

# Yukon Placer Database Operations Report



**Field Name:** Sulphur Gold Placers Ltd., 1981-1984, 1989-2002

**Last Update:** 04-Jan-2005

**Status:** Recent Producer 1978-present

**Stream:** Sulphur: a tributary of Dominion

**Map Sheet(s):** 1150/15

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## Operators

Name	From (Date)	To (Date)	Comment
Joel White	2002/01/01	2002/12/31	
Coulee Resources	2002/01/01	2003/12/31	
Paul Peirson	1989/01/01	2002/12/31	
Mark Peirson	1989/01/01	2002/12/31	
Bud Peirson	1989/01/01	2002/12/31	
Paul Peirson	1981/01/01	1984/12/31	
Mark Peirson	1981/01/01	1984/12/31	
Bud Peirson	1981/01/01	1984/12/31	

## Owners

Name	From (Date)	To (Date)	Comment
Joel White	2002/01/01	2002/12/31	
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Paul Peirson	1989/01/01	2002/12/31	
Mark Peirson	1989/01/01	2002/12/31	
Bud Peirson	1989/01/01	2002/12/31	
Sulphur Gold Placers Ltd.	1981/01/01	2003/12/31	
Paul Peirson	1981/01/01	1984/12/31	
Mark Peirson	1981/01/01	1984/12/31	
Bud Peirson	1981/01/01	1984/12/31	

## General Location

The property was situated along the left limit of Sulphur Creek, 1,500 feet upstream from the mouth of Friday Gulch. In 1998, this was the first operation on the right limit of Sulphur Creek, downstream from its confluence with Green Gulch.

## Location Details

Date:	Latitude			Longitude			Elevation (feet)	Distance from Mouth (feet)
	Deg	Min	Sec	Deg	Min	Sec		
2005/01/01	63	46	41	138	54	17		
2002/01/01	63	47	0	138	54	0		
1998/01/01	63	47	0	138	55	0		
1995/01/01	63	47	0	138	55	0		
1993/01/01	63	46	48	138	55	12	2,000	
1991/01/01	63	48	0	138	55	0		
1989/01/01	63	47	0	138	54	0		
1983/01/01	63	47	0	138	50	0		
1981/01/01	63	47	0	138	54	0		

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<b>Number</b>	<b>Comments</b>
LP00059	
PM99-125	Expires: 2009/12/31
PM93-056	
PM89-010	
PM91-068	

**Work History**

Sulphur Gold Placers Ltd. took over the property mined previously by Mr. Rudniski in 1981. They enlarged previous cuts made by Rudniski, and continued mining through til the 1984 season. Activity commenced again in 1989, with Pierson and his two sons working a single shift between 7:30am and 6:00pm. The following year, 2 cuts were excavated, the first measured 300 by 150 feet, and the second was 200 by 100 feet. The lower 2 feet of gravel and top 2 feet of pasty aly bedrock were sluiced. In 1991, two cuts 100 by 300 feet were mined, totaling 17,700 cubic yards sluiced. The following year, another two cuts 100 by 250 feet were mined, and roughly 14,800 cubic yards were sluiced. Mark, Paul and Bud Pierson ran the mine between 1993-1994. A 350 feet long by 100 feet wide cut and 2 right limit cuts 50 feet wide by 250 feet long were mined that first year. In 1994, two cuts 50 feet wide by 400 feet long were mined at the top of the property, along with a 60 foot wide by 240 foot long area downstream of the main camp that had previously been dredged. Four miners worked 12 hour days in 1995, and excavated a cut 200 by 150 feet. In 1996, again 4 miners covered two 10 hour shifts per day. Two cuts measuring 200 by 250 feet were stripped. Only one quarter of the second cut could be sluiced due to a cool year which caused poor thawing. The following year, five miners worked for approximately six weeks in June and July. Due to low gold prices, the crew was reduced to three miners after July. The two cuts continued upstream from those mined in 1996 and were 200 by 250 feet and 200 by 275 feet. Between 1998-2001, Mark and his brother, Paul Peirson carried on the family placer mining business from their father Bud Peirson, working one 10 hour shift daily. In 1998, a cut approximately 300 by 75 by 25 feet deep was excavated. Three separate cuts were done in 1999 totalling approximately 12,000 cubic yards stripped. An additional 3 cuts were mined in 2000 and in 2001; each 50 by 800 by 15 feet, out of which approximately 7,000 cubic yards were sluiced. In 2002, Joel White took over this operation working under Sulphur Gold Placers. Stripping and preparation of ground took place above camp on the right limit as well as at the mouth of Meadow Gulch. Most equipment was moved from this site to Black Hills Creek in 2003. Paul and Mark Peirson ran a monitoring program in the beginning of June, and Coulee Resources moved to the site mid-August to begin sluicing.

**Production**

<b>Year</b>	<b>Stripped</b>	<b>Sluiced</b>
2001	Unknown	3500 cubic yards
2000	Unknown	3500 cubic yards
1999	12000 cubic yards	Unknown
1997	Unknown	105000 square feet
1996	Unknown	100000 square feet
1995	Unknown	30000 square feet
1992	Unknown	14800 cubic yards
1991	Unknown	17700 cubic yards
1990	Unknown	65000 square feet

**Equipment**

In 1981, a D7 Caterpillar bulldozer and a D8K Caterpillar bulldozer were used to enlarge the cuts. A sluice box 75

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cm (30 inches wide, and 9 meters (30 feet) long was used to process the gravel. A box tender used a monitor to wash gravel from the dump box into the sluice. In 1983, a Caterpillar D9G bulldozer was used to strip material, feed the sluice box, and stack tailings. All by the lowermost 12 feet of material were stripped. The sluice box consisted of a single run, and was used with a dump box and no grizzly. Water for sluicing was provided at a rate of 1,500 igpm by a 6 by 8 inch pump powered by a Cummins 220 engine. The water was introduced into the dump box with a monitor.

In 1990, the same heavy equipment was used as in previous years. The sluice box consisted of a side feed dump box measuring 6 1/2 feet by 24 feet leading into a single run 32 inches wide by 26 feet long. The processing rate varied between 80 and 120 cubic yards per hour. An 8 by 10 inch Morris pump powered by a 3208 Cat engine delivered the 2000igpm needed for sluicing and any hydraulic stripping that is done. Water is pumped from an instream pump pond. Primary settling occurred in a private downstream settling pond with a final settling in the Sulphur Creek community Settling Pond. A Hy Hoe excavator was purchased in 1991 for drainage and feeding the box, and a hydraulic monitor was used for stripping.

In 1993, a D8K Caterpillar bulldozer and a D7 (17A) bulldozer stripped and pushed up the pay gravels. The D8K bulldozer and a Hi hoe were used to feed the sluice plants and dig drains as needed. A triple run sluice box capable of handling between 60 and 100 cubic yards per hour was used in 1993. A trommel 5 feet in diameter by 24 feet long was used in 1994. The .5-inch minus classified pay was sluiced in two runs 32 inches wide by 12 feet long lined with expanded metal and Nomad matting. The trommel could process 50 cubic yards per hour with between 400 and 500 igpm of water. Water for sluicing and monitoring came from an out-of-stream reservoir, which contained Sulphur Creek water when needed. The effluent was treated in instream settling ponds at the operation, with final treatment in the Sulphur Creek Community Settling Pond.

In 1995, mechanical stripping and sluicing were accomplished using 2 Caterpillar bulldozers, models D8K and D7. An 8 by 10 inch pump with a 3208 Caterpillar motor was used for hydraulic stripping. A Hyhoe excavator was used to dig drains and to feed the trommel. In 1996 a 355 Komatsu bulldozer was leased for 200 hours to help with stripping. The wash plant was a 5-foot diameter trommel. Water supply to the pump was via a 4 inch Flygt pump. From 50 to 60 loose yards per hour were processed. Water was obtained from Sulphur Creek. Primary settling was done on the property during sluicing. Effluent from hydraulic stripping was sent to the Sulphur Creek Community Settling Pond.

In 1998, one D8K with U blade and ripper was used interchangeably with a D7 Caterpillar dozer to strip and stockpiling pay gravels for the Hyhoe 1 yard bucket excavator. The excavator fed the pay gravels to the trommel. A hydraulic monitor was run by an 8 by 10 inch pump with a 3208 Caterpillar motor. A 5/8 inch screen trommel was powered by a 75 kilowatt power plant measuring 5 feet in diameter attached to two 12 foot sluice runs dropping from 1-1/2 inch to 1 foot. Water was supplied by a Flygt 6 inch pump powered by the 75 kilowatt Gen Set capable of pumping 1600 igpm. About 60 cubic yards were processed per hour. Up to the year 2000, Sulphur Gold Placers was part of the group of operators who participated in the use of a community settling pond constructed in old dredge tailings. Clean ups are performed with jigs. The creek was used as a conduit to transport effluent down to these ponds, with each operator informing the upstream user when clean water was required for hydraulicing or sluicing. In 2000, these claims were acquired by one owner on Sulphur Creek. On site settling facilities were required from that time on. In 2002, a Komatsu 1100 excavator was assembled by Coulee Resources, also a new 1000 Komatsu shovel arrived making a total of 3 large excavators working the site.

**Environmental Work**

**Year Reclamation Work**

1989 Contouring and restoration (including seeding) is ongoing at this property.

**Landforms**

<b>Landform</b>	<b>Comments</b>
Alluvial Valley	
Bedrock Terrace	

**Surficial Geology**

Deposits in 1981, were 6.1 to 7.3 meters (20 to 24 feet) thick, and consisted of 4.4 to 6.1 meters (18 to 20 feet) of silt overlying 1.2 to 1.8 meters (4 to 6 feet) of clast-supported cross-bedded pebbly gravel with quartz and schist clasts. There were old underground workings found on the property. In 1990 the stratigraphic section consisted of 26 feet of frozen black muck and occasional silt layers. Three to four feet of gravel is found on top of bedrock, which tends to be of a decomposed type. The following year, the stratigraphic section was 15 to 30 feet of muck over 6 feet of gravel on bedrock. The sluice section was all the gravel plus 2 feet of bedrock. In 1993, the upper cuts had an average of 20 feet black muck overlying 4-6 feet of mixed gravel. The bench cuts were 25 feet deep and had a large amount of slide bedrock. Mercury from old-timers' underground working showed up frequently in the bench excavations. By 1995, the miners encountered 30-50 feet of muck over 3-5 feet of gravel. In 1996 there was 15 to 50 feet of muck over 3 to 6 feet of gravel, and in 1997, the muck was not quite as deep as mining advanced upstream, with an average of 35 feet. The gravels were found to be in a slightly thicker layer from 6 to 8 feet; all the gravel plus 1-2 feet of bedrock were sluiced. During 1998, overburden and frozen black muck ranged from as little as 15 feet deep to 50 feet deep in this area of Sulphur Creek. Decomposed animal remains have been uncovered in the permafrost and lots of old workings are evident in gravel layers. Mining was conducted both below and above the water course and there is considerable clay content. About 5 feet of combined pay gravels and unconsolidated bedrock were processed. The overburden encountered in 2002, was between 40-45 feet.

**Bedrock Geology**

Bedrock is blocky-weathering to badly decomposed schist, with an irregular surface.

**Gold Comments**

The gold was sharp and angular with the exception of the lower cut, which had a lot of smooth and round gold. Some small nuggets with quartz were recovered, and fineness was 800. In 1990, the gold recovered was primarily fine grained; the screened sizes worked out roughly as 10% +10 mesh, 60% -60 +40 and 30% -40. A combination of two distinct types of gold appeared; flat and solid type or rounded jagged gold with quartz, with fineness of 799. In 1995, fineness was 800, and in 1998, the gold was very fine with only 3 or 4 ounces per year of coarse gold content. Mesh size was about minus 60 per cent and the colour was dull with some black and red staining.

**References**

- Debicki R.L. Yukon Placer Mining Industry 1978-1982. Whitehorse: DIAND, 1983.: p. 140  
Debicki R.L. Yukon Placer Mining Industry 1983-1984. Whitehorse: DIAND, 1986.: p. 135  
Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1995, 1996, 1997. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 1998.: p. 85  
Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1998-2002. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 2003.: p. 104-105  
Nowosad, M. Placer Mining Year End Summary, 2003. Client Services and Inspections Division, Yukon Energy Mines and Resources, 2004.: p. 116-117  
Thomson, R.F. Placer Mining Year End Summary, 2002. Mining Inspection Division, DIAND, 2003.: p. 99-102  
Thomson, R.F. Yukon Placer Mining Industry 1991-1992. Whitehorse: DIAND, 1993.: p. 101-102  
van Kalsbeek L.P. Yukon Placer Mining Industry 1989-1990. Whitehorse: DIAND, 1991.: p. 53  
van Kalsbeek L.P. Yukon Placer Mining Industry 1993-1994. Whitehorse: DIAND, 1996.: p. 38-39

**Pictures**

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**Notes:**

Sulphur Gold Placers excavating new cut.

