Yukon Placer Database Operations Report

Field Name: Stirling, 1993-2001 **Last Update: 21-Feb-2005**

Status: Recent Producer 1978-present

Stream: Stewart: a tributary of Yukon

Map Sheet(s): 115P/12

Operators

Name	From (Date)	To (Date)	Comment
Robert Stirling	1993/01/01	2002/12/31	

Owners

Name	From (Date)	To (Date)	Comment
Robert Stirling	1993/01/01	2002/12/31	
Robert Stirling	1993/01/01	2003/12/31	

General Location

The property was located at the McQuesten air strip approximately 800 feet back from the right limit of the Stewart River.

Location Details

Date:	Latitude Deg	Min	Sec	Longitude Deg	Min	Sec	Elevation (feet)	Distance from Mouth (feet)
2002/01/01	63	36	0	137	34	0		
1995/01/01	63	36	0	137	33	0		
1993/01/01	63	36	20	137	33	0	1,300	

Water Licence(s)

Number	Comments
PM00-193	
PM98-014	Expires: 2008/10/31
PM93-124	

Work History

Robert Stirling worked with a 2 person crew from Ampex mining on a 10 hour shift per day for the 1993-1994 seasons. About 2,500 cubic yards of material were sluiced and a like amount stripped from an old bar deposit. At the peak of mining in 1995, two miners and two camp workers were employed. Thirty four holes were drilled in 1995 using an Auger drill mounted on a Nodwell. A total of 360 feet were drilled, and approximately 15,000 cubic yards were processed from one cut. Drilling was in frozen ground and the auger drill had difficulty penetrating the unaltered quartz rich gravels. By establishing a reservoir in the mining cut duiring 1996, clean water for sluicing was readily obtained. Work during in 1997 consisted of thirty days of hand samping, and between 1998-2001, mining was on bar deposits on an overgrown back channel of the Stewart River.

Production

Year	Stripped	Sluiced
1995	Unknown	15000 cubic yards
1993	2500 cubic yards	2500 cubic yards

Equipment

During 1993, a D7 Caterpillar bulldozer was used for stripping, pushing up pay, and removing tailings. A 966 Caterpillar loader removed tailings and fed the excavator. Pay was also excavated with a Bantam excavator. A KH41 Kubota excavator fed the wash plant. A 3.5-foot by 3.5-foot hopper fed a small trommel with 0.5-inch

screens. Two orbiting sluice boxes 2 feet wide by 12 feet long were lined with expanded metal over backed Nomad matting. A Honda 4 by 4-inch pump recirculated water from a groundwater sump/settling pond at a rate of 225 igpm. The orbiting sluice boxes worked well in capturing the fine gold. A Honda 4 by 4 inch pump recirculated water from a groundwater sump/settling pond at a rate of 225 igpm. One hundred percent of the process water consisted of residual ground water (from thawing gravel and rainwater) and was obtained from the active mining cut and recirculated. A reservoir was established in the mining cut to hold the water required for the sluicing operation. No additional water was used from the Stewart River.
Equipment used in 1995, again consisted of a Caterpillar D7 bulldozer and a Caterpillar 235 excavator. During 1995 the entire drill sample from each hole was processed with a "Le Trap" plastic sluice box. The sluice box concentrate was then reduced to about 30 grams by panning. The 30-gram sample was then submitted to Northern Analytical Labs for a fire assay. The resulting gold bead was weighed to determine the gold grade in the drill hole. In 1996 the procedure for processing the gravels was as follows. A trommel, 4 feet in diameter and 12 feet long, screened material to 3 inch. This was followed by two oscillating, Bennett style, sluice boxes, 4 feet wide by 12 feet long, containing expanded metal over un-backed Nomad matting. The sluice runs were angled at 12 inches per foot. Concentrate was screened to 1mm and roughly processed on a gold screw wheel. The fine processing was done on a Gold Genie wheel. Approximately 15,000 cubic yards were processed from one cut. A 4 inch Gorman Rupp pump powered by a Lister diesel engine supplied 300 igpm to the wash plant. Drilling was in frozen ground and the auger drill had difficulty penetrating the unaltered quartz rich gravels.
By 1998-2001, a Kubota KH-41 excavator was used to access pay gravels, while hand testing was done to prove pay values. In 1996, an orbital spinning box had been used to recover thin bar gold. Since 1996, the property has seen minor exploration activities for several weeks a year within the confines of the 1994 to 1996 mining distrubances. Ground water from the mining cut was used for sluicing and was re-circulated through the mine cut.

Landforms

Landform	Comments
Alluvial Valley	
Gravel Bar	

Surficial Geology

Three feet of silt and organics were stripped from partially frozen ground in 1993. Four feet of mixed river gravel and stones up to 12 inches in diameter were sluiced, with a processing rate of 10 cubic yards per hour. The orbiting sluice boxes worked well in capturing the fine gold. In 1995, the depth to bedrock was estimated at 45 to 70 feet. Up to 3 feet of soil, clay and sand material was removed and stockpiled prior to processing. During 1998-2001, mining was on bar deposits on an overgrown back channel of the Stewart River; values were reportedly very fine in shallow layers.

Bedrock Geology

The Stewart River flows over the Nasina Suterrane and Klondike Schist Subterrane in its lower reaches. Near its confluence with the Yukon River, it cuts through Paleogene post-accretion plutons.

Gold Comments

During 1993, most of the gold was less than 25 mesh in size, as well as gold smaller than 200 mesh was recovered; fineness was 780. In 1995, gold was very fine grained and bright yellow in colour. Some flat flakes up to 1.5mm in diameter were recovered. Thin bar gold which would fit through a 1 mm screen was reportedly recovered in 1998.

References

Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1995, 1996, 1997. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 1998.: p. 137-138

Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1998-2002. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 2003.: p.156

References

Nowosad, M. Placer Mining Year End Summary, 2003. Client Services and Inspections Division, Yukon Energy Mines and Resources, 2004.: Mayo, p. 13-14

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