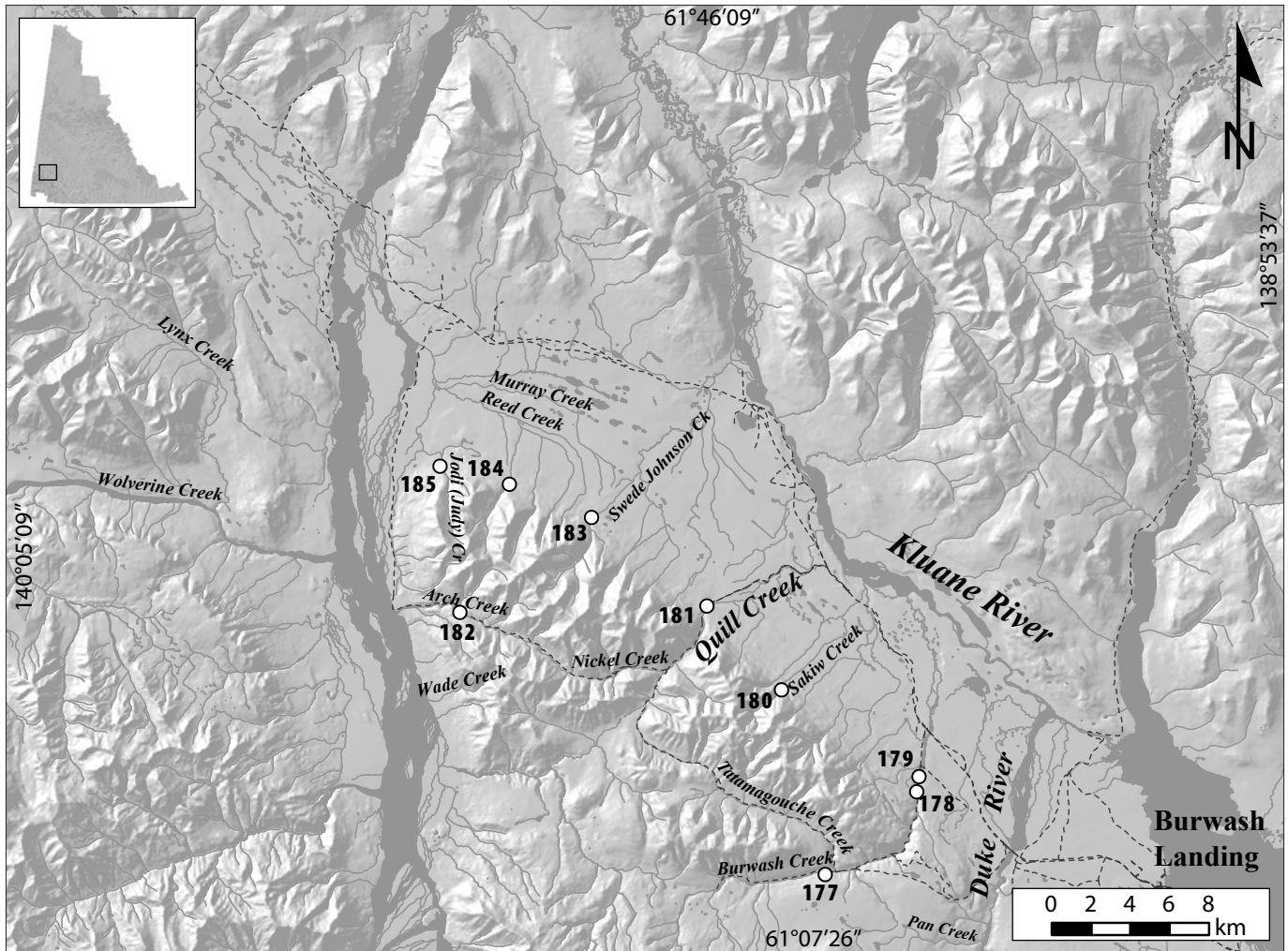


KLUANE PLACER AREA

SITES
177-185



LEGEND

- 177.....Johnson
- 178.....Johnson, S. Jr.
- 179.....Hall/Northern Mineral Development Inc.
- 180.....Jeanson
- 181.....Nichols
- 182.....Dulac
- 183.....Smith
- 184.....Tremblay & Smith
- 185.....Mitchell

BURWASH CREEK, a tributary of Kluane River

115G/6 2006: 61°22'05"N, 139°19'22"W

Steve L. Johnson

Water license: PM04-453 (2010)

Active producer (2005-2006) **Operation no. 177**

LOCATION The operation was located along Burwash Creek, immediately upstream of the mouth of Tatamagouche Creek.

WORK HISTORY AND MINING CUTS Steve Johnson has been active on Burwash Creek since 1993. In 2005, Johnson test mined approximately 130 cubic yards (100 m³) of material. In 2006, Mr. Johnson conducted some stripping on the right limit of Burwash Creek across from the mouth of Tatamagouche Creek.

SURFICIAL GEOLOGY AND STRATIGRAPHY The section in this area generally consists of 6 feet (2 m) of pay gravel on bedrock, overlain by 16 feet (5 m) of thawed creek gravel overburden.

BEDROCK GEOLOGY This area is roughly the zone between a gabbro and latite porphyry, both igneous intrusive rocks. Minor amounts of pyrrhotite, pentlandite and chalcopyrite occur at the contact.

BURWASH CREEK, a tributary of Kluane River

115G/6 2004: 61°24'17"N, 139°14'02"W

Sam Johnson, Jr.

Water license: PM04-435 (2010)

Active producer (2004-2006) **Operation no. 178**

LOCATION The operation was located on Burwash Creek on Kluane First Nation (KFN) Category A settlement land (R1A). Mr. Johnson had written permission from KFN. The operation was not on claims, but was between the downstream post of P03598 and the upstream post of P03915.

WORK HISTORY AND MINING CUTS Mr. Johnson mined briefly in 2004, and stripped and sluiced a small amount of ground in 2005 and 2006. The work was on both sides of the creek.

EQUIPMENT AND WATER TREATMENT Equipment included a Caterpillar 966 loader and small wash plant.



Sam Johnson Jr.'s sluicebox, loader and dog on Burwash Creek, 2005.

BURWASH CREEK, a tributary of Kluane River

115G/6

2003: 61°24'42"N, 139°13'52"W

Dale Hall, Charles Eikland Sr., Northern Mineral Development,
Clarke Ashley

Water license: PM03-331 (2015, Licensee: Northern Mineral Development Inc.)

Active producer (2003-2006)

Operation no. 179

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

WORK HISTORY AND MINING CUTS The property was first tested in 2001. Mining took place in 2002 and 2003 by Mr. Dale Hall with some stripping on the left limit. The property was largely inactive in 2004 and 2005. In 2006, Mr. Hall sold the claims to Mr. Clarke Ashley and Northern Mineral Development Inc. In 2006, the new operators, with a new water license, tested a new wash plant.

EQUIPMENT AND WATER TREATMENT A John Deere 690B excavator was used to feed the trommel and a Caterpillar D8H bulldozer was used to clear tailings and for pushing up pay gravel. A 6- by 8-foot hopper fed a 44-inch by 20-foot trommel which screened the material to 3/8-inch and 1/2-inch minus. Water was obtained from a ditch off of Burwash Creek with a Thompson 6-inch pump that was powered with a 635 Perkins diesel engine and was capable of providing 450 igpm. No water was returned to Burwash Creek as the four settling ponds were capable of total containment of the effluent. In 2003, this operation continued using a closed water use system.

SURFICIAL GEOLOGY AND STRATIGRAPHY The section consisted of 3 feet (1 m) of organic material and silt, overlying 8 feet (2 m) of gravel with small boulders on a bedrock terrace. The area worked was not frozen and was relatively flat. Ground penetrating radar conducted in 2005 determined that bedrock in the valley was deeper than 60 feet (20 m).

BEDROCK GEOLOGY The rocks exposed along Burwash Creek consist of mafic igneous rocks including diorite, andesite, basalt and gabbro, as well as sedimentary rocks such as shale, slate, chert, limestone and conglomerate.

GOLD CHARACTERISTICS The gold was reported as fine and flat and quite bright in colour, and described as well travelled. Fineness was 740.



Andre Jeanson's operation on Sakiw Creek, July 2005.

SAKIW CREEK, a tributary of Kluane River

115G/6

2003: 61°27'10"N, 139°21'36"W

Andre Jeanson

Water license: PM05-459 (2011)

Exploration (2003)

Operation no. 180

LOCATION This property was located on Sakiw Creek.

WORK HISTORY AND MINING CUTS Mr. Andre Jeanson dug some test holes in 2003.

EQUIPMENT AND WATER TREATMENT The operator used a wheeled Caterpillar 416 excavator.

QUILL CREEK, a tributary of Kluane River

115G/11, 115G/6

2004: 61°29'31"N, 139°25'44"W

Joe Nichols, Robert Hanson

Water license: PM99-042 (2005)

Active producer (2003-2004)

Operation no. 181

LOCATION The operation was located just downstream of the canyon at Quill Creek, where the valley widens.

WORK HISTORY AND MINING CUTS Willie Pfisterer began working on Quill Creek in the late 1980s, mining an average of 6000 cubic yards (4600 m³) each year until he sold the operation in 2002 to Joe Nichols and Robert Hanson. Mr. Nichols and Mr. Hanson conducted a program of stripping, testing and some limited sluicing on the right limit of Quill Creek in 2002 and shifted to the left limit in 2003 and 2004. The operation shut down and was reclaimed in 2005.

EQUIPMENT AND WATER TREATMENT Equipment on-site included a Case 850 loader and a Link-belt 2800 excavator. Both pieces of equipment were used for testing, stripping and feeding the wash plant. The wash plant included a 4- by 8-foot grizzly with spray bar over a 12-foot-long single-run sluice, which

processed 10 loose cubic yards per hour. Water was obtained from Quill Creek with a pump that was equipped with two 3-inch suction hoses. The effluent was treated in a series of two to four settling ponds.

SURFICIAL GEOLOGY AND STRATIGRAPHY The stratigraphic section generally consisted of 12 feet (4 m) of thawed, mixed layers of sand, silt and boulder-cobble gravel. Most coarse gravel layers contained gold values, but the highest grades were with the biggest boulders and at the bedrock contact.

BEDROCK GEOLOGY Bedrock in the area consists of a mixture of various volcanic, ultramafic and sedimentary rocks.

GOLD CHARACTERISTICS The gold was a mixture of fine and coarse grains, with that recovered from the right limit tending to be chunkier, with round, ball-like nuggets 3 to 5 g (0.1 oz to 0.2 oz) in weight. Copper was found in the concentrate from cuts on either side of the stream. Fineness was 870.

ARCH CREEK, a tributary of Donjek River

115G/5

2005: 61°29'30"N, 139°39'55"W

Marcel Dulac

Water license: PM03-326 (2008)

Active producer (2004-2006)

Operation no. 182

LOCATION This operation was located in the canyon of Arch Creek.

WORK HISTORY AND MINING CUTS In 2004, a crew of three miners and one camp person worked a daily 8-hour shift. One cut was mined, 60 feet wide, 120 feet long and 6 feet deep (20 x 40 x 2 m). In 2005, the same crew mined four cuts, each 30 feet wide, 9 feet long and 6 feet deep (10 x 3 x 2 m). In addition, several test pits were dug upstream of the mining. The operation sluiced in 2006 with a smaller crew, on the left limit approximately 1500 feet (450 m) from the Arch.

EQUIPMENT AND WATER TREATMENT In 2004, the equipment on site consisted of a Case 125B excavator. In 2005, a Caterpillar 988A loader and Hitachi UH172 excavator were added. The wash plant for both years consisted of a shaking hopper with a screen deck (1½-inch classification), boil boxes for nugget traps and a 2-foot-wide double sluice run with ¾-inch punch



View of Joe Nichols' operation on Quill Creek, 2004.

plate. The 12- by 10-inch pump was Detroit-powered and supplied enough water to process 40 (in 2004) to 60 (in 2005) loose cubic yards per hour. Water was acquired from an in-stream pump pond and effluent was settled in-stream. Clean-ups were done with jigs and a gold wheel.

SURFICIAL GEOLOGY AND STRATIGRAPHY In the narrow canyon with 300-foot (100-m) walls, the section consisted of many boulders the size of pickup trucks and small houses which made mining difficult. Depth to bedrock varied from 2 to 10 feet (0.6 to 3 m), and all material was sluiced.

GOLD CHARACTERISTICS The gold was very coarse and chunky, some smooth and some with quartz. The majority were nuggets, with 50% of the gold weighing 1 gram or more. The fineness was 870.

SWEDE JOHNSON CREEK, a tributary of Kluane River

115G/12

2006: 61°32'01"N, 139°32'14"W

Lorne E. Smith

Water licenses: PM05-491 (2011), PM04-399 (2009)

Exploration (2006)

Operation no. 183

LOCATION The operation was located midway up Swede Johnson Creek.

WORK HISTORY AND MINING CUTS Lorne Smith conducted intermittent test work and small-scale mining between the mid 1980s and early 1990s. In 2006, activity was limited to approximately 80 cubic yards (60 m³) of material for testing purposes.

SURFICIAL GEOLOGY AND STRATIGRAPHY Gold was said to occur in a winding pay streak.

BEDROCK GEOLOGY Bedrock consists of Permian and earlier basic lava, banded cherty tuff, volcanic breccia, chlorite schist, minor greywacke, argillite and limestone. Gold values up to 0.25 oz/t (8.6 g/t) Au were obtained from specimens of quartz-carbonate altered volcanic rocks found near the headwaters (Yukon MINFILE 115G 027, Deklerk, 2006).



Marcel Dulac's operation in the narrow canyon of Arch Creek, 2005.

REED CREEK, a tributary of Donjek River

115G/12 2005: 61°32'59"N, 139°36'55"W

Lorne E. Smith, Larry Tremblay

Water license: PM02-288 (2007)

Active producer (2003-2006) **Operation no. 184**

LOCATION The operation was located approximately 1000 feet (300 m) upstream from the mouth of the canyon.

WORK HISTORY AND MINING CUTS This operation was first active in 1989. Some sluicing was done in 2003 and 2004. In 2006, an area above the canyon that was worked five years prior was sluiced, as well as an area below the canyon. Mr. Smith moved to Swede Johnson Creek in 2006.

EQUIPMENT AND WATER TREATMENT Equipment included a Caterpillar D7 bulldozer and wheel-mounted excavator. Effluent was channeled down the left limit and seeped to ground with no discharge.

BEDROCK GEOLOGY Bedrock is mapped as an assortment of volcanic rocks, chlorite schist, argillite and limestone.

GOLD CHARACTERISTICS The gold was reported to be mostly coarse, rough and angular. Many of the pieces found contain quartz and white and black quartz-carbonate material. Nuggets up to ¾ ounce (20 g) were recovered. Purity was from 889 to 896.

JODI CREEK, a tributary of Donjek River

115G/12 2003: 61°33'31"N, 139°40'52"W

Wayne Mitchell

Water license: PM02-266 (2008)

Exploration (2003) **Operation no. 185**

LOCATION The operation was located at the mouth of the canyon.

WORK HISTORY AND MINING CUTS In 2003, Mr. Mitchell mechanically excavated two trenches.

EQUIPMENT AND WATER TREATMENT Mr. Mitchell used an excavator.

SURFICIAL GEOLOGY AND STRATIGRAPHY The creek empties from a canyon into the Donjek River floodplain. At the valley mouth are some glacial deposits likely derived from a cirque in the headwaters of Jodi Creek.