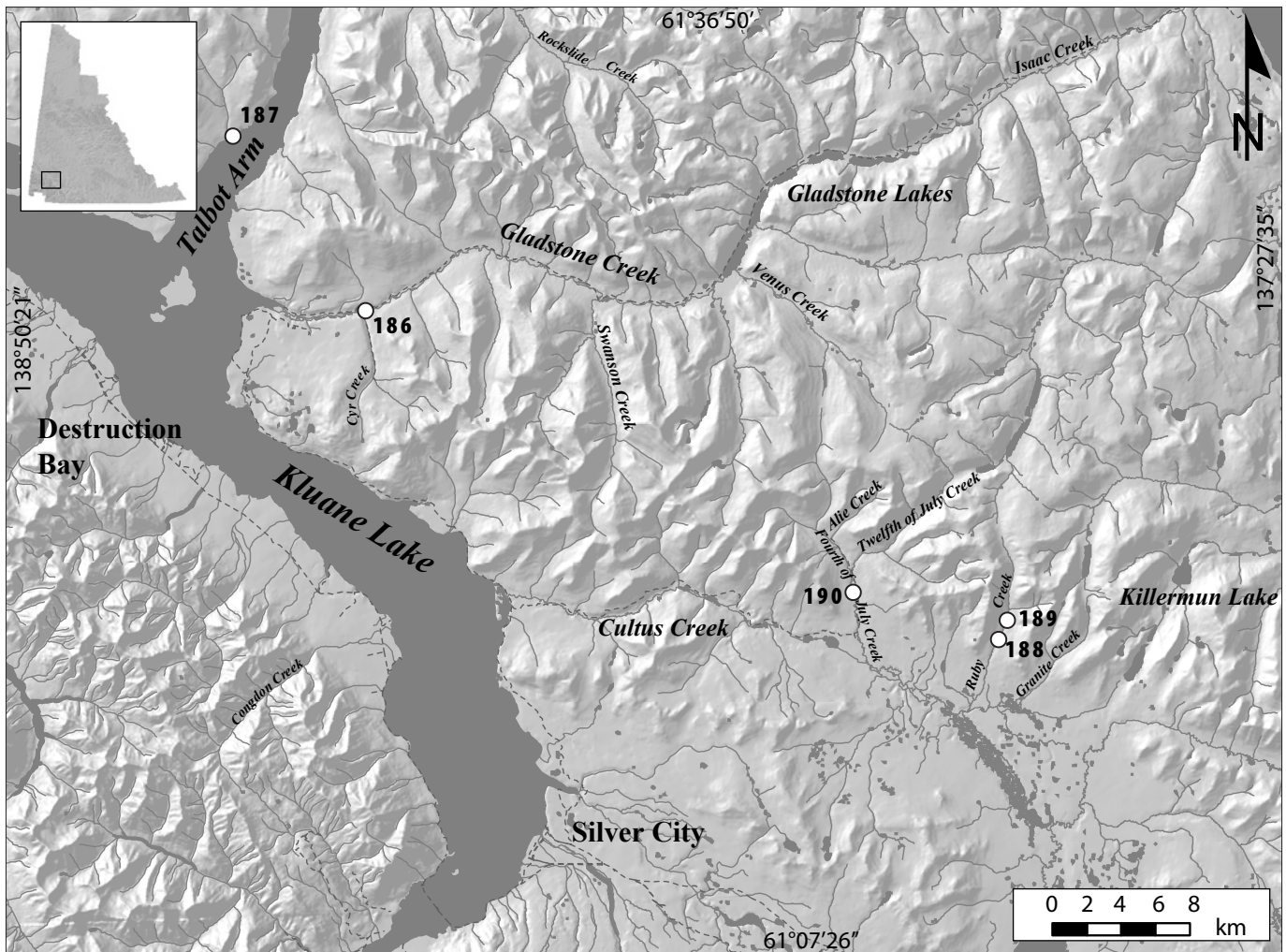


GLADSTONE PLACER AREA

SITES
186-190



LEGEND

- 186.....Tic Exploration Ltd., Gladstone
- 187.....Tic Exploration Ltd., Talbot Arm
- 188.....Brewster & Strand
- 189.....MacKinnon
- 190.....Churchill Placers Ltd.

GLADSTONE CREEK, a tributary of Kluane Lake

115G/7

2006: 61°18'53"N, 138°33'50"W

2005: 61°18'52"N, 138°34'50"W

2003: 61°18'49"N, 138°34'13"W

Tic Exploration Ltd., Alan Dendys

Water licenses: PM06-510 (2015), PM05-481 (2015)

Active producer (2003-2006)

Operation no. 186

LOCATION Alan Dendys has mined on Gladstone Creek at various locations from approximately 1.5 miles (2 km) upstream from its confluence with Kluane Lake to just upstream of Cyr Creek.

WORK HISTORY AND MINING CUTS Al Dendys began working the property in 1992. He has built up the size of the operation in subsequent years and now operates two wash plants simultaneously each season. Early in the 2003 season, Mr. Dendys had one floating trommel working on the left limit of Cyr Creek and a second floating trommel working on the left limit of Gladstone Creek approximately 2 miles (3 km) downstream of Cyr Creek. By September, work ceased on Cyr Creek and both trommels were operating on the left limit of Gladstone Creek. Near the end of the season, operating began on the right limit immediately south of the

unnamed creek. In 2004 and 2005, a crew of four miners and one camp person shared two 12-hour shifts. Both trommels continued to operate on Gladstone Creek on the right and left limits. Two cuts were completed in this period, each 1200 by 200 by 20 feet (360 x 60 x 6 m). In 2006, the 5-foot-diameter plant started work on the right-limit bench near camp, then moved to downstream of Cyr Creek on the left limit, then upstream to above the canyon. The 6-foot-diameter plant worked in the valley in the original creek channel up to the bottom of the canyon. The 5-foot-diameter plant processed a total cut size of 500 by 100 by 20 feet (150 x 30m x 6 m), and the 6-foot-diameter plant processed a cut 1200 by 200 by 15 feet (360 x 60 x 5 m).

EQUIPMENT AND WATER TREATMENT In the 2003 to 2006 seasons, equipment included two Caterpillar 330 excavators with 2-cubic-yard buckets, one Caterpillar 350 excavator with a 3-cubic-yard bucket, one Caterpillar D10N bulldozer with U-blade and ripper and two Caterpillar D9H bulldozers with U-blades and rippers. The bulldozers were used to mechanically strip the vegetation mat and top soil and reclaim the dredge tailings, while the excavators were used to process the glacial gravel. The wash plants were both floating trommels, one with a 6-foot-diameter and one with a 5-foot-



Tic Exploration's operations on Gladstone Creek in 2006. Channel diversion winds through photo while operation is in background; view looking east.



View of Tic Exploration's 5-foot-diameter trommel operating on the left limit of Gladstone Creek, 2006.

diameter. They both screened material to 1 inch minus which fed to hydraulic riffles followed by 2-inch flat bar riffles over Nomad matting. The 6-foot-diameter trommel processed 75 loose cubic yards per hour while the 5-foot-diameter trommel processed 50 loose cubic yards per hour. Each trommel was supplied water with a 6-inch pump; the pump for the 6-foot trommel was powered by a 6-litre Cummins diesel at 1200 igpm and the pump for the 5-foot trommel was powered by a 4-cylinder Lister at 1000 igpm. Water was acquired from Gladstone by seepage into the dredge ponds, and wastewater returned to Gladstone by seepage through the gravel. The out-of-stream dredge ponds were 200 by 50 feet (60 x 15 m) and 150 by 50 feet (45 x 15 m). Clean-ups were done with a Knudson bowl.

SURFICIAL GEOLOGY AND STRATIGRAPHY The valley of Gladstone Creek has extensive glacial till, glaciolacustrine clay and glaciofluvial outwash from the most recent glaciation which occurred in the period between 30,000 and 10,000 years ago. This sedimentary package has been downcut by the modern stream to the current level of Gladstone Creek valley. The valley floor of Gladstone Creek is thawed, while the banks are usually frozen, especially the south (north-facing)

bank. Deposits in the valley consist of up to 20 feet (6 m) of homogenous gravel, sand, cobbles and boulders on top of a clay layer, which acts as a false bedrock and traps placer gold in the same way. Low benches lie on each limit between the modern stream and the high clay banks. In the valley floor, most of the gravel and about 2 feet (0.6 m) of clay bedrock are usually sluiced. The section on the bench encountered from 2003 to 2005 consisted of 10 to 30 feet (3 to 9 m) of thawed glacial gravel with large boulders on a clay and schist bedrock. The bottom 10 to 20 feet (3 to 6 m) was sluiced.

BEDROCK GEOLOGY Unconsolidated, wavy clay forms a false bedrock layer in the valley floor. Schist bedrock was exposed on the benches in 2005.

GOLD CHARACTERISTICS Between 2003 and 2006, the gold was reported as flat and angular as well as round, rough and chunky, with a fineness of 830.

UNNAMED CREEK, a tributary of Kluane Lake

115G/07

2005: 61°2 4'31"N, 138°42'03"W

Alan Dendys, Tic Exploration Ltd.

Water license: PM05-499 (2016)

Exploration (2005-2006)

Operation no. 187

LOCATION The testing occurred on two adjacent unnamed tributaries of Talbot Arm on Kluane Lake.

WORK HISTORY AND MINING CUTS Dendys first conducted limited testing in the summer of 2004. In the winter of 2004-2005, equipment was brought over, on the ice, from the Gladstone Creek operation to use in the 2005 season. Similarly, in the winter of 2005-2006, additional equipment was transported for testing in the summer of 2006. Mr. Dendys also began construction of an airstrip.

EQUIPMENT AND WATER TREATMENT Equipment used for testing included a Caterpillar 235 excavator, a Caterpillar 325L excavator, a Caterpillar D8H bulldozer, a Caterpillar 955 traxcavator and a test wash plant.

SURFICIAL GEOLOGY AND STRATIGRAPHY The creek flows through a canyon and forms an alluvial fan delta into Kluane Lake. Fan gravel was a poorly sorted mixture of rounded boulders, cobbles and pebbles with sandy lenses and a calcite-cemented matrix. Similar placer deposit settings can be found on Mayo Lake in the Mayo Mining District.

RUBY CREEK, a tributary of Jarvis River

115H/4

2004: 61°07'45"N, 137°53'37"W

Dale Brewster, Diane Strand

Water license: PM00-208 (2005)

Active producer (2003-2004)

Operation no. 188

LOCATION This operation was located on the right limit of Ruby Creek.

WORK HISTORY AND MINING CUTS Mr. Brewster and Ms. Strand mined on the right limit of lower Ruby Creek from 1998 until 2004.

EQUIPMENT AND WATER TREATMENT A P&H excavator with a ¾-yard bucket was used for stripping and stockpiling, while a JCB wheeled backhoe with a ¼-yard bucket was used for feeding the sluice plant. The wash plant consisted of a 5- by 4- by 6-foot dump hopper over a 6- by 4-foot deck with ¾-inch screen, a 10-foot run of punch plate and a 16-inch by 3-foot riffle run. Water was obtained from Ruby Creek through the use of either a 5 horsepower 2-inch Honda pump, or a 16 horsepower 4-inch pump which produced 400 igpm. Effluent was settled out-of-stream with no discharge into Ruby Creek. In 2003, settling facilities consisted of three ponds over a distance of 1300 feet (400 m).

SURFICIAL GEOLOGY AND STRATIGRAPHY The average overall depth of the mining section was 16 to 18 feet (5 to 5.5 m), and was



Tic Explorations' exploratory operation on an unnamed tributary of Talbot Arm (Kluane Lake) in 2006.



Brewster and Strand operation on Ruby Creek, 2005.

composed mostly of fine pebble-cobble gravel. Clay layers were exposed below the stream channel.

BEDROCK GEOLOGY The bedrock at this site is wavy schist and quartzite.

GOLD CHARACTERISTICS Gold was reported to be bright in appearance with a mixture of flat, smooth and chunky textures. The average size was 60 mesh although some 0.06-ounce (2-g) nuggets were found.

RUBY CREEK, a tributary of Jarvis River

115H/4

2005: 61°08'21"N, 137°52'59"W

Brad MacKinnon

Water license: PM97-018 (2010)

Active producer (2003-2006)

Operation no. 189

LOCATION This operation was located on Ruby Creek upstream of the Brewster/Strand operation.

WORK HISTORY AND MINING CUTS Brad Mackinnon has been mining on Ruby Creek since 1998. From 2003 to 2006, approximately 5000 cubic yards (4000 m³) per year were mined. The processing site was located on the right limit of Ruby Creek, immediately above camp.

EQUIPMENT AND WATER TREATMENT A Bucyrus Erie 15H excavator was used to feed the wash plant, while a John Deere 544 loader was used to remove tailings. A John Deere 750 bulldozer was used for ground preparation and recontouring. The wash plant was a 5-foot-diameter trommel feeding a sluice run with a 2-foot-wide section for coarse material and a 4-foot-wide section for fine material. Water was supplied by a Honda 4-inch pump and acquired from Ruby Creek. The



Brad MacKinnon sluicing at his Ruby Creek mine, 2005.

processing rate was 22 loose cubic yards per hour and effluent was settled out-of-stream. Clean-ups were done with a long tom and gold wheel.

SURFICIAL GEOLOGY AND STRATIGRAPHY The section was described as glacial till intermixed with gravel. The depth to bedrock varied from 8 to 20 feet (2 x 6 m). The entire thickness was sluiced.

BEDROCK GEOLOGY Bedrock at this site is schist and quartzite.

GOLD CHARACTERISTICS The gold recovered was coarse, rough and spongy with some crystals present. Quartz was commonly associated with the gold. The fineness was 835.

drill truck, fuel tank, 6 by 6 truck, two rock trucks and a compressor truck were on site. A wash plant was located at the Alaska Highway.

SURFICIAL GEOLOGY AND STRATIGRAPHY Deposits consist of 1 foot (0.3 m) of muck overlying 12 to 20 feet (3.5 to 6 m) or more of gravel.

BEDROCK GEOLOGY Bedrock consists of quartz-sericite-chlorite schist and minor quartzite.

GOLD CHARACTERISTICS Gold was reported as flat and rough-edged with local quartz. Approximately 95% was smaller than 14 mesh and fineness averaged 810.

FOURTH OF JULY CREEK, a tributary of Jarvis River

115G/1

2004: 61°09'26"N, 138°02'54"W

Tom Churchill, Churchill Placers Ltd.

Water license: PM00-216 (2009)

Exploration (2004)

Operation no. 190

LOCATION The property was located on the Fourth of July Creek and extended a distance greater than 2 miles (4 km) below the left-limit tributary of Twelfth of July Creek to above the left-limit tributary of Snyder Creek.

WORK HISTORY AND MINING CUTS The property was mined by Sota Computing from 1999 to 2002. In 2003, the agreement with Sota Computing (John Fisher) expired, and property reverted back to Churchill Placers Ltd. In 2004, seven test drill holes were drilled for a total of 600 feet (180 m). All test sites were reclaimed prior to seasonal shut-down.

EQUIPMENT AND WATER TREATMENT In 2004, a Caterpillar D10N bulldozer, Caterpillar D8 bulldozer, Caterpillar 966 loader,



Churchill Placers Ltd.'s camp and equipment, 2004.