

## **LEGEND**

197..... Brad Mackinnon, Ruby Creek

198..... Brewster & Strand, Ruby Creek

199..... Sota Computing, Fourth of July Creek 200 .... Alan Dendys, Gladstone Creek

#### RUBY CREEK 115H/4

 Brad MacKinnon
 61°07'N 137°55'W

 Water Licence: PM97-018
 1998, 2000, 2001, 2002

 Gladstone Placer Area
 Site no. 197

**OPERATION/LOCATION** Mr. MacKinnon has been mining on the left limit of Ruby Creek immediately above Mr. Brewster, working in the same cut since 2000. All work was completed by Mr. MacKinnon.

**EQUIPMENT/FUNCTION** A John Deere 750 bulldozer was used for stripping, stockpiling and moving tailings. A Bucyrus Erie 15H excavator was used to feed material into the sluice plant.

**WASH PLANT** The wash plant was made up of a 4-foot by 6-foot vibrating screen with %-inch mesh. A 6-foot run of Hungarian riffles is followed by a 12-foot long by 3-foot wide section of expanded metal.

**GROUND DESCRIPTION** Most big rock was located at the surface followed by approximately 4 feet of loose, sandy gravel. The remainder was more clay laden and is a matrix of broken rock and some rounded creek gravels.

**MINING CUTS** A cut was made in 2002 and 3,400 cubic yards of material were removed. All material that was removed was sluiced.

**WATER SUPPLY AND TREATMENT** Water was obtained from Ruby Creek with the use of a Gorman Rupp, 3-cylinder, 4-inch pump that produces 500 imperial gallons of water per minute. The settling facility consisted of two ponds with a total capacity of 40,000 cubic feet and the effluent was returned to Ruby Creek once settled. During drier periods the water was recycled.

**GOLD** The gold recovered was rough and spongy looking with some crystallization. Quartz was often associated with the gold. The fineness is 835.

**COMMENTS** Permafrost was encountered consistently at a depth of 8 feet. Material was progressively removed as it thawed. Vegetation was comprised of willow and was piled and burned. No topsoil was encountered on the claim worked in 2002.

# RUBY CREEK 115H/4

Dale Brewster and Diane Strand61°08'N 137°52'WWater Licence: PM00-2081998, 1999, 2002Gladstone Placer AreaSite no. 198

**OPERATION/LOCATION** Mr. Brewster was mining on the right limit of lower Ruby Creek in the 2002 season. The number of personnel were one miner and one camp attendant and a four- to eight-hour daily shift was run.

**EQUIPMENT/FUNCTION** A P&H excavator with a ¾-yard bucket was used for stripping and stockpiling. A JCB wheeled backhoe with a ¼-yard bucket was used for feeding the sluice plant. Fuel was stored in 45-gallon drums.

**WASH PLANT** The wash plant consisted of a 5-foot by 4-foot by 6-foot dump hopper with a 6-foot by 4-foot by 3/4-inch screen deck, a 10-foot run of punched metal and a 16-inch by 3-foot riffle run.

**GROUND DESCRIPTION** Average overall depth of overburden was 16 to 18 feet, comprised mostly of fine gravels. The bedrock was wavy. Clay seams were encountered below the stream channel.

**MINING CUTS** One cut was made during the 2002 operating season.

**WATER SUPPLY AND TREATMENT** Water was obtained from Ruby Creek through the use of either a five horsepower 2-inch Honda pump or a 16 horsepower 4-inch pump which produced 400 imperial gallons of water per minute. The treatment of the water was accomplished through the use of one settling pond. There was no visible discharge into Ruby Creek.

**GOLD** A mixture of either flat, smooth or chunky gold was obtained, mostly at the 60 mesh size and bright in appearance. Some 2-gram nuggets were found.

**COMMENTS** The valley was relatively narrow with moderate slopes in the area being mined. Work in 2002 was primarily concentrated on removing overburden with a limited amount of restoration work. Water Licence PM95-101 was issued to Mr. Brewster and Ms. Strand to cover the mining activity that occurred in 1998 and 1999.

## FOURTH OF JULY CREEK

115G/1

 Sota Computing Systems Ltd.
 61°10'N 138°03'W

 Water Licence: PM99-033
 1999, 2000, 2001, 2002

 Gladstone Placer Area
 Site no. 199

**OPERATION/LOCATION** Since moving to Fourth of July Creek in 1999, Mr. J. Fischer has mined on the left limit of Fourth of July Creek between Eva Creek to the north and Twelfth of July Creek to the south. Three miners and one camp personnel were employed on a 24-hour shift.

**EQUIPMENT/FUNCTION** The equipment used during the past four years consisted of a 6-foot floating trommel, a Hyundai 320 excavator for feeding the plant, a Hyundai 320 excavator for shifting rock and performing miscellaneous tasks, a Komatsu 355 bulldozer with ripper for stripping and reclamation work, and a 4500-gallon fuel truck.

**Wash Plant** A 6-foot trommel floating on pontoons with a 50-foot stacker for tailings was used. Power was provided by a 6-cylinder Isuzu diesel engine that also ran the water pump. Gold was recovered on two 8-foot wide tables with hydraulic riffles.

**GROUND DESCRIPTION** The ground encountered in this area was comprised of a 12- to 14-foot thick layer of silt and clay over over 4 feet of pay gravel. Large quantities of old tailings from previous operators also had to be moved.

**MINING CUTS** In 1999, one continuous mining cut was made and 172,630 cubic yards of material were moved. Two cuts were made in 2000. The first cut was 34 feet deep by 145 feet wide by 750 feet long and the second cut was 20 feet deep by 110 feet wide by 650 feet long. In 2001, one cut was made 18 feet wide by 90 feet wide by 1950 feet long. During the 2002 season, a cut 12 feet deep by 150 feet wide by 1950 feet long was constructed.

**WATER SUPPLY AND TREATMENT** Water was acquired from the dredge pond and was 100% recycled. Typically, the pond size was approximately 150 feet long by 60 feet wide by 18 feet deep and the tailings were used to filter and settle the waste water.

**GOLD** Approximately 90% of the gold was very tiny nuggets about 16 mesh with very few larger nuggets, none of which were over 9 grams. Fineness averaged between 800 and 820.

**COMMENTS** All of the silt, clay and old tailings that were stripped and stockpiled were used to cover the levelled tailings on an ongoing basis.

## GLADSTONE CREEK

115G/7, 8

Tic Exploration Ltd. (Alan R. Dendys) Water Licence: PM99-079, LP00063 Gladstone Placer Area 61°18'N 138°32'W 1998, 1999, 2000, 2001, 2002 **Site no. 200** 

**OPERATION/LOCATION** In 1998, Alan Dendys continued his operation on Gladstone Creek approximately two miles upstream from its confluence with Kluane Lake. The valley width in this area is about 500 feet. A floating trommel plant is operated on each side of the creek. Personnel numbered five miners and one camp employee. In 2002, Mr. Dendys operated one floating trommel on the right limit of upper Gladstone Creek for the start of the season and later relocated the floating trommel to the left limit of middle Gladstone Creek. A second floating trommel operated on the left limit of lower Gladstone Creek for the entire 2002 operating season.



Soda Computing's New Zealand-style floating wash plant at Fourth of July Creek.

**EQUIPMENT/FUNCTION** Two D9H Caterpillar bulldozers were used for site preparation and reclamation work. A Caterpillar 350 excavator (2¾-cubic yard bucket) and a 330 excavator (2½ cubic yard bucket) fed the two floating trommels.

**WASH PLANT** Two trommels, 5-foot and 6-foot in diameter, were equipped with hydraulic riffles followed by 2-inch flat bar riffles over Nomad matting. Eighty cubic yards per hour were fed into the 6-foot trommel which screened material to 1¼-inch minus. Approximately 40 cubic yards per hour were fed into the 5-foot trommel which screened material to  $\frac{1}{2}$ -inch minus.

**GROUND DESCRIPTION** The floor of the Gladstone Creek valley is thawed while the benches are permafrost. The coarse glacial gravels average from 10 to 20 feet in depth and the clay bedrock is unconsolidated and wavy. All gravels were sluiced, including about 2 feet of the bedrock. Stripped overburden from the banks was stockpiled and used for restoration and reclamation.

**MINING CUTS** Over the last four years, Mr. Dendys completed a diversion channel approximately 1¼ miles in length. Two cuts were completed, each about 1500 feet long by 200 feet wide and 10 to 20 feet in depth.

WATER SUPPLY AND TREATMENT Water was acquired by gravity ditch from Gladstone Creek to supply the required dredge ponds to float the trommels used in this out-of-stream operation. Each pond was 200 feet by 50 feet by 20 feet deep at any given time. The ponds were restored and reclaimed on an annual basis. Effluent was filtered through hundreds of feet of settling pond before discharging, by seepage, back into the creek.

**GOLD** Gold varied from flat and round to rough and chunky. Sixty percent was finer than 60 mesh, 35% between 10 and 60 mesh and 5% was greater than 10 mesh. The fineness of the gold was 830.

**COMMENTS** Tic Exploration Ltd. was awarded the Robert E. Leckie Award for Outstanding Placer Mining Reclamation Practices from Indian and Northern Affairs Canada during its first year of presentation in 1999. It was cited as being the finest example of progressive placer mining restoration work in the Whitehorse Mining District.



Gladstone Creek operation.