

Owner(s): Butler Mountain Minerals Corp.
Steven Kocsis

GYRO ENERGY AND MINERALS CORP.

GEOPHYSICAL REPORT

on an

AIRBORNE VLF-ELECTROMAGNETOMETER

and

MAGNETOMETER SURVEY

BARKERVILLE GOLD BELT AREA

STEEP 1,2 CLAIMS

LAT. ^{10.3} 53° ~~02' 25" N~~ ^{10.3} ~~02' 25" N~~

LONG. ^{70.8} 121° ~~28' 45" W~~ ^{70.8} ~~28' 45" W~~ NTS 93H/4E ~~1455~~

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CONSULTING GEOPHYSICIST

DATE OF WORK: SEPT. 9 - SEPT. 17, 1985

DATE OF REPORT: JANUARY 21, 1986

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

FILMED

14,513

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

Rec'd

APR 7 1985

SUBJECT _____

FILE _____

VANCOUVER, B.C.



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INTRODUCTION

Western Geophysical Aero Data Ltd. conducted an airborne magnetometer and VLF-electromagnetometer survey in the Wells-Barkerville gold belt area of B.C. The survey was flown from September 9 to September 17, 1985 inclusive and totalled approximately 2,000 kilometres in length. The survey was conducted on a joint venture agreement which allows Gyro Energy and Mineral Corporation access to the data for the entire survey block.

Geological mapping is hampered by glacial till and soils covering approximately 95% of this area. It was the intention of this survey to map variations in magnetic field intensities for correlation with known geology in order to advance the geological interpretation on a 192 unit claim block northwest of Wells. To this end, the airborne survey covered approximately 400 sq. kilometres and compares the magnetic environment of the Barkerville gold producing area to that of the northern claim block owned by Gyro Energy and Minerals Corp.

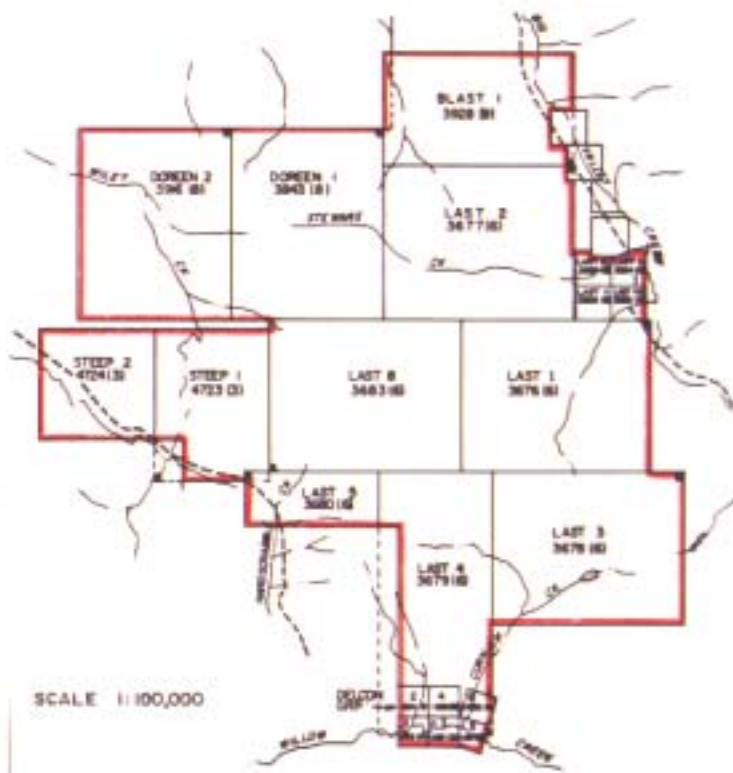


PROPERTY

The claims owned by Gyro Energy & Minerals Corp. are listed below and illustrated on Figure 1.

Claim Name	Record #	Units	Record Date	Expiry
Blast 1	3928	15	Sept. 1, 1981	1985exp.
Doreen 1	3843	20	Aug. 6, 1981	1986
Doreen 2	3916	20	Aug. 12, 1981	1986
Steep 1	4723	12	March 25, 1983	1986
Steep 2	4724	9	March 25, 1983	1986
Last 1	3676	20	June 26, 1981	1986
Last 2	3677	20	June 26, 1981	1986
Last 3	3678	20	June 26, 1981	1986
Last 4	3679	18	June 26, 1981	1986
Last 5	3680	8	June 26, 1981	1987
Last 8	3683	20	June 26, 1981	1986
Last 9	3684	1	June 26, 1981	1987
Last 10	3685	1	June 26, 1981	1986
Last 11	3686	1	June 26, 1981	1986
Last 12	3687	1	June 26, 1981	1986
Delcon 1-6	1163-1168	<u>6</u>	Aug. 31, 1979	1988
	TOTAL	192		





GYRO ENERGY CORPORATION
 — WELLS-BARKERVILLE PROJECT —
LOCATION AND CLAIMS MAP



LOCATION AND ACCESS

The claim group forms an irregularly shaped block approximately 9 km north-south by 8 km east-west at its' widest points and is centred near Mt. Wiley, some 9 km northwest of Wells, B.C. The claims lie within the Cariboo Mining Division and NTS 93H/4E. The approximate geographical co-ordinates of the centre of the claim block are latitude 53°10'N and longitude 121°39'W.

Logging and mining operations throughout the area have established an extensive road network across the claim block. Although many of these roads are passable with 2 wheel drive vehicles, 4 x 4's are recommended for general use. Two major routes leaving Wells provide general access to the claim block. One follows Downey Creek and Big Valley Creek along the eastern and northern claim boundaries. The second follows Willow River, Hardscrabble Creek and Sugar Creek skirting the southern and westernmost claims.

PREVIOUS WORK

Initial geological examination of parts of the Cariboo district were carried out in 1876 and 1894 by G.M. Dawson. Amos Bowman conducted the first systematic investigation of the rocks, veins and placers of the area in 1885-86.

A history of the mining in the Barkerville area prior to 1878 is given in considerable detail by H.H. Bancroft in "History of British Columbia" (1887). The California gold rush of 1849 left that country swarming with a population of gold seekers and when, in 1858, gold was discovered and authenticated in the north an extraordinary migration



followed. Initially placers were worked on the Thompson and Fraser Rivers. In 1861, placer gold was discovered in Williams and Lightning Creeks near Barkerville and a second important migration of miners to B.C. was prompted.

An accurate account of how much gold was produced from the Barkerville district is unknown but is estimated at \$35,000,000.00 from 1861 to 1923. From 1924 to the present a combination of dredging, placer mining and hard rock mining has continued in the area.

Geological examinations of the area have been undertaken by both the B.C. Department of Mines (Holland, S.S., 1954; Sutherland Brown, A., 1957, 1963) and the Geological Survey of Canada (Campbell, R.R., Mountjoy, E.W. and Young, F.G., 1973; Struick, L.C., 1981, 1982). The most recent mapping by L.C. Struick is published by the G.S.C. as open file maps 858 and 1109.

GEOLOGY

The following descriptions of the general, structural and economic geology are reproduced from the Canadian Department of Mines and Resources Map #336A. This data was issued in 1938 and based upon geology by G. Hanson, 1933 and 1934.

i) General Geology

"Bedrock is largely concealed by glacial drift and vegetation. Few mountains, rise above timber-line, which is about 6,200 feet above sea-level. Glacial drift, though present on the summits of the higher mountains, occurs mainly below 5,500 feet elevation and



LEGEND

MISSISSIPPIAN?, PENNSYLVANIAN AND PERMIAN

MPa Antler Formation: MP_h; diorite, basalt, serpentinite, gabbro, undifferentiated MP_s, MP_h; olive and grey chert, black and green slate, greywacke MP_h; serpentinite, sheared mafic rocks

MISSISSIPPIAN ? TO PERMIAN ?

MP_{DM} Dragon Mountain Succession: olive and grey micaceous quartzite and phyllite

MP_T Tom Creek Succession: olive grey micaceous quartzite, phyllite and schist

MP_D Downey Creek Succession: olive and grey micaceous quartzite and phyllite, grey olive and green slate, limestone, marble, metatuff? MP_s; limestone, marble, metatuff?, slate

MP_o amphibolite

MP_s dark grey sandy limestone, dark grey greywacke

DEVONIAN ? AND MISSISSIPPIAN ?

DM_s black siltite and phyllite, grey micaceous quartzite, limestone, minor metatuff? DM_s; greywacke, muddy conglomerate DM_g; quartzite clast conglomerate, quartzite DM_g; limestone, minor dolostone DM_s; grey micaceous quartzite, dark grey phyllite DM_s; quartzite, minor conglomerate DM_g; interbedded grey slate and green metatuff in part calcareous

HADRYNIAN ?

H_q grey and olive fine micaceous quartzite, and phyllite, minor marble H_q; marble, phyllite H_q; grey and green phyllite, minor olive quartzite H_q; white to dark grey quartzite

H_s grey and olive-grey micaceous quartzite, phyllite and schist conglomerate

HP undifferentiated H_o to MP_h, mainly DM_s to MP_o

PERMIAN? AND/OR TRIASSIC?

PT_s grey and green slate and phyllite, olive and grey greywacke, may be in part equivalent to

PERMIAN

P_c grey crinoidal limestone, minor grey chert

PERMIAN AND PENNSYLVANIAN

Middle Pennsylvanian

P_c black micritic limestone; grey and black shale

MISSISSIPPIAN

Lower Mississippian

MGR Greenberry Formation: grey crinoidal limestone, chert, slate

DEVONIAN AND MISSISSIPPIAN

GUYET FORMATION

Upper Devonian and Lower Mississippian

DM_g quartz sand matrix chert pebble conglomerate to breccia, black clay matrix lithic granule to cobble conglomerate, quartzite, greywacke and minor black slate.

Middle or Upper Devonian

D_gw Waverly Member: schistose calcareous volcanic sediments, green and purple pyroclastic rocks, pillow basalt, minor siltite.

ORDOVICIAN TO MISSISSIPPIAN ? OR YOUNGER

BLACK STUART GROUP

Upper Ordovician and Devonian to Mississippian or Younger (Silurian Missing?)

OM_s black slate, argillite and cherty argillite, black limestone, dolostone and silicified limestone (in part amphiportal)

Upper Silurian and Lower Devonian

SID_s light to dark grey chert breccia, grey limestone matrix dolostone granule to pebble breccia, limestone matrix chert quartz-dolostone conglomerate to breccia

CAMBRIAN

CARIBOO GROUP (M_i to C_oc)

Lower Cambrian

I_{CMU} Mural Formation: dark grey to white limestone to marble, white dolostone

CAMBRIAN AND/OR HADRYNIAN

MI Midas Formation: grey slate and phyllite, dark grey siltite, fine olive grey quartzite

Y_P Yanks Peak Formation: dark grey to white quartzite, grey to olive shale, phyllite and fine quartzite, minor quartz granule conglomerate

HADRYNIAN

H_{YB} Yankee Belle Formation: grey to olive shale, phyllite and fine quartzite, sandy grey limestone, grey to greenish grey limestone

H_C Cunningham Formation: dark grey to white limestone to marble, white dolostone

IGNEOUS ROCKS

PENNSYLVANIAN OR YOUNGER

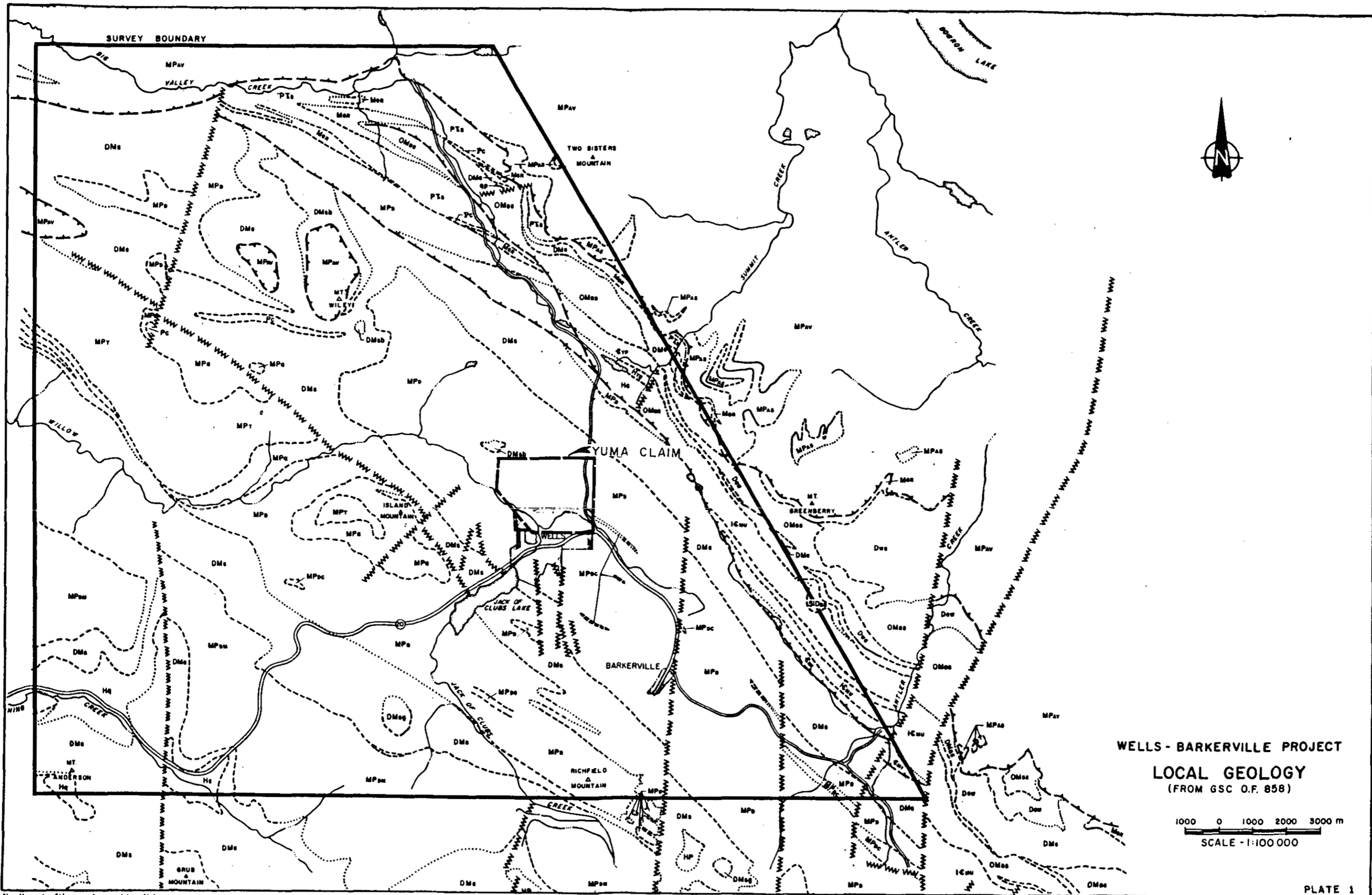
QP quartz porphyry rhyolite

KEY

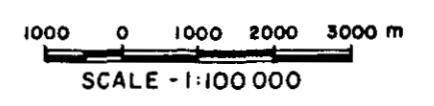
Geological contact (defined, approximate, assumed).....

Fault (defined, approximate, assumed)..... 

Thrust fault (defined, approximate, assumed) teeth in upper sheet 



WELLS - BARKERVILLE PROJECT
 LOCAL GEOLOGY
 (FROM GSC O.F. 858)



is commonly only a few feet thick except on lower valley slopes where it is locally more than 100 feet thick. A continental ice sheet formerly covered the area though the latest glaciers occupied the valleys only.

The oldest rocks are a series of sediments known as the CARIBOO SERIES. They are assumed to be of Precambrian age because they strongly resemble rocks of the Beltian series. The strata, which are more than 10,000 feet thick, lie in a broad, northwesterly plunging anticline. In the northeastern limb of this fold they are divisible into a number of distinct formations, but in the southwestern limb these formations are not recognizable and the series consists mainly of quartzites and their schistose equivalents. The schistosity planes conform closely to, and only rarely obscure the bedding.

The SLIDE MOUNTAIN SERIES lies unconformably above the Cariboo series. Basal conglomerates and grits are 900 feet thick and overlying crinoidal limestone, 400 feet. The top formation, several thousand feet thick, consist mainly of chert in beds 1 to 2 inches thick. A few poorly preserved fossils in the limestone formation indicate a Carboniferous age, probably Mississippian.

IGNEOUS ROCKS. Basic Breccias and flows overlaid sediments of the Slide Mountain series and some are perhaps intercalated with upper beds of the Antler formation.

The PROSPERINE INTRUSIVES, which cut the Cariboo series as quartz porphyry dykes and sills, are considerably altered. They are not sheared, however, and for that reason are considered to be younger than the stage of



shearing of the Cariboo series. On the other hand they are assumed to be older than the Slide Mountain series for they are not known to cut the latter. Some of these intrusives contain many irregular gash-veins of quartz and this has led to the view that the quartz porphyry or a parent body from which it came was the source of all the quartz veins within the area. No body of quartz porphyry has been traced on the surface for more than 200 feet. This apparent lack of continuity suggests the porphyry sills are mainly lenticular.

The MOUNT MURRAY INTRUSIVES comprise numerous basic dykes and perhaps other small intrusive bodies that cut the Slide Mountain series in the eastern and northeastern part of the area. They are so similar in mineral composition to the basic flows that overlie the Slide Mountain series that they are believed to be related in origin and of the same age."

ii) Structural Geology

"The major structure in the area is a broad northwesterly plunging anticline in the Cariboo series. Its crest is approximately horizontal near Barkerville but to the northwest it plunges about 10 degrees. Whilst this anticline is broadly a simple arch local minor folds striking northwest are present on the limbs. Dips of beds of the Cariboo series in the limbs range from 15 to 60 degrees, though the mean dip is about 35 degrees. The Slide Mountain series appears to be part of the major structure although folding probably affected the Cariboo series prior to deposition of the Slide Mountain sediments.



The rocks of the area are cut by a great many fractures, which are of two, if not three, ages. The oldest set cuts the Cariboo series only and includes numerous fractures filled with quartz veins, most of which strike northeast though some strike east and others northwest. A second set of fractures, later than the quartz veins, are normal faults that strike north and dip east. Only a few have been located and all these are confined to the Cariboo series. In each instance the strata on the east side of a fault are offset 400 to 1,200 feet south of their position on the west side. A third set of fractures, perhaps younger than the second set, are normal faults that cut both the Slide Mountain and Cariboo series. They strike northeast and offset the strata a few hundred feet to 4 miles."

iii) Economic Geology

"The Cariboo district has produced \$45,000,000 in placer gold and probably two-thirds of this amount has come from this area. Ground sluicing and hydraulicking is still carried on from year to year on many of the streams. Lode mining began in the 60's but met with very little success. Lode gold production began again in 1933 at the Cariboo Gold Quartz Mine at Wells on a 50-ton scale. In 1934 the Island Mountain Mine at Wells began producing on a 50-ton basis, and the Cariboo Gold Quartz Mine increased its capacity to 100 tons per day.



The lode deposits are gold-bearing quartz veins and gold-bearing pyritic replacements in limestone. Deposits with an encouraging gold content have been found only in the Cariboo series. Where the series is divided into formations, the best of the known veins lie in the upper part of the Richfield formation.

Most of the known gold-bearing veins strike northeast, dip steeply, and cut the strata roughly at right angles. These veins, known locally as transverse veins, rarely exceed 300 feet in length and vary in width from a fraction of an inch to 6 feet. The gold occurs free in pyrite which in some veins occurs in as high a proportion as 50 per cent of the vein matter. Another series of veins strikes north 60 degrees east to east. These veins are a little longer than the transverse veins and also appear to be somewhat wider but the largest veins do not average more than 3 or 3 1/2 feet wide. They are similar in mineralization to the transverse veins. Other veins are large lenticular masses of quartz lying parallel to the strata and containing only a little pyrite. None of these is known to be of commercial value. Other veins occupy fractures approximately parallel with the strata. Some of these are as much as 20 feet wide, are well mineralized with pyrite, and have yielded very encouraging assays. There are many veins in the map-area that do not belong to the classes mentioned, but none is yet known to be of commercial value. The best veins commonly assay an ounce of gold per ton but those mined so far have averaged half an ounce per ton.



Replacement deposits in limestone were discovered in the Island Mountain and the Cariboo Gold Quartz Mines in 1933 and so far have been found only in limestone beds in the upper part of the Richfield formation. The ore is typically a solid mass of fine-grained pyrite, the richer parts of which commonly assay 2 ounces of gold per ton. In mining the ore yields about an ounce of gold per ton."

The most recent mapping of the area was conducted by L.C. Struik and is published by the G.S.C. as open file maps 858 and 1109. Dr. Struik made little attempt to redefine the structural aspects of the area and concentrated on a more detailed lithological classification. The portions of his maps which cover the geophysical survey area and the related classification scheme are presented as Plate 1a and 1b of this report.

AIRBORNE VLF-ELECTROMAGNETIC AND MAGNETIC SURVEY

This survey simultaneously monitors and records the output signal from a proton precession magnetometer and two VLF-EM receivers installed in a bird designed to be towed 100 feet below a helicopter. A gimbal and shock mounted TV camera, fixed to the helicopter skid, provides input signal to a video cassette recorder allowing for accurate flight path recovery by correlation between the flight path cassette and air photographs of the survey area. A KING KRA-10A radar altimeter allows the pilot to continually monitor and control terrain clearance along any flight path.



Continuous measurements of the earth's total magnetic field intensity and of the total horizontal VLF-EM field strength of two transmission frequencies are stored in three independent modes: an analogue strip chart recorder, digital magnetic tapes and a digital video recovery system. A three-pen analogue power recorder provides direct, unfiltered recordings of the three geophysical instrument output signals. A Hewlett-Packard 9875 tape drive system digitally records all information as it is processed through an onboard micro-computer. The magnetic and electromagnetic data is also processed through the onboard micro-computer, incorporating an analogue to digital converter and a character generator, then superimposed along with the date, real time and terrain clearance upon the actual flight path video recording to allow exact correlation between geophysical data and ground location. The input signals are averaged and updated on the video display every second. Correlation between the strip chart, digital tape and the video flight path recovery tape is controlled via fiducial marks common to all systems. Line identification, flight direction and pertinent survey information are recorded on the audio track of the video recording tape.

DATA PROCESSING

Field data is digitally recorded, with the time of day fiducial, on magnetic cassettes in a format compatible with the Hewlett-Packard 9845 computer. The recovered flight path locations are digitized and the field data is processed to produce plan maps of each of the parameters. A variety of formats are available in which to display this data.



Total field intensity magnetic information is routinely edited for noise spikes and corrected for any diurnal variations recorded on a base magnetometer located in the survey area.

Total field intensity VLF-EM signals are sensitive to topographic changes and sensor oscillation. Oscillation effects can be reduced by filters tuned to the dominant period. Long period effects attributable to topography can be removed by high pass filtering the planimetric data.

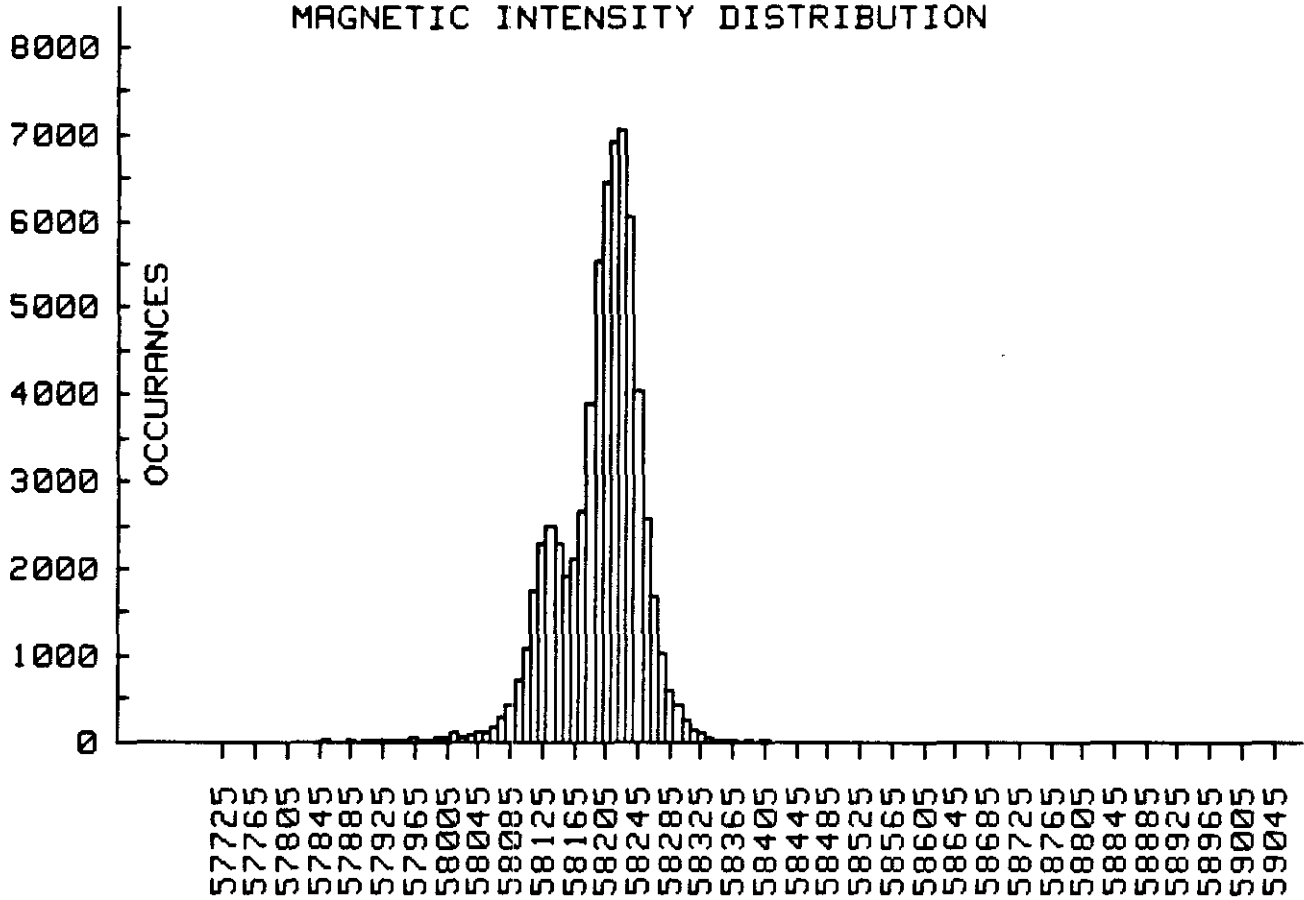
DISCUSSION OF RESULTS

I Magnetic Survey

Survey lines were oriented in an east-west direction, spaced at 200 metre intervals and flown with an average sensor terrain clearance of 75 metres. Two thousand line kilometres of data were flown from September 9 to September 17, 1985 covering an area of approximately 400 square kilometres. The magnetic data is presented in contour form at a scale of 1:20,000 as Figures 2A and 2B. In addition, the magnetic data across Gyro Energy & Mineral Corporation's 192 unit claim block is mapped at a 1:10,000 scale and presented as Figure 5. The VLF-EM data is illustrated in profile format as Figures 3A, B and 4A, B representing the Annapolis and Seattle frequencies respectively. Significant conductivity anomalies have been flagged and their locations transferred to the magnetic maps for easy correlation.



GYRO ENERGY & MINERALS CORP.
MAGNETIC INTENSITY DISTRIBUTION



MAGNETIC INTENSITY (GAMMAS)
Histogram bar width= 10 gammas

MAGNETIC INTENSITY DISTRIBUTION HISTOGRAM



The magnetic intensities observed during the course of this survey ranged from 57,760 to 58,810 gammas, however 89.6% of the readings fall within the 150 gamma range between 58,120 and 58,270. These results are graphically displayed in the normal histogram plot presented as Figure 6 of the report. Within this narrow range, three distinct levels of magnetic intensity were observed which appeared to reflect the major lithological units mapped by Struik in the area. To emphasize this correlation, the magnetic data was convolved with a 900 metre window Bartlett filter. The resulting "smoothed" data was contoured and is presented as Figures 2A and 2B. A weak but distinct gradient about the 58,210 gamma level is evident on these maps and delineates dominant northwest-southeast trending structures and lithological contacts.

The most recent and comprehensive geological mapping of this area was conducted by L.C. Struik (G.S.C. open file 858, 1109). Two lithological units dominate the survey area. One is the Downey Creek Succession (MPd), a Mississippian to Permian age assemblage of limestone, quartzite, phyllite, slate and metatuff which hosts the major gold occurrences. The second is a block stiltite and phyllite, quartzite, limestone and metatuff unit (DMs) of Devonian and Mississippian age. The DMs unit appears to be reflected by magnetic values between 58,175 and 58,210 gammas whereas the MPd unit produces slightly higher magnetic intensities, ranging from 58,220 to 58,300 gammas or greater. A third unit, the Dragon Mountain Succession (MPdm) is likely a lateral extension of the Downey Creek Succession (MPd) and is mapped in the southwest corner of the survey area. This unit appears to produce lower magnetic intensities, in the range of 58,100 to 58,150 gammas. The contact between the MPdm and DMs units is not acutely defined magnetically and is probably of a gradational nature. Because overburden covers more than 95% of the area, Struik had very few outcrops to



study and henceforth most of the geological contacts he maps are either poorly defined or assumed. Utilizing the magnetic data as a guide, many of these contacts can be repositioned yet still honor the outcrop locations Struik used as control points for his mapping. This interpretation is presented as Figure 7 at a scale of 1:100,000 for direct comparison to Struik's mapping (Plate 1).

A direct comparison between Struik's map (Plate 1) and the geophysical interpretation map is the clearest method of describing the results of the airborne survey. Struik maps the main gold bearing MPd unit as a band approximately 4 km wide, extending in a northwesterly direction through the townsites of Barkerville and Wells as far as Hardcastle Mtn. This same unit re-occurs further to the northwest along Sugar Creek and Yuzkli Lake. The western edge of this zone lies in contact with the DMs unit and is clearly delineated by the magnetic intensity map. The magnetic high reflecting the MPd unit suggests however that the zone is somewhat narrower (approximately 3 km wide) near Barkerville and Wells and furthermore is cut by a major northeasterly trending fault immediately south of Cornish Mountain. To the northwest of this fault the magnetic data delineates a very narrow (1 km wide) continuation of the MPd zone. The re-occurrence of this zone to the northwest near Sugar Creek appears to be much larger based on the magnetic response than as indicated by Struik. The magnetic low across the eastern portion of this belt suggests two possibilities. One, that the MPd unit is narrower than initially believed or two, that the magnetic data is delineating a facies change within the MPd unit. Struik favors this latter interpretation, citing field observations of an increased limestone content along the eastern portion of the belt.



LEGEND

MISSISSIPPIAN?, PENNSYLVANIAN AND PERMIAN

MPA Antler Formation: MPav ; diorite, basalt, serpentinite, gabbro, undifferentiated MPAs, MPAs; olive and grey chert, black and green slate, greywacke MPau; serpentinite, sheared mafic rocks

MISSISSIPPIAN ? TO PERMIAN ?

MPDM Dragon Mountain Succession: olive and grey micaceous quartzite and phyllite

MPT Tom Creek Succession: olive grey micaceous quartzite, phyllite and schist

MPD Downey Creek Succession: olive and grey micaceous quartzite and phyllite, grey olive and green slate, limestone, marble, metatuff? MPB; limestone, marble, metatuff?, slate

(MPD(1)) - volcanic facies
(MPD(2)) - limestone facies

MPa amphibolite

MPS dark grey sandy limestone, dark grey greywacke

DEVONIAN ? AND MISSISSIPPIAN ?

DMS black siltite and phyllite, grey micaceous quartzite, limestone, minor metatuff? DMSb; greywacke, muddy conglomerate DMSg; quartzite clast conglomerate, quartzite DMSc; limestone, minor dolostone DMSd; grey micaceous quartzite, dark grey phyllite DMSe; quartzite, minor conglomerate DMSf; interbedded grey slate and green metatuff in part calcareous

HADRYNIAN ?

Hq grey and olive fine micaceous quartzite, and phyllite, minor marble Hqc; marble, phyllite Hqp; grey and green phyllite, minor olive quartzite Hqq; white to dark grey quartzite

Hs grey and olive-grey micaceous quartzite, phyllite and schist conglomerate

HP undifferentiated Hst to MPk, mainly DMS to MPD

PERMIAN? AND/OR TRIASSIC?

PKs grey and green slate and phyllite, olive and grey greywacke, may be in part equivalent to

PERMIAN

Pc grey crinoidal limestone, minor grey chert

PERMIAN AND PENNSYLVANIAN

Middle Pennsylvanian

Pc black micritic limestone; grey and black shale

MISSISSIPPIAN

Lower Mississippian

MGR Greenberry Formation: grey crinoidal limestone, chert, slate

DEVONIAN AND MISSISSIPPIAN

GUYET FORMATION

Upper Devonian and Lower Mississippian

DMS quartz sand matrix chert pebble conglomerate to breccia, black clay matrix lithic granule to cobble conglomerate, quartzite, greywacke and minor black slate.

Middle or Upper Devonian

DGW Waverly Member: schistose calcareous volcanic sediments, green and purple pyroclastic rocks, pillow basalt, minor siltite.

ORDOVICIAN TO MISSISSIPPIAN ? OR YOUNGER

BLACK STUART GROUP

Upper Ordovician and Devonian to Mississippian or Younger (Silurian Missing?)

OMs black slate, argillite and cherty argillite, black limestone, dolostone and silicified limestone (in part amorphous)

Upper Silurian and Lower Devonian

SIDes light to dark grey chert breccia, grey limestone matrix dolostone granule to pebble breccia, limestone matrix chert quartz dolostone conglomerate to breccia

CAMBRIAN

CARIBOO GROUP (Ht to Ccc)

Lower Cambrian

CMU Mural Formation: dark grey to white limestone to marble, white dolostone

CAMBRIAN AND/OR HADRYNIAN

CMi Midas Formation: grey slate and phyllite, dark grey siltite, fine olive grey quartzite

CYP Yanks Peak Formation: dark grey to white quartzite, grey to olive shale, phyllite and fine quartzite, minor quartz granule conglomerate

HADRYNIAN

Hvb Yankee Belle Formation: grey to olive shale, phyllite and fine quartzite, sandy grey limestone, grey to greenish grey limestone

Hc Cunningham Formation: dark grey to white limestone to marble, white dolostone

IGNEOUS ROCKS

PENNSYLVANIAN OR YOUNGER

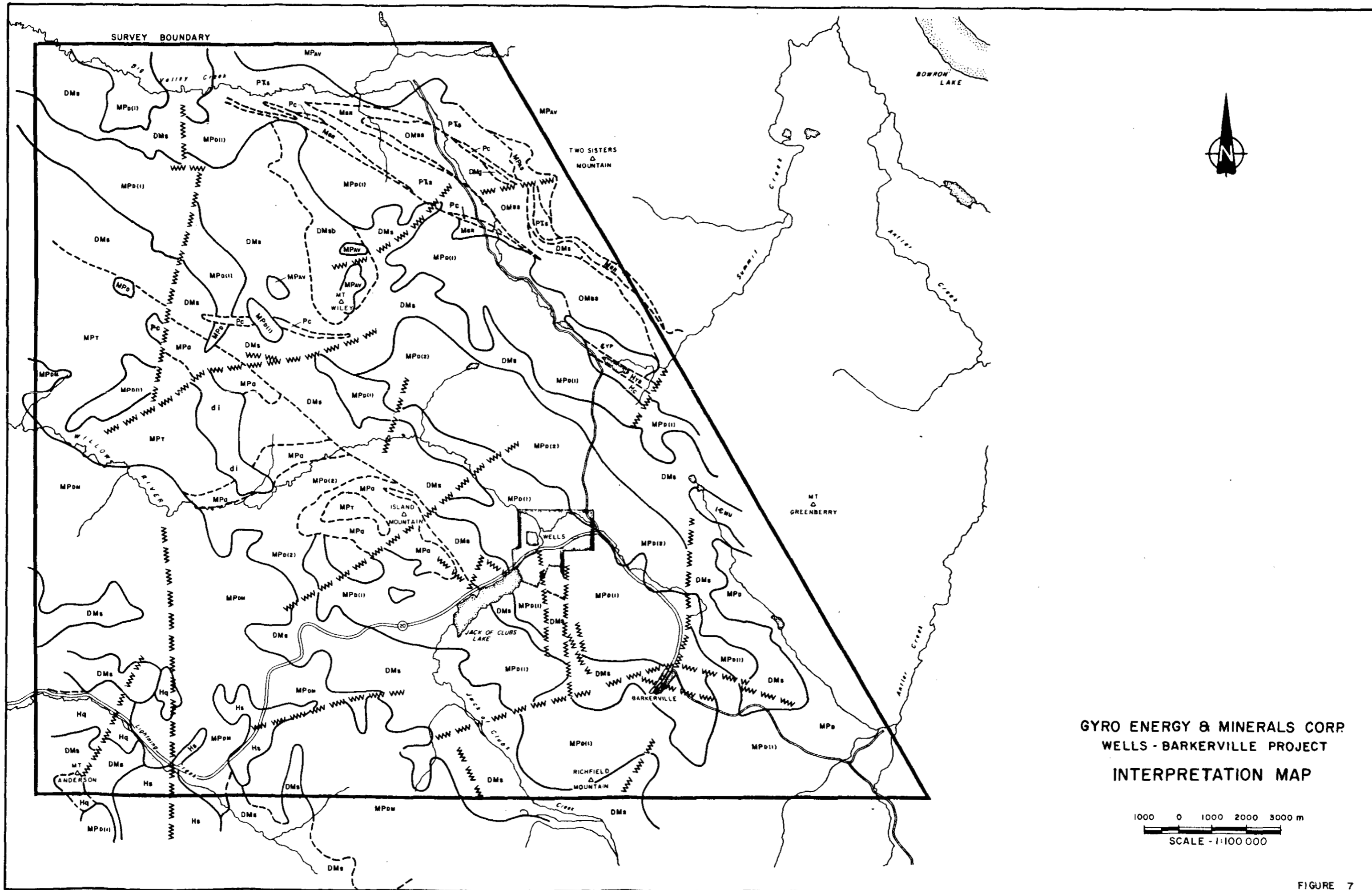
qp quartz porphyry rhyolite

di diorite intrusive

KEY

Geological contact (interpreted from geophysics).....
(interpreted from geology GSC map O.F. 85B).....

Fault WW WW



GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 INTERPRETATION MAP

1000 0 1000 2000 3000 m
 SCALE - 1:100 000

fineline drafting and graphics ltd.

Another zone of MPd rocks are mapped approximately 1 km to the southwest of and paralleling the major gold bearing zone. The zone is well defined by high magnetic values southeast of the same northeasterly trending fault described above. On the northwest side of this fault the magnetic intensity is markedly lower. Similar interpretation possibilities exist for the unexpected low magnetic response, either the absence of the MPd unit to the northwest or a change to a limestone facies.

Within the second MPd unit, two zones of anomalously high magnetic intensity (greater than 58,300 gammas) are observed. The northernmost feature (lines 38B and 39B) coincides with diorite boulders found in Coulter Creek. Diorite was also observed in the limited amount of outcrop across the second magnetic high noted to the south.

The strongest magnetic feature observed in the area is a magnetic high located on the southern slope of Mt. Tom. This feature is approximately 3 km long by 800 metres wide, elongated in a south-southeasterly direction. Local values of greater than 58,800 gammas (600 gammas above background) are observed along this trend. The area is geologically mapped as an amphibolite however similarly mapped areas do not exhibit the same magnetic signature. The most probable source of the magnetic feature is a buried intrusive, possibly dioritic in composition.

Faulting is reflected in the magnetic data in two ways. By the abrupt offset, alteration of termination of a regional magnetic trend, as for example the major fault described above, or by a series of isolated magnetic lows which align to form a narrow regional lineation. A number of faults are interpreted from the magnetic data as illustrated on the magnetic contour maps and interpretation map. Many of these



features are also delineated on pre-existing geology maps however some are new and require ground verification.

The most dramatic of these new faults is reflected by a series of sharp magnetic lows which strike west-southwest from the Barkerville townsite for approximately 8 km. This fault is displaced 2 km to the northwest at the geologically and geophysically defined contact between the MPd and DMs units inferring this contact is also related to previously undetected faulting. The displaced fault is mapped a further 5 km to the west as far as Chisholm Creek and the B.C. Highway #26. The eastern end of this major fault terminates against a geologically defined north-northeasterly trending fault which follows Williams Creek, immediately east of Barkerville. To the east of Williams Creek Fault, a number of magnetic lows similar to those defining the fault to the west are observed. No definitive alignment of these features is evident however the general orientation is northwesterly.

Another previously unmapped fault is observed trending west-southwesterly from a point between Wiley Mountain and Hardcastle Mountain, through Mt. Tom as far as Williams River. A weak magnetic high is noted along the northern flank of this fault near Willow River. The eastern end of this fault crosses the Last 5 claim owned by Gyro Energy and Minerals Corp. Evidence of numerous smaller faults are observed in the magnetic data and interpreted as illustrated on Figures 2A, 2B.

A detailed magnetic contour map covering the 192 unit claim block of Gyro Energy and Minerals Corporation is presented as Figure 5. The map is drawn at a 1:10,000 scale and based on unfiltered magnetic data. The same dominant northwest-southeast lineations exhibited on the filtered



1:20,000 scale maps are evident in the unfiltered data, however specific contacts are less distinct. The magnetic response suggests the major lithological contact is either shallow dipping, henceforth generating isolated pockets or erosional remnants of the DMS and MPd units along it or that the two rock units are interfingered and the contact is of a gradational nature.

A large number of small isolated magnetic lows are scattered across the claims area. Most of these anomalies are 50 to 200 gammas in amplitude and appear to be randomly distributed and oriented. Various shapes are observed but rectangular blocks approximately 50 metres wide by 500 metres long are fairly common. Some of these anomalies align or connect to form long linear features and can be interpreted as faults as illustrated on Figure 5.

II VLF-Electromagnetic Survey

The VLF-EM data, filtered to remove the terrain component, are presented in profile format as Figures 3A, 3B, 4A and 4B. Conductor axes were picked for the anomalous responses from unfiltered analogue records and flagged on both the magnetic contour map and the VLF-EM profile maps. A general observation of the survey results is the unexpected lack of any regional trends. This system monitors very high electromagnetic frequencies and typically responds to even the minor conductivity variations normally observed along geological contacts and fault zones. The lack of any VLF-EM responses to these features suggests a relatively high conductivity to the widespread overburden in the area.



Another overburden effect observed on the unfiltered VLF-EM records is an abundance of "spike" anomalies (variable intensity amplitude increases of less than 1 second duration). These "spikes" are randomly distributed throughout the survey area forming no distinct patterns or line to line correlations.

A number of weak lineations with strike lengths of greater than 500 metres are observed however with few exceptions they can be correlated with rivers, streams or other visible surface drainage systems. Those anomalous responses which cannot be explained by visible geomorphic or cultural features have been flagged on the appropriate maps.

Thirteen VLF-EM responses, considered anomalous because of their amplitude, shape or position, have been delineated across the claim block owned by Gyro Energy & Minerals Corp. The strongest of these occurs on the southeast slope of Mt. Wiley within the Last 8 claim. The anomaly is a conductive lineation approximately 800 metres long striking north-northeast and is located near the eastern end of a major east-northeast trending fault interpreted from the magnetic data. The VLF-EM anomaly can be interpreted as reflecting a fault which would make the area of intersection of the two faults a favourable site for in situ gold mineralization.



SUMMARY AND CONCLUSIONS

From September 9 to September 17, 1985 Western Geophysical Aero Data Ltd. conducted an airborne magnetometer and VLF-electromagnetometer survey in the Wells-Barkerville gold belt area of B.C. The survey totalled 2,000 kilometres in length and covered an area of approximately 400 square kilometres extending from the Barkerville townsite, 21 kilometres north to Big Valley Creek. Included in this area of coverage is a 192 unit claim block owned by Gyro Energy & Minerals Corp. The intention of the survey was to assist the regional geological mapping of the area and highlight areas favourable for gold occurrence.

The magnetic intensity contour map reflects extremely flat magnetic relief with over 50% of the 65,800 data points gathered being within a 50 gamma range and nearly 90% within a 150 gamma range. One very strong magnetic high was observed on Mount Tom and is interpreted as reflecting a buried diorite intrusive. In spite of the quiet nature of the magnetic data, the dominant northwest-southeast orientation of regional structures and lithologies is evident on the magnetic contour map.

Detailed analysis shows the Gyro Energy & Minerals Corporation 192 unit claim block to be centred on the crest of the same regional anticline which crosses the Barkerville and Wells townsites. The main gold producing zone of the area (Downey Creek Succession) is relatively well defined magnetically and lies along the southwestern limb of this structure. The zone is mapped as extending from Barkerville and Wells on to Gyro Energy's Delcon 1-6 and Last 4 claims where it is structurally deformed and terminates in an area of intersecting faults. The magnetic data infers this zone reappears along strike to the northwest on the Steep 2 claim



and is considered open in this direction. Another belt of Downey Creek Succession rocks are magnetically and geologically mapped along the northeastern limb of the regional anticline. This zone crosses the northeastern portion of the large claim block as illustrated on Figure 7.

The central portion of the claim block is reflected by relatively low magnetic value and interpreted as being underlain by the DMS unit along the crest of the anticline. The detailed magnetic contour map (Figure 5) delineates a large number of small, isolated magnetic lows and highs in this area. Some of these features align to form fault-like lineations but for the most part they appear to be randomly oriented. Although they are at or very near the surface, the sources of these anomalies are likely small and will require a ground based magnetic survey to be accurately resolved.

Three major east-northeast to northeast trending fault zones are evident in the magnetic data. One of these faults crosses Island Mountain and Coulter Creek and is also mapped by geological studies. The other two zones, as mapped on Figure 7, require ground verification. The larger of these zones intersects a geologically defined northerly trending fault which borders the Barkerville townsite. This supports the theory that in situ gold in the area may be concentrated near the intersection of northerly and northeasterly trending faults. The second unidentified fault extends from the Willow River, through Mt. Tom and on to Gyro Energy's Last 4 and Last 5 claims. Although the geologically defined northerly trending faults are not generally reflected in the airborne magnetic data there is weak magnetic evidence of such a structure intersecting the clearly defined northeasterly striking fault in the area of the Last 5 claim.



The VLF-EM signals are clearly dominated by the widespread overburden of the area. This surface cover is conductive enough to mask the weak conductivity lineations normally associated with geological contacts and faults. The VLF-EM responses flagged as anomalies are relatively weak and associated with surface or very near surface targets.

Thirteen VLF-EM anomalies have been flagged on the Gyro Energy and Minerals Corporation claim block. The strongest of these is interpreted as reflecting a northerly trending fault on the southeast slope of Mt. Wiley within the Last 8 claim.



RECOMMENDATIONS

Two bands of Downey Creek Succession rocks (the major gold producing zone) cross the Gyro Energy and Minerals Corporation claim block, flanking either side of a northwesterly trending anticline. Exploration efforts should be concentrated in these area as outlined on the interpretation map. The southern belt crosses the Delcon 1-6 and Steep 2 claims. The area surrounding a well defined northerly trending fault on the Delcon 3, 4 and Last 4 claim warrants the highest priority.

The east-northeasterly trending major fault zone interpreted across Mt. Tom and the Last 5 and Last 8 claims is also considered an area of high priority for ground investigations, particularly where intersecting northerly trending faults are projected.

The northern belt of Downey Creek Succession rocks are mapped across portions of the Last 1-3, Last 8-12, Doreen 1 and Blast 1 claims. Two northerly trending faults, one crossing the Last 2 claim and the other crossing the Last 1 and Last 3 claim warrant particular examinations.

Effective methods of ground exploration in these areas ultimately depends on local overburden conditions. Assuming general prospecting and trenching techniques are ineffective, detailing ground magnetometer and VLF-EM surveys will be required to provide specific drill targets.

Most of the surveyed area is shown on the B.C. government claim maps as staked however two magnetically anomalous areas appear to be open. The strong magnetic high extending south from Mt. Tom lies between the Wolf and the Upper, Downer and Joe claims. This magnetic high is the strongest magnetic response observed in the area and definitely



warrants exploration. A subtle magnetic high follows the topographic ridge southeast of Meadows Creek. This response may be reflecting an unmapped occurrence of Downey Creek Succession rocks and appears to be associated with the intersection of two major fault patterns.

If these two areas are open, as inferred on the B.C. Mining Recorder Claim maps, they should be staked and explored by normal ground prospecting technique including detailing magnetic and VLF-EM surveys.

Respectfully submitted,



E. Trent Pezzot, B.Sc.
Geophysicist



Glen E. White, B.Sc., P.Eng.
Consulting Geophysicist



INSTRUMENT SPECIFICATIONS**BARRINGER AIRBORNE MAGNETOMETER**

MODEL: Nimbin M-123

TYPE: Proton Precession

RANGE: 20,000 to 100,000 gammas

ACCURACY: \pm 1 gamma at 24 V d.c.

SENSITIVITY: 1 gamma throughout range

CYCLE RATES:

- Continuous - 0.6, 0.8, 1.2 and 1.9 seconds
- Automatic - 2 seconds to 99 minutes in 1 second steps
- Manual - Pushbutton single cycling at 1.9 seconds
- External - Actuated by a 2.5 to 12 volt pulse longer than 1 millisecond.

OUTPUTS:

- Analogue - 0 to 99 gammas or 0 to 990 gammas
- automatic stepping
- Visual - 5 digit numeric display directly in gammas

EXTERNAL OUTPUTS:

- Analogue - 2 channels, 0 to 99 gammas or 0 TO 990 gammas at 1 m.a. or 1 volt full scale deflection.
- Digital - BCD 1, 2, 4, 8 code, TTL compatible

SIZE: Instrument set in console
30 cm X 10 cm X 25 cm

WEIGHT: 3.5 Kg.

POWER

REQUIREMENTS: 12 to 30 volts dc, 60 to 200 milliamps maximum.

DETECTOR: Noise cancelling torroidal coil installed in air foil.



INSTRUMENT SPECIFICATIONS**SABRE AIRBORNE VLF SYSTEM**

Source of Primary Field: -VLF radio stations in the frequency range of 14 KHz to 30 KHz

Type of Measurement: -Horizontal field strength

Number of Channels: Two;
Seattle, Washington at 24.8 KHz
Annapolis, Maryland at 21.4 KHz

Type of Sensor: -Two ferrite antennae arrays, one for each channel, mounted in magnetometer bird

Output: -0 - 100 mV displayed on two analogue meters (one for each channel)
-recorder output posts mounted on rear of instrument panel

Power Supply: -Eight alkaline "AA" cells in main instrument case (life 300 hours)
-Two 9-volt alkaline transistor batteries in bird (life 300 hours)

Instrument Console: -Dimensions - 30 cm X 10 cm X 25 cm
-Weight - 3.5 Kg



INSTRUMENT SPECIFICATIONS**FLIGHT PATH RECOVERY SYSTEM****i) T.V. Camera:**

Model: RCA TC2055 Vidicon
Power Supply: 12 volt DC
Lens: variable, selected on basis of expected terrain clearance.
Mounting: Gimbal and shock mounted in housing, mounted on helicopter skid.

ii) Video Recorder:

Model: Sony SLO-340
Power Supply: 12 volt DC / 120 volt AC (60Hz)
Tape: Betamax 1/2" video cassette - optional length.
Dimensions: 30 cm X 13 cm X 35 cm
Weight: 8.8 Kg
Audio Input: Microphone in - 60 db low impedance microphone
Video Input: 1.0 volt P-P, 75 Ω unbalanced, sync negative from camera.

iii) Altimeter:

Model: KING KRA-10A Radar Altimeter
Power Supply: 27.5 volts DC
Output: 0-25 volt (1 volt /1000 feet) DC signal to analogue meter,
0-10 v (4mv/ft) analogue signal to microprocessor.
Mounting: fixed to T.V. camera housing, attached to helicopter skid.



INSTRUMENT SPECIFICATIONS**DATA RECORDING SYSTEM****i) Chart Recorder**

Type: Esterline Angus Miniservo III
Bench AC Ammeter - Voltmeter
Power Recorder.

Model: MS 413B

Specification: S-22719, 3-pen servo recorder

Amplifiers: Three independent isolated DC
amplifiers (1 per channel)
providing range of acceptable
input signals.

Chart: 10 cm calibrated width z-fold
chart.

Chart Drive: Multispeed stepper motor
chart drive, Type D850, with
speeds of 2,5,10,15,30 and 60
cm/hr. and cm/min.

Controls: Separate front mounted slide
switches for power on-off,
chart drive on-off, chart
speed cm/hr. - cm/min. Six
position chart speed selector
individual front zero
controls for each channel.

Power Requirements: 115/230 volts AC at 50/60 Hz
(Approximately 30 W).

Writing System: Disposable fibre tipped ink
cartridge (variable colors)

Dimensions: 38.6 cm X 16.5 cm X 43.2 cm

Weight: 9.3 kg.



ii) Digital Video Recording System

Type: L.M. Microcontrols Ltd.
Microprocessor Control Data
Acquisition System.

Model: DADG - 68

Power Requirements: 10 - 14 volts DC, Maximum 2
amps.

Input Signal: 3,0 - 100 mvolt DC signals
1,0 - 25 DC signals

Microprocessor: Motorola MC-6800

CRT Controller: Motorola MC-6845

Character Generator: Motorola MCM-6670

Analogue/Digital
Convertor: Intersil 7109

Multiplexer: Intersil IH 6208

Digital Clock: National MM 5318 chip
9 volt internal rechargeable
nickle-cadmium battery.

Fiducial Generator: internally variable time set
controls relay contact and
audio output.

Dimensions: 30 cm X 30 cm X 13 cm

Weight: 3 kg.



iii) Digital Magnetic Tape

Type: Hewlett Packard cartridge
tape unit.

Model: 9875A

Power Requirements: 24 volt d.c.

Data Format: HP'S Standard Interchange
Format (SIF)

Tape Cartridge: HP 98200A 225K byte cartridge
compatible with HP Series
9800 desktop computers.

Tape Drive: Dual tape drives providing up
to 8 hours continual
recording time.

Controller: Internal micro-computer
provides 23 built in commands
External computer generated
commands.



COST BREAKDOWN

Personnel	Date	Production	Rate/day	Subtotal
W.F. Mackenzie	Sept. 7-8	Mobilization	\$280	\$ 560.00
Navigator	Sept. 9-17	Survey	280	2,520.00
	Sept. 18	De-mob	280	280.00
E.T. Pezzot	Aug. 14-			
Geophysicist/	Sept. 6	Pre-survey prep.	325	5,850.00
Operator	Sept. 7-8	Mobilization	450	900.00
	Sept. 9-17	Survey	450	4,050.00
	Sept. 18	De-mob	450	<u>450.00</u>
Subtotal				\$14,610.00

Field Costs

Helicopter 32.4 hours @ \$450/hour	\$14,580.00
Fuel & Delivery	3,075.00
Instrument Lease	7,500.00
Vehicle Rental 12 days @ \$100/day	1,200.00
Meals and Accommodations (Crew & helicopter pilot)	2,040.00
Materials	1,850.00
Photomosaic - photographs, construction, photo reproductions	<u>5,500.00</u>
Subtotal	
\$35,745.00	



Office Costs

Flight Path Recovery	5.15/km x 2,000 km	.....	\$10,300.00
Flight Path Digitizing	2.05/km x 2,000 km	.....	3,480.00
Data Analysis - Field Charts	9.35/km x 2,000 km	.	15,660.00
Processing - Magnetometer & Contouring			
	11.40/km x 2,000 km	.....	19,140.00
	VLF-1 5.15/km x 2,000 km	.....	8,700.00
	VLF-2 5.15/km x 2,000 km	.....	8,700.00
Drafting	60 hrs @ \$50/hour	.....	3,000.00
Office Overhead, secretarial, phone, courier, shipping 10% of survey cost (\$119,335.00)			
		.....	11,935.00
Interpretation and report: 15% of survey cost (\$131,270.00)			
		.....	<u>19,690.00</u>
Subtotal			.....\$100,605.00
Total Survey Value			.....\$150,960.00

By agreement, Gyro Energy & Minerals Corp. contributed 62.5% of the total survey value in order to assure their receiving the first report of survey results.

62.5% x \$150,960.00	.....	\$ 94,350.00
Computer Processing - Magnetometer & contouring of detailed map \$11.40/km x 525 km		
	.....	<u>5,985.00</u>
Total		.....\$100,335.00

TOTAL ASSESSMENT VALUE OF THIS REPORT\$100,335.00



STATEMENT OF QUALIFICATIONS

NAME: PEZZOT, E. Trent

PROFESSION: Geophysicist - Geologist

EDUCATION: University of British Columbia -
B.Sc. - Honors Geophysics and Geology

**PROFESSIONAL
ASSOCIATIONS:** Society of Exploration Geophysicist

EXPERIENCE: Three years undergraduate work in geology -
Geological Survey of Canada, consultants.

Three years Petroleum Geophysicist,
Senior Grade, Amoco Canada Petroleum Co. Ltd.

Two years consulting geophysicist,
Consulting Geologist - British Columbia,
Alberta, Saskatchewan, N.W.T., Yukon,
Western U.S.A.

Six years geophysicist with
White Geophysical Inc.



STATEMENT OF QUALIFICATIONS

NAME: WHITE, Glen E., P.Eng.

PROFESSION: Geophysicist

EDUCATION: B.Sc. Geophysicist - Geology
University of British Columbia

PROFESSIONAL ASSOCIATIONS: Registered Professional Engineer,
Province of British Columbia.

Associate Member of Society of Exploration
Geophysicists.

Past President of B.C. Society of Mining
Geophysicists.

EXPERIENCE: -Pre-Graduate experience in Geology -
Geochemistry - Geophysics with Anaconda
American Brass.

-Two years Mining Geophysicist with Sulmac
Exploration Ltd. and Airborne Geophysics
with Spartan Air Services Ltd.

-One year Mining Geophysicist and Technical
Sales Manager in the Pacific north-west for
W.P. McGill and Associates.

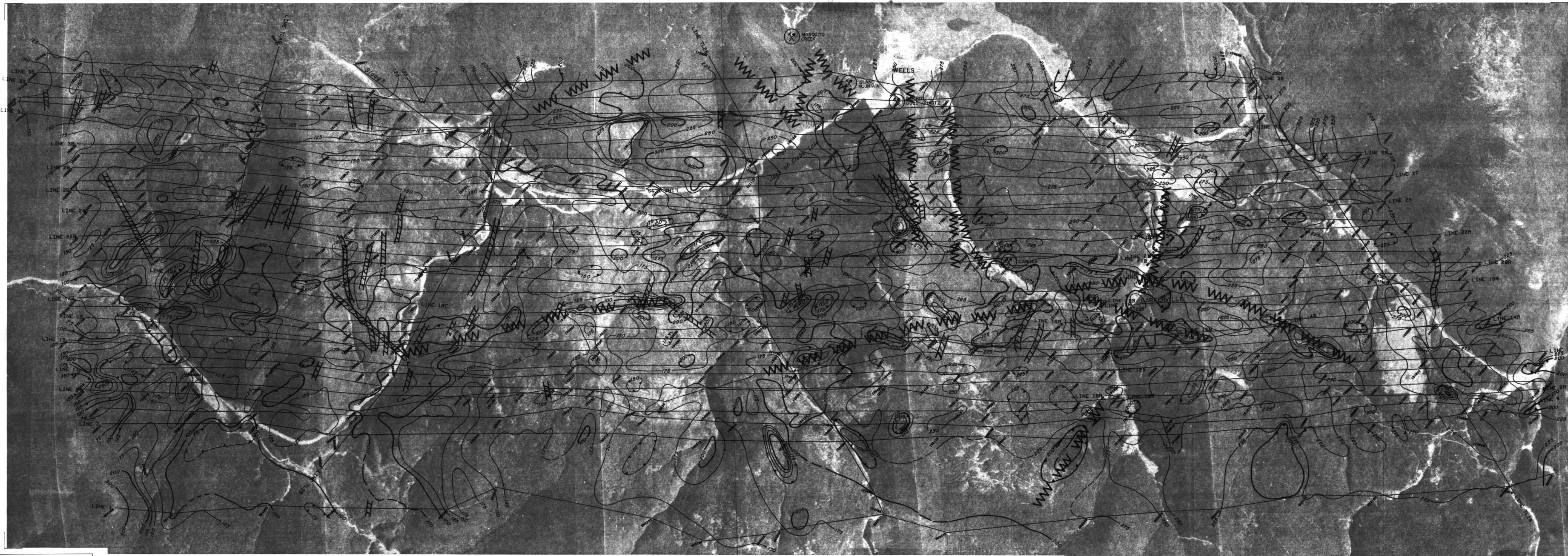
-Two years Mining Geophysicist and
supervisor airborne and ground geophysical
divisions with Geo-X Surveys Ltd.

-Two years Chief Geophysicist Tri-Con
Exploration Surveys Ltd.

-Fourteen years Consulting Geophysicist.





-Active experience in all Geologic provinces
of Canada.

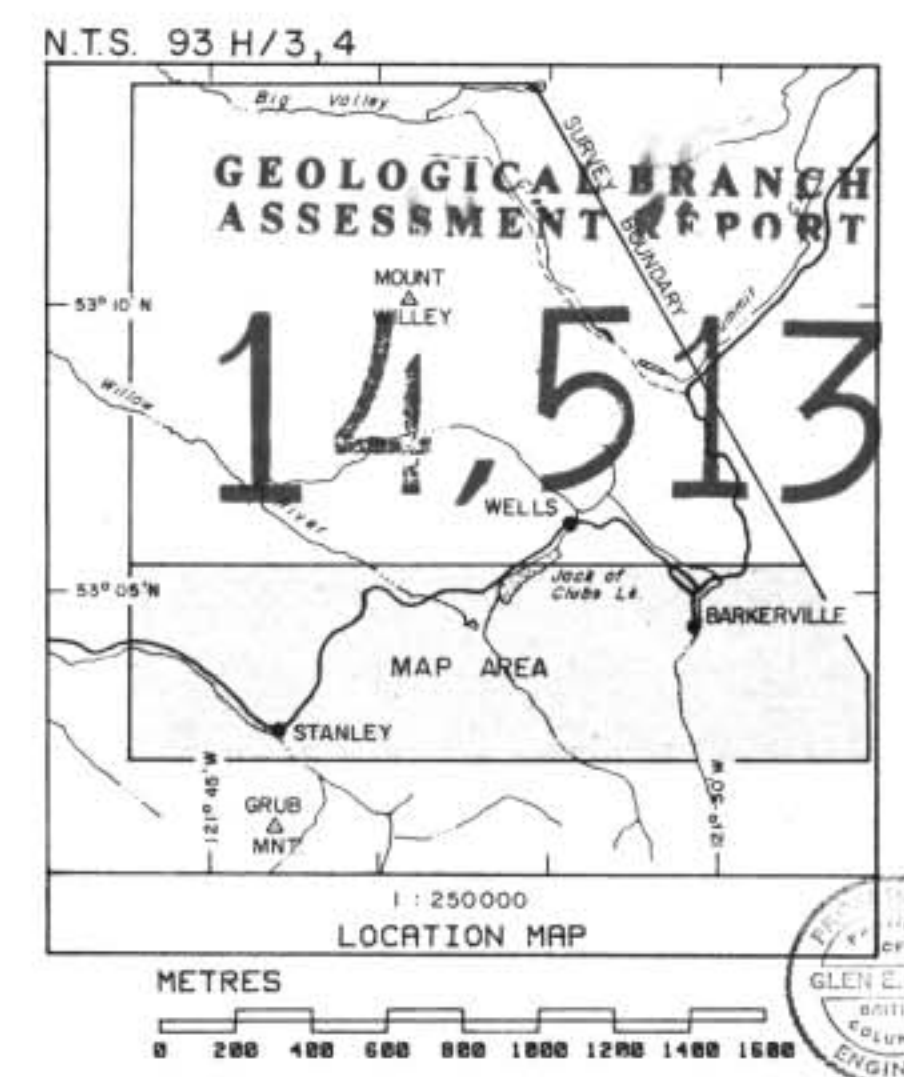




KEY

INSTRUMENT: Barringer M-123 Magnetometer
 Data corrected for diurnal variations
 Base value = 58000 gammas
 Contour interval = 25 gammas
 Sensor Elevation = 75 metres

Claim boundary ————
 Claim post ■
 Magnetic High 
 Magnetic Low 
 Inferred Fault 
 VLF-EM Conductor 



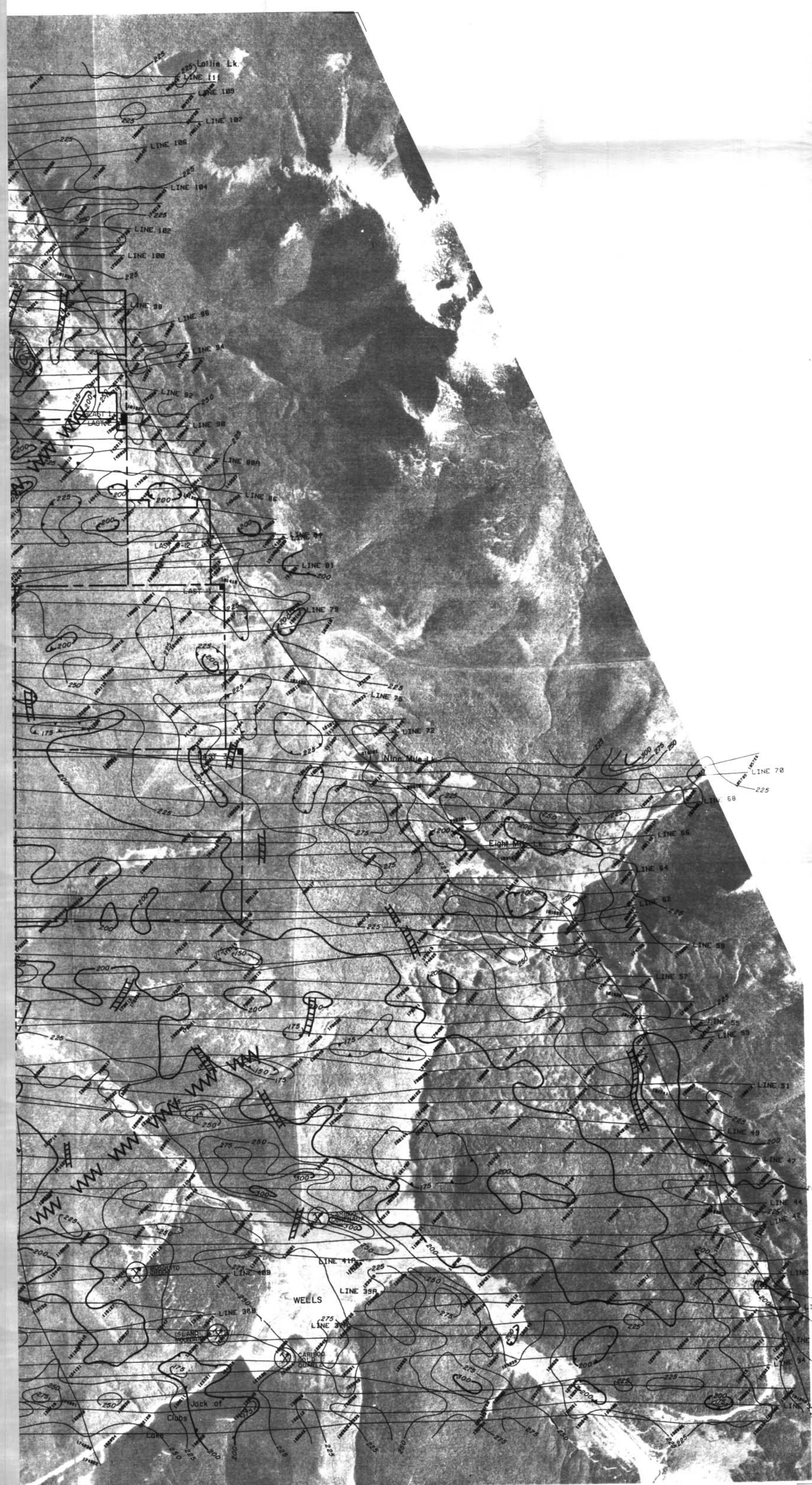
GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 MAGNETIC CONTOUR MAP
 TOTAL FIELD INTENSITY (gammas)

DATE: SEPT/85 FIG.: 2A ①

Western Geophysical
 Serv Data Ltd.





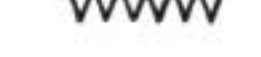
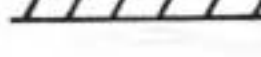
To accompany the Geophysical Report on the Wells - Barkerville Project





KEY

INSTRUMENT: Barringer M-123 Magnetometer
 Data corrected for diurnal variations
 Base value = 58000 gammas
 Contour interval = 25 gammas
 Sensor Elevation = 75 metres

Claim boundary 
 Claim post 
 Magnetic High 
 Magnetic Low 
 Inferred Fault 
 WLF-EM Conductor 



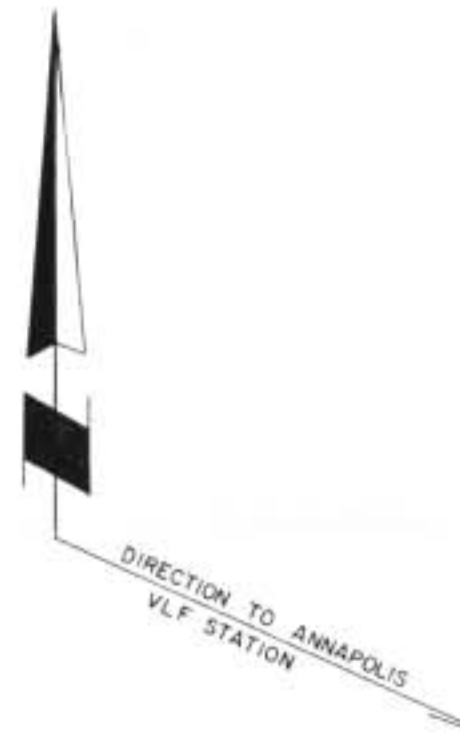
GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 MAGNETIC CONTOUR MAP
 TOTAL FIELD INTENSITY (gammas)

DATE: SEPT/85 FIG.: 2B (2)



Western
Geophysical
Services Ltd.

To accompany the Geophysical Report on the Wells - Barkerville Project



KEY

INSTRUMENT: Sabre Total Field Intensity VLF-EM
 Transmitter Station: Annapolis, Md. (21.4 Khz.)
 Data corrected for long period terrain effects
 Vertical Scale = 10% / cm.
 Sensor Elevation = 75 metres

Claim boundary

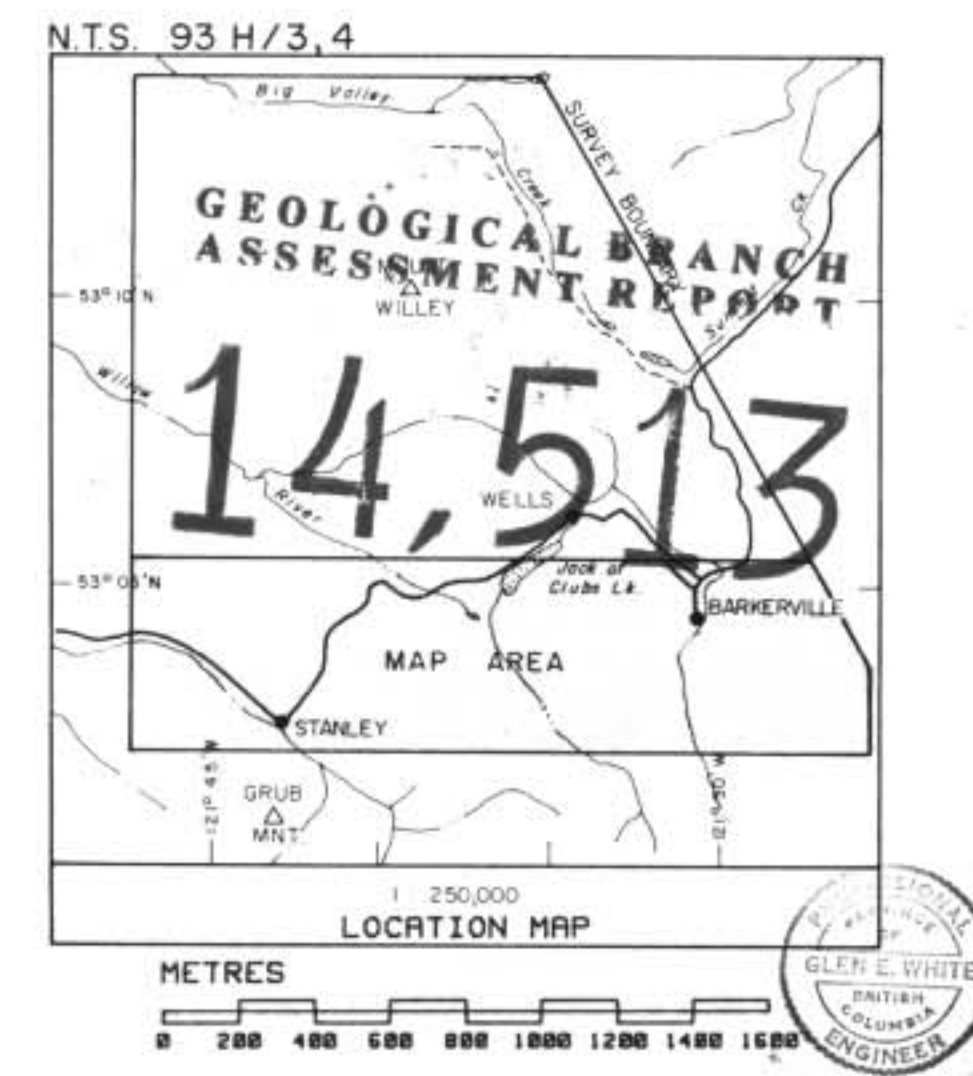
Claim post

Magnetic High

Magnetic Low

Inferred Fault

VLF-EM Conductor



NTS. 93 H/3,4

GEOLOGICAL BRANCH
ASSESSMENT REPORT

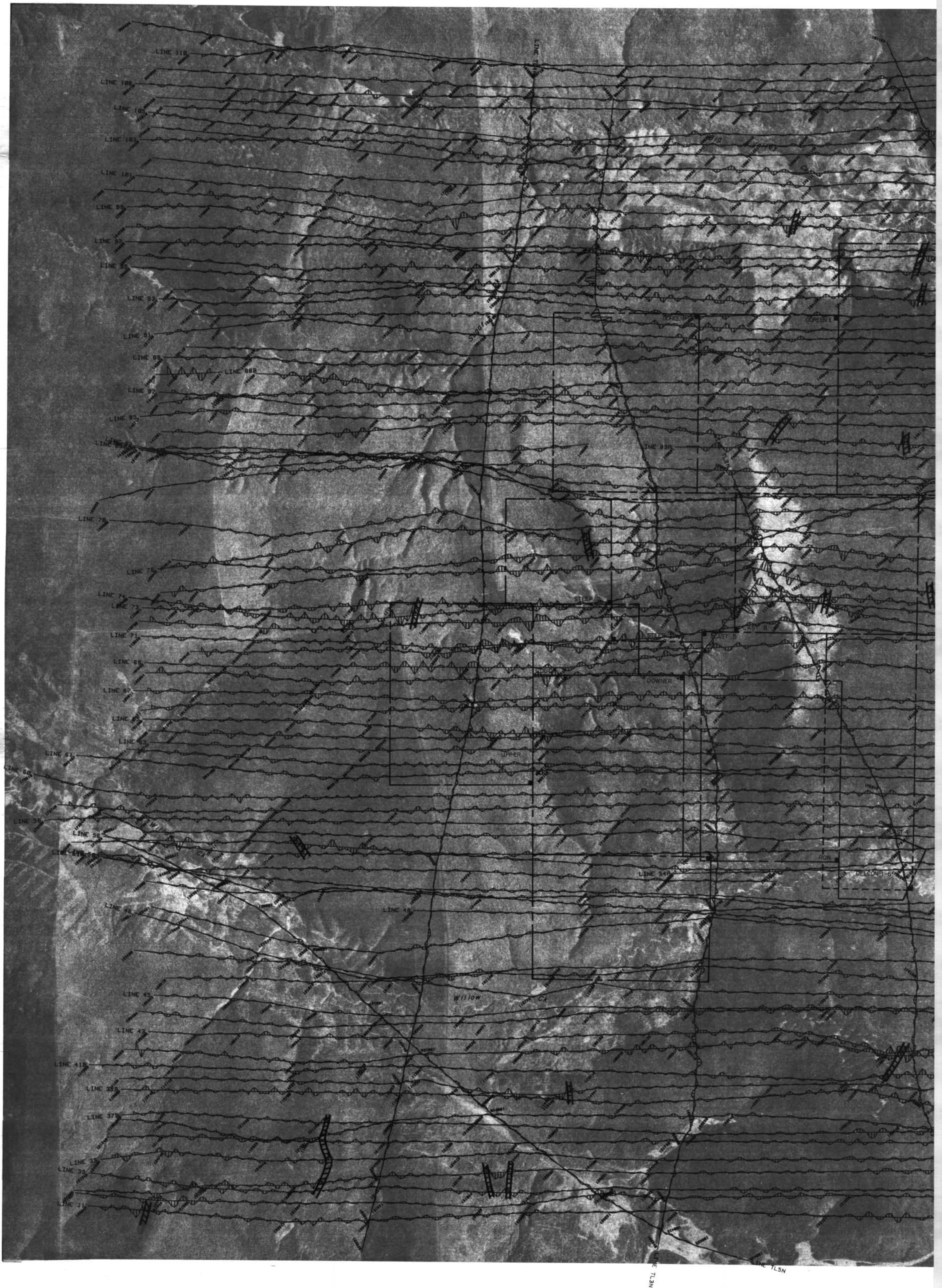
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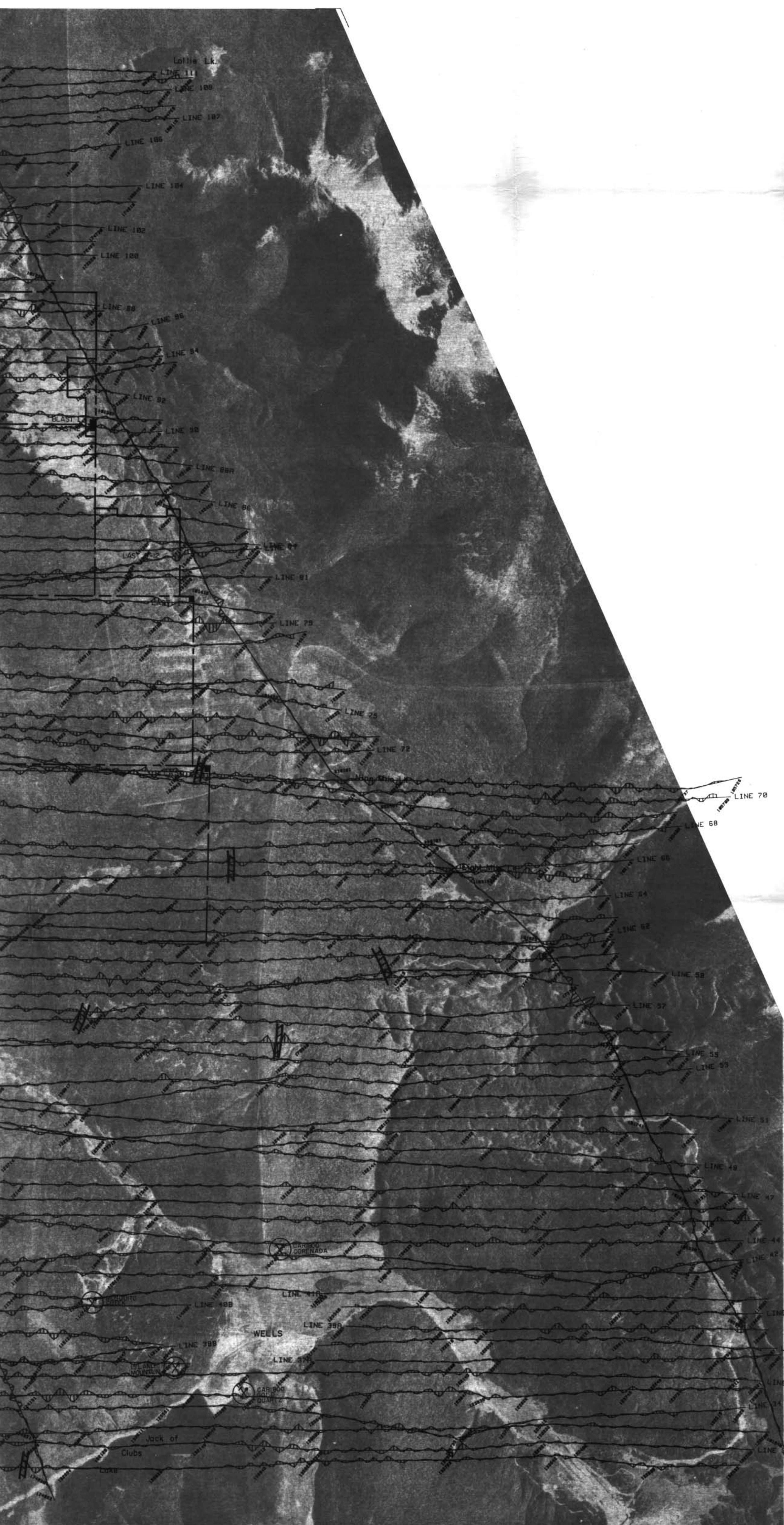
MAP AREA

LOCATION MAP

GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 VLF-EM PROFILES (ANNAPOLIS)
 TOTAL HORIZONTAL FIELD INTENSITY (%)

DATE: SEPT/85 FIG.: 3A(3)

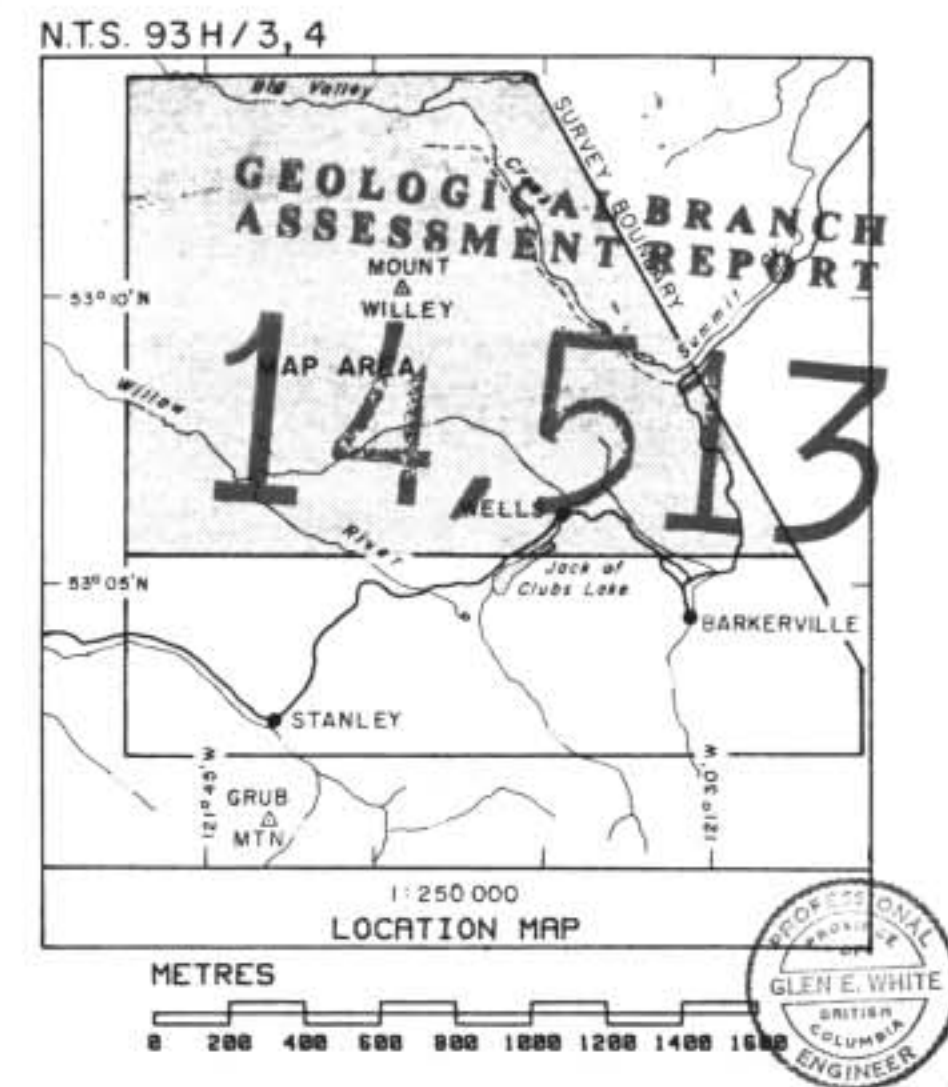




KEY

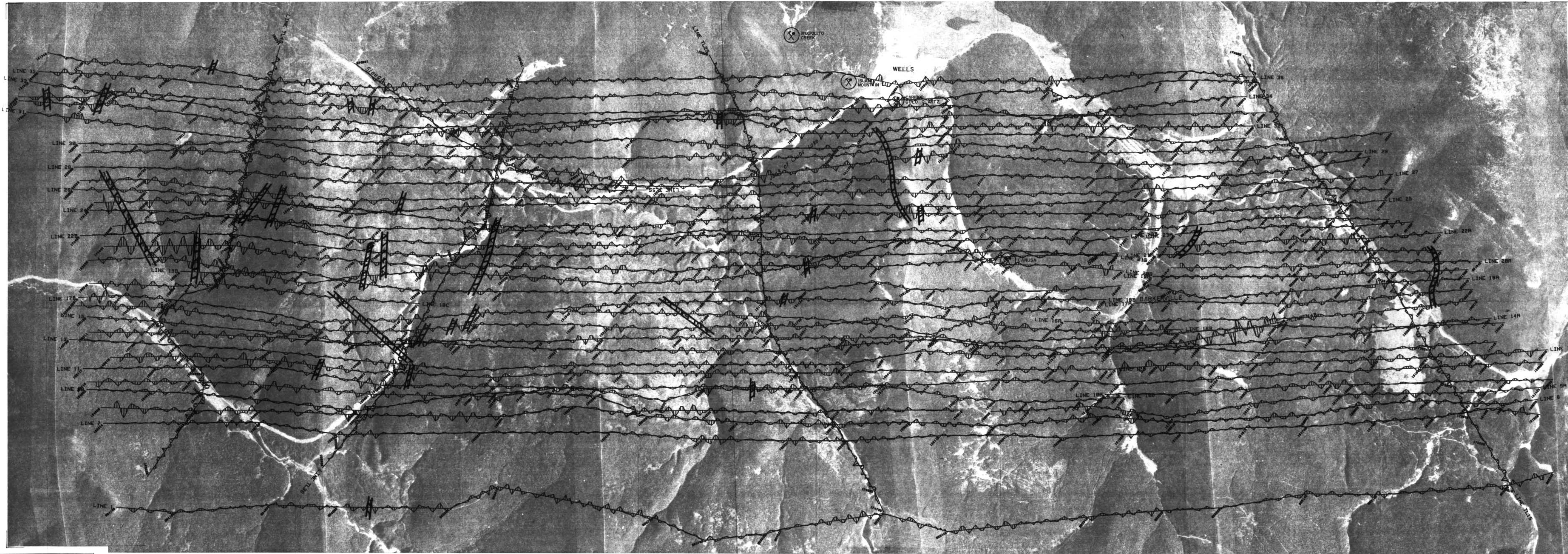
INSTRUMENT: Sabre Total Field Intensity VLF-EM
 Transmitter Station: Annapolis, Md. (21.4 Khz.)
 Data corrected for long period terrain effects
 Vertical Scale = 10% / cm.
 Sensor Elevation = 75 metres

Claim boundary — — — —
 Claim post ■
 Inferred Fault WWW
 VLF-EM Conductor ////



GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 VLF-EM PROFILES (ANNAPOLIS)
 TOTAL HORIZONTAL FIELD INTENSITY (%)

DATE: SEPT/85 FIG.: 3B (4)



Western Geophysical Aero Data Ltd.

To accompany the Geophysical Report on the Wells - Barkerville Project

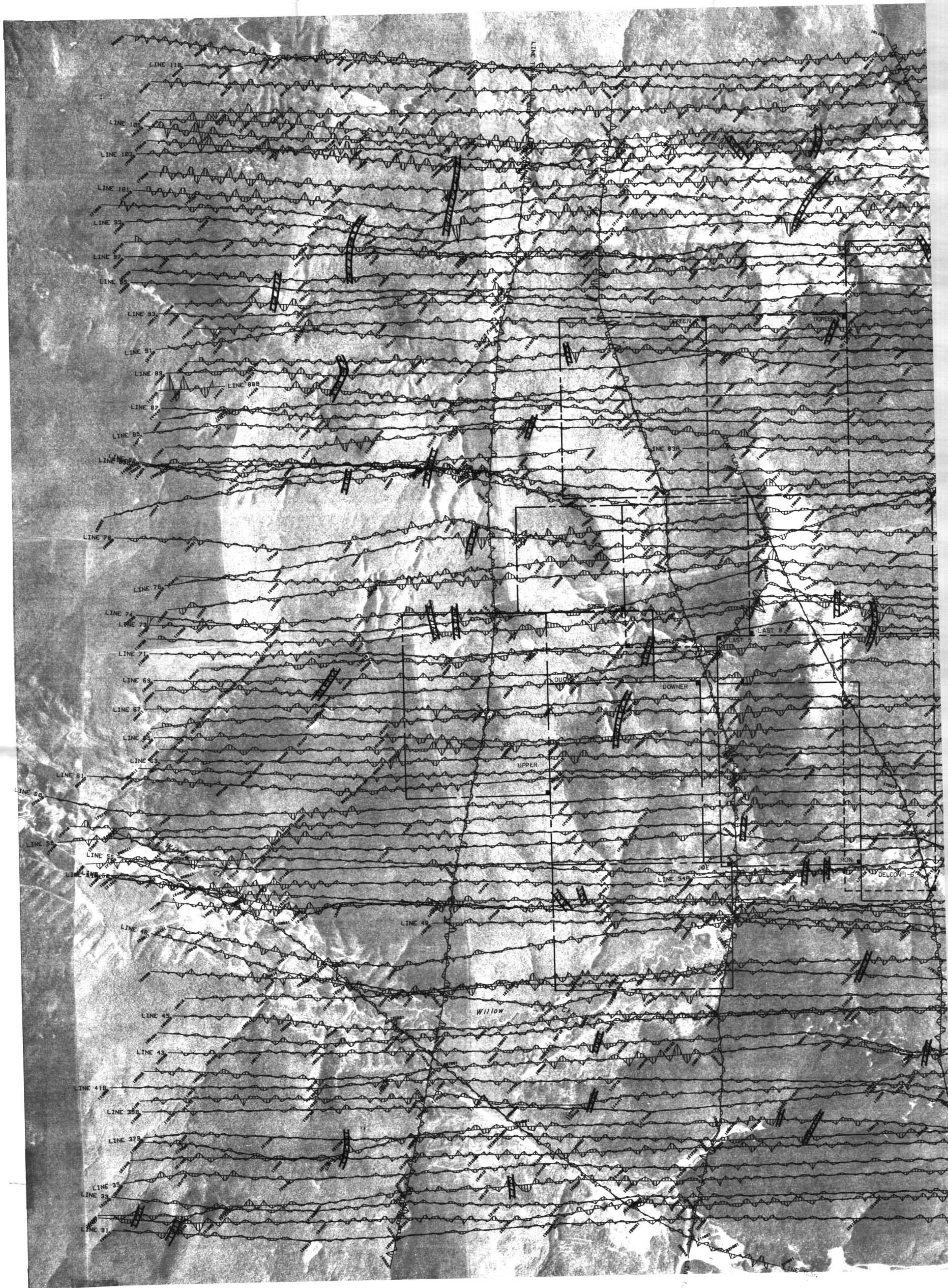
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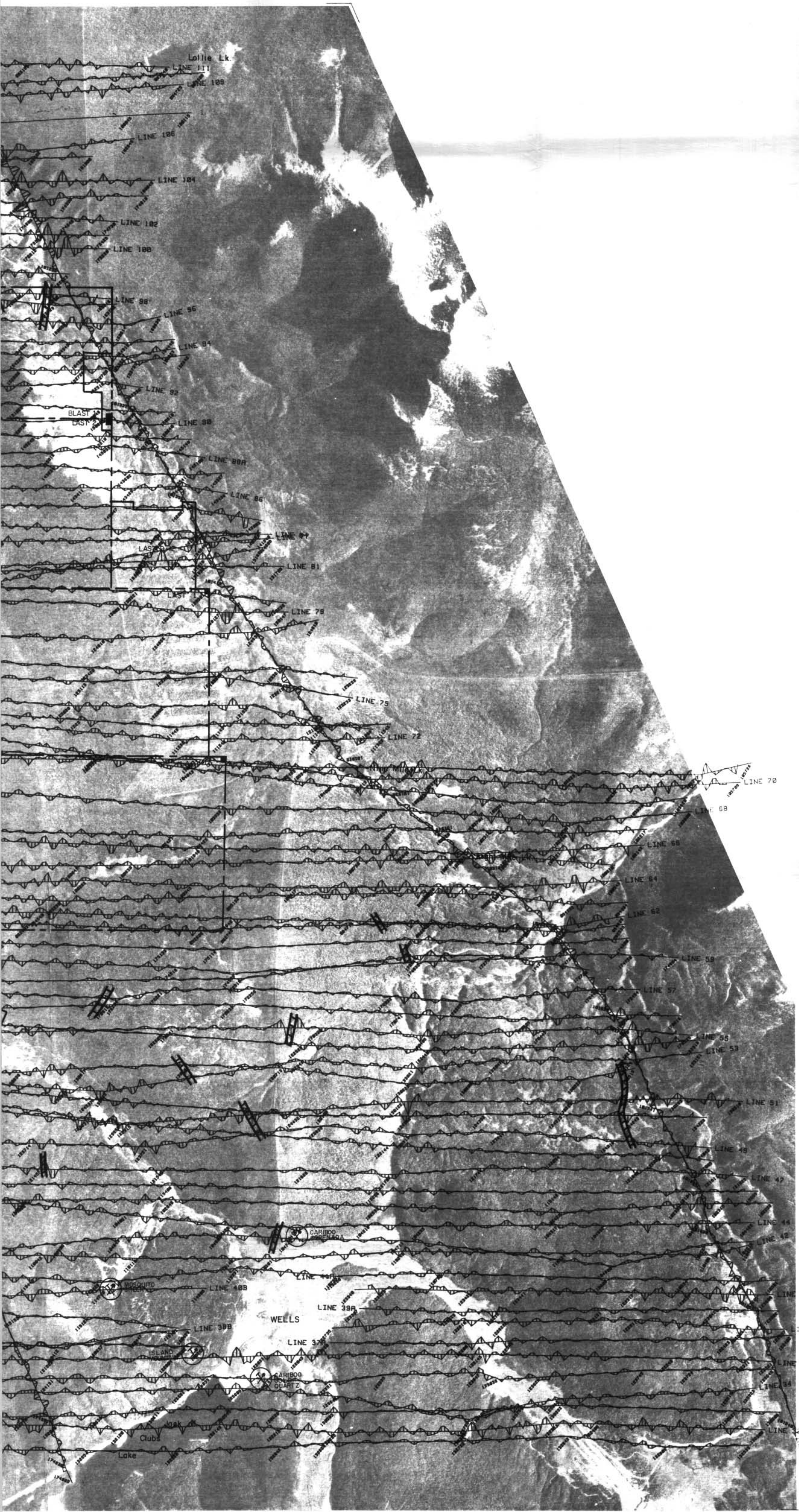
- INSTRUMENT: Sabre Total Field Intensity VLF-EM
- Transmitter Station: Seattle, Wa. (24.8 Khz.)
- Data corrected for long period terrain effects
- Vertical Scale = 10% / cm.
- Sensor Elevation = 75 metres
- Claim boundary
- Claim post
- Inferred Fault
- VLF-EM Conductor



GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 VLF-EM PROFILES (SEATTLE)
 TOTAL HORIZONTAL FIELD INTENSITY (%)

DATE: SEPT/85 FIG.: 4A(5)

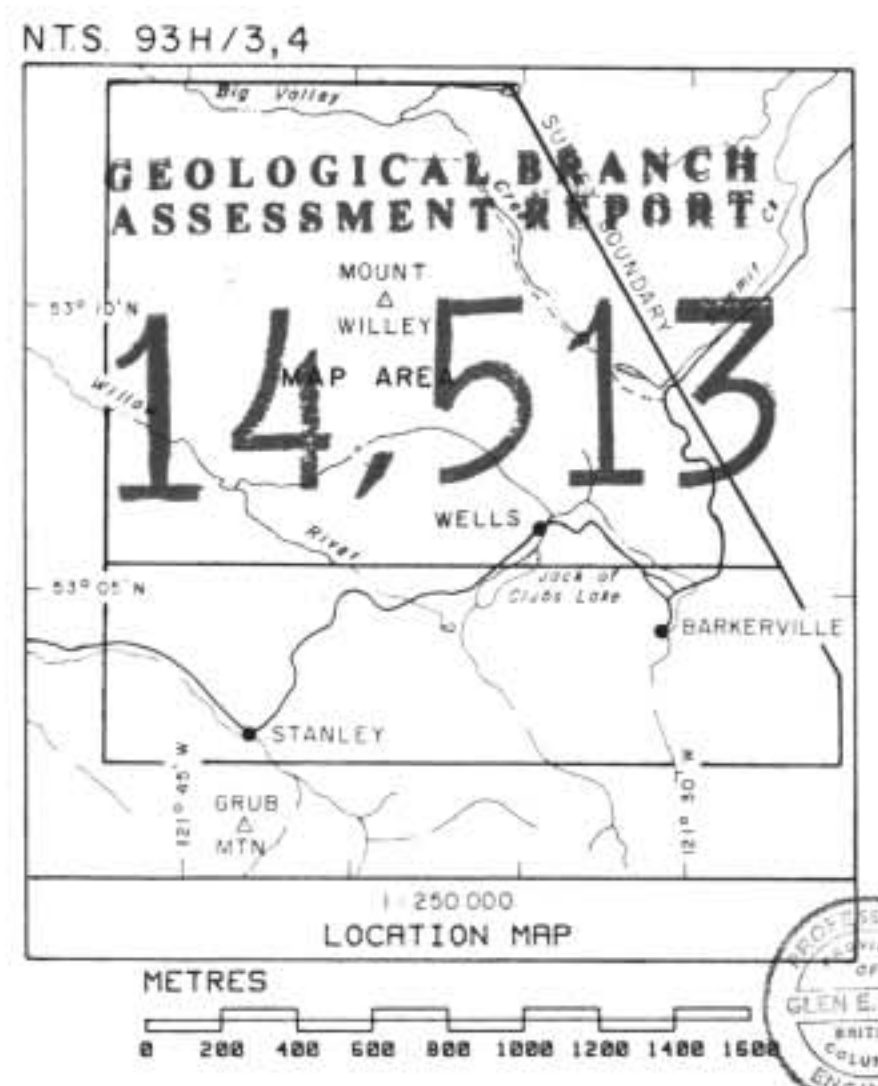




KEY

INSTRUMENT: Sabre Total Field Intensity VLF-EM
 Transmitter Station: Seattle, Wa. (24.8 KHz.)
 Data corrected for long period terrain effects
 Vertical Scale = 10% / cm.
 Sensor Elevation = 75 metres

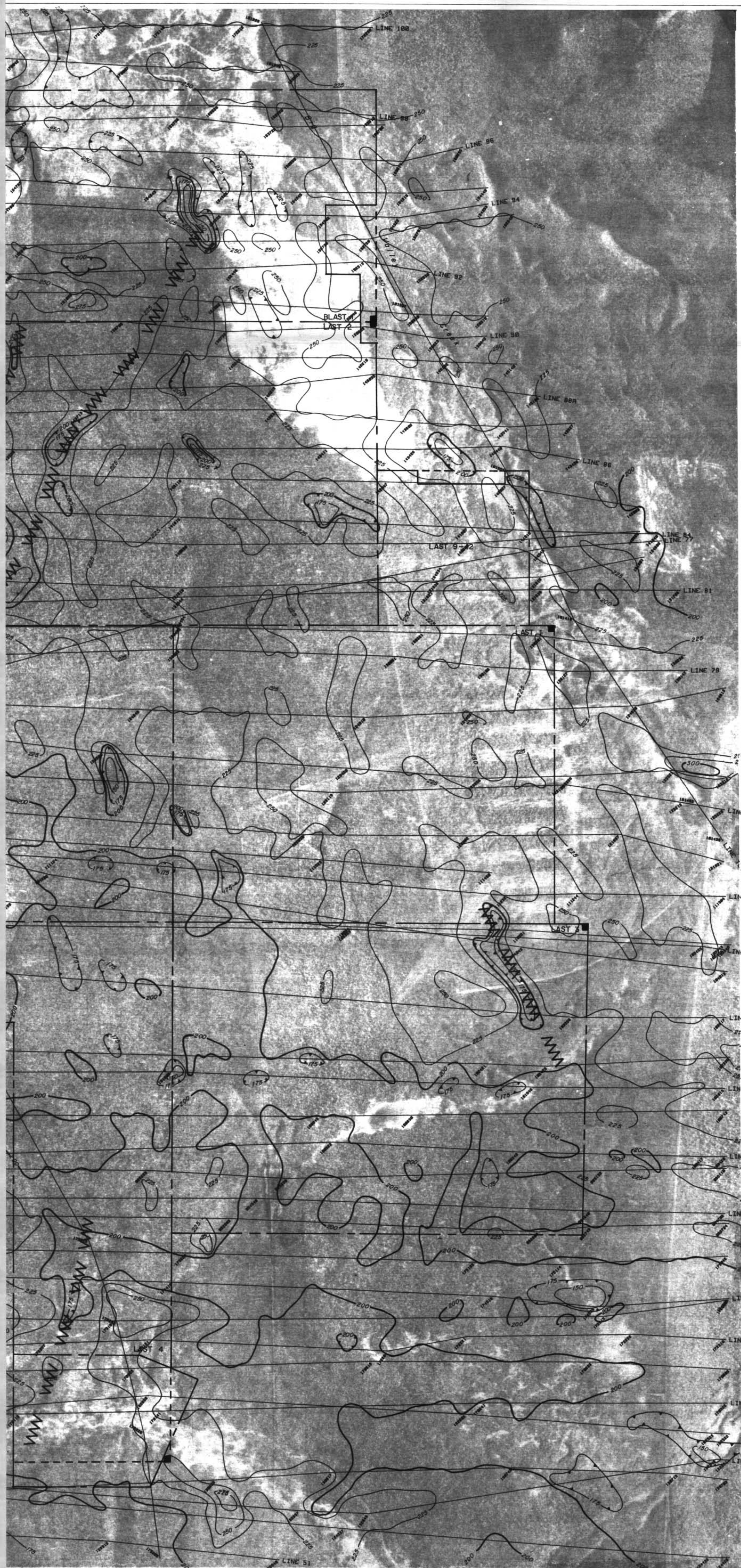
Claim boundary ————
 Claim post ■
 Inferred Fault W W W
 VLF-EM Conductor ////



GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 VLF-EM PROFILES (SEATTLE)
 TOTAL HORIZONTAL FIELD INTENSITY (%)





DATE: SEPT/85 FIG.: 4B (6)

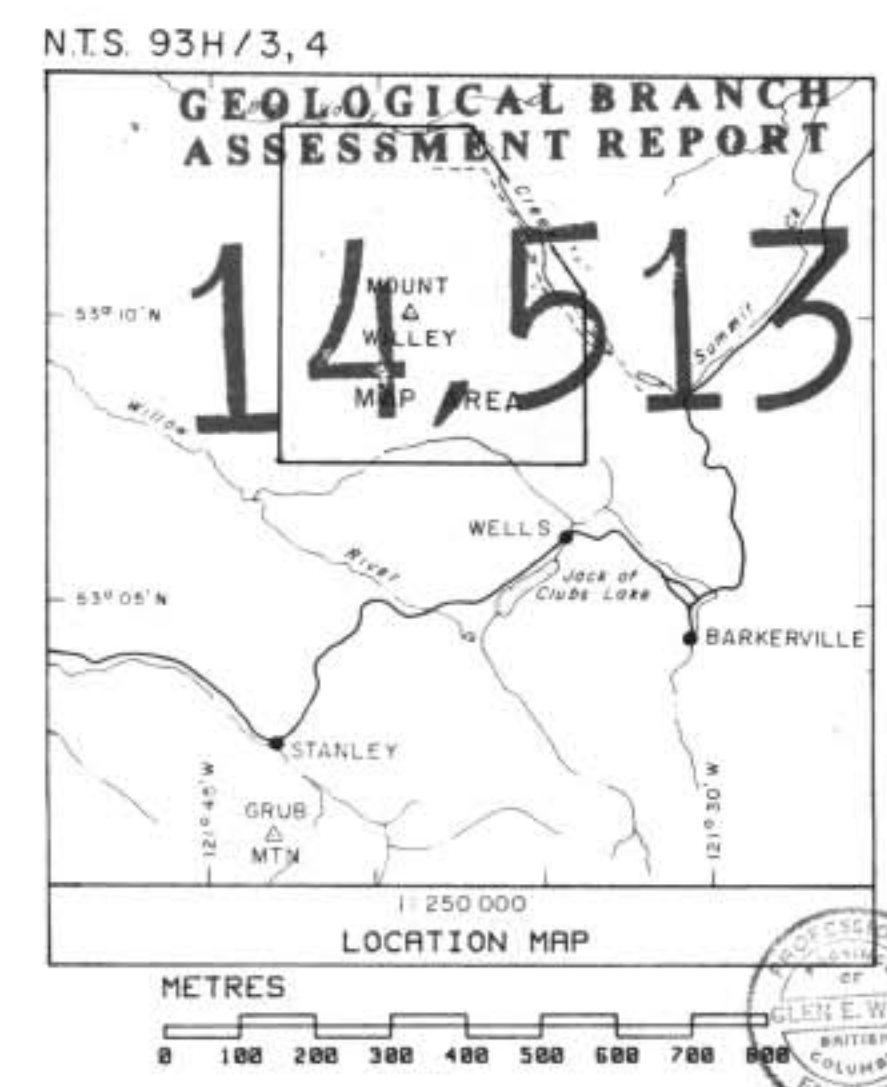




KEY

INSTRUMENT: Barringer M-123 Magnetometer
 Data corrected for diurnal variations
 Base value= 58000 gammas
 Contour interval= 25 gammas

Roads 
 Claim boundary 
 Claim post 
 Magnetic High 
 Magnetic Low 
 Inferred Fault 
 VLF-EM Conductor 



GYRO ENERGY & MINERALS CORP.
 WELLS - BARKERVILLE PROJECT
 MAGNETIC CONTOUR MAP
 TOTAL FIELD INTENSITY (gammas)

DATE: SEPT/85 FIG.: 5 **(7)**