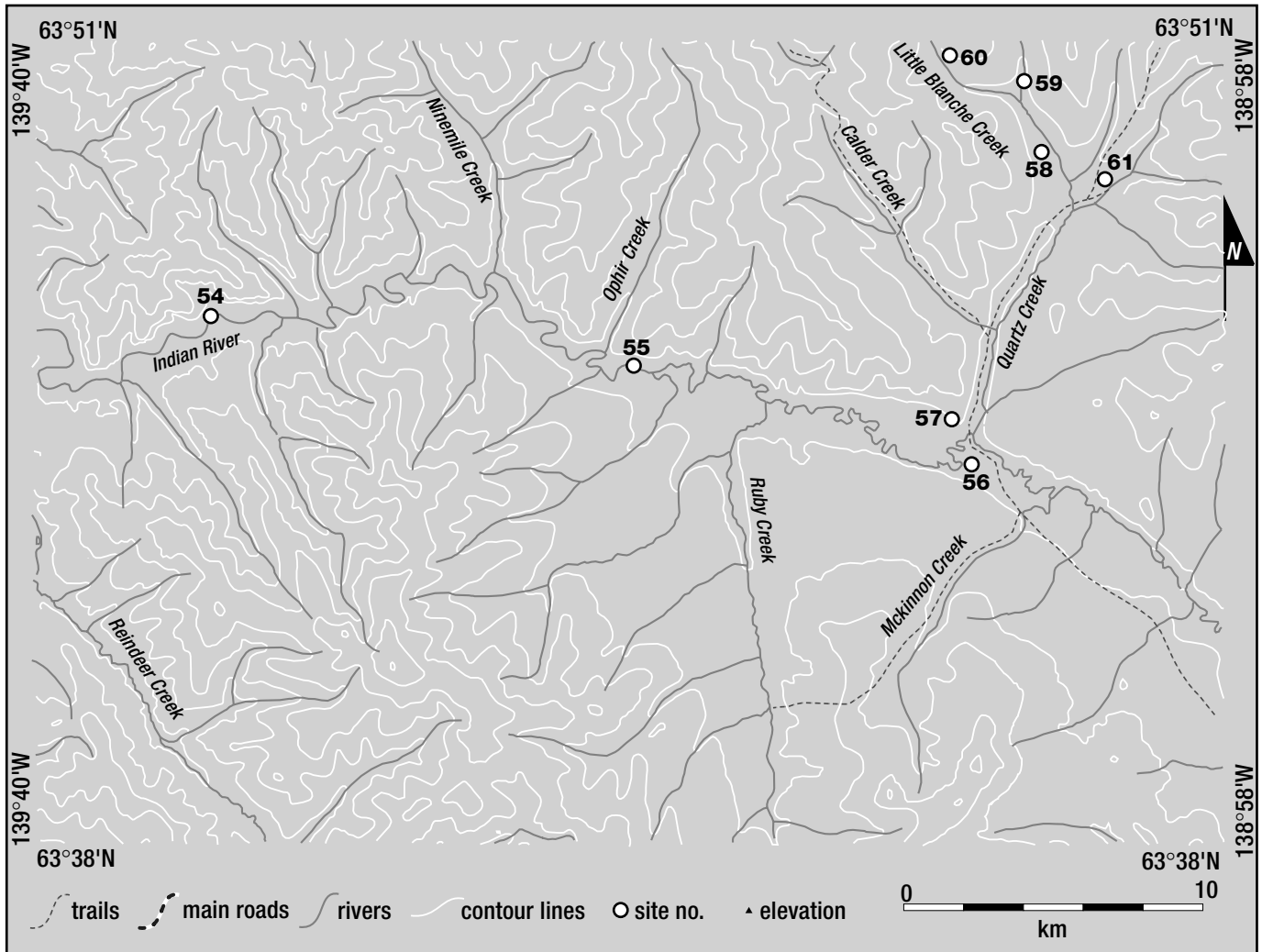


# KLONDIKE: INDIAN RIVER PLACER AREA

SITES  
54-61



## LEGEND

- 54..... David McBurney, Indian River
- 55..... 8629 Yukon Ltd., Indian River
- 56..... ISSL Canada Inc., Indian River
- 57..... Kim Ferguson, Quartz Creek
- 58..... Harvey Miller, Little Blanche Creek
- 59..... Irv Nafziger, Little Blanche Creek
- 60..... Barbara Coomes, Little Blanche Creek
- 61..... Tatlow Placers, Quartz and Little Blanche creeks

**INDIAN RIVER**

**1150/13**

David McBurney

63°46'N 139°34'W

Water Licence: PM96-076

1998, 1999, 2000, 2001, 2002

Indian River Placer Area

**Site no. 54**

**OPERATION/LOCATION** David McBurney ran a three-person operation along the right limit of the lower Indian River below Bertha Creek in 1998 and 1999, moving upstream and across to the left limit in 2000, 2001 and 2002. Another two-person operation just upstream on the right limit was sub-contracted under the same water licence to different operators: Tim Osler in 1999 and 2000 and Kim Ferguson in 2001.

**EQUIPMENT/FUNCTION** One Caterpillar D9G bulldozer was used for ripping and stripping frozen overburden, flattening tailings and spreading topsoil for restoration. Two Hitachi EX200 excavators were used for digging pay gravels, feeding the wash plant and removing tailings. In 2000, a new conveyor belt, 3 feet wide by 100 feet long, mounted on used excavator tracks, was added to reduce stripping costs; the stripped overburden and waste gravel was loaded onto the conveyor using one of the excavators, at a rate of about 250 cubic yards per hour. The two-person operation upstream on the right limit used an excavator for digging gravel and feeding the wash plant

**WASH PLANT** A trommel, 5 feet in diameter by 15 feet long, mounted on steel skids, classified material to ½ inch. A single sluice run, 2½ feet wide by 4 feet long with angle iron riffles, fed into five hydraulic riffle tables, 13 feet wide by 12 feet long. Tailings were stacked by a 40-foot long conveyor belt. An Indeng water pump, 6 inches by 6 inches, powered by an



*David McBurney mining operation on Indian River.*

Isuzu GBGIT diesel engine, delivered about 900 igpm which was used to process 85 cubic yards per hour.

**GROUND DESCRIPTION** Frozen sandy overburden along the right bank of the Indian River was 3 to 9 feet deep on top of frozen pay gravel which varied from 5 to 10 feet deep. As mining progressed farther away from the river bank, a layer of waste gravel was encountered which increased up to 10 feet deep on top of the pay gravel layer. The bottom 6 feet of pay gravel plus 1 to 3 feet of bedrock were sluiced. On the left limit of the Indian River the frozen mud, silt and sand varied from 4 to 20 feet deep on top of waste gravel up to 10 feet deep. Five to 6 feet of pay gravels and 1 to 3 feet of bedrock were sluiced. The bedrock was extremely wavy and appeared to striate the valley perpendicular to the creek, making it very difficult to estimate how much gravel or pay would be found.

**MINING CUTS** In 1998 and 1999 on the right limit, per season respectively, 75,000 and 85,000 cubic yards were processed and 300,000 and 325,000 square feet of bedrock were exposed. In 2000 and 2001 on the left limit, per season respectively, 82,000 and 85,000 cubic yards were sluiced with 110,000 and 140,000 cubic yards of overburden stripped and 290,000 and 310,000 square feet of bedrock exposed. Mining cuts were excavated about 150 feet wide in consecutive strips, parallel to the river banks. In 2002, approximately 78,000 cubic yards were sluiced and 315,000 square feet of bedrock were exposed with 173,000 cubic yards of overburden stripped.

**WATER SUPPLY AND TREATMENT** Water was pumped directly from the Indian River using fish screen mesh on the pump intake and was settled in out-of-stream ponds in old mining cuts.

**GOLD** Gold was mostly fine flakes with some coarse, flat flakes and fineness around 810.

**COMMENTS** Reclamation works included backfilling mining cuts, flattening tailings piles and spreading overburden for re-vegetation as well as restoring and armouring one bank of the river.

**INDIAN RIVER**

**1150/14**

8629 Yukon Ltd.

63°45'N 139°21'W

Water Licence: PM99-046

1998, 1999, 2000, 2001, 2002

Indian River Placer Area

**Site no. 55**

**OPERATION/LOCATION** Dennis and Ken Foy and their families continued to mine at this location, upstream from Ophir Creek, for 1998 and 1999. Activities were curtailed half way through the 2000 season and some equipment was moved to Alaska on another project. In 2001, numerous rock falls and a severe washout destroyed the access road and other than a brief visit, no mining took place. The mining lease



*Dennis Foy's Indian River placer pit.*

with the owner of the claims, Nnahtur Resources Ltd., was terminated in 2002, and Mr. Foy moved his equipment and property from the site. Mr. Kim Ferguson was authorized to do some testing during the season under this water licence which did not pan out.

**EQUIPMENT/FUNCTION** Stripping overburden and pushing pay was conducted with a Caterpillar D10N, while the wash plant was fed with a Caterpillar excavator. Tailings were removed with either a Fiat HD31 or 41 bulldozer. A Hough 666 excavator was also employed.

**WASH PLANT** A 24 by 15-foot dump box and grizzly was lined with ½-inch punch plate. A conveyor fed the wet hopper attached to four sluice runs. 3000 igpm of water was delivered by a 12-inch Morris pump to sluice about 150 cubic yards per hour.

**GROUND DESCRIPTION** This operation is in a very wide, flat part of the Indian River Valley. Overburden is only 4 to 6 feet deep and the gravel layer averages 10 to 12 feet deep. Gravels and 2 to 3 feet of the underlying decomposed bedrock were sluiced.

**MINING CUTS** In 1998, three cuts were made totalling 321,200 cubic yards of material. No further cuts were made at this site. In 2002, only cleanup, some reclamation and testing were performed.

**WATER SUPPLY AND TREATMENT** This was an out-of-stream operation, obtaining water from groundwater seepage into old mine cuts. An armoured diversion was built for the

Indian River on the right limit of the valley to bypass the mining area.

**GOLD** Gold is extremely fine-grained and assayed out at approximately 800.

**COMMENTS** Rising costs of fuel, “tired iron” maintenance and family health problems inspired the Foy's to “pack-in” this project.

## INDIAN RIVER

1150/11

ISSL Canada Inc.

63°44'N 139°08'W

Schedule III, LP00314

2002

Indian River Placer Area

Site no. 56

**OPERATION/LOCATION** This was a small out-of-stream operation located at the Risby camp at the mouth of Quartz Creek. The company leased claims from Nnahtur Resources Ltd. to test a magnetic recovery system (MRU) for separating black sands from fine gold. Five miners and one camp personnel were employed.

**EQUIPMENT/FUNCTION** A small Kubota R520 excavator was used to collect old cleanup tailings from four or five locations for additional processing and gold recovery.



*ISSL sluice runs on Indian River. (inset) Pete Risby stands beside rare earth magnet conveyor.*

**WASH PLANT** The material was first put through two 8-foot culvert dryers, then run over a dry separating system equipped with rare earth magnetics. Final cleanup was done across a wet sluice equipped with rare earth magnets. A Honda 5HP gasoline pump was used, capable of pumping about 60 igpm. The operation processed about 1 cubic yard per hour.

**GROUND DESCRIPTION** Excavation was in already stockpiled waste piles.

**MINING CUTS** No cuts were made.

**WATER SUPPLY AND TREATMENT** Water was acquired from an existing pond and any sluice box effluent was quickly absorbed by the existing coarse tailings. The entire operation was conducted well out-of-stream.

**GOLD** The gold was extremely small, smooth particles down to 400 mesh. Fineness of the gold averaged about 800. The system did recover a surprising amount from the concentrates, indicative of the efficiency of the system.

<b>INDIAN RIVER</b>	<b>1150/11</b>
Kim Ferguson	63°45'N 139°08'W
Schedule III, LP00323	2002
Indian River Placer Area	<b>Site no. 57</b>

**OPERATION/LOCATION** This was a small family operation to test and, if feasible, mine out a portion of a bench claim off Indian River near the mouth of Quartz Creek. Mr. Ferguson optioned the ground from Nnahtur Resources Ltd. The operation was completed in early fall and all reclamation was performed. For the duration of the program, Mr. Ferguson's family moved a mobile trailer into the area of the Risby camp. Two miners and one camp personnel were involved in this operation of short duration.

**EQUIPMENT/FUNCTION** A Caterpillar EL300 and Caterpillar D966A excavator was used to excavate material and feed the sluice box, as well as for stripping and reclamation.

**WASH PLANT** A small trommel and pump were used to complete this less than 300 cubic metres per day operation.

**GROUND DESCRIPTION** The area was in close proximity to already mined ground. Overburden was a nominal 2 to 3 feet and the ground was not frozen. Coarse Indian River gravels to bedrock were observed and bedrock itself was typical blocky, unconsolidated schist.

**MINING CUTS** Two cuts were made at the site, one approximately 600 by 30 feet and the second around 450 by 45 feet.

**WATER SUPPLY AND TREATMENT** Activities were conducted well out-of-stream using an existing tailings pond as a reservoir and discharging effluent onto old coarse tailings with no return to any creek.

**GOLD** As is typical in this area of Indian River at Quartz Creek, gold was fine and flaky with very few to none of nugget or jewellery size. Fines were generally 785.

**COMMENTS** As per the requirements of this Class II approval, reclamation was completed before the operator left the site.

<b>LITTLE BLANCHE CREEK</b>	<b>1150/14</b>
Harvey Miller	63°48'N 139°05'W
Water Licence: PM98-026	1998, 1999, 2000, 2001
Indian River Placer Area	<b>Site no. 58</b>

**OPERATION/LOCATION** This operation is located on Little Blanche Creek approximately one mile upstream from its confluence with Quartz Creek. Harvey Miller mined this property alone, leasing the claims from Murray Crockett.

**EQUIPMENT/FUNCTION** A D824 Caterpillar bulldozer with a straight blade and no ripper was used for all stripping and sluicing. A P&H 1¼-yard bucket dragline was used to dig reservoirs and drains and to bail out settling ponds.

**WASH PLANT** An 18- by 8-foot dump box fed a single, long tom type sluice run measuring 3 by 25 feet long. The sluice run contained 1½-inch Hungarian riffles. Water was acquired with a 6-inch Gould pump powered by a 271 General Motors diesel engine, providing around 1200 igpm. Mr. Miller's processing rate was about 30 cubic yards per hour.

**GROUND DESCRIPTION** Overburden averaged between 10 and 14 feet deep. Pay gravels were anywhere from 12 to 18 feet below the frozen black muck. Bedrock was composed of decomposed grey clay and blocky brown schist. The sluice section was composed of 12 feet of gravel and 1½ feet of broken up bedrock.

**MINING CUTS** Over a period of four years, Mr. Miller remained in the same basic location, opening up an area approximately 125 by 100 feet. In 1998, only mechanical stripping of this area was done. In 1999 and 2000, approximately 38 hours of sluicing was accomplished out of an area 80 by 60 feet. There was no activity other than equipment maintenance in 2001. Overburden is stacked on bench for later reclamation work.

**WATER SUPPLY AND TREATMENT** Prior to the temporary closure of the Tatlow Little Blanche operation in 2000, Mr. Miller was able to settle effluent in the ponds at the mouth of Quartz Creek. He now has to construct sufficiently stable settling ponds on his own claims and not pass effluent downstream



*Harvey Miller working in mine cut on Little Blanche Creek.*

of his boundary which may account for the lack of activity in 2001.

**GOLD** Gold ranged from fine to coarse with 20% from -14 to +10 mesh and 80% between -16 and +60 mesh. The fineness is usually between 700 and 720.

#### LITTLE BLANCHE CREEK

1150/14

Irvin Nafziger

63°49'N 139°06'W

Water Licence: PM98-055

1998, 1999, 2000, 2001, 2002

Indian River Placer Area

Site no. 59

**OPERATION/LOCATION** Irvin Nafziger mines approximately 2 miles upstream from the confluence of Little Blanche with Quartz Creek. In 1998, he reduced his operation to two people, one miner and one camp personnel, working one 8-hour shift daily.

**EQUIPMENT/FUNCTION** Using alternatively a D8H and a D8L Caterpillar bulldozers and an O&K 2-yard bucket excavator, Mr. Nafziger employed conventional placer methods in strip thawing and monitoring black muck to uncover the pay gravels.

**WASH PLANT** Pay was fed into a 10 by 10-foot hopper with a grizzly onto a Super Sluice IV screen deck. Two sluice runs with Hungarian riffles, Nomad matting and #4 expanded metal measuring 4 feet wide by 12 feet long classified the material down to 1 inch. The pump, used for both

monitoring and sluicing as required, was a General Motors 8 by 6-inch unit powered by a 371 diesel engine of the same make, capable of 1500 igpm. Approximately 70 cubic yards were processed an hour and final cleanups were done with a long tom.

**GROUND DESCRIPTION** Frozen organic overburden reached a depth of 20 feet and was mixed in with gravel layers. Bedrock was quite wavy and there was little evidence of old workings or bones. Four feet of gravels were sluiced. The waste sections were stockpiled, where possible, for use in road work, water structures and/or reclamation. In 2001 and 2002, Mr. Nafziger moved progressively downstream of the camp, where depths were shallower. Bedrock was found at around 10 feet and 2 feet of gravels and 2 feet of unconsolidated bedrock were sluiced.

**MINING CUTS** One cut measuring approximately 500 by 150 feet was mined each year over the period of 1998, 1999 and 2000. In 2001, three separate pits were excavated, measuring 150 by 90 feet, 230 by 40 feet and 300 by 70 feet. The mining cuts in 2002 were 300 by 54 feet and 225 feet by the same width.

**WATER SUPPLY AND TREATMENT** Water was first acquired by way of a reservoir pond excavated on upper Little Blanche. To acquire sufficient water in 2002 for sluicing in this low-volume creek, a 200 by 200-foot recirculating pond was employed and approximately 80% of the water was



*Irvin Nafziger's sluice plant on Little Blanche Creek.*

recirculated. Treatment of effluent was in-stream, with settling ponds created by damming old mine cuts on the property, although initially Mr. Nafziger used Little Blanche and Quartz creeks as conduits to send effluent to settling ponds at their confluence with the Indian River.

**GOLD** Gold was flat and angular, ranging from +30 to +50 in particle size. The gold had a dull appearance and only about 3% recovery were nuggets. Fineness was about 640.

**COMMENTS** Some reclamation work was accomplished near the camp. New and improved settling facilities are being constructed and once in place, further contouring and spreading of overburden can be done in the mined-out areas. In 2002, Mr. Nafziger noted that the creek had insufficient gold at the current value for his needs.

**LITTLE BLANCHE CREEK**

**1150/14**

Barbara Coomes  
Water Licence: PM01-221  
Indian River Placer Area

63°51'N 139°05'W  
2002  
**Site no. 60**

**OPERATION/LOCATION** This operation is located on the Right Fork of Little Blanche Creek and includes a Discovery claim on a left limit tributary. Barbara Coomes and Dave Trainer have an operation on Carmacks Fork and travelled to this property for a short period of time in the 2002 season.

**EQUIPMENT/FUNCTION** A D6 Caterpillar bulldozer was used to perform stripping and trenching to prepare ground for mining.

**WASH PLANT** No wash plant was required at this time. Any bulk sampling was taken back to the operation at Carmacks Fork (site no. 14) for testing.

**GROUND DESCRIPTION** At the confluence of the Right Fork with the tributary, testing indicated there was 20 feet of black muck, over 10 feet of gravels. It is intended to sluice the bottom 3 feet. Bedrock is composed of yellow, unconsolidated schist. The bench ground upstream is about 20 feet above the creek and consists of only 3 feet of black muck overlaying a 6 to 8 feet bed of gravel. Once again, testing in this location indicates that only 3 feet of the gravels should be sluiced, although it may prove more economical to sluice the entire section.

**MINING CUTS** Three areas were stripped to begin the process of thawing the frozen black muck. One approximately 150 by 150 feet, the second 300 by 50 feet, and the third one 50 by 50 feet. While the first two were only excavated to 6 feet deep, the third area achieved a depth of 12 feet.

**WATER SUPPLY AND TREATMENT** At the current time, no water was used. The licence allows for both in-stream reservoirs and settling facilities.

**GOLD** An insufficient amount of gold was recovered during testing to describe overall qualities. Fines at the lower Nafziger operation are generally in the neighbourhood of 640 and the gold is flat and angular.

**COMMENTS** Barbara Coomes and Dave Trainer both noted the unusually high number of bears in the area for such a narrow valley. When they move to the property, the camp set up will have to be extra bear proof.

## QUARTZ CREEK

1150/14

Tatlow Placer Mines

63°49'N 139°04'W

Water Licence: PM99-135

1998, 1999, 2000, 2001, 2002

Indian River Placer Area

Site no. 61

**OPERATION/LOCATION** Kevin and Gary Tatlow, along with their father, Ken Tatlow, continued their family mine operation at the confluence of Little Blanche and Quartz creeks. Four miners were employed, along with two camp personnel running a daily shift of 12 hours. In 2002, Ken Tatlow ran the operation at a considerably reduced activity level with his wife, Joan Tatlow. Work was confined to monitoring and strip thawing material on Quartz Creek upstream of the camp.

**EQUIPMENT/FUNCTION** One D9L Caterpillar bulldozer equipped with a U-blade and ripper was used to strip the mine area, while material was hauled out by three Terex S-24b scrapers

with 24 cubic yard capacity. An Hitachi EX300 excavator fed the sluice plant and performed other services such as ditch digging and reclamation. Upon the decision to downsize in 2001, several pieces of equipment were put up for sale and only the Hitachi EX300 excavator and the D9L Caterpillar bulldozer were kept in service for 2002.

**WASH PLANT** A 12 by 10-inch Morris pump, powered by a Caterpillar 3408 diesel engine, capable of 4500 igpm processed approximately 200 cubic yards per hour. The sluice plant was comprised of a 6 by 20-foot double decker screen deck to which four sluice runs, approximately 4 feet wide by 16 feet long were attached. By 2002, only a triple sluice with a 4-foot centre run and two 4-foot side runs were used. The boxes were lined with Nomad Matting with 1-inch Hungarian riffles on the side runs and 2½-inch on the centre run.

**GROUND DESCRIPTION** Mining was focussed on the right limit bench of Little Blanche Creek with some strip thawing and testing being done upstream of camp on Quartz Creek proper. The ground at Little Blanche was composed of 12 feet of frozen black muck, over 40 to 50 feet of gravels. Bedrock was partially decomposed. The gold was found in the last 10 feet of this section and the first 4 or 5 feet of the unconsolidated bedrock. Upper Quartz averaged approximately 6 to 8 feet of black muck and 35 feet of gravels overlaying a similar bedrock structure. About 15 feet of the



*Tatlow Placers' monitor on Upper Quartz Creek.*

lower gravels were sluiced, with the remainder being settled out or stockpiled for reclamation purposes.

**MINING CUTS** Over the course of the past 4 years, three huge pits were excavated, each averaging about 100 by 700 feet. The waste sections were hauled out by the Terex scrapers and stockpiled for use in road construction and for reclamation purposes. In the fall of 2000, the Little Blanche Creek mine area was put into temporary closure due to the rising price of fuel and the large amounts of material to be moved. In 2001, the remaining stockpiles were sluiced and some preparatory work was done on upper Quartz Creek. The mine cut in 2002 was 200 feet long by 75 feet wide.

**WATER SUPPLY AND TREATMENT** This operation was conducted out-of-stream with an 80% recycle system. Water for the camp and sluicing purposes was collected in a reservoir constructed at the mouth of Canyon Creek. Settling ponds consisted of a series of old mine cuts and dredge ponds that are situated at the mouth of Quartz Creek. At the cessation

of mining on Little Blanche Creek, a stable channel was restored. In the event of changes to requirements, on-site settling pond construction has been contemplated for future mining. A reservoir has been constructed to provide water for monitoring and sluicing, out of which 80% is recycled.

**GOLD** The gold recovered on both Little Blanche and Upper Quartz creeks is brightly coloured and chunky with a fineness of ranging between 670 and 750. Mesh sizes were 15% at +10, 70% from -10 to +60 and the remaining 15% at -60 mesh.

**COMMENTS** The rising costs of fuel and marginal returns on gold production have caused this family to re-think their long-range plans for the mine operation. Reclamation and restoration at the Little Blanche mine site has nearly been completed. Much of the equipment and other mine assets have been put up for sale, or has already been sold. Mr. Tatlow has adopted a “wait and see” outlook for the future.



*Tatlow Placers open pit on Little Blanche Creek.*