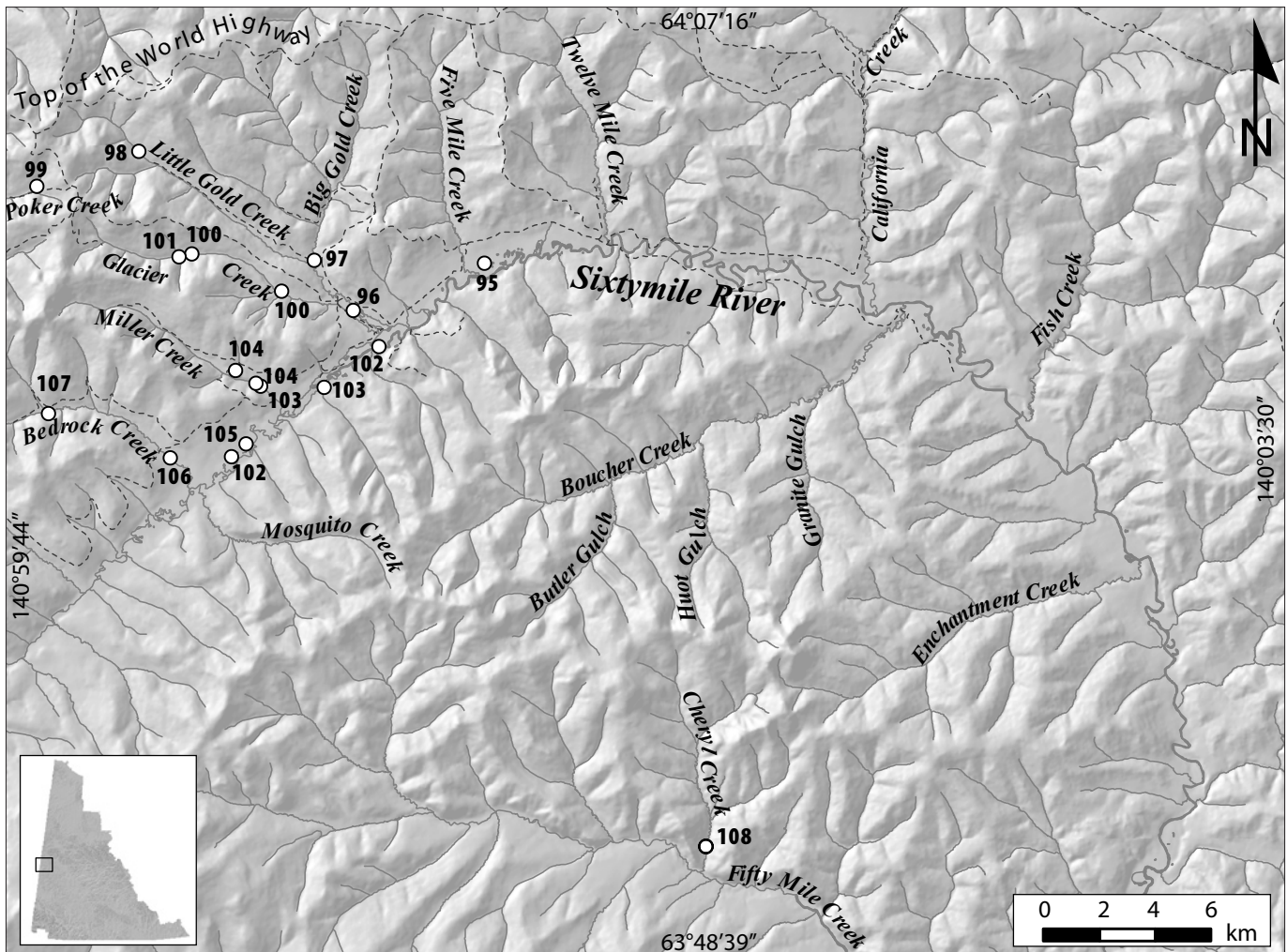


# SIXTYMILE PLACER AREA

SITES  
95-108



## LEGEND

- 95.....Eldorado Placers/Hawk Mining
- 96.....Prohaszka - Big Gold Creek
- 97.....Dredge Master Gold Ltd.
- 98.....Laurenson
- 99.....Payne
- 100.....Midas Rex Mining Inc. - Glacier Creek
- 101.....Travis
- 102.....Midas Rex Mining Inc. - Sixtymile
- 103.....Tri Kay/Hawker/Midas Rex
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- 106.....Prohaszka - Bedrock
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**SIXTYMILE RIVER**, a tributary of Yukon River

116C/1, 116C/2

2005: 64°02'13"N, 140°38'31"W

**Eldorado Placers Ltd., Greg Hakonson, Hawk Mining Ltd., Pat Glazier,  
Mike Church**

Water license: PM03-342 (2014)

Active producer (2003-2006)

**Operation no. 95**

**LOCATION** The operation was mining low-level gravel from the left-limit floodplain of the Sixtymile River, just above Five Mile Creek.

**WORK HISTORY AND MINING CUTS** Eldorado Placers Ltd. began working in Sixtymile River area in 1989. From 2003 to 2005, a crew of four miners worked a daily 12-hour shift. Four cuts were processed in 2003, with stripping of 506,844 cubic yards (387 510 m<sup>3</sup>) and 124,302 cubic yards (95 035 m<sup>3</sup>) sluiced. In 2004, four cuts were mined, with a total of 483,247 cubic yards (369 470 m<sup>3</sup>) of stripping and 177,444 cubic yards (135 665 m<sup>3</sup>) sluiced. In June 2005, the operation was sold to Mike Church and Pat Glazier (Hawk Mining Ltd.). That season, six cuts were mined. A total of 706,894 cubic yards (540 460 m<sup>3</sup>) were stripped and

184,756 cubic yards (141 256 m<sup>3</sup>) were sluiced. In 2006, stripping began in March and ended in late October. Sluicing was conducted from June 4 to September 24. Four cuts were sluiced for a total of 180,000 cubic yards (140 000 m<sup>3</sup>) processed and 360,000 cubic yards (275 000 m<sup>3</sup>) stripped.

**EQUIPMENT AND WATER TREATMENT** Equipment consisted of three Caterpillar D9L bulldozers and a Caterpillar 245 excavator. The wash plant was a 5- by 18-foot double screen deck, which processed material at a rate of 225 to 340 loose cubic yards per hour. Water for the plant was supplied at 4000 to 5000 igpm by a Peerless 10 by 12 pump powered by a 3206 Cat engine. Water was obtained from out-of-stream ponds and effluent was settled out-of-stream in ponds up to 2000 by 300 feet (600 x 100 m). Recycling rate was up to 100%. Concentrates were removed from the wash plant every shift and final clean-ups were performed with jigs.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** The stratigraphic section consisted of 9 to 15 feet (3 to 5 m) of muck overlying 12 feet (4 m) of gravel. A total of 3 feet of gravel (1 m) and 3 feet (1 m) of bedrock were sluiced.



*Aerial view of Eldorado Placers/Hawk Mining's pit on Sixtymile River, 2005.*



*Eldorado Placers Ltd. wash plant on Sixtymile River, 2004.*

**BEDROCK GEOLOGY** Bedrock at this site is fragmented and decomposed schist with localized clay and quartz boulders.

**GOLD CHARACTERISTICS** The gold was fine grained with a fineness of 840.

#### **BIG GOLD CREEK, a tributary of Sixtymile River**

116C/2

2005: 64°01'18"N, 140°44'22"W

Steve Prohaszka

Water license: PM98-038 (2009)

Active producer (2003-2006)

**Operation no. 96**

**LOCATION** This operation was located upstream from the confluence of Big Gold and Glacier creeks, near the Sixtymile River.

**WORK HISTORY AND MINING CUTS** Steve Prohaszka has operated in this area since 1989. From 2003 to 2006, Mr. Prohaszka continued the operation by himself. In 2003, a cut 200 by 200 feet (60 x 60 m) was mined and in 2005, a cut 150 by 150 feet (45 x 45 m) was mined. Exploration and assessment work was done in 2004. In 2005, stripping and sluicing were done on the property, and in 2006, some cuts were mechanically stripped.

**EQUIPMENT AND WATER TREATMENT** Equipment in 2003 and 2004 included a Caterpillar D9H bulldozer and a Drott 50 excavator. A Caterpillar 988 loader was used in 2005. The wash plant in 2003 consisted of a 3- by 6-foot shaker with a 5- by 6-foot sluice run. A 6-inch submersible electric-powered pump rated at 1600 igpm supplied water to the plant, to process 90 loose cubic yards per hour. Water was acquired from Glacier Creek and settled out-of-stream. The wash plant in 2005 was a 20-foot trommel with two 12-foot

sluice runs. The same pump was used and the processing rate was 150 loose cubic yards per hour. Water was acquired from Big Gold Creek and settled out-of-stream. Clean-ups were done with a jig. In 2006, some stripping was done on the property.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** In 2003, the section consisted of 30 feet (10 m) of muck overlying 7½ feet (2 m) of gravel. A total of 3 feet (1 m) of gravel and 2½ feet (0.8 m) of bedrock were sluiced. In 2005, the section consisted of 28 feet (8.5 m) of mixed tailings, all of which were sluiced.

**BEDROCK GEOLOGY** Bedrock at the creek mouth is decomposed andesite and andesite breccia.

**GOLD CHARACTERISTICS** In 2003, the gold was 10% fine grained and the fineness was 804. In 2005, the gold was 65% fine grained and the fineness was 804.



*Prohaszka's operation on Big Gold Creek, 2005.*

**BIG GOLD CREEK, a tributary of Sixtymile River**

116C/2

2003: 64°02'17"N, 140°46'07"W

**Dredge Master Gold Ltd.**

Water license: PM96-022 (2005)

Exploration (2003)

**Operation no. 97**

**LOCATION** This operation was located on Big Gold Creek.

**WORK HISTORY AND MINING CUTS** Activity first took place here in 1996, when the property was mined by Dave and Vern Trainer. Dave Cachelin mined an area in 2002. In 2003, assessment work and a small amount of excavation occurred.

**BEDROCK GEOLOGY** Bedrock at the creek mouth is decomposed andesite and andesite breccia.

**GOLD CHARACTERISTICS** Gold recovered in prior years was fine grained with a fineness of 720.

**LITTLE GOLD CREEK, a tributary of Big Gold Creek**

116C/2

2005: 64°04'26"N, 140°53'56"W

**Dave Laurenson , Sarah Laurenson**

Water license: PM03-315 (2014)

Exploration (2005)

**Operation no. 98**

**LOCATION** This operation was located on Little Gold Creek.

**WORK HISTORY AND MINING CUTS** Dave Laurenson and his wife Sarah moved to this location in September, 2005 and worked a daily 12-hour shift. A cut 200 by 100 feet (60 x 30 m) was processed.

**EQUIPMENT AND WATER TREATMENT** Equipment consisted of a Caterpillar D8H bulldozer equipped with a ripper and U-blade and a Terex 72-51 loader. Test sluicing was done with the wash plant which included a 10-yard hopper feeding into a 4-foot-wide by 14-foot-long double screen deck.



*Dave and Sarah Laurenson's workings on Little Gold Creek, 2005.*

The classified gravel was then washed through sluice runs totalling 7 by 21 feet, which were lined with a combination of angle iron riffles, expanded metal and Nomad matting. Tailings were stacked with a 40-foot conveyor. Water acquired from Little Gold Creek was supplied by an English 6-cylinder diesel-powered Ford 5- by 4-inch pump rated at 1200 igpm, enough to process 100 loose cubic yards per hour. Effluent was settled out-of-stream and 100% recycled from a 125- by 100-foot (40- x 30-m) pond. Clean-ups were done with a long tom.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** The section consisted of 6 feet (2 m) of muck overlying 3 feet (1 m) of gravel on bedrock. All of the gravel and 3 feet (1 m) of bedrock were sluiced.

**GOLD CHARACTERISTICS** The gold was reported as fine grained with a purity of 780.

**POKER CREEK, a tributary of Fortymile River**

116C/2

2003: 64°03'45"N, 140°58'29"W

**Duane K. Payne**

Water license: PM01-225 (2006)

Active producer (2003)

**Operation no. 99**

**LOCATION** The property was located on Poker Creek, less than 1 mile (2 km) upstream from the Alaska/Yukon border.

**WORK HISTORY AND MINING CUTS** Duane K. Payne began working in the area in 1993. In 2003, mining and sluicing occurred a short distance downstream on the Alaska side of the border. Some stripping also took place immediately downstream from the camp on the right-limit hillside.

**EQUIPMENT AND WATER TREATMENT** An Allis Chalmers HD6 bulldozer with a 9-foot-wide blade and ripper was used to strip overburden and dig and stockpile gravel. A Hine Werner C14 excavator with a 1-cubic-yard bucket fed the wash plant, and a Case W80 loader with a 1-cubic-yard bucket removed tailings. A shaker screen deck 5 feet wide by 9 feet long classified pay to 1¼ inch minus. This was followed by a single sluice run 24 inches wide by 8 feet long, with 3-inch sawtooth riffles over shovel matting, sloped at 2¼ inches per foot. Approximately 15 cubic yards per hour were processed using 600 igpm of water supplied by a Homelite 4-inch pump, powered by a Briggs & Stratton engine. Water was obtained from an in-stream reservoir and recycled in four out-of-stream settling ponds.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** Overburden was 2 feet to 6 feet (1 to 2 m) deep in the centre of the valley bottom. Gravel units averaged 4 to 5 feet (1.2 to 1.5 m) deep and were mainly reddish and sandy, with no clay. Bedrock was flat. All gravel units were sluiced.

**BEDROCK GEOLOGY** The bedrock at this site is flat and composed of Nasina quartzite.

**GOLD CHARACTERISTICS** The gold was reported as rough, angular, fine, and reddish and dull coloured. Approximately 98% was less than 10 mesh and greater than 60 mesh. Fineness was 873.

#### GLACIER CREEK, a tributary of Big Gold Creek

116C/2

2005: 64°02'25"N, 140°51'34"W

2003: 64°01'41"N, 140°47'35"W

#### Midas Rex Mining Inc., Stuart Schmidt

Water license: PM97-026 (2006, Licensee: K-1 Mining Services)

Active producer (2003-2005)

Operation no. 100

**LOCATION** This operation was located on Glacier Creek, both in the valley bottom and on a left-limit bench.

**WORK HISTORY AND MINING CUTS** In 2003 and 2005, a crew of eight miners was mining both at this location and at Sixtymile River. This location was inactive in 2004. Between both areas, a total of 25 to 35 cuts were mined each year, with each cut averaging 50,000 square feet (4600 m<sup>2</sup>) of bedrock. At this location in 2003, a total of 275,000 square feet of bedrock (25 500 m<sup>2</sup>) were mined for a total

of 81,480 cubic yards (62 290 m<sup>3</sup>). In 2005, 54,000 bedrock square feet (5000 m<sup>2</sup>) or 16,000 cubic yards (12 200 m<sup>3</sup>) were mined.

**EQUIPMENT AND WATER TREATMENT** In 2003 and 2005, equipment included two Caterpillar D10N bulldozers with U-blades and rippers for stripping, pushing pay to the sluice plant, stacking tailings and testing. A Hitachi EX700 hydraulic excavator with 3½-cubic-yard bucket was used to feed the sluice plant, dig drains and test. A Nodwell-mounted Mobil Drill auger was used for exploration and testing. The wash plant consisted of an 8-foot-diameter Gray Brothers trommel plant with 8-foot-wide, 1- by 1-inch riffles leading to a 24-foot-wide section of expanded metal runs and a 100-foot by 36-inch tailings stacker. The wash plant was driven by a Caterpillar 3306 diesel engine driving hydraulic pumps to power the trommel, stacker and hydraulic winches to position the sluice tables. The plant was mounted on a modified, non-powered Caterpillar 245 excavator track frame and was moved using a tow hitch to a Caterpillar D10N tractor. Water was supplied from Glacier Creek via a large recycle pond, and pumped at 3000 igpm by a Caterpillar 3408 diesel-powered 10- by 12-inch Goulds Model JC pump. The plant processed 250 loose cubic yards per hour. Effluent was settled in-stream, and recycled at 100% due to low water availability. The pond size was 500 by 250 feet (150



*Midas Rex Mining Inc. sluicing on Glacier Creek, 2003.*

x 75 m) on average. Clean-ups were done daily with a long tom, gold wheel and Deister table.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** In 2003, the stratigraphic section encountered in the valley was a ‘technogenic’ deposit, which consisted of 4 to 12 feet (1 to 4 m) of frozen mud which had been pushed on top of a layer of 8 to 15 feet (2.5 to 5 m) of gravel tailings from previous mining in the 1950s. All of the gravel was sluiced, along with up to 6 feet (2 m) of bedrock. On the bench, the section consisted of 0 to 2 feet (0 to 0.6 m) of frozen mud overlying 10 to 12 feet (3 to 4 m) of muddy colluvium overlying 20 to 50 feet (6 to 15 m) of gravel. From 2 to 4 feet (0.6 to 1 m) of the gravel was sluiced, along with up to 6 feet (2 m) of bedrock.

**GOLD CHARACTERISTICS** The purity of the gold recovered was 820 fine; a large amount of amalgam was reportedly encountered. Gold varied from coarse and chunky to fine-grained.

### GLACIER CREEK, a tributary of Big Gold Creek

116C/2

2005: 64°02'22"N, 140°52'09"W

#### Floyd Travis

Water license: PM02-305 (2008)

Active producer (2003-2005)

Operation no. 101

**LOCATION** This property was located approximately 1.9 miles (3 km) upstream from the mouth of Glacier Creek.

**WORK HISTORY AND MINING CUTS** Floyd Travis mined alone at this site. He worked on the bench and the valley of Glacier Creek, and processed a small trench excavated further upstream. Over the course of three years, he moved between mining the thawed bench and valley ground, and opening new cuts to strip thaw. Two areas were mined on the bench: 60 by 60 by 15 feet (20 x 20 x 5 m) and 100 by 250 by 3 feet (30 x 75 x 1 m). A cut 150 by 150 by 4 feet (45 x 45 x 2 m) was mined on the valley bottom.

**EQUIPMENT AND WATER TREATMENT** Equipment included a P&H excavator and Komatsu P31 track loader to strip and move material. The wash plant was a 30- by 30-inch shaker screen



*Floyd Travis' operation on Glacier Creek, 2003.*

deck attached to a single 25-foot sluice run lined with Nomad matting, one riffle and expanded metal. Water for the plant was supplied by a Gorman Rupp 4-inch pump powered by a Deutz diesel engine and rated at 1500 igpm. The processing rate was approximately 25 loose cubic yards per hour. Water was acquired from a large reservoir pond 100 by 60 feet (30 x 20 m) and effluent was settled out-of-stream in a 10- by 10- by 6-foot (3 x 3 x 2 m) pond. Clean-ups were done with a long tom, with final concentrates delivered to Ruth and Don Kenzie for processing on their Deister table.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** On the left bench, a thawed stripped area 60 feet square (6 m<sup>2</sup>) contained average-sized rock with a few large boulders.

A 4-foot (1.2-m) layer of gravel was overlying the bedrock. In frozen ground, there was 12 feet (4 m) of overburden and 3 feet (0.9 m) of gravel. Between 3 and 4 feet (0.9 to 1.2 m) of gravel was sluiced.

**BEDROCK GEOLOGY** Bedrock at this site is purple decomposed shale and phyllite.

**GOLD CHARACTERISTICS** On the bench, gold was described as coarse, dark particles shaped like ball-bearings. The valley-bottom gold was brighter, very fine grained and shiny. The fineness was 850.

### SIXTYMILE RIVER, a tributary of Yukon River

115N/15, 1150/12, 116C/2

2005: 64°00'36"N, 140°43'15"W

2004: 63°58'42"N, 140°49'10"W

**Midas Rex Mining Inc., Stuart Schmidt**

Water license: PM04-438 (2013)

Active producer (2003-2005)

**Operation no. 102**

**LOCATION** Between 2003 and 2005, this operation was at several locations in the upper Sixtymile River valley.

**WORK HISTORY AND MINING CUTS** In 2003 and 2005, a crew of eight miners worked at the upper Sixtymile River and at Glacier Creek. In 2004, only the upper Sixtymile River location was active. At the mine on the upper Sixtymile River, the total mined area was 1,225,000 bedrock square feet (113 800 m<sup>2</sup>) or 363,000 cubic yards (278 000 m<sup>3</sup>) in 2003; 1,500,000 bedrock square feet (140 000 m<sup>2</sup>) or 450,000 cubic yards (344 000 m<sup>3</sup>) in 2004; and 1,446,000 bedrock square feet (134 300 m<sup>2</sup>) or 428,450 cubic yards (327 570 m<sup>3</sup>) in 2005. An average cut was 50,000 bedrock square feet (5000 m<sup>2</sup>).

**EQUIPMENT AND WATER TREATMENT** Equipment included two Caterpillar D10N bulldozers with U-blades and rippers for stripping, pushing pay to the sluice plant, stacking tailings and testing. A Hitachi EX700 hydraulic excavator with 3½-cubic-yard bucket was used to feed the sluice plant, dig



*Midas Rex Mining Inc.'s operation on the Sixtymile River, 2004.*

drains and test. A Nodwell-mounted Mobil Drill auger drill was used for exploration and testing. The wash plant consisted of an 8-foot-diameter Gray Brothers trommel plant with 8-foot-wide, 1- by 1-inch riffles leading to a 24-foot-wide section of expanded metal runs and a 100-foot by 36-inch tailings stacker. The wash plant was driven by a Caterpillar 3306 diesel engine driving hydraulic pumps to power the trommel, stacker and hydraulic winches to position the sluice tables. The plant was mounted on a modified, non-powered Caterpillar 245 excavator track frame and was moved using a tow hitch on a Caterpillar D10N tractor.

Water was supplied from Sixtymile River via a trenched opening to the pump pond. A Caterpillar 3408 diesel-powered 10- by 12-inch Gould's Model JC pump supplied 3000 igpm. The plant processed 250 loose cubic yards per hour. Effluent was settled out-of-stream and 20% recycled in 2004. The pond size was 500 by 250 feet (150 x 75 m) on average. Clean-ups were done daily with a long tom, gold wheel and Deister table.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** From 2003 to 2005, the section consisted of 0 to 4 feet (0 to 1.2 m) of frozen mud overlying 8 to 10 feet (2.4 to 3 m) of gravel on bedrock. From 2 to 4 feet (0.6 to 1.2 m) of gravel and up to 6 feet (2 m) of bedrock were sluiced. Some tailings from previous mining were also processed.

**BEDROCK GEOLOGY** Bedrock consists of schist.

**GOLD CHARACTERISTICS** The gold was reported as mainly fine-grained and the fineness was 820 to 860.

#### SIXTYMILE RIVER, a tributary of Yukon River

115N/15, 116C/2

2005: 63°59'50"N, 140°48'31"W

2003: 63°59'48"N, 140°45'42"W

**Tri Kay Properties, Frank Hawker, Midas Rex Resources**

Water licenses: PM03-336 (2014, Licensee: Frank Hawker), PM01-249 (2006)

Active producer (2003-2005)

**Operation no. 103**

**LOCATION** From 2003 to 2005, mining took place in dredged areas in the Sixtymile River valley near the mouth of Big Gold Creek on a strip of a left-limit bench. One cut was also mined on Miller Creek.

**WORK HISTORY AND MINING CUTS** Frank and Karen Hawker began mining on the Sixtymile River in 1993 and they mined in the area until 2005. In 2003, a crew of three miners and one camp person worked a daily 12-hour shift to mine seven cuts, each 100 by 300 feet (30 x 100 m). One cut was stripped on the left-limit bench for 2004. In 2004 and 2005, the crew of two miners and one camp person worked a daily 11-hour shift. In each of those years, a cut on Sixtymile River 1000 feet (300 m) long and 120 feet (35 m) wide was mined. One small cut on Miller Creek was mined in 2005. In 2006,



*Midas Rex Mining Inc.'s operation on the Sixtymile River, 2005.*

the Hawkers moved their operation to Lindow Creek, a tributary of Bear Creek.

**EQUIPMENT AND WATER TREATMENT** Equipment included a Komatsu D375 A2 bulldozer for stripping, a Hitachi EX200 excavator with a 1½-cubic-yard bucket for feeding the wash plant and a Hitachi EX300 excavator with a 1-cubic-yard bucket for moving tailings. A Caterpillar D10N bulldozer for stripping was added for 2004 and 2005. The wash plant consisted of a 5-foot-diameter, 20-foot-long trommel leading to sluice runs 14 feet wide and 8 feet long, lined with hydraulic riffles. Water was supplied to the plant at 1200 igpm by an Indeng 6-inch pump powered by a Caterpillar 3306 engine, which was enough to process 80 loose cubic yards per hour. Water was acquired from a drainage ditch on the Sixtymile River, and effluent was settled in a 1000- by 100-foot (300- x 30-m) out-of-stream pond. Clean-ups were done with a long tom and gold wheel.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** The section consisted of tailings from previous bench mining overlying dredge tailings. A total of 40 feet (10 m) of waste was stripped off and 5 feet (2 m) of pay material (bedrock and gravel remnants) were sluiced.

**BEDROCK GEOLOGY** Bedrock was reported as fractured quartzite and schist.

**GOLD CHARACTERISTICS** The gold was reported as mostly fine grained, with a fineness of 830.

### MILLER CREEK, a tributary of Sixtymile River

115N/15, 116C/2

2005: 64°00'08"N, 140°49'38"W

2003: 63°59'53"N, 140°48'44"W

J.M. Mining, Jayce Murtagh

Water license: PM04-439 (2015)

Active producer (2003-2006)

Operation no. 104

**LOCATION** The property was located in the narrow valley bottom of Miller Creek and on the left-limit bench, within 2 miles (3 km) of the confluence with Sixtymile River.

**WORK HISTORY AND MINING CUTS** Jayce Murtagh began mining on Miller Creek in 1991. During 2003, a cut was mechanically stripped upstream from the Brisebois Bros. property, which was formerly mined by Walter Yaremccio. Murtagh also mined upstream under Sixty Mile Enterprises' license. The crew of three miners worked a single 12-hour shift daily in 2003. Three cuts were mined, two at 150 by 200 feet (45 x 60 m) and one at 100 by 300 feet (30 x 100 m). In 2004 and 2005, the crew was reduced to two miners working a daily 11-hour shift. In 2004, three cuts were mined, 50 by 100 feet (15 x 30 m), 75 by 100 feet (20 x 30 m), and 60 by 300 feet (18 x 100 m). In 2005, five cuts were mined, 50 by 250 feet (15 x 75 m), 50 by 350 feet (15 x 105 m), 50 by 100 feet (15 x 30 m), 50 by 250 feet (15 x 75 m), and 35 by 200 feet (10 x 60 m). In 2006, Mr. Murtagh mined a cut downstream of the old Miller Creek townsite.

**EQUIPMENT AND WATER TREATMENT** Equipment consisted of a Hitachi EX300LC excavator with a 2-cubic-yard bucket for



*Tri Kay/Hawker mining on left-limit bench of Sixtymile River, 2003.*

stripping and digging drains, a Hitachi EX700H excavator with a 5-cubic-yard bucket for stripping and digging drains and moving tailings, a Caterpillar D9L bulldozer for stripping, and a Caterpillar 980B loader for sluicing. In 2005, a Terex Payhauler 350C rock truck with a 50-ton (35 cubic yards) capacity was added. The wash plant consisted of a 4- by 12-foot single vibrating screen deck with  $\frac{3}{4}$ -inch punch plate, fed by a 15-cubic-yard hopper with a shuffle board feeder. Two sluice runs were 8½ feet wide and 8 feet long and lined with hydraulic riffles. Water for the plant was supplied in 2003 at 1600 igpm by a Morris 8- by 10-inch pump powered by a Caterpillar 3306 engine, enough to process 100 loose cubic yards per hour. In 2004, the process rate was 90 loose cubic yards per hour and in 2005, the pump was replaced by a Berkley 6- by 8-inch Isuzu-powered pump which at 1600 igpm allowed 80 loose cubic yards to be processed. Water was acquired out-of-stream and effluent was settled out-of-stream into ponds 300 by 50 feet (90 x 15 m) and 150 by 200 feet (45 x 60 m) in 2003; 100 by 300 feet (30 x 100 m), 50 by 100 feet (15 x 30 m) and 150 by 200 feet (45 x 60 m) in 2004; and 150 by 200 feet (45 x 60 m) in 2005. In 2005, effluent was 50% recycled. Clean-ups were done with a jig.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** In 2003, the section consisted of 19 feet (6 m) of dredge tailings and old settling pond mud overlying 6 feet (2 m) of virgin (side pay) gravel on bedrock.

All of the virgin gravel was sluiced along with 2 feet (0.6 m) of bedrock. In 2004 and 2005, an 80-foot-thick (25 m) bench was mined on the left limit of the creek. The section consisted of 8 feet (3 m) of mud overlying 72 feet (22 m) of gravel on bedrock. A total of 8 feet (3 m) of gravel and 2 feet (0.6 m) of decomposed bedrock were sluiced.

**BEDROCK GEOLOGY** Bedrock is wavy decomposed schist.

**GOLD CHARACTERISTICS** In 2003, the gold was 10% minus 35 mesh, 80% minus 10 mesh to plus 35 mesh and 10% over 10 mesh. The coarse fraction had some nuggets with quartz attached. The fineness was 810. In 2004 and 2005, the gold was 10% minus 20 mesh, 70% minus 10 mesh to plus 20 mesh and 20% over 10 mesh. The fineness was 820.

#### SIXTYMILE RIVER, a tributary of Yukon River

115N/15

2003: 63°58'27"N, 140°49'49"W

Northway Mining & Exploration, Don Sandberg

Water license: PM99-119 (2004)

Active producer (2003)

Operation no. 105

**LOCATION** The operation was located on Sixtymile River, just downstream from Bedrock Creek.

**WORK HISTORY AND MINING CUTS** Mining began at this operation in 2000 and continued until 2003.



Jayce Murtagh's operation on Miller Creek, 2005.



Northway Mining and Exploration Inc. stockpiling pay, Sixtymile River, 2003.

**EQUIPMENT AND WATER TREATMENT** Equipment included a Caterpillar D9L bulldozer for stripping, a Caterpillar 988B loader to excavate pay and feed the plant, and a Caterpillar 245 excavator to excavate pay. During later seasons, two Caterpillar D550 rock trucks and a Caterpillar D7 bulldozer were added to the operation. The wash plant was a 5-foot-diameter by 20-foot-long trommel that screened material to  $\frac{5}{8}$  inch. The sluice runs were 14 feet wide by 7 feet long with pulsating riffles. Process water was 100% recycled in mined-out cuts. The typical pond size was 300 feet (100 m) wide by 600 feet (200 m) long. A long drain discharged groundwater seepage to the Sixtymile River.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** The section consisted of 5 feet to 6 feet (1.5 to 2 m) of sand and organic silt overlying 12 feet (4 m) of pebble-cobble gravel. The bottom 3 feet (0.9 m) of gravel was sluiced.

**BEDROCK GEOLOGY** Bedrock is variably decomposed and competent andesite with disseminated sulphide minerals.

**GOLD CHARACTERISTICS** The gold was reported to be fine grained with a purity of 830.

#### **BEDROCK CREEK, a tributary of Sixtymile River**

115N/15

2003: 63°58'26"N, 140°52'33"W

Steve Prohaszka

Water license: PM04-430 (2010), PM98-037 (2009)

Exploration (2003)

**Operation no. 106**

**LOCATION** The property was situated on Bedrock Creek, approximately 3 miles (5 km) east of the Alaska border.

**WORK HISTORY AND MINING CUTS** Mr. Prohaszka has held claims on Bedrock Creek since 1971, and he mined there intermittently in the 1970s and 1980s. In 2003, he used a bulldozer to strip a small area on the left limit of the valley downstream from the camp.

**EQUIPMENT AND WATER TREATMENT** Prohaszka's equipment included Caterpillar D9H and Caterpillar D8H bulldozers with rippers.

**BEDROCK GEOLOGY** The bedrock is Nasina quartzite and Klondike Schist.

#### **BEDROCK CREEK, a tributary of Sixtymile River**

115N/15

2004: 63°59'18"N, 140°57'58"W

Jack M. Stewart

Water licenses: PM05-466 (2011), PM00-152 (2005)

Exploration (2004-2005)

**Operation no. 107**

**LOCATION** This operation was located near the upper forks of Bedrock Creek, approximately 4 miles (6 km) upstream from its confluence with the left limit of the Sixtymile River.

**WORK HISTORY AND MINING CUTS** Mining began on the property in 1989 and continued in 1990, 1995 and 1996. In 2004 and 2005, Mr. Stewart had the ground drilled for assessment purposes.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** Near the upper forks of the creek, overburden is sandy and averages 3 to 4 feet (0.9 to 1 m) deep. Gravel averages 8 to 10 feet (2 to 3 m) deep to bedrock, and the bottom 2 or 3 feet (0.6 to 0.9 m) of gravel plus approximately 1 foot (0.3 m) of bedrock were tested.

**BEDROCK GEOLOGY** Bedrock in the lower reaches includes quartzite, schist and andesite. Towards the head of the creek, rhyolite and rhyolitic tuffs occur.

**GOLD CHARACTERISTICS** Gold recovered in tests was a mixture of fine- and coarse-grained gold, but no nuggets.

#### **FIFTY MILE CREEK, a tributary of Sixtymile River**

115N/16

2005: 63°50'46"N, 140°28'50"W

**Ralph Nordling, Al Rudis**

Water license: PM02-284 (2012)

Active producer (2005)

**Operation no. 108**

**LOCATION** This operation was located on an unnamed left-limit tributary to Fifty Mile Creek, unofficially named Cheryl Creek.

**WORK HISTORY AND MINING CUTS** In 2005, a crew of four miners and one camp person worked a daily 10-hour shift. Two cuts were mined, each approximately 100 by 200 feet (30 x 60 m).

**EQUIPMENT AND WATER TREATMENT** Equipment in 2005 consisted of a Hitachi 300 excavator and a Hitachi 200 excavator for stripping and feeding the plant. A Caterpillar D8L bulldozer

was used for pushing pay and stripping. The Hitachi 200 was used for clearing tailings. The wash plant consisted of a 6- by 14-foot screen deck feeding 16 by 8 feet of sluice run with hydraulic riffles. Water was acquired from Cheryl Creek and pumped by a Cato 75KW-powered 6- by 8-inch Dentze 912 pump rated at 2500 igpm. From 100 to 150 loose cubic yards per hour were processed, depending on the type of material and fluctuations in the water supply. Effluent was settled out-of-stream in two ponds during start-up, one 100 by 150 feet (30 x 45 m) and one 100 by 200 feet (30 x 60 m). Clean-ups were done with a long tom and Diester table.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** The stratigraphic section consisted of a vegetation mat with moss and dirt up to 2 feet (0.6 m) thick, covering waste gravel from 0 to 6 feet (0 to 2 m) thick, overlying pay gravel from 1.5 to 5 (0.5 to 1.5 m) feet thick on multicoloured bedrock. The bedrock was scraped during the excavation of pay gravel.

**GOLD CHARACTERISTICS** The gold recovered was bright and yellow, with a fineness of 890 to 910.



*Rudis and Nordling's operation on Cheryl Creek, a left-limit tributary to Fifty Mile Creek, 2005.*