Yukon Placer Database Operations Report

Field Name: Right Fork Mining, 1993-2003 **Last Update: 21-Feb-2005**

Status: Active Producer

Stream: Revenue: a tributary of Big

Map Sheet(s): 115I/6

Operators

Name	From (Date)	To (Date)	Comment
Hank Fehr	2003/01/01	2003/12/31	
Phil Gow	1998/01/01	2001/12/31	Phil joined the operation on his summer vacations.
Diane Gow	1993/01/01	2001/12/31	
Buddy Gow	1993/01/01	2003/12/31	
John Gow	1993/01/01	2001/12/31	

Owners

Name	From (Date)	To (Date)	Comment
Hank Fehr	2003/01/01	2003/12/31	
Phil Gow	1998/01/01	2001/12/31	Phil joined the operation on his sum
Diane Gow	1993/01/01	2001/12/31	
Buddy Gow	1993/01/01	2003/12/31	
John Gow	1993/01/01	2001/12/31	
Right Fork Mining	1993/01/01	2003/12/31	

General Location

In 1998, Right Fork Mining was located on both Revenue and Mechanic Creeks which are right limit tributaries of Big Creek in the Mt. Freegold area.

Location Details

Date:	Latitude Deg	Min	Sec	Longitude Deg	Min	Sec	Elevation (feet)	Distance from Mouth (feet)
2003/01/01	62	20	24	137	15	26		
1998/01/01	62	20	0	137	17	0		
1995/01/01	62	20	0	137	17	0		
1993/01/01	62	19	48	137	16	48	2,500	

Water Licence(s)

Number	Comments
LP00036	
PM99-149	Expires: 2005/03/31
PM99-053	
PM98-052	Expired: 2003/05/01
PM95-069	
PM92-094	

Work History

John Gow and family worked single shifts from 1993 to 1997, with an additional miner added in 1994. In 1993, 4000 cubic yards of pay was sluiced from one continuous cut 16 feet wide by 500 feet long. This increased to 12,000 cubic yards from a 60 foot by 300 foot cut in 1994. In 1995, 11000 cubic yards of pay material was

sluiced from one continuous cut 100 feet wide by 200 feet long. In 1996, 13690 cubic yards was sluiced from a continuous cut 40 feet wide by 250 feet long, and 23000 cubic yards was sluiced from a cut 100 feet wide by 250 feet long in 1997.
From 1998-2001, John, Buddy and Diane Gow continued working single shifts and were joined by Phil Gow on his summer vacations. In 1998 the previous year's cut (see 1997 report) was competed and a second cut 75 feet by 125 feet was mined with a total of 19,365 cubic yards sluiced. A cut 80 feet by 200 feet was mined in 1999 on the lower left limit of Revenue Creek, which combined with 4000 cubic yards of material which had been stockpiled while stripping on Whirlwind Pup in 1996, a total of 17,700 cubic yards were sluiced. The remainder of the Whirlwind material, in addition to a cut 100 feet by 25 feet by 12 feet was sluiced in 2000. On Revenue Creek a cut 100 feet by 20 feet was mined out of which 3560 cubic yards were sluiced. Heavy rainfall, Boliden Hill road construction, losing an engine in the 890 John Deere excavator, plus low gold values, severely hampered the 2000 mining season. By September, however, the operation was moved to Mechanic Creek and began preparing the ground for mining and site clean up from previous operators as well as sluiced 4500 cubic yards. Early in the 2001 season, a cut 130 feet by 280 feet by 30 feet deep was made on Mechanic Creek and partially mined, sluicing a total of 12,500 cubic yards.
In 2003, stripping began on the right limit of Revenue Creek again, just up-stream from the settling facilities.

Production

Year	Stripped	Sluiced
2001	Unknown	12500 cubic yards
2000	Unknown	4500 cubic yards
1999	Unknown	17700 cubic yards
1998	Unknown	19365 cubic yards
1997	Unknown	23000 cubic yards
1996	Unknown	13690 cubic yards
1995	Unknown	11000 cubic yards
1994	Unknown	12000 cubic yards
1993	Unknown	4000 cubic yards

Equipment

In 1993, a 966 Caterpillar loader removed tailings, and a D7E Caterpillar bulldozer was used for preparatory work, stripping, and re-contouring tailings. A D7F bulldozer performed these tasks in 1994. Pay material fed at a rate of 35 loose cubic yards per hour into a 2 foot by 6-foot hopper reached a vibrating screen deck 4 feet wide by 5 feet long. A two-inch screen on the top and a 1/2-inch screen on the bottom fed a single run sluice with undercurrent 4 feet wide by 16 feet in total length. The first 2.5 feet was lined with one-inch riffles followed by 5.5 feet of expanded metal. The eight feet of undercurrent also used riffles and expanded metal. Nomad carpet lined the entire 16 feet of sluice run. A 20 kW generator powered by a Perkins diesel ran the screening plant. The effluent was treated in a series of these instream ponds. During periods of low flow, which were common, there was no discharge.
Throughout 1995-1997, an American 35 excavator with a 1 7/8 cubic yard bucket was used to feed the sluice plant, dig trenches and clean out settling ponds. In 1997 an 890 John Deere excavator with a 1 1/2 cubic yard digging bucket was used to dig trenches, clean settling ponds and strip overburden. A 966 Caterpillar loader removed tailings. In 1995 and 1996 a D155 Komatsu bulldozer was used for preparatory work, stripping and re-contouring tailings. In 1996 and 1997 a D9L Caterpillar with a U-blade was used for stripping and recontouring tailings. Pay material fed at a rate of 50 cubic yards per hour into a 4 cubic yard hopper reached a vibrating screen deck 4 feet wide by 10 feet long. Material was passed through a 4-inch screen, a 2-inch screen and a 1/2-inch screen before entering a triple run sluice 10 feet wide by 20 feet long. The first 10 feet were lined with 6 pound expanded metal and the bottom 8 feet held 1 1/2 inch Hungarian riffles. Nomad matting lined the entire sluice run. The expanded

metal portion of the sluice run had a 1 3/4 inch per foot slope, and the riffle section was sloped at 3 inches to the foot. A 20-kilowatt generator powered by a Perkins diesel ran the screening plant. Water was acquired from settling/recirculation ponds at a rate of 800 igpm using a 6-inch Gorman Rupp trash pump. The effluent was treated in the settling/recirculation ponds. During periods of higher flow water was acquired directly from Revenue Creek, and treated effluent discharged back into Revenue Creek.
In 1998-2001, an American 35 excavator with a 1-7/8 cubic yard digging bucket was used to feed the sluice plant. An 890 John Deere excavator with a 1-1/2 cubic yard digging bucket was used to clean out settling ponds and perform stripping. A Caterpillar 980B loader hauled tailings away and a D9L Caterpillar bulldozer was used to do stripping and re-contour tailings. An additional D7 Caterpillar bulldozer was used to push pay material to the excavator and other odd jobs. Thirty-five loose cubic yards of pay material per hour were fed into a 4 cubic yard hopper attached to a vibrating screen deck measuring 4 feet wide by 10 feet long. Materials passed through a 4 inch screen, a 2 inch screen and a 5/8 inch screen before entering a triple run sluice 10 feet wide by 20 feet long. The first 10 feet was lined with 6 pound expanded metal and the bottom 8 feet held Hungarian riffles. Nomad matting lined the entire sluice run, the expanded metal portion of which had a 1-3/4 inch per foot slope. The riffle section was sloped at 3 inches to the foot. A 20 kilowatt generator powered by a Perkins diesel ran the screening plant. Water was acquired on Revenue Creek using in stream recirculating ponds at a rate of 800 igpm with a 6 by 6 inch Gorman Rupp trash pump. The effluent was treated in a series of these in stream ponds before the final point of compliance. In the fall of 2000, water was acquired from an instream settling/recirculating pond on Mechanic Creek at the same rate using the same equipment and treating effluent in the same pond. The only discharge was seepage from this pond. In 2001, an out of stream pond was constructed. Water from the previous years settling/recirculating pond was pumped to this out of stream facility and refilled with clean water to be used as a reservoir. No seepage and no discharge to Mechanic Creek occurred in 2001.

Landforms

Landform	Comments
Paleo-Alluvial Fan	

Surficial Geology

The total depth on the lower reaches of Revenue Creek before it enters Big Creek Valley was 16 to 18 feet. On upper Revenue the ground was up to 40 feet deep. In 1993, 10 to 12 feet of sands and silts with some gravel covered a seam of black muck over six feet of gravel. The gravel above the black muck was sluiced with the gravel below right down to bedrock. In 1994 lake silts up to a depth of 12 to 14 feet containing six-foot ice lenses were encountered. These covered gravels with seams of black muck that contained fine gold. The pay gravels had boulders and coarse sands. The pay gravels were sluiced with the seams of black muck and four feet of bedrock. The total depth of ground where Revenue Creek enters Big Creek Valley was 60 feet of frozen material. In 1995 silts, sand, and fine gravel were layered in the top 50 to 55 feet, and the bottom 5 to 10 feet contained a combination of silt, fine gravel and large rock up to 3 feet in diameter. A 6-inch layer of clay lined the bedrock. In 1996 the top 40 to 45 feet was layered black muck, sand, silt, and fine gravel. This covered 15 to 20 feet of the same material mixed with large quantities of rock ranging from 1 to 3 feet in diameter, with a clay layer on bedrock. In 1997 the upper layers were the same as those found in 1996, while the bottom 10 to 15 feet contained approximately 30% less large rock. Fine gold was found in all layers up to 5 feet from the surface. The bottom 30 to 40 feet was sluiced.
Revenue Creek disclosed a total depth of 60 feet of frozen material at the point where it enters the Big Creek Valley. Sand, silt and fine gravels comprised the top 40 to 45 feet of layered black muck. The next 15 to 20 feet was the same material only mixed with rock ranging from 3 feet to nearly 10 feet in diameter posed quite a challenge, with a final clay layer covering the bedrock. Fine gold was found in all layers up to 5 feet from the surface and consequently, the bottom 30 to 40 feet had to be sluiced. Upper Revenue Creek, on whirlwind pup, decreased slightly to 55 feet of frozen material. Forty feet consisted of silts and ice and the lower 15 feet was gravel, sand and a small amount of coarse rock which was the portion sluiced. Mechanic Creek, an upstream right

limit tributary of Big Creek, consisted of a total depth of 40 feet of frozen material on the lower portion that has been mined to date. The top 5 to 8 feet was composed of moss, ash and silt. The remaining gravels ranged in size from fine to 50 per cent very coarse. Large boulders ranging from 2 to 4 feet in diameter were scattered on top of the bedrock. Once again, gold was found in all gravels and the bottom 30 to 35 feet was sluiced.

Bedrock Geology

Bedrock is quartz-feldspar porphyry with abundant quartz veinlets, which varies from fractured to partially decomposed.

Gold Comments

Some of the gold was coarse and wiry, and contained black material. Beady round balls up to 6.1 grams were recovered. Of the fine gold, 5% was four mesh, 50% was 20 mesh, and 10% was 40 mesh. Fineness ranged from 890 to 920.
From 1995 to 1997, the gold varied from coarse and wiry to beady round balls up to 6 grams in weight, to conglomerate type nuggets. Three percent was larger than 12 mesh, 10% was 20 to 40 mesh, 40% was 40 mesh, 15% was 50 mesh, 25% was 60 to 80 mesh, and 7% was 100 mesh and smaller. Purity was 890 fine.
From 1998 to 2001, some of the gold was coarse and wiry. beady round balls up to 6.1 grams in weight were recovered. Of the fine gold 50-60% was 4/50 mesh size, 20% was 20 mesh and the balance was -80 to -200 mesh. Purity was 890 to 910 fines. The majority of gold recovered at Mechanic Creek was 40/50 mesh size and smaller with a purity of about 900.

References

Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1995, 1996, 1997. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 1998.: p. 159-160

Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1998-2002. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 2003.: p. 185

Thomson, R.F. Placer Mining Year End Summary, 2002. Mining Inspection Division, DIAND, 2003.: p. 27

van Kalsbeek L.P. Yukon Placer Mining Industry 1993-1994. Whitehorse: DIAND, 1996.: p. 121-122

Pictures

Title: Right Fork's Mining Pit on Revenue Creek; 1998.

Notes:

Title: Right Fork Mining on Mechanic Creek

Notes: