



FISH HEALTH MANAGEMENT

January 1 – December 31, 2003

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ABSTRACT

This report contains a description of the activities of the Eagle Fish Health Laboratory, operated by the Idaho Department of Fish and Game, for the calendar year 2003. The primary objective of this program is to monitor, inspect, and improve the health of fish raised at 9 resident hatcheries, 11 anadromous hatcheries and satellites, and Eagle Hatchery, which rears Endangered Species Act-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, bacterial kidney disease, infectious hematopoietic necrosis virus, bacterial gill disease, whirling disease, and furunculosis. The Idaho Department of Fish and Game fisheries managers, researchers, hatcheries, and Eagle Fish Health Laboratory pathologists utilized the wet laboratory during the year.

Wild salmonids from six of seven regions of the state were examined for the parasite *Myxobolus cerebralis* that causes whirling disease. There were two new geographic occurrences of the whirling disease parasite this year. The staffs of the Eagle Fish Health Laboratory, Eagle Hatchery, and IDFG Salmon and Upper Snake Regions cooperated in whirling disease research projects with the University of Idaho.

The Eagle Fish Health Laboratory staff remained active participants in regional and national fish health issues. This included administering the Investigational New Animal Drug program through the United States Fish and Wildlife Service and the University of Idaho. Examples of additional liaison activities are included in the text.

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This report covers activities for grant F-75-R-20 Federal Aid in Fish Restoration January 1 to December 31, 2003 by the Idaho Department of Fish and Game (IDFG).

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

Resident Hatchery Activities

The Resident Hatchery Pathologist's (RHP) primary duties are to provide fish health inspection and diagnostic services to the Idaho Department of Fish and Game's resident fish hatcheries and to assist hatchery personnel in maintaining good health in cultured resident fish. These same services are provided to IDFG fishery managers and biologists and occasionally to private individuals or companies when the information or relationship is of benefit to the State of Idaho. The author, Douglas R. Burton, has held the RHP position since 1993. The RHP and the Anadromous Hatchery Pathologist work closely together, often assisting each other in their respective programs and coordinating efforts when those programs overlap. Both pathologists work out of the Eagle Fish Health Laboratory (EFHL), and are supported by the personnel and facilities there. Both individuals are certified by the American Fisheries Society as Fish Health Inspectors.

The RHP is the Investigational New Animal Drug (INAD) monitor for the IDFG resident hatcheries. This is the process by which the U.S. Food and Drug Administration will allow the limited use of certain drugs and chemicals not currently labeled for a specific use in food fish, while accumulating data to support adding such use to the label. Idaho Department of Fish and Game joined the U.S. Fish and Wildlife Service, Aquatic Animal Drug Approval Partnership Program (USFWS, AADAPP) in 1998. This group administers INAD programs for state, tribal, and private aquaculture across the United States. Chemical compounds used under this program by IDFG resident hatcheries during 2003 included oxytetracycline (OTC) and Chloramine-T (Chlor-T). Oxytetracycline is used to treat systemic bacterial infections in many hatcheries, and Chlor-T was used to treat bacterial gill infections at Hayspur Hatchery. Statewide, the single most significant fish disease in the IDFG resident hatchery program continued to be bacterial coldwater disease (CWD).

Bacterial CWD is caused by *Flavobacterium psychrophilum*, a motile, gram-negative bacterium that is usually susceptible to OTC, but requires the use of an INAD protocol for the treatment to be legal. The total number of INAD protocols to use OTC at resident hatcheries decreased from 36 in 2002 to 23 in 2003.

Another responsibility of the RHP was to issue import permits for all the resident programs that brought eggs or fish into the state. This duty involves collecting fish health inspection and certification information from various sources in order to be certain that such importations do not present a significant risk to established fish hatchery programs or the native fish that they may contact. The goal of the program is to reduce the risk of adversely impacting Idaho's fishery resources by increasing our ability to track fish imports and eliminating the appearance of a double standard between IDFG and the general public. This was the third year that we have required all IDFG personnel to seek such permits and compliance has been very good.

The RHP and EFHL personnel examined 87 cases for IDFG resident hatchery programs

during 2003 (34 diagnostic cases, 29 routine hatchery inspections, and 24 inspections of feral brood fish). This was a significant reduction from 2002, primarily due to the drop in diagnostic cases at Hagerman State Hatchery from 45 to 19. In addition, the RHP was responsible for 1 inspection done for Rangen's Aquaculture (rainbow trout purchased by Idaho Power Company for release in American Falls Reservoir), 16 various research tests, and 1 wild fish sample of kokanee salmon from Warm Lake.

A summary of the work done for each IDFG hatchery, as well as the results of all sampling done at those hatcheries, is as follows.

American Falls Hatchery

Two of three diagnostic examinations documented CWD and motile aeromonad septicemia (MAS) as the significant infectious diseases at American Falls Hatchery in 2003. Treatments with OTC-medicated feed at the standard dosage were moderately successful. It may be necessary to treat at a higher dosage, as allowed by INAD protocol, in the future. The third diagnostic examination detected no pathogens, but a condition of extremely pale livers was observed. Samples were sent to Charlie Smith at the Bozeman Fish Health Center for histological examination. His finding was that there were excessive glycogen deposits in the livers. A change was made in the fish diet and the condition was not observed again.

Two routine inspections of Westslope cutthroat trout detected no viruses, bacteria, or *Myxobolus cerebralis* (MC) spores.

Ashton Hatchery

The RFP visited the hatchery in March to sample the catchable rainbow trout population. No viral or bacterial pathogens or *Myxobolus* spores were detected. The hatchery manager reports that infestations of the external parasite *Gyrodactylus* continue to be the only significant disease problem on the station. Ashton Hatchery continues to be at risk for MC contamination, because the hatchery water source is not completely enclosed. As more bodies of water in the vicinity are shown positive for the parasite, the greater the probability that the spring and stream above the hatchery intake may become contaminated. In addition, the hatchery experiences heavy depredations by herons and other avian predators. These birds can also serve as vectors for disease agents. Portable screening that can be removed during times when snow is heavy and birds are not present would be a significant enhancement for this hatchery.

Cabinet Gorge Hatchery

The RFP visited Cabinet Gorge Hatchery twice in 2003. The first visit was in May, when juvenile Sullivan Springs kokanee salmon were inspected prior to release. No replicating viruses were detected. The fish were too small for any other tests.

Spawning kokanee adults were examined at both the Sullivan Springs Trap and the Clark Fork River Ladder. Both groups were tested for replicating viruses, for *Renibacterium*

salmoninarum (RS) by both the direct fluorescent antibody test (FAT) and the enzyme-linked immunosorbent assay test (ELISA), and for *Myxobolus* spores. No pathogens were detected from the Sullivan Springs population, and no viruses or *Myxobolus* spores were detected from the Clark Fork River fish. However, RS antibodies were detected in 6 of 12 five-fish pools from the Clark Fork River population. This was consistent with historic findings, although no clinical signs of bacterial kidney disease were observed.

Grace Hatchery

Grace Hatchery was at full production levels in 2003, while at the same time experiencing a drought that significantly reduced the water flow from the hatchery springs. As a result of these conditions, more fish health problems were evident. Specifically, CWD was the confirmed diagnosis in 5 inspections and suspected in a 6th, with concomitant MAS in three cases. Treatments with OTC-medicated feed under INAD protocols were generally successful in reducing mortalities.

Fish in the large raceways were also diagnosed with bacterial gill disease (BGD) in late January. This was most likely a result of the low water flow leading to near 100% reuse of water in the large raceways, and heavy loading in the upper portion of the hatchery resulting in a heavy waste load in the reused water. Treatments with potassium permanganate moderated the losses to manageable levels, but the situation was not resolved until enough fish were stocked out to reduce the hatchery load levels. Chloramine-T has always been a more effective treatment for this condition at Grace, but the INAD for its use was not available at the time.

Hagerman State Hatchery

A total of 20 cases (19 diagnostic and 1 research) were examined from Hagerman State Fish Hatchery in 2003, a reduction from 45 diagnostic cases 2002 and comparable with the 18 diagnostic cases in 2001 or the 26 diagnostic cases in 2000. The hatchery manager feels that there is a biennial cycle in which the impacts of CWD and infectious hematopoietic necrosis (IHN) virus alternate in severity. It was true that 2002 was an exceptionally high peak for CWD, while IHN was definitely much less significant until November and December, when the 2003 production cycle began. As indicated by the caseload and mortalities reported on the hatchery, CWD and IHN were both less severe in 2003.

Multiple pathogens are often detected in clinically ill fish at Hagerman Hatchery. This was true in 11 of the 19 diagnostic cases (58%). Because of this, diagnosis and treatment choice is dependent upon the predominant clinical signs. Infectious hematopoietic necrosis virus was confirmed 4 times (2 clinical and 2 carrier conditions), each time in combination with one or more bacterial pathogens (*F. psychrophilum*, *F. columnare*, or an *Aeromonas/Pseudomonas* species). Experience has taught that if the viral infection appears to be carrier, it is usually beneficial to treat the concomitant bacterial infection. But if the viral infection is clinical, it is generally necessary to let the virus run its course before a bacteria treatment will be effective.

Several bacterial infections, primarily CWD, MAS, or columnaris disease (COL), were diagnosed without the complication of virus. Again, multiple bacteria species were frequently isolated in conjunction with each other. These episodes were treated with OTC-medicated feed

when the situation warranted. Success of the treatments was highly variable, usually dependent upon the size of the fish and speed of diagnosis. Generally, the larger the fish and the quicker the application of therapy, the better the response.

The number of INAD protocols to treat CWD and/or COL was significantly lower than the previous year (15 v. 25), with the majority due to an aggressive program to treat small fish in the hatchery vats. There is a long history of losses in the vats, particularly in Hayspur-strain fry within 7-10 days after swim-up. Treatment has been ineffective, primarily because the fish are off feed and too sick by the time that bacterial isolations can be grown for a definite diagnosis. Therefore, the USFWS INAD Coordinator in Bozeman, Montana, gave approval to treat small fish with OTC-medicated feed without a prior isolation of bacteria. Results continued to be equivocal from this effort, so a different treatment regimen was initiated. The one common factor whenever these small fish were necropsied for diagnostic purposes was the terrible condition of their gills. Systemic bacteria could usually be isolated, but there were always heavy loads of bacteria, fungus, and parasites (*Ichthyobodo*) on the gills. The RHP became convinced that the initial infection occurs across the gills, and that key to ending these losses was to block that mode of entry to the fish. Daily 1-hour bath treatments with 100-mg/l hydrogen peroxide were initiated in December. To date, the hatchery manager reports exceptional survival in all but one group of fry treated in this manner. The one exception was a group in which the vats were initially loaded with twice the number of eggs, because there was no other room for them. Loading density stresses may have increased the susceptibility of the fishes, and had an impact on the outbreak of disease. Controlled studies have not yet been done, but are planned to confirm the efficacy of this treatment.

A group of 10 rainbow trout from the Riley Creek raceways were tested by PCR for the presence of *Tetracapsula byrosalmonae* (PKX), the causative agent of proliferative kidney disease (PKD) in salmonids. No evidence of PKX genetic material was detected from these samples, although the organism has been confirmed on station in the past (Burton 2003).

Aeromonas salmonicida, the causative agent of furunculosis (FUR), was not detected at Hagerman State Hatchery in 2003. This pathogen and clinical FUR have been detected at Hagerman for 4 of the last 6 years.

Hayspur Hatchery

The RHP's work at Hayspur Hatchery always involves considerable effort to inspect brood stock and brood stock replacement lots. Contrary to usual practice, the 2-year-old (BY2001) replacement rainbow (R9) and Kamloops (K1) populations were not inspected prior to transfer to the round ponds due to a drastic shortage of fish.

All BY2002 replacement R9s and K1s were given a bath vaccination using an autogenous *F. psychrophilum* bacterin. Aqua Health Ltd., (Charlottetown, P.E.I., Canada), produced the bacterin from a bacterial isolate taken at Hayspur in January 2002. In addition, all adult R9 and K1 fish, with the exception of 1 group were given intraperitoneal (IP) injections of the same *F. psychrophilum* bacterin approximately 1 month prior to spawning. This followed a trial in 2002, where blood serum titers from 2 groups (1 R9 and 1 K1) of IP-injected 2-year-old fish were compared to 2 similar groups of uninjected fish (Burton, D. 2003). The results of that trial were a measurable increase in blood serum antibody titers to *F. psychrophilum* in both injected groups. Using an unpaired t-test (2-tailed), the injected K1s were significantly different from the uninjected K1s ($P = 0.0234$) but there was no statistical difference ($P = 0.0946$) in the R9s. Thanks go to Ben

Lafrentz at the University of Idaho for testing these samples and running the statistics. The hatchery manager at Hayspur also reports that post-spawning mortalities were lower in the injected groups than in the uninjected groups.

Intensive sampling of the replacement brood stock pairings continued to be the health priority at Hayspur Hatchery. Ovarian fluids were collected from every female used in the pairings for virology and for RS analysis using the ovarian cell pellet fluorescent antibody test (OCP-FAT). Due to the loss of an entire year class of replacement fish to otters, it was decided not to sacrifice any females for tissue samples again this year. There should be enough new adults available in 2003 to resume lethal sampling. Additionally, good reagents for the ELISA test are again available, making lethal sampling for kidney tissues more valuable. Eggs from individual females were held in isolation until the test results were available. Established protocol dictates that if a parent female tests positive for any virus or for RS, the resulting group of eggs is culled.

The R9 brood stock replacement spawning for the 2002-2003 season began on October 31, 2002 and continued until May 7, 2003. Results for those fish spawned in 2002 have already been reported (Burton, 2003), but results from the later spawn days were not available when that report was submitted. The final total for female R9s tested in the 2002-2003 season was 227, with ovarian fluids from all females tested for viruses and RS. No pathogens were detected, so no eggs were culled.

The 2003-2004 R9 brood stock replacement spawning season began on October 9. Total females sampled by December 31, 2003 was 173, with no fish positive for viruses, but 2 individuals positive for RS by OCP-FAT. Eggs from the 2 RS-positive females were culled. Results for fish tested after January 1, 2004 will be reported in the 2004 Fish Health Report.

Kamloops brood stock replacement spawning ran from October 9 to November 19. Ovarian fluids from 99 females were tested for viruses and RS. No viruses were detected, but RS was detected from 2 females by OCP-FAT. Eggs from those 2 RS-positive individuals were culled. These positive RS findings from both the R9 and K1 populations were the first since December 2000.

This was the second year that eggs were taken from the BY2000 Westslope cutthroat trout, originating from Connor Lake, Canada. Typical age at maturation for fish in the wild population from which this lot originated is about age 4, and spawning occurs in June. But a majority of this new captive population (BY2000) matured at aged 1+ and spawned for the first time in February 2002. The females again began to ripen in February 2003. Sampling of spawning fish began on March 19 and continued to April 3. Ovarian fluids from 165 females were tested for viruses and for RS by OCP-FAT. In addition, 10 spawning mortalities were tested for RS by FAT and ELISA. No pathogens were detected by any testing method. Hatchery personnel collected and froze reasonably fresh mortalities after the spawning season. A total of 18 frozen fish were sampled on August 8 and tested for RS by both FAT and ELISA. No evidence of RS was detected.

A major problem with spawning the Connor Lake cutthroat continues to be that the males do not produce significant quantities of sperm early in the season, when the first females become ripe. This may contribute to poor fertilization rates in the early egg takes. To solve this problem, pituitary glands were harvested from 6 mature male R9 rainbow trout, fixed in acetone, and dried. The glands were then ground, reconstituted in sterile saline, and injected into 23 cutthroat males on March 6. These males were checked 7 days later. It was subjectively concluded that the injected males were producing more sperm, by volume, than uninjected males. This technique will be used in the future to allow for better fertilization of early eggs.

The use of sterile rainbow trout in all IDFG hatcheries has become an important part of statewide fishery management. With the exception of replacement brood stock groups, all eggs taken at Hayspur Hatchery are treated so that the resulting fish will be sterile triploids. To accomplish this, groups of eggs are shocked 20 minutes post-fertilization in a 26° C water bath. A goal of 95% triploid induction has been set for this treatment. Hatchery personnel randomly selected lots of eggs and gave the RHP subsamples of eyed eggs from those groups for incubation and rearing at the EFHL wet lab. When the resulting fish were large enough, the RFP took blood samples from 40 randomly selected individuals. The samples were then sent to the University of Washington for analysis. A total of 13 groups were tested from the 2002-2003 spawning season. Eleven of the 13 groups met or exceeded the 95% goal, with the two deficient groups at 92.5% and 90%. A total of 520 individual fish were tested of which 509 (97.9%) were triploid. While it has become evident that temperature shocking is not 100% efficient in inducing triploidy, the overall average did exceed the goal.

Henrys Lake Hatchery

Fish health inspection samples were taken from spawning cutthroat trout at Henrys Lake Hatchery from February 20 through April 24, 2003. Ovarian fluids were collected by hatchery personnel and shipped to EFHL where they were tested for viruses (175 females in 25 seven-fish pools) and RS by OCP-FAT (1302 females in 186 seven-fish pools). A group of 60 fish (both males and females) were sacrificed for kidney FAT, tissue virology, bacteriology (20 fish) and *Myxobolus* tests. No viruses or RS organisms were detected in any of the tissue or ovarian fluid samples, thus no eggs were discarded. Bacteriology samples showed a carrier-level infection of a *Pasteurella* species in 1 fish, which was probably not a primary pathogen. *Myxobolus* spores were detected in 3 of 12 five-fish pools by the PTD method. Spores from this population have been previously confirmed as MC.

Fish health inspection samples were taken from spawning brook trout from October 27 to November 6. Ovarian fluids were collected by hatchery personnel and shipped to EFHL where they were tested for viruses (78 females in 13 pools) and RS by OCP-FAT (48 females in 8 pools). A group of 30 females were sacrificed for kidney FAT, tissue virology, bacteriology (12 fish) and *Myxobolus* tests. No viruses were detected in any of the tissue or ovarian fluid samples. None of ovarian fluids or kidney tissues tested positive for RS by FAT, so no eggs were discarded. However, 3 of 6 pooled (x5) kidney tissue samples tested positive for RS antigens by ELISA at low levels. Samples could not be identified with egg lots, and the levels were well below the limit where transmission of bacteria with the eggs is likely. Bacteriology samples detected *A. hydrophila* (8 of 12), *F. psychrophilum* (5 of 12), and *Pseudomonas fluorescens* (3 of 12). No clinical signs of these bacterial infections were evident. A single *Myxobolus* spore was detected by the PTD method from 1 of 20 individual samples that was presumed to be MC because this population has been confirmed positive in the past. No signs of clinical whirling disease were observed.

Mackay Hatchery

No significant clinical disease or fish losses occurred at Mackay Hatchery in 2003. The RFP visited the hatchery June to inspect the juvenile Deadwood Reservoir kokanee salmon and Snake River fine-spot cutthroat. Both populations were tested for the presence of viruses, RS, pathogenic bacteria, and *Myxobolus* spores. No pathogens were detected.

Mackay Hatchery received green eggs from the early-spawning kokanee in Deadwood Reservoir. The spawning population was inspected on August 21. No viruses or RS were detected. However, *Myxobolus* spores were detected by PTD in 42% (5 of 12) of pooled, half-head samples. In addition, brain tissues from 5 fish were pooled, squashed on a microscope slide, and examined fresh. *Myxobolus* spores were observed in the squashed tissues. Confirmation by PCR on these samples is pending, but all indications are that the species is not MC. A neurotropic (having an affinity for nervous tissue) *Myxobolus* has been identified in many waters of Idaho (Hogge, Campbell, and Johnson, in press), and it is likely that this is the species involved at Deadwood Reservoir.

McCall Hatchery Resident Program

The McCall Resident Program experienced no disease problems in 2003, and the RHP was not called in during the short time that resident fish are on station. The Westslope cutthroat trout fry for mountain lakes had experienced episodes of CWD in the two previous years, but no losses occurred in 2003

Nampa Hatchery

The RHP examined 3 inspection and 6 diagnostic cases at Nampa Hatchery in 2003. Five episodes of clinical CWD were diagnosed and 4 were treated under INAD protocols. The inspections were all done in anticipation of moving fish to American Falls Hatchery to make up for production losses there, although the transfer was never made. No significant viral, bacterial, or parasite pathogens were detected during the inspections, but carrier levels of *Pseudomonas putida* were detected from one group. This organism is a common bacterium that is not generally considered a primary disease threat, but rather a secondary opportunist in fish that are somehow previously compromised.

Anadromous Hatcheries

The IDFG hatchery facilities and associated satellites are funded through Lower Snake River Compensation Plan (LSRCP) and Idaho Power Company (IPC) contributions. The Anadromous Hatchery Pathologist (AHP) provides diagnostic and inspection services to Chinook salmon, sockeye salmon, and steelhead that are spawned, reared and released from IDFG facilities with the goal of maintaining good fish health at these facilities. The AHP also cooperates with other state, private, federal, and tribal programs that could impact Idaho's fishery resource. The anadromous hatchery pathologist is the INAD monitor for the IDFG anadromous program. Chemical compounds used in the anadromous program are erythromycin medicated feed (INAD 6013), oxytetracycline medicated feed (INAD 9332), Chloramine-T (INAD 9321), and luteinizing hormone-releasing hormone analogue (INAD 8061). The AHP reports all reportable pathogens detected at anadromous facilities to the local Animal and Plant Health Inspection Service (APHIS) veterinarian-in-charge. The AHP also coordinates injectable erythromycin reporting needs between the wildlife veterinarian and hatchery personnel. Another responsibility of the anadromous pathologist is to issue import/export permits as needed. The annual summary of results for the

hatcheries and satellite stations is presented in Appendix 1. In 2003, the anadromous hatchery program submitted 190 inspection and diagnostic cases that were processed by the EFHL personnel. The AHP is responsible for all certification sampling of tilapia hybrids produced at Ace Development, Arraina Inc., and Epicenter Aquaculture. A total five certification samples for transport of live tilapia hybrids from Idaho into Canada were processed at EFHL in 2003.

Clearwater Hatchery

The Clearwater Hatchery with Crooked River, Powell, and Red River satellites produce steelhead and Chinook salmon. A total of 15 inspection and diagnostic cases were attributed to this facility. Brood Chinook salmon that were transported from Red River and Crooked River (South Fork of the Clearwater spring Chinook) were spawned at Clearwater Hatchery. ELISA technology was used to examine all 344 females for RS. Seventy-three females (21%) had their eggs culled from production because the kidney ELISA values was above 0.25. Infectious Hematopoietic Necrosis Virus was found in 10 fish of 62 brood fish examined. These detections of IHNV were reported to the APHIS veterinarian-in-charge. Pre-spawning mortality decreased in the South Fork of the Clearwater spring Chinook stock held at Clearwater Hatchery, from 19% in 2002 to 12% in 2003. The extra handling, elevated water temperatures, trauma associated with migration conditions and fisheries, are some of the causes attributed to this mortality. Further investigation is needed. In 2004 prophylactic measures will be applied to reduce pre-spawning mortality in brood Chinook.

Flavobacterium psychrophilum was isolated from BY'02 North Fork of Clearwater group B steelhead. OTC medicated feed was not applied. Preliberation samples were taken from 20 North Fork of the Clearwater B group steelhead. These fish were examined for viral replicating agents, RS, and MC. No pathogens were detected. Pathogens were not detected during juvenile Chinook salmon inspection sampling.

An additional 8 inspection cases were performed on samples collected at Dworshak National Fish Hatchery (DNFH) for brood steelhead and brood Chinook salmon sampling. Infectious Hematopoietic Necrosis Virus was isolated in B Group steelhead brood fish at DNFH in 25 fish out of 264 (9%) fish sampled. The eggs from the positive fish were culled from the Clearwater Hatchery program. Due to a shortage of adult Chinook salmon returning to IDFG facilities, eggs from DNFH were used to back fill Clearwater Hatchery and Rapid River Hatchery. *Renibacterium salmoninarum* was detected at high optical densities (>0.249) in 12 of 177 (7%) brood Chinook females sampled. The eggs from these fish were culled from production. Infectious Hematopoietic Necrosis Virus was detected in 108 of 177 (61%) brood Chinook sampled at DNFH in 2003 and the eggs from these females were also culled from production. All IHNV detections were reported to the APHIS veterinarian-in-charge.

Crooked River Satellite Facility

All brood spring Chinook salmon trapped at this facility were given a prophylactic intraperitoneal injection of erythromycin to limit pre-spawning mortality to RS. These fish were injected at a rate of 20 mg/kg. The number of fish injected, the rate of injection, and total amount of erythromycin were reported to the state's wildlife veterinarian.

Fall preliberation inspections were applied to acclimating Chinook salmon. One preliberation sample and two inspection samples did not detect RS by ELISA or DFAT examination. Viral replicating agents and MC were not detected. A total of 40 juvenile Chinook salmon were examined. In the first week in September 2003, hatchery staff noticed an increase in mortality due to an infestation of *Ichthyophthirius multifiliis*. After a bioassay was implemented, these fish were treated with formalin at 167 ppm three times per week until release. An estimated 9,000 fish (approximately 4%) died of this infestation.

Powell Satellite Facility

All brood spring Chinook salmon trapped at this facility were given a prophylactic intraperitoneal injection of erythromycin to limit pre-spawning mortality to RS. These fish were injected at a rate of 20 mg/kg. The number of fish injected, the injection rate, and total amount of erythromycin were reported to the state's wildlife veterinarian.

Eleven inspection cases were of brood Chinook salmon spawned at this satellite. Infectious Hematopoietic Necrosis Virus was detected in 10 of 61 fish examined during routine brood sampling. These detections of IHNV were reported to the APHIS veterinarian-in-charge. Two hundred sixty-six Chinook salmon females were examined for RS with ELISA. Of these, 31 females (11.7%) had optical densities above 0.25 and the eggs from these fish were culled. Pre-spawning mortality increased from 3% (2002) to 19% (2003) in the adult Powell spring Chinook salmon being held at Powell for spawning. Elevated pre-spawning mortality was linked to high water temperatures and trauma associated with fishing activities. *Myxobolus cerebralis* was not detected at this facility in adult Chinook salmon.

Juvenile fish were reared at this facility during 2003. Preliberation examinations did not detect pathogens in the spring (BY'01) and fall (BY'02) acclimation releases of Powell juvenile Chinook salmon. Pathogens were not detected in two inspections of BY'02 Powell spring Chinook salmon, involving a total of 20 juvenile fish.

Red River Satellite Facility

All brood spring Chinook salmon trapped at this facility were given a prophylactic intraperitoneal injection of erythromycin to limit pre-spawning mortality to RS. These fish were injected at a rate of 20 mg/kg. The number of fish injected, the rate of injection, and total amount of erythromycin were reported to the state's wildlife veterinarian.

During 2003, juveniles were released from this facility following a brief acclimation period. Pathogens were not detected in BY'01 South Fork of the Clearwater spring Chinook during spring preliberation sampling.

Magic Valley Hatchery

Dworshak, East Fork, Pahsimeroi, and Sawtooth steelhead trout stocks required 20 inspection and diagnostic cases during 2003 at the Magic Valley Hatchery. The diagnostic cases indicated CWD complicated by aeromonads and pseudomonades to be the etiological agents. Mortalities caused by CWD were high enough to warrant medicated feed treatment, and were

controlled with OTC medicated feed applications (allowed by INAD 9332). The organosomatic index demonstrated a very robust fish, with plenty of stored energy. In 2003, IHNV, IPNV, ERM, furunculosis, RS, and MC were not detected at Magic Valley Hatchery.

McCall Hatchery and South Fork Satellite

The anadromous portion of this program was responsible for 7 inspection cases at McCall Hatchery. Pathogens were not detected at preliberation sampling of BY'01 juvenile Chinook salmon. Two prophylactic applications of erythromycin medicated feed (INAD 6013) were fed to the BY'02 Chinook juveniles to control RS. Preliberation sampling of BY'01 South Fork and Johnson Creek summer Chinook salmon did not detect pathogens. *Aeromonas hydrophila* was detected in 3 of 10 fish sampled during a July 2003 inspection. A medicated feed treatment was not applied.

The South Fork Trap had 16 accessions logged into the EFHL during 2003. Upon arrival at the trap, adult Chinook are given an intra-peritoneal injection of erythromycin to limit pre-spawning mortality to RS. These fish were injected at a rate of 10 mg/kg. The number of fish injected, the dose of injection, and total amount of erythromycin were reported to the state's wildlife veterinarian. Brood summer Chinook salmon, from the South Fork of the Salmon River and Johnson Creek were examined for RS, MC, and viral replicating agents. *Myxobolus cerebralis* and viral replicating agents were not detected in adult Chinook salmon at this facility. Six per cent of the brood females of the South Fork summer Chinook salmon had optical densities at 0.25 or greater. The eggs from these higher risk females were culled from the hatchery program. Optical densities from brood females from the Johnson Creek program did not exceed the 0.249 limit. Thus eggs were not culled from this program. Pre-spawning mortality increased from 28% in 2002 to 32% in 2003. Elevated water temperatures, sport, and tribal fisheries are suspected causes. A focused investigation will be required to find the causes of this mortality, which is not limited to the South Fork of the Salmon River.

Niagara Springs Hatchery

Ten inspection cases were attributed to Niagara Springs Hatchery during 2003. Pahsimeroi and Hells Canyon A Group steelhead lots were examined and MAS and bacterial CWD were responsible for most mortality. Efforts for improving hatchery practices should focus on inventory manipulations to maintain densities below stressful levels and to manage around opportunistic pathogens such as CWD and MAS. Niagara Springs Hatchery has continued to vaccinate the steelhead against furunculosis (provided by AquaHealth LTD). Furunculosis, ERM, IHN, IPN, RS, and MC were not detected during routine sampling at this facility in 2003.

Oxbow Hatchery

Ten inspection and diagnostic trips were made to Oxbow Hatchery. Six inspection trips for Steelhead A Group adults were made during spawning to examine steelhead for pathogens such as IHN, IPNV, RS and WD. Pathogens were not detected in the 92 steelhead adults examined at this facility during 2003.

The fall Chinook salmon culture program was in its third year at this facility. This facility had four inspections for fall Chinook salmon, including a preliberation sample. Since the rearing of fall Chinook salmon was finished using water from the Snake River, *C. shasta* was an important potential pathogen. At preliberation, 60 fish were sampled microscopically for this parasite without detection. No other pathogens were detected during routine sampling except for *Aeromonas*

hydrophila. Mortalities were not high enough to warrant medicated feed treatments. Pathogens such as *RS*, *IHN*, *IPNV*, *Ceratomyxa shasta* and *MC* were not detected during routine sampling.

Pahsimeroi Hatchery

Sampling for pathogens of adult steelhead and Chinook salmon, juveniles and adults, from Pahsimeroi Hatchery resulted in 23 laboratory accessions to the EFHL in 2003. Viral replicating agents were not detected in any of the fish sampled from this facility. *Renibacterium* was not detected by ELISA in preliberation samples of BY 2001 summer Chinook salmon juveniles. ELISA high optical densities (0.25 and above) were found in 0.9% of the brood female Chinook salmon examined during routine sampling. The eggs from these higher risk females were culled from the hatchery program. Pre-spawning mortality increased from 5% in 2002 to 6% in 2003. All brood summer Chinook salmon trapped at this facility were given a prophylactic intra-peritoneal injection of erythromycin to limit pre-spawning mortality to *RS*. These fish were injected at a rate of 20 mg/kg. The number of fish injected, the dose of injection, and total amount of erythromycin were reported to the state's wildlife veterinarian.

Preliberation sampling in 2003 of juvenile Chinook salmon detected 2 positive fish for *MC* out of 20 fish sampled in BY 2001. In conjunction with IPC, the IDFG staff will continue to explore many options to manage around *MC* infection. Developing a well water source for early rearing remains the primary focus of this investigation. The BY'02 Pahsimeroi summer Chinook salmon were experiencing tetany after 5 days of erythromycin medicated feed application. The fish were removed from treatment. Lawson Creek, above the water intake of the upper facility, experienced a blow-out from a local thunderstorm micro-burst. This clouded the water servicing the upper facility ponds for weeks. As the water cleared, elevated mortalities warranted the two diagnostic visits. Ichthyophthiriasis complicated by clinical BKD was found. Formalin treatments were applied until water temperatures declined in the autumn. Estimated mortality due to ichthyophthiriasis was 2624 hatchery salmon (0.2%). A 10 g/100 pounds of fish OTC treatment for 14 days was applied to control BKD. This was provided by INAD 9332. This application of OTC medicated feed was followed by the scheduled prophylactic application of erythromycin at the 100 mg/kg/day rate for 28 days was provided by INAD 6013. After the application of these two antibiotics, BKD was not detected by any means in this broodyear of fish at this facility.

Rapid River Hatchery

Twenty-one inspection cases were entered from Rapid River Hatchery during 2003. Two diagnostic cases were required during this year at this facility. The majority of the cases were brood samples, primarily establishing ELISA optical densities for ELISA-based culling. Viral replicating agents were detected in routine adult sampling. Pre-spawning mortality increased from 20% in 2002 to 32% in 2003. Suspected causes for the elevated mortality in adult Chinook salmon at this facility are elevated water temperatures, trauma associated with migration conditions, sport and tribal fisheries. If this trend continues, an investigation into the causes of the mortality should be initiated. All brood spring Chinook salmon trapped at this facility were given a prophylactic intra-peritoneal injection of erythromycin to limit pre-spawning mortality to *RS*. These fish were injected at a rate of 20 mg/kg. The number of fish injected, the rate of injection, and total amount of erythromycin were reported to the state's wildlife veterinarian. The culling rate due to high ELISA values (0.25 and above) was 13%. As more adults are released into Rapid River above the weir, horizontal transmission of *RS* into fish reared at this facility should be expected. *RS* was not detected via ELISA sampling in juveniles at preliberation. The BKD culling program has eliminated

clinical BKD from this facility in recent years. External mycosis, "Fuzzy-tail," which had been a perennial problem at this hatchery in the late 80's and early 90's was almost non-existent. Pathogens were not detected in routine inspection sampling of juvenile Chinook salmon.

Sawtooth Hatchery

Thirty-three inspection cases, four diagnostic cases, and three research cases examined juvenile Chinook salmon, naturally spawned adult spring Chinook salmon carcasses, and brood spring Chinook salmon at Sawtooth Hatchery in 2003. Juvenile Sawtooth and Pahsimeroi Chinook salmon stocks and Redfish Lake sockeye salmon were examined at this facility. In addition, brood samples were obtained from brood Sawtooth spring Chinook salmon, brood South Fork of the Salmon River Chinook salmon, brood Redfish Lake sockeye salmon, adult East Fork Salmon River steelhead B Group and Sawtooth steelhead A Group.

In 2002, the BY'00 Sawtooth spring Chinook salmon experienced losses due to IHN. Because of these losses increased sampling of all fish spawned at this facility was implemented in 2003 to provide data concerning IHN in hatchery and natural fish stocks of the upper Salmon River. IHN was not detected in 508 steelhead, 116 spring Chinook sampled at the hatchery, and 61 spring Chinook salmon carcasses sampled above the Sawtooth Hatchery weir.

Preliberation samples of juvenile Chinook salmon showed all four pools to be negative for RS. One of 20 Chinook salmon was positive for MC. During the first prophylactic treatment of erythromycin, tetany was noticed at day 23 of the application. Since mortality rates were low, the feed treatment was completed. Preliberation sampling did not detect pathogens in a 60 fish sampled from the BY'02 released into Redfish Lake.

Prolonged rearing on well water has resulted in decreased detection of WD in Chinook salmon. Sentinel WD exposure experiments demonstrated the seasonality of infection by this parasite and have provided insight into managing around infection. It continues to be very important to rear the Chinook salmon at Sawtooth Hatchery until at least 75mm on well water. Due to higher demands for well water, expanding the well water supply at Sawtooth Hatchery is becoming a necessity. Enhancement of well water supplies will also reduce the prevalence and intensity of RS and IHN.

Pre-spawning mortality of Sawtooth spring Chinook adults decreased from 20% in 2002 to 5% in 2003. One fish out of the 33 Chinook salmon (approximately 3%) spawned at Sawtooth had an optical density above 0.25. The eggs from this female Chinook salmon were culled from the program. All brood spring Chinook salmon trapped at this facility were given a prophylactic intra-peritoneal injection of erythromycin to limit pre-spawning mortality to RS. These fish were injected at a rate of 20 mg/kg. The number of fish injected, the rate of injection, and total amount of erythromycin were reported to the state's wildlife veterinarian.

Sockeye and Chinook Salmon 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 for culture of ESA-listed Chinook salmon from collections of wild parr from three Idaho Rivers. In recent years this program has transitioned to hydraulic removal of eggs from naturally-produced redds. There has been an improvement in the health of the progeny resulting from this programmatic shift. The site selected for the freshwater rearing portion of this project was Eagle Hatchery. The marine site was the National Marine Fisheries Service's (NMFS) Manchester Marine Laboratory (MML). Both the sockeye salmon and Chinook salmon programs generate considerable case workload for the EFHL. Program activities for 2003 are reported by species.

Redfish Lake Sockeye Salmon Captive Broodstock

The IDFG EFHL processed samples of sockeye salmon for diagnostic and inspection purposes from broodstock and production groups; anadromous adults that were retained for hatchery spawning; smolts obtained from outmigrant traps; and kokanee obtained from trawl efforts. Forty-six laboratory cases involving 494 individual fish were processed in 2003. The laboratory also summarized pathology findings to satisfy the needs of adjacent state agencies for issuance of sockeye salmon import and transport permits.

There was no evidence of viral pathogens in any of the production and broodstock groups in 2003. This result is consistent with results from previous years. The Redfish Lake population remains the only sockeye salmon population in the Pacific Northwest that does not have IHNV.

Clinical BKD, caused by RS, did not occur in any production groups of sockeye salmon juveniles reared at Eagle Hatchery or at Sawtooth Hatchery. There were two cases from Sawtooth Hatchery in which elevated ELISA OD values were demonstrated but no evidence of clinical disease was observed. Captive adult sockeye salmon spawned in 2003 were also free of clinical levels of BKD. Bacterial kidney disease antigen was not detected in the two anadromous adults examined in 2003.

Furunculosis, caused by *A. salmonicida*, was detected in one of two anadromous adults retained for spawning in 2003. This demonstrates the wisdom of intraperitoneal injections of both Oxytetracycline and Erythromycin shortly after the adults were trapped.

Clinical disease caused by motile *Aeromonas* spp. was present in both anadromous adults, captive reared adults, and in BY99 and BY00 production sockeye salmon. Antibiotic therapy was administered three times to control losses in captive reared adults and production groups.

Myxobolus cerebralis, the myxosporean parasite which can cause salmonid whirling disease, was previously determined to be present in the upper Salmon River. The parasite was detected in sockeye smolts emigrating from Alturas lakes but not from Redfish and Pettit lakes nor from kokanee collected by trawling in these same lakes. The neurotropic *Myxobolus* sp was obtained from both anadromous adults in 2003.

Parvicapsuls minibicornis, the kidney microsporidan parasite known from the Fraser River sockeye salmon was demonstrated positive in both anadromous adult sockeye salmon in 2003.

Juvenile Fish Quality Assessment in 2003

In 1999, we initiated assessments of fish quality to juvenile sockeye salmon to provide additional perspective on factors that may affect fish survival from out planting through out migration. General parameters considered for investigation included: 1) proximate body composition analysis, 2) organosomatic index, 3) fish health and 4) smoltification assay.

Broodyear 2001 sockeye smolts from traps on Alturas Lake Creek, Pettit Lake Creek, and Redfish Lake Creek were sampled in limited numbers for proximate analysis indicated very low fat reserves in hatchery smolts compared to those of natural origin. This was also apparent from scores of body fat content in the organosomatic assessment. No pathogens were detected in any of the groups and smolt assessment indicated these were prepared for salt-water entry.

Salmon River Chinook Salmon Captive Rearing

In 2003, 41 laboratory accessions (representing 65 fish) were generated at the EFHL from captive Chinook salmon. Cause of mortality and magnitude of loss for Chinook salmon maintained at the Eagle Fish Hatchery during this reporting period were used to support interstate transportation of live salmonids. In addition Chinook salmon transferred to the State of Idaho from the NMFS MML in Washington State were screened for the North American strain of viral hemorrhagic septicemia (NAVHS). This pathogen does not occur in Idaho but has previously been identified in fish reared in close proximity to the NMFS site. Because of the risk associated with the potential introduction of NAVHS, ovarian fluid and tissues sampled from NMFS-origin fish were "blind-passed" to improve our ability of detecting the virus. There was no evidence of virus demonstrated even with these extra procedures.

Monitoring for BKD in captive Chinook salmon has been routinely conducted since the inception of the program in 1995. Of the 65 fish examined in 2003, none demonstrated clinical levels of BKD by ELISA. No BKD was identified in the safety-net rearing groups or those originating as naturally deposited eggs on station during this reporting period. Erythromycin-medicated feed for a 28-day duration was given twice as a prophylactic treatment.

Motile aeromonad septicemia, caused by *Aeromonas* and *Pseudomonas* spp. was detected in five broodstock groups and required antibiotic therapy which was effective in reducing loss.

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 late-1980s. The distribution of MC and the impact of the parasite on wild and hatchery salmonid populations continue as a concern for IDFG. Efforts made in 2003 focused on MC samples from Westslope cutthroat and redband trout in remote areas since these populations were already being sampled for genetic analysis. Samples were processed and reported from six of seven IDFG fishery management regions.

Westslope cutthroat trout were sampled at ten sites on the Selway River and nine sites on the Middle Fork Salmon River. No MC spores were detected but those of *Henneguya salmonis* and the neurotropic species were present in these collections.

Two new positive locations for MC in Idaho waters were identified in samples obtained in 2003 although these both were within drainages determined previously to be positive. Spores of the neurotropic *Myxobolus* spp. were detected from one of two anadromous sockeye salmon demonstrating the need for accurate identification of this *Myxobolus* species. The EFHL technologists have developed a PCR test to differentiate the neurotropic species from MC. This test has been applied to samples from many locations and demonstrated that the neurotropic species is widespread in Idaho waters. Our laboratory has assisted fisheries agencies of other states with this test.

The EFHL shared its fish health database with the USFWS Wild Fish Disease Survey and with the University of Idaho. The database of the lab has extensive fish health observations made over many years, which is useful at the regional and 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, Chinook and sockeye salmon and steelhead in Idaho.

WHIRLING DISEASE RESEARCH

The EFHL initiated sentinel trials to support our own and cooperative research on whirling disease, caused by *Myxobolus cerebralis*. Two sentinel series were made in the Pahsimeroi River basin and one in the Lemhi river basin to support research being conducted by graduate students of Dr. Moffitt at the University of Idaho. This work was to examine the effect that disconnected streams has on the distribution of the parasite. Two sentinel series were made in 2003 to examine whether the parasite has become established in Loving Creek and Silver Creek in central Idaho. We also deployed sentinel series in Blanchard Creek (IDFG Region 1), Little Lost River, and at Sawtooth Hatchery. There were done to support requests from IDFG Regional Fisheries Managers.

TRANSPORT AND IMPORT PERMITS

The EFHL issued 103 transport or import permits for the IDFG Fisheries Bureau and regional offices during 2003. These permits are required when non-aquaculture species are released to public waters of the State of Idaho. Thirty-eight of these dealt with grass carp (white amur) *Ctenopharyngodon idella* to be used for biological control of aquatic vegetation. The IDFG policy requires that grass carp be certified free of Asian tapeworm and to be sterile triploids. The United States Department of Agriculture Laboratory at Stuttgart, 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 Kootenai River white sturgeon *Acipenser transmontanus*; to the Nez Perce Tribe for salmon culture activities; and to the University of Idaho Aquaculture Research Institute and Hagerman Fish Culture Experiment Station for research.

REPORTS AND PRESENTATIONS

Reports generated by the EFHL include the Annual Resident Hatchery report for 2002, annual reports for each anadromous hatchery, and the monthly LSRCP and IPC facilities 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 Pacific Northwest Fish

Health Protection Committee (PNFHPC) semi-annual meetings; the Western Fish Disease Workshop; Rocky Plains Fish Health Workshop; and Northwest Fish Culture Conference.

The EFHL personnel attended some meetings of the Snake River Sockeye Technical Oversight Committee and the Chinook Captive Rearing Technical Oversight Committee during 2002. We also participated in the Whirling Disease Foundation Symposium, Idaho Chapter of the American Fisheries Society, national AFS/Fish Health Section annual meeting, INAD meeting hosted by the National INAD Office (USFWS), LSRCP Cooperators review, and USFWS/IDFG coordination workshops for the Clearwater and Salmon rivers activities.

Staff of the EFHL have cooperated during 2002 with colleagues in the fish health and fisheries management fields through the forum of the PNFHPC (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, Oregon State University, University of California-Davis, College of Southern Idaho); and with the Whirling Disease Foundation.

PRODUCTION STUDIES AND SURVEYS TO ENHANCE FISH HEALTH

The wet lab at the EFHL was used to evaluate production triploid induction rates with Hayspur rainbow trout and for cooperative research on WD exposure in the Pahsimeroi River.

Trials using Penicillin-G baths to reduce the effect of *F. psychrophilum* on juvenile rainbow and cutthroat trout were completed at Grace, Hagerman, and McCall hatcheries. Problems with maintaining fish in static baths for a 1-hour duration caused the results to be equivocal.

Staff of the EFHL performed inspections of three private aquaculture facilities that import live Tilapia 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 MC 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 rainbow 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. Difficulties in applying the practices developed in California have led to a discontinuation of the Penicillin G treatments. We recommend further investigations into the use of an autogenous CWD vaccine to see if it would provide control in the rainbow trout broodstock populations at Hayspur.

Considerable progress has been made in controlling of BKD in cultured Chinook 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. Clinical BKD in juveniles has been eliminated and the prevalence of BKD “high” adult females has been gradually decreasing over the last two generations. This program must continue as the highest fish health priority for IDFG hatcheries that raise Chinook salmon. This year, supplies of Kirkegaard-Perry Laboratories batch 1 antibodies for the BKD ELISA test were exhausted and we were forced to use those of batch 2. Our prior examination of Chinook salmon kidney tissues was reported in the American Fisheries Society Fish Health Section Newsletter (Scott and Johnson, 2001). The regression analysis provided an adjustment in optical density values for the BKD ELISA culling program. This was implemented in 2002 and was well documented and accepted by hatchery personnel and the National Marine Fisheries Service program oversight groups. The adjustment was from an OD of 0.25 to 0.19 but did not result in greater number of females deemed “highs”.

Expansion of the pathogen-free well water at Pahsimeroi Hatchery should be a high priority for funding by Idaho Power Company. The current program of rearing Pahsimeroi Chinook salmon at Sawtooth Hatchery to a length of seven cm has created considerable competition for well water between culture programs. A test well at the upper Pahsimeroi Hatchery was dug by IPC and EFHL sentinel exposures demonstrated water from this test well was free of MC infectivity.

The practice of collecting naturally produced parr to initiate broodstocks of the Chinook captive rearing program was discontinued. Losses to BKD and the handling stress from *Salmincola* control efforts had been unacceptably high and have limited the number of mature adults produced. Using protocols and equipment similar to those used by the Washington Department of Fisheries and Wildlife, Staff of Eagle Hatchery safely removing eyed-eggs from naturally-produced redds by hydraulic pumping. This technique has avoided health-related problems in this program.

The IDFG has cooperated in past years with the program of the International Association of Fish and Wildlife Agencies for registration of additional therapeutic agents for aquaculture. Progress toward FDA registration has been slow although there has been expansion of label claims for two compounds. Funding from IDFG license sources was discontinued due to fiscal constraints.

ACKNOWLEDGEMENTS

The staff of the EFHL would like to express our appreciation to the Lower Snake River Compensation Plan, Idaho Power Company, Sport Fish Restoration Program (USFWS), 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 assistance 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.

APPENDICES

Appendix A. Fish Health Summary Report 2003



FISH HEALTH SUMMARY REPORT

Report Date: 6/6/2006

Idaho Department of Fish and Game

Eagle Fish Health Laboratory

REPORT FOR SAMPLE DATES: 01/01/2003 TO 12/31/2003

BroodYr	Stock	Species	Class	Accession	Sample											ExamType	Diagnoses		
					Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH	
3 SOUTHWEST REGION			D																
BROOD	DEADWOOD RESERVOIR	KOKANEE-EARLY SPAWN		03-283	8/21/2003	-	-		-						-		INSPECTION	NEUROTROPIC MYXOBOLUS; VIRO 0/60, FAT 0/60, PTD-MYXOBOLUS 8/12(X5), HISTO-MYXOBOLUS SPORES IN BRAIN 1/1 (X5), PCR-MYXOBOLUS CEREBRALIS 0/6, PCR-NEUROTROPIC MYXOBOLUS 1/6	
3.5 MCCALL SUBREGION			D																
2001	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-086	3/14/2003												RESEARCH	NECRO: ORGANOSOMATIC INDEX; STOLLE MEADOW	
2001	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-168	4/30/2003												INSPECTION	NECRO: ORGANOSOMATIC INDEX, STOLLE MEADOW	
5 SOUTHEAST REGION			D																
ADULT	CLEAR SPRINGS	RAINBOW TROUT		03-151	4/3/2003												INSPECTION	UNIDENTIFIED TISSUE, IMPOSSIBLE TO POSITIVELY IDENTIFY AS A PARASITE.	
ACE DEVELOPMENT			D																
2002	HYBRID	TILAPIA		03-198	6/24/2003	-	-		-	-	-				+	-	-	CERTIFICATIO N	N NO SIGNIFICANT PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, AEROMONAS SOBRIA 3/65, PTD-WHD 0/60, CSH 0/60
2003	HYBRID	TILAPIA		03-536	12/9/2003	-	-		-	-	-				-			CERTIFICATIO N	N NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE
AMERICAN FALLS HATCHERY			A																
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-099	3/25/2003						-	-			+	+		DIAGNOSTIC	CWD, MAS; FLAVOBACTERIUM PSYCHROPHILUM 7/8, AEROMONAS HYDROPHILA 3/8
2003	WESTSLOPE TROUT COMPANY	WESTSLOPE CUTTHROAT TROUT		03-420	10/1/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/12
2003	CONNOR LAKE (CANADA)	WESTSLOPE CUTTHROAT TROUT		03-421	10/1/2003	-	-		-	-	-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE 0/4, PTD-WHD 0/60
2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-422	10/1/2003						-	-			+			DIAGNOSTIC	MAS; AEROMONAS HYDROPHILA 3/4

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BroodYr	Stock	Species	Class	Sample	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH	ExamType	Diagnoses
			Accession	Date													
2003	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-485	11/10/200	-	-		-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/5, EXCESS GLYCOGEN DEPOSITS IN LIVER
ARRANIA			D														
2002	HYBRID	TILAPIA		03-199	6/24/2003	-	-	-	-	-	-	-	-	-		CERTIFICATIO N	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE 0/60, PTD-WHD 0/60, CSH 0/60
2003	HYBRID	TILAPIA		03-537	12/9/2003	-	-	-	-	-	-	-	-	-		CERTIFICATIO N	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE
ASHTON HATCHERY			B														
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-088	3/17/2003	-	-	-	-	-	-	-	-	-		INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/48, BACTE 0/12, PTD-WHD 0/60
CABINET GORGE HATCHERY			A														
2003	SULLIVAN SPRINGS	KOKANEE SALMON		03-174	5/6/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/30, NAVHS 0/20
BROOD	CLARK FORK RIVER	KOKANEE SALMON		03-539	12/9/2003	-	-	+								INSPECTION	BKD; VIRO 0/60, FAT 0/60, ELISA 6/12(X5) (LOW 4, HIGH 2), PTD-WHD 0/60
BROOD	SULLIVAN SPRINGS	KOKANEE SALMON		03-540	12/10/200	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, ELISA 0/60, PTD-WHD 0/60
CLEARWATER HATCHERY			C														
2001	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-007	1/8/2003	-	-	-	-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	N. F. CLEARWATER RIVER	STEELHEAD, B GROUP		03-008	1/8/2003	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10
2002	N. F. CLEARWATER RIVER	STEELHEAD, B GROUP		03-094	3/20/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, ELISA 0/20, PTD-WHD 0/20
2003	N. F. CLEARWATER RIVER	STEELHEAD, B GROUP		03-206	7/1/2003	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-248	8/8/2003	+	-	-	+							INSPECTION	IHNV, BKD; IHNV 5/7(X3), IPNV 0/20, NAVHS 0/20, ELISA 15/18 (LOW 13, HIGH 2), PTD-WHD 0/20
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-253	8/12/2003	+	-	-	+							INSPECTION	IHNV, BKD; IHNV 5/8(X3), IPNV 0/23, NAVHS 0/11, ELISA 5/18 (LOW 3, HIGH 2)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-273	8/15/2003	-	-	-	+							INSPECTION	BKD; VIRO 0/17 NAVHS 0/17, ELISA 28/37 (LOW 22, HIGH 6)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-276	8/19/2003				+							INSPECTION	BKD; ELISA 60/95 (LOW 37, HIGH 23)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-298	8/22/2003				+							INSPECTION	BKD; ELISA 50/78 (LOW 28, HIGH 22)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-302	8/26/2003				+							BROOD	BKD; ELISA 29/53 (LOW 17, HIGH 12)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-336	8/28/2003				+							INSPECTION	BKD; ELISA 13/17 (LOW 10, HIGH 3)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-340	9/3/2003				+							INSPECTION	BKD; ELISA 18/18 (LOW 17, HIGH 1)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-365	9/5/2003				+							INSPECTION	BKD; ELISA 1/4 (HIGH 1)

BroodYr	Stock	Species	Accession	Sample Date	Class										ExamType	Diagnoses		
					IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH	
BROOD	S. F. CLEARWATER RIVER	SPRING CHINOOK	03-368	9/9/2003													INSPECTION	BKD; ELISA 4/6 (LOW 3, HIGH 1)
2003	N. F. CLEARWATER RIVER	STEELHEAD, B GROUP	03-500	11/17/200					-	-	+	-					INSPECTION	CWD; FLAVOBACTERIUM PSYCHROPHILUM 1/3
COWLITZ SALMON HATCHERY,																		
2001	COWLITZ RIVER, WA	COHO SALMON	03-133	4/6/2003											-		RESEARCH	MYXOBOLUS SPP; HISTO-MYXOBOLUS SPP 1/2
CROOKED RIVER SATELLITE																		
2002	S. F. CLEARWATER RIVER	SPRING CHINOOK	03-204	6/29/2003	-	-		-	-	-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	S. F. CLEARWATER RIVER	SPRING CHINOOK	03-245	8/6/2003	-	-		-	-	-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	S. F. CLEARWATER RIVER	SPRING CHINOOK	03-370	9/11/2003	-	-	-	-							-		INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, NAVHS 0/20, FAT 0/20, ELISA 0/20, PTD-WHD 0/20
DWORSHAK NFH																		
BROOD	N. F. CLEARWATER RIVER	STEELHEAD, B GROUP	03-073	3/5/2003	+	-	-										INSPECTION	IHN; IHNV 23/120, IPNV 0/120, NAVHS 0/12
BROOD	N. F. CLEARWATER RIVER	STEELHEAD, B GROUP	03-083	3/11/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/114, NAVHS 0/12
BROOD	N. F. CLEARWATER RIVER	STEELHEAD, B GROUP	03-093	3/18/2003	+	-											INSPECTION	IHNV; IHNV 2/30, IPNV 0/30
BROOD	N. F. CLEARWATER RIVER	SPRING CHINOOK	03-307	8/27/2003	+	-		+									INSPECTION	IHNV, BKD; IHNV 31/37, IPNV 0/37, ELISA 13/37 (LOW 9, HIGH
BROOD	N. F. CLEARWATER RIVER	SPRING CHINOOK	03-341	9/3/2003	+	-		+									INSPECTION	IHNV, BKD; IHNV 13/39, IPNV 0/39, ELISA 7/39 (LOW 4, HIGH
BROOD	N. F. CLEARWATER RIVER	SPRING CHINOOK	03-369	9/9/2003	+	-		+									INSPECTION	IHNV, BKD; IHNV 11/21, IPNV 0/21, ELISA 2/21 (HIGH 2)
BROOD	N. F. CLEARWATER RIVER	SPRING CHINOOK	03-378	9/16/2003	+	-		+									INSPECTION	IHNV, BKD; IHNV 34/49, IPNV 0/49, ELISA 3/49 (LOW 2, HIGH
BROOD	N. F. CLEARWATER RIVER	SPRING CHINOOK	03-396	9/23/2003	+	-		+									INSPECTION	IHNV, BKD; IHNV 19/31, IPNV 0/31, ELISA 2/31 (2 HIGH)
EAGLE HATCHERY																		
BY02	EAST FORK SALMON RIVER	CHINOOK SALMON	03-009	1/8/2003	-	-		-									DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1
BY02	EAST FORK SALMON RIVER	CHINOOK SALMON	03-010	1/10/2003	-	-		-									DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1
BY02	W.F. YANKEE FORK	CHINOOK SALMON	03-017	1/17/2003	-	-											INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1
BY00	REDFISH LAKE	SOCKEYE SALMON	03-034	1/24/2003	-	-		-									DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY01	REDFISH LAKE	SOCKEYE SALMON	03-047	2/7/2003	-	-		-									DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	REDFISH LAKE	SOCKEYE SALMON	03-054	2/20/2003	-	-		-									DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY01	REDFISH LAKE	SOCKEYE SALMON	03-060	2/22/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY02	HAYSPUR	RAINBOW TROUT	03-061	2/26/2003													RESEARCH	BIOASSAY OF NEW WELL WATER, NO GROSS PATHOLOGY OBSERVED ON GILLS.

BroodYr	Stock	Species	Accession	Sample Date	Class											ExamType	Diagnoses	
					IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH			
BY00	REDFISH LAKE	SOCKEYE SALMON	03-064	2/28/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY02	EAST FORK SALMON RIVER	CHINOOK SALMON	03-065	2/28/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1
BY99	LEMHI RIVER	CHINOOK SALMON	03-066	3/4/2003	-	-	-	-	-								DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, BACTE
BY01	REDFISH LAKE	SOCKEYE SALMON	03-074	3/6/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY01	W.F. YANKEE FORK	CHINOOK SALMON	03-141	4/11/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	YANKEE FORK RIVER	CHINOOK SALMON	03-175	5/7/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY98	LEMHI RIVER	CHINOOK SALMON	03-176	5/7/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY00	REDFISH LAKE	SOCKEYE SALMON	03-196	6/19/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	LEMHI RIVER	CHINOOK SALMON	03-197	6/21/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1, ELISA 0/1, PTD-WHD 1/1
BY98	LEMHI RIVER	CHINOOK SALMON	03-200	6/26/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY99	LEMHI RIVER	CHINOOK SALMON	03-201	6/29/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY99	EAST FORK SALMON RIVER	CHINOOK SALMON	03-209	7/10/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY99	REDFISH LAKE	SOCKEYE SALMON	03-210	7/12/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	LEMHI RIVER	SPRING CHINOOK	03-219	7/18/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY98	LEMHI RIVER	CHINOOK SALMON	03-220	7/21/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1, ELISA 0/1, PTD-WHD 0/1
23 BY98	YANKEE FORK RIVER	CHINOOK SALMON	03-223	7/23/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1, ELISA 0/1, PTD-WHD 0/1
BY98	YANKEE FORK RIVER	CHINOOK SALMON	03-224	7/23/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1, ELISA 0/1
BY98	LEMHI RIVER	CHINOOK SALMON	03-225	7/23/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1, ELISA 0/1, PTD-WHD 0/1
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-226	7/28/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1, ELISA 0/1
BY99	YANKEE FORK RIVER	CHINOOK SALMON	03-234	7/30/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY01	REDFISH LAKE	SOCKEYE SALMON	03-259	8/17/2003	-	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-288	8/26/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	EAST FORK SALMON RIVER	SPRING CHINOOK	03-327	9/3/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-350	9/9/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, NAVHS 0/4, ELISA 0/4, PTD-WHD 0/4
BY99	EAST FORK SALMON RIVER	CHINOOK SALMON	03-351	9/9/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2, NAVHS 0/2, ELISA
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-373	9/16/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY99	EAST FORK SALMON RIVER	CHINOOK SALMON	03-388	9/22/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2, NAVHS 0/2, ELISA
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-389	9/22/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1

BroodYr	Stock	Species	Accession	Sample Date	Class											ExamType	Diagnoses	
					IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH			
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-390	9/23/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
WILD	REDFISH LAKE	KOKANEE SALMON	03-391	9/25/2003	-	-	+										INSPECTION	RS, MYXOBOLUS SPP: VIRO 0/8, ELISA 1/2(4), PTD-MYXOBOLUS 1/4(X5), PCR-MYXOBOLUS CEREBRALIS 0/1, PCR-NEUROTROPIC MYXOBOLUS 0/1
WILD	PETTIT LAKE	KOKANEE SALMON	03-392	9/26/2003	-	-	+										INSPECTION	RS; VIRO 0/12, ELISA 1/3(X4), PTD-WHD 0/12
WILD	ALTURAS LAKE	KOKANEE SALMON	03-393	9/27/2003	-	-	-										INSPECTION	WHD: VIRO 0/10, ELISA 0/2, PTD-MYXOBOLUS 1/2(X5), PCR-MYXOBOLUS CEREBRALIS 3/5
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-394	9/24/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-397	9/26/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY99	EAST FORK SALMON RIVER	CHINOOK SALMON	03-398	9/26/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-413	9/29/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1, ELISA 0/1, PTD-WHD 0/1
BY99	EAST FORK SALMON RIVER	CHINOOK SALMON	03-414	9/29/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/6, NAVHS 0/4, ELISA
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-415	9/29/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1, ELISA
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-423	10/2/2003													INSPECTION	NO PATHOGENS DETECTED; PTD-WHD 0/1
BY99	EAST FORK SALMON RIVER	CHINOOK SALMON	03-424	10/2/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, NAVHS 0/4, ELISA
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-425	10/2/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1, ELISA
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-426	10/3/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1, ELISA
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-427	10/4/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-428	10/5/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-430	10/6/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY98	EAST FORK SALMON RIVER	CHINOOK SALMON	03-433	10/9/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BY99	EAST FORK SALMON RIVER	CHINOOK SALMON	03-434	10/8/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/2
BY00	EAST FORK SALMON RIVER	CHINOOK SALMON	03-435	10/9/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/11, ELISA 0/11
AN03	REDFISH LAKE	SOCKEYE SALMON	03-439	10/10/200	-	-	-	+	-	+	-	-	-				INSPECTION	FUR, CWD, NEUROTROPIC MYXOBOLUS, PARVICAPSULA; VIRO 0/2, FAT 0/2, ELISA 0/2, FLAVOBACTERIUM PSYCHROPHILUM 1/2, AEROMONAS SALMONICIDA 1/2, PTD-MYXOB 1/2, CSH 0/2, PCR-PARVICAPSULA 2/2MINIBICORNIS 2/2, PCR-MYXOBOLUS CEREBRALIS 0/2,
BY00	REDFISH LAKE	SOCKEYE SALMON	03-440	10/14/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/5, NAVHS 0/3, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-442	10/17/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, NAVHS 0/1, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-444	10/21/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, NAVHS 0/2, ELISA
BY99	REDFISH LAKE	SOCKEYE SALMON	03-445	10/21/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	REDFISH LAKE	SOCKEYE SALMON	03-453A	10/23/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/26, NAVHS 0/26, ELISA

BroodYr	Stock	Species	Accession	Sample Date	Class										ExamType	Diagnoses		
					IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH	
BY01	REDFISH LAKE	SOCKEYE SALMON	03-453B	10/23/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-455	10/24/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/19, NAVHS 0/19, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-457	10/28/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/29, NAVHS 0/3, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-460	10/29/200	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	REDFISH LAKE	SOCKEYE SALMON	03-467	10/30/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/33, NAVHS 0/5, ELISA
BY01	REDFISH LAKE	SOCKEYE SALMON	03-468	10/30/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, NAVHS 0/2, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-470	11/2/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	REDFISH LAKE	SOCKEYE SALMON	03-471	11/3/2003	-	-	-	+									INSPECTION	RS; VIRO 0/33, NAVHS 0/1, ELISA 1/33 (LOW 1)
BY01	REDFISH LAKE	SOCKEYE SALMON	03-472	11/3/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2, NAVHS 0/1, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-473	11/5/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY01	REDFISH LAKE	SOCKEYE SALMON	03-477	11/6/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	REDFISH LAKE	SOCKEYE SALMON	03-478	11/6/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4
BY00	REDFISH LAKE	SOCKEYE SALMON	03-481	11/7/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY99	REDFISH LAKE	SOCKEYE SALMON	03-482	11/10/200	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY99	REDFISH LAKE	SOCKEYE SALMON	03-483	11/10/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/7, NAVHS 0/1, ELISA
BY01	REDFISH LAKE	SOCKEYE SALMON	03-484	11/10/200	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY99	REDFISH LAKE	SOCKEYE SALMON	03-487	11/11/200	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
BY00	REDFISH LAKE	SOCKEYE SALMON	03-488	11/11/200	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2, ELISA 0/2
BY00	REDFISH LAKE	SOCKEYE SALMON	03-489	11/11/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-491	11/12/200	-	-		+									INSPECTION	RS; VIRO 0/31, ELISA 1/31 (LOW 1)
BY99	REDFISH LAKE	SOCKEYE SALMON	03-492	11/12/200	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/3, ELISA 0/3
BY01	REDFISH LAKE	SOCKEYE SALMON	03-493	11/12/200	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/28, ELISA 0/28
BY99	REDFISH LAKE	SOCKEYE SALMON	03-495	11/13/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1, ELISA
BY00	REDFISH LAKE	SOCKEYE SALMON	03-496	11/13/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/45, NAVHS 0/5, ELISA
BY01	REDFISH LAKE	SOCKEYE SALMON	03-497	11/13/200	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/38, NAVHS 0/4, ELISA

EAGLE WET LAB

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2002	HAYSPUR	RAINBOW TROUT	03-186	5/29/2003													RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/29
2003	TROUTLODGE	RAINBOW TROUT	03-441	10/16/200													RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/21

BroodYr	Stock	Species	Class	Accession	Sample Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH	ExamType	Diagnoses	
EPICENTER AQUACULTURE			D																
2003	HYBRID	TILAPIA		03-503	11/21/200	-	-		-	-	-	-	+				INSPECTION	MAS; VIRO 0/60, FAT 0/60, AEROMONAS HYDROPHILA	
GRACE HATCHERY			A																
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-002	1/2/2003	-	-			-	-	+	-				DIAGNOSTIC	CWD; VIRO 0/4, FLAVOBACTERIUM PSYCHROPHILUM 4/4	
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-036	1/23/2003												DIAGNOSTIC	BGD; BACTERIAL GILL DISEASE 8//8 (visual)	
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-040	2/4/2003					-	-	+	+				DIAGNOSTIC	CWD, MAS; FLAVOBACTERIUM PSYCHROPHILUM 6/11, AEROMONAS CAVIAE 4/11, PSEUDOMONAS FLUORESCENS/AUREOFACIENS 9/11	
2003	WESTSLOPE TROUT COMPANY	WESTSLOPE CUTTHROAT TROUT		03-287	8/25/2003					-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED: BACTE 0/8	
2003	WESTSLOPE TROUT COMPANY	WESTSLOPE CUTTHROAT TROUT		03-419	9/20/2003	-	-		-	-	-	+	+				INSPECTION	CWD, MAS; VIRO 0/60, FAT 0/12, FLAVOBACTERIUM PSYCHROPHILUM 1/8, AEROMONAS HYDROPHILA 1/8	
2003	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-486	11/11/200	-	-			-	-	+	-				DIAGNOSTIC	CWD; VIRO 0/5, FLAVOBACTERIUM PSYCHROPHILUM 5/5	
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-541	12/16/200					-	-	+	+				DIAGNOSTIC	CWD, MAS; FLAVOBACTERIUM PSYCHROPHILUM 12/12, AEROMONAS HYDROPHILA 2/12	
HAGERMAN SFH			C																
2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-037	1/24/2003	-	-			-	-	+	+				DIAGNOSTIC	CWD, MAS; VIRO 0/8, FLAVOBACTERIUM PSYCHROPHILUM 7/8, AEROMONAS HYDROPHILA 1/8	
2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-055	2/20/2003	-	-			-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/5, BACTE 0/4	
2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-056	2/20/2003	-	-			-	-	+	-				DIAGNOSTIC	CWD; VIRO 0/5, FLAVOBACTERIUM PSYCHROPHILUM 4/4	
2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-057	2/20/2003	-	-			-	-	+	+				DIAGNOSTIC	CWD, MAS, BGD; VIRO 0/5, FLAVOBACTERIUM PSYCHROPHILUM 4/4, AEROMONAS SOBRIA 3/4, BGD 2/5	
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-058	2/20/2003	-	-			-	-	-	+				DIAGNOSTIC	MAS; VIRO 0/4, AEROMONAS HYDROPHILA 4/4	
2003	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-069	3/4/2003	-	-			-	-	+	-				DIAGNOSTIC	CWD; VIRO 0/4, FLAVOBACTERIUM PSYCHROPHILUM 4/4	
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-070	3/4/2003	-	-			-	-	-	+				DIAGNOSTIC	COL, MAS; VIRO 0/4, AEROMONAS HYDROPHILA 1/4, FLAVOBACTERIUM COLUMNARE 2/4	
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-110	4/2/2003	-	-			-	-	+	+				DIAGNOSTIC	CWD, MAS; VIRO 0/5, AEROMONAS SOBRIA 2/4, AEROMONAS CAVIAE 2/4, FLAVOBACTERIUM	
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-111	4/2/2003	-	-			-	-	+	-				DIAGNOSTIC	CWD; VIRO 0/4, FLAVOBACTERIUM PSYCHROPHILUM 3/4	
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-112	4/2/2003	-	-			-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED: VIRO 0/5, BACTE 0/4	
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-113	4/2/2003	+	-	-		-	-	-	+				DIAGNOSTIC	IHNV, MAS; IHNV 1/1(X5), IPNV 0/5, NAVHS 0/5, PSEUDOMONAS SPP. 1/4	
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-131	3/26/2003												RESEARCH	NO PATHOGENS DETECTED: PCR-PKX 0/10	

BroodYr	Stock	Species	Class	Sample		IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH	ExamType	Diagnoses
			Accession	Date														
2003	HAYSPUR	KAMLOOPS RBT-TRIPLOID	03-155	4/4/2003	-	-	-	-	-	-	+	-					DIAGNOSTIC	CWD; VIRO 0/5, FLAVOBACTERIUM PSYCHROPHILUM 1/4
2003	HAYSPUR	KAMLOOPS RBT-TRIPLOID	03-156	4/21/2003	+	-	-	-	-	-	+	-					DIAGNOSTIC	IHN, CWD; IHNV 1/1(5), IPNV 0/5, FLAVOBACTERIUM PSYCHROPHILUM 1/4
2002	EAGLE CREEK	COHO SALMON	03-172	5/3/2003	-	-	-	-	-	-	+	+					DIAGNOSTIC	CWD, MAS; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 7/8, AEROMONAS HYDROPHILA 1/8
2003	TROUTLODGE	RAINBOW TROUT-TRIPLOID	03-202	7/1/2003	-	-	-	-	-	-	+	+					DIAGNOSTIC	CWD, MAS; VIRO 0/5, FLAVOBACTERIUM PSYCHROPHILUM 4/4, SERRATIA LIQUIFACIENS 4/4, AEROMONAS
2003	PAHSIMEROI	STEELHEAD, A GROUP	03-203	7/1/2003	-	-	-	-	-	-	-	-					DIAGNOSTIC	CWD; FLAVOBACTERIUM COLUMNNARE 2/4
2003	TROUTLODGE	RAINBOW TROUT-TRIPLOID	03-431	10/8/2003	+	-	-	-	-	-	+	+					DIAGNOSTIC	IHN, CWD, COL, MAS; IHNV 1/1(x5), IPNV 0/5, FLAVOBACTERIUM PSYCHROPHILUM 4/4, PSEUDOMONAS CHLORAPHIS 3/4, FLAVOBACTERIUM COLUMNNARE 2/4,
2003	TROUTLODGE	RAINBOW TROUT-TRIPLOID	03-432	10/8/2003	-	-	-	-	-	-	+	+					DIAGNOSTIC	CWD, MAS, COL; VIRO 0/5, FLAVOBACTERIUM PSYCHROPHILUM 4/4, AEROMONAS HYDROPHILA 4/4, FLAVOBACTERIUM COLUMNNARE 2/3
2003	HAYSPUR	RAINBOW TROUT	03-494	11/12/200	+	-	-	-	-	-	+	+					DIAGNOSTIC	IHN, CWD, MAS; IHNV 2/2(x5), IPNV 0/10, NAVHS 0/10, FLAVOBACTERIUM PSYCHROPHILUM 10/10, AEROMONAS HYDROPHILA 1/10

HAYSPUR HATCHERY

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BROOD	HAYSPUR	RAINBOW TROUT	03-035	1/23/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/22, NAVHS 0/3, OCP-
27	2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID	03-038A	3/3/2003												RESEARCH	TRIPLOID INDUCTION 37/40 (92.5%)
	2002	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-038B	3/3/2003												RESEARCH	TRIPLOID INDUCTION 39/40 (97.5%)
	2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID	03-038C	3/3/2003												RESEARCH	TRIPLOID INDUCTION 40/40 (100%)
	2002	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-038D	3/3/2003												RESEARCH	TRIPLOID INDUCTION 40/40 (100%)
	2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID	03-038E	4/28/2003												RESEARCH	TRIPLOID INDUCTION 40/40 (100%)
	2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID	03-038F	4/28/2003												RESEARCH	TRIPLOID INDUCTION 36/40 (90%)
	2002	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-038G	4/28/2003												RESEARCH	TRIPLOID INDUCTION 40/40 (100%)
	2000	CONNOR LAKE (CANADA)	WESTSLOPE CUTTHROAT TROUT	03-092	3/19/2003	-	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/50, NAVHS 0/20, OCP-
	2000	CONNOR LAKE (CANADA)	WESTSLOPE CUTTHROAT TROUT	03-100	3/26/2003	-	-		-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/65, OCP-FAT 0/65
	UNKNOW	HAYSPUR	RAINBOW TROUT	03-102	2/7/2003				-								INSPECTION	NO PATHOGENS DETECTED; FAT 0/1, ELISA 0/1, PTD-WHD
	2000	CONNOR LAKE (CANADA)	WESTSLOPE CUTTHROAT TROUT	03-103	3/27/2003				-								INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, ELISA 0/10
	BROOD	HAYSPUR	RAINBOW TROUT	03-129	4/2/2003	-	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, NAVHS 0/1, OCP-
	2000	CONNOR LAKE (CANADA)	WESTSLOPE CUTTHROAT TROUT	03-130	4/3/2003	-	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/50, NAVHS 0/5, OCP-

BroodYr	Stock	Species	Class	Sample										ExamType	Diagnoses	
			Accession	Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD			CSH
BROOD	HAYSPUR	RAINBOW TROUT	03-163	4/23/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, OCP-FAT 0/4
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-169A	5/27/2003											INSPECTION	TRIPLOID INDUCTION 39/40 (97.5%)
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-169B	5/27/2003											INSPECTION	TRIPLOID INDUCTION 40/40 (100%)
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-169C	5/27/2003											INSPECTION	TRIPLOID INDUCTION 40/40 (100%)
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-169D	5/27/2003											INSPECTION	TRIPLOID INDUCTION 40/40 (100%)
BROOD	HAYSPUR	RAINBOW TROUT	03-179	5/7/2003	-	-	-	-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, NAVHS 0/1, OCP-
2001	HAYSPUR	KAMLOOPS RBT	03-241	8/6/2003							-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/3
2000	CONNOR LAKE (CANADA)	WESTSLOPE CUTTHROAT TROUT	03-244	8/8/2003											INSPECTION	NO PATHOGENS DETECTED; FAT 0/18, ELISA 0/18
2003	HAYSPUR	KAMLOOPS RBT-TRIPLOID	03-254A	8/11/2003											INSPECTION	TRIPLOID INDUCTION 40/40 (100%)
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID	03-254B	8/11/2003											INSPECTION	TRIPLOID INDUCTION 38/40 (95.0%)
BROOD	HAYSPUR	KAMLOOPS RBT	03-436	10/9/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/23, OCP-FAT 0/23
BROOD	HAYSPUR	RAINBOW TROUT	03-437	10/9/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/8, OCP-FAT 0/8
BROOD	HAYSPUR	RAINBOW TROUT	03-446	10/22/200	-	-	-	-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/34, NAVHS 0/4, OCP-
BROOD	HAYSPUR	KAMLOOPS RBT	03-469	10/30/200	-	-	-	-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/50, NAVHS 0/5, OCP-
BROOD	HAYSPUR	RAINBOW TROUT	03-474	11/5/2003	-	-	-	-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/49, NAVHS 0/5, OCP-
BROOD	HAYSPUR	KAMLOOPS RBT	03-501	11/19/200	-	-		+							INSPECTION	RS; VIRO 0/26, OCP-FAT 2/26
BROOD	HAYSPUR	RAINBOW TROUT	03-502	11/19/200	-	-		+							INSPECTION	RS; VIRO 0/40, OCP-FAT 2/40
BROOD	HAYSPUR	RAINBOW TROUT	03-538	12/10/200	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/30, OCP-FAT 0/30
BROOD	HAYSPUR	RAINBOW TROUT	03-558	12/30/200	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/12, OCP-FAT 0/12
HENRY'S LAKE			C													
BROOD	HENRY'S LAKE	YELLOWSTONE CUTTHROAT TROUT	03-062	2/20/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/14, OCP-FAT 0/63
BROOD	HENRY'S LAKE	YELLOWSTONE CUTTHROAT TROUT	03-071	2/27/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, OCP-FAT 0/105
BROOD	HENRY'S LAKE	YELLOWSTONE CUTTHROAT TROUT	03-072	3/3/2003	-	-	-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, OCP-FAT 0/140
BROOD	HENRY'S LAKE	YELLOWSTONE CUTTHROAT TROUT	03-081	3/6/2003	-	-	-	-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, NAVHS 0/7, OCP-
BROOD	HENRY'S LAKE	YELLOWSTONE CUTTHROAT TROUT	03-082	3/10/2003	-	-	-	-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/14, NAVHS 0/7, OCP-

BroodYr	Stock	Species	Accession	Sample Date	Class										ExamType	Diagnoses
					IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH		
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-089	3/18/2003	-	-	-	-	-	-	-	-	-	+	INSPECTION	BACTEREMIA, WHD; VIRO 0/60, NAVHS 0/15, FAT 0/60, PASTEURELLA SPP 1/20, PTD-WHD 3/12(X5)
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-090	3/13/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, OCP-FAT 0/84
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-091	3/17/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, OCP-FAT 0/105
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-097	3/20/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/14, NAVHS 0/14, OCP-
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-098	3/24/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, NAVHS 0/21, OCP-
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-108	3/27/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/7, OCP-FAT 0/77
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-109	3/31/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; OCP-FAT 0/77
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-136	4/7/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; OCP-FAT 0/91
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-144	4/10/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; OCP-FAT 0/70
29 BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-145	4/14/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; OCP-FAT 0/49
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-158	4/17/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; OCP-FAT 0/35
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-159	4/21/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; OCP-FAT 0/35
BROOD	HENRYS LAKE	YELLOWSTONE CUTTHROAT TROUT	03-167	4/24/2003	-	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; OCP-FAT 0/70
BROOD	HENRYS LAKE	BROOK TROUT	03-456	10/27/200	-	-	-	+	-	-	+	+	+	INSPECTION	RS, CWD, MAS, WHD; VIRO 0/30, NAVHS 0/3, FAT 0/30, ELISA 3/6(X5, LOW 3), AEROMONAS HYDROPHILA 8/12, FLAVOBACTERIUM PSYCHROPHILUM 5/12, PSEUDOMONAS FLUORENSCENS 3/12, PTD-WHD 1/20	
BROOD	HENRYS LAKE	BROOK TROUT	03-479	11/3/2003	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/24, NAVHS 0/12, OCP-	
BROOD	HENRYS LAKE	BROOK TROUT	03-480	11/6/2003	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/24, NAVHS 0/12, OCP-	
MACKAY HATCHERY																
		B														
2002	DEADWOOD RESERVOIR	KOKANEE SALMON	03-188	6/10/2003	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE 0/12, PTD-WHD 0/60	
2002	SNAKE RIVER	FINE SPOT CUTTHROAT	03-189	6/10/2003	-	-	-	-	-	-	-	-	-	INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE	

BroodYr	Stock	Species	Class	Accession	Sample											ExamType	Diagnoses	
					Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH
MAGIC VALLEY HATCHERY			C															
2002	PAHSIMEROI	STEELHEAD, A GROUP		03-013	1/14/2003	-	-			-	-	+	-				INSPECTION	CWD; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 2/10
2002	SAWTOOTH	STEELHEAD, A GROUP		03-014	1/14/2003	-	-			-	-	+	-				INSPECTION	CWD; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 3/10
2002	UPPER SALMON RIVER	STEELHEAD, B GROUP		03-015	1/14/2003	-	-			-	-	+	-				INSPECTION	CWD; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 5/10
2002	DWORSHAK	STEELHEAD, B GROUP		03-016	1/14/2003	-	-			-	-	+	+				INSPECTION	CWD, MAS; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 9/10, AEROMONAS HYDROPHILA 4/10
2002	PAHSIMEROI	STEELHEAD, A GROUP		03-075	3/6/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, PTD-
2002	SAWTOOTH	STEELHEAD, A GROUP		03-076	3/6/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, PTD-
2002	UPPER SALMON RIVER	STEELHEAD, B GROUP		03-077	3/6/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, PTD-
2002	DWORSHAK	STEELHEAD, B GROUP		03-078	3/6/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, PTD-
2002	DWORSHAK	STEELHEAD, B GROUP		03-114	4/2/2003	-	-			+	-	-	-				DIAGNOSTIC	FUR; VIRO 0/5, AEROMONAS SALMONICIDA 5/5
2002	DWORSHAK	STEELHEAD, B GROUP		03-154	4/21/2003					+	-		-				INSPECTION	FUR; AEROMONAS SALMONICIDA 6/10
2003	DWORSHAK	STEELHEAD, B GROUP		03-187	6/1/2003	-	-			-	-	+	+				DIAGNOSTIC	CWD, MAS; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 7/10, PSEUDOMONAS AERUGINOSA 2/10
2003	DWORSHAK	STEELHEAD, B GROUP		03-238	8/1/2003	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10
2003	UPPER SALMON RIVER	STEELHEAD, B GROUP		03-239	8/1/2003	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10
2003	UPPER SALMON RIVER	STEELHEAD, B GROUP		03-258	8/14/2003	-	-			-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/6, NAVHS 0/3, BACTE
2003	DWORSHAK	STEELHEAD, B GROUP		03-355	9/10/2003	-	-			-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/3, BACTE 0/3
2003	SAWTOOTH	STEELHEAD, A GROUP		03-356	9/10/2003	-	-			-	-	+	+				DIAGNOSTIC	MAS, CWD; VIRO 0/10, AEROMONAS SOBRIA 7/10, FLAVOBACTERIUM PSYCHROPHILUM 7/10
2003	DWORSHAK	STEELHEAD, B GROUP		03-449	10/22/200	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10
2003	SAWTOOTH	STEELHEAD, A GROUP		03-450	10/22/200	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, NAVHS 0/10,
2003	SAWTOOTH	STEELHEAD, A GROUP		03-544	12/17/200	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10
2003	DWORSHAK	STEELHEAD, B GROUP		03-545	12/17/200	-	-			-	-	+	+				INSPECTION	CWD, MAS; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 2/10, PSEUDOMONAS PAUCIMOBILIS
MCCALL HATCHERY			C															
2001	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-005	1/7/2003	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2001	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-084	3/14/2003	-	-			-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, ELISA 0/20, PTD-WHD 0/20
2001	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-085	3/14/2003	-	-			-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, NAVHS 0/5 FAT 0/20, ELISA 0/20, PTD-WHD 0/20

BroodYr	Stock	Species	Class	Accession	Sample											ExamType	Diagnoses	
					Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH
2002	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-192	6/12/2003	-	-		-	-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-235	7/31/2003	-	-		-	-	-	-	+				INSPECTION	MAS; VIRO 0/10, FAT 0/10, AEROMONAS HYDROPHILA 3/10
2002	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-458	10/28/200	-	-		-	-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-498	11/17/200				-	-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, BACTE 0/10

MINTER CREEK HATCHERY

2001	MINTER CREEK, WA	COHO SALMON		03-137	4/9/2003												RESEARCH	MYXOBOLUS SPP.; HISTO-MYXOBOLUS SPP 4/5, PTD(brain)-MYXOBOLUS 2/3
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MONTANA FISH, WILDLIFE &

D

WILD	LAKE MARY RONAN	YELLOW PERCH		03-443	10/8/2003												RESEARCH	NO PATHOGENS DETECTED; PCR-HETEROSPORIS 0/39
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NAMPA HATCHERY

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2002	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-003	1/8/2003	-	-		-	-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, FAT 0/60, BACTE 0/20, PTD-WHD 0/60
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-004	1/8/2003				-	-	-	-					DIAGNOSTIC	NO PATHOGENS DETECTED; BACTE 0/4
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-029	1/21/2003				-	-	+	+					DIAGNOSTIC	CWD, MAS; PSEUDOMONAS VESICULARIS 7/8, FLAVOBACTERIUM PSYCHROPHILUM 3/8, AEROMONAS
2002	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-030	1/22/2003	-	-		-	-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/30, FAT 0/30, BACTE
2002	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-031	1/22/2003	-	-		-	-	-	-					INSPECTION	MAS; VIRO 0/30, FAT 0/30, PSEUDOMONAS PUTIDA 2/20
2002	TROUTLODGE	KAMLOOPS RBT-TRIPLOID		03-039	2/4/2003				-	-	+	-					DIAGNOSTIC	CWD; FLAVOBACTERIUM PSYCHROPHILUM 7/7
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-185	5/27/2003				-	-	+	-					DIAGNOSTIC	CWD; FLAVOBACTERIUM PSYCHROPHILUM 3/4
2003	HAYSPUR	KAMLOOPS RBT-TRIPLOID		03-242	8/7/2003				-	-	+	-					DIAGNOSTIC	CWD; FLAVOBACTERIUM PSYCHROPHILUM 1/4
2003	TROUTLODGE	RAINBOW TROUT-TRIPLOID		03-243	8/7/2003				-	-	+	-					DIAGNOSTIC	CWD; FLAVOBACTERIUM PSYCHROPHILUM 4/4
2003	HAYSPUR	RAINBOW TROUT-TRIPLOID		03-517	12/2/2003				-	-	+	-					DIAGNOSTIC	CWD; FLAVOBACTERIUM PSYCHROPHILUM 4/8

NAMPA RESEARCH

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BROOD	W.F. YANKEE FORK	SPRING CHINOOK		03-347	8/31/2003	-	-		+	-	-	-	+				DIAGNOSTIC	RS; VIRO 0/5, ELISA 1/5 (LOW 1), AEROMONAS SOBRIA 5/5
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NEZ PERCE TRIBE

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BROOD	POWELL	SPRING CHINOOK		03-271	8/14/2003				+								INSPECTION	RS; ELISA 1/2 (LOW 1)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK		03-272	8/15/2003				+								INSPECTION	RS; ELISA 1/1(LOW 1)

BROOD	POWELL	SPRING CHINOOK	03-274	8/18/2003											+	INSPECTION	BKD; ELISA 3/8 (LOW 2, HIGH 1)	
BroodYr	Stock	Species	Accession	Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH	ExamType	Diagnoses	
BROOD	POWELL	SPRING CHINOOK	03-296	8/21/2003													INSPECTION	BKD; ELISA 4/10 (LOW 3, HIGH 1)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-297	8/22/2003													INSPECTION	RS; ELISA 4/8 (LOW 4)
BROOD	POWELL	SPRING CHINOOK	03-299	8/25/2003													INSPECTION	BKD; ELISA 10/21 (LOW 6, HIGH 4)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-301	8/26/2003													INSPECTION	BKD; ELISA 4/8 (LOW 3, HIGH 1)
BROOD	POWELL	SPRING CHINOOK	03-333	8/28/2003													INSPECTION	BKD; ELISA 8/23 (LOW 6, HIGH 2)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-335	8/28/2003													INSPECTION	BKD; ELISA 7/11 (LOW 4, HIGH 1)
BROOD	POWELL	SPRING CHINOOK	03-337	9/2/2003													INSPECTION	BKD; ELISA 6/10 (LOW 3, HIGH 3)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-339	9/3/2003													INSPECTION	BKD; ELISA 10/11 (LOW 9, HIGH 1)
BROOD	POWELL	SPRING CHINOOK	03-362	9/4/2003													INSPECTION	BKD; ELISA 2/8 (LOW 1, HIGH 1)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-364	9/5/2003													INSPECTION	BKD; ELISA 4/7 (LOW 3, HIGH 1)
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-367	9/9/2003													INSPECTION	BKD; ELISA 2/7 (LOW 1, HIGH 1)
BROOD	POWELL	SPRING CHINOOK	03-374	9/11/2003													INSPECTION	NO PATHOGENS DETECTED; ELISA 0/2
BROOD	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-376	9/12/2003													INSPECTION	BKD; ELISA 1/1(HIGH 1)
BROOD	POWELL	SPRING CHINOOK	03-377	9/12/2003													INSPECTION	RS; ELISA 1/1(LOW 1)

NIAGARA SPRINGS HATCHERY

C

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2002	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP	03-011	1/14/2003	-	-			-	-	+	+					INSPECTION	CWD, MAS; VIRO 0/10, AEROMONAS HYDROPHILA 10/10, FLAVOBACTERIUM PSYCHROPHILUM 7/10
2002	PAHSIMEROI	STEELHEAD, A GROUP	03-012	1/14/2003	-	-			-	-	-	+					INSPECTION	MAS; VIRO 0/10, AEROMONAS HYDROPHILA 10/10
2002	PAHSIMEROI	STEELHEAD, A GROUP	03-067	3/4/2003	-	-			-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, PTD-
2002	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP	03-068	3/4/2003	-	-			-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, PTD-
2003	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP	03-237	8/1/2003	-	-			-	-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/10
2003	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP	03-447	10/22/200	-	-			-	-	-	+					INSPECTION	MAS; VIRO 0/10, AEROMONAS HYDROPHILA 2/10
2003	PAHSIMEROI	STEELHEAD, A GROUP	03-448	10/22/200	-	-	-		-	-	+	-					INSPECTION	CWD; VIRO 0/10, NAVHS 0/10, FLAVOBACTERIUM PSYCHROPHILUM 2/10
2003	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP	03-542	12/17/200	-	-			-	-	+	+					INSPECTION	CWD, MAS; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 3/10, PSEUDOMONAS FLUORENSCENS
2003	PAHSIMEROI	STEELHEAD, A GROUP	03-543	12/17/200	-	-			-	-	+	-					INSPECTION	CWD; VIRO 0/10, FLAVOBACTERIUM PSYCHROPHILUM 5/10

BroodYr	Stock	Species	Class	Accession	Sample											ExamType	Diagnoses	
					Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH
OXBOW HATCHERY			C															
2002	LYONS FERRY (SNAKE RIVER)	FALL CHINOOK SALMON		03-053	2/18/2003	-	-			-	-	-	-	+			DIAGNOSTIC	MAS, GBD; VIRO 0/10, AEROMONAS HYDROPHILA 6/8
2002	LYONS FERRY (SNAKE RIVER)	FALL CHINOOK SALMON		03-095	3/24/2003	-	-			-	-	-	-	+			INSPECTION	MAS; VIRO 0/10, FAT 0/10, AEROMONAS HYDROPHILA 1/10
BROOD	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP		03-096	3/24/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/5, PTD-WHD 0/6
BROOD	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP		03-132	4/7/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/21, PTD-WHD 0/15
BROOD	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP		03-138	4/10/2003	-	-			-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/25, NAVHS 0/9
BROOD	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP		03-142	4/14/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/40
BROOD	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP		03-149	4/17/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/42
BROOD	HELLS CANYON (SNAKE RIVER)	STEELHEAD, A GROUP		03-152	4/21/2003	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/32
2002	LYONS FERRY (SNAKE RIVER)	FALL CHINOOK SALMON		03-153	4/21/2003	-	-			-	-	-	-	+			INSPECTION	MAS; VIRO 0/10, FAT 0/10, AEROMONAS HYDROPHILA 2/10
2002	LYONS FERRY (SNAKE RIVER)	FALL CHINOOK SALMON		03-177	5/7/2003	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, NAVHS 0/40, FAT 0/60, ELISA 0/60, PTD-WHD 0/60, CSH 0/60
PAHSIMEROI HATCHERY			C															
2001	PAHSIMEROI	SUMMER CHINOOK SALMON		03-033	1/22/2003	-	-			-	-	-	-	-			INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2001	PAHSIMEROI	SUMMER CHINOOK SALMON		03-101	3/26/2003	-	-			-							INSPECTION	WHD; VIRO 0/20, FAT 0/20, ELISA 0/20, PTD-WHD 2/4(5)
BROOD	PAHSIMEROI	STEELHEAD, A GROUP		03-115	3/27/2003	-	-			-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, NAVHS 0/10
BROOD	PAHSIMEROI	STEELHEAD, A GROUP		03-116	3/31/2003	-	-			-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/36, NAVHS 0/4
BROOD	PAHSIMEROI	STEELHEAD, A GROUP		03-140	4/8/2003	-	-										INSPECTION	WHD; VIRO 0/36, PTD-WHD 1/20
BROOD	PAHSIMEROI	STEELHEAD, A GROUP		03-143	4/14/2003					-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/60
BROOD	PAHSIMEROI	STEELHEAD, A GROUP		03-157	4/21/2003	-	-			-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/18, NAVHS 0/4
2002	PAHSIMEROI	SUMMER CHINOOK SALMON		03-191	6/10/2003	-	-			-	-	-	-	-			INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	PAHSIMEROI	SUMMER CHINOOK SALMON		03-194	6/17/2003	-	-			-	-	-	-	-			DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/4, BACTE 0/4

BroodYr	Stock	Species	Accession	Sample Date	Class										ExamType	Diagnoses			
					IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH		
2002	PAHSIMEROI	SUMMER CHINOOK SALMON	03-208	7/8/2003	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE	
2002	PAHSIMEROI	SUMMER CHINOOK SALMON	03-269	8/20/2003	-	-		+	-	-	-						+	DIAGNOSTIC	BKD, ICH; VIRO 0/6, FAT 5/5, BACTE 0/6,
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-342	9/2/2003				+									INSPECTION	RS; ELISA 11/26 (LOW 11)	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-345	9/5/2003				+									INSPECTION	RS; ELISA 9/20 (LOW 9)	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-361	9/8/2003				+									INSPECTION	RS; ELISA 3/39 (LOW 3)	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-385	9/11/2003				+									INSPECTION	RS; ELISA 3/35 (LOW 3)	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-386	9/15/2003				+									INSPECTION	RS; ELISA 12/70 (LOW 12)	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-387	9/18/2003	-	-	-	+									INSPECTION	RS; VIRO 0/60, NAVHS 0/12, ELISA 1/83 (1 LOW), PTD-WHD	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-395	9/22/2003				+									INSPECTION	RS; ELISA 5/30 (LOW 5)	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-416	9/25/2003				+									INSPECTION	BKD; ELISA 3/20 (LOW 2, HIGH 1)	
BROOD	PAHSIMEROI	SUMMER CHINOOK SALMON	03-417	9/29/2003				+									INSPECTION	BKD; ELISA 6/23 (LOW 4, HIGH 2)	
2002	PAHSIMEROI	SUMMER CHINOOK SALMON	03-438	10/8/2003				-									DIAGNOSTIC	ICH, GILL MYCOSIS; FAT 0/5, ICHTHYOPHTHIRIUS MULTIFILIUS 2/6, GILL FUNGUS 4/6	
2002	PAHSIMEROI	SUMMER CHINOOK SALMON	03-476	11/4/2003	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE	
2002	PAHSIMEROI	SUMMER CHINOOK SALMON	03-546	12/18/200	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE	
POWELL SATELLITE																			
2001	POWELL	SPRING CHINOOK	03-105	3/30/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, FAT 0/20, ELISA 0/20, PTD-WHD 0/20	
2002	POWELL	SPRING CHINOOK	03-205	6/30/2003	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE	
2002	POWELL	SPRING CHINOOK	03-246	8/7/2003	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE	
BROOD	POWELL	SPRING CHINOOK	03-247	8/7/2003	+	-	-	+									INSPECTION	IHNV, BKD; IHNV 3/7(X3), IPNV 0/20, NAVHS 0/20, ELISA 5/20 (LOW 4, HIGH 1), PTD-WHD 0/20	

BroodYr	Stock	Species	Accession	Class												ExamType	Diagnoses	
				Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH			
BROOD	POWELL	SPRING CHINOOK	03-251	8/11/2003	+	-	-	+									INSPECTION	BKD, IHNV; IHNV 6/11(X3), IPNV 0/33, NAVHS 0/33 , ELISA 11/31 (LOW 10, HIGH 1)
BROOD	POWELL	SPRING CHINOOK	03-270	8/14/2003	+	-	-	+									INSPECTION	IHNV, BKD; IHNV 1/7, IPNV 0/7, ELISA 11/30 (LOW 9, HIGH 2)
BROOD	POWELL	SPRING CHINOOK	03-275	8/18/2003				+									INSPECTION	BKD; ELISA 16/42 (LOW 13, HIGH 3)
BROOD	POWELL	SPRING CHINOOK	03-295	8/21/2003				+									INSPECTION	BKD; ELISA 10/36 (LOW 6, HIGH 4)
BROOD	POWELL	SPRING CHINOOK	03-300	8/25/2003				+									INSPECTION	BKD; ELISA 14/32 (LOW 7, HIGH 7)
BROOD	POWELL	SPRING CHINOOK	03-334	8/28/2003				+									INSPECTION	BKD; ELISA 15/30 (LOW 9, HIGH 6)
BROOD	POWELL	SPRING CHINOOK	03-338	9/2/2003				+									INSPECTION	BKD; ELISA 9/16 (LOW 5, HIGH 4)
BROOD	POWELL	SPRING CHINOOK	03-363	9/4/2003				+									INSPECTION	BKD; ELISA 4/10 (LOW 3, HIGH 1)
BROOD	POWELL	SPRING CHINOOK	03-366	9/8/2003				+									INSPECTION	BKD; ELISA 3/12 (LOW 1, HIGH 2)
2002	POWELL	SPRING CHINOOK	03-371	9/11/2003	-	-	-	-							-		INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, NAVHS 0/20, FAT 0/20, ELISA 0/20, PTD-WHD 0/20
BROOD	POWELL	SPRING CHINOOK	03-375	9/11/2003				+									INSPECTION	RS; ELISA 1/7 (LOW 1)
RANGEN AQUA CTR		D																
2003	TROUTLODGE	RAINBOW TROUT-TRIPLOID	03-178	5/5/2003				-							-		INSPECTION	NO PATHOGENS DETECTED; FAT 0/60, PTD-WHD 0/60
RAPID RIVER HATCHERY		C																
2001	RAPID RIVER	SPRING CHINOOK	03-006	1/7/2003	-	-		-	-	-	+	-					INSPECTION	CWD; VIRO 0/10, FAT 0/10, FLAVOBACTERIUM PSYCHROPHILUM 5/10
2001	RAPID RIVER	SPRING CHINOOK	03-063	2/26/2003	-	-		-	-	-	-	-					DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/20, BACTE
2001	RAPID RIVER	SPRING CHINOOK	03-079	3/11/2003	-	-		-							-		INSPECTION	NEUROTROPIC MYXOBOLUS; VIRO 0/20, FAT 0/20, ELISA 0/20, PTD-MYXOBOLUS SPP 1/4(X5), PCR-WHD 0/5, PCR-NEUROTROPIC MYXOBOLUS 5/5
2002	RAPID RIVER	SPRING CHINOOK	03-080	3/11/2003					-	-	+	+					INSPECTION	CWD, MAS; FLAVOBACTERIUM PSYCHROPHILUM 10/10, PSEUDOMONAS AUREOFACIENS 6/10
2002	RAPID RIVER	SPRING CHINOOK	03-193	6/12/2003	-	-		-	-	-	-	+					INSPECTION	MAS; VIRO 0/10, FAT 0/10, PSEUDOMONAS SPP 7/10
2002	RAPID RIVER	SPRING CHINOOK	03-236	7/31/2003	-	-		-	-	-	-	+					DIAGNOSTIC	MAS; VIRO 0/6, FAT 0/6, AEROMONAS HYDROPHILA 2/6
BROOD	RAPID RIVER	SPRING CHINOOK	03-252	8/11/2003				-									INSPECTION	NO PATHOGENS DETECTED; ELISA 0/2
BROOD	RAPID RIVER	SPRING CHINOOK	03-260	8/14/2003				+									INSPECTION	BKD; ELISA 3/6 (HIGH 3)
BROOD	RAPID RIVER	SPRING CHINOOK	03-261	8/18/2003				+									INSPECTION	BKD; ELISA 8/28 (LOW 2, HIGH 8)
BROOD	RAPID RIVER	SPRING CHINOOK	03-282	8/21/2003				+									INSPECTION	BKD; ELISA 18/57 (LOW 14, HIGH 4)
BROOD	RAPID RIVER	SPRING CHINOOK	03-286	8/25/2003				+							-		INSPECTION	BKD; ELISA 21/100 (LOW 15, HIGH 6), PTD-WHD 0/20
BROOD	RAPID RIVER	SPRING CHINOOK	03-291	8/26/2003				+									INSPECTION	BKD; ELISA 23/56 (LOW 15, HIGH 8)
BROOD	RAPID RIVER	SPRING CHINOOK	03-306	8/28/2003	+	-	-	+									INSPECTION	BKD; IHNV; IHNV 2/20(X3), IPNV 0/60, NAVHS 0/24, ELISA

BroodYr	Stock	Species	Accession	Class											ExamType	Diagnoses		
				Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH	
BROOD	RAPID CREEK	SPRING CHINOOK	03-308	8/29/2003													INSPECTION	BKD; ELISA 46/95 (LOW 28, HIGH 18)
BROOD	RAPID RIVER	SPRING CHINOOK	03-325	9/2/2003													INSPECTION	BKD; ELISA 65/142 (LOW 44, HIGH 21)
BROOD	RAPID RIVER	SPRING CHINOOK	03-332	9/4/2003													INSPECTION	BKD; ELISA 33/91 (LOW 19, HIGH 14)
BROOD	RAPID RIVER	SPRING CHINOOK	03-348	9/8/2003													INSPECTION	BKD; ELISA 11/17 (LOW 6, HIGH 5)
2002	RAPID RIVER	SPRING CHINOOK	03-349	9/8/2003	-	-		-	-	-	-						INSPECTION	MAS; VIRO 0/6, FAT 0/6, PSEUDOMONAS SPP. 1/6
BROOD	RAPID RIVER	SPRING CHINOOK	03-372	9/11/2003													INSPECTION	BKD; ELISA 1/1 (HIGH 1)
BROOD	RAPID RIVER	SPRING CHINOOK	03-418	9/15/2003													INSPECTION	BKD; ELISA 2/3 (LOW 2)
2002	RAPID RIVER	SPRING CHINOOK	03-459	10/28/200	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	RAPID RIVER	SPRING CHINOOK	03-499	11/17/200				-	-	-	-						INSPECTION	MAS; FAT 0/10, AEROMONAS SOBRIA 2/10
RED RIVER SATELLITE		C																
2001	S.F. CLEARWATER RIVER	SPRING CHINOOK	03-104	3/29/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/15, FAT 0/15, ELISA 0/15, PTD-WHD 0/15
REDFISH LAKE																		
BY01	REDFISH LAKE	SOCKEYE SALMON	03-183	5/15/2003	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, ELISA 0/10, BACTE 0/10, PTD-WHD 0/10
BY01	REDFISH LAKE	SOCKEYE SALMON	03-184	5/15/2003	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, ELISA 0/10, BACTE 0/10, PTD-WHD 0/10
SAWTOOTH HATCHERY		C																
2001	SAWTOOTH	SPRING CHINOOK	03-032	1/22/2003	-	-		-	-	-	-						INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/9, BACTE
2001	SAWTOOTH	SPRING CHINOOK	03-059	2/21/2003	-	-		-	-	-	-						DIAGNOSTIC	MAS; VIRO 0/20, FAT 0/20, PSEUDOMONAS
2001	SAWTOOTH	SPRING CHINOOK	03-087	3/18/2003	-	-		-									INSPECTION	WHD; VIRO 0/20, FAT 0/20, ELISA 0/20, PTD-WHD 1/4(5), POOL #3 PTD-WHD 1/5
BROOD	SAWTOOTH	STEELHEAD, A GROUP	03-106	3/27/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/17, NAVHS 0/9
BROOD	SAWTOOTH	STEELHEAD, A GROUP	03-107	3/31/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/30, NAVHS 0/2
BROOD	SAWTOOTH	STEELHEAD, A GROUP	03-134	4/3/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/35, NAVHS 0/4
BROOD	SAWTOOTH	STEELHEAD, A GROUP	03-135	4/7/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/70, NAVHS 0/8
BROOD	SAWTOOTH	STEELHEAD, A GROUP	03-139	4/10/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/49, NAVHS 0/13
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	03-146	4/11/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/9, NAVHS 0/2
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	03-147	4/15/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/5, NAVHS 0/2
BROOD	SAWTOOTH	STEELHEAD, A GROUP	03-148	4/14/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/62, NAVHS 0/6
BROOD	SAWTOOTH	STEELHEAD, A GROUP	03-150	4/17/2003	-	-		-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/75, NAVHS 0/10

BroodYr	Stock	Class	Species	Accession	Sample											ExamType	Diagnoses		
					Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH	
BROOD	EAST FORK SALMON RIVER		STEELHEAD, B GROUP	03-160	4/18/2003	-	-											INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1
BROOD	SAWTOOTH		STEELHEAD, A GROUP	03-161	4/21/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/80, NAVHS 0/10
BROOD	EAST FORK SALMON RIVER		STEELHEAD, B GROUP	03-162	4/22/2003	-	-											INSPECTION	NO PATHOGENS DETECTED; VIRO 0/6
BROOD	SAWTOOTH		STEELHEAD, A GROUP	03-164	4/24/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/50, NAVHS 0/10
BROOD	EAST FORK SALMON RIVER		STEELHEAD, B GROUP	03-165	4/25/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/5, NAVHS 0/5
BROOD	SAWTOOTH		STEELHEAD, A GROUP	03-166	4/28/2003	-	-		-									INSPECTION	WHD; VIRO 0/20, FAT 0/60, PTD-WHD 4/25
BROOD	SQUAW CREEK		STEELHEAD, B GROUP	03-170	4/29/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1
BROOD	SAWTOOTH		STEELHEAD, A GROUP	03-171	5/1/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/12, NAVHS 0/12
BROOD	SAWTOOTH		STEELHEAD, A GROUP	03-180	5/5/2003	-	-											INSPECTION	NO PATHOGENS DETECTED; VIRO 0/8
BROOD	EAST FORK SALMON RIVER		STEELHEAD, B GROUP	03-181	4/15/2003				-									INSPECTION	WHD; FAT 0/15, PTD-WHD 1/11
BROOD	SQUAW CREEK		STEELHEAD, B GROUP	03-182	4/11/2003													INSPECTION	BKD, WHD; FAT 1/16, PTD-WHD 2/13
2002	SAWTOOTH		SPRING CHINOOK	03-190	6/10/2003	-	-		-	-	-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE
2002	SAWTOOTH		SPRING CHINOOK	03-195	6/17/2003	-	-			-	-	-	-					DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/5, BACTE 0/5
2002	SAWTOOTH		SPRING CHINOOK	03-207	7/8/2003	-	-		-	-	-	-						DIAGNOSTIC	MAS; VIRO 0/20, FAT 0/20, AEROMONAS SOBRIA 16/20, PSEUDOMONAS PUTIDA 4/20
BROOD	SAWTOOTH		SPRING CHINOOK	03-262	8/14/2003	-	-											INSPECTION	RS; VIRO 0/2, ELISA 1/1 (LOW 1)
ADULT	UPPER SALMON RIVER		CARCASS, SPRING CHINOOK SALMON	03-292	8/21/2003	-	-											RESEARCH	NO PATHOGENS DETECTED; VIRO 0/4
37	BROOD	SAWTOOTH	SPRING CHINOOK	03-293	8/25/2003	-	-											INSPECTION	RS; VIRO 0/10, ELISA 1/4 (LOW 1)
BROOD	SAWTOOTH		SPRING CHINOOK	03-294	8/21/2003	-	-											INSPECTION	RS; VIRO 0/12, ELISA 1/6
ADULT	UPPER SALMON RIVER		CARCASS, SPRING CHINOOK SALMON	03-328	8/21/2003	-	-	-										RESEARCH	NO PATHOGENS DETECTED; VIRO 0/22, NAVHS 0/2
BROOD	SAWTOOTH		SPRING CHINOOK	03-329	8/28/2003	-	-											INSPECTION	BKD; VIRO 0/20, ELISA 6/10 (LOW 5, HIGH 1)
BROOD	SAWTOOTH		SPRING CHINOOK	03-330	9/1/2003	-	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, NAVHS 0/1
BROOD	SAWTOOTH		SPRING CHINOOK	03-331	9/2/2003	-	-	-										INSPECTION	RS; VIRO 0/6, NAVHS 0/1, ELISA 1/4 (LOW 1)
BROOD	SAWTOOTH		SPRING CHINOOK	03-346	9/5/2003	-	-	-										9/08/03	RS, WHD; VIRO 0/20, NAVHS 0/2, ELISA 3/7 (LOW 3), PTD-
ADULT	UPPER SALMON RIVER		CARCASS, SPRING CHINOOK SALMON	03-353	9/5/2003	-	-											RESEARCH	NO PATHOGENS DETECTED; VIRO 0/35
BROOD	SAWTOOTH		SPRING CHINOOK	03-354	9/8/2003	-	-	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/45, NAVHS 0/2, ELISA
2002	REDFISH LAKE		SOCKEYE SALMON	03-429	10/7/2003	-	-	-	-	-	-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/60, NAVHS 0/20, FAT 0/53, ELISA 0/60, BACTE 0/18, PTD-WHD 0/59
2002	SAWTOOTH		SPRING CHINOOK	03-475	11/4/2003	-	-		-	-	-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE

BroodYr	Stock	Species	Class	Sample													ExamType	Diagnoses
				Accession	Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ICH		
2002	REDFISH LAKE	SOCKEYE SALMON		03-515	11/26/200	-	-		-	-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, FAT 0/1, BACTE 0/1, PTD-WHD 0/1
SOUTH FORK TRAP			D															
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-263	8/12/2003				+								INSPECTION	RS; ELISA 1/2 (LOW 1)
BROOD	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-264	8/12/2003				-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/3
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-265	8/15/2003				-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/6
BROOD	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-266	8/15/2003				-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/3
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-267	8/19/2003				+								INSPECTION	BKD; ELISA 2/9 (LOW 1, HIGH 1)
BROOD	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-268	8/19/2003	-	-		-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, ELISA 0/10, PTD-
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-284	8/22/2003				+								INSPECTION	BKD; ELISA 9/30 (LOW 7, HIGH 2), PTD-WHD 0/20
BROOD	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-285	8/22/2003	-	-		+								INSPECTION	RS; VIRO 0/3, ELISA 1/3 (LOW 1), PTD-WHD 0/3
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-289	8/26/2003				+								INSPECTION	BKD; ELISA 28/75 (LOW 24, HIGH 4)
BROOD	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-290	8/26/2003	-	-		+								INSPECTION	RS; VIRO 0/1, ELISA 1/1 (LOW 1), PTD-WHD 0/1
BROOD	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-309	8/29/2003	-	-		-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4, PTD-WHD
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-310	8/29/2003				+								INSPECTION	BKD; ELISA 47/157 (LOW 35, HIGH 12)
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-326	9/2/2003	-	-	-	+								INSPECTION	BKD; IHNV 0/60, IPNV 0/60, NAVHS 0/15, ELISA 23/106 (LOW 15, HIGH 8)
BROOD	JOHNSON CREEK	SUMMER CHINOOK SALMON		03-343	9/5/2003	-	-		-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, PTD-WHD
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-344	9/5/2003				+								INSPECTION	BKD; ELISA 22/82 (LOW 20, HIGH 2)
BROOD	S.F. SALMON RIVER	SUMMER CHINOOK SALMON		03-352	9/9/2003				+								INSPECTION	BKD; ELISA 4/14 (LOW 3, HIGH 1)

BroodYr	Stock	Species	Accession	Class											ExamType	Diagnoses		
				Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			ICH	
2003	SNAKE RIVER	CHINOOK SALMON	03-516	4/1/2003					+								RESEARCH	BKD; ELISA 25/40 (LOW 17, HIGH 8)
2003	SNAKE RIVER	CHINOOK SALMON	04-052	5/4/2003					+								RESEARCH	BKD; ELISA 10/79 (LOW 7, HIGH 3)

Sample Origin	Accession	Species	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	Diagnoses
MAJOR: CLEARWATER RIVER SECONDAR MIDDLE FORK TERTIARY: SELWAY RIVER QUATERNA BEAR CREEK TO MOOSE CREEK	03-279	WESTSLOPE CUTTHROAT TROUT Sample Date: 8/30/2003 Received Date: 8/21/2003					46.0895 N, E,		114.892 W N		+				HENNEGUYA; PTD-MYXOBOLUS SPP. 1/1(X3), HENNEGUYA 1/1(X3)
MAJOR: CLEARWATER RIVER SECONDAR MIDDLE FORK SECONDAR MIDDLE FORK TERTIARY: SELWAY RIVER QUATERNA MOOSE CREEK	03-280	WESTSLOPE CUTTHROAT TROUT Sample Date: 8/4/2003 Sample Date: Received Date: 8/21/2003					46.1407 N, E,		114.9128 W N		+	-	+		NEUROTROPIC MYXOBOLUS; PTD-MYXOB 2/2(X5), PCR-M. CEREBRALIS 0/5, PCR-NEUROTROPIC MYXOBOLUS 1/5
MALAD (WOOD) RIVER															
MAJOR: MALAD (WOOD) RIVER SECONDAR BIG WOOD RIVER TERTIARY: MAIN STEM QUATERNA @ KETCHUM-UPPER HULEN MEADOWS	04-178	RAINBOW TROUT Sample Date: 9/29/2003 Received Date:					43.7332 N, E,		114.3862 W N				+		WHD; PTD-MYXOBOLUS CEREBRALIS 1/4(x5)+0/1(x3)
MAJOR: MALAD (WOOD) RIVER SECONDAR BIG WOOD RIVER TERTIARY: MAIN STEM QUATERNA @ KETCHUM-UPPER HULEN MEADOWS	04-179	RAINBOW TROUT Sample Date: 9/30/2003 Received Date:					43.7332 N, E,		114.3862 W 4845556 N		-	-			NO PATHOGENS DETECTED; PTD-MYXOB 0/15
MAJOR: MALAD (WOOD) RIVER SECONDAR BIG WOOD RIVER TERTIARY: MAIN STEM QUATERNA @ GIMLET REACH	04-180	RAINBOW TROUT Sample Date: 10/1/2003 Received Date:					43.6327 N, E,		114.3486 W N				+		WHD; PTD-MYXOBOLUS CEREBRALIS 1/1(X2)
MAJOR: MALAD (WOOD) RIVER SECONDAR BIG WOOD RIVER SECONDAR BIG WOOD RIVER TERTIARY: MAIN STEM QUATERNA @ HAILEY REACH	04-181	WHITEFISH Sample Date: 10/2/2003 Sample Date: Received Date:					43.5145 N, E,		114.3203 W N		+	+	+		WHD, NEUROTROPIC MYXOBOLUS; PTD-MYXOB 17/17; PCR-MYXOBOLUS CEREBRALIS 3/5, PCR- NEUROTROPIC MYXOBOLUS 3/4
SALMON RIVER															
MAJOR: SALMON RIVER SECONDAR SOUTH FORK TERTIARY: STOLLE POND QUATERNA	03-123	CHINOOK SALMON Sample Date: 8/21/2003 Received Date: 4/3/2003					44.5741 N, E,		115.685 W N		-	-			NO PATHOGENS DETECTED; PTD-MYXOB 0/3

Sample Origin		Accession	Species												Diagnoses	
MAJOR:	SALMON RIVER	03-222	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	MYXOBOLUS SPP.; PTD-MYXOB 1/1(X5), PCR-M.
SECONDAR	MIDDLE FORK		Sample Date: 7/17/2003									+	-	-		CEREBRALIS 0/5, PCR-NEUROTROPIC
SECONDAR	MIDDLE FORK		Sample Date:									+		-		MYXOBOLUS 0/5
TERTIARY:	THOMAS CREEK		Received Date: 7/22/2003	GPS				44.7148	N,	115.012	W					
QUATERNA				or	UTM Zone				E,		N					
MAJOR:	SALMON RIVER	03-227	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NO PATHOGENS DETECTED; PTD-MYXOB 0/5
SECONDAR	MIDDLE FORK		Sample Date: 7/15/2003									-	-			
TERTIARY:	GREYHOUND CREEK		Received Date: 7/28/2003	GPS				44.648	N,	115.1679	W					
QUATERNA				or	UTM Zone				E,		N					
MAJOR:	SALMON RIVER	03-228	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NEUROTROPIC MYXOBOLUS; PTD-MYXOB 3/5,
SECONDAR	MIDDLE FORK		Sample Date: 7/16/2003									+	-	+		PCR-M. CEREBRALIS 0/1, PCR-NEUROTROPIC
SECONDAR	MIDDLE FORK		Sample Date:									+		+		MYXOBOLUS 1/1
TERTIARY:	RAPID RIVER		Received Date: 7/28/2003	GPS				44.6781	N,	115.147	W					
QUATERNA				or	UTM Zone				E,		N					
MAJOR:	SALMON RIVER	03-229	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NEUROTROPIC MYXOBOLUS; PTD-MYXOB 1/5,
SECONDAR	MIDDLE FORK		Sample Date: 7/16/2003									+	-	+		PCR-M. CEREBRALIS 0/1, PCR-NEUROTROPIC
SECONDAR	MIDDLE FORK		Sample Date:									+		+		MYXOBOLUS 1/1
TERTIARY:	PISTOL CREEK		Received Date: 7/28/2003	GPS				44.7238	N,	115.1507	W					
QUATERNA				or	UTM Zone				E,		N					
MAJOR:	SALMON RIVER	03-230	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NO PATHOGENS DETECTED; PTD-MYXOB 0/5
SECONDAR	MIDDLE FORK		Sample Date: 7/17/2003									-	-			
TERTIARY:	MARBLE CREEK		Received Date: 7/28/2003	GPS				44.7448	N,	115.017	W					
QUATERNA				or	UTM Zone				E,		N					
MAJOR:	SALMON RIVER	03-231	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	MYXOBOLUS SPP ; PTD-MYXOB 7/9, PCR-
SECONDAR	MIDDLE FORK		Sample Date: 7/18/2003									+	-	-		MYXOBOLUS CEREBRALIS 0/1, PCR-
SECONDAR	MIDDLE FORK		Sample Date:									+		-		NEUROTROPIC MYXOBOLUS 0/1
TERTIARY:	CUB CREEK		Received Date: 7/28/2003	GPS				44.8423	N,	114.7759	W					
QUATERNA				or	UTM Zone				E,		N					
MAJOR:	SALMON RIVER	03-232	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NO PATHOGENS DETECTED; PTD-MYXOB 0/2
SECONDAR	MIDDLE FORK		Sample Date: 7/18/2003									-	-			
TERTIARY:	WHITE CREEK		Received Date: 7/28/2003	GPS				44.791	N,	114.8438	W					
QUATERNA				or	UTM Zone				E,		N					
MAJOR:	SALMON RIVER	03-233	WESTSLOPE CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NO PATHOGENS DETECTED; PTD-MYXOB 0/5
SECONDAR	MIDDLE FORK		Sample Date: 7/18/2003									-	-			
TERTIARY:	LITTLE LOON CREEK		Received Date: 7/28/2003	GPS				44.7321	N,	114.9424	W					
QUATERNA				or	UTM Zone				E,		N					

Sample Origin		Accession	Species	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	Diagnoses
MAJOR:	SALMON RIVER	03-358	WESTSLOPE CUTTHROAT TROUT													NO PATHOGENS DETECTED; PTD-MYXOB 0/4
SECONDAR	MIDDLE FORK		Sample Date: 7/30/2003									-	-			
TERTIARY:	SHIP ISLAND CREEK		Received Date: 9/11/2003	GPS			45.1763	N,	114.7161	W						
QUATERNA				or	UTM Zone			E,		N						
MAJOR:	SALMON RIVER	03-454	KOKANEE SALMON	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NEUROTROPIC MYXOBOLUS; VIRO 0/60, FAT 0/60,
SECONDAR	SOUTH FORK		Sample Date: 10/23/2003	-	-		-					+	-	+		PTD-MYXOB 12/12(X5), PCR-M. CEREBRALIS 0/10,
SECONDAR	SOUTH FORK		Sample Date:									+		+		NEUROTROPIC MYXOBOLUS 7/10
TERTIARY:	WARM LAKE CREEK		Received Date: 10/23/2003	GPS			44.6406	N,	115.673	W						
QUATERNA	WARM LAKE			or	UTM Zone			E,		N						
SNAKE RIVER																
MAJOR:	SNAKE RIVER	04-052	CHINOOK SALMON	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	BKD; ELISA 10/79 (7 LOW, 3 HIGH)
SECONDAR			Sample Date: 6/4/2003				+									
TERTIARY:	BONNEVILLE DAM		Received Date: 1/10/2004	GPS				N,		W						
QUATERNA				or	UTM Zone			E,		N						
MAJOR:	SNAKE RIVER	04-250	RED BAND TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NO PATHOGENS DETECTED; PTD-MYXOB 0/7
SECONDAR	BRUNEAU RIVER		Sample Date: 3/20/2003									-	-			
TERTIARY:	BLACKSTONE		Received Date: 6/23/2004	GPS			42.1339	N,	115.6699	W						
QUATERNA				or	UTM Zone11		609922	E,	4666647	N						
MAJOR:	SNAKE RIVER	04-251	RED BAND TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	NO PATHOGENS DETECTED; PTD-MYXOB 0/6
SECONDAR	REYNOLDS CREEK		Sample Date: 4/1/2003									-	-			
TERTIARY:			Received Date: 6/23/2004	GPS			43.321	N,	116.6872	W						
QUATERNA				or	UTM Zone11		525249	E,	4796505	N						
MAJOR:	SNAKE RIVER	04-252	RED BAND TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	MYXOBOLUS; PTD-MYXOB 3/10 (X5)
SECONDAR	BRUNEAU RIVER		Sample Date: 4/5/2003									+				
TERTIARY:	JARBIDGE RIVER		Received Date: 6/23/2004	GPS			42.2497	N,	115.5463	W						
QUATERNA	CONFLUENCE OF POISON CREEK			or	UTM Zone11		619984	E,	4678246	N						
MAJOR:	SNAKE RIVER	04-253	RED BAND TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	MYXOB; PTD-MYXOB 1/8(x5), PCR-MYXOBOLUS
SECONDAR	SALMON FALLS CREEK		Sample Date: 4/11/2003									+	-	-		CEREBRALIS 0/5, PCR-NEUROTROPIC
SECONDAR	SALMON FALLS CREEK		Sample Date:									+		-		MYXOBOLUS 0/5
TERTIARY:	@ LILLY GRADE		Received Date: 6/23/2004	GPS			42.4505	N,	114.8612	W						
QUATERNA				or	UTM Zone11		675859	E,	4702004	N						
SOUTH FORK SNAKE RIVER																
MAJOR:	SOUTH FORK SNAKE RIVER	04-144	CUTTHROAT TROUT	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	MYXOB	WHD	NEUR	CSH	WHD, NEUROTROPIC MYXOBOLUS; PTD-MYXOB
SECONDAR	PALISADES RESERVOIR		Sample Date: 6/25/2003									+	+	+		6/6(x5); PCR-MYXOBOLUS CEREBRALIS 9/10; PCR-
SECONDAR	PALISADES RESERVOIR		Sample Date:									+		+		NEUROTROPIC MYXOBOLUS 9/10
TERTIARY:	MCCOY CREEK		Received Date: 3/31/2004	GPS			43.1522	N,	111.3208	W						
QUATERNA				or	UTM Zone			E,		N						



WD RESEARCH SUMMARY

Idaho Department of Fish and Game
 Eagle Fish Health Laboratory
 01/01/03 T 12/31/03

LOCATIO		Class	Sample												ExamType	Diagnoses	
BroodYr	Experimental Group	Stock/Species	Accession	Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH			
BLANCHARD CREEK PROJECT																	
2003	YERGENS PASTURE	HAYSPUR RAINBOW	03-255	8/15/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/43
2003	YERGENS POND	HAYSPUR RAINBOW	03-256	8/15/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/39
2003	RED BARN	HAYSPUR RAINBOW	03-257	8/15/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/39
LEMHI TRIAL I																	
2003	CONTROL	TROUT LODGE RAINBOW TROUT	03-311	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	BOHANNON CREEK	TROUT LODGE RAINBOW TROUT	03-312	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	BIG TIMBER CREEK	TROUT LODGE RAINBOW TROUT	03-313	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	CANYON CREEK	TROUT LODGE RAINBOW TROUT	03-314	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	WIMPEY CREEK	TROUT LODGE RAINBOW TROUT	03-315	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	KENNY CREEK	TROUT LODGE RAINBOW TROUT	03-316	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	HAYDEN CREEK	TROUT LODGE RAINBOW TROUT	03-317	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	BIG 8 MILE	TROUT LODGE RAINBOW TROUT	03-318	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	HAWLEY CREEK	TROUT LODGE RAINBOW TROUT	03-319	9/3/2003												RESEARCH	OPEN CASE; HISTO
2003	BIG SPRINGS CREEK	TROUT LODGE RAINBOW TROUT	03-320	9/3/2003												RESEARCH	OPEN CASE; HISTO

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LOCATIO BroodYr	Experimental Group	Class Stock/Species	Accession	Sample Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ExamType	Diagnoses
2003	UPPER LEMHI	TROUT LODGE RAINBOW TROUT	03-321	9/3/2003											RESEARCH	OPEN CASE; HISTO
2003	MID LEMHI	TROUT LODGE RAINBOW TROUT	03-322	9/3/2003											RESEARCH	OPEN CASE; HISTO
2003	L6 R=1	TROUT LODGE RAINBOW TROUT	03-323	9/3/2003											RESEARCH	OPEN CASE; HISTO
2003	L6 R=2	TROUT LODGE RAINBOW TROUT	03-324	9/3/2003											RESEARCH	OPEN CASE; HISTO
2003	CONTROL	HAYSPUR RAINBOW	03-399	10/1/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
2003	BOHANNON CREEK	HAYSPUR RAINBOW	03-400	10/1/2003										+	RESEARCH	WHD; PTD-WHD 1/21
2003	BIG TIMBER CREEK	HAYSPUR RAINBOW	03-401	10/1/2003										+	RESEARCH	WHD; PTD-WHD 38/39
2003	CANYON CREEK	HAYSPUR RAINBOW	03-402	10/1/2003										+	RESEARCH	WHD; PTD-WHD 33/33
2003	BIG 8 MILE	HAYSPUR RAINBOW	03-403	10/1/2003										+	RESEARCH	WHD; PTD-WHD 34/34
2003	HAYDEN CREEK	HAYSPUR RAINBOW	03-404	10/1/2003										+	RESEARCH	WHD; PTD-WHD 20/20
2003	KENNY CREEK	HAYSPUR RAINBOW	03-405	10/1/2003										+	RESEARCH	WHD; PTD-WHD 30/30
2003	WIMPEY CREEK	HAYSPUR RAINBOW	03-406	10/1/2003										+	RESEARCH	WHD; PTD-WHD 23/27, NO CLINICAL SIGNS WHEN SAMPLED, MEAN SPORE COUNT: 51,800 PER HEAD
2003	BIG SPRINGS CREEK	HAYSPUR RAINBOW	03-407	10/1/2003										+	RESEARCH	WHD; PTD-WHD 32/32
2003	HAWLEY CREEK	HAYSPUR RAINBOW	03-408	10/1/2003										+	RESEARCH	WHD; PTD-WHD 32/32
2003	UPPER LEMHI	HAYSPUR RAINBOW	03-409	10/1/2003										+	RESEARCH	WHD; PTD-WHD 28/28
2003	MID LEMHI	HAYSPUR RAINBOW	03-410	10/1/2003										+	RESEARCH	WHD; PTD-WHD 17/17
2003	L6 R=1	HAYSPUR RAINBOW	03-411	10/1/2003										+	RESEARCH	WHD; PTD-WHD 17/17
2003	L6 R=2	HAYSPUR RAINBOW	03-412	10/1/2003										+	RESEARCH	WHD; PTD-WHD 18/18
LEMHI TRIAL II																
2003	CONTROL	RAINBOW TROUT	03-518	12/11/200											RESEARCH	OPEN CASE; HISTO
2003	HC BVC R=1	RAINBOW TROUT	03-519	12/11/200											RESEARCH	OPEN CASE; HISTO
2003	HC BVC R=2	RAINBOW TROUT	03-520	12/11/200											RESEARCH	OPEN CASE; HISTO
2003	HC BOULDER R=1	RAINBOW TROUT	03-521	12/11/200											RESEARCH	OPEN CASE; HISTO
2003	HC BOULDER R-2	RAINBOW TROUT	03-522	12/11/200											RESEARCH	OPEN CASE; HISTO

LOCATIO		Class	Sample													Diagnoses
BroodYr	Experimental Group	Stock/Species	Accession	Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ExamType	Diagnoses
2003	HC EAST F R=2	RAINBOW TROUT	03-524	12/11/200											RESEARCH	OPEN CASE; HISTO
2003	HC HATCHERY R=1	RAINBOW TROUT	03-525	12/11/200										+	RESEARCH	WHD; HISTO 1/5
2003	HC HATCHERY R=2	RAINBOW TROUT	03-526	12/11/200										+	RESEARCH	WHD; HISTO 2/5
2003	LHC-01 R=1	RAINBOW TROUT	03-527	12/11/200										+	RESEARCH	WHD; HISTO 4/5
2003	LHC-01 R=2	RAINBOW TROUT	03-528	12/11/200										+	RESEARCH	WHD; HISTO 3/5
2003	HC BASIN C R=1	RAINBOW TROUT	03-529	12/11/200										+	RESEARCH	WHD; HISTO 5/5
2003	HC BASIN C R=2	RAINBOW TROUT	03-530	12/11/200										+	RESEARCH	WHD; HISTO 5/5
2003	AGENCY C	RAINBOW TROUT	03-531	12/11/200										+	RESEARCH	WHD; HISTO 5/5
2003	BIG SP C	RAINBOW TROUT	03-532	12/11/200										+	RESEARCH	WHD; HISTO 10/10
2003	UPPER LEMHI	RAINBOW TROUT	03-533	12/11/200										+	RESEARCH	WHD; HISTO 10/10
2003	MID LEMHI	RAINBOW TROUT	03-534	12/11/200										+	RESEARCH	WHD; HISTO 5/5
2003	L6	RAINBOW TROUT	03-535	12/11/200										+	RESEARCH	WHD; HISTO 8/10
2003	CONTROL	TROUT LODGE RAINBOW TROUT	04-007	1/12/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/42
2003	HC BVC R=1	TROUT LODGE RAINBOW TROUT	04-010	1/12/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/11

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2003	WET CREEK UPPER	HAYSPUR RAINBOW	03-303	8/29/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/34
2003	WET CREEK LOWER	HAYSPUR RAINBOW	03-304	8/29/2003											+	RESEARCH	WHD; PTD-WHD 32/32
2003	LITTLE LOST RIVER - MAINSTEM	HAYSPUR RAINBOW	03-305	8/29/2003											+	RESEARCH	WHD; PTD-WHD 11/11

PAH V

BY02	TROUT POND	HAYSPUR RAINBOW TROUT-TRIPLOID	03-173	5/6/2003	-	-			-	-	+	+			RESEARCH	CWD, MAS; VIRO 0/1, AEROMONAS HYDROPHILA 1/1, FLAVOBACTERIUM PSYCHROPHILUM 1/1	
2003	CONTROL	HAYSPUR RAINBOW	04-069	7/26/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/32
2003	PAH UPPER	HAYSPUR RAINBOW	04-070	7/26/2003											+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 3/29
2003	TROUT POND	HAYSPUR RAINBOW	04-071	7/26/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/24
2003	PFH INTAKE R=1	HAYSPUR RAINBOW	04-072	7/26/2003											+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 14/14

LOCATIO BroodYr	Experimental Group	Class Stock/Species	Accession	Sample											ExamType	Diagnoses		
				Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH				
2003	PFH INTAKE R=2	HAYSPUR RAINBOW	04-073	7/26/2003												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 20/20
2003	SULPHUR UPPER	HAYSPUR RAINBOW	04-074	7/26/2003												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/26
2003	SULPHUR LOWER	HAYSPUR RAINBOW	04-075	7/26/2003												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 21/21
2003	GOLDBURG R=1	HAYSPUR RAINBOW	04-076	7/26/2003												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 24/24
2003	GOLDBURG R=2	HAYSPUR RAINBOW	04-077	7/26/2003												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 25/25
2003	INDIAN SPRINGS R=2	HAYSPUR RAINBOW	04-078	7/26/2003												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 19/19
2003	PINES R=1	HAYSPUR RAINBOW	04-079	7/26/2003												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 18/19
2003	PINES R=2	HAYSPUR RAINBOW	04-080	7/26/2003												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 25/25
PAH VI																		
2003	DOWTON R=1	HAYSPUR RAINBOW	04-081	10/24/200												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 18/20
2003	DOWTON R=2	HAYSPUR RAINBOW	04-082	10/24/200												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 23/24
2003	P4 R=1	HAYSPUR RAINBOW	04-083	10/24/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/5
2003	P4 R=2	HAYSPUR RAINBOW	04-084	10/24/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/22
2003	ABOVE PBSC2 R=1	HAYSPUR RAINBOW	04-085	10/24/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/30
2003	ABOVE PBSCS R=2	HAYSPUR RAINBOW	04-086	10/24/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/25
2003	HATCH LANE R=1	HAYSPUR RAINBOW	04-087	10/24/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/24
2003	HATCH LANE R=2	HAYSPUR RAINBOW	04-088	10/24/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/22
PAH VII																		
2003	CONTROL	RAINBOW TROUT	04-028	12/17/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/11
2003	GB1 I	RAINBOW TROUT	04-029	12/17/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/24
2003	GB 1 II	RAINBOW TROUT	04-030	12/17/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/15
2003	GB 2 I	RAINBOW TROUT	04-031	12/17/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/8
2003	GB2 II	RAINBOW TROUT	04-032	12/17/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/21
2003	GB 3 I	RAINBOW TROUT	04-033	12/17/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/2
2003	GB 4 I	RAINBOW TROUT	04-034	12/17/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/12
2003	BG 5 I	RAINBOW TROUT	04-035	12/17/200												+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 3/17

LOCATIO		Class	Sample													Diagnoses	
BroodYr	Experimental Group	Stock/Species	Accession	Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ExamType	Diagnoses	
2003	GB 5 II	RAINBOW TROUT	04-036	12/17/200											+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 1/7
2003	BSL 1 I	RAINBOW TROUT	04-037	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/16
2003	BSL 1 II	RAINBOW TROUT	04-038	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/21
2003	BSL 2 I	RAINBOW TROUT	04-039	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/27
2003	BSL 2 II	RAINBOW TROUT	04-040	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/7
2003	BSL 3 I	RAINBOW TROUT	04-041	12/17/200											+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 5/10
2003	BSL 3 II	RAINBOW TROUT	04-042	12/17/200											+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 4/15
2003	BSU 1 I	RAINBOW TROUT	04-043	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/10
2003	BSU 1 II	RAINBOW TROUT	04-044	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/20
2003	BSU 3 I	RAINBOW TROUT	04-045	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/3
2003	BSU 3 II	RAINBOW TROUT	04-046	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/10
2003	BSU 4 I	RAINBOW TROUT	04-047	12/17/200											+	RESEARCH	WHD; PTD-MYXOBOLUS CEREBRALIS 1/14
2003	BSU 4 II	RAINBOW TROUT	04-048	12/17/200											-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/15
SAWTOOTH HATCHERY																	
2003	HEADBOX RCY4	TROUT LODGE RAINBOW TROUT	03-211	7/18/2003											+	RESEARCH	WHD; PTD-WHD 3/4(5), MYXOBOLUS CEREBRALIS 7/20
2003	SETTLING POND INTAKE	TROUT LODGE RAINBOW TROUT	03-212	7/18/2003											+	RESEARCH	WHD; PTD-WHD 2/4(X5), MYXOBOLUS CEREBRALIS 4/20
2003	SETTLING POND EFFLUENT	TROUT LODGE RAINBOW TROUT	03-213	7/18/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/36
SILVER CREEK I																	
2003	TRASH RACK	TROUT LODGE RAINBOW TROUT	03-214	7/18/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
2003	BROOD POND	TROUT LODGE RAINBOW TROUT	03-215	7/18/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
2003	GAVER LAGOON	TROUT LODGE RAINBOW TROUT	03-216	7/18/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/19
2003	TRESTLE	TROUT LODGE RAINBOW TROUT	03-217	7/18/2003											-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20

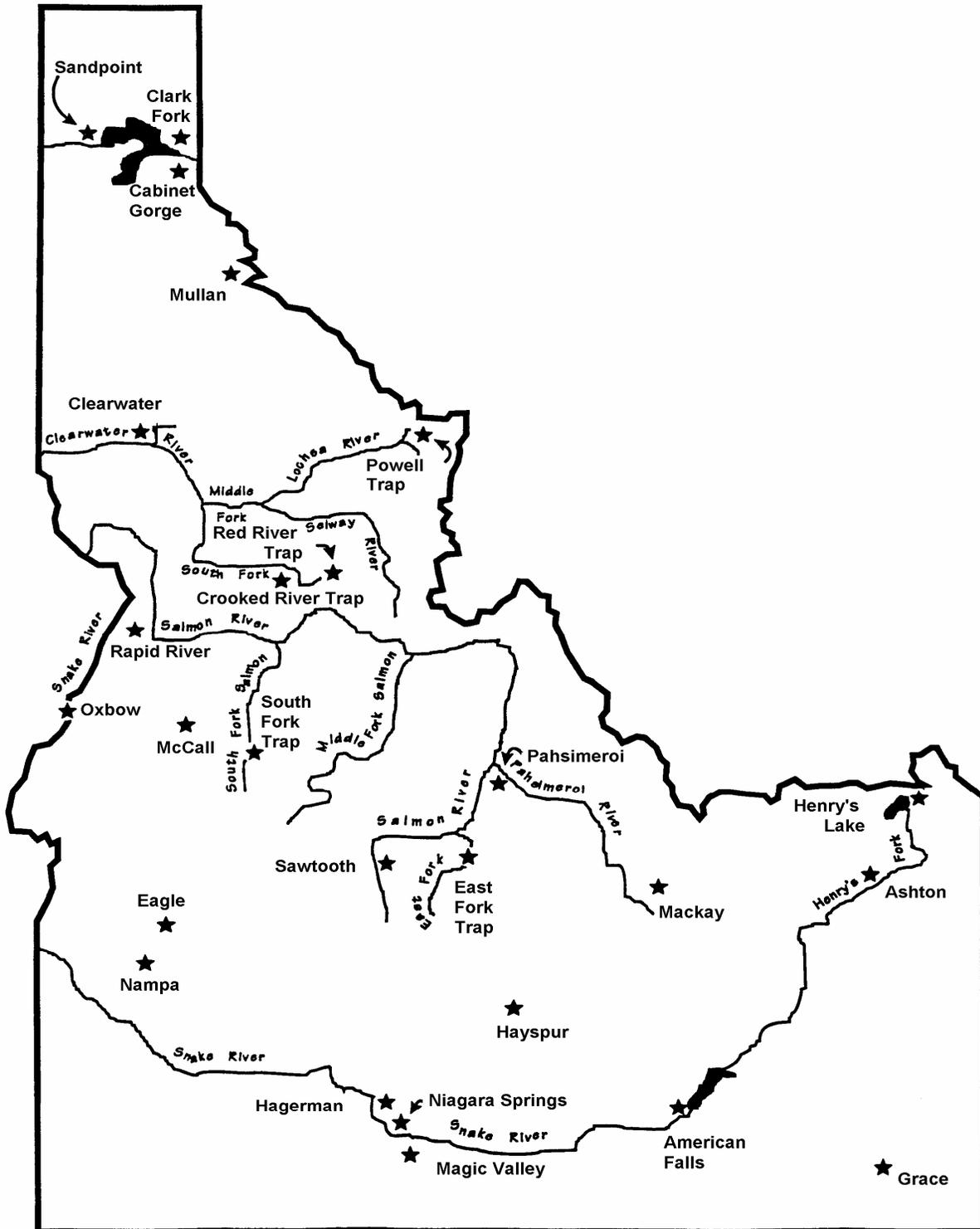
LOCATIO BroodYr	Experimental Group	Class Stock/Species	Accession	Sample Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH	ExamType	Diagnoses
2003	KILPATRICK BRIDGE	TROUT LODGE RAINBOW TROUT	03-218	7/18/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
SILVER CREEK II																
2003	EAGLE WET LAB	TROUT LODGE RAINBOW TROUT	03-221	7/22/2003					-	-	-			+	DIAGNOSTIC	MAS; AEROMONAS HYDROPHILA 1/2
2003	TRASH RACK	HAYSPUR RAINBOW	03-379	9/22/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/19
2003	BROOD POND	HAYSPUR RAINBOW	03-380	9/22/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
2003	GAVER LAGOON	HAYSPUR RAINBOW	03-381	9/22/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
2003	TRESTLE	HAYSPUR RAINBOW	03-382	9/22/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
2003	KILPATRICK BRIDGE	HAYSPUR RAINBOW	03-383	9/22/2003										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
2003	IRRIGATION CANAL SITE I	HAYSPUR RAINBOW	03-384	9/22/2003										+	RESEARCH	WHD; PTD-WHD 41/41
TETON I																
2003	TRAIL CREEK	CUTTHROAT TROUT	03-504	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 4/10
2003	WHITE BRIDGE	CUTTHROAT TROUT	03-505	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 7/10
2003	FOX CREEK	CUTTHROAT TROUT	03-506	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 8/10
2003	CHARLIE ROSS PROPERTY	CUTTHROAT TROUT	03-507	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 2/10
2003	CONTROL	CUTTHROAT TROUT	03-508	12/1/2003										-	RESEARCH	NO PATHOGENS DETECTED; HISTO-WHD 0/10
2003	SIX SPRINGS LAND TRUST	CUTTHROAT TROUT	03-509	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 8/10
2003	STEEL BRIDGE	CUTTHROAT TROUT	03-510	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 10/10
2003	BATE BRIDGE	CUTTHROAT TROUT	03-511	12/1/2003										+	RESEARCH	WHD; HISTO-WHD
2003	BUXTON BRIDGE	CUTTHROAT TROUT	03-512	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 3/10
2003	CACHE BRIDGE	CUTTHROAT TROUT	03-513	12/1/2003										+	RESEARCH	WHD; HISTO-WHD 2/10
2003	HARROPS BRIDGE	CUTTHROAT TROUT	03-514	12/1/2003										-	RESEARCH	NO PATHOGENS DETECTED; HISTO-WHD 0/10
2003	CONTROL	CUTTHROAT TROUT	03-547	12/31/200										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/35
2003	TRAIL CREEK	CUTTHROAT TROUT	03-548	12/31/200										+	RESEARCH	WHD; PTD-WHD 7/37
2003	CHARLIE ROSS PROPERTY	CUTTHROAT TROUT	03-549	12/31/200										-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/37
2003	WHITE BRIDGE	CUTTHROAT TROUT	03-550	12/31/200										+	RESEARCH	WHD; PTD-WHD 20/35

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LOCATIO BroodYr	Experimental Group	Class Stock/Species	Accession	Sample											ExamType	Diagnoses			
				Date	IHN	IPN	NAVHS	BKD	FUR	ERM	CWD	MAS	WHD	CSH					
2003	FOX CREEK	CUTTHROAT TROUT	03-551	12/31/200												+	RESEARCH	WHD; PTD-WHD 15/34	
2003	STEEL BRIDGE	CUTTHROAT TROUT	03-552	12/31/200												+	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 18/23	
2003	SIX SPRINGS LAND TRUST	CUTTHROAT TROUT	03-553	12/31/200												+	RESEARCH	WHD; PTD-WHD 24/33	
2003	BATE BRIDGE	CUTTHROAT TROUT	03-554	12/31/200												+	RESEARCH	WHD; PTD-WHD 19/35	
2003	BUXTON BRIDGE	CUTTHROAT TROUT	03-555	12/31/200												+	RESEARCH	WHD; PTD-WHD 1/29	
2003	CACHE BRIDGE	CUTTHROAT TROUT	03-556	12/31/200												+	RESEARCH	WHD; PTD-WHD 2/35	
2003	HARROPS BRIDGE	CUTTHROAT TROUT	03-557	12/31/200												-	RESEARCH	NO PATHOGENS DETECTED; PTD-MYXOB 0/22	
U OF I PAH TRIAL IV																			
BY02	CONTROL	HAYSPUR RAINBOW TROUT-TRIPLOID	03-018	1/27/2003													-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/20
BY02	HATCH SPRING R=2	HAYSPUR RAINBOW TROUT-TRIPLOID	03-019	1/27/2003													+	RESEARCH	WHD; PTD-WHD 1/5
BY02	BARNES R=1	HAYSPUR RAINBOW TROUT-TRIPLOID	03-020	1/27/2003													-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/16
BY02	BARNES R=2	HAYSPUR RAINBOW TROUT-TRIPLOID	03-021	1/27/2003													-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/21
BY02	GOLDBURG	HAYSPUR RAINBOW TROUT-TRIPLOID	03-022	1/27/2003													+	RESEARCH	WHD; PTD-WHD 7/22
BY02	E IRRIGATION	HAYSPUR RAINBOW TROUT-TRIPLOID	03-023	1/27/2003													-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/25
BY02	PINES R=1	HAYSPUR RAINBOW TROUT-TRIPLOID	03-024	1/27/2003													-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/25
BY02	PINES R=1	HAYSPUR RAINBOW TROUT-TRIPLOID	03-025	1/27/2003													+	RESEARCH	WHD; PTD-WHD 3/22
BY02	PINES R=2	HAYSPUR RAINBOW TROUT-TRIPLOID	03-026	1/27/2003													-	RESEARCH	NO PATHOGENS DETECTED; PTD-WHD 0/4
BY02	INDIAN SPRINGS	HAYSPUR RAINBOW TROUT-TRIPLOID	03-027	1/27/2003													+	RESEARCH	WHD; PTD-WHD 14/14
BY02	PFH INTAKE	HAYSPUR RAINBOW TROUT-TRIPLOID	03-028	1/27/2003													+	RESEARCH	WHD; PTD-WHD 9/10

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

IDAHO DEPARTMENT OF FISH AND GAME
FISH HATCHERIES



Submitted by:

Approved by:

IDAHO DEPARTMENT OF FISH AND GAME

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