

'81- # 48- # 8900

DIAMOND DRILLING REPORT
ON THE
ANDERSON MINERAL CLAIMS
(ANDERSON, ANDERSON 1 AND 2)
Kamloops Mining Division
N.T.S. 92I/8

Latitude 50° ~~29~~'N
24.5

Longitude 120° 25'W
24.5

ESPERANZA EXPLORATIONS LTD
(Owner and Operator)

Period of Work May 12 - June 6, 1980

January 30, 1981

Robert Holland
Geologist

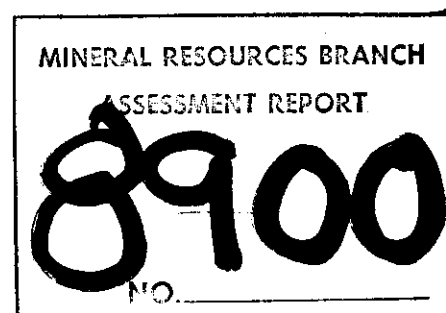


TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| SUMMARY, CONCLUSIONS & RECOMMENDATIONS | 1 |
| INTRODUCTION | 1 |
| LOCATION AND ACCESS | 3 |
| CLAIM STATUS | 3 |
| DIAMOND DRILLING | 4 |
| | |
| <u>APPENDICES</u> | |
| | |
| I. ITEMIZED COST STATEMENT - ANDERSON CLAIMS | |
| II. CERTIFICATE | |
| III. DETAILED DIAMOND DRILL LOG (HOLE NO: 80 An-1) | |
| | |
| <u>LIST OF FIGURES</u> | |
| | |
| <u>Fig.</u> | |
| 1. LOCATION MAP | 3a |
| 2. CLAIM MAP | 3b |
| 3. DIAMOND DRILL HOLE LOCATION MAP | 4a |

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

Drilling on the ANDERSON claim failed to intersect economically significant sulfides and the source of the reported high silver values was not found. The I.P. and S.P. conductors outlined by previous companies are likely caused by the graphitic horizons which were intersected. Four other holes drilled in to this horizon in the past appear also to have failed to intersect appreciable economic sulfides. It should be noted however, that the chert argillite (possibly a skarn) which underlies the graphitic schist may correlate with similar horizons associated with massive sulfide occurrences in the area. The most significant of these are Iron Mountain near Merritt and Stump Lake Mine. In these cases mineralization appears to be associated with magnetite-pyrite to pyrrhotite-pyrite facies changes. Since pyrrhotite-pyrite was recognized in the subject hole it is recommended that a magnetometer survey be conducted over the indicated horizon in an effort to locate magnetic zones for follow up testing. If results of this prove negative, no further work is recommended.

INTRODUCTION

Work in the Hollis Creek area was carried out by Newconex Canadian Explorations in 1972 and by Sumitomo in 1973. In both cases the primary targets were possible porphyry copper occurrences related to the intrusive rocks to the west. Soil geochemistry, self potential and I.P. surveys were conducted by these two companies and several areas of interest were outlined. Some visible copper mineralization was reported and is visible within the volcanic rocks overlying and to the east of the intrusive.

Within the area which underlies the present ANDERSON claim group a strong coincidental I.P. and self potential conductor traceable for 800 metres was obtained. Out on the flats, downhill and to the east of this conductor, a large silver soil response with values in excess of 6.0 ppm silver was outlined. Both the conductor and the soil anomaly were tested by percussion drilling by Sumitomo Mining and although no results are available, the following information was reported by a drill contractor in connection with the drilling of the claims.

- a) both holes on the silver anomaly failed to intersect bedrock and are believed to be underlain by thick glacial or stream sediment deposits.
- b) the most northerly hole of the five drilled through the conductor intersected graphic schist and a reported 2.0 oz/ton silver value over 9 metres from the bottom of the hole i.e. (approximately 50 to 60 metres depth).
- c) the silver anomaly may have been transported to its present location from the area of the conductor which lies on a moderately steep slope.

Based upon this information the ANDERSON claims were staked and optioned to Esperanza Explorations Ltd. During May 1980 the site of the drill hole reported to carry silver was relocated and a BQ check hole was drilled to a depth of 108.8 metres. The entire length of the hole totalling 38 samples was analysed geochemically for Copper, lead, zinc and silver. The results of this drilling are presented herein.

LOCATION & ACCESS

The ANDERSON claims are located five kilometres northwest of Stump Lake and the Merritt-Kamloops road, Highway 5. The nearest sizeable towns are Kamloops, 30 kilometres to the north and Merritt 42 kilometres to the southwest. Access to the claims is from Highway 5 at the north end of Stump Lake, via nine kilometres of rough dirt road, across rolling open privately owned cattle range.

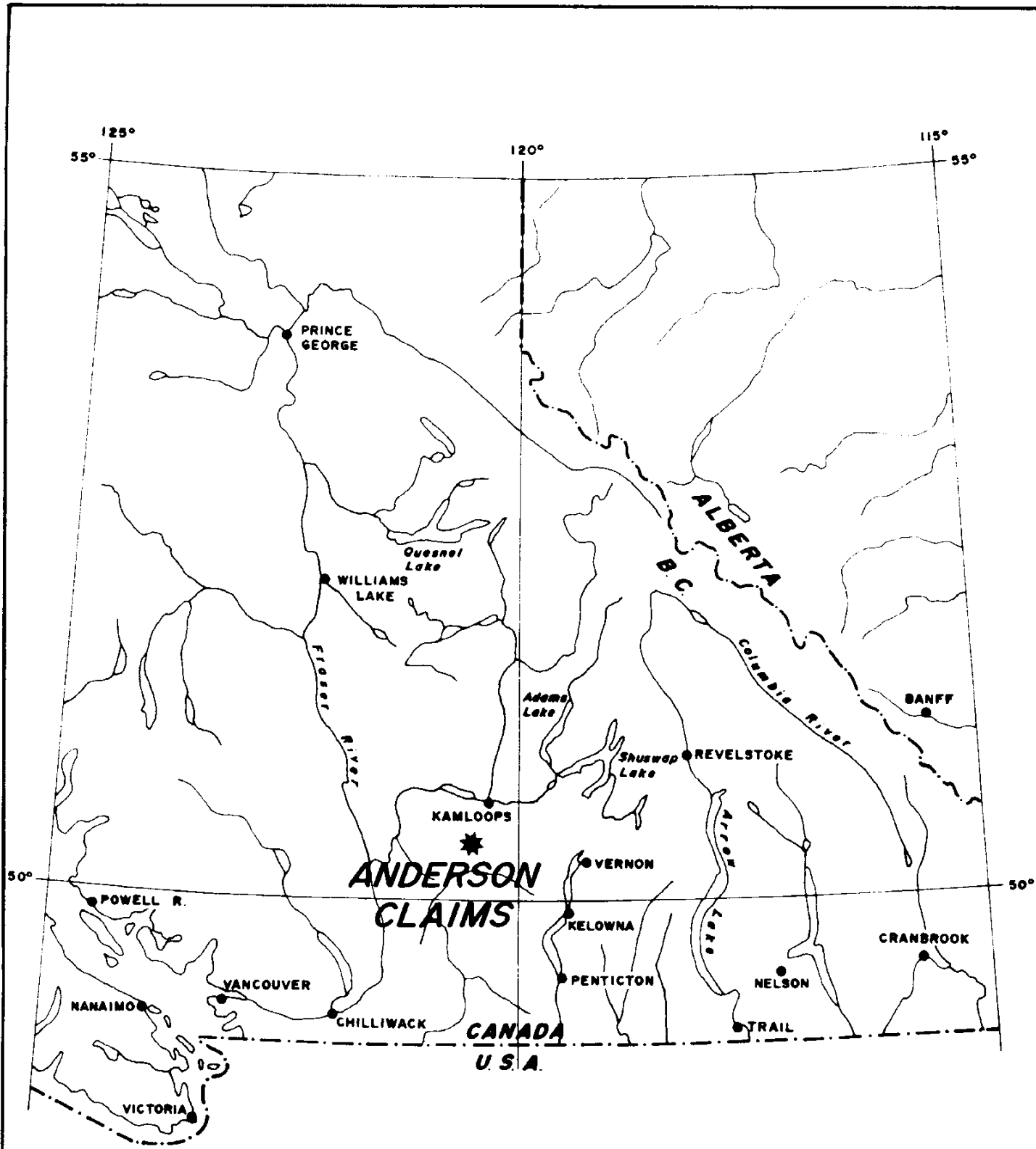
The claims themselves straddle Hollis and Moore Creeks, at their confluence, near the western edge of the rangeland, (see figure 2). Elevations range from 1000 metres (3300 feet) to 1200 metres (4200 feet) and the terrain is moderately steep. Much of the area has been selectively logged in the past and contains numerous clearings and old skid trails. To the west and northwest however, extensive areas of thick, nearly impenetrable tangles of second growth occur and swampy or marshy areas are common along Moore Creek.

Claim Status

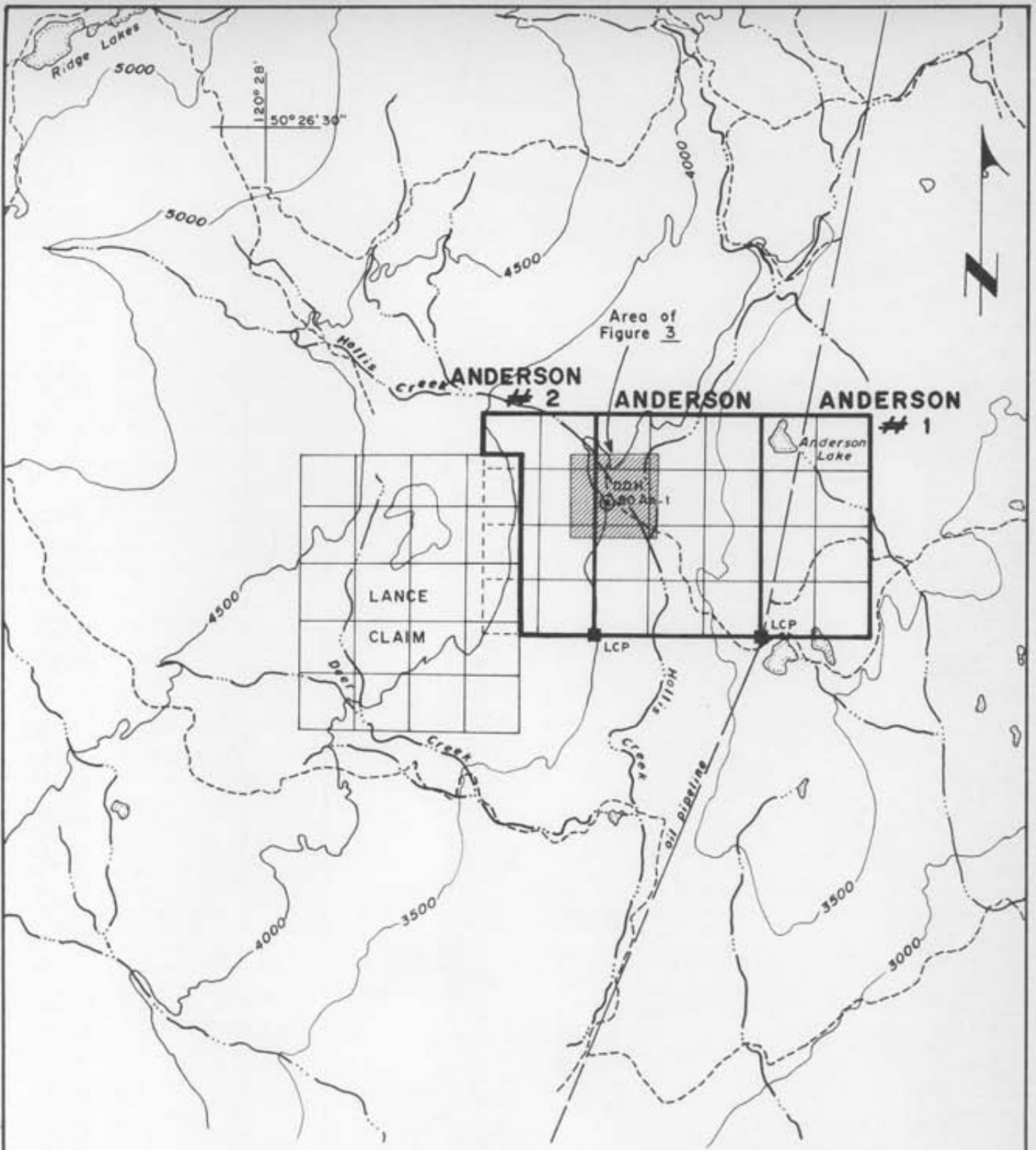
The following contiguous mineral claims, located within the Kamloops Mining Division, are registered in the name of Esperanza Explorations Ltd.

| <u>Claim</u> | <u>Grant Number</u> | <u>No. of Units</u> | <u>Expiry Date</u> |
|--------------|---------------------|---------------------|--------------------|
| ANDERSON | 2500 | 12 | March 31, 1981 |
| ANDERSON #1 | 2501 | 8 | March 31, 1981 |
| ANDERSON #2 | 2593 | 8 | May 8, 1981 |





The above claims were staked in the name of James McDonald and transferred to Esperanza on May 9, 1980.



| | | |
|------------------------------------|----------------|-----------|
| ESPERANZA EXPLORATIONS LTD. | | |
| ANDERSON CLAIMS | | |
| LOCATION MAP | | |
| Scale 1 : 4,000,000 | Date FEB. 1981 | NTS 921/B |
| Revised _____ | By R.H./d.h. | Fig. 1 |



LEGEND:

-  Contour (500 ft. intervals)
-  Creek
-  Road
-  LCP Legal Claim Post



| | | |
|------------------------------------|-----------------|-----------|
| ESPERANZA EXPLORATIONS LTD. | | |
| ANDERSON CLAIMS | | |
| CLAIM MAP | | |
| Scale: 1:50,000 | Date: FEB. 1981 | NTS 821/8 |
| Revised: _____ | By: R.H./d.h. | Fig. 2 |

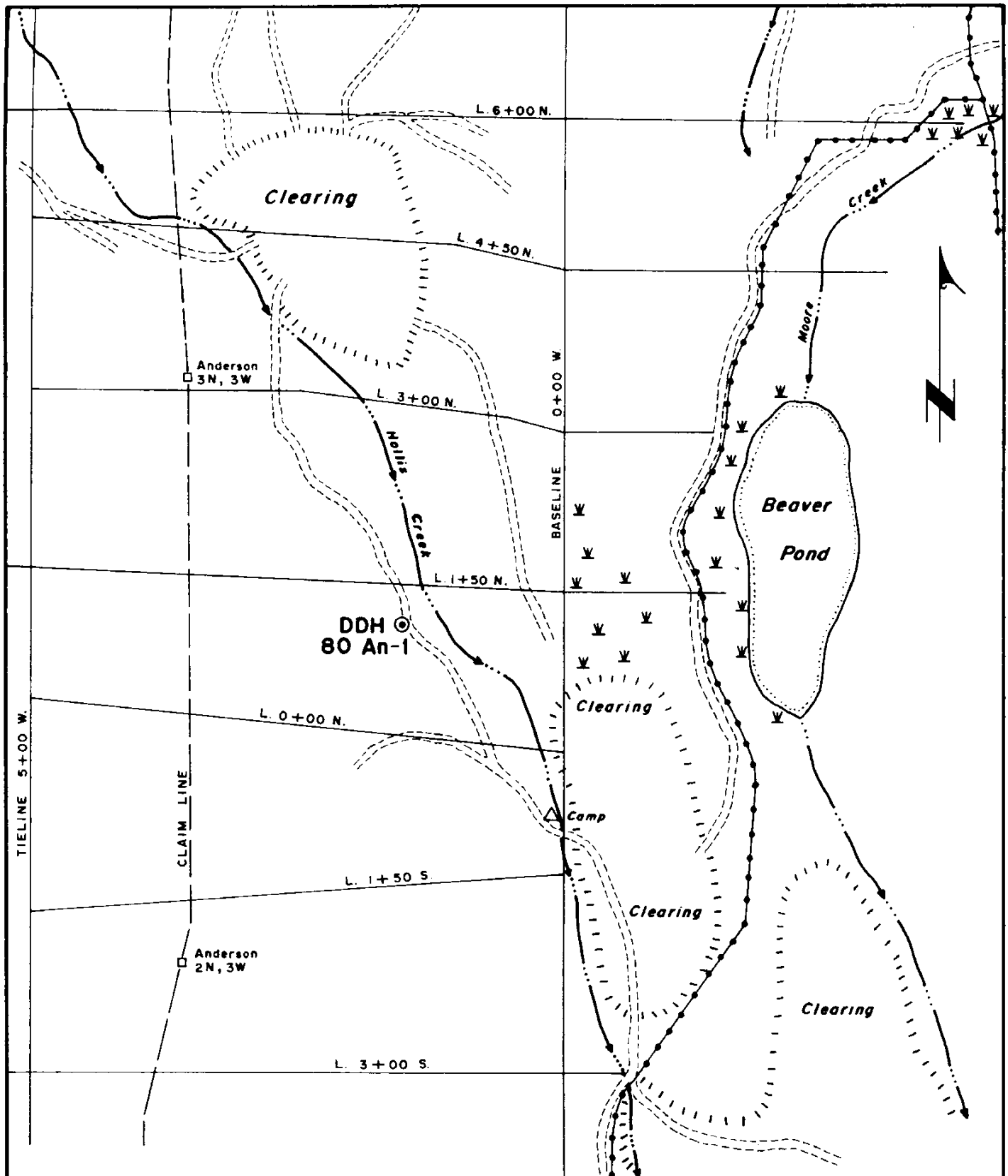
Diamond Drilling

The location of diamond drill hole 80 An-1 is shown with respect to claim boundaries, grid roads, and drainage in figure 3. The set-up was within a few metres of the former drill hole and was oriented vertically. Drilling was carried out by G & D Diamond Drilling of Kamloops and all core was left on the claims near the campsite (see figure 3). Detailed drill logs and geochemical results are included in Appendix '3' and a summary of the geology of the core is presented below.

Geological Drill Log

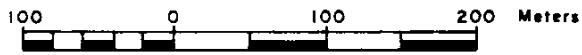
| | |
|-----------------|---|
| 0-2.5 metres | - overburden |
| 2.5 31.7 metres | - weak to strongly calcareous biotite-chlorite sericite schist; 0-5% pyrite. |
| 31.7 -71.2 | - variably calcareous graphitic schist; 2-15% pyrite and pyrrhotite, minor sphalerite. |
| 71.2 - 92.0 | interbanded graphitic schist and biotite-chlorite-sericite schist, similar to above sections. |
| 92.0 -102.6 | cherty biotitic argillite (skarn?), 1-10% pyrite, 1-4% pyrrhotite |
| 102.6 -108.8 | quartz feldspathic hornblende-biotite schist, 1-3% pyrite, 0.2% pyrrhotite. |

Graphitic schist intersections were carefully split with one half being submitted for geochemical analysis. The remaining sections were randomly chip sampled to obtain representative samples for analysis. Unless governed by lithological changes sample intervals were 3.0 metres.



LEGEND:

- Fence
- Swamp
- Road
- Creek



FOR LOCATION SEE FIGURE 2

| | | |
|--|-----------------|-----------|
| ESPERANZA EXPLORATIONS LTD. | | |
| ANDERSON CLAIMS | | |
| DIAMOND DRILL HOLE LOCATION MAP | | |
| Scale: 1 : 5,000 | Date: FEB. 1981 | NTS 921/8 |
| Revised: | By: R.H./d.h. | Fig. 3 |

Analyses were conducted by standard geochemical means for Copper, lead, zinc and silver by Chemex Labs of North Vancouver. All results are given in parts per million (ppm) and are tabulated opposite the appropriate interval on the drill logs (Appendix III).

APPENDIX I

ITEMIZED COST STATEMENT-ANDERSON CLAIMS

PERIOD MAY 12 - JUNE 6, 1980

SALARIES & WAGES

The following persons were employed by Esperanza Explorations on the ANDERSON claims on the days indicated.

| | |
|--|---------------|
| ROBERT HOLLAND - Geologist 7 days @ \$92.81/day May 12-18 | 649.67 |
| BRIAN KONST - Field assistant 4 days @ \$45.00/day, May 15-18 | 180.00 |
| SUSANNE VOETMANN- Field Assistant 7 days @ \$42.75/day, May 12-18 | <u>299.25</u> |
| Sub total | \$1,128.92 |

FOOD & ACCOMMODATION

| | |
|-------------------------------------|--------|
| 18 man days @ \$16.70/day May 12-18 | 300.60 |
|-------------------------------------|--------|

GEOCHEMISTRY

| | |
|------------------------------------|--------|
| Rock Geochem - 38 samples @ \$5.75 | 218.50 |
|------------------------------------|--------|

DRILL COSTS

| | |
|----------------------------------|---------------|
| Mobilization of equipment | 600.00 |
| Drilling -357 feet @ \$17.00 ft. | 6,069.00 |
| Material consumed | <u>213.25</u> |

| | |
|-----------|------------|
| Sub total | \$7,401.35 |
|-----------|------------|

| | |
|--------|------------|
| Total: | \$8,530.27 |
|--------|------------|

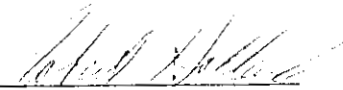
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APPENDIX II

CERTIFICATE

I, Robert T. Holland of 204 - 6331 McKay Avenue, Burnaby,
British Columbia, DO HERBY CERTIFY THAT:

1. I am a geologist with a business office at 1027 -
470 Granville Street, Vancouver, B.C.
2. I am a graduate in geology from the University of
British Columbia (BSc - 1976).
3. I have practiced my profession as a geologist for the
past five years.
4. To the best of my knowledge and belief the Statement of
Costs presented in this report Diamond Drilling
Report on the ANDERSON Mineral Claims.
is both correct and true.
5. I hold an interest in the shares of Esperanza Explorations Ltd.
and I am at this time employed by Esperanza Explorations Ltd.
as a geologist.



Robert T. Holland

APPENDIX III

Detailed Diamond Drill Log

Hole No. 80 An-1

ANDERSON CLAIMS

PROPERTY ANDERSON

HOLE NO. 80 An-1

LOGGED BY R. Holland

DATE May 17, 1980

| From | To | Rcvy % | Description | Sample | | | | Assays (in ppm) | | | | Visual Log | Min |
|------|------|--------|--|--------|------|-------|------|-----------------|----|-----|-----|------------|-----|
| | | | | From | To | Width | No. | Zn | Pb | Cu | Ag | | |
| 21.1 | 22.5 | 100 | SERICITE - CHLORITE - BIOTITE SCHIST - medium to coarse grained, strongly calcareous, light green to greenish grey, numerous rounded porphyroblasts altered to pale green chlorite and sericite; in lower sections abundant biotitic porphyroblasts probably after garnet; abundant pyritic stringers sulfides - 5% pyrite minor disseminated | 21.0 | 24.0 | 3.0 | chip | 154 | 1 | 62 | 0.1 | | |
| 22.5 | 24.0 | 95 | CHLORITE - SERICITE SCHIST - coarse grained, similar to chloritic interbands in 15.0-18.2, abundant quartz carbonate, weakly graphitic towards bottom schistosity - 60-70° sulfides - pyrite minor but up to 1% in graphitic sections | | | | | | | | | | |
| 24.0 | 28.0 | 100 | SERICITE SCHIST - fine grained; pale greenish grey, moderately calcareous, similar to 15.0-18.2 but with patches and clots of up to 40% unaltered fine grained biotite schist and little chlorite, some biotite clots may be altered garnet phenocrysts; poorly schistose schistosity - 40-55° - poor and faint sulfides - 3-6% pyrite and pyrrhotite (approx equal) disseminated and in stringers (mainly pyrite) | 24.0 | 27.0 | 3.0 | chip | 102 | 1 | 116 | 0.2 | | |
| 28.0 | 31.7 | 100 | SERICITE SCHIST - similar to 24.0-28.0 but with no visible biotite or porphyroblasts; locally weakly graphitic; abundant pyritic stringers; contains localized biotite schist sections similar to 25-15.0 sulfides - pyrite 7-8% minor disseminated pyrrhotite, minor disseminated red sphalerite and increased quartz-carbonate over last 0.3 meters | 27.0 | 30.0 | 3.0 | chip | 68 | 1 | 96 | 0.1 | | |
| | | | | 30.0 | 31.7 | 1.7 | chip | 108 | 1 | 480 | 0.1 | | |

PROPERTY ANDERSONHOLE NO. 80An-1LOGGED BY R HollandDATE May 17, 1980

| From | To | Rcvy % | Description | Sample | | | | Assays (in ppm) | | | | Visual Log |
|------|------|--------|---|--------|------|-------|-------|-----------------|----|----|-----|--|
| | | | | From | To | Width | No. | Zn | Pb | Cu | Ag | |
| 31.7 | 71.2 | 95 | GRAPHITIC SCHIST - strongly graphitic, black, variable calcareous, medium to coarse grained, well developed schistosity in graphite rich sections, poorly developed w quartz-carbonate rich sections; occasional minor F ₁ fold remnants cut off by S ₂ schistosity (See Visual log), abundant pyritic stringers and quartz-carbonate swarms, clots and stringers schistosity 31.7-50.5 - generally 50-60° but locally variable sulfides - pyrite generally in fine stringers or irregular clots minor disseminated - 2-15% - pyrrhotite generally as irregular clots occasionally interconnected by pyritic stringers 0-10%; pyrite and pyrrhotite are generally inversely proportional in abundance and not intimately related - red sphalerite - minor amounts locally up to 2% (1.5% Zn) as fine irregular disseminations often elongate along schistosity, most abundant when associated with fine remobilized quartz-carbonate clots - chalcopyrite - locally minor disseminated, minor copper stain also locally observed on partings | 31.7 | 33.0 | 1.3 | split | 90 | 4 | 46 | 0.1 | Visual Log 31.7-71.2 schistosity dip |
| | | | medium to coarse grained, well developed schistosity in | 33.0 | 36.0 | 3.0 | split | 235 | 2 | 66 | 0.1 | |
| | | | graphite rich sections, poorly developed w quartz-carbonate | 36.0 | 39.0 | 3.0 | split | 20 | 2 | 80 | 0.4 | |
| | | | rich sections; occasional minor F ₁ fold remnants | 39.0 | 42.0 | 3.0 | split | 194 | 1 | 66 | 0.1 | |
| | | | cut off by S ₂ schistosity (See Visual log), abundant pyritic | 42.0 | 45.0 | 3.0 | split | 260 | 1 | 82 | 0.1 | |
| | | | stringers and quartz-carbonate swarms, clots and stringers | 45.0 | 48.0 | 3.0 | split | 380 | 1 | 80 | 0.4 | |
| | | | schistosity 31.7-50.5 - generally 50-60° but locally variable | 48.0 | 51.0 | 3.0 | split | 350 | 1 | 84 | 0.4 | |
| | | | sulfides - pyrite generally in fine stringers or irregular clots | 51.0 | 54.0 | 3.0 | split | 520 | 1 | 92 | 0.2 | |
| | | | minor disseminated - 2-15% | 54.0 | 57.0 | 3.0 | split | 485 | 1 | 82 | 0.2 | |
| | | | - pyrrhotite generally as irregular clots occasionally | 57.0 | 60.0 | 3.0 | split | 390 | 1 | 82 | 0.2 | |
| | | | interconnected by pyritic stringers 0-10%; pyrite | 60.0 | 63.0 | 3.0 | split | 120 | 1 | 74 | 0.2 | |
| | | | and pyrrhotite are generally inversely proportional in | 63.0 | 66.0 | 3.0 | split | 148 | 1 | 64 | 0.1 | |
| | | | abundance and not intimately related | 66.0 | 69.0 | 3.0 | split | 370 | 1 | 72 | 0.1 | |
| | | | - red sphalerite - minor amounts locally up to 2% (1.5% Zn) as fine irregular disseminations often elongate along schistosity, most abundant when associated with fine remobilized quartz-carbonate clots | 69.0 | 72.0 | 3.0 | split | 310 | 1 | 72 | 0.1 | |
| | | | - chalcopyrite - locally minor disseminated, minor copper stain also locally observed on partings | | | | | | | | | |
| | | | 33.6-35.0 - CHLORITE-SERICITE SCHIST - medium grained, variably graphitic, olivegreen-grey to dark grey; pyrite decreased to 1-3%; no visible sphalerite or pyrrhotite | | | | | | | | | |
| | | | 37.0, 40.0-41.0 - BIOTITE SCHIST - fine grained, poorly schistose | | | | | | | | | |
| | | | 41.8-42.0, 44.4-44.6 - BIOTITE-SERICITE SCHIST - sericite alteration of fine grained biotite schist | | | | | | | | | |
| | | | 63.7-63.8 - CHLORITE-BIOTITE-GRAPHITE SCHIST | | | | | | | | | |
| | | | 50.1-50.3, 54.0-54.4 - minor fold structures, sheared | | | | | | | | | |



PROPERTY ANDERSONHOLE NO. 80An-1LOGGED BY R. HollandDATE May 18, 1980

| From | To | Rcvy % | Description | Sample | | | | Assays (in ppm) | | | | Visual Log |
|------|------|--------|---|--------|------|-------|-------|-----------------|----|----|-----|------------|
| | | | | From | To | Width | No. | Zn | Pb | Cu | Ag | |
| 71.2 | 74.4 | 100 | BIOTITE - SERICITE - CHLORITE SCHIST - Finegrained weak to non calcareous purple biotite schist strongly altered to pale green sericite and chlorite, similar to 25 to 150 m but poorly schistose. Some graphitic sections 71.2-71.9 sulfides | 72.0 | 74.8 | 2.8 | chip | 116 | 1 | 50 | 0.1 | |
| 74.4 | 76.8 | 95 | GRAPHITIC SCHIST - same as 31.7-71.2 10-20% sulfides mainly pyrrhotite disseminations with locally abundant pyrite stringers and disseminations minor disseminated red sphalerite | 74.8 | 76.8 | 2.0 | split | 385 | 1 | 82 | 0.1 | |
| 76.8 | 81.3 | 100 | BIOTITE - SERICITE SCHIST - fine grained, faintly laminated, non calcareous mainly purple biotite rich with abundant bands and partially altered zones of pale green sericite, quartz-carbonate sweets and discontinuous stringers and veinlets locally abundant, sericite alteration also well developed along stringers; interbeds of graphitic schist common up to 20 cm thick | 76.8 | 78.0 | 1.2 | chip | 170 | 1 | 72 | 0.1 | |
| | | | schistosity generally 70-80°, locally to 55°, some minor folding and disruption | 78.0 | 81.0 | 3.0 | chip | 132 | 1 | 80 | 0.1 | |
| | | | sulfides - pyrrhotite - most often as disseminations and discontinuous stringers associated with sericitic sections and quartz carbonate; generally minor in biotitic zones although may be abundant in associated quartz-carbonate; often very fine grained; - 4-8% | | | | | | | | | |
| | | | - pyrite - crosscutting stringers and disseminations associated in and around pyrrhotite - 2-3% | | | | | | | | | |
| | | | - chalcopyrite - occasional suspected disseminations in pyrrhotite | | | | | | | | | |
| 81.3 | 84.9 | 95 | GRAPHITIC SCHIST - same as 31.7-71.2 but locally chloritic; interbeds of sericitic schist (some remnant biotite) often associated with quartz-carbonate sweets, sericite-quartz-carbonate also occurs locally | 81.0 | 84.0 | 3.0 | chip | 210 | 1 | 72 | 0.1 | |



PROPERTY Anderson HOLE NO. An 80-1 LOGGED BY R Holland DATE May 18, 1980

| From | To | Rcvy % | Description | Sample | | | | Assays (in ppm) | | | | Visual Log | | |
|------|------|--------|---|--------|------|-------|------|-----------------|----|----|-----|------------|--|--|
| | | | | From | To | Width | No. | Zn | Pb | Cu | Ag | | | |
| | | | intermixed on a fine scale, calcareous with abundant fine remobilized white carbonate Schistosity - variable and often poorly defined Sulfides - pyrrhotite - fine disseminated, coarser in chloritic and quartz-carbonate zones - 5-10% - pyrite - fine disseminated, more abundant in chloritic and quartz-carbonate zones, occasionally stringer 2-3% - sphalerite - trace fine disseminated | | | | | | | | | | | |
| 84.9 | 92.0 | 100 | CHLORITE - GRAPHITE AND BIOTITE - SERICITE SCHISTS - interbedded + mixed well laminated, dark grey, non-calcareous, medium grained, moderate to locally strongly graphitic chlorite (dark grey) schist and well laminated purple and pale green, medium grained, non-calcareous biotite-sericite schist interbeds from 2-80 cm thick with generally sharp contacts with local grading and hybrid zones; both rock types weakly magnetic schistosity - 35-55° - locally to 20°, abundant minor folding particularly in graphitic sections (see visual log) Sulfides - graphitic sections - pyrrhotite - 10-15% locally to 20% as fine grained disseminated mats - pyrite - 3-4% as fine disseminated often in core of pyrrhotite mats, and as occasional fine stringer - sphalerite - locally trace amounts - biotite-sericite sections - pyrrhotite ~5% - very fine grained mats often invisible in biotite rich sections, contains intermixed pyrite, pyrite also as occasional fine stringer | 84.0 | 87.0 | 3.0 | chip | 200 | 1 | 70 | 0.1 | | | |
| | | | | 87.0 | 90.0 | 3.0 | chip | 140 | 1 | 70 | 0.1 | | | |
| | | | | 90.0 | 93.0 | 3.0 | chip | 94 | 1 | 64 | 0.1 | | | |

PROPERTY AndersonHOLE NO. An 80-1LOGGED BY R. HollandDATE May 18, 1980

| From | To | Rcvy % | Description | Sample | | | | Assays (in ppm) | | | | Visual Log |
|------|-------|--------|--|--------|-------|-------|------|-----------------|----|-----|-----|------------|
| | | | | From | To | Width | No. | Zn | Pb | Cu | Ag | |
| 920 | 1026 | 100 | BIOTITIC CHERY ARGILLITE - very hard and fine grained, gray to dark grey gradational laminae (graded bedding??) with fine ribbon bands of purple biotite, weakly calcareous often along fine fractures and stringers, laminae generally faint but often sharp and well defined; grades into massive, softer biotite rich sections, occasional thin band of coarser biotite and quartz (remobilized?) and white quartz sweets and clots; some sericite alteration along fractures in biotite rich sections and in remobilized zones; some weakly graphitic sections | 930 | 96.0 | 3.0 | chip | 66 | 1 | 64 | 0.1 | 92.1 |
| | | | | 96.0 | 99.0 | 3.0 | chip | 96 | 1 | 108 | 0.1 | |
| | | | | 99.0 | 1020 | 3.0 | chip | 82 | 1 | 205 | 0.1 | 92.2 |
| | | | Schistosity - 40-65° generally planar with occasional minor fold structure and numerous isoclinal fold remnants (original bedding?) (see visual log) with axis generally down dip of schistosity | | | | | | | | | 92.6 |
| | | | Sulfides - pyrrhotite - 1-4% - fine disseminations often concentrated along healed fractures and sericitic sections | | | | | | | | | 92.5 |
| | | | pyrite - 0-10% - locally abundant in stringers particularly in graphitic sections where occurs up to 15%; often absent or minor | | | | | | | | | |
| 1026 | 108.8 | 100 | QUARTZOFELDSPATHIC HORNBLENDE BIOTITE SCHIST - interlayered bands (generally .5-1.0m thick) of fibronbanked weakly calcareous, fine to medium grained quartz-biotite rich schist with increased light green chlorite and cream feldspar with depth; and medium-grained, moderately to well foliated, non-calcareous; light green; quartz hornblende - biotite - feldspar (K-spar?) greenstone gneiss. Hornblende has been almost completely altered to light green chlorite but some dark green cores remain; rare large hornblende phenocrysts (also altered) occur in the schist and a 2cm band of hornblende crystals separated by biotite occurs at 102.9m; often particular in lower sections the layering in the schist is very sharply defined and some bands | 102.0 | 105.0 | 3.0 | chip | 40 | 1 | 166 | 0.1 | |
| | | | | 105.0 | 108.8 | 3.8 | chip | 40 | 1 | 178 | 0.1 | |

