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GEOLOGICAL AND
GEOCHEMICAL SAMPLING REPORT
on the
BERMA 1 to 9 Claims
Omineca/Skeena Mining Divisions
Latitude 54°50′ North
Longitude 128°38′ West
N.T.S. 103-I/15
British Columbia

October 15, 1991

on behalf of

SKEENA RESOURCES LIMITED
Vancouver, British Columbia
- and LEEWARD CAPITAL CORP.
Calgary, Alberta

by M.D. Jamieson, P.Geol. - and -C.H. Aussant, P.Geol.

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SESSMENT REPORT

ABSTRACT

The BERMA 1 to 9 mineral claims, located 32 km north of Terrace, British Columbia, are underlain by Upper Jurassic Bowser Lake sedimentary rocks intruded by Cretaceous to Eocene diorite to granodiorite to quartz monzonite.

Reported precious and base metal occurrences are in the Bowser Lake sedimentary rocks in the form of mineralized quartz veins or shear zones, generally parallel to subparallel to bedding. These occurrences appear controlled by a thrust sheet developed beneath a prominant conglomerate marker horizon. Scattered quartz veins and molybdenite occur in the quartz monzonite intrusions. This mineralization is hosted by porphyritic phases of these intrusives.

During July and September/October 1991, 16 and 15 man days respectively were spent on the property. This exploration program focused on a gold zone previously delineated near the BERMA 2 and 3 common corner post. During this initial program, a series of five trenches were completed, and a grid was established over the area on which geochemical and geophysical surveys were completed. Channel sampling was completed at five trench locations extending along a 350 m section of the shear zone. The analyses of these channel samples yielded values up to 0.30 oz/ton Au over 3.0 m. Interpretation of the soil geochemical and geophysical survey data indicates that the structure and gold mineralization continue to the east, beyond the grid area.

Based on the encouraging results from this initial program, a second-phase exploration program was completed on the property (September 29 to October 3). This program consisted of additional trenching and geochemical sampling of areas which yielded significant results from the initial program, as well as geological mapping, prospecting, and geochemical sampling of reported mineral occurrences on the BERMA 5 and 8 claims.

Investigation of the anomalous gold-in-soil sample site at L.3E 1+25N located a 0.5 m wide quartz vein in intensely sheared argillite, from which 0.111 oz/ton Au was obtained over 0.5 m.

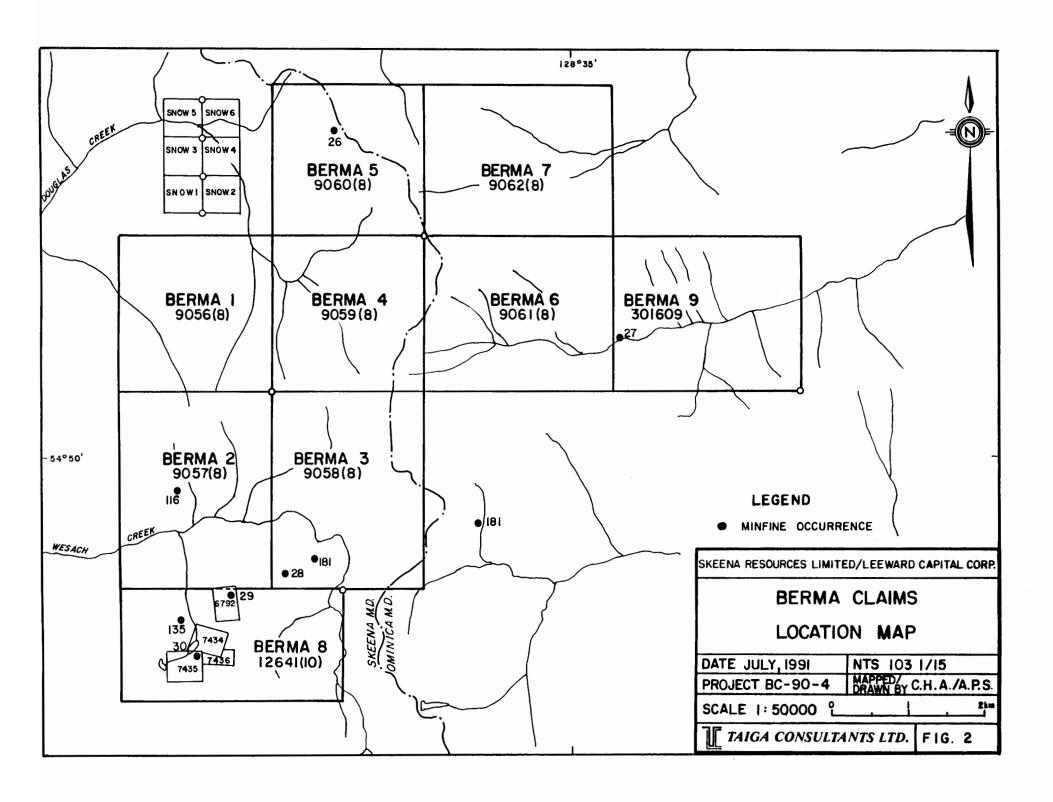
Based on the encouraging results at Trench #4, this trench was enlarged and resampled, and additional trenches were completed along this shear zone. Resampling of Trench #4 yielded 0.297 oz/ton Au over 4 m with Trench #5 (located 30 m to the northeast) yielding 0.203 oz/ton Au over 2 m.

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Claim Status

The BERMA group consists of the BERMA 1 to 9 modified-grid claims for a total of 196 units. Pertinent claim data are summarized in Table 1. The claims have been grouped, subsequent to the filing of this work, into two groups: the Berma East Group (BERMA 3, 6, 7, and 9 claims); and the Berma West Group (BERMA 1, 2, 4, and 8 claims). Assessment requirements are \$100/unit/year plus an assessment filing fee of \$5 per \$100 of work filed. With the acceptance of this report, the claims will be in good standing until 1992, with an excess credit of \$1,634.30; and the new anniversary date due to grouping will be August 5.

TABLE 1 - Claims Status

<u>Claim</u>		No.of <u>Units</u>		Date of <u>Record</u>		Current <u>Expiry</u>	·
BERMA BERMA BERMA BERMA BERMA BERMA BERMA BERMA	2 3 4 5 6 7 8	16 20 20 16 16 20 20 18 20	9056 9057 9058 9059 9060 9061 9062 9222 301609	Aug.5, 19 Aug.5, 19 Aug.5, 19 Aug.5, 19 Aug.5, 19 Aug.5, 19 Oct.3, 19 Jul.6, 19	990 990 990 990 990 990	Aug.5, Aug.5, Aug.5, Aug.5, Aug.5, Aug.5, Oct.3, Jul.6,	1991 1991 1991 1991 1991 1991
		196	units				

Physiography

Topography on the property is rugged with a maximum relief of 1175 m, ranging from 945 m at the east claim line of the BERMA 9 claim on South Lorne Creek, to the 2120 m mountain peak in the centre of the block.

Most of the property is above tree line (1370 m), the exception being the steep-sided creek valleys which are covered with coniferous forest. Outcrop is abundant due to the steep slopes, with good exposures of either outcrop or talus right to the tree line where lush vegetation covers most of the rock. Some outcrop is visible in the creeks, but at lower elevations, outcrop is rare.

GEOLOGY

The BERMA claims are underlain by Upper Jurassic Bowser Lake sedimentary rocks (argillite, greywacke, and conglomerate) intruded by Cretaceous to Eocene diorite to granodiorite. Some of the sediments have been altered to hornfels along the intrusive contact. Alteration of the granodiorite and quartz monzonite is minor and largely confined to chloritization of the mafic minerals.

Exploration in the 1920's and 1930's led to the discovery of a number of mineral showings on the BERMA 8 and the southern half of the BERMA 2 and 3 claims. Narrow quartz veins lie conformably below a 35 to 75 m wide conglomerate bed which strikes northeast and dips 50°-75°SE. The veins are mineralized with gold, galena, sphalerite, pyrite, pyrrhotite, and minor chalcopyrite.

The BERMA 5 and 7 claims are underlain by shale and greywacke altered to hornfels along the contact with an intrusive granodiorite and quartz monzonite sill. Exploration in the 1920's and early 1930's located scattered quartz veins with minor pyrite in the quartz monzonite intrusion as well as mineralized quartz veins and narrow siliceous shears within the sediments. Mineralization consists of galena, pyrite, chalcopyrite, and minor sphalerite in the quartz veins, and disseminated molybdenite near shear zones.

Molybdenite showings occur in both the host Bowser Lake sediments and the quartz monzonite to granodiorite intrusive on the BERMA 9 claim. The mineralization occurs primarily as fracture fillings and within quartz-vein stockwork.

HISTORY OF EXPLORATION

Douglas Creek, draining the northern part of the claims, has been the site of on-going placer operations since the mid- to late-1800's. Mineral exploration on the claims themselves was first conducted in the early 1920's and continued through to the early 1930's.

The following excerpt from Memoir 205 (1937) describes the work done on the properties where the BERMA 2, 3, and 8 claims are now located (Figure 3).

Bear Claim (MINFILE #29)

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References:
GSC Memoir: #205, pp.17-19; #32, pp.75-76
GSC Papers: #36-17, pp.25-27; #36-20, pp.44-47
EMPR Annual Reports: 1914, p.111; 1919, p.43; 1920, p.41; 1921, p.43; 1922, p.47; 1923, p.47; 1924, p.47; 1925, p.68; 1926, p.73; 1927, p.63; 1926, p.72; 1930, p.75; 1931, p.36; 1932, p.51
EMPR Bulletins: #2 (1932) pp.22,30; #10 (1943) p.58
GSC Summary Reports: 1922A, p.49; 1923A, pp.42-44
EMPR GEM 1970, p.97
GSC Maps: 11-1956, 36-17, 1136A, 278A, 1385A
EMPR Map: 8
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The Bear claim, owned by Matt Allard of Terrace, is situated on the west slope of Maroon Mountain about five miles due east of the north end of Kitsumgallum Lake. An excellent trail about six miles long leaves the lake about one mile south of Rosswood at Olanders Ranch, and leads to this property and others on Maroon Mountain. There are two log cabins at an elevation of about 4,300 feet just above timber line. In 1923, the claim was under bond to O.P. Brown of Seattle who operated a small Ross gold mill for a short time. It passed into the hands of the Chiro Mining Company in 1924, but nothing was done; and in 1925 the Hopper-Davis Syndicate took it over, drove a crosscut adit 143 feet long, and drifted 65 feet on a narrow gold-quartz vein. The prospect has since lain idle.

The Bear claim is underlain by slate and sandstone and a bed of conglomerate that ranges from 120 to 160 feet thick and increases northeast to 240 feet on the adjoining Gold Cap claim. The conglomerate is overlain and underlain by the slate and sandstone, striking northeast and dipping southeast at angles varying between 50° and 75°. Pebbles of quartzite, argillite, and granite are numerous in the conglomerate and average from 1 to 4 inches in diameter. The sediments belong to the Hazelton group of Jurassic age.

The quartz vein on the property is known at the Bear vein. It dips southeast at angles of 50° to 70° and lies in a shear zone that for the most part parallels the bedding of the slates and sandstones in which it is developed, but in places, cuts across the bedding planes at small angles for short distances. The vein lies to the west of and below the conglomerate bed.

An aplite dyke crosses and recrosses the Bear vein. It can be followed for more than 3,000 feet southwest to a small lake on the Black Wolf claim. It ranges from 4 feet wide near its ends to 12 feet wide along its central part.

The best outcrops of the Bear vein are a few feet above what is known as the upper adit. For about 50 feet, the vein maintains an average width of 3 feet. It consists of much pyrrhotite with sphalerite, chalcopyrite, pyrite, and galena in a quartz gangue. South from the adit, the vein narrows to 6 inches in a short distance, and within 200 feet it pinches out. Northeastward from the vein and aplite dyke intersection near the adit, the vein narrows and maintains an average width of less than one foot. About 700 feet to the northeast, an adit was driven south along the vein for 35 feet. For this distance, it ranges from 3 to 6 inches wide and is sparsely mineralized. A short distance farther southwest, the vein is exposed along the surface for over 100 feet and has widths up to 18 inches of white quartz, some of it honeycombed through oxidation of pyrite.

The upper tunnel, driven east 26 feet, intersects the vein about 15 feet below its outcrop. There is a drift 5 feet each way on the vein and a miniature stope extends to the surface. A sample taken from the north face of the drift by H.T. James in 1928 assayed: 1.26 oz/ton gold, 3.5 oz/ton silver, 6% lead, 4% zinc. A representative sample from the south drift collected last summer [1936] assayed 0.16 oz/ton gold and 0.64 oz/ton silver.

The lower adit, about 85 feet below the upper one, was driven 150 feet east to the vein and drifts run 25 feet south and 39 feet north. In the south face, the vein is only 4 inches wide; at the intersection of the crosscut adit and drift, 6 inches wide; and in the face of the north drift, 16 inches wide. A channel sample taken by the writer at the widest point in the face, across 16 inches, assayed: 1.36 oz/ton gold, 1.77 oz/ton silver. A sample taken by H.T. James in 1927 across the same face assayed: 0.80 oz/ton gold, 1.2 oz/ton silver, 0.4% lead, 5% zinc. The vein in this end of the drift is heavily mineralized with a fine impregnation of pyrrhotite and black sphalerite, with small amounts of chalcopyrite and galena in a quartz gangue.

The northeastern continuation of the Bear vein is on the Gold Cap claim.

Gold Cap Claim (MINFILE #28)

Reference:

EMPR Annual Report: 1930, p.76

The Gold Cap claim, owned by J. Carruthers of Terrace, is on the west slope of Maroon Mountain about $5\frac{1}{2}$ miles east of the north end of Kitsumgallum Lake. It adjoins to the northeast of the Bear claim, and is reached by way of the Maroon Mountain trail to the Bear claim from Rosswood.

The Bear vein continues northeast into the Gold Cap claim and has been exposed by trenching for about 300 feet beyond the Bear claim. It ranges from 2 to 6 inches wide and follows fairly closely the bedding plane of a narrow seam of soft, black, carbonaceous shale with overlying, impure sandstone. The vein is of quartz, in places heavily stained and honeycombed by the leaching out of pyrite. An unoxidized sample containing a little pyrite and galena, weighing one pound and 13 ounces, assayed: 0.06 oz/ton gold, 0.54 oz/ton silver. Four hundred feet farther northeast, a number of pits trace a similar vein for 100 feet. About 50 feet east of the pits is an altered, brown weathering dyke similar to one on the Guld claim. It is cut by a stockwork of reticulating quartz veinlets about one inch wide. An assay of similar quartz veinlets taken from the dyke on the Guld claim showed a trace of silver and no gold.

Guld Claim (MINFILE #181)

Reference:

EMPR Annual Report: 1930, p.76

The Guld claim, formerly known as the Alice, adjoins the northeast boundary of the Gold Cap claim and is reached by way of the Maroon Mountain trail from Rosswood. Oscar Olander of Rosswood is the owner.

The conglomerate horizon from the Bear and Gold Cap claims extends onto the Guld claim, continues northeast for 600 feet, and then swings north and may be followed down the valley slope to where it crosses Hall Creek. Close to the line between the Guld and Gold Cap claims is a quartz vein in a sheared zone in the conglomerate. It is 18 inches wide and 20 feet long, strikes N30°E, and dips 65°W. 500 feet to the northeast, a pit has been sunk on an altered, brown weathering dyke that is cut by a stockwork of quartz veinlets of one inch average width. A sample weighing one pound and 11 ounces, taken by breaking off quartz chips from a large number of the quartz veinlets, assayed only a trace of silver and no gold.

About 150 feet farther northeast, a deep pit has been sunk at the contact of an aplite dyke intrusive into black slates. Several small quartz stringers lie along the contact and in the slate. About 200 feet farther northeast and farther down the slope, two other pits expose small quartz stringers in black slates. A short distance west of these pits, the aplite dyke is intersected and cut by the brown weathering dyke.

Black Wolf Group (MINFILE #30)

References:

EMPR Annual Reports: 1921, p.43; 1924, p.47; 1925, p.68; 1926, p.72; 1927, p.64; 1928, p.73; 1930, p.74

The Black Wolf claims are situated on the west slope of Maroon Mountain between elevations of 4500 and 4900 feet, about $4\frac{1}{2}$ miles due east of the north end of Kitsumgallum Lake. The main Maroon Mountain trail from Rosswood crosses the claims and passes close to the workings. The claims were first staked in 1921, and in 1924, passed into the hands of the Black Wolf Mining Company of Seattle. In 1925, a 70-foot adit was driven along a narrow gold quartz vein and 300 sacks of ore were packed down to Kitsumgallum Lake. In 1928, some 25 tons of ore was taken from an adit driven along a vein in conglomerate. Nothing has been done in recent years.

The geology is essentially the same as that on the Bear claim. The conglomerate band continues south across the Hawk, Hall Fraction, and Black Wolf No.1 claims. Over this distance, the average dip to the east changes from 55° on the Bear to 15° on the Black Wolf claims. Quartz veins occur parallel to the bedding in the underlying argillaceous sandstones and slates about 50 feet below the conglomerate horizon, and one vein occurs in a fracture cutting diagonally across the conglomerate.

The vein in the conglomerate crops out high up on a rock bluff. It strikes easterly and dips 40°N. The walls of the vein are slickensided and the striations plunge at 20°E. Where an adit 50 feet long has been driven on the vein, the vein is well mineralized with pyrite, sphalerite, galena, and chalcopyrite, and maintains an average width of 12 inches. Below the adit, the vein may be followed along the rock bluff for about 50 feet in the conglomerate, and in places is 2 feet wide. Above the adit, it is quite narrow and may be seen to pinch out in 50 feet. A sample one-foot long taken across the vein in the face of the tunnel, by the resident engineer in 1927, assayed: 1.06 oz/ton gold, 2 oz/ton silver, 1% lead, 5% zinc.

Two hundred feet east of the small lake on the Black Wolf No.1 claim, a 70-foot adit was driven along a nearly horizontal quartz vein that crops out party way up a rock bluff. At the entrance, the vein strikes S60°E and dips 5°NE. It has a maximum width of 10 inches

and narrows gradually to 4 inches in about 30 feet in both directions along its strike. At the face in the adit, the vein has a width of 4 to 6 inches, but the dip increases suddenly to 30°NE. A channel sample taken by the writer 30 feet from the adit entrance on the north wall across 7 inches of vein quartz, assayed: 0.06 oz/ton gold, 0.22 oz/ton silver. The sample contained no sulphides, although in places the vein is sparingly mineralized with pyrite. Two hundred feet north of the adit is another quartz vein similar to the one just described. It lies just above a talus slope near the foot of the bluff, and has not been prospected. The strike is S40°E and the dip 20°NE. It ranges from 4 to 8 inches wide and is exposed for 100 feet. 300 feet farther north, an adit 30 feet long has been driven northeast on a 4-inch quartz vein that narrows to a mere stringer parallel to the bedding near the end of the adit.

On the northeast bank and close to the outlet of the small lake on the Black Wolf 1 claim, a trench crosses an altered, silicified, and mineralized aplite dyke. The dyke is $3\frac{1}{2}$ feet wide, strikes north and dips $35^{\circ}E$. It has been sheared, impregnated with finely crystalline quartz, and mineralized with pyrite. A 41-inch channel sample taken across the dyke at the trench assayed on a trace in gold and silver. The dyke has been followed north across the Hall Fraction claim by a number of trenches. A representative grab sample of the altered rock was taken on the latter claim from a deep open cut 640 feet north of the lake on the north side of a small creek. The sample weighed about 2 pounds and was cut by numerous quartz stringers and veined with fine pyrite. It assayed 0.02 oz/ton gold and a trace of silver. Eight hundred feet north of the lake, the dyke increases in width to 8 feet and no longer shows any minerals. It continues north across the Hawk and Bear claims.

Other known occurrences in this area include the Goat (MINFILE #135) and the Marmot (MINFILE #16), located north of Wesach Creek.

Goat (MINFILE #135)

References:

EMPR Annual Report: 1926, p.A73

The seven claims comprising this group (Goat, Kid, O.K. fraction, Buck, P.M., He, and She) are owned by G.F. Monckton of Terrace and associates. The claims are situated at about 4,500 feet elevation on the south side of Hall Creek and just west of the Black Bear group. The showing is a small quartz seam from 2 to 6 inches thick bedded with the argillite country rock. It has been exposed along the face of the bluff for 100 feet or more. The quartz carries some galena and zinc-blende, but on account of its size and the limited length which it has been exposed, it cannot be considered very prom-

ising. Similar showings have been found at different places on the claims, but do not give much evidence of enlarging to importance.

Marmot (MINFILE #16)

References:

EMPR Annual Report: 1928, p.C73

This group of two claims (Marmot and Sunlight), owned by A. Egan and partners of Rosswood, is situated at about 3900 feet elevation on the south side of Goat Mountain, on the opposite side of Hall Creek from the Black Bear group. It is reached by a trail up Hall Creek or by a branch trail from Douglas Creek.

The principal workigns are on a bedded vein in argillites immediately east of a deep gulch cutting into Goat Mountain. The vein strikes N75°E (mag.) and dips north into the hill at 35° to 40°. It ranges in width from 1 inch to 12 feet, and consists of quartz with small amounts of galena, sphalerite, pyrite, and chalcopyrite. A tunnel has been driven easterly along the vein from the gulch, where the vein has pinched down to a clay seam. The first 40 feet of the tunnel is along the strike of the vein, and the remaining 60 feet was driven in a N8°E direction, in an attempt to pick up the hanging wall. So far, however, there seems to be no definite hanging wall, for the wallrock contains a number of barren quartz streaks to the face of the tunnel. Nothing but barren quartz has been found underground, but it is probable that better material would have been found if the tunnel had been continued on its original course a short distance farther, for the vein contains sulphides in the vicinity of a shallow shaft a little farther along the vein.

West from the tunnel, across the gulch, and in the same horizon as the main vein, is a narrow vein, undoubtedly the continuation of the main vein. On the hillside west of the next gulch, a vein up to 3 feet wide crops out at intervals for a few hundred feet. Nothing has been done on this vein.

One of the owners obtained fair values in gold from some slightly oxidized material on the shoulder of Goat Mountain. I took two samples in the same locality, one from a large slightly sheared granodiorite dyke and one from the adjoining argillites. The first contained neither silver nor gold and the second contains a trace of gold and 0.2 oz/ton silver.

In 1932, an Ag/Pb/Cu/Au/Zn/Mo occurrence on the BERMA 5 claim assayed 20.6 g/t Au, 103 g/t Ag, and 3% Pb over a one-metre sample across a quartz vein (Bermaline showing; Minfile 103I-026). The vein has been traced for 425 feet

and strikes 295°; the dip ranges from vertical to 45°NE. It is up to 4 feet wide and carries up to 15% sulphides. A chip sample across the vein assayed 108 g/t Ag, 2.1 g/t Au, 4.4% Cu, 9.06% Pb, ad 0.4% Zn (GSC Memoir 212, 1937). The vein narrows to 6 inches about 300 feet to the northwest. Several other quartz veins in this area were sampled; assay values were generally low.

In 1980, Falconbridge Nickel Mines staked the Frankie Blue claim in this area, and conducted a three-day program consisting of stream sediment, rock, and soil geochemical sampling (Cu, Pb, Zn, Mo, Ag, Mn, F). Results were low to weakly anomalous, and no further work was done.

The area of the BERMA 6 and 9 claims was first staked by Amax Explorations in 1967. Four men spent a month on the claims conducting soil sampling and geological mapping. Old claim posts indicate the property was staked by R.Woodcock in 1971, but no assessment reports were filed for either of these programs.

In 1979, Newmont Exploration staked the SLC 1 to 4 eight-unit claims and undertook a program of rock, soil, and silt sampling, geological mapping, and diamond drilling. The diamond drill holes were to test observed showings and geochemically anomalous zones of molybdenum. The mineralization occurs primarily as fracture filling within the intrusive and sedimentary units, and within a quartz vein stockwork. The core was analyzed for Mo, Cu, Zn, Pb, and Ag, with largely negligible results.

A reconnaissance stream silt sampling survey completed by Skeena Resources Limited in 1990 yielded elevated to anomalous results (16 to 180 ppb Au) from numerous creeks draining the BERMA claims area.

EXPLORATION MODEL

Any exploration model proposed for the gold mineralization found in the southern part of the BERMA claims must take into consideration the following facts:

- 1. the mineralization is stratabound, located stratigraphically below a prominent conglomerate marker horizon
- 2. in outcrop-scale, mapping of the mineralization shows it to be controlled by a bedding plane shear or shears
- 3. the mineralization has a great areal extent, in that occurrences within this stratigraphic horizon extend continuously for kilometres
- 4. various penecontemporaneous dykes appear parallel to subparallel to the mineralized zone and locally cross-cut the mineralization
- 5. the mineralization is locally offset by north trending faults
- 6. the axes of folds in the area trend east-west
- 7. an east-west trending thrust fault is mapped immediately north of Wesach Creek
- 8. gold mineralization is hosted by sheared quartz veins or dykes, or by the sheared argillite

The best model to explain all of the above observations is that the gold mineralization is related to a major folded thrust fault which has been mineralized and intruded by sills. The north-south faults which affect this mineralization are viewed as tear faults. Gold occurrences and showings related to the thrust located just beneath the resistant conglomerate unit can be traced for a minimum distance of 10 km, extending from the Marmot showing to the Berma and beyond to the Scenic showing south of the current property.

The thrust fault has been cut through by erosion along the east-west trending anticline along Wesach Creek, exposing mineralization on either side of the valley and toward the east where the fold plunges. Because of the highly resistant nature of the conglomerate unit, this erosion has resulted in the inversion of the topography, i.e., the axis of the anticline being a valley with the paired synclines being located in the upland.

The ultimate source of mineralization would be one or more of the porphyry intrusives known in this area. The intersection of mineralized fluids with the overlying thrust sheet allowed the migration of these fluids along the thrust plane over a considerable distance. The presence of multiple mineralized zones would indicate that there may be several fault planes in close proximity within this stratabound interval. In addition, felsic sills would be injected along these faults, which would account for the observed dyke association both during and after the mineralizing event.

The implications of this ore deposit model are that there exists a very large area of potential gold mineralization. In addition, given the stratigraphic location of this mineralization with regard to a prominent stratigraphic marker unit (i.e., the conglomerate), following the trend of this mineralized trend should not be difficult.

1991 EXPLORATION PROGRAM

The 1991 property exploration consisted of a phased program. The first phase consisted of a total of 16 man days from July 4 to 7 inclusive. The focus of this exploration was a gold zone previously delineated near the corner post of the BERMA 2 and 3 claims. During this initial program, a series of five trenches were channel sampled, and a grid was established over the area on which soil geochemical and geophysical (VLF-EM and magnetometer) surveys were completed. Other exploration consisted of reconnaissance prospecting and lithogeochemical sampling of selected reported mineral occurrences.

Based partly on the results from this initial program, a second phase exploration program was completed, consisting of a total of 15 man days (September 29 to October 3). This work included additional trenching and lithogeochemical sampling of areas which yielded encouraging results from the first phase, as well as geological mapping, prospecting, and lithogeochemical sampling of reported mineral occurrences on the BERMA 5 and 8 claims.

A total of 100 soil, 11 silt, 45 rock, and 26 core samples were collected during the first phase of exploration, and 82 rock samples were collected during Phase II. These samples were forwarded to TerraMin Research Labs in Calgary, Alberta for Au, Ag, Cu, Pb, and Zn analyses. Sample locations are shown on the accompanying maps; rock sample descriptions, analytical results, and laboratory procedures are presented in the Appendix.

Grid Emplacement and Surveying

A flag-and-compass grid was emplaced to cover the strike extension of the mineralized quartz vein system located on the BERMA 2, 3, and 8 claims. Soil sampling and geophysical (VLF-EM and magnetometer) surveys were completed along the grid lines.

The grid consisted of a 500 m baseline with 100 m spaced crosslines (total 2.4 km). Soil smaples were collected at 25 m intervals; VLF-EM readings were

taken at 25 m intervals; magnetometer readings were taken at 12.5 m intervals. A VLF-EM-16 unit (transmitting station: Marlyand) was used to complete the VLF survey, and all readings taken during the magnetometer survey were corrected to a common datum.

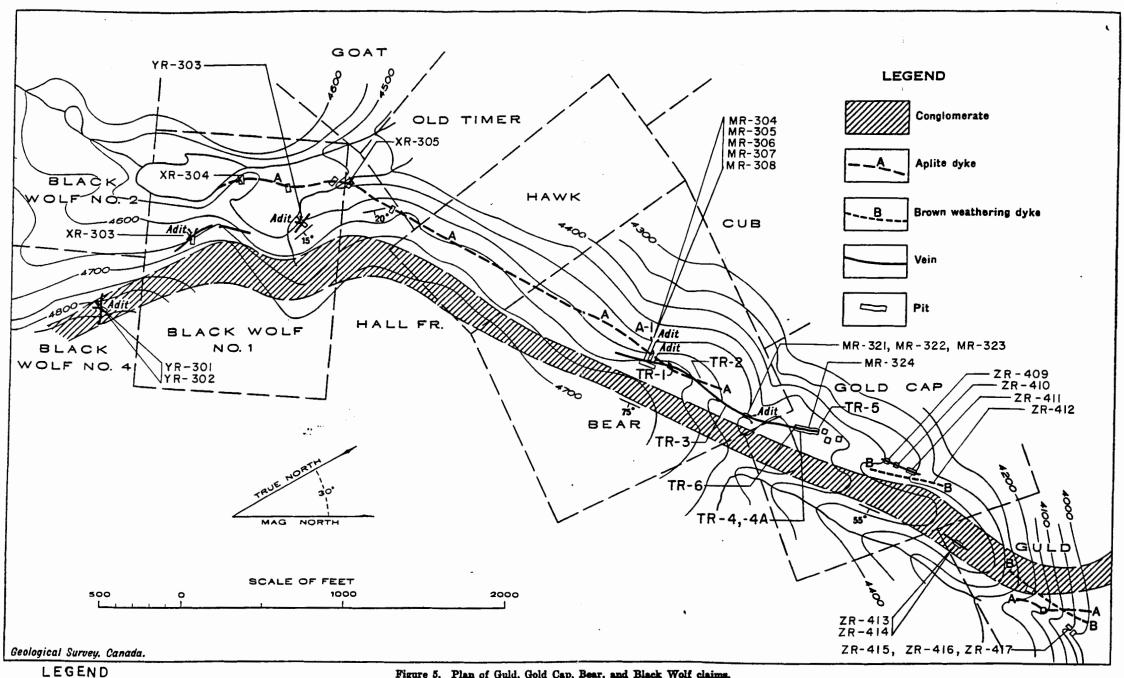
Magnetic and VLF-EM survey results only indirectly add in defining the mineralized shear system (Maps 6, 7, 8). While there is no direct correspondence with the main structure, magnetic and EM trends parallel this structure towards both the north and the south. These parallel trends probably correspond to formational conductors (graphitic argillite) or weakly mineralized zones which have a strong geophysical signature.

Soil sampling has led to the delineation of several anomalous trends. Gold-in-soil results give expression to a moderate anomaly extending from the vicinity of Trench T-4 toward the northeast (Map 9). No significant silver anomalies were detected (Map 10). Only a few anomalous values for copper (>100 ppm) were delineated in the central part of the grid area (Map 11). Anomalous lead (>50 ppm) values appear to outline the main mineralized structure very well, extending from Trench T-1 to Trench T-4 (Map 12). A single high zinc value (>500 ppm) was delineated in the vicinity of trench T-3 (Map 13).

The anomalous gold-in-soil sample site located on L.3E 1+25N was investigated as part of the Phase II program. A small outcrop of sheared argillite occurs at the sample site. Extensive prospecting in the area located a 0.5 m wide quartz vein in intensely sheared argillite at L.2+71E 1+18N (samples ZR-401 to ZR-408). A 0.5 m chip sample across the vein yielded up to 3800 ppb (0.111 oz/ton) Au with a selected grab sample yielding 20,000 ppb (0.583 oz/ton) Au. Samples collected of the adjacent sheared argillite yielded negligible results.

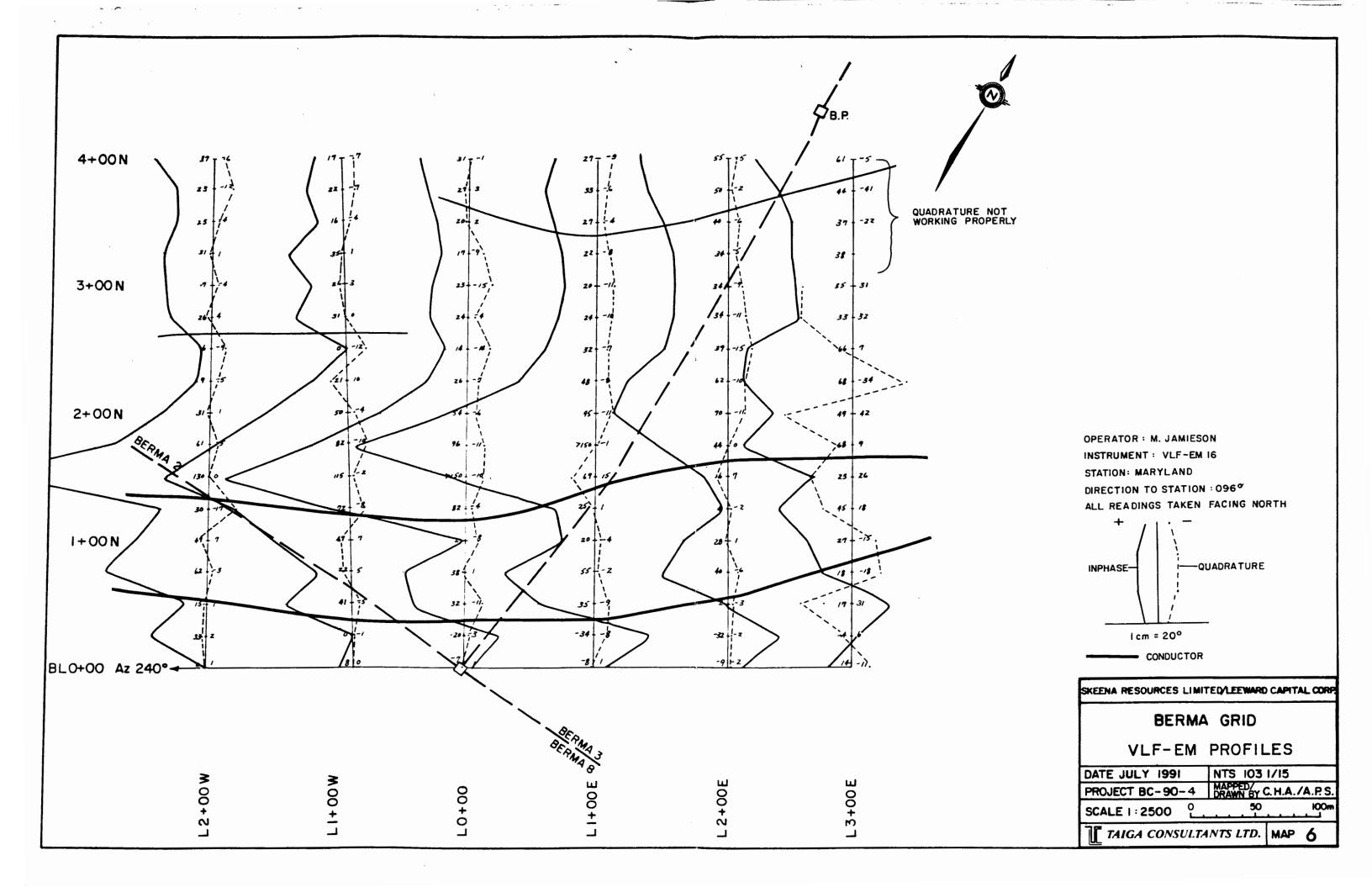
Lithogeochemical Sampling

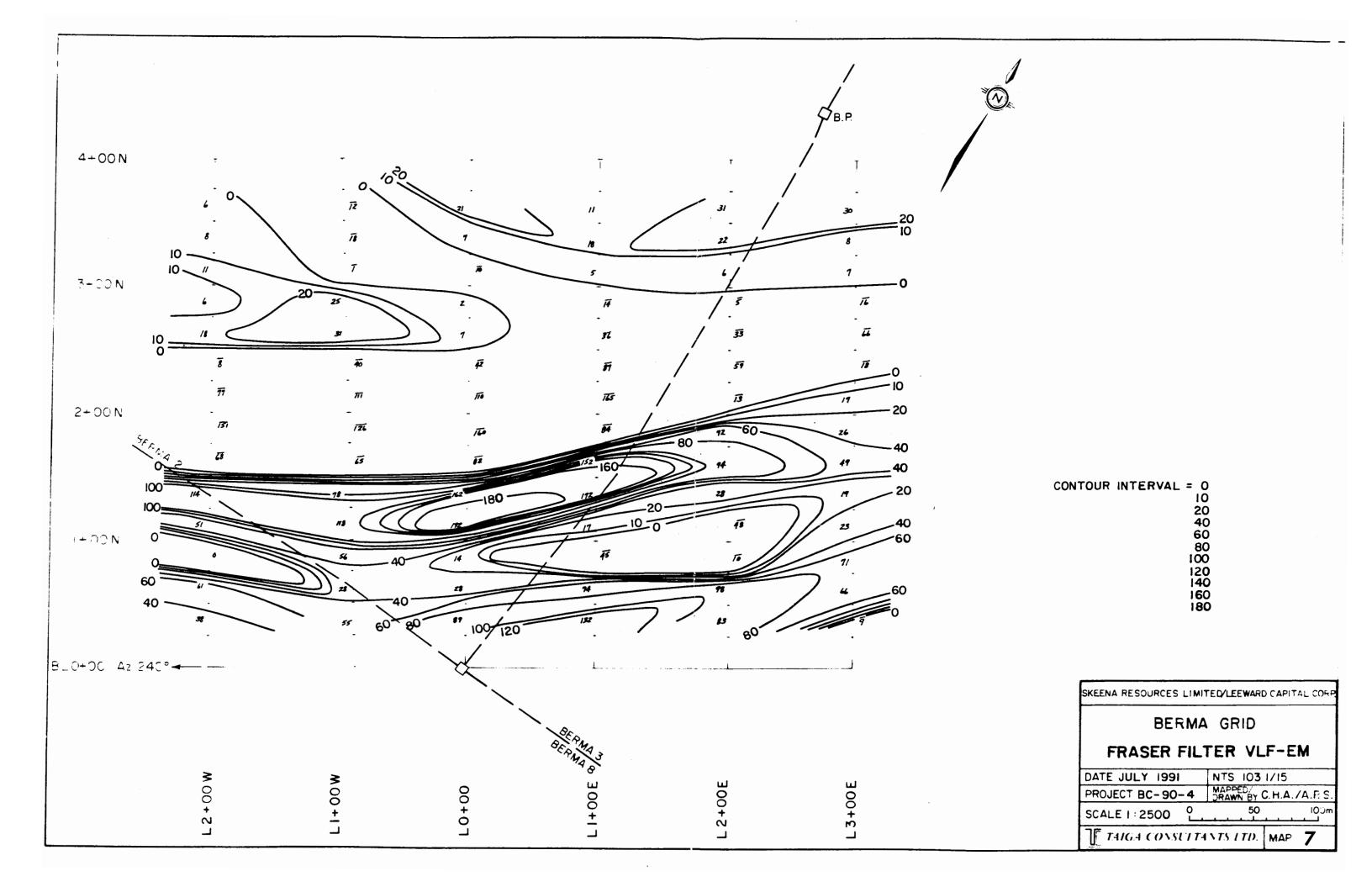
A brief investigation of the old workings on the BERMA 8 claim, located near the BERMA 2 and 3 corner post, was completed in October 1990. A total of

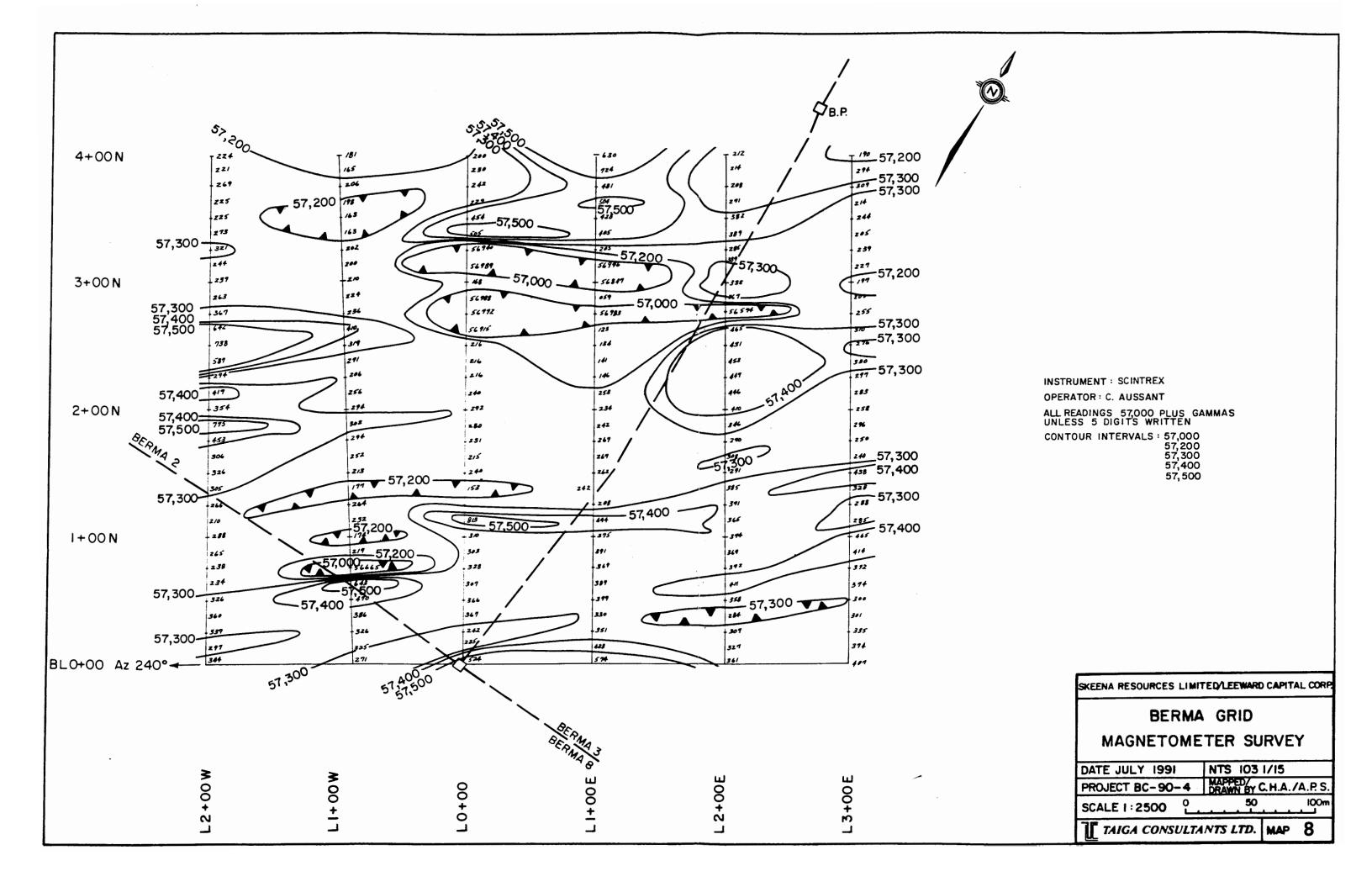


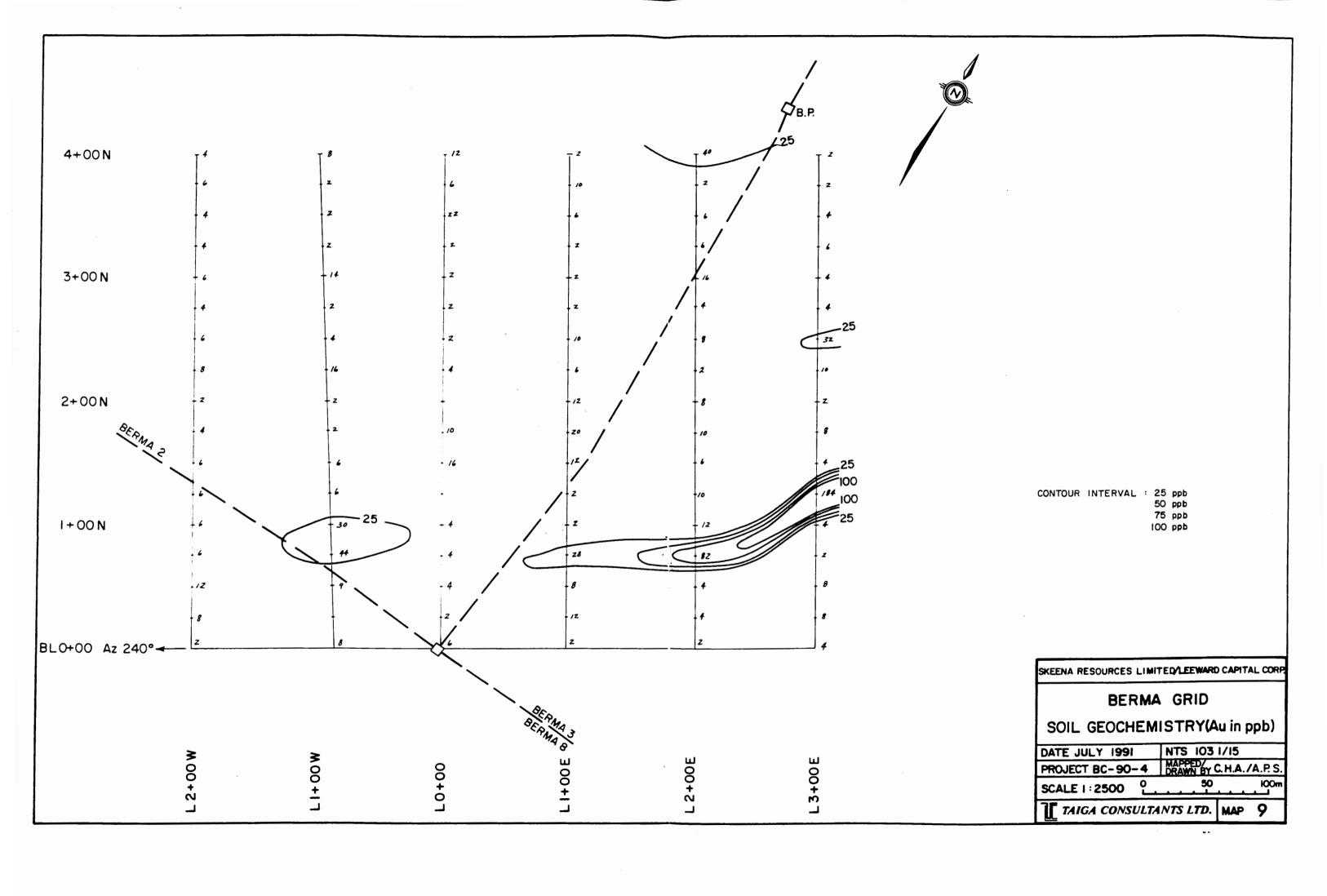
YR->LOCATION '90,'91 ROCK SAMPLES TR-I -TRENCH LOCATIONS

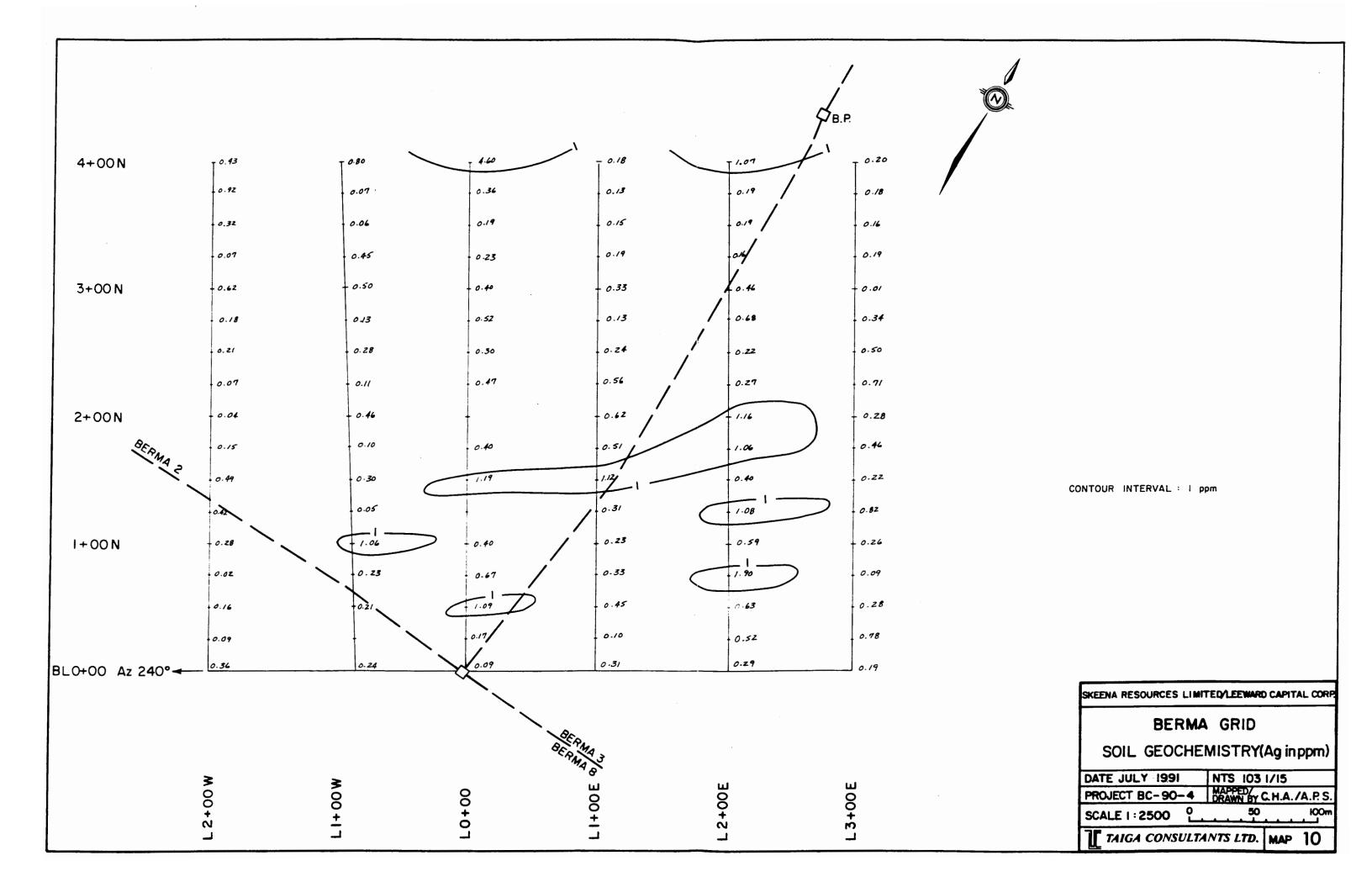
Figure 5. Plan of Guld, Gold Cap, Bear, and Black Wolf claims.

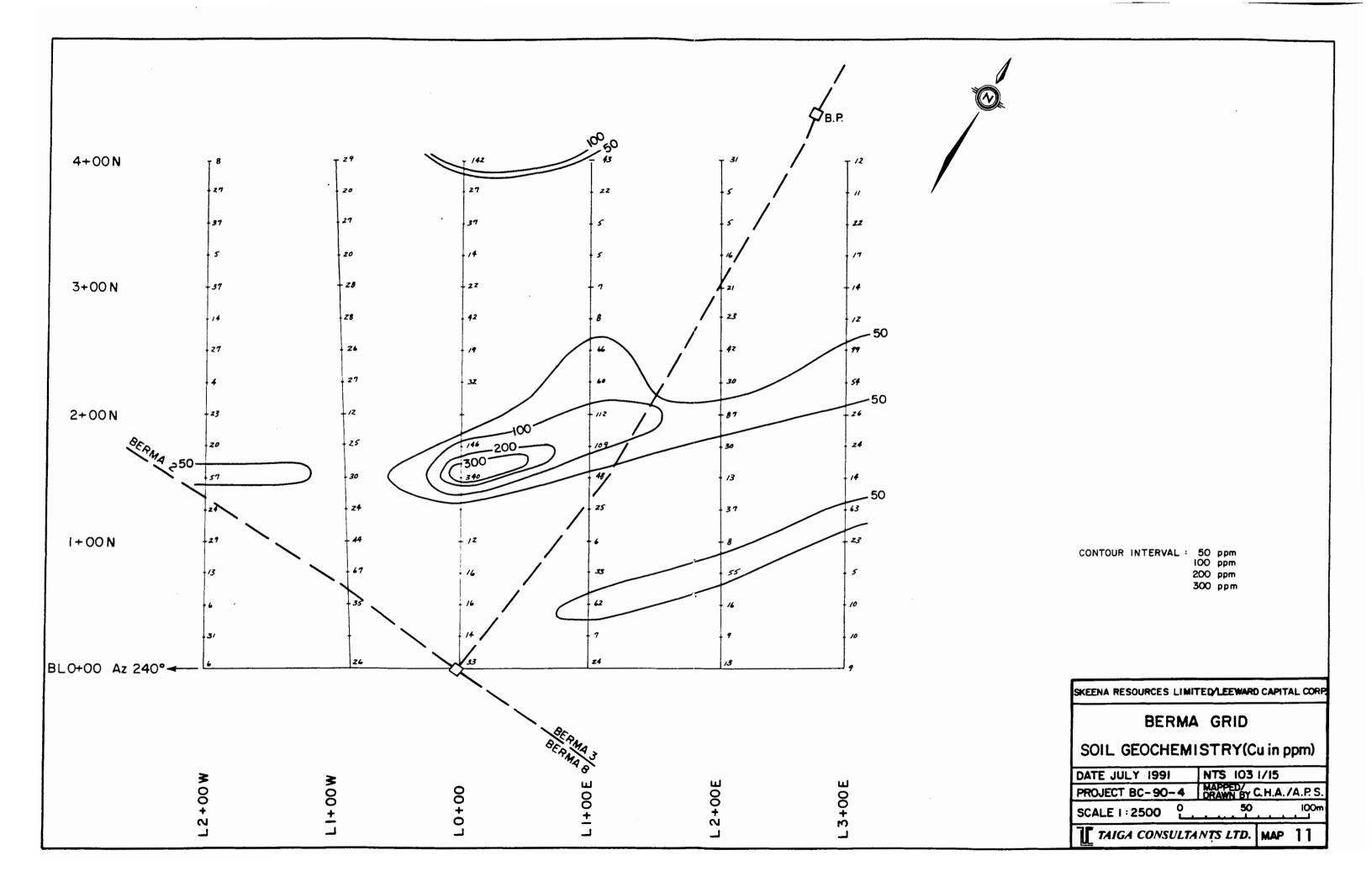


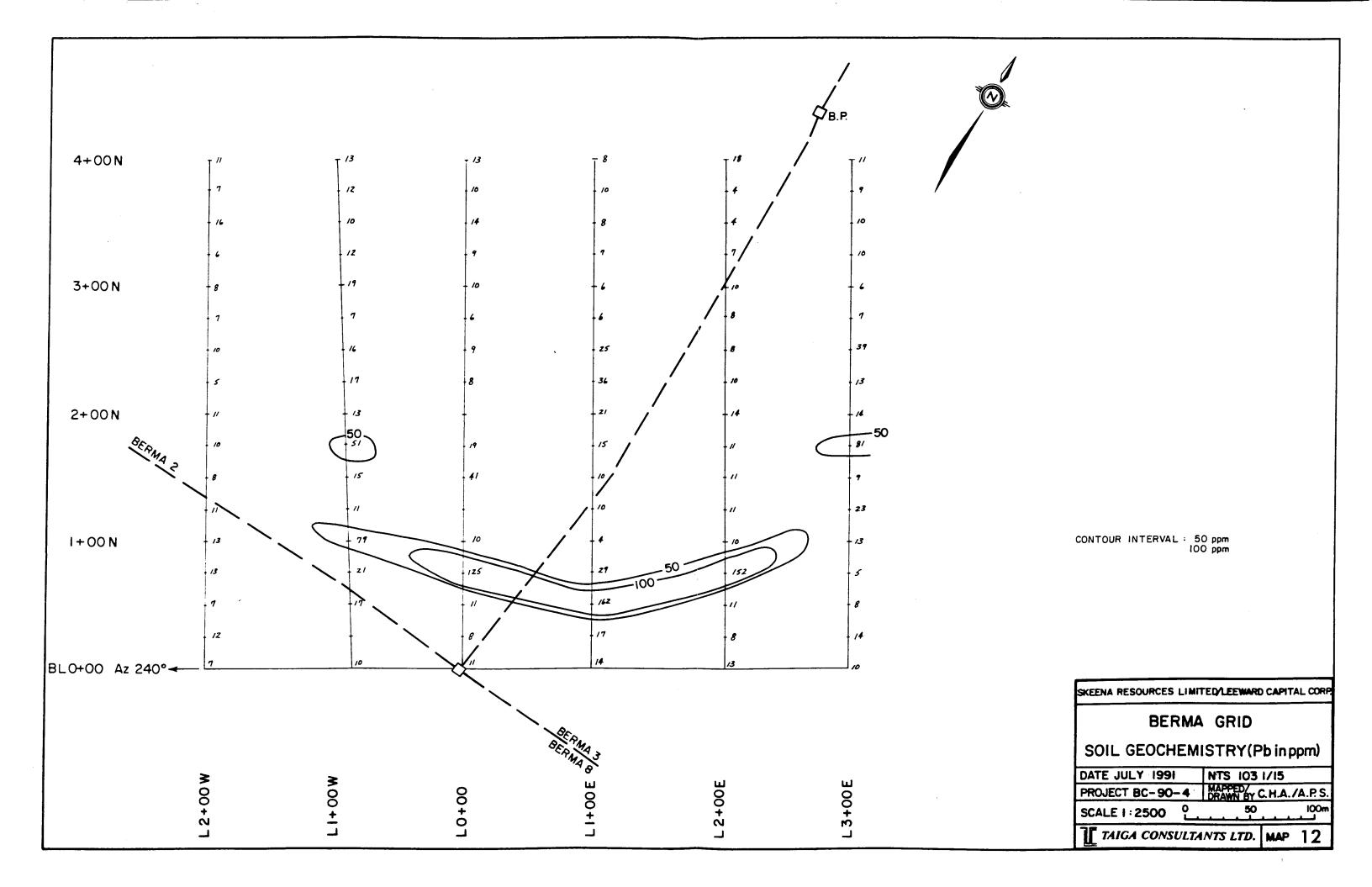


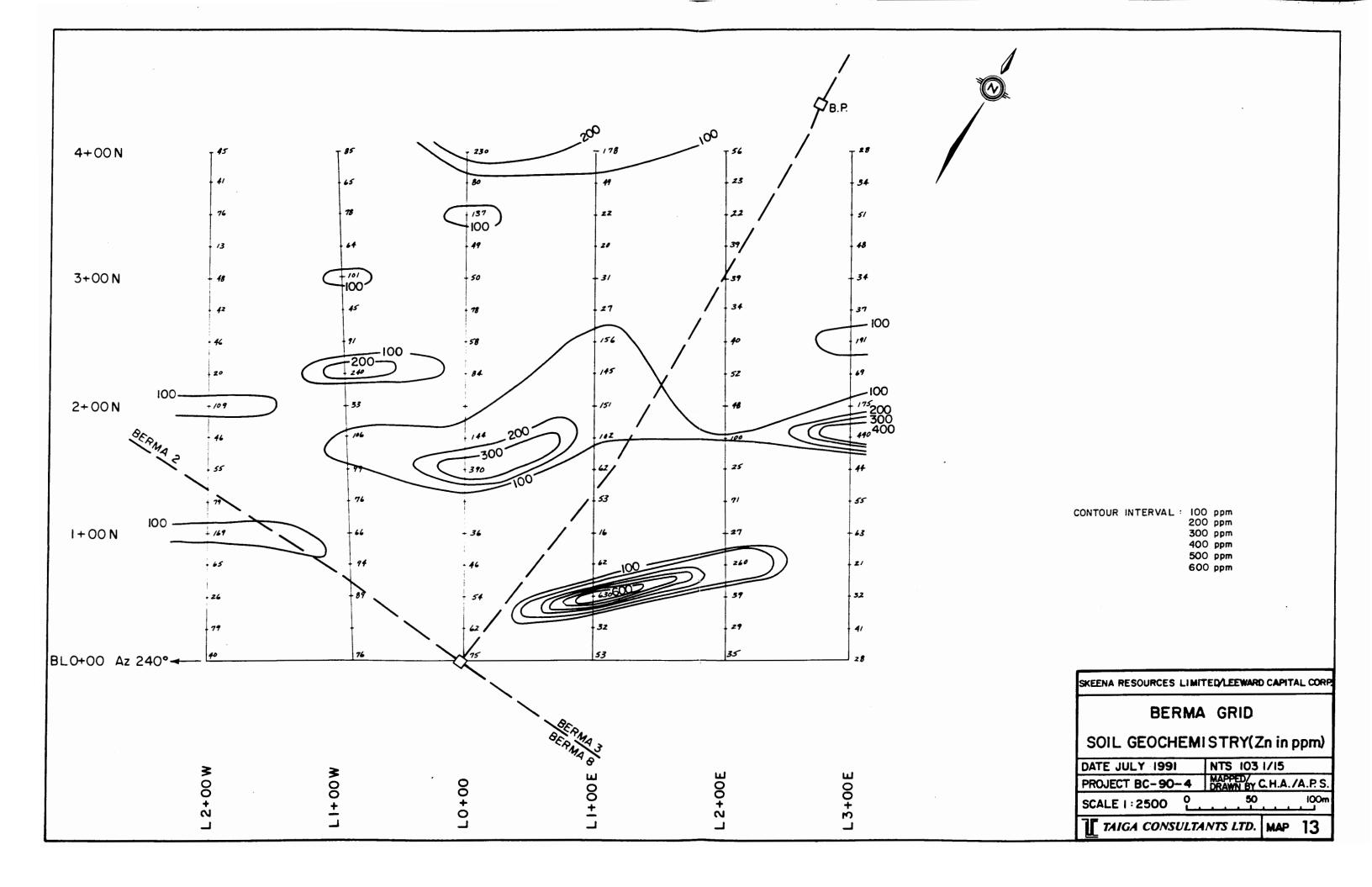












16 samples (DR-10,11; MR-300 to 309; MR-321 to 326) were collected and yielded significant gold values.

Based on these encouraging results, channel sampling was completed at five trench locations along this shear/quartz vein system (Maps 3 and 14; Figure 3).

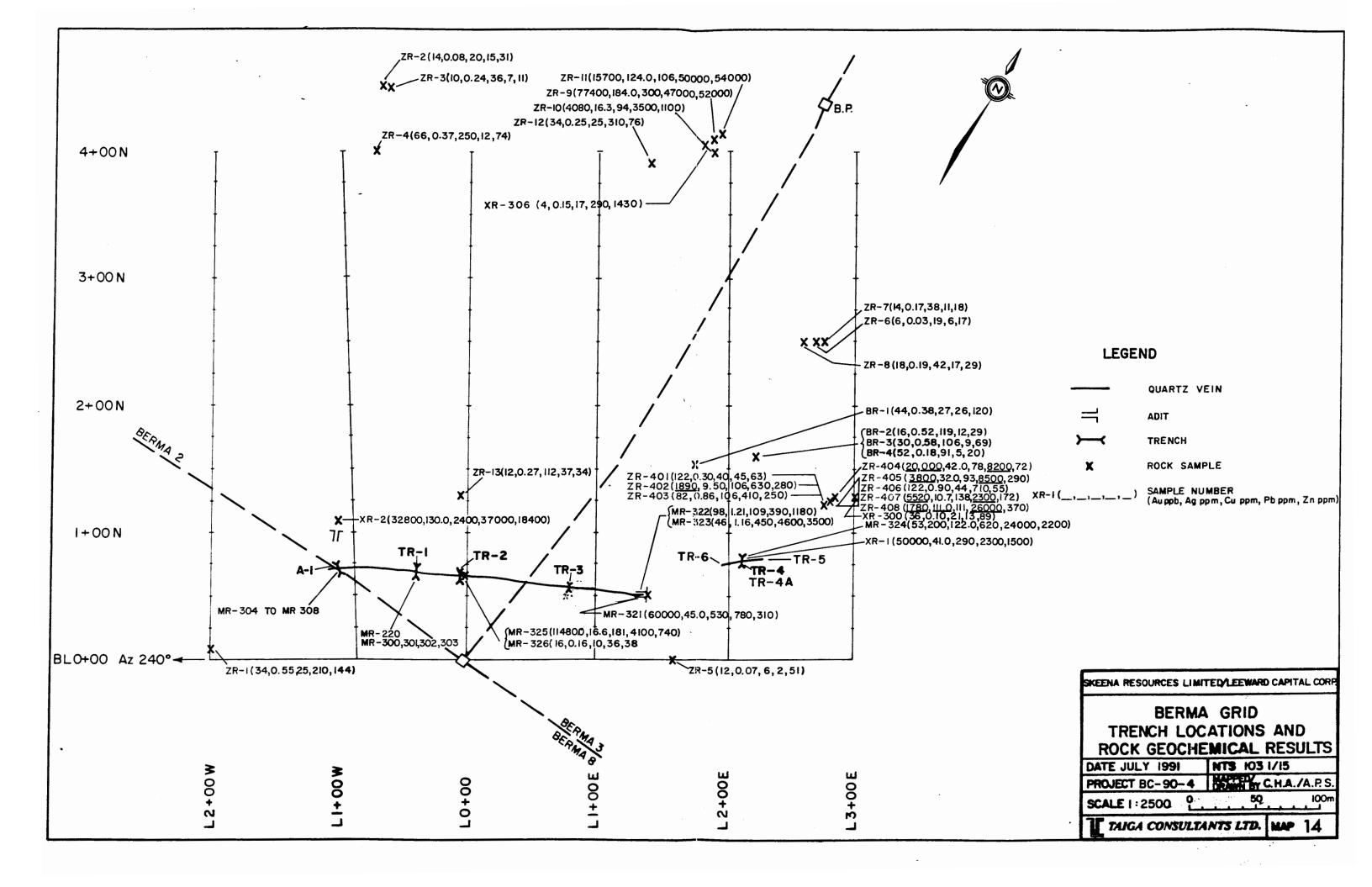
The vein system is exposed over a strike length of 350 m, striking 60°-70°, and dipping across the foliation at 50°-80°S, parallel to subparallel to bedding. Folations in the argillite strike 74°-84°, dipping 55°-60°N. The vein width ranges from 0.5 m to 2.0 m. The veining is disrupted by a felsic dyke; wherever the dyke crosses the veining, folding of the veins and concentrations of sulphides (galena, sphalerite, pyrite, chalcopyrite) occur.

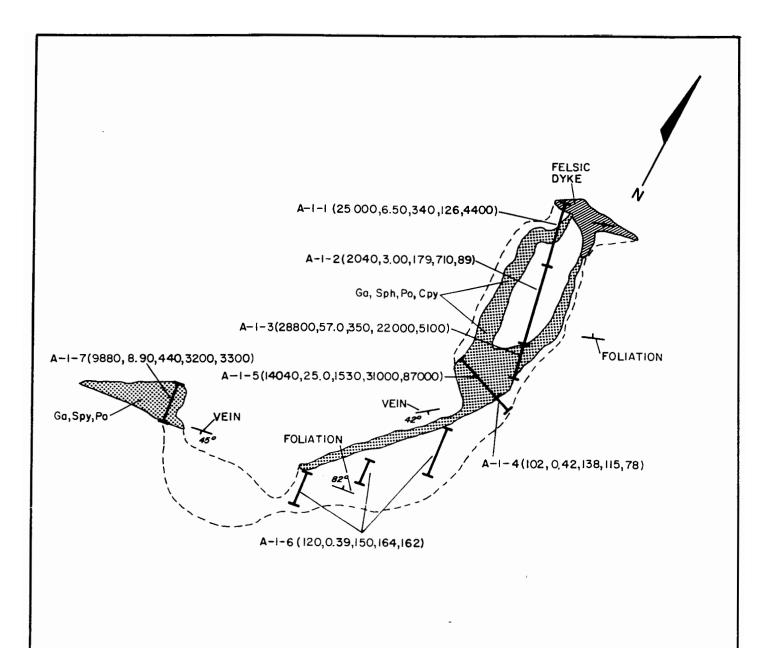
Rock-saw channel cuts were sampled across the mineralization in five separate locations along the length of the shear system. Samples were collected of the quartz veining and the surrounding sheared argillite, to determine if the mineralization is confined to the quartz vein or also occurs in the wallrock. The results of this channel sampling (Figures 4 to 8) are as follows:

<u>Trench</u>	<u>Width</u>	Au oz/ton	Ag oz/ton
A-1	0.7 m	0.42	0.74
T-1	1.5 m	0.25	0.49
T-2	0.5 m	0.37	1.19
T-3	< no s	significant resu	ults >
T-4	3.0 m	0.30	0.26

The mineralization in trenches A-1 and T-2 appears confined to the quartz vein while in trenches T-1 and especially T-4 occurs in both the quartz veining and in sheared graphitic argillite.

Based on the encouraging results at T-4, this trench was enlarged (T-4A) and re-sampled. New trenches were also completed: T-5 30 m east and T-6 40 m west (Figure 9). Trench T-4A yielded 0.279 oz/ton Au over 4 m, and trench T-5 yielded 0.203 oz/ton Au over 2 m. This shear was either not located by trench T-6 or the shear dies out prior to reaching T-6. A 0.6 m quartz vein was located at T-6 where the surrounding argillites are relatively undeformed by shearing.





DIP AND STRIKE

VERTICAL DIP

QUARTZ VEIN

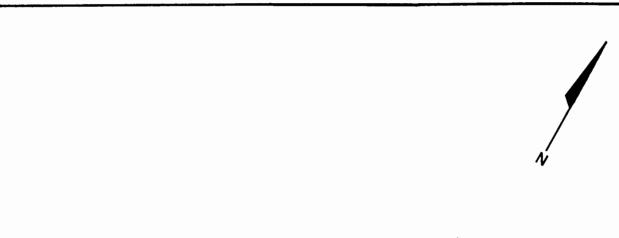
FELSIC DYKE

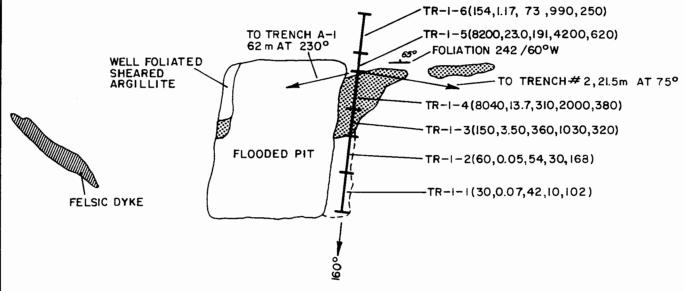
ARGILLITE

A-1-6 SAMPLE SITE AND SAMPLE NUMBER (Au ppb, Ag ppm, Cu ppm, Pb ppm, Zn ppm)

(EXPOSURES

BERMA CLAIMS A-I TRENCH DATE JULY 1991 NTS 103 1/15 PROJECT BC-90-4 MAPPED/DRAWN BYC. H.A./A. P. S. SCALE 1: 50 2 2m TAIGA CONSULTANTS LTD. FIG. 4





DIP AND STRIKE

VERTICAL DIP

QUARTZ VEIN

FELSIC DYKE

ARIGILLITE

TR-I-I SAMPLE SITE AND SAMPLE NUMBER
(Au ppb, Ag ppm, Cu ppm, Pb ppm, Zn ppm)

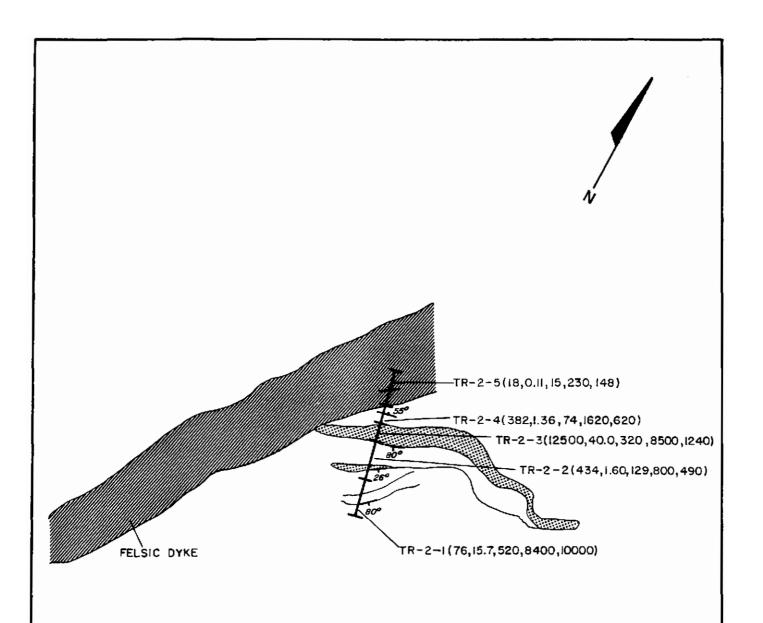
EXPOSURES

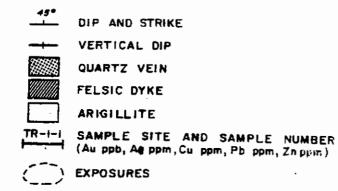
SKEENA RESOURCES LIMITED/LEEWARD CAPITAL CORP.

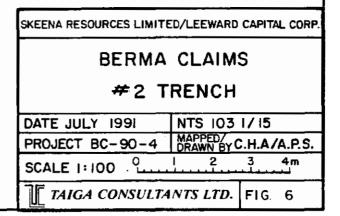
BERMA CLAIMS

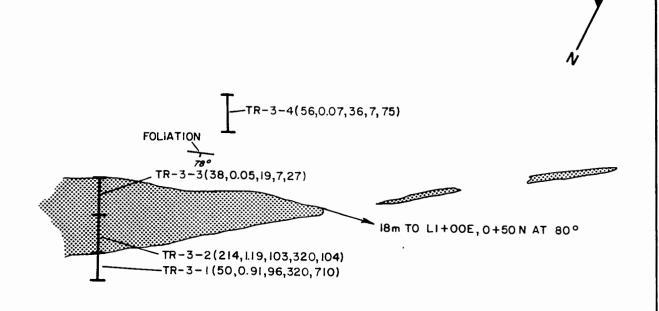
I TRENCH

DATE JULY 1991	NTS 103 1/15				
PROJECT BC-90-4	DRAWN BY C.H.A /A.P.S.				
SCALE 1:100 0 2 3 4m					
TAIGA CONSULTANTS LTD. FIG. 5					









DIP AND STRIKE

. Q

QUARTZ VEIN

TR-3-1 SAMPLE SITE AND SAMPLE NUMBER (Au ppb, Ag ppm, Cu ppm, Pb ppm, Znppm)

BERMA CLAIMS

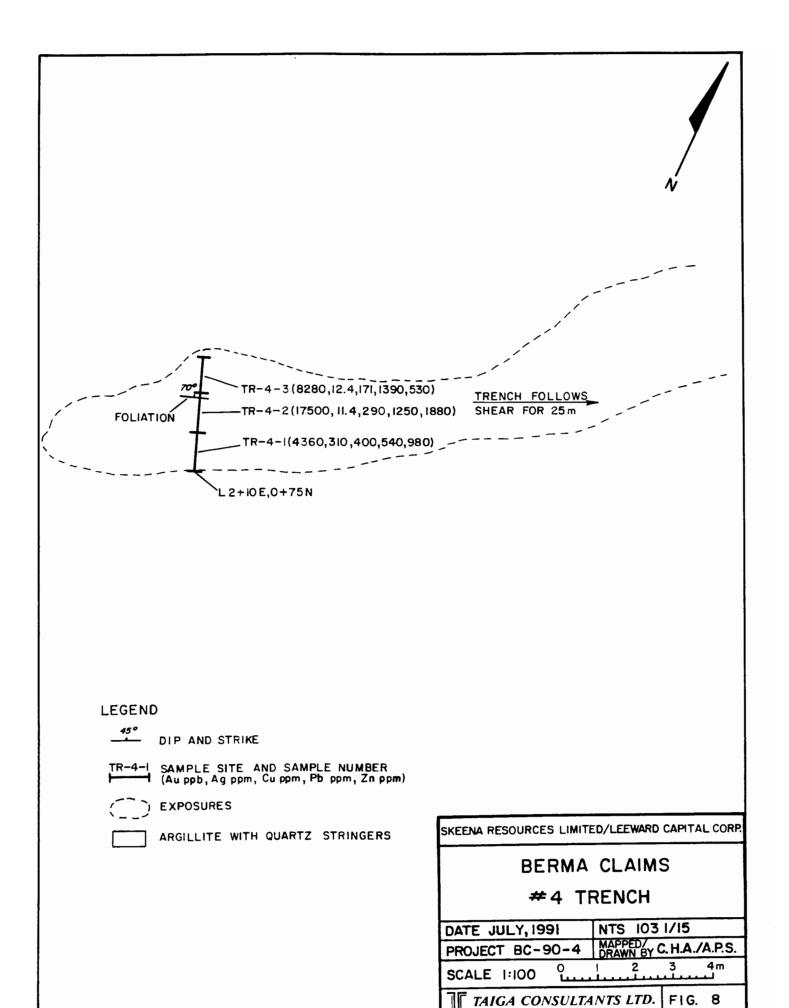
#3 TRENCH

DATE JULY, 1991 NTS 103 1/15

PROJECT BC-90-4 MAPPED/ C.H.A./A.P.S.

SCALE 1:100 0 1 2 3 4m

TAIGA CONSULTANTS LTD. FIG. 7



A previous drill program, conducted by Newmont in 1981, was designed to test a porphyry system located on the BERMA 9 claim. The drill core from the two holes drilled was briefly examined, and grab samples were randomly selected from the intervals of stockwork development. The samples yielded no significant values for any of Au, Ag, Cu, Pb, or Zn.

During Phase I, a number of lithogeochemical samples were taken from the property area. Three of these (ZR-9, 10, 11) yielded extremely high precious and base metal values. These sample sites were re-investigated as part of the Phase II program. These samples were found to have been collected from a 4 to 6 cm quartz veinlet over a 15 m interval, occurring at an argillite/dyke contact. A grab sample collected of the felsic dyke yielded negligible results. Consequently, the mineralization located here is not considered significant.

The Phase II exploration program included investigation of the reported continuation of the known mineralization on the BERMA 8 claim and investigation of the Bermaline showing located on the BERMA 5 mineral claim. Lithogeochemical grab and/or chip samples were collected from these areas.

The following excerpt from Memoir 329 (1964) summarizes the occurrences located on the BERMA 2, 3, and 8 claims:

Deposits on Maroon Mountain

Bear (14), Gold Cap, Guld (13), and Black Wolf (15) Claims

References: EMPR Annual Reports: 1920, p.41; 1921, p.43; 1923, p.47; 1924, p.47; 1925, p.68; 1926, p.72; 1927, p.63-64; 1928, p.72-73; 1930, p.74,76

The Bear, Gold Cap, and Guld claims, and the Black Wolf group, are all situated on the northwest slope of Maroon Mountain. They received considerable attention prior to the depression that began in 1929 but nothing has been done since. These claims are staked on narrow quartz veins, which in places reach a maximum width of 3 feet but average only a foot or less. They occur in the greywackes, conglomerates, and argillites of the Bowser Group that compose Maroon Mountain, and follow the bedding planes of the sediments where shear zones or open spaces have developed due to slippage along bed boundaries. Commonly they lie below a conglomerate bed that ranges in theikness from 120 to 250 feet but they may also occur in crossfractures that cut the bedding. Metallic minerals consist of galena,

sphalerite, pyrite, and pyrrhotite, and minor chalcopyrite which contain gold, silver, lead, copper, and zinc. Access is by a good trail that starts behind 'Olanders' ranch about a mile south of Rosswood. A branch trail that heads south from the main trail at an elevation of approximately 4,000 feet leads to the Motherlode claim at the headwaters of the south fork of Hall Creek.

The Bear claim has had the most development work done on it, there being two adits and numerous open cuts. The best outcrops on the Bear vein are a few feet above the upper adit where it has a width of 3 feet over a length of about 50 feet. However, it soon narrows to 6 inches, and pinches out within 200 feet. The upper tunnel driven east for 26 feet intersected the vein 15 feet below the outcrop. A drift was extended about 5 feet each way on the vein. Samples taken from the north face in 1928 by H.T. James assayed 1.26 oz/ton gold, 3.5 oz/ton silver, 6% lead, and 4% zinc.

A lower adit, about 85 feet below the upper tunnel, was driven 150 feet east to the vein. Drifts were driven for 25 feet south and 39 feet north. The vein was only a few inche wide on the south face at this level, but 16 inches on the north face. A sample across the north face taken by Kindle (1937) gave 1.36 oz/ton gold and 1.2 oz/ton silver. A grab sample taken from the dump by the author in 1953 gave 0.42 oz/ton gold, 24 oz/ton islver, 0.02% copper, 4.25% lead, and 4.40% zinc.

The Gold Cap and Guld claims are to the northeast of the Bear claim.

The Black Wolf group is situated south of the Bear claim and is geologically the same except that the vein dips at 15°, having flattened considerably. An adit was driven along the vein for a distance of 70 feet. The vein has a maximum width of about 10 inches, and carries very minor amounts of gold and silver.

Map 3 and Figure 3 depict the geology and sample locations. The old workings investigated narrow 15 to 80 cm quartz veins, parallel to sub-parallel to bedding; mineralization is restricted to the quartz veining, frequently yielding spectacular results.

The following excerpt from Memoir 212 (1937) describes adequately the Bermaline showing, located on the BERMA 5 claim. Samples relating to each particular vein described are cited in brackets:

Bermaline Group (34)

References: EMPR Annual Report 1930, p.137; B.C.Dept.Mines Bulletin No.2 (1932) p.56

The Bermaline group of five claims is on the northwest slope of Goat Mountain overlooking the divide between the headwaters of Douglas Creek and the north fork of Lorne Creek, approximately 12 miles west of Ritchie flag station. The owner, August Johnson of Dorreen, has constructed a 15-mile pack-horse trail to the claims from the station.

The claims are underlain by a thick series of sediments comprised largely of laminated argillites and thick massive beds of volcanic tuffs. The sediments are gently folded, with dips up to 15°, and are intruded by a few dykes and small stocks of granodiorite.

A quartz vein has been traced by trenches for about 425 feet between elevations of 4750 and 4900 feet. The vein strikes N65°W down a 15° slope towards the canyon at the head of Douglas Creek. The dip ranges from vertical to 45°NE. The vein occupies a fissure in argillaceous sediments and tuffs that strike N50°E and dip 15°NW. A body of granodiorite crops out on the mountain slope a short distance above the highest vein outcrop. Where the vein has been stripped for 30 feet at its upper end, it is 4 feet wide, dips vertically, and the quartz carries about 15% sulphides, of wheih roughly 10% is galena and 5% pyrite and chalcopyrite with a little sphalerite. A representative chip sample taken here across the vein assayed 0.06 oz/ton gold, 6.06 oz/ton silver, 9.06% lead, 0.40% zinc, 4.44% copper. In a trench about 100 fet farther northwest, the vein is 3 feet wide and the dip has changed from vertical to 45°NE. The quartz contains much less sulphide, but a representative chip sample across the vein assayed 0.04 oz/ton gold, 2.00 oz/ton silver, 4.04% lead, 0.80% zinc, 0.12% copper. About 300 feet farther northwest where the vein is exposed in a creek bed, it is only 6 inches wide and carries a little pyrite. A channel sample taken across it here showed neither gold nor [YR-304 to 307; ZR-418 to 425]

About 1500 feet farther southeast, at elevation 4950 feet, a quartz vein ranging from 18 to 24 inches wide is exposed at intervals across a knoll for about 300 feet. The vein has a north-south strike and dips vertically. It traverses sedimentary rocks that strike S60°E and dip 15°S. The vein quartz carries very little sulphide, probably less than 1% of pyrite and chalcopyrite. A representative sample gave on assay: trace gold, 1.03 oz/ton silver. At the north end of the vein exposure, a number of vugs or open spaces in the vein contain large clear crystals of quartz. [XR-312, 313]

A third quartz vein is exposed in the face of a 60-foot bluff of interbedded, gently dipping argillite and tuff about 300 feet east of the last-mentioned vein. The vein is 10 inches wide, strikes easterly, and has a vertical dip. It contains from 1 to 2% galena/pyrite. An assay of a typical sample of the vein quartz gave trace gold and 0.30 oz/ton silver,. What may be a continuation of this same vein was seen several hundred feet farther east at elevation 5100 feet, where a quartz vein of 15 inches average width is exposed for 30 feet near a group of claim posts. The vein carries a little pyrite and galena.

A chip sample across the vein assayed trace gold and 0.40 oz/ton silver. [XR-310, 311]

Farther southeast, at elevation 5200 feet on the Bingo claim, a quartz vein 6 feet wide has been stripped for about 40 feet. Its continuation is heavily drift covered. A typical sample of the vein quartz, carrying 1% pyrite, gave on assay: gold, none; silver, trace. [XR-308, 309]

Another quartz vein occurs at an elevation of 5650 feet on the divide looking down into the valley of the middle fork of Lorne Creek. The vein is exposed for less than 100 feet, its continuation down the steep middle fork slope being ice covered. It occurs in argillites and interbedded tuffs which strike S50°E and dip 27°SW. The sediments are intruded immeidately northwest of the divide by a stock-like body of granodiorite, several hundred feet in diameter. A representative sample of the vein quartz gave on assay: trace gold, 0.32 oz/ton silver. [XR-307]

The owner reports that another vein not seen by the writer occurs wholly in granodiorite some distance above the first-described occurrence. It is said to be covered by snow most of the year.

Samples collected confirm the assay results presented in this description.

SUMMARY AND RECOMMENDATIONS

The 1991 property exploration program consisted of sampling the known occurrences and establishing a grid over a gold zone previously delineated. Geochemical and geophysical surveys were completed on the grid.

Channel sampling was completed at seven trench locations extending along a 350 m section of the shear zone. The results of this channel sampling are as follows:

<u>Trench</u>	<u>Width</u>	<u>Au oz/to</u>	on Ag oz/ton
A-1	0.7 m	0.42	0.74
T-1	1.5 m	0.25	0.49
T-2	0.5 m	0.37	1.19
T-3	< no	significant	results >
T-4 } same	3.0 m	0.30	0.26
T-4A } location	4.0 m	0.279	0.23
T-5	2.0 m	0.203	0.52
T-6	< no	significant	results >

The results of the soil geochemical and geophysical surveys indicate that the structure and gold mineralization continue beyond the survey area. Investigation of an anomalous gold-in-soil sample site, on the eastern edge of the grid, located a 0.5 m quartz vein, from which a continuous chip sample yielded 0.111 oz/ton Au.

Further work on the property should consist of extensive prospecting and geological mapping, combined with lithogeochemical sampling, trenching, soil geochemistry, and geophysical surveying, if warranted. The existing grid should be extended to the northeast. The focus of this exploration should be to trace the extent of shear controlled mineralization associated with the folded thrust fault. Tracing the approximate stratigraphic interval using the conglomerate marker bed should be relatively easy. Systematic sampling of this thrust fault should result in the identification of the most prospective gold mineralization on the BERMA claims.

CERTIFICATE - M. D. Jamieson

I, Michael Douglas Jamieson, of 101 - 7th Street N.E. in the City of Calgary in the Province of Alberta, do hereby certify that:

- 1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 17th Avenue S.W., Calgary, Alberta.
- 2. I am a graduate of Queen's University, B.Sc. Geology (1985), and I have practised my profession continuously since graduation.
- 3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4. I am co-author of the report entitled "Geological and Geochemical Sampling Report on the **BERMA 1 to 9 Claims**, Omineca/Skeena Mining Divisions, British Columbia", dated October 15, 1991. I personally participated in the work reported therein.
- 5. I do not own or expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of SKEENA RESOURCES LIMITED or LEEWARD CAPITAL CORP. in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 15th day of October, A.D. 1991.

Respectfully submitted.

I. D. Jamieson, B.Sc., P.Geol.

GEOLOGIC STATES

PERMIT TO PRACTICE TAIGA CONSULTANTS LTD.
Signature

PERMIT NUMBER: P 239

The Association of Professional Engineers, Geologists and Geophysicists of Alberta

CERTIFICATE - C. H. Aussant

I, Claude Henry Aussant, of 31 Templebow Way N.E. in the City of Calgary in the Province of Alberta, do hereby certify that:

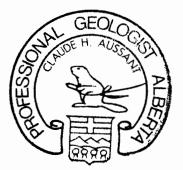
- 1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 17th Avenue S.W., Calgary, Alberta.
- 2. I am a graduate of the University of Calgary, B.Sc. Geology (1976), and I have practised my profession continuously since graduation.
- 3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
- 4. I am co-author of the report entitled "Geological and Geochemical Sampling Report on the **BERMA 1 to 9 Claims**, Omineca/Skeena Mining Divisions, British Columbia", dated October 15, 1991. I personally participated in the work reported therein.
- 5. I do not own or expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of **SKEENA RESOURCES LIMITED** or **LEEWARD CAPITAL CORP.** in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 15th day of October, A.D. 1991.

Respectfully submitted,

C. H. Aussant, B.Sc., P.Geol., F.GAC





BIBLIOGRAPHY

British Columbia Energy Mines & Petroleum Resources:

- Annual Reports: 1920 (pp.41,42) 1921 (p.43) 1923 (pp.47,48) 1924 (p.47) 1926 (p.72) 1927 (pp.63,64) 1928 (pp.72,73) 1930 (pp.74-76) 1967 (p.83)
- MINFILE: 103-I occurrence map
- Downing, B.W. (1980): Geochemical Report on Frankie Blue Claim; <u>for Falconbridge Nickel Mines Limited</u>; assess.report #8315
- Duffell, S.; Souther, J.G. (1964): Geology of the Terrace Map-Area, British Columbia; <u>in</u> Geol.Surv.Cda., Memoir 329
- Kindle, E.D. (1937): Mineral Resources of the Terrace Area, Coast District, British Columbia; <u>in</u> Geol.Surv.Cda., Memoir 205, pp.17-22
- ----- (1937): Mineral Resources, Usk to Cedarvale, Terrace Area, Coast District, British Columbia; <u>in</u> Geol.Surv.Cda., Memoir 212
- Visagie, D. (1981): Drilling Report on the SLC Claims; <u>for Newmont Exploration of Canada Ltd.</u>; assess.report #10400

APPENDIX

Summary of Personnel
Summary of Expenditures
Rock Sample Descriptions
Certificates of Analysis
Analytical Techniques

SUMMARY OF PERSONNEL

<u>Phase I</u>			
C.H.Aussant, P.Geol.	Project Geologist	Jul.4-7, 1991	4 days
M.W.Bowles, P.Geol.	Assistant Geologist	Oct.3, 1990 Jul.4,5,7/91	4 days
M.D.Jamieson, P.Geol.	Geologist/Prospector	Jul.4-7, 1991	3½ days
J.M.Hislop	Labourer/Prospector	Oct.3, 1990 Jul.4-7, 1991	4½ days
			16 man days
Phase II			
C.H.Aussant, P.Geol.	Project Geologist	Sep.29-Oct.3/91	5 days
M.W.Bowles, P.Geol.	Assistant Geologist	Sep.29-Oct.3/91	5 days
J.M.Hislop	Labourer/Prospector	Sep.29-Oct.3/91	5 days
			15 man days

SUMMARY OF EXPENDITURES		
Phase I Exploration		
Pre-Field Data Compilation pro rata Air Photo Interpretation pro rata Pre-Field pro rata Mob and Demob pro rata	3,150.00 1,350.00 465.00 1,300.00	6,625.00
Field Personnel Project Geologist	1,600.00 1,400.00 2,280.00	5,280.00
Camp Support Food and Accommodation 16 man days @ \$60/day van rental 4 days @ \$65/day magnetometer w/ base station VLF-EM-16 4 days @ \$20/day 4 days @ \$35/day Chainsaw 4 days @ \$9/day 4 days @ \$9/day 4 days @ \$9/day Miscellaneous (disposables, telephone, shipping)	960.00 260.00 200.00 80.00 140.00 36.00 36.00	1,712.00
Helicopter 6.7 hrs @ \$688/hr		4,609.60
Geochemical Analyses rocks: Au/Ag/Sb/Cu/Pb/Zn/Co silts: Au/Ag/Sb/Cu/Pb/Zn/Co rocks: Au/Ag/Cu/Pb/Zn soils: Au/Ag/Cu/Pb/Zn core: Au/Ag 46 @ \$16.00/each 100 @ \$13.50/each 26 @ \$12.00/each	405.60 144.10 736.00 1,350.00 312.00	2,947.70
Post-Field		2,820.00
Pha	se I TOTAL	\$ <u>23,634.30</u>
BERMA 9 Staking Costs		
Personnel Assistant Geologist1 day @ \$350/dayStakers2 x $\frac{1}{2}$ day @ \$285/day	350.00 285.00	735.00
Camp Support Food and Accommodation 2 man days @ \$60/day staking equipment 2 man days @ \$5/day van rental 1 day @ \$65/day disposables	120.00 10.00 65.00 50.00	245.00

1,824.36

\$<u>20,067.96</u>

Phase II TOTAL

Administration @ 10%

ROCK SAMPLE DESCRIPTIONS

- MR-214 Berma 5 claim (post 4N 3.5W); 5 cm wide vuggy quartz veinlet in medium grey-green volcaniclastic, disseminated pyrite near veinlet boundaries. 2 ppb Au
- MR-215 Berma 5 claim (post 4N 4W); quartz-carbonate stringers in medium green-grey greywacke. 42 ppb Au
- MR-217 Berma claims; sheared quartz vein, 5-10% disseminated pale pyrite, galena, sphalerite. 62000 / 37 / 1480 / 17400 / 16600
- MR-218 Berma claims; carbonate veinlet with massive galena, sphalerite, minor pyrite. 40200 / 133 / 970 / 88000 / 139000 / 168 ppm Sb
- MR-219 Berma claims; sheared, leached quartz-carbonate veinlet, 1% disseminated galena, pyrite, sphalerite. 7400 / 55 / 1360 / 28000 / 23000
- MR-220 Berma claims; brecciated quartz vein, 15% sphalerite, <1% pyrite, sample collected from old pit, vein 1 m wide, strike 70°/25°S, exposed for 50 m. 17500 / 37 / / 15800 / 200000
- MR-221 Berma 2 claim; 5 cm white fractured quartz veinlet, trace pyrite.

 Au 12 ppb
- MR-222 Berma 2 claim; sheared, graphitic argillite, trace pyrite. Au 4 ppb
- DR-10 grab; from a small (~3 m) trench, rusty weathered, brecciated quartz, clots of massive sulphides (pyrite) 2 / 0.76 / 300 / 3 / 103
- DR-11 grab; from a small trench approx. 20 m from DR-10; quartz veining in green argillite, quartz contains galena and sphalerite in clots 28 / 16.0 / 320 / 14200 / 14600
- MR-300 1.0 m chip; wallrock, grey-green argillite, with occasional quartz veinlets, trace pyrite 876 / 6.00 / 188 / 3900 / 1390
- MR-301 1.5 m chip; 70% quartz vein material, trace pyrite, minor chalcopyrite, galena, and sphalerite 9400 / 26.0 / 330 / 8700 / 630
- MR-302 1.2 m chip; wallrock, green argillite with a 30 cm quartz veinlet 1772 / 4.40 / 159 / 900 / 250
- MR-303 grab; rusty weathered quartz material, with galena, chalcopyrite, sphalerite 1850 / 101.1 / 1860 / 54000 / 28000
- MR-304 0.6 m chip (true width 0.35 m); wallrock, grey-green argillite, minor pyrite 26 / 0.69 / 87 / 310 / 290

- MR-305 1.3 m chip (true width 0.8 m); shear zone up to 35 cm wide with irregular quartz veining to 20%; disseminated pyrite and galena; vein material contains up to 15% pyrite, in places 10-15% galena instead of pyrite 26000 / 36.4 / 1020 / 19300 / 12500
- MR-306 0.9 m chip; 70% wallrock, 30% vein material, grey-white quartz, carbonaceous, 5% pyrite and galena 2940 / 31.1 / 390 / 14000 / 77
- MR-307 1.2 m chip (true width 0.75 m); rusty quartz with clots of massive galena and pyrite, sample of vein and shear material 26000 / 31.0 / 1780 / 12900 / 10800
- MR-308 1.2 m chip; grey-green, rusty weathered, argillite with quartz veinlets, pockets of 60-70% pyrite 11500 / 28.0 / 183 / 14300 / 13400
- MR-320 float grab; rusty weathered quartz, vuggy crystal intergrowths, claim post 6WIS 10 / 0.38 / 22 / 39 / 17
- MR-321 grab; rusty quartz in argillite, veinlet 15 cm wide, strike 60°/45°S, south wall of adit 60000 / 45.0 / 530 / 780 / 310
- MR-322 1.3 m chip; grey-black conglomerate, carbonaceous 98 / 1.21 / 109 / 390 / 1130
- MR-323 grab; rusty weathered conglomerate, angular fragments up to 4 cm, minor pyrite, north edge of adit 46 / 1.16 / 450 / 4600 / 3500
- MR-324 1.0 m chip; extensively gossaned quartz with clots of massive galena, strike 65°/75°N, from old trench 40 m long, a series of trenches cut the vein for 100 to 150 m $\,$ 53200 / 122.0 / 620 / 24000 / 22000
- MR-325 grab; mixed argillite and quartz with minor galena, rusty weathered, gossan, strike 65°/vertical 11480 / 16.6 / 181 / 4100 / 740
- MR-326 grab; 1.5 m quartz vein, rusty weathered, grey-white, trace pyrite strike 165°/vertical 16 / 0.16 / 10 / 36 / 38

Core Samples: DDH SLC-81-1

Footage/Meterage

- 91.8 / 27.7 silicified sections in the hornfels, pale grey; clear quartz stringers; molybdenite and 1% pyrite as disseminations and stringers 18 / 0.51 / 65 / 9 / 9
- 126.0 / 38.4 argillite, quartz-flooded in sections, 5% disseminated pyrite/pyrrhotite 6 / 0.49 / 730 / 2 / 47
- 242.0 / 73.8 massive quartz containing clear quartz stringers; <1% disseminated pyrite, occasional molybdenite blebs, minor phlogopite mica along fractures 12 / 0.22 / 23 / 4/7

252.0 / 76.8	quartz stockwork in pale grey monzonite, 1-2% disseminated pyrite, occasional molybdenite blebs and along the quartz stringers 18 / 0.60 / 108 / 4 / 26
316.0 / 96.3	porphyritic monzonite, hornblende needles, feldspar phenocrysts, pyrite as disseminations and stringers $4\ /\ 0.07\ /\ 37\ /\ 1\ /\ 24$
324.7 / 99.0	very fine-grained monzonite, quartz stockwork, 3% disseminated pyrite/molybdenite, occasional pyrite clots in the quartz stringers $140\ /\ 6.0\ /\ 390\ /\ 6\ /\ 17$
336.2 / 102.5	argillite, quartz flooded in sections, 5% disseminated pyrite 20 $/$ 1.90 $/$ 510 $/$ 28 $/$ 46
467.0 / 142.3	medium-grained monzonite, quartz stringers throughout, 2-5% disseminated pyrite/pyrrhotite $$ 6 / 0.26 / 106 / 1 / 23
536.0 / 163.4	coarse-grained monzonite, quartz stringers and blebs, disseminated molybdenite in the monzonite, disseminated pyrite throughout the quartz bleb 4 / 0.29 / 330 / 3 / 28
686.0 / 209.1	monzonite with quartz stringers, 2 mm wide quartz veinlet contains pyrite, molybdenite $$36\ /\ 0.51\ /\ 220\ /\ 6\ /\ 16$
977.0 / 297.8	quartz stockwork in diorite-monzodiorite, 3-4% sphalerite along fracture surface and disseminations; trace chalcopyrite 40 $/$ 0.78 $/$ 290 $/$ 2 $/$ 21
979.0 / 298.4	quartz-flooded monzonite, 50% quartz, 4% disseminated pyrite $10\ /\ 0.33\ /\ 81\ /\ 2\ /\ 15$
Footage/Meterage	Core Samples: DDH SLC-81-2
117.0 / 35.7	medium-grained granodiorite, 3-5% disseminated pyrite, molybdenite lining fractures, feldspar phenocrysts altering to clay, occasional mm-size quartz stringers (weak stockwork), occasional pyrite stringers $4/0.20/460/1/19$
131.2 / 40.0	(same as above) 4 / 0.21 / 460 / 2 / 22
156.1 / 47.6	monzonite with 5% disseminated pyrite, frequent quartz stringers with <1% disseminated pyrite/molybdenite 6 / 0.64 / 400 / 10 / 35
223.0 / 68.0	granodiorite with 5% disseminated pyrite, frequent up to 1 cm quartz veinlets with pyrite blebs; molybdenite lining fracture planes and edges of the quartz $$ 6 / 0.90 / 660 / 5 / 19
237.0 / 72.2	medium-grained granodiorite, 1% diss.pyrite, feldspar phenocrysts, minor quartz stringers 4 / 0.16 / 310 / 1 / 21

247.0 / 75.3	medium-grained granodiorite, 3-5% disseminated pyrite, molybdenite lining fractures, feldspar phenocrysts altering to clay, occasional mm-size quartz stringers (weak stockwork), occasional pyrite stringers $12/0.32/450/2/23$
293.9 / 89.6	monzonite with quartz stockwork 2 mm up to 1 cm wide, occasional quartz veinlets up to 10 cm, molybdenite/pyrite along fractures, 3% diss.pyrite throughout 10 / 0.23 / 340 / 1 / 17
388.0 / 118.2	granodiorite, medium-grained; 5% disseminated pyrite, occasional pyrite and molybdenite stringers, occasional quartz and quartz-feldspar stringers 8 / 0.42 / 540 / 6 / 25
410.0 / 125.0	granodiorite, 5% disseminated pyrite, <1% finely disseminated molybdenite, occasional mm-size quartz stringers 14 / 1.20 / 560 / 8 / 38
537.0 / 163.7	(same as above) 30 / 1.49 / 570 / 103 / 55
551.1 / 172.9	granodiorite with 5% disseminated pyrite, minor molybdenite along fractures, occasional mm-size quartz stringers 142 / 2.70 / 590 / 184 / 115
567.5 / 173.0	monzonite, argillically altered, 1% disseminated pyrite, molybdenite lining fractures, occasional quartz stringers $8\ /\ 0.16\ /\ 370\ /\ 2\ /\ 24$
657.0 / 200.3	medium-grained granodiorite, 3% disseminated pyrite, occasional Quartz stringers, occasional pyrite stringers, minor molybdenite lining fractures, feldspar phenocrysts $6 / 0.11 / 470 / 3 / 26$
875.9 / 267.0	granodiorite, 5% disseminated pyrite, <1% finely disseminated molybdenite, occasional mm-size quartz stringers 8 $/$ 0.22 $/$ 520 $/$ 1 $/$ 21

Trench A-1

Channel Sample	Width	THERE IN T
A-1-1	0.9 m	first 0.3 m - brown weathered felsic dyke, 245°/vertical, contact with quartz irregular; remaining interval quartz and rusty weathered argillite; sampled across the foliation and quartz veinlets which are vuggy with pyrite lining the vugs; quartz veins containing massive galena, sphalerite, chalcopyrite parallel the sampled interval above and below the cut 25000 / 6.50 / 340 / 126 / 4400
A-1-2	1.1 m	pale grey, sheared argillite, quartz stringers subparallel to foliation; quartz veins contain massive galena, sphal-

		erite, chalcopyrite cross-cut the foliation above and below the sampled interval; foliation 250°/vertical 2040 / 3.00 / 129 / 710 / 89
A-1-3	0.4 m	quartz vein mineralized with massive galena and sphalerite with 1% chalcopyrite 28800 / 57.0 / 350 / 22000 / 5100
A-1-4	0.2 m	black argillite, hanging wall $102 / 0.42 / 138 / 115 / 78$
A-1-5	0.7 m	massive quartz, vein contains massive and disseminated pyrite/pyrrhotite, sphalerite, chalcopyrite; the sulphides occur zoned; sampled across vein which strikes 230°/42°SE 14400 / 25.0 / 1530 / 31000 / 87000
A-1-6	2.0 m	true width 1.7 m; argillite, hanging wall, foliation 265°/82°NW; sampled across foliation trend 120 / 0.39 / 150 / 164 / 162
A-1-7	0.7 m	sampled across quartz vein containing massive galena, sphalerite, pyrrhotite and argillite bands, bedding 265°/45°SE, vein apparently follows bedding 9880 / 8.90 / 440 / 3200 / 3300

The area sampled was folded due to the disruption caused during the intrusion of the \mbox{dyke} .

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previous chip samples:

MR-304

MR-305 - corresponding interval A-1-7

MR-306 }

MR-307 } covered by samples A-1-1 to A-1-6

MR-308 }
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Trench #1

Channel <u>Sample</u>	Width	Trenen #1
TR-1-1	1.0 m	dark grey to black, massive argillite, well foliated 30 / 0.07 / 42 / 10 / 102
TR-1-2	1.0 m	dark grey to black, massive argillite, well foliated 60 / 0.05 / 54 / 30 / 168
TR-1-3	0.7 m	rusty weathered, vuggy, leached quartz, sheared argillite inclusions, minor galena, minor graphite along contact 150 / 3.50 / 360 / 1030 / 320
TR-1-4	1.0 m	rusty weathered quartz with graphitic argillite inclusions, vuggy, minor galena 8040 / 13.7 / 310 / 2000 / 380
TR-1-5	0.5 m	intensely fractured, sheared, black argillite, very well foliated at 254°/65°NW 8200 / 23.0 / 191 / 4200 / 120

TR-1-6 1.0 m black argillite, massive, well foliated 154 / 1.17 / 73 / 990 / 250

Quartz vein strikes subparallel to the foliation, dips of the vein are variable, parallel to or cutting across the foliation ~53°SE, foliation 242°, dip variable generally north

previous grab sample:

MR-220

brecciated 1 m wide quartz vein, 15% sphalerite, <1% pyrite, from pit, strike 70°/25°S, exposed for 50 m 17500 ppb Au, 37.0 ppm Ag, 29 ppm Sb, 370 ppm Cu, 15800 ppm Pb, 200000 ppm Zn, 10 ppm Co, 148 ppm As

Trench #2 (5 m south of previous samples MR-324,325,326)

Ch 1	(5 m	n south of previous samples MR-324,325,326)
Channel <u>Sample</u>	<u>Width</u>	
TR-2-1	1.0 m	argillite, well foliated (262°/65°NW) with 5 mm quartz stringers (236°/80°SE) cross-cutting foliation; disseminated galena associated with stringers, minor galena invading the surrounding argillite 76 / 15.7 / 520 / 8400 / 10000
TR-2-2	1.0 m	argillite with quartz veinlets up to 10 cm wide, strike of quartz veinlets 252°/26°SE; frequent quartz stringers and flooding cross-cutting foliation $434\ /\ 1.60\ /\ 129\ /\ 800\ /\ 490$
TR-2-3	0.5 m	quartz vein (250°/80°SE), massive, beige to rusty, width variable; this is the same vein sampled in Trench #1 12500 / 40.0 / 320 / 8500 / 1240
TR-2-4	0.5 m	argillite, dark grey to black, well foliated, sheared, foliation 264°/55°NW 382 / 1.36 / 74 / 1620 / 620
TR-2-5	1.0 m	felsic dyke (feldspar porphyry), beige, 55° /vertical, ~2.5 m wide; occasional white quartz stringers, spotty rusty stained appearing as disseminations throughout the dyke; dyke crosses the quartz vein 2 m south of the trench $16/0.11/15/230/148$
Channel		<u>Trench #3</u>
Sample	Width	
TR-3-1	0.7 m	argillite, dark grey to black, foliated; occasional mm- size quartz stringers 50 / 0.91 / 96 / 320 / 710
TR-3-2	1.0 m	quartz vein (240°/dip ?), massive, rusty weathered, occasional argillite inclusions, disseminated pyrite 214 / 1.19 / 103 / 320 / 104

TR-3-3	1.0 m	(same as TR-3-2) $38 / 0.06 / 19 / 7 / 27$
TR-3-4	1.0 m	argillite, well foliated (253°/78°SE), trace pyrite 56 / 0.07 / 36 / 7 / 75
		Trench #4
Channel Sample	<u>Width</u>	
TR-4-1	1.0 m	argillite, graphitic, dark black, occasional quartz stringers 4360 / 3.10 / 400 / 540 / 380
TR-4-2	1.0 m	(previous samples MR-324, XR-1) argillite, well foliated (254°/70°NW), rusty weathered, goethite, frequent quartz stringers, sections graphitic 17500 / 11.4 / 290 / 1250 / 1880
TR-4-3	1.0 m	argillite, rusty and extremely weathered, well foliated, sheared, occasional quartz stringers some of which contain disseminated galena and pyrite 8280 / 12.4 / 171 / 1390 / 530
XR-1	1.3 m	location L.2+10E 0+75N (previous sample MR-324) shear zone, rusty, gossanous, parts graphitic; old trench 30 m long along strike of the shear; shear contains numerous quartz stringers; quartz veinlets impregnated with pyrite, galena, minor sphalerite; very vuggy; in the graphitic bands, the quartz stringers have very finely disseminated galena and minor pyrite; foliation 74°/70°N 50000 / 41.0 / 290 / 2300 / 1500
XR-2	grab	sample from spoil pile at the mouth of adit, adit entrance covered with snow; 25 m vertical elevation down from Trench A-1; sample - quartz with massive galena, sphalerite, chalcopyrite, pyrrhotite; graphitic along edges of vein 32800 / 130.0 / 2400 / 37000 / 18400
<u>Sample</u>	Location	<u> </u>
ZR-1	2+00W 0+0	8N felsic dyke 60°/70°N, beige, rusty weathered; minor pyrite 36 / 0.55 / 25 / 210 / 144
ZR-2	0+70W 4+5	ON felsic dyke, beige, rusty weathered, porphyritic, minor pyrite 14 / 0.08 / 20 / 15 / 31
ZR-3	0+65W 4+5	ON white quartz, 20 cm wide, rusty weathered along fractures, 50°/vertical, <1% pyrite clots 10 / 0.24 / 36 / 7 / 11

results: ppb Au / ppm Ag / ppm Cu / ppm Pb / ppm Zn $\,$

ZR-4	0+75W 4+00N	white quartz vein, 50°/50°N, rusty along fractures, minor pyrite, in beige felsic dyke, old pit 66 / 0.37 / 250 / 12 / 74
ZR-5	B/L 1+59E	felsic dyke, beige, 60°; with quartz veinlets ~40 cm wide; intrudes conglomerate $12\ /\ 0.07\ /\ 6\ /\ 2\ /\ 51$
ZR-6	2+60E 2+50N	felsic dyke, beige, argillically altered, silicified, quartz veins with minor disseminated pyrite 6 / 0.03 / 19 / 6 / 17
ZR-7	2+75E 2+50N	felsic dyke, beige, argillically altered, rusty weathered 14 / 0.17 / 38 / 11 / 18
ZR-8	2+70E 2+50N	felsic dyke, 50°/70NW, beige, argillically altered, rusty weathered, with quartz veinlets, fractured, <1% pyrite 18 / 0.19 / 17 / 17 / 29
ZR-9	1+92E 4+08N	massive galena with sucrosic quartz veinlet inclusions, minor chalcopyrite, sheared 77400 / 184.0 / 300 / 47000 / 52000
ZR-10	1+90E 4+00N	argillite, rusty weathered, sheared, silicified, <1% disseminated pyrite $$ 4080 / 16.3 / 94 / 3500 / 1100
ZR-11	1+95E 4+15N	felsic dyke, rusty weathered, silicified sections, pockets of massive galena, quartz veinlets 15700 / 124.0 / 106 / 50000 / 54000
ZR-12	1+40E 3+90N	silicified shear, rusty weathered, quartz veinlets, minor pyrite; old trench 36 / 0.25 / 25 / 310 / 76
ZR-13	0+05W 1+30N	quartz, 60°/10°S, blue-grey, sheared, vuggy, graphitic, rusty weathered, micas along fracture planes 12 / 0.27 / 112 / 37 / 34
ZR-14	BERMA 9	Post #2: diorite, dark grey, massive, rusty weathered, 1% disseminated pyrite, very weak magnetism (Po?) 18 / 0.20 / 230 / 22 / 40
WR-1	BERMA 9	at talus along South Lorne Creek, 50 m west of DDH SLC-81-1: talus from gossan zone upslope to the south; massive pyrrhotite, fine disseminated pyrite, minor chalcopyrite, in dark grey argillite, weakly siliceous 40 / 0.80 / 1400 / 16 / 57

samples from 5 m long filled-in trench at 254°, location 2+22E 1+62N:

BR-91-1 grab, location 1+55N 1+82E, felsic dyke (feldspar porphyry) strike 165° dipping 82°E; appears to be intruded along south, 1-3% quartz

results: ppb Au / ppm Ag / ppm Cu / ppm Pb / ppm Zn

- veins with trace to 2% fine-grained disseminated pyrite; true width of dyke ~ 4.5 m $\qquad 44 \ / \ 0.38 \ / \ 27 \ / \ 26 \ / \ 120$
- BR-91-2 as 91-1 except 4-5% fine-grained disseminated pyrite with micro veins of magnetite and trace chalcopyrite 16 / 0.52 / 119 / 12 / 29
- BR-91-3 felsic dyke, strike 268° dipping 55°N, minimum true width 30 cm; rusty speckled appearance, gossaned, fresh surface whitish; hosts 0.5 cm seam of massive weathered sulphide; 5% pyrite as fine-grained accumulations forming irregular blebs; cut by two generations of fine quartz veins 30 / 0.52 / 106 / 9 / 69
- BR-91-4 quartz boulder/subcrop at east end of trench, light grey and dark grey quartz; trace to 2% fine-grained disseminated pyrite, rarely as irregular smears; no reaction to HCl; gossaned surface; fine veins of magnetite 52 / 0.18 / 91 / 5 / 20

Trench #4A

- TR-4A-1 1.0 m argillite, massive, grey; weakly foliated at 064°/86°N, trace pyrrhotite, pyrite 4 / 0.15 / 33 / 5 / 109
- TR-4A-2 0.5 m argillite, massive grey; minor quartz stringers, trace to 2% disseminated pyrrhotite increasing as shear approached 58 / 0.20 / 28 / 7 / 80
- TR-4A-3 1.0 m argilllite, graphitic, dark black; minor pyrite, frequent quartz stringers (sample sample as TR-4-1) 20600 / 14.9 / 480 / 370 / 850
- TR-4A-4 1.0 m argillite, well foliated at 254°/70°NW, rusty weathered in sections, graphitic; sections with frequent quartz stringers (same sample as TR-4-2) $\underline{6560}$ / 4.70 / 480 / 770 / 1220
- TR-4A-5 1.0 m argillite, extremely weathered, well foliated, sheared, graphitic; occasional quartz stringers some of which contain disseminated galena and pyrite (same sample as TR-4-3) 9700 / 9.40 / 240 / 1330 / 1010
- TR-4A-6 1.0 m argillite, medium to dark grey, weakly graphitic, extremely weathered over first third, well foliated; trace disseminated pyrrhotite as sample TR-4A-7 approached 1416 / 2.10 / 91 / 390 / 490
- TR-4A-7 1.0 m argillite, well foliated over first third then massive; blebs of disseminated pyrrhotite 314 / 0.42 / 32 / 101 / 230
- TR-4A-8 0.5 m argillite, massive, grey; 1% disseminated pyrrhotite $172\ /\ 0.23\ /\ 21\ /\ 19\ /\ 75$

		<u>Trench #5</u>
TR-5-1	0.6 m	argillite, dark grey; minor disseminated pyrrhotite, occasional small mm-size clots 34 / 0.15 / 32 / 4 / 93
TR-5-2	1.0 m	argillite, well foliated, rusty weathered in sections, graphitic in sections with numerous quartz stringers some of which contain pods of disseminated galena and pyrite <u>2840</u> / 18.3 / 310 / 980 / 300
TR-5-3	1.0 m	argillite, extremely weathered, well foliated, occasional quartz stringers some of which contain disseminated galena and pyrite, amount of quartz stringers decreasing toward sample TR-5-4 $\frac{11100}{17.3}$ / 380 / 3700 / 1420
TR-5-4	1.0 m	argillite, well foliated, extremely weathered, sheared 336 / 0.47 / 93 / 99 / 41
TR-5-5	1.0 m	argillite, well foliated, extremely weathered, sheared 302 / 0.59 / 48 / 46 / 56
TR-5-6	1.0 m	argillite, well foliated, extremely weathered, sheared 242 / 0.44 / 45 / 70 / 370
TR-5-7	0.6 m	argillite, massive, dark grey, moderately well foliated; 1-2% disseminated pyrite 70 / 0.36 / 48 / 102 / 280
		<u>Trench #6</u>
TR-6-1	1.0 m	argillite (verging on greywacke), dark grey to black, competent to friable, generally well sheared, variable texture fine to very fine-grained, minor soft sediment deformation (almost a siltstone in places) cut by 10% 1-2 mm rusty irregular fractures, rare 1-2 mm irregular quartz veins, trace carbonate, 2% fine-grained disseminated subhedral pyrite/pyrrotite rarely as 1-2 mm blebs, folded, weak bedding 28 / 0.12 / 38 / 30 / 130
TR-6-2	0.6 m	milky white quartz vein, irregular, rusty, containing 3% galena as irregular pods up to 1.5 cm and 1% fine-grained pyrite as blebs to 1 cm; hosted by deformed argillite, very fine-grained and intensely folded around the more competent quartz as illustrated by rusty fold planes and fractures; sample is 40% quartz; 0.6 m is true width of quartz vein 412 / 23.0 / 118 / 3700 / 310
TR-6-3	0.4 m	greywacke, weakly sheared; 5% disseminated pyrrotite/pyrite 88 / 0.35 / 40 / 20 / 63
TR-6-4	0.6 m	(same interval as TR-6-2) milky white quartz vein 040°/48°SE, rusty, massive, with 1% disseminated pyrite, trace

results: ppb Au / ppm Ag / ppm Cu / ppm Pb / ppm Zn $\,$

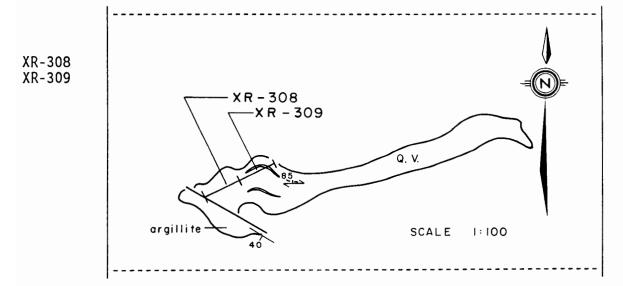
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		chalcopyrite, contacts sharp, cut by ver fine irregular rusty fractures; sample 30% quartz 830 / 5.90 / 60 / 320 / 158						
TR-6-5	0.5 m	argillite, dark grey, sheared, weakly folded, 068°/80°NW; rare 1 mm rusty fractures subparallel to cleavage 26 / 0.30 / 60 / 320 / 158						
TR-6-6	0.5 m	(same as TR-6-5) slightly less sheared 356 / 0.38 / 71 / 160 / 130						
TR-6-7	1.0 m	argillite grading to greywacke; 2% fine-grained pyrrhotite/pyrite as blebs and disseminations, trace chalcopyrite 122 / 0.25 / 38 / 133 / 165						
TR-6-8	1.0 m	(same as TR-6-7) 3% pyrrhotite as blebs and disseminations, minor to trace pyrite/chalcopyrite 22 / 0.19 / 33 / 62 / 230						
XR-300	sheared,	1+25N small outcrop (composite grab over 2 m): argillite, well foliated 73°/70°N, trace disseminated pyrite 0 / 21 / 13 / 89						
XR-301	grab BERMA 8: 10 m wide white/mottled quartz vein 045°/78°S, rusty weathered, massive, no sulphides, in beige coloured sandstone; foliation in the argillite 060°/80°N 2 / 0.13 / 57 / 1 / 8							
XR-302	grab BERMA 8: -2 m wide dyke, beige-coloured brown-weathered with numerous quartz stringers/veinlets/veins and occasional pockets of massive pyrite (grab sample of quartz with minor sulphides); the XR-301 vein runs into this dyke $48 / 0.13 / 65 / 1 / 27$							
XR-303	grab BERMA 8: 16 m adit at 130° on a 15-30 cm quartz vein 030°/20°NE, with variable sulphides up to 5-7% (magnetite and pyrite), strongly magnetic $$ 256 / 0.22 / 40 / 16 / 400 $$							
XR-304	veinlets pyrrhoti	RMA 8: 1.5 m wide aplite dyke $010^\circ/40^\circ$ E containing numerous and pods of quartz and stringers and disseminations of te/pyrite; the argillite immediately adjacent to the dyke frequent quartz veinlets $2/0.15/82/2/6$						
XR-305	quartz v trace p	RMA 8: ~2 m wide aplite dyke, rusty weathered, with numerous veinlets, periodic disseminations and stringers of pyrite, yrrhotite, pockets of massive sphalerite; in dark grey se $4/0.11/60/4/17000$						
ZR-9,10,1	1 collec	ted over 15 m interval from the same veinlet occurring at the						

- ZR-9,10,11 collected over 15 m interval from the same veinlet occurring at the argillite/dyke contact; dyke ~ 5 m wide
- ZR-9 4-6 cm quartz veinlet parallel to dyke/argilite contact
- results: ppb Au / ppm Ag / ppm Cu / ppm Pb / ppm Zn

- ZR-10 4 cm quartz veinlet
- ZR-11 4 cm quartz veinlet, insignificant
- XR-306 grab BERMA 2: felsic dyke, pale grey, with 2% disseminated pyrite; sample collected of the dyke containing the quartz veinlet sampled by ZR-9,10,11 -- if the felsic dyke is mineralized, this may be a target, otherwise mineralization is insignificant 4 / 0.15 / 17 / 290 / 1430
- ZR-4 grab BERMA 2: dyke, porphyritic, brown weathering; with numerous white quartz veinlets
- XR-307 grab BERMA 5: 30 cm max.width quartz vein exposed for 3 m, 313°/85°SW, sulphide content variable occurring in small blebs: disseminated pyrite, chalcopyrite, galena, minor malachite staining along fractures; occurs in metasediments near the granodiorite contact occasional discontinuous white quartz veinlets occur in the area near the granodiorite contact, occasional dioritic dykes cut the sediments 112 / 25.0 / 3100 / 9800 / 1410

XR-308,309 quartz vein, 300°/40°SW, white, massive, folded in the trench location, crenulated; numerous argillite inclusions, minor pyrite; sampled across a section which appeared to be the closest to the true width

- XR-308 1.0 m chip: massive white quartz, trace pyrite, occasional small concentrations of pyrite crystals, limonitic on fracture planes $134\ /\ 0.18\ /\ 12\ /\ 18\ /\ 15$
- XR-309 1.0 m chip: massive white quartz, minor disseminated pyrite, limonitic on fracture planes 102 / 0.09 / 5 / 9 / 10

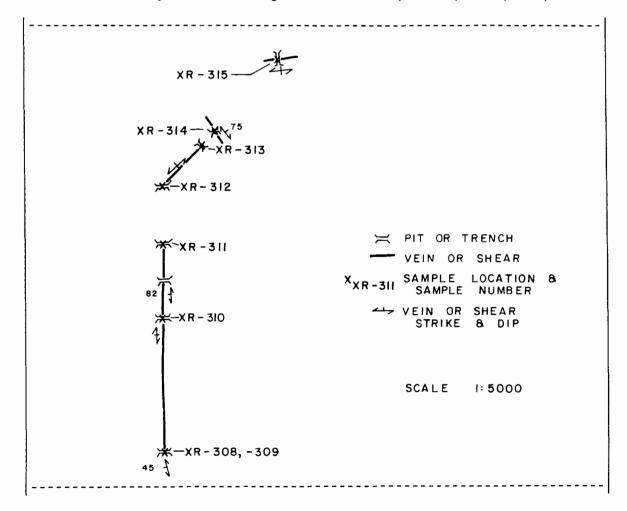


XR-310 0.75 m chip: weak shear, variable width, consists of a single 9 cm quartz vein and a stockwork of veins over 75 cm; sharp contacts; shear and veining at 316°/vertical; in black massive greywacke; sampled across the stockwork part of the shear, trace to minor disseminated pyrite 40 / 0.87 / 16 / 500 / 139

XR-311 0.40 m chip: quartz vein up to 40 cm wide variable to 5 cm, exposed on small cliff face for 20 m; sporadic disseminations of galena and pyrite with sections up to 5% 36 / 24.0 / 143 / 9800 / 5200

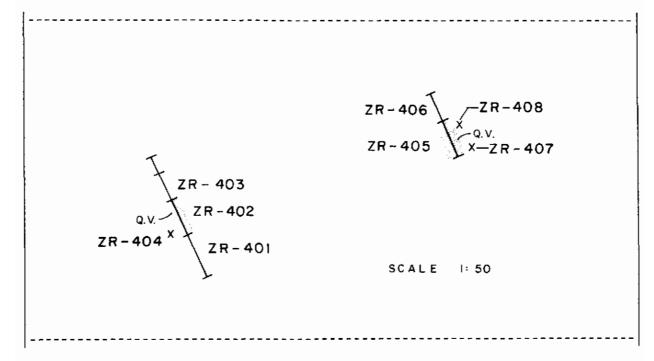
(samples XR-308,309,310,311 collected on the same shear/quartz vein system over a strike length of 275 metres)

- 1.0 m chip: massive white quartz vein up to 1 m wide, width fairly constant over exposed length (intermittently for 75 m over small knoll); strike north-south/vertical; frequent vugs containing large quartz crystal intergrowths; chrysocolla staining along fractures, pyrite/chalcopyrite clots, minor azurite 10 / 4.20 / 1290 / 116 / 440
- XR-313 1.0 m chip: same vein as XR-312 75 m north, massive white quartz, minor chrysocolla lining fractures 4 / 0.51 / 130 / 17 / 23



XR-314 20 cm quartz vein $105^\circ/75^\circ N$, mottled grey and smoky, glassy, in rusty greywacke, narrow discontinuous conglomerate bed on the hanging wall 56 / 8.90 / 41 / 87 / 3

- XR-315 grab: 30-40 cm massive white quartz vein, 040°/vertical, rusty; vuggy
 intergrowths 6 / 0.16 / 8 / 5 / 2
- ZR-401,402,403,404 location L.2+71E 1+18N
- ZR-401 0.6 m chip: argillite, intensely sheared, friable, dark brown, 60 cm exposed 122 / 0.30 / 40 / 45 / 63
- ZR-402 0.5 m chip: quartz vein, 180°/12°E, intensely gossaned, grey to white, 7% weathered galena, 1% sphalerite, sericitic alteration 1890 / 9.50 / 106 / 630 / 280
- ZR-403 0.4 m chip: schist, intensely sheared, argillically altered, weakly folded, graphitic, moderately gossaned, minor silica 82 / 0.82 / 106 / 410 / 250
- ZR-404 grab from ZR-402 sample site: quartz vein, grey to white, weakly sheared, moderately gossaned; graphitic bands, 6% galena along fracture planes and as disseminations, 1% weathered sphalerite, siderite, quartz crystals in open cavities, limonitic 20000 / 42.0 / 78 / 8200 / 72

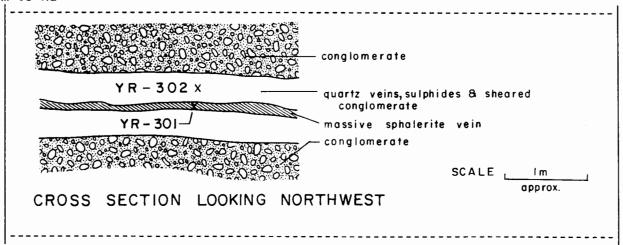


ZR-405 0.5 m chip: quartz vein, grey to translucent, moderately gossaned, weakly fractured, few vugs, 4% galena, 1% sphalerite as disseminations and clots 3800 / 32.0 / 93 / 8500 / 290

- ZR-406 0.4 m chip: argillite, intensely sheared, friable, dark brown (same as ZR-401) 122 / 0.90 / 44 / 710 / 55
- ZR-407 grab from sample site ZR-405: quartz, grey to white, moderately gossaned, 5% fine weathered galena, limonitic, graphitic on shear planes 5520 / 10.7 / 138 / 2300 / 172
- ZR-408 grab from sample site ZR-405: phyllite, graphitic, moderately sheared, quartz blebs, 5% weathered galena $\frac{1780}{111.0}$ / $\frac{111.0}{26000}$ / $\frac{370}{1100}$
- ZR-409 grab, loc.~L.3+78E 1+04N: argillite, graphitic, intensely sheared, quartz stringers and veinlets, mm-size specularite bands 58 / 0.67 / 32 / 52 / 110
- ZR-410 grab, loc.~L.4+00E 1+03N: massive graphitic horizon, 1-2 cm quartz veinlets containing 1% subhedral pyrite and 1% specularite 6 / 0.14 / 22 / 26 / 74
- ZR-411 grab, loc.~L.4+40E 1+08N: white quartz, pods and veinlets of graphite, 2% subhedral pyrite, 2% weathered galena, siderite crystals in cavities, quartz crystal intergrowths 58 / 0.24 / 14 / 32 / 27
- ZR-412 grab, loc.~L.4+80E 1+04N: milky white quartz and felsic dyke material in intensely sheared graphitic sediments 58 / 0.09 / 34 / 14 / 44
- ZR-413 (old trench) 2 m grab/chip across trench: massive milky white quartz veinlets 1-10 cm wide forming 40% of outcrop in weakly sheared conglomerate 14 / 0.22 / 26 / 4 / 28
- ZR-414 grab from sample site ZR-413: massive milky white quartz, 1% coarse euhedral pyrite 4/0.17/21/3/11
- ZR-415 2.5 m grab/chip across old trench: dyke, brown weathering, intermediate to felsic; massive white quartz pods and veinlets (3-20 cm wide), graphitic bands; quartz ~10% of sample 64 / 0.59 / 97 / 69 / 125
- ZR-416 grab of quartz vein at sample site ZR-415: massive white quartz, limonitic, in brown weathering dyke $12\ /\ 0.26\ /\ 420\ /\ 3\ /\ 33$
- ZR-417 grab: argillite, intensely sheared, crenulated, graphitic; white quartz pods and veinlets, minor limonite 8 / 0.11 / 49 / 5 / 33

BERMA 8

YR-301,302 samples from quartz vein/shear mineralization, 72°/40°NW, true width 80 cm; both hanging wall and footwall are polymictic conglomerate; in old adit (Black Wolf #4) which goes back 8 m @ 60°; old Black Wolf claim post 25 m to NE

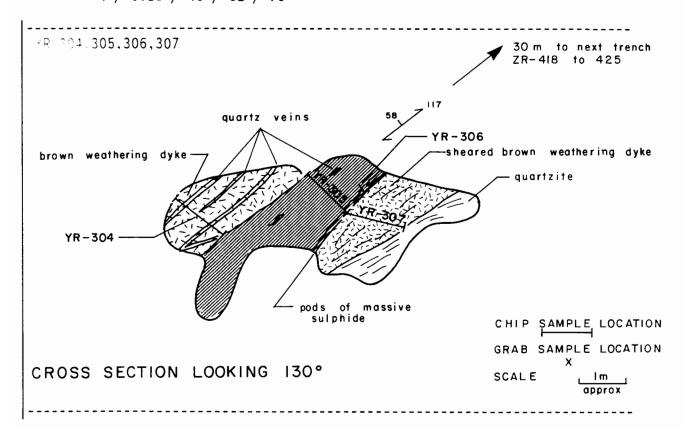


- YR-301 grab: massive sulphide (80%) vein; sphalerite > pyrite >> chalcopyrite > galena; hosted in YR-302 $\frac{12580}{29.0}$ / 29.0 / 410 / 8600 / 11700
- YR-302 quartz veins (grey to translucent) and sheared conglomerate, with irregular stringers of sphalerite, pyrite, minor chalcopyrite and galena 5280 / 12.6 / 330 / 4800 / 1430
- YR-303 grab: quartz vein, grey, 15 cm wide, $152^\circ/14^\circ$ NE; with near-massive sulphide pods of sphalerite > magnetite > chalcopyrite \simeq pyrite; hosted in grey argillite; a 6 m long adit has been driven into the hill to follow the vein 34400 / 122.0 / 1290 / 56000 / 5100

BERMA 5 - Bermaline Area

- 1.2 m chip: across felsic dyke, grey-green, brown weathering, fine-grained; 2% fine- to medium-grained subhedral disseminated pyrite; cut by 3% 1-6 cm subparallel white quartz stringers containing up to 3% fine-grained pyrite 42 / 0.57 / 44 / 290 / 240
- YR-305 1.2 m chip: across white quartz vein, $117^\circ/58^\circ\text{NW}$; mineralization is poddy consisting of coarse-grained euhedral pyrite and medium-grained galena; average content 1-2% rises to 40% along footwall 28 / 11.0 / 177 / 2000 / 97
- YR-306 grab: high-grade mineralization from footwall side of YR-305 vein; 5% coarse-grained pyrite, 25% medium-grained galena, rare tourmaline crystals 36 / 18. / 104 / 4000 / 350

YR-307 0.7 m chip: across footwall; dyke similar to YR-304 except intensely sheared and fractured parallel to quartz vein; no quartz stringers, only trace disseminated pyrite 4 / 0.18 / 46 / 52 / 76



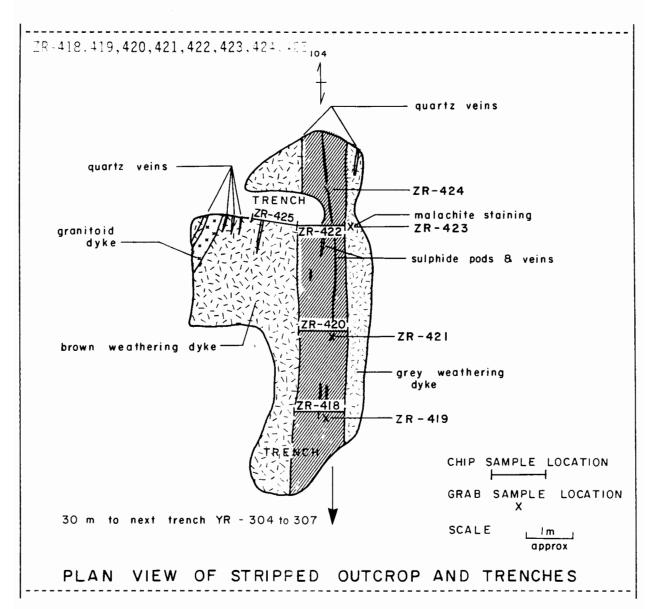
YR-308 grab: granodiorite, deep rusty weathering; containing xenoliths of argillite up to 5 m across; 5-7% fine- to medium-grained dissemianted euhedral pyrite, trace chalcopyrite; elevation 5100' 4 / 0.07 / 111 / 13 / 31

BERMA 7

- YR-309 grab: siltstone, fine-grained, dark grey, rusty weathering; 3% very fine-grained disseminated pyrite; top of ridge 2 / 0.03 / 39 / 4 / 76
- YR-310 as YR-309 but 7% pyrite; ~20 m NE of granodiorite contact $8 \ / \ 0.08 \ / \ 56 \ / \ 7 \ / \ 108$

BERMA 5 Bermaline Area

- ZR-418 1.2 m chip; across white quartz vein, 2% fine-grained pyrite, 1% chalcopyrite, 3% galena 1960 / 37.0 / 240 / 12000 / 6000
- ZR-419 grab: quartz vein, 5% galena, rare tourmaline crystals 336 / 24.0 / 157 / 6700 / 8400



- 2R-420 1.2 m chip; white quartz vein; 2% very coarse-grained subhedral and fine-grained pyrite, 3% galena, 1% to trace chalcopyrite, clasts of wallrock containing 2% fine-grained disseminated pyrite; well formed free growing quartz crystals up to 1 cm long in open cavities 146 / 27.0 / 880 / 4800 / 610
- ZR-421 grab: from vein at ZR-420; 5% galena, 2% chalcopyrite, 3% pyrite $382 / \frac{147.0}{2} / 1770 / \frac{52000}{2} / 1790$
- ZR-422 1.2 m chip; quartz vein; as ZR-420 but lacking quartz crystals $368 / \frac{62.0}{2000} / 4300 / \frac{20000}{2000} / 560$
- ZR-423 grab/chip: across 0.6 m of south wallrock, felsic dyke, massive, fine-grained, crystalline, grey weathering; appearance resembles a quartzite; trace fine-grained pyrite, minor malachite staining 10 / 0.59 / 1360 / 990 / 920

results: ppb Au / ppm Ag / ppm Cu / ppm Pb / ppm Zn

- ZR-424 grab: white quartz and dyke; 4% coarse-grained euhedral pyrite, 4% galena, 2% chalcopyrite, all as irregular clots 708 / 370.0 / 9800 / 58000 / 1150
- 2R-425 1.6 m chip: across north wall of vein; felsic dyke, grey-green, brown to grey weathering; 3-4% fine-grained disseminated pyrite; cut by five quartz stringers up to 8 cm wide 30 / 0.64 / 58 / 300 / 72
- NOTE: quartz vein width relatively consistent between 0.8 and 1.3 m; contacts are sharp but irregular; quartz stringers splay off main wall and intrude wallrock; sulphide mineralization consists of galena > pyrite > chalcopyrite averaging 3-5% combined, occurring as pods or stringers; minor malachite staining observed at sample site ZR-423; elevation 4,740′
- ZR-426 grab: porphyritic diorite, 150°/76°SW, dark grey; 3% fine-grained dissemianted pyrrhotite; zone swells to 4 m wide 4 / 0.28 / 168 / 66 / 34
- ZR-427 grab: quartz diorite, 10 m wide, foliation 155°/90°, speckled with rusty spots, brown weathering; 4% fine-grained pyrite, 1% disseminated chalcopyrite; minor calcite; cut by 5% 1-4 cm white to translucent crystalline quartz veins 18 / 1.07 / 191 / 67 / 34
- ZR-428 grab: quartz vein, grey, 4-30 cm wide along 8 m exposure, 136°/47°NE; 1% coarse-grained galena, 4% fine- to medium-grained disseminated pyrite; in diorite; from east side of second creek 248 / 93.0 / 530 / 4400 / 26
- ZR-429 grab: quartz vein, grey to white, coarse-grained, 134°/59°NE, 1-30 cm wide, average 20-25 cm, 30 m exposed, moderately gossaned, hosted in granodiorite; 5% fine-grained pyrite as blebs, disseminations, net textured; 2% coarse-grained galena as blebs, trace malachite, chalcopyrite, and sphalerite(?) 1160 / 42.0 / 350 / 1580 / 25
- ZR-430 grab: granodiorite, weakly chloritized, altered (biotite weathering out), rusty weathering; 6% fine- to medium-grained subhedral disseminated pyrite, trace to minor chalcopyrite; mineralized zones 0.5 m and 0.3 m wide running at 90° to foliations of 6°/62°NW; 16 m west of sample ZR-429 30 / 1.44 / 1240 / 16 / 54
- ZR-431 grab: quartz vein, translucent, rusty, 10-30 cm wide, average 20 cm; 139°/62°; 30 m length exposed; prominent alternating bands of fine-grained pyrite and galena up to 0.4 cm wide with open cavities containing euhedral quartz crystals and trace chalcopyrite 326 / 32.0 / 350 / 3600 / 80

- ZR-432 grab: white quartz vein, massive, weakly rusty, 30 cm wide subcrop; malachite, covellite, chalcopyrite, galena as clots, total sulphide ~4% 228 / 26.0 / 3500 / 5500 / 11000
- ZR-433 grab: milky white quartz vein, weakly rusted, 40 cm wide subcrop; 4% very coarse-grained euhedral pyrite as disseminations, 3% coarse-grained galena as clots, trace chalcopyrite; subhedral quartz crystals growing in open spaces 88 / 10.1 / 144 / 3400 / 880

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Claude Aussant

Date: October 15, 1990

Job No: 90-253

Project: BC-90-4

P.O. No:

18 Rock

Signed: /mb/

TERRAMIN RESEARCH LABE Little

Job#: 90-185

Project: BC-90-4

Sample Au Ag Sb Cu Pb Zn Co As Number ppp **b**pm ppm ppm bbw ppm ppm ppm

1 MR-90-

r ₂₁₄	2	0.90	2	490	22	120	12	
215	42	0.22	5	44	20	138	7	
217	62000	37.0	26	1480	17400	16600	5	1400
218	40200	133.0	168	9 70	88000	139000	4	280
219	7400	55.0	42	1360	28000	23000	1	75
220	17500	37.0	29	370	15800	200000	10	148
221	12	0.37	4	90	128	96 0	11	
L ²²²	4	0.38	4	91	30	140	6	
•	_							
BS-90- 201	2	0.20	1	57	12	178	20	
202	6	0.20	1	37	15	134	13	
1,203	4	0.14	1	35	24	138	19	

TERRAMIN RESEARCH LABS Ltd..

371

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-165

Project: BC-90-4

Au Pb Zπ Co Ag Sb Cu Sample ppm Number ppm ppm ppm ppw bbw ppm

JS-90.

√ 50	14	0.13	<1	47	. 9	104	19
/ 53	10	0.13	1	56	12	143	19

TERRAMIN RESEARCH LABS Ltd..

Job#: 90-165

Project: BC-90-4

p pm Zn	Co Ppm	
120	25	
9 7	15	
115 110	18	
	115	115 18 110 18

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.
Claude Aussant

cc: Ron Netolitsky

Date: July 27, 1991

Job No: 91-124

Project: BC-90-4

P.O. No:

26 Drill Core

91 Rock

114 Soil

77 Silt

Signed: 4MH

Job#: 91-124

Project: BC-90-4	Berma Claims
------------------	--------------

D 11 C	Sample Number	A u ppb	Ag ppm	. Cu ppm	₽₽m ₽b	Zn
Drill Co SLC 81-1		18 6 12 18 4	0.51 0.49 0.22 0.60 0.07	. 65 730 23 108 37	9 2 4 4 1	9 47 7 26 24
	336.2 324.7-349. 467 536 688	20 140 6 4 36	1.90 6.00 0.26 0.29 0.51	510 390 106 330 220	2 8 6 1 3 5	46 17 23 28 16
SLC 8 1-2	97 7 97 7 117 131.2 156.1	40 10 4 4 6	0.78 0.33 0.20 0.21 0.64	290 81 460 460 400	2 2 1 2 10	21 15 19 22 35
	223 237 247 293.8 388	6 4 12 10 8	0.90 0.16 0.32 0.23 0.42	660 310 450 340 540	5 1 2 1 6	19 21 23 17 25
,	410 537 551 567.4 65 7	14 30 142 8 6	1.20 1.49 2.70 0.16 0.11	560 570 500 870 470	8 103 184 2 3	38 55 115 24 26
	875.6	. 8	0.22	E2 0	1	21
Roc! A1-		25000 2040 28800 102 14040	3.00 57.0 0. 42			89 5100 7 8
BR-	6 7 1 2 3	120 9880 44 16 30	0.38 0.52	150 440 27 119 106		

Job#: 91-124

es.	Project:	BC-90-4	Berma	Claims	5	
	Sample Number	Au ppb	Ag ppm	Cu ppm	b bw 6,p	Zn ppm
BR-		52 30 60 150 8040	0.18 0.07 0.05 3.50 13.7	91 42 54 360 310	5 10 30 1030 2000	20 102 168 320 380
TR2-	5 6 1 2 3	8200 154 76 434 12500	23.0 1.17 15.7 1.60 40.0	191 73 520 129 320	4200 990 8400 800 8500	490
TR3-	4 5 1 2 3	382 - 18 50 214 38	1.36 0.11 0.91 1.19 0.05	74 15 96 103 - 19	1620 230 320 320 7	620 148 710 104 27
TR4-	4 1 2 3 1	56 4360 17500 8280 40	0.07 3.10 11.4 12.4 0.80	36 400 290 171 1400	7 540 1250 1390 16	75 980 1880 530 57
XR-	1 2 1 2 3	500 00 32800 34 14 . 10	41.0 130.0 0.55 0.08 0.24	290 2400 25 20 36	2300 37000 210 15 7	
	4 5 6 7 8	56 12 6 14 18	0.37 0.07 0.03 0.17 0.19	250 6 19 38 42	12 2 6 11 17	74 51 17 18 29
	9 10 11 12 13	77400 4080 15700 34 12	16.3	94.	47000 3500 50000 310 37	1110
	14	18	0.20	230	22	40

Job#: 91-124

Project: BC-90-4 Berma Claims

Coda	Sample	Au	ppm	Cu	Pb	Zn
	Number	ppb	Ag	ppm	ppm	ppm
Soil L 2 W	4+00 N 3+75 3+50 3+25 3+00	4 6 4 4 6		8 27 37 5 37	11 7 16 6 8	45 41 76 13 48
	2+75	4	0.18	14	7	42
	2+50	6	0.21	27	10	46
	2+25	8	0.07	4	5	20
	2+00	2	0.04	123	11	109
	1+75	4	0.15	20	10	46
	1+50 1+25 1+00 0+75 0+50	6 6 6 12		57 24 29 13 6	8 11 13 13 7	55 79 169 65 26
L 1 W	0+25	8	0.09	31	12	79
	0+00	2	0.36	6	7	40
	4+00 N	8	0.80	29	13	85
	3+75	2	0.07	20	12	65
	3+50	2	0.06	27	10	78
	3+25	2	0.45	20	12	64
	3+00	14	0.50	28	19	101
	2+75	2	0.13	28	7	45
	2+50	4	0.28	26	16	91
	2+25	16	0.11	27	17	240
	2+00	2	0.46	12	13	33
	1+75	2	0.10	25	51	106
	1+50	6	0.30	30	15	99
	1+25	6	0.05	24	11	76
	1+00	30	1.06	44	79	66
LO	0+75	44	0.23	67	21	94
	0+50	9	0.21	35	17	89
	0+00	8	0.24	26	10	76
	4+00 N	12	4.50	142	13	230
	3+75	6	0.36	27	10	80
	3+50 3+25 3+00 2+75 2+50	22 2 2 2 2 2	0.19 0.23 0.40 0.52 0.30	37 14 22 42 19	14 9 10 6	137 49 50 78 58

Job#: 91-124

	Project:	BC-90-4	Berma	Claims		
	Sample	A u	Ag	Cu	₽₽M	Zn
	Number	թթե	ppm	ppm	₽Ъ	ppm
LO	2+25 N	4	0.47	32	8	84
	1+75	10	0.40	146	19	144
	1+50	16	1.19	340	41	390
	1+00	4	0.40	12	10	36
	0+75	4	0.67	16	125	46
L 1 E	0+50	4	1.09.	16	11	54
	0+25	2	0.17	14	8	62
	0+00	6	0.09	33	11	75
	4+00 N	2	0.18	43	8	178
	3+75	10	0.13	22	10	49
	3+50 3+25 3+00 2+75 2+50	6 2 2 2 10	0.15 0.19 0.33 0.13 0.24	5 7 8 66	8 7 6 6 25	22 20 31 27 158
1	2+25 2+00 1+75 1+50 1+25	6 12 20 12 2	0.56 0.62 0.51 1.12 0.31	60 112 105 48 25	36 21 15 10	145 151 102 62 53
	1+00	2	0.23	6	4	16
	0+75	28	0.33	33	29	62
	0+50	8	0.45	62	162	630
	0+25	12	0.10	7	17	32
	0+00	2	0.31	24	14	53
L 2 E	4+00 N	40	1.07	31	18	56
	3+75	2	0.19	5	4	22
	3+50	6	0.19	5	4	22
	3+25	6	0.16	16	7	39
	3+00	16	0.46	21	10	39
	2+75 2+50 2+25 2+00 1+75	4 8 2 8 10	0.68 0.22 0.27 1.16 1.06	23 42 30 87 30	8 10 14 11	34 40 52 48 100
	1+50	6	0.40	13	11	25
	1+25	10	1.08	37	11	71
	1+00	12	0.59	8	10	27
	0+75	82	1.90	55	152	260
	0+50	4	0.63	16	11	39

Job#: 91-124

Project: BC-90-4 Berma Claims

•					
Sample	Au	Ag	Cu	₽b	Zn
Number	ppb	bbw	bbw	ppm	ppw
0+25 N	4	0.52	9	8	29
0+00	2	0.29	13	13	35
4+00 N	2	0.20	12	11	28
3+75	2	0.18	11	9	34
	4	0.16	22	10	51
					•
3+25	6	0.19	17	10	48
	4	0.01	14	6	34
	- 4	0.34	12	7	37
		0.50		39	191
		0.71	54		69
2+00	. 2	0.28	26	14	175
	8	0.46	24	81	440
	4	0.22	14	9	44
	184	0.82	63	23	5 5
	4	0.26	23	13	63
0+75	2	0.09	5	5	21
0+50	8	0.28	10	8	32
0+25	8	0.78	10	14	41
0+00	4	0.19	9	10	28
ZS-1	10	0.37	126	19	116
	Number 0+25 N 0+00 4 4+00 N 3+75 3+50 3+25 3+00 2+75 2+50 2+75 2+50 1+50 1+25 1+00 0+75 0+50 0+25 0+00	Number ppb 0+25 N 4 0+00 2 4+00 N 2 3+75 2 3+50 4 3+25 6 3+00 4 2+75 4 2+50 32 2+25 10 2+00 2 1+75 8 1+50 4 1+25 184 1+00 4 0+75 2 0+50 8 0+25 8 0+00 4	Number ppb ppm 0+25 N 4 0.52 0+00 2 0.29 4+00 N 2 0.20 3+75 2 0.18 3+50 4 0.16 3+25 6 0.19 3+00 4 0.01 2+75 4 0.34 2+50 32 0.50 2+25 10 0.71 2+00 2 0.28 1+75 8 0.46 1+50 4 0.22 1+25 184 0.82 1+00 4 0.26 0+75 2 0.09 0+50 8 0.28 0+25 8 0.78 0+00 4 0.19	Number ppb ppm ppm 0+25 N 4 0.52 9 0+00 2 0.29 13 4+00 N 2 0.20 12 3+75 2 0.18 11 3+50 4 0.16 22 3+25 6 0.19 17 3+00 4 0.01 14 2+75 4 0.34 12 2+50 32 0.50 99 2+25 10 0.71 54 2+00 2 0.28 26 1+75 8 0.46 24 1+50 4 0.22 14 1+25 184 0.82 63 1+00 4 0.26 23 0+75 2 0.09 5 0+50 8 0.28 10 0+25 8 0.78 10 0+00 4 0.19 9 <	Number ppb ppm ppm ppm 0+25 N 4 0.52 9 8 0+00 2 0.29 13 13 4+00 N 2 0.20 12 11 3+75 2 0.18 11 9 3+50 4 0.16 22 10 3+25 6 0.19 17 10 3+00 4 0.01 14 6 2+75 4 0.34 12 7 2+50 32 0.50 99 39 2+25 10 0.71 54 13 2+00 2 0.28 26 14 1+75 8 0.46 24 81 1+50 4 0.22 14 9 1+25 184 0.82 63 23 1+00 4 0.26 23 13 0+75 2 0.09 5

ANALYTICAL REPORT

Taiga Consultants Ltd. Claude Aussant

Date: October 14, 1991

Job No: 91-199

Project: BC-90-4

P.O. No:

82 Rock

Signed: 4MH

Job#: 91-199

Project: BC-90-4

	Sample Number	Au dq q	ррm	Cu ppm	Pb ppm	Zn
YR-	302	5280	12.6	330	4800	1430
	303	34400	122.0	1290	56000	51000
	304	42	0.57	44	290	240
	305	28	11.0	177	2000	97
	306	36	18.4	104	4000	350
ZR-	307 308 309 310 401	4 2 8 122	0.18 0.07 0.03 0.08 0.30	46 111 39 5 6 40	52 13 4 7 45	76 31 76 108 63
	402	1890	9.50	106	630	280
	403	82	0.86	106	410	250
	404	20000	42.0	78	8200	72
	405	3800	32.0	93	8500	290
	406	122	0.90	44	710	55
	407	5520	10.7	138	2300	172
	408	1780	111.0	111	26000	370
	409	58	0.67	32	52	110
	410	6	0.14	22	26	74
	411	59	0.24	14	32	27
	412	58	0.09	34	14	. 44
	413	14	0.22	25	4	28
	414	4	0.17	21	3	11
	415	64	0.59	97	69	125
	416	12	0.26	420	3	33
	417	8	0.11	49	5	33
	418	1960	37.0	240	12000	6000
	419	336	24.0	157	6700	8400
	420	146	27.0	880	4800	610
	421	392	147.0	1770	52000	1790
ZR-	422 423 424 425 426	10	62.0 0.39 370.0 0.64 0.28	1360 9800 58	990	920
	427 428 429 430 431	248 1160	1.07 93.0 42.0 1.44 32.0	530 350 1240	1580 16	26
	432 433	228 88			5500- 3400	



14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7 (403)/276-00000.

FIRE ASSAY/AA METHOD FOR GOLD AND SILVER PLATINUM AND PALLADIUM

Approximately 1 assay ton of prepared sample is fused with a litharge flux charge to obtain a lead button. The button is cupelled down to a precious metal prill which is then dissolved in aqua regia. The resulting solution is analysed by atomic absorption spectrophotemetry to determine the precious metals.

14-2235 - 30th Avenue N.E. Caigary, Alberta T2E 7C7 (403) 227226668

250-94€

SAMPLE PREPARATION

Soil and sediment samples are dried and sieved through 80 mesh nylon screen (maximum particle size 200 microns).

Rock or drill core samples are crushed to approximately 1/8" in a jaw crusher, riffled to obtain a representative sample, and pulverized to 150 mesh (100 micron particle size).



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ANALYTICAL METHODS FOR BASE METALS

Cd, Cr, Co, Cu, Fe (soluble), Pb, Mn (soluble), Mo, Ni, Ag, Zn

A portion of the prepared sample is digested in hot nitric/perchloric acid mixture, or hot aqua regia (nitric/hydrochloric acids).

Elements are determined by atomic absorption spectrophotometry.



