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GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

NORA GROUP

ALBERNI MINING DIVISION NTS 92F/6

49 Deg. 18'N - 125 Deg. 19'W

Owner: FRANK MILAKOVICH

BY

LEO J. LINDINGER, P. Geo

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

KAMLOOPS, B. C.
APRIL 23, 1993

22,870

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GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE NORA CLAIM GROUP

INTRODUCTION

During late March and early April 1993 a geological mapping and geochemical sampling program was completed on part of the Nora Claim Group. The program was adjacent to earlier work completed on the claims where anomalous gold and magnetometer results were obtained (Cukor 1983, Sookochoff 1991), and was in part a ground follow up of possibly economically significant airphoto features. The 1993 field work resulted in 62 soil, and 27 rock samples being sent for analysis, 1900 M of grid line being flagged, 1200 M of elevation and compass controlled lines and 1.5 square Km of 1: 5000 scale geological mapping being completed.

Airphoto analysis was used as an aid in all phases of the program.

This report documents the 1993 field work and subsequent results, conclusions and recommendations. Additional background information was provided from sources cited under Selected References.

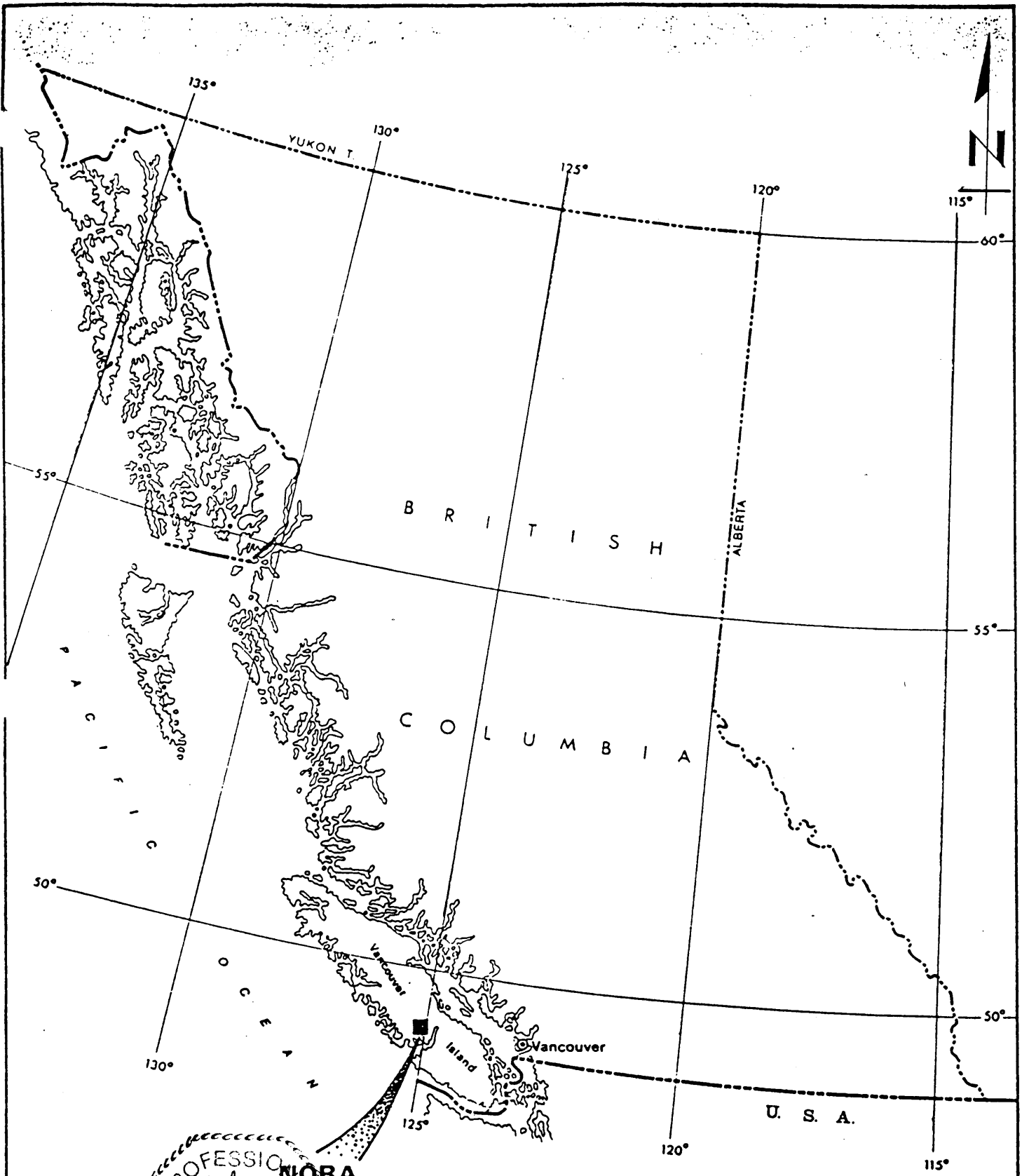
SUMMARY


The Nora Group comprise 38 contiguous modified grid and 2 post claims located 37 Km west northwest of Port Alberni. Exploration activity prior to 1917 resulted in the discovery of gold bearing quartz fissure veins some 2 Km east of the claims. Exploration activity has since resulted in the discovery of additional vein, skarn and porphyry copper mineralization in the area, including 145,000 Tons of 0.063 oz/ton gold in a quartz fissure vein 1 Km east of the claims.

Pillow and flow basalts that have been intruded by quartz diorite with more mafic and felsic end members comprise the lithologies found to date on the claims. The dominant structural trends are easterly, northwesterly, and northerly trending steeply dipping structures.

Auriferous mineralization in pyritiferous quartz carbonate veins and silicified shears in northwest and east-northeast striking steeply dipping structures adjacent to quartz diorite has been found. Highlights are 26.6 ppm (0.776 oz/t gold, 910 ppb (0.026 oz/t gold), 75 and 40 ppb gold. Anomalous arsenic is associated with the high gold values. Gold analyses from soils were below detection.

Additional geological mapping with rock geochemistry over and surrounding the gold mineralization located during this program, and in similar geological environments is recommended.



NORA GROUP	
LOCATION MAP	
ALBERNI M.D., B.C.	NTS 92 F/6W
L. LINDINGER, P. GEO.	KAMLOOPS B.C.
DATE: 93-04-20	SCALE:  100 meters
	FIG. 1

PROPERTY

The Nora Claim Group comprises 10 contiguous claims; two modified grid claims and eight 2 post claims.

Claim Name	Units	Record No.	Record Dates	Expiry Date*
Nora 1	16	1438	May 7, 1982	May 7, 1994
Nora 2	14	1439	May 7, 1982	May 7, 1994
Abraham 1-8	8	1916-1923	Nov. 24, 1983	Nov. 24, 1994

* On the approval of one years assessment work filed prior to May 7, 1993 for which this report is a part of.

LOCATION AND ACCESS

The Nora Claim Group is located on Vancouver Island 37 kilometers west-northwest of the town of Port Alberni, B.C. The claim group lies within the Taylor River valley some eight kilometers west of the west end of the Taylor Arm of Sproat Lake, at 69 deg. 18'N, 125 deg. 19' W as found on NTS map sheet 92F/6.

Road access to the east, central, and west parts of the claims is provided by Paved Hwy No. 4, the "Island Highway", and by Macmillan Bloedel Logging Mains 505W, 550W and subsidiary logging roads.

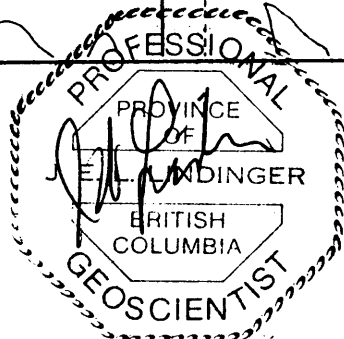
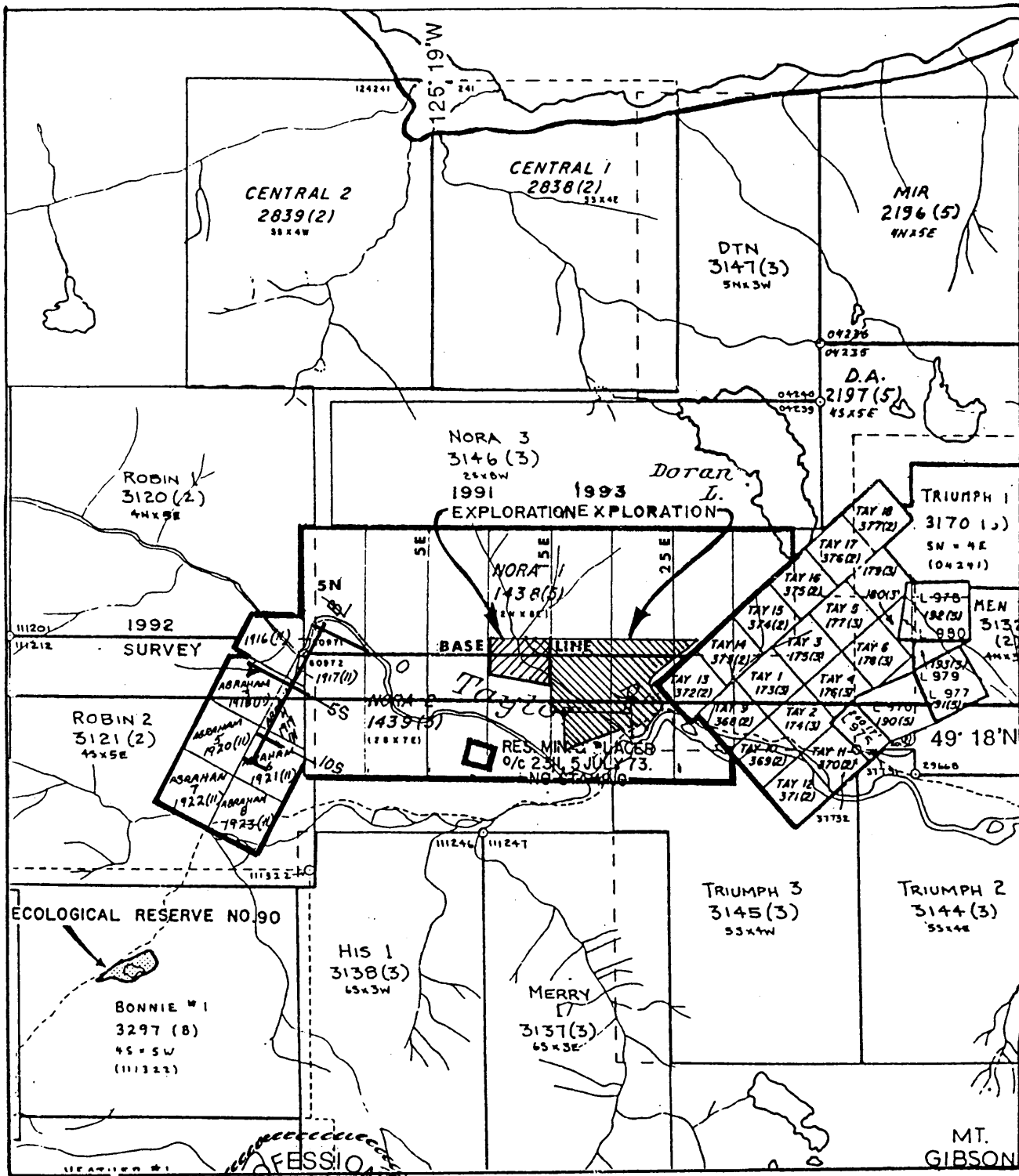
The extreme northeast part of the claims are accessed by Macmillan Bloedel Logging Main 500W which terminates south of Doran lake.

TOPOGRAPHY, CLIMATE and VEGETATION

Topography within the Taylor River valley ranges from flat sediment filled depressions and rocky hummocks and knobs within the Taylor River valley bottom to steep slopes and cliffs on either side of the river. Elevations range from 40 meters where the east flowing Taylor River crosses the east claim boundary to over 700 meters along the north claim boundary.

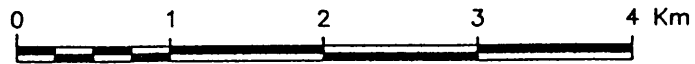
The climate is characterized by hot summers and relatively mild winters. Precipitation is high and occurs year round. Annual snowfall accumulations can exceed 3 meters with snow pack remaining in sheltered areas until mid April.

Vegetation is temperate coastal rain forest with douglas fir, hemlock, balsam and cedar tree species predominating.



* Dept. of Mines and Petroleum Resources Claim Map

NORA GROUP			
ALBERNI M.D.			
CLAIMS and INDEX MAP			
SCALE: 1:50,000	DATE: 93/04/23	N.T.S. 82F/6W	DRAWN BY: L.J.L.
			FIGURE: 2



WATER AND POWER

Ample water supplies for exploration purposes at lower elevations are available from the Taylor river and several permanent streams. Several small lakes along the northern claim boundary provide water resources at higher elevations in that area.

A power line runs adjacent to highway No. 4.

HISTORY

The B. C. Minister of Mines report for 1917 has a reference to the presence of gold bearing veins in the vicinity of the Nora Group. These veins would be the Morning and Apex veins some two kilometers east of the Nora claims. These veins have since seen intermittent exploration and development to the present resulting in several adits being driven into them.

On an adjacent property to the east of the Nora Claims ongoing exploration since the mid 1970's has resulted in the delineation of 145,000 short tons grading 0.063 oz Au/ton in a quartz carbonate fissure vein (Lammle 1988).

On an adjacent property to the west of the Nora Group exploration for copper skarn and gold have been completed since 1970 (Sayer 1987).

On a property about 10 Km south of the Nora Group copper mineralization related to felsic intrusive stocks has been worked on since the late 1960's (Stevenson 1969).

REGIONAL GEOLOGY

Sookochoff 1992 states:

"The regional geology of the area, as presented by J.E. Muller in Open File 463, is stated as being part of the Insular Belt, the Westernmost Major tectonic subdivision of the Canadian Cordillera. The Insular Belt (Island Mountains) is further stated as containing a middle Palaeozoic and a Jurassic Volcanic-plutonic complex, both apparently underlain by gneiss-migmatite terranes and overlain respectively by Permo-Pennsylvanian and Cretaceous clastic sediments. A thick shield of Upper Triassic basalt (the Karmutsen Formation), overlain by carbonate-clastic sediments, separates these two complexes in time and space.

Intruding the pre-Jurassic lithologies including the Karmutsen Formation are the "Island Intrusions" ;

... "batholiths and stocks of granitoid rocks ranging from quartz diorite (potash feldspar less than 10% of total feldspar; quartz 5-20%) to granite (potash feldspar more than 1/3 of total feldspar; quartz more than 20%). They underlie about one quarter of the island's surface..."

"...Muller states the structure of the island is almost entirely dominated by steep faults. Only the flysch-type Pennsylvanian the Jura-Cretaceous sediments and associated thin-bedded tuffs show isoclinal shear folding. Faulting and rifting probably occurred during the outflow of Karmutsen lavas in Late Triassic time, establishing the northerly and westerly directed fault systems affecting Sicker and Vancouver Group rocks..."

PROPERTY GEOLOGY

The geology underlying the claim group comprises Upper Triassic Karmutsen Formation tholeiitic rocks, and intruding that sequence, batholiths and stocks of the Jurassic intermediate to felsic "Island Intrusions".

Government mapping indicates that the northeast and southwest areas of the claims are underlain by intrusive rocks, with the remainder being Karmutsen formation. Mapping completed by Sookochoff 1991, 1992 largely confirms the government mapping. On the Tay property immediately to the east dykes and apophyses of intrusive rocks occur where government mapping indicated only basalts (Lammle, 1988). Immediately west of the claims an east-west striking steeply north dipping limestone bed within the Karmutsen formation containing sporadic copper bearing skarn mineralization is found. This limestone is interpreted to continue to the east onto the Abraham Claims (Sayer 1987), and one geological plan shows limestone occurring where the Macmillan Bloedel 505W logging road crosses the Taylor River on the west central part of the Nora claims (Stephenson 1970).

These rocks have been subjected to significant faulting. The most dominant structure is the west-northwest striking Taylor River fault which is interpreted cross through the claims at the break in slope on the north side of the Taylor River. Numerous subsidiary structures striking predominantly east-west, and northwest. Northeast and north trending structures also occur.

The basalts have undergone extensive chloritic alteration with localized zones of epidote, and carbonate flooding (Sookochoff 1991). A distinctive crackle breccia texture within these rocks has been interpreted to be caused by hydro-brecciation during alteration of the basalts (Lammle 1988).

Rock samples of pyritiferous quartz carbonate veins in northwesterly striking structures and other areas of altered rock containing anomalous gold have been found (Sookochoff 1991).

Several weak to moderate soil and rock anomalies for copper, zinc, lead and arsenic have been located to date. These programs were localized surveys conducted to follow up magnetometer anomalies from earlier programs (Cukor 1983, Cukor 1984). To date no soils samples have returned results above trace for gold.

REVIEW OF EXPLORATION ON THE NORA GROUP

Exploration activity for skarn related copper mineralization was conducted west of where the Nora claims now exist. Historic mapping suggest that this exploration continued onto the ground now under the Abraham and the west end of the Nora claims (Stevenson 1970), (Sayer 1987). Since the Nora claims were staked in 1982 and the Abraham claims in 1983, physical work consisting of linecutting, geophysical work consisting of Proton magnetometer surveys (Cukor 1983, 1984), and combined geochemical surveys for gold and base metals with reconnaissance geological mapping on anomalous areas derived from the geophysical surveys have been completed on low lying areas within the Taylor River valley (Sookochoff 1991, 1992). Anomalous gold (34 ppb) has been analyzed from rock samples taken of vein and sheared wallrock from structures from the break in slope of the Taylor River valley.

1993 EXPLORATION PROGRAM

Studies by the author of air photos BC5498 No.'s 251-252, approximate scale 1:58,800 which overlie the area of the claims revealed that a resistant circular feature was present indicative of an intrusive complex where government mapping had only indicated basaltic rocks, was located northeast of the 1991 program by Sookochoff, and immediately west of gold mineralization found on the adjacent Tay claims. (Figure 3: GEOLOGY).

The author completed a combined geological mapping prospecting and rock and soil geochemical sampling programs on the unexplored precipitous northeast side of the claims (air photo target) and on numerous outcropping areas east and southeast of the 1991 work program by Sookochoff.

Ground access to other areas of the claims was hindered by heavy snow pack on all logging roads, and treed areas. Road access was only possible from the Highway #4 and where Macmillan Bloedel equipment had pushed snow off the main logging roads at lower elevations.

The area covering by the 1993 program abuts the Tay claims to the east. Several claims posts surveyed during the 1988 program on that property gave good control as to where the claim boundary was located (Lammle 1988). There is excellent topographic control in the area, and airphoto features to determine study and sample locations to a high degree of confidence. No claims posts were located during the 1993 program.

The steep slopes and cliffs were explored using a combination of airphoto, and topographic information. Vertical control was maintained using an altimeter calibrated at the start and end of each day. Horizontal control was maintained utilizing airphotos, and bearings to distinctive topographic features. Local control was maintained by compass and pace, or hipchain control lines. Control was established in the flat low lying areas explored by tying into and extending the preexisting grid to the east and south. A broad west north-west striking band through the program area was not sampled. The west part of this band is a thick talus wedge and in fact may be an old landslide. The east part is a floodplain and former river channel of the Taylor river. This area is underlain by fluviially deposited material.

A total of 62 soil and 27 rock samples were submitted for geochemical analysis using 30 element ICP and gold being analyzed using NAA finish. A 1:5000 scale geological map covering 1.5 square kilometers of surface mapping was completed (Figure 3).

GEOLOGY

Lithologic units found from mapping and aided from previous reports are Upper Triassic Karmutsen pillow basalts, flows and breccias. Intruding these rocks are plagioclase (hornblende) (quartz) (biotite) diorites of the "Island Intrusions". No pre-Karmutsen lithologies have been observed.

The Karmutsen basalts observed were dark green to black vesicular to massive cryptocrystalline to fine and medium grained augite plagioclase porphyry. Pillow basalts were the most common form observed during mapping. Pillows ranged from 0.2 to 0.8 M in diameter and usually had irregular ovoid shapes. Porphyritic varieties had phenocrysts ranging from 0.5 to 3 mm for augite and 0.5 to 1.5 mm for plagioclase. and comprise up to 12 percent of the rock for each mineral. Vesicals observed comprised less than 4 percent of the rock, were ovoid ranging from 3 to 10 mm long and were either empty, calcite or quartz filled. Quartz filled vesicles tended to occur in areas of higher metamorphic grade. Observed tops were up. Pillow basalts dominated the Karmutsen rocks mapped north of the Taylor River Fault. However the Karmutsen basalts mapped in the Taylor river lowlands appeared to be in part augite plagioclase flows, with heavily vesicled layers. No strikes or dips have been determined.

Intruding the Karmutsen Basalts are many stocks, dykes and sills of the dioritic "Island Intrusions". Refer to "Figure 3: Geology". The southeastern part of the Bedwell Batholith is interpreted to cover the northeastern part of the claims. Several dykes were found in the northern half of the area mapped. These dykes occur south of the contact delineated by the government map but due west of the "Tay quartz diorite" located on the adjacent property to the east. These dykes strike roughly east-west and northwest ranging from less than 0.2m to over 8m in width. They are generally hornblende plagioclase with minor biotite and quartz porphyritic quartz diorite. Hornblende occurs as black dark greyish green subhedral to anhedral prisms ranging in size from 2 to 8 mm long and comprises 3 to 20 percent of the rock. Hornblende is often partly to completely altered having chloritized rims. Plagioclase forms subhedral but generally anhedral grains ranging in size from 1 to 6 mm averaging 4 mm and comprises 20 to 80 percent averaging 40 % of the rock. On weathered surfaces plagioclase invariably weathers recessively indicating that plagioclase has been sausseritized to some degree. Fresh surfaces of diorite also react weakly with 10 percent HCl due to innumerable hairline calcite filled fractures. Biotite ranges from trace to 7 percent occurring as black to dark green chloritized specks to thin 8mm books in coarser grained diorites. Quartz is usually an interstitial component in diorite.

There are two much more felsic intrusive variants mapped. The first location was a highly altered extremely siliceous (80% quartz) porphyritic feldspar tonalite? (Rock 93-39) The feldspar phenocrysts have been altered to recessive easily weathered clay-sericite-epidote masses. The remainder of the rock is essentially granular quartz.

The second mapped location of felsic intrusive is near the rest area on Hwy 4 (line 16+00E 6+00S to 8+00S). Numerous subcropping? intrusive boulders and vein like outcrops striking roughly east west through outcrops and felsenmeer of altered basalt are found here. Two intrusive types are noted. The first has been identified in outcrop and is a pale green-grey white weathering quartz eye-plagioclase porphyry. The relict 2 to 5 mm plagioclase phenocrysts comprise 15 to 25 % of the rock have been replaced with recessive, easily weathered clays and sericite and possibly ankerite. The plagioclase phenocrysts are within a granular (1-2 mm) silicious groundmass consisting of essentially quartz. A pale green colour to fresh surfaces is probably due to microscopic interstitial sericite within the silicious matrix. No mafic minerals have been noted in this rock thus this rock may be an alaskite.

The second variant is a finer grained rock and has been found as felsenmeer trails. Minute 0.5 to 1.2 mm euhedral needles of relict hornblende comprising less than 0.5 percent and minute

anhedral to subhedral 0.4- 0.8 mm clay altered plagioclase? phenocrysts comprising another 20 percent of the rock in a leucocratic sugary textured siliceous groundmass. These rocks may be compositionally and visibly very similar to the "dacite porphyry" found associated with the Tay fissure vein, and silicious intrusive rocks associated with the "Vent" porphyry copper occurrence 10 Km south of the claims (Stevenson, 1969).

Contact relationships with Karmutsen rocks range from indistinct, sharp, and faulted. The Karmutsen rocks are hornfelsed to a very hard black very fine grained biotitic rock adjacent to these intrusive bodies, forming resistant ridges. Commonly the intrusive rocks weather more recessively than the hornfels resulting in felsenmeer trails of intrusive rocks through large outcrops of resistant hornfels. These dykes strike from 075 to 100 deg., usually steeply north dipping, and at 135-165 deg. also steeply dipping. Several mapped areas showed that diorite was forcibly injected into open joints and fractures where the two dominant trends crossed resulting in stair stepped dykes, and blocks. One east-west fault contact mapped had several sawtooth diorite-basalt segments with subvertical SW and NE striking contacts.

Structure.

The dominant structure on the claims is the 110 deg. striking Taylor River fault. This structure occurs at the break in slope on the north side of the Taylor river. Another parallel structure occurs on the south side of the Taylor River again occupying the break in slope. Numerous sub-parallel structures are found throughout the claims. A secondary structural trend is northwest striking as is seen from several prominent air photo lineaments and mapped structures. Several locations were mapped where the secondary trend has offset the primary trend with apparent right lateral slip. Vertical displacements could not be determined, however observed slickensides had shallow plunges. Weaker structural sets trending north and northeast have been determined from air photo analysis and confirmed previous information (Lammle 1988 pp8:6-8:8). In addition rare flat faults have been mapped. One flat fault mapped near the west property boundary at 240 M elevation contains box work and cockscomb quartz veining (sample site 93-08). This location also was at the intersection of 135 deg. striking 70E dipping and 080 striking 080N dipping structures.

Alteration and Mineralization.

Every observed rock type has undergone sausseritic alteration to some degree. This is evident in basaltic rocks as relict plagioclase grains readily weather to clay minerals, and weak to intense chloritization of the mafic groundmass. Augite is

commonly altered with chloritized rims. Biotite has been altered to chlorite. Basalts that have been moderately to intensely altered react weakly to moderately with 10% HCl. Numerous open fractures, and anastomosing tension gashes indicate high fluid pressures during metamorphism. These have been described as steam explosions, (Lammle 1988, p8-2). Basalts mapped in the Taylor River lowlands exhibit apparent broad westerly striking zones of crackle brecciated sausseritized rock. Also major structures of any orientation exhibit a marked increase in chloritization of basalt with sheared basalt displaying anastomosing chloritic shears with many open fractures. A marked decrease of feldspathic grains along altered structures may indicate plagioclase destruction had or was occurring during movement with the migration of the materials (epidote, calcite, albite, sericite, etc. away from areas of deformation where fluid flow tended to be focused.

Pillow basalts usually have interpillow apical spaces filled with an outer rim of ankerite, with epidote-quartz-ankerite, white quartz with calcite and finally calcite with sulphides in the core. The apical spaces in higher grade metamorphic areas usually contain pyrite with minor chalcopyrite cores.

All intrusive rocks observed contain plagioclase and biotite and to a lesser degree hornblende that has undergone sausseritic alteration. However evidence of degassing (hydrofracturing) and ductile shear was not generally evident. One location containing fractured intrusive rock is the highly siliceous "tonalitic" appearing rock (rock 39). Broken quartz vein material was incorporated in this fractured rock

A very dark black with a brownish tinge hornfels occurs adjacent to intrusive contacts. This colouring is probably due to fine felted biotite within the hornfels. Here also feldspar grains are markedly absent probably due to driving off of the alteration minerals during hornfelsic alteration.

Overprinting the sausseritic and hornfelsic alteration are quartz-carbonate veins with or without sulphides. These veins are largely confined to structures striking easterly, northwesterly and random flat faults. There is a marked increase in vein mineralization proximal to intrusive contacts within hornfelsed basalts. Vein mineralization within intrusive rocks mapped were linear joint and fracture fillings, also deformed and broken veins were found in structures displacing intrusive rocks. These veinlets are usually quartz rich. At least one potassic vein has been noted with pink potassic feldspar-quartz veining with minor potassic feldspar flooding into the host diorite. Some of the delicate vein textures noted ie cockscomb and boxwork quartz veining imply a late stage of vein emplacement.

Pyrite as finely disseminated grains are found in hornfelsed

basalts. Pyrite has been found as discreet grains in altered diorite, possibly as part of a halo of late stage quartzo-potassic veining described earlier. Pyrite as veinlets and stringers within faults, fractures and quartz veins are common near intrusive contacts. No other sulphide minerals were noted in the outcrops mapped. However several pieces of pillow basalt float with attached apical infillings containing late stage pyrite and chalcopyrite were observed. A piece of float (93-07) containing basalt breccia fragments in quartz vein with a small limestone pod was found. Malachite and azurite as well as pyrite as the visible sulphides are located near the limestone quartz contact.

Gold mineralization associated with pyritiferous quartz-carbonate veining within northwesterly striking steeply northeast dipping structures have been found on the Nora claims. Rock sample Nora 93-18 was assayed at 26.6 ppm (0.776 oz/t Au). This sample was of weakly pyritic cockscomb quartz veining within quartz carbonate altered and sheared pyritic fault gouge in a structure striking 135 deg. and dipping 70 deg. NE. The shear was 0.5 to 5 cm wide and occurs in the hangingwall of a small quartz diorite dyke. 15 meters to the north is a larger 070 deg. striking structure. 150 M west on this structure and on the north side is another 135 deg. striking NE 70 dipping structure where a sample of silicified and sheared volcanic rock with several late stage quartz calcite veins ran 910 ppb (0.026 oz/t Au). Both of these rocks are also moderately anomalous for arsenic. Copper, zinc, and lead were not sufficiently anomalous if at all to be considered significant.

GEOCHEMICAL SURVEY

For details of sample location methodology refer to "1993 EXPLORATION PROGRAM." Each location that a sample was taken was flagged with red flagging with the grid location or sample identification number.

Samples taken and sent for analysis during the 1993 program consisted of 62 soils and 27 rocks.

Soils samples were taken of the BF or C horizon (if insufficient B horizon material was available). Care was taken to avoid placing any humic material in the sample. The following information was noted for each sample: horizon(s), colour, depth, host material (till, gravel, residual or a mixture), and host rock surrounding the sample (APPENDIX I: SOIL SAMPLE DESCRIPTIONS).

Rock samples taken were relatively fresh, and clean. Rock type, alteration, mineralization and any other distinguishing

characteristics were noted (APPENDIX II: ROCK SAMPLE DESCRIPTIONS).

All sample were sent to Ecotech Laboratories in Kamloops for 30 element ICP (induced coupled plasma) and gold (acid leach/AA finish) ANALYSIS.

Soil samples were dried and sieved with the -80 mesh fraction retained. Rocks were dried then crushed to 100% passing -10 mesh using jaw and cone crushers with a 250 gram subsample taken then ring pulverized to -140 mesh.

0.5 gm subsamples were digested with 3 ml HCL-HNO₃-H₂O (aqua regia) relative proportions 3-1-2 respectively for one hour at 95 deg. C then diluted to 10 ml with distilled water. The detection limit for gold from this method is 3 ppm, therefore a second gold analysis was made by acid leach and atomic absorption from a 10 gm sub-sample. The detection limit for gold using this method is 5 ppb. A 15 gram sample (1/2 assay tonne) is used for fire assaying of gold samples that have been analyzed over the threshold limit of 1000 ppb.

EXPLORATION RESULTS

Note: Rock samples Nora 93-12 and Nora 93-13 are excluded from all calculations as they are float samples from unknown origins. For additional information regarding other elements not described below please refer to Appendix III, Assay Certificates.

Gold: All soil samples analyzed were below trace for gold. Rock geochemistry was more successful resulting in one "ore grade" sample (Nora 93-18) assaying 26.6 ppm or 0.776 oz/ton, one highly anomalous 910 ppb gold (0.026 oz/t) (Nora 93-21), and several anomalous samples ranging from 25 to 75 ppb were taken during this program.

Arsenic. All soils and rocks analyzed below 50 ppm arsenic with the exception of the ore grade gold sample Nora 93-18 which ran 1835 ppm. However the following slightly anomalous trends were noted. Arsenic results of soil and bedrock averaged 20 ppm from samples taken within the hornfelsed and diorite intruded lithologies in the northern half of the sampled area. A second clustering of values averaging 20 ppm arsenic in soils with rock samples in the same area running trace clustering around station 17+00E, 6+00S. A third weak soil anomaly is associated with a major northwest trending structure passing through 16+00E 6+50S All other areas averaged less than 10 ppm arsenic.

Copper: Geochemical results for copper can be separated into the following populations; soils with the northern

hornfelsed area averaging 175 ppm, soils within the southern gridded area averaged 57 ppm ranging from 3 to 389 ppm. Rocks in the northern part averaged 183 ppm ranging from 32 to 499 ppm. The selected rock samples averaged 57 ppm ranging from 6 to 231 ppm. Copper values for both soils and rocks in the southern grid decline towards the south. The most anomalous area for both rock and soils is in the northeast corner of the grid, proximal to dioritic intrusions.

The lone copper high (Nora 93-13) was from a float sample of Quartz vein breccia containing fragments of malachite bearing skarnified limestone. Similar mineralization has been described west of the claims (Sayer 1987).

Zinc, lead and other elements were not plotted as no significant anomalies were noted.

CONCLUSIONS

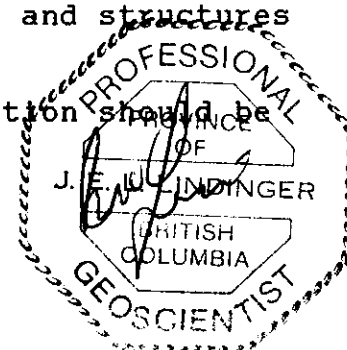
A combined program of geological mapping, prospecting, rock and soil sampling in steep terrain and in conjunction with air photo interpretation resulted in locating samples of auriferous pyritiferous quartz (carbonate) veins and sheared, silicified volcanic rock being found grading up to 26.6 gm/t Au (0.776 Oz/ton). These samples are within northwest striking steeply, dipping faults and are intimately associated with diorite dykes. These northwest striking structures appear to be subsidiary to a north 70 deg. E striking structure. These rocks are due east of and structurally on strike with anomalous gold values encountered on the adjacent property to the east.

Arsenic values in soils and rocks form proximal anomalies with gold mineralization. Copper forms weak anomalies associated with dioritic intrusive rocks. Gold geochemistry results in soils were all below the analytical level of detection.

RECOMMENDATIONS

Geological mapping and prospecting with rock sampling and strategic soil sampling should be completed on the Nora Claim group, specifically north of the projected strike of the Taylor River Fault in steep terrain where a; the most significant mineralization has been found to date, b; a favourable geological environment containing numerous intrusive bodies and structures is interpreted.

The areas containing significant gold mineralization should be mapped and sampled in detail.



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STATEMENT OF EXPENDITURES

Geological Field Work	10 days @ \$350/day	\$3500.00
Transportation from Kamloops B.C.	1960 Km @ \$0.32/km	\$ 627.20
Toll Booth Coquihalla	2 * \$10.00	\$ 20.00
Accommodation	10 days @ \$80/day	\$ 800.00
Vehicle (2 wheel drive)	10 days @ \$30/day	\$ 300.00
Consumable Field Supplies		\$ 60.00
Geochemical Analyses and Assaying		\$1249.97
Report	4 days @ \$350/day	\$1400.00
Drafting	10Hrs @ \$25.00/hr	\$ 250.00

Total Expenditures		\$8207.17



CERTIFICATE OF QUALIFICATIONS

I, Leo J. Lindinger, hereby do certify:

I am a graduate of the University of Waterloo (1980) and hold an honours Earth Sciences degree.

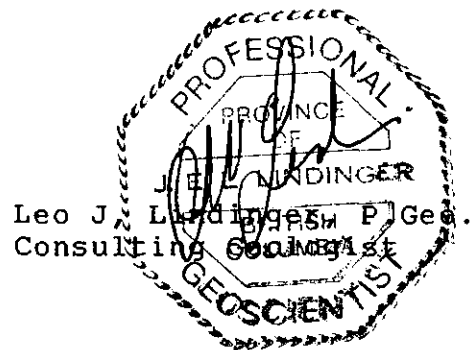
I have been practising my profession continually for the past 13 years.

I am a fellow of the Geological Association of Canada (1987).

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (1992).

The information presented in this report was a result of field work performed in March and April 1993, with additional information provided from Selected References.

I have no interest, financial or otherwise in the Nora Claim Group.



APPENDIX I
SOIL SAMPLE DESCRIPTIONS

NORA GROUP - SOIL SAMPLE DESCRIPTIONS

SAMPLE # (LOC)	COLOUR	DEPTH (CM)	HORIZON	MATERIAL	HOST ROCK	COMMENTS
15+00E 2+755	GREY BAN	5-10	C/B	SANDY TILL	BASALT	
15+00E 3+005	OR-BAN	5-7	B/C	SANDY RESIDUAL	FLOW BASALT	
15+00E 3+255	GR-BN	2-5	C/B	SANDY TILL	FLOW BASALT	
" 3+505	GR	2-5	C/B	SANDY RES-TILL	BASALT	
" 3+755	GR	1-5	C/B	SANDY RES.	BASALT	
" 4+005	GR-BN	2-5	C/B	STONY RESIDUAL	BASALT	
" 4+505	DK GR	5	C/B	SANDY CLAYEY RES	BASALT	
" 4+755	DK GR	2-5	C	SANDY RES	BASALT	
15+00E 5+005	BN	2-5	B/C	MIXED TILL-RES	BASALT	
15+50E 3+255	BN	5	B/C	TILL	—————	
" 3+755	BN	5	B/C	TILL	—————	
" 4+005	LT GY	3-6	C	RESIDUAL	BASALT	
" 4+255	BN GY	3	B/C	RES-TILL	BASALT	
" 4+505	BN GY	5	B/C	RES-TILL	BASALT	
15+50E 5+005	GY BN	4	B/C	TILL	BASALT	
16+00E 3+755	OR BN	5	B	TILL	—————	
" 4+005	OR	5	B/C	TILL	—————	
" 4+505	GR	3-5	C/B	RES-TILL	BASALT	
" 4+755	GR	3-5	C/B	RES-TILL	BASALT	
" 5+005	GR	5-7	C/B	TILL-RES	BASALT	
" 5+255	GR BN	5	B/C	TILL	BASALT	
" 5+505	BN OR	5	B	SAND	BASALT	
" 5+755	GR BN	3	B/C	CLAY-TILL-RES	BASALT	
" 6+005	GR BN	5	B/C	" " "	BASALT	
" 6+505	BN	5	B/C	" " "	DACITE	
" 6+755	BN	4	B/C	CLAYEY RES.	BASALT/DACITE	
" 7+005	BN OR	3	B/C	CLAYEY RES.	BASALT	
" 7+255	BUFF	4	C/B	CLAYEY RES.	BASALT	
" 7+505	TAN	2	B/C	CLAY RES.	DACITE	
" 7+755	BUFF	2	C/B	CLAYEY RES.	DACITE	
16+00E 8+005	TAN	4	B/C	CLAYEY RES.	DACITE	
16+50E 1+955	GR BN	3	C	CLAYEY RES	BASALT	
16+75E 4+505	GR BN	5	C/B	PEBBLY TILL	BASALT	
17+00E 4+755	GR BN	5	B/C	TILL-RES.	BASALT	
17+00E 5+005	GR BN	2-4	B/C	RES.-TILL	BASALT	
17+00E 5+255	BN	5	C/B	TILL-RES.	BASALT	

NORA GROUP - SOIL SAMPLE DESCRIPTIONS

SAMPLE # (Loc)	COLOUR	DEPTH (CM)	HORIZON	MATERIAL	HOST ROCK	COMMENTS
17+00E 6+00S	GR	3	B/C	RES TILL	BASALT	
17+00E 6+25S	GR BN	2	B/C	RES TILL	BASALT	
17+50E 5+50S	BN GR	5	C/B	CLAYBY TILL	BASALT	DIORITE?
" 6+00S	BN GR	2-5	C/B	CLAYBY TILL	BASALT	
" 6+50S	BN GR	2-5	C/B	CLAYBY RES	BASALT	
SOIL 93-05	BN	5	C/B	SANDY RES.	BASALT	
93-07	BN	3	B	SANDY SCREE	BASALT AND	DIORITE
93-09	BN	4	B/C	SANDY RES.	BASALT	
93-10	BN	3	B/C	SANDY SCREE	BASALT AND	DIORITE
93-16	BN	5	B/C	SANDY STONY RES	BASALT AND	DIORITE
93-17	BN	5	B	STONY RES.	BASALT	
93-19	GR BN	3	B/C	SANDY RES	DIORITE +	BASALT
93-20	BN	2	C/B	STONY RES-TILL	DIORITE AND	BASALT
93-23	BN	5	C/B	STONY RES-TILL	BASALT AND	DIORITE
93-24	BN	5	C/B	STONY RES-TILL	BASALT AND	DIORITE
93-30	BN	5	C/B	SANDY RES-TILL	BASALT	
93-33	BN	5	B/C	SANDY TILL-RES.	BASALT	
93-34	BN	5	B/C	RES.	BASALT AND	DIORITE
93-35	BN	3	B/C	SANDY STONY RES.	BASALT	
93-36	BN	2	B/C	RES.	BASALT	
93-37	BN	3	B/C	SANDY RES.	BASALT AND	DIORITE.
93-38	BN	2	B	SANDY RES.	DIORITE AND	BASALT
				RES.		
				-RESIDUAL		
	GR-GREY					
	OR-ORANGE					
	BN-BROWN					
	DK-DARK					
	LT-LIGHT					

APPENDIX II
ROCK SAMPLE DESCRIPTIONS

NORA GROUP - ROCK SAMPLE DESCRIPTION

SAMPLE # LOC	ROCK TYPE - ALTERATION - MINERALIZATION
14165E 2+155	GREY BROWN CRACKLE BRECCIATED FELDSPAR PORPHYRITIC BASALT
14165E 2+505	BUFF GREEN TECTONIZED MANGANESO ALTERED BASALT.
14180E 2+455	BLACK SHEARED AND BRECCIATED BASALT @ DOWNWARD Q VEINS
14185E 3+755	MELANOCRATIC BRECCIATED GREEN FAULT GOUGE (BASALTIC)
14190E 3+205	" " " " "
15100E 3+755	" " " " "
16100E 6+255	LEUCOCRATIC GREY GREEN QUARTZ EYE FELDSPAR PORPHYRITIC DACITE
16100E 6+405	QUARTZ EYE FELDSPAR PORPHYRITIC DACITE
16110E 5+705	LEUCOCRATIC QFP AND ALTERED GREEN BASALT BRECCIA
16150E 4+255	MELANOCRATIC GREY BROWN FINE GRAINED AUGITE PORPHYRITIC VESICULAR BASALT
17105E 5+455	MELANOCRATIC GREY GREEN BRECCIATED CHLORITICALLY ALTERED BASALT.
17150E 6+405	DARK GREY GREEN CARBONATE ^{FLOODED} AUGITE PORPHYRITIC BASALT.
ROCK 93-05	ANKERITE EPIDOTE APICAL INFILLING IN HUANFUSSED BASALT.
ROCK 93-08	QUARTZ EPIDOTE @ TRACE PY. IN APICAL INFILLING IN BASALT
ROCK 93-11	MELANOCRATIC GREEN CHLORITIZED BASALTIC FAULT GOUGE
ROCK 93-12	(FLOAT)
ROCK 93-13	(FLOAT) BASALT BRECCIA WITH EPIDOTE MAGNETITE VEINING
ROCK 93-14	LEUCOCRATIC GREY VITREOUS QUARTZ VEIN TA PY DISSEM.
ROCK 93-18	QUARTZ PYRITE VEIN - SILICIFIED + PYRITIZED FAULT GOUGE
ROCK 93-20	BUFF GREEN CARBONATE QUARTZ FLOODED AND VEIN GOUGE
ROCK 93 22	CHLORITICALLY ALTERED MANGANESE STAINED DIORITE (DYKE)
ROCK 93 29	DARK GREEN PYRITE VEINED FAULT GOUGE
ROCK 93 31	DARK GREY GREEN HUANFUSSED CRACKLE BRECCIATED FAULT GOUGE. PYRITE STRINGERS
ROCK 93-39	WHITE QUARTZ FELDSPAR PORPHYRY WITH Q VEIN FRAGS

APPENDIX III
CERTIFICATES OF ANALYSES AND ASSAY



ASSAYING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700
Fax (604) 573-4557

APRIL 16, 1993


CERTIFICATE OF ASSAY ETK 93-87

NORA GROUP GEOCHEMISTRY
3557 WESTSYDE ROAD
KAMLOOPS, B.C.
V2B 7H5

ATTENTION: LEO LINDINGER

SAMPLE IDENTIFICATION: 27 ROCK SAMPLES RECEIVED APRIL 5, 1993

ET#	Description	Au (g/t)	Au (oz/t)
22 -	ROCK 93-18	26.60	.776


ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

SC93/kmisc#1

ECO-TECH LABORATORIES LTD.
 10041 EAST TRANS CANADA HWY.
 KAMLOOPS, B.C. V2C 2J3
 PHONE - 604-573-5700
 FAX - 604-573-4557

NORA GROUP GEOCHEMISTRY ETK 93-87
 3557 WESTSYDE ROAD
 KAMLOOPS, B.C.
 V2B 7H5

APRIL 16, 1993

ATTENTION: LEO LINDINGER

27 ROCK SAMPLES RECEIVED APRIL 5, 1993

VALUES IN PPM UNLESS OTHERWISE REPORTED

PAGE 1

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1	- 14+65E 2+15S	5	<.2	3.09	<5	4	35	5	1.20	<1	36	129	27	5.43	<.01	<10	3.01	1029	<1	.03	32	680	6	<5	<20	30	.16	<10	165	<10	15	54
2	- 14+65E 2+50S	25	<.2	4.95	<5	4	50	5	1.73	<1	49	180	151	7.88	<.01	10	6.12	1393	1	.01	60	350	14	5	<20	17	.31	<10	236	<10	26	62
3	- 14+80E 2+45S	5	<.2	4.40	<5	4	40	10	.61	<1	47	161	56	7.37	.05	10	4.24	1240	1	.01	58	370	8	5	<20	7	.27	<10	202	<10	21	68
4	- 14+85E 3+75S	5	<.2	5.26	<5	4	65	10	.38	<1	51	122	10	8.78	.16	10	4.21	1479	<1	.01	66	410	8	5	<20	10	.04	10	233	<10	9	88
5	- 14+90E 3+20S	10	.4	5.22	<5	4	70	<5	.49	<1	43	109	231	8.10	.09	10	3.28	1720	<1	<.01	46	580	8	5	<20	8	.01	<10	197	10	6	72
6	- 14+95E 2+05S	5	<.2	3.24	<5	6	35	10	.66	<1	43	186	97	5.73	<.01	<10	3.51	1174	1	.02	49	360	10	5	<20	9	.48	<10	224	<10	33	62
7	- 15+00E 3+75S	5	<.2	4.56	10	4	50	5	.30	<1	47	182	91	9.22	.01	10	3.54	2106	1	.01	56	720	6	5	<20	6	.03	10	297	<10	8	83
8	- 16+00E 6+25S	5	.2	.87	<5	2	40	<5	.52	<1	3	72	9	1.02	.28	10	.25	507	3	.02	2	170	4	<5	<20	6	<.01	<10	8	<10	4	17
9	- 16+00E 6+40S	5	.2	.68	<5	2	40	<5	.68	<1	2	61	11	.89	.20	10	.22	656	2	.01	1	170	2	<5	<20	10	<.01	<10	4	<10	4	19
10	- 16+00E 17+35S	5	.2	.94	<5	2	55	<5	.15	<1	3	54	11	.98	.39	<10	.23	305	2	.01	1	150	4	<5	<20	6	<.01	<10	9	<10	2	14
11	- 16+10E 5+70S	10	.2	1.81	<5	2	40	<5	.87	<1	15	68	24	3.06	.16	10	1.19	758	1	.01	19	300	8	<5	<20	13	<.01	<10	65	<10	6	37
12	- 16+50E 4+25S	5	<.2	4.33	<5	10	45	10	3.94	<1	40	27	23	6.64	.03	<10	2.13	855	<1	.03	38	479	9	7	<20	25	.51	<10	188	<10	33	60
13	- 17+05E 5+95S	5	<.2	3.65	5	2	45	5	1.50	<1	33	37	6	6.85	.11	10	3.35	1347	<1	.01	13	690	4	10	<20	17	.04	<10	145	<10	11	58
14	- 17+50E 6+00S	5	.2	4.00	<5	4	60	5	.64	<1	31	60	8	6.36	.20	10	2.89	1626	1	.02	18	680	6	5	<20	14	.04	<10	132	<10	7	69
15	- 17+50E 6+40S	10	<.2	5.32	<5	6	45	10	2.69	<1	53	172	65	7.88	.02	10	5.89	1377	1	.01	57	330	2	5	<20	62	.49	<10	238	<10	34	61
16	- ROCK 93-05	10	<.2	3.92	<5	8	20	<5	5.82	<1	23	65	131	2.88	.01	<10	.56	339	2	.02	18	360	8	5	<20	105	.39	<10	123	<10	29	27
17	- ROCK 93-08	5	<.2	3.77	5	6	25	<5	3.95	<1	39	68	499	4.50	<.01	<10	1.31	586	1	.02	36	390	8	5	<20	38	.52	<10	151	<10	38	49
18	- ROCK 93-11	5	<.2	3.63	<5	6	35	<5	2.22	<1	35	47	169	5.86	.01	<10	2.09	805	<1	.04	30	590	6	5	<20	23	.30	<10	172	<10	26	46
19	- ROCK 93-12	25	2.2	2.48	30	4	20	<5	5.36	1	76	143	6190	3.80	<.01	<10	.62	390	7	.01	13	<10	<2	<5	<20	57	.03	<10	36	20	1	201
20	- ROCK 93-13	25	<.2	.71	25	4	35	10	.89	<1	19	40	39	9.36	<.01	<10	.39	349	1	<.01	28	310	<2	<5	<20	34	.14	10	86	<10	9	17

PAGE 2

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SW	SR	TI(%)	U	V	W	Y	ZN
21	- L 16+ 00E 5 + 00S	<5	<.2	1.66	<5	<2	15	<5	.23	<1	9	16	42	2.52	.01	<10	.31	143	<1	<.01	6	420	10	<5	<20	7	.23	<10	102	<10	13	18
22	- L 16+ 00E 5 + 50S	<5	<.2	2.33	10	<2	35	5	.16	<1	10	35	23	4.54	<.01	<10	.36	241	<1	<.01	5	510	12	<5	<20	9	.16	<10	155	<10	8	24
23	- L 16+ 00E 5 + 75S	<5	<.2	2.11	10	<2	30	5	.11	<1	10	43	25	4.60	<.01	<10	.49	184	<1	<.01	9	270	8	<5	<20	6	.04	<10	148	<10	1	25
24	- L 16+ 00E 6 + 00S	<5	<.2	1.50	<5	<2	35	<5	.20	<1	6	18	20	2.66	.02	<10	.18	260	<1	<.01	5	150	10	<5	<20	7	.01	<10	100	<10	<1	27
25	- L 16+ 00E 6 + 50S	<5	<.2	4.50	20	<2	40	5	.25	<1	17	56	69	5.73	<.01	<10	.64	333	1	<.01	13	380	16	5	<20	8	.22	<10	193	<10	11	36
26	- L 16+ 00E 6 + 75S	<5	<.2	1.64	15	<2	30	10	.15	<1	10	39	18	6.45	<.01	<10	.15	171	<1	<.01	4	330	8	<5	<20	7	.23	<10	237	<10	10	20
27	- L 16+ 00E 7 + 00S	<5	<.2	3.41	15	<2	45	5	.37	<1	24	71	72	6.42	<.01	<10	1.00	802	<1	<.01	23	870	14	<5	<20	12	.34	<10	213	10	19	50
28	- L 16+ 00E 7 + 25S	<5	<.2	2.39	10	<2	30	5	.23	<1	13	34	31	5.58	<.01	<10	.55	275	<1	<.01	9	600	10	<5	<20	8	.15	<10	174	<10	6	33
29	- L 16+ 00E 7 + 50S	<5	<.2	1.38	5	<2	15	<5	.10	<1	4	9	3	2.78	.01	<10	.12	155	<1	<.01	1	250	8	<5	<20	5	.03	<10	107	<10	<1	11
30	- L 16+ 00E 7 + 75S	<5	<.2	2.15	10	<2	30	5	.20	<1	8	35	17	4.83	.01	<10	.32	250	<1	<.01	6	930	8	<5	<20	8	.06	<10	150	<10	2	26
31	- L 16+ 00E 8 + 00S	<5	<.2	2.50	10	<2	35	5	.16	<1	13	40	31	4.90	.01	<10	.53	711	<1	<.01	9	440	10	<5	<20	8	.05	<10	149	<10	1	36
32	- L 16+ 00E 15+ 25S	<5	<.2	1.04	<5	<2	20	5	.22	<1	8	20	11	3.45	.01	<10	.18	123	<1	<.01	3	440	8	<5	<20	14	.22	<10	144	<10	11	14
33	- L 16+ 55E 1 + 95S	<5	<.2	3.66	15	<2	45	<5	.28	<1	18	44	68	5.27	<.01	<10	.66	453	<1	<.01	14	1670	14	<5	<20	14	.24	<10	147	<10	12	43
34	- L 16+ 75E 4 + 50S	<5	<.2	2.35	10	<2	30	<5	.36	<1	13	18	58	3.82	.01	<10	.35	443	<1	.01	8	670	14	<5	<20	8	.28	<10	126	<10	14	31
35	- L 17+ 00E 4 + 75S	<5	<.2	1.84	<5	<2	30	<5	.24	<1	9	22	42	3.28	.01	<10	.19	200	<1	<.01	5	610	10	<5	<20	8	.15	<10	134	<10	7	29
36	- L 17+ 00E 5 + 00S	<5	<.2	1.87	5	<2	25	5	.33	<1	13	39	31	4.21	<.01	<10	.36	529	<1	<.01	8	480	10	<5	<20	10	.22	<10	162	<10	12	24
37	- L 17+ 00E 5 + 25S	<5	<.2	4.01	15	<2	35	5	.40	<1	23	62	119	5.30	<.01	<10	.97	524	<1	<.01	21	670	14	5	<20	10	.37	<10	186	<10	20	37
38	- L 17+ 00E 5 + 50S	<5	<.2	2.67	5	<2	60	<5	.48	<1	20	44	59	4.18	.02	<10	1.14	993	<1	<.01	18	760	14	5	<20	13	.14	<10	118	<10	10	47
39	- L 17+ 00E 5 + 75S	<5	<.2	3.11	20	<2	60	<5	.34	<1	15	46	55	4.98	.04	<10	.62	738	<1	<.01	14	1460	16	<5	<20	12	.15	<10	170	<10	9	55
40	- L 17+ 00E 6 + 00S	<5	<.2	3.32	20	<2	40	<5	.23	<1	23	35	71	6.18	.01	<10	.71	1042	<1	<.01	14	890	12	<5	<20	9	.09	<10	190	<10	7	59
41	- L 17+ 00E 6 + 25S	<5	<.2	2.36	10	<2	40	5	.41	<1	16	37	36	4.76	.02	<10	.71	813	<1	<.01	13	420	24	<5	<20	14	.15	<10	160	<10	8	31
42	- L 17+ 50E 5 + 50S	<5	<.2	2.07	10	2	45	<5	.36	<1	16	32	49	3.14	.01	<10	.85	811	<1	<.01	13	520	10	<5	<20	11	.12	<10	82	<10	10	36
43	- L 17+ 50E 6 + 00S	<5	<.2	3.67	20	2	45	<5	.33	<1	17	59	91	6.62	<.01	<10	.71	389	<1	<.01	14	1870	10	<5	<20	11	.26	<10	210	<10	13	40
44	- L 17+ 50E 6 + 50S	<5	<.2	.92	10	<2	15	5	.16	<1	9	26	14	3.24	<.01	<10	.18	136	<1	<.01	6	290	10	<5	<20	10	.24	<10	144	<10	13	18
45	- SOIL 93- 05	<5	<.2	4.32	20	2	65	<5	.53	<1	31	52	144	5.56	.03	<10	.58	2184	1	<.01	35	790	18	<5	<20	28	.27	<10	182	<10	16	53
46	- SOIL 93- 06	<5	<.2	3.82	20	<2	50	<5	.43	<1	30	61	149	5.69	.01	<10	.54	582	<1	<.01	34	640	12	5	<20	19	.37	<10	170	<10	20	53
47	- SOIL 93- 07	<5	<.2	4.81	25	2	60	<5	.61	<1	42	61	390	7.13	.02	<10	1.42	913	<1	.01	54	1370	8	<5	<20	26	.19	<10	180	<10	14	52
48	- SOIL 93- 09	<5	<.2	2.78	15	2	40	5	.44	<1	18	41	63	4.24	.01	<10	.65	684	<1	<.01	18	970	12	<5	<20	12	.27	<10	130	<10	15	48
49	- SOIL 93- 10	<5	<.2	4.37	30	2	65	<5	.67	<1	37	40	268	6.39	.03	<10	1.31	1417	1	.01	35	1050	10	5	<20	35	.09	<10	161	<10	8	48
50	- SOIL 93- 16	<5	<.2	6.42	15	2	25	<5	.18	<1	14	33	122	3.38	<.01	<10	.36	316	<1	<.01	9	2510	22	<5	<20	7	.23	<10	115	<10	27	22

PAGE 3

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
51 -	SOIL 93- 17	<5	<.2	3.97	10	2	40	5	.57	<1	25	56	116	5.41	<.01	<10	1.13	386	<1	<.01	24	610	14	5	<20	12	.46	<10	196	<10	25	40
52 -	SOIL 93- 19	<5	<.2	7.06	5	<2	40	<5	.17	<1	23	41	152	3.96	.01	<10	.22	414	<1	<.01	11	960	20	<5	<20	9	.21	<10	120	<10	26	31
53 -	SOIL 93- 20	<5	<.2	3.19	15	2	45	10	.40	<1	27	71	70	7.11	.01	<10	.81	427	<1	.01	24	290	10	<5	<20	22	.45	10	264	<10	24	34
54 -	SOIL 93- 23	<5	<.2	5.21	15	2	40	5	.35	<1	19	45	97	5.13	.01	<10	.46	455	1	<.01	13	1190	16	<5	<20	10	.35	<10	176	<10	20	41
55 -	SOIL 93- 24	<5	<.2	3.83	20	<2	45	<5	.51	<1	50	44	139	5.83	.02	<10	.49	1026	<1	.01	22	620	14	5	<20	22	.34	<10	172	<10	19	48
56 -	SOIL 93- 30	<5	<.2	4.62	10	<2	65	<5	.38	<1	24	37	137	5.11	.02	<10	.50	381	<1	<.01	23	350	14	<5	<20	15	.28	<10	159	<10	16	34
57 -	SOIL 93- 33	<5	<.2	4.02	25	4	45	<5	.43	<1	32	42	174	5.50	.01	<10	.69	701	2	.01	21	540	12	5	<20	19	.37	<10	172	<10	22	45
58 -	SOIL 93- 34	<5	<.2	5.35	40	<2	70	<5	.32	<1	34	58	149	6.84	.02	<10	1.05	1790	<1	<.01	29	830	12	5	<20	26	.29	<10	244	<10	16	59
59 -	SOIL 93- 35	<5	<.2	4.98	15	<2	60	<5	.45	<1	51	84	320	8.18	.01	<10	1.78	1752	<1	<.01	44	580	8	<5	<20	34	.37	10	275	<10	25	61
60 -	SOIL 93- 36	<5	<.2	4.21	10	2	65	<5	.45	<1	46	38	140	5.83	.02	<10	.68	1645	1	<.01	30	590	14	<5	<20	33	.29	<10	177	<10	19	46
61 -	SOIL 93- 37	<5	<.2	3.28	15	<2	80	<5	.50	<1	40	36	87	5.66	.04	<10	.80	2079	<1	<.01	21	490	16	<5	<20	27	.19	<10	177	<10	17	48
62 -	SOIL 93- 38	<5	<.2	3.40	10	2	50	<5	.42	<1	38	49	100	5.68	.01	<10	.80	2220	<1	<.01	25	700	14	<5	<20	28	.33	10	187	<10	19	46

QC DATA

REPEAT #:

1 - L 15+ 00E 2 + 75S	<.2	3.26	15	<2	35	<5	.34	<1	16	26	102	4.29	.01	<10	.59	350	1	.01	13	520	16	5	<20	9	.20	<10	128	<10	11	56
39 - L 17+ 00E 5 + 75S	<.2	3.02	20	2	60	5	.33	<1	15	45	55	4.82	.04	<10	.62	714	<1	<.01	14	1420	14	<5	<20	12	.15	<10	167	<10	9	53
STANDARD 1991 -	1.0	1.68	60	4	120	<5	1.64	<1	18	57	79	3.51	.34	<10	.93	659	<1	.01	20	590	16	5	<20	57	.09	<10	68	<10	10	60
STANDARD 1991 -	1.0	1.70	50	2	130	<5	1.65	<1	18	57	81	3.48	.35	<10	.96	671	<1	.01	21	600	18	5	<20	61	.09	<10	69	<10	9	61

NOTE: < = LESS THAN
> = GREATER THAN

COPY
ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

ECO-TECH LABORATORIES LTD.
 10041 EAST TRANS CANADA HWY.
 KAMLOOPS, B.C. V2C 2J3
 PHONE - 604-573-5700
 FAX - 604-573-4557

MORA GROUP GEOCHEMISTRY ETK 93-88
 3557 WESTSYDE ROAD
 KAMLOOPS, B.C.
 V2B 7H5

APRIL 16, 1993

ATTENTION: LEO LINDINGER

62 SOIL SAMPLES RECEIVED APRIL 5, 1993

VALUES IN PPM UNLESS OTHERWISE REPORTED

PAGE 1

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1	L 15+ 00E 2 + 75S	<5	<.2	3.36	<2	35	<5	.36	<1	17	27	104	4.54	.07	<10	.61	368	<1	.01	14	540	20	<5	<20	10	.20	<10	133	<10	12	59	
2	L 15+ 00E 3 + 00S	<5	<.2	3.55	10	<2	40	<5	.31	<1	25	42	160	5.51	<.01	<10	.48	1035	<1	<.01	14	760	16	<5	<20	9	.29	<10	174	<10	19	49
3	L 15+ 00E 3 + 25S	<5	<.2	2.96	10	<2	55	<5	.41	<1	25	38	69	5.65	.03	<10	.76	2622	<1	<.01	17	730	14	<5	<20	9	.10	<10	175	<10	5	54
4	L 15+ 00E 3 + 50S	<5	<.2	1.75	5	<2	25	<5	.16	<1	11	24	9	3.08	.03	<10	.41	859	<1	<.01	7	490	10	<5	<20	5	.02	<10	115	<10	1	25
5	L 15+ 00E 3 + 75S	<5	.4	1.06	<5	<2	20	<5	.08	<1	10	24	27	2.40	.01	<10	.35	1716	<1	<.01	7	280	8	<5	<20	4	.02	<10	85	<10	1	21
6	L 15+ 00E 4 + 00S	<5	.6	4.85	5	<2	70	<5	.70	<1	28	79	289	5.60	.02	10	1.45	2390	<1	<.01	48	780	14	<5	<20	11	.01	<10	166	<10	23	70
7	L 15+ 00E 4 + 50S	<5	<.2	3.83	10	2	45	<5	.64	<1	25	52	134	4.44	.01	<10	1.33	791	1	.01	27	790	18	5	<20	12	.27	<10	138	<10	20	48
8	L 15+ 00E 4 + 75S	<5	<.2	1.98	5	<2	25	<5	.36	<1	15	32	61	3.41	.01	<10	.70	604	<1	<.01	13	410	10	<5	<20	8	.16	<10	109	<10	11	29
9	L 15+ 00E 5 + 00S	<5	<.2	2.38	5	<2	25	<5	.29	<1	12	25	60	3.33	<.01	<10	.42	236	<1	<.01	9	450	12	<5	<20	9	.22	<10	112	<10	12	27
10	L 15+ 50E 3 + 25S	<5	<.2	5.23	30	<2	45	<5	.28	<1	27	49	125	5.14	<.01	<10	.62	946	<1	<.01	19	800	20	5	<20	7	.27	<10	145	<10	18	52
11	L 15+ 50E 3 + 50S	<5	<.2	1.95	10	<2	35	10	.30	<1	16	35	40	4.98	<.01	<10	.25	331	<1	<.01	8	470	12	<5	<20	11	.31	<10	173	<10	17	34
12	L 15+ 50E 3 + 75S	<5	<.2	2.01	5	<2	40	5	.22	<1	21	44	33	5.77	.01	<10	.51	804	<1	<.01	10	450	8	<5	<20	5	.05	<10	226	<10	2	49
13	L 15+ 50E 4 + 00S	<5	<.2	2.55	5	<2	35	5	.08	<1	20	54	7	5.58	.01	<10	1.25	505	<1	<.01	22	190	10	<5	<20	4	<.01	<10	192	<10	<1	50
14	L 15+ 50E 4 + 25S	<5	<.2	2.26	5	<2	45	<5	.21	<1	10	29	44	4.15	.04	<10	.31	767	<1	<.01	7	700	20	<5	<20	11	.16	<10	149	<10	8	50
15	L 15+ 50E 4 + 50S	<5	<.2	2.18	5	<2	30	5	.32	<1	13	31	37	4.69	.01	<10	.40	243	<1	<.01	7	860	10	<5	<20	12	.31	<10	180	<10	16	32
16	L 15+ 50E 5 + 00S	<5	<.2	3.03	10	<2	35	10	.46	<1	23	50	89	4.83	.01	<10	1.05	417	<1	<.01	20	570	14	5	<20	12	.45	<10	170	<10	27	37
17	L 16+ 00E 3 + 25S	<5	<.2	2.83	5	<2	40	<5	.07	<1	11	36	14	4.37	.01	<10	.95	265	<1	<.01	7	220	10	5	<20	4	.01	<10	140	<10	<1	29
18	L 16+ 00E 4 + 00S	<5	<.2	3.51	15	<2	60	5	.27	<1	14	41	58	6.08	.01	<10	.47	227	<1	<.01	9	600	14	<5	<20	10	.21	<10	168	<10	11	47
19	L 16+ 00E 4 + 50S	<5	<.2	2.00	5	<2	25	<5	.30	<1	10	16	59	2.77	.01	<10	.28	266	<1	<.01	6	350	12	<5	<20	8	.22	<10	99	<10	12	22
20	L 16+ 00E 4 + 75S	<5	<.2	1.75	5	<2	15	<5	.36	<1	9	14	40	2.90	<.01	<10	.24	150	<1	.01	5	250	10	<5	<20	7	.21	<10	112	<10	12	18

PAGE 2

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
21	- ROCK 93-14	40	<.2	1.12	5	4	10	<5	1.88	<1	15	118	161	1.85	<.01	<10	.27	242	5	<.01	14	200	4	<5	<20	47	.28	<10	56	<10	18	21
22	- ROCK 93-18	>15000	.4	2.57	1835	8	50	<5	.32	4	30	84	207	7.75	<.01	<10	1.42	375	3	<.01	39	210	8	5	<20	11	.33	10	134	<10	18	43
23	- ROCK 93-21	910	<.2	2.38	45	4	20	10	2.53	<1	33	132	32	4.41	<.01	<10	1.26	638	2	.01	33	510	2	<5	<20	102	.40	<10	136	<10	25	34
24	- ROCK 93-22	5	<.2	3.26	5	4	100	5	.84	<1	28	50	33	5.75	.04	<10	2.45	900	<1	.03	12	670	2	5	<20	16	.20	<10	183	<10	19	41
25	- ROCK 93-29	75	<.2	3.43	20	6	40	<5	2.30	<1	40	46	371	9.07	<.01	<10	1.39	426	<1	.02	18	510	2	5	<20	28	.47	<10	162	<10	30	28
26	- ROCK 93-31	10	<.2	3.46	10	8	40	<5	2.24	<1	41	79	193	7.76	.01	<10	2.27	582	<1	.04	60	520	2	5	<20	30	.51	<10	210	<10	36	45
27	- ROCK 93-39	5	<.2	1.93	<5	6	10	<5	2.45	<1	9	110	36	1.57	<.01	<10	.40	172	4	.01	12	110	2	<5	<20	46	.13	<10	82	<10	9	11

QC DATA

REPEAT #:

14+65E 2+15S	<.2	3.28	<5	6	30	5	1.29	<1	37	133	30	5.60	<.01	<10	3.22	1076	<1	.04	33	680	2	5	<20	35	.17	<10	177	<10	15	55
STANDARD 1991 -	1.2	1.93	55	6	130	<5	1.84	<1	21	65	84	4.00	.39	10	1.05	747	<1	.01	22	650	18	5	<20	62	.10	<10	77	<10	12	65

NOTE: < = LESS THAN
> = GREATER THAN

Robert Mener
 ECO-TECH LABORATORIES LTD.
 FRANK J. PEZZOTTI, A.Sc.T.
 B.C. Certified Assayer

SC93/KAMMISC#1



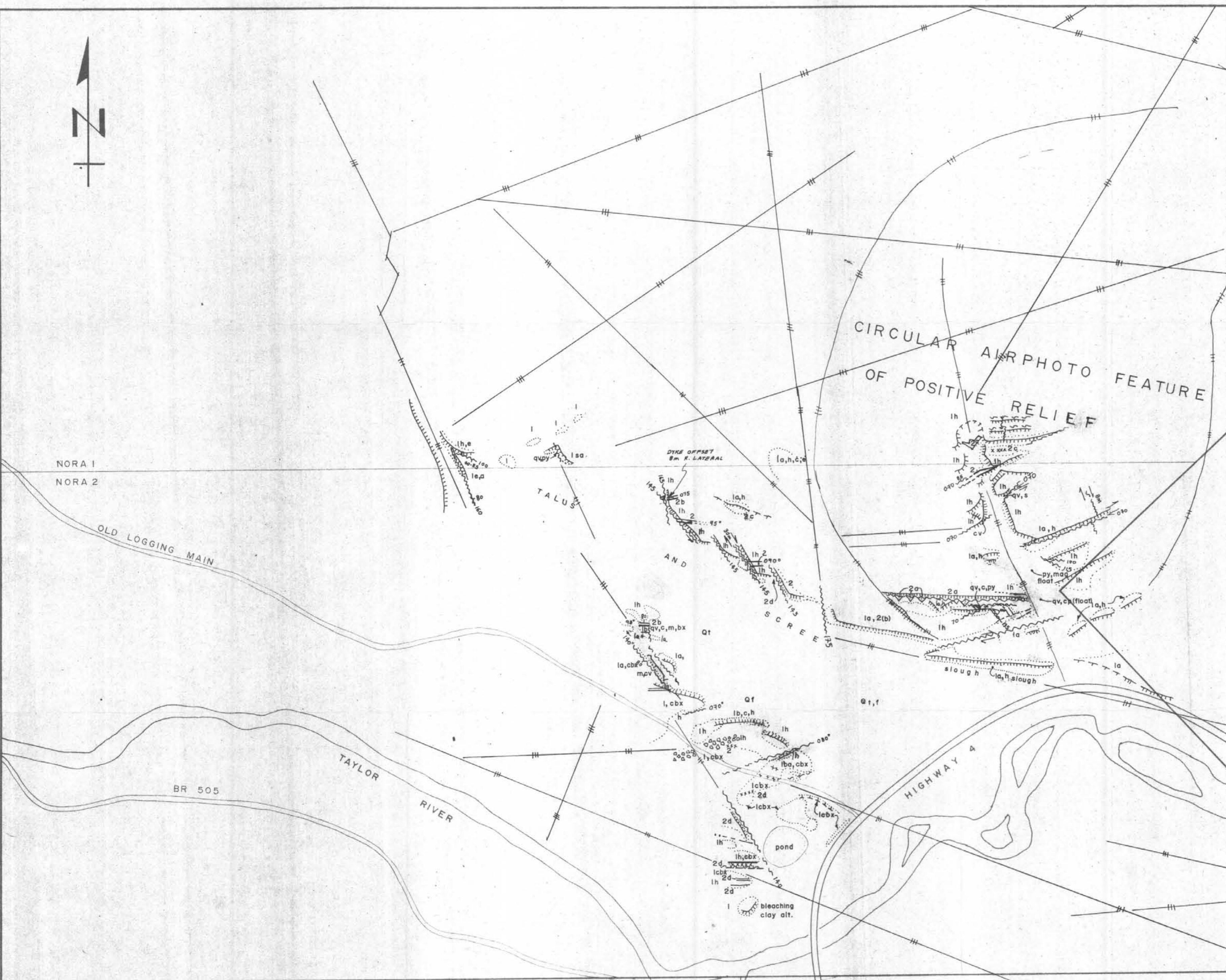
LEGEND

- QUATERNARY and RECENT**
 Q(t,f) Unconsolidated Sediments (till, fluvial)
- JURASSIC (and TERTIARY?)**
- 2 DIORITE
 - 2a Hornblende Plagioclase Porphyry
 - 2b Plagioclase Porphyry
 - 2c Quartz Plagioclase Porphyry
 - 2d Quartz Plagioclase DACITE Porphyry

- TRIASSIC**
- 1 BASALT
 - 1a Pillow Basalt
 - 1b Augite Plagioclase Porphyry Flow

- Alteration and Mineralization**
- h hornfels
 - cb(x) calcite chlorite (crackle breccia)
 - e(v) epidote (veining)
 - c calcite
 - s silicification
 - qv quartz veining
 - py pyrite
 - cpy chalcopyrite

- SYMBOLS**
- x ○ outcrop, small, large
 - ⊞ felsenmeer
 - ⊞ cliff, skarp defined, approximate
 - ⊞ air photo linear
 - ⊞ fault defined, approximate, assumed strike and dip
 - ⊞ movement (right lateral reverse)
 - ⊞ geological contact defined, approximate, assumed, strike and dip
 - ⊞ shearing strike and dip
 - vein



**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

22,870

NORA CLAIM GROUP BOUNDARY

JOB NO.
 CHKD. BY
 DRN. BY L.J.L.
 DATE 93/04
 SCALE 1:5000
 DWG NO.

NORA CLAIM GROUP
 NTS 92F/6 ALBERNI M. D.

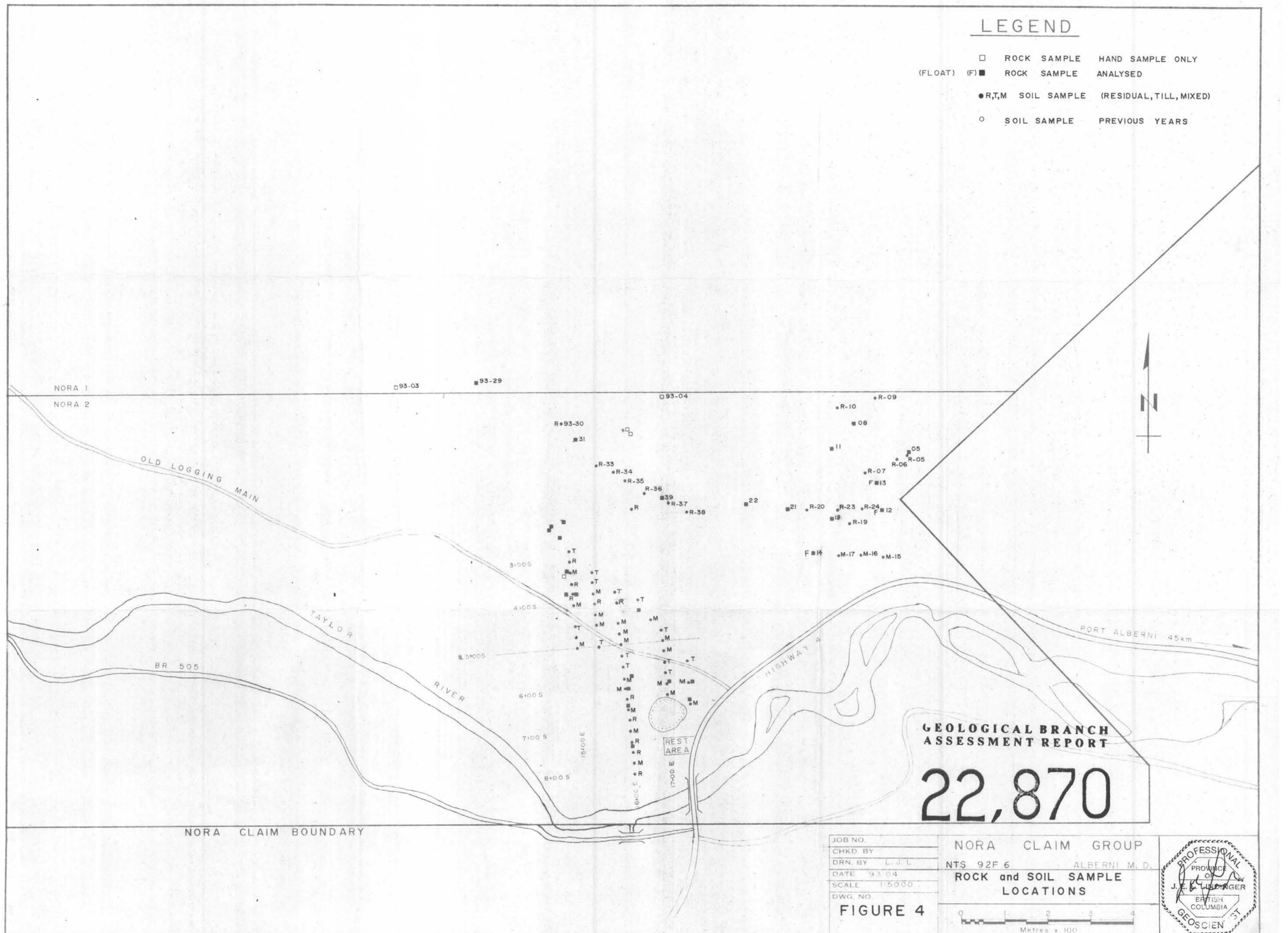
GEOLOGY

FIGURE 3



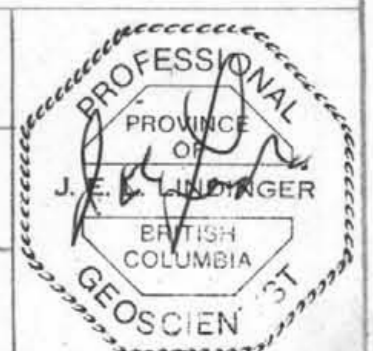
LEGEND

- ROCK SAMPLE (FLOAT) (F) ■ ROCK SAMPLE ANALYSED
- R,T,M SOIL SAMPLE (RESIDUAL, TILL, MIXED)
- SOIL SAMPLE PREVIOUS YEARS



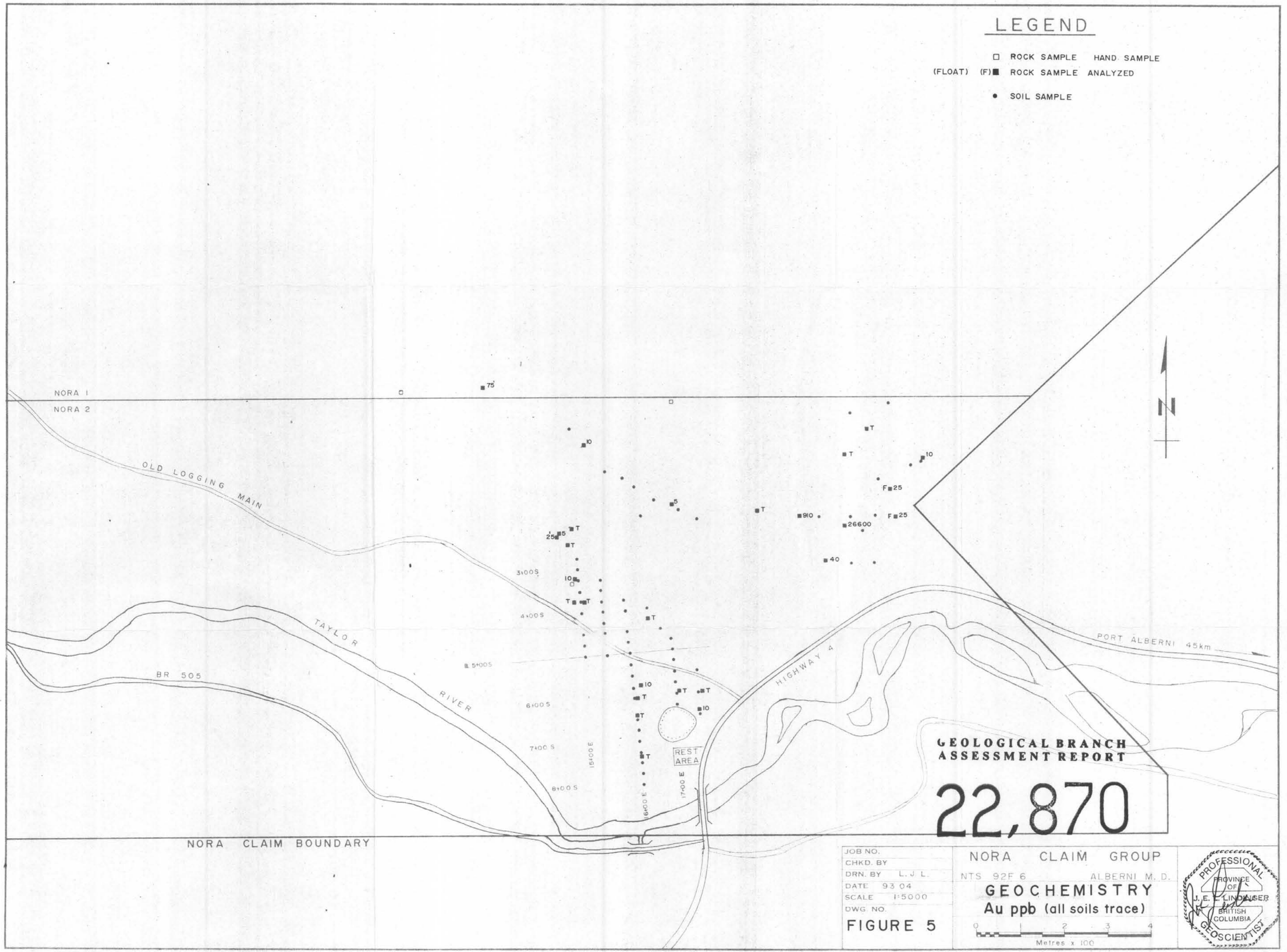
JOB NO.
 CHKD BY
 DRN. BY L.J.L.
 DATE 93 04
 SCALE 1:5000
 DWG. NO.
FIGURE 4

NORA CLAIM GROUP
 NTS 92F 6 ALBERNI M. D.
ROCK and SOIL SAMPLE LOCATIONS



LEGEND

- ROCK SAMPLE HAND SAMPLE
- (F) ■ ROCK SAMPLE ANALYZED
- SOIL SAMPLE



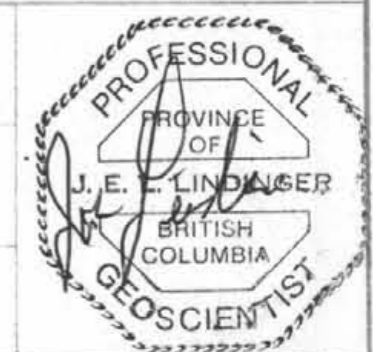
GEOLOGICAL BRANCH ASSESSMENT REPORT

22,870

JOB NO.
 CHKD. BY
 DRN. BY L. J. L.
 DATE 93 04
 SCALE 1:5000
 DWG. NO.
FIGURE 5

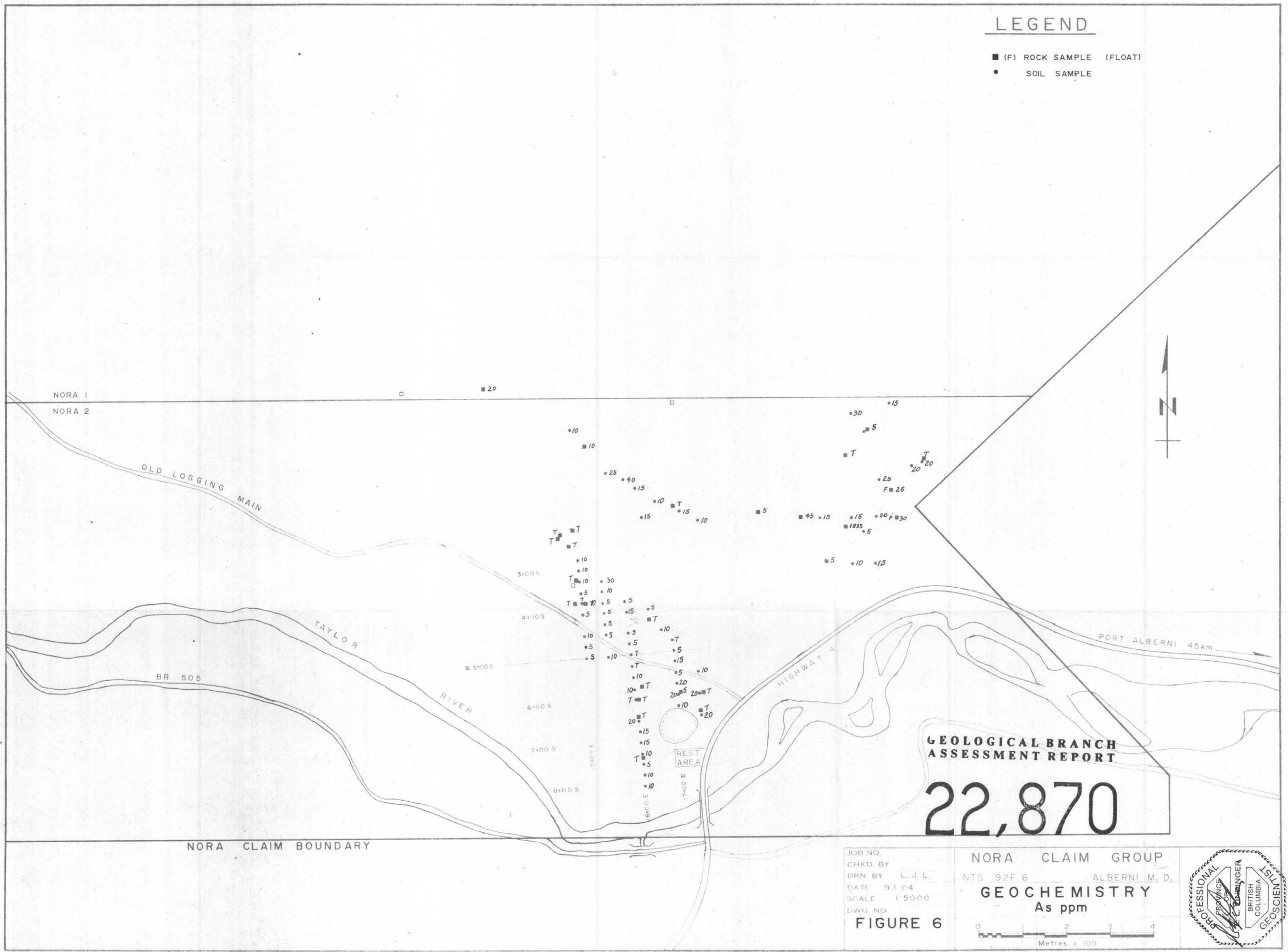
NORA CLAIM GROUP
 NTS 92F 6 ALBERNI M. D.

GEOCHEMISTRY
 Au ppb (all soils trace)



LEGEND

- (F) ROCK SAMPLE (FLOAT)
- SOIL SAMPLE



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,870

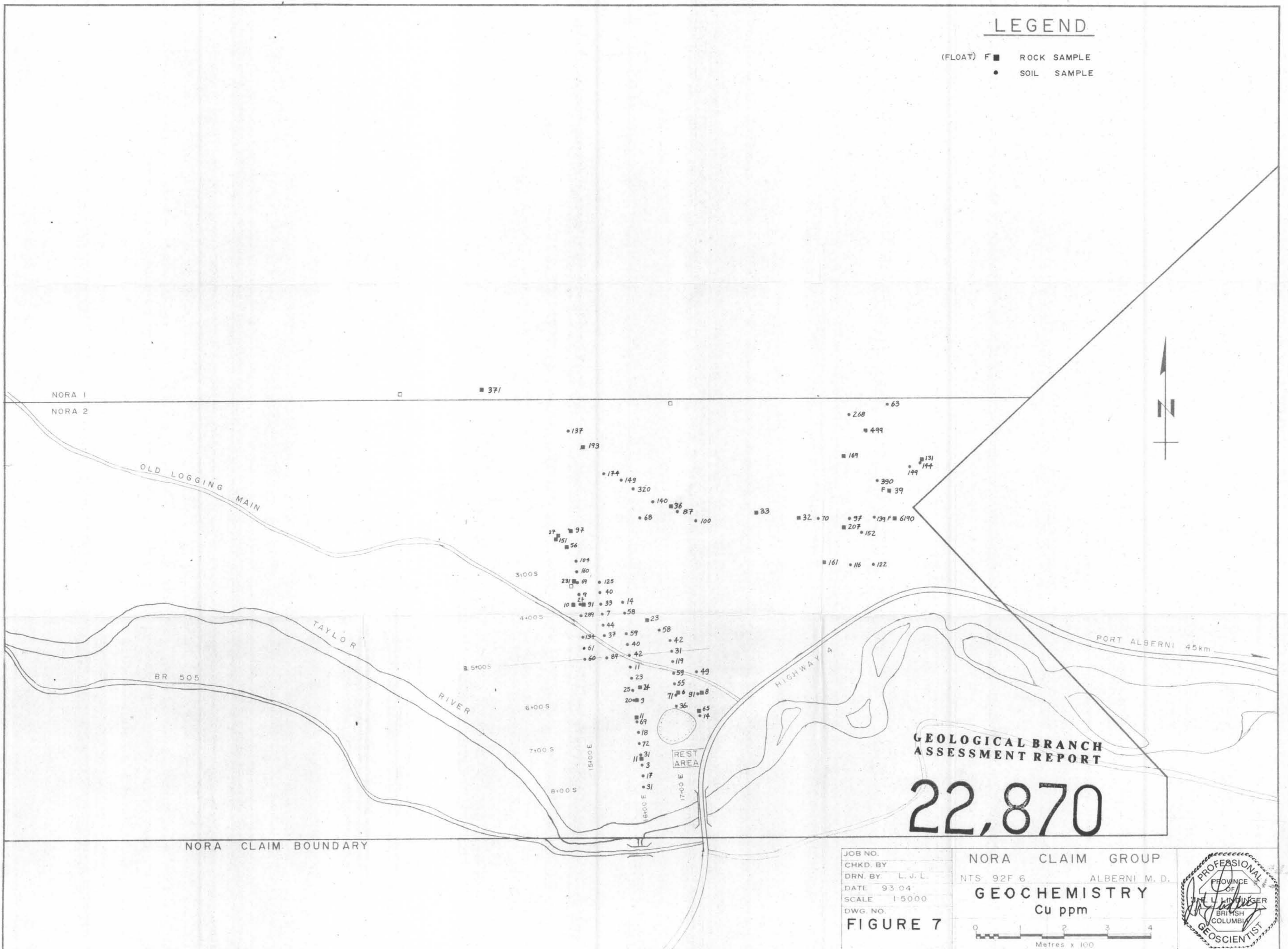
JOB NO.
CHKD. BY
DRN. BY L. J. L.
DATE 93 04
SCALE 1:5000
DWG. NO.
FIGURE 6

NORA CLAIM GROUP
NTS 92F 6 ALBERNI M. D.
GEOCHEMISTRY
As ppm



LEGEND

(FLOAT) F ■ ROCK SAMPLE
 • SOIL SAMPLE



GEOLOGICAL BRANCH
 ASSESSMENT REPORT

22,870

JOB NO.
 CHKD. BY
 DRN. BY L.J.L.
 DATE 93 04
 SCALE 1:5000
 DWG. NO.
FIGURE 7

NORA CLAIM GROUP
 NTS 92F 6 ALBERNI M. D.

GEOCHEMISTRY
 Cu ppm

