

The Walter W. Johnson Company and Atlin Placers, Ltd., hold mining leases and options on Pine and Otter Creeks, two placer gold bearing streams located at Surprise Lake, 12 miles east of the town of Atlin, British Columbia. Atlin is situated 125 miles southwest of Whitehorse, Yukon Territory.

A good gravel road connects Whitehorse, Atlin, Surprise Lake and the two creeks. The road is maintained by the provincial governments and is open throughout the year.

Passenger transportation is by plane leaving Seattle or Vancouver at 7:00 A.M., arriving at Whitehorse at 12:00 noon, then 125 miles by automobile to Atlin.

Freight is shipped by steamer or barges to Skagway, or Haines, Alaska, then by trucks from Haines, or by railroad to Whitehorse and by truck to the property.

It is proposed to combine Otter and Pine Creeks, of which Otter is a tributary, into a dredging operation with a minimum life of 14 years, using a 12 cubic foot gold dredge now available. All leases and options will be transferred to a new company to be formed, as later described in this brochure.

OTTER CREEK

In 1939 Atlin Placers, Ltd., acquired leases and options on four miles of Otter Creek from the Compagnie Franchise des Mines d'Or du Canada, Societe Anonoysee, a French controlled company, who in the early twenties built a 10 mile ditch and hydrauliced the top glacial gravels as deep as the grade permitted, recovering 15¢ per cubic yard (new price). A 5% royalty applies on a maximum option price of \$375,000.00. \$18,500.00 has been paid on the option.

Otter Creek flows into Surprise Lake from the south. Four miles up stream it divides into two forks. The original discovery of gold in Otter Creek was made in a canyon on the left fork in 1904, which produced \$60,000 (old price).

A later flow of glacial till gravel covered the channel gravels to a depth of 60 to 90 feet for a distance of approximately three and a half miles up stream from the mouth of the creek. This glacial till gravel has been partially removed by mining and where hydrauliced or sampled has had an average value of 15¢ a cubic yard. (new gold price).

In 1930 the French Company when hydraulicing the glacial till 2000 feet from the mouth of the creek uncovered for a short distance the top of the underlying channel gravels. A shaft known as the Strand Shaft was put down in the bottom of the hydraulic pit. It encountered bedrock on the right limit rim 27 feet above the main bed rock level. The shaft averaged \$1.00 per cubic yard.

An inclined shaft downstream from the Strand Shaft was then sunk to bed rock. This shaft, with a vertical depth of 82 feet, cut three major pay streaks - the Moran, Strand and Bedrock. In addition to the pay streaks gold is

distributed throughout the gravel - from rim to rim and from the surface to bed rock. In fact the Moran, Strand and bed rock level in this section of the creek can be considered as one pay streak over 50' thick.

The Moran level is 50' above bed rock and was drifted for a short distance. The Strand level 20' above bed rock, and the bed rock level were drifted at intervals over a length of 900'. The three levels produced \$198,000.00 and averaged \$11.00 per cu. yd. When dredged this 900' of channel should produce an additional \$700,000.00. Up stream the three pay streaks will converge into one on bed rock.

The channel is 80 to 120 feet wide on bedrock, 80 feet deep and approximately 220 feet wide at the surface.

No mining on Otter Creek has been conducted by Atlin Placers, Ltd., but from 1939 a prospecting campaign has developed \$5,200,000 in 8,976,000 cubic yards of channel gravel in the lower 2.8 mile section of Otter Creek with an average value of 58¢ a cubic yard and 4,000,000 cubic yards of overlying glacial till averaging 15 cents a cubic yard. There is a possibility of developing additional gravel one mile upstream on Otter Creek and on the left fork, also down stream below line five.

The lower two tenths of a mile of Otter Creek has been prospected by means of one line of drill holes 300 feet below the drifted area and 35 large cut bulk samples taken underground in the 900 foot drifted section. Upstream from the drifted section 2.6 miles have been proven by one shaft 110 feet deep, two shafts 32 feet deep and 39 drill holes using 5" and 6" churn drills. The gold from two samples taken underground, one \$40 and the other \$20, was compared both as to weight and number of colors from two of the best drill holes. The results of these comparisons indicated that the drill values could be increased 100%. The average weight of the colors from the underground samples was 4.45 mgms. That of the two drill hole samples was 2.52 mgms. The underground sampling averaged \$1.70 a cubic yard from surface to bed rock.

PINE CREEK

Before the ice age Pine Creek, of which Otter is a tributary, traversed a gold bearing formation consisting of schists, serpentine and intrusive rocks for a length of 10 or more miles. Five tributaries, including Otter, cutting through this gold bearing area and all emptying into Pine Creek in the vicinity of what is now Surprise Lake, have produced approximately \$5,000,000.00 from gravels rich enough to be mined by hand methods. Otter Creek, because of its extreme depth, has been the least mined of any of these creeks.

A glacier formed in the Pine Creek valley, 16 miles long and in places forty five hundred feet wide. The glacier apparently was diverted from the Pine Creek channel about a mile below the mouth of Otter Creek leaving six miles of Pine Creek below the lake intact and covered by glacial moraine gravels from ten to sixty feet in thickness.

The original tertiary gravels are about 20 to 25 feet in depth. The gravel in the lower two miles of Pine Creek was hydraulized for a maximum width of eleven hundred feet. The government records show that \$2,500,000

came from this section at an average reported value of 60¢ per cubic yard at the old gold price. There was considerable gold mined and not reported. Later, one test of 21,000 cu. yds. showed from 7¢ to 25¢ remain in the tailings.

Due to lack of grade, hydraulicing stopped about four miles down stream from Surprise Lake.

Some drifting was conducted in this upper four miles of Pine Creek but the miners were badly handicapped in their efforts by depth and water. An attempt was made to dredge the ground in 1904 by a four cubic foot bucket dredge. The project met with failure because of the smallness of the dredge and its primitive design.

Since 1960 two separate attempts have been made to mine the partially drifted ground up stream from the old hydraulic operations. About one mile of the channel has been partially mined by open pits using a two yard shovel and a two yard drag line. The last pit mined in 1963 (as reported by Allan Mattson, one of the owners of the claims) was three hundred feet wide with 20 feet of partially drifted tertiary gravel and eleven feet of overburden. The tertiary gravel in the last pit averaged \$1.00 per yard for about 18,500 cubic yards. The ground was too deep for the equipment, and in 1964 they moved to Spruce Creek.

A lease on a 5% gross royalty was then obtained on the two miles of the Pine Creek channel known locally as the Gold Run Channel. In June 1967 Atlin Placers, L. T. D. located two miles of the Gold Run Channel from the Mattson property to the lower end of Surprise Lake. Unless a large portion of the channel below the lake has been scoured out by ice, there is a probable 8,200,000 cubic yards of gravel with an average value of 70¢ per cubic yard to be developed between the upper end of the Gold Run Channel extending down stream to the upper end of the old hydraulic operations.

It is proposed to drill the upper two miles of Gold Run and check the lower two miles. Also drill on lower Otter Creek below line No. 5 to determine how far the values extend below line 5. Drilling can be completed in the summer of 1968.

If gold values are found as is expected, a 12 cubic foot dredge can be moved from California or Alaska to Pine Creek in the winter and spring of 1970. We control a power site on Pine Creek four miles down stream from where dredging will start. 1750 HP can be developed under 100 foot head with one mile of ditch.

Based on past experience gained in dredging a coarse gold deposit on the Trinity River in California and on Caribou Creek in the Fairbanks District of Alaska, the recovery should exceed the drill results by \$2,500,000.00. (See appendix for more details.)

It is almost impossible to determine values accurately by drilling deposits containing a large percentage of coarse gold.

There are no Canadian Income Taxes except Provincial on the first 3-1/2 years of operations. Operating costs are based on U.S. dollars instead of Canadian.

CONSOLIDATION OF PINE AND OTTER CREEKSOPERATING STATEMENTPINE CREEK

Total yardage and values subject to drilling in 1968, assuming a width of 250 feet, an average depth of 51 feet and a length of 3-1/2 miles, total yardage would equal 8,500,000 cubic yards. With an estimated value of 70¢ a cubic yard, total recovery

	\$5,950,000
Royalty @ 5%	<u>297,000</u>
	5,653,000
Operating Costs, 8,500,000 cu. yds. @ 16.5¢	1,400,000

Profit before return of capital investment \$4,253,000

OTTER CREEK

Gold Recovery:

Gravel - 9,000,000 cu. yds. @ 58¢	\$5,220,000	} overall av. grade is 45¢ for 13,000,000 cu. yds.
Glacial till - 4,000,000 cu. yds. @ 15¢	<u>600,000</u>	
	5,820,000	
Royalty - 5% (See Note 3)	<u>291,000</u>	

5,529,000

Operating Costs - 13,000,000 cu. yds. @ 18¢ 2,340,000

Profit before return of Capital Investment 3,189,000

TOTAL GROSS PROFIT FROM PINE & OTTER CREEKS 7,442,000

Less cost of moving dredge from Pine to Otter 200,000

Hydraulic Equipment or Dragline 50,000 250,000

7,192,000

Return of working capital 100,000

Total profit before return of capital investment 7,292,000

Less return of capital investment (1,450,000 - 100,000*) 1,350,000

NET PROFIT BEFORE TAXES 5,942,000

It is proposed to drill Pine Creek in 1968 and if warranted, to install a 12 cubic foot dredge and a hydro-electric power plant in 1969-70. Dredging up stream would start in May of 1969 to the point where the channel has undoubtedly been eroded by the Surprise Lake glacier, about 3-1/2 miles distant.

The dredge, by dredging flotation, can then be moved to the lower end of Otter Creek, a distance of approximately one and one quarter miles, creating an attractive dredging operation at the present price of gold, with a probable 16,200,000 cubic yards of channel gravel and 4,000,000 cubic yards of glacial till gravel.

With a dredging season of 180 days at 9000 cubic yards a day, the dredging operation will have a minimum life of 14 years.

LEASES, OPTIONS AND EQUIPMENT

Atlin Placers, Ltd., has expended to date approximately \$360,000 in payment on leases and options, and in prospecting. This figure does not include engineering expense or overhead.

Atlin Placers Ltd., and the Walter W. Johnson Company will transfer their leases, locations and options for a 20% interest in a corporation to be formed and a loan of \$50,000 to be used to clear their obligations on the Atlin properties - \$15,000.00 at the time of signing any agreement and \$35,000 December 1st, 1968, upon taking over the option and the leases on the properties.

The Johnson Company did have a modern 12 cubic foot dredge designed and built in 1938 by the Johnson Company for a Minneapolis mining company under a R. F. C. loan. The dredge digs 75 feet below water and washes and stacks a bank 60 feet above water.

Possession of the dredge can be reestablished at a reasonable price. This dredge is particularly adaptable for Otter Creek as it has a large boulder ejector built into the dredge, and two 22 foot diameter sand wheels for placing excess sand on the stacker belt.

The dredge operated part time during the second world war and for a short time afterwards, dredging 275,000 cubic yards per month at a cost of 7¢ to 10¢ per cubic yard in heavy ground comparable to Otter Creek.

Should the values be found on the upper Gold Run Channel, the dredge will have four to five seasons work on Pine Creek before reaching Otter Creek.

The gold in the Atlin district is unusually coarse. On Otter Creek 28% of the gold weighs in excess of 8¢ per color, making accurate prospecting by the use of drills impossible. Nuggets worth \$300.00 to \$1200.00 have been found on every creek that drains into Pine Creek down stream from Ruby Creek.

Fortunately, we have had the unusual experience of finding a large

profitable dredging project on the Trinity River in California by checking drill holes with shafts after the property had been drilled by three major companies.

One shaft placed over a 10¢ drill hole averaged 54¢ per cubic yard and later when dredged the area around the shaft and drill hole averaged 50¢ per cubic yard for 39,000 cubic yards.

In later years the same experience was encountered on Caribou Creek in the Fairbanks District of Alaska. In the upper part of the creek the values over ran the drilling 300%. One \$325.00 nugget was recovered.

NOTES:

1. There are no Canadian income taxes except Provincial on net profits during the first three and a half years of mining operations.
2. Operating costs are based on U. S. dollars and if the Canadian discount rates should continue, net profits would be increased by approximately \$200,000.
3. The French Company's royalty ceases after it has received \$375,000, less \$18,500 paid on account. Yearly advance payments of \$5,000 will probably have to be made to the French Company and to Atlin Placers, Ltd., until the dredge starts operating on Otter Creek.
4. The value of 70¢ per cu.yd. has been used on Pine Creek for the reason that Pine Creek values have been established by drilling, then mined to bed rock by open cuts showing an increase in values of 58% over the drill hole values.
5. 2.8 miles of lower Otter Creek have been drilled. 1000 feet have been partially drilled. Check tests show in every instance that when mined the recovered values will exceed the drill values by over 100%.

The values used on Otter Creek are those found by drilling and have an average of 58¢ per cubic yard. Using a 50% increase factor, Otter Creek should produce \$2,500,000.00 over that shown on page 7.

6. Using the values of 58¢ per cubic yard based on drill results on Otter Creek, the net profit before income taxes is \$5,650,000, or an average profit of approximately \$404,000.

Since the dredging ground lies on two separate creeks, it may be possible to form a separate company for each creek, increasing the time to seven years, before the payment of Federal income taxes.

OPERATING COSTS - 12 CU. FT. DREDGE
PINE CREEK AND OTTER CREEK, ATLIN DISTRICT, BRITISH COLUMBIA
OPERATING SEASON - 180 DAYS

Wage schedule is slightly higher than the wage agreement extending through 1965 between the Yukon Consolidated Gold Corporation, Ltd., Dawson, Yukon Territory, and the International Union of Mine, Mill and Smelter Workers.

	OTTER CREEK	Per Month
1 Dredge Master	\$12,000.00 per year (6 months per yr)	\$ 2,000.00
1 Bookkeeper	\$ 9,000.00 per year (6 months per yr)	1,500.00
3 Winchmen	\$2.00 per hour - \$570.00 per month	1,810.00
6 Oilers	\$1.65 per hour - \$475.00 per month	2,850.00
3 Nozzle Men	\$1.60 per hour - \$460.00 per month	1,380.00
1 Machinist	\$2.00 per hour - \$570.00 per month	570.00
1 Electrician	\$2.00 per hour - \$570.00 per month	570.00
1 Welder	\$2.00 per hour - \$570.00 per month	570.00
2 Shoremen	\$1.60 per hour - \$460.00 per month	920.00
*2 Dragline Operators	\$1.90 per hour - \$550.00 per month	1,100.00
2 Oilers	\$1.65 per hour - \$475.00 per month	950.00
1 Cat Driver	\$1.70 per hour - \$485.00 per month	485.00
1 Truck Driver	\$1.60 per hour - \$460.00 per month	460.00
3 Power Plant Operators	\$1.65 per hour - \$475.00 per month	1,425.00
		17,390.00
	Compensation Ins. Benefit, etc. -20%	3,478.00
		\$20,868.00
Renewal parts for dredge, dragline, tractor, truck @ 6¢ per yd.		16,500.00
Dredge Ins. - \$600,000 @ 2% equals \$12,000.00		2,000.00
Boarding House Loss & Allowance for Married Men		1,500.00
Administration, etc. - \$30,000.00		5,000.00
Travel, Telegrams, etc.		600.00
Ditch Upkeep		500.00
Diesel Oil, Gasoline, Grease, etc. - Average		3,000.00
Contingencies		2,000.00
	Operating Costs per Month	\$50,868.00
\$50,868.00	18.¢ per cu. yd.	
275,000 cu. yds.		

*NOTE: For recasting excess tailings behind stacker on Otter Creek when dredge is operating with a 50 foot high bank above water level. It is not expected to use a dragline on Pine Creek.

ADDENDUM TO DREDGE OPERATING COST SHEET

The wage scale as shown on page 8 of the brochure was increased last spring over the Union agreement rates. As an example, the Winchman rates were scheduled at \$2.00 per hour. Due to a wildcat strike the Winchman's rate was increased to \$2.37 per hour. Corresponding increases in other classifications amounted to an increase of about 18-1/2%.

The dredge, while operating on Pine Creek, will not use a drag line for stacking tailings thus eliminating two operators and two oilers, also the three nozzle men, resulting in the saving of \$3500.00 a month in wages plus fuel for the drag line.

- started operating in 1938

$$\begin{array}{r} 6 \overline{) 125,000} \\ \underline{20,000} \end{array}$$

$$\begin{array}{r} 6 \overline{) 20,000} \\ \underline{125,000} \end{array}$$

$$65 \overline{) 20000}$$

$$\begin{array}{r} 20 \quad 5280 \\ \underline{21120} \end{array}$$

$$\begin{array}{r} 20 \text{ hrs} \\ \underline{0} \\ 120 \text{ holes} \\ \underline{60} \\ 6000 \text{ ft.} \\ 8.5 \end{array}$$

$$\begin{array}{r} 18000 \\ \underline{15000} \\ 30000 \end{array}$$

CAPITAL INVESTMENT

Capital required to purchase and move a 12 cubic foot gold dredge from LaGrange, California to Pine Creek, Atlin, British Columbia

	<i>Sept. 12/62.</i>	
Dismantling	<i>\$100,000</i>	\$100,000
Compensation insurance		10,000
Loading on truck at LaGrange, 1800 tons @ \$2.00		3,600
Trucking to Stockton @ \$9.00 a ton	<i>16,920</i>	16,200
Unloading at Stockton @ \$2.00 a ton		3,600
Loading on barge @ \$2.00 a ton	<i>6,000</i>	3,600
Port fees	<i>1,000</i>	1,000
Ocean freight, barge from Stockton to Skagway by contract	<i>57,500</i>	57,000
Unloading at Skagway @ 4.00 a ton	<i>6,000</i>	7,200
Marine insurance, \$800,000 @ 1%	<i>4,000</i>	8,000
Rail freight to Whitehorse	<i>70,000</i>	70,000
Truck freight to Pine Creek @ \$15.00 / <i>ton</i>	<i>38,000</i>	27,000
Preparation of site for erection		2,500
Rental of crane for erection		10,000
Erection of dredge	<i>160,000</i>	160,000
Compensation insurance	<i>15,000</i>	16,000
Overhaul of dredge machinery	<i>25,000</i>	26,500
Additions to main drive motor, grids and wiring		20,000
New electrical wiring and repairs	<i>5,000</i>	7,500
Shore cable	<i>10,000</i>	10,000
Wire rope (new surplus)	<i>5,000</i>	5,000
New riffles	<i>5,000</i>	5,000
Sand blast and paint	<i>10,000</i>	10,000
Dredge pond	<i>10,000</i>	5,000
Stacker cover	<i>5,000</i>	5,000
60 H. P. boiler for heat (used)		6,000
Lumber, canvas for roof, hardware, galv. siding, paint	<i>10,000</i>	12,500
Small machine shop, building, tools (heavy machine work will be done in White Pass R. R. shops, Whitehorse)	<i>30,000</i>	20,000
Purchase camp on Spruce Creek, move to upper Pine Creek	<i>30,000</i>	25,000
D-8 Tractor with bulldozer (rebuilt)	<i>30,000</i>	30,000
One 10 ton truck, one pickup, one station wagon, 1 jeep	<i>20,000</i>	20,000
Freight on above	<i>10,000</i>	5,000
Retort house		1,500
Transportation of men		6,000
Telephone and telegraph		2,500
Engineering and O. H. dismantling and erecting dredge		50,000
1750 H. P. hydro-electric power plant installed at lower end of Pine Creek Canyon, including freight	<i>100,000</i>	225,000
Butler type building, 40' x 80'		15,000
Crib dam, 1 mile of ditch, penstock, 1000' 48" pipe		25,000
Power line - 4 miles	<i>8 miles - 40,000</i>	16,000
2 Drills, including engineering for 1968 drilling program		125,000
Contingencies	<i>50,000</i>	50,000
Working capital	<i>100,000</i>	100,000
Purchase of dredge (\$75,000 cash and \$75,000 from production)	<i>750,000</i>	75,000
Advance to Atlin Placers Ltd., for its lease and option on Otter Creek (to be repaid from 50% of its 5% royalty returns)		50,000
TOTAL CAPITAL INVESTMENT		\$1,449,200

Walter W. Johnson
Walter W. Johnson, M. E.

12 CUBIC FOOT BUCKET GOLD DREDGE

Designed and built by The Walter W. Johnson Company, San Francisco, California.

Sixty foot high bank in front of Dredge is broken down by a hydraulic monitor, installed in the front gantry.

3,000 gallons of water per minute under a two hundred fifty foot head, is pumped from the dredge pond, by a 10" centrifugal pump, to the monitor, which operates automatically.



