

1899 - Empties into the south side of Surprise Lake. No work to speak of, has been done below the Upper Canyon, as the bedrock is too deep. Above the Upper Canyon, fairly good pay dirt has been obtained and plenty of work done. Several leases, both bench and creek, have been granted on this creek. *claims 100' x 100'*

122 g

1900 - A little work has been done on this creek by individual placer miners only, consequently the results are small. However, many leases have been taken up and considerable prospecting done, with a view to locating pay gravel. It is reported that considerable work will be done on this creek next season by various companies. 122 ounces gold taken.

1901 - No placer miners have worked on this creek during the past season. Messrs. Moran and Carmichael are operating some leases on the upper portion of the creek and the following is the report of their operations;- During the summer a ditch was constructed fourteen hundred feet in length and twenty-two hundred cubic yards of gravel, which paid well, were washed. It is intended to further prospect the ground to locate the pay gravel.

1902 - On Otter creek no work was done below the second canyon, but above this Messrs. Carmichael and Moran who, with their friends, have acquired a considerable area, with commendable persistence prospected the ground last winter by drifting in several directions, and with very excellent results. A stratum of gravel was found under the silt which had been formerly accepted as bedrock. Four men were employed all the summer and a small prospecting plant installed, lumber and supplies being taken in with pack horses. About 2,500 yards were washed, with such promising results that a local syndicate has been formed to work the property extensively. The plant of the Pendugwig Hydraulic Mining Company, on Wright Creek, has been purchased by the syndicate and is being moved to Otter creek. Houses and stables have been erected, wagon roads built and all arrangements perfected to have the large plant in operation by May, 1903. From 15 to 20 men are at present working on the ground. Prospecting showed this gravel to average \$1 per cubic yard.

Upper Ca

thick?

*1902
\$1 per cu yd*

170 g

The lower part of this creek, for five or six miles, has been held under leases, but, the conditions not having been complied with, these were cancelled. The ground has, however, been to a considerable extent re-located in leases, and will be prospected as a dredging proposition in the near future. 170 oz.

*Some interest
of upper portion
of adjacent
benches.*

1903 - On Otter creek, the Otter Creek Hydraulic Company, Limited, under the management of Mr. J.H. Brownlee, P.L.S., installed a hydraulic plant and did considerable dead work, but owing to the supply of water failing early in the season no large returns were secured. I regret to say that the manager neglected to supply me with data from which to give a more extended notice of the property and operations. (report since found and following extracts made)-
"This company has acquired Messrs. Carmichael & Moran's lease on Otter creek, consisting of 3 miles of the upper portion of the creek and the contiguous benches. The property has been successfully prospected by the former owners with excellent results, No. 1 & 2 pits being opened up. The plant installed by the present company during 1903 may be summarised briefly as follows:- "Five

2..... Otter Creek

1500 c.f.m.

1903 - contd - "thousand feet of supply flume, carrying a maximum flow of 1,000 inches of water, the supply pipe consisting of 2,000 feet of 12, 14 and 16 inch double rivetted No. 14 gauge; intake pipe, 28 inches, connecting with pressure box with sand tank, etc., all on solid gravel foundation, 246 feet above present workings; three No. 4 monitors with Hoskind deflectord; bywash consisting of 1,500 feet of ditch and 400 feet of double 12 inch pipe-line. The bed-rock flume, 30 inches wide and 40 feet long, has been extended 150 feet. There is a full equipment of tools, blacksmith's supplies, etc. and a commodious dining-room, bunk-house, cook-house, foreman's cabin, blacksmith shop, tool-house, powder-house, stable and other buildings have been erected.

Maintenance Camp - 1st used for ops on upper creek upper Otter Cr 80' x 41 pay streak

"Development began on July 1st. 1903, an opening being made 1,000 feet below No.1 Pit; the rim was blasted out and the old channel, prospected by the former owners, was reached just as water gave out. A tunnel was also driven across the channel, which is 80 feet wide with a 4-foot pay-streak and a splendid bedrock grade up stream, with satisfactory results, and everything is in readiness for beginning work in 1904. Surveys have also been made for conserving dams." "The company has also acquired 160 acres of bench ground below the present workings, which it is intended to prospect with Keystone drill. The principal owners (Mr. Switzer and associates) also have a lease of three miles of Flat creek ground which it is proposed to dredge." "The company is in good financial condition and the outlook is most encouraging". 28 oz. of gold taken. reported

28 oz

1904 - On this creek the Otter Creek Hydraulic Company, Limited, did considerable work on the leases held under bond from Messrs. Carmichael, Moran et al, but early in the season closed down, with, I understand, the intention of abandoning any further claim under the bond. The owners are still confident as to the value of their property, and claim that it is quite capable of profitable operation by properly utilising the available supply of water, the scarcity of which is the greatest difficulty.

upper Otter Creek

1905 - Beyond the operations of four of five men prospecting a group of leases near its mouth, nothing was done on this creek during the summer, but Mr. Carmichael is on it this winter preparing for extensive operations next season on the group of leases on Upper Otter held by himself and partners, which have recently been re-conveyed to them by the Otter Hydraulic Co., which failed to perform its part under the bond held on the properties.

1906 - On this creek we have another evidence of plucky perseverance and faith in the ground which, I am glad to say, promises to be well rewarded. I refer to the operations of Messrs. Carmichael & Co., who own the Otter Creek Consolidated Group of hydraulic leases, situated on upper Otter creek, acquired and for a time held by the "Otter Hydraulic Co. Ltd." and reconveyed last year to Messrs. Carmichael and partners, the original owners. These operators commenced in April to move the plant, pipe lines, etc, and did a large amount of dead work, including the laying and riffling of 240 feet (lineal) of sluice flume, 2' by 3' and laying a long length of supply pipe. They commenced piping on May 22, and between then and the 10th of Oct., when their sluices froze up, with an average force of 5 men and a very limited supply of water, they washed down 26,000 cu. yds. of barren dirt and over 10,000 cu. yds. of "pay gravel" from which they obtained, approx. \$4,000 worth of gold. They have left their plant and pits in excellent shape for an early start and successful operations next season. The banks

upper Otter Cr.

10,000 cu yds 2000 lbs 10,000 cu yds = .02 g/cu yd at 100% = 200 lbs = 400 lbs @ 25%

equiv to 400' x 80' x 8.5' -> 20,000 cu yds @ 100%

1906 - contd.

81-12'
x width?
e 504/cy

on which they operated average about 18' in height with from 8 - 12 feet of pay gravel, yielding from \$2.34 to \$3.46 per sq. yd. of bedrock and over 50 cents per cubic yard. This property is now owned by a small "close" corporation which has several leases of apparently good ground, and a plant is installed consisting of about one mile (5,240 feet) of supply ~~600 feet of sluice flume by 30 inches, No. 3 Giants, 3,600 feet of steel pipe lines,~~ flume, 20 inches by 30 inches, 3,600 feet of steel pipe lines, 600 feet of sluice flume, two No. 3 Giants, the usual supply of mining tools, blacksmith shop and outfit, and very comfortable dwelling house, cabins and barn. I believe it is intended to establish a system of reservoirs next season, for which the physical conditions are said to be favorable, so that very good results may be expected from future operations.

Upper G.
7 cy

Another group of leases on lower Otter is held under bond by Messrs. Maluin, Jamieson & Co., who did considerable prospecting on them last season, with, I believe, very encouraging results, and I understand all preliminary arrangements have been made for the installation of an hydraulic plant next year.

255 oz

Gold recovered - Companies 255 oz., \$3,952.00 value, \$39.05 royalty

Upper G.
20,000 cy
345 g

1907 - Otter Creek - On this creek Messrs. Carmichael, Moran and Company (the Otter Creek Development Company) who own the Otter Creek Consolidated group of hydraulic leases, situated on upper Otter creek, worked with a force of 5 men throughout the season, and were again rewarded by very fair returns. They commenced operations on April 25th and continued until October 21st while active piping was carried on from May 25th to Oct. 15th. During this period they moved about 20,000 cu. yds. of gravel, uncovering over 2,000 sq. yds. of bedrock from which they recovered gold averaging upwards of \$2.50 per sq. yd. of bedrock. They also constructed dams for the conservation of water and performed other dead-work which is calculated to enable them to make a much ~~xxx~~ improved showing next season.

Lower
Otter

On lower Otter creek the Otter Creek Hydraulic Gold Mining Company, which controls a group of 11 leases, under the superintendence of Mr. M.R. Jamieson, had a crew of from four to eight men employed from June 1st. to October 15th. preparing for the installation of hydraulic plant, in the course of which was constructed about 2,100 feet of ditch and flume 4' x 3½' with necessary head dams, etc. and a larger dam on the "divide" between Otter and Spruce Creek, thus establishing a reservoir capable of conserving a large quantity of water. Everything is in readiness for the installation next spring of a hydraulic plant, with which to at once commence operations and be able to make a fair showing before the end of the season.

Gold recovered - Companies 345 oz., \$5,347.50 value, \$66.95 royalty

30,000 cy
269 g

1908 - Otter Creek - On the upper portion of this creek the Otter Creek Development Co. under the management of Mr. J.E. Moran, operated with 6 men, and, notwithstanding shortage of water, moved 30,000 cu. yds. of gravel, built 2 nes storage dams, etc., and I understand are in good shape for next season's work.

On lower Otter Creek, the Maluin Syndicate (which is last years report was desingated the 'Otter Creek Hydraulic Gold Mining Co.')

Where? ->
Could be
App. 07 of
upper traverse
3220/3220 + etc
over

brought in a hydraulic plant over the ice and commenced installation work about the 1st. of May, had it installed and water turned on in 2 No.4 giants with 6" nozzles on May 26th and throwing a stream estimated at 1,200 miners inches under 150' pressure. With an average force of 8 men, they operated until Oct. 15th during which time they moved about 112,000 cu. yds. of material cutting through the northern bank of Otter Creek, where at one point it was 103 feet deep, so as to gain access to Surprise Lake for dumping purposes. They laid about 1050 feet of Blume 40" x 40", paved with 8" x 8" x 8" riffle blocks, which is laid on a 3% grade, and when operations were suspended the outer end had an elevation of 53 feet above Surprise Lake, and the inner pit end was 25' velow the surface of the creek bed but still not on bedrock. With a view to prospecting the ground and ascertaining where bedrock is, they commenced a shaft in the pit near the upper end of the flume, and with a steam pump and hoist are sinking and drifting from that point. They have also built another storage dam, half-way up the valley (say 2½ - 3 mi.) which is 250' long and 16' high, with provision for raising it to 20'. It is well constructed and provided with spillway etc, to accomodate surplus water. The installation of the plant and the constructions of this dam was superintended by W.H.Brethour of Victoria. Should the pay in the gravel on this property prove as good as the prospects indicate, this syndicate, which controls 11 leases, will be found to possess a very valuable property.

Gold reported 1908 - Companies 269, oz., \$4,160.00 value, \$40.00 royalty

all from
upper Otter Cr

1909 - Otter Creek - On the upper portion of this creek the Otter Creek Development Co. under the management of J.E.Moran, operated with 6 men fro the first 2 months and with 5 for the rest of the season. There was uncovered about 3000 sq. yeds of bedrock and about 54,000 cu. yds. of gravel were moved, working against a face of about 50' in height. The gravel appears to be well charged with gold, but, unfortunately, the early cold snap prevented the cleaning up of bedrock, so that the full results of the seasons operations are unknown. The gold will all be recovered early next season.

Upper
otter

later
proved
+ dam

On the lower part of Otter Creek the Maluin Syndicate continued piping to reach bedrock, but had not quite succeeded when the first cold snap compelled it to close down. The operations, which were carried on under the superintendence of W.H.Brethour, were commenced on May 10th and closed down about October 20th. The company began the season by enlarging the supply ditch, moving the pressure-box about 1,000 ft. upstream, and repairing damage caused by the bursting of a reservoir near the head of the creek. Piping with 2 No. 4 giants with 6" nozzles was carried on from June 7th until Oct. 20 but as the piping was against a bank, of about 140' in height, progress was not rapid although a large amount of material was moved.

"Lower"
otter

During the season a storage dam, partly built last season about half-way up the valley, was completed and utilised, with very satisfactory results. During the season's operations the present creek-bed, or channel, was piped into the cluice and a fair amount of gold recovered, but what they are seeking is the old channel which appears to lie beneath this immense bank of gravel, the removal of which it fortunately possess or can procure. The company is sanguine of reaching bedrock early in the coming season and realizing the anticipations of rich pay thereon.

dam at
2½ - 3 mi.
from mouth
of Otter Cr

1910 - Otter Creek - On the upper portion of this creek the Otter Creek Development Co. under the superintendence of J.E.Moran operated from the 28th of April until Oct. 17th with a force of 4 men, and during that period moved about 30,000 cu. yds. of gravel and uncovered about 1000 sq. yds. of bed-rock. The results were rather disappointing, the expectations expressed at the close of the previous season not being realized. (little golden bedrock)

On the lower part of Otter Creek the Maluin Syndicate with a force of from 8 to 18 men - an average of 14 - under the superintendence of W.H.Brethour, continued to search for bedrock, in the prosecution of which a large amount of overburden (over 250,000 cu. yds) was moved, but owing to a succession of unfortunate accidents, the hydraulic operations were suspended about the 1st. of August and the desired goal was not reached. This outfit commenced operations on the 8th of May and things were going along satisfactorily until June 29th when a reservoir dam, situated about 3 mi. upstream collapsed and the consequent rush of water destroyed the intake and a portion of the supply ditch carrying away about 600 ft. (lineal) of the lower end of the sluice boxes and filling pits with debris many feet deep. About the end of July another reservoir dam located about 5 mi. upstream, gave way and with it all the reserve water was lost, and so hydraulic operations were compelled to cease. For the balance of the season all energies and resources were directed to repairing and rebuilding the ditch, dams and flumes, diggign other ditches, sinking and driving prospecting shafts and tunnels etc. until, finally, they were compelled to close down because the pumps used in the prospecting shaft were unable to control and dispose of the inflow of water. Operations are expected to commence very early next season, with the hope of reaching bed-rock and washing considerable pay-gravel before the close of the season.

1911 - Otter Creek - On the upper portion of this creek the Otter Creek Development Co. under the management of J.E.Moran, with a force of 5 men, commenced operations on May 1st. and continued until Oct. 25th.

About 40,000 cu. yds of gravel, from banks about 30' in height, was washed down hydraulically, and, although the returns were a little better than those of the previous season, they were still rather disappointing.

On the lower part of Otter Creek the Maluin Syndicate with W.H.Brethour as manager, with a force of from 5 to 15 men (with an average of 7), commenced operations on April 6th and continued until Oct. 2nd. Prospecting, by means of shafts as during the previous season, was continued for a short time and then abandoned for a Keystone driller, with which 21 holes were sunk to bedrock at alternate cross sections on the creek, the results from which were very encouraging; in fact, I believe that in no instance did they fail to find gold where bedrock was reached; the average depth of the channel was found to be about 44'.

Hydraulic operations were prosecuted from August 2 - Sept. 30 and a large quantity of overburden disposed of.

A new ditch, about 8000' farther up than the present working ditch, was commenced and partially constructed; when completed it is expected to supply water at a vertical head of 298 feet.

upper
30,000 yds
poor results
"lower"
Otter Cr.

upper
40,000 yds
poor results

1911 contd. Otter Creek

An additional supply of hydraulic pipe, aggregating 5,300' in length and averaging 30" in diameter, is expected in upon the opening of navigation, so that good results may be expected during the next season.

Upper
1912 - Otter Creek - On the upper portion of this creek J.E. Moran with a force of 4 men commenced operations on April 25th but owing to the scarcity of water only 3 men were working during the latter part of the season. The returns were about the same as in former seasons in proportion to the amount of gravel moved, and over \$1 per sq. yd. of bed-rock uncovered was secured. The banks were about 30' deep. Operations were closed down Oct. 28th.

Lower
On the lower part of Otter Creek the Maluin Syndicate, under the management of W.H. Brethour, continued the development work commenced 2 years ago, and, with a considerable force, running from 10 - 30 men, was engaged throughout the season installing pipe-lines and hydraulicking out a foundation for ditch and pipe-line and to reach bedrock. During the season nearly 6,000 feet of new hydraulic pipe running from 16 - 32" diameter, was installed at a cost of nearly \$16,000 and altogether an expenditure of about \$35,000 was reported in addition to that reported for previous seasons. This installations, when completed will be extensive and well equipped, and will doubtless give a good account of itself when mining is once more permanently undertaken.

1913 - Report made by Atlin Gold Commissioner to Victoria

Upper
OTTER CREEK - On upper Otter creek J.E. Moran assisted by three others, operated throughout the season, and when overtaken by the early freeze-up, was compelled to leave the greater part of the results of his last pit unrecovered, and will therefore have an easy clean-up to commence with in the spring; results secured, however, even as it was, were better than for the previous year. A new dam was built during the season which will enhance the efficiency of the water supply.

"Lower"
rock sluiceway (map) under east bank
On lower Otter creek the Maluin Syndicate, under the management of W.H. Brethour and the general superintendence of Henry Maluin, with an average of twelve men, continued working down towards bed-rock, as in former seasons, commencing May 15th and closing down on October 20th. During that period of operation about 150,000 cubic yards of earth and gravel is reported as having been moved, besides making a sluiceway through rock for about 400 feet, with an average depth of 8 feet. This heavy "dead-work" has been rendered necessary in order to follow the "pay" which a Keystone drill and other prospects-work had disclosed as swinging out of the creek and under a high bank of gravel. It is expected that "pay" on bed-rock will be reached next summer. This work is being done by water, under pressure, and the debris is carried down towards Surprise Lake, which provides excellent dump-room.

west rim swinging eastward under high bank of gravel
Other work done during the season comprised the laying of 900 feet additional flume, moving camp buildings, re-enforcing dams, etc.

OTTER CREEK

1914?

On upper Otter creek J.E. Moran assisted by three others, operated throughout the season, and when overtaken by the early freeze-up, was compelled to leave the greater part of the results of his last pit unrecovered, and will therefore have an easy clean-up to commence with in the spring; results secured, however, even as it was, were better than for the previous year. A new dam was built during the season which will enhance the efficiency of the water.

On lower Otter creek the Maluin Syndicate, under the management of W.H. Brethour and the general superintendence of Henry Maluin, with an average of twelve men, continued working down towards bed-rock, as in former seasons, commencing May 15th and closing down on October 20th. During that period of operation about 150,000 cubic yards of earth and gravel is reported as having been moved, besides making a sluiceway through rock for about 400 feet, with an average depth of 8 feet. This heavy "dead-work" has been rendered necessary in order to follow the "pay" which a Keystone drill and other prospect-work has disclosed as swinging out of the creek and under a high bank of gravel. It is expected that "pay" on bed-rock will be reached next summer. This work is being done by water, under pressure, and the debris is carried down towards Surprise lake, which provides excellent dump-room.

Other work done during the season comprised the laying of 900 feet additional flume, moving camp buildings, re-enforcing dams, etc.

see 1913
identical

OTTER CREEK

1915 -

On upper Otter creek J.E. Moran continued his sluicing operations, and with a force of five men on an average moved about 20,000 cubic yards of gravel and uncovered over 10,000 square feet of bed-rock. The results were rather disappointing, but by accident "pay" was discovered during the season on higher ground that was being worked and where it was not anticipated, and it is Mr. Moran's intention to devote his attention to the operations of this ground during the coming season.

During the season a dam about 120 feet in length and about 10 feet in height was built to assist in the manipulation of the water-supply.

Operations were commenced on April 25th and piping on May 13 and continued until October 20th, when the approach of winter compelled them to close down and move to a lower altitude.

On lower Otter creek the Mines d'Otter, under the superintendence of W.H. Brethour and the general management of Henry Maluin, continued advancing its sluice-boxes up-stream about 750 feet and its flumes down-stream for dump purposes, and in so doing cut through banks averaging about 60 feet in height and moved approximately 150,000 cubic yards of material, but the season closed upon them before they had quite got the upper end on to bed-rock. Towards the end of the season, however, a prospect-hole was sunk in the pit, which revealed bed-rock and good pay at a very short distance below the grade of the sluice-boxes, so that it is confidently anticipated by the management that they can operate on bed-rock and in good pay-gravel for the greater part of next season, and so begin to recoup themselves for their heavy outlay.

Other work done during the season was the building of a by-wash, deepening ditches and strengthening dams, of which they have three, sawing riffle-blocks, and building about a mile of wagon-road from the Government wagon-road to the actual seat of main operations.

This outfit has now in operation about 9,500 feet of supply-ditches, three good dams and reservoirs and a long line of flumes and sluices, a sawmill and other plant, all of which, with the labour expended, represents an investment of many thousands of dollars, and it is gratifying to learn that bed-rock is so nearly accessible and that the "pay" is there.

As those operations were dependent upon French (Parisian) capital, I regret to say that they have been somewhat hampered in consequence of the war, but they have never actually been suspended as yet.

A force comprising an average of nine men was employed during the season of 1915, which covered the period from May 3rd to October 28th. Drifting operations were carried on last winter and again this winter-prospecting-and about ten men are thus engaged.

20,000 cy
Moran's

"Lower
Otter
Creek"

Declaration of Work by H. Maluin - 1919

The group of Lower Otter Creek - Mines d'Otter Creek Oct. 1919.
(Vinci, Otter, Louise, Crown, Bear, Lynx, Fox, Paris, Melborne,
Marheer, London)

*Bear Cr
Lease*
Work was mainly performed on the Bear Creek Lease and consisted of preparatory work in the spring, running sawmill, setting pipelines and monitors, cleaning ditches and flumes, strengthening dams etc. such work lasting from April 25 to May 15th and then the usual hydraulic operations during which about 200,000 yds of overburden and gravel were removed. The last piping was done on Oct. 17th. The number of men averaged 9 with an approx. payroll of \$9000. Total wxpenses amounted to about 16,000 - including explosives, horse and teaming, logging contracts, manager expenses, government fees, tools and supplies, lumber etc. An average of about 300 feet upstream was made without encountering the bedrock which however seems to crop up in the right corner of the last pit. Some gold but not in paying quantity, was encountered, as during the last 4 seasons, upon a false bedrock of hard clay. The depth of gound removed varied from 60 to 120 feet.

Report to Victoria for 1918 by Atlin Gold Commissioner.

Lower Otter Cr.

OTTER CREEK: The Mines D'Otter Creek, sup. J.E.Moran and general management of H.Maluin commenced operations on March 15 and with a force varying from a minimum of 4 to a maximum of 10 and an average of 6 carried on until the end of October. During that period about 1200' of new sluice flume was built and the sluice blocks renewed in the 3500' of sluice previously in use. About 200,000 cu. yds. of gravel were removed and about 40,000' of a hardpan bedrock which underlies the gravel in that portion of the valley was uncovered but the genuine bedrock was not reached and the operators were constrained to believe that it lies at a greater depth and below sluicing (hydraulic) grade and unfortunately the 'hardpan' was not found to carry gold in paying quantities which was disappointing as indications at the close of the previous Seasons operations led the operators to believe that at last they were on 'bedrock' and that thenceforth they would have plain sailing with profitable returns.

Note: intelligent on hardpan

There was exceptionally high water on this creek early in the season which threatened great damage and which was only averted by strenuous effort but after that passes there was rather a scarcity of water as there was very little rainfall in the locality.

An experiment was made during the season which it is hoped may, to some extent solve the formidable cost of riffling and maintaining long lines of sluices. This was the riffling of the sluice with heavy flat rocks held in place by sandboards and relieved by alternate rows of wooden (riffle) blocks.

The experiment is reported to have been quite a success and leads those operators to believe that it will be of material value to them.

Some years ago manganese steel plates were introduced here and worked very well but even they will wear out and the price of iron has advanced to such an extent that a satisfactory substitute will be hailed with delight by hydraulic miners.

Some drifting is being done this winter for the purpose of, if possible, locating genuine bedrock and better 'pay' and if they are successful in so doing, operations will continue next season providing sufficient satisfactory labor can be secured but if better 'pay' is not thus located it is probable those operations will be discontinued until conditions improve.

The average wage paid during last season was \$7.00 a day and this, taken in conjunction with the high cost of everything else, constrains those operators to believe that they will be justified in awaiting the return of more favorable conditions.

A fair amount of gold was won during the season but not sufficient to cover expenses.

Nothing worth mentioning was done on upper Otter this season.

Jan.15,1920 - brief report to Victoria covering 1919 season

OTTER CREEK - On Otter Creek about the same force of men as in former Seasons continued throughout the Season, but unfortunately did not reach the genuine bedrock which they so confidently expected to at the begining of the Season. This outfit has been wrestling with these conditions for about 10 years. every year expecting to make the bedrock and just securing sufficient gold above bedrock to encourage them to continue in the hope of realizing fair returns when bedrock is reached but is is disappointing to them and to all concerned and incidentally unfortunate for the District that their search is being prolonged so disappointingly.

1919 gold output - Otter Creek \$5440

1919 Season - Otter Creek / the Mines D'Otter with Mr. J.E.Moran as Foreman and H.Maluin as General Manager commenced operations May 1 and continued until the 1st of November and expended about \$6000.00 in a continued effort to hydraulic their way down to the solid bedrock upon which the pay-gravel lies from which they expect to be recouped for all their outlay and to secure a substantial profit as well.

*Lower Otter
200 foot
channel*
This Season's operations were mostly confined to widening the channel paralleling last Season's operations in order to determine its full width and also to recover the gold known to exist in the gravel over-lying a stratum of hardpan which acted as a sort of false bedrock and from which a certain quantity of gold has always been recoverable. The width of the channel was found to be a little under 200 feet.

In widening this channel it was necessary to remove an overburden about 140 feet in depth and in doing so a considerable deposit of glacial mud and clay ~~ex~~ was encountered which was ~~x~~ absolutely barren but which it was deemed necessary to remove to attain the desired information and results. About 220,000 cubic yards of material were thus removed to get down to the gravel.

A comparatively small quantity of gold was recovered this year and consequently a deficit of nearly \$10,000.00 was experienced but they had the satisfaction of finding an increasing quantity of gold near the upper end of their pit, which appeared to increase as they advanced, and also to find the hardpan bedrock (so called) giving place to hard (genuine) bed-rock and the apparent association of the increasing quantity of gold with the appearance of the hard (genuine) bed-rock encourages the hope and belief that next season will see them properly installed at last upon the real bed-rock of the Creek and that they may find thereon the rich pay which is confidently believed to exist there on.

Other work undertaken during the Season consisted in part of the repairing and re-riffling of about 2500 feet (lineal) of sluice flume; the dismantling, removing and relaying of about 1000 ft. of Pipe line, extending the "Wright" Creek water supply ditch about 1200 ft. strengthening the reservoir dam on the "Paris" lease etc.

The force employed throughout the Season varied from 6 to 10 men with an average of 8 men and the wages paid were on a basis of \$7.00 per day.

This Company certainly deserves success and encouragement for its tenacity and manifest faith in the potentialities of the Creek and it is to be hoped next season will afford it the relief and reward it anticipations.

Nothing beyond a little 'sniping' was done on Upper Otter this season.

Gold output 1920 - Otter Creek Individuals \$500.00
Companies \$10,100.00

Dec. 4, 1920 report to Victoria by Atlin Government Agent

*Am
\$10,100
+500.00*

OTTER CREEK: the Mines d'Otter Creek commenced operations on the 25th of April cleaning up ditches, flumes etc and operating until Oct. 17th with an average of 9 men and altogether expended about \$16,000 and only recovered about \$10,100.00. This gold which was recovered was lying upon false bedrock of hard clay but towards the end of the Season they encountered what appeared to be real bedrock in one corner of their pit and notwithstanding a number of just such experiences they intend to continue next season in the hope of recovering gold in paying quantities there from.

2 or 3 men were operating on Upper Otter Creek part of the Season but I have no return of the output which however I believe did not amount to very much so that I have placed the output from that Creek at \$10,600.00 although I believe it would run over \$11,000.00

→ Upper Otter @ \$500 - 1000

Dec. 9/1921 - Otter approx. \$14,500.00 Struck new paystreak

Dec. 15, 1921 - Government report - placer output Otter - \$12,500.00

Dec. 30, 1921 - letter from Atlin Gold Commissioner to Victoria.

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OTTER CREEK - On lower Otter the Mines d'Otter Creek under the Supertendence of Mr. Henri Maluin with Mr. J.E. Moran as foreman commenced operations on the 25th of April and continued until the end of Oct. during which period they advanced their sluices upstream about 250 feet and moved about 200,000 cu. yds of material but have not yet reached bedrock for which they are searching. This season operations uncovered about 40,000 sq. ' of a hardpan 'bedrock', such has been described in previous reports but no satisfactory amount of gold was found thereon. Near the close of the season however, a discovery of a stratum or deposit of really good 'pay' gravel on a somewhat high rim increased the Seasons output very materially - exceeding last years output by from 20 to 25% and encouraging the belief that good pay may be recovered from rather high levels in the benches as well as from bedrock when they reach it. A few men are 'drift' mining there this winter.

Oct. 10, 1921 from H. Maluin - Mines D'Otter Creek

Otter Creek gold recovered	4500
	2000
	<u>2100</u>
	8600 up to Oct. 14, 1921
	<u>3500</u>
	12,100

Grouping of leases on Otter Creek (report submitted by H. Maluin)
2 - Paris; 36 - Marten; 362 - Lynx; 363 - Bear; 381 - Fox; 404 - Crown;
548 - City of Paris on Wright Creek

Work on Bear and Lynx. Fifteen thousand since 20 day of April 1921 until end of Oct. 1921.

Usual hydraulic operations from 25 April to end of Oct. with an average number of 8 men per day - payroll totalling about \$10,000. About 200,000 yds. of material were removed and about 40,000 sq. ft. uncovered. Most of that surface was the hardpan already described and poor about $\frac{1}{2}$ of the surface was rim work and the values there were a little higher - Bedrock was not reached.

Sluices were advanced about 250' upstream. The cost of operations seems to exceed the gold recovered by several thousands dollars. Last clean up not made yet at this date (Oct. 10, 1921) Balance of expenses cover: Dynamite, lumber, horse hire, teaming, Mgr. salary and expenses, govt. rentals, provisions, tools etc. Late season better ground was uncovered on the rim of the left limit and outlook is more encouraging.

OTTER CREEK

1922 -

On lower Otter creek the Mines d'Otter, under the superintendence of Henri Malin, with J.E. Moran as foreman, commenced operations on April 25th and continued until the end of October, during which period they advanced their sluices up-stream about 250 feet and moved about 200,000 cubic yards of material, but have not yet reached bed-rock, for which they are searching. This season's operations uncovered about 40,000 square feet of a hard-pan bed-rock, such as had been described in previous reports, but no satisfactory amount of gold was found thereon. Near the close of the season, however, a discovery of a stratum or deposit of really good pay-gravel on a somewhat high rim increased the season's output very materially, exceeding last year's output by from 20 to 25 per cent., and encouraging the belief that good "pay" may be recovered from rather high levels in the benches, as well as from bed-rock when they reach it. A few men are drift-mining there this winter.

See 1921
identical

Oct. 21, 1924 - Mines d' Otter Creek - last cleanup \$1320.00

About \$4000 dollars were spent during winter from Nov. 1, 1923 until May 1, 1924 in trials to reach bedrock by shaft and drilling. No definite results were obtained on account of quicksand and water in the sinking attempts and boulders in the drifting attempt.

Hydraulic operations were retarded by the breaking of a gravel bank close to the dam at Blue Canon. The mine was partially filled up and considerable damage done. All the high water period was lost in repairing things and relaying pipeline. Hydraulic washing started on July 1st only instead of May 20th as usual.

Operations during the short period from July until October were conducted in a different place than heretofore - the idea being to prospect a high level bench, the result of that work was satisfactory; a new pay channel being located and enough gold won therefrom to pay all expenses of the mining season, including spring deadwork. Further efforts by drilling were made to reach the deep gravels, which must be rich in gold, but the boulders are too numerous to permit of drilling successfully.

Two(?) pay streaks have so far been proved to exist in the Otter Creek Valley, one being from 15 to 25 feet under the surface and resting on a high rim, the other being at an average depth of 80 feet under the surface and resting on a hardpan floor (false bedrock).

If the bottom pay streak resting on the deepest bedrock in the trough of the valley could be reached in the near future, successful hydraulicing could be carried on for a very long period of years.

There will be no work this winter.

Hydraulic will be resumed next spring.

Water was normal; labour satisfactory, but short at times.

It seems that the best plan to explore the deep ground is to hydraulic a new cut from Surprise Lake, deeper than the actual one - other prospecting seems absolutely worthless.

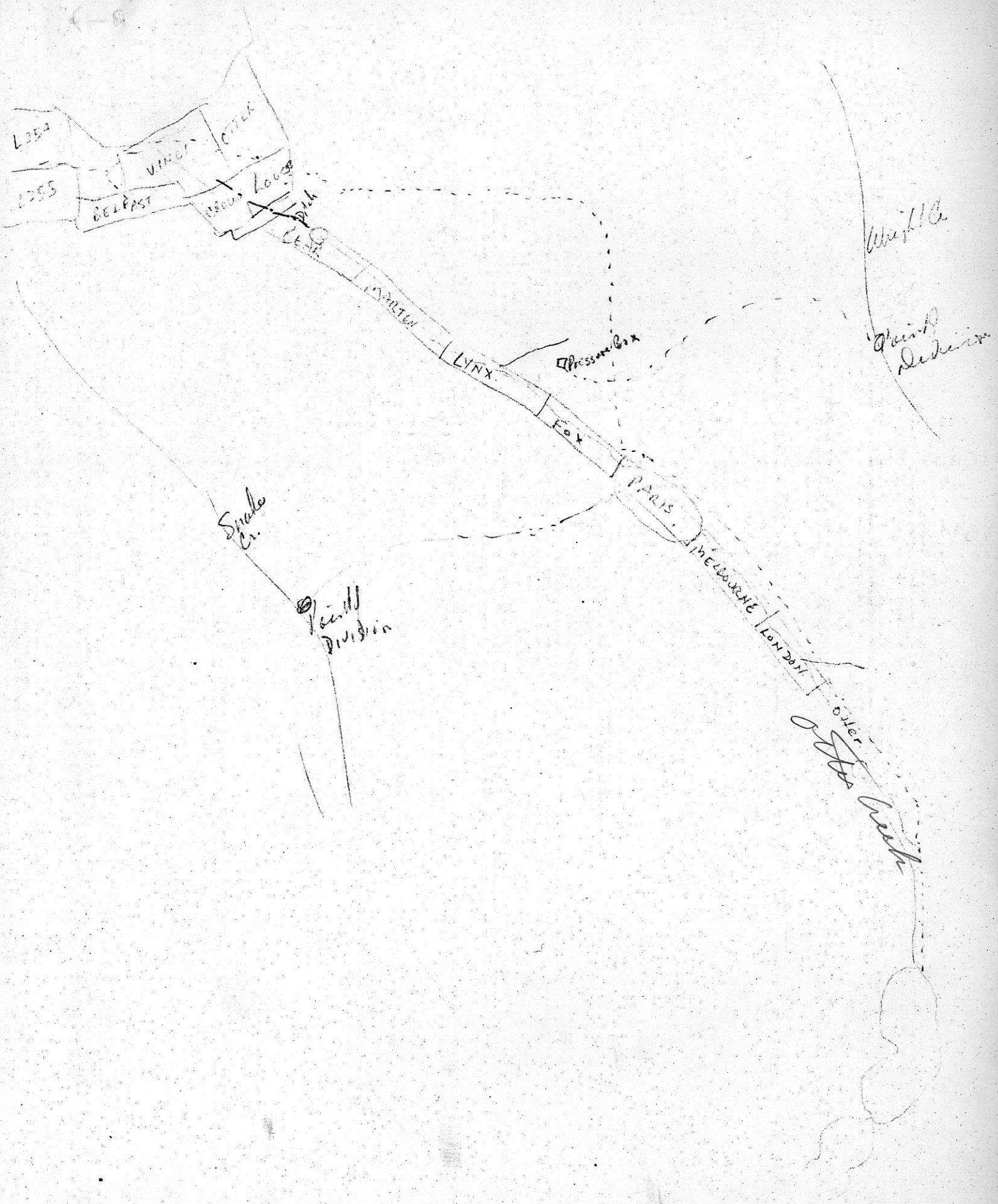
(signed) H. Maluin

**K*
per Reg. Davis
following
suggestion - ✓

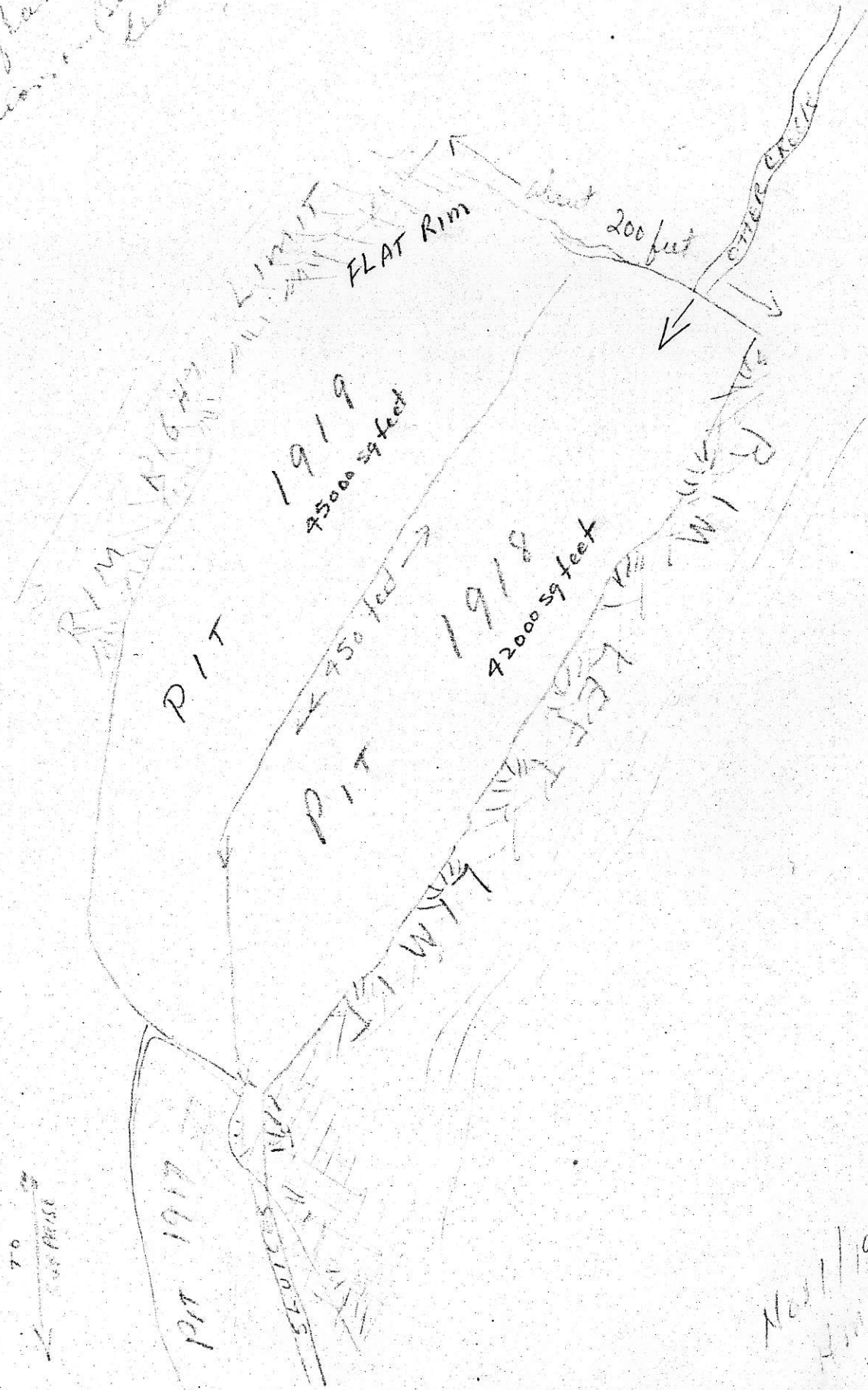
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Hand sketched plan of
Season Excavations on Bear
Creek



Nov 1919