

TEXACO CANADA RESOURCES LTD.

EXPLORATION - 1983

TP MINERAL CLAIM

ATLIN MINING DIVISION, BRITISH COLUMBIA

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,300**

Trigg, Woollett Consulting Ltd.

November 1983

P. G. Lhotka  
R. A. Olson

TEXACO CANADA RESOURCES LTD.

EXPLORATION - 1983

TP MINERAL CLAIM

ATLIN MINING DIVISION, BRITISH COLUMBIA

	<u>CONTENTS</u>	<u>PAGE</u>
SUMMARY		1 ✓
INTRODUCTION		2 ✓
GEOLOGY		4 ✓
MINERAL OCCURRENCES		5 ✓
TRENCHING		7 ✓
SAMPLING		8 ✓
GEOPHYSICAL SURVEYS		10 ✓
CONCLUSIONS		11 ✓
RECOMMENDATIONS		12 ✓
REFERENCES		14 ✓
CERTIFICATION		15 ✓

TABLES

TABLE

I	TABLE OF FORMATIONS	16 ✓
II	BISMUTH, NICKEL, LEAD, PLATINUM AND PALLADIUM ANALYSES OF SELECTED GOLD- AND COBALT-BEARING ROCK CHIP SAMPLES	17 ✓

APPENDICES

APPENDIX

I	FIELD PERSONNEL	AT END ✓
II	STATEMENT OF EXPENDITURES	AT END ✓
III	PHOTOGRAPHS: MAIN SHOWING AND GOLD- AND COBALT-BEARING AMPHIBOLE SKARN	AT END ✓

APPENDIXPAGE

IV	PETROGRAPHIC DATA SHEETS	AT END
V	GEOCHEMICAL LAB REPORTS	AT END
VI	CERTIFICATES OF ANALYSIS	AT END
VII	SUMMARY OF GEOCHEMICAL RESULTS	AT END
VIII	TRENCHES T-1, T-2, T-3, T-4 - GEOLOGY, SAMPLING	AT END
IX	MAGNETOMETER SURVEY NOTES AND CALCULATIONS	AT END
X	RECONNAISSANCE GEOPHYSICAL SURVEY PROFILES	AT END /

ILLUSTRATIONSDRAWING

3102-1	LOCATION	3
3102-2	GEOLOGY, PROSPECTING, SAMPLING TP MINERAL CLAIM	POCKET
3102-3	GEOLOGY, SAMPLING, MAGNETOMETER SURVEY MAIN SHOWING	POCKET
3102-4	DETAILED GEOLOGY, SAMPLING, CROSS-SECTIONS MAIN SHOWING	POCKET
3102-5	PROPOSED EXPLORATION MAIN SHOWING	POCKET

TEXACO CANADA RESOURCES LTD.

EXPLORATION - 1983

TP MINERAL CLAIM

ATLIN MINING DIVISION, BRITISH COLUMBIA

SUMMARY

Exploration of TP mineral claim was conducted between June 1 and July 16, 1983. Geological mapping at 1:10,000 scale was performed in conjunction with prospecting and sampling of the entire mineral claim. At the Main Showing, a gold- and cobalt-bearing occurrence discovered in 1982, exploration included geological mapping at 1:1,000 scale, trenching, sampling, magnetometer and grid surveying. Similar detailed exploration was also performed at the Camp Showing.

TP mineral claim is underlain by pre-Permian gneiss and schist of Yukon Group that is unconformably overlain by Upper Triassic volcanic rocks of Stuhini Group. Numerous intrusions, of several ages, ranging in composition from granodiorite to hornblendite, are present. Yukon Group metamorphic rocks include marble, which locally is altered to skarn. At the Main Showing visible gold, erythrite and a cobalt arsenide exist where two fracture zones coincide with amphibole skarn. Rock chip sampling at the Main Showing has outlined two gold- and cobalt-bearing zones with maximum strike lengths on surface of 25 metres and 40 metres. Weighted average grades from the gold- and cobalt-bearing zones range up to 22.66 parts per million gold over 4.85 metres, and 3.91 per cent cobalt over 3.55 metres.

Further exploration is required at the Main Showing, but is not warranted at any of the other minor mineral occurrences discovered within TP mineral claim. Exploration at the Main Showing should comprise a minimum of 550 metres of diamond drilling and a minor amount of surface mapping and rock chip sampling. The estimated cost to perform the work is \$210,500. Depending on the results of this drilling, additional drilling may be warranted.

INTRODUCTION

Location and Access

TP mineral claim is in northwestern British Columbia, within National Topographic System (NTS) map area 104M/10E, at 59°41'N latitude,

134°41'W longitude (Dwg. 3102-1). The region is mountainous with peaks up to 2,300 m, separated by broad U-shaped glacial valleys with valley floors at elevations of 650 m above sea level. At higher altitudes extensive winter snow may persist into mid- or late-June on all but the south-facing slopes.

TP mineral claim is on the southwest end of Teepee Peak, and is 20 km east of Fraser, British Columbia. Fraser is on Highway 2 which links Whitehorse, Yukon Territory to the deep water port at Skagway, Alaska. White Pass and Yukon Route Railway also connects Whitehorse to Skagway, passing through Fraser, but has been out of operation since 1982. Access to the mineral claim is by helicopter. It has been determined that a road could be constructed to the base of Teepee Peak from Highway 2.

### History

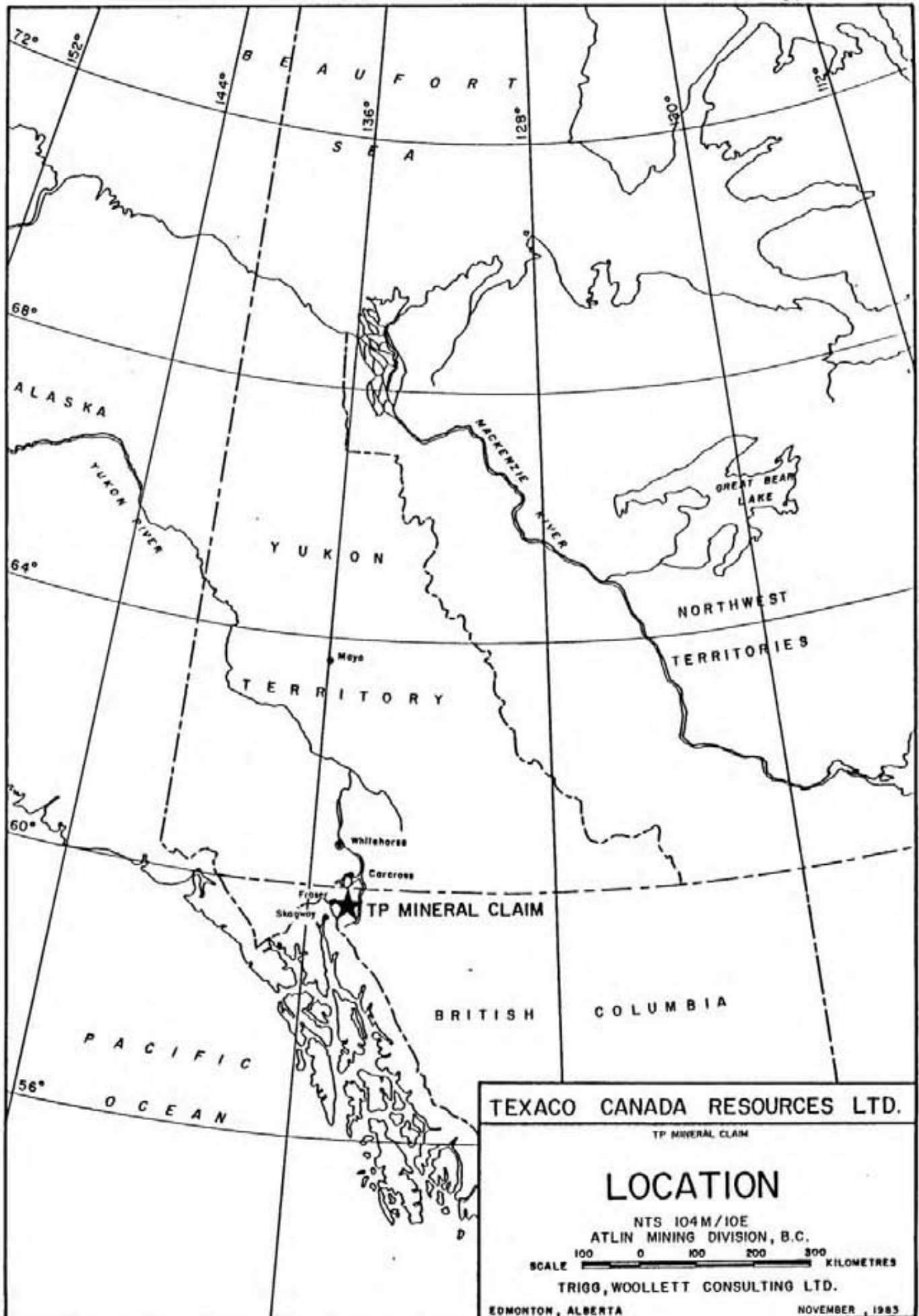
TP mineral claim, encompassing 500 ha, was recorded on August 24, 1982 in the name of Texaco Canada Resources Ltd. The claim was staked to protect a gold-cobalt occurrence discovered in July 1982 by prospecting (Lhotka and Olson, 1982).

Previous exploration in the region dates to the 1890's when prospectors travelling to the Klondike goldfields prospected en route. Gold production was recorded from the Engineer Mine at Taku Arm of Tagish Lake, British Columbia from quartz veins, and gold and silver were produced from the Venus and Big Thing mines on Montana Mountain just north of the Yukon Territory - British Columbia border. Assessment records do not document any previous work within TP mineral claim, nor is there any surface indication of exploration such as trenching or sampling at any of the mineral occurrences.

In 1982 a gold-cobalt occurrence, now named the Main Showing, and a pyrrhotite-bearing skarn, now named the Camp Showing, were discovered by prospecting (Lhotka and Olson, 1982). A limited amount of exploration was performed at that time and included prospecting, sampling and reconnaissance geological mapping. This exploration is not described in this report and the costs pertaining to it are not included in the costs of the 1983 exploration submitted for assessment credit.

### 1983 Exploration

Exploration was conducted from a camp within TP mineral claim by Trigg, Woollett Consulting Ltd. on behalf of Texaco Canada Resources Ltd. between June 1 and July 16, 1983. Logistical support and mobilization were provided by helicopters based at Atlin, British Columbia and Whitehorse, Yukon Territory. A total of 190 field man days were expended by a crew comprised of a supervising field geologist, an assisting geologist, a trencher/pro prospector, two geological assistants and a cook (Appendix I).



Exploration included geological mapping at 1:10,000 scale, using airphotos and topographic maps for control. Prospecting and sampling were performed in conjunction with geological mapping. Detailed geological mapping at 1:1,000 scale, grid surveying, sampling, trenching and magnetometer surveying were performed at the Main Showing and, to a lesser extent, at the Camp Showing. At the Main Showing grid surveying was accomplished using a transit and electronic chain level, whereas grid surveying at the Camp Showing was accomplished using a tape and right angle prism. A total of 81 rock chip, 18 rock grab and 2 stream sediment samples were collected for analysis. The estimated minimum expenditure for the work performed at TP mineral claim, including reporting, is \$66,120 (Appendix II).

#### GEOLOGY

The Geological Survey of Canada has geologically mapped NTS map area 104M at a scale of 1:253,440 (Christie, 1957) and adjacent map area 104K at a scale of 1:250,000 (Souther, 1971). Because the geology of the two map areas is similar and Souther's work is more detailed and more recent than that of Christie, the stratigraphic terminology of Souther is used in this report.

Within the northeastern quadrant of NTS 104M, which includes Teepee Peak, the oldest rocks are Yukon Group, a series of quartz-chlorite-amphibole gneiss and schist, with minor amounts of marble (Table I). The age of Yukon Group is uncertain; Christie (1957) assigns the group a pre-Permian(?) age, whereas Souther (1971) prefers a Triassic and earlier age. Fine grained diorite intrudes Yukon Group and is of probable Lower or Middle Triassic age. Upper Triassic Stuhini Group exists in two northwest trending belts which are up to 40 km long by 10 km wide, and several smaller isolated exposures, including one capping Teepee Peak (Dwg. 3102-2A). Regionally, Stuhini Group is a highly variable unit comprised of felsic to mafic flows, tuff and breccia interbedded with slate, siltstone, greywacke and conglomerate. King Salmon Formation, a locally identifiable division of Stuhini Group, comprises well-bedded conglomerate, greywacke, siltstone and shale. Jurassic Laberge Group lies in locally conformable, disconformable or unconformable contact with Stuhini Group and consists of conglomerate, greywacke, siltstone, shale and limestone. Porphyry intrusions, in the form of stocks, dykes and sills, some of which are older than Stuhini Group and some of which intrude Stuhini Group, are grouped into a unit assigned a Cretaceous and older age. Cretaceous and/or Jurassic Coast Plutonic rocks, which are comprised largely of granodiorite, but include rocks ranging from diorite to granite, intrude all other rock types.

#### Geology of TP Mineral Claim

The oldest rocks within TP mineral claim are Yukon Group which is dominantly comprised of quartz-chlorite-amphibole gneiss and schist with minor amounts of marble; the marble is locally replaced by magnetite, amphibole and calcsilicate-calcite skarns (Dwg. 3102-2B). Hornblendite and

fine grained diorite intrude Yukon Group. Stuhini Group crops out only on the upper elevations of Teepee Mountain where it unconformably overlies Yukon Group. Near the southern boundary of TP mineral claim the unconformity is marked by a rubble zone, from 1 m to 3 m in thickness, comprised of locally derived clasts of Yukon Group. The rubble zone is in turn overlain by a porphyritic mafic volcanic flow, the base of which contains occasional clasts similar to those in the rubble zone. Stratigraphically upwards, the mafic flows are overlain by felsic flows and by finely laminated, porphyritic, felsic volcanics which may represent an ash-flow or crystal-tuff. East of the Main Showing the base of Stuhini Group is marked by a sharp angular unconformity between Yukon Group gneiss and a porphyritic intermediate flow which contains rare clasts derived from Yukon Group. The unconformity generally strikes northwesterly and dips shallowly northeastwards. However, northeast of the Main Showing the trace of the unconformity turns sharply uphill to the east, and then turns sharply northwesterly to again parallel the topographic contours. The change in the trace of the unconformity at this locale is spatially coincident with the assumed trace of Teepee Fault.

Teepee Fault is a major northwesterly trending fault that cuts Yukon Group metamorphic rocks southeast of and, possibly, northwest of Teepee Peak (Dwg. 3102-2A). Within TP mineral claim there is no evidence, such as alteration zones, shearing or linear topographic features, to indicate that Teepee Fault cuts any of the rocks younger than pre-Permian age. The assumed trace of Teepee Fault is shown on drawing 3102-2B where it is thought to be present beneath Stuhini Group.

Cretaceous and older porphyry intrusions, including rare dykes of intermediate composition, exist as sills, dykes and stocks. Some of these intrusions are older than Stuhini Group, as evidenced by their being eroded at the unconformity, whereas others intrude Stuhini Group. It was not possible to consistently separate the different ages of porphyries, therefore, they have been shown as one unit on drawing 3102-2B. Many of the dykes and sills which belong to this unit are too small to show at a 1:10,000 map scale and these rocks are more abundant than shown on drawing 3102-2B. A large stock of Cretaceous and/or Jurassic granodiorite intrudes Stuhini Group volcanics in the northeastern part of TP mineral claim.

#### MINERAL OCCURRENCES

Prospecting of TP mineral claim and immediately adjacent areas was conducted in conjunction with geological mapping by a geologist and a prospector. Several new mineral occurrences were discovered and sampled. Detailed geological mapping was performed at the Main and Camp Showings.

#### Main Showing

At the Main Showing, gold and cobalt minerals exist in and near two northwesterly trending fracture zones adjacent to the contact between a quartz-feldspar porphyry stock, a skarn, and gneiss and schist (Appendix III, Figure 1). Detailed mapping at the Main Showing has shown that



numerous, metamorphosed quartz porphyry sills intrude the gneiss and schist, and that the sills are older than Upper Triassic because clasts of the same lithology are found in Stuhini Group intermediate flows which unconformably overlie Yukon Group. For this reason, the quartz porphyry sills are included in the pre-Permian Yukon Group on drawing 3102-3. The quartz-feldspar porphyry stock which intrudes Yukon Group is not in contact with Stuhini Group at the Main Showing. Northeast of the Main Showing, however, the stock does intrude Stuhini Group (Dwg. 3102-2B). Therefore, this quartz-feldspar porphyry stock is younger than Upper Triassic. This same stock is cut by fine grained, green, intermediate composition dykes in the southeast part of the grid (Dwg. 3102-3). Four lens-shaped dykes were mapped in the northern part of the grid area. These dykes are comprised of a fine grained, felsic, groundmass with phenocrysts of quartz and feldspar, and rare angular breccia fragments that are a few centimetres in diameter. The age of the breccia dykes is uncertain because they are not in contact with the quartz-feldspar porphyry stock or the fine grained, green, intermediate composition dykes.

A skarn 200 m long by about 15 m thick exists near the eastern contact of the quartz-feldspar porphyry stock (Dwg. 3102-3). Locally a narrow wedge of gneiss separates the stock from the skarn. The skarn is zoned and consists of four mineralogical types. The northern end of the skarn comprises a magnetite zone which consists of magnetite with minor amounts of calcite. The magnetite zone grades southerly into a calcsilicate-calcite zone which is comprised of garnet and calcite with minor amounts of dark green amphibole. Further to the south the calcsilicate-calcite zone grades into marble. At the northern end of the skarn the magnetite zone pinches out. There are three other small lenses of magnetite and calcsilicate-calcite skarn east of the main skarn. A fourth mineralogical type of skarn comprises pale green amphibole. Zones of amphibole exist along or near fracture zones which cut the magnetite zone of the main skarn. The amphibole zones host most of the gold and cobalt minerals (Appendix III, Figure 2).

Two en echelon fracture zones, each about 200 m long, trend northwest parallel to the contact between skarn and quartz-feldspar porphyry (Dwg. 3102-4). Both zones are comprised of one or more narrow fractures which locally have slickensides. The southern zone dips about 45 degrees east while the northern zone dips about 70 degrees east. Slickenside steps indicate the relative motion on the northern fracture zone is left lateral, but displacement is negligible because no displacement exists where the fracture zone intersects the magnetite skarn-gneiss contact.

Sulphide mineral occurrences at the Main Showing can be classed as one of four types (Dwg. 3102-3). The most important type comprises erythrite, a primary cobalt mineral and, locally, visible gold. Visible gold exists at trench T-1. Erythrite, and the primary cobalt mineral from which it is derived, exist in amphibole skarn and to a lesser extent in gneiss and quartz-feldspar porphyry adjacent to the two en echelon fracture zones (Dwg. 3102-4). The second type of mineral occurrence comprises small

pyrite-bearing gossans in gneiss and schist. A third type of mineral occurrence exists about 25 m south-southeast of trench T-4, adjacent to the fracture zone, and comprises disseminated arsenopyrite replacing magnetite skarn. No cobalt or visible gold is associated with this occurrence. A fourth type of mineral occurrence exists at the southwest end of the grid, near sample site 3PLP004, where a 20 cm diameter pod of chalcopyrite, malachite and galena is hosted by calcsilicate-calcite skarn.

A petrographic study of two specimens collected in 1982 was performed in May 1983. Petrographic data sheets, which describe the samples in detail, are included as Appendix IV. Both samples are megascopically similar and comprise erythrite, a cobalt arsenide, which may be skutterudite, and magnetite in pale green amphibole skarn. Specimen TS-6 from near trench T-1 contains gold that is visible with the aid of a 10X hand lens, whereas specimen TS-7 from near trench T-4 contains no visible gold. Examination of polished thin sections prepared from the two specimens, in both reflected and transmitted light, indicate they are essentially mineralogically identical, except for the lack of visible gold in specimen TS-7. The gold in specimen TS-6 exists as discrete grains up to 0.1 mm in diameter. Gold occurs at grain boundaries of the cobalt arsenide, magnetite, and silicate minerals. Textural relationships indicate magnetite and the cobalt arsenide may replace silicate gangue minerals and that gold was deposited in the interstices between magnetite, the cobalt arsenide and silicate minerals.

#### Camp Showing

The Camp Showing comprises a small lens of skarn in Yukon Group gneiss and schist. In 1983 this occurrence was geologically sketch mapped at 1:500 scale (Dwg. 3102-2C). The skarn consists of two mineralogical types: massive magnetite, and calcsilicate-calcite that contains garnet, epidote and calcite. The northwest trending skarn is discontinuously exposed for about 60 m, and varies in width from 1 m to 7 m. A quartz-feldspar porphyry body of unknown size is in contact with the skarn at its northern end.

Pyrrhotite is the only sulphide mineral present at the Camp Showing and it exists as fine grained disseminations that locally comprise up to 40 per cent by volume of the skarn.

#### TRENCHING

Four trenches were excavated at the Main Showing (Dwg. 3102-4). Approximately 25 m<sup>3</sup> of rock was excavated from the four trenches using a gasoline-powered hand drill and explosives. An additional 12 m<sup>3</sup> of overburden was removed by hand before actual trenching could begin.

### SAMPLING

Thirteen rock grab, 2 rock chip and 2 geochemical stream sediment samples were collected during prospecting traverses. In addition, 75 rock chip and 5 rock grab samples were collected from the Main Showing, and 4 rock chip samples were collected from the Camp Showing. All samples were sent to Bondar-Clegg & Company Ltd., North Vancouver, British Columbia for analysis for gold, silver and cobalt. Selected samples were also analyzed for one or more of copper, lead, nickel, zinc, tungsten, bismuth, platinum and palladium. Analytical methods used are indicated on the geochemical lab reports (Appendix V) and certificates of analysis (Appendix VI). A summary of all the analytical results, which includes a brief description of each sample, is included as Appendix VII.

At the Main Showing, samples from pyrite-bearing gneiss and schist, arsenopyrite in magnetite skarn, and chalcopyrite and galena in calcisilicate-calcite skarn contain less than 1.00 parts per million (ppm) gold (Dwg. 3102-3). All of the samples which contain greater than 1.00 ppm gold are from, or are adjacent to, fracture zones that contain cobalt minerals. Rock chip samples from trenches and outcrops at the Main Showing contain up to 65.18 ppm gold, 5.59 per cent cobalt and 79.9 ppm silver. Geological sketches of the four trenches with details of the rock chip sample results are included as Appendix VIII. Drawing 3102-4 symbolically shows all gold and cobalt values for the rock chip samples. The symbols indicate that high gold and cobalt values generally occur together. The limits of the gold- and cobalt-bearing zones shown on drawing 3102-4 are defined by rock chip samples that contain greater than 3.00 ppm gold and/or 0.10 per cent cobalt. Within a gold- and cobalt-bearing zone all rock chip sample results were combined by calculating weighted average grades. Weighted average grades for gold range from 4.48 ppm over 3.95 m to 22.66 ppm over 4.85 m, and for cobalt from 0.02 per cent over 3.95 m to 3.91 per cent over 3.55 m. Silver results are generally less than 10.0 ppm and therefore they have not been included in calculations of weighted averages for gold- and cobalt-bearing zones. The widths given with weighted average grades approximate true widths because the rock chip samples were collected at approximately right angles to the strike, and to the dip of the gold- and cobalt-bearing zones (Appendix VIII).

Rock chip sampling indicates that two areas contain important gold and cobalt values at surface. Both these areas correspond to visibly identifiable cobalt-bearing zones that are associated with the two en echelon fracture zones. The surface traces of the two gold- and cobalt-bearing zones have been outlined on drawing 3102-4. Two interpretive cross-sections have been prepared by extrapolating the surface information into the sub-surface.

At the northern fracture zone gold and cobalt values exist over a strike length of about 25 m. The gold- and cobalt-bearing zone is poorly exposed due to overburden, but is well exposed at trench T-4. Rock chip

samples, collected 11 m south of trench T-4, are from a small outcrop about 1 m by 1.5 m in extent. The outcrop comprises cobalt-bearing amphibole skarn surrounded by overburden. This entire small outcrop is mineralized and therefore the sampled interval, which contains 8.62 ppm gold and 1.37 per cent cobalt over 1.50 m, is the minimum width of the gold- and cobalt-bearing zone at this site. Further south, at sample sites 3XFO018 to 3XFO022, the fracture zone does not contain cobalt minerals or important gold or cobalt values. The northern end of this fracture zone is cut off by a dyke that intrudes magnetite skarn; beyond the dyke, magnetite skarn does not contain visible gold or cobalt minerals.

At the southern fracture zone a gold- and cobalt-bearing zone is exposed in trenches T-1 and T-2. The maximum surface length of this zone is about 40 m. The north end of this gold- and cobalt-bearing zone terminates before trench T-3 which does not contain important gold or cobalt values. South of trench T-1, erythrite exists in a fractured zone of amphibole skarn for a distance of about 12 m before being covered by talus and snow in a deep gully. Across the gully, about 27 m south of trench T-1, a narrow fractured zone of amphibole skarn contains erythrite. A chip sample across this zone contains 8.02 ppm gold and 0.99 per cent cobalt over 1.00 m. Just south of this chip sample the amphibole skarn pinches out and the fracture zone dies out.

Five samples from the two gold- and cobalt-bearing zones were analyzed for bismuth, nickel, lead, platinum and palladium; results are tabulated in Table II. Maximum values are 0.875 per cent bismuth, 0.230 per cent nickel, 0.270 per cent lead, less than 0.050 ppm platinum and 0.020 ppm palladium.

At the Camp Showing four rock chip samples were collected across the magnetite skarn at approximately equal intervals along the exposed strike length (Dwg. 3102-2C). All of these samples contain less than 0.01 ppm gold and 0.01 per cent cobalt.

Analytical results for gold and cobalt in samples collected outside the Main Showing and Camp Showing areas are presented on drawing 3102-2B. Maximum results are 10.83 ppm gold, 0.02 per cent cobalt and 147.4 ppm silver. Silver values are generally less than 30.0 ppm and were not plotted except for one sample which contains 147.4 ppm silver. Two sites produced samples that contain greater than 1.00 ppm gold. At sample site 3XFP002, an arsenopyrite-bearing feldspar porphyry dyke contains 1.90 ppm gold. Arsenopyrite locally comprises up to 10 per cent by volume of the chilled margin of the dyke over an area of less than 2 m<sup>2</sup>. Prospecting along the dyke failed to discover any further arsenopyrite, but exposure is poor. At sample site 3PLO026 a magnetite and calcsilicate-calcite skarn, 5 m by 15 m in extent, hosted by marble, locally contains pyrrhotite, chalcopyrite and arsenopyrite. Rock chip sample 3PLO026, collected across the sulphide-bearing portion of this skarn, contains 0.09 ppm gold, less than 0.01 per cent cobalt and 12.3 ppm silver over a sampled interval of 3.00 m. Rock grab sample 3PLP011, which contains 10.83 ppm gold, 0.02 per cent cobalt and 147.4 ppm silver, was collected at

an arsenopyrite-rich zone, which is less than 2 m<sup>2</sup> in area, and is located a few metres from rock chip sample 3PLO026.

Neither of the two geochemical stream sediment samples contain greater than 5 parts per billion (ppb) gold (Dwg. 3102-2B).

#### GEOPHYSICAL SURVEYS

Magnetometer and very low frequency electromagnetic (VLF-EM) surveys were performed locally at TP mineral claim.

Magnetometer surveying was performed using a Scintrex MP-2 proton magnetometer to measure the total magnetic field. Because of rugged terrain, the sensor was mounted on a backpack for easier operation. All lines were surveyed using a loop procedure and diurnal corrections were made to the data. Reconnaissance lines were surveyed by taking readings from the starting point to the end of the line, then returning to the starting point to complete the loop. The grid was surveyed by taking readings along the baseline as described above, then taking readings along each crossline, starting at the baseline, and returning to the same point on the baseline to complete the loop. Raw field data and diurnal corrections are included as Appendix IX.

VLF-EM surveying was performed using a Geonics EM-16 instrument. The instrument was used to measure the in-phase and quadrature components of the secondary field using the transmitting station at Cutler, Maine which generates a signal at a frequency of 17.8 KHz. All stations on each survey line were surveyed with the operator facing the same direction; this operator-facing direction is indicated on each drawing.

#### Main Showing

A magnetometer survey was completed over all grid crosslines with readings taken at 12.5 m intervals. Contoured results of this survey are plotted on drawing 3102-3 with the zero contour set equal to a total field reading of 60,000 gammas. As expected, magnetite skarn produced extremely large anomalies with positive highs up to +25,000 gammas and negative lows down to -15,000 gammas. At the north central part of the grid, a linear magnetic high, flanked by linear magnetic lows, trends north-northwest parallel to magnetite skarn. At the north end of the grid these magnetic anomalies fade out into background readings where magnetite skarn pinches out. In the central part of the grid the linear magnetic high broadens out into a large, oval, very high anomaly without flanking magnetic lows. A discontinuous lens of magnetite skarn exists at the center of this high. At the southeast end of the grid a slight magnetic high corresponds to a narrow lens of magnetite skarn.

### Camp Showing

A magnetometer and VLF-EM survey line was performed across the Camp Showing to test whether these methods would respond to the pyrrhotite-bearing magnetite skarn (Dwg. 3102-2C). A profile of the magnetometer survey data indicates readings up to about 59,000 gammas over the magnetite skarn, compared to a background of about 57,000 gammas. The VLF-EM profile indicates a 7 degree increase in the in-phase reading and a corresponding slight decrease in quadrature readings.

### Reconnaissance Lines

Reconnaissance geophysical survey lines were also surveyed at three other locales (Dwg. 3102-2B). The results from these three lines are plotted as profiles and included as Appendix X.

The purpose of reconnaissance line 1 was to test for a possible northern extension of the Main Showing skarn towards the north under a talus-covered area. Magnetometer readings indicate a high of about +300 gammas with an adjacent low of about -400 gammas, relative to a background of 57,500 gammas, exists at the west end of the line. This feature is interpreted to represent the contact of the quartz-feldspar porphyry with hornblendite. Near the middle of the line a single station high of +100 gammas may indicate the position of Teepee Fault. The remainder of the line shows that readings vary within 100 gammas of background. A VLF-EM survey was not performed on this line.

Lines 2 and 3, which are located south of the Main Showing, were surveyed by magnetometer and VLF-EM to test whether marble and skarn, which trends towards the Camp Showing, continues under moraine. Profiled results of the magnetometer survey from line 2 indicate the maximum range measured is 200 gammas. No pattern is evident in the readings. VLF-EM profiles of line 2 show variations of 10 degrees in the in-phase component and 14 degrees in the quadrature component of the electromagnetic field. Two possible anomalies are present, but topography and underground streams may account for both possible anomalies. VLF-EM profiles from line 3 show variations of 12 degrees in the in-phase component and 22 degrees in the quadrature component. Several possible anomalies are present. A general trend to increasing values in both in-phase and quadrature readings towards the east end of the line is interpreted to be due to a topographic effect. The possible anomalies may be explained by underground streams and topographic effects.

### CONCLUSIONS

The Main Showing is the only important gold-bearing occurrence discovered at TP mineral claim. At the Main Showing, two zones which contain important gold and cobalt values have been outlined by rock chip sampling of trenches and outcrops (Dwg. 3102-4). The northern zone has a maximum surface strike length of about 25 m, whereas the southern zone has a maximum surface strike length of 40 m, assuming that it is continuous across a talus and snow-covered gully.

Both of the gold- and cobalt-bearing zones are spatially related to amphibole skarn and fracture zones. Amphibole skarn is always found on or adjacent to gold-bearing fracture zones and it is possible that amphibole skarn is in fact an alteration product produced by fluids moving along the fracture zone. Gold and cobalt values exist in quartz-feldspar porphyry, gneiss and schist, and amphibole skarn near fracture zones. The highest gold and cobalt values always occur in amphibole skarn, indicating that this rock type is the most favourable host rock.

Interpretive cross-sections, constructed from surface data, indicate that the two fracture zones may intersect at a depth of about 40 m below surface (Dwg. 3102-4). Metamorphic layering in the skarn and adjacent gneiss and schist dips east at about 45 degrees. The dip of the fracture zones roughly parallels the dip of the skarn which indicates that the intersection of the fracture zones should occur within the skarn at depth. The down dip extensions of the fracture zones and their intersection are thought to be a favourable site for gold and cobalt mineralization.

The assumed trace of Teepee Fault indicates it should be present in Yukon Group, underneath Stuhini Group, about 200 m northeast of the Main Showing (Dwg. 3102-2B). Further evidence for the presence of Teepee Fault is the unusual trace of the unconformity northeast of the Main Showing. The trace of the unconformity may reflect a paleoscarp produced by Teepee Fault. It is possible that the gold- and cobalt-bearing fracture zones are related to Teepee Fault. If this is correct, Teepee Fault itself may also be a favourable site for gold and cobalt mineralization.

Drilling is required to test whether the down dip extensions of the fracture zones, the intersection of these fracture zones, and Teepee Fault are gold- and cobalt-bearing.

Further exploration is warranted at and near the Main Showing. Further exploration is not warranted at the Camp Showing or any of the other mineral occurrences discovered within TP mineral claim.

#### RECOMMENDATIONS

A drill program comprising a minimum of 550 m, should be completed. Eight holes, totalling 415 m, should be completed to test the down dip extensions and intersection of the two gold- and cobalt-bearing zones (Dwg. 3102-5). Because the dips of the two fracture zones are uncertain at depth, the proposed lengths and inclinations of the eight drillholes shown on drawing 3102-5 are estimated. Modifications may be required once drilling is in progress. The remaining 135 m of drilling should be used to test the fracture zones further down dip from the eight recommended holes. Diamond drilling should be performed during the summer months.

In conjunction with the drill program, a geologist and an assistant should perform a small amount of rock chip sampling and mapping to more precisely define the length, width and grade of the Main Showing at surface. Mapping should also be performed northeast of the Main Showing to better define the trace of Teepee Fault.

If drilling beneath the Main Showing produces encouraging results, additional drilling may be warranted. This additional drilling should further test the Main Showing and test whether Teepee Fault is a gold- and cobalt-bearing structure. One or more holes may be required to test Teepee Fault.

The estimated cost of the minimum 550 m drilling program and the surface work is \$210,500.

Trigg, Woollett Consulting Ltd.

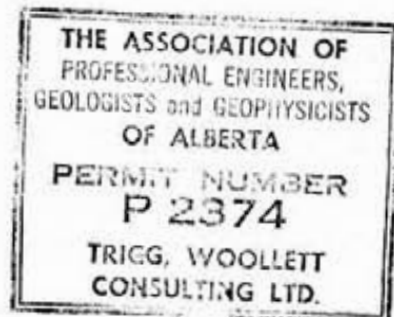
*P. G. Lhotka*

P. G. Lhotka, B.Sc. (Hons.)



R. A. Olson, Ph.D., P. Eng.

November 16, 1983  
Edmonton, Alberta





REFERENCES

- Christie, R. L. (1957) Bennett, Cassiar District, British Columbia; Geol. Surv., Canada, Map 19-1957.
- Lhotka, P. G. and Olson, R. A. (1982) Exploration - 1982, Volcanogenic Copper, Gold Deposits, Carcross Region, Atlin Mining Division, British Columbia, Whitehorse Mining District, Yukon Territory; unpublished report prepared by Trigg, Woollett Consulting Ltd. for Texaco Canada Resources Ltd.
- Souther, J. G. (1971) Geology and mineral deposits of Tulsequah map-area, British Columbia; Geol. Surv., Canada, Memoir 362.

CERTIFICATION

I, R. A. OLSON OF 8727 - 181 STREET, EDMONTON, ALBERTA CERTIFY AND DECLARE THAT I AM A GRADUATE OF THE UNIVERSITY OF BRITISH COLUMBIA WITH A B.S.C. DEGREE IN GEOLOGY (1968), A GRADUATE OF THE UNIVERSITY OF WESTERN ONTARIO WITH A M.S.C. DEGREE IN GEOLOGY (1971) AND A GRADUATE OF THE UNIVERSITY OF BRITISH COLUMBIA WITH A PH.D. DEGREE IN GEOLOGY (1977). I AM REGISTERED AS A PROFESSIONAL ENGINEER WITH THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA AND AS A PROFESSIONAL GEOLOGIST WITH THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF ALBERTA.

MY EXPERIENCE INCLUDES SERVICE AS AN EXPLORATION GEOLOGIST WITH TEXASGULF INC., VANCOUVER, BRITISH COLUMBIA. SINCE 1969 I HAVE CONDUCTED AND DIRECTED PROPERTY EXAMINATIONS, PROPERTY EVALUATIONS AND EXPLORATION PROGRAMS ON BEHALF OF COMPANIES AS A GEOLOGIST IN THE EMPLOY OF TRIGG, WOOLLETT & ASSOCIATES LTD. AND AS A PARTNER IN THE FIRM OF TRIGG, WOOLLETT CONSULTING LTD., EDMONTON, ALBERTA.

I HAVE NO INTEREST, DIRECT OR INDIRECT, IN TEXACO CANADA RESOURCES LTD. OR THEIR PROPERTIES, NOR DO I EXPECT TO RECEIVE SUCH INTEREST.

P. G. LHOTKA'S REPORT ON EXPLORATION - 1983, TP MINERAL CLAIM, ATLIN MINING DIVISION, BRITISH COLUMBIA, IS BASED UPON FIELD WORK AND UPON STUDY OF PUBLISHED AND UNPUBLISHED DATA.

R. A. OLSON, PH.D., P.ENG.



NOVEMBER 1983

TABLE I

## TABLE OF FORMATIONS\*

(NTS Map Area 104M)

EON	ERA	GROUP	FORMATION	LITHOLOGY	MAP UNIT <sup>+</sup>
MESOZOIC	CRETACEOUS AND/OR JURASSIC	Coast Plutonic rocks		mainly granodiorite, ranges from diorite to granite	7
	INTRUSIVE CONTACT				
	CRETACEOUS AND OLDER			porphyry intrusions including rare, intermediate composition dykes	6
	INTRUSIVE CONTACT				
	JURASSIC	Laberge Group		conglomerate, greywacke, siltstone, shale and limestone	5
	CONFORMABLE, DISCONFORMABLE OR UNCONFORMABLE CONTACT				
	UPPER TRIASSIC	Stuhini Group		felsic to mafic flows, tuff and breccia interbedded with slate, siltstone, greywacke and conglomerate	4
			King Salmon Formation (local division of Stuhini Group)	well-bedded conglomerate, greywacke, siltstone and shale	3
UNCONFORMABLE CONTACT					
LOWER OR MIDDLE TRIASSIC				fine grained diorite	2
INTRUSIVE CONTACT					
PALEOZOIC	PRE-PERMIAN?	Yukon Group		quartz-chlorite- amphibole gneiss and schist with minor amounts of marble	1

\*Modified after Souther (1971) and Christie (1957).

<sup>+</sup>Map units on drawings 3102-2, 3102-3 and 3102-4 use this numbering sequence.

TABLE II

BISMUTH, NICKEL, LEAD, PLATINUM AND PALLADIUM ANALYSES OF  
SELECTED GOLD- AND COBALT-BEARING ROCK CHIP SAMPLES

<u>IDENTIFIER</u>	<u>INTERVAL SAMPLED (m)</u>	<u>LOCATION</u>	<u>GOLD ppm</u>	<u>COBALT %</u>	<u>SILVER ppm</u>	<u>BISMUTH %</u>	<u>NICKEL %</u>	<u>LEAD %</u>	<u>PLATINUM ppm</u>	<u>PALLADIUM ppm</u>
3PLO007*	0.50	T-1	65.18	0.13	14.4	0.500	0.068	0.108	<0.050	0.010
3PLO012*	0.65	T-2	12.24	0.08	3.3	0.135	0.067	0.006	<0.050	<0.005
3PLO035*	1.10	T-4	17.21	5.59	5.6	0.500	0.038	0.009	<0.050	0.005
3PLO044**	1.00	south of T-1	8.02	0.99	13.0	0.046	0.021	0.052	<0.050	0.005
3XFO016**	0.80	south of T-4	14.50	2.28	79.9	0.875	0.230	0.270	<0.050	0.020

\*The location of these rock chip samples in trenches T-1, T-2 and T-4, are shown in Appendix VIII; the location of trenches T-1, T-2 and T-4 are shown on drawing 3102-4.

\*\*The sampled intervals which these rock chip samples are from, are shown on drawing 3102-4.

APPENDIX I

FIELD PERSONNEL

APPENDIX I

FIELD PERSONNEL

<u>NAME AND ADDRESS</u>	<u>POSITION</u>	<u>TIME SPENT IN FIELD (1983)</u>	<u>FIELD DAYS</u>
D. Fluet 10 Westbrook Drive Edmonton, Alberta	Geologist	June 1-6, 8-30, July 15	30
D. Halwas Box 266 Headingley, Manitoba	Geological Assistant	June 30	1
P. G. Lhotka c/o 10504 - 103 Street Edmonton, Alberta	Supervising Field Geologist	June 2-6, 8-30, July 7, 16 (1/2 day)	29 1/2
A. Prost 16212 - 83 Avenue Edmonton, Alberta	Geological Assistant	June 1-30, July 15	31
J. Reid #3, 475 - 27 Street E. Prince Albert, Saskatchewan	Cook	June 1-30	30
S. Ridley 26 McKinnon Crescent Red Deer, Alberta	Geological Assistant	June 2-29	28
R. Smith Box 257 LaRonge, Saskatchewan	Trencher/ Prospector	June 1-30	30
		MOBILIZATION DAYS	10 1/2
		TOTAL	190

APPENDIX II

STATEMENT OF EXPENDITURES

APPENDIX II

STATEMENT OF EXPENDITURES\*

Accommodation	\$ 640
Analytical	1,330
Communications	525
Drafting, reporting	1,885
Equipment, supplies	1,450
Expediting	2,270
Food	3,770
Freight	1,160
Fuel	2,100
Helicopter	11,160
Insurance	230
Licences	30
Maps, reports, airphotos, assessment data	145
Petrographic study	145
Rentals	3,625
Salaries	25,100
Travel	2,725
Consultant's and related fees	7,830
	<u>7,830</u>
	\$66,120**

\*Receipts documenting exploration expenditures are on file with Trigg, Woollett Consulting Ltd.

\*\*Estimated minimum expenditure for exploration performed at TP mineral claim during 1983.



APPENDIX III

PHOTOGRAPHS: MAIN SHOWING AND GOLD- AND COBALT-BEARING AMPHIBOLE SKARN

FIGURE 1: MAIN SHOWING

FIGURE 2: GOLD- AND COBALT-BEARING AMPHIBOLE SKARN



FIGURE 1: MAIN SHOWING

View of Main Showing area facing southeast. Positions of trenches T-1 through T-4 are indicated as well as the two en echelon fracture zones. The skarn unit (1c,d,e) is outlined as is quartz-feldspar porphyry (6a). Note well developed jointing in some portions of quartz-feldspar porphyry. Gneiss and schist of Yukon Group (1a) are shown and one of the many white weathering quartz porphyry sills (1g) is outlined. Stuhini Group (4b) unconformably overlies Yukon Group in the upper portion of the photograph. Scale in the photograph is about 1 cm equals 10 m.



FIGURE 2: GOLD- AND COBALT-BEARING AMPHIBOLE SKARN

Gold- and cobalt-bearing amphibole skarn exposed in trench T-4 is illustrated. Pink staining is erythrite on weathered surfaces. In upper left of photograph, note the sharp fracture contact of amphibole skarn with magnetite skarn. Orange lines are spray paint marking rock chip sample locations. Orange flagging tape indicates sample identifiers. Scale is shown by the rock hammer.

APPENDIX IV

PETROGRAPHIC DATA SHEETS

PETROGRAPHIC REPORT

Examiner P.G. Lhotka

Date May 17, 1983

Section: no. TS6

T.S.  P.T.S.  P.S. 

location TRENCH T-1

Specimen: no.

location

description, field name

The hand specimen is a pale green amphibole rock (skarn) which contains a silver coloured metallic mineral which produces erythrite on weathering. Specks of visible gold up to 0.1 mm were observed on slabbed specimens with a 10X hand lens. Magnetite exists in variable proportions.

Field name - amphibole skarn.

## Microscopic examination

A. Minerals	%	Optical properties	Mode of occurrence, distribution
<u>REFLECTED LIGHT</u>			
Cobalt arsenide skutterudite? (Co,Ni,Fe) As <sub>3</sub>	5	bright white, possible light cream tint; isotropic, bireflectance negative	Highly irregular grain shapes many inclusions of silicate gangue. Grains occur as aggregates which seem to replace the silicate minerals.
Native Gold	Tr	very bright yellow, isotropic	Small grains of up to 0.1 mm (at least 15 grains were observed). Occurs in contact with skutterudite but largely occurs adjacent to magnetite and sometimes at silicate grain boundaries.
Magnetite	5	light grey, difficult to distinguish from some silicates.	Irregular shaped grains most of which have skutterudite associated with them. The grains appear to be replacing silicate gangue. Cores of the grains contain another unidentified mineral which magnetite is replacing? Margins of grains are weathered(?) to a grey mineral which is a brownish translucent colour under transmitted light probably limonite.

PETROGRAPHIC REPORT

Examiner P.G. Lhotka Date  
 Section: no. TS6 continued T.S.  P.T.S.  P.S.   
 location  
 Specimen: no. location  
 description, field name

## Microscopic examination

A. Minerals	%	Optical properties	Mode of occurrence, distribution
<u>TRANSMITTED LIGHT</u>			
Clinoamphibole Actinolite?	80	clear sometimes with pale tint, high birefringence, inclined extinction	Large 1-3 mm subhedral grains with one easily observed cleavage, cross-sections are diamond-shaped but do not show good cleavage. Clinoamphibole forms a non-foliate mass of crystals which appear to be the earliest in the paragenetic sequence.
Chlorite	5	2 types? a) pale green, anomalous interference colours b) medium brown colour "Pennite"	Both types have similar modes of occurrence i.e. as space fillings in between amphibole grains.
Quartz	5	clear, low relief grey birefringence	Fills spaces between amphibole crystals. Has no internal texture. Sometimes contains needles of green chlorite.
Erythrite	Tr	pink, in plane light has high birefringence	Forms radiating clusters in interstitial spaces similar to chlorite. Rarely they both occupy the same space.
Unknown	Tr	honey coloured in plane light associated with magnetite; birefringence obscured by the colour	Forms small crystals associated with opaques and chlorite, sometimes lines the space occupied by opaque.

B. <sup>TS6</sup>  
Texture

1. Fabric The rock fabric is massive, non-foliate felted as defined by the principal mineral clinoamphibole.
2. Grain, xtl size  
Average grain size is 1-3 mm.
3. Morphology

C. Paragenesis

Clinoamphibole appears to be the earliest formed mineral followed by chlorite and quartz which are interstitial to clinoamphibole. Skutterudite and magnetite replace silicate minerals. Gold occurs at grain boundaries and is likely late in the paragenetic sequence. Erythrite and limonite coating magnetite are last. They are produced by weathering of the cobalt arsenide and magnetite.

**Significance, discussion, conclusions:**

The most important observation is that gold occurs as discrete grains at other mineral grain boundaries. It is not directly associated with the cobalt arsenide or any other mineral. The number of grains of gold observed would account for the analytical results obtained from this trench that range up to 60 ppm gold.

Rock name: amphibole skarn.

PETROGRAPHIC REPORT

Examiner P.G. Lhotka

Date May 17, 1983

Section: no. TS7

T.S.  P.T.S.  P.S.

location TRENCH T-4

Specimen: no.

location

description, field name

The hand specimen is a pale green amphibole rock (skarn) which contains a silver coloured metallic mineral which produces erythrite on weathering. No visible gold was noted when examined with a 10X hand lens. Magnetite comprises 20 per cent. This sample is very similar to TS6.

Field name - amphibole skarn.

Microscopic examination

A.	Minerals	%	Optical properties	Mode of occurrence, distribution
	<u>REFLECTED LIGHT</u>			
	Cobalt arsenide skutterudite	10	see TS6	see TS6 for descriptions
	Magnetite	20		
	<u>TRANSMITTED LIGHT</u>			
	Clinoamphibole actinolite?	50		
	Chlorite	5		
	Quartz	5		
	Erythrite	Tr		



**B. Texture** see TS6 for textural description

1. Fabric

2. Grain, xtl size

3. Morphology

**C. Paragenesis**

The paragenetic sequence is the same as described for TS6 with the exception that no gold was observed.

**Significance, discussion, conclusions:**

The lack of gold observed is interesting because samples from trench T-4 indicate it contains 10-17 ppm gold. This sample was analyzed and contained 6 ppm gold. Obviously there is gold in the sample which is not microscopically visible. This gold may exist as very finely divided discrete grains (similar to section TS6 but just finer grain size), as tiny inclusions in one or more of the other minerals or in the lattice of the cobalt arsenide.

Rock name: amphibole skarn

APPENDIX V

GEOCHEMICAL LAB REPORTS

Bondar-Clegg & Company Ltd.  
130 Pemberton Ave.  
North Vancouver, B.C.  
Canada V7P 2R3  
Phone: (604) 985-0681  
Telex: 04-332667



Geochemical  
Lab Report

REPORT: 123-0945

FROM: TRIGG, WOOLLETT CONSULTING LTD.

SUBMITTED BY: P. LHOTKA

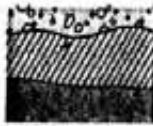
DATE: 14-JUN-83 PROJECT: 3102

	LOWER					
ELEMENT	DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
As	.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100	ROCKS	CRUSH, PULVERIZE -100
Co	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		RETENTION OF REJECTS
Au	5 PPB	AQUA REGIA	Fire Assay AA	-100		

REPORT COPIES TO: MR. PAUL LHOTKA  
MR. P. LHOTKA

INVOICE TO: MR. PAUL LHOTKA

REMARKS: SHIPMENT #2



REPORT: 123-0945 PROJECT: 3102

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	As PPM	Co PPM	Au PPB	NOTES
R 3PLP001		23.0	50	180	



REPORT: 123-1186

FROM: TRIGG, WOOLLETT CONSULTING LTD.

SUBMITTED BY: P. LHOTKA

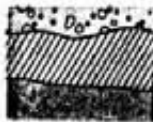
DATE: 05-JUL-83 PROJECT: 3102

ELEMENT	LOWER	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
	DETECTION LIMIT					
Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100	OTHER	CRUSH, PULVERIZE -100
Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		RETENTION OF REJECTS
Zn	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		DRY, SEIVE -80
Ag	.2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		RETENTION OF REJECTS
Ni	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		
Co	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		
M	2 PPM	CARBONATE SINTER	Colourimetric	-100		
Au	5 PPB	AQUA REGIA	Fire Assay AA	-100		

REPORT COPIES TO: MR. PAUL LHOTKA  
TRIGG WOOLLETT CONSULT.  
MR. P. LHOTKA

INVOICE TO: MR. PAUL LHOTKA

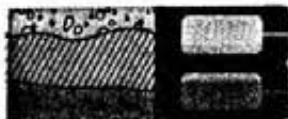
REMARKS: ASSAY OF HIGH Ag, Au TO FOLLOW ON 623-1186



REPORT: 123-1186 PROJECT: 3102

PAGE 1

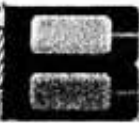
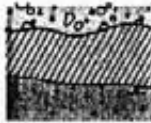
SAMPLE NUMNER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	W PPM	Au PPB	NOTES
T 3XFC018					0.5		14		<5	
T 3XFC019					0.4		14		<5	
R 3PL0001					1.9		80		800	
R 3PL0002					8.2		1200		> 10000	
R 3PL0003					8.4		2630		7500	
R 3PL0004					0.3		104		140	
R 3PL0005					<0.2		40		110	
R 3PL0006					10.0		500		> 10000	
R 3PL0007					16.0		1320		> 10000	
R 3PL0008					13.0		1650		> 10000	
R 3PL0009					2.9		368		7300	
R 3PL0010					0.4		30		880	
R 3PL0011					2.5		364		3900	
R 3PL0012					3.3		800		> 10000	
R 3PL0013					0.2		67		870	
3PL0014					0.7		67		260	
R 3PL0015					3.6		103		4150	
R 3PL0016					0.4		120		345	
3PL0017					0.2		103		70	
3PL0018					0.2		45		30	
3PL0019					2.8		129		40	
3PL0020					0.2		59		30	
R 3PL0021					<0.2		21		10	
R 3PL0022					<0.2		13		20	
3PL0023					<0.2		21		5	
R 3PL0024					<0.2		8		<5	
3PL0025	405	40	3545	2.2	38	22	2	2	5	
3PL0026	2220	144	68	15.0	33	62	3	3	90	
R 3PLP002				0.2		7			40	
3PLP003	3950			21.0		48	2	2	20	
R 3PLP004	16	133	525	0.5		3			5	
R 3PLP005				0.2		3			<5	
3PLP006				<0.2		1			<5	
R 3PLP007				<0.2		6			10	
R 3PLP008				2.9		124			255	
3PLP009	58			0.4		3			<5	
R 3PLP010	66			1.8		8			40	
P 3PLP011	151	4650	105	> 50.0	46	1680	3	> 10000		
I 3PLP012				1.1		7			20	
R 3PLP013				1.6		13			40	



REPORT: 123-1186 PROJECT: 3102

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	W PPM	Au PPB	NOTES
R 3PLP014					0.4		7		5	
R 3PLP015					0.3		17		5	
R 3XF0001		175			1.8		10		5	
R 3XF0002		440			2.7		14		<5	
R 3XF0003		45			0.4		6		<5	
R 3XF0004		28			0.2		2		<5	
R 3XFP001		229			5.7		17		40	
R 3XFP002					0.6		555		1900	



REPORT: 223-1186

FROM: TRIGG, WOOLLETT CONSULTING LTD,

SUBMITTED BY: P LHOTKA

DATE: 28-OCT-83 PROJECT: 3102

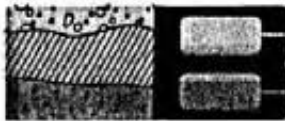
ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
01	Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100	ROCKS	AS RECEIVED, NO SP
02	Ni	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		
03	Bi	1 PPM	HNO3	Atomic Absorption	-100		
04	Pt	15 PPB	AQUA REGIA	Fire Assay AA	-100		
05	Pd	2			-100		

REPORT COPIES TO: MR. PAUL LHOTKA

INVOICE TO: MR. PAUL LHOTKA

TRIGG WOOLLETT CONSULT.





REPORT: 223-1186

PROJECT: 3102

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Pb PPM	Ni PPM	Bi PPM	Pt PPM	Pd PPM	NOTES
3PLD007		1080	680	5000	<50	10	
3PLD012		63	670	1350	<50	<5	

Bondar-Clegg & Company Ltd.  
130 Pemberton Ave.  
North Vancouver, B.C.  
Canada V7P 2R5  
Phone: (604) 983-0681  
Telex: 04-352667



Geochemical  
Lab Report

REPORT: 123-1363

FROM: TRIGG, WOOLLETT CONSULTING LTD.

SUBMITTED BY: P LHOTKA

DATE: 18-JUL-83 PROJECT: 3102

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100	ROCKS	CRUSH, PULVERIZE -100
As	.2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		RETENTION OF REJECTS
Co	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		
Au	5 PPM	AQUA REGIA	Fire Assay AA	-100		

REPORT COPIES TO: MR. PAUL LHOTKA  
TRIGG WOOLLETT CONSULT.  
MR. P. LHOTKA

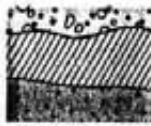
INVOICE TO: MR. PAUL LHOTKA

REMARKS: ASSAY OF HIGH As, Au TO FOLLOW ON 623-1363

SHIPMENT #4



Bondar-Clegg & Company Ltd.  
130 Pemberton Ave.  
North Vancouver, B.C.  
Canada V7P 2R5  
Phone: (604) 985-0681  
Telex: 04-352667



**BONDAR-CLEGG**

**Geochemical  
Lab Report**

REPORT: 223-1363

FROM: TRIGG, WOOLLETT CONSULTING LTD,

SUBMITTED BY: P. LHOTKA

DATE: 28-OCT-83 PROJECT: 3102

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
01	Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100	ROCKS	AS RECEIVED, NO SP
02	Ni	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		
03	Bi	1 PPM	HNO3	Atomic Absorption	-100		
04	Pt	15 PPB	AQUA REGIA	Fire Assay AA	-100		
05	Pd	2			-100		

REPORT COPIES TO: MR. PAUL LHOTKA

INVOICE TO: MR. PAUL LHOTKA



REPORT: 223-1363

PROJECT: 3102

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Pb PPM	Ni PPM	Ri PPM	Pt PPB	Pd PPM	NOTES
3PL0035		97	380	5000	<50	5	
3PL0044		520	215	460	<50	5	
R 3XFD016		2700	2300	8750	<50	20	

REPORT: 123-1679

FROM: TRIGG, WOOLLETT CONSULTING LTD.

SUBMITTED BY: P. LHOTKA

DATE: 03-AUG-83 PROJECT: 3102

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100	OTHER	CRUSH, PULVERIZE -100
Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		RETENTION OF REJECTS
Zn	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		
Ag	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-100		
As	2 PPM	NITRIC PERCHLOR DIG	Colourimetric	-100		
Au	5 PPB	AQUA REGIA	Fire Assay AA	-100		
Sb	2 PPM		X-RAY Fluorescence	-100		

REPORT COPIES TO: MR. PAUL LHOTKA  
TRIGG WOOLLETT CONSULT,  
MR. P. LHOTKA

INVOICE TO: MR. PAUL LHOTKA

REMARKS: SHIPMENT &

ASSAY OF HIGH Ag, Pb TO FOLLOW ON 623-1679  
3. As - INTERFERENCE NOTED DUE TO Sb

REPORT: 123-1679 PROJECT: 3102

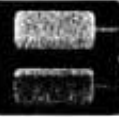
PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	As PPM	Au PPB	Sb PPM	NOTES
( 3PL0047		3	15	30	<0.2	52	10	8	
3PL0048		3	18	26	<0.2	28	50	12	
X 3PL0049		2	10	23	<0.2	67	355	10	
3PL0050		2	25	58	<0.2	10	<5	7	
3PL0051		8	13	33	<0.2	11	<5	14	
X 3PL0052		5	27	30	0.3	40	640	<2	

APPENDIX VI

CERTIFICATES OF ANALYSIS





REPORT: 623-1186

FROM: TRIGG, WOOLLETT CONSULTING LTD.

SUBMITTED BY: P. LHOTKA

DATE: 15-SEP-83 PROJECT: 3102

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
AU	.07 GMT			-100	OTHER	CRUSH; PULVERIZE -100
AS	.7 GMT			-100		

REPORT COPIES TO: MR. PAUL LHOTKA  
TRIGG WOOLLETT CONSULT.  
MR. P. LHOTKA

INVOICE TO: MR. PAUL LHOTKA

REMARKS: \*\*CORRECTED REPORT\*\*



REPDR: 623-1186 PROJECT: 3102

PAGE 1

INFILE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	NOTES
	3PLD002	18.45	7.2	
	3PLD006	58.53	7.5	
R	3PLD007	65.18	14.4	
	3PLD008	18.24	7.5	
	3PLD012	12.24		
	3PLD011	10.83	147.4	
	3PLD003	6.24	7.9	
R	3PLD009	6.31		
R	3PLD010	6.69		
	3PLD011	6.51		
R	3PLD013	0.39		
	3PLD015	4.08		
	3PLD026		12.3	
R	3PLP003		16.5	

Bondar-Clegg & Company Ltd.  
130 Pemberton Ave.  
North Vancouver, B.C.  
Canada V7P 2R5  
Phone: (604) 983-0681  
Telex: 04-152667



Certificate  
of Analysis

REPORT: 623-1363

FROM: TRIGG, WOOLLETT CONSULTING LTD.  
DATE: 21-JUL-83 PROJECT: 3102

SUBMITTED BY: P. LHOTKA

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Au	.07 GMT			-100	ROCKS	AS RECEIVED, NO SP
Ag	.7 GMT			-100		
Cd	.01 PCT					

REPORT COPIES TO: DR. R. A. OLSON  
MR. PAUL LHOTKA  
TRIGG WOOLLETT CONSULT.  
MR. P. LHOTKA

INVOICE TO: MR. PAUL LHOTKA



REPORT: 623-1363 PROJECT: 3102

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	As GMT	Co PCT	NOTES
---------------	---------------	--------	--------	--------	-------

R 3XF0016		14.50	79.9	2.28	
R 3PL0035		17.21		5.59	
R 3PL0036		16.90		5.24	
R 3PL0037		10.35			
R 3PL0038		14.16		2.64	

R 3PL0042		15.29			
R 3PL0044		8.02			

APPENDIX VII

SUMMARY OF GEOCHEMICAL RESULTS

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: P. L. HOTKA

APPENDIX VII

SUMMARY OF GEOCHEMICAL RESULTS

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppb	Co <sup>1</sup> ppm	
JUNE 12	164M	3PL0001	TRENCH 1 TP	CHIP				1.9	800	80	1.50m
JUNE 13	"	3PL0002	"	"				<sup>FA 7.2</sup> 8.2	1845ppm	1200	0.50m
"	"	3PL0003	"	"				<sup>FA 7.1</sup> 8.4	<sup>FA 6.27ppm</sup> 7500	2630	1.00m Co
"	"	3PL0004	"	"				0.3	140	104	0.10m Co
"	"	3PL0005	"	"				< 0.2	110	40	0.85m
"	"	3PL0006	"	"				<sup>FA 7.5</sup> 10.0	5853ppm	500	0.85m
"	"	3PL0007	"	"				<sup>FA 7.1</sup> 16.0	6518ppm	1320	0.50m high Au? + Co
"	"	3PL0008	"	"				<sup>FA 7.5</sup> 13.0	1824ppm	1650	0.45m high Au? Co
"	"	3PL0009	"	"				2.9	<sup>FA 6.31ppm</sup> 7300	368	0.60m high Au? Co
"	"	3PL0010	TRENCH 2 TP	"				0.4	<sup>FA 6.49ppm</sup> 880	30	1.10m
"	"	3PL0011	"	"				2.5	<sup>FA 6.51ppm</sup> 3900	269	0.10m
"	"	3PL0012	"	"				3.3	1224ppm	800	0.65m Au? Co
JUNE 14	"	3PL0013	"	"				0.2	<sup>FA 20.7ppb</sup> 870	67	0.50
"	"	3PL0014	"	"				0.7	260	67	0.80
"	"	3PL0015	"	"				3.6	<sup>FA 1.02ppm</sup> 4150	103	1.00
"	"	3PL0016	"	"				0.4	345	120	0.70

FA = Fine assay

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: P. L. H. T. H.

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments	
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppm	Co ppm		
JUNE 14	104M	3PL0017	TRENCH 2 TP	CHIP				0.2	70	103	1.00 m	
"	"	3PL0018	"	"				0.2	30	45	0.25	
"	"	3PL0019	TRENCH 3	"				2.8	40	129	0.60	
JUNE 16	104M	3PL0020	TRENCH 3	"				0.2	30	59	0.90	
"	"	3PL0021	"	"				<0.2	10	21	1.00	
"	"	3PL0022	"	"				<0.2	20	13	1.00	
"	"	3PL0023	"	"				<0.2	5	21	0.60	
"	"	3PL0024	"	"				<0.2	<5	8	0.60	
JUNE 19	104M	3PL0025	SOUTHWEST OF TRACK	CHIP	40	3515	405	2.2	5	22	2.10	Ni 28 ppm W 2 ppm NEW OCCURRENCE
"	"	3PL0026	"	"	144	68	2270	15.0	90	62	3.00	Ni 23 W 3 ppm ANOTHER NEW OCCURRENCE
JUNE 29	104M	3PL0027	TRENCH 4	CHIP				40.2	10	97	1.10	
"	"	3PL0028	"	"				40.2	10	153	1.10	
"	"	3PL0029	"	"				3.4	160	405	1.20	
"	"	3PL0030	"	"				5.8	20	575	0.90	
"	"	3PL0031	"	"				40.2	75	1340	0.60	
"	"	3PL0032	"	"				0.5	185	1520	0.55	

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: P. LHOTKA

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppm	As Co ppm	
JUNE 29	104M	3PL0033	TRENCH 4	CHIP				0.6	420	4650	0.60
"	"	3PL0034	"	"				0.4	495	4200	0.30
"	"	3PL0035	"	"				5.6	17.21 ppm >10,000	5.59% >20,000	1.10
"	"	3PL0036	"	"				4.6	16.90 ppm >10,000	5.29% >20,000	0.75
"	"	3PL0037	"	"				4.4	10.35 ppm 5930	15200	0.60
"	"	3PL0038	"	"				10.0	14.16 ppm >10,000	269% >20,000	1.10
"	"	3PL0039	"	"				2.8	1020	580	0.90
"	"	3PL0040	"	"				2.8	3170	515	0.90
"	"	3PL0041	"	"				36.0	2790	765	0.50
"	"	3PL0042	"	"				22.0	15.29 ppm >10,000	1950	0.50
JUNE 29	104M	3PL0043	TP CORRAL ZONE 4 o/c	CHIP				1.5	175	208	1.50
"	"	3PL0044	"	"				13.0	8.02 ppm 6390	9900	1.00
"	"	3PL0045	"	"				40.2	75	87	1.50

JULY 16	104M/05	3PL0047	TP TRENCH T-1	CHIP	8	15	30	3	<0.2	10	As 57	0.50
"	"	3PL0040	"	"	12	18	26	3	<0.2	50	28	0.50



COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: P. LHOTKA P.L.

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppb	U As ppm	
JULY 16	104M/10E	3PLO049	TP TRENCH T-1	CHIP 10	10	23	2	10.2	255	167	upper 0.50 m of 3PLO001
"	"	3PLO050	TP TRENCH T-2	" 7	25	55	2	10.1	25	10	11 Resamples lower 0.40 m of 3PLO010
"	"	3PLO051	"	" 14	13	33	8	10.2	25	11	middle 0.50 m
"	"	3PLO052	"	" 22	27	70	5	0.3	640	40	upper 0.50 m

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: P. L. H. T. A. (PL)

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppb	Co <sub>2</sub> ppm	
JUNE 6	104M/10	3PLP001	TP - TRAV. FROM BELOW LAKE	GRAB				23.0	180	50	MAGNETITE SKARN W. ASP
JUNE 8	104M/10	3PLP002	TP TRAVERSE P-001	GRAB				0.2	40	7	MAGNETITE SKARN
JUNE 14	104M/10	3PLP003	TP - TRAV. FROM BELOW LAKE	GRAB			3950	21.0	20	48	W. 2 ppm S.D. PO ANHYDRITE SKARN
JUNE 17	104M/10	3PLP004	TP - GRID	COMPOSITE	133	525	76	0.5	5	3	RUSTY GARNET SKARN
"	"	3PLP005	"	"				0.2	< 5	3	MAGNETITE CALCILICATE SKARN
"	"	3PLP006	"	"				40.2	< 5	1	MARBLE
"	"	3PLP007	"	"				40.2	10	6	CALCILICATE SKARN
"	"	3PLP008	TP TRAVERSE P-002	GRAB				2.9	255	124	MAGNETITE W. ASP - SKARN
"	"	3PLP009	"	"			58	0.4	< 5	3	PELOSOPH PORPHYRY W. B. P. T. C. P.
"	"	3PLP010	"	"			66	1.8	40	8	A. T. T. P. PORPHYRY W. ASP + PY
JUNE 20	104M/10	3PLP011	TP TRAVERSE P-004	GRAB	4650	105	151	147.4	10.83	1680	Ni - 46 ppm W - 3 ppm ASP IN SKARN - SITE OF 3PLP0026
"	"	3PLP012	"	"				1.1	20	7	CALCILICATE (M. C. I. T. E. SKARN
"	"	3PLP013	"	"				1.6	40	13	GARNET SKARN
JUNE 21	104M/10	3PLP014	TP TRAVERSE P-005	GRAB				0.4	5	7	PYRITIC GNEISS
"	"	3PLP015	"	"				0.3	5	17	HYDRALUMINITE

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: S Float (X=)

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments
					<del>Pb</del> Sb ppm	Zn As ppm	Cu ppm	Ag ppm	Au ppb	<del>Co</del> Co ppm	
June 16	104m	83XFC018	TP Claim	"				0.5	< 5	14	
" "	104m	83XFC019	" " "	"				0.9	< 5	14	

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: D. Fluct (X.F.)

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments	
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppm	$\frac{Co}{ppm}$		
June 22	104M	83XF0001	TP Mag occurrence (Comp)	Chip			175	1.8	<5	5	10	2.00
"	"	002	"	"			440	2.7	<5	<5	14	1.50
"	"	003	"	"			45	0.4	<5	<5	6	1.00
"	"	004	"	"			28	0.2	<5		2	1.00
June 27	"	005	Trench Area	"				<0.2	<5		8	0.60 Above trench #1
"	"	006	"	"				<0.2	<5		4	0.10 "
"	"	007	"	"				<0.2	5		9	0.70 "
"	"	008	"	"				<0.2	<5		28	0.50 Between trench #3 and #4
"	"	009	"	"				0.9	75		124	0.60 "
"	"	010	"	"				0.4	10		39	1.10 "
"	"	011	"	"				0.3	10		38	0.80 "
"	"	012	"	"				0.3	15		29	0.20 west of trenches
"	"	013	"	"				<0.2	<5		5	1.10 "
"	"	014	"	"				0.2	<5		17	1.30 "
"	"	015	"	"				<0.2	<5		14	1.10 "
"	"	016	"	"				79.9 ppm 750.0	14.50 ppm 710.000	2.25 220.000	0.70	Adjacent to trench #1

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

SAMPLER: D. Fluct (X.F.)

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppb	Sb ppm	
June 27	104m	83XF0017	TP Trench Area	Chip				7.2	1900	3390	0.70mm Adjacent to trench #4
28	"	018	"	"				2.2	575	239	0.50 Above + right of trench #4
	"	019	"	"				2.0	630	228	0.80 "
	"	020	"	"				1.9	715	238	0.80 "
	"	021	"	"				0.6	370	217	1.20 "
	"	022	"	"				0.2	40	42	0.70 "
	"	023	"	"			23	40.2	5	26	0.70 Above + right of trench #4
	"	024	"	"			96	40.2	45	6	0.70 "
	"	025	"	"			89	0.3	45	12	0.50 "
	"	026	"	"			49	0.3	45	6	0.30 "
	"	027	"	"			55	0.3	45	2	0.60 "
	"	028	"	"			53	0.2	45	3	0.60 "
	"	029	"	"			133	0.6	45	12	0.60 "
	"	030	"	"			72	0.2	45	12	0.30 "

COMPANY: TEXACO CANADA RESOURCES LTD.

PROJECT: 3102

YEAR: 1983

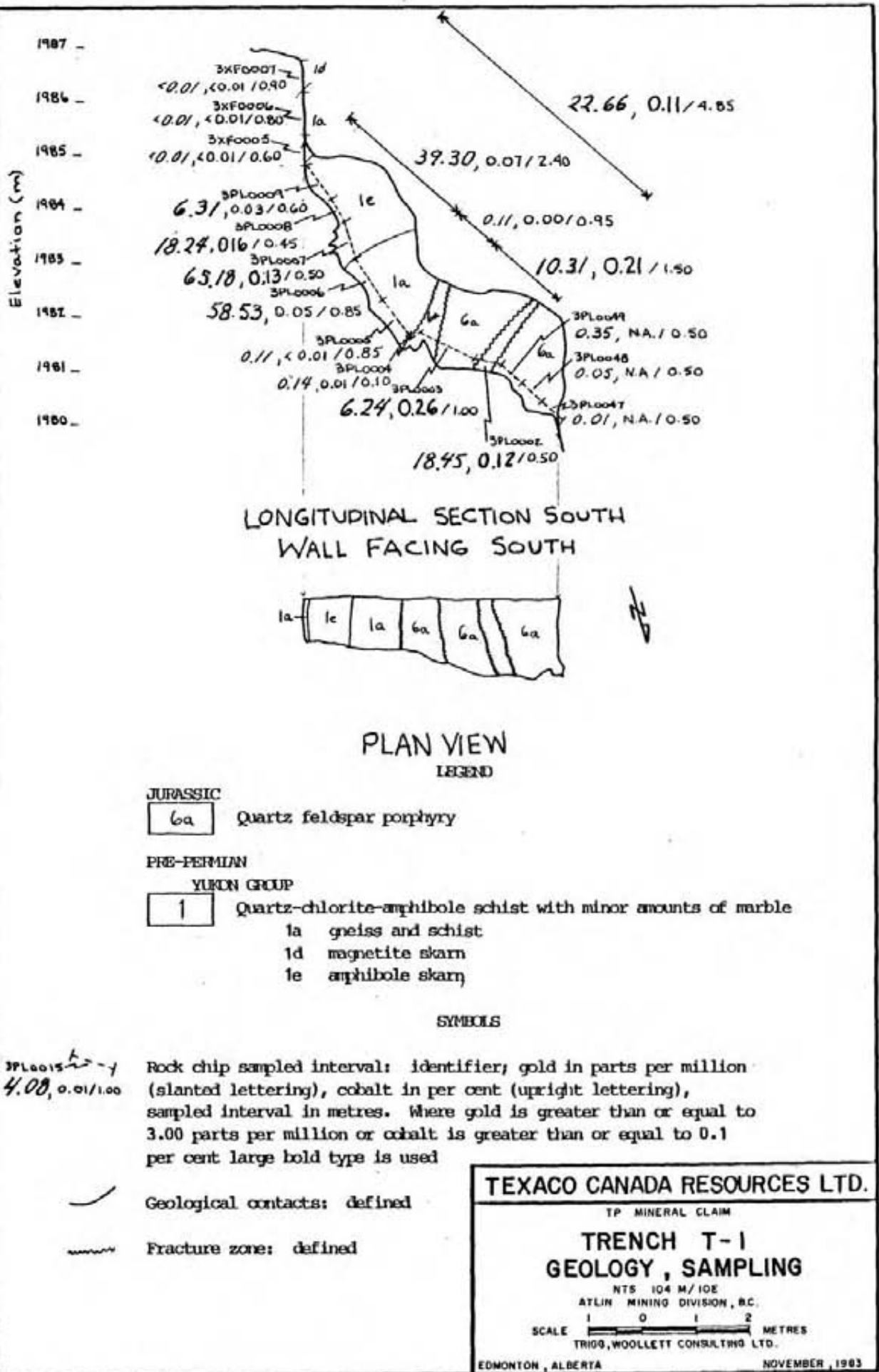
SAMPLER: D. Flout (XF)

1983 SAMPLING RECORD

Date Collected	NTS	Sample Identifier	Location	Sample Type	Laboratory Analyses						Comments	
					Pb ppm	Zn ppm	Cu ppm	Ag ppm	Au ppm	Co ppm		
June				Grab <sup>Sp</sup> (rock)								
15	104M	83XF001	TP Claim (XF004)	"			229	5.7	40	35	17	Moo. nu. Trace elements
16	"	83XF002	" " " (XF005)	"				0.6	1900	1550	555	As...

APPENDIX VIII

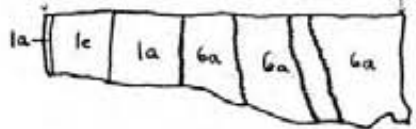
TRENCHES T-1, T-2, T-3, T-4 - GEOLOGY, SAMPLING



1987 -  
1986 -  
1985 -  
1984 -  
1983 -  
1982 -  
1981 -  
1980 -

3XF0001 1d  
<0.01, <0.01 / 0.90  
3XF0002 1a  
<0.01, <0.01 / 0.80  
3XF0003 1a  
<0.01, <0.01 / 0.60  
3P10001 1c  
6.31, 0.03 / 0.60  
3P10002 1c  
18.24, 0.16 / 0.45  
3P10003 1a  
65.18, 0.13 / 0.50  
3P10004 1a  
58.53, 0.05 / 0.85  
3P10005 6a  
0.11, <0.01 / 0.85  
3P10006 6a  
0.14, 0.01 / 0.10  
3P10007 6a  
6.24, 0.26 / 1.00  
3P10008 6a  
18.45, 0.12 / 0.50  
3P10009 6a  
0.35, N.A. / 0.50  
3P10010 6a  
0.05, N.A. / 0.50  
3P10011 6a  
0.01, N.A. / 0.50  
3P10012 6a  
0.11, 0.00 / 0.95  
3P10013 6a  
10.31, 0.21 / 1.50  
3P10014 6a  
39.30, 0.07 / 2.40  
3P10015 6a  
22.66, 0.11 / 4.85

LONGITUDINAL SECTION SOUTH WALL FACING SOUTH



PLAN VIEW  
LEGEND

- JURASSIC  
6a Quartz feldspar porphyry
- PRE-PERMIAN  
YURON GROUP  
1 Quartz-chlorite-amphibole schist with minor amounts of marble  
1a gneiss and schist  
1d magnetite skarn  
1e amphibole skarn

SYMBOLS

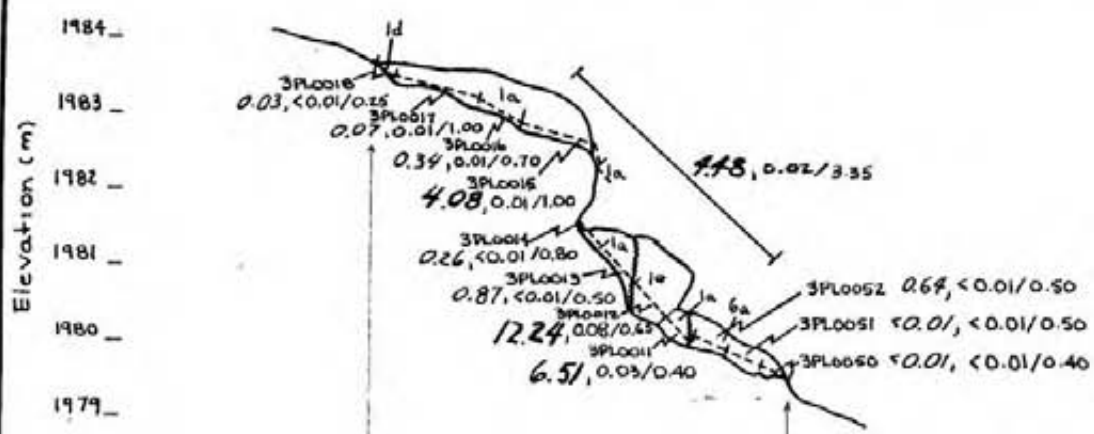
3P10015 4.00, 0.01 / 1.00

Rock chip sampled interval: identifier; gold in parts per million (slanted lettering), cobalt in per cent (upright lettering), sampled interval in metres. Where gold is greater than or equal to 3.00 parts per million or cobalt is greater than or equal to 0.1 per cent large bold type is used

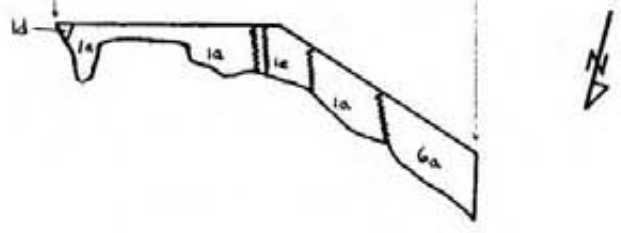
- Geological contacts: defined  
~ Fracture zone: defined

TEXACO CANADA RESOURCES LTD.  
TP MINERAL CLAIM  
TRENCH T-1  
GEOLOGY, SAMPLING  
NTS 104 M/10E  
ATLIN MINING DIVISION, B.C.  
SCALE 1 0 1 2 METRES  
TRIGG, WOOLLETT CONSULTING LTD.  
EDMONTON, ALBERTA NOVEMBER, 1983





LONGITUDINAL SECTION SOUTH WALL FACING SOUTH



PLAN VIEW

LEGEND

- JURASSIC
- 6a Quartz feldspar porphyry
- PRE-PERMIAN
- YUKON GROUP
- 1 Quartz-chlorite-amphibole schist with minor amounts of marble
    - 1a gneiss and schist
    - 1d magnetite skarn
    - 1e amphibole skarn

SYMBOLS

3P0015 <sup>4.08</sup> 0.01/1.00

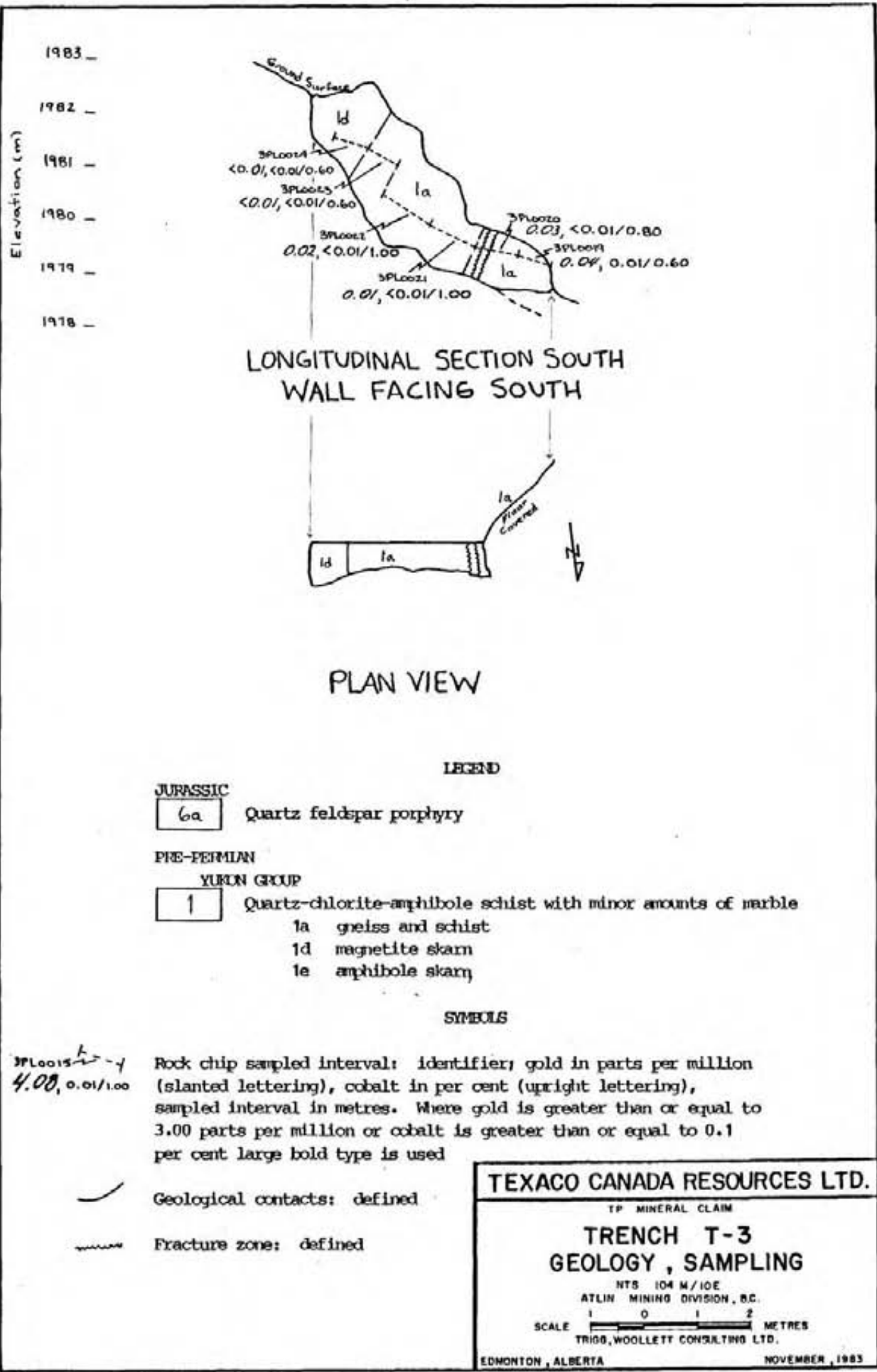
Rock chip sampled interval: identifier; gold in parts per million (slanted lettering), cobalt in per cent (upright lettering), sampled interval in metres. Where gold is greater than or equal to 3.00 parts per million or cobalt is greater than or equal to 0.1 per cent large bold type is used

- Geological contacts: defined
- Fracture zone: defined

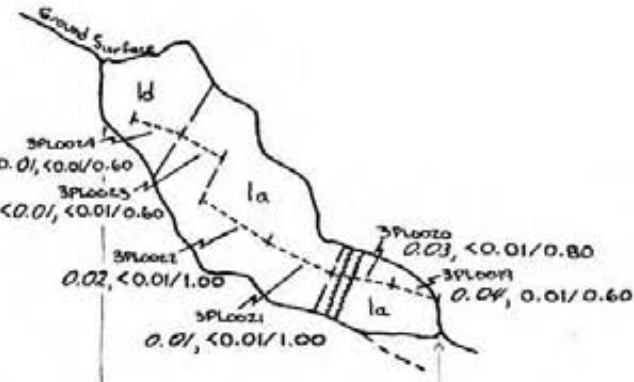
TEXACO CANADA RESOURCES LTD.

TP MINERAL CLAIM  
TRENCH T-2  
GEOLOGY, SAMPLING

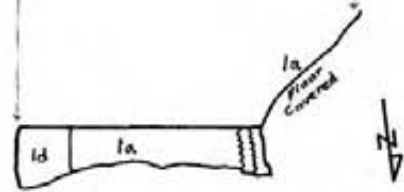
NTS 104 M/10E  
ATLIN MINING DIVISION, B.C.  
SCALE METRES  
TRIGG, WOOLLETT CONSULTING LTD.



1983 \_  
 1982 \_  
 1981 \_  
 1980 \_  
 1979 \_  
 1978 \_



LONGITUDINAL SECTION SOUTH WALL FACING SOUTH



PLAN VIEW

LEGEND

JURASSIC

6a Quartz feldspar porphyry

PRE-PERMIAN

YURON GROUP

1 Quartz-chlorite-amphibole schist with minor amounts of marble

1a gneiss and schist

1d magnetite skarn

1e amphibole skarn

SYMBOLS

3P0001<sup>k</sup>  
 4.00, 0.01/1.00

Rock chip sampled interval: identifier, gold in parts per million (slanted lettering), cobalt in per cent (upright lettering), sampled interval in metres. Where gold is greater than or equal to 3.00 parts per million or cobalt is greater than or equal to 0.1 per cent large bold type is used

Geological contacts: defined

Fracture zone: defined

TEXACO CANADA RESOURCES LTD.

TP MINERAL CLAIM

TRENCH T-3  
 GEOLOGY, SAMPLING

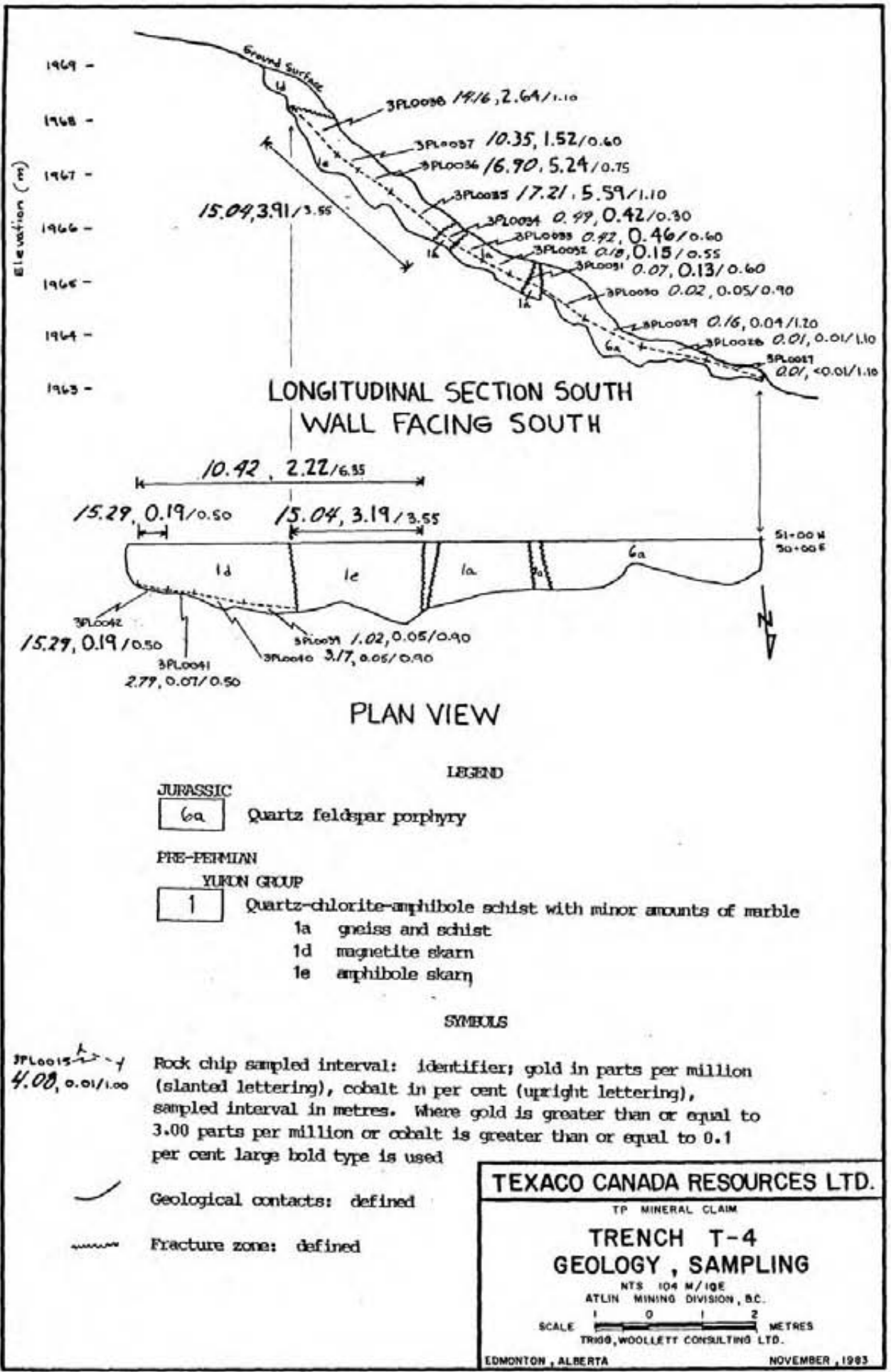
NTS 104 M/10E  
 ATLIN MINING DIVISION, B.C.

SCALE 1 0 1 2 METRES

TRIGG, WOOLLETT CONSULTING LTD.

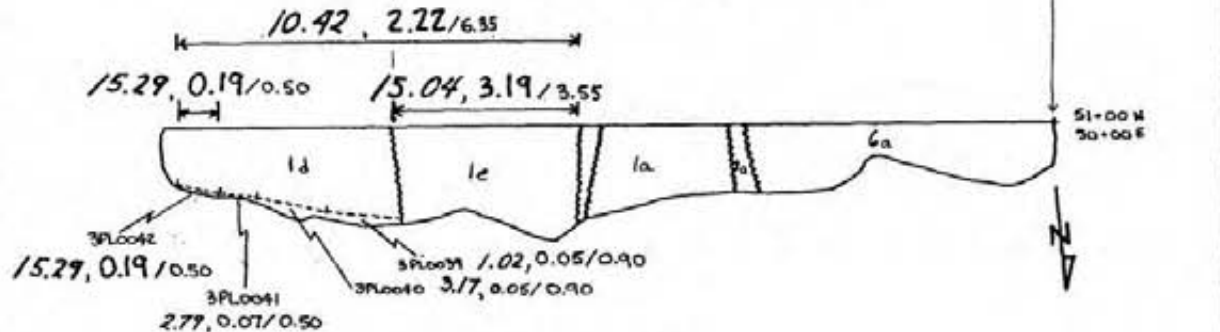
EDMONTON, ALBERTA

NOVEMBER, 1983



Elevation (m)  
 1969 -  
 1968 -  
 1967 -  
 1966 -  
 1965 -  
 1964 -  
 1963 -

LONGITUDINAL SECTION SOUTH WALL FACING SOUTH



PLAN VIEW

- LEGEND
- JURASSIC
- 6a Quartz feldspar porphyry
- PRE-PERRMAN
- YULON GROUP
- 1 Quartz-chlorite-amphibole schist with minor amounts of marble
    - 1a gneiss and schist
    - 1d magnetite skarn
    - 1e amphibole skarn

SYMBOLS

3P0005 4.00, 0.01/1.00

Rock chip sampled interval: identifier; gold in parts per million (slanted lettering), cobalt in per cent (upright lettering), sampled interval in metres. Where gold is greater than or equal to 3.00 parts per million or cobalt is greater than or equal to 0.1 per cent large bold type is used

- Geological contacts: defined
- ~ Fracture zone: defined

TEXACO CANADA RESOURCES LTD.

TP MINERAL CLAIM

TRENCH T-4

GEOLOGY, SAMPLING

NTS 104 M/10E

ATLIN MINING DIVISION, B.C.

SCALE 1 0 1 2 METRES

TRIGG, WOOLLETT CONSULTING LTD.

EDMONTON, ALBERTA NOVEMBER, 1983

APPENDIX IX

MAGNETOMETER SURVEY NOTES AND CALCULATIONS

## MAGNETIC DATA CARD

TP 1

PROJECT NO. 302		INSTRUMENT SCINTREX MP.2		DATE JUNE 17	
CLIENT TEXACO		LINE NO. -		OPERATOR A.P.	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS
BL 49+00 N 50+00 E	8:50	57678	0	57678	
49+25 N	8:52	57632	-3	57629	
49+50	8:54	57143	-6	57137	
49+75	8:55	59855	-8	59847	
50-00	8:57	71999	-11	71988	
50+25	9:06	OFF			unknown *70K
49+00 N	9:12	57717	-39	57678	$-39 \frac{8}{22 \text{ min}} = -1.55$
49+00 N	9:19	57726	-18	57678	
49+00 N 50-12.5 E	9:20	57602	-1	57553	
49+00 N 50-37.5 E	9:21	57021	-3	56970	
49+00 N 50-37.5 E	9:23	57391	-6	57337	
49+00 N 50-52.5 E	9:24	57445	-7	57390	
49+25 N 50+50 E	9:26	59198	-10	59190	
49+25 N 50+37.5 E	9:27	56329	-11	56170	
49+25 N 50+25 E	9:29	57630	-14	57577	
49+25 N 50+12.5 E	9:30	57610	-16	57546	
49+25 N 50+00 E	9:31	57770	-17	(57705)	
49+25 N 50+00 E	9:33	57746	-18 -20	57678	$-20 \frac{8}{14 \text{ min}} = -1.428/\text{min}$

## MAGNETIC DATA CARD

TP 2

PROJECT NO. 3102		INSTRUMENT Scintrex MP.2		DATE June 17	
CLIENT Texaco		LINE NO. -		OPERATOR A.P.	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS
49+00 N					
50+00 E	9:43	57757	-7 -0	57678	
49+87.5 E	9:44	57569	1 -0	57490	
49+75 E	9:45	58081	1 -1	58001	
49+62.5 E	9:47	62233	1 -2	63152	Fluc 20X
49+50 E	9:48	59122	1 -2	59041	Fluc 40X
49+25 N 50+50 E	9:52	57876	1 -4	57793	
49+62.5 E	9:54	56451	1 -5	56367	
49+75 E	9:55	57630	1 -5	57546	
49+87.5 E	9:57	57549	1 -6	57464	
50+00 E	9:58	57791	1 -7	(57705)	
49+00 N 50+00 E	10:00	57766	-7 -9	57678	$\frac{-9}{20} = -0.458/\text{min}$
49+50 N 50+25 E	10:07	57248	-11 +0	57137	
50+12.5 E	10:08	57030	1 +1	56920	
50+25 E	10:09	56786	1 +2	56677	
50+37.5 E	10:11	61926	1 +5	61820	
50+50 E	10:12	59291	1 +6	59186	
49+75 N 50+50 E	10:14	59677	1 +8	59574	
50+37.5 E	10:15	62382	1 +9	62280	
50+25 E	10:16	71075	1 +10	70974	
50+12.5 E	10:16	60994	1 +12	6095	
50+50 E	10:21	59922	1 +16	59844	
49+50 N 50+25 E	10:22	57231	-11 +17	57127	$+17/15 = 1.13$

## MAGNETIC DATA CARD

TP 5

PROJECT NO.		INSTRUMENT			DATE	
3102					June 26	
CLIENT		LINE NO.			OPERATOR	
					SE	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS	
50+25N						
49+50E	10:42	56823	-68	0	56755	
49+12.5E		56494		+2	56428	
49+7E		55725		+3	55660	
49+87.5E		54091		+5	54028	
50+00E		OFF SCALE		+6		MAGNETIC
50+12.5E	10:52	70870		+8	70808	
50+25E		64029		+10	63971	
50+37E		59714		+11	59657	
50+50E	10:58	58416		+13	58361	
50+50N 50+50E		57487		+17	57436	
50+7E		56972		+19	56923	
50+2E		57090		+22	57044	
50+17.5E		OFF SCALE				MAGNETIC
50+32E		53793		+23	53748	
50+37.5E		53996		+25	53953	
50+7E	11:16	56224		+28	56188	
50+12.5E	19	57215		+30	57277	
49+50E		57709		+32	57173	
50+12.5N 50+12.5E	11:24	56789	-68	+34	56755	+34/42 min = 0.81 %/min

## MAGNETIC DATA CARD

TP 6

PROJECT NO.		INSTRUMENT			DATE	
3102					June 26	
CLIENT		LINE NO.			OPERATOR	
					SR	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS	
50+75N						
49+50E	11:30	57578	-474	0	57104	
50+12.5E		57666		-2	57190	
50+2E		57886		-3	57409	
50+97.5E		57211		-5	56732	
50+2E		53684		-7	53203	
50+12.5E		OFF SCALE				MAGNETIC
50+75E	11:37	53201		-11	52716	
50+37.5E		54454		-12	53972	
50+50E		56037		-13	56420	
5100N 50+50E		56172		-15	55688	
50+37.5E		54922		-18	54430	
50+25E	11:41	51557		-19	51059	
50+12.5E		OFF SCALE				
50+00E	9	59209		-21	59314	
49+87.5E	1	57207		-23	56710	
49+75E	2	57484		-24	56990	
49+67.5E	3	57750		-25	57251	
49+50E	5	59664		-28	58162	
50+12.5N 50+12.5E	11:56	57607	-474	-29	57104	-29/26 = -1.11 %/min



## MAGNETIC DATA CARD

TP9

PROJECT NO.		INSTRUMENT		DATE	
CLIENT		LINE NO.		OPERATOR	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS
MAGNETOMETER		RECON.	SURVEY		
GOING DOWNHILL FROM 52+00N 54+00E					
50+00E 52+00N	1:32	57687	+10 +0	57697	
015m		57583	+2	57595	
030		57563	+4	57577	
045	1:35	57551	+7	57568	
060	6	57515	+9	57534	
075	6	57463	+9	57482	
090	7	57395	+11	57416	
105	7	57335	+11	57356	
120	8	57280	+13	57303	
135	9	57244	+16	57270	
150	10	57250	+18	57278	
165	1:41	57174	+20	57204	
180	2	57234	+22	57266	
195	1:43	57900	+25	57935	
210	1:44	57782	+27	57819	
50+00E 52+00N	2:01	57622	+10 +65	57697	$65/29 = 2.24 \text{ } \frac{\%}{\text{min}}$

## MAGNETIC DATA CARD

TP10

PROJECT NO.		INSTRUMENT		DATE	
CLIENT		LINE NO.		OPERATOR	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS
MAG.		RECON.	SURVEY		
50+00E starting at 52+00N & 50+00E					
50+00E 52+00N	7:05	57631	+66 -0	57697	
015		57482	-1	57550	
030		57505	-2	57569	
045		57524	-4	57590	
060		57523	-5	57584	
075	2:11	57511	-7	57570	
090	2	57494	-8	57552	
105	3	57424	-10	57480	
120	4	57476	-11	57531	
135	5	57443	-12	57495	
150	2:16	57495	-13	57548	
50+00E 52+00N	2:24	57654	+66 -23	57697	$-23/19 = -1.21 \text{ } \frac{\%}{\text{min}}$



## MAGNETIC DATA CARD

TP 11

PROJECT NO.		INSTRUMENT		DATE	
3102				June 28	
CLIENT		LINE NO.		OPERATOR	
				SE	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS
54+75N					
50+00E	10:19	57489	-120	0	57369
50+12E	20	57256		-1	57135
50+25E	22	57031		-2	56909
50+37.5E	23	57216		-3	57093
50+50E	10:24	57392		-3	57219
49+82.5E	5	57610		-4	57486
49+75E	7	57677		-5	57552
49+62.5E	8	57698		-6	57372
49+50E	10:29	57816		-7	57689
50+00E	10:31	57497	-120	-8	57369
					$\frac{1}{2} = -0.67 \frac{\%}{min}$

## MAGNETIC DATA CARD

TP 12

PROJECT NO.		INSTRUMENT		DATE	
3102				June 28	
CLIENT		LINE NO.		OPERATOR	
				SE	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS
54+75N					
50+00E	10:31	57497	-120	0	57369
50+30N	37	56787		+1	56662
50+02E				+2	56087
50+14E	44	56213		+4	43890
50+75N	51	44014		+5	65143
50+10E				+6	42919
50+75N	59	65266		+7	57585
50+17E	59	65266		+6	42919
50+8E	11:05	44041		+7	57585
50+17E	11:07	57706		+7	57585
50+15N	11:11	57490	v	+7	57369
50+00E					$\frac{1}{40} = 0.19 \frac{\%}{min}$

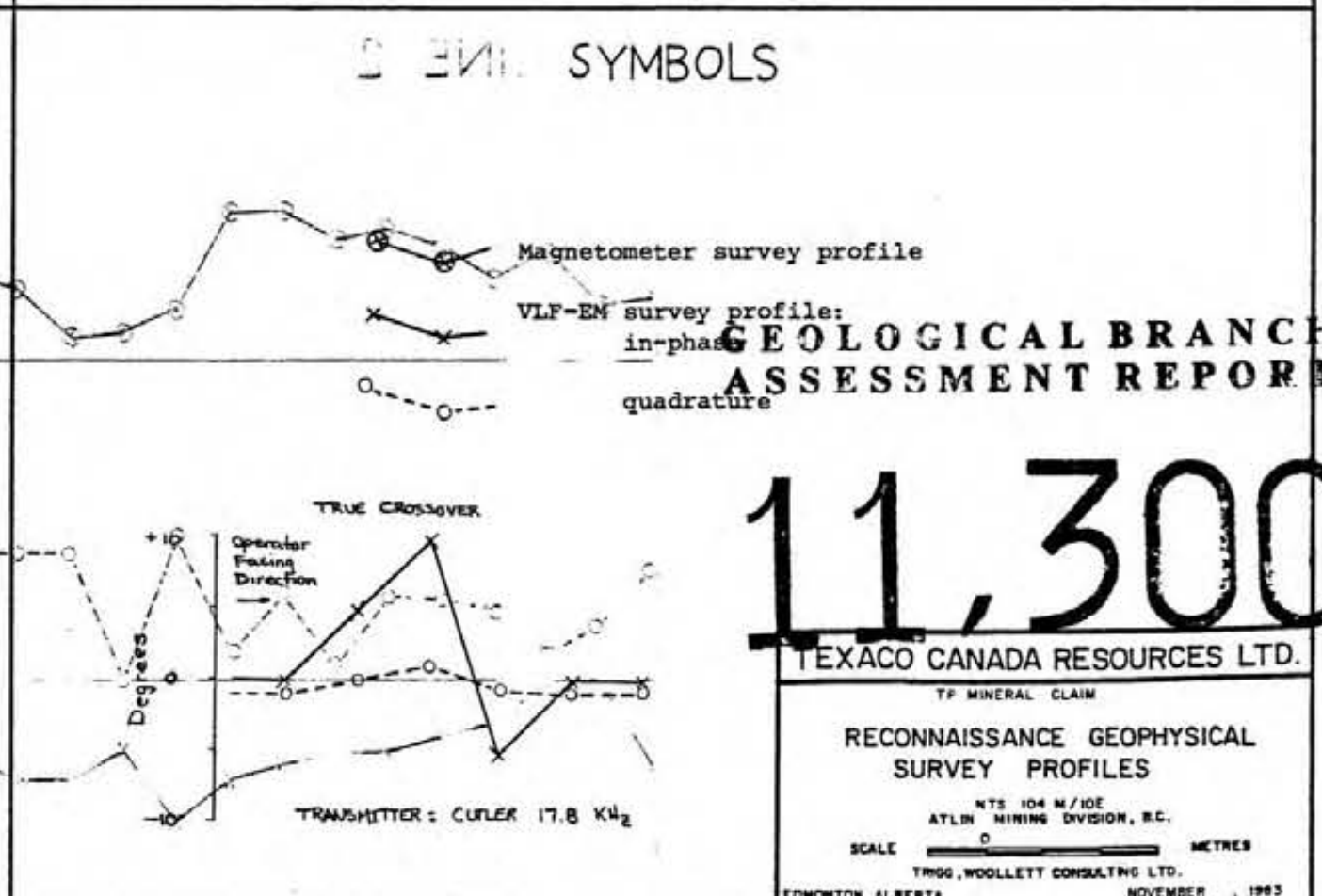
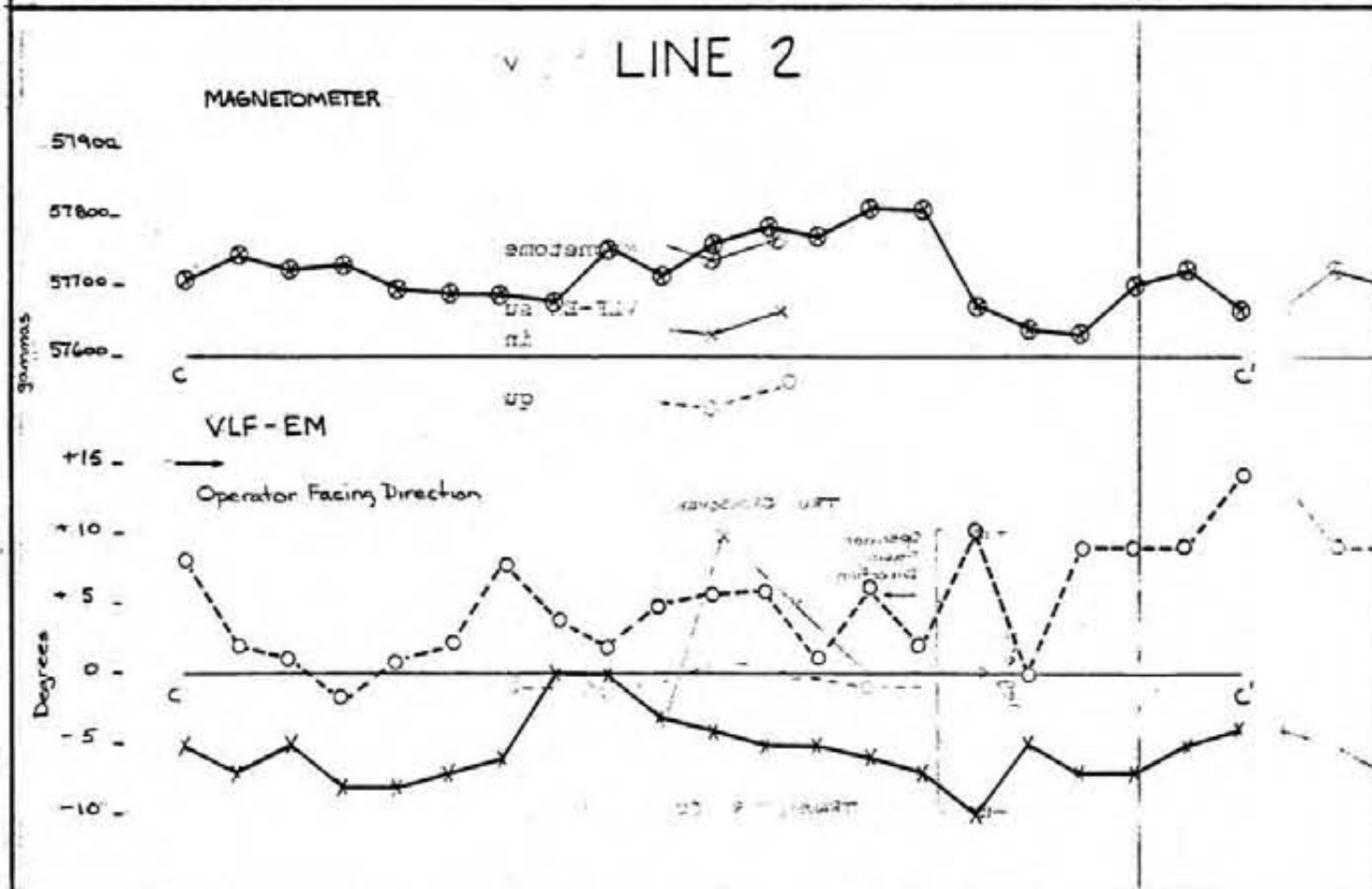
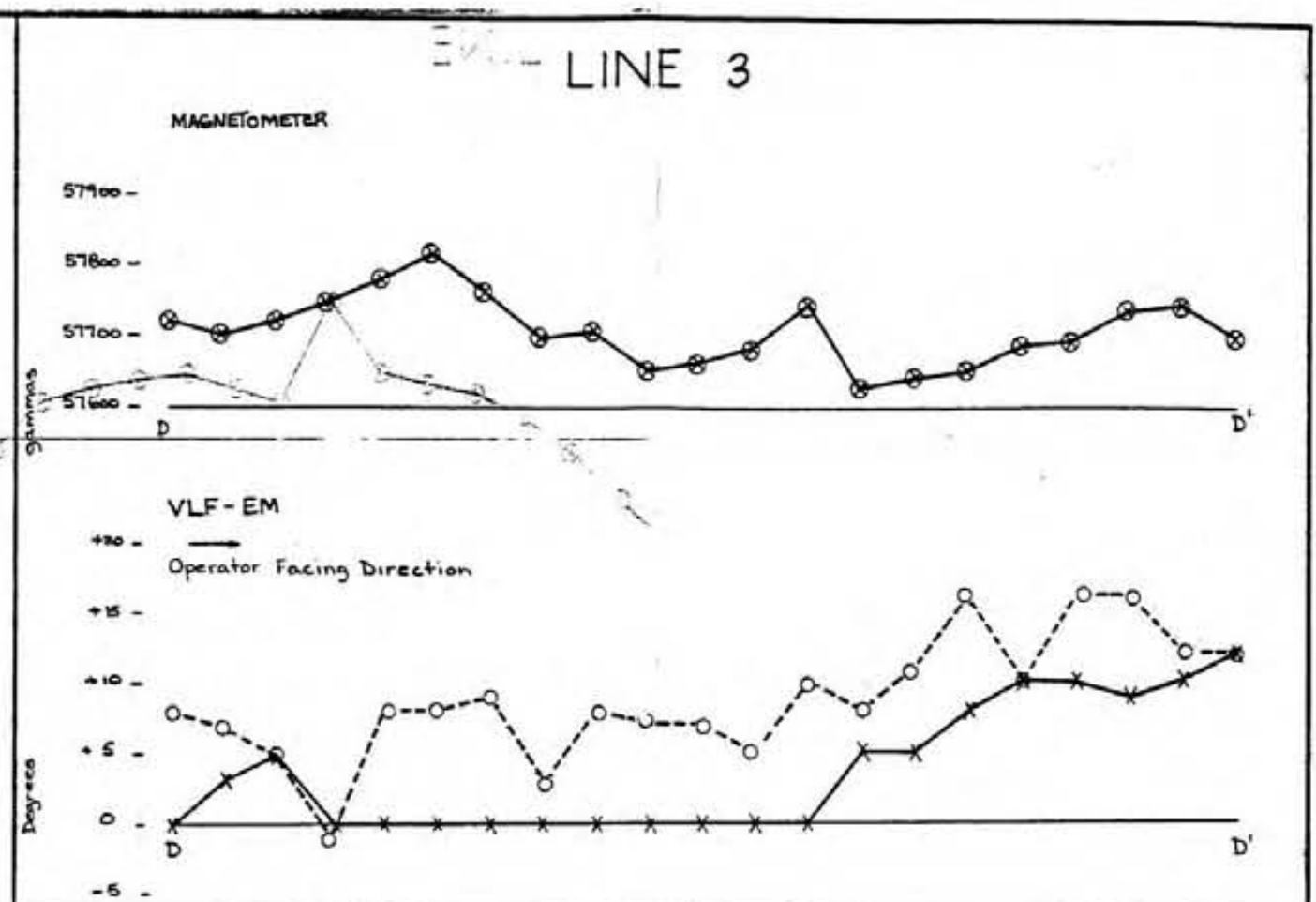
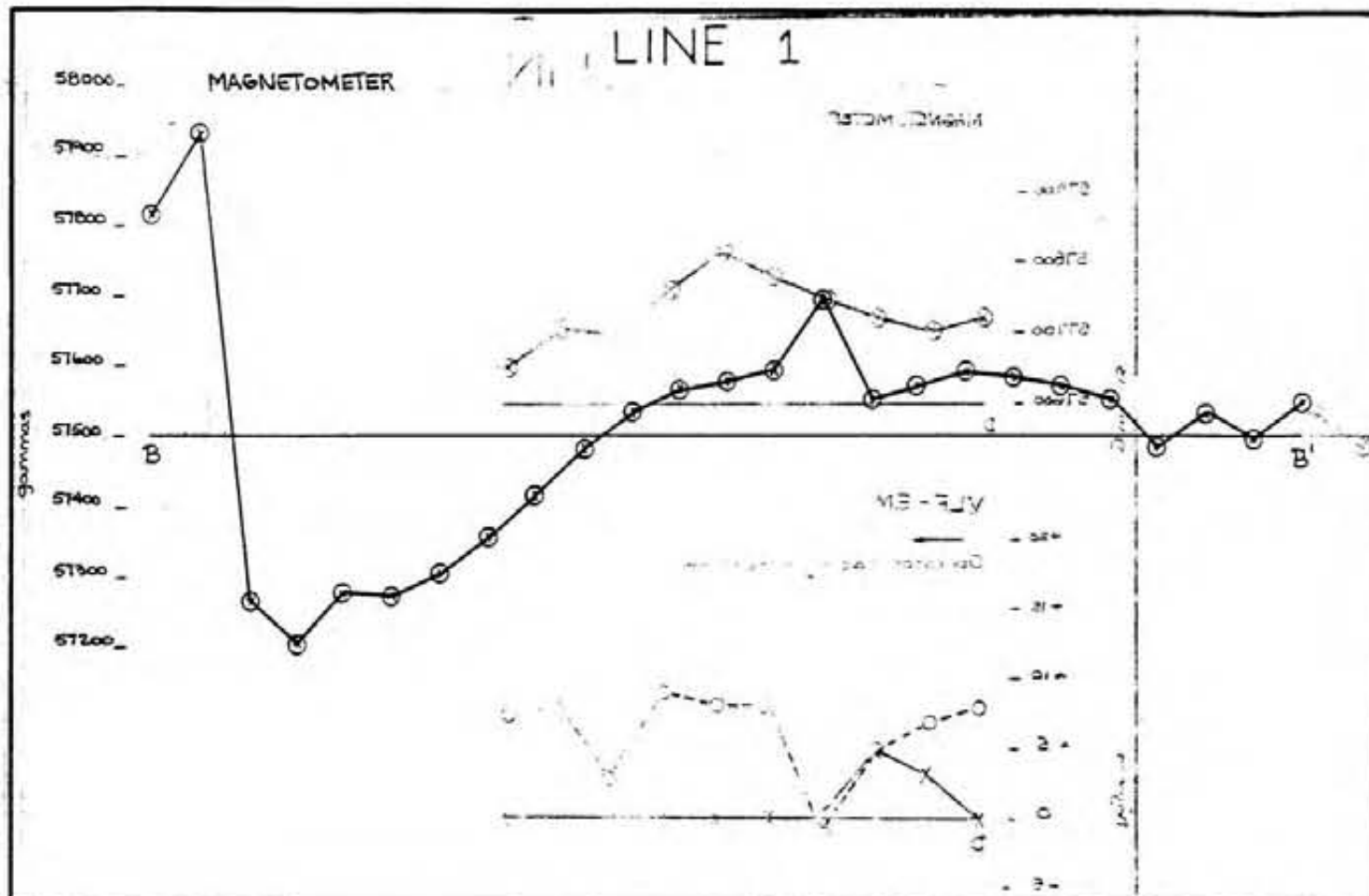
## MAGNETIC DATA CARD

TP15

PROJECT NO.		INSTRUMENT		DATE	
CLIENT		LINE NO.		OPERATOR	
STATION	TIME	READING	DIURNAL	CORRECTED VALUE	OBSERVATIONS
3102					June 30/1966
TEXACO		RECON 3			A.P.
000	9:18	57723	0	57723	Recon (to Survey. (N.E. Dir.)
15	9:19	57705	+ .3	57705	
30	9:20	57724	+ .5	57725	
45	9:21	57753	+ .8	57754	
60	9:22	57782	+1.1	57783	
75	9:23	57820	+1.3	57821	
90	9:24	57762	+1.6	57764	
105	9:25	57699	+1.9	57701	
120	9:26	57707	+2.1	57709	
135	9:27	57648	+2.4	57650	
150	9:28	57661	+2.7	57664	
165	9:29	57683	+2.9	57686	
180	9:30	57745	+3.2	57748	
195	9:31	57625	+3.5	57629	
210	9:31.5	57642	+3.6	57646	
225	9:32	57653	+3.7	57657	
240	9:33	57685	+4.0	57689	
255	9:34	57690	+4.3	57694	
270	9:36	57734	+4.8	57739	
285	9:37	57741	+5.1	57746	
300	9:38	57696	+5.3	57701	
000	1:48	57715	+8	57723	$\frac{8}{30} \text{ min} = .267$

APPENDIX X

RECONNAISSANCE GEOPHYSICAL SURVEY PROFILES



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

# 11,300

TEXACO CANADA RESOURCES LTD.  
TF MINERAL CLAIM

RECONNAISSANCE GEOPHYSICAL  
SURVEY PROFILES

NTS 104 M/10E  
ATLIN MINING DIVISION, B.C.

SCALE 0 METRES

TRIGO, WOOLLETT CONSULTING LTD.  
EDMONTON, ALBERTA      NOVEMBER 1983

LEGEND

11.300

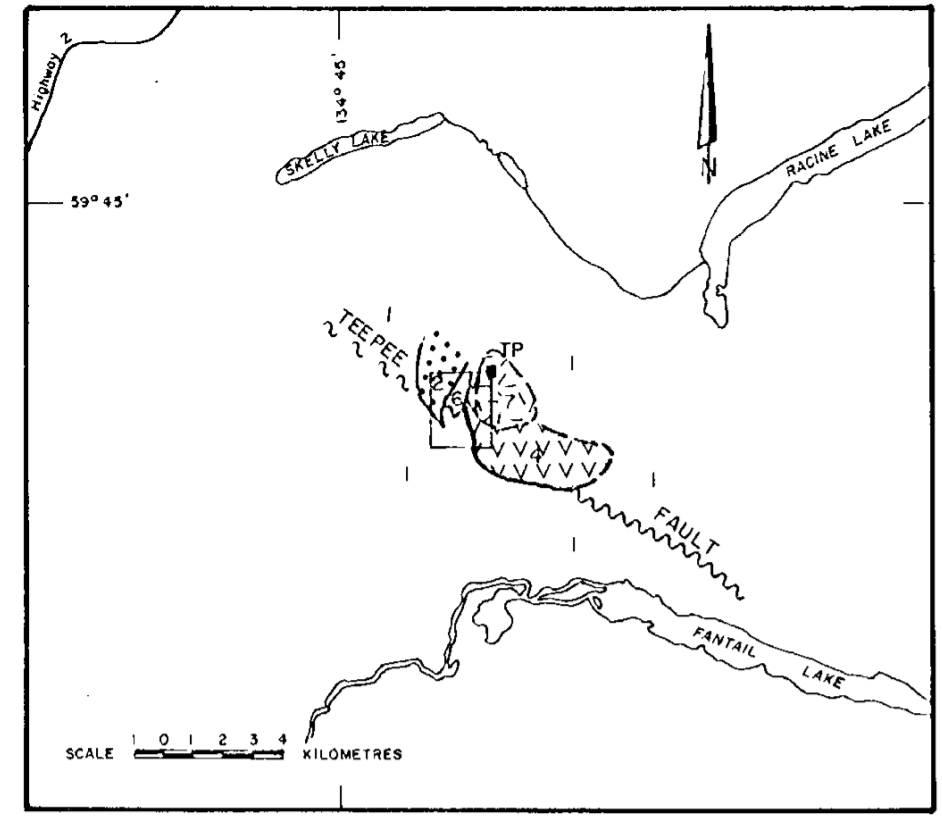
- PRE-CAMBRIAN AND/OR JURASSIC
    - Granodiorite
  - PROTEROZOIC AND OLDER
    - Porphyry intrusions including rare intermediate-composition dykes, both older and younger than Stuhini Group
  - MIDDLE TRIASSIC
    - STUHINI GROUP
      - 4a felsite flows
      - 4b intermediate flows
      - 4c mafic flows
  - LOWER OR MIDDLE TRIASSIC
    - 6a felsite
  - FIRE-HOLEAN
    - YUKON GROUP
      - 1 Quartz-chlorite-amphibole gneiss and schist with minor amounts of marble and ultramafic rocks
      - a gneiss and schist
      - b marble
      - c calcisilicate-calcite skarn
      - d magnetite skarn
      - e hornblende
- Note: Stratigraphic relationships are not implied by the sequence of lettered lithological units

SYMBOLS

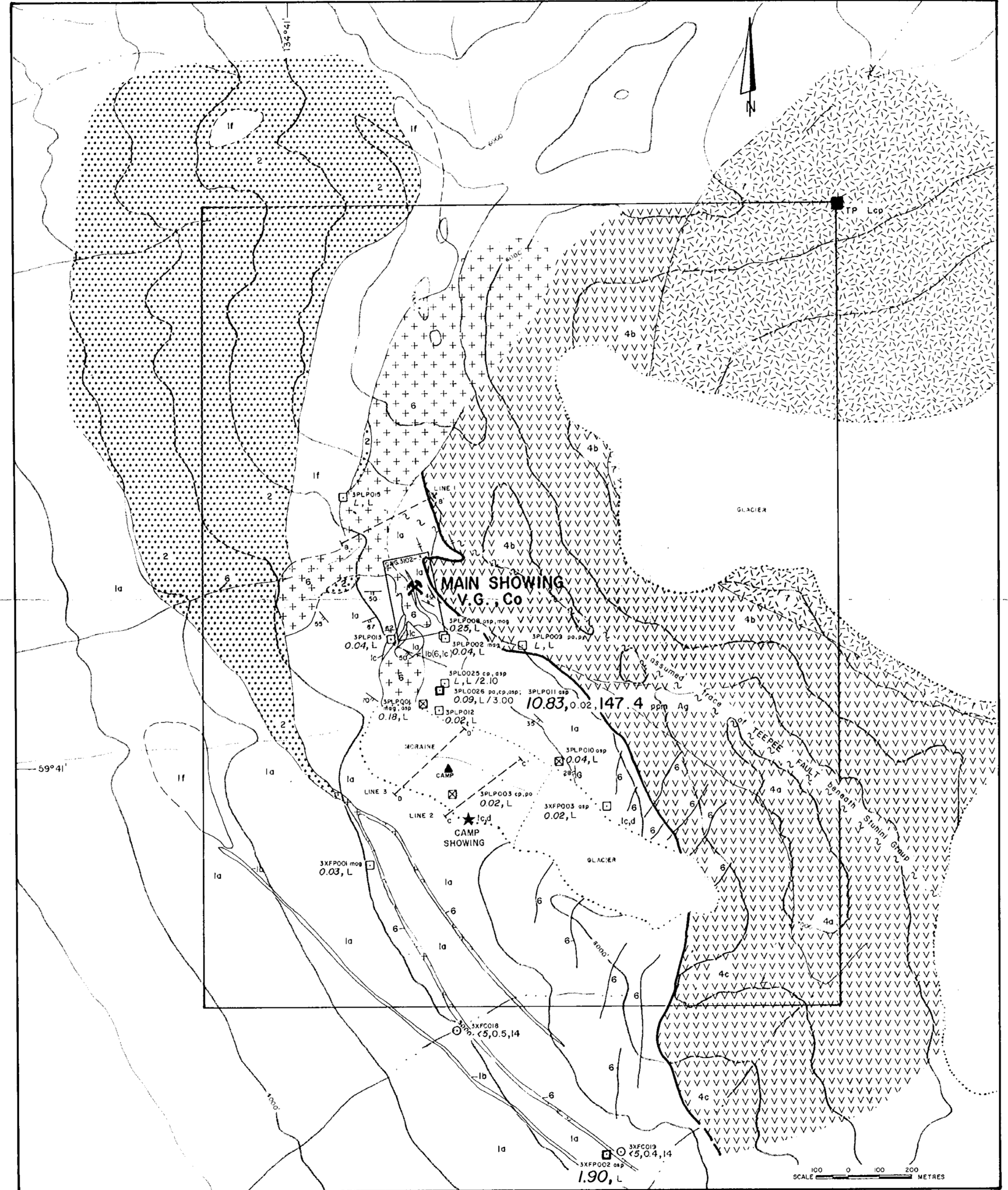
- Outcrop
- Geological contact: defined, approximate, assumed
- Unconformity: defined, approximate or assumed
- Banding or metamorphic layering, tops unknown: vertical, inclined
- Fault: defined, approximate, assumed
- MAIN SHOWING Trenched locale: identifier
- CAMP SHOWING Mine: mineral occurrence: identifier
- Rock chip sample site: identifier; minerals present; gold in parts per million, cobalt in per cent/interval sampled in metres
- Rock grab sample site: from outcrop, from talus or a boulder; identifier; minerals present; gold in parts per million, cobalt in per cent. Where gold is greater than or equal to 1.00 parts per million large bold type is used
- Geochemical stream sediment sample site: identifier, gold in parts per billion, silver in parts per million, cobalt in parts per million
- Mineral claim held by Texaco Canada Resources Ltd.: name; legal corner post shown
- Reconnaissance geophysical survey line: identifier, see Appendix X for results

ABBREVIATION

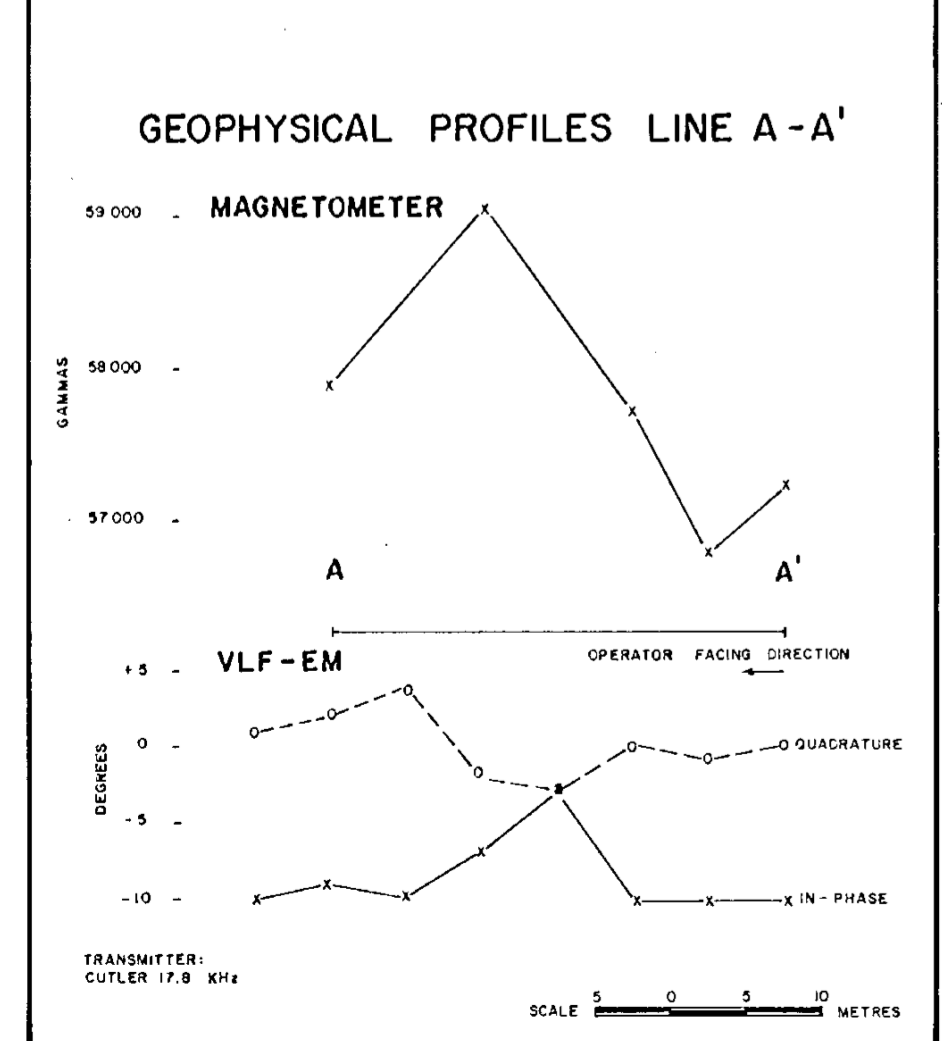
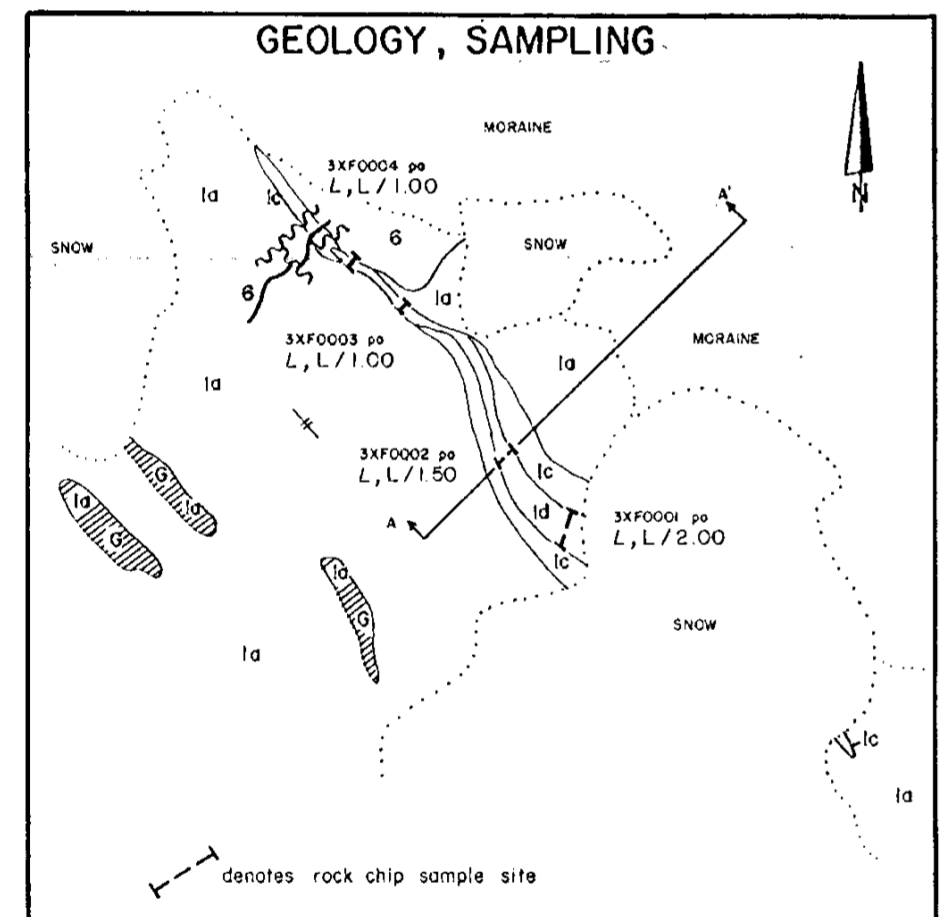
Ag	silve.	mag	magnetite
asp	arsenopyrite	po	pyrrhotite
cp	chalcopyrite	ppm	parts per million
Co	cobalt	py	pyrite
G	gossan	V.G.	visible gold
L or L	less than 0.01		



A. LOCATION AND REGIONAL GEOLOGY



B. TP MINERAL CLAIM - GEOLOGY, PROSPECTING, SAMPLING



C. CAMP SHOWING



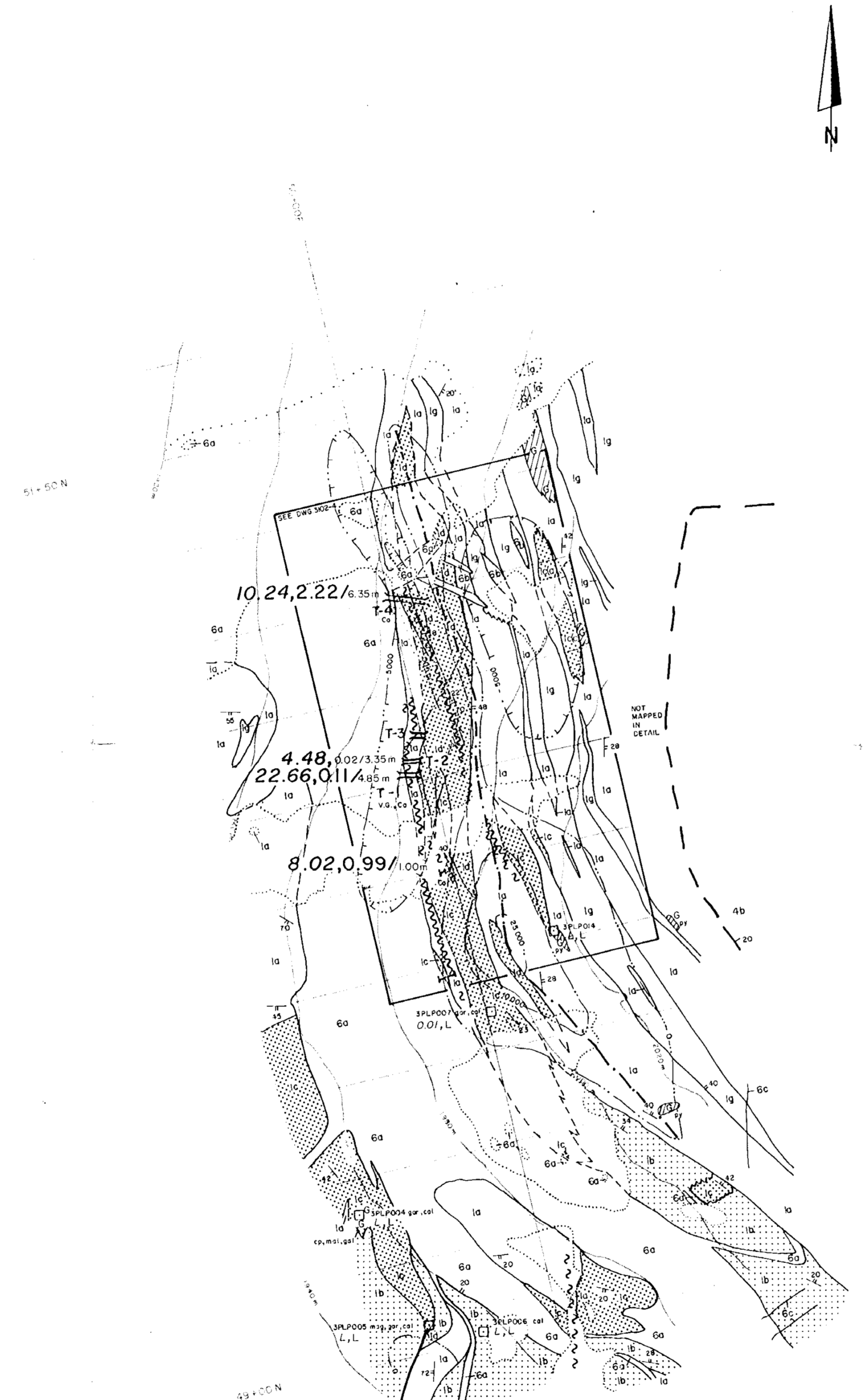
THE ASSOCIATION OF  
PROFESSIONAL ENGINEERS,  
GEOLOGISTS and GEOPHYSICISTS  
OF ALBERTA  
PERMIT NUMBER  
P 2374  
TRIGG, WOOLLETT  
CONSULTING LTD.

TEXACO CANADA RESOURCES LTD.

TP MINERAL CLAIM  
**GEOLOGY,  
PROSPECTING,  
SAMPLING**  
NTS 104M/10E  
TRIGG, WOOLLETT CONSULTING LTD.  
EDMONTON, ALBERTA

Field Geologist P.G. Lhotka

NOVEMBER, 1983



**LEGEND**

- CLASSIFICATION**
- 6 a. quartz-feldspar porphyry, dykes, sills and stocks
  - 6 b. basaltic dykes
  - 6 c. intermediate-composition dykes
- POST-TRIASSIC**
- 4b Intermediate porphyritic flows
- PRE-TRIASSIC**
- YUKON GROUP
- 1a gneiss and schist
  - 1b marble
  - 1c calc-silicate-schist skarn
  - 1d magnetite skarn
  - 1e amphibole skarn
  - 1g quartz porphyry dykes and sills

Note: Stratigraphic relationships are not implied by the sequence of lettered lithological units

**SYMBOLS**

- Outcrop, rubble outcrop
- Geological contact: defined, approximate or assumed
- - - Unconformity: defined, approximate or assumed
- ∠ Bedding or metamorphic layering; tops unknown: inclined
- ↘ Fold: S-fold, C-fold; arrow indicates direction and amount of plunge
- ↔ Fracture zone: defined, approximate or assumed; arrows indicate displacement, dip shown
- T-1 Trench: identifier
- 22.66, 0.11/4.85 m Rock chip sample site producing gold values greater than 3.00 parts per million: gold in parts per million, cobalt in per cent (interval sampled in metres. (See drawing 3102-4 for details of sampling)
- 4.48, 0.02/3.35 m Rock chip sample site producing gold values less than 3.00 parts per million: (See drawing 3102-4 for details of sampling)
- 3PLP004 gr, col L, L Rock grab sample site, from outcrop: identifier; minerals present; gold in parts per million, cobalt in per cent
- 0000 Magnetic contour: values in gauss with respect to a datum where 60,000 gauss is the 0 contour
- 8000 Magnetic depression
- Axis of magnetic high

**ABBREVIATIONS**

cal	calcite	L or L	less than 0.01
cm	cobalt minerals	mag	magnetite
g	gossan	mal	malachite
gal	galena	py	pyrite
gat	garnet		

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,300**



THE ASSOCIATION OF  
PROFESSIONAL ENGINEERS,  
GEOLOGISTS and GEOPHYSICISTS  
OF ALBERTA  
PERMIT NUMBER  
P 2374  
TRIGG, WOOLLETT  
CONSULTING LTD.

TEXACO CANADA RESOURCES LTD.

TP MINERAL CLAIM  
MAIN SHOWING

**GEOLOGY, SAMPLING,  
MAGNETOMETER  
SURVEY**

NTS 104M/10E  
ATLIN MINING DIVISION, BRITISH COLUMBIA

SCALE 20 0 20 40 60 METRES

TRIGG, WOOLLETT CONSULTING LTD.

**LEGEND**

CRETACEOUS

**+6g+** Quartz-feldspar porphyry

PRE-PERMIAN  
YUKON GROUP

**1** gneiss and schist  
**2a** calcisilicate-calcite skarn  
**2b** magnetite skarn  
**2c** amphibole skarn

Note: Stratigraphic relationships are not implied by the sequence of lettered lithological units

**SYMBOLS**

- Outcrop
- Geological contact: defined, approximate or assumed
- Bedding or metamorphic layering, tops unknown: inclined
- Fracture zone: defined, approximate or assumed; arrows indicate displacement, dip shown
- Lineation: direction and amount of plunge
- Rock chip sample site: interval sampled; gold values are symbolically represented above the line while cobalt values are shown below the line. Sample identifiers indicate the series of samples taken for outcrop sites only
- Gold and cobalt-bearing zone: gold in parts per million, cobalt in per cent/interval sampled in metres. Rock chip samples are taken from outcrop surface except for sites labelled T-1 to T-4 which are trenches
- Gold- and cobalt-bearing zone: boundary is defined, approximate, assumed

Note: For details of geology and sampling of trenches see appendix VIII

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,300**

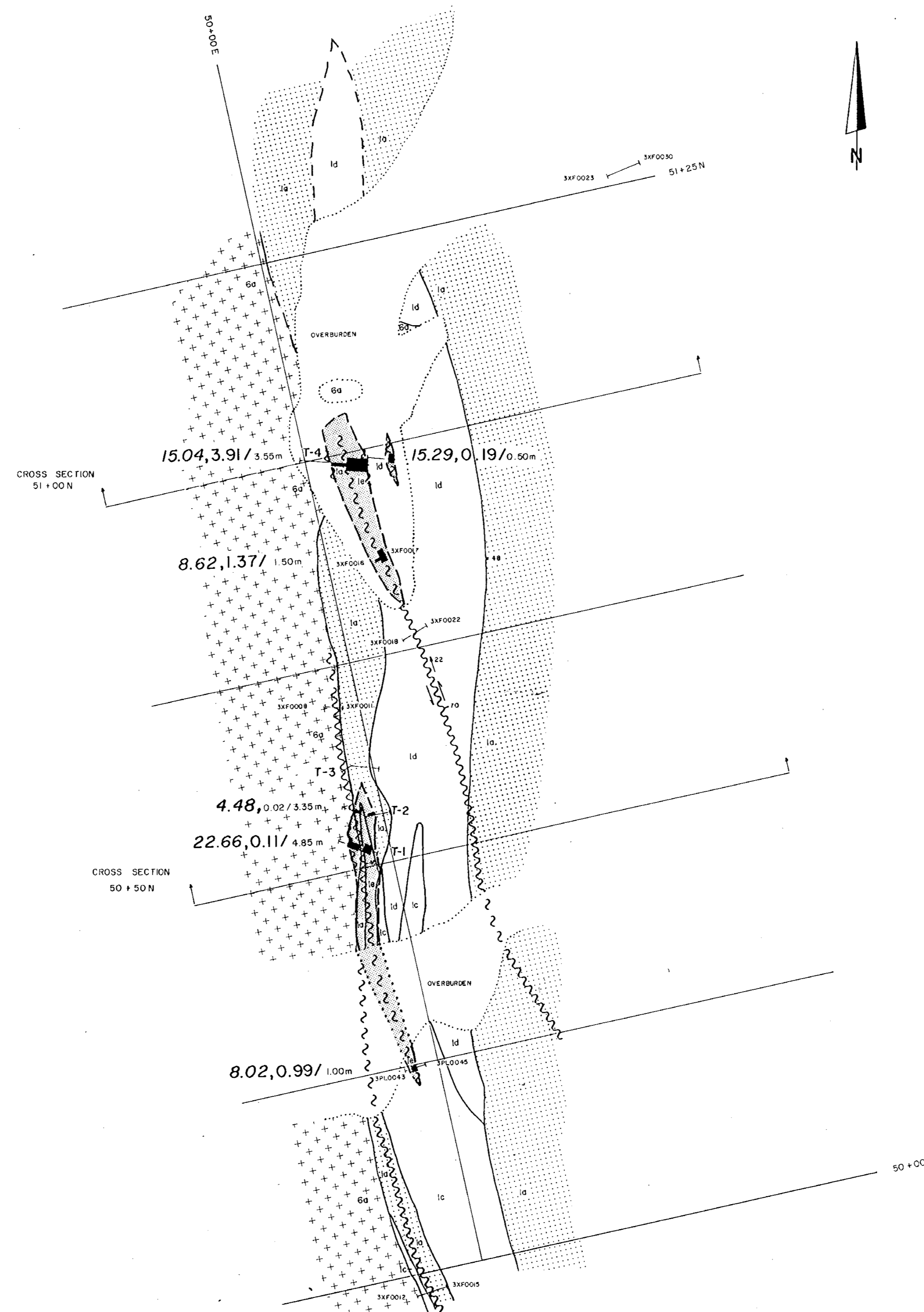
THE ASSOCIATION OF  
PROFESSIONAL ENGINEERS,  
GEOLOGISTS and GEOPHYSICISTS  
OF ALBERTA  
PERMIT NUMBER  
P 2374  
TRIGG, WOOLLETT  
CONSULTING LTD.

TEXACO CANADA RESOURCES LTD.

TP MINERAL CLAIM  
MAIN SHOWING  
**DETAILED GEOLOGY,  
SAMPLING,  
CROSS-SECTIONS**

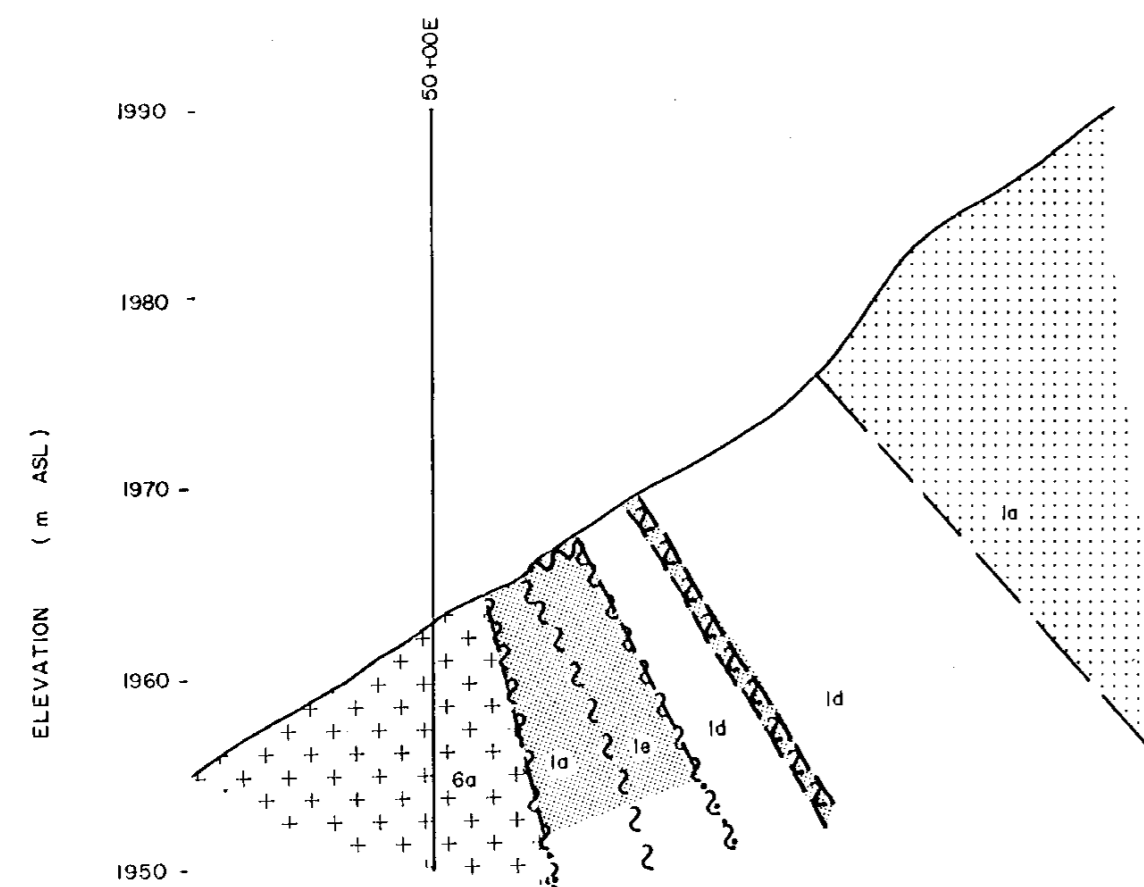
NTS 104M/10E  
ATLIN MINING DIVISION, BRITISH COLUMBIA  
SCALE 0 5 10 15 METRES  
TRIGG, WOOLLETT CONSULTING LTD.

EDMONTON, ALBERTA NOVEMBER, 1983

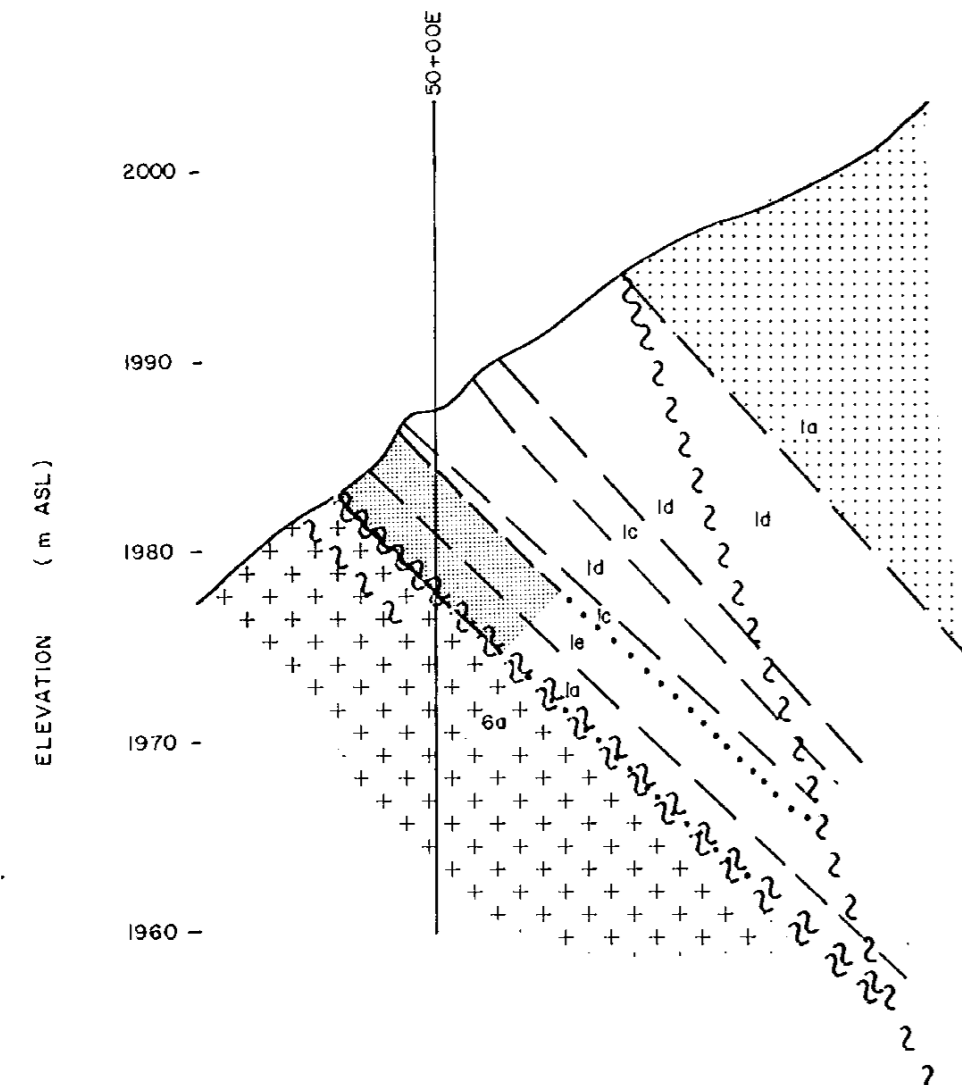


PLAN VIEW  
GOLD- AND COBALT - BEARING ZONES

CROSS-SECTION 51+00N



CROSS-SECTION 50+50N



Field Geologist: P.G. Lhotko

11,300

LEGEND

- CRETACEOUS  
60 Quartz-feldspar porphyry
- PRE-PERMIAN  
YUKON GROUP  
1 a gneiss and schist  
c calcisilicate-calcite skarn  
d magnetite skarn  
e amphibole skarn

Note: Stratigraphic relationships are not implied by the sequence of lettered lithological units

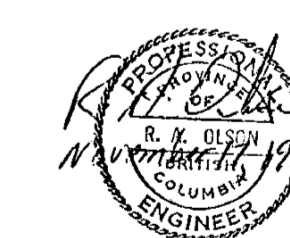
SYMBOLS

- Outcrop
- Geological contact: defined, approximate or assumed
- Bedding or metamorphic layering, tops unknown: inclined
- Fracture zone: defined, approximate or assumed; arrows indicate displacement, dip shown
- Lineation: direction and amount of plunge
- Rock chip sample site: interval sampled; gold values are symbolically represented above the line while cobalt values are shown below the line. Sample identifiers indicate the series of samples taken for outcrop sites only
- Gold and cobalt-bearing zone: gold in parts per million, cobalt in per cent/interval sampled in metres. Rock chip samples are taken from outcrop surface except for sites labelled T-1 to T-4 which are trenches
- Gold- and cobalt-bearing zone: boundary is defined, approximate, assumed
- Note: For details of geology and sampling of trenches see appendix VIII

PROPOSED DRILLING

- DDH-1 Diamond drillhole identifier

DRILLHOLE IDENTIFIER	ESTIMATED INCLINATION	ESTIMATED LENGTH (m)
RECOMMENDED DRILLING		
DDH - 1	60	45
DDH - 2	60	45
DDH - 3	60	45
DDH - 4	60	50
DDH - 5	90	50
DDH - 6	90	60
DDH - 7	90	55
DDH - 8	90	65
		415
available for further drilling		135
		550



THE ASSOCIATION OF  
PROFESSIONAL ENGINEERS,  
GEOLOGISTS and GEOPHYSICISTS  
OF ALBERTA  
PERMIT NUMBER  
P 2374  
TRIGG, WOOLLETT  
CONSULTING LTD.

TEXACO CANADA RESOURCES LTD.

TP MINERAL CLAIM  
MAIN SHOWING

PROPOSED  
EXPLORATION

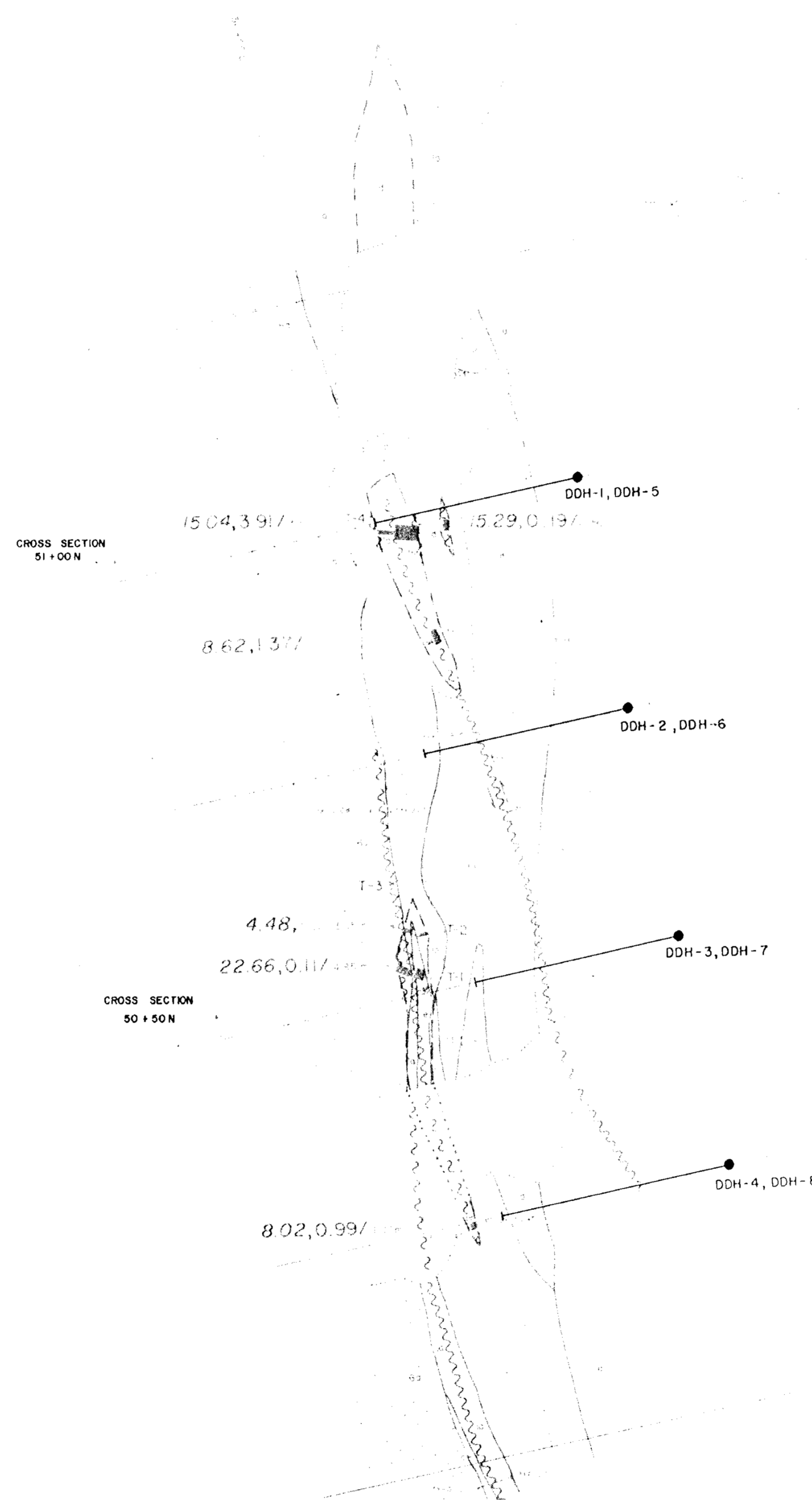
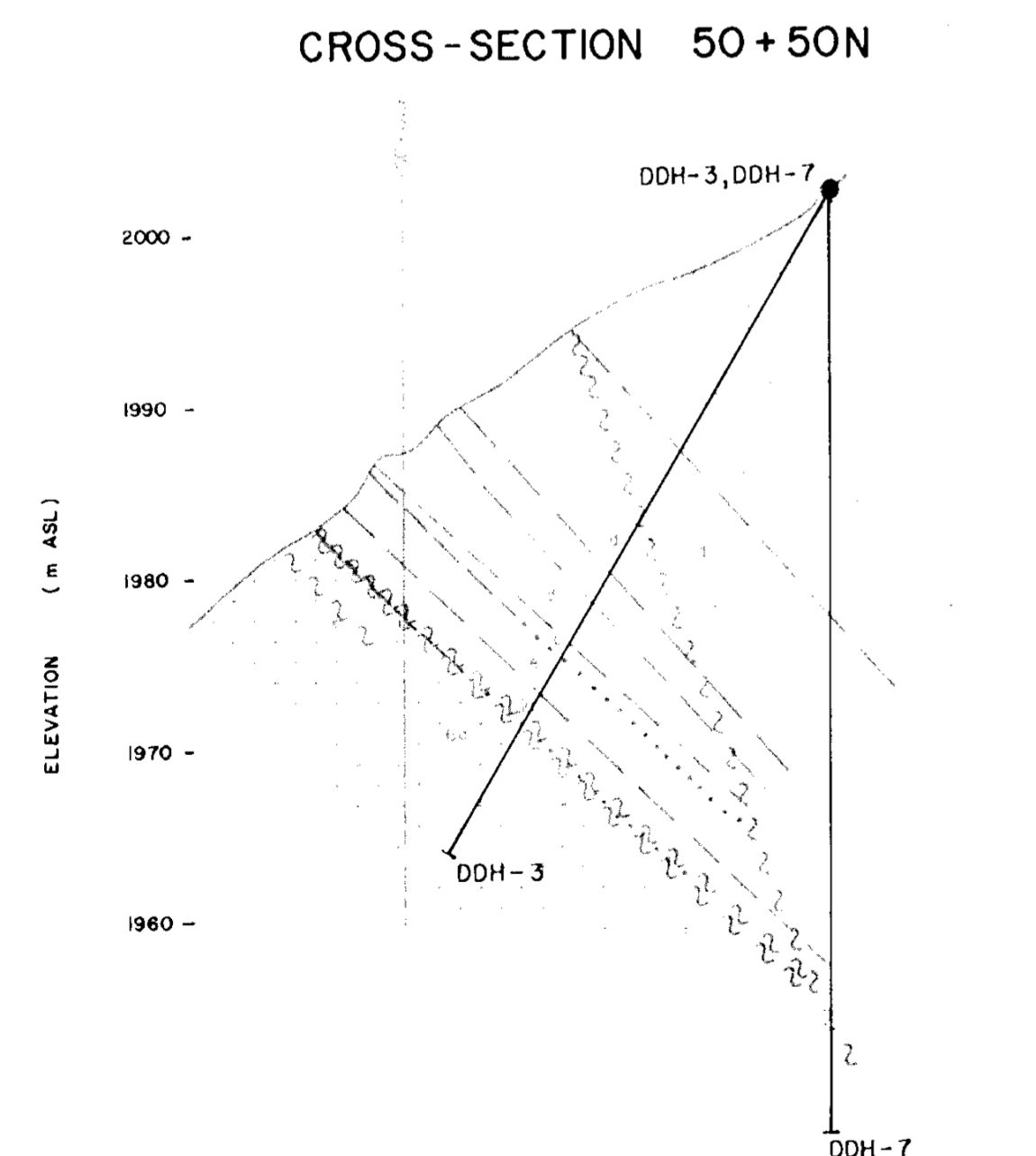
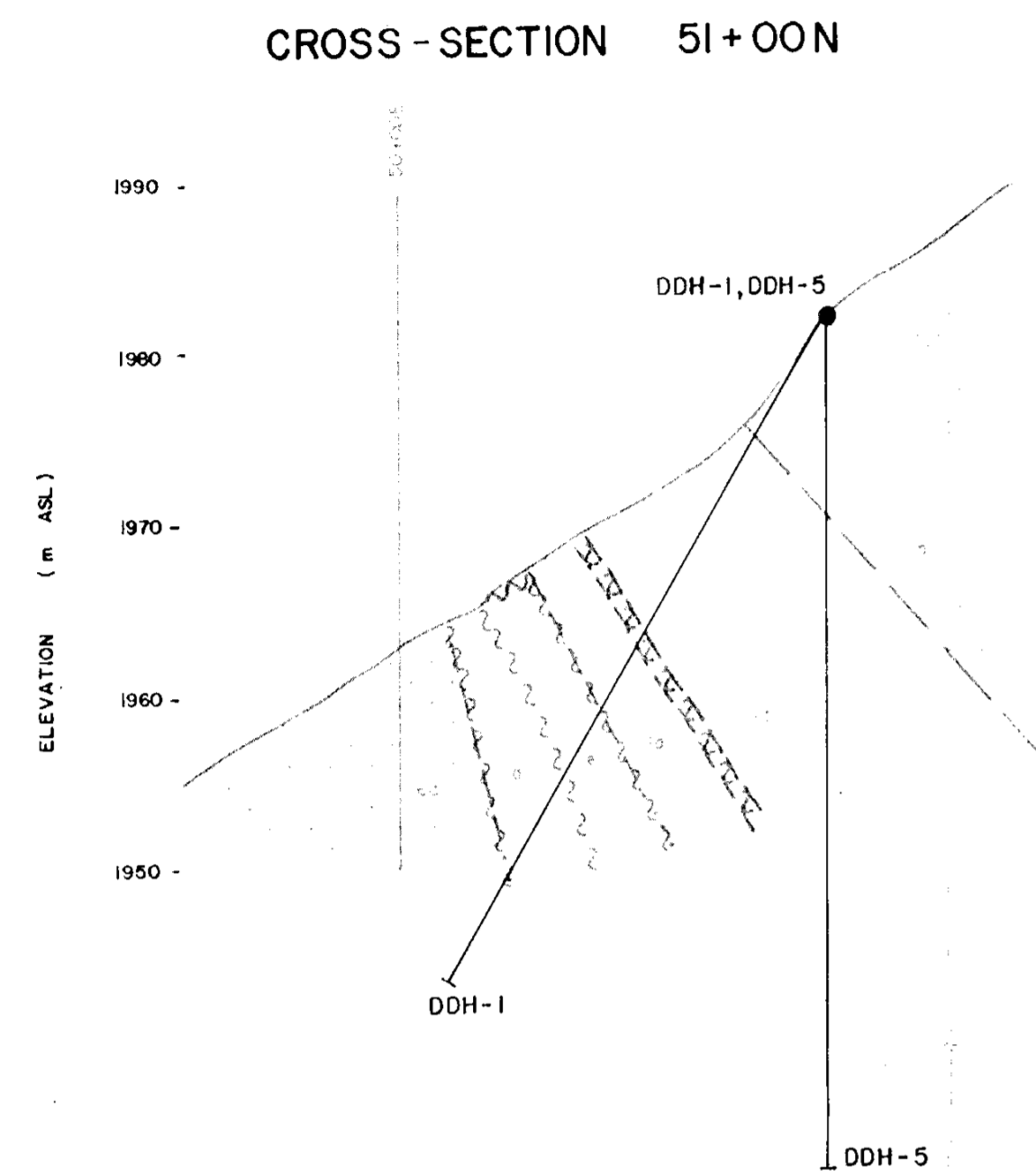
NTS 104M/10E  
ATLIN MINING DIVISION, BRITISH COLUMBIA  
SCALE 0 5 10 METRES  
TRIGG, WOOLLETT CONSULTING LTD.

Field Geologist: P.G. Lhotka

EDMONTON, ALBERTA

NOVEMBER, 1983

DWG. 3102-5



PLAN VIEW  
GOLD- AND COBALT-BEARING ZONES