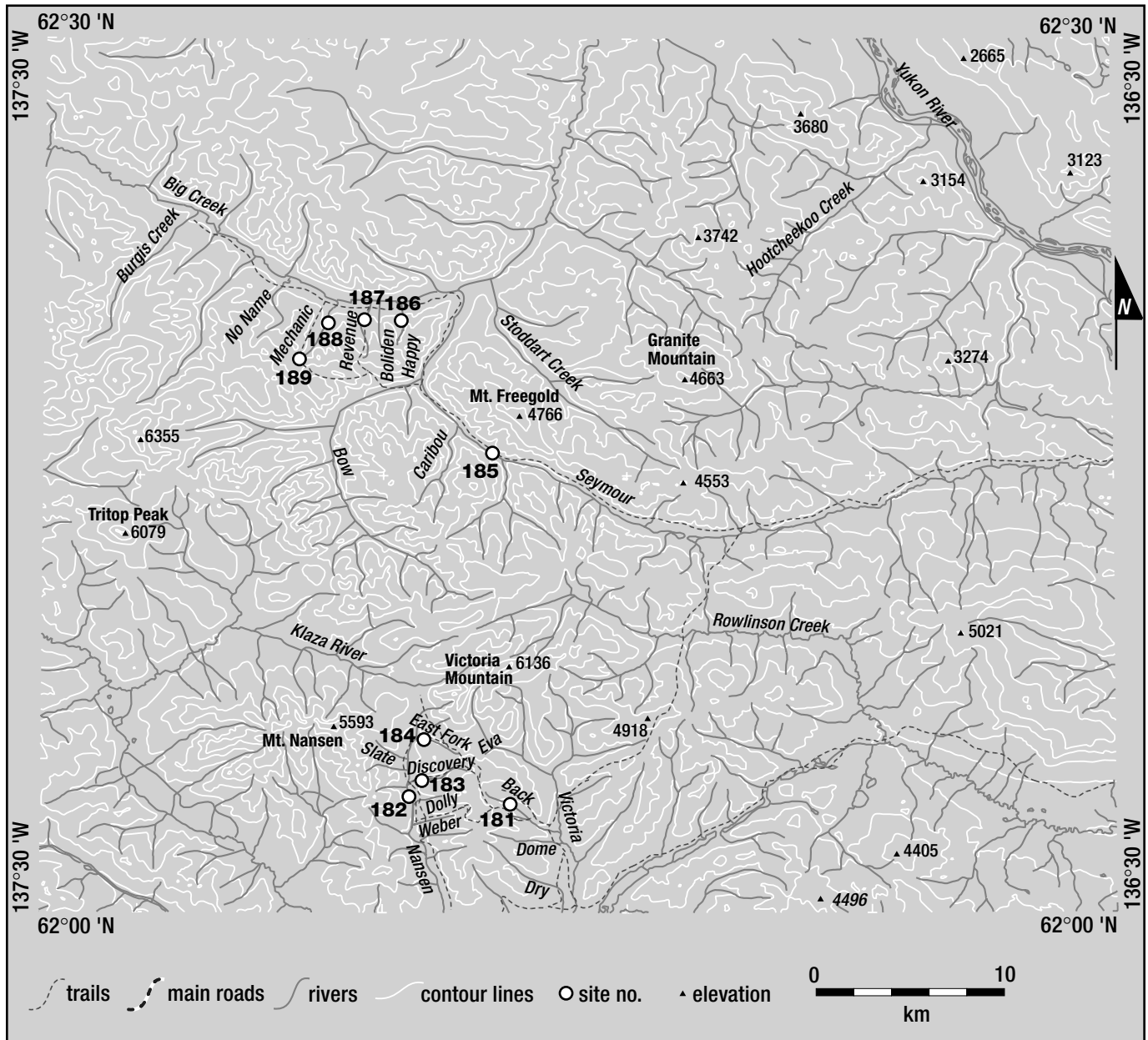


BIG CREEK-NANSEN PLACER AREA

SITES
181-189



LEGEND

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BACK CREEK**1151/3**

Bill Trerice 62°03'N 137°07'W
 Water Licence: PM99-047, LP00021 1998, 1999, 2000, 2001
 Big Creek-Nansen Placer Area **Site no. 181**

OPERATION/LOCATION Bill Trerice has been operating on Back Creek since the 1999 mining season. The 1998 season was spent testing an area in the Klaza River/Iron Creek basin. During the 1999 to 2001 mining season, two miners and one camp personnel worked a single nine-hour shift.

EQUIPMENT/FUNCTION A Komatsu D355 bulldozer was utilized for stripping while a Caterpillar D-8H was used for tailings removal and feeding pay material to a Case 125B excavator. A Caterpillar 966 loader was also used to feed pay material to the sluice plant as well as for general yard work.

WASH PLANT A 4-foot diameter, 20-foot long trommel mounted on a 40-foot trailer was fed by a 4-foot by 8-foot screen deck. Feed material was screened to minus ¾-inch while the oversize was discharged by conveyor. Water was supplied to the wash plant by a 6-inch Monarch electric pump which delivered a pump rate of 1200 igpm.

GROUND DESCRIPTION The bedrock in the area was overlain by 4 feet of black muck then 8 feet of glacial till mixed with gravel. The remaining 4 feet of gravels were sluiced along with decomposed bedrock.

MINING CUTS In 1999, two cuts measuring 200 feet by 40 feet and 150 feet by 70 feet were mined. In 2000, two cuts were also mined. The first cut involved the widening of the 1999 second cut, then a cut measuring approximately 200 feet by 75 feet was mined. The 2001 mining season produced four cuts, each of which was approximately 150 feet long by 70 feet wide. The ground was frozen throughout.

WATER SUPPLY AND TREATMENT Water was acquired from Back Creek. A series of instream settling ponds were utilized to settle out the effluent.

GOLD Ninety percent of the recovered gold was ¼ inch minus while the remaining 10% was ¼ inch plus. The gold is described as very rough, crystalline and wiry. Fineness is 820.

COMMENTS The area of mining activity was in a narrow section of the Back Creek watershed. The right limit was very steep while the left limit was more gradual. Overburden strippings were either pushed sideways or downstream of the mining cuts. Water flows in Back Creek range from very, very small amounts to very high during flood events. Several exploration drill holes were drilled using a churn drill in 2001 in an attempt to delineate pay gravels in the area. Reclamation has been progressive throughout the mining seasons.

NANSEN CREEK**1151/3**

Johnson Exploration 62°04'N 137°14'W
 Water Licence: PM99-146, LP00153 1998, 1999, 2000, 2001
 Big Creek-Nansen Placer Area **Site no. 182**

OPERATION/LOCATION Brian and Loren Johnson began mining on the left limit of Nansen Creek in 1994, working their way upstream from the mouth of Dolly Creek to the mouth of Discovery Creek by 2001.

EQUIPMENT/FUNCTION A D9H bulldozer with a ripper was utilized for stripping and feeding pay material to the sluice plant while a 966D and a 980C Caterpillar front-end loaders were also utilized for stripping and feeding the sluice. Also on-site were two Caterpillar excavators, a 225 and a 235 used mainly for stripping overburden. In the 2000 mining season, an additional 988B caterpillar loader was added.

WASH PLANT A 16-foot belt feeder fed pay material to a 40-foot long by 7-foot diameter trommel. Classified pay material was discharged onto three 26-foot by 10-foot live bottom sluice runs. The sluice runs were lined with 16 feet of 2½-inch expanded metal. Water was fed to the sluice plant by a 4-inch Cummins pump delivering 800 igpm.

GROUND DESCRIPTION The stratigraphic section in the area of the operation was consistent throughout the mining seasons. The 4-foot pay section was overlain by 12 feet of sand and gravel then 2 feet of organics. In the 2001 mining season, the operator attempted to hydraulically strip some sandy overburden with the use of a monitor. The pay section was made up of 70% sand and rock and 30% clay.

MINING CUTS In the 1998 to 2000 mining seasons, two cuts were mined each season, averaging 450 feet long by 180 feet wide. In 2001, two cuts were also mined, the first being 235 feet long by 300 feet wide and the second in a pie-shape configuration measuring 900 feet long by 0 to 100 feet wide.



Johnson Exploration, Nansen Creek.

WATER SUPPLY AND TREATMENT Water was supplied from Nansen Creek and effluent was settled through seepage into the ground as well as in a series of seven settling ponds.

GOLD Of the gold that was recovered, most was in the 40 mesh range, with a few nuggets, some containing quartz. Fineness was 800.

DISCOVERY CREEK

115I/3

Don Frizzell 62°04'N 137°13'W
Water Licence: PM98-058, LP00048 2002
Big Creek-Nansen Placer Area **Site no. 183**

OPERATION/LOCATION Don Frizzell operated on Discovery Creek, a tributary to Nansen Creek, in the 2002 mining season. Some of the 2001 mining season and two-thirds of the 2002 mining season were spent doing extensive clean-up of the area, bringing in and setting up equipment and camp. During the 2002 mining season, three miners and one camp personnel worked a single 12-hour shift.

EQUIPMENT/FUNCTION A Caterpillar D7 bulldozer was utilized for stripping and pushing pay material to a Caterpillar 235 excavator feeding the wash plant. In addition to the bulldozer, a 631 scraper was used for overburden removal and moving washed gravels around the site for road and tailing pond construction. Also on-site was a Caterpillar 966 loader which was used in all aspects of the day-to-day mining operation.

WASH PLANT The wash plant consisted of a 20-foot long by 4-foot diameter trommel which was fed 3-inch minus material by a 12-foot by 12-foot hydraulic finger grizzly set at 10 degrees. A 5-foot by 5-foot screen allowed ¾-inch minus material to pass through a nugget trap then onto two, 2-foot by 12-foot oscillating sluice runs. Screened tailings were then broadcasted by a 32-foot stacker. The plant was powered by a 50KVA Dorman diesel generator and processed 45 to 50 cubic yards per hour. Water was supplied by an 8- by 6-inch 671 GM pump delivering 900 igpm.

GROUND DESCRIPTION The area of mining activity is in a steep, narrow valley with 2 to 6 feet of partly frozen overburden which contained boulders to a depth of up to 3 feet. Everything was sluiced in order to obtain coarse materials for road, settling pond and camp construction.

MINING CUTS Mining in the 2002 season consisted of several test pits on the valley sides which revealed minor quantities of fine gold. A small test area, 20 feet by 150 feet, was sluiced from the left limit of Discovery Creek.

WATER SUPPLY AND TREATMENT Water was supplied through re-circulation and obtained from the number 2 settling pond. A

series of two in-stream settling ponds were utilized to settle out the effluent.

GOLD Most of the recovered gold consisted of fines with a few small nuggets weighing 3 to 8 grams. Colour was dull with a rough texture. Fineness of the gold has not been tested.

COMMENTS This was the first year of mining after five years of building the plant and acquiring the equipment and camp. The operator reports that the new wash plant (designed and built by Mr. Neal Duncan) worked extremely well.

EAST FORK NANSEN CREEK

115I/3

Jack Coghlin 62°06'N 137°12'W
Water Licence: PM97-051 1998, 1999, 2000, 2001, 2002
Big Creek-Nansen Placer Area **Site no. 184**

OPERATION/LOCATION This operation is located on the East Fork of Nansen Creek. Jack Coghlin and Beryl Potter operated a single 9- to 10-hour shift per day and have been mining in this location since 1995.

EQUIPMENT/FUNCTION A D9H and a D7F bulldozer, both equipped with U-blades and rippers, were utilized for stripping and pushing up pay gravels to be sluiced. A 6-cubic yard Trojan loader was used to feed the sluice plant and move tailings.

WASH PLANT The wash plant consisted of a 6-foot by 24-foot trommel fed by a 10-foot by 16-foot hopper. Feed to the sluice runs were screened to ½ inch. The sluice run was 2 feet by 24 feet long and was lined with 2 feet of riffles. The amount of pay material processed was in the order of 30 to 40 cubic yards per hour.

GROUND DESCRIPTION The stratigraphic section of the mining area was generally consistent through the 1998 to 2001 mining seasons. Overburden was 2 to 4 feet in thickness overlying about 4 feet of gravels. The pay zone was generally 3 to 4 feet thick and the size of material ranged from pebble



Jack Coghlin's East Fork Nansen Creek operation.

size to boulders up to 12 inches. The mining cuts did not reach bedrock in the area and during the processing of pay gravels, some clay was sluiced.

MINING CUTS There is no data as to the size of mine cuts for the 1998 and 1999 mining seasons. In 2000, a single cut measuring 150 by 200 feet and in 2001, a cut was mined with the dimensions of 100 by 500 feet. In 2002, there were two mining cuts measuring 60 by 100 feet and 60 by 300 feet. The tailings produced were used to armour the diversion channel and any excess was placed into the previous years mining cuts.

WATER SUPPLY AND TREATMENT The settling facilities for this operation were out-of-stream. There were a series of settling ponds utilized, the largest of which measured 100 by 50 feet and was 12 feet deep. During periods of low water, the operator recycled 100% of the process water and during periods of normal water flows, a 40% recycle rate was employed. Water to the sluice plant was provided by a Flyte 6-inch pump powered by a GM electric motor delivering 800 igpm. Water was obtained from East Fork, Nansen Creek.

GOLD The gold in this area ranges from very fine to rough. The operator encountered some nugget-sized gold but most was around 35 to 50 mesh. Fineness ranged from 790 to 820.



Jack Coglin's East Fork Nansen Creek operation.

SEYMOUR CREEK

1151/6

Ted Tullis

62°18'N 137°18'W

Water Licence: PM00-205, AP00205, PM99-031, LP00119 2000, 2001
Big Creek-Nansen Placer Area

Site no. 185

OPERATION/LOCATION Ted Tullis moved to this site in the fall of 1999 to mine under Bill Harris's water licence and mining land use approval. In the 2000 season, three miners and one camp employee ran two 10-hour shifts per day. However, in 2001, Mr. Tullis worked alone at another location further upstream on the right limit of Seymour Creek. Mr. Tullis acquired his own water licence and mining land use approval for this location. No mining was conducted during the 2002 mining season.

EQUIPMENT/FUNCTION A 980B Caterpillar loader was used to stack tailings, while a 450 Mitsubishi excavator fed the wash plant. A 355 Komatsu bulldozer equipped with a ripper performed stripping and reclamation work.

WASH PLANT In 2000, a 6 by 16-foot double deck screen plant on skids was connected to two 4 by 8-foot side sluice runs for processing gravels. A vibrating grizzly feeder dealt with the bouldery material. A conveyor measuring 30 by 40 inches took away tailings. The 6-inch submersible Flyte pump was powered by a 125 kilowatt generator and was capable of processing about 100 cubic yards per hour. However, in 2001, Mr. Tullis reverted to the trailer-mounted trommel set up, as described in his report on Nansen Creek. A jig and a wheel were used for final clean-ups.

GROUND DESCRIPTION About 3 feet of silty overburden covered 15 to 20 feet of gravel which was composed of material anywhere from sand-sized to rocks measuring 20 inches in diameter. The 3 feet was pushed aside for reclamation at conclusion of the operation and the rest was sluiced.

MINING CUTS In 2000, three different areas were mined totalling approximately 26,000 cubic yards of material moved. Only one cut measuring 100 feet by 75 feet by 30 feet deep was mined in 2001 due to a delay in the new water licence issue.

WATER SUPPLY AND TREATMENT A reservoir pond collected water for sluicing from Seymour Creek and effluent was treated in two out-of-stream settling ponds, measuring approximately 100 feet by 50 feet in size.

GOLD While most of the gold was thin, flaky and very fine, some jagged, rock encrusted nuggets were recovered in 2001. Fines were 850.

COMMENTS Reclamation was completed on the initial site in 2001. Mr. Tullis noted that gold was not in sufficient quantities to be viable.



Dave Acker on Happy Creek.

HAPPY CREEK

1151/6

Dave Acker 62°21'N 137°21'W
 Water Licence: PM97-043 1998, 1999, 2000, 2001, 2002
 Big Creek-Nansen Placer Area **Site no. 186**

OPERATION/LOCATION Mr. Acker's operation is located on Happy Creek which is a tributary of Big Creek. Mining has been ongoing since 1998 when the water licence was issued.

EQUIPMENT/FUNCTION Several types and sizes of equipment have been utilized at the operation. Mainly, a bulldozer is used to strip overburden and to push pay gravels into piles, then a loader would feed the sluice plant.

WASH PLANT A small screen deck was utilized to process pay material.

WATER SUPPLY AND TREATMENT Water was obtained primarily by recirculating from the final settling pond. Total creek flow from Happy Creek was diverted in the settling pond system.

REVENUE AND MECHANIC CREEKS 1150/14

Right Fork Mining 62°20'N 137°17'W
 Water Licence: PM99-053/99-149, LP00036 1998, 1999, 2000, 2001
 Big Creek-Nansen Placer Area **Site no. 187, 188**

OPERATION/LOCATION Both Revenue and Mechanic creeks are right limit tributaries of Big Creek in the Mt. Freegold area. John, Buddy and Diane Gow worked single shifts from 1998 to 2001, joined by Phil Gow on his summer vacations.

EQUIPMENT/FUNCTION An American 35 excavator with a 1 $\frac{1}{8}$ -cubic yard digging bucket was used to feed the sluice plant. An 890 John Deere excavator with a 1 $\frac{1}{2}$ -cubic yard digging bucket was used to clean out settling ponds and perform stripping. A Caterpillar 980B loader hauled

tailings away and a D9L Caterpillar bulldozer was used to do stripping and re-contour tailings. An additional D7 Caterpillar bulldozer was used to push pay material to the excavator and for other odd jobs.

WASH PLANT Thirty-five loose cubic yards of pay material per hour were fed into a 4-cubic yard hopper attached to a vibrating screen deck measuring 4 feet wide by 10 feet long. Materials passed through a 4-inch screen, a 2-inch screen and a $\frac{5}{8}$ -inch screen before entering a triple run sluice, 10 feet wide by 20 feet long. The first 10 feet were lined with 6-pound expanded metal and the bottom 8 feet held Hungarian riffles. Nomad matting lined the entire sluice run, the expanded metal portion of which had a 1 $\frac{3}{4}$ -inch per foot slope. The riffle section was sloped at 3 inches to the foot. A 20 kilowatt generator powered by a Perkins diesel ran the screening plant.

GROUND DESCRIPTION Revenue Creek disclosed a total depth of 60 feet of frozen material at the point where it enters the Big Creek valley. Sand, silt and fine gravels comprised the top 40 to 45 feet of layered black muck. The next 15 to 20 feet was the same material, only mixed with rock ranging from 3 feet to nearly 10 feet in diameter which posed quite a challenge, with a final clay layer covering the bedrock. Fine gold was found in all layers up to 5 feet from the surface and consequently, the bottom 30 to 40 feet had to be sluiced. Upper Revenue Creek, on Whirlwind Pup, decreased slightly to 55 feet of frozen material. Forty feet consisted of silt and ice, and the lower 15 feet were gravel, sand and a small amount of coarse rock which was the portion sluiced. Mechanic Creek, an upstream right limit tributary of Big Creek, consisted of a total depth of 40 feet of frozen material on the lower portion that has been mined to date. The top 5 to 8 feet was composed of moss, ash and silt. The remaining gravels ranged in size from fine to 50% very coarse. Large boulders ranging from 2 to 4 feet in diameter were scattered on top of the bedrock. Once again, gold was found in all gravels and the bottom 30 to 35 feet were sluiced.



Right Fork Mining on Mechanic Creek.

MINING CUTS In 1998, the previous year's cut was completed and a second cut 75 feet by 125 feet was mined. Total cubic yards sluiced were 19,365. A cut 80 feet by 200 feet was mined in 1999 on the lower left limit of Revenue Creek. Combined with 4000 cubic yards of material which had been stockpiled while stripping on Whirlwind Pup in 1996, a total of 17,700 cubic yards were sluiced. The balance of the Whirlwind material, in addition to a cut 100 feet by 25 feet by 12 feet, was sluiced in 2000. On Revenue Creek, a cut 100 feet by 20 feet was mined, out of which 3560 cubic yards were sluiced. Heavy rainfall, Boliden Hill road construction, losing an engine in the 890 John Deere excavator, plus low gold values, severely hampered the 2000 mining season on Revenue Creek. By September of 2000, however, the operation was ready to move to Mechanic Creek and begin preparation of the ground for mining and to do site cleanup from previous operators. Despite all, a total of 4500 cubic yards were sluiced that fall. Early in the 2001 season, a cut 130 feet by 280 feet by 30 feet deep was made on Mechanic Creek and partially mined, sluicing a total of 12,500 cubic yards.

WATER SUPPLY AND TREATMENT Water was acquired on Revenue Creek using in-stream recirculating ponds at a rate of 800 igpm with a 6- by 6-inch Gorman Rupp trash pump. The effluent was treated in a series of these in-stream ponds before the final point of compliance. In the fall of 2000, water was acquired from an instream settling/recirculating pond on Mechanic Creek at the same rate using the same equipment and treating effluent in the same pond. The only discharge was seepage from this pond. In 2001, an out-of-stream pond was constructed. Water from the previous year's settling/recirculating pond was pumped to this out-of-stream facility and refilled with clean water to be used as a reservoir. No seepage and no discharge to Mechanic Creek occurred in 2001.

GOLD Some of the gold was coarse and wiry. Beady round balls up to 6.1 grams in weight were recovered. Of the fine gold, 50 to 60% was 4/50 mesh size, 20% was 20 mesh and the balance was -80 to -200 mesh. Fineness ranged from 890 to 910. The majority of gold recovered at Mechanic Creek was 40/50 mesh size and smaller, with a purity of about 900.

COMMENTS Since 1998, an increase in rainfall has caused road washouts. Bulletin Hill area washed out twice during 1998. Once again in 1999, this portion of the road washed out. Road repairs were performed by the combined efforts of the miners in this area. In 2000, the washout was irreparable, so the government and two of the miners in the area relocated nearly ½ mile of road. Approximately 6300 cubic yards of tailings were hauled from lower Revenue Creek for this purpose which took eight days to complete. Twice in 2001, about 300 feet of the road washed out along lower Seymour

Creek. The road has yet to be repaired. In accordance with the new mining land use regulations, a fuel station with liner was constructed on lower Revenue Creek, about 200 feet from the high water mark. Bill LeBarge, Mark Nowosad and Tanya Gates spent some time in this area during the 1999 mining season sampling and gathering data for the Yukon Placer Deposit and Water Quality Sampling Program. Twelve conservation students, three mining administrators from Zimbabwe and two mining inspectors paid visits in 2000. The students did a placer inspection, while the people from Zimbabwe were interested in the mining inspection regime employed in the Yukon compared to their own country.

MECHANIC CREEK

1151/06

Hank Fehr	62°20'N 137°11'W
Water Licence: PM97-076	1998, 1999, 2000, 2001, 2002
Big Creek-Nansen Placer Area	Site no. 189

OPERATION/LOCATION Mr. Fehr's operation was located on Mechanic Creek which is a tributary of Big Creek. One miner worked a single 10-hour shift.

EQUIPMENT/FUNCTION Equipment on-site consisted of a bulldozer utilized for stripping, an excavator and a front-end loader for feeding pay material to the sluice plant and for general site maintenance.

WASH PLANT The particulars of the washplant are unknown, however it is a trommel setup with a single sluice run.

WATER SUPPLY AND TREATMENT Water was supplied to the plant from Mechanic Creek and effluent was treated through a series of in-stream as well as out-of-stream settling ponds.



Hank Fehr's operation on Mechanic Creek.