Yukon Placer Database
Operations Report

Field Name: T.D. Oilfield Services Ltd., 1996-2002 **Last Update: 17-Feb-2005**

Status: Active Producer

Stream: Hunker: a tributary of Klondike

Map Sheet(s): 116B/3

Operators

Name	From (Date)	To (Date)	Comment
Dave Marsters	2002/01/01	2002/12/31	
Grew Creek Ventures	2001/08/01	2002/12/31	During 2001, the property was sold to Dave Marsters of Grew Creek Ventures.
Doug Busat	1996/01/01	2001/08/01	

Owners

Name	From (Date)	To (Date)	Comment
Dave Marsters	2002/01/01	2002/12/31	
Grew Creek Ventures	2001/08/01	2002/12/31	During 2001, the property was sold t
Doug Busat	1996/01/01	2001/08/01	

General Location

This operation was located at the mouth of Hunker Creek in 1996, and continued upstream in 1997. Between 1998-2002, it was located close to the mouth of Hunker Creek on the left side of the valley and extended for approximately 3 miles, covering a width of about 1000 feet.

Location Details

	Latitude			Longitude			Elevation	Distance from Mouth
Date:	Deg	Min	Sec	Deg	Min	Sec	(feet)	(feet)
2003/01/01	64	1	23	139	9	29		
2002/01/01	64	2	0	139	9	0		
2000/01/01	64	2	0	139	9	0		
1998/01/01	64	2	0	139	9	0		
1996/01/01	64	2	0	139	9	0		

Water Licence(s)

Number	Comments
PM96-085	Expires: 2005/04/30

Work History

Doug Busat started this operation mid-season in 1996, and a small amount of sluicing was done. The following year, the mine was ready for full production with a crew of 4 miners and one camp person. A large single cut 200 by 600 feet was mined with approximately 45,000 cubic yards sluiced. The overburden was stockpiled and then replaced into the cut after the pay material was removed for sluicing. In 1998, a 900 by 300 feet cut was opened and roughly 350,000 cubic yards were mined. An even larger area was mined in 1999, which was approximately 1000 by 300 feet. In 2000, a 400 by 700-feet cut was excavated, equalling about 400,000 cubic yards, and a slightly larger area was mined in 2001; 350 by 1000 feet. Production was similar in 2002, with about 130,000 cubic yards being sluiced.

Production

Year	Stripped	Sluiced
2002	Unknown	130000 cubic yards

Production

Year	Stripped	Sluiced
2000	Unknown	400000 cubic yards
1998	Unknown	350000 cubic yards
1997	Unknown	45000 cubic yards

Equipment

Since 1996, a Caterpillar D9H bulldozer equipped with a ripper and a Caterpillar 245 excavator (4 yard bucket) were used for clearing and stripping. A Caterpillar 980C loader (5 yard bucket) and a Caterpillar 980B loader (4 1/2 yard bucket) were used to haul pay gravel to the sluice plant and for moving the tailings. The sluice plant was fed with a Hitachi EX 270 excavator equipped with a 1 3/8 yard bucket. A hopper feeds into a Clemro double screen deck. The upper screen classifies to 3/4 inch minus and the lower screen classifies to 3/8 inch minus. The material between 3/8 inch and 3/4 inch is washed through a single sluice run 4 feet wide by 16 feet long. The 3/8 inch minus material was washed through 4 runs 2 by 5 feet before entering centrifugal drums 18 inches in diameter by 10 feet long. The sluice runs are lined with Nomad matting and riffles made of 1 1/2 inch flat iron with 1/2 inch tops. The concentrate from the sluice was run through a Millspec concentrator for final cleanup. The material from the concentrator drums was run through 26 inch jigs for clean-up. A 10 by 8 inch pump powered by a Caterpillar 3208 engine supplied the 1200 igpm needed to process between 80 and 100 cubic yards per hour. Hunker Creek was elevated with an instream rock dam to deflect a portion of the flow into a ditch to the pump pond located next to the main channel. The water was pumped to the wash plant and the effluent was treated in an out-of-stream settling complex constructed over old dredge tailings downstream of the operation. Most of the discharge was by seepage through the old tailings.

During 1998-2002, a D9H Caterpilllar bulldozer equipped with a U-blade and ripper was used to strip overburden and push tailings. Two Caterpillar loaders, a 980B (5½ -yard bucket) and a 980C (4½ -yard bucket), along with a 245 Caterpillar backhoe with 4-yard cleanup bucket and an Hitachi EX270 backhoe with a ½ -yard bucket were employed in various capacities around the property. Two MT36 27-tonne Moxi rock trucks were used to haul material, including pay gravels to the wash plant. A screen deck wash plant with a 20-yard hopper dropped materials onto a grizzly. A 60-foot conveyor fed a 20-foot wide by 16-foot long sluice run lined with 1½ by ½ -inch riffles and punch plate holes ¾ by 3/4 inches. The sluice run was sloped approximately 2½ inches per foot, lined with Nomad carpets and equipped with three 16-foot boiler boxes. Water was supplied by a Pasco 8 by 8-inch pump powered by a Caterpillar 3208 diesel engine and fed at a rate of about 2000 igpm. One hundred and twenty-five cubic yards were processed per hour. Water was supplied by ground seepage and captured in an 800 by 800-foot recycling pond. Effluent was settled out in a series of 3 ponds, the sizes of which were 150 by 50 by 20 feet, 150 by 250 by 25 feet and 150 by 60 by 15 feet respectively.

Environmental Work

Year	Reclamation Work
2002	Each season tailings were contoured, sides were sloped and topsoil was respread with the ponds being left for fish habitat and other recreational uses.

Landforms

Landform	Comments
Alluvial Valley	

Surficial Geology

The ground mined in 1997, averaged 25 to 30 feet deep with between 8 and 10 feet of pay gravel beneath the black muck overburden. The bedrock tended to be wavy and uneven with lots of small quartz boulders. All of the gravels and 1 to 2 feet of the bedrock were sluiced. Numerous old shafts and tunnels were found throughout the workings. Between 1998-2002, the maximum depth of overburden to bedrock was about 30 feet. The gravel was partially thawed with some frozen spots, and particle sizes were 12-inch in diameter to sand, with an average of 3 inches. Most of the work took place 25 feet below surface water. There was some evidence of old shafts and workings; old bones were recovered in poor shape. The sluice section was 8 to 10 feet, 2 feet of which was bedrock. It was noted that ground composition in 2002 averaged 44 feet in depth, with 6 feet of black muck and 38 feet of gravel before pay began. At that point, 6 feet of pay gravels and 2 feet of bedrock were sluiced. The valley at the mouth of Hunker had a very flat floor of considerable width; this allowed for a progressive mining plan where cuts were used for the purpose of backfilling material and settling ponds.

Bedrock Geology

The bedrock encountered was flat and wavy. The rocks along the upper part of Hunker Creek consist of the light coloured sericite schists, and the greenish chloritic schists of the Klondike series, cut by a few small bosses of rhyolite. From Colorado Creek to the mouth the same rocks also occur, but are associated with wide bands of the lead coloured and dark graphitic schists of the Hunker series, some green schists and occasional bands of limestone.

Gold Comments

The gold was reported to be primarily flat and smooth with no nuggets. The gold was dull in colour and some mercury contamination from old mining activity was found; purity was 780 fine. Over the 1998-2002 seasons, the gold was flat, smooth and bright coloured, with a few nuggets, and fines ranged from 74 to 78%.
Lowey reported flat, dull, smooth gold of fineness ranging from 760-780.

References

Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1995, 1996, 1997. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 1998.: p. 53

Mining Inspection Division, Yukon Region. Yukon Placer Mining Industry 1998-2002. Department of Indian Affairs and Northern Development, Whitehorse, Yukon, 2003.: p. 63

Nowosad, M. Placer Mining Year End Summary, 2003. Client Services and Inspections Division, Yukon Energy Mines and Resources, 2004.: p. 118

Thomson, R.F. Placer Mining Year End Summary, 2002. Mining Inspection Division, DIAND, 2003.: p. 103

Pictures

Title: T.D. Oilfield Services Ltd. Operations

Notes:

This operation won the much-coveted Robert E. Leckie Award for Oustanding Placer Mining Reclamation Practices in November of 2001, presented to Doug Busat. The work performed included the reconstruction of the Hunker Creek Road, creek restoration and the reclamation of land disturbances.

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