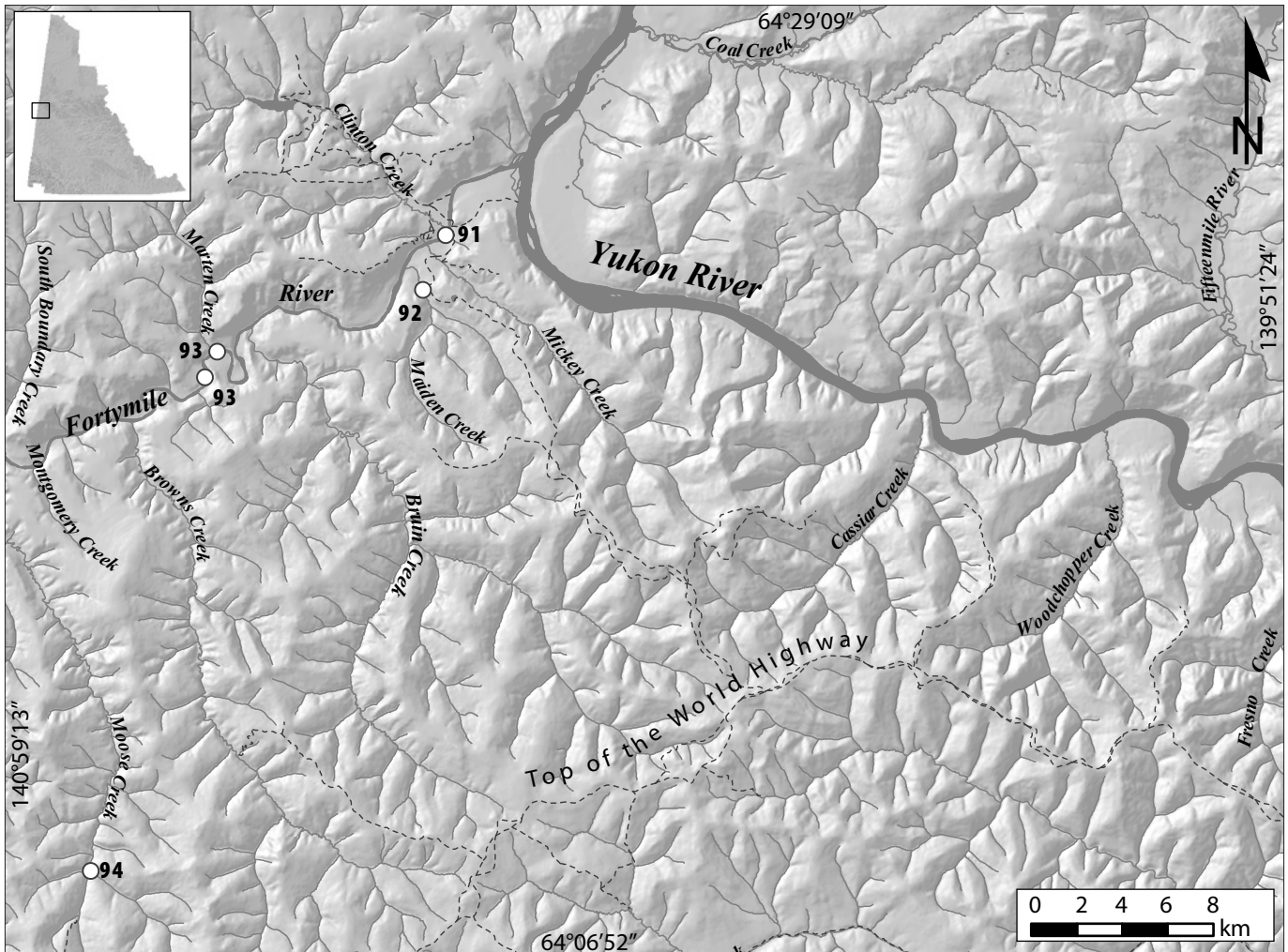


# FORTYMILE PLACER AREA

SITES  
91-94



## LEGEND

- 91 .....Lindsay
- 92 .....Groundhog Exploration Co. Ltd.
- 93 .....Fortymile Placers
- 94 .....Jones

**FORTY MILE RIVER, a tributary of Yukon River**

116C/7

2003: 64°23'58"N, 140°35'03"W

Joseph Lindsay

Water license: PM02-301 (2007)

Active producer (2003)

**Operation no. 91**

**LOCATION** The operation was located on the right limit of the Fortymile River just upstream of the Clinton Creek bridge.

**WORK HISTORY AND MINING CUTS** Some mining took place in the 2002 season, and in 2003, stripping to hardpan occurred at a previous sluice site, with some material excavated from the right bank of the river.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** A bleached gravel similar to White Channel gravel was exposed to bedrock, and overlain by several feet of silt and muck.

**BEDROCK GEOLOGY** Bedrock consists of Nasina series micaceous quartzite, quartz-mica schist, graphitic schist and scattered occurrences of serpentinized ultramafic rocks.

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

116C/7

2005: 64°22'39"N, 140°37'16"W

Angus Woodsend, Cam Woodsend, Groundhog Exploration Co. Ltd.

Water license: PM02-287 (2007, Licensee: Stanley Stempien)

Active producer (2003-2006)

**Operation no. 92**

**LOCATION** The operation was located on the right limit of Maiden Creek, a tributary of Fortymile River.

**WORK HISTORY AND MINING CUTS** Angus Woodsend and his son, Cam, drilled, stripped and sluiced ground on the Maiden Creek during the 2003 to 2006 seasons. A cut was put in each year, and a stream diversion was built in 2005. Sluicing operations continued in a downstream location in 2006.

**EQUIPMENT AND WATER TREATMENT** The property was drilled using an 8-inch auger. Black muck was stripped with a Hitachi EX200 excavator, which also fed the plant. The plant consisted of a New Zealand-style trommel with a 3½-foot-diameter and a conveyor for stacking tailings. A 1½-inch pump with a rotating fish screen installed on the pump intake was used to acquire make-up water from the creek,



Groundhog Exploration Co.'s operation on Maiden Creek, 2005.

and a 4½-inch pump was used in the cut to dewater. A single out-of-stream pond was used for settling and recycling water.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** Depths of black muck range between 0 to 6 feet (0 to 2 m) with a gravel layer from 12 to 18 feet (3 to 6 m); the bottom 10 feet (3 m) were processed.

**BEDROCK GEOLOGY** Bedrock is mapped as Nasina group graphitic quartzite and muscovite quartz-rich schist.

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

116C/7

2006: 64°21'13"N, 140°48'26"W

2003: 64°20'37"N, 140°49'05"W

**Fortymile Placers, Leslie Chapman, Bill Claxton**

Water licenses: PM97-071 (2008), PM97-072 (2008)

Active producer (2003-2006)

**Operation no. 93**

**LOCATION** From 2003 to 2006, operations were on the left limit in two locations, on a low bench and on a river gravel bar at the mouth of Marten Creek.

**WORK HISTORY AND MINING CUTS** Bill Claxton and Leslie Chapman began working on the Fortymile River in 1987. They have mined in the area nearly continuously since then, although only a small amount of mining was done between 2003 and 2006. Activity was focused on a low left-limit bench on the Fortymile River, as well as on a river gravel bar at the confluence of Fortymile and Marten Creek.

**EQUIPMENT AND WATER TREATMENT** Equipment included a Caterpillar D6C bulldozer for ground preparation and for levelling tailing piles, and a Hitachi UH10 excavator to excavate gravel and to feed the wash plant. A Caterpillar 920 loader was used as backup and to feed the wash plant. The wash plant was a 4-foot-diameter, 12-foot-long floating trommel with 5/16-inch punch plate and two 4- by 6-foot sluice runs with hydraulic riffles. Tailings were stacked with a 30-foot-long conveyor. Mining was carried out during low water periods only, with no discharge of effluent other than by seepage. Restoration and stabilization of the gravel bar and bank was completed at the end of each season.



*Fortymile Placers operation on a bar of the Fortymile River, 2004.*

**SURFICIAL GEOLOGY AND STRATIGRAPHY** On the river gravel bar, the depth of gravel to bedrock varied from 6 to 18 feet (2 to 5.5 m). All of the gravel plus 2 to 3 feet (0.6 to 0.9 m) of bedrock were sluiced.

**BEDROCK GEOLOGY** Bedrock consists of Nasina series micaceous quartzite, quartz-mica schist and graphitic schist.

**GOLD CHARACTERISTICS** Gravel bar gold recovered was mostly fine grained with only 5% coarser than 10 mesh. The fineness was approximately 840.

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

116C/2

2003: 64°09'02"N, 140°55'19"W

**Daniel Joseph Jones**

Water licenses: PM04-359 (2014), PM99-145 (2010)

Active producer (2003-2005)

**Operation no. 94**

**LOCATION** This operation was located near the upper end of Moose Creek, a trans-boundary tributary to the Fortymile River, near the Alaska border. In 2005, the operation moved to a downstream location.

**WORK HISTORY AND MINING CUTS** Daniel Jones first mined on Moose Creek in 1995. The operation was active near the headwaters in 2003, and in 2004, the operators mechanically stripped some ground at a downstream location while they sluiced at the upstream location. In 2005, they sluiced at the

upstream location and then moved downstream to sluice at the new site under a new water license. The new location was near the site of the old McMillan mine.

**EQUIPMENT AND WATER TREATMENT** A Case 1187B excavator was used to dig pay gravel, feed the wash plant, remove tailings and construct dams. The wash plant included a 10- by 10-foot grizzly with iron bars 4 inches apart over a 10- by 2-foot oscillating sluice run lined with angle iron riffles and miner's moss matting. Approximately 70 cubic yards per hour of pay was processed. Water was recycled and out-of-stream ponds were used for primary settling, with final settling in in-stream ponds. Settling pond dam spillways were protected with large rock and plastic liners.

In 2005, at the new location downstream, they sluiced with out-of-stream settling and seepage discharge only.

**SURFICIAL GEOLOGY AND STRATIGRAPHY** Organic overburden was less than 3 feet (0.9 m) deep; gravel was frozen and varied in depth from 8 feet (2.5 m) downstream to 4 feet (1 m) upstream.

**BEDROCK GEOLOGY** Bedrock is clay and shale.

**GOLD CHARACTERISTICS** Gold was reported as mostly coarse with 50% larger than 10 mesh and some nuggets up to ¼ ounce. The larger-sized gold was dull-coloured and covered with a blackish coating. The fineness was around 855.



*Daniel Jones' operation on Moose Creek, 2004.*