Yukon Placer Database Operations Report

Field Name: Levesque, 1990-2003 **Last Update: 11-Jan-2005**

Status: Active Producer

Stream: Hester: a tributary of Hunker

Map Sheet(s): 115O/14

Operators

Name	From (Date)	To (Date)	Comment
The Nugget Factory	2002/01/01	2002/12/31	
Colette Levesque	1992/01/01	1997/12/31	
Steve Chizen	1992/01/01	1992/12/31	
Emile Levesque	1990/09/01	2003/12/31	
Emile Levesque	1990/01/01	1990/08/31	

Owners

Name	From (Date)	To (Date)	Comment
The Nugget Factory	2002/01/01	2002/12/31	
Colette Levesque	1992/01/01	1997/12/31	
Steve Chizen	1992/01/01	1992/12/31	
Emile Levesque	1990/09/01	2003/12/31	
Emile Levesque	1990/01/01	1990/08/31	
Wolverine Gold Mines Ltd.	1988/01/01	1990/08/31	

General Location

This operation was at the mouth of Hester Creek, a left limit tributary of Hunker Creek. The mining was done on Paradise Hill and on right limit side pay of Hester Creek in 1998. A cut on Hester Creek was mined in the spring of 1999 before moving up onto Nugget Hill to sluice the rim gravels. Old tailings and sections of virgin gravels were processed on Nugget Hill throughout 2000 and most of 2001. A section of Hester Creek that had been partially stripped previously was mined in the fall of 2001.

Location Details

Date:	Latitude Deg : Min : Sec			Longitude Deg : Min : Sec			Elevation (feet)	Distance from Mouth (feet)
2003/01/01	63	58	47	139	3	30		
2003/01/01	63	58	0	139	0	0		
1999/01/01	63	59	0	139	4	0		
1995/01/01	63	58	0	139	0	0		
1993/01/01	63	59	0	139	3	0		
1991/01/01	63	59	0	139	3	0		
1990/01/01	63	58	0	139	3	0		

Water Licence(s)

Number	Comments
PM96-037	Expires: 2005/04/15
PM96-067	
PM93-039	Emile Levesque
PM88-003	Wolverine Gold Mines license used in 1990
PM90-005	Emile Levesque

Work History

In 1990 the operation mined side pay left behind by Wolverine Gold Mines Ltd. in 1988 and 1989. A area 300 feet by 300 feet, varying from 60 feet to 120 feet deep was stripped and sluiced in 1990. Emile Levesque worked a 16 to 18 hour shift by himself, with his wife assisting during cleanups.
In 1991-1992, Emile Levesque ran the operation with one employee while Colette Levesque ran the camp. Steve Chizen was taken on as a partner for part of 1992. A large cut measuring 75 feet long by 250 feet wide was processed in 1991. In 1992, a smaller cut measuring 125 feet by 150 feet was sluiced.
In 1993 and 1994, Emile Levesque ran the operation by himself. A 150 feet wide by 100 feet long cut on Hester Creek and a 100 feet wide by 200 feet long cut on a left limit draw were mined in 1993. Mining continued up the draw in 1994 until the pay tapered off in the fall.
In 1995, Emile Levesque continued to mine. Mr. Levesque and 2 employees ran a single 12 hour shift. Collette Levesque ran the camp. A single cut 300 by 300 feet was sluiced.
In 1996, the operation worked it's way up a left limit draw of Hester Creek. An area approximately 500 by 500 feet was sluiced on the left limit draw.
In 1997, the operation moved on Paradise Hill. A large area measuring 1000 by 1000 feet was re-washed on Paradise Hill.
In 1998-2001, Emile Levesque and a single employee usually worked a single shift 12 to 14 hours per day. A large cut (approximately 700 feet long by 50 feet wide by 40 feet deep) along the right limit of Hester Creek was monitored in 1998 and 1999. Approximately 45,000 cubic yards were sluiced on Nugget Hill in the fall of 1999. Tailings from several locations on Nugget Hill were processed throughout 2000 and part of 2001. Approximately 30,000 cubic yards were processed from Hester Creek in the fall of 2001. The Nugget Factory mined under this license during 2002. The operation was shut down during the last week due to poor gold recovery. This operation continued activity this season. The Nugget Factory was in the process of completing the purchase of this property from Levesque.

Equipment

A Cat 950 loader was used to carry pay from the cut and feed the sluice box, as well as to carry tailings away. A John Deere 450 bulldozer with a backhoe dug ditches. The new sluice plant for 1990 consisted of a 5 foot wide by 12-foot long shaker screen deck, with 1.25 in by 3 in openings. The classified pay was fed into two sluice runs 24 feet long each. The first four feet of each run was lined with Nomad matting and expanded metal, while the next 12 feet was lined with Nomad matting and 1.5-inch angle iron riffles. The last 8 feet was lined with Nomad matting and expanded metal. An estimated 120 cubic yards per hour could be processed with 1300 igpm water. A 10 KW power plant ran the shaker deck and light system. Water for sluicing was pumped from out-of-stream cuts mined by Wolverine Gold Mines Ltd. at the mouth of Hester Creek. The effluent by-passed the pumping ponds and flowed downstream to two large out-of-stream settling ponds built on ground owned by Tamarack. Effluent outflow was by seepage only.
In 1991 a D6C was used for overburden stripping, construction and mucking of settling facilities, and moving the sluice plant. A 950 Cat loader fed the sluice and a Cat 966 loader cleared tailings. A D9H was used for stripping for a short time in 1992. In 1992, pay was pushed and stockpiled with the D6C bulldozer and fed to the plant by the Cat 966 loader, which also cleared tailings. The wash plant was similar to that used in 1990 but the screen was replaced with 3/4 inch punch plate, and a second sluice run, 2 feet by 18 feet, was added along with a nugget trap.
In 1993, a D6 Caterpillar bulldozer was used to strip and in 1994 a D9G bulldozer was acquired for this task. A 966 Caterpillar loader and a 950 loader were available for sluicing and settling pond maintenance. A hopper fed a screen plant 5 feet wide by 12 feet long. The 1.25-inch minus classified pay was sluiced in a 15-foot long run, which tapered from 33 inches to 24 inches wide. The slurry was then spread out over three oscillating sluice runs four feet wide by eight feet long. The upper run was lined with two-inch angle iron riffles. The oscillating runs were lined with heavy expanded metal and Nomad matting. An 8 by 6 inch Fairbanks pump supplied the water needed to sluice approximately 120 cubic yards per hour. A 12-inch Morris pump was used for monitoring the thick black muck overburden layer.

Water for sluicing and monitoring was pumped from an out-of-stream reservoir near the mouth of Hester Creek in the Hunker Valley. Make-up water came through a gravity ditch from Hunker Creek. The effluent was treated in a large out-of-stream settling facility with discharge back to Hunker Creek
1995- Same equipment as in 1993/1994. The wash plant consisted of a dump box leading into a 5 by 11 foot long shaker screen outfitted with a 1 1/4 inch punch plate. The 1 1/4 inch minus classified gravels were then sluiced through a 16 foot long single run which tapered from 33 inches down to 24 inches before being distributed onto 3 oscillating sluice runs 4 feet wide by 8 feet long. The upper single run was lined with 2-inch angle iron riffles. Matting was not used except for a small section below the shaker plant, which was found to capture a good percentage of the gold. The oscillating runs were lined with expanded metal and Nomad matting. A 6 by 8 inch Morris pump powered by a 3306 Caterpillar engine supplied the estimated 2500 igpm required to process 150 cubic yards per hour. Water for sluicing and monitoring came, as in past seasons.
In 1997, a Bantom 360 excavator was added to the operation. For part of 1997 the effluent was discharged off Paradise Hill directly into the out-of-stream settling pond. The settling pond was constructed over dredge tailings and the only discharge is usually by seepage.
In 1998-2001, a Caterpillar D6 bulldozer, a Caterpillar 950 loader, a Caterpillar 966 loader and a 260 Bantam excavator were used in 1998 and 1999. The 966 loader was sold and was not used in 2000 and 2001. The loaders were used to feed the sluice plant and for hauling pay gravels. The excavator was used to feed the sluice plant on Nugget Hill and for scraping the cut face and maintenance of drains. The bulldozer was used to scrape the cut faces and for various small jobs. The wash plant consisted of a dump box leading into a 5 foot wide by 11 foot long shaker screen outfitted with 1¼ inch punch plate. The 1¼ inch minus classified gravels were then sluiced through a 16 foot long single run which tapered from 33 inches down to 24 inches before being distributed onto three oscillating sluice runs 4 feet wide by 8 feet long. The upper single run was lined with 2 inch angle iron riffles. Matting was not used except for a small section below the shaker plant which was found to capture a good percentage of the gold. The oscillating runs were lined with expanded metal and Nomad Matting. A 6 inch by 8 inch Morris pump powered by a Caterpillar 3306 engine or a 360 Cummings engine supplied the estimated 2500 igpm needed to process 150 cubic yards per hour on Hester Creek and Paradise Hill. When sluicing tailings on Nugget Hill the production was increased to 200 cubic yards per hour. Water for sluicing and monitoring on Hester Creek and Paradise Hill came from an out of stream reservoir near the mouth of Hester Creek. Make up water was brought in from Hunker Creek when needed. The final effluent treatment occurred in large out of stream settling ponds in the Hunker Creek Valley or in the pump pond. When sluicing on Nugget Hill the water was pumped from a ditch beside Hunker Creek up onto Nugget Hill. The effluent was carried over the rim to the large out of stream reservoir used for sluicing on Hester Creek. No visible discharge could be seen.

Landforms

Landform	Comments
Tailings	
Alluvial Terrace	
Alluvial Valley	

Surficial Geology

Hydraulic mining on Nugget Hill resulted in up to 20 feet of White Channel Gravel tailings being washed from the bench on the left limit of Hester Creek onto black muck in the valley, which had the effect of thawing much of it. The thickness of the muck was up to 30 feet, which overlies between 10 and 20 feet of gravel on bedrock. In 1991-1992, the entire gravel section was sluiced along with up to 3 feet of fractured quartzite schist bedrock.
Ground mined on Hester Creek in 1993 varied from 70 to 80 feet deep. A 20-foot layer of White Channel tailings covered 50 to 60 feet of frozen black muck and eight feet of gravel. The bedrock was decomposed. A left limit draw of Hester Creek was mined during part of 1993 and 1994. Old tailings covered six feet of frozen muck and a mixture of gravels. Both decomposed and solid bedrock were encountered. The amount of bedrock sluiced depended on which type was found.

In 1995, the ground on Hester Creek that was mined decreased in depth to approximately 65 feet. A 50-foot layer of frozen black muck overlies 15 feet of gravel and workings from old timers shafting. The ground on Paradise Hill averaged 3 feet deep and consisted entirely of old workings where the overburden had already been removed. All of the old tailings were re-washed.
In 1998-2001, the ground on Hester Creek varied in depth from 40 feet deep on the right limit to over 50 feet deep in the centre of the creek. Approximately 32 feet to 40 feet of black muck overlies 8 feet of gravel. Bedrock tended to be solid and hard. All of the gravel was sluiced. The sluicing on Paradise Hill was restricted to washing the remaining gravels and old timer tailings along the rim. There was approximately 3 feet to 6 feet of White Channel gravels on top of decomposed graphite bedrock. All of the gravels and up to 2 feet of the bedrock was sluiced. The rim of Nugget Hill was sluiced in the fall of 1999. As on Paradise Hill the rim was found to range from 3 feet to 6 feet deep with decomposed bedrock. All the White Channel gravel and up to 2 feet of the decomposed bedrock was sluiced.

Bedrock Geology

Bedrock is decomposed carbonaceous schist in places and fractured quartzite schist in other places.

Gold Comments

In 1990, gold was reported to be mostly fine grained, generally flat and smooth with some quartz attached. The fineness was 720.
In 1991-1992, the gold was almost entirely fine, flat and smooth. The fineness varied between 715 and 765 in 1991, but dropped to 670 in 1992.
In 1993-1994, most of the gold was fine and flat, although some small nuggets were recovered. The purity varied between 740 and 820 fine. There appears to be two or three local sources for the gold recovered.
In 1995-1997, the gold from Hester Creek tended to be fine and rough with a purity of 670. The gold on Paradise Hill was fine and flat with a higher purity averaging 820.
In 1998-2001, the gold varied a great deal depending on where it was mined. Gold from Hester Creek tended to be fine and range from an average purity of 650 fine to a high of 760 fine. The gold on Paradise Hill and Nugget Hill had a higher purity with an average of 820 fine. Nuggets up to one ounce in weight were found on Nugget Hill.

References

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Pictures

Title: Emile Levesque on Hester and Hunker Creeks

Notes: