87-502-15958 7/88

REPORT ON RECONNAISSANCE

GEOCHEMICAL-GEOLOGICAL SURVEY

of the

SILVERCROSS CLAIM

in

Alberni and Victoria Mining Divisions, B.C.

for

PAYTON VENTURES INC.

2400 - 609 Granville Street Vancouver, B.C. V7Y 1G5 SUB-RECORDER RECEIVED JUL 2.7 1987 M.R. # ______\$____ VANCOUVER, B.C.

j) î.

ASHWORTH EXPLORATIONS LIMITED

by

Mezzanine Floor 744 West Hastings Street Vancouver, B.C. V6C 1A5

| Location: | NTS 92C/15/NE 48°57.5'North/124°33.5'West 33 km SE of Port Alberni, Vancouver Island, B.C. | A G |
|--------------|--|--------------------|
| Subject: | Results of Geochemical-Geological Reconnaissance Survey, October 29 – November 1, 1986, and Recommendations for Follow-up Work | EOL |
| Prepared by: | Hugo Laanela, F.G.A.C. Consulting Geologist 3657 Ross Road, Nanaimo, B.C. V9T 2S3 | O G I C S S M E |
| | December 31, 1986 | AL BR NT RE |
| | FILMED OO | A N CH |

SUMMARY

The Silvercross Claim (15 units) covers 3.75 km^2 and is located in Victoria and Alberni Mining Divisions, Vancouver Island, B.C., about 33 km SE of Port Alberni and 8 km NW of west end of Cowichan Lake. Its coordinates are 48° 57.5' North and 124° 33.5' West, NTS 92 C/15/NE. The claim is wholly owned by Payton Ventures Inc., of 2400-609 Granville Street, Vancouver, B.C., V7Y 1G5.

During October 29 - November 1, 1986, Ashworth Explorations Limited, Vancouver, B.C., on behalf of Payton Ventures Inc., carried out a limited "grassroots" exploration program on this property. Work was done over a small area (about 140 m x 200 m in size) centered on an old mineralized pit, near the northern edge of the claim, and consisted of some prospecting and mapping and taking 27 soilsamples and 9 mineralized rock samples. The only previous work done on the property appears to be some road building, trenching and pit blasting, of which we have no records.

Geologically, the area of this project is underlain by Jurassic Bonanza Group volcanic rocks (mainly basaltic flows). A small pit, 3×7 metres, was located; this was blasted into basaltic outcrop and it exposes a system of epidote-calcite-quartz veinlets which contain disseminated to massive bornite and malachite mineralization.

The mineralized zone is 1.5 m wide, but is not exposed along its strike length. Eight dump and grab samples collected in the vicinity of this pit assayed as high as "more than 10%" copper (lab detection limit) and up to 2.8 ounces per ton silver.

The soilsamples, analysed for precious and base metals, and several trace elements, did not reveal any significant or obvious anomalous zones, i.e. the highest analytical results were generally close to background values, with a few "low anomalous" values. However, by statistically combining the anomalous ratings of various elements in each sample and plotting and contouring the resultant values, several weakly to moderately anomalous areas have been outlined in the mineralized pit area; most of these are "open".

The mineralization in the pit is associated with basaltic rocks displaying textures indicative of volcanic eruptions and close proximity to a volcanic center; it is suggested that other mineralized zones can be found in the vicintiy of this center.

The exploration data so far collected covers only a very limited area (about 1%) of the claim, hence the mineral potential on the remaining part of the claim is not known.

It is recommended that a Phase I exploration survey be carried out over the entire claim area, to asses its potential, along with some detail follow-up work in the mineralized pit area. This survey requires a 3-man crew carrying out a 10-day field program, with a proposed budget of \$ 27,000.

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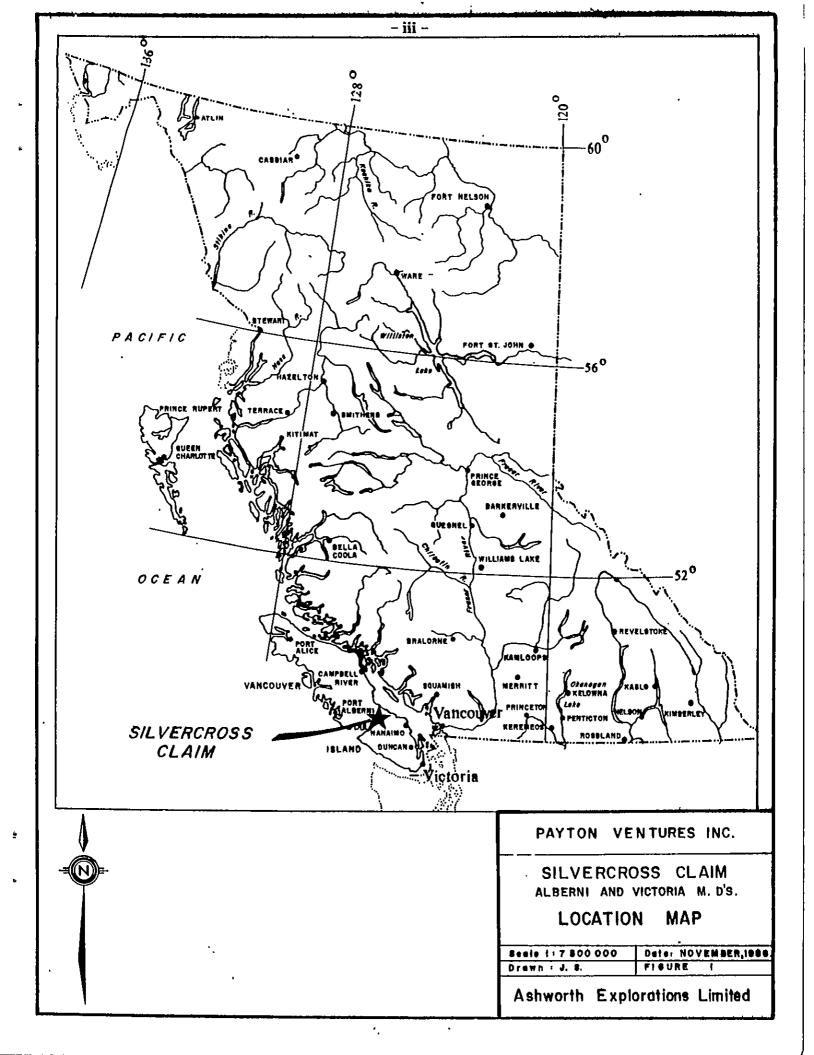
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1. INTRODUCTION

During October 29 - November 1, 1986, Ashworth Explorations Limited, on behalf of Payton Ventures Inc., carried out a reconnaissance type geochemicalgeological exploration program over a small area on the Silvercross Claim in Nitinat River area, Victoria Mining Division, Vancouver Island, B.C. The purpose of the program was to assess the mineral potential of the area surrounding a small pit known to contain copper mineralization.

The following report describes the geology and known mineralization of the area and summarizes the results of the geochemical sampling program in the vicinity of the mineralized pit. A proposed program for further exploration of the entire claim area is outlined, with a budget.

2. PROPERTY

The Silvercross Claim, comprises of 15 units $(3.75 \text{ km}^2 \text{ or about 927 acres})$, straddles the boundary of the Victoria and Alberni Mining Divisions. About 90% of the claim is within the Victoria M.D., however the legal corner post lies within the Alberni M.D.

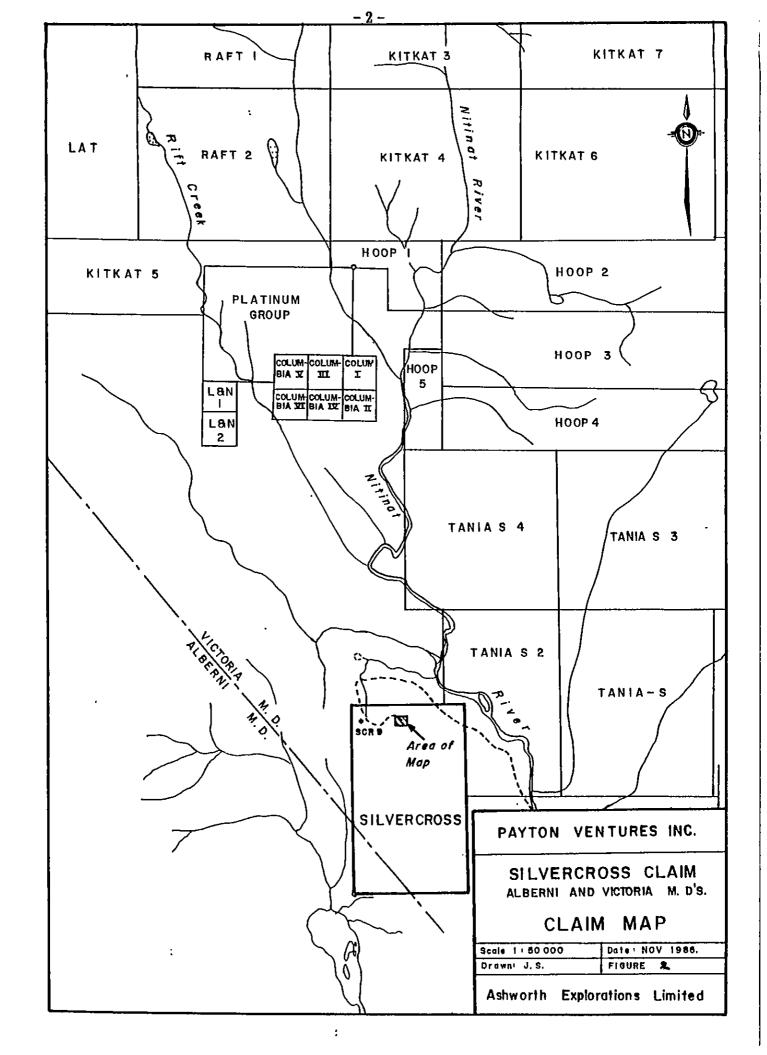
Record Number of the Silvercross Claim is 2383 (8), Recording Date is August 9, 1984. The claim was originally staked by Dorothea Scott, of Duncan, Vancouver Island, B.C., it is now 100% owned by Payton Ventures Inc., 2400 - 609 Granville Street, Vancouver, B.C. V7Y 1G5.

3. LOCATION, TERRAIN AND ACCESS

The claim is located about 33 km SE of Port Alberni, Vancouver Island, B.C., and about 8 km NW of west end of Cowichan Lake. It is about 6 km SSE of the Platinum Claim Group, also owned by Payton Ventures Inc.

Terrain is quite steep and rugged in the area, with numerous precipitous cliffs. The central part of the claim lies along a generally north-south trending ridge with elevations there reaching to about 500m along the southern boundary. The lower elevations are about 100m above mean sea level, toward Tuck Lake and Nitinat River (near SW and NE corners, respectively). Vegetation consists of thick first and second growth Douglas fir, hemlock, cedar and alder.

Access to eastern and northern part of the claim is by Crown Zellerbach logging roads from Lake Cowichan, about 15 km to the SE.



4. HISTORY AND PREVIOUS WORK

Prior to this program, the only work done on the property appears to have consisted of road building, trending and blasting out a pit (described below). No reports are available on this work.

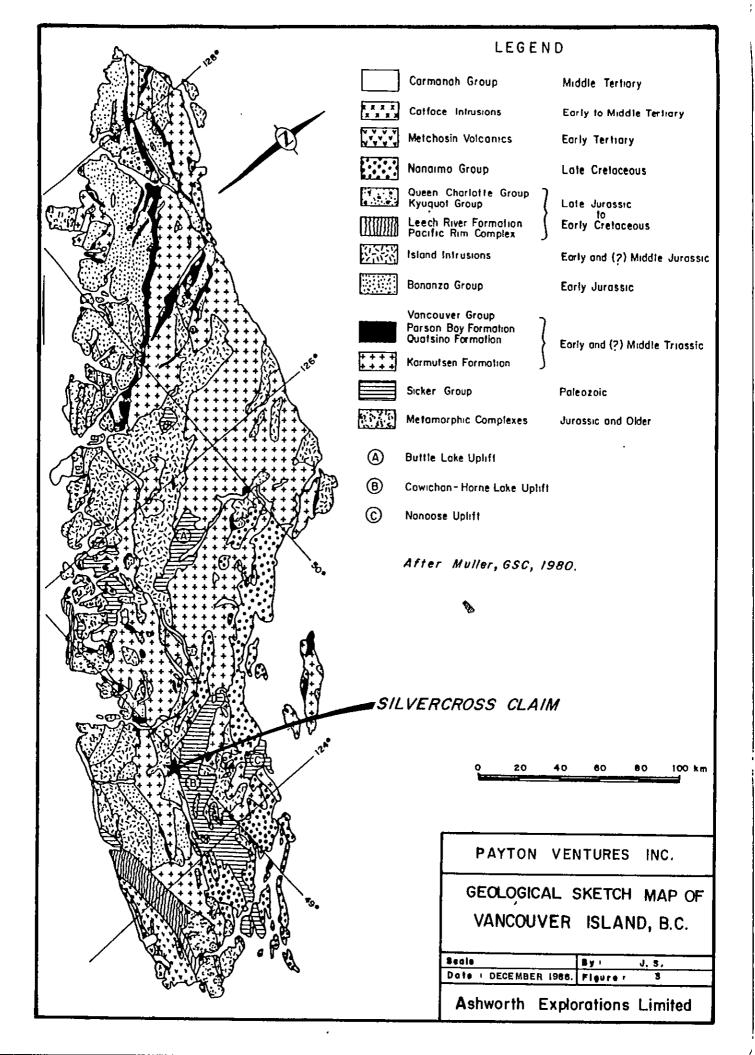
5. REGIONAL GEOLOGY

According to Muller's map (1982), the Silvercross claim area is underlain by a SE trending belt (the Gordon River Belt) of Lower Jurassic Bonanza Group volcanics which include basaltic to rhyolitic tuff, breccia, flows, sills and dykes, minor argillite and graywacke (GSC Open File 821/Geology of Nitinat Lake Map Area). Muller describes the Bonanza Group in the area as follows:

"The Bonanza Group is composed of voluminous remnants of an Early Jurassic volcanic arc terrane, considered to be consanguineous with Westcoast Complex and Island Intrusions. These volcanic rocks are most extensive in the northern part of the Gordon River belt. They are largely dark brown, maroon and yellow grey coloured massive tuff, volcanic breccia and massive or plagiophyric flows, the latter not uncommonly with aligned bladed plagioclase phenocrysts. Compositions have not been studied in detail but range from basalt to rhyolite. Light-coloured dacite and rhyodacite flows and/or sills are exposed abundantly in the region east of Barkley Sound. Volcaniclastic beds in the mountains east and west of Wilson Creek, about 10 km north of Caycuse River, have yielded Early Jurassic ammonites and bivalves."

On a more regional scale, the major faults, shown on Muller's map (1982), indicate structural discontinuities of substantial displacement that separate several structural-geological domains. Of most interest here is the major Cowichan Fault which follows the north side of Cowichan Lake toward NNW and extends up the Rift Creek, passing within less than a km of the NE corner of the property. This fault separates here two main geological domains, the Mesozoic Gordon River belt to the southwest, and the Paleozoic Chemainus River belt to the northeast. The former is underlain by early Mesozoic Vancouver and Bonanza group rocks with related Island Intrusions and Westcoast Complex, while the latter, separated by a wide fault valley, is composed chiefly of uplifted Paleozoic Sicker Group rocks (the Cowichan-Horne Lake Uplift).

Occurrences of economic mineralization in Bonanza Group rocks are not well documented. Most of the recent mining and exploration on Vancouver Island has been concentrated in the uplifted belts of Paleozoic Sicker Group rocks, which here includes the Nitinat River area toward north and northeast. Mineral occurrences are also found in Triassic Vancouver Group rocks, eg. in Mount Spencer area, about 12 km NW of Silvercross claim. Previously, the Bonanza volcanics have been included as a formation in the Vancouver Group, and only within the last 15-20 years have they been afforded their own group status. On Mount Spencer, veins and Tertiary dykes, associated with the precious and base metal mineralization, occur both in Vancouver (Karmutsen Formation) and Bonanza Group rocks (Laanela, 1964-66, 1985).



6. FIELD PROGRAM

During October 29 - November 1,1986, a crew consisting of a geologist and two geotechnicians carried out a reconnaissance type prospecting, geological mapping and geochemical rock and soil sampling program over a small area centered on a blasted out mineralized pit in the northernmost part of the claim. There appear to be no previous records of work being done on the property, although the pit and some road building may have been submitted as assessment work by previous owners.

A flagged grid, consisting of 4 lines and covering an area of 140m x 200m, was laid out by hip-chain and compass. Twenty-seven B-horizon soil samples were collected on the grid, along with 9 rock samples in and around the pit. These were sent to Vangeochem Lab in North Vancouver for analysis and assay. Three rock samples from the pit area were sent to Vancouver Petrographics Ltd. in Fort Langely, B.C., for petrographic examination.

In the lab, the soil samples were dried and sieved to -80 mesh, then digested in hot acid and subjected to Induced Coupled Plasma (ICAP) analysis for a "package" of 28 elements. These included precious metals (Au, Ag, Pt, Pd), base metals (Cu, Pb, Zn, Ni, Co, Cr, etc.), plus a number of rock-forming and trace elements. The detection limits, using the ICAP method, however, were too high for gold, platinum and palladium for the purposes of this type of survey, i.e. 3 ppm (3000 ppb) for each of Au, Pt and Pd, hence no values of these metals were detected. The samples were therefore re-analyzed for gold using the A.A. method with a 5 ppb detection limit which revealed some anomalous Au values.

The rock samples, after being pulverized and digested, were similarly analysed by the ICAP method. Again, it became necessary to rerun these for gold by conventional methods (F.A./A.A.) with 5 ppb Au detection limits.

To evaluate any anomalies present, frequency distribution histograms, based on lab data, were prepared for a number of ore-forming and path-finder elements in soils. The statistical parameters were also calculated with the values of "mean plus standard deviation" taken as "threshold", and "mean plus two standard deviations" taken as "anomalous".

Because of the many elements involved and the generally low and often very scattered anomalous values, it became necessary to limit the number of geochemical maps to a few by combining the elements according to their geochemical affinities into groups, such as chalcophile, siderophile and lithophile elements. Results were plotted on four 1:1,000 scale base maps, including the respective histograms, and the anomalous elements were underlined (Figures 5 to 8). Because the anomalous values of individual elements were generally "low" and tended to be scattered, and to facilitate the interpretation of results for a large number of elements, two further maps were prepared: Figure 9 shows the "combined anomaly ratings" for each of the three geochemical affinity groups, i.e. chalcophile, siderophile and lithophile element anomalies, while Figure 10 shows the combined total ratings of all three groups (19 elements).

The outcrops in the grid area were also mapped. All survey results were plotted on 1:1,000 scale base maps.

7. RESULTS

7.1 MAPPING AND PROSPECTING (See Figure 4)

The following description of geology is based on the geological field report and geology map (Figure 4) prepared by Mr. Alan Hill, B.Sc., geologist.

The Silvercross Claim lies within a large area underlain by lower Jurassic Bonanza Group rocks (Muller, 1982). The Paleozoic Sicker Group belt of rocks occur east of the claim, separated by the major Cowichan Fault which passes within less than a km from the NW corner of the claim.

During the 1986 field program, carried out in the northwestern and north-central portion of the claim, porphyritic basalt flows were found to outcrop widely (Figure 4). This rock type forms large, bare, knobby outcrops, with buff-coloured weathered surfaces, and displays only a massive texture. Two thin sections ('A' and 'B' in Appendix B) were prepared from this rock taken from an outcrop 10 - 20m south of the mineralized pit. Numerous large augite phenocrysts were identified here, along with smaller plagioclase phenocrysts, in amygdaloidal basalt rock. One thin section displayed microbreccia textures which may have been formed by violent eruptions breaking up a nearly solidified crystal-rich lava, in very close proximity to a volcanic centre. Systems of interconnected amygdales are infilled with chlorite-palagonite, along with lesser calcite, epidote, albite, prehnite, quartz and tremolite.

A small pit, 3 x 7 metres in size, and now filled with water, was located in the north-central part of the claim, being blasted into a basaltic outcrop. The pit exposes a system of epidote-calcite-quartz veinlets which contain disseminated to massive bornite and malachite copper mineralization. Thin section 'C' (Appendix B) was prepared from this zone; it showed that the system of veinlets was probably related deuterically to the original magma. The vein fillings are similar to the amygdale fillings in the two previous thin sections 'A' and 'B' of the "normal" country rock. The main difference is that thin section 'C' consists of a more siliceous (silicified?) andesite rock and contains sulphides in association with epidote. The <u>mineralized zone in the pit</u> is exposed there over a 1.5 metre (about 5 feet) width; it is not exposed along its strike length. The zone is steeply dipping and trends at 098° azimuth. Eight grab samples collected in the vicinity of the pit and from its dump, returned assays as high as "more than 10%" copper and 2.8 ounces/ton silver. (See Figure 4 for assays and sample locations.)

Another grab sample, SCR-9 (Figure 2), was collected about 550 metres west of the pit showing, where a 1 metre wide carbonate filled shear zone was located. It was thought that this might be a continuation of the pit mineralized zone. This sample returned assays of 479 ppm (about 0.05%) copper and 2.2 ppm (about 0.064 ounces/ton) silver.

7.2 GEOCHEMISTRY

In the following discussion of results, the elements analyzed are grouped on basis of their geochemical affinities, i.e. as chalcophile, siderophile and lithophile. These affinity groupings are approximate qualitative indication of natural associations and offer partial explanations for phenomena such as the scarcity of the siderophile Pt-group metals and Au in crustal rocks. In this instance, the explanation is that these elements are siderophile and are thus, along with siderophile Fe and Ni, concentrated in Earth's core. Some elements may also have characteristics common to two groups, eg. Au, although primarily siderophile, may also be chalcophile; also, Cr is strongly lithophile in Earth's crust, but if oxygen is deficient, it may behave as chalcophile.

7.2.1 Chalcophile Elements: Ag, Cu, Pb, Zn, As, Sb and Bi in Soil (See Figures 5 and 6)

Chalcophile elements have an affinity for sulphur, hence they tend to be concentrated in sulphides. They form covalent bonds with sulphur, or with Se and Te (also chalcophiles) if these are present.

Figure 5 shows silver, copper, lead and zinc values, with the anomalous values ("mean plus two standard deviations") underlined. Notice that the anomalies are few, scattered and of a "low" rank, hence could be classified as "possibly" or "probably" anomalous. The somewhat higher values tend to be in the vicinity of the mineralized pit, eg. Zn and Cu.

Figure 6 shows As, Sb and Bi values (Cd is not shown since all its values were same, i.e. 0.1 ppm, just above the detection limit). The anomalous values of antimony and bismuth are barely above the threshold, hence insignificant, while arsenic, a "path-finder" for precious metals, occurs as a few "spot anomalies" on 3 lines.

The combined values of all 7 elements are shown on a later combined anomaly map.

7.2.2. Siderophile Elements: Au, Co, Ni and Sn in Soil (See Figure 7)

Similar to the chalcophile elements above, there are only a few scattered, low order "spot anomalies" on this map. Gold values are uniformly in the 5 ppb background range, with only 4 values of 10 ppb, taken here as "possibly anomalous".

Siderophile elements, which also include Platinum Group Metals (PGM), Fe, Mo and P, are those having primarily an affinity for iron; they are concentrated in Earth's core. They normally prefer the metallic bond characteristics of metals and do not tend to form compounds with oxygen or sulphur, thus explaining why Au and PGM (Pt, Pd, et al) commonly occur as native elements.

Although platinum and palladium both were analyzed for, no values were detected due to the high detection limited used in the ICAP method (5 ppm and 3 ppm, respectively). This lack of detectable values therefore does not necessarily indicate that the PGM elements are not present in anomalous quantities in the soil samples; normally the soil samples should be run for Pt-Pd with much lower detection limit (at ppb level) to detect any, particularly low order, anomalies in soil (at considerable extra cost, of course).

The iron, molybdenum and phosphorus (P) values are not shown on the map, but are included in the later calculation of the combined anomaly map. Mo has high mobility and hence is used as a "path-finder" in regional surveys.

7.2.3. Lithophile Elements: Mn, Ba, Cr and Sr in Soil (See Figure 8)

This group includes a number of other elements, eg. U, W (both analysed here, but not shown on map), a number of rock forming elements (also analysed, but not shown), all Rare Earth elements; and actinide series. These elements are concentrated in Earth's crust and have an affinity for silicates. Lithophile elements ionize readily and tend to form, or be associated with, silicate minerals in which ionic bonding is found.

Two anomalous Mn values occur just east of the mineralized pit. Manganese tends to form haloes beyond and around ore deposits, hence it is a useful "path-finder" for buried ore deposits. Some "possibly anomalous" strontium and chromium values occur 100 metres or more NW of the mineralized pit. None of the above anomalies appear to be significant, although the Mn value is "open" toward east.

7.2.4. Discussion of Geochemical Anomalies (See Figures 9 and 10)

The foregoing descriptions of geochemistry results covered a wide range of elements and a number of weak or low anomalies. Taken individually, very limited sense can be made of their significance or importance, particularly in view of trying to outline some definite anomalous trends or zones that may indicate "hidden" mineralization and, hence, may warrant further follow-up work. On Figure 9, the anomalous values of individual metals and trace or "path-finder" elements have been grouped according to their geochemical affinity (chalcophile, siderophile or lithophile). The "anomaly ratings" in each group are totalled for each anomalous sample, then statistically evaluated and contoured at "mean plus standard deviation" and "mean plus two standard deviations" levels. The resulting map shows several partly overlapping, weakly to moderately anomalous areas, most of which are "open", i.e. may extend beyond the present grid limits. Two anomalous areas appear to be of particular interest: one immediately south and east of the mineralized pit (open toward east), and the other 70 - 130 metres northwest of the pit. Although the two anomalous areas are not joined, their presence, however, suggests a SE-NW anomalous trend parallel or subparallel to the strike of the mineralized zone exposed in the pit.

On Figure 10, the 19 elements used in the 3 above affinity groupings are combined further, giving an overall view of cumulated (total) anomalous ratings of individual elements. Again, the anomalies are largely "open", indicating that the present grid should be extended, particularly toward east and west of the pit.

8. CONCLUSIONS

1) The Silvercross Claim is underlain by basaltic Bonanza Group volcanics, the mineral potential and geology of which is still largely unknown.

2) Significant copper-silver mineralization was found in a pit; however, the 1.5 m wide mineralized zone here is poorly exposed, and needs further stripping and systematic sampling before its extent and grade can be fully assessed.

3) Limited geochemical sampling in the pit area revealed a number of generally weak, scattered and "spotty" anomalies without any discernible anomalous trends. By combining all anomalous values, however, several weakly to moderately anomalous areas can be outlined, most of which are "open" beyond the present grid boundaries. More soilsampling data is needed to evaluate these "open" anomalies.

4) The mineralization in the pit is associated with country rock displaying textures indicative of volcanic eruptions and close proximity to a volcanic center. It is possible that other mineralized zones can be found in the vicinity of this center; the carbonate filled 1 m wide shear zone, $\frac{1}{2}$ km west of the pit, carrying low Ag - Au values, may be an extension of such a zone. These conjectures can only be proved by further exploration.

5) The exploration data so far collected covers only a very limited area (estimated 1.2% of the claim), and hence the mineral potential in the larger remaining claim area has to be explored by further work.

9. RECOMMENDATIONS

It is recommeded that a "grassroots" type geochemical-geological-prospecting survey be carried out over the entire claim area, similar to the work that was recently done on the company's Platinum claims to the north. This would include establishing a 2.5 km N-S base line across the property, with 12 crosslines, 200 metres apart, for mapping and sampling control. Soilsamples should be taken at 50 metre intervals, and analysed for precious and base metals. This work is estimated to take 6-7 days, with a crew of 3.

Additional 3-4 days should be spent on the mineralized pit area, by taking additional soilsampling, running a VLF-EM survey, stripping and prospecting, channel-sampling and mapping the mineralized zones. A budget is proposed below to carry out this 10 day field program.

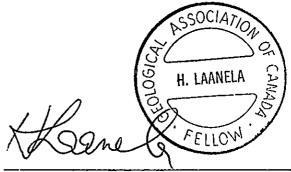
10. PROPOSED BUDGET (PHASE I) (10 days field work x crew of 3)

| Project Geologist @ \$275/day x 10 days 2 Geotechnicians @ \$190/day x 10 days | \$2,750 <u>3,800</u> \$6,550 |
|--|---|
| 4 x 4 Truck rental @ \$90/day x 10 days Room & Board @ \$60/day x 30 man days Communications @ \$20/day x 10 days VLF-EM rental @ \$110/day x 4 days Field supplies Mob/demob | \$ 900 1,800 200 440 500 1,000 \$ 4,840 |
| Lab analysis, say 400 samples x \$15 Petrographic studies | \$ 6,000 <u>500</u> \$ 6,500 |
| Administration/management @ \$400/day x 4 days Consulting geologist @ \$375/day x 6 days (field trips, data evaluation, reporting) Drafting, maps and prints Typing, copying, | \$ 1,600 2,250 <u>1,000</u> <u>600</u> \$ 5,450 |
| Subtotal | \$ 23,340 |
| Miscellaneous and Contingency (15% of above) | 3,501 |
| TOTAL, PHASE I: | <u>\$ 26,841</u> |
| | (Say, \$ 27,000) |

Respectfully submitted by:

ASHWORTH EXPLORATIONS LIMITED

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Hugo Laanela, F.G.A.C., Consulting Geologist

December 31, 1986 Vancouver, B.C.

CERTIFICATE

I, ALAN R. HILL, residing at #1401 - 1601 Barclay Street, Vancouver, B.C., V6G 1J9, do hereby declare that:

- 1. I am a geologist, and graduated from the University of Western Ontario, London, Ontario in 1984 with a Bachelor of Science degree in Geology.
- 2. I have worked during the last 8 years in the geological field in the N.W. Territories, Ontario, Quebec and British Columbia.
- 3. I worked during October 30 November 1, 1986, as a project geologist on the Silvercross Claim, subject of this report, and also supervised field work.
- 4. I have no interest, nor do I expect to receive any interest, in the subject property of this report or in any shares of the company.

Dated at Vancouver, B.C., this 31st day of December, 1986.

Alan R. Hill, B. Sc.

CERTIFICATE

I, HUGO LAANELA, of 3657 Ross Road, Nanaimo, B.C., do hereby declare that:

- 1. I am a geologist, graduate of the University of British Columbia, Vancouver, B.C., in 1961 with a B.A. degree in geology.
- 2. I am a Fellow of The Geological Association of Canada, and a full member of The Association of Exploration Geochemists, The Canadian Institute of Mining and Metallurgy, and The Australasian Institute of Mining and Metallurgy.
- 3. I have practiced my profession as a mining exploration geologist from 1961 to 1966 and 1973 to present across Canada, and during 1966 to 1972 as a senior/regional geologist in Australia.
- 4. The information, opinions and recommendations presented in this report are based on my examination of exploration data and my previous experience in the area.
- 5. I have no interest in the subject property of this report, nor any shares of the company.
- 6. I consent to the use of this report in a Prospectus or Statement of Material Facts by Payton Ventures Inc. for the purpose of private or public financing.

Dated at Vancouver, B.C., this 31st day of December, 1986.

SSOCIATIO 00 H. LAANELA FELLOW

Hugo Laanela, F.G.A.C.

- 14 -

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- Laanela, H., 1964-66: Mineral Occurrences on E & N Land Grant, Vancouver Island, B.C.; a compilation of private reports for Gunnex Limited.
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- Muller, J.E. and Carson, D.J. T., 1969: Geology and Mineral Deposits of Alberni Map-Area, B.C. (92F); GSC Paper 68-50.
- Muller, J.E., 1977: Geology of Vancouver Island; 2 map sheets (1:250,000) with marginal notes; GSC Open File # 463.
- Muller, J.E., 1982: Geology of the Nitinat Lake map area (1:250,000), with marginal notes; GSC Open File # 821.

FIELD PERSONNEL, 1986 PROGRAM

| Alan Hill, Geologist/Party Chief | Oct. 30,31, Nov. 1. |
|----------------------------------|---------------------|
| Robert Paeseler, Geotechnician | Oct. 29-31. |
| Sydney Nicholls, Geotechnician, | Oct. 29, 30. |

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EXPENDITURES RE: SILVERCROSS

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| Project Preparation | | \$ 250.00 |
|--|---|-------------|
| Field Work Personnel: Project Geologist @ \$275.00 X 3 Geotechnicians: 5 mandays @ \$190/day Room and Board: 8 mandays @ \$60 Truck and Fuel: 3 days @ \$90 Materials (hip chain thread, flagging, etc.) | \$ 825.00 950.00 480.00 270.00 150.00 | 2,675.00 |
| Laboratory Analysis and Charges Soil Samples: 27 @ \$12.10 Rock Samples: 9 @ \$29.00 | 326.70 261.00 | 587.70 |
| Thin Sections and Petrography | | 205.25 |
| Supervision @ \$450/day x 1 day | | 450.00 |
| Report Writing: 1 geologist x 1 day @ \$275/day | | 275.00 |
| Maps and Drafting | | 180.00 |
| | | 4,622.95 |
| Administration @ 15% | | 693.44 |
| | Total | \$ 5,316.39 |



VANGEOCHEM LAB LIMITED

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GEOCHEMICAL ANALYTICAL REPORT

CLIENT: ASHWORTH EXPLORATION LTD.DATE: Nov 18 1986ADDRESS: Mezz F1r - 744 W. Hastings St.: Vancouver, B.C.REPORT#: 860609 GA: V6C 1A5JOB#: 860609

PROJECT#: Silvercross ClaimINVOICE#: 860609 NASAMPLES ARRIVED: Nov 3 1986TOTAL SAMPLES: 27REPORT COMPLETED: Nov 18 1986SAMPLE TYPE: 27 SOIDANALYSED FOR: AuICPREJECTS: DISCARDED

SAMPLES FROM: MR. ALAN HILL COPY SENT TO: ASHWORTH EXPLORATION LTD.

PREPARED FOR MR. ALAN HILL

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| ANALYSED BY: | VGC Staff |
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| SIGNED: | Ullin. |
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GENERAL REMARK: None

VANGEOCHEM LAB LIMITED

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MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH: (604)986-5211 TELEX:04-352578 BRANCH OFFICE: 1630 PANDDRA ST. VANCOUVER B.C. V5L 1L6 PH: (604)251-5656

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ICAP GEOCHEMICAL ANALYSIS

A 15 HEAR SAMPLE IS DIRESTED WITH S ML OF 31112 HOL TO HADS TO HIG AT 95 DEG. C FOR 90 MINUTES AND 15 DILUTED TO 10 ML WITH WATER. THIS LEACH IS FARTIAL FOR SHITE. HE AND ALL OF SHITE HE IN HAR TO HER AN AND SHITE OF AN AND AD DETECTION IS C FEM. IS= THEORETICANTELE. HO= HOT DETECTED. -= HOT AMALYZED

| COMPANY: AS ATTENTION: PROJECT: SI | LVER | | 5 CL/ | MIF | , | ŕ | ċ | 10B#: | 860 | 86060 609 8600 | - | | | | DATE | | IPLET | ED: | 36/11 86/1 | /03 1/12 | 2 | Pat |)E 10# | | ANALY | (ST_4 | <u>u) </u> | Heres |
|--|----------------------------|--------------------------------------|---------------------------------|----------------------------|------------------------------|-----------------------------|----------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------------------|---------------------------------|------------------------------------|------------------------------------|-------------------------|---------------------------------|---------------------------|---------------------------------|-----------------------------|----------------------------|-------------------------------|---|----------------------------|----------------------------|----------------------------|----------------------------------|------------------------------|
| SAMPLE HARE | as Ppr | AL L | AS Ppr | AL Pfr | sa Ffe | ùl Pfxi | CA 1 | CD Ffiti | LŪ 220 | CR FFN | Cu Ffit | FE L | x 2 | RÚ 2 | ль Рер | 86 275 | NA Z | ni PPK | F L | FFR | PD PPM | PT FPR | S) Pfh | SN PPN | SR Pfn | U PP# | N PPR | 2N PPN |
| SE 86-501 SE 88-062 SE 88-003 SE 88-003 SE 88-005 | .1 .1 .5 .2 | 4.10 4.54 5.94 4.37 3.67 | NÚ NÚ NÚ NÚ | NŬ NŬ NŬ ND | 33 19 31 | 3 ND ND ND ND | .22 .39 .40 .49 .48 | .1 .1 .1 .1 | 1. 13 10 10 | 37 47 56 85 37 | 53 42 12 37 34 | 0.12 7.11 7.24 10.19 6.55 | .11 .07 .07 .14 | 1.0a .95 1.02 .81 .95 | 377 413 371 211 329 | ж5 1 46 1 1 | .01 .01 .01 .01 | 11 15 15 11 | .15 .vi .12 .11 .13 | 15 15 21 23 22 | nd Hd Nd Nd | НС Ож Ир Ир Ир | nd Pr Nd Nd Nd | NG Ng Ng 4- Ng | 1a 21 23 30 31 | NÐ ND ND ND ND | nd Ng Nd Nd Nd Nd | 59 51 52 43 - 49 |
| SC 86-006 SC 86-007 SC 86-008 SC 86-009 SC 86-009 SC 86-010 | .1 .1 .1 | a.40 3.00 4.16 5.20 3.84 | NŰ 7 NG ND NO | NŬ ND ND ND | 25 28 27 38 34 | NØ ND ND ND ND | .45 .45 .51 .e3 1.13 | .i .1 .i .i | 13 7 7 20 14 | 49 40 3. 20 57 | 43 24 40 51 38 | •.55 E.17 •.49 7.40 7.54 | .10 .07 .13 .15 .14 | 1.08 .52 .44 1.01 1.12 | 347 243 190 344 55D | ND 1 1 5 1 | .01 .01 .01 .01 .01 | 19 9 10 15 17 | . 10 . 14 . 13 . 35 | 72 16 18 21 20 | DM Gr Dr Dr Dr | ND ND ND ND ND | ы 10 17 17 17 17 17 17 17 17 17 17 17 17 17 | ND Nd Nd Nd Nd | 20 22 22 19 4 5 5 | ND ND ND ND ND | ND ND ND ND ND | •1 40 45 55 |
| SC 94-011 SC 84-012 SC 84-013 SC 84-013 SC 84-014 SC 84-015 | .5 .2 .1 .3 .1 | 2.11 2.25 3.10 2.15 4.91 | 16 8 ND 14 ND | kû Kû Kû Kû Kû | 25 19 27 25 | NG ND ND 3 ND | .77 .73 .50 .44 .44 | .1 .1 .1 .1 | 13 9 10 11 | 26 36 37 27 34 | 13 35 23 24 52 | 1.45 8.94 6.00 5.55 5.70 | .05 .17 .14 .10 .11 | .20 .48 .35 .50 .97 | 173 490 219 222 347 | 2 2 1 2 NS | .01 .01 .01 .01 .GI | 4 7 5 6 10 | .04 .08 .05 .27 .14 | 22 22 21- 26 22 | ND ND ND ND | ND ND ND ND | ND No Nu Ng | 1 1 NG 1 ND | 24 14 18 16 20 | ND ND ND ND ND | NÐ ND NC NG | 40 22 23 |
| SC 84-016 SC 86-017 SC 86-018 SC 84-019 SC 84-020 | .2 .1 .1 .3 | 3.15 8.74 8.69 3.02 4.55 |] К0 К0 К0 К0 К1 | ND ND ND ND ND | 21 2230 31 37 30 | MÛ X ND ND 4 ND | . 44 . 38 . 56 . 56 | .1 .1 .1 .1 .1 | 10 12 14 14 14 | 32 42 43 33 42 | 27 80 76 39 46 | 7.44 5.71 4.74 7.40 7.10 | .13 .12 .10 .17 .14 | .39 1.20 .86 .59 .93 | 220 442 344 320 397 | 1 NÛ NÛ 2 1 | .01 .01 .01 .01 | 5 17 14 13 26 | .v5 .00 .68 .05 .00 | 71 25 74 22 23 | ND Dk ND Dk Dk | ng Xd Nd Xd Ng | ж0 4 4 3 ЖД | H Nđ Nđ S Nđ | 15 12 12 21 17 | ND ND ND 4 ND | NG HD HD HD HD | 4! 54 51 41 52 |
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| DETECTION LIMIT | .1 | .01 | 3 | 2 | - | 3 | .01 | .1 | 1 | i | i | .01 | .01 | .01 | 1 | 1 | .01 | 1 | - 71 | 4 | \$ | 3 | - | 4 | 1 | J. | 3 | 1 |



SC 86-024

SC 86-025

SC 86-026

SC 86-027

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VANGEOCHEM LAB LIMITED

MAIN OFFICE 1521 PEMBERTON AVE. NORTH VANCOUVER, B.C V7P 253 (604) 988-5211 TELEX: 04-352578 BRANCH OFFICE 1630 PANDORA ST VANCOUVER, B.C. V5L 1L6 (604) 251-5656

| REPO | DRT N | UMBER; | 869699 | 6A | JOB | NUMBER | 860609 | ABHM | with explor | ation LTI |). | Page | 1 | OF | 1 |
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Jancouver Petrographics Lid.

JAMES VINNELL, March JOHN G PAYNE PUNCTAL

IF O BOX 39 HORT NASH STREET LORT LANGLEY, B.C. VINA 110

PHONE (604) 888-1323 Invoice 6151

Report for: Alan R. Hill, Ashworth Explorations Ltd., 744 West Hastings Street, Vancouver, B.C., V6C 1A5.

November 14, 1986

Samples: Rock A, B, C.

Summary:

Rock A and Rock B are similar in bulk composition (basalt) but have different textures. Rock B consists of large augite annd smaller plagioclase phenocrysts in a fine chlorite-plagioclase groundmass. Small amygdales are quite common in the groundmass. Chlorite-palagonite is the commonest filling along with lesser calcite, epidote, albite, prehnite, quartz and tremolite. Rock A consists largely of plagioclase phenocrysts (with some surrounding groundmass around them) which are embedded in a matrix which consists largely of chlorite. The matrix/phenocryst intergrowth appears as if the matrix is a system of "interconnected amygales" which has developed around fragmented pieces of the basalt and the rock could be considered as a breccia formed from an almost crystalline crystal mush which was broken up during violent (but not explosive) eruption close to a volcanic centre. Large augite phenocrysts are intensely fractured and altered pieces of these (red spots) are scattered throughout.

Rock C is a porphyritic andesite flow consisting of plagioclase phenocrysts in a fine felted groundmass of plagioclase with chlorite. A system of calcite and epidote veinlets is present throughout, grading into zones where calcite is associated with prehnite and epidote associated with quartz. Hinor sulphides are associated with the epidote. The alteration assembalge is essentially the same as that in the amygdales of Rock B and the veining is probably epigenetic or deuteric, produced by residual fluids from the same magma system.

A. R. Kinkydan

A. L. Littlejohn, M.Sc.

Rock A: AMYGDALOIDAL, PORPHYRITIC BASALT (BEECGIA).

This sample is a massive volcanic rock of basaltic composition, containing many plagioclase and some augite phenocrysts. It has apparently been erupted violently as a crystal much or breccia so that pieces of the basalt (mainly phenocrysts and some groundmass material) are embedded in a matrix of fine chlorite which occurs in a partly interconnected system of amygdale-like patches. The augite phenocrysts are highly fractured and partly broken up into small pleces which are scattered around the plagioclase aggregates and in the chlorite. These have been altered to a brown isotropic material of uncertain composition but which is appears to be partly chlorite and is often stained red due the prescence of hematite/rutile aggregates associated with the pyroxene (original magnetite ?). The alteration is probably deuteric. Hinerals are:

| plagioclase | 60% | (strong | incipient | ch1o | rite) |
|----------------|-----|---------|-----------|------|---------|
| chlorite | 23 | - | - | | |
| altered augite | 7 | | | | |
| glass | 4 | | | | |
| Fe-Ti oxides | 4 | (mainly | hematite, | some | rutile) |
| augite | 2 | _ | - | | |
| epidote | min | or | | | |
| quartz | tra | .ce | | | |

Plagioclase phenocrysts are dominant and form euhedral laths 0.5 to 1.5mm in size, with one or two up to 3mm, which are packed closely together in a groundmass consisting of a mixture of small plagioclase laths with intergranular glass, some chlorite and very fine ragged hematite grains. The plagioclase phenocrysts are quite strongly incipiently chloritic; the chlorite has penetrated into the grains, through the groundmass, from the enclosing chlorite matrix.

The matrix consists of a system of partly interconnected shapeless chlorite patches one or two millimeters in size. The chlorite forms a compact mass of flakes less than 0.01mm in size. Small epidote grains are scattered in this. Some parts of the rock consist of matrix material with single phenocrysts or small aggregates of phenocryst/groundmass embedded within it. Other parts of the rock consist of phenocryst/groundmass with the matrix penetrating into the pieces around the phenocrysts and breaking them off from the groundmass.

Unaltered augite phenocrysts form subhedral, squat prismatic grains 1 to 2.5mm in size. These are all highly fractured in a fine network, and partly broken up into angular/subangular pieces, while still retaining the original pyroxene outline. Quartz has developed in the fracture system, along with some chlorite. At the edges of some of the grains and in some pieces the augites are altering to a dirty brown material. Subcubic opaque grains 0.1 to 0.4mm in size are included in or occur in clusters close to the augites; these may have been magnetite.

(continued)

Rock A (cont.)

Throughout the rock within the chloritic patchwork there are subangular altered pieces of augite and altered magnetite; the altered augite pieces are 0.2 to 0.8mm in size and some retain a crude pyroxene outline. The augite has mostly altered to a dirty brown isotropic material (palagonite-like) but with some chlorite occuring in indistinct patches; some small pieces have altered completely to chlorite. The magnetite has altered to a mixture of rutile and hematite. the hematite forms a skeltal framework between which the cloudy rutile has developed. Hematite stain occurs in these and the altered augite pieces with which they are associated. Rock B: PORPHYRITIC, AMYGDALOIDAL BASALI.

This is a dark brown, massive volcanic rock consisting mainly of large augite and plagioclase phenocrysts crowded in a fine chlorite-plagioclasehematite groundmass. Small amygdales filled with a variety of minerals are present throughout; the deuteric fluids which formed these have permeated the rock so that the plagioclase phenocrysts are incipiently chloritic and some of the augite phenocrysts are altered to chlorite. Hinerals are:

| plagioclase (phenocrysts) | 56% (strong incipient chlorite) |
|---------------------------|---|
| augite (phenocrysts) | 15 (10% completely altered to chlorite) |
| chlorite (groundmass) | 10 |
| plagioclase (groundmass) | 7 |
| chlorite (amygdales) | 4 ' |
| hematite (groundmass) | 3 |
| augite (groundmans) | 2 |
| palagonite (amygdales) | 2 |
| opaque grains (hematite) | 1 |
| epidote (amygdales) | minor |
| calcite (amygdales) | minor |
| albite (amygdales) | trace |
| prehnite (amygdales) | trace |
| quartz (amygdales) | trace |
| tremolite (amygdales) | trace |
| | |

Plagioclase phenocrysts form elongated subhedral grains mostly 1 to 2mm in length. They are crowded in a groundmass consisting of an intimate intergrowth of shapeless plagioclase grains less than 0.1mm in size, extremely fine chlorite and ragged rounded hematite grains less than 0.05mm in size. The phenocrysts are pervasively and quite strongly altered by incipient chlorite. Rounded to tabular augite grains 0.05 to 0.2mm in size are scattered amongst the other groundmass minerals; small chlorite patches may be altered augites.

Augite forms squat tabular, idiomorphic phenocrysts which are mostly 1 to 5mm in size and scattered unevenly amongst the plagioclase phenocrysts. They are zoned with a narrow outer zone of slightly different birefringence colours. Many of the smaller ones are completely altered to a mass of extremely fine chlorite and outlines by a thin rim of hematite. The zoning is apparent in the alteration with the chlorite forming different sizeed flakes in the outer and innner zones. The augites are either completely altered or completely unaltered, although small patches of chlorite may occur in the larger grains which are parts of the groundmass material which has been incorporated into the phenocryst. Some of the augite phenocrysts contain subcubic opaque grains up to 0.4mm in size; these are also scattered throughout the rock.

(continued)

Rock B (cont.)

Amydales make up about 6% of the rock; they are irregularly shaped and 0.2 to 2.0mm in size; most are about 1mm. Extremely fine chlorite is the dominant mineral and is often associated with brownish palagonite; patches of these grade into one another in many of the larger ones. The chlorite may form a compact mass of rounded flakes grading into patches where splayed aggregates of fine clongated flakes have developed; these are sometimes intergrown with thin acicular tremolite grains. Epidote forms thin tabular grains less than 0.1mm in length which occur in small aggregates within some of the chloritic amygdales. Calcite usually occurs by itself in smaller amygdales, a single grain making up the patch, although there is sometimes a thin rim of chloritic material around the edge. In one larger calcite amygdale the carbonate is intergrown with sheafs of prehnite. A small amount of fine calcite rarely occurs with albite which forms tabular grains about 0.3mm in size filling several amygdales. Quartz forms subrouned interlocking grains about 0.3mm in size in a few amygdales. Small grains of epidote often occur around the edge, intergrown with the quartz. Fine chlorite is often included in the quartz.

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Rock C: PORPHYRITIC ANDISITE WITH CALCITE-PREHNITE AND EPIDOTE.

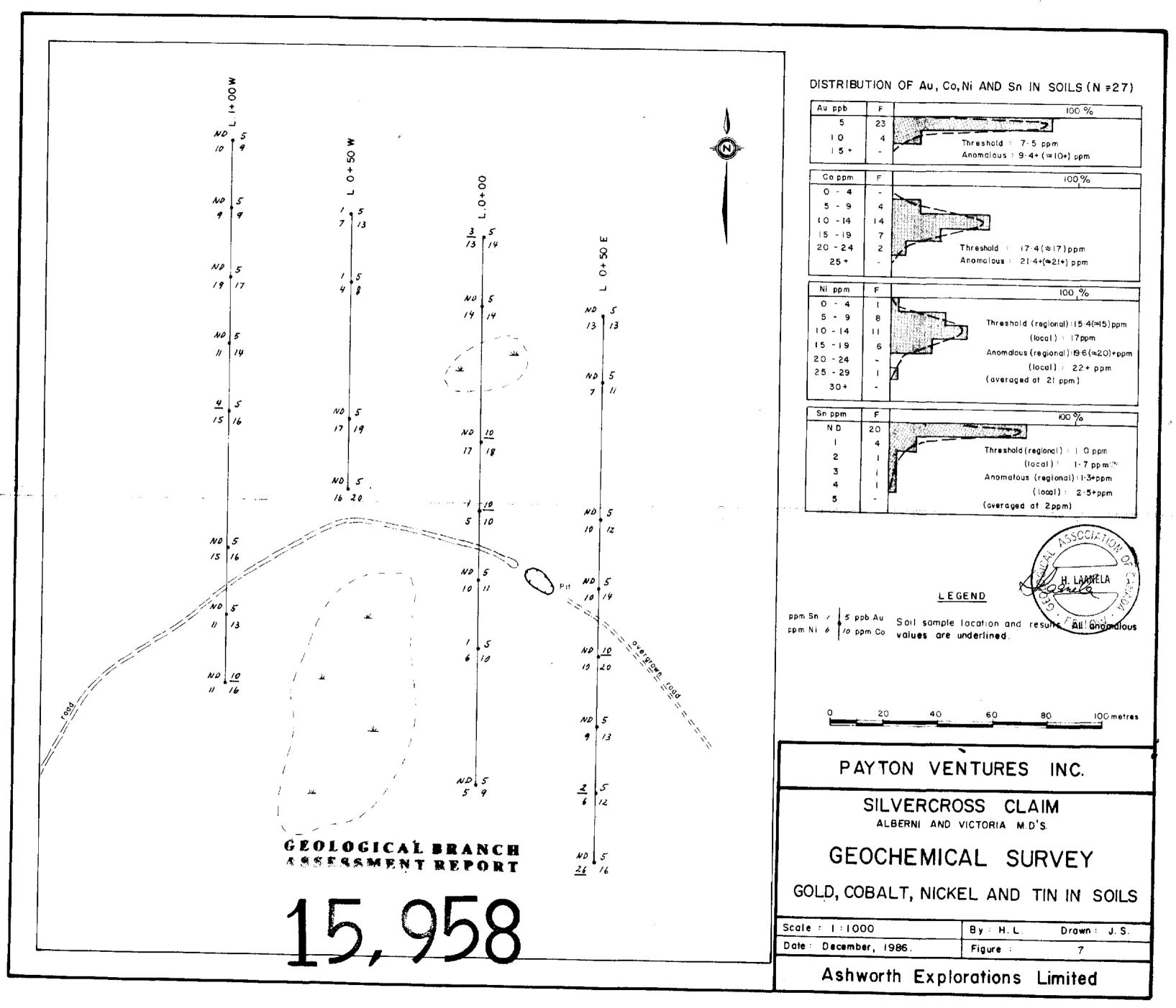
This sample is a fine to medium grained massive porphyritic volcanic rock consisting of plagioclase phenocrysts in a fine felted groundmass of thin plagioclase laths and chlorite. There is a network of calcite-prehnite and epidote-quartz veinlets and patches cutting through the rock. These are spaced several millimeters apart but may coalesce into zones 5 to 10mm wide. The epidote veinlets are associated with opaques (sulphides). The vein system is probably related to deuteric alteration, associated with continuing vulcanism and fracturing. Minerals in the section are:

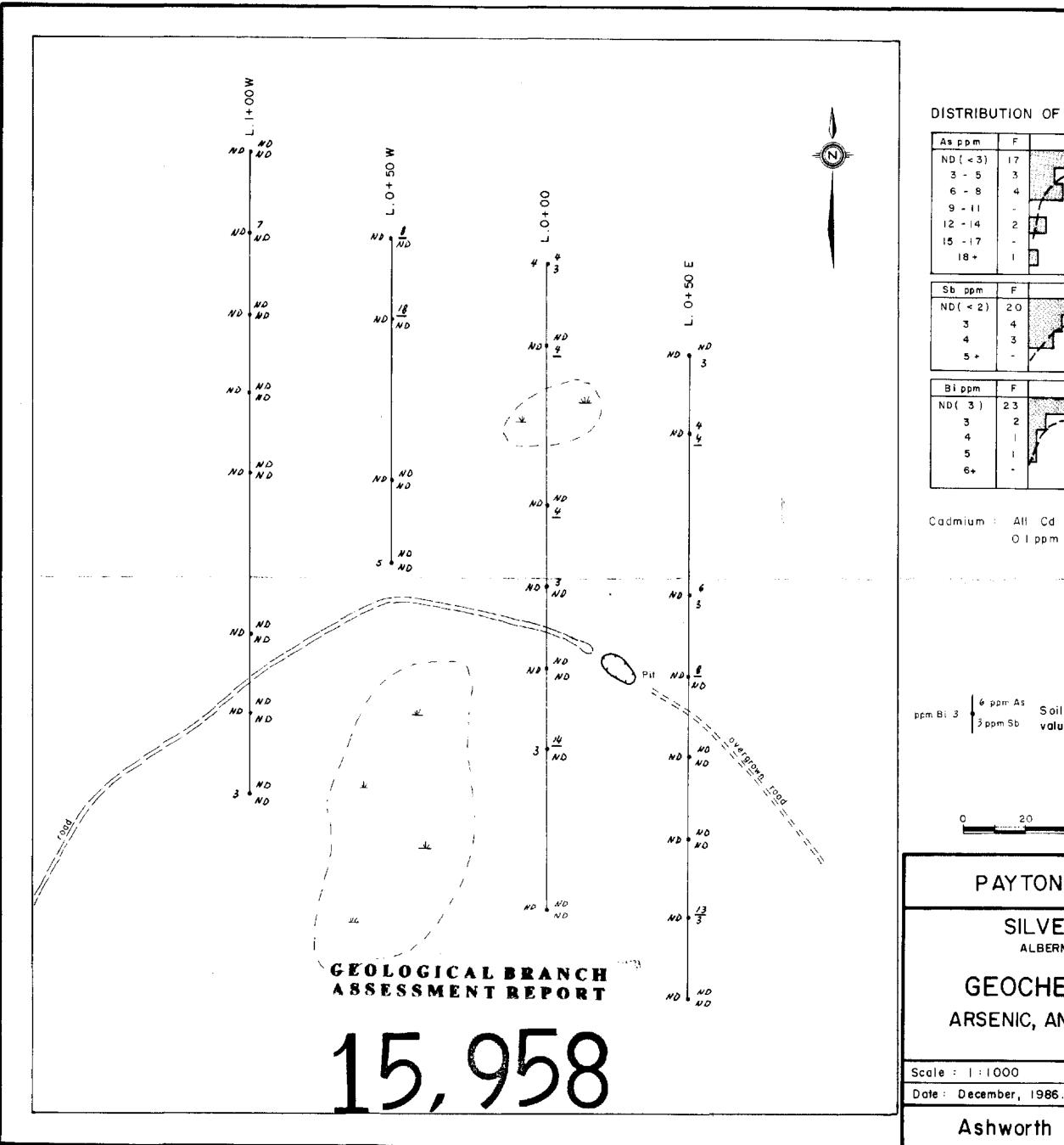
| plagioclase groundmass | 257 |
|-------------------------|-------|
| plagioclase phenocrysts | 20 |
| calcite | 23 |
| epidote | 15 |
| chlorite | 7 |
| prehnite | 5 |
| quartz | 2 |
| Fe-Ti oxides | 1 |
| opaques (sulphides) | minor |

The andesite consists of euhedral plagioclase laths 0.5 to 1.5mm in length scattered in a felted groundmass of thin plagioclase laths 0.1mm in length which mixed with extremely fine chlorite and Fe-Ti oxides, occuring between the laths. Minor chloritisation has occured in the phenocrysts. They sometimes occur in small aggregates. The Fe-Ti oxides sometimes occur in ragged clusters and aggregates up to 0.3mm in size.

Throughout the andesitic part of the section there is an interconnected network of calcite veinlets 0.1 to 0.5mm in width within the groundmass and grading into small patches which tend to overlap into the phenocrysts. The veinlets tend to have indistinct margins. Grains are rather shapeless and are less than 0.3mm in size in the veinlets and up to 1mm in size in the patches. There is also a finer, discontinuous network of epidote veinlets and these form rounded grains about 0.05mm in size. The epidote veinlets tend to occur adjacent to the calcite veinlets and patches and sometimes cut across them.

The calcite and epidote networks grade into a fracture/shear zone about 8mm wide. This consists of alternating/gradational elongated, vein-like patches one or two millimeters wide in which one or the other is dominant. The calcite may form large elongated grains and at the edge of these there is a narrow zone of tabular prehnite grains up to 0.3mm in length intergrown with the edges of the calcite. Small ovoid patches of much finer prehnite occur within the calcite. The epidote forms extremely fine grains which have cut through the calcite and prehnite. In the contact zone next to the andesite the epidote (and some calcite) is intergrown with subrounded to subhedral quartz grains 0.1 to 0.4mm in size occuring in elongated patches two or three millimeters in length. Thin streaky patches of very fine chlorite occur next to and partly intergrown with the epidote. Small elongated, shapeless opaque grains are intergrown, in clusters, with the epidote, quartz and chlorite.





| F | 100 % |
|----|-----------------------------|
| 17 | |
| 3 | |
| 4 | Threshold (regional): 5 ppm |
| ~ | u (local): 9ppm |
| 2 | Anomalaus (regional): 7+ppm |
| - | 21 (tocal) I3+ppm |
| - | (averaged at 10 ppm) |
| F | 100 % |
| 20 | |
| 4 | |
| 3 | Threshold ÷ 2·7 (≈3)ppm |
| - | / Anomalous: 3.9 (~4)+ppm |
| F | 100 % |
| 23 | |
| 2 | |
| - | |
| 1 | Threshold : 2.7 (↔3) ppm |
| | Anomalous: 3−6 (≠4)+ppm |

DISTRIBUTION OF As, Sb, Bi AND Cd IN SOILS (N=27)

All Cd values are O | ppm (detection limit O | ppm also)

H LAANELA

LEGEND

Soil sample location and results. All anomalous 3 ppm Sb values are underlined.

| 20 | 40 | 60 | 80 | IOC metres |
|----|----|----|----|------------|
| | | | | |

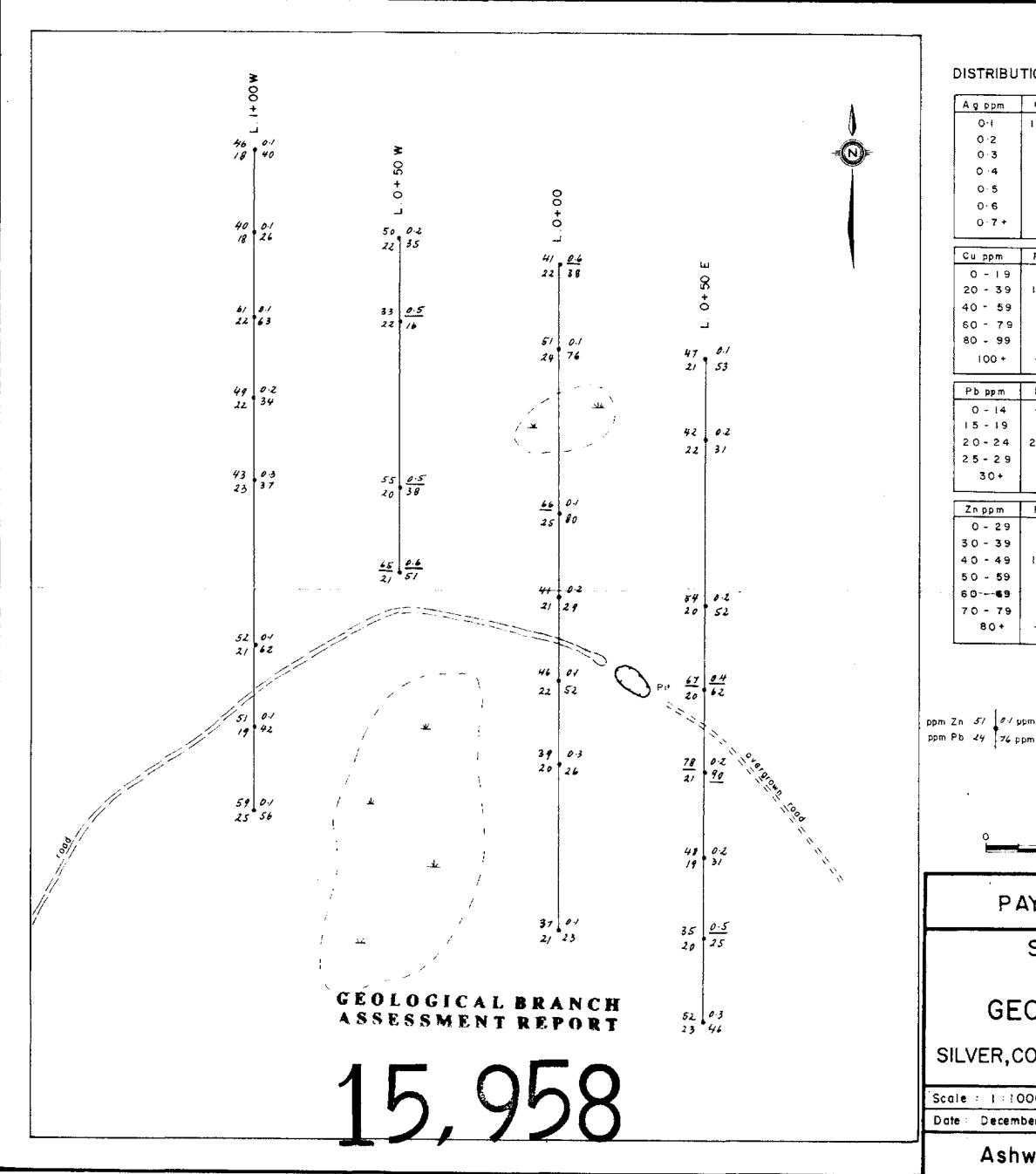
PAYTON VENTURES INC.

ALBERNI AND VICTORIA M.D'S.

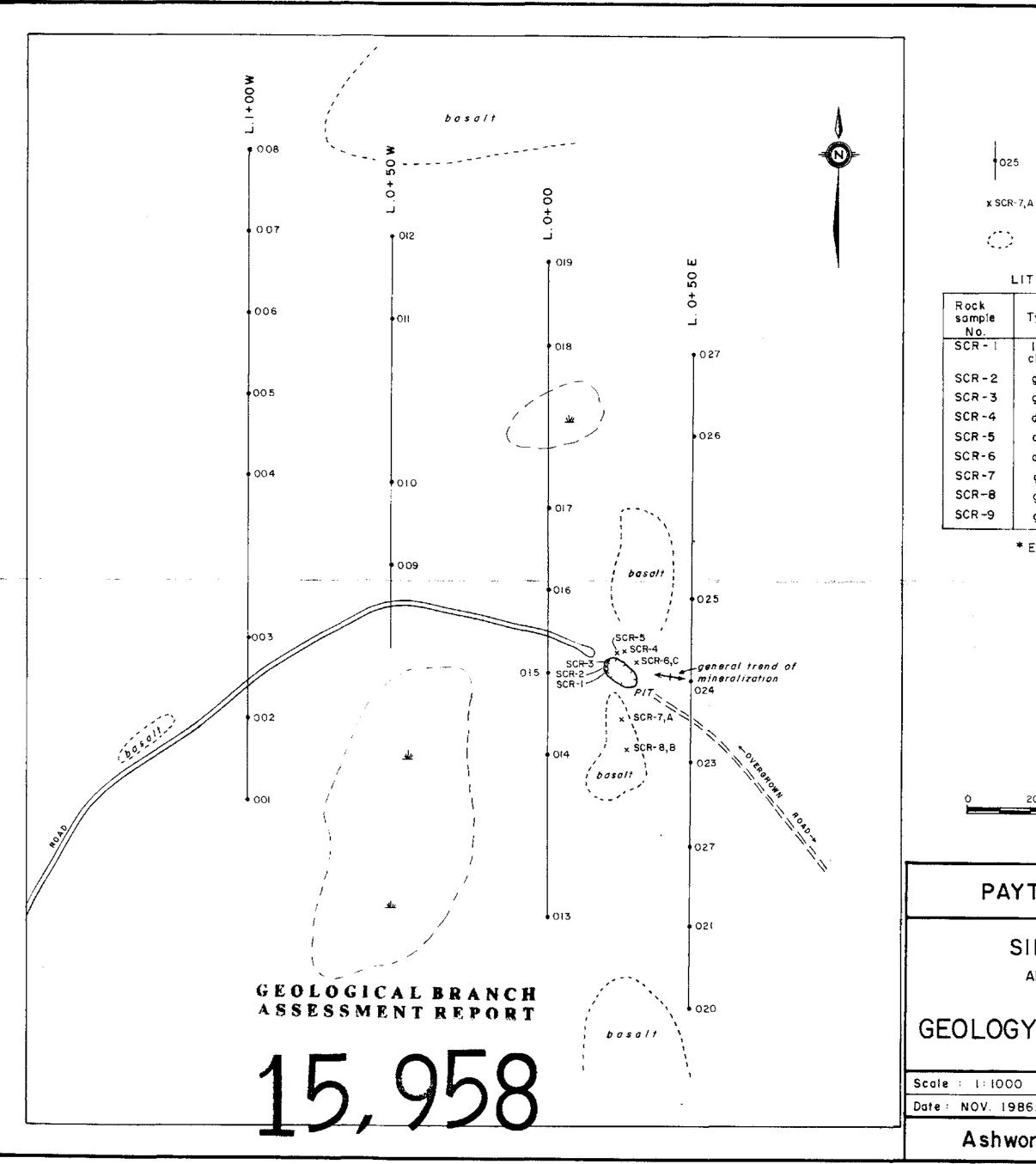
GEOCHEMICAL SURVEY ARSENIC, ANTIMONY AND BISMUTH IN SOILS

000 By:H.L. Drawn:J.S. sber, 1986. Figure : 6

Ashworth Explorations Limited



| JTION | OF | Ag, | Cu, F | PB AN | D Zn | IN | SOILS(N | =27) | |
|------------------|--------------|----------|---------------------------|----------------------------|---------------------|--------|------------------------|--------------|---|
| F | | | | 50 % | | | 100 % | | |
| | | | | | | | | | |
| 7 | | | | | fension | | 0.26 555 | | ŧ |
| 1 | 7 | | | | | | 0-26 ppm 0-4 ppm | | |
| 3 | 7 | | | | | | 0-35+ ppm | | |
| 2 | | | | | | | 0 - 5 7+ (≈0-(| 1 | |
| - | | | | | | | | | |
| F | | | | 50 % | | · | 100,% | | |
| 1 | N | _ | | | | | | | |
| 12 | | | \rightarrow | | | | | | 1 |
| 8 | | <u> </u> | | | | | 65 ppm | | |
| 2 | 7 | | | | Anoma | lous | 85 + ppm | | |
| - | | | | | | | | | |
| | | · | | *0.9/ | | | 100 % | | |
| F | <u></u> | | | 50,% | | | 100 /0 | | |
| 4 | | a | | | | | | | ł |
| 21 | | | | | |] | | | |
| 2 | | ` | | Thresh | old 2 | 4 ppm | 1 | | |
| - | | | | Anoma | lous: | 26+p | pm | | |
| F | | ···· | | 50 % | | | 100,% | | |
| - | | | | | | | | | |
| 4 | | | | | | | nal) = 54 ppm | | |
| 8 | | | | | | | ∶61 ppm nal):62+ppm | | ł |
| 4 | | - | | | | - | l): 72+ppi | | |
| 1 1 | | - | | | | | ··· - ••• | | |
| - | | | | | | | 1 | | |
| ypm Ag ppm Cu | S oi vali | l son | LEGE hple li are ur | END ocation iderline | and e d . | result | H. LA | ANELA | |
| | | | | | | | FEL | LOW | 1 |
| 20 |) | 4 | 0 | 60 | | 80 | | metres | |
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| ΑΥ Τ | ON | | /EN | ITU | RES | | INC. | | |
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| EOC | HE | ΞM | IC/ | 4L | Sl | JR | VEY | | ł |
| COPI | PEF | ₹,∟ | EA | A C | ND : | ZIN | C IN SC | NLS | |
| 000 | | | | ₿у - | H.L. | | Drawn : | J. S. | 1 |
| nber, | 1986 | | | Figur | e : | | 5 | | 1 |
| nwor | th | Ex | plo | oratio | ons | L | imited | · | 1 |
| | · · · · · | | | | · · · · · | | | | J |



LEGEND

5 Soil sample location and number (all have prefix SC-86-)

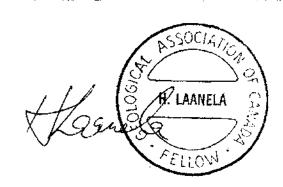
Rock sample location, 'A' denotes petrographic sample.

: Outcrop

LITHOGEOCHEMICAL RESULTS

| | Туре | Copper ppm(%) | Silver ppm(oz/t) |
|---|--------------|------------------|---------------------|
| | l·5m chip | 4517 (0.45) | 6-4 |
| | grab | (5513 (1-55) | 17-2 |
| | grab | 1598 (0-15) | [4+। |
| | dump | * > 10% | 96-5(2-8) |
| : | dump | 93607 (9-36) | 71-1 (2-0) |
| | dump | 21967 (2-19) | 22.7 (0.7) |
| | grab | 156 | [+ ? |
| | grab | 69 | 1-8 |
| | grab | 479 | 2.2 |
| | | | |

* Exceeds instrument limits.



| 20 | 40 | 60 | 80 | loometres |
|----|-------|----|----|-----------|
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PAYTON VENTURES INC.

SILVERCROSS CLAIM

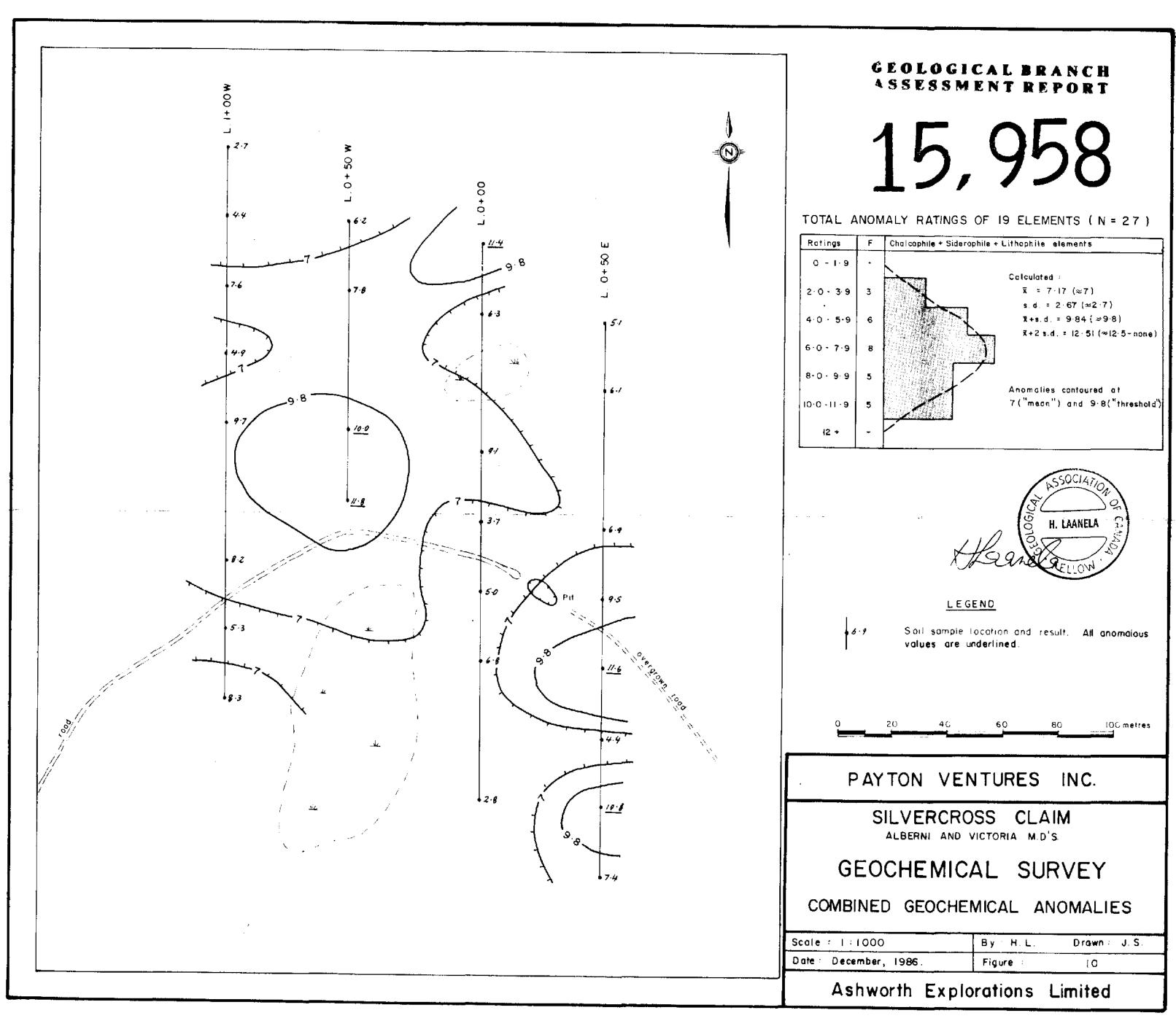
ALBERNI AND VICTORIA M.D'S.

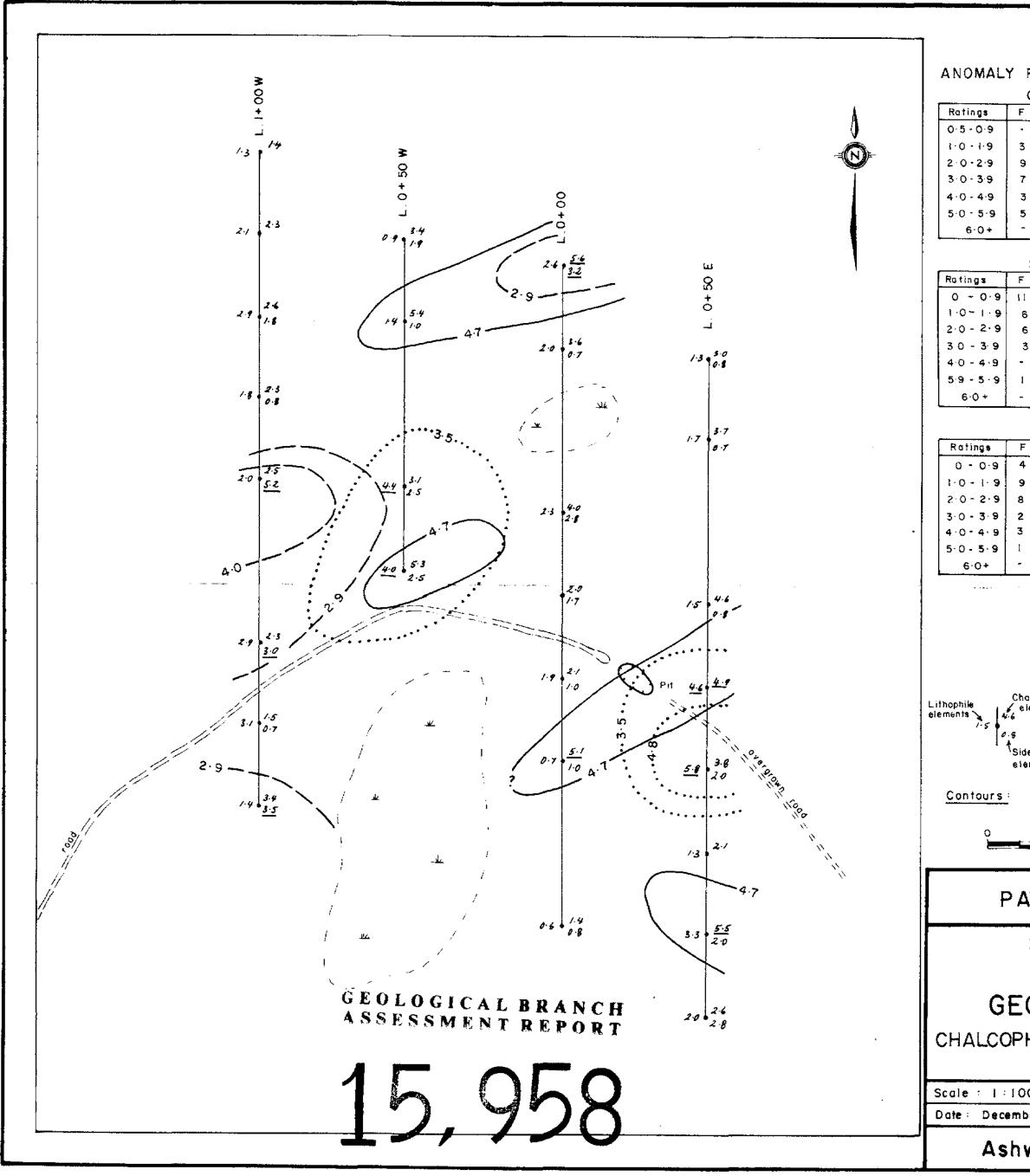
GEOLOGY AND SAMPLING PLAN

| 00 | Drawn : | A.H. | / J.S. | |
|------|----------|------|--------|--|
| 986. | Figure : | | 4 | |
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Ashworth Explorations Limited

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| RATINGS: Statistics and Histograms ($N = 2.7$) | | | | |
|--|-------------------------|--|--|--|
| | HALCOPHILE E | | | |
| F | Ag+Cu+Pb+Zi | n + As + Sb + Bi in Soils | | |
| 3 | | x = 3.38 - "mean" | | |
| 9 7 | | s.d. = 1.30 -"standard deviation" | | |
| , 3 | | x+s.d. = 4·68 (≈4·7) - " threshold" x+ 2s.d. = 5·98 (≈6·0) - "anomalous" | | |
| 5 | | x+3sd, = 7·28(≠7·3) - (no samples) | | |
| | | ···· | | |
| | DEROPHILE E | | | |
| F 11 | Au + Co + Ni + Sr | h + Mo + P + Fe in soils | | |
| 8 | | x = 1.67 | | |
| 6 3 | | s.d. = 1-19 | | |
| - - | | $\bar{x} + s.d. = 2.86 (42.9)$ | | |
| 1 | | $\vec{x} + 2 \text{ s.d.} = 4 \cdot 05(\neq 4 \cdot 0)$ $\vec{x} + 3 \text{ s.d.} = 5 \cdot 24(\neq 5 \cdot 2)$ | | |
| - | | | | |
| | ITHOPHILE E | | | |
| F | Mn + Ba + Cr + U + | Sr in solls | | |
| 9 | | x = 2·23 | | |
| 8 | | s.d. = 1:30 | | |
| 2 3 | | x+s.d. = 3 · 53 (~3·5) | | |
| t | | x + 2 s.d. = 4·83 (≠4·8) x + 3 s.d. = 6·13 (≠6·1 - no samples) | | |
| - | | | | |
| | | 1550C14/7/04 | | |
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| | | H. LAANELA | | |
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| · b 1 | LE | GEND | | |
| | nents | | | |
| | | e location and results. All anomalous underlined. | | |
| lder lem | ophile | | | |
| | | Siderophile Lithophile | | |
| (| Chalcophile elements | C siderophile Lithophile elements | | |
| . | 20 40 | 60 80 100 metres | | |
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| A | TUN VE | NTURES INC. | | |
| ç | | OSS CLAIM | | |
| | | VICTORIA M.D'S. | | |
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| :C | CHEMI(| CAL SURVEY | | |
| ΡН | ILE.SIDER | OPHILE AND LITHOPHILE | | |
| | • | ANOMALIES | | |
| 00 | | By : H.L. Drawn : J.S. | | |
| | r, 1986. | Figure : 9 | | |
| | | | | |
| worth Explorations Limited | | | | |

