# Yukon Placer Database Operations Report

**Field Name: Fuerstner, 1998-1999** **Last Update: 21-Feb-2005**

**Status: Recent Producer 1978-present**

**Stream: Livingstone: a tributary of South Big Salmon**

**Map Sheet(s): 105E/8** 

## Operators

| Name | From (Date) | To (Date) | Comment |
|---|---|---|---|
| Max Fuerstner | 1998/01/01 | 1999/12/31 | |

## Owners

| Name | From (Date) | To (Date) | Comment |
|---|---|---|---|
| Max Fuerstner | 1998/01/01 | 1999/12/31 | |
| Max Fuerstner | 1998/01/01 | 2003/12/31 | |

## General Location

This operation was located on Livingstone Creek, a tributary of South Big Salmon.

## Location Details

| Date: | Latitude Deg | Min | Sec | Longitude Deg | Min | Sec | Elevation (feet) | Distance from Mouth (feet) |
|---|---|---|---|---|---|---|---|---|
| 2003/01/01 | 61 | 19 | 38 | 134 | 19 | 32 | | |
| 1999/01/01 | 61 | 20 | 0 | 134 | 16 | 0 | | |
| 1998/01/01 | 61 | 20 | 0 | 134 | 16 | 0 | | |

## Water Licence(s)

| Number | Comments |
|---|---|
| PM97-065 | Expired: May 1, 2003 |

## Work History

In 1998 and 1999, one continuous cut was mined by Mr. Fuerstner and one other miner on the right limit of Livingstone Creek. All equipment and materials has since been removed from the site. Restoration work has also been completed. In 2003, both the water use license and mining land use approval expired.

## Equipment

A D9 Bulldozer was used to strip overburden with a 7 yard excavator feeding the wash plant. A 966 Caterpillar loader was used for tailings removal and yard work. Total creek flow of Livingstone Creek was diverted into a large settling facility located on the Ghost Claims on the left limit, immediately downsstream of the mine area. A discharge from the settling facility did not occur.

## Environmental Work

| Year | Reclamation Work |
|---|---|
| 2002 | All reclamation was addressed, and the site left in a stable manner for final decommissioning. |

## Landforms

| Landform | Comments |
|---|---|
| Alluvial Valley | |

## Bedrock Geology

Bedrock in the lower portion of the drainage basin consists of dark green, fine grained amphibolite and amphibolitic greenstone that grades into massive, melanocratic, dioritic to quartz dioritic hornblende augen gneiss near the headwaters. These rocks belong to the Anvil allochthonous assemblage and are associated with muscovite-quartz schist and muscovite quartzite of the Nisutlin assemblage. Quartz veins are numerous on Livingstone Creek and bedrock is occasionally strongly silicified and pyritized. Bedrock is well foliated and competent and forms a

good surface for gold retention.
On the north slope of the valley, approximately 2.2 km from the mouth of the canyon an adit was driven on a quartz vein [Horseshoe vein]. The average thickness of this vein is about 70 cm. The mineral assemblage consists of gold, pyrite, galena, chalcopyrite, tennanite, Au-Ag tellurides, hessite/stuetzite, quartz and minor carbonate gangue. Individual gold grains reach 2 mm in diameter. Selected samples of this material assay up to 1.58 oz/ton Au, 16.6 oz/ton Ag and 9.9% Pb. In 1992 L. Stroink and G. Friedrich compared gold and gold-silver tellurides from placer deposits and the Horseshoe vein, and suggested that most of the placer gold in Livingstone Creek is derived from gold-bearing quartz veins which crosscut the local metamorphic bedrock.

## References

Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1998-2002. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 2003.: p. 200

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

Thomson, R.F. Placer Mining Year End Summary, 2002. Mining Inspection Division, DIAND, 2003.: p. 16