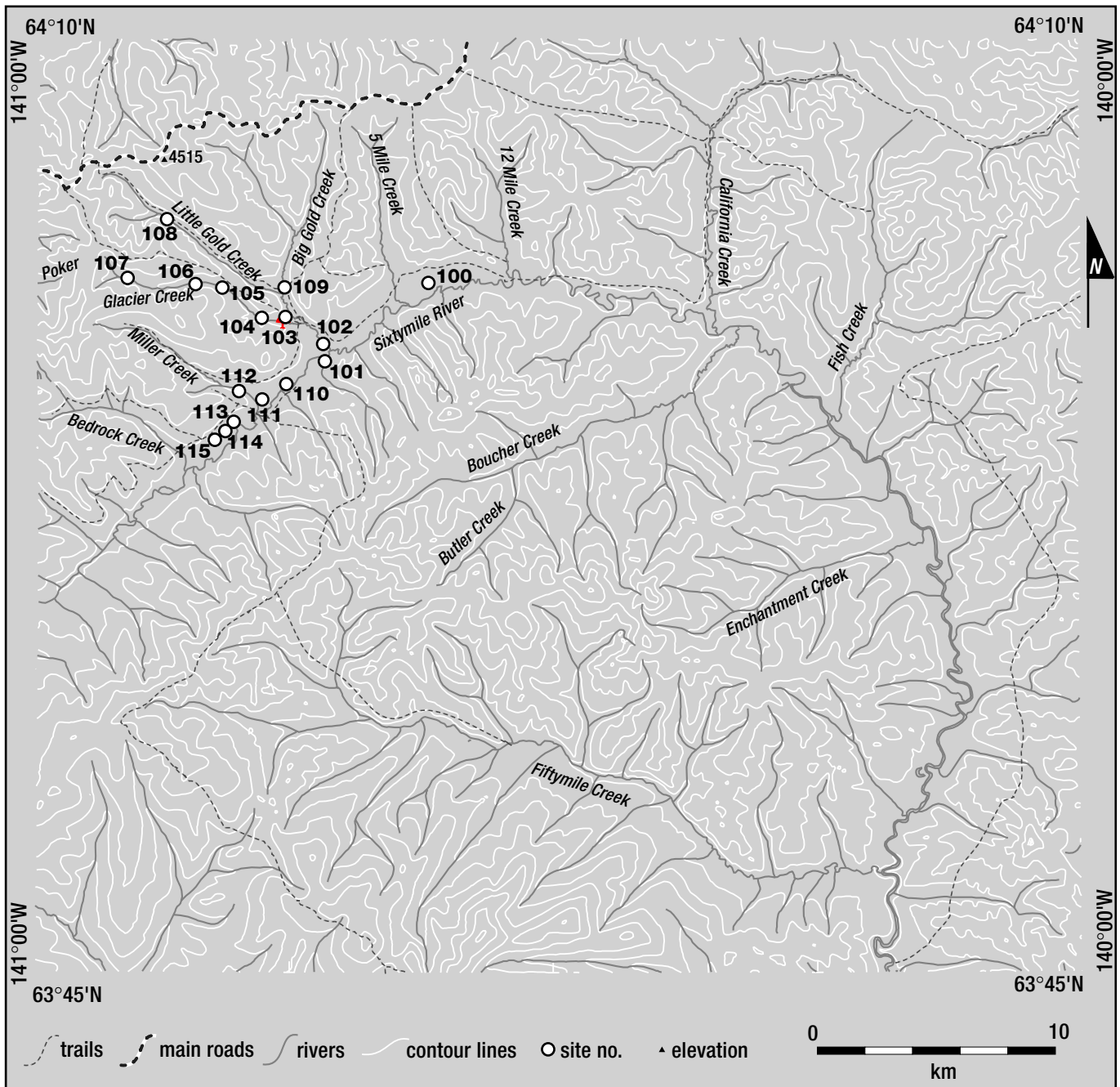


# SIXTYMILE PLACER AREA

SITES  
100-115



## LEGEND

- |  |   |
|--|---|
| 100 ..... Eldorado Placers, Sixtymile River                        | 108..... Maurice Alexander (Stempien), Little Gold Creek    |
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**SIXTYMILE RIVER****116C/02A**

Eldorado Placer Ltd.

64°02'N 140°38'W

Water Licence: PM93-072

1998, 1999, 2000, 2001, 2002

Sixtymile Placer Area

**Site no. 100**

**OPERATION/LOCATION** Greg Hakonson's operation mined property on the left limit of the Sixtymile River near 5 Mile Creek. Each year four miners worked one 12-hour shift per day except for 2001 when there were three miners.

**EQUIPMENT/FUNCTION** This operation used three Caterpillar D9L bulldozers and one Caterpillar 245 excavator to mine.

**WASH PLANT** The wash plant used was a 5-foot by 18-foot double deck screen plant. The reported average process rate varied from year to year from 225 to 340 loose cubic yards per hour. Water was supplied at a rate of 5000 to 5500 igpm using a 10 by 12-inch Peerless pump powered by a 3206 Caterpillar engine. Jigs were used to clean concentrates which were removed from the wash plant every shift.

**GROUND DESCRIPTION** In 1998 and 1999, the stratigraphic section for this property was reported as 3 yards of muck over 4 yards of gravel. The bottom 1 yard of gravel and 1 yard of bedrock were sluiced. In 2000, the operation processed an additional yard of the gravel. In 2001, the mud layer increased to 5 yards over the 4 yards of gravel. The sluice section was 1 yard each of gravel and bedrock. In 2002, the mud layer was 3 yards deep. The sluice section was the same as in 2001.

**MINING CUTS** Five cuts were mined in 1998 with a total volume of 137,490 cubic yards. In 1999, the total volume of the five cuts mined was 195,062 cubic yards. In 2000, four cuts were mined with a total volume of 72,000 cubic yards. In 2001, production was reduced to two cuts averaging

approximately 17,000 cubic yards each. In 2002, the surface area of each of the four cuts mined was 120,000 square feet.

**WATER SUPPLY AND TREATMENT** Water is obtained from out-of-stream ponds. Settling is also out-of-stream. The operation usually accomplished 100% re-circulation of process water. The pond size varies depending on the location on the property of the sluice setup. It can be as large as 2000 feet by 300 feet. Discharge from the site is generally drainage water although there have been discharges of overflow process water when working at the downstream end of the property.

**GOLD** The fineness of the gold is 840. The gold is described as fine-grained.

**COMMENTS** Reclamation is being addressed on an ongoing basis.

**BIG GOLD & GLACIER CREEKS****116C/02B, C**

Jayce Murtagh

64°01'N 140°43'W

Water Licence: PM99-113, PM97-026

2000

Sixtymile Placer Area

**Site no. 101**

**OPERATION/LOCATION** In 2000, Jayce Murtagh sluiced test cuts at a number of locations on Glacier Creek under a water use licence held by K-1 Mining Services. In addition, he mined at the mouth of the Big Gold Creek valley under Water Use Licence PM99-113.

**EQUIPMENT/FUNCTION** A Caterpillar D9L bulldozer with single shank ripper was used to repair the road. A 980B Caterpillar loader and an Hitachi EX300LC excavator were used for stripping and sluicing. A Caterpillar D8 bulldozer owned by K-1 Mining Services Ltd. was also used as needed.



*Eldorado Placer's sluice plant operating in the Sixtymile River area downstream from 5 Mile Creek in 2002.*

**WASH PLANT** A 4-foot by 12-foot single deck screen with steel punch plate screened to ¾ inch. A hopper fed a 30-inch by 50-foot tailing stacker. Sluice runs are two 8-foot wide runs with hydraulic riffles. The pump was changed to an 8 by 10-inch Morris powered by a 3306 Caterpillar engine, with water use rate of 1800 igpm to wash 100 loose yards per hour. The clean-up system was changed to a two cell jig with a long tom.

**GROUND DESCRIPTION** The area mined on Glacier Creek had previously been stripped by K-1 Mining. Mr. Murtagh sluiced 3 feet of gravel and 3 feet of bedrock in this area. The total depth of the area worked at the mouth of Big Gold Creek is estimated to be 14 feet.

**MINING CUTS** The three cuts sluiced on Glacier Creek were each 50 feet by 100 feet in area. On Big Gold Creek an area 200 feet by 200 feet was stripped down by 8 feet. The site has not yet been sluiced.

**WATER SUPPLY AND TREATMENT** On Glacier Creek process water was recycled at a rate of approximately 50%, with settling occurring in a series of out-of-stream ponds that were mined-out cuts.

**GOLD** Gold from the area of Glacier Creek was stained brown and coarse. Purity of gold recovered from Glacier Creek typically ranges from 830 to 860 fine.

**COMMENTS** Reclamation was addressed as work was completed at each of the sites.

#### **BIG GOLD AND GLACIER CREEKS 116C/02B**

Steve Prohaszka 64°01'N 140°44'W  
Water Licence: PM98-038 1998, 1999, 2000, 2001, 2002  
Sixtymile Placer Area Site no. 102

**OPERATION/LOCATION** This operation, located upstream from the confluence of Big Gold and Glacier creeks, near the Sixtymile River, was mined by Mr. Prohaszka and one employee. They usually worked one eight-hour shift per day. Mr. Prohaszka worked cuts both between the two creeks, and on the right limit of Glacier Creek.

**EQUIPMENT/FUNCTION** Mr. Prohaszka used two caterpillar bulldozers, models D9H and a D9L, both with U-blades and rippers, a Caterpillar 988 loader with a 6-yard bucket and a Drott 50 backhoe.

**WASH PLANT** Mr. Prohaszka sluiced using a 2-metre diameter trommel which he built on-site. The sluice runs were 24 feet by 8 feet with 2-inch riffles. The plant processed 180 loose cubic yards of material per hour. In 2002, a 3-foot by 6-foot shaker plant was used. It had 7-foot by 7-foot sluice runs equipped with New Zealand live riffles. This plant

processed 80 loose yards per hour. Water was supplied to both plants using a 6-inch submersible pump to provide the 1600 imperial gallons per minute. Jigs are used to clean up concentrates from the wash plants.

**GROUND DESCRIPTION** In 1998 and 1999, Mr. Prohaszka had to strip 32 feet of frozen muck and 5 feet of waste gravel to get to the 4 feet of pay gravel and 6 feet of bedrock which he sluiced. In 2000, 2001 and 2002, the frozen muck layer increased to 40 feet and the pay gravel layer was 5 feet deep. In 2002, the waste gravel layer increased to 6 feet.

**MINING CUTS** In 1998 and 1999, one 200-foot by 300-foot cut was processed each year. The cut in 2000 was 300 feet by 400 feet. The cut in 2001 was 300 feet by 300 feet. In 2002, one cut 300 feet by 300 feet was mined on the right limit of Glacier Creek as well as a cut approximately 150 feet by 150 feet between the creeks.

**WATER SUPPLY AND TREATMENT:** In 1998 and 1999, the water came from Big Gold Creek. In 2000 and 2001, Glacier Creek was used.

**GOLD** Gold recovered had a purity of 840 fine.

#### **GLACIER CREEK**

**116C/02B**

Erich Rauguth 64°02'N 140°47'W  
Water Licence: PM94-047 1998  
Sixtymile Placer Area Site no. 103

**OPERATION/LOCATION** Tim Coles finished up operations at this location early in the 1998 mining season. Some work was conducted under this water use licence on a left limit bench of Glacier Creek early in the year.

**EQUIPMENT/FUNCTION** Mr. Coles used a John Deere 890 excavator.

**GROUND DESCRIPTION** Work in 1998 was conducted on a left limit bench of Glacier Creek in an area which had been previously mined.



*Sluicing on the left limit bench of Glacier Creek in 1998 under Erich Rauguth's water use licence.*

**WATER SUPPLY AND TREATMENT** Water was obtained using a small intake ditch from Glacier Creek. The water was pumped up onto the bench and then settled in an old working area. No discharge was noted from this location.

**GOLD** Gold recovered from Glacier Creek has a purity from 830 to 860 fine.

**GLACIER CREEK****116C/02**

Schmidt Mining 64°02'N 140°48'W  
Water Licence: PM97-026, PM99-094 2001, 2002  
Sixtymile Placer Area **Site no. 104**

**OPERATION/LOCATION** Stuart Schmidt and his crew mined on Glacier Creek under water use licences held by K-1 Mining Services Ltd. The crew was four miners and one camp employee. They worked two 12-hour shifts per day. Schmidt Mining worked part of the season each year at this location.

**EQUIPMENT/FUNCTION** One Caterpillar D10N bulldozer was used to mine at this site.

**WASH PLANT** The wash plant was a four-run sluice box with passive screening. It had a manually controlled feed with a monitor. The plant processed 150 loose yards per hour with water supplied by a 10 by 12-inch Morris pump, powered by a Caterpillar engine.

**GROUND DESCRIPTION** In 2001, the operation did not sluice. An area was stripped on a left limit bench at the upstream end of the claim block. In 2002, the operation worked in an area of previously mined ground near the mouth of Owl Gulch. The previous mining took place in the 1940s and 1950s. In 2002, they sluiced a total area of 70,000 square feet.

**MINING CUTS** Two cuts were sluiced in 2002. The first was 40,000 square feet and the second was 30,000 square feet.

**WATER SUPPLY AND TREATMENT** Process water was partially recycled in out-of-stream ponds on the right limit of Glacier Creek. The recycle rate was estimated at 50%.

**GOLD** The purity of the gold recovered was 820 fine. They reported encountering lots of amalgam.

**GLACIER CREEK****116C/02**

K-1 Mining and Services 64°01'N 140°48'W  
Water Licence: PM99-094 1998, 2000  
Sixtymile Placer Area **Site no. 105**

**OPERATION/LOCATION** Mike and Kim McDougall continued to mine claims located on the lower to middle reaches of Glacier Creek. In 1999, their efforts were focussed primarily on work under water use licence PM97-026 (site no. 106). Their mining operation employed three miners who worked 12 hours per day.

**EQUIPMENT/FUNCTION** Two Caterpillar bulldozers, models D9L and D8H, with blades and rippers, were used to push pay to the excavator, contour tailings and perform reclamation. An Hitachi EX300 excavator was used to dig drains and pump ponds and feed the screen. In 2000, a Caterpillar D10N with blade and ripper stripped, forwarded material, sluiced and moved tailings.

**WASH PLANT** The wash plant consisted of a 4-foot by 6-foot fabricated screen deck with hydraulic riffles. It had a 30-foot tailings stacker and a shuffleboard feeder. Process water was supplied at a rate of 1200 igpm using a 10-inch Sandmaster pump powered by a Deutz Diesel engine. The plant processed 75 loose yards per hour. The final clean-up of concentrates was accomplished using a long tom and a 4-yard jig.

**GROUND DESCRIPTION** In 1998, an area was worked on a high-level right limit bench on claim 37773. In this area, 5 feet of material were stripped off and 6 feet were sluiced. In 2000, the operation encountered 12 to 15 feet of mud, gravel and tailings, above 2 to 3 feet of stained gravels. Two feet of stained gravels and up to 2 feet of bedrock were sluiced.

**MINING CUTS** In 1998, the area stripped on the right limit bench was 200 feet by 150 feet. Of this, an area 250 feet by 100 feet was sluiced. The total volume of the cut was 11,000 cubic yards. In addition, an area 495 feet long by 60 wide which had been stripped in 1997 was sluiced. The volume sluiced from this cut was 8800 cubic yards. In 2000, two cuts were mined. One was 125 feet long by an average of 50 feet in width, the other was 400 feet by 60 feet.

**WATER SUPPLY AND TREATMENT** Water was obtained from an in-stream pond on Glacier Creek. Settling was accomplished in out-of-stream ponds.

**GOLD** The purity of the gold recovered was 860 fine. The shape varied from flat to rounded.

**COMMENTS** Reclamation was addressed on a progressive basis.

**GLACIER CREEK****116C/02**

K-1 Mining and Services Ltd.  
 Water Licence: PM97-026  
 Sixtymile Placer Area

64°03'N 140°52'W  
 1998, 1999, 2000  
**Site no. 106**

**OPERATION/LOCATION** Mike and Kim McDougall started mining these claims located upstream on Glacier Creek from an area which they had been mining in previous years. There were three miners working a single 12-hour shift at the site. During 1998 and 1999, in addition to the mining operations, auger drilling and exploration trenching were performed to define reserves.

**EQUIPMENT/FUNCTION** In 1998, a Komatsu D155 bulldozer with a U-blade and ripper and an Hitachi UH09 excavator were used to conduct exploration work. Equipment used at the site to mine included Caterpillar bulldozers, models D9L and D8H, with blade and ripper, which pushed pay to the excavator, contoured tailings and performed reclamation work. An Hitachi EX300 excavator was used to dig drains and pump ponds and feed the screen. A Caterpillar D10N bulldozer with blade and ripper stripped, handled material to be sluiced and moved tailings.

**WASH PLANT** The wash plant consisted of a 4-foot by 6-foot fabricated screen deck with hydraulic riffles. It had a 30-foot tailings stacker and a shuffleboard feeder. Process water was supplied at a rate of 1200 igpm using a 10-inch Sandmaster pump powered by a Deutz Diesel engine. The plant processed 75 loose yards per hour.

**GROUND DESCRIPTION** In 1998, material from a high-level left limit bench 4 feet deep was mined. The depth of material stripped from a site on the lowermost claims in the block was 8 feet deep. On the upper portion of the claim block, the two areas mined had a depth of 8 feet and 13.5 feet respectively. Of the 8-foot deep cut, 3.75 feet were sluiced. Of the 13.5-foot deep cut, 60 feet were sluiced.

In 1999, the work was on claims on the upper portion of the property on a high-level left limit bench. The depths of the cuts varied. The first cut was sluicing pay which had been left at various sites on the property by previous operators. It was sluiced at the same location as the first cut in 1998. Cut 2 as listed below, required stripping of up to 15 feet of material at the back with no stripping required at the front. It was an upstream extension of the old historic "Glacier Creek" high channel, first mined in 1901 by underground methods. The next cut was stripped in previous years, leaving an unmined pay pile in the middle and cleaning of bedrock. The next cut had up to 20 feet of overburden and previous miners' strippings on it. It had been drifted at the bottom by oldtimers and had been mined on the creek side by another previous miner. Parts of this cut were in the historic and rich Glacier Creek pay channel. There was a small 100-foot

section of virgin ground. The next cut, number 5 listed below, had up to 25 feet of a previous miner's tailings on it. The next cut saw an average of 30 feet stripped with a total depth up to 40 feet. The next cut required removal of up to 25 feet of tailings to reach the virgin ground. Two feet of gravel and up to 2 feet of bedrock were sluiced. The last cut was covered by 3 to 15 feet of frozen overburden. It was located adjacent to an unnamed left limit tributary at the upstream end of the property.

In 2000, the total depth varied from 6 to 18 feet. One to 2 feet of rusty red stained gravel with slide rock mud matrix lay above frozen gravel. The sluice section was 2 feet of gravel and up to 2 feet of bedrock.

**MINING CUTS** In 1998, a 1000-foot by 300-foot area was stripped from a high-level left limit bench. Another 850-foot by 35-foot area was stripped starting on the lower claims. Two cuts were stripped and sluiced on claims in the upper portion of the claim block. One was 320 feet by 450 feet with a total volume of 42,600 cubic yards. The other was 570 feet by 80 feet and had a total volume of 22,800 cubic yards. Of the six 4-foot wide exploration trenches dug, three were 500 feet long by 8 feet deep and three were 80 feet long by 10 feet deep.

In 1999, eight cuts were worked. Cut 1 was 100 loads hauled by dump truck for a total of 1850 cubic yards. Cut 2 was two areas, 120 feet by 145 feet each, which partially overlapped at the middle. Out of a total of 8970 cubic yards, 5100 cubic yards were sluiced. Cut 3 was 250 feet by 30 feet, 2600 cubic yards of which were sluiced. Cut 4 was 250 feet by 30 feet. Of the 8200 cubic yards handled, 3200 diluted yards were sluiced. Cuts 5, 6 and 7 were all on the edges of a deep channel where the previous miner had worked last. Cut 5 was a small triangle on the rim at the bottom of cut 4. Up to 15 feet of gravels were sluiced. Cut 6 was the left limit side pay of the deep channel. It was 250 feet by 60 feet. A total of 16,500 cubic yards were stripped and 3000 cubic yards were sluiced. Cut 7 was on the rim of the deep channel. The cut was 325 feet by 90 feet. It saw 13,000 cubic yards stripped and 7000 cubic yards sluiced. Cut 8 was 250 feet by 150 feet. On this cut 6500 cubic yards were stripped, however only the front of the cut was sluiced, with waste material mixed in for a total of 3000 cubic yards.

In 2000, one cut was mined on the upper claims. It was 250 feet by 250 feet.

**WATER SUPPLY AND TREATMENT** The operation sluiced using a closed re-circulation pond system set up on the left limit of Glacier Creek. Make-up water was obtained from upper Glacier Creek. The recycle rate for process water was 100%.

**GOLD** The purity of the gold recovered was 860 fine. The gold was coarse and stained and was very spotty throughout the cut.

**COMMENTS** In 1999, a pair of Levi’s jeans from 1902 were recovered at the bottom end of cut 4 from an oldtimer’s mine drift. Hand-hewn wooden tracks for ore cars, left behind by miners working in 1902, were found as laid down in the bottom of cut 7. The miner worked the cuts in a manner which facilitated reclamation of areas which had been previously impacted.

**GLACIER CREEK 116C/02**

Gordon Hagen 64°03'N 140°54'W  
 Water Licence: PM98-030 1998, 1999, 2000  
 Sixtymile Placer Area **Site no. 107**

**OPERATION/LOCATION** Gordon Hagen ran a one-person operation near the headwaters of Glacier Creek, approximately 5 miles upstream from its mouth. Mr. Hagen mined an average of 10 hours per day. Glacier Creek valley is steep sided and narrow bottomed in this area.

**EQUIPMENT/FUNCTION** One Caterpillar 931 tracked excavator with quick-attach back hoe, was used to dig pay gravel, feed the wash plant and remove tailings. In 1998, a Komatsu D155 was brought in to strip an 80-foot by 300-foot area.

**WASH PLANT** A wet grizzly with 1½-inch bars fed into a 24-inch screen deck with ¾-inch punch plate. This was followed by a single sluice run 18 inches wide by 12 feet long equipped with 1¼-inch angle iron riffles. The screen deck

was powered by an 11 horsepower Honda engine. A 4 by 6-inch Berkley water pump, powered by an Allis Chalmers gas engine, delivered approximately 400 igpm. Approximately 15 to 20 cubic yards of material were processed per hour.

**GROUND DESCRIPTION** A thin layer of organic overburden had been stripped previously from about 6 feet of pay gravel mixed with slide bedrock. Bedrock was fractured.

**MINING CUTS** Several small test holes were dug in 1998, and in 1999, one cut, about 30 feet wide by 150 long, was mined. In 2000, Mr. Hagen did an additional 10 hours of test sluicing.

**WATER SUPPLY AND TREATMENT** Water was pumped from a small in-stream reservoir and cleaned in two out-of-stream settling ponds on the right limit of the creek.

**GOLD** Coarse gold, mostly larger than 20 mesh, was cleaned up using a long tom and had a fineness of around 830.

**COMMENTS** Mr. Hagen stated that the slide rock made the ground hard to mine.

**LITTLE GOLD CREEK 116C/02**

Maurice Alexander 64°04'N 140°52'W  
 Water Licence: PM98-019 2001, 2002  
 Sixtymile Placer Area **Site no. 108**

**OPERATION/LOCATION** Maurice (Moe) Alexander started mining at this site during the latter part of the 2001 mining season. The claims and water use licence for the site are owned by Stanley Stempien. The claims are located on the upper reaches of the Little Gold Creek which is a tributary of Big Gold



*Maurice Alexander’s sluice plant set up on the left limit of the Little Gold Creek valley in 2002.*

Creek. During the period that Mr. Alexander worked the site, there were two miners working one ten-hour shift per day.

**EQUIPMENT/FUNCTION** A D7E Caterpillar bulldozer with a ripper was used for all earth moving. A Komatsu front-end loader was used to feed the wash plant in 2002.

**WASH PLANT** The wash plant consisted of an eight-foot by 25-foot dump box with a nugget trap and a 32-inch by 25-foot sluice run equipped with 2½-inch Hungarian riffles and ½-inch astro turf matting. The sluice run was set up at a slope of 1¾ inches per foot. Thirty-three loose cubic yards per hour were processed. A long tom, screens and pans were used for cleanups.

**GROUND DESCRIPTION** The area that was being mined is side pay. The operator stripped off 15 to 16 feet, 5 feet of which was mixed gravel, clay and decayed vegetation, leaving a sluice section of 6 to 7 feet of red and black stained gravel and some bedrock.

**MINING CUTS** Two cuts were processed in 2002. One was 250 feet by 21 feet and the other was 300 feet by 21 feet. In 2002, work continued up Little Gold Creek along the left limit of the valley past the confluence with the un-named left limit tributary which meets Little Gold Creek at claim Nicholas X.

**WATER SUPPLY AND TREATMENT** An 8-inch Berkley pump, powered by a 4-71 General Motors diesel engine, provided approximately 1200 igpm to the wash plant. Water was obtained from a small pond at the side of Little Gold Creek. Settling took place in a series of small ponds along the left limit side of the creek. Pond overflows were lined with plastic to minimize erosion and leakage.

**GOLD** Gold recovered from the site had a fineness approaching 850. Some nuggets up to two to three pennyweight were found. They were described as smooth, quartz-rich and spongy.

#### **BIG GOLD AND LITTLE GOLD CREEKS 116C/2B**

Dredge Master Gold Ltd., David Cachelin	64°03'N 140°46'W
Water Licence: PM96-022	1998, 2000, 2002
Sixtymile Placer Area	<b>Site no. 109</b>

**OPERATION/LOCATION** Allan Downes of Dredge Master Gold Ltd. tested a number of small cuts on Little Gold Creek. In 2002, David Cachelin processed a cut on Big Gold Creek under Dredge Master Gold Ltd.'s water use licence, using ponds left by a previous operator. He also tested an area on Little Gold Creek under Schedule III, Notification of water use without a licence. The Dredge Master camp, which he used, was also used from 1998 to 2001 by Allan Downes as a his base for hard rock exploration activity.



*David Cachelin processing a cut on Big Gold Creek in 2002. Settling ponds are in the foreground.*

**EQUIPMENT/FUNCTION** In 1998, a D7 Caterpillar bulldozer was used by Allan Downes to strip an area on Little Gold Creek. In this year, drilling was also performed on Big Gold Creek. In 2000, three more trenches were dug on Little Gold Creek using the D7 bulldozer. In 2002, Dave Cachelin used a John Deere back-hoe and a D7 bulldozer to mine two cuts and two test holes on Big Gold and Little Gold creeks. Maurice Alexander used a Komatsu front-end loader to put in a test cut on Little Gold Creek.

**WASH PLANT** The wash plant used at this site was a Super Sluice II.

**GROUND DESCRIPTION** Allan Downes did testing in areas on Little Gold Creek. The tests varied in depth from 3 to 10 feet. Mr. Cachelin was working in an area where overburden had been removed by a previous operator. His test holes were up to 20 feet deep.

**MINING CUTS** In 1998, the area stripped was 125 feet by 80 feet, with a total cubic yardage of 1852. A drain was also dug at this time. In 2000, the three trenches dug were 85 feet by 60 feet, 90 feet by 60 feet, and 70 feet by 60 feet, with a total volume of 4933 cubic yards. In 2002, the three cuts had an area of 295 feet by 33 feet, 65.6 feet by 88.6 feet, and 98.4 feet by 13 feet, with a total volume of approximately 4447 cubic yards. The volume moved for the test holes was 444 cubic yards and 222 cubic yards.

**WATER SUPPLY AND TREATMENT** Water for the test cuts on Big Gold Creek was pumped from the creek. Settling occurred in a previously mined cut.

**GOLD** The purity of gold recovered from Big Gold Creek is typically from 847 to 854 fine.

**SIXTYMILE RIVER****115N/15,116C/02**

Frank and Karen Hawker  
 Water Licence: PM95-071  
 Sixtymile Placer Area

63°59'N 140°47'W  
 1998, 1999, 2000, 2001  
**Site no. 110**

**OPERATION/LOCATION** Frank and Karen Hawker continued to operate at this location on the Sixtymile River. Mining took place between Miller and Big Gold creeks in the Sixty Mile valley. In 1998, there were three miners working at the site. This was increased to four for 1999, 2000 and 2001. In 2002, they returned to a crew of three miners. The miners worked 12 hours per day.

**EQUIPMENT/FUNCTION** A D9H Caterpillar bulldozer with a U-blade and ripper was used to strip overburden. An EX300 Hitachi excavator was used for stripping, tailings handling and ripping bedrock. A UH07-7 Hitachi excavator fed the wash plant. In 2000, a Komatsu 375 bulldozer was added to the stripping machinery. In 2001, an EX200 Hitachi excavator was added for stripping and reclamation work.

**WASH PLANT** This operation used a 5-foot diameter New Zealand-style trommel to process approximately 80 loose yards of gravel per hour. The sluice runs were 14 feet wide and equipped with hydraulic riffles. Water was supplied at a rate of 1200 igpm by a 6 by 6-inch Indeng pump powered by a Caterpillar 3306 engine.

**GROUND DESCRIPTION** This operation has been mining a sluice section which lies beneath tailings from dredging activity that took place in the Sixtymile River valley from 1929 through 1943. In some areas, the tailings are covered with waste materials from previous bench mining in the area. The sluice section has varied from 1 to 8 feet over the last five



*Frank and Karen Hawker's sluicing set up in the Sixtymile valley in 2000.*

years. The waste section, which has been mostly thawed, varied from 12 to 40 feet in depth.

**MINING CUTS** In 1998, 10 cuts with an average area of 300 feet by 100 feet were mined. In 1999, there were 11 cuts mined of the same average dimensions as in 1998. In 2000, five cuts 700 feet long by 100 feet wide were processed. In 2001, another five cuts with an average size of 650 by 100 feet were mined. In 2002, three cuts were mined. The first cut in 2002 was 120,000 square feet, the second was 100,000 square feet and the third was 78,000 square feet.

**WATER SUPPLY AND TREATMENT** Process water for this operation is obtained from a drainage ditch through old workings. Settling of waste water was accomplished in large ponds downstream before final discharge entered the Sixtymile River upstream from its confluence with Big Gold and Glacier creeks. The Hawkers also used a monitor to strip along the left limit bench. The water from this operation was settled and recycled at a rate of approximately 30%.

**GOLD** Gold from this site had a purity of from 810 to 830 fine. The gold consisted of fine, flat, flaky material although there have been some small nuggets with quartz.

**COMMENTS** Frank Hawker has been addressing reclamation of this site in a progressive manner. He has received Honourable Mentions for the Robert Leckie Awards for Outstanding Reclamation Practices for Placer Operations. The contoured site which replaces the dredge tailings which dominated the area are showing good revegetation.

**SIXTYMILE RIVER BENCH****115N/15H**

Brisebois Bros. Construction, Cecil Loney  
 Water Licence: PM95-095  
 Sixtymile Placer Area

63°59'N 140°47'W  
 1998, 1999  
**Site no. 111**

**OPERATION/LOCATION** In 1998, Cecil Loney mined a bench area on the left limit of the Sixtymile River downstream from Miller Creek. The work was conducted in an area which had been previously worked by Brisebois Bros. Construction. In 1999, Conrad Brisebois did some additional work in this area as well as some trenching on his nearby claims on Miller Creek.

**EQUIPMENT/FUNCTION** Mr. Loney used a Caterpillar 980 loader and a Komatsu D31S loader to work the site. Mr. Brisebois used a Koehring excavator and a Caterpillar loader.

**WASH PLANT** Mr. Loney used a small test plant on the bench above the old Brisebois mine pits.

**GROUND DESCRIPTION** One of the cuts excavated by Mr. Loney had a depth of 30 feet. The other went down 40 feet. Mr. Brisebois' varied in depth from 4 to 30 feet.





*Cecil Loney processing material on a left limit bench of the Sixtymile River, downstream from Miller Creek in 1998.*

**MINING CUTS** Mr. Loney put in two cuts. They were 100 feet by 100 feet and 100 feet by 200 feet. The total cubic yardage moved was 37,037. Mr. Brisebois moved a total of 55,554 cubic yards, 16,666 of which were attributed to reclamation work.

**WATER SUPPLY AND TREATMENT** The water supply for the cuts sluiced on the bench was the accumulated water in the old bench pits. Process was recycled at a rate of 100% in these pits.

**GOLD** Gold recovered from the Sixtymile River has a range of purity from 810 to 840 fine. Gold from Miller Creek has a range of purity from 827 to 857 fine.

## MILLER CREEK AND SIXTYMILE RIVER

115N/15H

J.M. Mining

63°59'N 140°48'W

Water Licence: PM95-109

1998, 1999, 2000, 2001, 2002

Sixtymile Placer Area

Site no. 112

**OPERATION/LOCATION** Jayce Murtagh mined this property on lower Miller Creek. The operation ran with two miners, except in 2001 when there were three. The working shift was 12 hours per day, except in 2000 when it was 10 hours per day.

**EQUIPMENT/FUNCTION** In 1998, a Caterpillar D9L bulldozer with single shank ripper was used for stripping. A P&H excavator was used for stripping, sluicing and digging drains. A 980B Caterpillar loader was used to feed the sluice plant. In 1999, an Hitachi EX300LC excavator was used for stripping, sluicing and digging drains. In 2000, an Hitachi EX700H excavator with a 3.8-yard bucket was added for stripping and digging bedrock pay.

**WASH PLANT** A 4-foot by 12-foot single deck screen with steel punch plate screened material to  $\frac{3}{4}$  of an inch. A hopper fed a 30-inch by 50-foot tailings stacker. Recovery was in two 8-foot wide sluice runs with hydraulic riffles. Water was supplied at a rate of 1600 igpm using a 5 by 6-inch Mission pump powered by a V8 Deutz diesel engine. The process rate was 100 loose yards per hour. In 2001, the pump was changed to a 6 by 8-inch Berkley powered by a V8 Deutz diesel engine. It provided 2500 igpm of water used to wash 110 loose yards per hour. In 2002, the pump was changed to an 8 by 10-inch Morris powered by a 3306 Caterpillar engine. The water use rate was 1800 igpm. The process rate was 100 loose yards per hour. From 1998 to 2000, concentrates were cleaned using a long tom and a Diester



*Jayce Murtagh's processing plant operating on Miller Creek in 2002.*

table. In 2001, the clean-up system was changed to a two-cell jig with a long tom.

**GROUND DESCRIPTION** In 1998, the stratigraphic section varied with 15 to 25 feet of mixed mud and gravel layers which comprised the waste layer. This waste layer was over 6 to 9 feet of gravel. The 6 to 9 feet of gravel and 3 feet of bedrock were sluiced. The stratigraphic section of the ground, mined in 1999, was varied from 15 feet of overburden comprised of mixed black muck and gravel with 3 feet of pay gravel to 15 feet of settled muck over 15 feet of black muck above the pay gravel. The sluice section was 3 to 9 feet of gravel and 2 feet of bedrock. In 2000, the area of Miller Creek which was mined was covered by a settling pond used by Klondike Underground Mining from 1987 to 1990. The sluice section was 6 feet of gravel and 3 feet of bedrock, with 20 feet of muck and overburden removed as waste. In 2001, the area mined had been dredged in 1912. There were 6 feet of coarse tailings over 3 feet of sand and 3 feet of mud. The sluice section varied from 0 to 10 feet of gravel and 3 feet of bedrock. The ground mined in 2002 was similar to that mined in 2001. The sluice sections of the 7 cuts mined varied with pay gravel from 9 to 0 feet and the bedrock washed from 2 to 4 feet.

**MINING CUTS** In 1998, three cuts were mined. The first was 150 feet by 150 feet, the second was 150 feet by 100 feet and the third was 100 feet by 100 feet. Four cuts were mined in 1999. Two were 75 feet by 100 feet, one was 75 feet by 200 feet and the last was 120 feet by 300 feet. Two cuts were mined in 2000. Each cut was 150 feet by 300 feet. There were four cuts mined in the 2001 season. Each cut was approximately 300 feet long by 100 feet wide. The seven

cuts mined in 2002 were 150 feet by 300 feet, 500 feet by 60 feet, 150 feet by 150 feet, 300 feet by 100 feet, 300 feet by 100 feet, 300 feet by 75 feet, and 100 feet by 100 feet.

**WATER SUPPLY AND TREATMENT** Water was obtained from an in-stream pond. Effluent was settled in out-of-stream ponds. In 1999, some of the settling was in in-stream ponds and the miner recycled 50% of process water. The settling pond was 100 feet by 400 feet by 8 feet deep. In 2000, there was no recycling of process water. In 2001, both in-stream and out-of-stream effluent treatment was used with no recycling of process water. In 2002, settling was out-of-stream with 100% recycling of process water. The pond was 200 feet by 300 feet.

**GOLD** The purity of the gold was 810 fine. One percent of the gold was +10 mech, 19% was -10 to +20 mesh, 30% was -20 to +35 mesh and the remainder was -35 mesh. The gold had a dull colour.

**COMMENTS** Work has begun on contouring overburden piles and contouring and covering tailings piles with overburden.

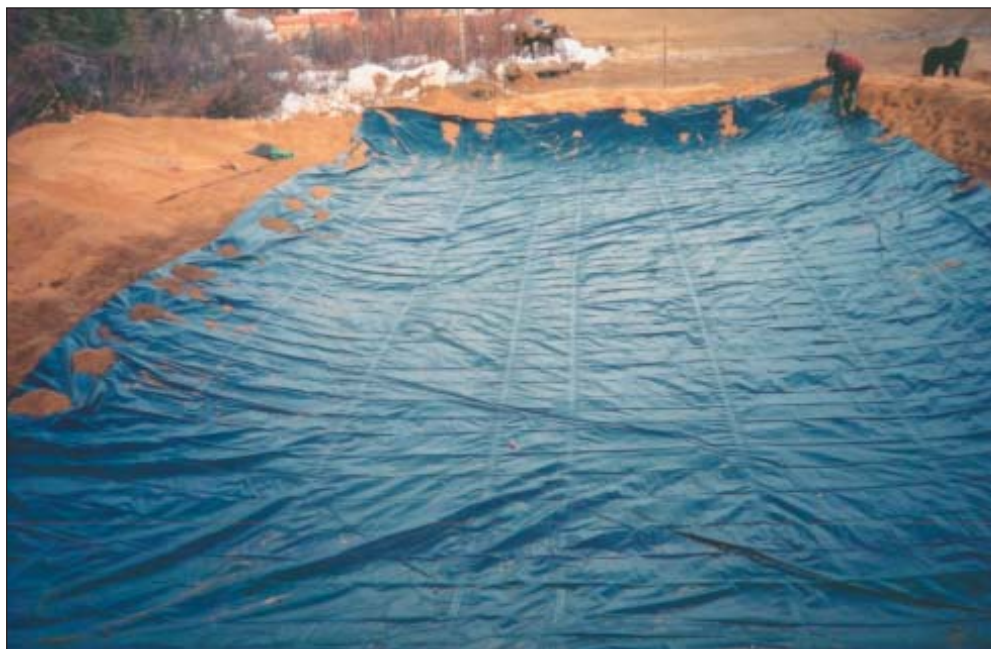
**SIXTYMILE RIVER**

**115N/15H, I**

Schmidt Mining  
 Water Licence: PM99-119, PM99-108  
 Sixtymile Placer Area

63°59'N 140°49'W  
 2001, 2002  
**Site no. 113**

**OPERATION/LOCATION** Stuart Schmidt mined an area on the right limit side of the valley beside an area previously mined by Walter Yaremciio. Mining took place between Miller and Bedrock creeks. A crew of four miners and one camp employee covered two 12-hour shifts per day.



*Jayce Murtagh installing a liner in his secondary fuel containment facility on Miller Creek.*

**EQUIPMENT/FUNCTION** A D10N Caterpillar bulldozer was used to mine at this site.

**WASH PLANT** The wash plant used was a four-run sluice box. A 10 by 12-inch Morris pump, powered by a Caterpillar 3408 engine, provided the water required to process 150 loose yards of material per hour. Cleanups were done using a long tom, a screen, a Diester table and a wheel.

**GROUND DESCRIPTION** The operation processed waste piles from previous mining, and virgin ground. In the previously untouched areas, they encountered 4 feet of muck and 8 feet of gravel. The sluice section consisted of 3 feet of the gravel and 3 feet of bedrock.

**MINING CUTS** In 2001, one cut 250 feet by 300 feet was mined. In 2002, three cuts were mined. Each one was 150 feet by 250 feet.

**WATER SUPPLY AND TREATMENT** In 2001, process water was obtained from the Sixtymile River and treated in a 1000-foot by 200-foot pond. In 2002, the operation switched to a re-circulation system which recycled 100% of process water in a 250-foot by 300-foot pond.

**GOLD** The purity of the gold was 830 fine. Gold recovered was generally fine-grained.

## SIXTYMILE RIVER

115 N/15H,I

Northway Mining & Exploration Inc.

63°59'N 140°49'W

Water Licence: PM99-119, PM99-108

2000, 2001, 2002

Sixtymile Placer Area

Site no. 114

**OPERATION/LOCATION** Don Sandberg mined on the Sixtymile River downstream from Bedrock Creek. The valley is relatively wide in this area. There were three miners and one camp employee working a 12-hour shift each day.

**EQUIPMENT/FUNCTION** A D9L Caterpillar bulldozer was used for stripping. A Caterpillar 988B front-end loader was used to dig pay, haul it to the plant and feed the plant. A Caterpillar 245 excavator was used to dig pay gravels. In 2001, two D-550 rock trucks were also used. In 2002, a Caterpillar D7 bulldozer was also used.

**WASH PLANT** The wash plant was a 5-foot diameter by 20-foot long trommel that screened material to  $\frac{5}{8}$  of an inch. The sluice runs were 14 feet wide by 7 feet long with pulsating riffles.

**GROUND DESCRIPTION** The operator encountered 12 feet of gravel in this area. The bottom 3 feet were sluiced.

**MINING CUTS** In 2001, two cuts were mined. One was 60 yards by 200 yards with a total volume of 48,000 cubic yards. The other was 50 yards by 200 yards with a total volume of 15,000 cubic yards. In 2002, two cuts were recorded. One



*Northway Mining & Exploration Inc. operating on the Sixtymile River upstream from Miller Creek in 2001.*



*Walter Yaremcio's operation on the Sixtymile River between Bedrock and Miller Creeks in 2000.*

was 400 by 50 yards and the other was 425 by 70 yards. The total volume of the two cuts was 169,250 cubic yards.

**WATER SUPPLY AND TREATMENT** Process water was 100% recycled in mined-out cuts. The typical pond size was 300 feet wide by 600 feet long. A long drain discharged groundwater seepage to the Sixtymile River.

**GOLD** The purity of the gold recovered was 830 fine.

**SIXTYMILE RIVER 115N/15H,I**

Walter Yaremcio 63°59'N 140°50'W  
 Water Licence: PM99-108 1998, 1999, 2000, 2001  
 Sixtymile Placer Area **Site no. 115**

**OPERATION/LOCATION** Walter Yaremcio began mining at this location on the Sixtymile River upstream from its confluence with Miller Creek in 1997. The Sixtymile River valley in this area is approximately 2500 feet wide. A crew of five miners and two camp employees worked two 11-hour shifts per day.

**EQUIPMENT/FUNCTION** The equipment used at this site was a Caterpillar D8L bulldozer, two Caterpillar loaders, models 966C and 966F, and one Caterpillar 330 excavator. In 2000, a Caterpillar D10N bulldozer was added.

**WASH PLANT** A 4-foot by 8-foot screening plant with a 6-foot by 12-foot sluice area was used. The sluice run was equipped with New Zealand hydraulic riffles and 5/8 inch punch plate. An 8-inch by 10-inch pump, powered by a Caterpillar engine, provided up to 2000 igpm of water used to process 80 loose yards of material

**GROUND DESCRIPTION** The average depth of the ground mined was 12 feet. Some of the material encountered was frozen. Bedrock was very wavy. The sluice section consisted of 1 foot of gravel and up to 6 feet of bedrock.

**MINING CUTS** In 1998, an area 2000 feet long by 200 feet wide was mined. The total volume of the cut was 148,148 cubic yards. In 1999, three cuts were mined. They were 800 by 100 feet, 1000 by 200 feet and 1500 by 200 feet. The total cubic yardage was approximately 160,000. In 2000, two cuts were mined. One was 2000 feet long by 400 feet wide and the other was 700 feet long by 100 feet wide. A total of 335,184 cubic yards were mined. The operation did some test cuts in 2001 and then shut down.

**WATER SUPPLY AND TREATMENT** Water used at this operation was pumped from the Sixtymile River. Settling was accomplished in out-of-stream ponds.

**GOLD** The gold recovered from this site was bright coloured with 60% described as being the size of rolled oats and the rest fine-grained. Fineness was 830.



*60 Mile Dredge, since moved to Skagway.*