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GEAREX ENGINEERING GEAREX MANAGEMENT LTD.

The President and Directors SUNMARK MINES LTD 1500 - 609 Granville Street Vancouver, British Columbia **V7Y 1G5**

May 25,1984

SUMMARY REPORT VIC GOLD PROPERTY TASEKO LAKE AREA Clinton Mining Division 9205E

SUMMARY

THIS REPORT SUMMARIZES THE WORK PERFORMED TO-DATE. AND POINTS OUT THE POSSIBLE GEOLOGIC RELATIONSHIPS RELEVANT TO THE 'VIC' PROPERTY, IN GENERAL, AND THE VIC VEIN SYSTEN, IN PARTICULAR. IT RECONNENDS AN AGGRESSIVE PROGRAM OF EXPLORATION, WHICH IN TWO STAGES, WILL INVESTIGATE, IN DETAIL, THE VIC VEIN SYSTEM, AND PERFORM A 'GRASS ROOTS' RECONNAISSANCE OVER THE REMAINDER OF THE EXTENSIVE HOLDINGS. ESTI-NATED COST OF THE TWO-PHASED PROGRAM IS PROJECTED AT \$500,000

renard von rosen

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v2v

bc



INTRODUCTION

The undersigned was commissioned by A.C. Sewell to complete a report summarizing exploration activities performed over the **VIC** property, and environs, and if the results warranted, to recommend further exploration on this gold property. The writer is familiar with the **VIC** workings, specifically, and a portion of the surrounding area generally, as a result of previous investigations which are described in published reports listed in the bibliography.

The most recent engineering report was written by M.K. Lorimer, P.Eng.



LOCATION MAP

"VIC" GOLD PROPERTY

BERT KNB MIS LA VIC

Taseko Lake, B.C.



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PROPERTY HOLDINGS

**	** ** ** **	** ** ** **	** ** ** **	** ** **	* ** ** **	*
* <u>C</u>]	LAIM NAME	RECORD NO.	UNITS	ANNI	VERSARY	*
* *	KNB	1403	12	May	18, 1985	* *
* *	MIS	1404	20	Мау	18, 1985	* *
* *	BERT	1461	15	July	22, 1984	* *
* *	LA	1462	20	July	22, 1985	* *
*	VIC	1269	20	October	14, 1984	*
**	** ** ** **	** ** ** **	** ** ** **	** ** **	* ** ** **	*

The claims are recorded in the Clinton Mining Division and are plotted on map 9205E.

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LOCATION & ACCESS

51°22'N

123°39'W

9205E

The group of claims comprising the property holdings is located on the west side of the area where the north-flowing Taseko river empties out of the north end of Lower Taseko lake.

The claims cover a gold-bearing zone up the steep cliffs of "VIC MOUNTAIN" through a relief of 1000 meters between 1400 meters ASL and the summit at about 2400 meters ASL, on the front, or east side of the mountain, and down a moderate slope to about 2000 meters ASL on the back, or west side.

The claim holdings cover an area which measures about 4.5 x 5.5 kilometers.

The property is reached from Williams Lake, British Columbia via around 200 kilometers of road of which the first portion is paved, the remainder is gravel surfaced.

Access to the property has been greatly enhanced due to the v construction, with financial aid of the Department of Mines, of a road up the west side of the Taseko river. This road passes directly below the VIC workings, and also provides access to the higher levels of the property via the southern cat trail.

The VIC property has formerly been poorly explored over the \checkmark years because of the necessity of fording Taseko river from Murdoch's ranch, and because of the mountainous terrain. It is now possible to establish road accessible operations on the proper side of the river.

PHYSIOGRAPHY & VEGETATION

VIC MOUNTAIN is the main peak of a massif which forms the eastern edge of the Chilcotin Ranges of the Coast Mountains. The eastern aspect of this mountain formation is a steep scarp which drops into Taseko valley.

Most of the massif is bare of vegetation. The lower slopes generally are covered with poor stands of timber growing on slide rock.

HISTORY OF "VIC" GOLD PROPERTY

Property history is detailed in a previous summary report by the writer (December 3, 1980), suffice it at this time to provide the following up-date.

June 1, 1983: M.K. Lorimer, P.Eng. inspected the property and took samples.

June 10, 1983: M.K. Lorimer, P.Eng. authored an Engineering Report on the Vic Property for your company. The recommendations in this report included a two-phased program of exploration, consisting of 1000 feet of underground diamond drilling.

August 19 - September 3, 1983: four underground, flat, diamond drill holes where cored for a total depth of 800 feet, without engineering supervision.

May 25, 1984: Gerhard von Rosen, P.Eng. completed the present Summary Report on the property.

GEOLOGY

The regional geology is shown on GSC map 29-1963, with a more recent open-file update by H.W. Tipper (O.F. 534). A more detailed property map by Victor Dolmage is published in the \$1935 Minister of Mines Annual Report.

The property is entirely underlain by a thick sequence of Cretaceous volcanics. In the immediate vicinity of the workings, these consist of andesites, tuffs, and massive flow-breccias striking northerly and dipping shallowly to the west into the mountain side. Through the area of the main showing, a branching series of diorite dikes are present trending northwesterly up the mountain. These dip steeply (75°SE to 80°NW) and vary in width from 7 to 30 meters. Transecting the dike swarm at a shallow angle, the fault zone of immediate interest strikes southwesterly up the mountain, from the scree-covered alopes at the base of the mountain, to the summit. This structure, with widths up to 8 meters, cuts both the volcanics and the diorites and dips vertically to 75° to the southeast. Several sub-parallel faults have been recognized but these appear to be less continuous and less well defined.

Similar shear zones are likely to occur at other localities within the property, and several outcrops have been noted from helicopter traverses where strong rust staining, and possible gossan formation occur within the volcanic rocks. These brown colored scree slides can in several cases be seen to originate from rusty fissures which traneect the cliff faces above.

ASSAYS

Numerous samples have been taken over the years from which assays are on record. An itemized listing of these is given in the December 3, 1980 report by this writer. M.K. Lorimer, P.Eng. (June 10, 1983) summarizes the assay information as follows:

"...The following table gives weighted average values of several samples from each of the four exposures: at the upper adit, 200 feet above the upper adit, and from drill holes collared in sulphides 100 feet above the upper adit. (In the case of the drill holes, the heading "Width" refers to the intersection length <u>down-dip</u>.)

*	* * * * * * * * * *	* * * * *	* * * * *	* * * *	* * * * *	2
*_	LOCATION	WIDTH	GOLD	SILVER	COPPER *	ł
*	Upper adit	0.43 m	0.070o/T	0.110/T	0.46% *	;
*	Upper adit + 200'	0.62 m	2.770o/T	2.360/T	6.07% *	ł
*	Upper adit + 800'	0.55 m	0.3260/T	0.210/T	N/A *	1
*	Drill holes	2.00 m	2.4300/T	3.720/T	2.23% *	?
*	* * * * * * * * * *	* * * * *	* * * * *	* * * *	* * * * *	2
	("+200 '" der	otes 200'	uphill fro	m the adi	t, etc.)	

"...Near the summit and down the western slopes the vein appears as an oxidized band up to seven feet wide. In this band isolated occurrences of quartz, calcite, pyrite, chalcopyrite and malachite carry some gold: the 1935 Minister of Mines Report gives an assay of 0.68 ounces of gold per ton across a 12-inch width of quartz containing

CONCLUSIONS

The VIC property has been the object of gold exploration since the 1930's. Most of the attention focused on a nearly vertical, markedly continuous, shear zone trending up the face of "Vic mountain". High-grade gold values caused the early operators to drive two adits. However WWII, and the subsequent changes in the precioce metal prices, caused termination of activities in the area.

Resumption of the interest in gold is shown in the mid-1960's by the acquisition of the property by various parties. However very difficult access prevented even the most serious of undertakings to falter. The recently completed mineaccess road, which leads past the lower skirts of Vic mountain, relieves one of the main stigmas the property had. The remaining ons, the steepness of the terrain near the east showings, remains a problem which can be overcome by utilizing mountaineering personnel.

The matter of snow slides, and rock falls can be overcome via a previous recommendation by the writer, albeit expensive, of going underground at the lower levels of the mountain.

The present holdings include more than 2200 hectares of terrain which displays signs to the explorationist that indicate metallization, which appear worthy of investigation.

Most of this area can be accessed with greater ease than the Vic showings, par se, with the exception of the eastern bluffs of Vic mountain, which extend both north and south for some distance. The western extension of the Vic shear zone should be easy to follow on-strike, presumably with the use of modern exploration techniques (because of the overburden), as the slopes are gentle and the ground is devoid of bothersome vegetation.

The <u>remainder</u> of the property needs to be explored using the "grass roots" approach oriented towards the detection of further highgrade gold-silver deposits, as well as the possibility of hidden bulk-tonnage situations.

DISCUSSION

Exploration of the VIC property has been focused mostly on following the extensions of high grade gold accumulations within the parallel, guartz-filled shear zones. Terrainrelated difficulties forced earlier operators to go underground in their quest of probing the near-vertical shear zone. More recent attempts at mining the high-grade from the surface above the adits, also failed because of logistical problems. The two adits are difficult to reopen even utilizing modern technology, because of the local access problems. Once the engineering decision has been made that it is worthwhile spending the money, it will be a much easier proposition to enter the mountain at the lower, more-sheltered levels of VIC mountain. From this vantage point one can drive into the shear structure, per se, and thence follow it until the vein is located, and until the proper ore-localizing zone(s) are reached.

However, this is only one aspect of the explorational potential of the VIC PROPERTY. The writer became aware of the larger scope of the VIC MOUNTAIN massif, with its metal-bearing possibilities, when small-scale exploration was carried out by helicopter, and on foot, by the writer, and crews during prior field seasons. Encouraging results were obtained from assays derived from 'oxidized' outcrops. It is prudent to re-acquire some of the neighbouring land to the west in order to re-examine this adjoining ground.

RECOMMENDATIONS

staged, aggressive exploration program is hereby A recommended to be undertaken over specific, as well as general areas of the property. The stages should be organized in such a manner, that adequate engineering summaries can be undertaken of the work, in advance of proceeding with succeeding programs. In practice this proves difficult to carry out because of the effectively short field season which prevails over most of the uplands. Work programs recommended herein, will be divided into two parts, namely detail work on the "VIC VEIN" proper, both on the steep, 'front', or <u>east side</u>, as well as the west, or 'back' side, and reconnaissance, "grass roots' style, exploration over the large area holdings, to run concurrently with a helicopter-borne geophysical survey.

In effect, the stages will spread out over possibly three field seasons, with engineering reports being prepared at the end of each season, summarizing the information gathered todate, and possibly changing the recommendations for further work to be undertaken during the forthcoming season.

PHASE ONE RECOMMENDATIONS

1) VIC VEIN SYSTEM

A) Exploration along the east, or front side, should resume with a detailed mapping program. This will include the study relationship between the volcanic rocks, the of the intrusives into these, the fault activity, and the stagee of mineralization along these. The writer is not aware of this having been done properly. However this is work for geologists trained in mountaineering work. Past prospectors did negotiate the main VIC out from the ridge to the bottom, and returned some samples to this writer, however, the men were not equipped to perform a proper mapping job, and they only followed one of the cuts, whereas there are several branches to the shear zone. The Cartwright ground sluicing site (8 to 9 ounces gold per ton reported from zone, 7 feet wide, 800 feet long) is reportedly up in one of the cuts.

B) Exploration along the west, or back side side, appears to present the most reasonable approach to exploration of the VIC shear zone, with one proviso. This proviso lies in the writer's working theory which holds that gold mineralization occurs along those areas of the VIC shear zone where there is

the coincidence of the suitable volcanic bed, with the suitable intrusive apophysis. The volcanic beds dip westerly, into the mountain. Drifting along the crosscutting shear zone from the base of the mountain will intersect the various beds, thareby presenting a better chance to intersect a zone with oremaking potential. If therefore, the back slope of VIC mountain is underlain by only those volcanic beds which do not produce ore, then exploration in that area will be fruitless. Still, the backslope provides a much simpler exploration target than the front side. Exploration of the backslope should start with the refurbishing of the cat trail north up the creek on the west side of VIC mountain. Such ground access to a field camp to be established on the backslope will reduce helicopter costs

tremendously.

A survey grid should be established as a mapping base for all further work. <u>Ground geophysics should be used to delineate of</u> <u>the VIC shear zone west of the crest area</u>. The geology should be carefully mapped, and correlated with the results of the investigations obtained from the east, or front side. The writer is familiar with a test plant which provides gravity concentrates from bulk samples, utilizing accelerated gravity techniques. This HY-G* machine proves ideal for

taking large-scale 'stream sediment' samples. Pits can be dug on a grid basis, from which samples measuring several cubic meters can be taken and concentrated to a volume of about 2 liters, for further laboratory analysis. The study of the make-up of the concentrates will provide a direct indication of the metallic content of the bedrock subcropping up-slope. Such a bulk 'geochemical' sampling program is recommended.

The main lead of the VIC vein has been followed by hand trenches from the crest west-ward for a short distance. Some diamond drill holes have, likewise, intersected the zone at depth. Past operators have attempted to blast away the blue ice, which at times remains of the usual snow cover, in order to reach the bedrock in the gorge immediately east of the crest.

Further work is warranted in this crest area, and should concentrate on delineating the extent of the vein system. This could best be accomplished with the use of a backhoe \checkmark penetrating the rubbly slide rock cover to cut into in-situ rock of the shear zone. Trenches should be excavated on contour, mapped, sampled, and backfilled. Several such \checkmark terraced cuts should be made tracing the VIC system downhill to the west.

ESTIMATED COST OF RECOMMENDED PROGRAM

PHASE ONE: A) VIC VEIN SYSTEM

1) FRONT SIDE:

Camp establishment, 1 cook, 4 mountaineering geologists, 2 months; detail work, report.

2) BACK SIDE:

Road construction, camp establishment, cook & helper, 1 geologist, 2 helpers, 1 cat-hoe operator, 2 months; trenching, etc., HY-G* testing, geophysics, supervision, report.

ALLOW FOR \$150,000

PHASE ONE: B) REMAINDER OF PROPERTY

1) FRONT SIDE:

Four mountaineering geologists, 2 months, follow-up detail work, report.

2) BACK SIDE:

Cook personnel, prospectors, stakers, Helicopter geophysical personnel, geologist, supervision, 2 months; staking, prospecting, airborne survey.

 Phase One Engineering Summary Report and Assessment work filing.

ALLOW FOR \$100,000

PHASE TWO: A) VIC VEIN SYSTEM

PHASE TWO: A) VIC VEIN SYSTEM

1) FRONT SIDE:

Cook personnel, 4 mountaineering geologists, helicopter supported, two months; surveying, mapping, sampling, rehabilitating underground, drilling, report.

2) BACK SIDE:

Several, deep, NQ diamond drill holes across the VIC vein structure, supervision, report.

ALLOW FOR \$150,000

PHASE TWO: B) REMAINDER OF PROPERTY

1) FRONT SIDE:

Camp-cook personnel, 4 mountaineers, 2 months; anomaly chasing, follow-up exploration, report.

2) REMAINDER:

Camp-cook personnel, helicopter-supported fly camps, anomaly chasing, road construction, backhoe trenching, mapping, sampling, supervision, report.

3) Phase Two Engineering Summary Report and Assessment Report Filing.

ALLOW FOR \$100,000



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REFERENCES CITED

B.C. DEPARTMENT OF MINES, Minister of Mines Report, Report and Map, 1935.

WESTERVELT, R.D., P.Eng., <u>AN EXPLORATION REPORT ON THE VIC</u> CLAIM GROUP, Private Report, 1976.

VON ROSEN, GERHARD, P.Eng., <u>SUMMARY</u> <u>REPORT</u> <u>ON</u> <u>VIC</u> <u>GOLD</u> <u>HOLDINGS</u>, Private Report, 1977.

TIPPER, H.W., Geological Survey of Canada, <u>TASEKO LAKES</u> (920) <u>MAP AREA</u>, Preliminary Map Open File 534, 1978.

STATEMENT OF QUALIFICATIONS

I Gerhard Ernst Alexander von Rosen certify:

I am a graduate with the degrees of B.Sc. and M.Sc. in Honours Geology from the University of British Columbia.

I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.

I carry on practice at 33176 Richards Avenue, Mission, British Columbia.

I have practiced my profession since 1963, and have had broad experience in exploration and geology.

I base this report on my personal knowledge of the property, having visited it several times before, and on references cited.

I am expecting to receive the fees and expenses invoiced regarding the preparation of this report, as this is my sole remuneration. I have no interest in the company, its properties, or its shares, neither do I expect to receive any.

G.E.A. von Rosen, P.Eng.

