

GEOLOGICAL EXPLORATION REPORT

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on the

VIMY RIDGE GOLD PROPERTY

HISLOP TOWNSHIP, ONTARIO

Larder Lake Mining Division District of Cochrane

for

RESONT RESOURCES CORPORATION

JUL 14 1989

MINING LANDS SECTION

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KENNETH H. DARKE CONSULTANTS LIMITED
May 15, 1987

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INTRODUCTION:

The Vimy Ridge Property described in this report consists of eight, contiguous, unpatented mining claims located in Northeastern Ontario between the gold mining camps of Timmins-Porcupine and Kirkland Lake-Larder Lake. The property is located four miles by highway southeast of the town of Matheson, Ontario. Matheson is serviced by Trans-Canada Highway No. 11; and connects via Highway 101 to the west (43 miles) with the city of Timmins which is the major settlement & distribution centre in the region.

The Vimy Ridge Property is readily accessible via Trans-Canada Highway No. 11 that cuts through the southwestern quadrant of the claim group; and via an all-weather, gravelled, east-west trending road (Hislop Road) that extends along the southern boundary of the property.

Hislop Township is situated in the "Abitibi Greenstone Belt" that includes the Timmins & Kirkland Lake Gold Camps. Said Greenstone Belt consists essentially of Early to Middle Precambrian (Archean-age) metamorphosed volcanic & sedimentary rocks that have been intruded by felsic plutons and mafic/ultramafic rocks & plugs. All the aforementioned rock types have been cut by younger (Proterozoicage) mafic dikes (diabase, quartz diabase).

The regional geology within such Greenstone Belts can be generalized as consisting of a group of contemporaneous volcanic piles and related sediments all of which have been intensely folded, faulted, eroded, and intruded by rocks of mafic to felsic composition.

Much of the bedrock in the region is masked by a pervasive cover of younger Pleistocene-age glaciofluvial/lacustrine deposits (sand & gravel, clay). The low-lying areas are covered further by recent alder & muskeg swamp. The general lack of bedrock exposure in many areas, including the current area of interest, had severely limited direct prospecting as a method of mineral exploration.

Recent exploration for gold deposits throughout such regions where there is little bedrock outcrop has been greatly aided by the use of modern geophysical survey techniques. Electromagnetic (E.M.), and where applicable Induced Polarization (I.P.) and/or VLF-EM surveys have proven to be an invaluable aid in tracing out mineralized (sulphide) zones, graphitic horizons and/or regional structural features through areas of extensive overburden cover. Magnetic surveys also have been used very effectively to further define the regional stratigraphy by delineating local iron formations and the younger crosscutting Diabase Dikes and Ultramafic to Mafic Intrusives (magnetic highs) present in the region.

Another exploration method, where applicable, that has often proven to be effective in such areas where there is little bedrock exposure has been the examination and analysis of mineralized dispersion trains within lodgement tills (emplaced by retreat glaciers) located in a down-ice direction from areas of geological interest. The mineralogical examination, both megascopic & microscopic, and geochemical analysis of such lodgement tills --- in particular detailed examination of the heavy mineral content of the basal till situated at the overburden-bedrock interface --- has proven to be an effective aid to mineral exploration in areas of Continental Glaciation; that is, in areas now covered by a mantle of glaciolacustrine deposits such as found throughout most of the Abitibi Clay Belt Region including the subject property. For this exploration method to be successful there must be sufficient basal and/or other pertinent lodgement till in place. Also, in the Abitibi Region it has been indicated that in a truly anomalous dispersion train every sample should contain at least ten visible gold grains. The most effective method of obtaining the aforementioned till samples in areas of deep overburden cover has been by means of specialized "Reverse Circulation" or "Sonic" overburden drill rigs.

Gold mineralization is widely distributed throughout Hislop Township. The original gold discoveries in the township were made as the direct result of prospecting of bedrock outcrops; and follow-up exploration along strike of known gold showings. In essence, it means that detailed gold exploration has been confined to less than 10% of Hislop Township because of the aforementioned pervasive overburden cover present throughout much of the area.

The major gold deposit in the township is the Ross Mine that has been in continuous production since 1936. Current exploration successes on the nearby New Kelore Property & adjacent area by Goldpost Resources, and new discoveries by the joint venture partners Chevron Minerals & Stroud Resources on a property located northwest of the Ross Mine have sparked a renewed interest in the entire Hislop Township Region. It is considered highly significant and encouraging from an overall exploration viewpoint that these current exploration programs have been successful in delineating gold-bearing zones of potential economic significance on properties where previously there had been only minor or nil established ore reserves. The Golden Arrow Prospect, which produced from an open pit operation during the period 1980-83, is located 1.5 miles southeast of the subject Vimy Ridge Property.

Host rocks for the gold deposits in Hislop Township are variously pyritized, silicified, hematitized, and carbonatized zones in metavolcanics, syenite, and/or quartz porphyries. The gold mineralization occurs in the native state (free gold) within quartz-carbonate stringer veins & stockworks and/or within highly altered, brecciated, and mineralized host rocks where there is little or no associated quartz veining. Sulphides often associated with the gold are pyrite, and minor amounts of chalcopyrite, galena & sphalerite. Zones of hematitization, although not direcindicators of gold mineralization, are indicative of the alteration processes with which gold is often present in Hislop Township.

At the Ross Mine the orebodies, which include numerous gold-bearing quartz veins, appear to be spatially related to an intricate system of fault planes. At the Golden Arrow Prospect the gold zones are related to north-easterly & easterly-trending faults and associated brecciated zones.

Most of the bedrock on the subject Vimy Ridge Property is masked by a pervasive cover of glaciofluvial/lacustrine deposits ... there is less than 10% bedrock outcrop on the property, and it is confined to the western claims. The known rock types on the property consist predominently of mafic to intermediate metavolcanic flows (basalt, andesite, dacite and/or derived chlorite/carbonate/sericite schists) with local bedded tuffs-cherty horizons, and quartz-feldspar porphyry. All the aforementioned rock types have been cut by northerly-trending diabase dikes; and in one place, by a lamprophyre dike. A small felsic intrusive plug outcrops just south of the property adjacent to the southwestern claim; and a zone of variably granophyric lavas occur within a swampy area on the southeastern claim.

The Vimy Ridge Property contains an old prospect shaft (1923) located adjacent to an easterly-trending fault zone that cuts altered mafic flows & a cherty, hematitized, tuff. Quartz-carbonate stringer veins associated with this fault zone contain local concentrations of sulphides (pyrite, pyrrhotite, & minor chalcopyrite, galena). A selected grab sample of sulphide-rich cherty quartz from the shaft dump material contained significant gold values.

The presence on the property of quartz-carbonate stringer veins containing associated sulphide mineralization within highly altered & brecciated host rocks is geologically significant. The fact that gold values are associated with these veins in the one area tested (shaft zone) enhances the overall exploration potential of the property. There is no evidence that the property has ever been evaluated by geophysical surveys or diamond drilling.

The subject Vimy Ridge Property contains numerous untested exploration target areas. Additional evaluation of the property in an exploratory search for gold deposits similar to those found in the adjacent area is definitely warranted and is herein recommended.

PURPOSE & SCOPE:

The purpose of this geological exploration report is to provide an evaluation of the Vimy Ridge Property with respect to its gold potential; and to provide recommendations to the management of Resont Resources Corporation.

The scope of this report will include a brief summary of the regional and economic geology of the Abitibi Greenstone Belt with respect to the Hislop Township Area; and will contain recommendations for an extensive exploration program on the subject Vimy Ridge Property in an exploratory search for gold deposits.

SOURCES OF INFORMATION:

This report is based upon a personal knowledge of the Hislop Township Region gained while conducting exploration programs throughout the adjacent townships; upon a personal knowledge of the major gold occurrences within the general Timmins-Kirkland Lake Gold Region; upon a study of the pertinent geological literature including Ontario Division of Mines' assessment work files; and upon personal examinations of the Vimy Ridge Property itself and adjacent areas during the past several weeks.

PROPERTY DESCRIPTION:

The Vimy Ridge Property described in this report consists of eight, contiguous, unpatented mining claims (total area of 320 acres) that form a rectangular-shaped block located within the limits of the Corporation of The Township of Black River-Matheson, Larder Lake Mining Division, District of Cochrane, Ontario. The mining claims encompass Lot 13, Concession 3, Hislop Township and are further described as follows:

Claim Nos.:	No. of Claims:	Date Recorded:	<u>Time Extension</u> :
L.893567-74 incl.	8	June 6, 1986	Oct. 6, 1987

By an Order of the Mining & Lands Commissioner dated May 12, 1987 the Due Dates for filing the required first-year's assessment work (20 days/claim) was extended for four months from June 6th/87 until Oct.6, 1987.

On May 12, 1987 all interest in the said eight claims was transferred from the original claim staker (Glenn J. Mullan, License No. K20009) to Pelangio-Larder Mines Limited, License No. T971.

Current ownership of the Vimy Ridge Property has been attested to by management Resont Resources Corporation; Suite 5900, One First Canadian Place; Toronto, Ontario M5X 1K2 and was not independently so ascertained by this writer.

LOCATION & ACCESS:

The Vimy Ridge Gold Property is located in the extreme western part of Hislop Township adjacent to Bowman Township, at Longitude 80°25'W / Latitude 48°29'N or approximately four miles by highway southeast of the town of Matheson, Ontario. Matheson is serviced by Trans-Canada Highway No. 11 and the Ontario Northland Railway (O.N.R.), and connects via Highway 101 to the west (43 miles) with the city of Timmins which is the major settlement & distribution centre in the region. The flag-stop of Vimy Ridge on the O.N.R. is located one mile due east of the subject property. The Trans-Canada Natural Gas Pipeline crosses through the region adjacent to the northeast corner of the property.

The Vimy Ridge Property is readily accessible via Trans-Canada Highway No. 11 that cuts through the southwestern quadrant of the claim group; and via an all-weather, gravel, east-west-trending road (Hislop Road) that extends along the southern boundary of the property.

TOPOGRAPHY & DRAINAGE:

Terrain throughout most of the Hislop Township Area is relatively flat and typical of the clay belt regions of the heavily glaciated Precambrian Shield. The following description of the general topography of Hislop Township is paraphrased directly from an ODM Report by V.K. Prest, 1956:...

"The gently undulating-to-flat topography of Hislop township is due mainly to the Pleistocene deposits that mantle most of its surface. The scattered bedrock exposures seldom project more that 20 or 25 feet above the surrounding drift areas, or else have been revealed by postglacial erosion along the creeks and rivers.

The Pleistocene deposits that control the topography of the township are of two types, glaciofluvial and glaciolacustrine. The former consists of an esker, and associated outwash, which occupies the north-central part of the township and rises from a few to about 25 feet above the bordering drift areas to the east and west. South of the Pike River in the central part of Hislop township, the esker and outwash, due to a gentle slope to the south, pass beneath the glaciolacustrine deposits of glacial Lake Barlow-Ojibway. Glaciofluvial deposits may be seen again in a few places farther south where they project above the surface of the glacial lake clays as low knolls and ridges.

The Lake Barlow-Ojibway deposits consist of varved clays that overlie stratified silts. These deposits no doubt caused a very flat area between the low rock and gravel knolls towards the close of the lake stage. But with the breaching of the ice barrier that had formed the north shore of Lake Barlow-Ojibway and the consequent establishment of a drainage system to the north, the clayplain was soon channelled, and the process has continued to the present time though at a greatly reduced rate. It is believed that the deep channels of both the Black and Pike rivers were cut during the draining of Lake Barlow-Ojibway. Their valleys are possibly the most marked feature of the topography of the township.

Due to the channelling of the lake clays and to the low areas and knolls of glaciofluvial deposits and the scattered outcrop areas, the expected clay-plain features are not too clear. Only in the northeastern corner of the township might the term "clay plain" be safely applied. This broad flat area is mostly covered by swamp and muskeg."

On the Vimy Ridge Property itself topographic relief is confined to the southwestern claims and consists of low, rounded, sand-covered hills containing scattered bedrock outcrops. The remainder of the property is essentially a flat and featureless clay-sand-covered plain with local alder & muskeg swamps. Depths of overburden on the southern claims as shown by three overburden holes varied from 37 ft. on the west to 123 ft. on the east.

Drainage in the region forms part of the James Bay-Hudson bay watershed ... streams flow in a generally northerly direction and join the Abitibi River which is a tributary of the Moose River that empties into James Bay near the village of Moosonee. Two creeks are located on the Vimy Ridge Property: one drains the northwestern claims; the other cuts through the extreme southeastern claim and drains an adjacent swampy area. Both creeks flow in a general northerly direction into the Black River which is a tributary of the aformentioned Abitibi River.

HISTORY:

The general Hislop Township Region has a long history of sporadic exploration dating back to the discovery of gold in the nearby Ramore Area in 1905. The area encompassed by the current Vimy Ridge Property (8-claim group) had been a former Veterans Patent that apparently lapsed about 1981. The area subsequently was re-staked a number of times prior to its recent acquisition by Resont Resources Corporation.

During the winter of 1922-23 the Hislop Mining Syndicate sank a two-compartment shaft to a depth of 80 feet in the south-half of Lot 13, Concession III on Resont's current mining claim L.893571. Other than said prospect shaft & trenching on the same claim, work previously completed on the property has been confined to regional geological mapping (1949) by the Ontario Department of Mines, and three overburden drill holes completed in 1981 by Asarco Exploration. There is no evidence that any detailed exploration has been conducted on the property subsequent to that undertaken in 1922-23. In particular, there is no record that geophysical surveys or diamond drilling have been undertaken on the property.

REGIONAL GEOLOGY:

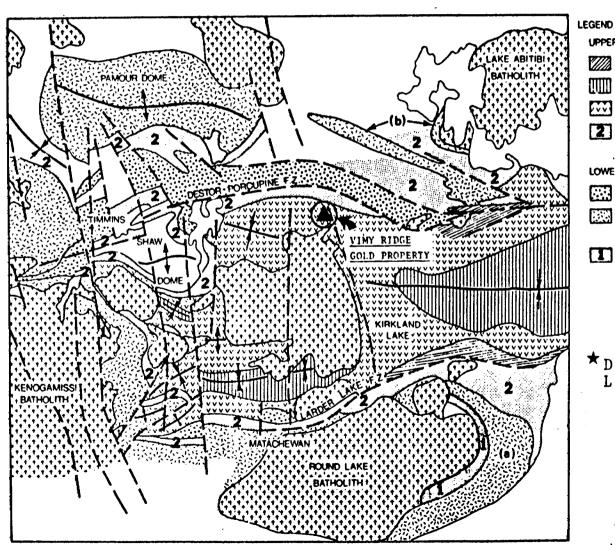
All the consolidated rocks in the general Timmins-Kirkland Lake Region, including Hislop Township, are of Precambrian age and constitute part of the "Abitibi Greenstone Belt" that lies within the Superior Structural Province of the Precambrian Shield that underlies much of Northern Ontario and adjacent Northwestern Quebec. Said Greenstone Belt consists essentially of Early to Middle Precmabrian (Archean-age) metamorphosed volcanic & sedimentary rocks that have been intruded by felsic plutons and mafic/ultramafic stocks & plugs. All the aformentioned rock types have been cut by younger (Proterzoic-age) mafic dikes (diabase, quartz diabase).

The regional geology within such Greenstone Belts can be generalized as consisting of a group of contemporaneous volcanic piles and related sediments all of which have been intensely folded, faulted, eroded, and intruded by rocks of mafic to felsic composition. The volcanism is cyclic in nature and consists of an initial ultramafic-mafic

phase followed by more intermediate & felsic rock types with intercalated clastic sediments & exhalites, and ends with felsic pyroclastic-volcaniclastic material at the top. That is, major volcanic cycles as repeated throughout these Greenstone Belts begin with ultramafic & mafic submarine activity (basaltic flows) at their base and end with more siliceous volcanism (rhyolitic pyroclastics) and penecontemporaneous sedimentation. These major volcanic piles are generally flanked by a contemporaneous assemblage of sediments-volcaniclastics deposited in adjacent restricted basins.

In the Timmins-Kirkland Lake Region the cyclic volcanic/sedimentary rocks have been divided (Pyke & Jensen, 1981) into two main Super Groups: an older, Lower Supergroup; and a younger, Upper Supergroup. On the basis of chemical composition the volcanics within said Supergroups have been further subdivided (Jensen Cation Plot, 1976) according to their MgO, Al_2O_3 , and $FeO+Fe_2O_3+TiO_2$ content into three main subalkalic rock series: (1) komatite: (2) tholeiite; and (3) calc-alkalic. The Komatiitic Series consists of magnesium-rich ultramafics (peridotite) and mafics (basalt). The Tholeittic Series ranges from high aluminum/low magnesium rhyolite, dacite, andesite to iron-rich basalt. The Calc-Alkalic Series ranges from aluminum-rich/low iron rhyolite, dacite, andesite to more magnesium-rich basalt. Refer to the Addenda for details re the aforementioned Jensen's Cation Plot.

ONTARIO GEOLOGICAL SURVEY;
MISCELLANEOUS PAPER 97 (1981):
GENESIS OF ARCHEAN,
VOLCANIC HOSTED GOLD DEPOSITS.



UPPER SUPERGROUP

Alkalic Volcanics

(Timiskaming Group)
Calcalkalic Volcanics

(Blake River Group)
Tholelitic Volcanics

Tholeilitic Volcanics
(Kinojevis Group)

Komatilitic Volcanics

Komatilitic Voltanics
(Stoughton Floquemaure Group
and Larder Lake (Froup)

LOWER SUPERGROUP

Sedimentary Rocks (Porcupine Group)

Calicalkalic & Tholeitic Volcanics
(a. Skead & Catherine Group)
(b. Hunter Mine Group)

Komatiitic Volcanics (Wabeweda Group)

> 0 12 Mi 0 20 Km

★D.R. Pyke & L.S. Jensen

OGS MP97; p.60 Figure 5-1—Stratigraphy and structural geology of the Timmins-Kirkland Lake area.

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The volcanic rocks of the general Kirkland Lake Area and the region to the north, which encompasses Hislop Township, were described in part by L.S. Jensen, 1981 as follows: ...

"The volcanic rocks of Kirkland Lake form part of a large east-plunging synclinorium located between the Lake Abitibi Batholith and the Round Lake Batholith (Figure 5-1). The Destor-Porcupine Fault zone and the Kirkland Lake-Larder Lake Fault zone are located at the north and south limbs of the synclinorium, respectively.

The volcanic rocks were formed during cycles of volcanism that consisted of komatiitic volcanism followed by tholeiitic, calc-alkalic, and ultimately, alkalic volcanism. The rocks of each cycle are referred to as a supergroup. A supergroup is divided into groups according to major changes in the chemistry of the rocks. In the Upper Supergroup, the basal komatiitic succession is referred to as the Stoughton-Roquemaure Group on the north limb of the synclinorium and as the Larder Lake Group on the south limb of the synclinorium. These Komatiitic successions can be correlated by tracing the komatiites around the nose of the synclinorium (Pyke, 1981). The overlying tholeiitic, calc-alkalic, and alkalic successions are referred to as the Kinojevis, Blake River, and Timiskaming Groups respectively. Each group of volcanic rocks has its own set of associated sedimentary and intrusive rocks. In the Kirkland Lake area, the Upper Supergroup is over 35km thick."

A variety of felsic intrusive rocks occur in the general Timmins-Kirkland Lake Region: soda-rich quartz-feldspar porphyries and trondhjemites are considered to be the oldest; the youngest are more potassic granodiorites and monzonite. The porphyries all occur within the lower formations of the Upper Supergroup ... restriction to this stratigraphic horizon and other evidence suggests (Pyke, 1981) that some or all of the porphyries represent rhyolitic domes formed on the surface.

The general region including Hislop Township was overridden by a continental ice sheet during the Pleistocene Period. As the ice melted back a large glacial lake (Lake Barlow-Ojibway) formed along its front. Sediments were deposited in the lake in the form of layered or varved clays that covered most of the bedrock and at least partly covered the flanks of the thick sand & gravel deposits left by former meltwater rivers. Depth of this glacial-derived overburden is highly variable throughout the region. Most of the bedrock on the Vimy Ridge Property is masked by a pervasive cover of glaciofluvial/lacustrine deposits ... there is less than 10% bedrock outcrop on the property, and it is confined to the western claims.

Regional geological mapping has shown that the Vimy Ridge Property is located in an area underlain primarily by tholeiitic volcanics that comprise the Kinojevis Group of the Upper Supergroup (Figure 5-1). The known rock types on the property itself consist predominently of mafic to intermediate metavolcanic flows (basalt, andesite, dacite and/or derived chlorite/carbonate/sericite schists) with local bedded tuffs-cherty horizons, and quartz-feldspar porphyry. All the aforementioned rock types have been cut by northerlytrending diabase dikes; and in one place, by a lamprophyre The most prominent diabase dike is approximately 150 ft. wide and extends through the western claims. granitic/granodiorite intrusive plug outcrops just south of the property adjacent to the southwestern claim; and a zone of variably granophyric lavas occur within a swampy area on the southeastern claim.

ECONOMIC GEOLOGY:

Gold deposits in the typical Precambrian Greenstone Belts, such as the subject Abitibi Greenstone Belt which encompasses a large area including the Timmins-Kirkland Lake Region, have been found in all parts of cyclic volcanic piles; that is, within both the ultramafic-mafic base and the felsic top as well as within associated sediments and younger felsic intrusives. The major gold mines found throughout such Greenstone Belts are generally located along well-defined regional structural/stratigraphic horizons. It is very important from an exploration viewpoint to note that it is more the rule than the exception to find a series of gold deposits situated along the same geologically-favourable gold-bearing horizon rather than to find an isolated deposit. Also, it is common to find a number of separate gold-bearing horizons within the same cylcic volcanic pile; that is, as stratabound deposits within a diverse variety of rock types.

Because of several periods of extensive regional folding most of the original essentially flat-lying volcanic strata & sediments in adjacent basins are now vertical to steeply dipping. Due to subsequent intense erosion (peneplanation) throughout the region, the entire volcanic pile from bottom to top, and the adjacent infolded basinal sediments are generally exposed; that is, a complete cross-section of the volcanic pile-sedimentary basin often can be seen as bedrock outcrop. As a result, separate stratabound gold-bearing zones and any associated identifiable marker horizons (graphitic tuffs-sediments; iron formations) will be present as roughly parallel belts conformable to the local stratigraphy.

The general Hislop Township Region has a long history of sporadic exploration dating back to the initial discovery of gold in 1905 in the adjacent Ramore Area. After a long hiatus, interest in the region was rejuvenated in 1933 by the discovery of a major gold deposit (Ross Mine) located in the eastern part of Hislop Township. Several other significant gold discoveries were subsequently made in the area located immediately to the north of the Ross Mine (Kelore, Hislop), and in the southwestern part of Hislop Township (Golden Arrow, Vimy). Current exploration successes on the New Kelore Property & adjacent area by Goldpost Resources, and new discoveries by the joint venture partners Chevron Minerals & Stroud Resources on a property located northwest of the Ross Mine have sparked a renewed interest in the general Hislop Township Region.

Gold is widely distributed throughout Hislop Township. The showings in general consist of variously pyritized, silicified, hematitized, and carbonatized zones in metavolcanics, syenite, and/or quartz porphyries. Gold-bearing quartz veins & stockworks are present in many of the showings; however, economic gold mineralization is not confined to such veins but has also been found within highly altered, fractured, and mineralized host rocks where there is little or no associated quartz veining. At the Ross Mine; however, many quartz veins have contributed appreciably to the gold production.

Zones of hematitization, although not direct indicators of gold mineralization, are indicative of the alteration processes with which gold is often present in Hislop Township. Hematitized rocks are obvious at the Ross, Kelore & Golden Arrow properties and have been noted around other showings.

Sulphides frequently associated with gold in Hislop Township are pyrite, chalcopyrite, galena & sphalerite.

Other minerals also identified in ore from the Ross Mine include tennantite, pearcite, proustite, argentite and native silver.

The text that follows briefly describes the major gold deposits and/or occurrences in Hislop Township ... the Addenda to this report contains additional information on these gold showings.

(a) ROSS MINE:

The Ross Mine, originally developed by Hollinger Consolidated Gold Mines and now owned by Pamour Inc., has been in continuous production since 1936. The original milling rate was at 440 tons per day with a recovered grade from 1936-68 of 0.175 oz. gold & 0.33 oz. silver per ton. All ore from the Ross Mine is currently trucked to Pamour's mill at Timmins where it is mixed with other ore before milling. Neither current production rates at the Ross Mine or ore grades are reported by Pamour.

The country rocks are rhyolite tuff & breccia, and basalt which are intruded by very small stocks of red syenite. Certain zones have been carbonatized, silicified, and hematitized. The general strike of the stratigraphy is northwest, and the dips are steep.

The orebodies (gold, silver) consist of lens-shaped and pipe-like stringer lodes & tabular vein zones composed of parallel quartz stringers. The veins are generally only a few inches in width and consist of quartz or quartz-dolomite veins cut by later quartz-calcite veins. Small amounts of chalcopyrite, sphalerite, galena, tennantite, native gold & silver are contained in the veins.

The orebodies at the Ross Mine appear to be spatially related to an intricate system of fault planes. The fault zones are characterized by zones of gouge several inches in width, by calcite & quartz veins several feet in width, and by abundant iron oxide (hematite).

(b) GOLDPOST RESOURCES INC. / KELORE PROSPECT:

- Kelrowe Gold Mines, Limited (1939-40);
- Kelwren Gold Mines, Limited (1946-47);
- Kelore Gold Mines, Limited (1948-52);
 New Kelore Mines Ltd. (1953-73).
- Hollinger Mines Ltd.; 12-yr. lease (1973-85).
- Goldpost Resources Inc. (1986-87).

(i) KELROWE/NEW KELORE/HOLLINGER MINES:

The Kelore Prospect, located 1-mile north of the Ross Mine, was initially evaluated by a 3-compartment shaft and underground workings in 1939. The property became idle in 1950 at which time indicated reserves (not ore grade at the then prevailing price of gold) were 400,000 tons averaging 0.17 oz. gold per ton above the 500-foot level. work on the property was conducted in 1973-74 by Hollinger who dewatered the old shaft, sampled underground workings, and completed both underground & surface diamond drilling. At that time, calculated proven & drill-indicated reserves were estimated to be 318,982 tons at a grade of 0.184 oz. gold per ton contained within five zones.

Country rocks at the Kelore Prospect are intermediate to basaltic volcanics which include amygdaloidal & breccia types. Some of these rocks have been chloritized, syenitized or hematitized. Syenite dikes from 35 to 250 feet in width strike N 55° W, and syenitized lavas near the shaft contain dikelets of felsite and hornblende syenite.

Gold is found within the main syenite body and in the rocks adjacent to it. Narrow stringers of cherty quartz are usually present where the gold content is highest and pyrite is concentrated along the margins of the quartz stringers.

Although gold values often appear to be associated with pyrite where no quartz is present, pyrite is not always accompanied by gold, and in places heavy pyrite mineralization is barren. It has been observed from drill core that where pyrite was crushed it was invariably accompanied by gold.

Although the syenitic phases are, in part at least, directly related to the introduction of gold, the fault movements attendant on its introduction may well control the localization of gold values.

(ii) GOLDPOST RESOURCES INC.:

The New Kelore Property and adjacent area (Holcorp & Valliere Properties) is currently being actively explored by Goldpost Resources who have completed a decline, and are conducting an extensive diamond drilling & underground Goldpost has reported some very significant initial drilling results. Surface DDH#1, located along strike of the ore structure about 1,300 ft. southeast of the shaft, reportedly (Northern Miner; Dec. 22, 1986) intersected 70.5 ft. assaying 0.27 oz. gold per ton; individual higher assays within this interval ranged from 3.0 ft. @ 0.43 oz. to 5.0 ft. @ 0.76 oz. gold per ton. An underground hole in a separate area (Gibson West), drilled as a pilot hole along the line of a proposed crosscut, intersected (NM; Feb. 9/87) 1.4 oz. gold per ton across an estimated true thickness of 14.5 feet. It was subsequently announced (NM; Apr. 27/87) that the aforementioned crosscut on the Gibson West Zone had encountered high-grade gold mineralization ... free gold was noted on both walls and in the muck, and all assays

over one oz. gold/ton were arbitrarily reduced by 50%. Using this criteria, nine panel samples along the west wall averaged 0.75 oz. gold/ton across 7.5 feet, and 15 panel samples along the east wall averaged 3.75 oz. gold/ton across 12.5 feet. Other significant gold zones also are being evaluated.

(c) CHEVRON MINERALS & STROUD RESOURCES:

The joint venture partners Chevron Minerals & Stroud Resources are currently actively exploring a large property located in Hislop Township adjacent to the Ross Mine on the The property encompasses a number of goldbearing quartz vein stockworks that occur along a belt of felsic & mafic metavolcanics containing intercalated quartzfeldspar porphyries that trend northwest along the regional strike from the Ross Mine. It was reported (NM; Feb. 9/87) that Chevron, as the project operator, in order to evaluate the property using new geological information drilled six holes located 1,600 ft. northwest of the known gold-bearing Main Zone on the property. The best hole cut a 9.2-foot section grading 0.345 oz. gold/ton. Another hole, on a second section, intersected 6.6 ft. grading 0.224 oz. gold/ The other holes intersected similar widths assaying approximately 0.12 oz. gold/ton.

It was subsequently reported (NM; June 1/87) that diamond drilling by Chevron/Stroud had intersected another mineralized zone located 1,300 ft. northwest along strike of known mineralization. Results from the new discovery (Footwall Shoot) include 6.6 ft. grading 0.188 oz. gold/ton and another section of 13.8 ft. grading 0.156 oz. gold/ton. Two other holes in the zone cut 15.0 ft. grading 0.29 oz. § 6.6 ft. assaying 0.164 oz. gold/ton.

The latest drilling program by Chevron/Stroud was conducted along a section of the Stroud fault zone which

hosts two previously discovered gold-bearing zones known as the Main & Creek Zones. The newly discovered Footwall Shoot is associated with the Creek Zone. Substantial additional drilling on the property is scheduled to begin shortly.

(d) GOLDEN ARROW PROSPECT:

- Golden Arrow Mines, Limited (1935-52);
- Hollinger Consol. Gold Mines; Option (1946-47);
- Consolidated Golden Arrow Mines Ltd. (1953-69);
- Canadian Arrow Mines Limited (1970-87).
- Pamour Porcupine Mines Ltd. (Pamour Inc.) holds 20-yr. lease (1979-99) & 46.38% of Canadian Arrow shares.

The current Canadian Arrow gold property, located in the southwest corner of Hislop Township approximately 1.5 miles southeast of the subject Vimy Ridge Property, was initially explored in 1935-36 by Golden Arrow who sank a 48-foot prospect shaft (No.1 Shaft) on their gold-bearing West Showing. In 1946-47, Hollinger Consolidated, under an option agreement, sank a 429-foot shaft (No.2 Shaft) on the gold-bearing East Showing, and established levels at 200 & 400 feet. The No.2 Shaft is located 2,300 ft. east of the No.1 Shaft. This underground development and surface diamond drilling established reserves of 440,174 tons averaging 0.099 oz. gold/ton. The majority of the work was conducted on the East Zone where the bulk of the reserves were established.

In 1979, Pamour Porcupine Mines acquired a 20-year lease on the Canadian Arrow Property and developed a 500-ton per day open pit operation that produced from 1980-83. The property is currently idle.

The West Zone consists of quartz veins & stringers within highly altered & brecciated basalt adjacent to a Syenite stock. Numerous one to four-inch quartz stringers are present along fractures that strike N 70° E & Due East. The main vein is a one-foot-wide quartz vein that trends N 70° E. The wall rocks are much altered and heavily mineralized. Differential alteration along the branching fracture system has given rise to some replacement breccia. Both pyrite and chalcopyrite are quite evident parallel to the vein walls and in narrow fractures in the quartz itself.

Country rocks in the East Zone consist of highly altered & brecciated mafic to intermediate volcanics, quartz porphyry, and an adjacent syenite stock. The stock, which is normally grey in colour, is generally reddish near its contact with the volcanic rocks, and is cut by stringers of quartz & calcite.

Three faults that strike N 40° E cut through both the metavolcanics and the syenite stock. The main fault, located 180 ft. west of Shaft No.2, where observed on surface (Prest, 1956) has an associated 9-foot wide highly carbonatized zone. The main fault is quite straight, has a near-vertical dip, and is characterized in places by several inches of strong gouge or a calcite filling.

Gold values are associated with the main fault and its subsidiary fractures. Along the fault itself values are best in that portion where it separates syenite from volcanic rocks. The volcanics are altered to a dense, hard, purplish material, which is mineralized with extremely fine pyrite filling tight fractures. Gold is associated with the fine pyrite in the syenitized volcanics and in veinlets of bluish quartz. On the 400-foot level, fine

visible gold was observed in blue quartz. In the syenite to the west of the fault, pyrite is coarser, and gold values are not so high.

One prominent subsidiary vein leaves the main fault as a tension fracture striking southwestward, but in 100 feet it turns parallel to the main fault. Close to its junction with the main fault it is a breccia vein with syenite fragments in white quartz, and has a maximum width of three feet. Erratic gold values occur with discontinuous stringers of blue quartz which cut the white quartz vein.

The most consistent body of ore on the 250-foot level is a lenticular body lying between the main fault and the subsidiary fault described above. Gold is associated with fine disseminated pyrite in fractured, silicified grey syenite. This lenticular body, which was outlined by diamond drilling, is about 150 feet long and 40 feet wide, and averages 0.15 ounces gold per ton. It is terminated on the south by the same oblique fault that displaced the main fault.

PREVIOUS WORK:

During the winter of 1922-23 the Hislop Mining Syndicate sank an 80-foot, 2-compartment, prospect shaft and did trenching in the south-half of lot 13, Concession III on Resont's current mining claim L.893571. The shaft is situated adjacent to an easterly-trending fault zone within an area comprised of mafic to intermediate flows, minor flow breccia, bedded tuff & chert, and quartz-feld-spar porphyries. There are no details on record pertaining to this early work on the property.

During the period June & July 1981, Asarco Exploration Company of Canada Limited completed a reconnaissance program of reverse circulation overburden drilling on claims in Hislop & adjacent Bowman Township. The overburden holes were designed to test for anomalous gold and/or base metal mineralization within lodgement (basal) tills and within the upper few feet of bedrock. Overburden holes were located at approximately one-quarter mile spacing along an east-west profile line in a search for anomalous dispersion trains in a down-ice direction (150° to 180°) from their bedrock source.

Three of these overburden holes were drilled on the southern two claims of the current Vimy Ridge Property: #HL-1 was drilled on Claim No.893573; and HL-2 & HL-3 on Claim No.893574. Hole #HL-1 encountered 37.0 ft. of overburden consisting of 9.0 ft. of sand, followed by 27 ft. of clay, and one-foot of basal till. Hole # HL-2 intersected 25 ft. of clay, followed by 4.0 ft. of sand; there was no till present. Hole #HL-3 intersected 123 ft. of overburden consisting of 37 ft. of clay, 74 ft. of sand & gravel, and 12 ft. of basal till. Bedrock in Hole Nos. 1 & 2 was described as being a chloritic, mafic volcanic (basalt)

containing disseminated pyrite & magnetite, and minor hematite; in Hole #HL-3 bedrock was a chloritic schist (basalt). Assay results from the basal till samples are not known.

Gold-bearing quartz-carbonate stringer veins occur within mafic flows & tuffs in Bowman Township (N1, Lot 2, Concession 3) approximately 4,000 ft. west of the Vimy Ridge Property. There are three sets of quartz veins present: two sets that strike northeasterly & northwesterly consist of barren glassy bull quartz; the third set strikes easterly and contains disseminated pyrite & gold values in places. Samples of vein material & wallrock (Leahy, 1965) assayed as high as 0.11 ozs. & 0.14 ozs. gold per ton, with lesser gold values eslewhere. The easterly strike projection of the gold-bearing veins & host rocks would extend through an intervening overburden-covered area, extensive sand plain, into the middle to the Vimy Ridge Property approximately 1,400 ft. north of the old prospect shaft.

The aforementioned old prospect shaft is currently capped (wooden platform) and the old trenches are over-Broken muck that constitutes dump material located adjacent to and presumably from the shaft contains quartzcalcite stringer veins with abundant pyrite & pyrrhotite, scattered chalcopyrite & minor galena in places. Host rocks are highly altered mafic volcanics & cherty, hematitized, tuffs. One grab sample of heavily mineralized cherty quartz taken from the shaft dump muckpile reportedly (Mullan, 1986) assayed 65 ppm gold (1.895 oz. gold per ton) ... this selected "character" sample probably is indicative of the more heavily mineralized part of the fault zone upon which the shaft was originally sunk. The high gold assay should not be construed as being representative of the shaft zone as a whole, and it is included herein only because it does confirm the presence of gold values on the property.

*

There are no records of any detailed geological mapping, systematic sampling of the abundant quartz-carbonate stringer veins & adjacent altered host rocks, or evaluation of the several zones of quartz-feldspar porphyries present on the property. Also, there is no evidence that geophysical surveys or diamond drilling have been undertaken on the Vimy Ridge Property.

CONCLUSIONS:

The Vimy Ridge Property is geologically well located since it is underlain by the same mafic to intermediate metavolcanics and/or derived schists, quartz porphyries, and felsic intrusives that elsewhere in the nearby area are the host rocks for significant gold deposits. An exploratory search on the property for similar gold deposits is definitely warranted.

The principal gold deposits in Hislop Township are associated directly with and/or are spatially related to highly altered fault zones containing gold-sulphide-bearing quartz-carbonate stringer veins & stockworks; and/or are located within adjacent pyritized/hematitized breccia zones. Therefore, the presence on the property of quartz-carbonate stringer veins containing associated sulphide mineralization within highly altered & brecciated host rocks is geologically significant. The fact that gold values are associated with these veins in the one area tested (shaft zone) enhances the overall exploration potential of the property.

Because the economically significant faults & associated breccia zones are generally highly altered and often have associated pyrite mineralization they may be detectable by VLF-EM Surveys; or where the pyrite is more disseminated,

by I.P. Surveys. Because of the extensive overburden cover on the Vimy Ridge Property said geophysical surveys should be undertaken as part of the initial exploration program. Any E.M. Conductive Zones or I.P. Anomalies detected from the aforementioned surveys would represent first priority targets for geological evaluation; and where warranted, by follow-up testing by diamond drilling.

A Magnetometer survey should also be conducted in order to detect or further delineate both diabase dikes (linear magnetic highs) and areas underlain by felsic intrusives/quartz porphyries (magnetic lows) known to be present on portions of the property.

The limited previous work completed on the Vimy Ridge Property has indicated a number of exploration target areas that warrant detailed evaluation. Said target areas are described as follows: ...

- (a) The gold-bearing Shaft Zone and easterly strike extension of the associated fault; and an adjacent bedded tuff-chert horizon. Of particular interest is an over-burden-covered area where a northeasterly-trending fault intersects the cherty tuff horizon.
- (b) A northeasterly-trending quartz porphyry horizon and parallel fault zones located on the southern claims, and adjacent granophyric volcanics situated on the north edge of a felsic stock also warrant detailed evaluation since they represent a geological environment that is similar to that present at the East Gold Zone of the nearby Golden Arrow Property.

(X)

(c) The overburden-covered area situated approximately 1,400 ft. north of the old shaft warrant consideration since it may contain the easterly strike extension of goldbearing horizons present in adjacent Bowman Township.

11

RECOMMENDATIONS:

It is hereby recommended that a preliminary exploration program on the Vimy Ridge Property be undertaken at the earliest convenience in an exploratory search for gold deposits similar to those major orebodies found in the adjacent regions.

The initial exploration program should consist of the cutting of a control grid of north-south-bearing picket lines at a 200-foot line-spacing over the entire property; to be followed by detailed geophysical surveys (VLF-EM; Magnetic) thereon; detailed geological mapping, sampling & assaying; limited I.P. check surveys over selected areas of the property; and follow-up diamond drilling where warranted to test any E.M. conductive zones and/or I.P. anomalies detected from said surveys, and/or other areas of geological significance.

* * * * * * * * * * * * * * * *

Respectfully submitted,

K.H. Darke, P.Eng. Consulting Geological Engineer

May 15, 1987 Timmins, Ontario VIMY RIDGE GOLD PROPERTY; HISLOP TOWNSHIP, ONTARIO; ESTIMATED COSTS OF PRELIMINARY WORK PROGRAM RECOMMENDED:

PHASE I:-

1. Geophysical Surveys:	
(a) Linecutting of Control Grid: (All-Inclusive Costs as Stated)	
(i) 14.5 miles @ \$375/line-mi \$5,450 (ii) Transportation & Expenses 750 \$6,200	\$ 6,200
(b) Ground Geophysical Surveys:(All-Inclusive Costs as Stated)	e ^c
(i) VLF-EM; 14.5 mi @ \$175/li-mi \$2,550 (ii) Magnetic; 14.5 mi @ \$175/li-mi 2,550 (iii) Transportation & Expenses 800 (iv) Evaluation Report & Maps 1,800 \$7,700	7,700
(c) I.P. Surveys:	
(i) Surveys; 10 days @ \$1800/day \$18,000 (ii) Transportation & Expenses 1,400 (iii) Evaluation Report & Maps 2,500 Sub Total: \$21,900 Contingencies @ 10%: 2,200 \$24,100	24,100
(d) Geological Supervision (Consultant); & Evaluation of Geophysical Survey Results re Economic Geology:	3,800
2. Geological Mapping, Sampling & Assaying:	
(a) Mapping; 8 claims @ \$200/claim \$1,600 (b) Transportation & Expenses 1,250 (c) Sampling & Assaying 3,600 (d) Geol. Report & Maps 2,450 \$8,900	8,900
3. Summary Evaluation Report by Geological Consultant containing Recommendations:	2,100
Sub Total PHASE I:	

... Continued on Page 33.

ESTIMATED COSTS continued:
PHASE I: Balance Forward \$ 52,800
4. Preliminary Diamond Drilling Program:
*NOTE:- Because of the extensive overburden cover and the numerous target areas already indicated, it is anticipated that substantial diamond drilling will be required in the evaluation of the Vimy Ridge Property.
 (a) Mobilization to Campsite; Camp Erection including Core Tent; Set-up at first Drill Hole; and Demobilization: \$ 11,000
(b) Coring (NQ); Moving Between Holes; Acid Tests; and Core Boxes; 7,000 ft. @ \$25/foot:
(c) Spotting of Drill Holes; Detailed Core Logging & Sampling: (i) Jr.Geol.; 50 days @ \$150/day 7,500 (ii) Consult.; 35 days @ \$400/day 14,000 (iii) Transportation & Expenses 6,500
(d) Assaying of Core Samples: 4,800
Sub Total: \$218,800 Contingencies @ 10%: <u>21,900</u>
\$240,700 240,700
5. Geological Evaluation of Diamond Drilling Results:
Preparation of Technical Data (Logs, Maps, Sections, Assay Plans, etc.) & Summary Report by Geol. Consultant containing Recommendations:
<u>Total PHASE I: \$299,500</u>

* * * * * * * * * * * * * * * *

K.H. Darke, P.Eng. Consulting Geological Engineer

BIBLIOGRAPHY:

Jensen, L.S.

1981: Gold Mineralization in the Kirkland Lake-Larder Lake Areas; p.59-65 in Genesis of Archean, Volcanic-Hosted Gold Deposits; Ont. Geological Survey, MP97, 175 p.

Jones, W.A.

1948: Ross Mine; p.570-579 in Structural Geology of Canadian Ore Deposits; CIM Symposium Volume, 1948, 948 p.

Leahy, E.J.

1965: Currie & Bowman Townships; Ont. Dept. of Mines, Geological Report No.40, 22 p. accompanied by Geol. Map No.2071, Scale: 1 in. = 2640 feet.

ODM

1971: Gold Deposits of Ontario, Part 1; Cochrane District, p.73-78 in Ont. Div. of Mines, Mineral Resources Circular No.13, 315 p.

1973: Timmins-Kirkland Lake Sheet; Cochrane, Sudbury & Timiskaming Districts; Ont. Dept. of Mines, Geol. Compilation Series Map 2205, Scale: 1 in. = 4 miles.

OGS

1983: The Geology of Gold in Ontario; Ont. Geol. Survey, Miscellaneous Paper MP110, 278 p.

Prest, V.K.

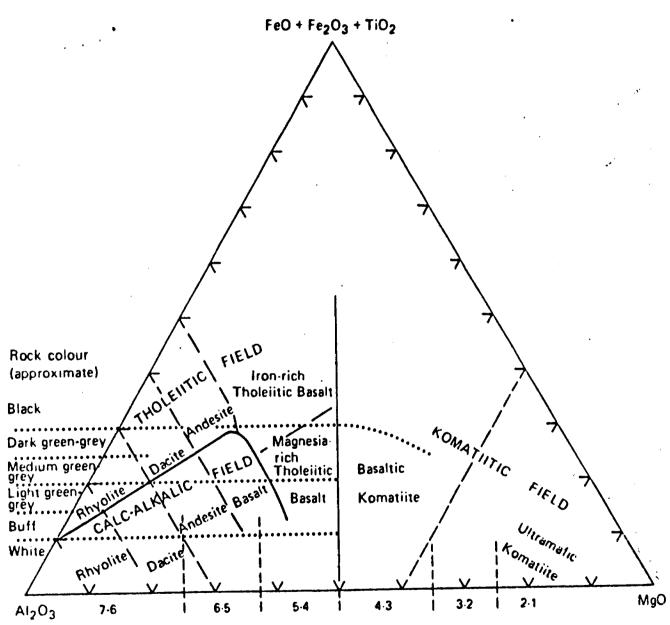
1956: Geology of Hislop Township; Sixty-Fifth Annual Report of the Ont. Dept. of Mines; Vol. LXV, Part 5, 1956, 51 p. accompanied by Geol. Map No. 1955-5, Scale: 1 in. = 1,000 feet.

Pyke, D.R.

1981: Relationship of Gold Mineralization to Stratigraphy and Structure in Timmins and Surrounding Area; p. 1-15 in Genesis of Archean, Volcanic-Hosted Gold Deposits; Ont. Geol. Survey, MP97, 175 p.

Ontario Geological Survey Volcanic Rock Classification

L.S. Jensen (1976)
CATION PLOT FOR SUBALKALIC VOLCANIC ROCKS



Approximate hardness for low grade metamorphic mineralogy.

Ontario Division of Mines, Mineral Resources Circular No.13, 1971; p.76.

Ross Mine (Producer)

Main Metals: Au, Ag.

Location: 11 miles southeast of Matheson and 1/2 mile north of Holtyre,

Hislop Township. N1/2 lot 1, con. II, S1/3 lot 2, con. III, and NW and
SE quarters of the N1/2 of lot 2, con. III. Shaft NW1/4 N1/2 lot 1, con. II.
Map Reference: ODM 1955-5, Hislop Township.

Geology: The country rocks are rhyolite tuff and breccia and basalt which are intruded by syenite. Certain zones have been carbonatized and silicified. The general strike is northwest and the dip steep. Fault zones are characterized by zones of gouge several inches in width, by calcite and quartz veins several feet in width and by abundant iron oxide. The orebodies consist of lens-shaped and pipe-like stringer lodes and vein zones consisting of parallel quartz stringers. The veins are generally only a few inches in width and consist of quartz or quartz-dolomite veins cut by later quartz-calcite veins. Small amounts of chalcopyrite, sphalerite, galena, tennantite, silver and gold are contained in the veins. Lens-shaped orebodies are 300 feet in length by 75 feet in width. The average grade is 0.17 ounces gold and 0.33 ounces silver per ton.

Economic Features: (Canadian Mines Handbook 1970-71, p.172)

Type of Reserve	Ore Reserve tons	Gold Content ounces per ton		
Proven Probable and possible	449,000 474,000	0.191 0.175		

Ownership: Hollinger Mines Ltd.

History: 1933: Sampled by Frank Tremblay.

1933-35: Trenching, surface drilling. Shaft to 480 feet, levels at 150, 300 and 450 feet and 1,000 feet lateral work on 150-foot level by Hollinger Consolidated Gold Mines Ltd.

1936-68: No. 1 shaft 2,910 feet deep. Total development 50,788 feet of drifts, 47,820 feet of crosscuts. Mill handles 440 tons per operating day. Operated by Hollinger Consolidated Gold Mines Ltd.

Production:	Years	Gold ounces	Silver ounces	Total Value dollars	Ore Milled tons
	1936-68	609,259	1,154,065	23,172,516	3,483,560

References: ODM 1936, Vol. 45, pt.6, p.17-23

ODM 1956, Vol. 65, pt.5, p.39-44

ODM 1968, Vol. 78, p.17-18

Struct. Geol. Canadian Ore Deposits, C1MM 1948, Jubilee Vol., p.570-579.

Ontario Division of Mines, Mineral Resources Circular No.13, 1971; p.75.

Kelore Prospect

Main Metals: Au.

Location: 9 miles southeast of Matheson, Hislop Township, eastern part.

17 claim group, Hislop and Guibord Townships; in Hislop part of lots 1, 2 and 3, con. III and IV, shaft W1/3 of S1/3 lot 1, con. IV (claim L26963). Map Reference: ODM 1955-5, Hislop Township.

Geology: The country rocks are intermediate to basaltic volcanics which include amygdaloidal and breccia types. Some of these rocks have been chloritized, syenitized or hematitized. Syenite dikes from 35 to 250 feet in width strike N55°W and syenitized lavas near the shaft contain dikelets of felsite and hornblende syenite. Gold is found within the main syenite body and in the rocks adjacent to it. Narrow stringers of cherty quartz are usually present where the gold content is highest and pyrite is concentrated along the margins of the quartz stringers.

Economic Features: The better mineralized sections on surface are the Shaft zone, the East zone which extends to 2,000 feet east of the Shaft and the West zone which extends 1,600 feet west of the Shaft. Assay values included 0.24 ounces for 14.4 feet, 0.23 ounces for 73.9 feet, 0.56 ounces for 15.2 feet, 0.17 ounces for 34 feet, 0.26 ounces for 11.5 feet (Survey of Mines 1947, p.234).

On the 450-foot level a zone 190 feet long and 10 to 11 feet wide averaged 0.27 ounces of gold per ton (Survey of Mines 1949, p.162). Underground work indicated 180,000 tons averaging 0.12 ounces of gold per ton above the 450-foot level (Survey of Mines 1953, p.174).

Ownership: New Kelore Mines Ltd.

History: Surface exploration and 4,914 feet of diamond drilling by Tovoric Gold Mines Limited.

1939-40: Shaft 319 feet, levels at 80, 180 and 300 feet, total drifting and crosscutting on the two upper levels 917 feet by Kelrowe Gold Mines Limited.

1947: Shaft deepened to 475 feet, level at 450 feet, lateral work 707 feet, underground drilling 18 holes 2,429 feet, surface drilling 6 holes

2,429 feet by Kelwren Gold Mines Limited.
1948: Lateral work 2,928 feet underground drilling 122 holes 12,623 feet by Kelore Gold Mines Ltd.

References: ODM 1956, Vol. 65, pt.5, p.45-47

ODM 1941, Vol. 50, pt.1, p.59

ODM 1948, Vol 57, pt.2, p.43

ODM 1949, Vol. 58, pt.2, p.35.

Ontario Division of Mines, Mineral Resources Circular No.13, 1971; p.73.

Golden Arrow Prospect

Main Metals: Au.

Location: Six miles south of Matheson, Hislop Township. 11 claims including con. I, lot 12 S1/2, lot 13 E1/2 of S1/2. No. 1 shaft in NE1/4 of S1/2 lot 13, con. 1 and No. 2 shaft in NE1/4 of S1/2 lot 12, con. 1. Map Reference: ODM 1955-5, Hislop Township.

Geology: The East zone is in a syenite stock about 3,000 feet in diameter with the best gold mineralization extending across the stock. Gold is associated with finely disseminated pyrite in fractured and silicified syenite. The zone is adjacent to a fault which strikes northeast and has been explored to a depth of 400 feet.

The West zone is a quartz stringer zone in basalt adjacent to the stock which strikes N80°E and dips 65°N. Pyrite is present in the quartz with the best mineralized zone 120 feet long and 10 to 15 feet wide.

Economic Features: Surface drilling indicated 3 main zones with 1,045 tons
per vertical foot averaging 0.134 ounces of gold per ton. Underground
development tended to confirm surface drill results (Survey of Mines 1955,
p.189). A lenticular zone on the 250-foot level is 150 feet long, 40
feet wide and averages 0.15 ounces of gold per ton (ODM 1956, Vol. 65,
pt.5, p.37).

Ownership: Canadian Arrow Mines Ltd.

History: 1935-37: Surface sampling, trenching,800 feet of diamond drilling, and No. 1 shaft sunk to 48 feet; work done by Golden Arrow Mining Company Limited and under an option by Hollinger Consolidated Gold Mines Ltd. 1946-47: No. 2 shaft sunk to 429 feet, levels at 250 and 400 feet, total drifting 1,628 feet, crosscutting 669 feet, surface drilling 27 holes 14,906 feet, underground drilling 58 holes 3,675 feet, by Golden Arrow Mines Ltd.

References: ODM 1936, Vol. 45, pt.6, p.32-33

ODM 1937, Vol. 46, pt.1, p.138-139

Canadian Mines Handbook 1938, p.107

ODM 1948, Vol. 57, pt.2, p.31

Survey of Mines 1955, p.189

ODM 1956, Vol. 65, pt.5, p.35-37.

KENNETH H. DARKE CONSULTANTS LIMITED

338 SPRUCE STREET NORTH TIMMINS, ONTARIO TELEPHONE (705) 264-1910 RESIDENCE 264-7403

The Management Resont Resources Corporation Suite 5900 One First Canadian Place TORONTO, Ontario M5X 1K2

CERTIFICATE

With reference to my Geological Exploration Report on the Vimy Ridge Gold Property dated May 15, 1987 ...

I, KENNETH H. DARKE, of the city of Timmins, Ontario do hereby certify that:

- I am a graduate of the University of British Columbia in Geological Engineering and have practised my profession in this capacity continuously for the past 31 years;
- 2. I am and have been an independent Consulting Geological Engineer (Exploration) with an office situated in Timmins, Ontario for the past 23 years;
- I am a registered Professional Engineer in the Province 3. of Ontario:
- I have no interest direct or indirect in the Vimy Ridge Gold Property; Hislop Township, Ontario described in this report or in the shares of Resont Resources Corporation nor do I expect to receive any; and
- This report is based upon a personal knowledge of the Hislop Township Region gained while conducting exploration programs throughout the adjacent townships; upon a personal knowledge of the major gold occurrences within the general Timmins-Kirkland Lake Gold Region; upon a study of the pertinent geological literature including Ontario Division of Mines' assessment work files; and upon personal examinations of the Vimy Ridge Property itself and adjacent areas during the past several weeks. POOPEREJONAL SE K. H

Dated this 15th day of May, 1987 Timmins, Ontario

K.H. Darke, P.Eng.

K. H. DARKE

Consulting Geological Engineer

KENNETH H. DARKE CONSULTANTS LIMITED

338 SPRUCE STREET NORTH TIMMINS, ONTARIO P4N 6NB TELEPHONE (705) 264-1910 RESIDENCE 264-7403

May 15, 1987

The Management
Resont Resources Corporation
Suite 5900
One First Canadian Place
TORONTO, Ontario
M5X 1K2

Gentlemen:

VIMY RIDGE GOLD PROPERTY; HISLOP TOWNSHIP, ONTARIO:

Letter of Consent to use my Geological Exploration Report dated May 15, 1987

This letter is your authority to use my Geological Exploration Report on the Vimy Ridge Gold Property; Hislop Township, Ontario dated May 15, 1987 for any corporate purpose you deem necessary including its submittal to the pertinent regulatory authorities and its inclusion in whole or in part in any company prospectus.

Yours truly,

K.H. Darke, P.Eng. Consulting Geological Engineer

K. H. Darke

KENNETH H. DARKE CONSULTANTS LIMITED

- 1. Detour Lake
- 2. Les Mines Selbaie
- 3. Inco-Golden Knight
- 4. Teck-Golden Hope
- 5. Joutel
- 6. Matagami Lake

General Location Map

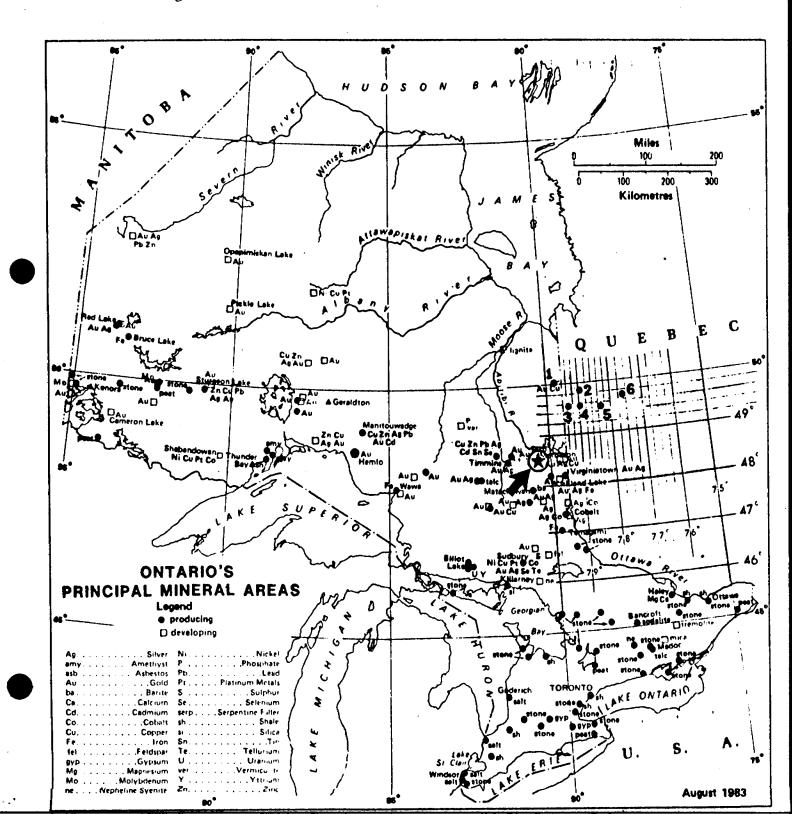
RESONT RESOURCES CORPORATION

VIMY RIDGE GOLD PROPERTY

HISLOP TOWNSHIP, ONTARIO

Larder Lake Mining Division
District of Cochrane

Scale: 1 inch = 135 miles



6 . . .

le Management

SEAVIEW RESOURCES LTD.

Cedar Hill CONNAUGHT, Ont. PON 1A0

338 Spruce St. North TIMMINS, Ont. P4N 6N5

705

Aug. 26, 1988

PARTIGULAR 8	FEES		
VIMY RIDGE GOLD PROPERTY; HISLOP TOWNSHIP, ONTARIO:			
Geological Consulting Services Rendered during the period Aug. 17th-25th, 1988:			
Meetings with M. Hibbard & L. Lee re Proposed Exploration Program & Financing Schedule (Aug. 18th & 20th/88) No Charge. Property Examinations & Recon. Geological Mapping (Aug. 16th & 22nd, 1988) & Discussions with Management re preceding; Consulting Fee Charged: 2 days @ \$400/day Expenses Incurred (Auto)			
Total:	\$865.80		
INVOICE			

KENNETH H. DARKE

PHONE (705) 264-1910

639

264-7403

The Management

RESONT RESOURCES CORPORATION

• 5900 - One First Canadian Place TORONTO, Ont.

July 10, 1987

No

338 Spruce St. North

Timmins, Ont.

P4N 6N5

M5X 1K2 DATE PARTICULARS Geological Consulting Services Rendered: ... Seaview (a) Preparation of Geological Exploration (Qualifying) Report on the Vimy Ridge Gold Property; Hislop Township, Ont. dated All-Inclusive Fee Charged May 15, 1987: \$2,500.00 (b) Preparation of Geological Exploration (Qualifying) Report on the Slate Falls Gold Property; Wesleyan Lake, Ont. dated June 15, 1987: All-Inclusive Fee Charged ... 2,500.00 Lelangio \$5,000.00 Mar. 31st/87:- Partial Payment Received per Cheque 3,000.00 Balance Due: 000.00

Ministry of ___ Natural Resources

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT No. W8908-196



42A0BNW0036 2.12609 HISLOP 900								
Type of Survey(s)		Mining Act			Do not use shaded areas below.			
	"SFind too					slop	Township	
Beneficiation Claim Holder(s)	J. UUTES		9	126		Prospecto	r's Licence No.	
Pelangio Lard	er Mines Lim	ited ?	rece .	INV		1 5	771	
220 Bay Stree	t, Suite 701	,_TORO	NTO, O	nt M5J 1F	(from & to)		Total Miles of line	Cut
Kenneth H. Da Name and Address of Author (o	rke Consulta f Geo-Technical report)	nts_Li	mited	20 MOS	87 25	<u>08 88</u>		
Kenneth H. Da	rke, 338 Spr	uce St	. So.	TIMMINS, (Ont. P4	N 6 N	15	
Credits Requested per Each (Claim in Columns at r	ight	Mining C	laims Traversed (I	List in nume	rical sequ		
Special Provisions	Geophysical	Days per Claim	Prefix	ining Claim Number	Expend. Days Cr.	Prefix	fining Claim Number	Days Cr.
For first survey:	- Electromagnetic		L	893567	28			
Enter 40 days. (This includes line cutting)	- Magnetometer			893568	28	230		
For each additional survey:	- Radiometric			893569	28			
using the same grid: Enter 20 days (for each)	- Other			893570	28			
2	Geological		40 3	893571	28	ONTARI	GEOLOGICAL	
	Geochemicat			893572	28	ASS	POOMEN FI	ES
Man Days	Geophysical	Days per				\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	OFFICE	
Complete reverse side		Claim		893573	28	Š	EP 29 1989]
and enter total(s) here	- Electromagnetic			893574	28		<u> </u>	1
	- Magnetometer		-			D E	N -	1-1
	- Radiometric					 	CEIVE	P
-Beneficiation	- Other	-28-						
	Geological							
	Geochemical				UE PROGRAM	 		
Airborne Credits		Days per Claim	1 1	Man Man	WIS	TO I		
Note: Special provisions	Electromagnetic	Claim				114		
credits do not apply				11.0	A 1989	11		+
to Airborne Surveys.	Magnetometer			LI LI JUN 1		1 1		
	Radiometric	<u> </u>		279.	Scam			
Expenditures (excludes power formed /	er stripping)	$\overline{}$				4		
	Section 7	7-191						
Performed on Claim(s)					VE	1		
			-	RECE	1 V E V		-	
						1		
Calculation of Expenditure Days	٦	otal		JUL - 6	503			-
Total Expenditures	Days	Credits) OF	L		
\$ 3,365.80	+ [15] = [2]	24	1	MINING LAN	DS 2F	claims co	nber of mining vered by this	
Instructions Total Days Credits may be ap	portioned at the claim h	older's				report of	work.	<u>8</u>
choice. Enter number of days in columns at right.			Total Day	For Office Use O	Inly	Mining Re	ecorder ,	
			Recorded	1 lune	17/89	a.	G. Warn	er
Date Record (Signature) 22 The Approveries Record			As Recorded	Branch D				
June 7, 1989 4	et of Work	*	7.1	· V /3/2"	70/	111	love	
Certification Verifying Report of Work I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work								
or witnessed same during and/or after its completion and the annexed report is true.								
Name and Postal Address of Person Certifying								
Maurice Hibbard Date Certified Cay (V) Spinaryte)								
Cedar Hill, CONNAUGHT, Ont PON 1AO June 7, 1980								

Cedar Hill, CONNAUGHT, Ont PON 1A0 (362 (81/9)

LEGEND BEATTY TWP. HIGHWAY AND ROUTE No. OTHER ROADS TRAILS A RO WAR THE BOY OF L SURVEYED LINES: 1 Froome and the second 1048333 TOWNSHIPS, BASE LINES, ETC. LOTS, MINING CLAIMS, PARCELS, ETC. 1.+ S. - New PATTALL - PICHTS UNSURVEYED LINES: 1046334 LOT LINES PARCEL BOUNDARY MINING CLAIMS ETC. RAILWAY AND RIGHT OF WAY UTILITY LINES 54796 NON-PERENNIAL STREAM 53(729 | 53(728 FLOODING OR FLOODING RIGHTS SUBDIVISION OR COMPOSITE PLAN RESERVATIONS ORIGINAL SHORELINE 2 MARSH OR MUSKEG MINES TRAVERSE MONUMENT GEODECTIC STATION DISPOSITION OF CROWN LANDS 547990 TYPE OF DOCUMENT PATENT, SURFACE & MINING RIGHTS " , SURFACE RIGHTS ONLY_____ " MINING RIGHTS ONLY LEASE, SURFACE & MINING RIGHTS GUIBORD , SURFACE RIGHTS ONLY.... o. S " , MINING RIGHTS ONLY..... LICENCE OF OCCUPATION RESERVATION _____ CANCELLED SAND & GRAVEL Vimy OWE Riage 26539 25977 25976 6542 24713 693569 SCALE: 1 INCH = 40 CHAINS 737142 737139 Berndt 737141 737140 113609 #3610 1033721 #136#\ TOWNSHIP 43452 43453 43454 | 43451 M.N.R. ADMINISTRATIVE DISTRICT COCHRANE

PLAYFAIR TWP.

·3

SYMBOL ORDER-IN-COUNCIL OC OP. 12609 MINING DIVISION LARDER LAKE LAND TITLES / REGISTRY DIVISION COCHRANE

Ministry of

and Mines

Humber

Northern Development

G-3650

Ministry of

Resources

Natural

Bata JUNE 1988

Ontario

NOTICE OF FORESTRY ACTIVITY THIS TOWNSHIP / AREA FALLS WITHIN THE _____ WATABEAG MANAGEMENT UNIT

AND MAY BE SUBJECT TO FORESTRY OPERATIONS. THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT: P.O. BOX 129
SWASTIKA, ONT.

POK ITO 705-642-3222

CIRCULATED FEBJ5/89

200

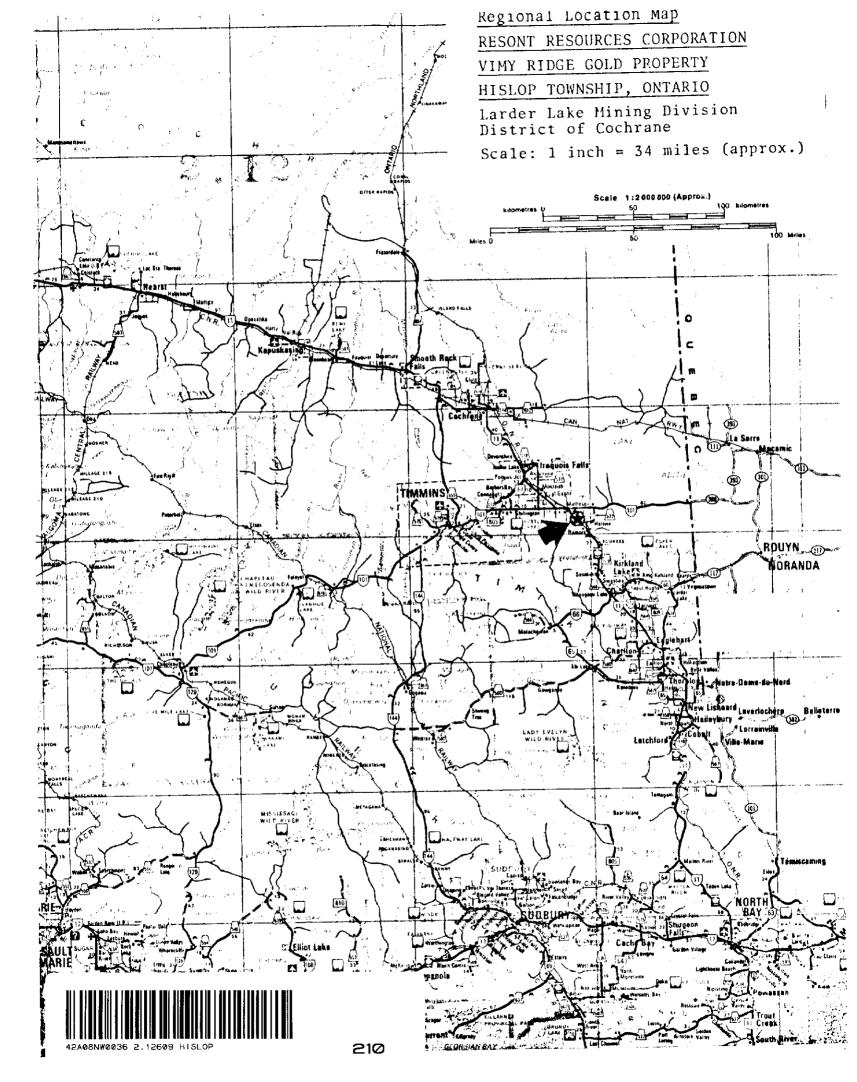
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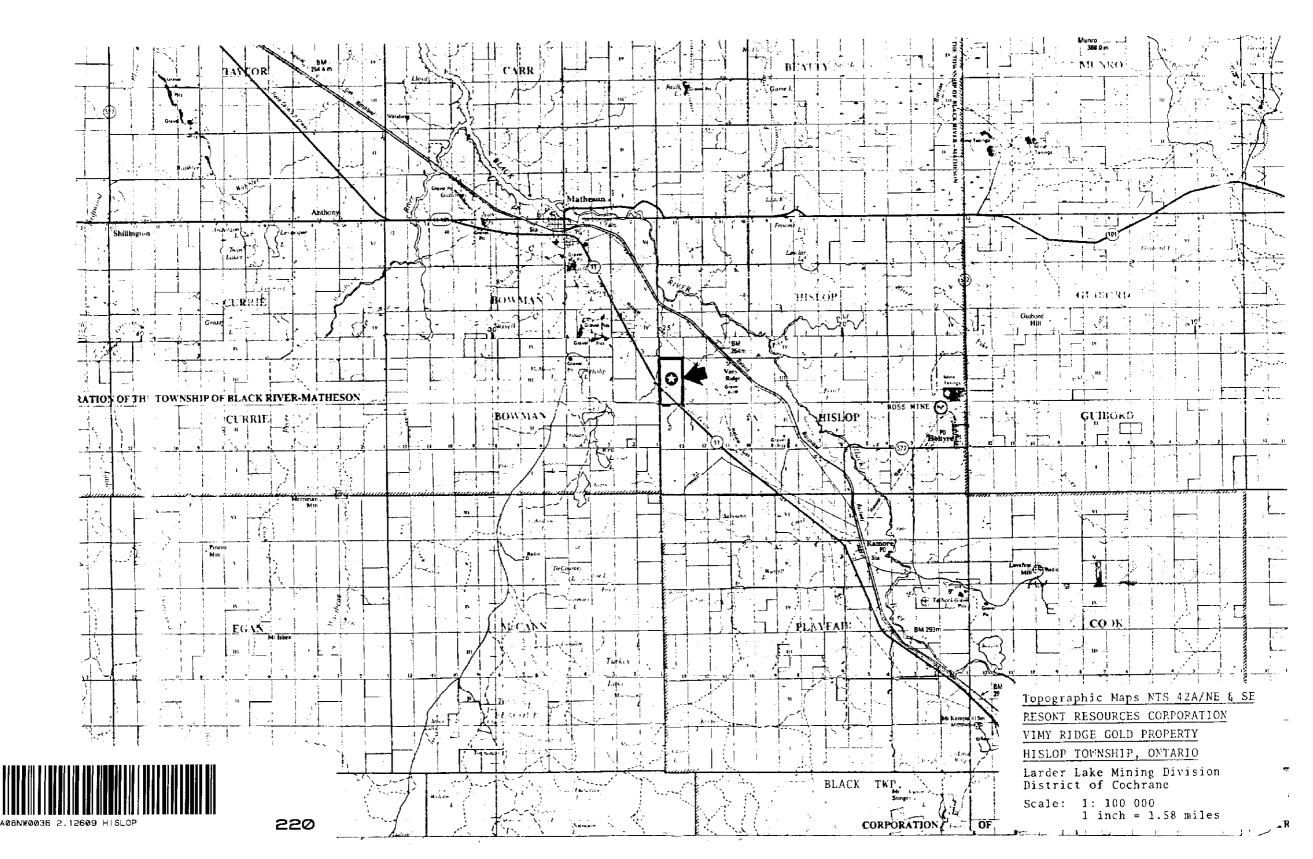
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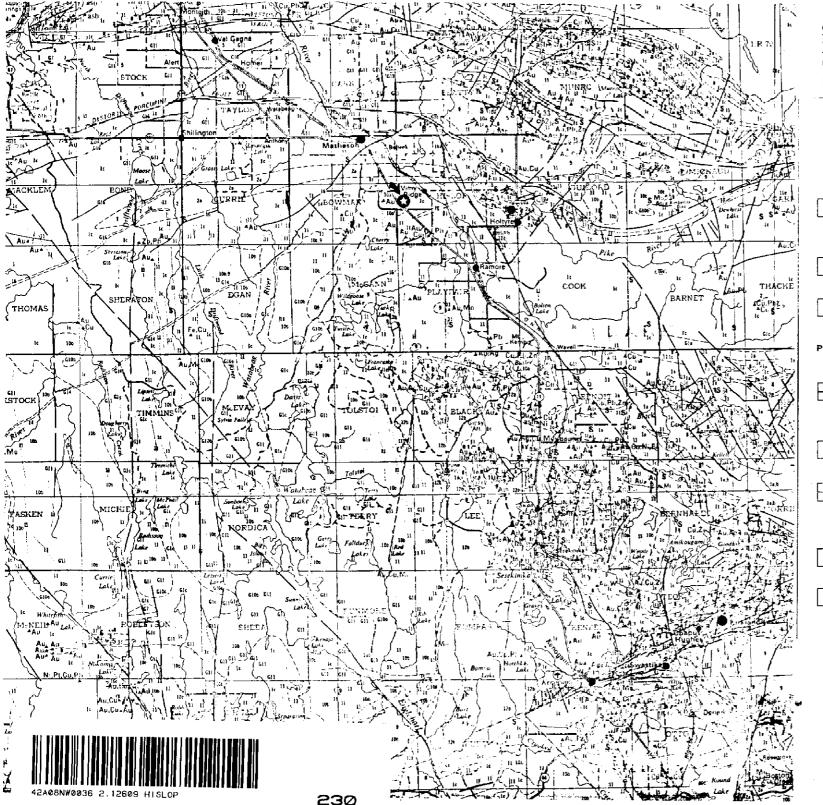
9

10

248.3 24.62 4.44.51 248.3 24.62 4.44.51







ONT. DEPT. MINES MAP 2205

TIMMINS-KIRKLAND LAKE

Geol. Compilation Series

Scale: 1 inch = 4 miles

LEGEND

CENOZOIC

PLEISTOCENE AND RECENT

Till, varved tiley, sand, gravel, peal,

UNCONFORMITY

MESOZOIC

—19 — 19 Kir berlile: dikes.

INTRUSIVE CONTACT

PALEOZOIC LOWER AND MIDDLE SILURIAN

18 Thirmipe Formation: limestone, dolom : sandstone. Wa: formation: timestone, shale.

MIDDLE AND UPPER ORDOVICIAN

17 Day on Point Formation, shale, Fair Formation: limestone. Burks formation: Irmestone, shale. Guizans formation: sandstone.

PRECAMBRIAN

LATE PRECAMBRIAN MAFIC INTRUSIVE ROCKS

16 Dintase: dikes.

INTRUSIVE CONTACT MIDDLE PRECAMBRIAN ALKALIC INTRUSIVE ROCKS

15. Sycrite, nepheline syenite.

MARIC INTRUSIVE ROCKS

14 Dinhase, granophyre: sheets and

INTRUSIVE CONTACT

HURONIAN SUPERGROUP COBALT ISROUP Lorrain Formation

13 Quartzite, arkose.

Gowgand · Formation

12 Um hdivided. 12a Firmick Member, argillite, grey-nerm, sitistone, arkose. 12b Colman Member: conglomerate, ark <. greywacke, quartzile, argif.

UNCONFORMITY

EARLY PRECAMBRIAN MARIC INTRUSIVE ROCKS

Il 11 Diabase: dikes.

INTRUSIVE CONTACT FELSIC INTRUSIVE ROCKS

10a Quartz porphyry, quartz-feidspar porphyry, feidspar porphyry, gran-ochyre, feisited

10b Tronds public grandionite, quartz morsonite: simple barnoliths and stocks#

10c Trondhjemite, granodiorite, quartz montonito, quartz diorito, abite, pegmatito, migmatito: complex

9 Syenite, monzonite, feldspar sorphyryd

METAMORPHOSED MARIC AND ULTRAMAFIC ROCKS

8 Gabbio, diorite, lamprophyre.

Peridotite, dunite, pyroxenite, serpenlindel

INTRUSIVE CONTACT

METASEDIMENTS !

6 Conglomerate, greywacke, sittstone, state, argititeh

Greywacke, siltstone, state, argitite and minor pebble conglomeratel

METAVOLCANICS 5

ALKALIC METAVOLCANICSA Exactlying the order tractifies; flows, toll, buttera.

ULTRAMAFIC METAVOLCANICS*

3. Serecutivated duritic and perido-

FELSIC METAVOLCANICS

2 Unsubcivided. 2a Pyroclastic rocks. 2b Flows.

INTERMEDIATE AND MARIC METAVOLCANICS!

| 1 Unsubdivided. | 1a Informidiato flows. | 1b Informediato pyroclastic rocks. | Ic Majic flows and pyroclastic rocks.

IF Ironformation and fortuginous cheft focuss a a member of stratigraphic units 1, 2, 4, and 5).

S Suiptude mineralization.

ODM Geological Map 2205

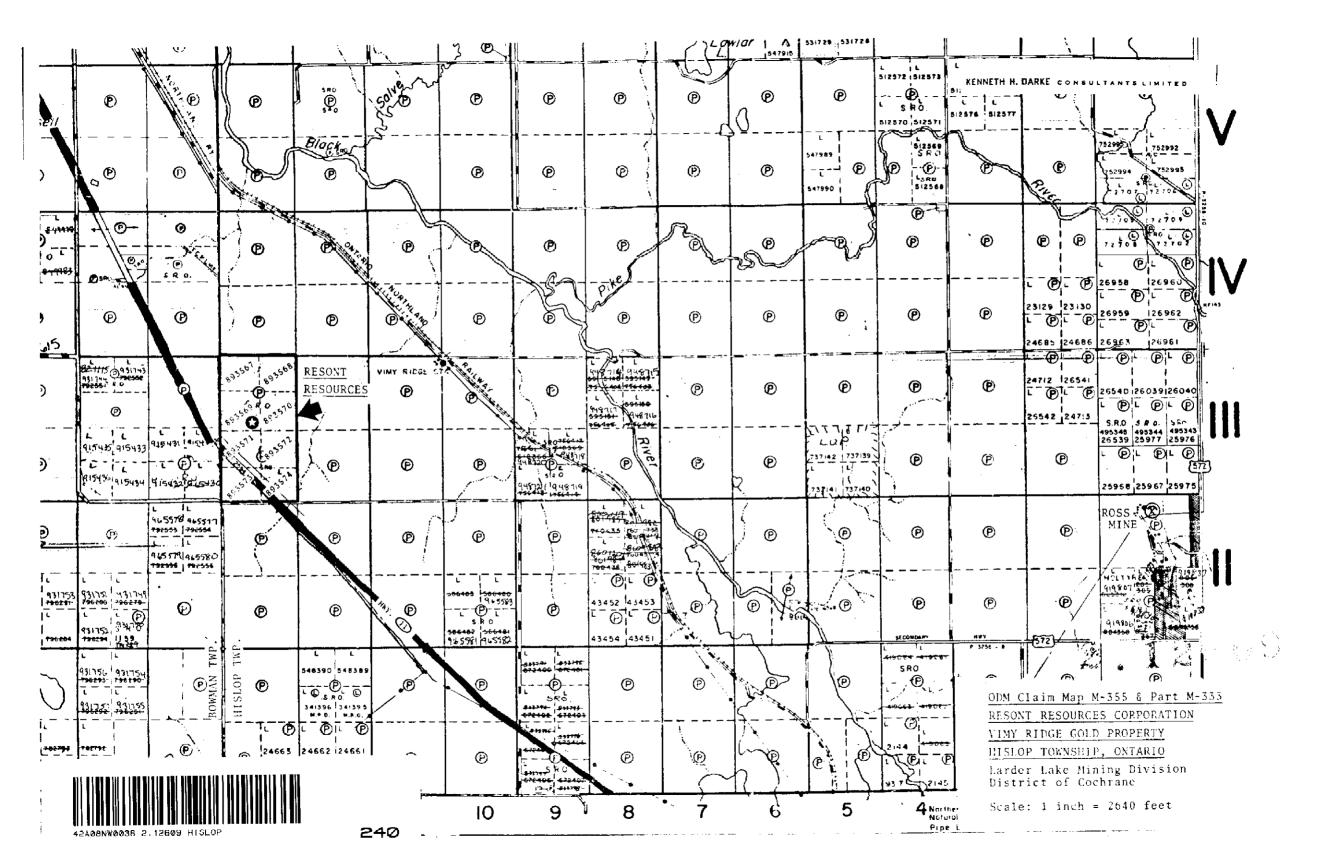
RESONT RESOURCES CORPORATION

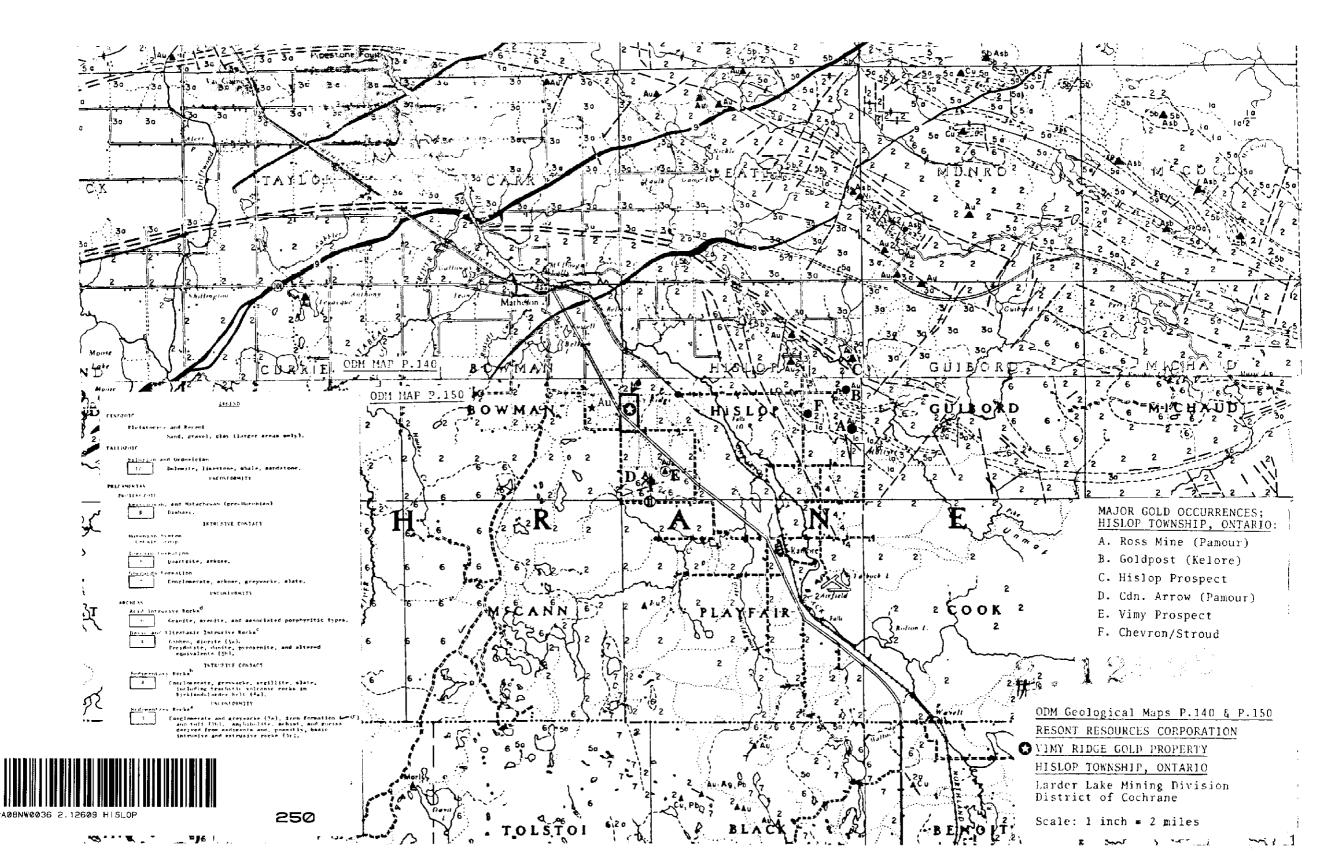
VIMY RIDGE GOLD PROPERTY 🔝

HISLOP TOWNSHIP, ONTARIO

Larder Lake Mining Division District of Cochrane

Scale: 1 inch = 4 miles





12 **13** ⊃ **LEGEND** CENOZOIC RECENT AND PLEISTOCENES Swamp and stream debris: glacial like class silt and minor sand; silt-de-tional sand and gravel; glacial didt HISLOF BOWMAN GREAT UNCONFORMITY 04110000 **PRECAMBRIAN** IV MATACHEWAN Diabase, quartz diabase, trap (7a): Urahasis porphyry, quartz diabase porphyry (7b). INTRUSIVE CONTACT ALGOMAN Ö Gravels Granilin, granodiorite and porphyrotic place (fal) syenula, porphyrotic syrnide (66) quartz, folispar and quartz-folispar purphyrins (50); folisia (60). Vincy Ridge RESONT Woods (601). Open woods RESOURCES INTRUSIVE CONTACT HAILEYBURIAN (1) TOWNSHIP CORPORATION Diabase, diorite cabbro (5b); serpentinized periontile (5c); intrusive breccia (5br). TIMISKAMING** Sheared conglomerate (4a): crassive conglomitate, bedded aril, arexinable (4b); trackyte, trackyte brecia (4c) INTRUSIVE CONTACT KEEWATIN Acidic volcanics Oper: woods Open woods Spherulitic and spheroidal rhyoli(n (3a); rhyolife, frachyle, dacife (3b); charse and fine fragmentals (3c); bedded and banded (uff.s (3d); massive (uff. crystal tuff. pseudoporphyry (3e). Woods III Intermediate to basic volcanics Pillow lava (?a); coarse lextured lavas (2b); spherodal lava (2c); flow and explosive bucca (2d); bedded fuff and chert (2e); tale-chlorite schist (2f); actinolitized volcanies (2q). Sediments Arkose (1b); conglomorate (1e). Co G Carbonate rock. Partially carbonalized rock. Q.V. Q.C.V. Quartz and quartz-carbonate veins #roods ODM Geological Map No. 1955-5 Open woods RESONT RESOURCES CORPORATION VIMY RIDGE GOLD PROPERTY HISLOP TOWNSHIP, ONTARIO Larder Lake Mining Division District of Cochrane

Scale: 1 inch = 1000 feet

Zone of variably granophyric lavas

260

