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Geotechnical Consulting / Exploration Services

geology
geophysics
geochemistry

PROGRESS REPORT #77-3

Carolin Mines

Ladner Creek Project, Hope, B. C.

This progress report is to supplement earlier reports designated #77-1 and dated August 2; and 77-2 dated October 17, 1977. They pertain exclusively to the Idaho Gold Zone underground exploration and ancillary surface work at Ladner Creek, in the New Westminster Mining Division. For background information please refer to a report entitled "An Underground Exploration Proposal and Cost Estimate on the Idaho Gold Zone of Carolin Mines Ltd." dated July 14, 1976 by the author.

Since the 2nd of August, underground decline work has resumed on the main 500 (metre) east ramp after completion of the 600 (metre) north cross cut. The main decline was turned onto the 700 east mine latitude to become the 700 north cross cut. Advance for this period was 87 metres for a total advance (including the 68 metre long 600 cross cut) of 342.4 metres. (since collaring the portal on June 16, 1977.) The following categories describe progress in various areas of the program.

1. Personnel and Contractors

Carolyn Mines "in field" staff totals six men including Mr. David Griffith (B.Sc.) the project manager. The duties of Carolyn's staff includes surveying, sample plant construction, sampling, logging and splitting core, maintaining road access, clearing muck storage sites, expediting, maintaining the Lear camp and a host of miscellaneous day to day tasks necessary to operations. The underground decline work is being conducted by Fry and Associates, and their staff includes one superintendent, six miners (on two 8 hr. shifts per day), two mechanics and periodic head office supervision. S and L Contractors were hired by Fry to transport the muck to the muck storage area and their personnel consists of one and sometimes two truckdrivers, two equipment operators and an owner-operator. S and L are also employed by Carolyn to maintain the access road for snow removal and excavations for muck storage. Kema Diamond Drilling Inc. has two diamond drillers who are normally alternately supervised by Mr. Mathieu and Mr. Kendrick.

The consulting staff consists of Ker Priestman and Associates (environmental studies), Mr. F. E. Worthington (metallurgy), W. E. Clarke and D. R. Cochrane (geology and engineering).

2. Mining

The main decline ramp which was turned from its northerly bearing to an easterly one at the 700 mine north latitude, has now been turned at the 700 north, 560 east point and will once more resume its northerly course towards the surface drill hole fence at the 860 mine north latitude (drill holes 33 and 34). There remains then 160 metres (or 525 feet) to the 860 north point. With safety bays, drill stations and gentle turns, the all inclusive remaining distance will actually be closer to the 180 metre mark. (approximately 600 feet). Underground drill stations are being established at 33 metre intervals along the main decline. Drilling will soon commence in the 700 cross cut then there will be drill stations as close as possible to 733, 767, 800, 833, and 867 metre marks.

Underground advance has been at a standstill for the last two weeks, since all personnel have been employed in winterizing operations and meeting the requirements set out by the district mines inspector which includes:

- completion of first aid room
- snow slide protection over the portal
- upgrade access road

After installation of an additional 4 inch pipe, and some additional rock bolting, mining will resume.

3. Underground Diamond Drilling

To date, a total of 524.3 metres (1720 feet) of A.Q. wire line drilling has been completed in 14 drill holes. Ten of the holes were drilled from the 600 cross cut and four holes in the 666 north drill station. After the 666 north section is drilled off, the drill is scheduled to move into the 700 cross cut area.

4. Sampling

Sampling, in two forms, has proceeded well during this period. Muck sampling from each round is conducted by taking one small shovel-full of muck from each scoop load. Normally three large full bags are collected from each 8 foot round in this manner. The three assays are averaged to provide grade information on a day to day, round by round basis. In addition to muck sampling, Mr. P. Willson has been chip channel sampling walls, backs and the face (where applicable). Samples are sent to Bondar Clegg in Vancouver and check assays to Loring Labs in Calgary.

5. Muck Storage

Decline rounds that grade in excess of 0.05 troy ounces of gold per ton, and those that grade lower but are bounded by rounds in excess of 0.05 troy ounces per ton are tagged and stored in one of the muck storage tiers near the sample plant. A survey plan of the position of the piles is kept in the field office at Lear, in order that a particular round may be easily located, for further processing.

6. Sample Plant

The foundations for the crusher motors were poured Dec. 2nd. The jaw crusher has been grouted in its final position. The #1 conveyor is bolted into place with the belt on, and the #2 conveyor has been bolted down. The discharge chutes have been welded into place. The generator is being dried out in preparation for start-up. Much of the remaining work is mainly electrical in nature and involves wiring which will be contracted. A great deal of winterizing of the sample plant has been recently completed to minimize possible damage from snow. A shed has been erected over the 200kw. generator and rebuilt twin G.M. deisel engines and the generator is currently being dried-out prior to testing. Due to the difficulties, and additional expenses involved in moving muck and operating the sample plant under severe winter conditions, it is not anticipated that full scale operation will begin until next spring.

7. Access and Equipment

Road access from Hope, to the Lear Camp and thence to the Portal has remained fair. The Dept. of Highways plows snow to Othello (just outside of Hope); from there snow will be plowed to the Lear Camp on the Coquihalla road (a distance of 6.4km or 4 miles); and from there to the Idaho Portal (a distance of 18.5km or 11½ miles). Carolin Mines Ltd. has made arrangements with Messr. H. Jones and J. John of Vancouver, whereby Carolin has full use of a large inventory of heavy equipment (as listed in Appendix I) for a period of four (4) months. The equipment will be used in snow removal, access road maintenance, muck loading, hauling and also as standby and safety equipment.

8. Geology and Mineralization

Significant mineralization was encountered at the 183.5 metre mark (602 feet) from the portal in the main decline, where the ramp entered the Upper Idaho zone. Mineralization consisted of abundant pyrite, pyrrhotite, arsenopyrite and traces of chalcopyrite and sphalerite. Visible gold was observed in the 700 cross cut, main ramp. The average of a total of a continuous 51.8 metres (170 feet) from the muck samples in the main decline and cross cut is 0.148 troy ounces of gold per short ton. This represents an average of 26 rounds, calculated from 99 separate muck assays. Chip channel sampling in this area gave similar and confirmatory check results with individual assays ranging from 0.045 ounces across 1.65 metres to 1.03 ounces across 2.50 metres.

Underground diamond drilling in both the 600 cross cut and 666 drill station has confirmed the results indicated by the much wider-spaced surface diamond drilling program conducted in 1973, 1974 and 1975, in and around the present underground working area.

In general, progress has been considerably slower than anticipated, however results to date are most encouraging.

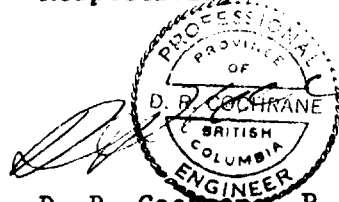
9. Budget

A total of \$538,953.00 has been directly expended in exploration on the property this year to date.

10. Recommendations

In view of the encouraging exploration results encountered during the recent course of the program, continuation on a basis similar to that recommended in the "Underground Proposal Report" dated July 14, 1976 is strongly recommended.

Respectfully submitted



D. R. Cochrane, P. Eng.

December 21, 1977

APPENDIX I

List of equipment owned by Harold Jones and Jimmy John to belong to Carolin Mines Ltd. for use at their Ladner Creek project at Hope, B. C.

Description	Replacement Value
1 only Tucker Sno-Cat Sec. #159365	\$ 2,500.00
1 only 1,000 gal. fuel tank on skids w. pump	1,000.00
1 only 500 gal. " " on wheels "	800.00
1 only Cat Sen Set Model D 333, Ser. #66D 4766-125KVA	22,500.00
1 only International TD 25-B w. angle dozer winch equipped with ice grousers Ser. #2066	45,000.00
1 only 600 CFM Gardner Denver portable air compressor	10,000.00
1 only 600 DFM Chicago pneumatic " " "	10,000.00
1 only Michigan Model #280 Dozer	60,000.00
1 only Michigan Model #275 A front end loader 5 yd.	22,000.00
1 only Onan 3 KVA site plant	1,450.00
1 only Dodge power wagon	2,750.00
1 only Lincoln 400 AMP diesel lite plant Ser. A 640016	2,800.00
1 only Kenworth 1973 tractor Ser. #889180	35,000.00
1 only Fruehauf 40' hi boy	6,500.00
1 only Sicard Sno blower	35,000.00
1 only Gustin Western all wheel drive grader w. sno-wing	28,000.00
1 only Volvo dump truck 1975 (6 x 6)	69,000.00
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	\$354,800.00

Due to the fact that these machines are written down in value we have had to keep the prices in line. The new replacements of the above list of equipment would be well in excess of 1½ million Dollars.

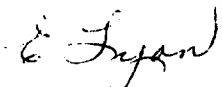
December 20, 1977

POWER OF ATTORNEY

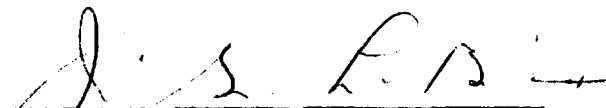
I hereby appoint Roy G. McKay or, failing him, Orval E. Gillespie, power of attorney for and on my behalf to sign a statement of material facts to be issued by Carolin Mines Limited (The Company) with respect to the secondary offering between The Company by Norvan Management and for Management Limited and amendments thereto.

Dated this 5th day of January, 1978.

Witness:



E. Lyon



J. S. LaBine

4. THE ESTIMATED NET PROCEEDS OF THE ISSUER ARE TO BE SPENT.

There are no net proceeds to the Company relating to the offering of securities as set forth in this Statement of Material Facts.

5. THE FULL NAME, HOME ADDRESS AND CHIEF OCCUPATION, THE NUMBER OF SHARES OF THE ISSUER BENEFICIALLY OWNED, DIRECTLY OR INDIRECTLY, BY EACH SENIOR OFFICER OR DIRECTOR OF THE ISSUER AND, IF EMPLOYED DURING THE PAST FIVE YEARS, THE NAME OF EACH EMPLOYER.

<u>Name and Address</u>	<u>Chief Occupation</u>	<u>Number of Shares Of Issuer Benefi- cially Owned</u>
Orval Edward Gillespie 8999 - 164th Street, Surrey, B.C.	President, Carolin Mines Ltd.	218,500
Director and President		
Roy Gordon McKay, 903 Stanton Avenue, Coquitlam, B.C.	Secretary, Carolin Mines Ltd.	102,250
Director and Secretary		
Joseph Shirley LaBine, 106 - 561 Avenue Road, Toronto, Ontario	Retired	59,500
Director		
Edward Angus, 12474 Crescent Road, Surrey, B.C.	Field Manager for McIntyre Porcupine Mines Ltd.	12,451
Director		

6. PARTICULARS OF THE CORPORATE STANDING OF THE ISSUER.

The Company was incorporated in British Columbia as a specially limited company on February 3, 1966, by Memorandum and Articles.

The last annual report was filed with the Registrar of Companies of British Columbia on February 16, 1977. All filings required to be made by the Company under the Securities Act and Companies Act of British Columbia are up-to-date.

Audited financial statements of the Company for the year end May 31, 1977 were placed before the shareholders at the annual general meeting held November 18, 1977.

The Company, by its Memorandum is not restricted from carrying on any business. However the Company is primarily engaged in the business of acquiring and developing natural resources properties.