

# Yukon Placer Database Operations Report



Field Name: Stuart, 1977-86, 1989-1990, 1994-2003

Last Update: 21-Mar-2005

Status: Active Producer

Stream: Caribou: a tributary of Dominion

Map Sheet(s): 1150/15

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## Operators

Name	From (Date)	To (Date)	Comment
Roger Stuart	1998/01/01	2002/12/31	
Roger Stuart	1995/01/01	1997/12/31	
Jim Stuart	1994/01/01	2003/12/31	
Jim Stuart	1989/01/01	1990/12/31	
K. Stuart	1977/01/01	1984/12/31	
Jim Stuart	1977/01/01	1986/12/31	The Stuart's moved to this property from Allgold Creek in 1976.

## Owners

Name	From (Date)	To (Date)	Comment
Art Sailer	2002/01/01	2002/12/31	
Roger Stuart	1998/01/01	2002/12/31	
Roger Stuart	1995/01/01	1997/12/31	
Jim Stuart	1994/01/01	2003/12/31	
Jim Stuart	1989/01/01	1990/12/31	
K. Stuart	1977/01/01	1984/12/31	
Jim Stuart	1977/01/01	1986/12/31	The Stuart's moved to this property f
K. Stuart	1976/01/01	1984/12/31	
Jim Stuart	1976/01/01	1986/12/31	From 1978 until 1982, the Stuart's o
J. Stuart			

## General Location

The operation started off in 1977 on the upper reaches of Caribou Creek, a right limit tributary of Dominion Creek. In 1983, the operation was located approximately 3,500 feet upstream from its confluence with Dominion Creek, and 4000 feet upstream by 1985. In 1994, the location was between Caribou Creek and Lions Gulch, and in 1995, it was 2,500 feet upstream from its confluence with Dominion Creek.

## Location Details

Date:	Latitude			Longitude			Elevation	Distance from Mouth
	Deg	Min	Sec	Deg	Min	Sec	(feet)	(feet)
2003/01/01	63	50	7	138	49	15		
1998/01/01	63	50	6	138	49	10		
1995/01/01	63	49	0	138	49	0		2,500
1993/01/01	63	49	26	138	49	12	2,000	
1989/01/01	63	49	0	138	50	0		
1985/01/01	63	49	0	138	48	0		4,000
1983/01/01	63	50	0	138	49	0		3,500
1977/01/01	63	49	0	138	50	0		

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**Water Licence(s)**

Number	Comments
LP00028	
PM98-049	Expires: 2009/05/01
PM86-116	
PM93-114	

**Work History**

The Stuarts held 10 claims on Caribou Creek and 2 claims on Lion Creek (off Caribou); but concentrated their efforts on Allgold Creek in 1976. The following season, they mined 20,000 bedrock square feet on Claim No. 21 on the left limit of Caribou Creek. During 1978, the company mined and processed material from three cuts totalling 1,650 square metres (18,000 square feet) in area. Work continued during 1979 in the same location, but no production figures were given. The following year, the company moved approximately 1,000 metres (3,500 feet) downstream, and dug a drainage ditch 350 meters (1,100 feet) long. A valley-bottom cut was made and approximately 9,150 square metres (30,000 square feet) in area was stripped and mined to a depth of 4.5 metres (15 feet). During each of the 1981 and 1982 seasons, they stripped and mined a cut approximately 80 metres (300 feet) square and 6 to 7.5 metres (20 to 25 feet) deep. In 1983, the Stuarts mined an area of approximately 140,000 square feet extending across the valley bottom and including a low left limit bench. Approximately a 120,000 square feet area was mined in 1984. Mr. J. Stuart and 3 other helpers worked on the property the following season, along with 4 other helpers in 1986. In 1989 and 1990, two people worked a single shift. Mr. Stuart returned to Caribou Creek in 1994 after working other properties on Hunker and Bonanza creeks from mid-1990 through 1993. Two miners and 1 camp worker put in 8 hours per day. Two cuts were mined in 1994, one 400 by 120 feet, and one 75 by 200 feet. Hydraulic stripping with settling removed some of the overburden. In 1995, Jim Stuart and his son, Roger, mined on the left limit of the creek. A total of 31,900 cubic yards were mined from two cuts on the creek in 1996. In 1997, two more cuts totaling 37,800 cubic yards were mined. From 1998 to 2002, generally two cuts were mined per year. In 2002, one of the cuts was on the left limit of Dominion Creek by Art Sailer. By 2003, mechanical stripping took place on the left limit of Dominion Creek across from Caribou Creek.

**Production**

Year	Stripped	Sluiced
1997	Unknown	37800 cubic yards
1996	Unknown	31900 cubic yards
1982	300 square feet	Unknown
1981	300 square feet	Unknown
1980	30000 square feet	30000 cubic yards
1978	18000 square feet	Unknown
1977	20000 bedrock square feet	Unknown

**Equipment**

In 1977, one D8 Caterpillar bulldozer and one International TD15B were used.  
 In 1978, work was done using a D8-46A Caterpillar bulldozer and an International TD15B bulldozer.  
 In 1981, two D8H Caterpillar bulldozers, and a Hein-Werner C-14A backhoe with a .75 cubic metre (1 cubic yard) bucket were used. Some water fro sluicing was recirculated from a settling pond, as the flow in Caribou Creek was insufficient.  
 In 1983, Caterpillar D8H and D8K bulldozers were used to strip and mine the property. A Hein Werner C-14A hoe equipped with a 1 1/2 cubic yard bucket was used to feed the sluicing plant. The lowermost 2 to 3 feet of gravel and 1 1/2 feet of bedrock were sluiced. The sluicing plant consisted of a dump box 8 feet wide and 22 feet

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long and a single sluice run 36 inches wide and 24 feet long. It had a capacity of 80 cubic yards per hour. The dump box was lined with punch plate and gold saving devices, and the sluice run was lined with 2 inch riffles, expanded metal, and Astroturf.

In 1984, a Caterpillar D9G was added. Water for sluicing was supplied at a rate of 2,500 igpm by an 8 by 10 inch pump powered by a 6 cylinder Volvo engine. A settling-recycling pond was located approximately 800 feet downstream of the sluice plant. A second settling pond was located farther downstream.

In 1985, heavy equipment included one Caterpillar D9G bulldozer, which was used primarily to strip overburden, one D8H Caterpillar bulldozer, used primarily for pushing tailings, and one Hein-Warner C-14A, one cubic yard capacity excavator, used primarily to feed the sluice box. The washing plant was the same configuration from the previous seasons.

In 1989 a Cat D9G bulldozer and a Cat D8H bulldozer was used to strip the overburden and to stockpile pay gravels. A Cat 96 rubber-tired loader was used to feed the sluice plant and to remove tailings. The wash plant consisted of a 3 foot wide by 30-foot long trommel with 2 sluice runs, which had expanded metal over Nomad carpet. Water was supplied to the plant using an 8 by 10 inch Canada pump, powered by a Volvo 150HP engine at a rate of 1500igpm. The wash plant processed 80 cubic yards per hour.

Caterpillar bulldozers (models D9G and D8H) were used for stripping and pushing up pay gravel. A C14A Hein Werner excavator fed the wash plant, and a 1641 Volvo loader hauled tailings. A trommel 4.5 feet in diameter by 30 feet long classified the pay to 3/4 inch minus. The pay was then washed through two sluice runs 5 feet wide by 8 feet long. The first two feet of the runs used hydraulic riffles, and the remaining six feet were lined with Nomad matting and expanded metal. An 8 by 10 inch Canada pump powered by a 150 horsepower Volvo engine delivered the 1500 igpm needed to sluice 75 to 100 cubic yards per hour. Process water was obtained from Caribou Creek. Settling occurred in existing instream ponds on Caribou Creek, with a final settling pond on the right limit of the Dominion Creek Valley. This pond was constructed under a previous license and was 700 feet long by 300 feet wide.

Equipment in 1995 consisted of two Caterpillar bulldozers (a D9G and a D8H), a 966 Cat loader, and a Hein Werner C14A excavator. In 1996 and 1997 a 125B Case excavator replaced the Hein Werner. Process water was obtained from either Caribou or Lion Creek as the location of the current sluice set up indicated. Settling was accomplished in small instream ponds with final settling in a large pond on the right limit of Dominion Creek Valley at the mouth of Caribou Creek. The large pond was instream during the mining season with flows routed around the pond at the end of each season.

During 1998 to 2002, the same equipment was used as in 1996 and 1997. A 54-inch diameter trommel was used to process pay. The trommel had a total length of 28 feet with 6 feet of that a section of screen. The trommel screened material to 1 inch. It had two sluice runs, each of which were 5 feet wide by 8 feet long. The sluice runs were equipped with New Zealand-style water riffles for the first 4 feet on each side and then expanded metal over Nomad matting for the rest. Process water was supplied using a 6 by 8-inch Monarch pump powered by a 671 General Motors engine. The plant used 1200 to 1500 igpm to process 80 to 100 loose yards per hour. A single cell jig was used for cleanups. From 1998 to 2001, water was treated in the same way as the 1995 to 1997 seasons. In 2002, process water for the cut on the left limit of Dominion Creek, across from the mouth of Caribou Creek, was obtained from a large beaver pond at the mouth of Caribou Creek and settling was accomplished in a pond set up below the cut. A new intake to settling ponds downstream from working area was constructed in 2003.

**Environmental Work**

<b>Year</b>	<b>Reclamation Work</b>
2003	Contoured area upstream showed good revegetation.
2002	Recently mined areas were contoured.

**Landforms**

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

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## **Landforms**

### **Landform**

### **Comments**

Alluvial Terrace

## **Surficial Geology**

The Caribou Creek Valley is fairly narrow and has relatively low flows during much of the mining season. Deposits consist of 1 to 4.5 metres (3 to 15 feet) of unfrozen, unmined, black muck overlying 1.5 to 2.5 metres (5 to 8 feet) of clast-supported sandy gravel containing abundant grains of magnetite. The deposits on the low level left limit bench along Caribou Creek have previously been partly mined by underground methods. Work was confined to those portions of the deposits which are frozen. The section of the bench is similar to the one in the creek except that colluvium of variable thickness blankets it. In 1989, the stratigraphic section had 12 to 15 feet of frozen black muck over 3 to 4 feet of pay gravel to bedrock. The section in 1994 consisted of twenty feet of black muck over 6 feet of gravel. The material had a rusty stain and would oxidize after a few days. Six feet of gravel and 1 foot of bedrock were sluiced.

Lowey noted approximately 2-3 meters of pay gravel resting on schist, overlain by 2-3 meters of overbank fines and muck.

## **Bedrock Geology**

Bedrock is quartz-sericite schist, and is partially decomposed.

## **Gold Comments**

The gold has a fineness ranging from 816-840. Gold recovered was reported to be mostly fine-grained, with a fineness of 850. It was described as being fairly smooth. The grain size distribution was reported to be 20% +8 mesh, 30% -8/+16 mesh, and 50% -16 mesh. In 1994, fineness varied from 820 to 850, decreasing from downstream to upstream. Some nuggets were reported. In 1995, the fineness of gold recovered from this creek varied from 816 to 840. Similar gold was found in the 1998-2002 seasons.

## **References**

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