GEOCHEMICAL AND GEOPHYSICAL ASSESMENT REPORT

On The FEN 1-4 & TSALIT 4-8 MINERAL CLAIMS

Omineca M.D.
93L/2W

Lat. 54°10'N Long. 126°55'W

June-Aug. 1991

For Owner & Operator
Baril Developments Ltd.

Delta, B.C.
Sept., 1991

S. Zastavnikovich, Geochemist
L.M. Bzdel, Geophysicist

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SUMMARY

The contiguous FEN group of claims consist of the Fen1-4 and Tsalit4-8 mineral claims as described below. The claims are presently owned by Baril Developments Ltd., and are located between Fenton and Code creeks 4 km south of Morice River, 30 km southeast of Houston, in the Omineca M.D. on map sheet NTS 93L/2W.

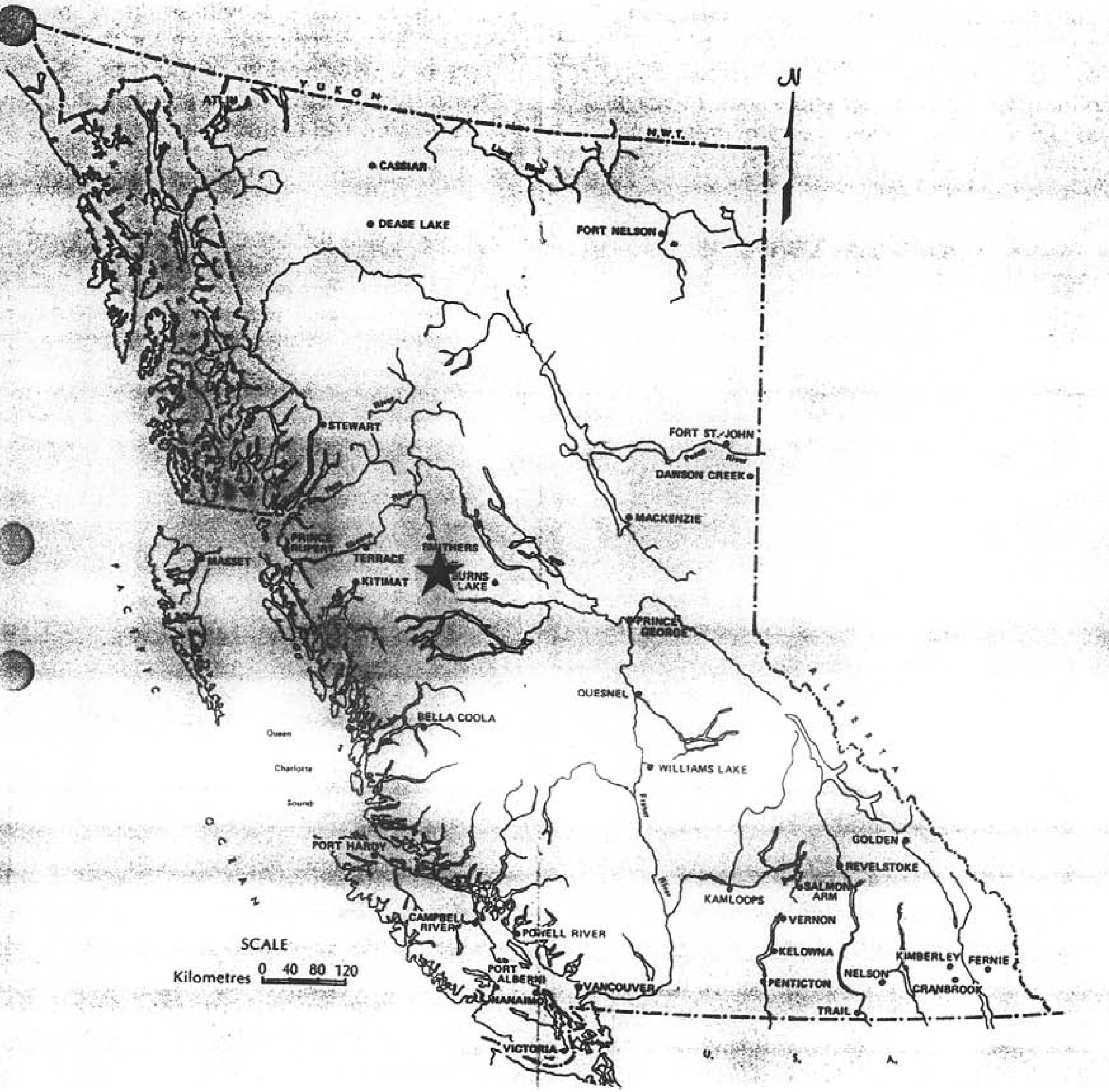
Claim	Record #	Units	Expiry Date *
Fen1	12630	20	Sept. 25, 1993
Fen2	10873	20	June 25, 1993
Fen3	12631	20	Sept. 24, 1993
Fen4	12751	16	Oct. 24, 1993
Tsalit4	13066	14	Mar. 21, 1994
Tsalit5	13067	16	Mar. 21, 1994
Tsalit6-8	13068-70	1 each	Mar. 21, 1994

* Upon approval of this report.

The history, physiography, general geology and mineralization for the eastern portion of the claims, where the bulk of the present work described in this report was conducted,and adjacent area on Tsalit Mtn., are described by B.N. Church in GEM 1970 Annual Report as quoted overleaf. In the central area of the claims the local geology, as described by B.N. Church in GEM 1972, p. 373-378, consists of an 1x2 km easterly-elongated window of Mesozoic Hazelton Group volcanics located between Mineral Hill and Fenton Creek (Fig. 4, in pocket), within volcanic rocks of Tertiary age present elsewhere on the property.

In order to help identify possible mineralizing structures in the area, the writer carried out in June and August this year linecutting, geochemical and geophysical reconnaissance surveys in the central and eastern portions of the claims, consisting of soil and sediment sampling and VLF-EM16 readings. A single 4.5 km long cut line, L-OB.L., provided an east-west intersection for soil sampling and VFL-EM16 readings, while a recently built logging road along Fen1-Fen2 claim line provided a 3.1 km north-south intersection for the geophysical readings and collection of field-sieved, fluvial, lithic sediment samples. Several additional short lines were read with the VLF-EM16 instrument, as shown on Fig. 4.

The geophysical readings were taken by the writer and a helper at 25m intervals, as plotted on the VLF-EM16 profiles (Fig.s 5a-5g), and interpreted by L.M. Bzdel, geophysicist, Interpretex Res. Ltd., overleaf in this report. The geochemical sampling, consisting of collection of the B-horizon soils, field-sieved lithic sediments, and occasional rock float and outcrop samples was done by the writer. All sample analysis was performed by Min-En Labs of N.Vancouver using standard geochemical methods (Appendix III, IV).

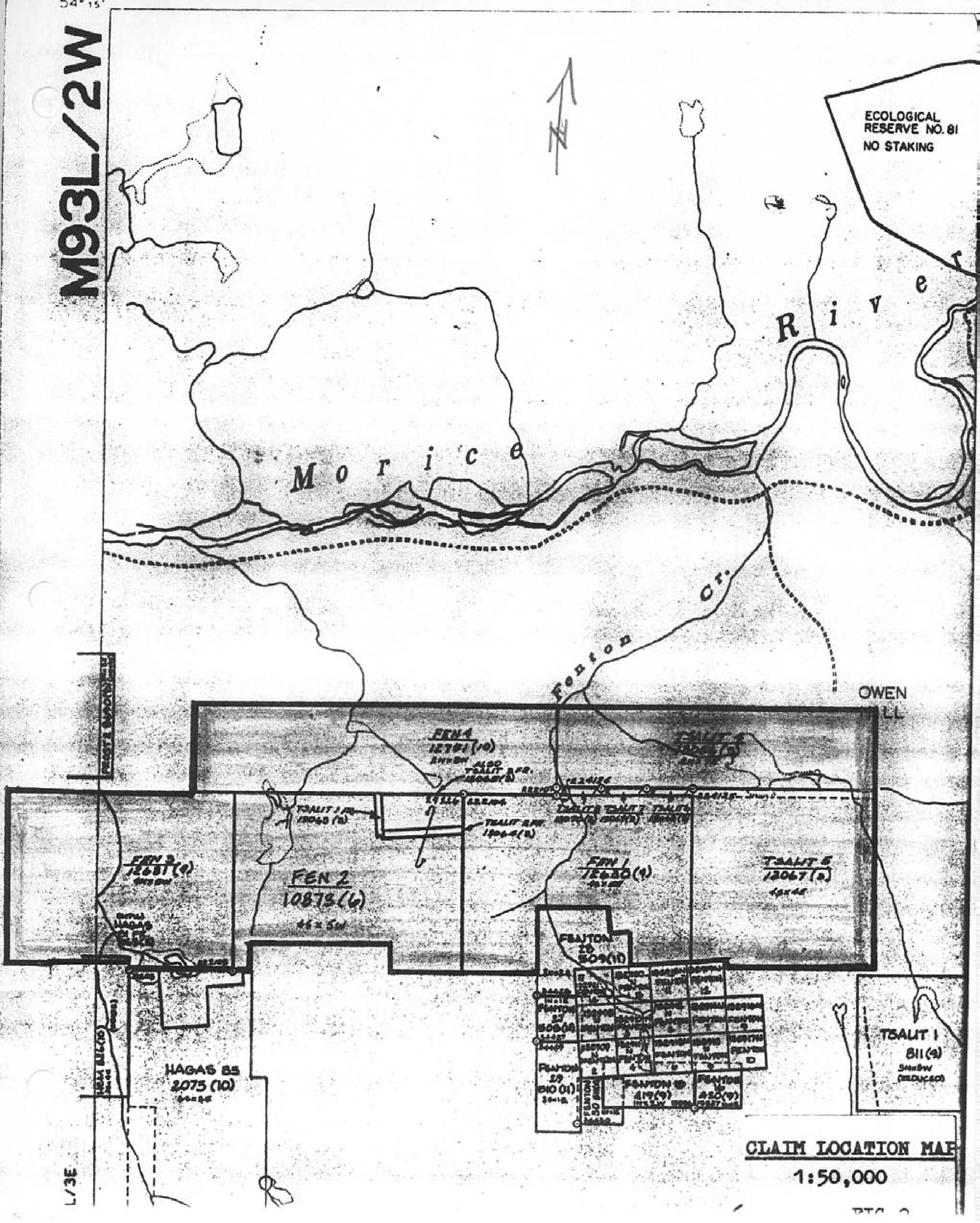


INDEX MAP

FEN 1-4 & TSALIT 4-8
MINERAL CLAIMS

Omineca M.D.

Fig. 1



CLAIM LOCATION MAP

1:50,000

The geochemical samples, which were analyzed for 30 elements by ICP, plus Hg, F, total Ba, and fire-geochem Au, indicate a strong Ag-Pb-Zn and Cu-As-Sb response in both north-south silts and east-west soils where sampled in the area of the Hazelton volcanics window, as indicated on the 1:10,000 scale sample location map, Fig. 4, in pocket. Analytical values range up to 3.2 ppm Ag, 117 ppm As, 106 ppm Pb, 20 ppm Sb, and 486 ppm Zn in the lithic sediments, and even higher 18.0 ppm Ag, 28.5 ppm Cd, 104 ppm Cu, 204 ppm Pb, and 2045 ppm Zn in the B-horizon soils, supported by erratic up to 690 ppb Hg mercury values.

Cross-cutting structures in the Tertiary volcanics are indicated by similarly anomalous multielement geochemistry on the OBL soil line at 9.00E, 11.50E, 17.50-18.00E, and 21.00E, which correspond well with the geophysical VLF-EM16 conductors located at 9.50E, 11.75 E, then at 18.00E, and 20.25 E respectively (Fig.s 4, 5A). The silt samples collected along the logging road are similarly geochemically anomalous at 2000 m, 2100 m, 2250 m, 2650 m, and at 3000-3050 m, which location is just beyond the southern end of the geophysical readings. Gold values in the regular -80 Mesh fraction yield 10ppb Au at 450W in the B-horizon soils on Line-OBL, and 32ppb Au at 950m, and 18ppb Au at 2150m, in the lithic silts along the road. The non-magnetic heavy minerals (H.M.) fraction, analyzed for the handful of recce sediment samples collected, is anomalous in Ba,Bi,Pb,Zn, and Hg in sample Sed104 at 480m along the road, and anomalous in Ba,Fe,P,Pb,V,Zn plus 235ppb Au in sample Fent2, taken on the right tributary of the Fenton Creek draining the Tsalit4 claim area (Fig. 4).

Of the eight H.M. fraction soil samples collected at 50m intervals along the SE slope of the Mineral Hill (Fig. 4), sample S101 contains highly anomalous 5.2ppm Ag, 357ppm As, 141ppm B, 52ppm Li, 178ppm Pb, 30ppm Sb, and 357ppm Zn, plus anomalous gold values of 534ppb Au, 473ppb Au, 334ppb Au in samples S105, S107, and S108 respectively. The highly anomalous volatile elements B and Li may be indicative of tourmalinization, which may be associated with precious metals mineralization at depth, as suggested by the above listed anomalous gold values in soils, and in the H.M. fraction in siliceous float rocks sampled in the same area (see the writer's Nov. 1989 Assmt. Rep.).

Presence of similar epithermal alteration is suggested in the siliceous, barite-rich bedrock sample Mtn.top1 in the H.M. fraction, with 2.1ppm Ag, 49ppm As, 19ppmB, 1.2ppm Cd, 2886ppm Pb, 17ppm Sb, 233ppm Zn, and 260,000ppm Ba total, located at 3000m along the road, which is coincident with the B, Ba, Li, Sb, Hg, anomaly at 3000-3050m in the regular -80 Mesh fraction in the soils (Fig. 4, in pocket).

p3

From the 1970 GEM Annual Report, p 142-149, by B.N. Church on the Tsalit Mtn. area:

DESCRIPTION:

Introduction

Prospecting activity has increased markedly in the general area south of Houston with recent major mineral discoveries near Goosly Lake and some important mine development work at Owen Lake. In the light of this activity it seems appropriate to update the published information on some of the more interesting mineral showings such as exemplified in the Tsalit Mountain area. This report deals with the general geology of the Tsalit Mountain area and reviews three mineral prospects —the grubstake showing, the summit showing, and the north slope prospect.

Prospecting History

The original grubstake showing was discovered by P. Pouport in 1929 on the upper south slope of Tsalit Mountain. This proved to be mainly a silver-copper prospect, although early reports indicate the presence of some molybdenum mineralization in the area.

Apparently there was little or no work done until June 1965, when the Far claims were staked by E. Westgarde covering the showing. In mid-1966 these claims were integrated with a large block and formed the nucleus of Normont Copper Ltd. According to company reports, in late 1966 an intense exploration programme was undertaken which included line-cutting, geological mapping, access road construction, geochemical soil-sampling, stripping, blasting, and surface-sampling.

During this time the area in which mineralization is known was increased from just a few scattered trenches to an area measuring roughly 1,000 by 400 feet. Also, molybdenum mineralization was discovered in volcanic rocks near the summit of the mountain, about 2,500 feet north of the grubstake showing. Since pyrrhotite proved to be an important mineral at both showings, a detailed magnetometer survey was carried out. Subsequently, about 12 short diamond-drill holes were put down to test magnetic anomalies in the grubstake area.

Almost contemporaneous with the activity on the Far claims, Amax Exploration, Inc. was investigating molybdenum mineralization in the area of a granite intrusion on the north slope of Tsalit Mountain. In 1964, anomalous molybdenum concentrations were found in silts along the course of Tsalit Creek draining the north slope. In 1965 geological and geochemical surveys delineated an area underlain by granite west of Tsalit Creek averaging 26 p.p.m. Mo in soils. This area is approximately 1½ miles north of the grubstake showing.

Prospecting interest has been revived after a short dormant period. Anaconda American Brass Limited is currently investigating silver-zinc geochemical anomalies on their Code claims located immediately west of Tsalit Mountain. Also the grubstake and summit prospects were recently acquired by R. Blusson and G. O. M. Stewart, of Vancouver, who are apparently reactivating exploration in the area.

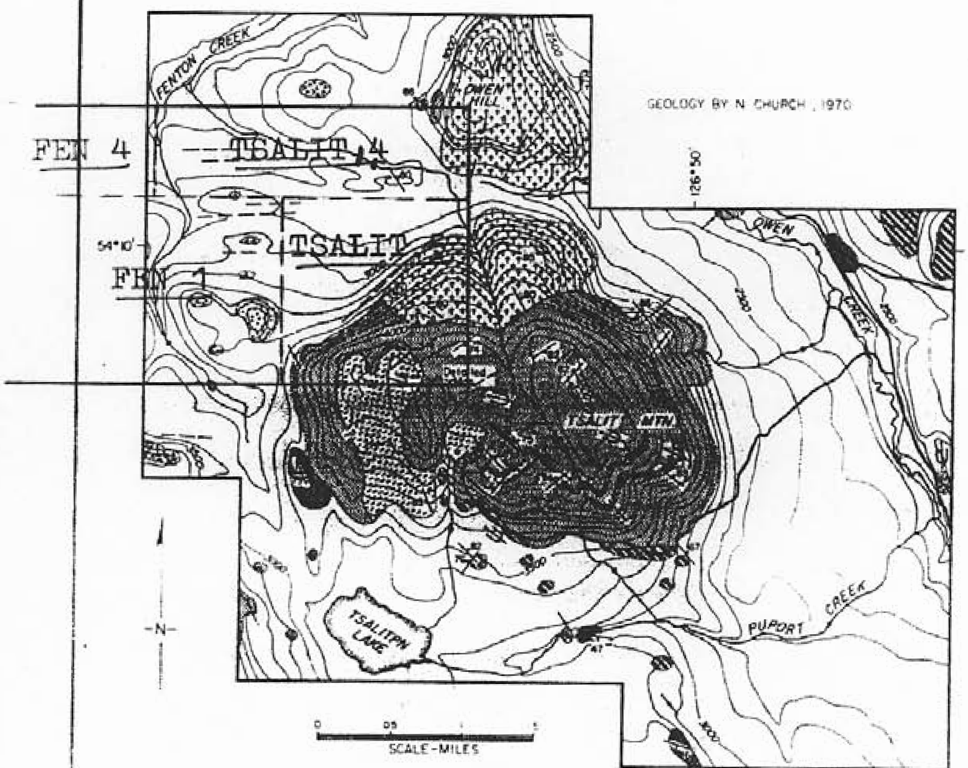
Physiography

The top of Tsalit Mountain is saddle-shaped, with a summit horn on the east side at an elevation of 4,500 feet. The east face rises sharply above the gentle slopes of the valley of Owen Creek at 2,500 feet. A westerly knob, lying a few hundred feet lower than the summit, overlooks the broad arched back of the mountain and low swampy rolling terrain to the northwest near Fenton Creek.

Owen Hill is a prominent granite knob located immediately north of Tsalit Mountain. A fire lookout station at the top of the hill at 3,500 feet provides a panoramic view of the Morice River region beyond the north boundary of the map-area.

GENERAL GEOLOGY OF FEN & TSALIT CLAIMS AREA

(In GEM, 1970, By B.N. Church)



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LATE TERTIARY

FENTON CREEK VOLCANICS, RHYOLITE DOME GLASSY BANDED LAVA AND BRECCIA.

LATE MESOZOIC OR EARLY TERTIARY

OWEN HILL GRANITIC STOCK

TIP TOP HILL ANDESITIC AND DACITIC LAVAS AND PYROCLASTICS.

EARLY MESOZOIC

BASALT AND ANDESITIC LAVAS.

RHYOLITE LAVA AND DYKES.

ANDESITIC TUFF-BRECCIA.

SEDIMENTARY ROCKS, MAINLY SANDSTONES AND ARGILLACEOUS BEDS.

BEDDING ATTITUDE

IMPORTANT FRACTURE ATTITUDE

GEOLOGICAL CONTACT

TOPOGRAPHIC LINEAMENT

STREAM

TOPOGRAPHIC CONTOUR, 100 FOOT INTERVAL

IMPORTANT MINERAL SHOWING

GLACIAL STRIAE

BOUNDARY OF EXPOSURE

ROAD

Figure 14. Geology of the Tsalit Mountain area.

FIG. 3.

Tsalitpn Lake and the upper part of Puport Creek occupy a broad glacier-carved hanging valley located between Tsalit and Nadina Mountain to the south. The lower section of Puport Creek is cut deeply into morainal material which merges with a broad zone of glacial drift in Owen Valley.

The mean glacial striæ direction on Tsalit Mountain is 113 degrees; a single measurement east of Owen Creek gives 178 degrees.

Except for a burn extending from the north slope of Nadina Mountain to the upper course of Puport Creek, the area is well wooded with stands of lodgepole pine and spruce.

General Geology

The geology of the Tsalit Mountain area is shown on the accompanying map (Fig. 14). The bedrocks consist of an assortment of Mesozoic and Tertiary volcanic and sedimentary rocks and a large granite intrusion.

A suite of Early Mesozoic rocks underlies most of the map-area and is host to the mineral deposits on Tsalit Mountain. The lowest part of this sequence consists of argillite beds exposed along Puport Creek and east of Owen Creek in the northeast part of the map-area. The argillite is overlain by a thick rhyolite unit cropping out to the north and south of the upper course of Puport Creek and east of Owen Creek. The upper part of this sequence is about 1,000 feet thick, consisting mainly of volcanic rocks exposed on Tsalit Mountain. On the east part of the mountain the rocks are dark amygdaloidal basalt and andesite lavas with a few thin intercalated rhyolite marker flows. To the west, a thick lens-shaped body of tuff breccia is found near the top of a basalt-andesite lava pile.

The strong bimodal composition characteristic of the Early Mesozoic volcanics is well displayed by arc-fusion analyses of 70 representative lava specimens (*see* Fig. 15). An estimate of the bulk composition of these rocks shows 20 per cent basalt, 40 per cent basaltic andesite, 10 per cent dacitic andesite, and 30 per cent rhyolite; dacite lavas and pyroclastic rocks are scarce. Chemical analyses of basic and acid end representatives are given in the accompanying table.

Chemical Analyses of Tsalit Mountain Volcanic Rocks

	1	2
SiO_2	49.90	79.00
TiO_2	1.12	0.08
Al_2O_3	17.38	13.04
Fe_2O_3	1.24	0.34
FeO	5.87	0.28
MnO	0.17	0.04
MgO	5.29	0.23
CaO	9.12	1.33
Na_2O	3.11	2.82
K_2O	0.95	2.31
H_2O-	0.02	0.03
H_2O+	5.33	0.27
CO_2	0.01	0.01
P_2O_5	0.22	0.01
SrO	0.04	0.005
BaO	0.07	0.12
R.I. (arc fusion)	1.572	1.495

1. Amygdaloidal basaltic lava on Tsalit Mountain, 0.6 mile north of the grubstake showing at the elev[illegible] of 4,250 feet.

2. Flow banded rhyolite lava on Tsalit Mountain, 0.5 mile southeast of small lake near summit and 0.8 [illegible] of Puport Creek at the elevation of 4,100 feet.

A series of andesite lavas and breccias thought to be Late Mesozoic or Early Tertiary age is exposed in the area drained by Fenton Creek west of Tsalit Mountain and east of Owen Creek on the east boundary of the map-area. These rocks resemble the Tip Top Hill volcanics in the Owen Lake area and clearly exhibit a lower grade of metamorphism than the rocks described above. The unit is widely distributed throughout the region and more or less flat lying.

The youngest rocks are fresh glassy rhyolite lavas and breccia cropping out in a small area between Tsalit Mountain and Fenton Creek. The rocks are somewhat eroded, displaying a number of semicircular structures possibly representing the flanks of a dissected Pliocene rhyolite dome.

A granite stock cropping out on Owen Hill and the north slope of Tsalit Mountain is the only sizeable igneous intrusion in the area. Modal analysis of five etched and stained hand specimens gives an average composition of 30 per cent quartz, 29 per cent potassium feldspar, 35 per cent plagioclase, and 6 per cent combined biotite and other ferromagnesian minerals. Locally near the margin of the granite, the volcanic rocks are silicified and altered to hornfels with scattered pyrite.

The intrusion appears to have lifted the rocks of the north side of Tsalit Mountain, tilting the beds gently to the south.

A statistical plot of joints and cleavages shows that the main fracture direction in the Tsalit Mountain area strikes about 140 degrees dipping 80 degrees northeast; a strong cross-joint system strikes about 045 degrees dipping 85 degrees northwest (*see* Fig. 16).

Topographic lineaments in the Fenton Creek area have a distinct easterly trend, whereas major fissures visible on Owen Hill trend northeast and southerly. The main lineaments on Tsalit Mountain strike south and southeasterly subparallel to the strong joint set found in the area.

Mineralization

The detailed geology of the area near the grubstake and summit showings on Tsalit Mountain is given on Figure 17. The main geological units are dark basaltic lava flows, rusty weathering tuff breccia, flow-banded rhyolite lava, chert, and argillite.

Some of the original trenching in the grubstake area is near station 52+00 NE. on the base-line. The host rocks here are sheared and sericitized rhyolite with patchy azurite staining. A 10-foot-wide sampled section of the shear zone assayed 6.8 ounces per ton silver and 0.9 per cent copper (*Minister of Mines, B.C.*, Ann. Rept., 1929, p. C 175).

The main mineralized zone is exposed in a trench about 600 feet north of the shear. The host rock is tuff breccia, consisting locally of andesitic matrix and rhyolite breccia fragments. Pyrrhotite, chalcopyrite, sphalerite, and pyrite have selectively replaced the matrix and penetrated cracks in the coarse fragments (*see* Plate VIIB). A sample across 45 feet reportedly assays 0.6 ounce per ton silver and 0.4 per cent copper (*Minister of Mines, B.C.*, Ann. Rept., 1929, p. C 175). A recent assay of a well-mineralized grab sample from the same area gave 0.4 ounce per ton silver, 0.26 per cent copper, 0.12 per cent zinc, 10.72 per cent iron, 160 p.p.m. nickel, and 0.02 per cent carbon dioxide. Also, similar mineralization is visible in trenches and pits several hundred feet to the north and east. A company report quotes seven assays on grab samples from this area averaging 0.9 ounce per ton silver and 0.18 per cent copper.

The magnetic background in the vicinity of the grubstake showing is low or intermediate intensity. In areas of pyrrhotite concentration, the magnetic intensity is generally high as might be expected. A ridge of high magnetic intensity trends northerly bisecting the area; however, this anomaly appears to coincide with a medium-grained basic dyke. (Modal analysis of the dyke shows 38 per cent hornblende, 52 per cent plagioclase, 3 per cent chlorite, 5 per cent quartz, 1 per cent magnetite and opaque minerals, and a trace of apatite.)

The summit showing is a few hundred feet northwest of station 76+00 NE. on the base-line. The exposures consist of five pits, one of which contains mineralized amygdaloidal basalt. The rocks are locally hornfelsed and fractures and amygdules are filled with quartz, calcite, amphibole, and concentrations of pyrrhotite, molybdenite, minor pyrite, and chalcopyrite (*see* Plates VIIIA and VIIIB). Analysis of a grab sample of mineralized basalt shows 294 p.p.m. copper, 50 p.p.m. lead, 111 p.p.m. zinc, 310 p.p.m. molybdenum, and 159 p.p.m. nickel. A magnetometer survey in this area failed to delineate the mineralized areas, the background response being generally high over the basalt.

The north slope occurrence was not examined in detail by the writer. However, according to company reports, the Owen Hill granite is not well exposed on the north slope of Tsalit Mountain, the mineralized zones being located mainly by soil geochemistry. Flakes of molybdenite, specularite, and grains of pyrite are scattered through the granite west of Tsalit Creek. It is reported that seven chip samples in this area averaged 140 p.p.m. molybdenum and 66 p.p.m. copper. Also, four chip samples from pyritized volcanics near the granite contact averaged 291 p.p.m. molybdenum and 265 p.p.m. copper.

A small quartzofeldspathic porphyry intrusion exposed in the upper part of Puport Creek is compositionally similar to the Owen Hill granite and may be an apophysis of this body. The general impression is that the granite extends under Tsalit Mountain and, since it is itself mineralized, this body is probably the ultimate source of mineralizing solutions in both the grubstake and summit areas.

WORK DONE: Reroute of access road around washout west of Owen Creek.

REFERENCES: *Geol. Surv., Canada*, Sum. Rept., 1929, Pt. A, p. 91; *Minister of Mines, B.C.*, Ann. Rept., 1929, p. C 125.

By B. N. Church

GEOCHEMICAL SURVEY

In order to help identify possible mineralizing structures in the central and eastern portions of the Fen group claims, the writer cut a 4.5 km long line streching from Mineral Hill to near the eastern claims boundary, and sampled the B-horizon soils at 10-30 cm depths and 50m intervals along the L-OBL line from 20.OW to 25.OE for a total of 93 samples (Fig. 4, in pocket). An additional eight soil samples were collected along the SE contour at the base of Mineral Hill, and another seven samples nearby along a projected lineament to the south.

The newly constructed logging road traversing along the Fen1-Fen2 N-S claim line was silt sampled at 50m intervals by field sieving the fluvial, lithic, glacial sediment along the upslope road ditch for a distance of 3.1 km to obtain 63 high quality, uniform material, silt samples. Another eight stream sediment samples were likewise collected elsewhere on the property (Fig. 4, in pocket).

GEOCHEMICAL SURVEY, cont.d

Some 25 rock samples, most of which are float as described in Appendix II and located on map Fig. 4, were collected in the overburden covered claims area. The presence of sulfides, alteration, silicification, or rusty precipitates on fractures were selectively sampled, as all are considered possible indicators of potential mineralization. Except for the barite-rich H.M. fraction of the silicified, epithermally altered outcrop sample Mtn-Top1 located at 3000m along the road, which had 19ppm B, 260000ppm Ba, 2886ppm Pb, and 17ppm Sb, the rock samples collected do not exibit anomalous trace element geochemistry, and none had anomalous gold values.

The B-horizon soils and the roadside silt samples were analyzed at Min-En Labs in N.Vancouver for fire-geochem Au, Hg, total Ba, F, and 30 trace elements by ICP in the regular -80 Mesh fraction. The eight contour soils and the eight stream sediments were processed for the heavy minerals (H.M.) fraction and likewise analyzed. Complete analytical results are presented on the geochemical 1:10,000 scale map, Fig. 4, and are also enclosed in Appendix IV.

Silt Sediments Geochemistry

The highest geochemical gold value of 235ppb Au in the non-magnetic H.M. fraction in the eight stream sediments sampled was obtained in sample FENT2, from the mouth of the eastern Fenton Creek tributary draining the Tsalit4 claim area (Fig. 4, in pocket). The sample contains 18.3 % of non-magnetic iron, suggesting that most of the geochemical gold may be present in iron precipitates, rather than as free placer gold, which in turn implies a mineralized bedrock source upstream at depth. The tributary should be sediment sampled at regular intervals to determine the cutoff point for the anomalous gold values.

Sediment sample SED101, located near the eastern end of line L-OBL at 22.90E, is highly anomalous in molybdenum with 28ppm Mo, which may indicate mineralized structures at depth, or glacial smearing westward from the known moly showings on nearby Tsalit Mtn. (Fig. 4, in pocket).

The large multi-element anomaly in the roadside silts, extending from 700m to 2250m accross the Hazelton volcanics window, is centered at 1500m-1550m where anomalous values of up to 13ppm B, 160ppm Ba, 15ppm Li, 1050ppm P, and 150ppb Hg are present in addition to 3.2ppm Ag, 117ppm As, 34ppm Cu, 1690ppm K, 104ppm Pb, 20ppm Sb, and 486ppm Zn in the regulr -80 Mesh fraction (Fig. 4, in pocket).

Silt Sediments Geochemistry, cont.d

The presence of anomalous boron values in the roadside silts suggests possible tourmalinization to the northwest in the direction of Mineral Hill, where similarly anomalous boron values are present in the L-OBL soils at the western end of the soil line.

An anomalous mercury value of 265ppb Hg suggests a cross-structure at 2650m further up the road, and at 3000m weakly anomalous B, Ba, Li, Sb, and Hg geochemical values in the silts coincide with the visible epithermal alteration in bedrock, as represented by rock sample Mtn-Top1 (Fig. 4 and Appendix II).

Soil Samples Geochemistry

A continuous multielement geochemical anomaly in the B-horizon soils extends for 2000m along the sampled line L-OBL from Fenton Creek westward to Mineral Hill over the Hazelton volcanics window. The anomaly is strongest west of the logging road, from 1500W to the end of the line at 2000W on Mineral Hill, where anomalous values of 28ppm B, 1278ppm Ba, 58680ppm Ca, 28.5ppm Cd, are present in addition to 18.0ppm Ag, 78ppm As, 104ppm Cu, 2590ppm K, 26ppm Li, 204ppm Pb, 11ppm Sb, 2045 ppm Zn, 690ppb Hg, and 260ppm F in the regular -80 Mesh fraction.

The anomalous boron present at 1900W to 2000W may be indicative of epithermal tourmalinization and possible associated gold mineralization at depth, as suggested by the presence of strongly anomalous gold values of 534ppb Au, 473ppb Au, and 334ppb Au in the H.M. fraction of the contour soil samples S105, S107 and S108 respectively, taken along the SE slope of Mineral Hill in the same area (Fig. 4 and AppendixIV). The H.M. fraction of samples S101 and S102 is also anomalous in boron, with 141ppm B and 45ppm B present respectively.

To the east of Fenton Creek, anomalous multi-trace element sites occur at 900E, 1150E, 1750-1800E, and 2050-2100E, on line L-OBL. The anomalous trace elements are Ag,As,Ba,Be,Ca,Cu,Fe,K,Li,Mg,Mn,Na,Ni,P,Pb,Sr,Th,V,Zn,Ga, Cr, and Hg. Such extensive combination of anomalous major and minor elements likely indicates presence of cross-cutting deep structures in the Tertiary volcanic cover rocks at or near the anomalous sites which may be associated with mineralizing environments at depth. Additional parallel soil sample lines are needed to determine the orientation of the anomalous structures.

GEOPHYSICAL SURVEY

by L.M. Bzdel

The geophysical program on the Fen property consisted of electromagnetic (VLF-EM) readings at 25m intervals along seven reconnaissance test lines located throughout the claims area (Fig. 4, in pocket). The objectives of the survey were to test the effectiveness of VLF-EM in identifying possible mineralized conductive structures and locate areas of interest for additional geophysical testing on the property.

A Geonics Limited EM-16 VLF-EM receiver instrument was used to carry out the survey. The primary transmitter station used was NLK, Seattle, WA. (24.8 kHz). Station NPM, Lualualei, HI. (23.4 kHz) was used as a secondary station on several lines.

The following is a brief description and summary of the significant anomalies on each surveyed line (Fig. 4, in pocket, and Fig.s 5a-5g, geophysical profiles, overleaf).

LINE: OBL, Fig. 5a, 2500E to 275W.
STATION: NLK, Seattle.

Numerous VLF-EM anomalies are interpreted on this 2800m long surveyed portion of the line. The best responses are located at the following intervals: 100W, 075E, 975E, 1250E, 2275E, and 2450E.

These stronger VLF-EM responses may represent structural features such as faults, fractures and lithological contacts. The weaker anomalies (Fig. 5a) possibly reflect poorly conductive overburden.

LINE: O ROAD, Fig.s 5b,c,
STATION: NLK, Seattle, 3000m to 0m,
NPM, Lualualei, 2200m to 400m.

The whole road line was read from 3000m going north to 0m using the Seattle station (Fig. 5b). The Lualualei station was also read from 2200m going north to 400m (Fig. 5c). A good correlation is seen between the two stations where the survey overlapped. A number of relatively strong conductors are indicated on this line. The most prospective responses are located at the following stations: 750m, 875m, 1150m, 1275m, 1850m, 2275m, 2625m, and 2825m.

LINE: 1E, Fig. 5d,
STATION: NLK, Seattle, 3200m to 2225m.

Eight conductive responses have been interpreted on this line. Of these, the best responses are located at following stations: 2460m S, 2710m S, 2775m S, and 3100m S.

GEOPHYSICAL SURVEY, cont.d by L.M. Bzdel

LINE: MIN HILL LO, Fig. 5d,
STATION: NLK, Seattle, 0m to 500m W.
NPM, Lualualei, 0m to 500m W.

Only one weak conductor is identified on this line. The conductor is evident only in the NPM station data, and is located at station 045m W.

LINE: 7, Fig. 5e,
STATION: NLK, Seattle, 0m to 1050m W.

This line contains three strong VLF-EM conductors and a number of weaker anomalies. The best responses are located at the following intervals: 50m, 200m, 410m, 460m, 580m, 710m, and 860m W.

The anomaly at 200m W is characterized by a strong in-phase and a moderate reverse quadrature response. The reverse quadrature suggests the presence of a good conductor, possibly a massive sulphide source. The other two conductros located at 460m and 710m W exibit strong in-phase responses with weak to moderate quadrature.

LINE: 500W, Fig. 5f,
STATION: NPM, Lualualei, 0m to 1500m S.

A strong in-phase response is noted at 1160m S. The characteristics of the curve suggest a shallow, narrow source. A moderate conductor is observed at 1350m S. The remaining conductors located at 075m S, 140m S, 480m S, 620m S, 760m S, and 860m S are classified as weak responses.

LINE: DDH 85-1 HILL, Fig. 5g,
STATION: NLK, Seattle, 0m to 525m W.

The strongest VLF-EM response on this line is at station 410m W. This conductor exibits a moderate in-phase and poor quadrature. The remaining two anomalies at stations 190m W and 460m W are weak conductors displaying only quadrature responses.

The VLF-EM anomalies results of this geophysical survey should be combined with geological and geochemical information to better define the priority areas. Further VLF-EM work should be combined with a magnetometer survey to aid in the interpretation of geology and structure in the Fen claims area.

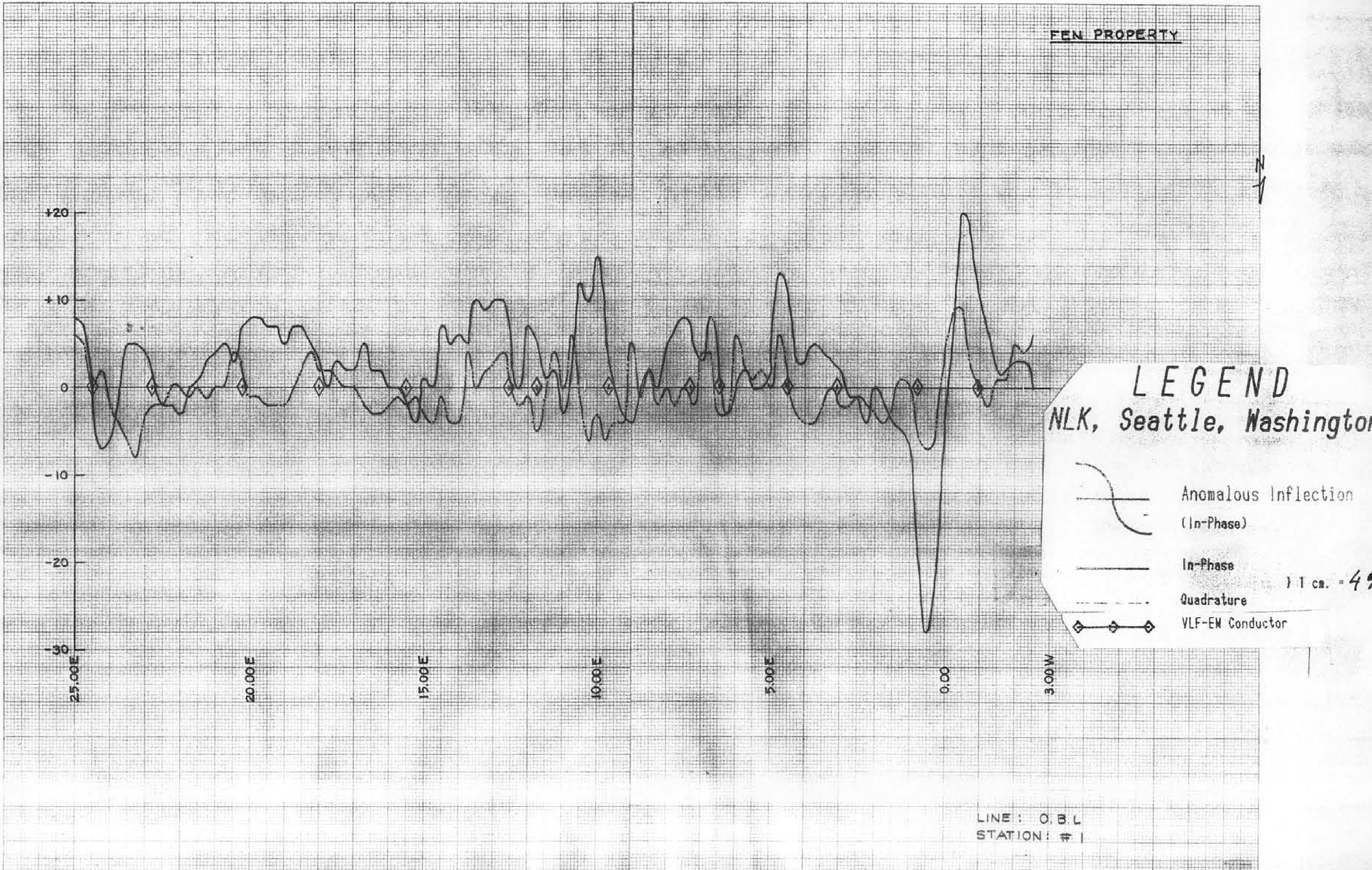

FEN PROPERTY
+20
+10
0
-10
-20
-30
25.00E
20.00E
15.00E
10.00E
5.00E
0.00
3.00W
LEGEND
NLK, Seattle, Washington
Anomalous Inflection
(In-Phase)
In-Phase
Quadrature
} 1 cm. = 4%
VLF-EM Conductor
LINE: O.B.L
STATION: # 1
N

Figure # 5a.

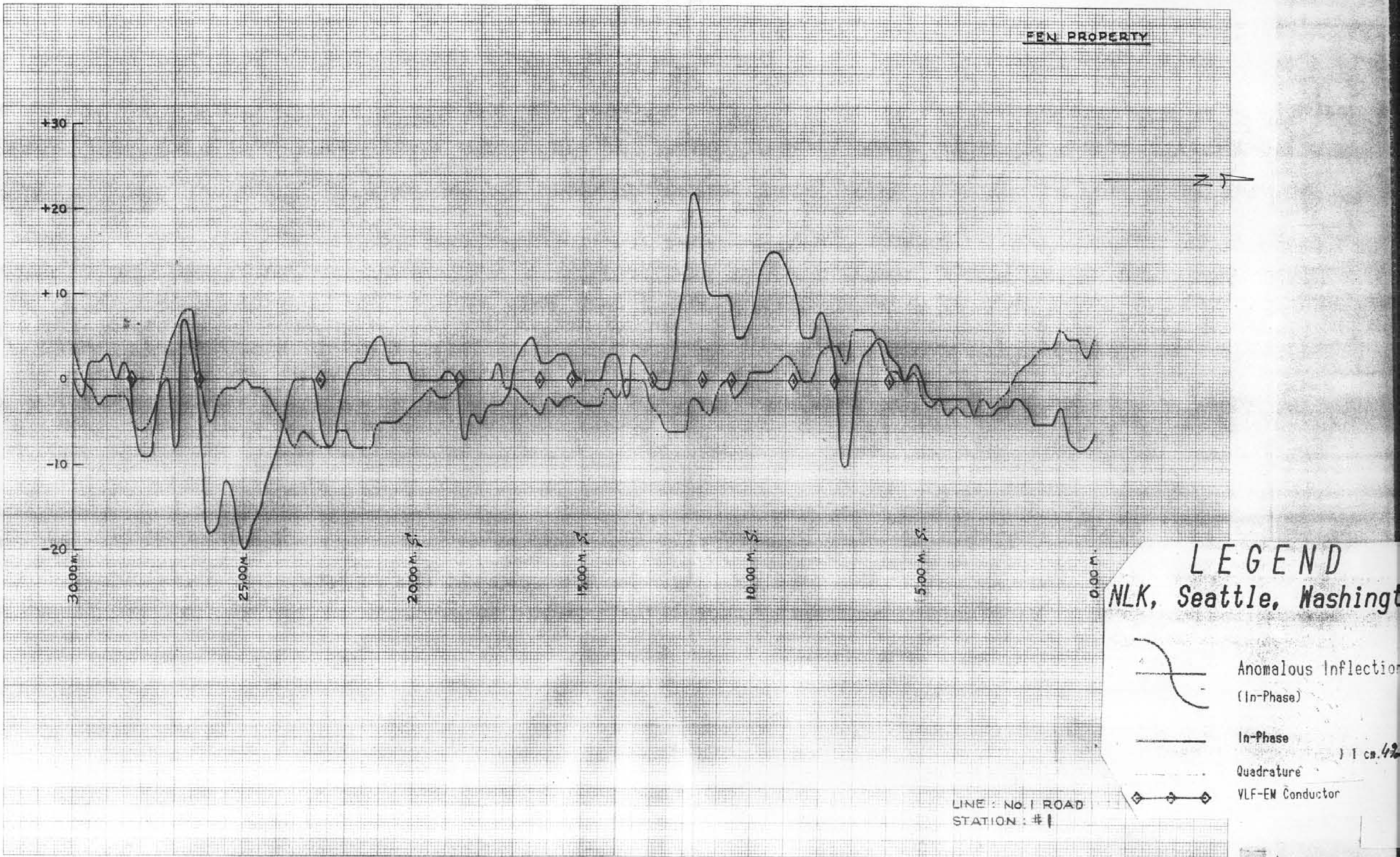

FEN PROPERTY
+30
+20
+10
0
-10
-20
30.00 M.
25.00 M.
20.00 M. S.
15.00 M. S.
10.00 M. S.
5.00 M. S.
0.00 M.
LINE : No. 1 ROAD
STATION : #1
LEGEND
NLK, Seattle, Washingt
Anomalous Inflectio
(In-Phase)
In-Phase
Quadrature
VLF-EM Conductor
} 1 cm.

Figure # 56.


FEN PROPERTY
LEGEND
NPM, Lualualei, Hawaii
Anomalous Inflection
(In-Phase)
In-Phase
Quadrature
} 1 cm. = 4%
+20
+10
0
-10
-20
2200
2100
2000 M.S.
1900
1800
1700
1600
1500 M.S.
1400
1300
1200
1100
1000 M.S.
900
800
700
600
500 M.S.
400 M.S.
LINE : O (MAIN ROAD)
STATION : # 2 (HAWAII)

Figure # 5c.

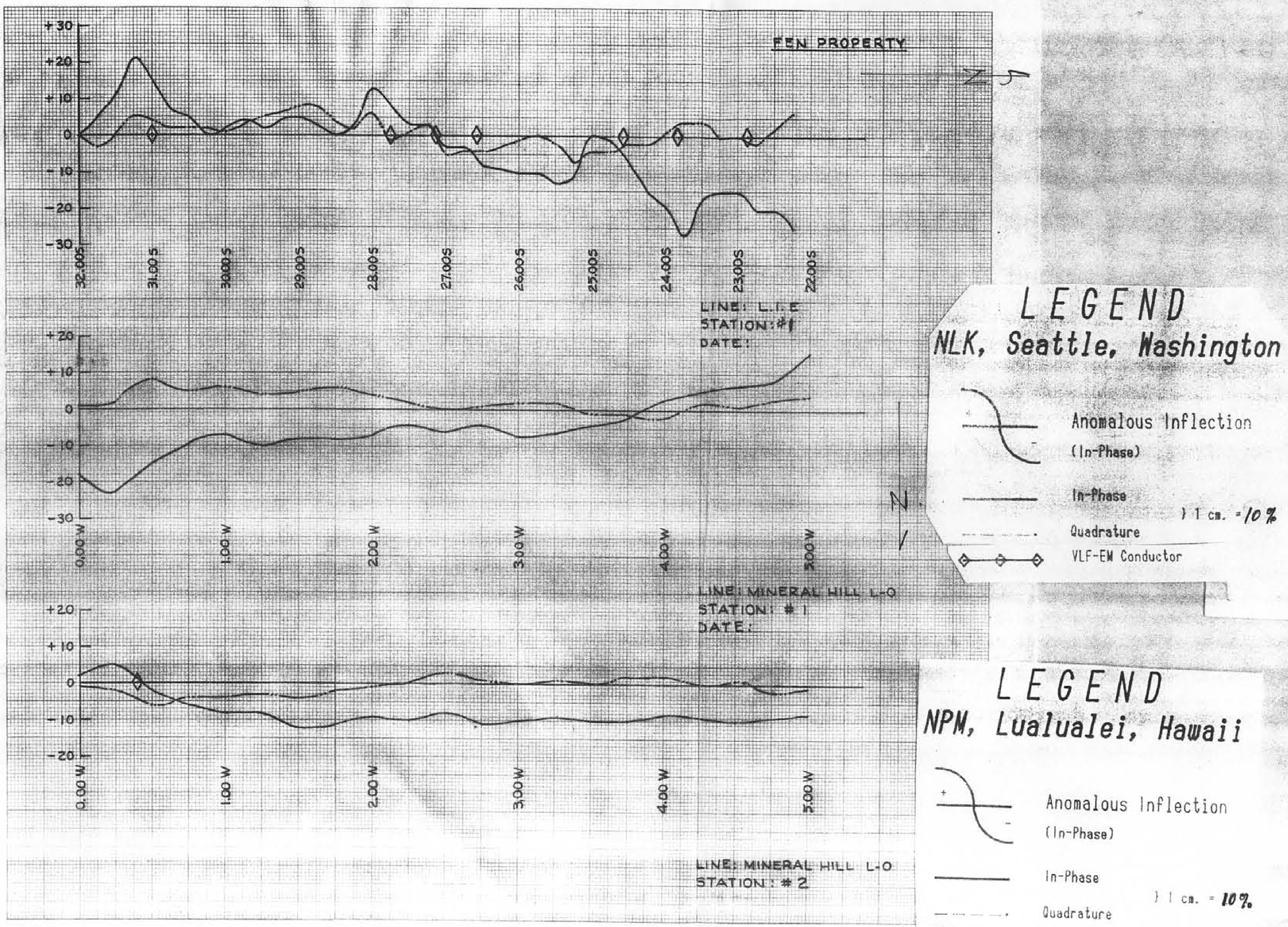
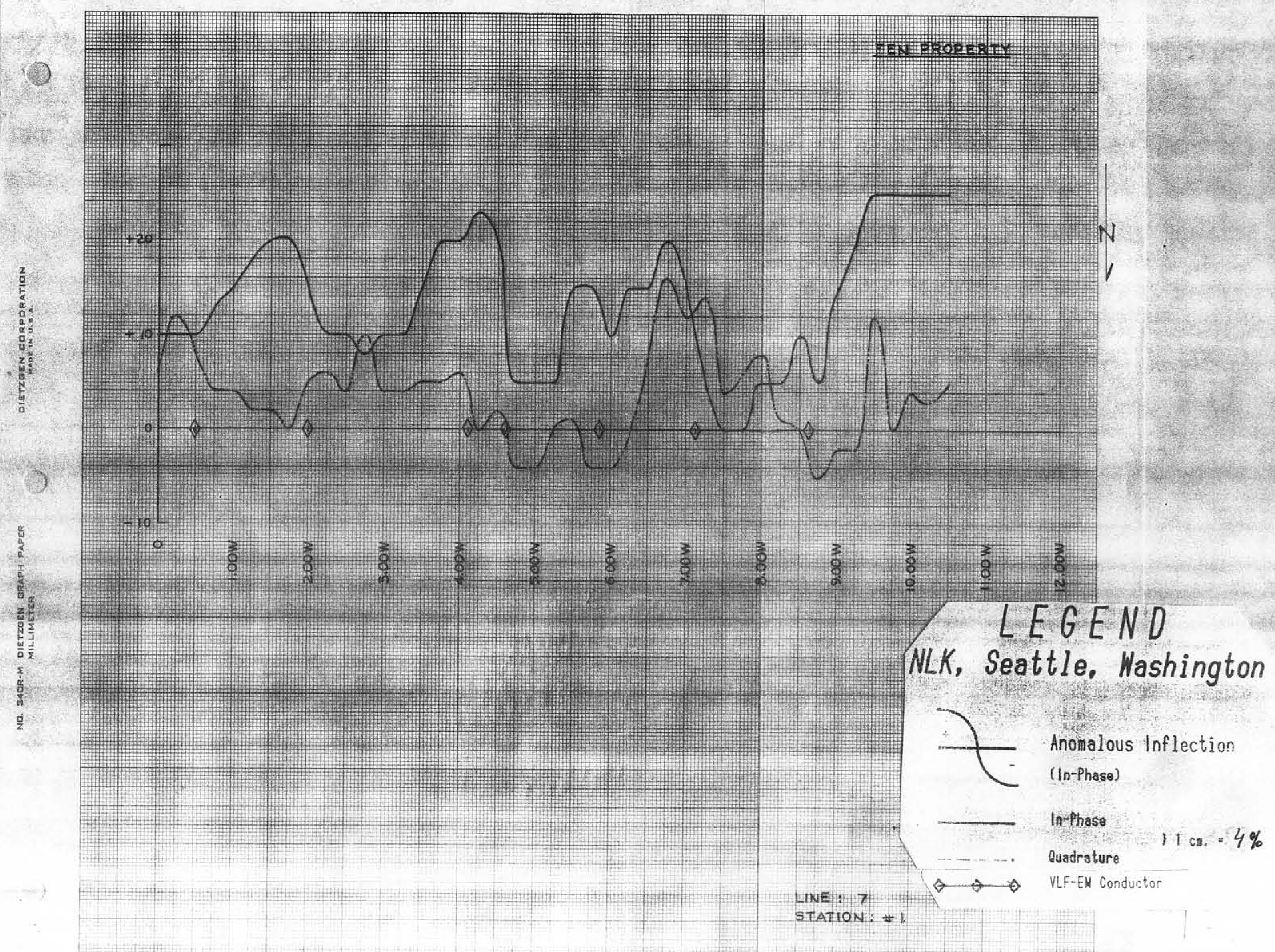
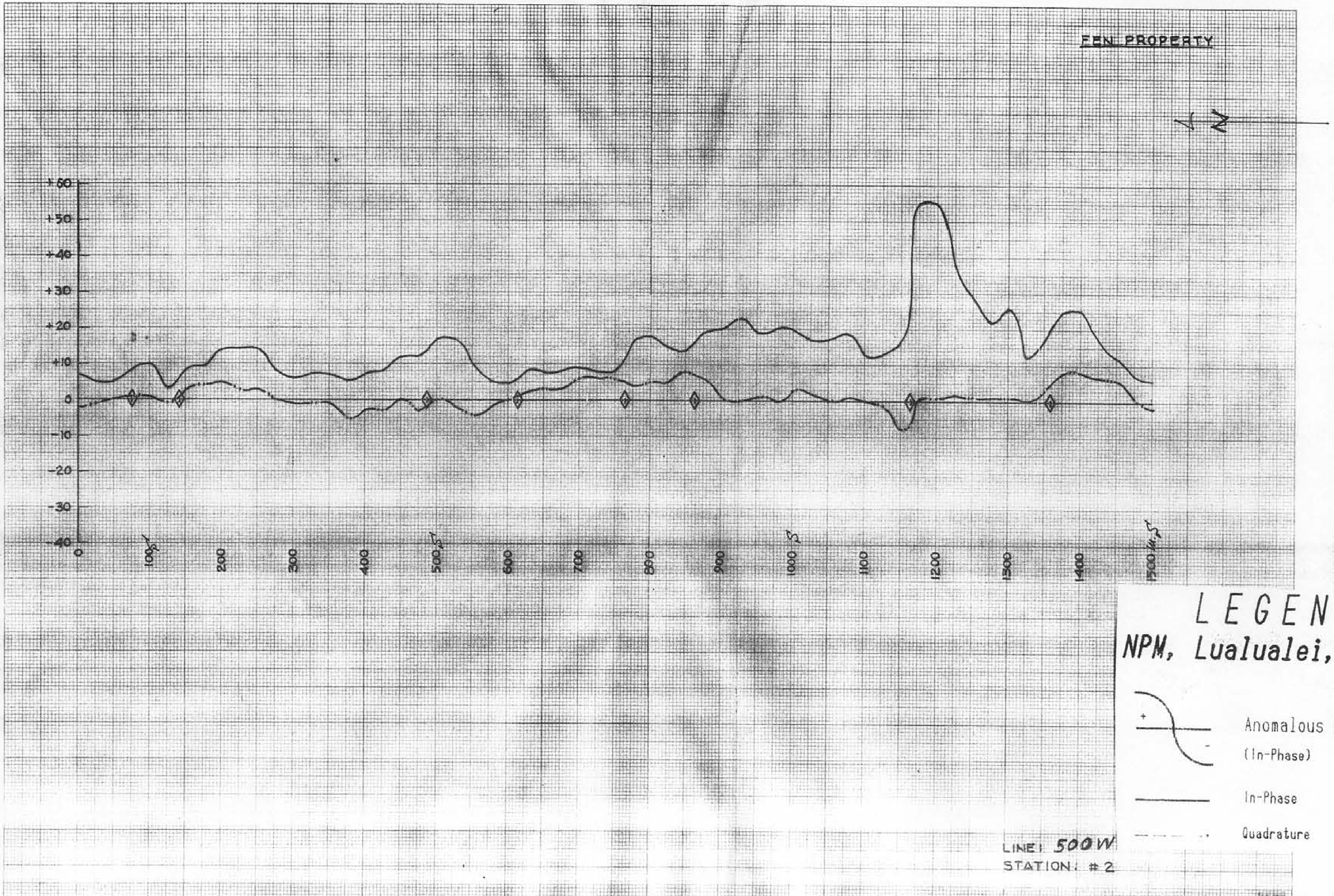

FEN PROPERTY
+30
+20
+10
0
-10
-20
-30
32.00S
31.00S
30.00S
29.00S
28.00S
27.00S
26.00S
25.00S
24.00S
23.00S
22.00S
LINE: L.1 E
STATION: #1
DATE:
+20
+10
0
-10
-20
-30
0.00 W
1.00 W
2.00 W
3.00 W
4.00 W
5.00 W
LINE: MINERAL HILL L-O
STATION: #1
DATE:
+20
+10
0
-10
-20
0.00 W
1.00 W
2.00 W
3.00 W
4.00 W
5.00 W
LINE: MINERAL HILL L-O
STATION: #2
LEGEND
NLK, Seattle, Washington
Anomalous Inflection
(In-Phase)
In-Phase
} 1 cm. = 10%
Quadrature
VLF-EM Conductor
LEGEND
NPM, Lualualei, Hawaii
Anomalous Inflection
(In-Phase)
In-Phase
} 1 cm. = 10%
Quadrature

Figure # 5d.



FEN PROPERTY
+20
+10
0
-10
0
1.00W
2.00W
3.00W
4.00W
5.00W
6.00W
7.00W
8.00W
9.00W
10.00W
11.00W
12.00W
N
LEGEND
NLK, Seattle, Washington
Anomalous Inflection
(In-Phase)
In-Phase
Quadrature
} 1 cm. = 4%
VLF-EM Conductor
LINE : 7
STATION : # 1
NO. 340R-M DIETZGEN GRAPH PAPER
MILLIMETER
DIETZGEN CORPORATION
MADE IN U.S.A.

Figure # 5e.



LEGEND

NPM, Lualualei, Hawaii

Anomalous Inflection (In-Phase)

In-Phase

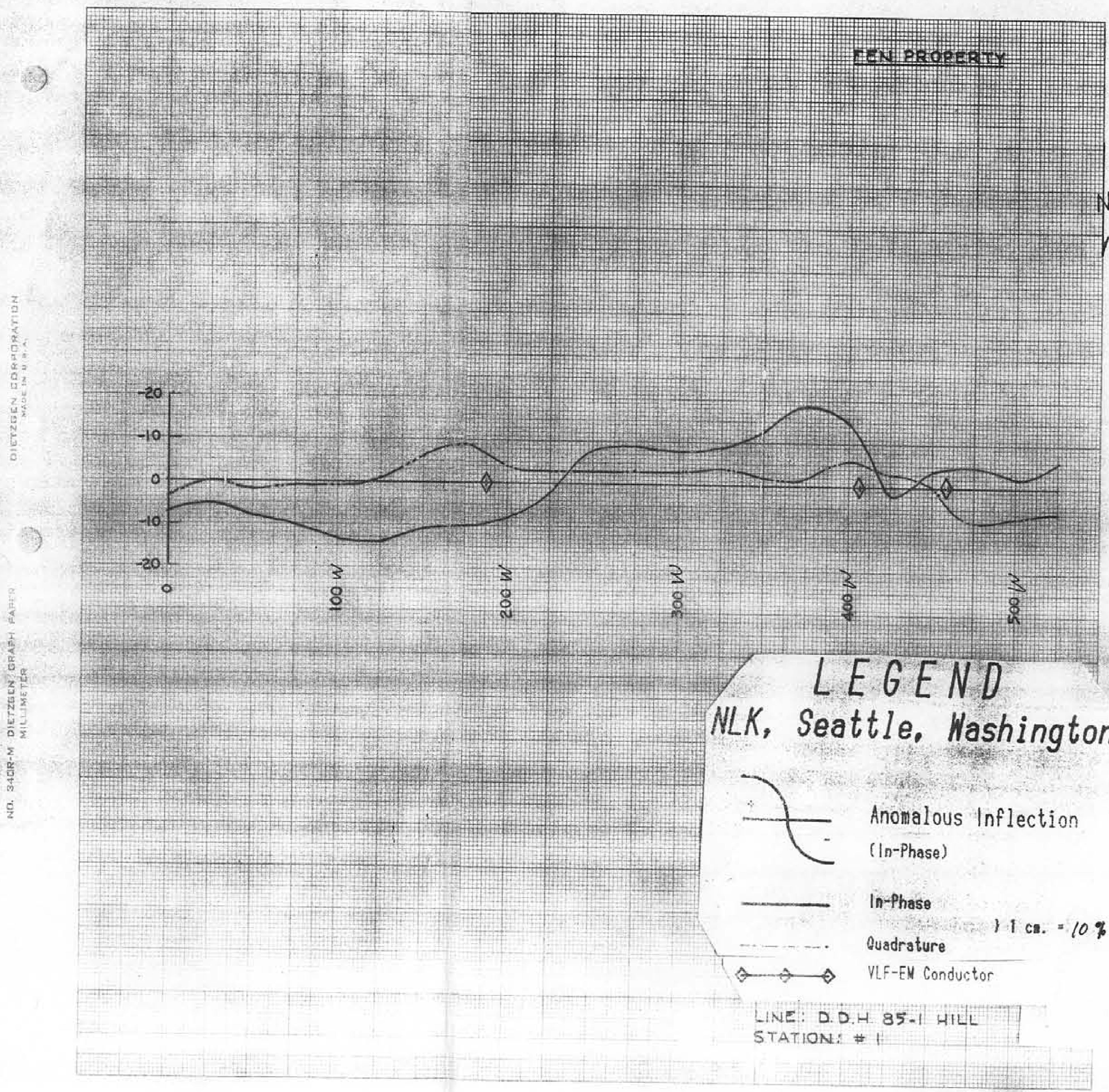
Quadrature

} 1 cm. = 10%

NO. 340R-M DIETZGEN GRAPH PAPER MILLIMETER

DIETZGEN CORPORATION MADE IN U.S.A.

Figure # 5f.



FEN PROPERTY
N
-20
-10
0
-10
-20
0
100 W
200 W
300 W
400 W
500 W
LEGEND
NLK, Seattle, Washington
Anomalous Inflection
(In-Phase)
In-Phase
1 cm. = 10 %
Quadrature
VLF-EM Conductor
LINE: D.D.H. 85-1 HILL
STATION: # 1
NO. 340R-M DIETZGEN GRAPH PAPER
MILLIMETER
DIETZGEN CORPORATION
MADE IN U.S.A.

Figure # 5g.

CONCLUSIONS

1. In the area of the Hazelton volcanics window, which is anomalous in multi-trace elements throughout where sampled, the strongest response in both glacial silts and the B-horizon soils occurs near the Mineral Hill, where anomalous boron values may represent epithermal tourmalinization associated with possible gold mineralization at depth, as suggested by anomalous gold values present in the H.M. fraction in both soils and siliceous float rocks in the area.

2. Distinct narrow geochemical multi-trace element anomalies and geophysical VLF-EM anomalies, which often coincide, have been identified in the Tertiary volcanic cover rocks to the east and the south of the Hazelton Window.
Additional parallel lines are needed to determine the orientation and the extent of possible mineralizing structures thus identified.

3. The anomalous gold values in the H.M. fraction of stream sediments collected at the mouth of the eastern tributary to Fenton Creek draining the Tsalit 4 claim area should be traced upstream with additional silt sampling to help identify the source of the geochemical gold anomaly.

REFERENCES

Church, B.N., Geology, Exploration and Mining in British Columbia, 1972, p. 373.

Church, B.N., GEM 1970, p 142 - 149.

Zastavnikovich, S., Geochemical H.M. Assmt. Rep. on FEN Claims, Nov., 1989.

CERTIFICATE

I, Lawrence Michael Bzdel, Geophysicist of Burnaby, British Columbia, Canada, hereby certify that:

1. I received a B.Sc. Adv. degree in Geophysics from the University of Saskatchewan in 1986.

2. I have been practising my profession since graduation.

3. I hold no direct or indirect interest in, nor expect to receive any benefits from, the mineral property or properties described in this report.

4. This report may be used for the development of the property, provided that no portion will be used out of context in such a manner as to convey meanings from that set out in the whole.

5. Consent is hereby given to the company for which this report was prepared to reproduce the report or any part of it for the purposes of development of the property, or facts relating to the raising of funds by way of a prospectus and/or statement of material facts.

Date: Sept 10/91

Vancouver,
British Columbia

Signed: Lawrence Bzdel

Lawrence Michael Bzdel
B.Sc.

STATEMENT OF QUALIFICATIONS

I.- Sam Zastavnikovich, do hereby certify that:

1. I am a graduate of the University of Alberta with the Degree of B. Ed. in Physical Sciences, 1969.

2. I have been a practicing exploration geochemist with Falconbridge Ltd. of Toronto and Vancouver for thirteen continuous years as:

   1969-1975: Field geochemist, international.
   1975-1979: Project geologist-geochemist, B. C.
   1979-1982: Exploration geochemist, worldwide, where
   I was engaged in all aspects of geochemical exploration, including research and development of improved sampling techniques, and advanced geochemical interpretation, as well as the writing of final, budget, and assessment reports.

3. I am a voting member of the Association of Exploration Geochemists.

4. I am a consulting geochemist with offices at 5063 - 56th. St., Delta, B. C.

S. Zastavnikovich,
Expl. Geochemist

APPENDIX I.

STATEMENT OF EXPENDITURES

Fen & Tsalit Mineral Claims, June 11-18, Aug. 4-11, 1991.

Fieldwork-	S. Zastavnikovich, Geochemist, 14 field days @ 295/d	4,130	
	J.A. Barakso Jr., helper, 7 days @ 120	840	
	S. Hutchison, helper, 7 days @ 120/d	840	
	Food & Lodging, 14 days @ 100/d, 2 men/d	1,400	
	Transport, 4x4 truck & cycle, 14 d @ 65	910	
	Truck rental, Smithers, 1 week,	350	
	Air ticket, Vanc.-Smithers ret, for JAB	570	
	Gasoline	530	
	Mileage, 3,480 km & 1780 km @ 10¢/km	526	
	Instrument rental, Geonics VLF-EM16,	320	
	Field supplies, sample deliv., l.d. tel.	185	
			10,601.00
Analysis-	156 soils & seds, prep @ 1.25/sample	195.00	
	25 rocks prep @ 3.75/sample	93.75	
	156 samples, ICP,fire-Au,Hg,F,Ba @26.25	4095.00	
	25 rocks, ICP, fire-Au, Hg,F,Ba @26.25	656.25	
	11 H.M. prep @ 25	275.00	
	11 H.M. for ICP, fire-Au,Hg,F,Ba@26.25	288.75	
			5,603.75
Report Preparation-			
	S. Zastavnikovich, 5 days @ 295/d	1475.00	
	L.M. Bzdel, 1 day @ 300/d	300.00	
	Drafting maps, profiles,typing, reprd.	235.00	
	Mileage and parking	45.00	
			2,055.00
		Total Expenditures,	$ 18,259.75

APPENDIX II.

ROCK SAMPLE NOTES

Sample #	- Note: all samples are float, except where noted as outcrop.
101R -	- med. grained dark basic float with rusty 1cm rind, weakly magnetic.
102R -	- acid intrusive float with pyrite blebs and rusty rind
103R -	- rusty dark volcanic, silicified, float with qtz-carb. veinlets
104R -	- strongly chloritized breccia float
105R -	- chloritic, weakly silicified dark green float with minor dissem. py.
106R -	- light colored pyroclastic, with Fe-Mn rusty fract.s
107R -	- rusty flow-banded rhyolite outcrop.
108R -	- highly fractured, rusty, rhyolite float
109R -	- rusty, fractured rhyolite float.
110R -	- granitic glacial boulder.
J-01 -	- rhyolite float with rusty specks of sulfide.
J-02 -	- highly hematitic volcanic float with specks of magnetite.
J-03 -	- basic intrusive float, specks of py., magnetic.
J-04 -	- altered Hazelton? volc. float, hematite coatings, specks of pyrite.
J-05 -	- highly altered volc., hematitic, carbonate veinlets.
J-06 -	- hematitic rhyolite with specks of pyrite.
J-07 -	- quartz-monz. float, with specks of magnetite.
J-08 -	- highly altered volc. float with carbonate veinlets.
J-11 -	- altered qtz.-monz. float with 3% iron sulfides.
J-12 -	- quartz-feldspar-porph. with iron sulfides on fract.s.
J-13 -	- rhyolite float with 2% specks of iron sulfides.
J-14 -	- qtz.-diorite float with minor pyrite specks, slightly magnetic.
MTN-TOP1 -	epithermally-bleached outcrop, silicified in parts, with barite.
MIN-HILL1-	silicified float rock, rusty fractures.
MIN-HILL2-	weakly silicified, bleached volcanic float.

APPENDIX III

Analytical Procedure - The samples were analyzed by Min-En Laboratories Ltd. of 705 West 15th St., N.Vanc, as follows:

The stream sediments were oven-dried in their original water-resistant kraft paper bags at 95°C and screened to obtain the minus 80 mesh fraction for analysis. The rock samples were crushed and pulverized in a ceramic-plated pulverizer.

A suitable weight og 5.0 or 10.0 grams is pretreated with HNO_3 and $HClO_4$ mixture.

After pretreatment the samples are digested with Aqua Regia solution, then taken up with 25% HCl to suitable volume and aliquot used for the 26 element ICP trace element analysis.

From the major remaining portion of the sample, Gold is preconcentrated by standard fire assay methods, then extracted with Methyl Iso-Butyl Ketone and analyzed by Atomic Absorption.

For Mercury analysis, 1 gram of sieved material is sintered at 90°c for 4 hours, then digested in HNO_3 and HCl acids mixture, and analyzed by the Hatch and Ott flameless AA method.

PHONE: (604) 980-5814 or 988-4524

APPENDIX III

TELEX: 0

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ASSESSMENT REPORT FOR:

HEAVY MINERAL SAMPLING AND CONCENTRATIONS

A large sample is collected from stream sediments or soils big enough to yield a minimum of 0.5 kg of the desired minus fraction. After sieving through any of the sieve mesh sizes they are adapted for the survey. After seiving the samples, the minus fraction is grinded to -80 mesh.

Then 0.4 kg of sample is weighed into a suitable centrifuge containers. The prepared concentrations of liquids are added to obtain a 3.1 specific gravity flotation.

The heavy fractions are then washed cleaned and dried. After drying the samples they are separated . The sink float Heavy Minerals are separated into Magnetic and Non Magnetic fractions and both fractions are weighed. The percent of the Magnetic and non Magnetic fractions are calculated and reported with the analytical data.

The analysis are than carried out in the ususal analytical manner by I.C.P. or A.A. method.

COMP: JOHN BARAKSO
PROJ: FEN
ATTN: J.BARAKSO/S.ZASTAVNIKOVICH

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1V-0848-HJ1
DATE: 91/09/12
* H.M. NON-MAG * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM
SED-101	.1	8790	40	11	76	.1	12	10370	.1	18	16	72900	1450	9	4220	4325	28	80	1	1250	33	1	34	.3	2249	184.0	63	1	2	4	19	2	65	2390
SED-102	.1	8110	8	4	39	.1	8	6930	.1	12	13	43910	850	7	4100	622	1	90	1	1270	17	1	23	1	1624	117.3	52	1	10	3	24	3	20	615
SED-103	.1	10600	19	2	43	.1	11	11540	.1	13	13	52260	2300	8	5160	609	1	80	1	910	32	1	37	1	2088	137.0	76	1	2	4	21	3	55	575
SED-104	.1	9130	12	1	115	.1	16	14190	.1	17	26	79180	640	4	3700	786	1	60	1	770	57	1	36	1	2601	192.3	102	1	1	4	30	7	160	960
SED-105	.1	10820	16	2	39	.1	6	8960	.1	11	21	46570	220	4	6060	723	1	100	1	810	24	3	34	1	1152	108.1	87	1	1	2	12	2	15	590
SED-106	.1	9780	1	2	39	.1	7	8940	.1	12	15	58680	210	3	4450	715	1	60	1	1100	24	1	37	1	1737	145.8	72	1	1	2	11	30	20	470
FENT-1	.1	9840	1	3	46	.1	6	8960	.1	14	16	72450	240	5	5090	903	1	80	1	1410	36	1	34	1	1551	174.0	111	1	1	2	16	26	45	390
FENT-2	.1	19700	1	7	129	.1	11	20570	.1	31	27	183190	610	10	10950	1396	1	150	1	4670	31	1	69	1	2851	445.0	94	1	1	5	18	235	20	890

ATTN: J.BARAKSO/S.ZASTAVNIKOVICH
(604)980-5814 OR (604)988-4524
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM
101R	.5	16960	3	6	80	.1	5	20260	.1	19	23	49370	780	6	6380	920	1	1970	4	2040	15	1	67	1	1041	133.9	149	2	1	4	70	2	60	981
102R	.5	6300	8	3	125	.2	1	42400	.1	18	4	38880	2020	7	14760	1306	1	550	17	2190	17	1	49	1	48	55.5	95	2	1	3	53	1	70	730
103R	.3	15680	4	4	37	.1	2	27240	.1	16	54	51050	730	16	10570	1902	1	370	1	1150	35	1	33	1	174	123.0	244	4	1	4	58	1	65	212
104R	2.2	42320	1	1	11	.1	18	27160	.1	33	16	63700	80	10	25940	1327	1	160	1	670	4	1	88	1	4616	196.2	87	1	4	5	91	1	55	95
105R	1.7	15500	1	1	21	.1	13	11080	.1	16	19	34330	410	15	21020	524	1	850	44	870	4	1	20	1	3570	83.8	72	1	4	7	151	3	40	285
106R	.2	13400	2	1	239	.8	2	8730	.1	15	18	46750	1270	6	2420	1842	1	630	39	1540	19	1	31	1	608	73.7	129	1	1	2	54	1	110	1230
107R	.5	8790	7	1	129	.1	1	3600	.1	3	14	10620	1090	1	1260	37	1	680	2	780	7	1	18	1	528	42.7	24	1	1	4	82	2	30	1580
108R	.2	5960	9	1	96	.3	1	3260	.1	5	6	18790	960	12	1410	1076	7	490	1	460	16	1	17	2	116	15.2	105	1	1	5	153	4	105	1670
109R	.2	9460	8	1	284	.1	1	15160	.1	12	19	32280	920	8	5770	725	2	1020	3	1560	15	1	70	1	235	81.6	108	1	1	5	108	1	50	1300
110R	1.0	5110	7	1	111	.1	5	5230	.1	5	10	14330	1910	9	3110	340	9	650	1	460	10	1	13	2	1512	20.0	38	1	2	10	262	1	55	1520

ATTN: J.BARAKSO/S.ZASTAVNIKOVICH
(604)980-5814 OR (604)988-4524
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM
J-01	.3	6130	11	4	188	.1	2	8400	.1	6	46	24160	850	3	2280	2526	5	870	2	1360	20	1	33	1	75	25.7	52	1	1	3	77	3	195	1280
J-02	.2	6530	16	1	3213	.1	2	1820	.1	6	20	24200	1620	3	380	85	5	430	1	1250	30	1	137	1	52	34.2	21	1	1	3	82	2	50	4110
J-03	1.1	34660	6	1	302	.1	10	46050	.1	23	59	49550	1350	11	12820	1071	1	3750	23	2220	12	1	278	1	1938	172.8	145	3	3	4	65	2	75	1750
J-04	.2	6950	5	1	113	.1	3	6380	.1	5	34	23500	1080	2	1610	465	7	930	1	1280	13	1	35	1	554	29.0	48	1	1	5	121	1	40	1320
J-05	.2	4850	7	1	216	.1	1	7770	.1	5	30	21520	710	2	1670	1769	4	710	1	1350	13	1	25	1	54	21.1	44	1	1	3	62	3	140	1440
J-06	.2	8840	9	1	399	.1	5	6670	.1	10	63	37020	1220	2	1490	5706	11	1100	4	1300	21	1	46	1	730	32.8	66	1	1	6	157	10	70	1600
J-07	.7	19500	1	1	196	.1	7	20740	.1	18	48	48000	960	9	9120	809	1	1340	1	1900	10	1	73	1	1588	132.4	66	3	2	3	38	4	25	1190
J-08	.4	19370	4	1	144	.1	6	15710	.1	20	81	45960	1090	2	8140	994	2	3940	3	2040	16	1	96	1	1294	137.7	80	2	2	6	107	2	55	924
J-11	.5	6910	8	1	643	.1	1	8650	.1	3	87	11740	3880	1	1490	857	21	330	4	710	13	1	25	4	49	17.5	24	2	1	6	118	18	80	1110
J-12	.3	10200	16	8	838	.1	1	20660	.1	10	73	29380	3010	12	8980	933	5	650	5	1040	17	1	67	1	33	53.1	59	3	1	8	190	6	135	1380
J-13	.3	10710	17	1	103	.2	2	7300	.1	11	62	19330	2920	6	6880	137	13	280	44	420	12	1	12	1	81	25.3	22	3	1	8	201	3	50	757
J-14	.3	4270	11	1	233	.1	1	5080	.1	3	15	13120	2470	2	1290	372	5	430	4	490	8	1	13	4	160	14.2	23	2	1	8	221	2	45	1250

COMP: JOHN BARAKSO
PROJ: FEN
ATTN: J.BARAKSO/S.ZASTAVNIKOVICH

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1V-0848-SJ1+
DATE: 91/09/1
* SOIL * (ACT:F31) PAGE 1 OF STAV

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM	PPM
LO-0.0E	.3	12740	18	4	122	.1	4	6890	.1	10	16	26470	770	7	4050	991	1	230	5	680	46	1	30	1	543	59.2	98	2	1	2	15	3	110	845	180
LO-0.5E	.3	13530	14	1	143	.1	5	5190	.1	10	15	27290	920	6	2880	832	1	140	2	640	19	1	22	1	774	63.0	90	2	1	1	12	1	35	1480	135
LO-1.0E	.4	12620	7	1	92	.1	4	4900	.1	6	10	18110	750	8	2760	183	1	150	2	210	13	1	23	1	807	43.7	75	2	1	1	10	1	50	1290	140
LO-1.5E	.6	16670	9	1	133	.1	5	6080	.1	7	15	19910	1000	9	3640	300	1	170	4	400	14	1	34	1	837	47.0	80	2	1	1	12	1	40	1160	5
LO-2.0E	.7	19910	8	1	138	.1	5	5570	.1	7	14	23190	990	15	3500	282	1	150	4	510	16	2	28	1	926	55.2	191	3	1	1	13	1	45	825	45
LO-2.5E	.6	22570	19	1	123	.1	6	5680	.1	9	12	34220	980	14	4160	303	1	170	3	610	16	1	29	1	995	73.7	156	3	1	2	14	1	60	888	30
LO-3~0E	.4	15460	14	1	97	.1	5	5560	.1	8	10	27700	890	8	3060	461	1	140	1	760	19	1	28	1	928	66.0	117	2	1	1	14	1	45	772	55
LO-3.5E	.3	23830	16	1	177	.1	5	5690	.1	9	21	30030	1580	10	4620	595	1	180	4	510	20	1	38	1	815	68.2	135	4	1	2	15	1	55	776	115
LO-4.0E	.7	14080	11	1	89	.1	5	4950	.1	6	8	21030	820	9	2250	219	1	130	1	380	12	1	21	1	923	51.9	81	3	1	1	10	1	40	905	80
LO-4.5E	.4	20780	21	1	127	.1	5	5310	.1	9	11	32860	870	12	3500	299	1	150	4	1200	15	1	28	1	873	69.0	125	3	1	2	13	1	70	843	95
LO-5.0E	.1	24710	14	1	105	.1	4	4990	.1	10	20	32490	1170	8	4350	332	1	140	4	900	20	1	19	1	724	71.4	83	4	1	2	15	2	35	659	105
LO-5.5E	.4	12010	7	1	99	.1	4	4990	.1	5	7	18800	590	7	2070	189	1	120	1	700	13	1	20	1	794	46.2	51	2	1	1	9	1	25	789	65
LO-6.0E	.4	14980	6	1	98	.1	5	5220	.1	7	7	24520	770	10	2000	285	1	140	2	1070	13	1	21	1	937	57.4	130	2	1	1	11	1	65	732	90
LO-6.5E	.4	16700	11	1	126	.1	4	4660	.1	8	9	27870	730	10	2150	781	1	120	1	1610	16	1	17	1	711	62.9	117	3	1	1	11	1	80	720	60
LO-7.0E	.5	17290	11	1	83	.1	5	4320	.1	8	8	24720	620	7	2260	276	1	130	2	1060	17	1	16	1	821	55.7	86	3	1	1	12	1	45	740	60
LO-7.5E	.2	16300	17	1	121	.1	4	5120	.1	10	13	29760	830	8	3450	360	1	170	1	390	20	1	24	1	764	66.4	68	3	1	1	12	7	50	741	90
LO-8.0E	.4	16630	11	4	145	.1	4	6070	.1	7	11	24980	580	10	2130	228	1	160	1	350	14	1	32	1	685	62.2	73	3	1	1	12	1	65	729	65
LO-8.5E	.4	18170	7	1	161	.1	5	4670	.1	9	9	27950	640	10	1990	280	1	140	1	1950	14	1	21	1	799	63.7	159	3	1	1	11	1	40	718	70
LO-9.0E	.3	30360	23	2	842	.1	6	15650	.1	30	23	70150	1180	12	3220	10305	1	450	8	3090	52	1	140	1	216	57.0	92	1	1	1	10	1	150	1130	65
LO-9.5E	.5	27790	21	1	209	.1	6	4950	.1	12	11	33690	780	14	3200	240	1	150	5	470	20	1	21	1	877	78.5	73	4	1	2	13	6	65	803	70
LO-10.0E	.1	25120	14	1	123	.1	5	5080	.1	10	12	28520	1200	10	4340	261	1	150	3	810	13	1	20	1	848	69.3	89	3	1	1	11	1	45	676	110
LO-10.5E	.4	18190	15	1	145	.1	4	5760	.1	10	13	25870	1210	8	3770	366	1	150	4	630	16	1	23	1	877	60.1	90	3	1	1	12	8	65	784	95
LO-11.0E	.4	32770	23	1	147	.1	5	5020	.1	11	12	39970	920	19	2790	245	1	130	1	3020	20	1	24	1	1020	81.5	210	3	1	1	15	1	95	678	60
LO-11.5E	2.6	51480	30	1	568	1.1	4	15580	.1	11	47	31880	2060	18	7260	1318	1	780	16	1120	25	1	96	3	259	67.5	142	6	2	2	24	1	220	888	90
LO-12.0E	.4	14530	11	1	172	.1	4	4450	.1	6	10	19290	870	6	1390	796	1	260	1	1050	14	1	19	1	531	44.8	73	3	1	1	9	1	75	785	70
LO-12.5E	.3	12500	12	1	103	.1	5	5970	.1	7	9	25190	630	7	3010	274	1	130	1	480	15	1	22	1	926	61.1	68	2	1	1	11	1	40	835	65
LO-13.0E	.2	19350	18	1	158	.1	4	5790	.1	9	16	31350	740	9	3630	318	1	120	2	710	15	1	20	1	635	74.4	85	3	1	2	12	1	55	772	50
LO-13.5E	.4	11890	13	1	137	.1	3	5840	.1	8	11	25230	580	7	3440	402	1	150	2	500	12	1	22	1	787	60.3	82	2	1	1	12	1	45	798	65
LO-14.0E	.3	11870	9	1	94	.1	4	4960	.1	6	9	20100	430	6	3370	263	1	120	2	570	12	1	16	1	639	47.2	46	2	1	1	10	1	55	752	90
LO-14.5E	.3	15850	18	1	101	.1	4	4790	.1	8	13	27670	550	8	3490	381	1	110	4	1060	15	1	19	1	533	59.1	108	3	1	1	13	2	25	783	55
LO-15.0E	.1	14540	11	1	138	.1	3	5180	.1	6	12	19160	470	8	3000	215	1	160	1	460	11	1	17	1	382	48.1	56	2	1	2	10	1	50	729	85
LO-15.5E	.3	20810	14	1	175	.1	4	5390	.1	10	17	28650	420	7	3530	307	1	120	3	660	14	1	22	1	523	58.9	69	2	1	1	12	1	45	824	60
LO-16.0E	.4	13160	10	1	122	.1	4	8010	.1	8	12	24030	570	24	3940	423	1	230	2	240	12	1	43	1	722	57.1	84	2	1	2	12	5	65	829	60
LO-16.5E	.7	18190	8	1	166	.1	3	8190	.1	6	16	21000	520	10	3840	186	2	210	5	480	18	1	36	1	667	53.5	56	3	1	2	15	3	45	959	80
LO-17.0E	.6	12430	7	1	124	.1	4	6760	.1	6	12	20380	500	6	2660	271	1	190	3	220	16	1	30	1	910	55.4	64	2	1	2	14	1	35	949	55
LO-17.5E	.6	23850	38	2	754	.1	7	13590	.1	22	39	52220	1310	13	4890	14282	27	200	37	1390	51	1	68	1	547	82.7	208	1	1	3	18	2	100	1510	85
LO-18.0E	1.1	33970	21	1	340	.4	4	13450	.1	11	50	27620	1040	16	5690	853	2	290	16	1200	27	1	62	2	498	68.0	140	5	2	2	22	1	145	1210	90
LO-18.5E	.4	22100	13	1	175	.1	4	7030	.1	8	14	27070	600	11	3520	274	1	150	7	700	14	1	27	1	771	61.6	104	3	1	2	15	2	55	855	85
LO-19.0E	.5	12130	8	1	93	.1	4	5280	.1	7	9	20330	500	6	2890	299	1	140	1	370	11	1	18	1	830	50.1	53	3	1	1	11	1	35	778	70
LO-19.5E	.5	15990	9	1	123	.1	5	5030	.1	8	12	25010	630	8	3500	632	1	150	3	640	16	1	18	1	892	58.0	83	3	1	2	14	1	45	832	75
LO-20.0E	.7	15170	6	1	117	.1	5	6320	.1	8	11	23320	650	7	3610	367	1	180	2	610	12	1	24	1	1140	56.8	68	3	1	1	14	1	20	741	65
LO-20.5E	.5	30220	10	1	259	.1	6	7100	.1	11	30	32240	1090	12	4910	1758	1	370	8	770	23	1	33	1	1045	74.0	125	3	1	2	19	1	55	831	95
LO-21.0E	1.5	47180	22	2	429	.6	4	12660	.1	13	65	40490	2240	20	8540	1040	1	360	18	1360	28	1	81	2	628	89.7	193	5	2	2	30	1	165	821	90
LO-21.5E	.3	16420	9	1	92	.1	5	5280	.1	8	12	33310	820	15	2690	243	2	130	1	900	17	1	20	1	1069	81.4	120	3	1	2	15	2	55	634	50
LO-22.0E	.8	16020	9	1	137	.1	5	6630	.1	8	13	25450	550	9	3400	333	1	200	3	440	14	1	27	1	1057	62.2	99	3	1	2	15	5	45	796	70
LO-22.5E	.7	14280	14	1	87	.1	4	4990	.1	7	13	23090	450	7	2890	252	1	140	1	800	18	1	16	1	844	55.6	76	4	1	2	13	3	50	747	60
LO-23.0E	.7	18940	13	1	161	.1	4	5880	.1	7	20	24380	780	9	2960	584	1	150	3	1460	19	1	25	1	838	56.1	138	3	1	1	14	1	70	755	65
LO-23.5E	.6	11870	7	1	83	.1	5	6720	.1	7	13	21440	530	8	3910	344	1	240	2	420	14	1	27	1	977	53.7	60	3	1	1	12	1	50	790	65
LO-24.0E	.9	22280	16	1	198	.1	4	6710	.1	9	17	26230	1130	11	4190	863	1	140	4	990	23	1	28	1	696	59.4	130	5	1	2	15	1	45	781	95
LO-24.5E	.5	16980	7	1	117	.1	4	5240	.1	8	12	25620	630	10	3190	488	1	150	1	720	15	1	18	1	992	60.3	126	3	1	1	13	5	45	726	60
LO-25.0E	.6	13570	7	1	50	.1	4	4340	.1	6	8	22330	480	6	2150	192	1	130	1	940	13	1	14	1	859	51.9	65	3	1	1	11	2	55	714	60
LO-0.5W	.4	15660	11	1	146	.1	4	6580	.1	10	12	29600	980	7	3320	644	1	140	4	1720	19	1	27	1	792	64.5	140	3	1	2	13	1	80	775	80
LO-1.0W	.4	18110	28	1	126	.1	4	4890	.1	10	15	31070	810	6	3670	553	1	150	8	490	36	1	20	2	839	67.0	189	2	1	2	18	2	85	753	115
LO-1.5W	.4	16480	30	1	98	.1	4	3880	.1	11	15	35640	620	8	2620	1381	1	120	4	1550	52	1	15	1	778	83.2	174	2	1	2	20	1	55	757	100
LO-2.0W	1.6	30150	37	1	294	.2	3	8430	.1	10	48	29950	1530	13	5360	1146	1	440	12	860	42	1	56	2	443	65.9	556	4	1	2	20	1	140	853	150
LO-2.5W	1.6	27430	43	1	316	.4	4	7810	.1	9	42	28470	1690	12	5220	976	1	140	11	1050	37	2	53	1	400	57.5	352	4	1	1	18	3	105	840	165
LO-3.0W	.3	10940	41	1	88	.1	4	4900	.1	8	13	26030	710	7	3160	447	1	130	2	480	24	3	23	1	685	56.1	167	2	1	1	13	1	35	820	80
LO-3.5W	.5	9800	24	1	74	.1	3	3790	.1	7	12	23100	570	5	3030	442	1	150	3	250	28	3	17	2	546	50.4	148	3	1	2	14	1	45	854	75
LO-4.0W	.8	10230	21	1	116	.1	3	3410	.1	7	11	21340	1140	4	2330	624	1	110	2	1140	27	2	15	1	418	45.4	239	3	1	1	12	5	55	842	60
LO-4.5W	3.3	29130	74	1	405	1.0	3	9370	.1	11	100	36160	1590	16	6560	1220	1	160	25	890	47	13	85	2	251	59.6	736	5	1	2	23	10	125	904	110

COMP: JOHNKSO
PROJ: FEN
ATTN: J.BAI/S.ZASTAVNIKOVICH

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1V-0848-SJ3+4
DATE: 91/09/12
* SOIL * (ACT:F31) PAGE 1 OF 2STAVNIH

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM	F PPM
LO-5.0W	.3	16470	29	4	156	.1	4	5660	.1	8	24	27380	820	12	3910	944	1	120	4	560	39	2	32	1	467	55.7	273	3	1	2	13	2	65	779	140
LO-5.5W	.1	11440	21	1	70	.1	4	3720	.1	6	10	24450	470	6	2710	241	1	530	1	550	28	1	18	1	481	53.0	106	2	1	1	10	1	100	704	145
LO-6.0W	2.5	45380	75	2	316	1.2	6	5220	.1	9	118	30800	1690	28	4840	2366	1	870	28	1470	30	7	36	1	271	53.0	927	4	2	2	24	3	275	697	210
LO-6.5W	.5	16850	43	1	129	.1	5	5980	.1	7	13	24990	800	9	2610	419	1	450	4	1030	24	1	24	1	732	51.8	287	2	1	1	11	1	105	806	30
LO-7.0W	.5	16270	36	1	120	.1	4	5350	.1	7	15	22880	750	10	3090	502	1	600	3	480	26	2	22	1	547	48.1	277	3	1	1	11	2	65	765	125
LO-7.5W	.6	15690	36	1	137	.1	4	6080	.1	7	17	24280	920	10	3220	621	1	540	2	590	30	3	26	1	635	51.5	349	3	1	1	11	1	95	791	135
LO-8.0W	.5	9270	44	1	260	.1	5	5890	3.5	9	17	32300	1380	9	1240	2064	1	440	4	1000	107	5	47	1	196	30.8	566	1	1	1	6	1	80	1242	155
LO-8.5W	1.3	26810	66	1	320	.2	5	10080	.1	10	45	32350	1890	28	5210	1691	1	510	11	1170	42	4	98	1	393	59.9	723	4	2	2	19	1	150	839	175
LO-9.0W	.5	14090	41	1	118	.1	4	6230	.1	8	17	26490	890	11	3790	672	1	540	1	390	34	3	36	1	674	56.9	274	2	1	1	13	1	85	841	135
LO-9.5W	1.5	21910	52	1	210	.1	5	7590	.1	8	31	28590	1380	18	4310	858	1	480	10	850	46	4	53	1	508	55.9	465	3	1	2	16	2	125	864	120
LO-10.0W	.6	15570	31	1	122	.1	5	5210	.1	7	17	24550	960	10	3350	537	1	140	3	440	31	2	25	1	727	55.0	257	3	1	1	13	3	75	773	125
LO-10.5W	.4	14760	45	1	100	.1	5	5070	.1	7	13	25700	1050	7	3570	395	1	130	3	580	32	4	23	1	668	59.9	234	3	1	2	13	1	40	803	130
LO-11.0W	.9	19890	40	1	161	.1	5	6630	.1	8	26	27630	1560	15	4320	988	1	650	7	640	41	3	43	1	681	58.3	463	4	1	1	15	2	115	857	145
LO-11.5W	.8	18320	32	1	136	.1	5	5540	.1	8	18	25720	1090	14	3270	857	1	150	4	630	33	2	29	1	736	55.8	650	3	1	1	13	1	90	768	140
LO-12.0W	.9	17450	23	1	180	.1	4	5130	.1	7	23	23020	1110	10	3000	1286	1	600	5	560	35	2	30	1	548	48.0	455	3	1	1	13	3	100	2960	145
LO-12.5W	1.0	22940	32	1	197	.4	4	5140	.1	8	28	25860	1250	20	3650	1584	1	130	9	730	52	2	41	1	339	50.3	554	3	1	1	16	2	75	2330	165
LO-13.0W	.5	14340	27	1	91	.1	3	4440	.1	7	12	23540	880	23	2920	596	1	140	4	340	33	1	28	1	544	48.8	352	3	1	1	13	1	45	1790	110
LO-13.5W	2.3	29380	37	1	293	.4	4	9430	.1	10	54	31420	2240	24	5820	1104	1	480	17	820	47	3	100	2	331	60.3	498	4	1	1	22	1	155	2240	145
LO-14.0W	1.1	14400	19	1	128	.1	4	6090	.1	7	12	23450	870	18	2440	645	1	130	3	880	40	1	36	1	484	45.8	399	3	1	1	12	2	50	945	95
LO-14.5W	1.0	13820	21	1	118	.1	4	5650	.1	7	11	21850	740	12	3250	516	1	150	3	390	31	2	25	1	607	47.4	234	3	1	1	14	4	40	1980	120
LO-15.0W	.7	20290	25	1	145	.1	4	4370	.1	8	9	28410	780	14	3530	481	1	110	3	1430	62	1	17	1	535	56.1	610	3	1	1	13	1	65	927	135
LO-15.5W	4.9	25400	59	1	302	.1	5	11110	14.7	10	47	34500	1900	26	4920	3611	1	430	17	1350	82	5	118	1	346	53.1	1831	3	1	2	18	1	245	3870	165
LO-16.0W	18.0	27810	60	1	414	.6	3	14480	13.8	8	104	31300	2590	19	4220	1242	1	360	40	1880	138	9	114	2	116	36.1	1287	4	1	1	18	4	690	2630	180
LO-16.5W	5.6	18640	78	1	235	.4	4	6600	4.9	9	75	33480	2140	16	2780	1845	1	510	22	1580	204	11	38	1	178	38.9	821	2	1	1	14	2	275	1360	260
LO-17.0W	1.3	15070	36	1	189	.1	5	5050	2.2	11	12	35310	990	12	2340	2048	1	100	4	1650	118	2	20	1	638	65.5	731	2	1	1	14	1	105	927	115
LO-17.5W	3.5	11660	22	1	102	.1	3	6420	9.0	6	15	23700	1190	9	2090	950	1	390	6	970	181	6	22	1	323	37.6	2045	2	1	1	10	1	155	1980	185
LO-18.0W	1.3	10890	30	1	95	.1	4	6190	.1	6	11	22710	960	7	3150	381	1	150	2	850	66	3	26	1	592	44.5	302	3	1	1	11	2	65	898	190
LO-18.5W	4.4	13160	25	1	654	.1	6	12300	28.5	11	38	29840	1360	11	1950	10235	1	430	33	1690	126	3	86	1	403	39.2	1819	1	1	1	8	1	115	1380	90
LO-19.0W	.9	8080	21	5	455	.1	4	20440	7.5	6	27	17530	1300	6	2010	4083	1	560	13	2560	38	3	91	1	240	22.9	616	2	1	1	7	1	125	1010	85
LO-19.5W	1.3	2520	12	28	1278	.1	6	58680	21.3	6	39	10520	950	1	1860	9315	1	450	32	10340	35	3	238	1	106	7.7	1913	2	1	1	5	1	165	1600	50
LO-20.0W	.7	4610	6	8	707	.1	6	22070	1.3	8	17	15940	1130	4	2280	8081	3	300	17	1550	45	1	80	1	285	16.2	265	1	1	1	5	2	170	1090	65
SUMMIT	.1	14020	15	1	199	.1	4	4130	.1	8	10	27610	1340	11	2450	778	1	490	3	1020	47	1	21	1	441	49.6	266	2	1	1	11	1	75	1060	115
TRENCH	1.2	13960	66	1	161	.1	4	6150	.1	9	24	31570	1440	6	3120	1564	1	650	4	800	150	10	21	1	410	47.2	414	1	1	1	11	5	155	888	185
LIU-1	1.7	31240	35	2	330	.8	4	11420	.1	8	49	28040	1870	22	5980	1142	4	810	16	1250	62	1	79	1	225	52.4	291	5	2	2	21	3	135	7720	195
LIU-2	1.4	26230	45	2	299	.3	5	8510	.1	18	34	44410	1600	21	3670	1992	10	1280	9	1450	92	1	67	1	459	89.2	291	3	2	2	18	2	165	1350	320
LIU-3	2.7	32280	34	2	227	.3	5	8680	.1	8	40	29870	1840	28	4920	1369	.2	550	18	1010	58	1	63	1	305	56.2	320	4	3	2	23	2	270	824	185
LIU-4	2.3	23260	21	1	192	.3	4	7310	.1	8	38	24870	1270	12	4470	804	1	720	14	820	57	1	47	1	258	50.2	250	4	2	1	20	2	205	866	205
LIU-5	.5	27050	24	1	256	1.3	4	7650	.1	14	60	26960	1190	11	3580	2028	5	740	21	1030	32	1	65	1	222	53.7	87	4	2	1	17	1	165	802	225
LIU-6	.5	23900	19	1	202	1.1	3	6330	.1	8	59	21760	1140	11	3460	814	3	710	20	910	23	1	50	1	236	42.0	76	4	2	1	17	3	200	775	135
LIU-7	.1	12930	14	1	141	.1	4	3550	.1	6	21	18220	640	7	2340	283	3	650	11	810	16	1	33	1	442	43.9	72	3	1	1	13	2	90	861	140

ATTN: J.BARTAVNIKOVICH

(604)[redacted]-5814 OR (604)988-4524

* HEAVY MINERAL * (ACT:F31) PAGE 1 OF 2ICH

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPB	BA-TOT PPM	HG PB
S101	5.2	6110	214	141	325	.4	13	14480	.1	26	46	125720	780	52	3090	927	1	250	1	1910	178	30	15	3	1	241.1	357	1	1	1	58	5	4000	20
S102	2.2	7470	357	45	199	.1	6	13200	.1	28	48	131820	590	13	2820	786	1	160	1	2840	141	25	19	1	1	224.0	244	1	1	1	40	5	4500	15
S103	1.6	7430	48	11	166	.1	1	9370	.1	25	44	116570	510	5	2870	716	1	100	1	4220	147	24	30	1	1	135.6	306	1	1	1	20	14	1890	95
S104	.9	7720	5	9	104	.1	4	9040	.1	17	24	85720	570	6	2810	643	1	100	1	2220	40	4	22	1	1	169.2	215	1	1	1	23	9	1270	20
S105	1.0	8110	10	10	112	.1	4	8400	.1	21	30	111610	690	3	2790	723	1	140	1	1830	39	5	26	1	1	203.4	191	1	1	1	24	534	1180	20
S106	1.3	7240	1	10	85	.1	5	7870	.1	20	22	103780	420	8	2560	531	1	80	1	940	110	6	12	1	1	219.4	215	1	1	1	30	15	1150	15
S107	1.6	8700	39	17	172	.8	5	12450	.1	24	39	124320	1290	1	2430	820	1	260	1	2160	87	25	38	1	1	172.2	270	1	1	1	33	473	2400	20
S108	1.0	7480	16	7	107	.1	3	7970	.1	17	22	83710	460	2	2840	608	1	100	1	1490	46	9	15	1	1	158.2	174	1	1	1	21	334	1300	22
MTN-TOP 1	2.1	1360	49	19	6774	.1	5	1260	1.2	8	26	29440	1340	1	230	129	2	130	6	330	2886	17	53	1	7	10.4	233	10	1	1	26	10	260000	20
MIN-HILL 1	1.3	1150	20	8	1500	.1	4	750	1.5	3	7	15060	1850	1	150	86	4	100	13	300	547	16	19	1	8	7.3	324	14	1	1	34	10	16000	25
MIN-HILL 2	.6	3390	17	4	816	.8	2	2270	2.1	7	34	35060	2490	1	180	1035	3	60	1	830	547	15	12	1	1	4.6	486	1	1	1	28	5	6200	25

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA TOT. PPM
000M	.7	11560	1	6	91	.1	5	6640	.1	8	13	23070	560	11	3560	491	1	260	3	520	9	1	13	1	1	58.3	50	1	1	1	11	2	170	910
050M	.5	16020	1	1	106	.1	5	6330	.1	9	17	27700	860	9	4350	712	1	210	6	640	78	1	12	1	1	67.0	139	1	1	2	12	1	135	765
100M	.7	14340	1	1	98	.1	6	9080	.1	12	22	36620	990	8	5490	759	1	330	4	660	9	1	17	1	1	95.6	77	1	1	2	19	1	65	865
150M	.5	11120	1	1	85	.1	5	6790	.1	8	12	23230	840	6	3620	527	1	540	3	480	10	1	14	1	1	58.2	63	1	1	1	10	1	95	720
200M	.9	15910	3	1	130	.1	5	7160	.1	8	18	24460	1030	8	4200	495	1	590	4	520	17	1	17	1	1	59.5	56	1	1	2	13	3	150	800
250M	.8	12570	1	1	103	.1	5	6830	.1	9	16	27620	880	7	4120	691	1	470	4	590	12	1	13	1	1	67.8	72	1	1	1	12	1	65	795
300M	.7	12570	1	1	77	.1	6	8060	.1	11	21	36160	630	8	4870	658	1	580	6	640	10	1	11	1	1	96.9	71	1	1	2	16	1	85	690
350M	.3	8590	1	1	69	.2	2	4200	.1	6	11	17110	440	5	2730	432	1	100	4	370	10	1	6	1	1	39.8	62	1	1	1	7	1	185	830
400M	.5	10910	14	1	105	.2	3	5640	.1	9	16	25160	730	6	3710	903	1	160	4	620	32	2	15	1	1	53.8	157	1	1	1	10	2	50	685
450M	.5	11750	9	1	102	.1	4	6430	.1	10	17	33130	800	7	4110	930	1	170	3	680	25	1	16	1	1	78.0	157	1	1	2	13	1	45	700
500M	.5	14410	12	1	123	.2	3	5670	.1	9	18	27810	960	7	4070	818	1	160	5	580	31	1	18	1	1	61.1	164	1	1	1	12	1	45	785
550M	.7	10370	1	1	52	.1	6	9080	.1	11	17	41300	580	7	5030	659	1	450	1	610	9	1	11	1	1	115.9	80	1	1	2	17	3	95	625
600M	.6	13560	24	1	98	.2	5	5640	.1	8	16	25910	1010	8	3790	739	1	460	5	560	32	2	18	1	1	57.9	287	1	1	1	11	2	50	705
650M	.7	10800	4	1	65	.1	5	8870	.1	10	17	33480	690	7	5160	703	1	630	4	520	13	1	10	1	1	87.7	93	1	1	2	14	1	45	755
700M	.6	13070	28	1	93	.2	4	6790	.1	9	18	28830	970	9	4300	794	1	200	4	530	24	1	16	1	1	66.8	200	1	1	1	13	4	35	680
750M	1.1	13560	25	1	94	.1	4	7830	.1	11	25	32200	990	13	4970	1066	1	260	6	590	21	1	14	1	1	77.9	178	1	1	2	15	1	50	905
800M	.6	13900	39	1	99	.2	3	5710	.1	8	19	27680	1010	8	3910	710	1	150	3	510	30	3	15	1	1	61.6	368	1	1	1	11	3	45	2275
850M	.8	17040	123	1	149	.3	5	6080	.1	10	31	34140	1570	8	4260	998	1	170	7	560	43	15	20	1	1	68.5	365	1	1	2	13	3	60	1355
900M	.6	14240	31	1	94	.2	5	5980	.1	10	16	35170	1070	7	3810	756	1	150	4	470	31	3	17	1	1	84.3	272	1	1	2	16	32	50	835
950M	.7	13020	30	1	124	.1	5	7030	.1	11	20	38290	1070	7	4030	896	1	190	3	690	41	3	20	1	1	94.3	345	1	1	2	17	2	70	2115
1000M	.5	13400	36	1	117	.2	3	6710	.1	10	25	28240	1000	8	4380	1052	1	200	7	750	39	4	17	1	1	59.4	415	1	1	1	13	5	35	770
1050M	.5	11610	16	1	89	.1	4	7740	.1	10	21	27340	690	8	5350	763	1	230	7	610	17	1	10	1	1	61.0	139	1	1	1	12	2	40	1665
1100M	.3	15410	62	1	134	.4	3	5670	.1	9	25	31370	1090	7	4160	927	1	150	5	610	59	9	17	1	1	62.2	292	1	1	1	13	1	115	1220
1150M	.5	9660	30	1	78	.2	3	5180	.1	7	13	22540	690	6	3340	753	1	120	4	440	41	7	13	1	1	47.0	175	1	1	1	8	3	80	965
1200M	1.1	18610	42	1	122	.3	4	5530	.1	9	18	27460	980	10	3970	770	1	390	6	520	66	3	14	1	1	55.9	396	1	1	1	11	2	105	860
1250M	.6	15690	35	1	120	.3	4	7230	.1	10	22	31950	1110	8	4530	722	1	180	5	770	44	3	17	1	1	70.9	262	1	1	2	14	5	65	895
1300M	.8	12900	41	1	127	.2	4	6430	.1	10	21	28940	1440	6	3260	1669	1	190	7	650	48	6	19	1	1	56.6	195	1	1	1	11	2	75	835
1350M	3.2	19380	44	1	156	.3	4	6370	.1	8	28	26060	1630	9	4260	806	1	140	7	580	36	7	19	1	1	54.5	303	2	1	1	14	1	90	780
1400M	.6	23670	50	1	166	.5	4	6650	.1	10	32	33970	1690	8	4960	552	1	560	6	600	47	9	20	2	1	65.4	245	3	1	2	19	3	140	730
1450M	.6	15050	55	1	139	.3	3	5450	.1	9	26	29170	1310	6	3620	935	1	160	4	580	72	10	16	1	1	54.8	293	1	1	1	12	2	85	770
1500M	1.6	14460	117	13	163	.5	3	4320	.1	10	26	31880	1040	15	3220	1168	1	100	8	1050	99	20	12	1	1	53.6	486	1	1	1	13	2	150	1005
1550M	1.0	15390	101	5	161	.4	5	5480	.1	10	27	32250	1240	11	3780	1031	1	140	5	900	84	14	15	1	1	58.3	388	1	1	1	13	1	120	950
1600M	1.5	17970	80	2	181	.2	5	5920	.1	10	34	34310	1410	7	3650	1350	1	180	5	890	104	15	21	1	1	59.4	455	2	1	2	15	2	115	895
1650M	1.2	14810	61	1	120	.2	5	7220	.1	10	26	30550	1320	8	4200	1198	1	220	5	650	77	10	17	1	1	60.6	319	1	1	1	14	1	75	935
1700M	2.1	17620	49	1	135	.4	5	5600	.1	8	20	25810	1450	8	3350	1041	1	420	6	590	83	7	19	1	1	51.3	387	3	1	1	14	3	135	845
1750M	2.5	20780	48	1	155	.4	4	4660	.1	7	24	25340	1550	9	3450	965	1	550	7	580	81	8	16	1	1	50.4	458	2	1	1	14	1	120	850
1800M	1.4	15350	44	1	114	.3	4	4650	.1	8	20	26580	1430	6	3210	949	1	130	6	520	106	7	15	1	1	50.6	359	2	1	1	13	2	90	975
1850M	1.5	12560	13	1	77	.2	5	6710	.1	8	16	26540	1040	7	3800	754	1	370	4	500	45	1	15	1	1	63.9	178	2	1	2	13	1	75	815
1900M	1.3	9710	13	1	67	.1	3	5370	.1	7	11	20240	930	4	2900	621	1	390	2	470	43	1	12	1	1	44.5	149	2	1	1	10	2	75	735
1950M	1.3	12000	13	1	85	.3	3	3930	.1	6	13	19810	990	5	2720	637	1	140	4	390	51	2	12	1	1	41.4	219	2	1	1	9	3	85	750
2000M	2.1	15210	18	1	115	.3	3	5010	.1	8	16	23550	1230	5	3190	801	1	370	4	530	55	2	15	1	1	47.9	254	2	1	1	13	1	70	800
2050M	1.4	14160	15	1	117	.3	4	5250	.1	8	16	23310	1120	6	2980	831	1	390	7	600	59	2	15	1	1	50.4	281	2	1	1	13	1	110	405
2100M	1.1	16960	25	1	135	.4	4	5530	.1	8	19	26080	1310	7	3290	1058	1	530	7	660	75	3	18	1	1	53.8	347	2	1	1	13	3	125	770
2150M	.9	12450	10	1	88	.2	5	7200	.1	9	16	26710	900	5	4070	730	1	200	5	560	34	1	14	1	1	62.4	121	3	1	1	13	18	50	800
2200M	.8	12150	12	1	99	.2	4	6610	.1	10	17	26830	990	5	3490	939	1	210	6	520	46	1	17	1	1	63.9	118	2	1	2	15	2	70	760
2250M	1.0	14300	17	1	112	.3	4	6290	.1	9	18	25280	1370	5	3160	891	1	230	6	640	45	3	25	1	1	51.7	140	2	1	1	14	1	120	870
2300M	.9	13180	13	1	96	.2	4	5610	.1	9	14	23590	1090	7	3240	830	1	200	6	500	38	1	20	1	1	53.8	113	2	1	1	13	1	70	1035
2350M	.7	15470	12	1	117	.2	4	6240	.1	9	17	25910	1360	6	3910	771	1	490	5	590	37	1	20	1	1	59.6	119	2	1	2	15	3	95	1040
2400M	.7	16900	4	1	123	.3	5	7340	.1	10	20	29330	1270	7	4580	754	1	290	6	610	28	1	21	1	1	69.3	95	2	1	2	17	1	110	925
2450M	.3	11730	9	1	103	.2	3	5550	.1	8	14	21960	990	5	3250	673	1	250	5	500	25	1	17	1	1	51.6	68	1	1	2	12	1	105	1080
2500M	.5	10920	7	1	108	.2	4	5600	.1	9	13	21880	1010	4	2990	662	1	300	5	530	29	1	20	1	1	54.3	62	1	1	1	14	2	110	1150
2550M	.5	12800	8	1	125	.3	3	5250	.1	8	15	21370	1130	4	3040	505	1	300	5	470	23	1	22	1	1	50.5	75	1	1	1	13	1	120	1095
2600M	.7	12100	14	1	123	.3	3	5170	.1	6	19	16470	880	4	2620	379	2	320	5	300	18	1	32	1	1	38.2	101	3	1	1	12	2	145	1245
2650M	.6	18360	13	1	152	.5	4	5550	.1	8	19	22530	1260	5	3660	408	1	290	6	450	14	1	29	1	1	48.3	79	3	1	1	15	2	265	1030
2700M	.4	18670	6	1	177	.4	3	4400	.1	6	15	17660	1260	5	2990	226	2	560	6	500	11	1	35	1	1	40.1	62	3	1	1	14	1	110	930
2750M	.5	16040	8	1	134	.2	3	5590	.1	8	18	21920	1220	4	3210	347	1	530	4	440	15	1	27	1	1	51.2	64	3	1	1	14	1	170	865
2800M	.2	16670	5	1	145	.3	2	4710	.1	6	14	19530	1590	4	2860	249	2	270	3	360	12	1	24	1	1	38.5	49	2	1	1	12	4	120	935
2850M	.2	19030	6	1	157	.3	3	4020	.1	8	11	21000	1500	5	3010	234	1	170	3	300	11	1	18	1	1	41.9	51	2	1	1	10	2	185	1045
2900M	.5	20960	12	1	157	.3	4	2140	.1	9	10	22060	1100	9	3110	129	2	350	11	290	10	1	12	1	1	41.8	50	4	1	2	19	1	115	1165
2950M	.6	15290	7	1	163	.2	4	4680	.1	9	13	23140	1080	4	3940	400	1	190	11	470	13	1	17	1	1	51.5	47	2	1	2	15	1	60	124[illegible]
3000M	.3	16070	8	3	142	.4	4	3120	.1	8	13	19780	1130	11	3570	247	2	130	11	410	15	3	13	1	1	40.0	66	1	1	1	16	1	110	975
3050M	.4	20860	5	1	147	.5	3	4610	.1	9	24	22710	1180	8	3560	430	1	230	8	430	16	1	21	1	1	44.4	67	1	1	1	15	2	230	965
3100M	.6	15040	1	1	135	.1	5	5340	.1	7	10	17860	1110	7	4310	226	1	250	8	380	5	1	18	1	1	41.9	40	2	1	1	15	2	70	102[illegible]

APPENDIX V.

GEONICS LIMITED
VLF EM 16

Source of Primary Field:	VLF transmitting stations
Transmitting Stations Used:	Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.
Operating Frequency Range:	About 15-25 Hz
Parameters Measured:	(1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).
Method of Reading:	In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone.
Scale Range:	In-phase ±150%; quadrature ±40%
Readability:	±1%
Reading Time:	10-40 seconds depending on signal strength
Operating Temperature Range:	-40 to 50° C.
Operating controls:	ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature, dial ±40%, inclinometer dial ±150%
Power Supply:	6 size AA (penlight) alkaline cells. Life about 200 hours
Dimensions:	42 x 14 x 9 cm (16 x 5.5 x 3.5 in)
Weight:	1.6 kg (3.5 lbs)
Instrument Supplied With:	Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries
Shipping Weight:	4.5 kg (10 lbs.)
Name and Address of Manufacturer:	Geonics Limited 1745 Meyerside Drive/Unit 8 Mississauga, Ontario L5T 1C5


SOILS, (H.M. FRACTION)
Sample No. Ag PPM Au PPB
S101 5.2 5
S102 2.2 5
S103 1.6 14
S104 0.9 9
S105 1.0 534
S106 1.3 15
S107 1.6 473
S108 1.0 334
30 ppb Au
SED 106
LINE 0 = RD
SOIL SAMPLE NO.
SED 105
SUMMIT SOIL SAMPLE
BASE LINE 0
21 ppb Au
235 ppb Au
MORICE RIVER
IJT
IJTc,b
uKK
IJTc
IJTb
KDI
Ev
Eqm
IKv
LEGEND
TERTIARY
Ev Ootsa Lake Group felsic volcanics
Endako Group mafic volcanics
Eqm Nanika Intrusion - quartz monzonite
MESOZOIC
KDI Bulkley Intrusion - diorite
uKK Kasalka Group andesitic volcanics
IK v,s Skeena Group andesitic volcanics and sediments
IJT Hazelton Group - Telkwa Fm.
c siliceous pyroclastic facies
b maroon basaltic flow facies
Geological contact
Fault
Trench
Percussion drill hole
Diamond drill hole
Good road
Logging road to be upgraded
Trail
GEOCHEMISTRY
LO-6.0W
(AIRBORNE CONDUCTORS)
Soil sample & Geophysical lines
FENT 1
Sediment sample
Rock sample
(x) Float rock sample
ANOMALY, -80MESH FR.
38 ppb Au
GOLD, > 10 ppb.
SILVER, > 1.5 ppm.
GEOLOGICAL BRANCH
ASSESSMENT REPORT
21,663
BARIL DEVELOPMENT LTD.
FEN PROPERTY
LOCATION MAP
OF GEOCHEMICAL AND GEOPHYSICAL
WORK
N.T.S. 93L/2,3
OMINECA M.D., B.C.
0 500 1000 METRES
BARAKSO CONSULTANTS LTD.
SCALE 1:10,000
DATE SEP. 1991
FIGURE No. 4