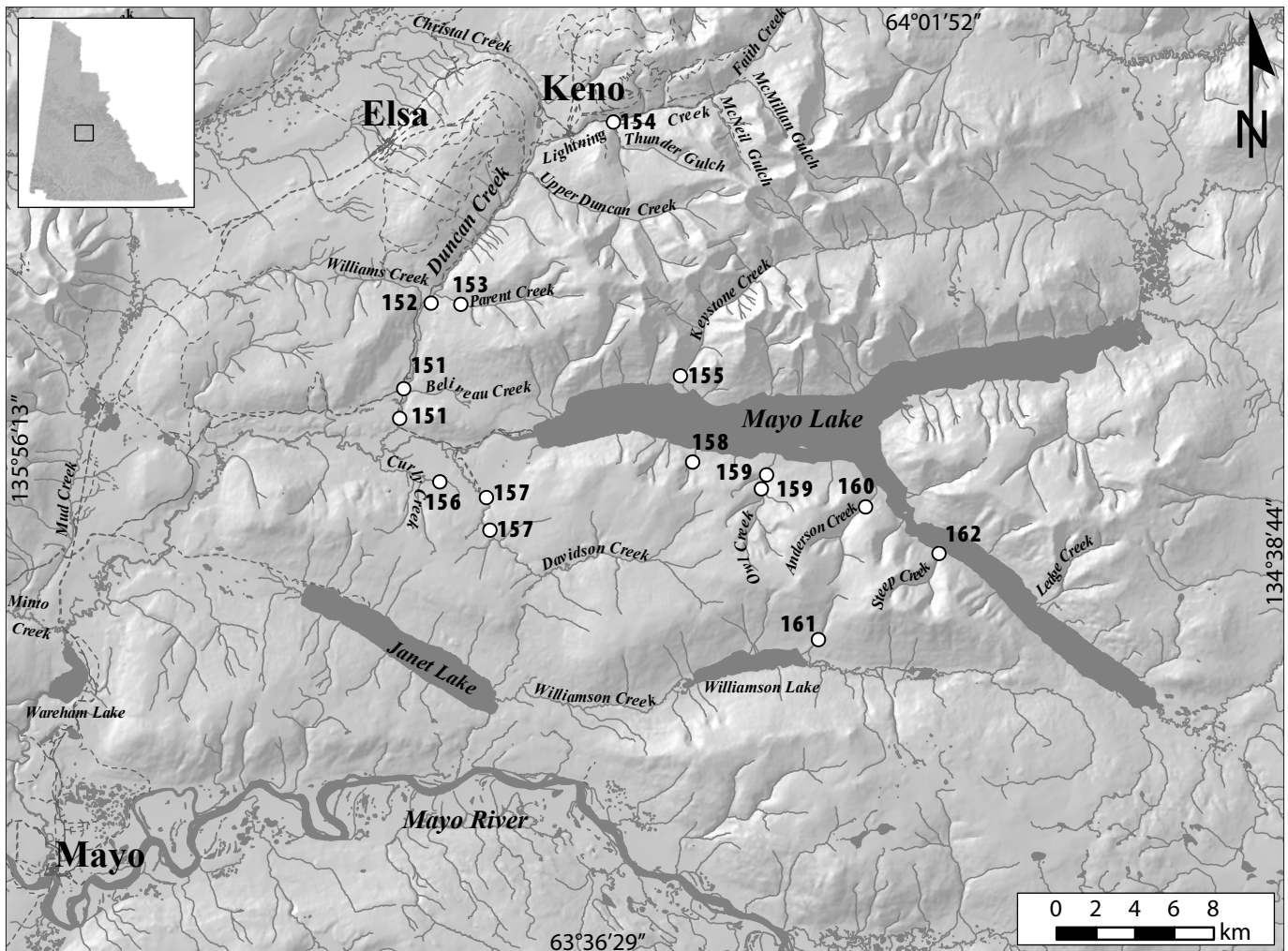


DUNCAN CREEK PLACER AREA

SITES
151-162



LEGEND

- 151.....Duncan Creek Golddusters Ltd. – Duncan Creek
- 152.....Zeiler - Duncan Creek
- 153.....Zeiler - Parent Creek
- 154.....Bardusan Placers Ltd.
- 155.....Duncan Creek Golddusters Ltd. – Keystone Creek
- 156.....Plut
- 157.....Klippert/Rivest
- 158.....Wozniak
- 159.....Barchen - Owl Creek
- 160.....20861 Yukon Inc.
- 161.....Dublenko
- 162.....Barchen - Steep Creek

DUNCAN CREEK, a tributary of Mayo River

105M/13, 105M/14

2006: 63°47'9"N, 135°30'10"W

2003: 63°47'57"N, 135°29'45"W

Duncan Creek Goldbusters Ltd., Frank Taylor, Troy Taylor

Water license: PM03-312 (2015)

Active producer (2005-2006)

Operation no. 151

LOCATION This property is located on Duncan Creek, between 1.2 miles (2 km) and 4.3 miles (7 km) from the confluence of Duncan Creek and Mayo River.

WORK HISTORY AND MINING CUTS The Taylor family has mined in this location since 1975, the ground being held since the 1950s. The crew from 2003 to 2005 consisted of three miners and one camp person, working a daily 12-hour shift. In 2006, this was reduced to two miners. Mining progressed in 2003 on the left limit of Duncan Creek in shallow modern gravel, a few claims below camp. A shallow bedrock bench was also mined in this area. Mining continued in the 2004 and 2005 seasons, and in October, 2005 the operation moved downstream to a location just upstream of the Duncan Creek bridge. Duncan Creek was diverted from its location on the

left limit and the shallow modern gravel was mined adjacent to the former creek channel in 2005 and 2006. From 2003 to 2005, a significant amount of gravel was also sluiced from a buried placer deposit located to the west of the modern drainage.

EQUIPMENT AND WATER TREATMENT Equipment consisted of a Hitachi UH30 excavator with a 5-cubic-yard bucket for stripping and to lift pay closer to the plant; a Komatsu D355 bulldozer for stripping and pushing pay; a Caterpillar 330BL excavator with a 2-cubic-yard bucket for feeding the wash plant; and a Caterpillar 988B loader for removing tailings. The wash plant included a modified, wet vibrating grizzly feeder (VGF), two 3-foot-wide by 9-foot-long sluice runs with 1-inch angle iron riffles, and four 3-foot-wide by 9-foot-long sluice runs lined with expanded metal riffles. A 6-inch Gorman Rupp trash pump supplied water to the wash plant. The processing rate varied from 95 to 125 loose cubic yards per hour. Previously mined cuts were used for settling out-of-stream with no recycling. Clean-ups were conducted using a jig.



Duncan Creek Goldbusters' operation in 2003.



Aerial view of Duncan Creek Golddusters on Duncan Creek in 2005.

SURFICIAL GEOLOGY AND STRATIGRAPHY The section exposed by mining to the west of the modern drainage from 2003 to 2005 consisted of 10 to 25 feet (3 to 7.5 m) of silt/sand and pebbles with some organic material overlying 6 to 15 feet (2 to 4.5 m) of boulder pay gravel resting on bedrock. In 2006, the section near the Duncan Creek bridge consisted of 0 to 3 feet (0 to 1 m) of organic material, silt/sand and pebbles overlying 6 to 10 feet (2 to 3 m) of boulder pay gravel resting on bedrock on the left limit. Towards the valley centre, the boulder pay gravel was overlying glacial till.

BEDROCK GEOLOGY Bedrock is decomposed schist and siliceous schist.

GOLD CHARACTERISTICS The size of the gold was generally fine-grained (mainly less than 18 mesh) but highly variable, and most nuggets were thin, flat and fairly smooth. Some nuggets as large as one ounce (31 g) were found. Fineness ranged between 770 and 800.

DUNCAN CREEK, a tributary of Mayo River

105M/14

2005: 63°50'13"N, 135°27'36"W

Mel Zeiler

Water license: PM04-318 (2014)

Exploration (2003-2005)

Operation no. 152

LOCATION Testing operations were located on Duncan Creek, a tributary to the Mayo River.

WORK HISTORY AND MINING CUTS In 2003 and 2004, a crew of up to two personnel conducted trenching programs on Duncan Creek. A standard test hole measured 4 by 10 by 22 feet (1 x 3 x 6 m). In 2005, a drill program was undertaken, and holes were drilled throughout the property to determine bedrock depths.

EQUIPMENT AND WATER TREATMENT A Caterpillar 225 hoe was used for excavating test holes and a Nodwell Track with an 8-inch bit and 7-inch auger was used in the drilling program.



Mel Zeiler standing beside his Nodwell-mounted auger drill at his camp on Duncan Creek, 2005.

SURFICIAL GEOLOGY AND STRATIGRAPHY The drill program was designed around earlier test trench programs with the intention of defining a previously discovered buried channel. Frozen ground was encountered throughout the property with glacial till overlying approximately 50 feet (15 m) of clay. Bedrock was not reached and large boulders were frequently intersected in the drilling.

GOLD CHARACTERISTICS Gold was described as light and flaky.

PARENT CREEK, a tributary of Duncan Creek

105M/14

2005: 63°50'07"N, 135°25'47"W

Mel Zeiler

Water licenses: PM05-474 (2014), PM03-319 (2014)

Exploration (2003-2005)

Operation no. 153

LOCATION This property was tested in several locations including Parent, Duncan and Williams creeks.

WORK HISTORY AND MINING CUTS In 2003 and 2004, a crew of up to two personnel conducted trenching programs on Parent Creek and Williams Creek. A number of holes were excavated and sampled using a Caterpillar 225 hoe. A standard test hole measured 4 by 10 by 22 feet (1 x 3 x 6 m) and bedrock was reached in only two locations on Parent Creek. A total of 27 holes were drilled throughout the property to establish bedrock depths wherever possible.

EQUIPMENT AND WATER TREATMENT A Caterpillar 225 hoe was used for excavating test holes and a Nodwell Track with an 8-inch bit and 7-inch auger was used in the drilling program.

SURFICIAL GEOLOGY AND STRATIGRAPHY The left limit of Parent Creek was frozen to bedrock and well-washed gravel was located under extensive frozen clays on the right limit. Bedrock was not reached on the right limit.

GOLD CHARACTERISTICS Light flaky gold was found in samples.

LIGHTNING CREEK, a tributary of Duncan Creek

105M/14

2006: 63°54'43"N, 135°15'21"W

Bardusan Placers Ltd., Hans Barchen, Claus Barchen

Water licenses: PM02-297 (2013), PM98-043 (2004)

Active producer (2003-2006)

Operation no. 154

LOCATION In 2006, the property was approximately a half mile (1 km) upstream of the mouth of Thunder Gulch.

WORK HISTORY AND MINING CUTS Bardusan Placers first mined on Lightning Creek in 1991 and 1992, and returned again to mine from 1998 to present. In each of the seasons from 2003 to 2006, approximately 60,000 cubic yards (46 000 m³) were stripped and 30,000 cubic yards (23 000 m³) were sluiced. In 2005, stripping and mining took place along the right limit of Lightning Creek upstream from the mouth of Thunder Gulch. Gravel was stockpiled for sluicing in the 2006 season. In 2006, stockpiled gravel was sluiced, and mining continued upstream of Thunder Gulch along the left limit of Lightning Creek.

EQUIPMENT AND WATER TREATMENT Equipment included a Hitachi UH 20 excavator, a Caterpillar 980 loader and a Caterpillar 988 loader. The wash plant was a 10- by 20-foot Derocker over a 3- by 24-foot-long, double run sluice box. From 80 to 100 cubic yards of material were processed per hour. The mine cut was below the water table which, when pumped to drain the cut, provided the water for the wash plant. Effluent was settled out-of-stream in two ponds, each 400 feet (120 m) long and 80 feet (25 m) wide.

SURFICIAL GEOLOGY AND STRATIGRAPHY The section exposed from 2003 to 2006 was 60 to 70 feet (18 to 20 m) of angular, manganese and iron-stained cobble-boulder gravel mixed with localized silt and sand lenses, overlying 20 to 30 feet (6 to 10 m) of grey, compact, boulder pay gravel on bedrock.

BEDROCK GEOLOGY Bedrock at this site is quartzite and quartz-sericite schist.

GOLD CHARACTERISTICS From 2003 to 2006, the gold was 90% less than 12 mesh in size.



Bardusan Placers' operation on Lightning Creek, 2005.

KEYSTONE CREEK, a tributary of Mayo Lake

105M/14

2005: 63°47'38"N, 135°12'38"W

Duncan Creek Goldbusters Ltd., Frank Taylor, Troy Taylor

Water licenses: PM01-260 (2008)

Exploration (2003-2006)

Operation no. 155

LOCATION Testing was conducted at several locations along the length of Keystone Creek.

WORK HISTORY AND MINING CUTS Duncan Creek Goldbusters have tested several locations on Keystone Creek. In 2004, a bedrock drain was started near the apex of the alluvial fan delta which empties into Mayo Lake.

EQUIPMENT AND WATER TREATMENT Equipment for testing included a Caterpillar 330BL excavator brought in from the nearby Duncan Creek property. A settling pond is in place for future water treatment.

BEDROCK GEOLOGY Bedrock is interbedded muscovite-talc schist and micaceous quartzite.

CURLY CREEK, a tributary of Mayo River

105M/14

2004: 63°45'19"N, 135°28'02"W

Frank Plut

Water license: PM00-186 (2006)

Exploration (2003-2005)

Operation no. 156

LOCATION The operation was located primarily on the left limit of Curly Creek, a tributary to Mayo River.

WORK HISTORY AND MINING CUTS Stripping took place in 2003 on several areas on the left limit. In 2004 and 2005, more areas were stripped and a small testing program was conducted.

DAVIDSON CREEK, a tributary of Mayo River

105M/11

2005: 63°43'53"N, 135°25'13"W

2003: 63°44'47"N, 135°25'14"W

Kim Klippert, Paul Rivest

Water license: PM03-341 (2014, Licensee: J.P. Rivest)

Active producer (2003-2006)

Operation no. 157

LOCATION The operation was located above the canyon on the right limit, and moved upstream progressively each year including 2006.

WORK HISTORY AND MINING CUTS The creek was first tested by the Rivest family in 1995. Cam Arkinstall mined here in 1998 and 1999, and in 2001, Kim Klippert optioned the ground. Kim Klippert's operation with a crew of up to 5 personnel continued mining above the canyon in each of the mining seasons from 2003 to 2006. In 2003, one cut mined was 75 by 100 by 12 feet (20 x 30 x 4 m) or 3333 cubic yards (2550 m³) and another was 150 by 30 by 25 feet (45 x 10 x 8 m) or 4546 cubic yards (3475 m³). In 2004, four cuts were mined: 130 by 80 by 14 feet (40 x 25 x 5 m), 125 by 80 by 10 feet (38 x 25 x 3 m), 100 by 75 by 12 feet (30 x 20 x 4 m), and 135 by 75 by 12 feet (40 x 20 x 4 m), for a total of 13,596 cubic yards (10 395 m³). In 2005, three cuts were mined: 170 by 120 by 24 feet (50 x 40 x 7 m), 190 by 120

by 14 feet (60 x 40 x 4 m), and 120 by 70 by 10 feet (40 x 20 x 3 m), for a total of 33,066 cubic yards (25 280 m³). In addition, four test areas were completed for advance mine plans, from the top end of the canyon upstream to the top of the claim block held by Paul Rivest. In 2006, the operation sluiced upstream of the 2005 mine cut.

EQUIPMENT AND WATER TREATMENT Equipment between 2003 and 2006 included a Caterpillar D8H bulldozer with U blade and ripper, as well as a Hitachi UH12 excavator with a 1½-cubic-yard bucket and a Michigan 275 loader. A Hitachi UH16 excavator with a 2¼-cubic-yard bucket was added in 2005. The wash plant consisted of a 5- by 12-foot double screen deck with 2-inch and ⅝-inch holes in punch plate and a 40- by 36-foot tailings stacker. Fine tailings were pumped with a 6-inch ASH gravel pump using a hose alongside the conveyor. Water was supplied with a diesel-powered Detroit 6- by 6-inch pump rated at 600 igpm, enough to process 75 loose cubic yards per hour. Water was acquired from Davidson Creek and settled out-of-stream in a pond 100 by 160 feet (30 x 50 m). Clean-ups were done with a long tom and #13 Wilfley table.

SURFICIAL GEOLOGY AND STRATIGRAPHY Between 2003 and 2005, the section consisted of gravel from 4 to 16 feet (1 to 5 m)



Kim Klippert's operation above the canyon on Davidson Creek, 2005.

in thickness from surface to bedrock. Large water-washed boulders were found throughout, and only the narrow valley bottom was thawed. Old mine workings were found in a few places. Any gravel units higher than 5 feet (2 m) above bedrock were considered waste and the best gold values were in the lowest 2 to 3 feet (0.6 to 0.9 m) above bedrock.

BEDROCK GEOLOGY Bedrock at this site is decomposed, wavy schist. Across the valley bottom, the bedrock is flat.

GOLD CHARACTERISTICS Between 2003 and 2005, the gold was reported to be flat, smooth and bright with a fineness of 840, and varying in size from fine up to #4 Tyler mesh.

UNNAMED CREEK, a tributary of Mayo Lake

105M/14 2006: 63°45'15"N, 135°12'21"W

Manfred Wozniak

Water license: PM04-366 (2014)

Exploration (2005-2006)

Operation no. 158

LOCATION This property was located on an unnamed tributary of Mayo Lake between Dawn Gulch and Owl Creek.

WORK HISTORY AND MINING CUTS Mr. Wozniak dug several test holes and constructed settling ponds and a creek diversion on the right limit. Camp facilities were set up and access up to the canyon was constructed.

SURFICIAL GEOLOGY AND STRATIGRAPHY The creek forms an alluvial fan delta into Mayo Lake, and the fan is comprised of reworked glacial deposits with boulders, sand, silt and clay.

BEDROCK GEOLOGY Bedrock has been mapped as Hyland Group rocks including sandstone and conglomerate, minor limestone and phyllite.

GOLD CHARACTERISTICS Gold from this creek has been reported to be angular and show little wear.

OWL CREEK, a tributary of Mayo Lake

105M/11 2005: 63°44'43"N, 135°07'53"W

2003: 63°44'21"N, 135°08'16"W

Ralph Barchen

Water licenses: PM03-351 (2014), PM01-247 (2006)

Active producer (2003-2006)

Operation no. 159

LOCATION This operation is located on Owl Creek, a tributary of Mayo Lake.

WORK HISTORY AND MINING CUTS Mr. Barchen began mining here in 2001. In 2003, mine site preparation (stripping, drain and settling pond construction) defined the bulk of work until July. The mine cut progressed upstream in the steep valley walls of Owl Creek. The main channel was mined while the stream was temporarily diverted to the left limit of the valley



Ralph Barchen slicing on Owl Creek, 2005.



Aerial view of Ralph Barchen's Owl Creek operation, 2005.

and perched above the mine cut. Mining continued upstream on the creek in 2004, 2005 and 2006.

EQUIPMENT AND WATER TREATMENT Equipment included a Caterpillar D9H bulldozer which was used for stripping and stockpiling of materials, and a Caterpillar 988B loader which was used to remove tailings. In 2005, a John Deere EX16 excavator was being used to feed the wash plant. A Kubota KX080 excavator was used for digging test pits. The plant included a 10- by 17-foot Derocker which fed minus 2-inch material to an undercurrent sluice run. The processing rate was 150 cubic yards per hour. An 8- by 8-inch Gorman Rupp trash pump provided water to the wash plant. The settling ponds were established out-of-stream on the left limit of Owl Creek downstream of the alluvial fan apex, with no discharge to Mayo Lake.

SURFICIAL GEOLOGY AND STRATIGRAPHY The ground was 20 feet (6 m) to bedrock near the apex of the alluvial fan and the lower 10 feet (3 m) were processed as pay gravel. The top 4 feet (1 m) of material were described as coarse, rounded diorite boulders overlying cobble gravel and clay.

BEDROCK GEOLOGY Locally, bedrock consists of pyritic mica-schist and quartzite which dips steeply to the south.

GOLD CHARACTERISTICS Gold was described as coarse, well-rounded nuggets with a fineness of 840. The largest nugget, recovered in 2002, weighed 1 ounce (30 g).

ANDERSON CREEK, a tributary of Mayo Lake

105M/11

2003: 63°43'35"N, 135°01'58"W

20861 Yukon Inc., Raymond Brosseuk

Water license: PM99-120 (2004)

Active producer (2003)

Operation no. 160

LOCATION This property was located downstream of the apex of the alluvial fan delta on Anderson Creek, a tributary of Mayo Lake. Some work was done in the canyon upstream of the apex.

WORK HISTORY AND MINING CUTS In 2000, Ray Brosseuk (20861 Yukon Inc.) acquired the property from Manfred Wozniak. Activity was initially focused on the area downstream of the alluvial fan apex on the left limit of the stream. In 2003, mining shifted to a higher grade zone upstream of the fan apex in the narrow canyon.

EQUIPMENT AND WATER TREATMENT On-site equipment included, at various times, a Caterpillar D9R bulldozer, a Caterpillar 950G loader, a Caterpillar 335DL excavator, two Caterpillar 988B loaders with 9-yard buckets, a Case 220B excavator with a 3-yard bucket, and two Fiat Allis D-31 loaders. Two wash plants were used, both reverse-spiral trommels which concentrated pay gravel to minus 1 inch through a 3- by 20-foot tail sluice run and a feedback loop to an 18-inch by 16-foot side sluice run. In each plant, an estimated 8 yards per hour of minus 1-inch concentrate were processed by the side run and 225 cubic yards per hour were processed in the main sluice run. Water supply was provided by Anderson Creek through a 471 Jimmy 6-inch Monarch water pump operating at 1300 igpm. Effluent was treated in three out-of-stream settling ponds measuring 50 by 80 feet (15 x 25 m).

SURFICIAL GEOLOGY AND STRATIGRAPHY This deposit is an alluvial fan delta, consisting of coarse, boulder-gravel layers overlain by interbedded sand and gravel. Glaciolacustrine clay lies in a layer upstream of the fan apex, where it overlies an interglacial creek channel.

Depths to bedrock on the fan varied from 40 feet (10 m) on the left limit to 70 feet (20 m) on the right limit. Mining downstream of the fan apex exposed a section consisting of 10 feet (3 m) of sand and gravel overlying large boulders in a layer 8 to 10 feet (2 to 3 m) thick. The boulder layer contained reasonable gold values, and was sluiced. The boulder layer was overlying 18 feet (5 m) of compact, clay matrix-filled coarse gravel, overlying 6 feet (2 m) of bright orange/yellow and black gravel deposits on bedrock. The orange gravel deposits on bedrock had the best gold grades. The clay-buried interglacial creek channel mined upstream in the canyon in 2003 also proved to have very good gold grades.

BEDROCK GEOLOGY Bedrock was described as clay-altered blue schist.

GOLD CHARACTERISTICS Gold was described as granular with 40% 4 mesh or larger, but ranging to 300 mesh. Fineness of the gold was 890 to 910.



20861 Yukon Inc.'s operation on Anderson Creek in 2003.

UNNAMED CREEK, a tributary of Williamson Lake

105M/11

2005: 63°40'05"N, 135°05'37"W

Lawrence and Constance Dublenko

Water licenses: PM05-480 (2015), PM99-076 (2005)

Exploration (2003-2005)

Operation no. 161

LOCATION The property was located approximately 3000 feet (900 m) northeast of the east end of Williamson Lake, on an alluvial fan delta.

WORK HISTORY AND MINING CUTS In July 1994, Constance and Lawrence Dublenko located a co-discovery claim on this creek, an unnamed and unmined tributary to Williamson Lake located along the northeast shore. In 2004 and 2005, assessment work was done upstream of previously mined cuts on the left limit along the access route.

EQUIPMENT AND WATER TREATMENT In 2003 to 2005, assessment work was done with the Case 850 crawler.

SURFICIAL GEOLOGY AND STRATIGRAPHY The sections in trenches consisted of mixed fluvial gravel and glacial till throughout. Bedrock was not reached.

BEDROCK GEOLOGY Bedrock is mapped as limestone, thin to thick shale, fine- to coarse-grained quartz-rich sandstone grit and quartz-pebble conglomerate, phyllite and minor marble.

GOLD CHARACTERISTICS Between 1998 and 2005, only flour gold was recovered in limited quantities.



Lawrence Dublenko's mining cut on an unnamed tributary to Williamson Lake in 2005.

STEEP CREEK, a tributary of Mayo Lake

105M/10, 105M/14

2003: 63°42'08"N, 134°57'43"W

Ralph Barchen

Water license: PM00-191 (2006)

Exploration (2003)

Operation no. 162

LOCATION This operation was located on the alluvial fan of Steep Creek on Mayo Lake.

WORK HISTORY AND MINING CUTS Mr. Barchen extensively tested various locations on the Steep Creek fan from 2000 to 2003. The Steep Creek site was decommissioned in 2004, after Mr. Barchen had moved his operations to Owl Creek.

EQUIPMENT AND WATER TREATMENT A Caterpillar D9H bulldozer was used for stripping and stockpiling of material. A Caterpillar 988B loader fed the box and removed the tailings. A 10- by 17-foot Derocker fed minus 2-inch material to an undercurrent sluice run 16 feet long by 4 feet wide. The processing rate was 150 cubic yards per hour. An 8- by 8-inch Gorman Rupp trash pump pumped water to the wash plant at a rate of 1000 igpm.

SURFICIAL GEOLOGY AND STRATIGRAPHY Steep Creek forms an alluvial fan delta into Mayo Lake. The fan is comprised of reworked glacial boulders, sand and clay. The areas mined and tested showed a depth to bedrock of 45 feet (15 m).

BEDROCK GEOLOGY At the apex of the gravel fan, bedrock is graphitic muscovite schist. The steeply dipping bedrock forms natural riffles. Numerous bull quartz veins cut the schist.

GOLD CHARACTERISTICS Gold was reported to be angular and fine-grained with a fineness value ranging from 890-910.