

W.A. Coy W.M.S. COY.
INTERIM REPORT No. 1.
EXPLORATION-DEVELOPMENT
PROGRAM.
COULTER CREEK PLACER
FLEDMONT PLACER DEVELOPMENT
LTD. (N.P.L) OCT. 1964.

801093

INTERIM REPORT No. 1

EXPLORATION + DEVELOPMENT PROGRAM

AT THE

COULTER CREEK FLACER PROPERTY

WELLS AREA, B. C.

FOR

FLEURMONT FLACER DEVELOPMENT LTD. (N. P. L.)

VANCOUVER, B. C.

OCTOBER, 1964.

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EXPLORATION
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161 PEMBERTON AVENUE,
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October 15th, 1964.

Flourmont Placer Development Ltd., (N.P.L.),
575 Howe Street,
Vancouver 1, B. C.

Attention: Mr. John E. LaFleur:

Dear Sirs:

This report will summarize my October 4 - 5 field examination of your gold placer exploration-development project at Coulter Creek. I have also included some general observations, recommendations and related cost estimates.

The helpful assistance from Messrs. J. LaFleur, G. Lewis, and other Flourmont personnel are hereby thankfully acknowledged.

The June 16, 1964 request re quotations from, or abstracts of this report is respectfully *repeated*.

Respectfully submitted,

W. M. SHARP, P. Eng.

ms:gd.



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SUMMARY & RECOMMENDATIONS

The considerable progress in plant installation and exploratory work, for a reasonable expenditure, is encouraging.

Preliminary gold recoveries, as made on a very limited inspection of the 30 foot upstream section of the sluice boxes, appear to substantiate the earlier estimates of plus 30¢ per c.y. for "overburden" and plus \$5.50 to \$7.00 per c.y. for 6' - 10' depths of "bedrock gravels" sampled earlier in the exploration tunnel.

* Over-all mining costs and gold content cannot be determined until the first full-scale "clean-up" and volume calculations are made, which will be some months in the future.

The present program of exploration and testing, using a full-scale hydraulic plant is the most practical procedure in this particular situation. Churn-drill exploration would be unsatisfactory in view of the typically coarse nature of the gold.

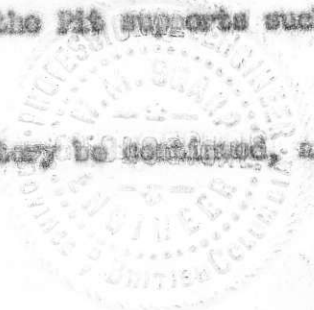
of the immediate deposit

The flatly-lying strata of overlying sands, boulder-clays, and gravels suggests a flat, or gently-dipping bedrock surface to the North of the existing pit margins. This feature would be favourable for the occurrence of additional "pay-gravels" at elevations well above the presently known creek-gravel deposit.

*These indications
have caused the
expansion*

The occurrence of further elevated gold-bearing gravel deposits would result from a repetition of bed-rock configuration, such as exists between the existing pay-channel and the present active channel of Coulter Creek. The bench-like topography to the North of the Pit supports such an inference.

It is recommended that the current exploratory be continued, and



so directed as to determine the cross-sectional potential of the deposit as expeditiously as possible prior to other exploratory efforts. In this connection, current geophysical techniques for determination of bedrock and hard-pan profiles should be seriously considered, and included in budgetary estimates.

The estimated cost of the contemplated field program for a 6-month period, and employing an average of 4 men per single shift, is estimated at \$1,000.00, before head-office costs, financing charges, and reserves for operating capital.



PRELIMINARY REMARKS

The objectives of the October 4 - 5 field engineering assignment were to accurately cross-section the current working section of the pit, to observe any new geological features of the deposit that may have been exposed since the June 3 - 4, 1961 examination, and to inspect the general mining plant, auxiliary equipment, and facilities during actual operating periods.

The cross-section details are shown on the appended sheets No's 1 and 2. The main items of the hydraulic plant and present pit outline are shown on sheet No. 1.

The present exploration-development program represents a re-activation of gold placer mining operations, within a formerly-productive deposit - using a more modern plant to more efficiently handle larger volumes of low-grade cover material, and possibly higher-grade "bedrock gravels".

Details of property, history, workings, general geology, and preliminary sampling are contained in the previous report and will not be reviewed here. Additional sampling was not considered practicable during the recent visit as the pay-gravel and bed-rock sections were generally obscured by overlying bank material recently excavated, and in-transit to the sluice boxes.

The gold recovered during the next major clean-up, with respect to volumes of overburden and bedrock gravels excavated, should provide reasonably indicative sample results. These, of course, should be evaluated with respect to the relative volumes of "overburden" and "bedrock gravel" handled.

Until further direct sampling is feasible or until bulk sample

figures may be derived from the foregoing clean-up results, the previously estimated grades of:

per "loose" c.y.
\$5.50 - \$7.00 / c.y. for 6' - 10' (?) depths

of bedrock gravel; and \$0.38 plus/ c.y. of the overlying sand-boulder-clay-gravel deposits are considered reasonably indicative.

Also, due to the current generally-obscured condition of the pit-walks, no major additions to the geological cross-section were possible. However, a thick bed of firm bluish boulder-clay, closely above the inferred "bedrock-gravel" section, has been partly exposed by current hydraulicizing. This is rather similar to material previously sampled in the back (roof) of the small prospect tunnel and may also contain appreciable amounts of gold.

*Oct. 1965
approx. hydraulicizing
rim of pit-walk
& overlying boulder
gravel &
this horizon*

ACCESS

A substantial log bridge over lower Coulter Creek was recently built. The Slough Creek Crossing has also been rehabilitated. The road from the Slough Creek turn-off has been repaired and relocated so as to provide easy access to ordinary two-wheel drive motor vehicles as far as the Camp. The section from the camp to the pit ($\frac{1}{2}$ mile approx.) is satisfactory for transport by four-wheel drive vehicles.

BUILDINGS

These now consist of:-

- (a) Kitchen-messhall with two attached bedrooms
- (b) Two 3-man bunkhouses
- (c) One Tool and Oil Storage Shed
- (d) One "Dry", with washing and changing facilities
- (e) Drag-line hoist-shed at the pit
- (f) Compressor and Tool Shed at the Pit
- (g) Miscellaneous small sheds.

MAIN HYDRAULIC PLANT

The following components, built or rehabilitated since last June, are shown on Map Sheet No. 1:-

- (a) Earth-fill dam and timber-steel intake structure
- (b) 500 ^{L.F.} C.F. supply ditch, from the dam to the 12' x 12' x 5' penstock-bypass structure
- (c) 300 ^{L.F.} C.F. of steel pipe; 24" - 20" - 18" - 11" diameters running downstream to the monitor
- (d) Monitor, with interchangeable No. 4 and 5 nozzles
- (e) 192 ^{L.F.} C.F. of 3' wide x 4' deep double-bottom sluice boxes, lined with steel plates and heavy rails; 120 ^{L.F.} C.F. of single-riffled 3' x 4' sluice boxes, lined with plate and rail; 360 ^{L.F.} C.F. of 3' x 4' discharge sluices. The above structure is mounted on timber sills sitting in an earth and rock cut on a 5% to 15% grade.

The up-stream approach to the sluice-boxes is via timber wing-structures.

The main reservoir is fed by two branches of Coulter Creek, and has been adequate for continuous hydraulicicking on 4 to 8 hour shifts. Additional "wash" water, or water for smaller auxiliary monitor may be obtained by diverting a fair-sized stream now flowing into the pit downstream of the current working area.

Southerly
cross sec. 4+00

AUXILIARY MECHANICAL EQUIPMENT

- (a) Dragline and double-drum hoist, powered by a Chrysler Industrial gasoline engine,

- (b) One 3/4 c.y. P.E. Loader,
- (c) Oliver C.D. 1/2 Bulldozer,
- (d) 125 C.F.M. Compressor, 2 end-dump mine cars,
- (e) Jack-leg Drill, hoses, steel, etc.,
- (f) Denver Mechanical gold-pan,
- (g) Pit Light-plant, Camp Light-plant,
- (h) Dodge 1/2-shovel drive Power Wagon with winch,
- (i) Miscellaneous Small Tools.

PERSONNEL - CURRENT

- (a) 1 Foreman - monitor man
- (b) 1 Dragline Operator
- (c) 1 General Equipment Operator-Mechanic
- (d) 1 Carpenter - General Handyman
- (e) 1 Cook

Mr. LaFleur has spent a considerable part of the Summer actively engaged on the operation.

DESCRIPTION OF OPERATIONS

The current program is mainly directed at the exploration and development of possible elevated hillslope, bench, or channel deposits on the North margin of the present pit. The present procedure of doing this by means of a full-scale hydraulic plant-plus auxiliary mechanical equipment - appears to be the most practicable under the present circumstances, as ^{a considerable proportion} the gold recovered to date is typically coarse (nuggets to plus 1/4"), it is unlikely that churn-drill exploration would

1960 - recommend of planting
channel across possible elevated
Seismic + possible direct
Application; feasibility
not estimate would
depend on these
results.

would provide comparable, or even closely indicative sample data.

The immediate objective is to examine a cross-section of the deposit in the vicinity of the prospect tunnel. The present inference is that this tunnel has partly penetrated the rim of a more northerly channel, or is situated within bedrock, forming an elevated, flat, or gently-sloping bench.

1965 work has substantially confirmed this inference; also exposing an underlying sect. of tertiary channel gravels - about 8-10' thick & extent not to be defined.

This exploratory excavation, and concurrent evaluation of the material excavated, is being done by monitor and drag-line. It is planned to bring in a ripper-equipped D-7 or D-8 dozer to speed up excavation of the overburden section of the deposit. Possibly an auxiliary cutting monitor, operating from a higher-pressure water supply, will be employed later on.

All of the material excavated is passed through the sluice boxes. Prior to the first major clean-up, the roughly-corrugated bedrock (schists) surface, up-stream of the sluices, will be ripped up and passed through also. A large proportion of the gold within the sluiced gravels will be trapped in the roughly-ridged bedrock floor.

Un-mined sections of the existing lower creek-channel deposit are being excavated and sluiced during the current program.

Bedrock gradients of 5% to 10% or more should expediate the above work.

GENERAL PROGRESS

The installation of plant, camp, and other facilities has been done efficiently and at reasonable cost, considering the rather extensive

and solidly-built nature of the plant, and the quantity of small mechanical equipment required for this stage of the operation.

Approximately 12,000 c.y. of excavation have been accomplished. The sluice-boxes appear to be operating efficiently, as an appreciable amount of both coarse and fine gold was recovered during an inspection of the upstream 30 feet of the sluice-boxes. A thorough clean-up will be made only after the water supply is inadequate for further full-shift hydraulicizing, and after the exposed bedrock has been ripped up and passed through also. By this time the sluice-box liners will be due for repairs.

<u>ESTIMATED EXPENDITURES</u>	<u>SIX-MONTHS</u>
Provis. Equipment Rentals.....	6,000.00
Rental - Dodge 1-wheel Drive.....	3,000.00
Light Plant & Repairs.....	600.00
Dragline Rental & Repairs.....	1,200.00
Provision D-8 Cat & Ripper @ \$250.00/day - 30 days.....	7,500.00
Miscellaneous Equipment.....	800.00
Steel Plate & Nail, Repairs, 10 Tons @ \$200.00/Ton.....	2,000.00
Fuel & Lubcs, except "D-8" Cat.....	1,000.00
Repair, Lumber & Other Material.....	500.00
Cookhouse & Camp Supplies.....	2,500.00
Labour - 4 Men @ \$100.00 / Mon.,ca. Plus Payroll Charged.....	10,500.00
Provisional, Engineering, Geophysical, & Miscellaneous.....	5,100.00
TOTAL, Excluding Head Office Costs, Financing Charges, and further provisions for working capital.....	\$ 41,000.00

Respectfully submitted,

W. H. SHARP, P. Eng.

October 25, 1941.

WHS:gd.

CERTIFICATE

I, W. M. SHARP, of North Vancouver, British Columbia,
DO HEREBY CERTIFY THAT:-

1. I am a Consulting Geological Engineer, with residence at 3200 Chestersfield Avenue, and offices at 161 Pemberton Avenue, North Vancouver, British Columbia;
2. I am a registered Professional Engineer in the Province of British Columbia;
3. I am a graduate of the University of British Columbia, with B.A. Sc. & M.A. Sc. degrees in Geological Engineering, and have practiced my profession since 1946;
4. I am not a vendor, member of the Board of Directors, or a regular employee of the Company to which this report is directed;
5. I have no interest, direct or indirect, in the properties or securities of the above company, nor do I expect to have any such interest;
6. This report on the property of Flourmont Flour Development Ltd., (N.P.L.) is based on personal examinations, the most recent being on October 4 - 5, 1964, and previous reports contained in the Annual Report to the Minister of Mines for the Province of British Columbia.

W. M. SHARP, P. Eng.

