE | CUTTHROAT TROUT | 97-176 | 5/20/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD; VIRO 0/5, FLAVOBACTER PSYCROPHILUM 4/4 |
| 1996 | CLARK FORK HATCHERY | CUTTHROAT TROUT | 97-465 | 12/10/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | PSEUDOMONAS, CWD; VIRO 0/8, PSEUDOMONAS MALTOPHILA 3/8, P. AUREOFACIENS 1/8, P. SPP. 3/8, FLAVOBACTER PSYCHROPHILUM 1/8 |
| **CLEARWATER HATCHERY** | | C | | | | | | | | | | | | | | |
| 1995 | POWELL | SPRING CHINOOK | 97-050 | 3/11/97 | - | - | | + | | | | - | | | INSPECTION | RS; FAT 0/10, ELISA 1/2(5-FISH POOLS, O.D.=0.276), VIRO 0/10, WHD 0/10 |
| 1995 | RED RIVER | SPRING CHINOOK | 97-051 | 3/11/97 | - | - | | + | | | | - | | | INSPECTION | RS; FAT 0/10, ELISA 1/2 (5 FISH POOLS, O.D.=0.100), VIRO 0/10, WHD 0/10 |
| 1995 | RAPID RIVER | SPRING CHINOOK | 97-052 | 3/11/97 | - | - | | + | | | | - | | | INSPECTION | RS; FAT 0/20, ELISA 2/4 (5-FISH POOLS, O.D.s = 0.103, 0.134), VIRO 0/20, WHD 0/10 |
| 1996 | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-053 | 3/12/97 | - | - | | + | | | | - | | | INSPECTION | RS; FAT 0/20, ELISA 1/4 (5-FISH POOLS, O.D. = 0.105), VIRO 0/20, WHD 0/20 |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-054 | 3/12/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | PSEUDOMONAS; VIRO 0/5, PSEUDOMONAS CHLORARAPHIS 2/4 |
| BROOD | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-055 | 3/11/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/20 |
| BROOD | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-065 | 3/19/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/30 |
| BROOD | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-069 | 3/25/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/39 |
| BROOD | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-079 | 4/1/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/39 |
| BROOD | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-096 | 4/8/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/29 |
| 1997 | HAYSPUR | KAMLOOPS RBT | 97-193 | 6/26/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | PSEUDOMONAS; VIRO 0/4, PSEUDOMONAS AUREOFACIENS 4/4 |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-200 | 7/11/97 | - | | | + | - | - | + | | | | INSPECTION | RS, CWD, PSEUDOMONAS; IHNV 0/20, ELISA 2/2 (bw), FAT 0/20, FLAVOBACTER PSYCHROPHILUM 1/12, PSEUDOMONAS FLUORESCENS 3/12 |
| BROOD | SELWAY | SPRING CHINOOK | 97-201 | 7/11/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 11/11, 2 LOW, 9 HIGH |
| 1997 | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-209 | 7/24/97 | - | - | | - | - | - | - | | | | INSPECTION | MAS; VIRO 0/10, DFAT 0/10, A. HYDROPHILA 8/8 |
| 1997 | N. F. CLEARWATER | STEELHEAD, B GROUP | 97-214 | 7/25/97 | | | | | - | - | - | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; BACTE 0/8 |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-221 | 7/31/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-229 | 8/6/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 4/4--3 LOW, 1 HIGH (FISH # 1) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-250 | 8/12/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 7/8 ALL LOW |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-251 | 8/15/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 16/19 (14 LOW, 2 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-252 | 8/19/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 47/50 (37 LOW, 10 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-268A | 8/26/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/60, ELISA 71/71 (50 LOW, 21 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-268B | 8/26/97 | | | | | | | | | | | INSPECTION | SEE ACCESSION 97-268A |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-270 | 8/20/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 4/4, ALL LOW |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-271A | 8/22/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 53/53 (35 LOW, 18 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-271B | 8/22/97 | | | | | | | | | | | INSPECTION | SEE ACCESSION 97-271A |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-272 | 8/25/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 4/4 (3 LOW, 1 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-310A | 8/28/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 15/19 (12 LOW, 3 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-310B | 8/29/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 44/47 (32 LOW, 12 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-310C | 9/2/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 99/124 (71 LOW, 28 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-310D | 9/2/97 | | | | | | | | | | | INSPECTION | SEE ACCESSION 97-310C |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-310E | 9/5/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 29/36 (25 LOW, 4 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-310F | 9/8/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 21/29 (18 LOW, 3 HIGH) |
| BROOD | S.F. CLEARWATER | SPRING CHINOOK | 97-310G | 9/9/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 16/16 (12 LOW, 4 HIGH) |
| BROOD | SELWAY | CHINOOK CAPTIVE | 97-311A | 8/29/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 2/2 HIGH (O.D.= 3.165, 3.129) |
| BROOD | SELWAY | CHINOOK CAPTIVE | 97-311B | 9/2/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 3/3 HIGH (O.D. = 1.534, 0.656, 1.837) |
| BROOD | SELWAY | CHINOOK CAPTIVE | 97-321 | 9/11/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 1/4 (bw) |
| BROOD | S.F. SALMON RIVER | SPRING CHINOOK | 97-322A | 9/11/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 67/68 (59 bw, 8 high) |
| BROOD | S.F. CLEARWATER RIVER | SPRING CHINOOK | 97-322B | 9/11/97 | | | | + | | | | | | | INSPECTION | SEE 97-322A |
| BROOD | S.F. CLEARWATER RIVER | SPRING CHINOOK | 97-332 | 9/18/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 4/4 (all bw) |
| BROOD | S.F. CLEARWATER RIVER | SPRING CHINOOK | 97-333 | 9/22/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 1/1 (LOW) |
| BROOD | SELWAY | CHINOOK CAPTIVE | 97-334 | 9/22/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 1/1 (LOW) |
| 1997 | ENNIS | RAINBOW TROUT | 97-387 | 10/19/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE-NSG |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-388 | 10/19/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8 |
| 1996 | LOOKING GLASS | SPRING CHINOOK | 97-389 | 10/19/97 | - | - | | + | - | - | - | | | | DIAGNOSTIC | BKD, PSEUDOMONAS; VIRO 0/10, FAT 2/10 (both TNTC), PSEUDOMONAS SPP. 1/8 |
| 1996 | S.F. CLEARWATER RIVER | SPRING CHINOOK | 97-390 | 10/19/97 | - | - | | - | - | - | - | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE-NSG |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-448 | 11/19/97 | - | - | | + | - | - | - | | | | DIAGNOSTIC | BKD, PSEUDOMONAS; VIRO 0/10, FAT 9/10 (heavy), PSEUDOMONAS CEPACIA 2/8, PSEUDOMONAS SPP. 4/8 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-449 | 11/19/97 | - | - | | + | - | - | - | | | | DIAGNOSTIC | BKD; VIRO 0/10, FAT 7/7, BACTE 0/8 |
| 1997 | POWELL | SPRING CHINOOK | 97-463 | 12/8/97 | | | | | - | - | + | | | | DIAGNOSTIC | CWD; FLAVOBACTER PSYCHROPHILUM 2/4 |
| **CROOKED RIVER SATELLITE** | | C | | | | | | | | | | | | | | |
| BROOD | CROOKED RIVER | SPRING CHINOOK | 97-308 | 9/5/97 | | | | | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; WHD 0/8 |
| **EAGLE HATCHERY** | | D | | | | | | | | | | | | | | |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-001 | 1/2/97 | | | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; ELISA 0/1, FAT 0/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-004 | 1/8/97 | | | | - | | | | + | | | DIAGNOSTIC | WHD; ELISA 0/14, M.CEREBRALIS 8/14 (PREVIOUSLY CONFIRMED POPULATION) |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-006 | 1/13/97 | | | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; ELISA 0/1 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-007 | 1/21/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 LOW (OD=0.168), WHD 0/1 (NFS#ECE-94-51) |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-013 | 1/22/97 | | | | | | | | | | | DIAGNOSTIC | LYMPHOSARCOMA; HISTO CONFIRMED |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-016 | 1/27/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED, HISTO-ant. & post. kidney, liver, spleen, intestine; VIRO 0/1, NUCLEOSPORA 0/1, |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-020 | 2/2/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED: VIRO 0/1, NO INCLUSIONS IN KIDNEY, SPLEEN, OR LIVER IMPRINTS, HISTO--KIDNEY, LIVER SPLEEN |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-027 | 2/8/97 | - | - | | - | | | | - | | | WILD FISH | NO PATHOGENS DETECTED; VIRO 0/1, WHD 0/1, ELISA 0/1 (o.d. = 0.088), HISTO--LIVER, SPLEEN, KIDNEY |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-029 | 2/13/97 | - | - | | + | - | - | - | - | | | DIAGNOSTIC | PSEUDOMONAS, BKD; VIRO 0/1, PS. FLUORESCENS 1/1, ELISA 1/1 (o.d. = 0.436), WHD 0/1, HISTO: KIDNEY, LIVER, SPLEEN--NO INCLUSIONS |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-030 | 2/13/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, NO INCLUSIONS IN SPLEEN, KIDNEY, OR LIVER IMPRINTS, HISTO--LIVER, KIDNEY, AND SPLEEN |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-036 | 2/22/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, NO INCLUSIONS IN SMEARS, HISTO--KIDNEY, LIVER, SPLEEN |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-037 | 2/22/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, NO INCLUSIONS IN SMEARS, HISTO--KIDNEY, LIVER, SPLEEN |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-044 | 3/8/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1 |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-045 | 3/9/97 | | | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; ELISA 0/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-048 | 3/12/97 | - | - | | + | - | - | + | + | | | DIAGNOSTIC | RS, CWD, MAS, WHD; ELISA 1/1 (5-FISH POOLS) LOW OD# .109, MYXOBOLUS CEREBRALIS 1/4 - NO HISTO NEEDED PREVIOUSLY CONFIRMED IN GROUP, VIRO 0/4, PSEUDOMONAS 1/4, F. PSYCHROPHILUM 1/4 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-056 | 3/15/97 | - | - | | + | | | | | | | DIAGNOSTIC | RS; ELISA 1/1 (o.d. = 0.114), VIRO 0/1, HISTO--KIDNEY, LIVER, SPLEEN |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-057 | 3/16/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 (o.d. = 0.067), HISTO--KIDNEY, LIVER, SPLEEN |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-059 | 3/18/97 | | | | - | | | | | | | DIAGNOSTIC | LEUKEMIA (PRESUMPTIVE); ELISA 0/1, NEGATIVE FOR PKX OR NUCLEOSPORA; PROLIFERATION OF LYMPHOBLASTS INDICATES PROBABLE LYMPHOBLASTIC/PLASMACYTOID LEUKEMIA, HISTO--KIDNEY, LIVER, SPLEEN, GUT |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-071 | 3/29/97 | - | - | | + | - | - | - | - | | | DIAGNOSTIC | BKD, PSEUDOMONAS; ELISA 1/1 (HIGH OD =3.841), VIRO 0/1, WHD 0/1, PSUEDOMONAS FLUORESCENS 1/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-072 | 3/31/97 | | | | - | | | | - | | | DIAGNOSTIC | NO PATHOGENS DETECTED; ELISA 0/1, WHD 0/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-073 | 3/31/97 | | | | | | | | | | | DIAGNOSTIC | HISTO-ant. & post. kidney, liver, spleen. SMEARS-blood, gut, kidney, liver, spleen |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-077 | 4/2/97 | - | - | | - | | | | | | | DIAGNOSTIC | LYMPHOSARCOMA, HISTO-tumor (2), intestine, spleen, liver, and. & post. kidney; VIRO 0/1, ELISA 0/1 |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-081 | 4/3/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED, HISTO-ant. & post. kidney, liver, spleen. BLOOD SMEARS; VIRO 0/1 |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-083 | 4/6/97 | - | - | | | | | | | | | DIAGNOSTIC | LYMPHOSARCOMA; VIRO 0/1, SMEARS NEGATIVE FOR INCLUSIONS, HISTO-KIDNEY, LIVER, SPLEEN |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-100 | 4/11/97 | - | - | | | | | | | | | DIAGNOSTIC | LYMPHOSARCOMA; VIRO 0/1, HISTO--KIDNEY, LIVER, SPLEEN |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-101 | 4/11/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 LOW OD# .183, WHD 0/1, NUCLEOSPORA 0/1 |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-108 | 4/17/97 | | | | | | | | | | | DIAGNOSTIC | HISTO-ant. kidney, spleen, pseudobranch. SMEARS-blood, kidney spleen. |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-116 | 4/22/97 | | | | | | | | | | | DIAGNOSTIC | HISTO; CHANGES MAY BE DUE TO POST-MORTEM AUTOLYSIS |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-119 | 4/22/97 | - | - | | - | | | | - | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, FAT 0/1, WHD 0/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-135 | 4/30/97 | - | - | | + | - | - | - | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 LOW OD # .224, BACTE NSG, WHD 0/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-143 | 5/5/97 | - | - | | + | | | | - | | | DIAGNOSTIC | BKD; VIRO 0/1, ELISA 1/1 (O.D. = 0.511), WHD 0/1, |
| ANBY94 | RED FISH LAKE | SOCKEYE SALMON | 97-145 | 5/5/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-147 | 5/6/97 | - | - | | - | | | | + | | | DIAGNOSTIC | WHD; VIRO 0/1, ELISA 0/1, M. CEREBRALIS 1/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-148 | 5/6/97 | - | - | | + | | | | + | | | DIAGNOSTIC | BKD, WHD; VIRO 0/1, ELISA 1/1 HIGH, FAT 1/1, WHD 1/1 |
| BY-94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-151 | 5/9/97 | - | - | - | - | - | - | | - | | | DIAGNOSTIC | EXTERNAL FUNGUS WITH LESION; VIRO 0/1, ELISA 0/1, WHD 0/1, EIBS 0/1, BACTE-A. SOBRIA |
| ANBY96 | RED FISH LAKE | SOCKEYE SALMON | 97-181 | 6/3/97 | | | | | | | | | | | DIAGNOSTIC | EYE DEFORMITY SURVEY;1 normal; 3 one-eye; 5 small no eye; 5 large no eye. |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-191 | 6/24/97 | | | | | | | | | | | DIAGNOSTIC | LYMPHOSARCOMA 1/1 |
| ANBY96 | RED FISH LAKE | SOCKEYE SALMON | 97-199 | 6/11/97 | | | | | | | | | | | RESEARCH | HISTOLOGY OF ONE-EYE ANOMALY |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-202 | 7/14/97 | - | - | | - | | | | - | | | DIAGNOSTIC | NO PATHOGENS DETECTED, UNDETERMINED ETIOLOGY; VIRO 0/1, ELISA 0/1, WHD 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-203 | 7/16/97 | | | | | | | | | | | DIAGNOSTIC | LYMPHOSARCOMA 1/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-212 | 7/25/97 | - | - | | + | | | | - | | | DIAGNOSTIC | BKD, SCOLIOSIS; VIRO 0/1, ELISA 1/1 HIGH (o.d = 0.628), WHD 0/1 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-213 | 7/25/97 | - | - | | + | - | - | - | - | | | DIAGNOSTIC | BKD; VIRO 0/1, ELISA 1/1 HIGH (o.d. = 3.197), FAT 1/1 TNTC, WHD 0/1, BACTE-NSG |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-218 | 7/31/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA LOW (o.d. = 0.124), WHD 0/1 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-219A | 7/31/97 | - | - | | + | | | | + | | | DIAGNOSTIC | BKD, WHD; VIRO 0/1, ELISA 1/1 LOW, WHD 1/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-219B | 7/31/97 | - | - | | + | | | | - | | | DIAGNOSTIC | BKD; ELISA HIGH (3.567), FAT-TNTC, R.S. CULTURED ON KDM2 MEDIA AND STOCK CULTURE FROZEN, VIRO 0/1, WHD 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-223 | 8/1/97 | | | | | | | | | | | INSPECTION | LYMPHOSARCOMA |
| BY94 | YANKEE FORK RIVER | CHINOOK CAPTIVE | 97-224 | 8/1/97 | - | - | | - | | | | - | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, WHD 0/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-227 | 8/12/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; ELISA 1/1 (o.d. = 0.345), VIRO 0/1, WHD 0/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-257 | 8/22/97 | | | | + | | | | | | | DIAGNOSTIC | BKD; VIRO 0/1, FAT 1/1, ELISA 1/1 (O.D.= 3.415), WHD 0/1 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-260 | 8/25/97 | - | - | | + | | | | - | | | INSPECTION | RS, SCOLIOSIS; VIRO 0/1, ELISA 1/1 (0.135), WHD 0/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-291 | 9/4/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/3, ELISA 3/3 (3 lbw), WHD 0/3 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-305 | 9/11/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/33, ELISA 20/33 (19 lows, 1high), WHD 0/33 |
| BY94 | W.F. YANKEE FORK | SPRING CHINOOK | 97-306 | 9/16/97 | - | - | | + | | | | - | | | DIAGNOSTIC | BKD; VIRO 0/20, ELISA 12/20 (11 low, 1 high), WHD 0/20 |
| BY96 | RED FISH LAKE | SOCKEYE SALMON | 97-313 | 9/11/97 | | | | - | - | - | | | | | DIAGNOSTIC | PSEUDOMONAS; FAT 0/1, ELISA 0/1, PSEUDOMONAS FLUORESCENS 1/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-319 | 9/18/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/22, ELISA 16/22 (15 low, 1 high), WHD 0/22 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-328 | 9/23/97 | - | - | | + | | | | + | | | DIAGNOSTIC | BKD, WHD; VIRO 0/4, ELISA 4/4 (2 low, 2 high), WHD 1/1 (4-fish pool) |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-349 | 10/7/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-350 | 10/8/97 | - | - | | + | - | - | - | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 0/1, BACTE 0/1, WHD 0/1 |
| BY96 | RED FISH LAKE | SOCKEYE SALMON | 97-351 | 10/9/97 | | | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; ELISA 0/1 |
| BY95 | LEMHI RIVER | CHINOOK CAPTIVE | 97-352 | 10/9/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 (lbw), WHD 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-353 | 10/9/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/11, ELISA 0/11 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-354 | 10/9/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-356 | 10/10/97 | - | - | | + | | | | + | | | DIAGNOSTIC | BKD, WHD; VIRO 0/1, ELISA 1/1 (0.557), M. CEREBRALIS 1/1 (DIGEST ONLY, POPULATION PREVIOUSLY CONFIRMED BY HISTO). |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-357 | 10/10/97 | - | - | | + | | | | + | | | DIAGNOSTIC | RS, WHD; VIRO 0/1, ELISA 1/1 (low), M. CEREBRALIS 1/1 (DIGEST ONLY, POPULATION PREVIOUSLY CONFIRMED BY HISTO). |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-360 | 10/10/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 (o.d. = 0.261), WHD 0/1 |
| BY 94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-361 | 10/10/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO0/1;ELISA 1/1 (O.D.=0.287) WHD 0/1 |
| BY94 | YANKEE FORK RIVER | CHINOOK CAPTIVE | 97-362 | 10/11/97 | - | - | | + | | | | | | | DIAGNOSTIC | RS;VIRO 0/1;WHD 0/1; ELISA 1/1(O.D.=0.278) |
| BY 94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-363 | 10/12/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1; ELISA 1/1 (O.D.=0.317); WHD 0/1 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-364 | 10/12/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 (O.D. = 0.130), WHD 0/1 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-365 | 10/12/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.220, WHD 0/1 |
| BY 94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-366 | 10/12/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.131, WHD 0/1 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-367 | 10/13/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.127, WHD 0/1 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-368 | 10/13/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.242, WHD 0/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-369 | 10/13/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.169, WHD 0/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-370 | 10/13/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.239, WHD 0/1 |
| BY96 | RED FISH LAKE | SOCKEYE SALMON | 97-371 | 10/13/97 | - | - | | + | | | | | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.287 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-372 | 10/14/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.311, WHD 0/1 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-373 | 10/14/97 | - | - | | + | | | | + | | | DIAGNOSTIC | RS, WHD; VIRO 0/1, ELISA 1/1 O.D.=0.138, WHD 1/1 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-374 | 10/14/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.164, WHD 0/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-375 | 10/14/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/2, ELISA 2/2 O.D.s=0 .171(#1) & 0.310(#2), WHD 0/2 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-376 | 10/14/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/18, ELISA 0/18 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-379 | 10/15/97 | - | - | | + | | | | + | | | DIAGNOSTIC | RS, WHD; VIRO 0/1, ELISA 1/1 O.D.=0.158, WHD 1/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-380 | 10/15/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.282, WHD 0/1 |
| BY94 | W.F. YANKEE FORK | CHINOOK CAPTIVE | 97-381 | 10/16/97 | - | - | | + | - | - | + | - | | | DIAGNOSTIC | RS, CWD, PSEUDOMONAS; VIRO 0/1, ELISA 1/1 O.D.=0.239, PSEUDOMONAS FLUORESCENS, FLAVOBACTER PHYCHROPHILUM, WHD 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-382 | 10/16/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-383 | 10/16/97 | - | - | | + | | | + | - | | | DIAGNOSTIC | RS, CWD; VIRO 0/1, ELISA 1/1 O.D.=0.164, FLAVOBACTER PSYCHROPHILUM 1/1, WHD 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-384 | 10/17/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20 |
| BY94 | EAST FORK SALMON RIVER | CHINOOK CAPTIVE | 97-385 | 10/18/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.307, WHD 0/1 |
| BY94 | YANKEE FORK RIVER | CHINOOK CAPTIVE | 97-386 | 10/18/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.232, WHD 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-391 | 10/20/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/12, ELISA 0/12 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-393 | 10/23/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/12, ELISA 0/12 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-394 | 10/23/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/3 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-396 | 10/24/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/3 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-398 | 10/26/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-399 | 10/26/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-400 | 10/27/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/8, ELISA 0/8 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-401 | 10/27/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/3 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-402 | 10/28/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/5, ELISA 0/5 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-405 | 10/29/97 | - | - | | + | | | | | | | DIAGNOSTIC | RS; VIRO 0/4, ELISA 1/4 O.D.=0.252 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-406 | 10/30/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/15, ELISA 0/15 |
| BY93 | RED FISH LAKE | SOCKEYE SPAWNER | 97-407 | 10/30/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4 |
| BY93 | RED FISH LAKE | SOCKEYE SPAWNER | 97-408 | 10/31/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-409 | 11/1/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-410 | 11/2/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/5 |
| BY96 | RED FISH LAKE | SOCKEYE SALMON | 97-412 | 11/3/97 | - | - | | + | | | | | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.= 0.246 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-413 | 11/3/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2, ELISA 0/2 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-414 | 11/3/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/7, ELISA 0/7 |
| BY94 | LEMHI RIVER | CHINOOK CAPTIVE | 97-415 | 11/3/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-416 | 11/4/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/5, ELISA 0/5, HISTO-FIBROMA |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-417 | 11/6/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/3 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-418 | 11/4/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2, ELISA 0/2 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-419 | 11/5/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-423 | 11/3/97 | - | - | | + | | | | | | | DIAGNOSTIC | RS; VIRO 0/2, ELISA 1/2 O.D. = 0.628 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-425 | 11/7/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/3 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-426 | 11/8/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/6, ELISA 0/6 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-427 | 11/9/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2, ELISA 0/2 |
| BY96 | RED FISH LAKE | SOCKEYE SALMON | 97-428 | 11/9/97 | - | - | | - | | | | - | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, WHD 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-429 | 11/10/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2, ELISA 0/2 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-430 | 11/10/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/3 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-435 | 11/13/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-437 | 11/14/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-438 | 11/14/97 | - | - | | - | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-439 | 11/15/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED;VIRO 0/1, ELISA 0/1 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-440 | 11/17/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/6, ELISA 1/6 (O.D. = 0.284) |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-442 | 11/18/97 | - | - | | + | | | | | | | DIAGNOSTIC | RS; VIRO 0/1, ELISA 1/1 O.D.=0.137 |
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-450 | 11/21/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY93 | RED FISH LAKE | SOCKEYE SALMON | 97-451 | 11/21/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BY94 | RED FISH LAKE | SOCKEYE SALMON | 97-452 | 11/25/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4 |
| BY94 | RED FISH LAKE | SOCKEYE SPAWNER | 97-453 | 11/25/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/23, ELISA 1/23 O.D.=0.145 |
| BY93 | RED FISH LAKE | SOCKEYE SPAWNER | 97-454 | 11/25/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 |
| BY96 | RED FISH LAKE | SOCKEYE SALMON | 97-459 | 12/8/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 (o.d = 0.062) |
| **EAGLE WET LAB** | | D | | | | | | | | | | | | | | |
| 1996 | HAYSPUR | RAINBOW TROUT | 97-011 | 1/17/97 | | | | - | | | | - | | | RESEARCH | NO PATHOGENS DETECTED; WHD 0/13, ELISA 0/13 |
| 1996 | TROUT LODGE | RAINBOW TROUT | 97-122 | 4/23/97 | | | | | | | | - | | | RESEARCH | NO PATHOGENS DETECTED; WHD 0/16 (DIGEST ONLY) |
| BY95 | HAYSPUR | RAINBOW TROUT | 97-129 | 4/25/97 | | | | - | | | | | | | RESEARCH | NO PATHOGENS DETECTED; ELISA 0/12 |
| BY95 | DEAD WOOD RESERVOIR | KOKANEE | 97-136 | 4/30/97 | | | | | | | | | | | RESEARCH | NO LYMPHOSARCOMA DETECTED. |
| BY95 | HAYSPUR | RAINBOW TROUT | 97-144 | 5/5/97 | | | | - | | | | | | | RESEARCH | NO PATHOGENS DETECTED; ELISA 0/60 |
| BY96 | DEAD WOOD RESERVOIR | KOKANEE | 97-180 | 5/30/97 | | | | | | | | | | | RESEARCH | NO LYMPHOSARCOMA DETECTED |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-190 | 6/24/97 | - | - | | | - | - | - | - | | | RESEARCH | NO PATHOGENS DETECTED; WHD 0/10, VIRO 0/1, BACTE-NSG |
| 1995 | HAYSPUR | RAINBOW TROUT | 97-207 | 7/21/97 | | | | + | | | | | | | RESEARCH | RS; ELISA 1/12 (5-fish) VERY LOW (o.d =0.100) |
| 1995 | DEAD WOOD RESERVOIR | KOKANEE | 97-222 | 8/1/97 | | | | | | | | | | | RESEARCH | NEGATIVE FOR LYMPHOSARCOMA |
| BY96 | RAPID RIVER | SPRING CHINOOK | 97-318 | 9/17/97 | - | - | | - | | | | | | | RESEARCH | NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1 (O.D.=0.091), FAT 0/1 |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-337 | 9/29/97 | | | | + | | | | | | | RESEARCH | AZITHROMYCIN TRIAL--RS; ELISA 4/30 (pools) |
| BY95 | DEAD WOOD RESERVOIR | KOKANEE, EARLY SPAWNER | 97-348 | 10/6/97 | | | | | | | | | | | RESEARCH | HISTO-liver, LYMPHOSARCOMA PASSED BY INJECTION |
| **GRACE HATCHERY** | | B | | | | | | | | | | | | | | |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-034 | 2/18/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, AEROMONAS HYDROPHILA 3/8, FLAVOBACTER PSYCHROPHILUM 1/8 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-189 | 6/19/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD; VIRO 0/10, F. PSYCHROPHYLUM 8/8 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-245 | 8/20/97 | | | | | - | - | - | | | | DIAGNOSTIC | PSEUDOMONAS, FLAVOBACTERIOSIS (CWD?); PSEUDOMONAS FLUORESCENS 1/10, FLAVOBACTER SPP. 1/10 |
| **HAGERMAN SFH** | | C | | | | | | | | | | | | | | |
| 1996 | HAYSPUR | RAINBOW TROUT | 97-123A | 4/16/97 | | | | | | | | | | | INSPECTION | GILL ANEURYSMS 14/20 (70%), 5 LOW, 7 MODERATE, 2 HIGH |
| 1996 | HAYSPUR | RAINBOW TROUT | 97-123B | 5/20/97 | | | | | | | | | | | INSPECTION | GILL ANEURYSMS 11/20 (55%), 2 LOW, 5 MODERATE, 4 HIGH |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-124A | 4/16/97 | | | | | | | | | | | INSPECTION | GILL ANEURYSMS 5/20 (25%), 2 LOW, 3 MODERATE |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-124B | 5/20/97 | | | | | | | | | | | INSPECTION | GILL ANEURYSMS 11/20 (55%), 1 LOW, 6 MODERATE, 4 HIGH |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-169 | 5/20/97 | | | | | - | - | - | | | | INSPECTION | MAS, COLUMNARIS; A. HYDROPHILA 2/3, F.COLUMNARIS 2/3 |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-170 | 5/20/97 | | | | | - | - | + | | | | INSPECTION | CWD, PSEUDOMONAS; F. PSYCHROPHILUM 1/3, P. FLUORESCENS 3/3 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-171 | 5/20/97 | | | | | | | | | | | INSPECTION | GILL ANEURYSMS 11/19 (57.9%); 8 negative, 1low, 7 moderate, 3 high |
| 1997 | HAYSPUR | KAMLOOPS RBT | 97-183A | 6/5/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, F. PSYCHROPHILUM 6/8, A. HYDROPHILA 5/8 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-183B | 6/5/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, F. PSYCHROPHILUM 6/8, A. HYDROPHILA 5/8 (SEE ACCESSION 97-183A). |
| 1997 | HAYSPUR | KAMLOOPS RBT | 97-184 | 6/5/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/5, F.PSYCHROPHILUM 3/4, A. HYDROPHILA 1/4 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-194 | 7/10/97 | + | - | | | - | - | + | | | | DIAGNOSTIC | IHN, CWD; IHNV 1/2 (x5), IPNV 0/10, F.PSYCHROPHILUM 4/4 |
| 1997 | HAYSPUR | KAMLOOPS RBT | 97-195 | 7/10/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, F. PSYCHROPHILUM 2/4, A. HYDROPHILA 1/4 |
| 1997 | TROUT LODGE | KAMLOOPS RBT | 97-196 | 7/10/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, F. PSYCHROPHILUM 4/4, AEROMONAS HYDROPHILA 1/4 |
| 1997 | HAYSPUR | KAMLOOPS RBT | 97-197 | 7/10/97 | + | - | | | - | - | + | | | | DIAGNOSTIC | IHN, CWD, MAS; IHNV 2/2 (x5), IPNV 0/10, F. PSYCHROPHILUM 4/4, AEROMONAS CAVIAE 1/4 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-198 | 7/10/97 | + | - | | | - | - | - | | | | DIAGNOSTIC | IHN; IHNV 1/1 (x5), IPNV 0/5, BACTE-NSG |
| 1997 | MIXED | KAMLOOPS RBT | 97-457 | 12/4/97 | + | - | | | - | - | - | | | | DIAGNOSTIC | IHN, MAS; IHNV 1/2 (x4), IPNV 0/8, AEROMONAS HYDROPHILA 3/8, CITROBACTER FREUNDI, 1/8, PSEUDOMONAS SPP. 1/8 |
| **HAYSPUR HATCHERY** | | C | | | | | | | | | | | | | | |
| BROOD | COLORADO RIVER | RAINBOW TROUT | 97-002 | 1/7/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/50, ELISA 2/10 LOW (o.d. = 0.181, 0.116), MFAT 1/50, FAT 0/10 |
| BROOD | HAYSPUR | KAMLOOPS RBT | 97-003 | 1/7/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/10, ELISA 1/10 LOW (o.d. = 0.113), FAT 0/10, MFAT 0/10 |
| BROOD | COLORADO RIVER | RAINBOW TROUT | 97-010 | 1/16/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/45, MFAT 1/45, FAT 0/20, ELISA 1/20 MOD (OD .487) |
| BROOD | HAYSPUR | KAMLOOPS RBT | 97-012 | 1/21/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/31, MFAT 0/11, FAT 0/25, ELISA 2/25 LOW OD'S |
| BROOD | COLORADO RIVER | RAINBOW TROUT | 97-017 | 1/28/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/30, FAT 0/10, ELISA 2/10 LOW, MFAT 0/30 |
| BROOD | HAYSPUR | KAMLOOPS RBT | 97-026 | 2/5/97 | - | - | | + | | | - | | | | INSPECTION | RS; VIRO 0/16, ELISA 3/25 LOW, DFAT 0/25, MFAT 0/16, OVARIAN BACTE NSG |
| BROOD | COLORADO RIVER | RAINBOW TROUT | 97-028 | 2/11/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/25, MFAT 1/25 (female #195 -TNTC) |
| BROOD | HAYSPUR | KAMLOOPS RBT | 97-035 | 2/19/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/36, ELISA 2/6 HIGH (OD'S = 0.607, 0.381), FAT 0/8, MFAT 2/36 |
| 1995 | HAYSPUR | KAMLOOPS RBT | 97-087 | 4/7/97 | - | - | - | + | - | - | - | - | | | INSPECTION | RS; VIRO 0/60, ELISA 1/60 LOW (o.d. = 0.111), FAT 0/60, WHD 0/60, EIBS 0/5, BACTE NSG, NUCLEOSPORA 0/5 |
| 1995 | HAYSPUR | RAINBOW TROUT | 97-088 | 4/7/97 | - | - | - | + | - | - | - | - | | | INSPECTION | RS, PSEUDOMONAS; VIRO 0/60, ELISA 5/60 LOW OD'S, FAT 0/60, WHD 0/60, EIBS 0/5, BACTE RESULTS: PSEUDOMONAS 1/12, NUCLEOSPORA 0/5 |
| 1996 | COLORADO RIVER | RAINBOW TROUT | 97-106 | 4/15/97 | - | - | - | - | - | - | - | - | | | INSPECTION | PSEUDOMONAS; ELISA 0/60, FAT 0/60, EIBS 0/5, PSEUDOMONAS SPP. 1/12, VIRO 0/60, WHD 0/60 |
| 1996 | HAYSPUR | RAINBOW TROUT | 97-137 | 4/30/97 | | | | | - | - | - | | | | INSPECTION | PSEUDOMONAS; P. PAUCIMOBILUS 1/56 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1995 | HAYSPUR | RAINBOW TROUT | 97-210 | 7/24/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | ENVIRONMENTAL/BACTERIAL GILL DISEASE, CWD CARRIER; VIRO 0/2, P. FLUORESCENS (from gills) 2/2, F. PSYCHROPHILUM 1/2 (very light) |
| BROOD | HAYSPUR | RAINBOW TROUT | 97-355 | 10/9/97 | - | - | | + | - | - | + | | | | INSPECTION | RS, CWD (carrier); ELISA 3/10 (bw), DFAT 0/20, F. PSYCHROPHILUM 1/20, VIRO 0/20 |
| BROOD | HAYSPUR | RAINBOW TROUT | 97-395 | 10/23/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/30, FAT 0/30, ELISA 0/10 |
| BROOD | HAYSPUR | RAINBOW TROUT | 97-424 | 11/6/97 | - | - | | - | | | - | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/50, ELISA 0/10, FAT 0/50, WHD 0/10, BACTE-CWD 0/20 |
| BROOD | HAYSPUR | KAMLOOPS RBT | 97-436 | 11/13/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/40, FAT 0/40, ELISA 1/40 (0.107) |
| BROOD | HAYSPUR | RAINBOW TROUT | 97-443 | 11/19/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/50, DFAT 0/50, ELISA 0/10, WHD 0/10 |
| BROOD | HAYSPUR | KAMLOOPS RBT | 97-455 | 11/25/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/36, FAT 0/36, ELISA 0/10 |
| BROOD | HAYSPUR | RAINBOW TROUT | 97-456 | 12/4/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/30, FAT 0/30, ELISA 2/10 (o.d.s = 0.175, 0.652) |
| BROOD | HAYSPUR | KAMLOOPS RBT | 97-476 | 12/17/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/12, FAT 0/12, ELISA 0/10 |
| BROOD | HAYSPUR | RAINBOW TROUT | 97-477 | 12/17/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/20, FAT 0/20, ELISA 3/10 (o.d.s = 0.131, 0.107, 0.161) |
| **HENRY'S LAKE** | | C | | | | | | | | | | | | | | |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-049 | 3/11/97 | | | | + | | | | | | | INSPECTION | RS; FAT 1/70 (5-FISH POOLS) TNTC |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-066 | 3/20/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/105, DFAT 0/560 |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-080 | 4/2/97 | - | - | | + | - | - | - | - | | | INSPECTION | RS, PSEUDOMONAS; VIRO 0/60, ELISA 7/12(5-FISH POOLS) bws, FAT 0/60, WHD 0/60, PSEUDOMONAS AEROFACIENS 2/12 |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-107 | 4/15/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/105, FAT 1/30 TNTC |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-126 | 4/18/97 | | | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; FAT 0/273 |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-127 | 4/22/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/140, FAT 0/23 |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-139 | 4/25/97 | | | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; FAT 0/245 |
| BROOD | HENRY'S LAKE | CUTTHROAT TROUT | 97-154 | 5/7/97 | | | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; FAT 0/161 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-392 | 10/20/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/25, OV-FAT 0/70 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-403 | 10/23/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/50, OV-FAT 0/65 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-404 | 10/27/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/50, FAT 0/60 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-411 | 10/30/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/50, FAT 0/60 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-420 | 11/3/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/50, FAT 0/55 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-431 | 11/10/97 | - | - | | + | - | - | + | | | | INSPECTION | RS, WHD, CWD; VIRO 0/60, FAT 0/60, ELISA 2/12 (both bw), MYXOBOLUS CEREBRALIS 1/12 (HISTO CONFIRMED), FLAVOBACTER PSYCHROPHILUM 2/12, FLAVOBACTERIUM ODORATUM 1/12 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-432 | 11/6/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/15, FAT 0/53 |
| BROOD | HENRY'S LAKE | BROOK TROUT | 97-433 | 11/10/97 | | | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; FAT 0/35 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MACKAY HATCHERY** | | B | | | | | | | | | | | | | | |
| 1996 | SARATOGA | BROWN TROUT | 97-163 | 5/14/97 | - | - | | - | - | - | - | - | | | INSPECTION | MAS; AEROMONAS HYDROPHILA 1/4, FAT 0/20, WHD 0/20, VIRO 0/20 |
| 1996 | PAINT BANK | BROWN TROUT | 97-164 | 5/14/97 | - | - | | - | - | - | - | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20, WHD 0/20, BACTE-NSG |
| 1996 | DEAD WOOD RESERVOIR | KOKANEE | 97-165 | 5/14/97 | - | - | | - | - | - | - | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, WHD 0/20, BACTE-NSG |
| 1996 | COLORADO RIVER | KOKANEE | 97-166 | 5/14/97 | - | - | | - | - | - | - | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, WHD 0/20, BACTE-NSG |
| 1996 | FISH LAKE | WESTSLOPE CUTT TROUT | 97-167 | 5/14/97 | - | - | | - | - | - | - | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20, WHD 0/20, BACTE - NSG |
| **MAGIC VALLEY HATCHERY** | | C | | | | | | | | | | | | | | |
| 1996 | DWORSHAK | STEELHEAD, B GROUP | 97-022 | 2/4/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE NSG |
| 1996 | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-023 | 2/4/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE NSG |
| 1996 | PAHSIMEROI | STEELHEAD, A GROUP | 97-024 | 2/4/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4 |
| 1996 | SAWTOOTH | STEELHEAD, A GROUP | 97-025 | 2/4/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE NSG |
| 1996 | DWORSHAK | STEELHEAD, B GROUP | 97-060 | 3/19/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20, FAT 0/20, WHD 0/20 |
| 1996 | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-061 | 3/19/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20, FAT 0/20, WHD 0/20 |
| 1996 | PAHSIMEROI | STEELHEAD, A GROUP | 97-062 | 3/19/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20, FAT 0/20, WHD 0/20 |
| 1996 | SAWTOOTH | STEELHEAD, A GROUP | 97-063 | 3/19/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20, FAT 0/20, WHD 0/20 |
| 1997 | DWORSHAK | STEELHEAD, B GROUP | 97-188 | 6/16/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD; VIRO 0/20, F. PSYCHROPHILUM 3/4 |
| 1997 | DWORSHAK | STEELHEAD, B GROUP | 97-217 | 7/29/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD; VIRO 0/10, F. PSYCHROPHILUM 4/7 |
| 1997 | SAWTOOTH | STEELHEAD, A GROUP | 97-338 | 9/29/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE-NSG |
| 1997 | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-339 | 9/29/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE-NSG |
| 1997 | PAHSIMEROI | STEELHEAD, A GROUP | 97-340 | 9/29/97 | - | - | | | + | - | + | | | | INSPECTION | FUR, CWD; VIRO 0/10, AEROMONAS SALMONICIDA 3/4, FLAVOBACTER PSYCHROPHILUM 1/4 |
| 1997 | DWORSHAK | STEELHEAD, B GROUP | 97-341 | 9/29/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE-NSG |
| 1997 | DWORSHAK | STEELHEAD, B GROUP | 97-472 | 12/16/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8 |
| 1997 | PAHSIMEROI | STEELHEAD, A GROUP | 97-473 | 12/16/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8 |
| 1997 | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-474 | 12/16/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8 |
| 1997 | SAWTOOTH | STEELHEAD, A GROUP | 97-475 | 12/16/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8 |
| **MCCALL HATCHERY** | | C | | | | | | | | | | | | | | |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1995 | S.F. SALMON RIVER | SUMMER CHINOOK | 97-042 | 3/5/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/20, ELISA 4/4 (5-FISH POOLS) LOW OD#'S .191, .227, .104, .102, FAT 0/20, WHD 0/20 |
| 1995 | S.F. SALMON RIVER | SUMMER CHINOOK | 97-043 | 3/5/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 3/4 (LOW OD#'S .120, .248, .156), FAT 0/20 |
| BROOD | WESTSLOPE | CUTTHROAT TROUT | 97-155 | 5/9/97 | - | - | | + | | | | - | - | | INSPECTION | RS; VIRO 0/71, ELISA 14/20 (1 HIGH, 13 LOW), DFAT 0/20, CSH 0/20, WHD 0/20 |
| 1996 | WESTSLOPE | CUTTHROAT TROUT | 97-177 | 5/21/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE-NSG |
| 1996 | S.F. SALMON RIVER | SUMMER CHINOOK | 97-179 | 5/28/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE-NSG |
| 1996 | S.F. SALMON RIVER | SUMMER CHINOOK | 97-204 | 7/17/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE 0/4 |
| 1996 | S.F. SALMON RIVER | SUMMER CHINOOK | 97-330 | 9/23/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE-NSG |
| BY96 | S.F. SALMON RIVER | SUMMER CHINOOK | 97-447 | 11/18/97 | - | - | | - | - | - | - | | | | INSPECTION | PSEUDOMONAS; VIRO 0/10, FAT 0/10 , PSEUDOMONAS SPP. 1/4 |
| **NAMPA HATCHERY** | | A | | | | | | | | | | | | | | |
| 1996 | HAYSPUR | KAMLOOPS RBT | 97-005 | 1/9/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | BACTEREMIA; VIRO 0/3, FLAVOBACTER* SPP. 3/3 |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-015 | 1/23/97 | | | | | - | - | + | | | | DIAGNOSTIC | CWD; FLAVOBACTER PSYCHROPHILUM 8/8 |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-018 | 1/30/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8 |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-019 | 1/30/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD; VIRO 0/10, FLAVOBACTER PSYCHROPHILUM 8/8 |
| 1996 | SARATOGA | BROWN TROUT | 97-046 | 3/10/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | MAS ; VIRO 0/10, AEROMONAS SOBRIA 4/8, CHRYSEOMONAS LUREOLA 1/8, NUCLEOSPORA 0/4 |
| 1996 | SARATOGA | BROWN TROUT | 97-110 | 4/18/97 | | | | | - | - | - | | | | DIAGNOSTIC | BACTEREMIA; FLAVOBACTER ODORATUM 1/8 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-121 | 4/22/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/5, FLAVOBACTER PSYCHROPHILUM 3/4, AEROMONAS HYDROPHILA 1/4 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-157 | 5/12/97 | | | | | - | - | - | | | | INSPECTION | MAS; AEROMONAS HYDROPHILA 2/12 |
| 1996 | SARATOGA | BROWN TROUT | 97-178 | 5/22/97 | - | - | - | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, EIBS 0/3, NUCLEOSPORA 0/8, F. PSYCHROPHILUM 3/8, A. HYDROPHILA 4/8 |
| 1996 | TROUT LODGE | KAMLOOPS RBT | 97-206 | 7/18/97 | | | | | - | - | + | | | | DIAGNOSTIC | MAS, CWD; A. HYDROPHILA 2/6, F. PSYCHROPHILUM 2/6 |
| 1997 | HAYSPUR | RAINBOW TROUT | 97-344 | 10/1/97 | - | - | | - | - | - | - | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60, ELISA 0/60, BACTE-NSG, WHD 0/60 |
| 1997 | TROUT LODGE | KAMLOOPS RBT | 97-434 | 11/12/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | BACTEREMIA; VIRO 0/5, CITROBACTER FREUNDII 1/8 |
| **NAMPA RESEARCH** | | D | | | | | | | | | | | | | | |
| WILD | RAPID RIVER | BULL TROUT | 97-120 | 4/22/97 | | | | + | | | | - | | | WILD FISH | RS; ELISA 13/13 (O.D.s=0.247, 0.237, 0.200, 0.169, 1.016, 0.519, 0.429, 0.265, 0.437, 0.387, 0.312, 0.514, 1.207 ), FAT 0/13, WHD 0/13 (Actual samples dates 6/19/96 - 7/10/96) |
| 1997 | UNKNOWN | RAINBOW TROUT | 97-444 | 11/20/97 | | | | | | | | - | | | RESEARCH | WHD 0/15 |
| | UNKNOWN | UNKNOWN | 97-445 | 11/20/97 | | | | | | | | + | | | INSPECTION | WHD 15/15 |
| | UNKNOWN | RAINBOW TROUT | 97-460 | 12/8/97 | | | | | | | | - | | | RESEARCH | WHD 0/20 |
| 1997 | UNKNOWN | UNKNOWN | 97-461 | 12/8/97 | | | | | | | | + | | | RESEARCH | WHD 13/20 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FISH CREEK | CUTTHROAT TROUT | 97-466 | 12/15/97 | | | | | | | | + | | | INSPECTION | WHD 20/20 |
| | UNKNOWN | RAINBOW TROUT | 97-467 | 12/15/97 | | | | | | | | + | | | RESEARCH | WHD 20/20 |
| | UNKNOWN | CUTTHROAT TROUT | 97-468 | 12/15/97 | | | | | | | | + | | | RESEARCH | WHD 19/20 |
| | UNKNOWN | RAINBOW TROUT | 97-469 | 12/15/97 | | | | | | | | + | | | INSPECTION | WHD 19/20 |
| | UNKNOWN | CUTTHROAT TROUT | 97-470 | 12/15/97 | | | | | | | | + | | | INSPECTION | WHD 20/20 |
| | UNKNOWN | RAINBOW TROUT | 97-471 | 12/15/97 | | | | | | | | + | | | INSPECTION | WHD 18/20 |
| **NATURE CENTER - BOISE** | | | | | | | | | | | | | | | | |
| 1996 | HAYSPUR | RAINBOW TROUT | 97-047 | 3/10/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/5, BACTE 0/4 NSG |
| **NIAGARA SPRINGS HATCHERY** | | C | | | | | | | | | | | | | | |
| 1996 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-008 | 1/16/97 | - | - | | | - | - | + | | | | INSPECTION | CWD, MAS; VIRO 0/10, FLAVOBACTER PSYCHROPHILUM 5/8, AEROMONAS HYDROPHILA 2/8 |
| 1996 | PAHSIMEROI | STEELHEAD, A GROUP | 97-009 | 1/16/97 | - | - | | | - | - | + | | | | INSPECTION | CWD, MAS; VIRO 0/10, FLAVOBACTER PSYCHROPHILUM 6/8, AEROMONAS HYDROPHILA 2/8, PSEUDOMONAS SPP. 2/8 |
| 1996 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-014 | 1/23/97 | - | - | | - | - | + | - | | | | DIAGNOSTIC | ERM; VIRO 0/10,FAT 0/8, YERSINIA RUCKERI 8/8 |
| 1997 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-033 | 2/19/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, FLAVOBACTER PSYCHROPHILUM 3/8, AEROMONAS CAVIAE 2/8, |
| 1996 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-040 | 3/4/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, ELISA 0/20, WHD 0/20 |
| 1996 | PAHSIMEROI | STEELHEAD, A GROUP | 97-041 | 3/4/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/20, ELISA 1/4 (5-FISH POOLS) LOW OD# 0.143, FAT 0/20, WHD 0/20 |
| 1996 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-064 | 3/19/97 | + | - | | | - | - | + | | | | DIAGNOSTIC | CWD, IHN;IHNV 1/1 (x4), INPV 0/4, FLAVOBACTER PSYCHROPHILUM 4/4 |
| 1997 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-186 | 6/10/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10 |
| 1997 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-192 | 6/26/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD, MAS; VIRO 0/10, F. PSYCHROPHILUM 8/8, A. HYDROPHILA 1/8 |
| 1997 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-215 | 7/29/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE-NSG |
| 1997 | PAHSIMEROI | STEELHEAD, A GROUP | 97-216 | 7/29/97 | - | - | | | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/8, BACTE-NSG |
| 1997 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-246 | 8/20/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | PSEUDOMONAD SEPTICEMIA; VIRO 0/10, PSEUDOMONAS PAUCIMOBILUS 2/4 |
| 1997 | PAHSIMEROI | STEELHEAD, A GROUP | 97-247 | 8/20/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | MAS; VIRO 0/10, AEROMONAS HYDROPHILA 1/4 |
| 1997 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-327 | 9/22/97 | + | - | | | - | - | - | | | | DIAGNOSTIC | IHN; IHNV 2/2 (5-fish pools), IPNV 0/10, BACTE-NSG |
| 1997 | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-377 | 10/14/97 | | | | | - | - | + | | | | DIAGNOSTIC | CWD; FLAVOBACTER PSYCHROPHILUM 3/4 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1997 | PAHSIMEROI | STEELHEAD, A GROUP | 97-378 | 10/14/97 | + | - | | | - | - | + | | | | DIAGNOSTIC | IHN, CWD, PSEUDOMONAS SEPTICEMIA; IHNV 2/2 (x4), IPNV 0/8, FLAVOBACTER PSYCHROPHILUM 3/4, PSEUDOMONAS SPP. 1/4 |
| **NMFS, MANCHESTER, WA** | | | | | | | | | | | | | | | | |
| 1994 | RED FISH LAKE | SOCKEYE SALMON | 97-068 | 3/26/97 | | | | + | | | | | | | DIAGNOSTIC | BKD; ELISA 1/37 HIGH OD# 3.201 VERIFIED TNTC BY FAT |
| **OXBOW HATCHERY** | | C | | | | | | | | | | | | | | |
| BROOD | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-058 | 3/17/97 | - | - | | + | | | | | | | INSPECTION | RS; ELISA 3/15 LOW, VIRO 0/42 |
| BROOD | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-067 | 3/24/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; WHD 0/10, VIRO 0/20, ELISA 0/15 |
| BROOD | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-070 | 3/27/97 | - | - | | + | | | | - | | | INSPECTION | RS; ELISA 1/15 LOW OD # .118, WHD 0/20, VIRO 0/20 |
| BROOD | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-086 | 4/7/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; ELISA 0/15, VIRO 0/20 |
| BROOD | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-102 | 4/14/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/5 |
| BROOD | HELLS CANYON (SNAKE RIVER) | STEELHEAD, A GROUP | 97-118 | 4/21/97 | - | - | | | | | | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/6 |
| **PAHSIMEROI HATCHERY** | | C | | | | | | | | | | | | | | |
| 1995 | PAHSIMEROI | SUMMER CHINOOK | 97-032 | 2/13/97 | - | - | | - | - | - | - | | | | INSPECTION | PSEUDOMONAS; VIRO 0/8, FAT 0/8, PSEUDOMONAS SPP. 6/8 |
| BROOD | PAHSIMEROI | STEELHEAD | 97-076 | 3/31/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, ELISA 0/5 |
| BROOD | PAHSIMEROI | STEELHEAD, A GROUP | 97-082 | 4/3/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/10, ELISA 1/10 (0.105), WHD 0/10 |
| BROOD | PAHSIMEROI | STEELHEAD, A GROUP | 97-089 | 4/7/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/5, ELISA 1/5 (LOW), WHD 0/5 |
| 1995 | PAHSIMEROI | SUMMER CHINOOK | 97-097 | 4/10/97 | - | - | | + | | | | + | | | INSPECTION | RS, WHD; VIRO 0/20, ELISA 2/4 (x5, BOTH LOW), FAT 0/20, WHD 2/4 (x5) |
| BROOD | PAHSIMEROI | STEELHEAD, A GROUP | 97-098 | 4/10/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/5, ELISA 1/5 (0.105), WHD 0/5 |
| BROOD | PAHSIMEROI | STEELHEAD, A GROUP | 97-105 | 4/14/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/20, ELISA 1/10 (0.216), WHD 0/10 |
| BROOD | PAHSIMEROI | STEELHEAD | 97-109 | 4/17/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10 |
| BROOD | PAHSIMEROI | STEELHEAD, A GROUP | 97-117 | 4/21/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/20, ELISA 1/5 (LOW), WHD 0/5 |
| BROOD | PAHSIMEROI | STEELHEAD, A GROUP | 97-133 | 4/28/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/10, ELISA 1/10 (LOW), WHD 0/10 |
| BROOD | PAHSIMEROI | STEELHEAD, A GROUP | 97-140 | 5/1/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/20, ELISA 1/5 (OD=0.176) |
| 1997 | PAHSIMEROI | STEELHEAD, A GROUP | 97-182 | 6/3/97 | + | - | | | - | - | - | | | | INSPECTION | IHN; IHNV 2/2 (5-fish pools), IPNV 0/10, BACTE-NSG |
| BROOD | PAHSIMEROI | SPRING CHINOOK | 97-287 | 9/1/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/2, ELISA 2/2 (0.123, 0.227), WHD 0/2 |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-295 | 8/24/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2. |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-296 | 9/4/97 | | | | + | | | | - | | | INSPECTION | RS; ELISA 1/2 (o.d =0.108), WHD 0/3 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-297 | 9/8/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/5, ELISA 2/5 (0.115, 0.134), WHD 0/5. |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-315 | 9/11/97 | | | | + | | | | + | | | INSPECTION | RS, WHD; VIRO 0/2, ELISA 1/2 (0.136), WHD 1/1 (x2, digest only) |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-320 | 9/16/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/7, ELISA 4/7 (0.104, 0.119, 0.103, 0.181), WHD 0/7 |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-326 | 9/18/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/3, ELISA 2/3 (0.118, 0.107), WHD 0/3 |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-329 | 9/21/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/3, ELISA 3/3 (0.177, 0.141, 0.118), WHD 0/4 |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-336 | 9/25/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/3, ELISA 1/3 (0.109), WHD 0/9 |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-342 | 9/28/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/2, ELISA 1/3 (0.168), WHD 0/3 |
| BROOD | PAHSIMEROI | SUMMER CHINOOK | 97-345 | 10/2/97 | - | - | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/2, WHD 0/4 |
| 1996 | PAHSIMEROI | SUMMER CHINOOK | 97-422 | 11/5/97 | - | - | | - | - | - | + | | | | INSPECTION | CWD; VIRO 0/10, FAT 0/10, F. PSYCHROPHILUM 1/8 |
| **POWELL SATELLITE** | | C | | | | | | | | | | | | | | |
| BROOD | POWELL | SPRING CHINOOK | 97-228A | 8/11/97 | - | - | | + | | | | - | | | INSPECTION | BKD; VIRO 0/38, ELISA 95/95 (61 LOW, 34 HIGH ), WHD 0/20 |
| BROOD | POWELL | SPRING CHINOOK | 97-228B | 8/11/97 | | | | | | | | | | | INSPECTION | SEE ACCESSION 97-228A |
| BROOD | POWELL | SPRING CHINOOK | 97-228C | 8/11/97 | | | | | | | | | | | INSPECTION | SEE ACCESSION 97-228A |
| BROOD | POWELL | SPRING CHINOOK | 97-248 | 8/14/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 51/51 (36 LOW, 15 HIGH) |
| BROOD | POWELL | SPRING CHINOOK | 97-249A | 8/18/97 | - | - | | + | | | | | | | INSPECTION | BKD; ELISA 103/103 (69 LOW, 34 HIGH) |
| BROOD | POWELL | SPRING CHINOOK | 97-249B | 8/18/97 | | | | | | | | | | | INSPECTION | SEE ACCESSION 97-249A |
| BROOD | POWELL | SPRING CHINOOK | 97-269 | 8/25/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 3/3 (ALL LOW) |
| BROOD | POWELL | SPRING CHINOOK | 97-273A | 8/21/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 39/40 (15 LOW, 24 HIGH) |
| BROOD | POWELL | SPRING CHINOOK | 97-273B | 8/21/97 | | | | | | | | | | | INSPECTION | SEE ACCESSION 97-273A |
| BROOD | POWELL | SPRING CHINOOK | 97-309 | 9/3/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 1/1 HIGH (O.D. = 0.526) |
| **PRIVATE** | | D | | | | | | | | | | | | | | |
| 1996 | ACE DEVELOPMENT | PACU | 97-146 | 5/6/97 | - | - | | | - | - | - | | - | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE - NSG, WHD 0/60, C.SHASTA 0/60 |
| 1996 | UNKNOWN | GOLDFISH | 97-185 | 6/9/97 | | | | | - | - | | | | | DIAGNOSTIC | MAS (Motile Aeromonad Septicemia); AEROMONAS HYDROPHILA 4/4 |
| 1996 | EPICENTER AQUACULTURE | TILAPIA | 97-208 | 7/22/97 | - | - | | - | - | - | - | - | - | | INSPECTION | NO CERTIFIABLE PATHOGENS DETECTED; VIRO 0/60, WHD, 0/60, FAT 0/60, A. SALMONICIDA 0/60 |
| 1997 | ACE DEVELOPMENT | TILAPIA | 97-441 | 11/18/97 | - | - | | - | - | - | | - | - | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60, C. SHASTA 0/60, FAT (BKD) 0/60, WHD 0/60, FURUNC. 0/60, ERM 0/60, PLESIOMONAS SHIGELLOIDES 4/60 |
| **RANGEN AQUA CTR** | | D | | | | | | | | | | | | | | |
| 1996 | RANGEN | RAINBOW TROUT | 97-138 | 4/29/97 | | | | - | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; FAT 0/60, WHD 0/60 |
| **RAPID RIVER HATCHERY** | | C | | | | | | | | | | | | | | |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1995 | RAPID RIVER | SPRING CHINOOK | 97-038 | 2/27/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/20, FAT 0/20, ELISA 2/4 (x5, OD=0.185, 0.107), WHD 0/20 |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-039 | 2/27/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | PSEUDOMONAS; VIRO 0/5, P. FLUORESCENS 1/4 |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-168 | 5/19/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4, FAT 0/4, BACTE - NSG |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-205 | 7/17/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10, FAT 0/10. |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-220 | 7/31/97 | - | - | | - | - | - | + | | | | DIAGNOSTIC | MAS, PSEUDOMONAS, CWD; VIRO 0/10, A. HYDROPHILA 4/4, F. PSYCHROPHILUM 3/4, PSEUDOMONAS SPP. 4/4 |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-239 | 8/18/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/15, ELISA 15/15 (10 low, 5 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-240 | 8/18/97 | | | | | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; WHD 0/20 |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-243 | 8/19/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2, ELISA 0/2 |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-256A | 8/21/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/43, ELISA 43/43 (24 low, 19 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-256B | 8/21/97 | - | - | | + | | | | | | | INSPECTION | SEE ACCESSION 97-256A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-258 | 8/22/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 9/11(7 low, 2 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-261A | 8/25/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 123/123 (63 low, 60 high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-261B | 8/25/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-261A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-261C | 8/25/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-261A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-261D | 8/25/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-261A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-261E | 8/25/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-261A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-262 | 8/26/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 42/45 (37 low). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-276A | 8/28/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 140/147 |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-276B | 8/28/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-276A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-276C | 8/28/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-276A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-276D | 8/28/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-276A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-277A | 8/29/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 72/94 (63 low, 9 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-277B | 8/29/97 | | | | + | | | | | | | INSPECTION | SEE 97-277A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-279A | 9/1/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 244/257 (39 high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-279B | 9/1/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-279A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-279C | 9/1/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-279A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-279D | 9/1/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-279A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-279E | 9/1/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-279A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-279F | 9/1/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-279A |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-284A | 9/2/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 94/158 (16 high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-284B | 9/2/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-284A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-292A | 9/4/97 | | | | + | | | | | | | INSPECTION | BKD, ELISA 129/141 (112 low, 17 high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-292B | 9/4/97 | | | | + | | | | | | | INSPECTION | SEE 97-292A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-292C | 9/4/97 | | | | + | | | | | | | INSPECTION | SEE 97-292A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-293A | 9/5/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 55/139 (44 low, 11high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-293B | 9/5/97 | | | | + | | | | | | | INSPECTION | SEE 97-293A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-298A | 9/8/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 79/79 (63 low, 16 high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-298B | 9/8/97 | | | | + | | | | | | | INSPECTION | SEE 97-298A |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-299 | 9/9/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 46/96 (40 low, 6 high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-312 | 9/11/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 17/17 (4 high). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-316 | 9/12/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 15/27 (14 low, 1 high). |
| 1997 | RAPID RIVER | SPRING CHINOOK | 97-317 | 9/16/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 4/8 (all low) |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-343 | 9/30/97 | - | - | | - | - | - | - | | | | INSPECTION | MAS; VIRO 0/6, FAT 0/6, AEROMONAS SOBRIA 3/6 |
| 1996 | RAPID RIVER | SPRING CHINOOK | 97-446 | 11/18/97 | - | - | | - | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE-NSG |
| **RED RIVER SATELLITE** | | | | | | | | | | | | | | | | |
| BROOD | RED RIVER | SPRING CHINOOK | 97-307 | 8/19/97 | | | | | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; WHD 0/23 |
| **SAWTOOTH HATCHERY** | | C | | | | | | | | | | | | | | |
| 1996 | SAWTOOTH | SPRING CHINOOK | 97-031 | 2/12/97 | - | - | | | - | - | - | | | | INSPECTION | PSEUDOMONAS; VIRO 0/5, PSEUDOMONAS STUTZERI 4/5 |
| 1996 | SAWTOOTH | STEELHEAD | 97-074 | 2/25/97 | | | | | | | | + | | | RESEARCH | WHD; M. CEREBRALIS 5/20 (digest), 3/5 (histo). |
| 1996 | SAWTOOTH | STEELHEAD | 97-075 | 2/25/97 | | | | | | | | + | | | RESEARCH | WHD; MYXOBOLUS CEREBRALIS 12/20 |
| BROOD | SAWTOOTH | STEELHEAD | 97-078 | 3/31/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/13 |
| BROOD | SAWTOOTH | STEELHEAD | 97-084 | 4/3/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/18 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-085 | 4/3/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1 |
| 1995 | SAWTOOTH | SPRING CHINOOK | 97-090 | 4/8/97 | - | - | | + | | | | - | | | INSPECTION | RS; VIRO 0/20, FAT 0/20, ELISA 4/4 ( ALL LOW), WHD 0/20 |
| 1995 | PAHSIMEROI RIVER | SUMMER CHINOOK | 97-091 | 4/8/97 | - | - | | + | | | | - | | | DIAGNOSTIC | RS; VIRO 0/20, ELISA 2/4 (5-FISH POOLS) LOW OD#'S .155, .145, FAT 0/20, WHD 0/20 |
| 1996 | SAWTOOTH | STEELHEAD, A GROUP | 97-092 | 4/8/97 | - | - | | | - | - | - | | | | DIAGNOSTIC | PSEUDOMONAS; VIRO 0/4, PSUEDOMONAS SPP. 4/4 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-093 | 4/8/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-094 | 4/8/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/12 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-099 | 4/10/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/27 |

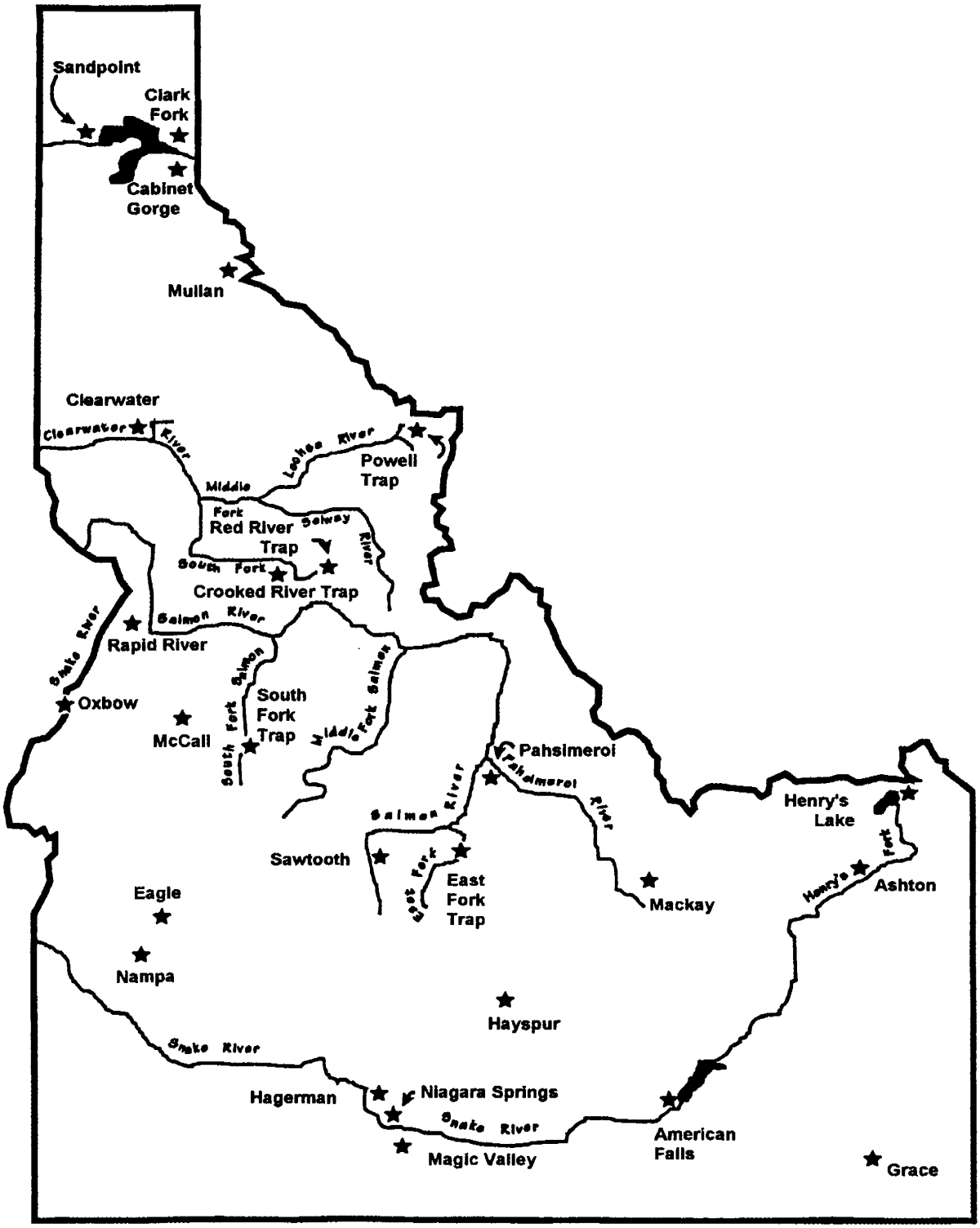
| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-103 | 4/14/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/20 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-104 | 4/14/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/5 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-111 | 4/17/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/38 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-112 | 4/16/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-113 | 4/21/97 | - | - | | + | | | | | | | INSPECTION | RS, WHD; VIRO 0/51, ELISA 3/5 (2 LOW, 1 HIGH), M. CEREBRALIS 1/1(X5) |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-114 | 4/18/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/15 |
| 1996 | SAWTOOTH | STEELHEAD, A GROUP | 97-115 | 4/21/97 | - | - | | | - | - | + | | | | DIAGNOSTIC | CWD; VIRO 0/10, FLAVOBACTER PSYCHROPHILUM 6/6 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-125 | 4/24/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/21 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-128 | 4/24/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/68 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-130 | 4/28/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/60 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-131 | 4/25/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-132 | 4/27/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/9 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-141 | 5/1/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/50 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-142 | 4/29/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/2 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-149 | 5/5/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/36 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-150 | 5/2/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/1 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-152 | 5/8/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/36 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-153 | 5/6/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/6 |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-156 | 5/9/97 | - | - | | | | | | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/4 |
| 1996 | SAWTOOTH | SPRING CHINOOK | 97-158 | 5/12/97 | - | - | | | - | - | - | | | | INSPECTION | PSEUDOMONAS; VIRO 0/1, P.FLUORESCENS 1/1 |
| OM96 | RED FISH LAKE | SOCKEYE SALMON | 97-159 | 5/12/97 | | | | | - | - | - | | | | INSPECTION | MAS; AEROMONAS HYDROPHILA 7/8 |
| BROOD | SAWTOOTH | STEELHEAD, A GROUP | 97-160 | 5/12/97 | | | | + | | | | + | | | INSPECTION | RS, WHD; ELISA 39/59 (36 bw, 3 high), M. CEREBRALIS 1/4 (5-fish pools) |
| BROOD | EAST FORK SALMON RIVER | STEELHEAD, B GROUP | 97-161 | 5/12/97 | | | | + | | | | + | | | INSPECTION | RS, WHD; ELISA 12/33 LOW, M.CEREBRALIS 2/4 (5-FISH POOLS) |
| 1996 | SAWTOOTH | SPRING CHINOOK | 97-187 | 6/13/97 | | | | - | - | - | - | | | | DIAGNOSTIC | PSEUSOMONAS; FAT 0/7, PSEUDOMONAS FLUORESCENS 2/4 |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-234 | 8/7/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/7, ELISA 7/7 (4 bw, 3 high) |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-235 | 8/11/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/2, ELISA 2/2 (0.149, 0.162) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-236 | 8/11/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/1, ELISA high 1/1 (o.d.2.452) |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-238 | 8/13/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/6, ELISA 5/6(all bw) |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-244 | 8/18/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/15, ELISA 15/15 (all bw ) |
| 1996 | SAWTOOTH | SPRING CHINOOK | 97-253 | 8/21/97 | - | - | | - | - | - | - | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; VIRO 0/7, FAT 0/7, BACT; 0/7 |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1996 | PAHSIMEROI RIVER | SUMMER CHINOOK | 97-254 | 8/21/97 | - | - | | - | - | - | - | | | | DIAGNOSTIC | MAS; VIRO 0/2, FAT 0/2, AEROMONAS HYDROPHILA 2/2. |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-255 | 8/21/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/5, ELISA 4/5 (3 bw, 1 high) |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-264 | 8/25/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/10, ELISA 10/10 (8 bw, 2 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-265 | 8/21/97 | + | - | | | | | | | | | INSPECTION | IHNV; IHNV 2/12, IPNV 0/12 |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-266 | 8/25/97 | + | - | | | | | | | | | INSPECTION | IHNV; IHNV 1/4 (2-fish pools), IPNV 0/8 |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-267 | 8/21/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/10, ELISA 6/10 (4 bw, 2 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-280 | 8/28/97 | + | - | | + | | | | | | | INSPECTION | IHN, BKD; IHNV 2/32, IPNV 0/32, ELISA 22/32 (9 bw, 13 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-281 | 8/21/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/3, ELISA 16/17 |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-282 | 8/28/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/4, ELISA 4/4 |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-283 | 8/11/97 | | | | | | | | + | | | INSPECTION | WHD; MYXOBOLUS CEREBRALIS 2/6 POOLS ( DIGEST ONLY) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-288 | 9/2/97 | + | - | | + | | | | | | | INSPECTION | IHNV, BKD; IHNV 2/2 (pools), IPNV 0/4, ELISA 4/4 (1 bw, 3 high). |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-289 | 9/2/97 | - | - | | + | | | | | | | INSPECTION | RS; VIRO 0/5, ELISA 3/4 (3 bw). |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-290 | 9/2/97 | + | - | | + | | | | | | | INSPECTION | BKD, IHN; IHNV 6/50, IPNV 0/50, ELISA 15/17 (7 bw, 8 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-300 | 9/4/97 | + | - | | + | | | | | | | INSPECTION | BKD, IHNV; IHNV 1/2, IPNV 0/2, ELISA 2/2 (1 bw, 1 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-301 | 9/8/97 | + | - | | | | | | | | | INSPECTION | IHNV; IHNV 1/17 (2-fish pools), IPNV 0/33 |
| BROOD | SAWTOOTH | SPRING CHINOOK | 97-302 | 9/8/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/1, ELISA 1/1 (high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-303 | 9/8/97 | + | - | | + | | | | | | | INSPECTION | BKD, IHNV; IHNV 2/3, IPNV 0/3, ELISA 3/3 (2 bw, 1 high) |
| BROOD | RAPID RIVER | SPRING CHINOOK | 97-324 | 8/21/97 | | | | | | | | - | | | INSPECTION | MYXOBOLUS; MYXOBOLUS SP. 1/4 (4-fish pools) BY DIGEST ONLY |
| BROOD | LOOKING GLASS | SPRING CHINOOK | 97-325 | 8/11/97 | | | | | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; WHD 0/1 |
| 1996 | PAHSIMEROI RIVER | SUMMER CHINOOK | 97-347 | 10/3/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE-NSG |
| 1996 | SAWTOOTH | STEELHEAD, A GROUP | 97-421 | 11/4/97 | - | - | | - | - | - | - | | | | INSPECTION | NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE-NSG |
| BY96 | RED FISH LAKE | SOCKEYE SALMON | 97-462 | 12/9/97 | | | | | - | - | - | | | | DIAGNOSTIC | NO PATHOGENS DETECTED; BACTE 0/12 |
| **SOUTH FORK TRAP** | | D | | | | | | | | | | | | | | |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-226 | 8/8/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 8/8--ALL LOWS |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-230 | 8/12/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 4/4--ALL LOW |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-237 | 8/14/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 15/18, (13 bw, 2 high). |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-241 | 8/19/97 | | | | | | | | - | | | INSPECTION | NO PATHOGENS DETECTED; WHD 0/20 |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-242A | 8/19/97 | - | - | | + | | | | | | | INSPECTION | BKD; VIRO 0/60, ELISA 52/63 (45 bw, 7 high) |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-259A | 8/22/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 111/121 (92 bw, 19 high) |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-259B | 8/22/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-259A |

| LOCATION BroodYr | Stock | Class Species | Log # | Sample Date | IHN | IPN | EIBS | BKD | FUR | ERM | CWD | WHD | CSH | ICH | ExamType | Diagnoses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-259C | 8/22/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-259A |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-263A | 8/26/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 57/64 (49 low, 8 high) |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-263B | 8/26/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-263A |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-278A | 8/29/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 106/118 (89 low, 17 high). |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-278B | 8/29/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-278A |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-278C | 8/29/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-278A |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-285A | 9/2/97 | | | | + | | | | | | | INSPECTION | BKD; 80/113 (71 low, 9 high, 33 negative). |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-285B | 9/2/97 | | | | + | | | | | | | INSPECTION | SEE ACCESSION 97-285A |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-294 | 9/5/97 | | | | + | | | | | | | INSPECTION | RS; ELISA 27/41 (27 low). |
| BROOD | S.F. SALMON RIVER | SUMMER CHINOOK | 97-304 | 9/10/97 | | | | + | | | | | | | INSPECTION | BKD; ELISA 6/11 (6 low). |

Appendix 2. Geographic location of Idaho Department of Fish and Game culture facilities.

# IDAHO DEPARTMENT OF FISH AND GAME FISH HATCHERIES



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