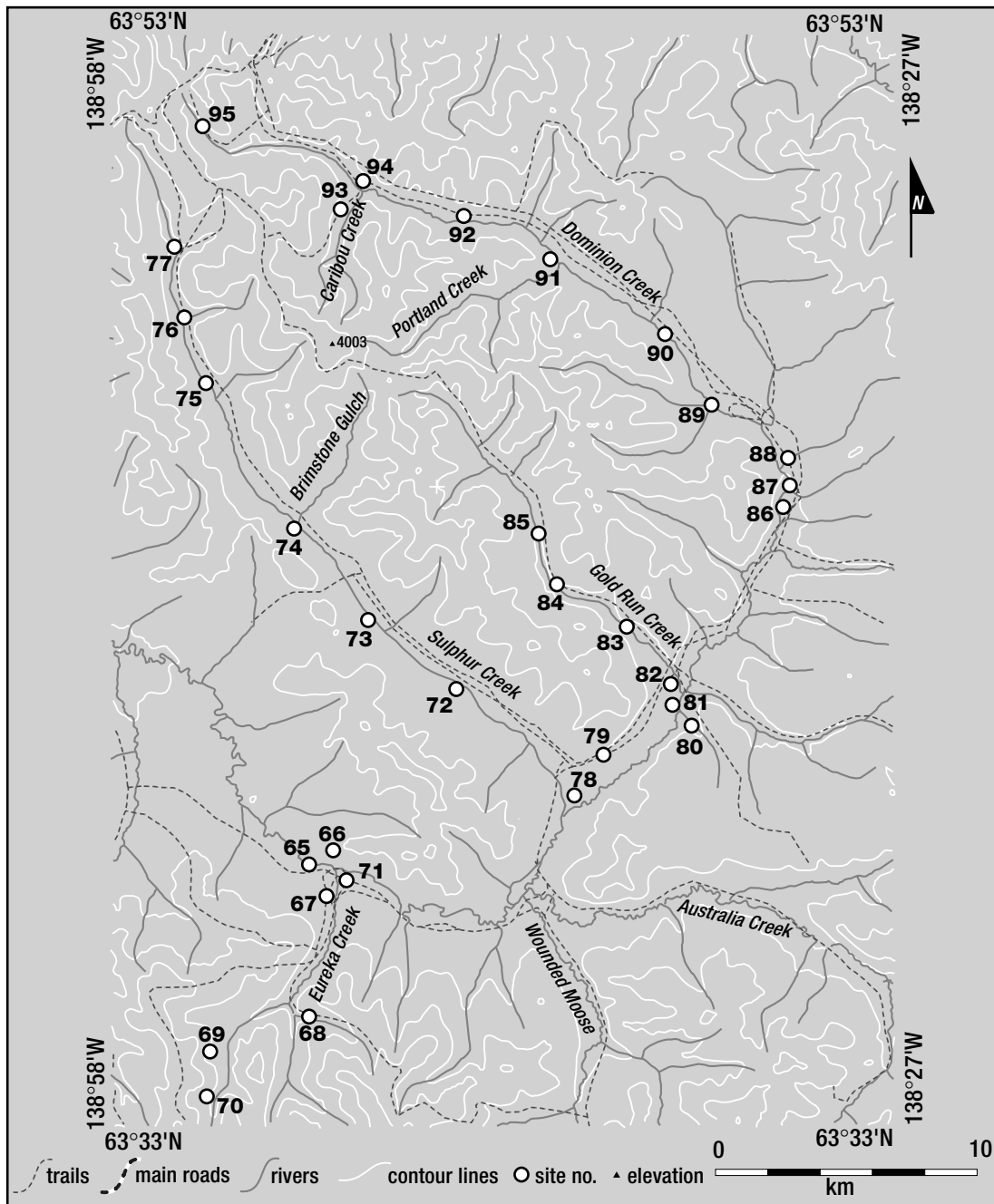


KLONDIKE: DOMINION-SULPHUR PLACER AREA

**SITE NO.
65-95**



LEGEND

- | | | |
|--|---|---|
| 65..... Tamarack Inc., Indian River | 75..... Sulphur Gold Placers, Sulphur Creek | 86..... A-1 Cats (Ross Mining), Dominion Creek/Arkansas Creek |
| 66..... Midas Rex Mining, Indian River | 76..... Coulee Resources, Sulphur Creek | 87..... M. & V. Johnson, Dominion Creek |
| 67..... Star North Placers, Eureka Creek | 77..... Neils Sprokkreeff, Sulphur Creek | 88..... Peter Bodin, Kentucky Creek |
| 68..... Eureka Placers Ltd., Eureka Creek | 78..... Gatenby Mining, Dominion Creek | 89..... Jim Conklin, Dominion Creek |
| 69..... Miyahama, Hiro, Eureka Creek | 79..... Gimlex Enterprises Ltd., Dominion Creek | 90..... Arthur Sailer, Dominion Creek, Nevada |
| 70..... Ripper Mining, Eureka Creek | 80..... George Abermeth, Lee Pup | 91..... Arthur Sailer, Dominion Creek/Champion Creek |
| 71..... Aurion Placers, Indian River | 81..... Adrian Hollis (Ross Mining), Dominion Creek | 92..... Favron Enterprises Ltd, Dominion Creek |
| 72..... Henry Kruger, Sulphur Creek | 82..... Ross Mining, Dominion, Rob Roy | 93..... James Stuart, Caribou Creek |
| 73..... Mary Ange Resources, Sulphur Creek | 83..... Mary Ange Resources (Klein), Gold Run Creek | 94..... Arthur Sailer (Stuart), Dominion Creek at Caribou Creek |
| 74..... Lucky Lady Placers, Sulphur Creek | 84..... Ray Lizotte, Gold Run Creek | 95..... Tim Coles (Adams), Upper Dominion Creek |
| | 85..... D & P Mining, Gold Run Creek | |

INDIAN RIVER	1150/10
Tamarack Inc.	63°38'N 138°53'W
Water Licence: PM98-071	1999, 2000, 2001, 2002
Dominion-Sulphur Placer Area	Site no. 65

OPERATION/LOCATION This operation is located at the mouth of Eureka Creek on left limit of the Indian River. Frank Short and Tony Beets moved to this site from Paradise Hill. They employed four miners and two camp personnel, working a 12-hour daily shift. By 2002, there was only one miner and one camp personnel working a single eight to 12-hour shift daily.

EQUIPMENT/FUNCTION Two 657 Caterpillar scrapers were used to strip and stockpile the pay gravels. Two D9 Caterpillar bulldozers were used to push the scrapers and feed the sluice plant and other miscellaneous jobs. Two wheeled Caterpillar scrapers hauled pay gravels to the sluice plant. One 245 Caterpillar loader was used for loading the haulers.

WASH PLANT A 90 cubic yard hopper with a 4 by 16-foot apron feeder put the pay gravel onto a variable speed conveyor which was 4 feet wide and 60 feet long. The gravels were conveyed to a trommel measuring 8 feet in diameter by 50 feet long, where the last 6 feet classified the pay to ¾-inch minus. A 2-foot wide by 45-foot long chute divided the slurry into six oscillating runs, each 3 by 20 feet in size. The runs were lined with Nomad matting and expanded metal. The Morris 10 by 12-inch pump was powered by a 3406 Caterpillar diesel engine capable of producing 1200 igpm. Approximately 100 cubic yards per hour were processed.

GROUND DESCRIPTION The stratigraphy of this area proved to be 5 to 6 feet of black muck, 5 to 6 feet of barren gravels with 2 feet of pay. Total depth averaged from 12 to 14 feet.



Tamarack's sluice plant on Indian River.

The sluiced section was generally 2 feet with a waste section of 10 feet. Interestingly, a site visit by placer geologist Bill Lebarge, revealed that the "Ross" gravels continue this far downstream.

MINING CUTS The first area stripped to thaw in 1999 measured 600 by 250 feet. Most of that season was spent setting up camp, and preparing ground for mining. During 2000, a further 2 cuts were made one 500 by 200 feet and the other 600 by 200 feet. Generally, the depths did not vary from the 12 to 14 feet. An area 200 by 200 feet and one 300 by 200 feet was completed in 2001 and one of a similar size in 2002.

WATER SUPPLY AND TREATMENT Water was acquired from the Indian River and collected by seepage and flow in an old mine cut just upstream of the mouth of Eureka. The settling ponds were out-of-stream and measured approximately 700 feet by 600 feet. No recycling was required due to the amount of seepage.

GOLD Gold was extremely fine-grained with no appreciable sized nuggets. The fineness ran from 820 to 830 in purity. Final clean-ups were conducted with a Pro-Pulse jig.

COMMENTS This operation has been slow to start up, but plans to be in major production by 2003. While not a great season in 2002, ground has been stripped to thaw.

INDIAN RIVER	1150/10
Midas Rex Mining and Exploration Ltd.	63°40'N 136°55'W
Water Licence: PM94-080	1998, 1999, 2000, 2001, 2002
Dominion-Sulphur Placer Area	Site no. 66

OPERATION/LOCATION Midas Rex moved to this location on Indian River near and around the mouth of Eureka Creek in the fall of 1997. For the years 1998 and 1999, six miners worked this operation performing two 12-hour shifts with one camp personnel. For 2000 and 2001, this was reduced to four miners with two camp personnel. There was no work in 2002 other than further camp removal.

EQUIPMENT/FUNCTION One Caterpillar D10N with a U-blade was employed stripping overburden and pushing pay gravels up to the "big" box.

WASH PLANT The dump or "big" box measured 16 by 20 feet and was connected to a 4 run sluice lined with Nomad carpeting, expanded metal and 1-inch Hungarian riffles made out of angle iron. An additional run using ¾-inch punch plate was used to handle the oversized material. The box tender washed the material as it was dropped into the dump box. Water was supplied by a 12 by 14 Morris pump, powered by a Caterpillar 3408 diesel engine, capable of



Midas Rex sluicing operation on Indian River.

pumping 2500 igpm. Approximately 160 cubic yards were processed per hour.

GROUND DESCRIPTION The ground was very consistent, averaging 2 to 4 feet of sand and muck intermixed, 6 to 10 feet of barren reddish coloured gravels, and the bottom 4 feet only containing greyish pay gravels. No bones, old workings or shafts were encountered.

MINING CUTS Seven cuts were mined per season. Over a mile of the right limit of Indian River, averaging 750 feet in width, was excavated, processed and reclaimed. Nearly 1,500,000 cubic yards of material were moved, out of which 900,000 cubic yards were sluiced.

WATER SUPPLY AND TREATMENT All water acquisition was from the Indian River using previously mined cuts for out-of-stream settling ponds. A minimum of three ponds were used at all times to settle out effluent prior to re-entry into the Indian River. No recycling was required.

GOLD The particle size of the gold was small, having a flaky, floury and pebbly type consistency. The concentrate was run through a long tom, screened for particle size and run over a Diester table. Fineness ran about 830.

COMMENTS The operator referred to the pay streak as being elusive and evasive. Considerable focus was placed on restoration and reclamation of tailings which was accomplished immediately upon the cessation of mining, along with camp cleanup and removal of structures. The operation has gone into temporary closure given the high costs of fuel and low price of gold, making the profit line marginal at best.

EUREKA CREEK

1150/10

Star North Placers Ltd.

63°36'N 138°48'W

Water Licence: PM99-127

1999, 2000, 2001, 2002

Dominion-Sulphur Placer Area

Site no. 67

OPERATION/LOCATION John Loveless et al. acquired this property from Wayne Tatlow and Pamela Nowlin (Sky Dawn) in 1999 and commenced mining approximately 5 kilometres upstream on Eureka Creek from the site of their 1998 operation (Aurion Placers). Consequently, it was a short haul to move equipment to this new area and they were able to utilize their existing camps and infrastructure. They employed five miners and two camp personnel and worked two 12-hour shifts for 1999 and 2000. In 2001, John Loveless and family did not return to the site. Troy Cahoon continued to operate with Hiro Miyahama and sluiced into early November regardless of the icicles. Only two miners and four camp personnel were employed. Both men moved from this property in 2002 to begin mining further upstream on the Right Fork of Eureka.

EQUIPMENT/FUNCTION Two D10 and two D9L Caterpillar bulldozers were used for stripping and stockpiling pay gravels. The bulldozers were equipped with U-blades and single shank rippers. An EL300 Caterpillar excavator fed the sluice plant and dug ditches as required. To stack tailings and perform yard work, a Caterpillar 980C loader was employed. All equipment was used at various times for the purpose of restoration and reclamation. In 2001, however, the operation downsized considerably and only one D9H was employed for all works.

WASH PLANT A 5 by 16-foot ELRUSS incline shaker plant, fed via a hopper, screened material to minus ¾ inch. Four 4 by 16-foot sluice runs were lined with unbacked Nomad matting and expanded metal. Half-way down the length of each sluice run, a short 4-foot section of 1-inch Hungarian



Star North late fall sluicing by Troy Cahoon on Eureka Creek.

riffles were installed. Powered by a Caterpillar 3306 diesel engine, the Morris 10 by 8-inch pump was capable of pumping 2000 igpm. The operation processed around 200 yards per hour. Final cleanups were dealt with using a two-hutch jig and portable long tom. In 2001, Troy Cahoon and Hiro Miyahama used a conventional triple run sluice with a Morris 10 by 10-inch pump, powered by a Caterpillar 3406 diesel engine, capable of 2000 igpm. With this equipment they were able to process about 75 to 100 yards per hour. Final cleanups were actually done off site by Don and Rose Kenzie at their facility in the Callison Industrial subdivision using jigs and a vibrating Diester table.

GROUND DESCRIPTION During 1999 and 2000, Eureka Creek was diverted to the right limit of the valley and the creek and bench area mined. This turned out to be very deep ground where the overburden varied from 75 feet of frozen black muck to 25 feet. The pay gravels, once accessed, also were divergent, measuring at times 5 feet, while other areas yielded a 15-foot layer for sluicing. The 2001 season saw the operators mining the side pay to avoid the overburden depths previously encountered. Consequently, the sluice section was between 5 and 10 feet of gravels and the waste section was a maximum of 25 feet.

MINING CUTS In 1999 and 2000, four huge pits measuring 400 by 400 feet were mined basically from the right limit to the bench grounds moving over 300,000 cubic yards of material. This was cut back to five cuts in 2001 approximately 100 by 75 feet in size and concentrating on side pay only. While some stockpiled gravels were sluiced in 2002, the main work was restoration of old road to upper Eureka and some reclamation.

WATER SUPPLY AND TREATMENT This operation utilized out-of-stream settling ponds. An old mining cut near the mouth of Eureka was the final settling facility. Sending effluent down a right limit drain proved problematic as the flow tended to pick up mud and sediment from the bank. Diverting Eureka to the left limit within a kilometre of that facility soon corrected the problem and the operator has suggested a new location for the final restoration channel for the creek.

GOLD The gold recovered tended to be a mixture of coarse and fine particles with some nuggets. Purity of gold averaged about 730.

COMMENTS Reclamation at this operation has been progressive in nature, using the material from the next mine cut to backfill pits and re-contouring tailings as they are created.

EUREKA CREEK**1150/10**

Eureka Placers Ltd.

63° 35'N 138°52'W

Water Licence: PM97-039

1998, 1999, 2000, 2001, 2002

Dominion-Sulphur Placer Area

Site no. 68

OPERATION/LOCATION Richard Allen and Don Marino continued to move upstream on the Right Fork Eureka Creek. Three miners were employed as well as one camp personnel in 1998-99 and approximately 800 hours sluicing was done each season. One 10-hour shift was worked daily. This was reduced in 2000 to two miners and one camp personnel, running 12-hour shifts and only 600 hours were spent sluicing. Limited stripping was performed in 2001 when the licences and approvals expired. Preparations were made to temporarily close down this operation and it moved to Montana/Stowe Creek. New water licences and Mining Land Use approvals have been issued for both this property and the Left Fork Eureka Creek but no work has been done under either.

EQUIPMENT/FUNCTION A Caterpillar D9G and two D8H Caterpillar bulldozers were employed to strip cuts and maintain settling facilities. A Caterpillar 900A and a 225 excavator were used to feed the trommel. Tailings were ramped with bulldozers.

WASH PLANT The pay gravels were fed into a hopper before being classified to minus ¾-inch, then into a 6-foot diameter trommel complete with scrubber. The material was then put through two 8-foot sluice runs lined with matting, expanded metal and 1 by 1-inch angle iron riffles. In 1998 and 1999, a Paco 8- by 6-inch pump, powered by a Cummins diesel engine delivered 1500 igpm. Approximately 30 yards were processed per hour. In 2000, the operator switched back to using a Morris pump, powered by a Caterpillar 3406 diesel engine capable of 2000 igpm and sluiced about 100 to 150 cubic yards per hour. Final cleanups were done with a long tom and table.

GROUND DESCRIPTION Twenty-five to 35 feet of frozen black muck overlies 5 to 6 feet of gravel and 5 feet of decomposed bedrock situated well below the water course. Some old workings were encountered. The gravel, plus 2 to 5 feet of the decomposed bedrock, was sluiced.

MINING CUTS In 1998, six cuts about 100 by 150 feet each were completed using an out-of-stream facility. In 1999, four cuts approximately 100 by 120 feet were mined. Sluicing for these two seasons was about 800 hours. In 2000, the operator moved upstream to nearly the top of the right fork and took out a mine cut about 600 by 90 by 35 feet deep, sluicing for approximately 600 hours. Although some stripping was done at this site, Mr. Allen and Mr. Marino moved to another location within the Dawson Mining District in 2001.



Eureka Placers on Upper Eureka Creek.

WATER SUPPLY AND TREATMENT Water from Eureka Creek, and from the Right Fork Eureka as the operation moved upstream, was contained in an in-stream pump pond managed with a water control box. Small in-stream settling ponds were constructed to contain effluent as the in-stream settling pond at the mouth of the Right Fork and Eureka Creek was filled in 1997 and a temporary diversion to the left limit was constructed and has been stabilized by operator. Negotiations to use a lower Eureka Creek settling facility owned by Star North were made in the event a high water event occurred.

GOLD The gold is very fine with a purity between 620 and 690.

RIGHT FORK EUREKA CREEK 115O-10

Hiro Miyahama 63°36'N 138°55'W
 Water Licence: PM01-241 2002
 Dominion-Sulphur Placer Area **Site no. 69**

OPERATION/LOCATION Troy Cahoon and Hiro Miyahama, operating as Hamar Placers, mined on an unnamed left limit tributary of the Right Fork of Eureka Creek. Two miners worked one eight-hour shift daily.

EQUIPMENT/FUNCTION A D9H Caterpillar bulldozer with ripper was used to strip material and push pay. Shortly after startup in this first season, a 690B John Deere excavator was rented.

WASH PLANT The trommel was 5 by 40 feet with a 4 by 10-foot sluice run, lined with expanded metal and Nomad matting and contained 1½-inch Hungarian riffles. Final cleanups were performed by Don and Rose Kenzie at their Callison-site using a jig and a Diester table.

GROUND DESCRIPTION This was the initial year at the property. Stripping indicated approximately 15-feet of black muck



Hiro Miyahama and Troy Cahoon sluicing on an unnamed tributary.

overlying unconsolidated, very fractured and decomposed bedrock. Six feet of broken bedrock was sluiced.

MINING CUTS One cut was mined that was 60 feet by 100 feet.

WATER SUPPLY AND TREATMENT Water was acquired from the tributary and settling ponds were constructed approximately 1200 feet upstream from the mouth.

GOLD Gold was coarse with some small nuggets and a bright yellow, high silver content. Fineness was about 685.

COMMENTS Generally, the operators were pleased with the initial gold recovery at this location.

RIGHT FORK EUREKA CREEK 1150/10

Ripper Mining, Hamar Placers 63°33'N 138°53'W
 Water Licence: PM97-073, PM01-242 1998,2002
 Dominion-Sulphur Placer Area **Site no. 70**

OPERATION/LOCATION Troy Cahoon and A.J. Everton began preparing this unnamed right limit tributary of the Right Fork Eureka Creek in 1998. The initial water licence restricted this operator from obtaining water from the tributary or the Right Fork of Eureka unless flows were greater than 0.07 cubic metres per second in consideration of the adjoining placer miner. The operator had the opportunity to work with another miner using the name Star North on lower Eureka Creek and moved to that location in 1999. In 2001, Mr. Cahoon obtained a new water licence for this property without the water restriction. It will be mined with new partner, Hiro Miyahama, under the name Hamar Placers.

EQUIPMENT/FUNCTION A D8K Caterpillar bulldozer and Hitachi UH-7 excavator were employed for stripping and sluicing the test area during the initial approach. No equipment was moved to the site in 2002 in conjunction with the new water licence other than a D9H Caterpillar bulldozer used for building road access.

WASH PLANT A 30-foot trommel with a 5-inch water pump was intended for sluicing, but was not put into action. All testing was done with a long tom only.

GROUND DESCRIPTION The Right Fork of Eureka Creek is known to have 25 to 30 feet of black muck over 5 feet of gravels and 5 to 6 feet of decomposed bedrock. It is reasonable to assume that this tributary would have a similar composition. Test results were not definitive in this respect, but it is likely that the overburden will be less on the tributary.

MINING CUTS A large cut was opened up in 1998. Thawing black muck made stripping very difficult in this narrow valley. During the years that the property was abandoned,

the creek channel has stabilized somewhat. In 2002, as part of another project to reach quartz claims at the top of this valley, a more permanent access road was constructed along the right limit and an area cleared for a camp location.

WATER SUPPLY AND TREATMENT It was intended to settle in a series of ponds to be constructed progressively using the previously mined pit. The creek was diverted into a gravelled channel which repeatedly filled with sediment from thawing black muck. New mining efforts will have to consider the feasibility of a more permanent and stable diversion to avoid this contingency, in the event the ponds are unable to settle out material prior to the point of compliance.

GOLD It is hoped that the gold will be similar in quality to that recovered by the other Hamar operation on a left limit tributary of Right Fork Eureka. The gold found there was coarse, nuggetty and a bright yellow in colour. Fineness in the Eureka valley usually ranges anywhere from 650 to 690.

INDIAN RIVER 1150/10

Aurion Placers 63°38'N 138°51'W
 Water Licence: PM95-055 1998
 Dominion-Sulphur Placer Area **Site no. 71**

OPERATION/LOCATION 1998 was the last season for this operator to mine these Indian River placer claims located at the mouth of Eureka Creek as the lease agreement was not renewed by Tamarack Inc. John Loveless employed five mining and one camp personnel working two 12-hour shifts daily.

EQUIPMENT/FUNCTION One D10 and two D9L Caterpillar bulldozers were used for stripping and stockpiling pay gravels. The bulldozers were equipped with U-blades and single shank rippers. An EL300 Caterpillar excavator fed the sluice plant and dug ditches as required. To stack tailings and perform yard work, a Caterpillar 980C loader was employed. All equipment was used at various times for the purpose of restoration and reclamation.

WASH PLANT A 5 by 16-foot ELRUSS incline shaker plant fed, via a hopper, screened material to minus ¾ inch. Four 4 by 16-foot sluice runs were lined with unbacked Nomad matting and expanded metal. Halfway down the length of each sluice run, a short 4-foot section of 1-inch Hungarian riffles was installed. Powered by a Caterpillar 3306 diesel engine, the Morris 10 by 8-inch pump was capable of pumping 2000 igpm. The operation processed around 200 cubic yards per hour. Final cleanups were dealt with using a two hutch jig and portable long tom.

GROUND DESCRIPTION Overburden ranged anywhere from 2 feet to 12 feet in depth of frozen and partially frozen material. Gravels varied from a maximum of 10 feet to a minimum

of 2 feet and were composed of both frozen and thawed sections. Bedrock was decomposed and contained some clay and bands of black, slabby schist extending right across the valley. The sluice section fluctuated between 6 and 10 feet and the waste section between 6 and 16 feet.

MINING CUTS Six mining cuts averaging 250 feet wide by 350 feet long were made out of which a total of 200,00 cubic yards were sluiced.

WATER SUPPLY AND TREATMENT Sluice water was acquired from the Indian River, 75% of which was recirculated in out-of-stream settling ponds built within previous era mining cuts at the mouth of Eureka Creek. The discharge of effluent into Indian River from the final settling facility was well below the allowable rate for settleable solids in this area.

GOLD The gold tended to be travelled, floury, smooth and bright. Some small nuggets were recovered as well as some nuggets with quartz attached. The fineness averaged 760.

COMMENTS Interestingly, absolutely no old workings, shafts or even bones were found in any of the overburden or

gravels. As this was Aurion's last year, reclamation of most of the mined areas was completed, barring some tailings at the mouth of Eureka that Tamarack wished to use in the construction of their access, fuel storage and general camp layout.

SULPHUR CREEK

1150/10

Henry O. Kruger

63°42'N 138°42'W

Water Licence: PM96-056

1998, 1999, 2000, 2001, 2002

Dominion-Sulphur Placer Area

Site no. 72

OPERATION/LOCATION Mr. Kruger continued his one man operation on the right limit of Sulphur Creek valley, working an eight-hour shift daily. He has been mining this ground for over 25 years. His most recent location is between the dredge tailings and cutting into the far right bench.

EQUIPMENT/FUNCTION D9G and D7E Caterpillar bulldozers were used to strip overburden. A Koehring 605 dragline or a Komatsu 955 shovel were available to hoist material out of the mine pit. A Hough 120C loader, along with the bulldozers, was used to feed the sluice plant.

WASH PLANT In 1999, Mr. Kruger switched from using his Ross-type box to a 5 by 16-foot ELRUSS screen deck. The 4 by 6-foot deck fed into a distribution box divided into



Aurion Placers operation on Eureka Creek.



Henry Kruger sluicing on Sulphur Creek.

two 4 by 15-foot sluice runs. The first 2 feet of run had 1-inch riffles while the remainder was expanded metal. An 8-inch Murphy pump, powered by a 6-71 General Motors diesel provided 2500 igpm. About 50 cubic yards were processed per hour which dropped to 40 to 45 cubic yards as the operator moved further into the bench. Cleanups were performed with a screen deck and wheel, drying the remainder and removing magnetite. A final spin in the wheel and the gold was relatively clean.

GROUND DESCRIPTION Overburden consisted of frozen black muck to a depth of 14 or 15 feet. Gravels averaged 14 to 15 feet as well, with bedrock somewhere between 28 and 30 feet. The sluiced section averaged around 12 feet of gravels and 1 foot of decomposed bedrock. The 2001 and 2002 mine cuts were composed of larger, boulder-type material and slabby bedrock which caused a definite slow down in processing. Bedrock became progressively deeper in 2002 as Mr. Kruger worked into the hillside at 30 to 35 feet. The colouring changed to a slightly greenish tinge as the operation moved further into the bank.

MINING CUTS Mr. Kruger excavated one mine cut per year, all of which were approximately 150 by 150 feet to bedrock.

WATER SUPPLY AND TREATMENT This is an out-of-stream operation acquiring water from Sulphur Creek or old tailings ponds. Groundwater has a tendency to seep into old mine cuts which can then be used as reservoirs. Previous year's mine cuts are used as next year's settling pond.

GOLD The gold was very delicate and flaky with a fineness of about 820.

COMMENTS Mr. Kruger, an excellent metal worker, applied his ingenuity to construct a double-walled mobile tank creating an easy-to-move, impervious secondary containment for fuel storage greater than 4000 litres. Reclamation at this mine site is progressive in nature.

SULPHUR CREEK

1150/10

Mary Ange Resources Ltd. 63°44'N 138°50'W
 Water Licence: PM98-064 1998, 1999, 2000, 2001, 2002
 Dominion-Sulphur Placer Area **Site no. 73**

OPERATION/LOCATION Located upstream from the lower dredge on Sulphur Creek, Grant, Richard and Michael Klein moved an equipment/fuel storage area camp over from Gold Run Creek in order to mine the remaining virgin ground and re-mine old dredge tailings. In 1998, three miners began the work, with two camp personnel; in 1999 this increased to five miners, with six in 2000 and back down to five miners in 2001. Work shifts varied between 10 and 12 hours. The obligations for reclamation at this site were completed in 2002.



Mary Ange conveyor late season sluicing on Sulphur Creek.

EQUIPMENT/FUNCTION During the fall of 1997, two D9N Caterpillar bulldozers had been moved onto this property to strip the black muck overburden. A Caterpillar 637E scraper with push/pull front and rear engines was employed as well, removing the old surface tailings and constructing the dykes required for a settling pond. A Caterpillar 235 hydraulic excavator with a 42-inch dig bucket and a 72-inch cleanup bucket was added in 1998 to feed the sluice plant, along with a Caterpillar 245 back hoe to load the scraper. At various times throughout the mining, a Caterpillar D9N and a D9L bulldozer with multi-shank rippers, a D10N Caterpillar bulldozer with a single shank ripper and U-blade, and a Caterpillar 966D bulldozer with a 4 cubic yard bucket were used in various capacities. A 330BL Caterpillar excavator hoe with a 21-foot 4-inch boom and a 54-inch cleanup bucket was used in 1999 and 2001 to bail tailings ponds and load the scraper and the D300E Caterpillar haul truck.

WASH PLANT A Hewitt Robbins screen deck and four sluice runs with 1-inch punch plate holes and lined with outdoor matting was powered by a D60P1 Caterpillar Olympian 3 phase generator, rated 54 kilowatts, producing 480 volts of electricity. An 8 by 10 Morris pump capable of 3500 igpm and powered by a 3406 Caterpillar diesel engine fed the hopper and conveyor belt. Approximately 126 cubic yards were sluiced per hour.

GROUND DESCRIPTION The Sulphur Creek valley is fairly wide and flat at this point. Overburden consisted of 30 feet of frozen black muck. An average of about 8 feet of pay gravels and 3 feet of rolling, decomposed bedrock were sluiced.

MINING CUTS In 1998, an estimated volume of 96,100 cubic yards of waste was mechanically removed, while hydraulic stripping removed about 50,000 cubic yards. 1999 saw a program of 32,000 cubic yards being hydraulically stripped and 242,777 cubic yards mechanically removed. In 2000, the figures remained much the same, with 204,843 cubic yards mechanically removed while hydraulic stripping accounted for 30,000 cubic yards. The operation wound down in 2001 to 92,500 cubic yards of waste being mechanically stripped. Mining claims 34 to 48 were mined consecutively, representing approximately 1.32 miles of ground out of which 395,205 cubic yards of pay gravels were sluiced.

WATER SUPPLY AND TREATMENT Mary Ange Resources Ltd. was licenced for in-stream and out-of-stream works. Water for sluicing was obtained from Sulphur Creek and an unnamed left limit tributary. When possible, the operators worked out-of-stream using old mine cuts for tailings as required. During low water, in-stream reservoirs were constructed. Recycle was 100% and the tailing ponds averaged about 1000 feet by 200 feet in size.

GOLD The gold recovered was very fine and a bright colour, most of which was plus 8 mesh. Some quartz was present and a few nuggets, some with quartz attached, ran about plus 10 mesh size. The fineness averaged 810.

COMMENTS Mining was completed at this site by August of 2001. Reclamation of most of the mined areas was done in the fall of 2001 and completed during the 2002 season. Lucky Lady Placers, the new owner of these claims, has undertaken to complete any outstanding reclamation works which include leaving a few areas open for further mining.

SULPHUR CREEK

1150/10

Lucky Lady Placers

63°44'N 138°51'W

Water Licence: PM00-181

1998, 1999, 2000, 2001, 2002

Dominion-Sulphur Placer Area

Site no. 74

OPERATION/LOCATION Four miners and 3 camp personnel comprised this placer operation in 1998, which was reduced to three miners in 1999. One 10-hour shift was run daily. Located on the right limit of Sulphur Creek near its confluence with Brimstone Gulch, the property has been mined continuously since the early 1970s, started by Don Gibson and carried on by his son Lance, and partner Kris Kana. By 2002, only Kris Kana and Lance Gibson mined the property due to rising costs of production.

EQUIPMENT/FUNCTION Two D9 Caterpillar bulldozers were used to push material up to the loader, while a 245 Caterpillar excavator was employed digging drains, building berms and constructing roads. A 980C Caterpillar loader was used to feed the wash plant. A Gorman Rupp 10 by 10-inch pump manned an innovative, custom-built automatic monitor for hydraulic stripping.



Lucky Lady's sluice plant on Sulphur Creek.

WASH PLANT This operation processed approximately 125 cubic yards per hour with a Cornell 6 by 8-inch pump, powered by a General Motors 671 diesel engine running anywhere from 1000 to 1200 igpm. The tailings stacker was 36 inches wide by 60 feet long and two sluice runs, each 4 feet wide by 20 feet long, were lined with expanded metal and Nomad matting. One half-inch minus classified pay gravels were sluiced. Material was delivered by a 60-foot by 46-inch wide conveyor feeding the 5-foot by 14-foot long double decker screen plant. During the 2002 season, sluicing was considerably reduced and only 70 cubic yards were processed per hour.

GROUND DESCRIPTION Thirty feet of black muck covered from 6 to 8 feet of normal creek gravels. Bedrock was unconsolidated Klondike schist, slab-like and chunky. Three feet of the bedrock and 6 feet of the gravels were mined.

MINING CUTS A cut approximately 310 feet by 400 feet was mined in 1998, while two cuts 150 by 150 feet and 300 by 300 feet were excavated in 1999. In 2000 and 2001, one cut was mined each season, averaging about 300 by 340 feet in size. 2002 saw only one cut, measuring 200 by 300 feet in size.

WATER SUPPLY AND TREATMENT Under Water Licence PM95-097, a community settling pond was included for use by a number of Sulphur Creek miners. Mr. Gibson acquired the claims upon which the settling ponds were constructed in 2000 for the exclusive use of Lucky Lady Placers due to the downturn in placer mining activity. This operation utilized an out-of-stream recycling system for its sluicing and monitoring programs. Effluent was conveyed downstream, using a combination of the creek and a ditch located on the right limit of Sulphur, to three large settling ponds built from dredge tailings. These ponds measured 1500 by 2500 feet in total. When necessary, an on-site reservoir pond about 500 by 50 feet was dyked off in order to have a sufficient amount of clean water for monitoring.



Sulphur Gold Placers excavating new cut.

GOLD Gold has a fineness of 800 and very small particle size, some of which is almost powdery in nature. Mesh sizes range from -20 to -150. Final cleanups are done with a double two stage jig, a gold wheel and table.

COMMENTS Lucky Lady Placers uses most of the material generated by mining for the construction of roads, dikes and water structures. A small amount of overburden is stockpiled but it is noted that the tailings have sufficient fines to revegetate fairly quickly once the contouring and sloping has been done. In 2002, all of the strippings from the new mine cut at Brimstone Gulch were hauled to an old cut which was filled in. Old mine areas above camp have been cleaned up and eroding pit walls stabilized.

SULPHUR CREEK		1150/10
Sulphur Gold Placers	63°47'N 138°54'W	
Water Licence: PM99-125	1998, 1999, 2000, 2001, 2002	
Dominion-Sulphur Placer Area	Site no. 75	

OPERATION/LOCATION This is the first active operation on the right limit of Sulphur Creek downstream from its confluence with Green Gulch. Mark and his brother, Paul Peirson have carried on the family placer mining business from their father Bud Peirson, working one 10-hour shift daily. In 2002, the property was optioned to Joel White of Coulee Resources. Paul Peirson remained on-site working for Mr. White.

EQUIPMENT/FUNCTION One D8K Caterpillar bulldozer with U-blade and ripper was used interchangeably with a D7 Caterpillar dozer to strip and stockpile pay gravels for the Hyhoe 1 yard bucket excavator. The excavator fed the pay gravels to the trommel. A hydraulic monitor was run by an 8 by 10-inch pump with a 3208 Caterpillar motor.

WASH PLANT A 5/8-inch screen trommel was powered by a 75 kilowatt power plant measuring 5 feet in diameter attached to two 12-foot sluice runs dropping from 1½-inch to 1 foot. Water was supplied by a Flygt 6-inch pump, powered by the 75 kilowatt Gen Set, capable of pumping 1600 igpm. About 60 cubic yards were processed per hour.

GROUND DESCRIPTION Overburden and frozen black muck can range from as little as 15 feet deep to 50 feet deep in this area of Sulphur Creek. Decomposed animal remains have been uncovered in the permafrost and lots of old workings are evident in gravel layers. Mining was conducted both below and above the water course and there is considerable clay content. About 5 feet of combined pay gravels and unconsolidated bedrock were processed.

MINING CUTS In 1998, a cut approximately 300 by 75 by 25 feet deep was excavated. Three separate cuts were done in 1999 totalling approximately 12,000 cubic yards. An

additional three cuts were mined in 2000, and in 2001, a 50-foot wide by 800-foot long, 15-foot deep area was excavated out of which approximately 7000 cubic yards were sluiced.

WATER SUPPLY AND TREATMENT Up to the year 2000, Sulphur Gold Placers was part of the group of operators who participated in the use of a community settling pond constructed in old dredge tailings. The creek was used as a conduit to transport effluent down to these ponds, with each operator informing the upstream user when clean water was required for hydraulic or sluicing. In 2000, these claims were acquired by one owner on Sulphur Creek. On-site settling facilities were required from that time on.

GOLD The gold at this site is very fine with only 3 or 4 ounces per year of coarse gold content. Mesh size is about minus 60% and the colour is dull with some black and red staining. Cleanups are performed with jigs.

SULPHUR CREEK

1150/10

Coulee Resources 63°48'N 138°54'W
Water Licence: PM99-125 2002
Dominion Sulphur Placer Area **Site no. 76**

OPERATION/LOCATION Joel White of Coulee Resources optioned this ground from Mark and Paul Peirson. The property is located just downstream from Green Gulch. A mobile camp was put together at Meadow Gulch. Mr. White was previously mining on Black Hills Creek and continued to do some work there as well. Seven miners and two camp personnel put in two 12-hour shifts per day.

EQUIPMENT/FUNCTION The operation intended to complete mining on this ground during the 2002 season. A D8L and a D9H Caterpillar bulldozer as well as a Komatsu D455A were used to strip off the overburden. Excavators included a Komatsu PC200, LC5, PC400 and a 992 John Deere. Partway through the season, a PC1000 was purchased with 48-inch "superwide" pads and a 6 yard bucket, one of the largest excavators to work in the Klondike placer area.

WASH PLANT An ELRUSS 6 by 16-foot inclined double screen deck wash plant was employed, with four 4 by 16-foot oscillating sluice runs, lined with Nomad matting and No. 8 expanded metal. The angle was 1½-inch per foot of grade. The plant was run by a Gorman Rupp 10 by 12-inch pump, powered by a Caterpillar 3406 diesel engine, capable of approximately 1800 igpm. Approximately 150 cubic yards were processed per hour.

GROUND DESCRIPTION An average of 25 feet of black muck overlays a 4-foot bed composed of small, rounded and washed gravels. The bedrock was soft and decomposed



Al Rothwell stands beside a PC1000 Komatsu 6 cubic yard bucket.

unconsolidated schist which ranged in colour from an orange colour (where the gold was found) interspersed by blue grey colour (no concentrates whatsoever) reefs. Both the 4-foot bed of gravel and 2 feet of orange coloured bedrock were sluiced.

MINING CUTS Three cuts were completed in the 2002 season. Dimensions were 1800 by 120 feet, 1100 by 120 feet and a 700 by 80-foot pit. There is some material left to be sluiced in 2003.

WATER SUPPLY AND TREATMENT Water acquisition was from Sulphur Creek and a 400 by 100-foot out-of-stream settling pond was used to treat effluent. The pond spillway entered into an old dredge area and virtually no water was returned to the creek. Water was accumulated in a reservoir pond and approximately 60% was recycled.

GOLD The gold was generally very fine with a few dendritic crystalline nuggets. Fines were from 79 to 80. Cleanups were performed every 80 hours by jiggling, screening to four sizes and run over a Diester table. An average cleanup was comprised of about 129 ounces at -30 mesh, 112 ounces at -20 mesh, 26 ounces at -10 mesh, 12 ounces at +10 mesh and between 1 to 2 ounces of a +4 size.

SULPHUR CREEK

1150/10

Neils Sprokkreeff 63°50'N 138°56'W
Water Licence: PM96-070, LP00152 1998
Dominion-Sulphur Placer Area **Site no. 77**

OPERATION/LOCATION Mr. Sprokkreeff mines upper Sulphur Creek, above Green Gulch. The last sluicing season he had was in 1997. In 1998, he did some work on the Community Settling Pond, but no mining was done. For the past few

seasons, Mr. Sprokkreeff has been operating equipment for other miners.

EQUIPMENT/FUNCTION To build the new settling pond cell, the operator used a D9 Caterpillar bulldozer and two Caterpillar 980 excavators at various times.

WASH PLANT No sluicing or mining was reported for the period of this publication.

GROUND DESCRIPTION The area of the settling pond is composed of old dredged tailings with medium to large bouldery gravels. As there can be as much as 60 feet in depth, they make an ideal medium for settling silt-laden waters prior to re-entering the creek. At the same time, the silt and other material adheres and eventually covers the gravel enhancing the ability of the area to revegetate.

MINING CUTS As mentioned, the only work reported was the construction of an additional cell to the community settling pond, bringing the total number to three. The approximate size of this new area was 500 by 800 by 20 feet in depth, greatly increasing the capacity for the upstream miners on Sulphur Creek.

WATER SUPPLY AND TREATMENT In a typical mining season, Mr. Sprokkreeff would run effluent downstream to community settling ponds using the creek as a conduit. As no mining

was done during community settling, no water supply or treatment was used. By the end of the 2000 season, Mr. Sprokkreeff elected to sell the claims upon which the ponds were situated and the community pond agreement was cancelled. Consequently the five or six miners who previously used this pond had to re-think their mining plans and settle on their own ground.

GOLD Past gold recovered at this operation was angular and had a fineness of 780.

COMMENTS Typical of several operations in the Yukon, as fuel prices climbed and gold market value did not, this miner was forced to seek employment offering a guaranteed income.

DOMINION CREEK	1150/10
Gatenby Mining Services, Balner Enterprises Ltd.	63°39'N 138°39'W
Water Licence: PM99-086	1998, 1999, 2000, 2001, 2002
Dominion-Sulphur Placer Area	Site no. 78

OPERATION/LOCATION Lisle Gatenby mined an area of Dominion Creek upstream from its' confluence with Sulphur Creek. This area of the Dominion Creek valley was approximately 2500 feet wide with a relatively low slope. Three miners worked the property covering a total of 18 hours per day in 1½ shifts.



Gatenby Mining Services sluice plant on Dominion Creek.

EQUIPMENT/FUNCTION Two Caterpillar bulldozers, models D9L and D8H, a John Deere model 844 loader and two Hitachi excavators, models EX200 and EX400, were used to mine the site. The loader had a 5½ cubic yard bucket, the EX200 had a ¾ cubic yard bucket and the EX400 had a 1½ cubic yard bucket.

WASH PLANT The wash plant consisted of a feeder which included a conveyor that fed material to the double deck screen. The screen decks were made of rubber-coated steel. The top deck had 1-inch holes and the bottom deck had ½-inch holes. Coarse tailings left the plant and were stacked via another conveyor. Recovery was in vibrating trays. The processing rate was 150 loose yards per hour. Process water was supplied at a rate of 2500 igpm by an 8 by 10-inch Berkley pump powered by a Cummins engine.

GROUND DESCRIPTION The operation encountered 10 feet of silt or peat over 10 feet of Dominion Creek gravel, over 10 feet of White Channel gravel on decomposed schist bedrock. The total depth to bedrock was 30 feet. The whole section was frozen. Both the White Channel and the Dominion gravel were unsorted with a lot of tight framework. There were some big quartz boulders. The White Channel gravel contained kaolinite clay. The schist bedrock also had shattered quartz veins. The sluice section consisted of 4 to 7 feet of White Channel gravel and 2 feet of decomposed schist bedrock.

MINING CUTS In 1998, development work was conducted at the site. This work included drain and diversion channel construction and stripping of blocks to be mined from 2000 to 2002. In 1999, work started in 1998 was continued. Construction of the sluice plant was also done in 1999. In 2000, plant construction was completed and two mine cuts were processed. One was 450 feet by 200 feet and the other was 100 feet by 100 feet for a total of 27,000 cubic yards. In 2001, three cuts were processed. The first had an area of 450 feet by 150 feet, the second 200 feet by 150 feet and the third 250 feet by 200 feet. The total cubic yardage processed was 30,000. In 2003, another 3 cuts were processed. The area of these cuts was 200 feet by 100 feet, 300 feet by 150 feet and 100 feet by 100 feet. A total of 27,000 cubic yards were processed.

WATER SUPPLY AND TREATMENT The operation was able to utilize ground water for sluicing. A recycle rate of up to 100% was accomplished with settling occurring in old mining blocks.

GOLD The purity of gold at this site was 860 fine. The majority of the gold was between 10 and 100 mesh with less than 1% greater than 10 mesh.

COMMENTS Reclamation was being addressed by using mined-out cuts as settling ponds and then back-filling into them.

DOMINION CREEK

1150/10

Gimlex Gold Mines 63°40'N 138°38'W
Water Licence: PM96-050 1998, 1999, 2000, 2001, 2002
Dominion-Sulphur Placer Area **Site no. 79**

OPERATION/LOCATION This operation is located on Dominion Creek between Gold Run and Sulphur creeks. With the exception of 2000 when four miners worked the site, six miners were employed. One 12-hour shift was worked per day.

EQUIPMENT/FUNCTION The equipment used to mine this site included four Komatsu bulldozers, one model D475, two D355s and one D155. There were also two Komatsu model WA 600 loaders, one Komatsu model PCL400 excavator and one Caterpillar model 235 excavator. The equipment was used for stripping overburden and mining. The loaders were used to feed the wash plant and remove tailings.

WASH PLANT Pay was processed using an ELRUSS feeder with two conveyors and a 4-foot by 16-foot screen deck on a custom built wash plant. The 4000 to 5000 igpm of water required was supplied using a 10 by 12-inch Morris pump, powered by a Caterpillar 3406 engine. From 1998 to 2000, the processing rate ranged from 100 to 250 loose yards per hour. In 2001 and 2002, the processing rate was from 175 to 250 loose yards per hour.

GROUND DESCRIPTION The operators encountered frozen gravels from 3 to 12 feet thick, overlain by 40 to 60 feet of frozen black muck and sandy muck, possibly loess. The sluice section included the gravel and 1 to 2 feet of decomposed bedrock. The black muck and loess were waste.

MINING CUTS From 1998 to 2000, one cut was mined each season. The cut sizes, in order by year, were 750 feet by 250 feet, 900 feet by 250 feet and 600 feet by 250 feet. In 2001, two cuts were mined each having an area of approximately 7000 square metres. In 2002, one cut of 13,500 square metres was mined.

WATER SUPPLY AND TREATMENT In the 1998 mining season, process water was obtained from a drainage ditch from the upstream operation, Ross Mining Ltd. The ditch was extended to bring water to within 500 feet of where it was required. Effluent was treated in a 600-foot by 200-foot pond. Re-circulation of approximately 50% of the water ensured an adequate supply. In 1999 and 2000, runoff and seepage filled the re-circulation pond. Effluent was settled out-of-stream in a 700-foot by 200-foot settling area. There was 100% re-circulation of the water. In 2000 to 2002, run-off, seepage and snow-melt were collected by means of ditches in the re-circulation ponds. Previous years' cuts with a total area of 11,000 square metres were used to attain 100% re-circulation.

GOLD Ninety-nine percent of the gold recovered was finer than 12 mesh, although occasional small nuggets were recovered. The gold was bright and had a reported fineness of 850.

COMMENTS Concentrates from the wash plant were cleaned up daily. They were first processed through a home-made mini-screen plant which screened the material to minus 12 mesh which was then directed through a long tom, and plus 12 was collected and run through a jig. The minus 12 mesh fraction was then cleaned on three 3-foot diameter wheels.

Tailings were used to reclaim old works, fix roads, stabilize slopes, to prepare re-circulation ponds for future mining and prepare set-ups for the sluice plant. Black muck and sandy overburden stockpiles have been set aside for contouring and reclamation when mining is completed. The northeast end of the cut was stabilized and contoured adjacent to the main public road. This reclamation work was extended west for about 1500 feet along the north edge of the mining area in 2002.



Gimlex conveyors feeding wash plant. (inset) Gimlex relocating fuel tank liner.

**UNNAMED TRIBUTARY OF
DOMINION CREEK**

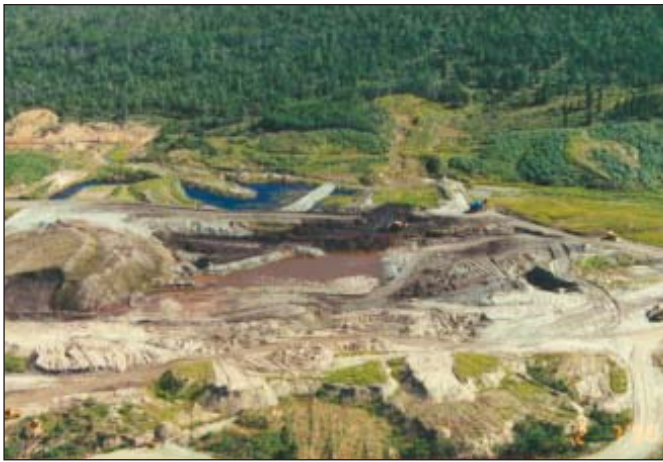
1150/10

George Abermeth	63°41'N 138°35'W
Water Licence: PM98-072	1998, 1999
Dominion-Sulphur Placer Area	Site no. 80

OPERATION/LOCATION Gyppo Mining Ltd. continued mining on this unnamed left limit tributary of Dominion Creek downstream from Rob Roy Creek. The tributary is commonly referred to as Lee Pup or Gyppo Creek. In 1998, the crew was reduced to four from the six miners employed in 1997. In 1999, three miners worked the site. Miners worked 11 hours per day. In 2000, Mr. Abermeth began work to shut down this operation. Closure work is expected to take approximately two years.

EQUIPMENT/FUNCTION The equipment and its usage was unchanged from previous years. The equipment used was a Komatsu model 355 bulldozer, a Caterpillar model D8 bulldozer, a Hein Werner model C-24 excavator and a Caterpillar 966C loader.

WASH PLANT Mr. Abermeth used a Tyroc vibratory double deck screen that fed to sluice runs to process his pay gravels. The screen deck was powered by a General Motors engine. The top screen was 2½-inch plus and the bottom screen was ¾-inch minus. Process water was supplied at a rate of



George Abermeth's mine site in 1998. The creek flows along the right limit edge of the valley to back of the photo.

1400 igpm using a 12 by 10 pump powered by a 6-71 General Motors engine. The sluice rate was from 60 to 80 loose yards per hour. A Spriggs Jig was used to process concentrate.

GROUND DESCRIPTION During the 1998 mining season, the operation removed from 20 to 30 feet of frozen black muck to reach a 2-foot gravel layer which lay on decomposed bedrock. The sluice section consisted of the gravel and from 2 to 4 feet of bedrock. In 1999, the frozen black muck layer reduced to 15 to 20 feet and the gravel layer was from 1 to 2 feet deep. The sluice section in 1999 was the gravel and 2 to 3 feet of the decomposed bedrock.

MINING CUTS Two cuts were mined in 1998. One 100 yard by 80 yard cut was mined in 1999.

WATER SUPPLY AND TREATMENT This operation recirculated process water to attain an adequate water supply. Water was pumped upstream to the cut from what had been a mine cut on the left limit side of Dominion Creek put in by a neighbouring miner.

GOLD Fineness of the gold recovered from this creek is reported to be from 880 to 900 with 5% being coarse grained.

COMMENTS Poor metal prices and depletion of reserves at the site led to the reduction in the crew size and eventual mothballing of this operation.

DOMINION CREEK		1150/10G	
Adrian Hollis		63°41'N 138°36'W	
Water Licence: PM97-047		2001, 2002	
Dominion-Sulphur Placer Area		Site no. 81	

OPERATION/LOCATION Adrian Hollis mined an area of Dominion Creek near the mouth of an un-named left limit tributary commonly referred to as Gyppo Creek. Mr. Hollis

started working at this site in September of 2001. In the first season, he worked on his own and in 2002 he worked with one employee. There were approximately 50 sluicing days in the 2002 season.

EQUIPMENT/FUNCTION A PC400 Komatsu excavator was used to mine the property. In 2001, a D9H Caterpillar bulldozer and a 25-ton Moxy rock truck were leased from Ross mining for approximately one week. The rock truck was used to construct dykes and address reclamation in areas of a previously mined cut which were not needed for Mr. Hollis' work. In 2002, the D9H was leased again for approximately 10 days to rip frozen ground.

WASH PLANT The wash plant was a screen deck equipped with New Zealand-style hydraulic riffles. Process water was obtained at a rate of 600 igpm to process 100 to 120 loose yards per hour. Clean-ups were completed using Ross Mining's clean-up equipment.

GROUND DESCRIPTION The average depth of the ground was 17 to 20 feet. The section was made up of mud over 2 to 4 feet of Dominion gravel. The sluice section was the 2 to 4 feet of gravel and up to 2 feet of chlorite schist bedrock. The area being mined was a perched bench at the edge of the Dominion flood plain. The bedrock was elevated slightly relative to surrounding bedrock.

MINING CUTS In 2001, the cut processed was 50 feet by 100 feet in area. In 2002, an L-shaped pit was mined. It had an average width of 50 feet and was approximately 200 feet long.

WATER SUPPLY AND TREATMENT Water was pumped directly from Dominion Creek. In 2001, settling occurred in an area previously mined by Ross Mining Ltd. In 2002, process water for the first portion of the cut was settled in the same area as in 2001. After this, primary settling occurred in areas mined by Mr. Hollis, with final settling in the Ross Mining cut.

GOLD The gold recovered was fine-grained. It had a purity of 860 fine.

COMMENTS Reclamation was addressed as mining progressed.

DOMINION CREEK		1150/10G	
Ross Mining Ltd.		63°41'N 138°36'W	
Water Licence: PM97-047		1998, 1999, 2000, 2001, 2002	
Dominion-Sulphur Placer Area		Site no. 82	

OPERATION/LOCATION Norman Ross' operation on Dominion Creek was located near the confluence with Gold Run Creek. The Dominion Creek valley in this area is relatively wide and flat. In 1998, this operation employed eight miners and



Ross Mining Ltd.'s processing plant on Dominion Creek near Rob Roy Creek in the Dawson Mining District.

four camp personnel and ran one 10½-hour shift per day. In 1999, there was an additional camp employee. In 2000, the crew size and the number of shifts varied depending on the stage of the operation. There were six to nine miners and two to four camp employees. The operation ran either one or two 10-hour shifts per day. In 2001, the operation increased the number of miners to 14 while the camp crew was two. Two 10½-hour shifts were worked each day. The crew increased again to 16 miners and three camp personnel, again working two 10½-hour shifts per day.

EQUIPMENT/FUNCTION In 1998 and 1999, two excavators, one a Caterpillar 245 and the other an Hitachi EX1100, three Caterpillar bulldozers, models D10L, D9L and D8L, three 60-ton Terex 3309 trucks, two Caterpillar loaders, models 988 and 992, and one Caterpillar 16G grader, were used to mine this site. In 2000, a Caterpillar D9L bulldozer and a Komatsu PC400 excavator were added. In 2001, a Caterpillar D10N was added. In 2002, two 40-ton trucks were added.

WASH PLANT A hopper and conveyor which fed a 6-foot by 20-foot double deck screen deck which in turn fed to six oscillating sluice runs were used to process pay gravel. There were 300 feet of 42-inch wide conveyor. The sluice runs were 26 feet wide. The processing rate varied widely. The overall range of rates was from 225 to 400 cubic yards per hour. As the processing rates varied so did the water use rates. It varied over the five years from a minimum of 2000 to a maximum of 6000 igpm. The water was supplied to the plant using a 12 by 14-inch Berkley pump powered by a Cummins diesel engine.

GROUND DESCRIPTION In 1998, the stratigraphic section encountered was 6 to 10 feet of black muck over 8 to 12 feet of Dominion gravel and sand which was over 10 to 15 feet

of White Channel. The waste section was 24 to 28 feet of gravel and muck. The sluice section was composed of 4 to 8 feet of White Channel and 2 to 6 feet of bedrock. In 1999, the overall depth was made up of 8 to 12 feet of black muck and sand over 10 to 15 feet of Dominion gravel which was over 10 to 14 feet of White Channel. The operation sluiced 4 to 8 feet of the White Channel and 2 to 5 feet of bedrock after removing 25 to 28 feet of muck and gravel. In 2000, the muck layer varied from 5 to 15 feet. The sand was 2 to 5 feet deep. The red-coloured Dominion gravel and the White Channel were 5 to 10 feet deep each. Four to 10 feet of White Channel gravel and 2 to 6 feet of bedrock were sluiced. In 2001 and 2002, the stratigraphic section was composed of 6 to 14 feet of muck, 2 to 8 feet of sand, 6 to 12 feet of red gravel and 8 to 12 feet of White Channel gravel. The bedrock was a green chlorite schist. The average depth to bedrock was 34 feet. In 2001, the sluice section was 4 to 8 feet of White Channel and 3 to 6 feet of bedrock. The sluice section in 2002 was 4 to 5 feet of White Channel and 2 to 3 feet of bedrock.

MINING CUTS In 1998, two cuts were mined, one approximately 180,000 square feet and the other approximately 260,000 square feet. In 1999, one cut of 650,000 square feet was mined. In 2000, the one cut mined was 850,000 square feet. In 2001, one cut of approximately 900,000 square feet was mined. The cut mined in 2002 was 1,080,000 square feet.

WATER SUPPLY AND TREATMENT This operation used a closed re-circulation settling system. Usually 100% re-circulation was achieved. However, at times it was necessary to have some level of discharge from the system, most often when excess water entered the system due to heavy rainfall.

GOLD The fineness of the gold from this site has varied from year to year. In 1998, it ranged from 830 to 860. In 1999, it was 840 to 860. In 2000, the range was 845 to 875. In 2001, it ranged from 882 to 885. In 2002, the purity of the gold dropped back down to 835 to 860 fine. It was described as fine and rugged with 50% smaller than 50 mesh.

COMMENTS As cuts are mined-out they are reclaimed first by using them as settling ponds, then by placing material stripped from subsequent cuts in them and finally they are sloped and overlain with topsoil. This operation has been an industry leader in placer mining practices and was awarded the first Robert E. Leckie award for Long Time Achievement in Mine Reclamation in 2001.

GOLD RUN CREEK**1150/10G**

Mary Ange Resource Ltd.

63°42'N 138°38'W

Water Licence: PM98-020

2001, 2002

Dominion-Sulphur Placer Area

Site no. 83

OPERATION/LOCATION Grant, Richard and Michael Klein commenced their mining at this location in 2001. A camp located on the site served as their base camp while mining on Sulphur Creek prior to working here. The valley is fairly wide and flat. Areas of this property have been hand, dredge and bulldozer mined previously, with the most recent prior activity by Teck Mining Group Ltd. This operation employed seven miners and one camp worker, covering two 10-hour shifts per day. In 2002, there were three miners, five employees and one camp worker. Two 10- to 12-hour shifts were worked each day.

EQUIPMENT/FUNCTION In 2001, the operation utilized two Caterpillar bulldozers, models D10N and D9N, both equipped with U-blades and rippers. The D9N had a multi-shank ripper while the D10N was equipped with a single shank ripper. Also used were one Caterpillar 966 loader with a 3-yard bucket, one Caterpillar 637E scraper, and a Caterpillar 330B excavator. The loader had a 4 cubic yard bucket. The excavator had a 54-inch cleanup bucket. Some of the waste overburden was hydraulic stripped using a 10- by 8-inch Morris pump. In 2002, the scraper was not used but an MT36 Moxy truck was added. A 6- by 8-inch Cornell pump, powered by a Caterpillar 3206 engine, was used for hydraulic stripping. The pump rate was 2500 igpm.

WASH PLANT The wash plant consisted of a hopper with belt-feeder which fed onto a Hewitt Robbins screen deck with

1-inch punch plate holes. The screen deck fed into a sluice box with three sections of runs, two 4-foot wide by 18-foot long runs equipped with riffles and 3 runs equipped with expanded metal. Power for the wash plant was supplied by a D60P1 Caterpillar Olympian generator. Water was supplied to the plant using an 8 by 10-inch Cornel pump, powered by a Caterpillar 3406 engine, at a rate of 3500 igpm to process 188 loose yards per hour. The process rate in 2002 was 143 loose yards per hour.

GROUND DESCRIPTION The stratigraphic section was 30 feet of muck over 8 feet of pay gravel. Mining also occurred in an area which had been previously dredged from 1914 to 1923. The sluice section was 10 feet deep. In 2002, overburden consisted of 25 feet of frozen black muck. There were many old workings encountered. The average depth of pay dirt was 5 feet. The operation sluiced the pay gravel and 3 feet of rock. The pay gravel was mixed with black mud. The black mud had approximately 10 to 20% pay gravel that had either been left by the dredge or was spillage from the dredge buckets.

MINING CUTS Five cuts were mined in 2001. They varied in size from 200 feet by 150 feet to 500 feet by 150 feet. The total volume sluiced in 2001 was 28,600 cubic yards over 240 hours. Of the total 170,000 cubic yards of waste material removed, 120,000 cubic yards were removed by hydraulic stripping. In 2002, one cut mined in the previously dredged area was 150 feet by 1300 feet with a total of 50,064 cubic yards of pay gravel sluiced. A second cut in virgin ground was 40 feet by 250 feet.

WATER SUPPLY AND TREATMENT Water was obtained and treated in two out-of-stream ponds. One was 600 by 400 feet and



Mary Ange Resources using an hydraulic monitor in the Gold Run Creek valley during the 2001 mining season.

the other was 800 by 900 feet. In 2001, there was no effluent discharge from the operation to Gold Run Creek. In 2002, water was obtained from Gold Run Creek and from an unnamed tributary to Gold Run. During low water periods, in-stream reservoirs were constructed. No settling took place in-stream. The settling pond was 1000 feet by 300 feet and 100% of process water was recycled.

GOLD The gold was described as 90% fine-grained and 10% small nuggets which were bright, round and chunky. There was some quartz present in the gold. The nuggets recovered were not bigger than 10 mesh in size. Some were crystalline. The fineness was 850.

GOLD RUN CREEK 115O/10H

Ray Lizotte and Brent Construction Inc.	63°43'N 138°41'W
Water Licence: PM99-128	1999, 2000
Dominion-Sulphur Placer Area	Site no. 84

OPERATION/LOCATION This operation was located at the mouth of Laskey Pup which is a right limit tributary to Gold Run Creek approximately 3 miles from the confluence with Dominion Creek. The average valley width at this location was 1200 feet. The operation utilized a pond left by Teck Mining Ltd. for water acquisition and settling. There were two miners employed, working one 12-hour shift per day.

EQUIPMENT/FUNCTION Two Caterpillar bulldozers with rippers, models D9H and D8K, were used to strip black muck. The D8K was also used to push pay gravel to a Caterpillar 235 excavator which fed the wash plant. A Caterpillar 980 Loader with an 8-yard bucket was used to remove tailings. A Caterpillar 988 loader was added in 2000. An automated monitor was also used to strip the frozen black muck overburden.

WASH PLANT In 1999, the wash plant consisted of a 16-foot by 18-foot hopper with a belt feeder which dumped into a 4-foot diameter trommel equipped with hydraulic riffles set at a slope of 1-inch per foot. This plant processed from 32 to 50 loose cubic yards per hour. In 2000, a Super Sluice plant with hydraulic riffles was used to process 100 to 150 loose yards per hour.

GROUND DESCRIPTION The miners encountered 35 feet of frozen black muck which covered 1 foot of gravel. The bedrock was sloped and wavy. The gravel and 3 feet of bedrock were sluiced.

MINING CUTS The operation sluiced 4052 cubic yards in one cut in 1999. In 2000, one 400-foot by 400-foot cut was mined, with 30,000 cubic yards sluiced.

WATER SUPPLY AND TREATMENT A pond 2000 feet long by 300 feet wide was used for water acquisition and settling.



The automated hydraulic monitor used at Laskey Pup on Gold Run Creek by Ray Lizotte and Brent Construction.

The operation recirculated 100% of process water. A 10 by 12-inch Morris slurry pump powered by a 3408 Caterpillar engine pumped up to a maximum of 4000 igpm.

GOLD The gold recovered was approximately 80% fine-grained and 20% coarse-grained. The purity of gold from this creek is typically 830 to 878.

COMMENTS Approximately two-thirds of the area showed evidence of earlier hand working.

GOLD RUN CREEK

1150/10

D & P Mining Exploration Ltd.

63°44'N 138°42'W

Water Licence: PM99-065

1998, 1999, 2000, 2001, 2002

Dominion-Sulphur Placer Area

Site no. 85

OPERATION/LOCATION Dan and Peggy Cuevas continued mining this property located approximately 5 miles up Gold Run Creek from its confluence with Dominion Creek. The operation employed two miners working one 10-hour shift per day.

EQUIPMENT/FUNCTION A Caterpillar D9G bulldozer equipped with a ripper and U-blade was used to rip and push frozen mud overburden and stockpile pay gravels. A Caterpillar 235C excavator with a 3.5 yard bucket was used to dig drains, cleanup bedrock pay-dirt and feed the sluice plant. A Caterpillar 966C loader with a 4-yard bucket was used to remove and stockpile tailings.

WASH PLANT No sluicing was performed in the 1998 mining season. In 1999, a new sluice plant was put into use. The new wash plant consisted of a 4-yard hopper with a belt feeder which fed to a 4-foot by 10-foot double screen deck. The screen deck classified material to $\frac{5}{16}$ of an inch. The larger material was processed in a 3-foot by 20-foot sluice run set at a slope of 2.5 inches per foot and equipped with expanded metal and Nomad carpet. The majority of the gold recovered in the run, classified to $\frac{5}{16}$ -inch minus, was processed through two in-line 4-foot by 4-foot jig cells. In 1999, the 400 igpm of water used to process the 35 loose yards per hour of material which went through the plant was supplied by a 10 by 12 Worthington pump, powered by a Caterpillar 3208 engine. Water was supplied in 2000, 2001 and 2002 by a 12 by 12 Pumpmaster pump powered by a Deutz engine.

GROUND DESCRIPTION The stratigraphic section of this property in the area currently being mined consisted of 35 to 40 feet of mud above 2 to 5 feet of gravel. The composition is uniform and frozen with particle sizes ranging from small-grained through sand and gravel to rocks with a diameter from one to two feet. The rocks were mostly quartz. The material was over wavy blue and green bedrock which was fractured and decomposed. The sluice section consisted of an average of 3 feet of gravel along with 3 feet of decomposed bedrock.



Dan and Peggy Cuevas' operation on Gold Run Creek in 2000.

MINING CUTS In 1998, the operators worked at stripping two cuts. One was 250 feet wide by 400 feet long and the other was 120 feet wide by 540 feet long. From 1999 through 2001, two-thirds of the 120 by 540-foot cut was sluiced. Minimal sluicing was done on the 120 by 540-foot cut in 2002 due to wet weather conditions. They plan to finish this cut in the 2003 mining season. The Cuevas also stripped another cut downstream which was 120 feet wide by 420 feet long. They also plan to start sluicing this cut in 2003.

WATER SUPPLY AND TREATMENT Water for this operation has been obtained using an in-stream reservoir in Gold Run Creek. Process water has been recycled when possible to do so. The total settling area used was 150 feet by 300 feet.

GOLD Gold recovered from this property is 840 to 870 fine. It is mostly round, smooth and chunky with some flat, angular and rough pieces and some wire gold. Twenty percent is +10 mesh, 70% was -10 to +60 and 10% was -60. Some 1/4 ounce and smaller quartz-rich nuggets were obtained.

COMMENTS Much of the 1999 mining season was spent on the construction and modification of the new sluice plant. The operators have noted old mining shafts during the stripping process. They also encountered old bones at the mud/gravel contact in some areas of the site.

DOMINION AND ARKANSAS CREEKS 1150/10G

A-1 Cats

63°44'N 138°31'W

Water Licence: PM97-047

2002

Dominion-Sulphur Placer Area

Site no. 86

OPERATION/LOCATION A-1 Cats commenced operations in 2002 at this site formerly mined by Miles and Vicki Johnson. The site is located on the west central portion of the Dominion Creek valley bottom at a location 1500 feet downstream from its confluence with Arkansas Creek where the valley width averages 2400 feet. There were six miners and four camp personnel working one 12-hour shift per day at this site.

EQUIPMENT/FUNCTION A Caterpillar D11N bulldozer equipped with a 54 cubic yard push capacity U-blade and a single-shank ripper was used to strip overburden. A Caterpillar D9H bulldozer equipped with a U-blade and a ripper was used for coarse tailings removal, road construction and maintenance, pay gravel stockpiling, and also assisted in the removal of overburden. Pay gravels were loaded into two Caterpillar 30013 rock trucks by a Caterpillar 235C excavator and a second 235C excavator was used to load the wash plant. A third 30013 rock truck was available onsite as a standby unit. Both excavators were utilized during the later stages of stripping to construct pre-ripped perimeter and cross drainage ditches to enhance pay gravel thaw. A Caterpillar LPG D6H bulldozer equipped with a winch and a straight blade was used for grooming purposes over soft ground conditions during ongoing reclamation of disturbed areas. A Caterpillar 966C wheeled loader was used on-site for a variety of work.

WASH PLANT Pay gravel were loaded into a 15 cubic yard hopper feeder consisting of a variable speed belt measuring 3½ feet wide by 16 feet long. A second conveyor belt, measuring 4 feet by 50 feet, elevated the material to a 5-foot by 16-foot Clemro horizontal double screen wash deck. A rock kicker was utilized on this conveyor to discard boulders exceeding 12 inches in diameter. The upper deck screened the material to 1½-inch minus and the lower deck screened to ⅝-inch minus, using standard steel mesh. A side-mounted bottom-slotted boil box distributed the screened slurry into a primary sluice run. The primary sluice was made up of two 4-foot wide by 10-foot long boxes containing one-inch angle iron riffles and sloped at 2 inches per foot. The second run consisted of four 20-foot by 4-foot oscillating (160 RPM) sluices containing expanded metal and sloped at 1½ inches per foot. A 3-foot by 40-foot conveyor was used to stack coarse tailings and fine tailings self-dispersed into an old mine cut. All sluice runs were lined with heavy traffic Nomad carpet. Gold was separated from the concentrate with the use of a long tom and a 4½-foot by 9-foot Wilfrey table. The 3000 igpm of water necessary to process the 200 loose yards per hour of pay gravel that went through the plant was provided using a 10 by 8-inch Berkley pump powered by a 250 horsepower Isuzu engine.

GROUND DESCRIPTION The stratigraphic section in the mine cut consisted of a massive black mud layer ranging from 8 to 18 feet thick. The mud was underlain by a package of reddish-brown silt, sand and gravel ranging from 7 to 17 feet thick. Bedrock averaged 25 feet deep and was generally flat with occasional pockets 2 feet deep. Bedrock was made up of a dark gray coloured micaceous, garnet-rich schist and occasional greenish grey in colour in areas proximal to quartz stockwork outcrops. The sluice section consisted of 4½ feet of the lowermost reddish-brown cobble-boulder gravels lying on

bedrock and 1½ feet of bedrock. The waste section consisting of frozen black mud and upper silt, sand and gravel was longitudinally and cross-ripped and ramped out of the mine cut with a D11N bulldozer.

MINING CUTS One cut, 320 yards wide by 125 yards long, was mined in 2002. A total of 300,000 cubic yards of overburden were removed to reach the 92,000 loose cubic yards of pay gravels which were sluiced.

WATER SUPPLY AND TREATMENT Water was obtained from an existing reservoir in an old mine cut with a surface area of 40,000 square yards. The operation recycled 100% of the process water.

GOLD The gold was very flat, smooth and dull. It had a fineness of 830. Most of the gold was fine-grained with 46% -30 mesh, 49% +30 to -20 mesh, 3% +20 to -10 mesh, and 2% +10 mesh.

COMMENTS On September 14, the operation started water stripping cuts for next season. Material removed from the first cut had an area of 28,500 square yards and the second had an area of 12,000 square yards.

DOMINION CREEK	115O/10, 115 O/15
Miles and Vicki Johnson	63°45'N 138°31'W
Water Licence: PM96-061	1998, 2000
Dominion-Sulphur Placer Area	Site no. 87

OPERATION/LOCATION Maverick Gold Mines Inc. continued to mine this site located on Dominion Creek at its confluence with Arkansas Creek. This area of the Dominion Creek valley is approximately 1200 feet wide and flat. A crew of five miners and two camp personnel worked 10 hours per day at the site.



Miles and Vicki Johnson's plant processing material on Dominion Creek near Arkansas Creek in 1998.

EQUIPMENT/FUNCTION The equipment used to mine this site was a Caterpillar D9L bulldozer, a Caterpillar 980 loader, a Komatsu PC400 excavator and two 25-ton Moxy trucks.

WASH PLANT The wash plant consisted of a 6 by 16-foot screen deck which fed to four 4 by 20-foot oscillating trays. The 3000 igpm of water needed to process 80 to 120 loose yards of pay per hour was supplied by a 12 by 14-inch pump, powered by a 6-71 General Motors engine.

GROUND DESCRIPTION This ground was approximately 28 feet deep to bedrock. It consisted of 6 to 15 feet of black muck over 10 to 15 feet of sand and Dominion gravel on top of 3 to 5 feet of mixed White Channel and Dominion gravel. The sluice section was 2 to 4 feet of gravel and 2 to 4 feet of bedrock.

MINING CUTS Five cuts of varying sizes were mined in 1999.

WATER SUPPLY AND TREATMENT Water was acquired from Dominion Creek with a two pond, out-of-stream re-circulation settling system used to recycle approximately 70% of the water.

GOLD The gold had a purity of 830 to 850 fine. It was described as flat and fine-grained. Final cleanup of concentrates was accomplished using tables.

COMMENTS The majority of the work required to decommission this site was accomplished at the end of the 1999 mining season. The remainder of the work was completed in 2000.

KENTUCKY CREEK

115O/15A, 115 O/16

Peter Bodin	63°46'N 138°31'W
Water Licence: PM99-071	2000, 2001, 2002
Dominion-Sulphur Placer Area	Site no. 88

OPERATION/LOCATION Peter Bodin is in the early stages of operation at this site. Kentucky Creek is a left limit tributary of Dominion Creek. Mr. Bodin's operation has been working an area upstream of the Dominion Creek road. Ground preparation has been progressing each year. Mr. Bodin worked the site alone, putting in one eight-hour shift per day. Mr. Bodin has not yet begun to sluice at this location.

EQUIPMENT/FUNCTION Two Caterpillar bulldozers, models D8H and D6, as well as a Caterpillar model 977H front-end loader were used to mine the site.

WASH PLANT The wash plant which Mr. Bodin plans to use is a 36-inch drum trommel which is fed by a conveyor belt fed by a dump box. Water will be supplied using a 4-inch Monarch pump powered by a Dietz engine. Mr. Bodin anticipates using 1400 igpm to wash 25 cubic yards per hour.

GROUND DESCRIPTION Drilling of the site has indicated 19 to 24 feet of frozen black muck over gravel. The muck overlays approximately 3 feet of gravels. All of the gravel section will be sluiced.

MINING CUTS One cut 110 feet by 86 feet has been stripped to allow thaw.

WATER SUPPLY AND TREATMENT Process water will be obtained from Kentucky Creek. The settling system will be two out-of-stream ponds each 50 feet by 50 feet.



Peter Bodin's camp on the right limit of Kentucky Creek in 2000. Initial stripping can be seen across the valley from the camp.

GOLD Gold is expected to have a fineness of 820 based on gold found in the surrounding area.

DOMINION CREEK 1150/15A

Jim Conklin 63°47'N 138°35'W
 Water Licence: PM99-045 1998, 1999, 2000, 2001, 2002
 Dominion-Sulphur Placer Area **Site no. 89**

OPERATION/LOCATION This small operation located on Dominion Creek upstream from its confluence with Hunter and Leana creeks occupied two miners each year except for 2000 when there was one miner and 2002 when there were three. In 1998 and 1999, the working shift was 12 hours. This dropped to 10 hours per day for 2000 and 2001. The shift increased to 12 hours per day again in 2002.

EQUIPMENT/FUNCTION Mr. Conklin used a Fiat Allis model HD-31 bulldozer with a U-blade and ripper and a Michigan model 175-B loader with a 6-yard bucket to mine the property. In 2001, a Kawasaki model 95ZIII loader was also used. In 2002, a model 350H Bucyrus Erie backhoe was added.

WASH PLANT The processing plant used at this site consisted of a 4-foot by 8-foot ¾-inch screen deck feeding two 4-foot by 8-foot sluice runs. The sluice runs were fitted with expanded metal and carpet. The operation processed 60 loose yards per hour in 1998 and 1999, 80 in 2000 and 100 in 2001. In 1998 and 1999, process water was supplied at a rate of 1200 igpm by a 6-inch Jaeger pump powered by a Ford diesel engine. In 2000, Mr. Conklin used 800 igpm of water. The pump was powered by a 4-cylinder engine. In 2001, water consumption



Jim Conklin's processing plant on the right limit of Dominion Creek upstream from Hunter Creek.

increased to 900 igpm using the same pump and engine as in 2000.

GROUND DESCRIPTION During the 1998 mining season, Mr. Conklin re-processed two tailings piles from previous operations at the site. In 1999, this operation worked to a total depth of 12 to 15 feet. The sluice section was 4 to 6 feet of muck and gravel and 2 feet of bedrock. In 2000, 10 feet of overburden and 2 feet of waste gravels were removed to reach the 5 feet of pay gravels and 3 feet of bedrock which were processed. In 2001, the operation removed 17 feet of silt and sand and 2 feet of waste gravel to reach the 5 feet of pay gravel and 5 feet of bedrock which were processed. In 2002, the total depth of the ground was 24 feet. Fourteen feet of overburden were removed to reach the 10 feet of pay which were sluiced. The sluice section included from 3 to 6 feet of bedrock. Some of the material processed in 2002 was tailings.

MINING CUTS In 1998, two tailings piles were mined. From 1999 to 2000, one cut was mined each season. In 1999, the cut was 550 feet long by 150 feet wide. In 2000, the cut was 80 feet wide by 200 feet long. In 2001, the cut was 125 feet wide by 250 feet long. In 2002, in addition to the 8000 yards of tailings which were sluiced, two cuts were made in virgin ground. The two new cuts were 150 feet by 100 feet and 125 feet by 200 feet in area.

WATER SUPPLY AND TREATMENT This operation utilized a total re-circulation system for water acquisition and treatment. No visible discharge was noted from the site. Mined-out cuts were used for settling as well and were also backfilled with overburden from subsequent cuts.

GOLD In 1998, 1999 and 2002, the gold obtained had a reported fineness of 820 and consisted of fine-grained, angular particles. The size was from 10 to 60 mesh. In 2000 and 2001, the reported fineness was 825 with the material recovered continuing to be fine-grained and mostly minus 60 mesh.

COMMENTS Mr. Conklin used a long tom or wheels to clean up his concentrate. Some areas of the site have gradually been tidied up from previous operations.

DOMINION/NEVADA CREEKS 1150/15

Art Sailer 63°48'N 138°38'W
 Water Licence: PM98-040 1998, 1999, 2000, 2001, 2002
 Dominion-Sulphur Placer Area **Site no. 90**

OPERATION/LOCATION Arthur Sailer was licenced to mine on three properties on Dominion Creek each year. In 1998 and 1999, his crew was made up of six miners and two camp workers. In 2000 and 2001, there were two fewer miners.

On average two miners worked at each site with movement of employees between the sites as required. The regular shift was 10 hours per day. The property mined under this licence is a left limit bench of Dominion Creek. The approximate valley width in this area is 1500 feet.

EQUIPMENT/FUNCTION Equipment used by Mr. Sailer to mine the properties was four Caterpillar bulldozers, three Caterpillar front-end loaders, two Caterpillar excavators. Three of the bulldozers, models D9G, D9H, D8-14A, were equipped with U-blades and rippers. The other bulldozer, model D8-14A, was equipped with an S-blade and a winch. The loaders were model 980B with 5 cubic yard buckets. The Caterpillar excavators were models 225 and EL300. In 1997, a model 235 Caterpillar excavator was added. An additional Caterpillar excavator, model 235, was used in 2000 and 2001. Generally a bulldozer, a loader and an excavator were used at this site, however, equipment was moved as required between the sites.

WASH PLANT The wash plant used on the Dominion Creek and Nevada Creek site was a 5-foot by 14-foot screen plant with a 10-foot by 10-foot sluice run with expanded metal and Nomad carpet and an 8-foot by 4-foot run with 1¼ angle

iron riffles. This plant processed approximately 100 to 150 loose yards per hour.

In 2001 and 2002, all sluiced material was processed using an ELRUSS 5 by 14-foot double deck screening plant. Pumps used for the Dominion Creek/Champion Pup and the Dominion/Nevada creek sites were a 12 by 14-inch Byron Jackson and a 10 by 12-inch Dayton Dowd, each powered by a D13000 Caterpillar engine.

GROUND DESCRIPTION The miners encountered deposits having a total depth varying from 30 to 50 feet. Of the total depth, 10 to 40 feet was reported to be muck and 5 to 15 feet was gravel. From 6 to 12 feet of the gravel and up to 5 feet of the bedrock were sluiced. Gravel sizes and bedrock types were varied.

MINING CUTS In 1998, four cuts with an approximate size of 85,000 cubic yards were sluiced. In 1999, six cuts of 120,000 cubic yards were sluiced. In 2000, four cuts of 6800 cubic yards were sluiced. In 2001, three cuts of 55,000 cubic yards were sluiced. In 2002, the total cubic yardage moved, in four cuts, was 245,124.

WATER SUPPLY AND TREATMENT Out-of-stream water acquisition and settling ponds were used at this site.



Processing pay at Art Sailer's operation on Dominion Creek in 1998.

GOLD Gold recovered from this site was fine, flat and flaky with some spongy and quartz nuggets. There was 1% +10 mesh, 50% -10 mesh to +60 mesh and 49% -60 mesh.

DOMINION CREEK/CHAMPION PUP 1150/15

Art Sailer	63°49'N 138°41'W
Water Licence: PM98-041	1998, 2000, 2001, 2002
Dominion-Sulphur Placer Area	Site no. 91

OPERATION/LOCATION Arthur Sailer was licenced to mine on three properties on Dominion Creek each year. Mr. Sailer did not mine under this licence in 1999 in order to concentrate his efforts on the ground covered by licence PM98-040. His crew consisted of six miners and two camp workers. On average, two miners worked at each site with movement of employees between the sites as required. The regular shift was 10 hours per day. The property mined under this licence is creek and left limit bench ground of Dominion Creek. The valley width in this area is approximately 1500 feet.

EQUIPMENT/FUNCTION Equipment used by Mr. Sailer to mine the two properties was four Caterpillar bulldozers, three Caterpillar front-end loaders, and two Caterpillar excavators. Three of the bulldozers, models D9G, D9H, D8-14A, were equipped with U-blades and rippers. The other bulldozer, model D8-14A, was equipped with an S-blade and a winch. The loaders were model 980B with 5 cubic yard buckets. The Caterpillar excavators were models 225 and EL300. After 1999, a model 235 Caterpillar excavator was added. Generally two bulldozers, a loader and an excavator were used at this site, however, equipment was moved as required between the sites.

WASH PLANT The wash plant used on the Dominion Creek and Champion Pup site was a 10-foot by 20-foot Derocker. This plant processed approximately 100 loose yards per hour. In 1998, a 5-foot by 20-foot trommel with a 4-foot by 18-foot sluice run equipped with expanded metal and angle iron and water riffles was also used on this site. In 2001 and 2002, all sluiced material was processed using an ELRUSS 5 by 14-foot double deck screening plant. Pumps used for the Dominion Creek/Champion Pup and the Dominion/Nevada creek sites were a 12 by 14-inch Byron Jackson and a 10 by 12-inch Dayton Dowd, each powered by a D13000 Caterpillar engine.

GROUND DESCRIPTION The miners encountered from 10 to 40 feet of muck over 5 to 15 feet of gravel. Of this, from 6 to 12 feet of the gravel and up to 5 feet of the bedrock were sluiced.

MINING CUTS In 1998, two cuts, with a total volume of approximately 33,000 cubic yards, were mined. In 2000,

three cuts totalling approximately 35,000 cubic yards were mined. In 2001, the three cuts mined had a total volume of approximately 47,000 cubic yards. In 2002, two cuts were mined with a total cubic yardage moved of approximately 45,000.

WATER SUPPLY AND TREATMENT Small in-stream reservoirs were used at this site. Settling was accomplished in out-of-stream ponds.

GOLD Gold recovered from this site was fine, flat and flaky with some spongy and quartz-rich nuggets. There was a slightly higher portion of coarser gold than found at the Dominion/Nevada creek sites.

DOMINION CREEK 1150/15

Favron Enterprises Ltd.	63°50'N 138°45'W
Water Licence: PM97-059	1998, 1999, 2000, 2001, 2002
Dominion-Sulphur Placer Area	Site no. 92

OPERATION/LOCATION The Favrons continued to mine at this property located approximately 25 miles from the Indian River. In 1998, the mine employed seven miners and three camp employees, working one 11-hour shift per day. In 1999, there were five miners. In 2000, there were six miners. In 2001, there were two miners working at the site and no camp workers. In 2002, four miners sluiced at this property.

EQUIPMENT/FUNCTION Two bulldozers were used to rip and strip ground from 1998 to 2000. One was a D9L Caterpillar and the other an FD50 Fiat Allis. In 2001, an 8220 Terex bulldozer with a straight blade was used to move and push dirt to a monitor which was used for hydraulic stripping. The pump used for hydraulic stripping was a 12 by 10-inch Binham, with power supplied by a 6-71 Detroit Diesel engine. A mud pump was used to transfer effluent from the hydraulic stripping to a previously mined cut for settling. In 2002, the Caterpillar D9L bulldozer was used to remove overburden to expose pay on the right limit side of the cut. Two 350H Bucyrus Erie hydraulic excavators equipped with 2½ yard buckets were used to dig drains and clean bedrock in 1998. From 1999 to 2002, only one of the excavators was used at this site. Two TS24B and 2 TS18 Terex scrapers were used to haul overburden and pay dirt in 1998 and 1999. Only the TS24B scrapers used in 2000 to haul pay dirt. No scrapers were used in 2001 but all four were used to haul and stockpile pay for four days in 2002. One of the TS-18s remained at the site to finish mining the cut. In 1998 and 1999, two bulldozers, one an 82-30B and the other an 82-40 Terex, were used to push up to the wash plant. In 2000, two 82-30B Terex bulldozers with U-blades were used to push off overburden. In 2002, one 8240 Terex bulldozer was used to feed the wash plant.

WASH PLANT A variable speed 42-inch by 21-foot belt feeder fed to a 42-inch by 60-foot elevation conveyor. The conveyor fed to a 5-foot by 10-foot double screen deck with 1½-inch and ¾-inch screens. The plus ¾-inch material travelled out a 36-inch by 35-foot radial stacking conveyor. The minus ¾-inch material flowed down two 12-inch hoses to two 9-foot by 12-foot slick plates which channelled material into six 36-inch by 16-foot runs equipped with expanded metal with Nomad matting for 16 feet and an additional section 2-foot by 4-foot 1-inch, equipped with 1-inch riffles over Nomad matting. The expanded metal sections were set at a slope of 1½ inches to the foot. The riffle-equipped sections were set at a slope of 2 inches to the foot. There were three of the runs on each side of the plant. Water was supplied to the plant using a Peerless 10 by 12-inch pump powered by a 671 General Motors engine. In 2000, the pump was powered by a 4-71 Detroit Diesel engine. The plant used 2500 igpm to process 150 loose yards per hour. Concentrates were cleaned using a long tom and a 48-inch reverse spiral wheel.

GROUND DESCRIPTION The stratigraphic section encountered was 25 feet of frozen muck with ice seams over 10 feet of gravel. The sluice section was 5 feet of the gravel and 1 foot of bedrock. In 1999, the stratigraphic section was 30 feet of frozen black muck with ice seams over 10 feet of grey silt on 10 feet of gravel located 10 feet below the watercourse. The bedrock was sloped and wavy. The sluice section was 6 feet of the gravel and from 1 to 3 feet of bedrock. The cut mined in 2000 had up to 40 feet of frozen black muck over 5 feet of gravel with a grain size ranging from sand to coarse gravels. The sluice section was 4 feet of gravel and 1 foot of bedrock. In 2001, hydraulic stripping methods were used to remove 10 feet of thawed black muck and silt from a heavily hand-mined area.

MINING CUTS Three cuts were mined in 1998. They were 450 feet by 210 feet, 2100 feet by 122 feet and 600 feet by 150 feet, for a total of 332,984 cubic yards moved. Three cuts were mined in 1999. They were 500 feet by 200 feet, 1100 feet by 150 feet and 1000 feet by 150 feet, with a total cubic yardage of 1,090,900. One cut was mined in 2000. It was 1400 feet by 150 feet for a total of 233,000 cubic yards. In 2001, one cut was prepared for sluicing in 2002. The cut was 950 feet by 200 feet. A total of 70,370 cubic yards were removed from the cut in 2001 and 49,259 cubic yards were sluiced from the cut in 2002.

WATER SUPPLY AND TREATMENT Water was obtained and treated using an in-stream system which was part of a second channel down Dominion Creek. When water was not in use it flowed down a channel away from the acquisition/settling system. The operation recycled approximately 50% of process water. The pond size in 1998 was 150 feet by 200 feet. In 1999, the pond was 1000 feet by 150 feet.

GOLD The gold recovered was bright in fine, flat pieces with some quartz present. The purity was 820 fine.

COMMENTS Old workings were encountered during mining. Work has started on preparing the site for decommissioning over the next few years.

CARIBOU CREEK

1150/15

Jim Stuart and Roger Stuart

63°50'N 138°49'W

Water Licence: PM98-049

1998, 1999, 2000, 2001, 2002

Dominion-Sulphur Placer Area

Site no. 93

OPERATION/LOCATION Jim Stuart and his son Roger continued to mine this property. Caribou Creek is a right limit tributary of Dominion Creek near its headwaters. The Caribou Creek valley is fairly narrow and has relatively low flows during much of the mining season.

EQUIPMENT/FUNCTION Two Caterpillar bulldozers, models D9G and D8H, a 966 Caterpillar loader and a 125B Case excavator were used to mine the property.

WASH PLANT A 54-inch diameter trommel was used to process pay. The trommel had a total length of 28 feet with 6 feet of that a section of screen. The trommel screened material to 1 inch. It had two sluice runs, each of which were 5 feet wide by 8 feet long. The sluice runs were equipped with New Zealand-style water riffles for the first 4 feet on each side and then expanded metal over Nomad matting for the rest. Process water was supplied using a 6 by 8-inch Monarch pump powered by a 671 General Motors engine. The plant used 1200 to 1500 igpm to process 80 to 100 loose yards per hour. A single cell jig was used for cleanups.

GROUND DESCRIPTION This operation typically encountered 15 feet of black muck over 4 to 6 feet of gravel. The sluice section was all of the gravel and up to 2 feet of bedrock. In 2002, the cut on Dominion Creek had an average depth of 15 to 18 feet. The muck layer was mixed and not all black muck as was encountered on Caribou Creek. The gravel averaged 4 to 5 feet deep. The sluice section on the Dominion cut was the gravel layer only.

MINING CUTS Generally a couple of cuts were mined per year along Caribou Creek. In 2002, one of the cuts was on the left limit of Dominion Creek.

WATER SUPPLY AND TREATMENT Process water was obtained from Caribou Creek. Settling was accomplished in small in-stream ponds with final settling in a large pond on the right limit of the Dominion Creek valley at the mouth of Caribou Creek. The large pond was in-stream during the mining season with flows routed around the pond at the end of each season. In 2002, process water for the cut on the left limit of Dominion Creek, across from the mouth of Caribou

Creek, was obtained from a large beaver pond at the mouth of Caribou Creek and settling was accomplished in a pond set up below the cut.

GOLD The purity of gold from this creek is typically from 816 to 840 fine.

DOMINION CREEK	115O/15E
Art Sailer	63°51'N 138°48'W
Water Licence: PM98-049	2002
Dominion-Sulphur Placer Area	Site no. 94

OPERATION/LOCATION Arthur Sailer was licenced to mine on three properties on Dominion Creek each year. On average, two miners worked at each site with movement of employees between the sites as required. The regular shift was 10 hours per day. The property mined under this licence is on the left limit of Dominion Creek, upstream from its confluence with Caribou Creek. The activity was covered by a water use licence held by Jim Stuart. The approximate valley width in this area is 500 feet.

EQUIPMENT/FUNCTION Mr. Sailer utilizes the following equipment as needed at each of his mine sites: four Caterpillar bulldozers, three Caterpillar front-end loaders and four Caterpillar excavators. Three of the bulldozers, models D9G, D9H, D8-14A, were equipped with U-blades and rippers. The other bulldozer, model D8-14A, was equipped with an S-blade and a winch. The loaders were model 980B with 5 cubic yard buckets. The Caterpillar excavators were two model 235, and one each of models 225 and EL300. Generally a bulldozer, a loader and an excavator were used at a given site, however, equipment was moved as required between the sites.

WASH PLANT The plant used to process material was an ELRUSS 5 by 14-foot double deck screening plant. Pumps used were a 12 by 14-inch Byron Jackson or a 10 by 12-inch Dayton Dowd each powered by a D13000 Caterpillar engine.

GROUND DESCRIPTION The ground mined in this area was approximately 15 feet deep.

MINING CUTS The cut mined was 166 yards by 50 yards in area, with a total of 41,500 cubic yards processed.

WATER SUPPLY AND TREATMENT Out-of-stream water acquisition and settling ponds were used at this site.

GOLD The purity of gold recovered from the middle to upper reaches of Dominion Creek historically ranges from 805 to 849 fine.

COMMENTS Much of the site was recontoured on completion of processing the cut and all equipment was removed to the main camp downstream on Dominion Creek.

UPPER DOMINION CREEK	115O/15D
Tim Coles	63°52'N 138°55'W
Water Licence: PM97-054	2002
Dominion-Sulphur Placer Area	Site no. 95

OPERATION/LOCATION Tim Coles started mining this property at the headwaters of Dominion Creek in June of 2002. The site has been mined previously. The site was mined by two to three miners working an average of 12 hours per day. Mr. Coles was able to sluice from August 15 to October 7 in the 2002 mining season.

EQUIPMENT/FUNCTION The site was mined using a model 890 John Deere excavator and a model D6 Caterpillar bulldozer. In September, a model EL300 Caterpillar excavator was added. The D6 was used for road maintenance and reclamation work. The excavators were used for all other mining-related works.

WASH PLANT The wash plant consisted of a 4-foot by 22-foot trommel which screened material to 5/8 of an inch. Recovery was via two 4-foot wide by 8-foot long sluice tables which were stacked one above the other. The sluice tables were equipped with 4 feet of expanded metal and 4 feet of 1¼-inch riffles on matting. The process rate for the plant was 60 to 70 loose yards per hour. Water was supplied using an 8-inch by 10-inch Paco pump powered by a Cummins engine. The pump rate was 1200 to 1500 igpm. A long tom was used for final cleaning of concentrates.

GROUND DESCRIPTION The miners encountered an average of 20 feet of muck. Beneath the muck was a 5 to 8-foot gravel layer.

MINING CUTS The total area mined at this site in the 2002 mining season was 22,500 square feet.

WATER SUPPLY AND TREATMENT Process water was obtained from an in-stream recycle pond. The operator found it necessary to utilize 100% re-circulation of process water in order to ensure an adequate water supply. The recycle pond was approximately 50 feet wide by 120 feet long. The operator also found it necessary to have a pre-settling pond at the end of the trommel in order to meet the effluent standard. Approximately 50% of the John Deere excavator's hours were spent removing tailings from the pre-settling pond.

GOLD Gold recovered from this property was reported to be coarse and rounded. Nuggets up to half an ounce were recovered. The purity was reported as 790 fine.

COMMENTS The operation is working to address site reclamation on an ongoing basis.