EZEKIEL EXPLORATION LTD.

AIRBORNE ELECTROMAGNETIC & MAGNETIC SURVEY

REPORT ON THE G NORTH PROPERTY

CARIBOO MINING DIVISION

NTS 93J/14

JULY 1984 MARCEL H. KONINGS, P.ENG.

CLAIMS COVERED

CLAIM	UNITS	RECORD NO.	ANNIVERSARY
G NORTH 1	12	3310	7 APRIL
GN 2	20	3311	7 APRIL
GN 3	20	3312	7 APRIL
GN 4	10	3313	7 APRIL
GN 6	20	3315	7 APRIL
GN 7	20	3316	7 APRIL
GN 8	20	3317	7 APRIL
GN 9	20	3318	7 APRIL
GN 11	20	3320	7 APRIL
GN 12	20	3321	7 APRIL
GN 14	20	3323	7 APRIL
GN 16	20	3965	26 AUGUST
GN 17	20	3966	26 AUGUST
GN 18	20	4067	30 SEPTEMBER
GN 19	6	5877	19 MARCH

LOCATION:	54° 56' NORTH LATITUDE: 123° 18' WEST LONGITUDE:
OWNERS/OPERATORS:	EZEKIEL EXPLORATION LTD.
CONSULTANT:	ARCHEAN ENGINEERING LTD.
PROGRAMME MANAGERS:	NORANDA EXPLORATION COMPANY LTD/ MARK MANAGEMENT LTD
CONTRACTORS:	QUESTOR SURVEYS LTD.

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SUMMARY

A total of 350 line-km of survey was flown in May 1984, for Noranda Exploration Company Limited. The G North and GN Mineral Claims, collectively known as the G North Property, are held by Ezekiel Exploration Ltd. and were included in the survey area.

The survey outlined several coincident EM and Magnetic anomalies which were considered to be primary priority targets. Secondary priority targets were defined as having a distinct shape (width) improvement in a long stratigraphic conductor. Tertiary priority targets are amplitude-conductance improvement along a conductive horizon but are usually too wide to be distinct anomalies. All three priorities warrant follow-up work.

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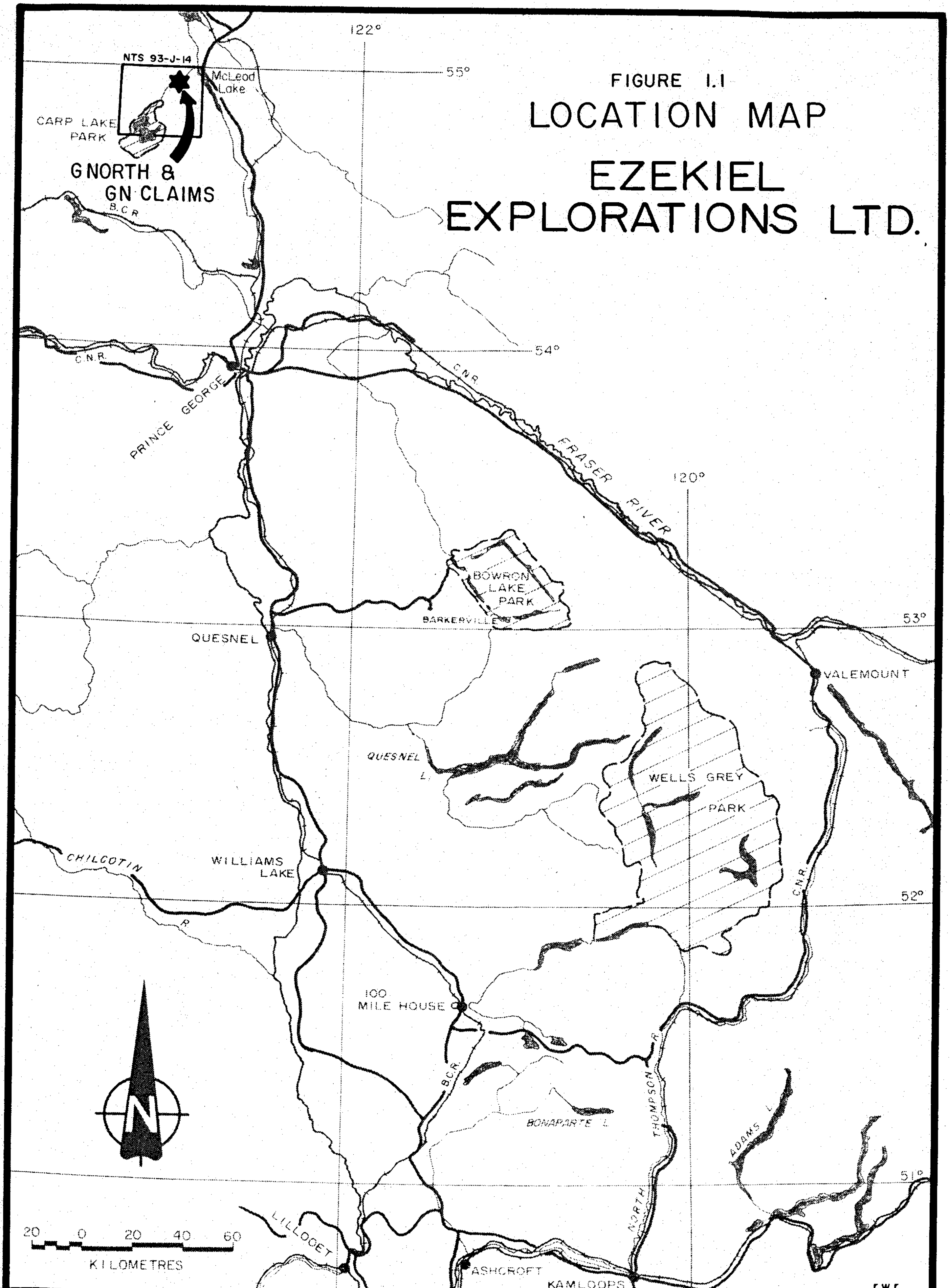
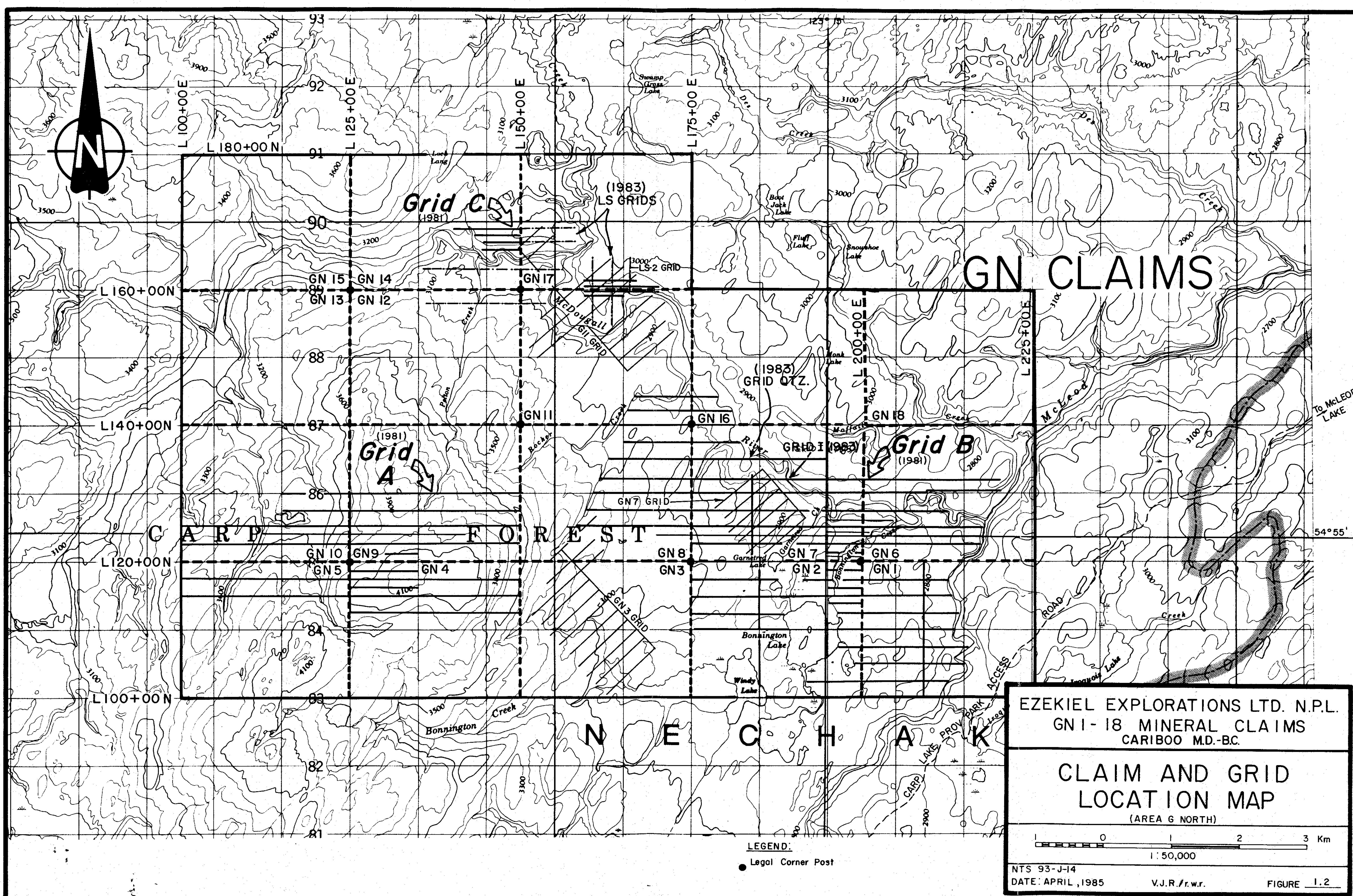


FIGURE 1.1
LOCATION MAP
EZEKIEL EXPLORATIONS LTD.



LEGEND:

● Legal Corner Post

EZEKIEL EXPLORATIONS LTD. N.P.L.
GN 1- 18 MINERAL CLAIMS
CARIBOO M.D.-B.C.

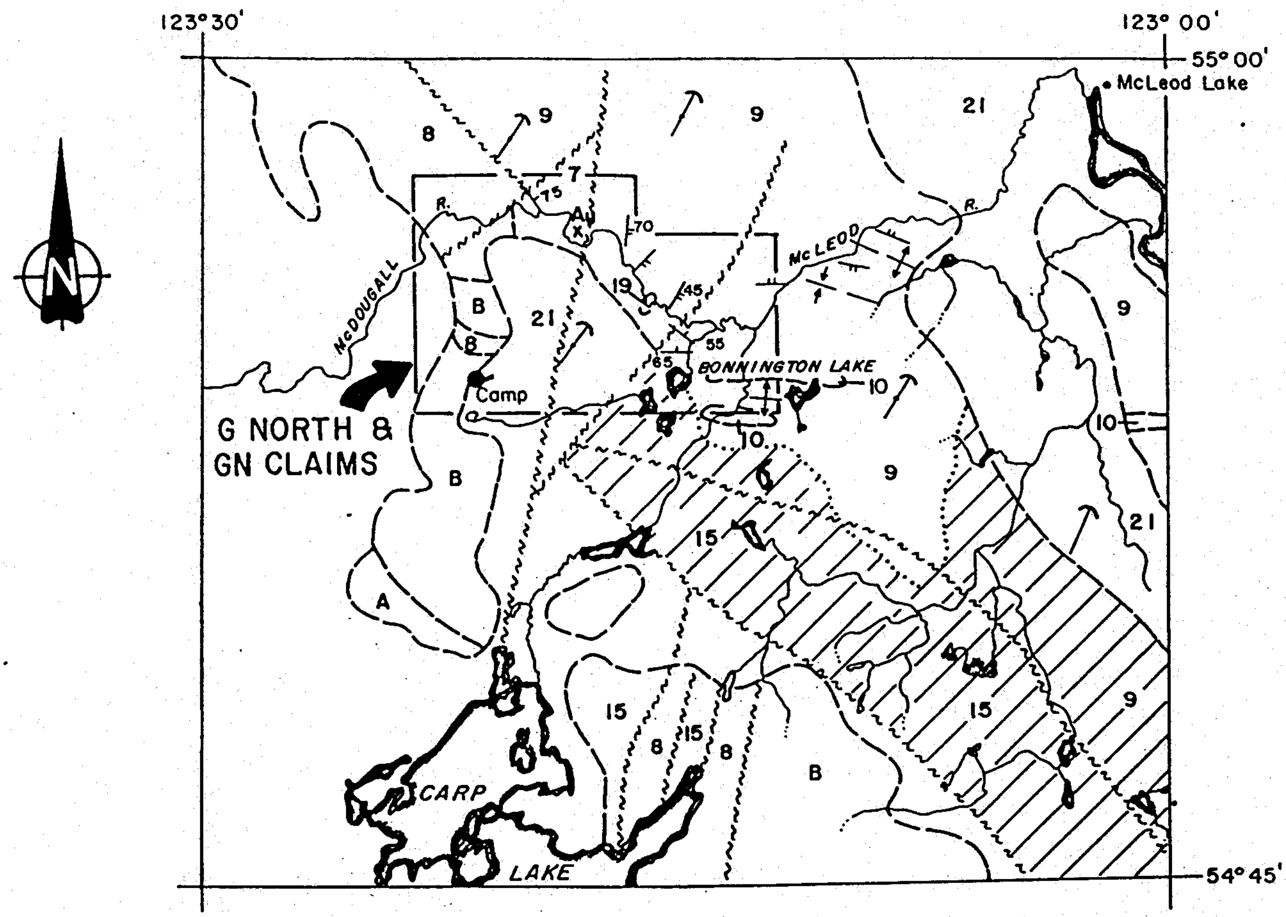
CLAIM AND GRID LOCATION MAP
(AREA G NORTH)

1 0 1 2 3 Km

1:50,000

NTS 93-J-14

DATE: APRIL, 1985 V.J.R./r.w.r. FIGURE 1.2



CENOZOIC

QUATERNARY

21	*Till, gravel, sand, clay, silt*
19	*Conglomerate, sandstone, mudstone, lignite; 19a, may be older than 18*

MESOZOIC

TRIASSIC AND/OR JURASSIC

UPPER TRIASSIC AND/OR LOWER JURASSIC

TAKLA GROUP

18	*Andesitic and basaltic flows, tuffs, breccias; 18a, conglomerate, greywacke, argillite, limestone*

PALEOZOIC

SLIDE MOUNTAIN GROUP (9,10)

9 | 10	10. *Limestone* 9. *Basaltic pillow lavas, andesite, related pyroclastic rocks, argillite, chert, greywacke*

CAMBRIAN AND/OR LATER

LOWER CAMBRIAN AND/OR LATER

CARIBOU GROUP (7,8)

7 | 8	8. *SNOWSHOE FORMATION(?): grey micaceous quartzite, phyllitic quartzite, phyllite; includes minor pegmatite of A* 7. *MIDAS FORMATION(?): black quartzose phyllite, argillite*

WOLVERINE COMPLEX

A	*Granodiorite, granite, pegmatite*
B	*Granitoid gneiss, micaceous, garnetiferous chloritic schists, pegmatite, and small bodies of granodiorite, minor feldspathized quartzite*

Areas interpreted from aeromagnetic maps
Geological boundary (approximate, assumed)
Bedding, tops known (horizontal, inclined)
Bedding, tops unknown (inclined, vertical)
Schistosity, gneissosity (inclined, vertical, dip unknown)
Fault (defined, approximate, assumed)
Anticline (defined, approximate)
Syncline (defined, approximate)

Drumlin (direction of ice movement known)

Mineral occurrence Au X

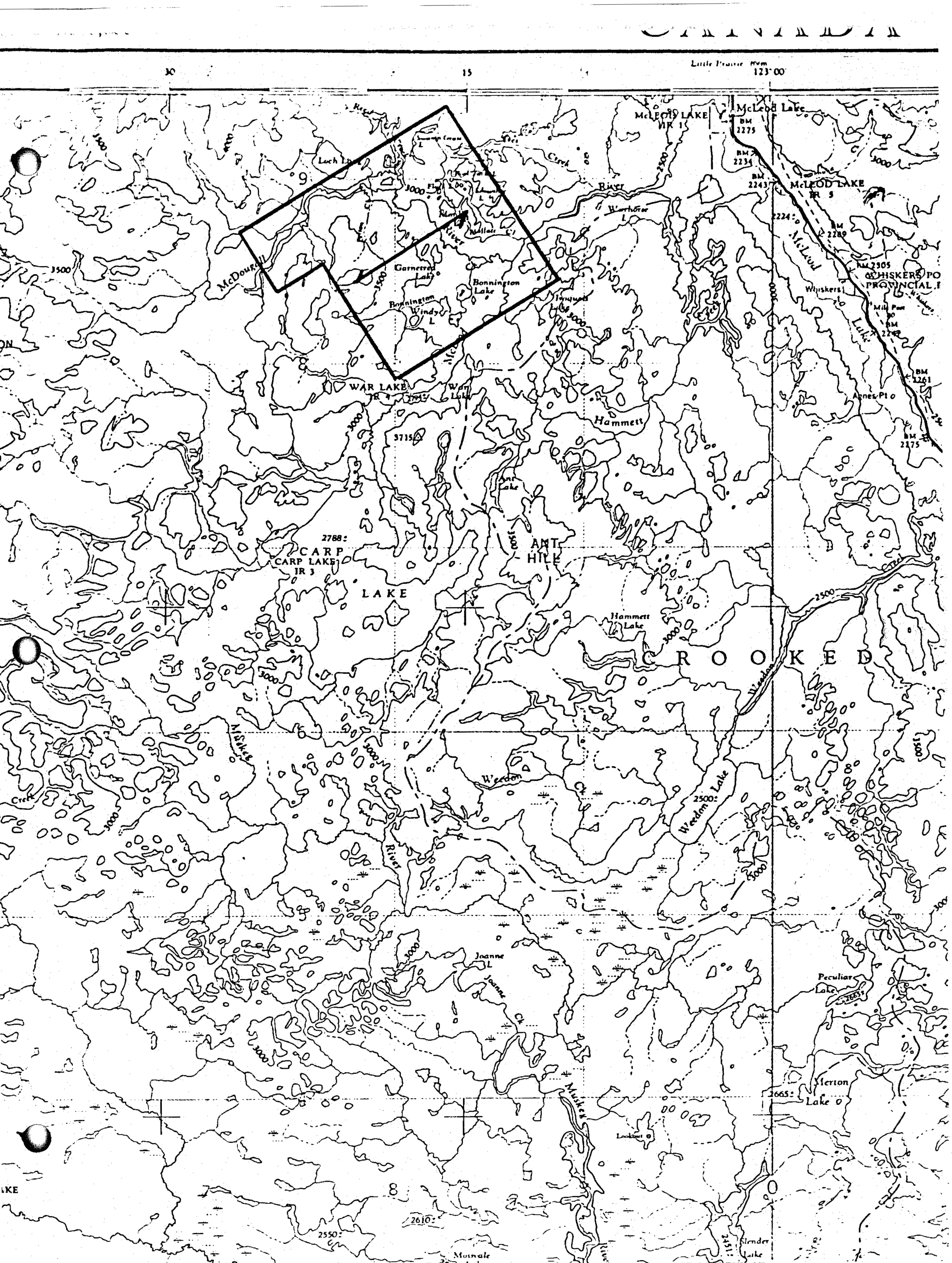
EZEKIEL EXPLORATIONS LTD.

REGIONAL GEOLOGY MAP

G NORTH & GN CLAIMS
After GSC Map 1204 A

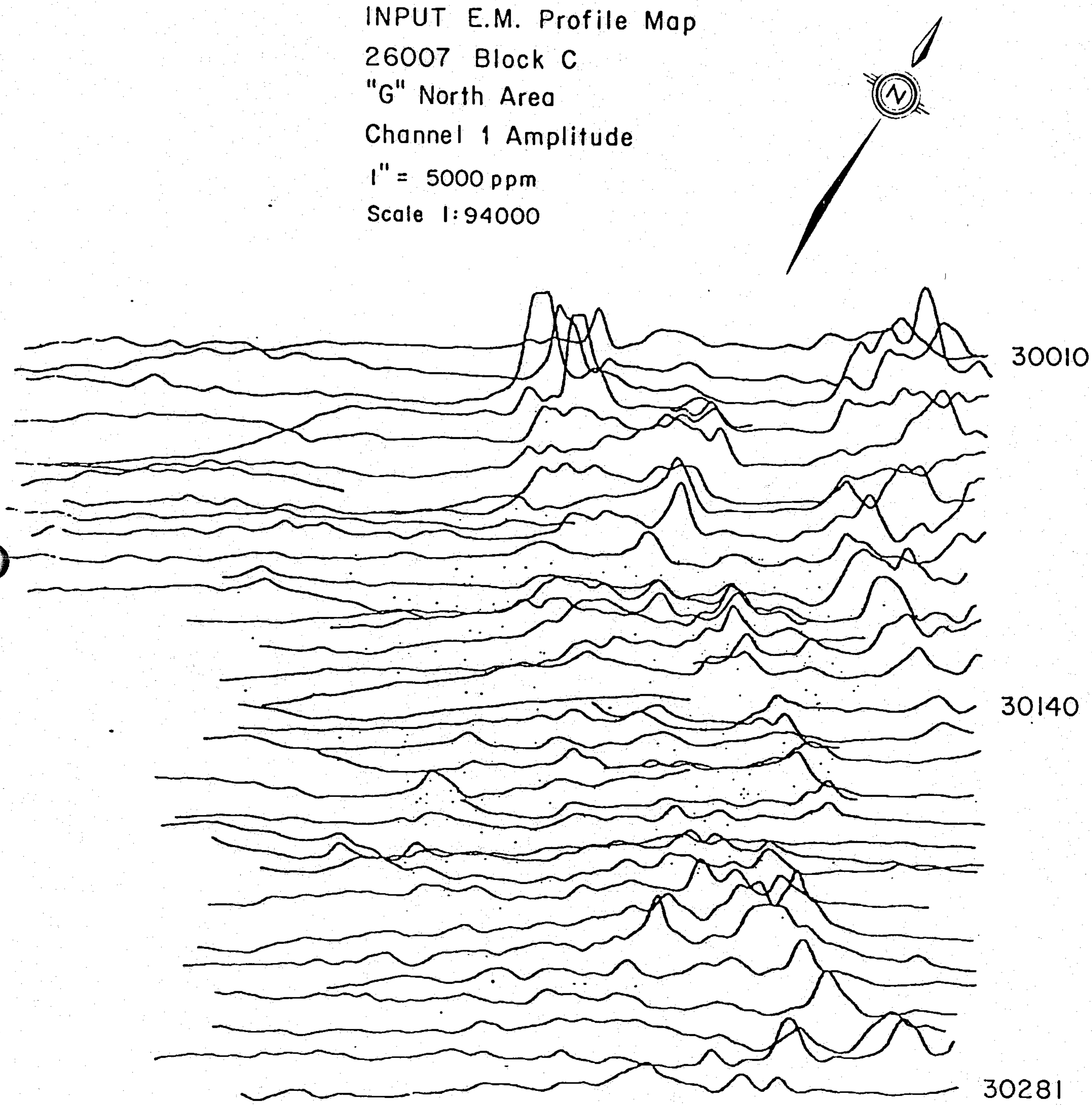
Scale 1:253,440 L.D./r.w.r. DEC., 83

FIGURE 1.3 NTS 93-J-14



123°00'
Little Prairie
McLEOD LAKE IR 1
McLeod Lake
McLEOD LAKE IR 5
Loch L
Creek
River
McDougall
Garnetree Lake
Bonnington Lake
Bonnington
Windy L
Warthorse L
WAR LAKE IR 4
War Lake
Hammett
Hammett Lake
Ant Lake
ANT HILL
CARP
CARP LAKE IR 3
LAKE
CROOKED
Weedon
Weedon Lake
Weedon Ck
Muskeg
River
Joanne L
Joanne Ck
Muskeg
WHISKERS PO
PROVINCIAL
Whiskers
McLeod Lake
Agnes Pt
Peculiar Lake
Merton Lake
Lookout
Slender Lake
Creek
3715
2788
2610
2550
2665
2500
3000
3500

INPUT E.M. Profile Map
26007 Block C
"G" North Area
Channel 1 Amplitude
1" = 5000 ppm
Scale 1:94000



NAME : MARCEL H. KONINGS

OCCUPATION : Senior Geophysicist

EDUCATION : B.A.Sc., Geological Engineering.
University of Toronto, Toronto, Ontario.

PROFESSIONAL AFFILIATIONS : Society of Exploration Geophysicists (SEG)

Canadian Exploration Geophysical Society (KEGS)

Association of Professional Engineers of the Province of Ontario (APEO).

EXPERIENCE :

1980 Questor Surveys Limited.
Senior Geophysicist.
Responsible for supervision, reporting and interpretation of INPUT and magnetometer survey data.

1981-82 Project Manager/Geophysicist
Mexico magnetics/radiometrics project including field operations, data compilation and interpretation.

1982 Project Manager/Geophysicist.
Brazil INPUT surveys. Responsibilities included field operations, data compilation and interpretation at survey locations.

1976 Shell Canada Resources.
Project Geophysicist.
Duties included supervision of EM, IP, gravity and magnetic surveys as well as interpretation. Geophysical surveys and interpretation resulted in the successful drilling of the East Kemptville tin deposit.

1975 Prospection Limited.
Contract Geophysicist.
Based in the Sultinate of Oman.
Responsibilities included evaluation of INPUT survey results, supervision of geophysical field parties and interpretation of ground transient electromagnetics, magnetics and gravity. Two new deposits were delineated.

1975 Crone Geophysics Limited.
Contract Geophysicist.
Responsible for gravity and elevation surveys, data reduction and interpretation.

1974 Amoco Canada Petroleum Co. Ltd.
Project Engineer.
Involved in mineral exploration programs from initial INPUT surveys through drilling.
Part of Detour Lake discovery team.

1972 Amoco Canada Petroleum Co. Ltd.
Geological and geophysical surveying.

1971 New Jersey Zinc Exploration Co.
Geophysical Operator.

COUNTRIES WORKED IN : Canada, Oman, Mexico and Brazil.

LANGUAGES SPOKEN : English, Dutch, and a working knowledge of French, Portuguese, Spanish

PASSPORT # : MA 691 641 Expires December 30, 1985.

CITIZENSHIP : Canadian

DATE OF BIRTH : August 22, 1951

PLACE OF BIRTH : Geleen, Netherlands

COST STATEMENT

CONTRACTOR'S FEES

QUESTOR SURVEYS LIMITED	350 line km @$45.02/km	$15,757.30
MARK MANAGEMENT LTD.	Programme Research, Preparation and Coordination	2,363.60
	Supplies	307.85
		$18,428.75

COST APPORTIONED TO CLAIMS:

G NORTH 1	$ 839.38
GN 2	1,428.63
GN 3	1,398.97
GN 4	699.48
GN 6	1,428.63
GN 7	1,398.96
GN 8	1,398.96
GN 9	1,387.47
GN 11	1,387.47
GN 12	1,387.47
GN 14	1,387.46
GN 16	1,428.63
GN 17	1,428.62
GN 18	1,428.62
	$18,428.75

1. INTRODUCTION

This report contains our interpretation of the results on an INPUT MK VI airborne electromagnetic and magnetic survey flown for Noranda Exploration Company Limited. The survey area lies within the Province of British Columbia, approximately 160 kilometres NNW of the Town of Prince George. The area outlines are presented on the following pages.

The survey was commissioned by Mr. John Harvey of Noranda Exploration Company Limited on January 20, 1984. The author supervised the data compilation and interpretation through to the completion of the project in July, 1984. Noranda geologists and geophysicists were present at the survey base to review results and production.

The survey objective is the detection and location of base metal sulphide conductors within assumed Paleozoic volcano-sedimentary lithology.

The primary survey area consists of 350 kilometres of traverse and control lines. These were flown between the dates of May 25 and May 27, 1984 using Prince George as the survey operations base.

SURVEY OPERATIONS

2a. Project Location

A Short Brothers Skyvan aircraft equipped with the **QUESTOR/BARRINGER** MK VI INPUT system was utilized for the survey, the results are presented on 1 map sheet. The survey area lies within N.T.S. Map 93J14.

2b. Production

The flight line spacing over the block was 400 metres. The table summarizes the kilometres flown during the survey operation.

Traverse lines	306.7 km.
Control lines	32.4 km.
Total lines	339.1 km.

The survey was completed in 1 1/2 production flights. One day was lost during the survey to excessive magnetic diurnal activity on May 26.

2c. Survey Personnel

The survey crew was made up of experienced **QUESTOR** employees:

Crew Manager/Data Technician	-	K. Sherk
Pilot/Captain of Aircraft	-	L. Gowler
Co-Pilot/Navigator	-	F. Clarke
INPUT Equipment Technician	-	D. Borsoi
Aircraft Engineer	-	P. Melen

The flight path recovery was completed at the survey base, while the final data compilation and drafting was carried out by

QUESTOR at its Mississauga, Ontario office. The magnetic and electromagnetic processing was carried out using **QUESTOR** software and computer drafted. The INPUT interpretation and reporting was completed by M.H. Konings.

Mr. Lyndon Bradish, District Project Geophysicist for Noranda Exploration was the technical authority for the project. A preliminary compilation of results - a red ball anomaly map - was presented to Noranda representatives at the completion of the field data acquisition.

2d. Data Compilation

The flight path of the aircraft is recorded by a strip camera on black and white 35 mm. film continuously during flight. The camera is controlled by the fiducial time system of the data acquisition system. Fiducial numbers are imprinted on the film every 2 seconds, marked onto the analogue records every 20 seconds and recorded digitally every half second.

The flight line headings are opposite on adjacent lines, which are normally flown sequentially in an "S" pattern. The navigation references are flight strips at a scale of 1:20,000 which are made from the base maps. The equipment operator logs the flight details recording line numbers, time, the fiducial range and other pertinent flight information. This information is entered into the digital data system recorded on magnetic tape and verified after it has been recorded (read-after-write). It is compared to the film, analogue records and the magnetic base station recording at the completion of the survey flight.

The film and all records are developed, edited and checked at the completion of each flight. Recovery of the flight track is carried out by comparing the negative of the 35 mm. film to the topographic features of the base map. Coincident features are picked and plotted on exact copies of the stable mosaic base map on which the final results are drafted. Points are picked at an average interval of 1 kilometre which corresponds approximately to one whole fiducial unit or 20 seconds. The picked points will not necessarily fall on whole fiducial numbers, but on the final presentation, only the first and last whole fiducial numbers on a line are marked on each flight line. By interpolation, the other whole numbers are marked as ticks along the flight path. This keeps the anomaly and interpretation maps free of unnecessary numbers.

These procedures are performed daily so that the data quality and progress may be measured objectively. Reflights for covering navigational gaps and other deficiencies are usually flown on the following day.

The analogue records are inspected for coherence with specifications, and anomalies are selected for classification and plotting. Selected anomalous conductors are positioned by plotting their fiducial positions, less the lag factor (Appendix C). These resultant positions are located by interpolating between fiducial points established by the flight path recovery process.

The survey results are presented as 3 products. There is an INPUT anomaly map with interpretation, and a magnetic contour overlay. The summary describes the interpretation of INPUT results and presents recommendations for ground follow-up surveys. A colour presentation of the magnetic contours and a "sun shadow" colour magnetic representation was also included as a standard product.

3. INPUT DATA PRESENTATION

The base maps for the survey area are photomosaics constructed from 1:40,000 air photographs supplied by the British Columbia Department of Environment and taken in 1977. The photomosaic was used to construct the navigation flight strips and it is also the base onto which the flight path was recovered. The mosaics are uncontrolled at a scale of 1:20,000. The survey results are presented on 1 sheet which is partitioned as illustrated on the location map.

The INPUT anomaly map presents the information extracted from the analogue records. This consists chiefly of the peak anomaly positions and response characteristics, surficial responses, up-dip responses, and magnetic anomaly locations. In effect, these represent the primary data analysis. The symbols are explained in the map legend, but the following observations are presented:

- position of peak anomaly;
- conductance or conductivity-thickness;
- amplitude of channel 2 response;
- position and peak amplitude of associated magnetic anomalies;
- where present, surficial, up-dip, poorly defined responses have been identified with a unique symbol.

The interpretation maps outline the geophysical-geological interpretation of the INPUT electromagnetic, magnetic, geological and physiographic data. Bedrock conductors have axis locations and dip directions, when they are interpretable. The anomalous zones which are recommended for follow-up have a reference label assigned, to which additional comments and recommendations are directed in the Interpretation section of this report. Surficial response sources are mapped out by boundaries showing their interpreted lateral extent. The following list summarizes the interpretation presentation:

- bedrock conductor axis, probable and possible;
- conductor dip;
- surficial conductor outlines;
- anomalous conductors selected for ground evaluation with reference number.

4. INTERPRETATION - GENERAL

4a. Regional Geology

Rocks in the survey area span an age range from Lower Cambrian through Jurassic as depicted on GSC Map 1204A; the only geological reference available to the author. In general terms, it depicts older rocks to the west and younger rocks to the east. Dips are presumed to be to the northeast in a range of 35-75° E. with tops to the east reported for Paleozoic rocks of the Slide Mountain Group (limestones with some intercalated volcanics) and the Caribou Group (quartzites and phyllites). In the north-western extremity of the survey area, granite, gneiss and other metamorphic rocks of the Wolverine Group have more complex dips and strikes.

Although a number of faults are indicated on Map 1204A, these may have been interpreted from older high altitude aeromagnetics and subject to error, especially those in the NE direction. Surficial sediments obscure the geology of much of the area to an unknown depth.

4b. Conductivity Analysis

The conductivity-thickness products of planar horizontal and thin, steeply dipping conductors are proportional to the time constant of the secondary field electromagnetic transient decay. This transient may be closely approximated by an exponential function for which the conductivity-thickness product (TCP) is inversely proportional to the log difference of two channel amplitudes at their respective sample times.

These response functions are presented in the form of graphs in which the amplitudes of the 6 channels of INPUT response are plotted on a logarithmic scale against conductivity. The relative amplitudes of the secondary response, at any given conductivity, may be accurately related to the depth of a conductor below the surface. These are typically referred to as Palacky nomograms. These are available for a number of conductor geometries. It has been found that the shape of the decay transient and its amplitude is usually unique to a particular geometry. Therefore, if the origin of a conductive response is in question, a good "fit" of the peak response amplitude to one nomogram will define its origin.

The 90^{o} nomogram was utilized exclusively to determine the apparent conductances of the responses obtained from the survey. This procedure is valid for near vertical conductors, within a dip range or $45\text{-}135^{o}$, relative to the aircraft flight direction.

Although the conductor depth can be interpreted from the nomograms, the short strike lengths and the variability of conductor geometry may result in the over-estimation of depths. The response shapes are indicative of shallow depth conductors over the entire survey area, with 10-40 metre depths interpreted for most selected zones. The INPUT system depth capability is typically 200 metres for a vertical, 600 metre strike length by 300 metre depth extent target. The effective penetration depth increases for a dipping target and decreases for a smaller size conductor.

Depths were only determined for responses which appear to fit the interpretation model - a thin near vertical plate with a strike length of greater than 500 metres. Qualifications for these determinations are summarized in the interpretation section.

The depths for 5 and 6 channel anomalies were corrected for the interpreted conductor strike intersection relative to the flight line direction and the effects of aircraft altitude deviations from a flight altitude of 120 metres.

An anomaly listing at the back of this report summarizes each anomalous response in a numerical sequence. In addition to the standard anomaly parameters, an "anomaly type" classification has been added. The letters correlate with the plotted symbols according to the following table.

ANOMALY TYPE	RESPONSE SOURCE	SYMBOL
BLANK	bedrock conductors	circular
S	surficial (overburden or lakebottom) conductivity	diamond
U	up-dip accessory peak to main response	half circular, half diamond, symbolically "pointing" in dip direction
P	poorly defined response	asterisk "*" in lower left quadrant
C	cultural source (not applicable for this survey)	square

The "P" poorly defined response may not yield signatures diagnostic of a discrete bedrock anomaly to standard electromagnetic prospecting equipment. Interpreted axis locations may be approximate for these intercepts.

5. INPUT INTERPRETATION

"G" North Block

The "G" North survey area is characterized by two unique geophysical zones which can be recognized by both their magnetic and electromagnetic signatures. The western portion of the block has relatively inactive magnetics and is fairly resistive. Weak conductors in the decay channels 1 to 3 range have been interpreted parallel to anticipated bedrock trends. Conductances are consistently less than 1 siemen although several isolated responses show higher conductances. These are interpreted to be bedrock conductors; however, no general dip direction could be attributed to the unit. Magnetic patterns are broad and complex, having no correlation to the interpreted axes. No follow-up recommendations are suggested for this resistive unit as the conductors are not particularly anomalous in amplitude or by long transient decays.

The magnetization for this unit is higher by 50-75 nanoTeslas, and can be traced by a step shaped profile between control lines 3910 and 3930 in the western part of the area. The contact with the conductive unit which dominates the eastern part of the survey block is also defined by the abrupt northwestern termination of the bedrock conductors. The non-linear trace of the interpreted contact is good evidence for a fault contact. Conductors within this zone are typically long and variable in conductance. All classes of conductors are present in the eastern unit, which often combines both extremely high amplitudes and exceptional conductances. These may be traced with great difficulty (due to the wide traverse line spacing and profile shape variability). Solid axis traces on the interpretation map depicts probable axial traces while the dashed lines will relate to conductors whose presence is certain but whose strike and exact axis positioning is approximate.

5a. Relation of Geophysical Results to Geology

At this time it is worthwhile reviewing the relation of the geophysical evidence to the regional scale geology.

No evidence is present for the existence of crosscutting NNE faults (GSC Map 1204A) while other subparallel strike faults may exist within the northern zone. Some minor magnetic dykes may be seen crosscutting the regional magnetic high contours at the northern corner of the survey area. From regional mapping, persistent northeast dips are reported, dipping at 35-75°. These cannot be directly substantiated by INPUT dip interpretations.

The resistive unit in the western portion has been described in GSC mapping as predominantly quartzite, which is usually derived from high energy sedimentary processes. The absence of graphitic conductors is consistent with the geological observations. The eastern part of the survey block mapped as the Slide Mountain Group has been reported to contain both basic volcanic rocks and associated sediments. This includes argillite, chert and greywacke. The multiple, long trend nature of the conductors leads the interpreter to believe that numerous conductive units are present. Minor exceptions occur in the southern corner of the survey area and straddling the northwestern part of control line 3922.

5b. INPUT Response Characteristics

The nature of the INPUT conductors is extremely complex and variable. Although mapped geological structures imply a consistency in northeastward inclined bedding dips and tops, the INPUT survey results do not imply such simplicity. Up-dip type responses are rarely recognized due to numerous multiple conductors. A staggering of amplitude peaks in the direction of dip for the latter decay times does not yield consistent dip indications in this survey. The explanations offered for the lack of definitive dip information are complex small scale folding and host rock conductivity which may produce current gathering effects in conductors. For many horizons there is a consistency in the peak skew from none to a pronounced effect in one direction; this should be interpreted as a sign of a vertical to moderate dip in the direction of skew. Where skew occurs in both flight directions, conductor width and current gathering may be dominant factors.

5c. Anomaly Selection Criterion

Selecting of exploration targets which are unique in terms of anomalous characteristics is not a straightforward task in the "G" North Block. Magnetic anomalies are rare, and where present, have no direct relationship to either response amplitude or decay characteristics.

The only remaining characteristics which may be used to select conductors are:

- Finite strike length
- High conductance
- Narrow profile shape

These parameters are based on the finite size and high conductance that sulphide deposits show in contrast to carbonaceous deposits which are often very wide, long and consistent in apparent conductance. From the small scale profile map of the survey area, it may be observed that high amplitude anomaly trends are clustered in distinct localities. This observation applies to conductance characteristics as well. Anomaly shape often improves with conductance, although in some multiple conductive zones it is not possible to resolve more than the peaks due to superposition of flanking responses.

For this reason, we have chosen to group the responses in two localities (ZONES A and B) together rather than to analyze every horizon individually. As there are a large number of individual responses, other selection criterion (geology, geochemistry) should be utilized to further scrutinize these conductors.

6. SELECTED TARGETS

ZONE A

- Includes at least eight individual conductive horizons which all have sections with exceptional electromagnetic characteristics;
- axis interpretation is probable rather than definite as the variability of response shapes from line-to-line does not allow application of standard interpretation classification or selection procedures.
- A magnetic correlation is either flanking on the north side or or directly coincident with the westward extension of ZONE 313S, the only series of responses with consistent profile shape characteristics. A magnetic anomaly present along the trend east of intercept 30040G, is sharp (originates from a shallow near vertical source) but does not appear to have any relationship to electromagnetic response.
- With the exception of the aforementioned horizon which could be investigated for gold, no specific recommendations are suggested for the northern conductors.
- Geochemistry, geology and results from zones 312B-312C may aid in prioritizing and selecting "anomalies" from this zone of intense conductivity.

ZONE B

- In overall shape, areal extent and number of conductive horizons it is remarkably similar to ZONE A.
- However, axial traces have been delineated with more confidence, and "isolated" conductors may be present among the ubiquitous formational conductors - presumably graphitic in origin.
- The magnetic character of the conductors is variable and inconsistent. Magnetic expressions are weak but sharp peaks occur sporadically along the strike length of specific horizons, seldom recognizable for more than two flight lines.
- These location intercepts are listed below:

  30010F, 30030L, 30042F, 30041E, 30050M, 30060HMN?, 30071K, 30100M, 30110E.

- These intercepts are recommended as starting points in follow-up exploration in the absence of any other prioritization factors.
- It is interesting to note that ZONE B, as a whole unit, falls within a linear magnetic low of 50-100nT. Low susceptibility combined with formational conductivity is a sedimentary deposition attribute.

<u>ANOMALY 302J</u> Priority 1

Type	Isolated
Conductance	38S
Associated Magnetics	10-15 nT
Related Responses	30010J
Response Characteristics	- very wide
	- additional weaker zone may be positioned north of axis
	- conductor axis extends northwest off the survey boundary

<u>ANOMALY 310K</u> Priority 1

Type	Isolated?
Conductance Range	19-36S
Associated Magnetics	20 nT
Related Responses	30090N, 30102C, 30110H, 30121E, 30122K
Response Characteristics	- Consistently wide
	- Response 30121E has peak skew southward
	- Consistent amplitudes and shape in both flight directions implies steep dip

<u>ANOMALY 311G</u> Priority 2

Type	Isolated?
Conductance	36S
Horizon Conductance Range	9-14S
Associated Magnetics	-
Related Responses	30122J, 30130J
Response Characteristics	- Response 30311G may have peak shift south
	- Abrupt strike termination between 30121E-F appears unrealistic
	- Probable strike extensions in ZONE B

ANOMALY 311R	Priority 3
Type	Formational
Conductance	30S
Strike Length	2000 m
Magnetic Coincidence	-
Related Responses	30071M, 30080E, 30090Y, 30100E, 30120E
Shape Characteristics	- consistently wide responses originate from a source which is widest at 30110R - peak shift south for the strongest response suggests a steep southward dip - probable graphitic source

ANOMALY 312B	Priority 3
Type	Formational
Conductance	29S
Strike Length	+ 1200 m
Magnetic Coincidence	10 nT?
Related Responses	30100A, 30110W, 30120B, 30130T
Shape Characteristics	- Narrow profiles are typical of this horizon - Response shapes are symmetrical but peak skew to south on 30120B implies southward dip and/or width greater than 50 m. - The horizon probably extends into ZONE A at response 30090CC

ANOMALY 312C	Priority 3
Type	Formational
Conductance	34S
Strike Length	+ 800 m
Magnetic Coincidence	-
Related Responses	30100B, 30110T
Shape Characteristics	- The prime response target is superimposed on 30120D - Conductance is underestimated because of superposition by 313S anomaly on early channels - Responses along strike to west are very subtle inflections on flanks of stronger responses - The horizon probably extends into ZONE A through 30090BB

ANOMALY 313G,H	Priority 2
Type	Formational?
Conductance Range	32-41S
Associated Magnetics	-
Related Responses	30122H, 30141A
Response Characteristics	- Both responses are in reality probably part of adjacent longer conductive horizons; however, line 30141S was flown at a high terrain clearance and cannot be effectively interpreted. - Intercept "G" has a possible isolated source. - Responses on lower channels are integrated together and lack individual character. From sharpness of ch 1-2, depth should be shallow for both.

ANOMALY 313S	Priority 3
Type	Formational
Conductance	at 313S = 45S; range 9-23S
Strike Length	+ 6000 m
Magnetic Coincidence	-
Related Responses	30080G, 30090Z, 30100D, 30110S, 30120D, 30140A, 30150R, 30160A
Shape Characterists	- Responses are persistent along strike through ZONE A. - Associated magnetics compliment responses 30090Z and 30080G only. - Prime response is a local width, amplitude conductance improvement. - Peak skew northward infers north (?) dip; however, it should be near 90°.

ANOMALY 315E	Priority 1
Type	"Isolated"
Conductance	23S
Strike Length	400 m
Magnetic Coincidence	-
Related Responses	3930H, 30160N?
Shape Characteristics	- Wide profile, peak shift north infers source width and/or north dip. - Strike extensions to east are uncertain although responses on the control line confirm its amplitude and conductance improvement relative to adjacent conductors.

ANOMALY 318G	Priority 1
Type	"Isolated"
Conductance	25S
Strike Length	800 m
Magnetic Coincidence	-
Related Responses	30172D, 30190N, 30200F
Shape Characteristics	- 6 Channel response with profound northward peak shift. - Could be explained as an up-dip peak of 30180H, suggesting a flat (30-45°) northward dip. - Superposition from 30180H and related responses may have increased amplitudes and relative conductances.

ANOMALY 318M	Priority 3
Type	Formational?
Conductance	17S
Strike Length	1600 m
Magnetic Coincidence	-
Related Responses	3930F, 30172H, 30170J
Shape Characteristics	- Response M has appearance of an up-dip response (peak shifted southward). - The long transient decay is an improvement over responses along strike; however, this cannot be confirmed by control line intersection.

ANOMALY 319L	Priority 3
Type	Formational
Conductance	24S
Strike Length	+6000m
Magnetic Coincidence	--
Related Responses	30172F, 30180J, 30200H
Shape Characteristics	- beyond selected intercepts for follow-up, exact conductor strike is uncertain (ie., axis may extend to 30210N instead of M as interpreted). - along strike are other intercepts with similar long transients. - peak shifts are consistently in the direction of flight, an indicator of source width (+50m) and near vertical dip.

ANOMALY 320J	Priority 3
Type	Formational
Conductance	16S
Strike Length	+3200m
Magnetic Coincidence	--
Related Responses	30180L, 30190J, 30201K, 30210M
Shape Characteristics	- in profile, response shapes are broad and lack real character. - transient improvements over formational trends are moderate. - follow-up is recommended only in conjunction with adjacent zones.

ANOMALY 320P	Priority 3
Type	Formational
Conductance	24S
Strike Length	+2000m
Magnetic Coincidence	--
Related Responses	30170E, 30180T, 3910B, 30210G, 30210E
Shape Characteristics	- transient may have been artificially enhanced by superposition of the 30200R up-dip response. - can not be recognized in northward flight direction on line 30200 unless it is represented by response "D".

ANOMALY 321F	Priority 3
Type	Formational
Conductance	14S
Strike Length	+2000m
Magnetic Coincidence	--
Related Responses	30201D, 30190C, 30200R, S.
Shape Characteristics	- peak shifts are northward only on north direction flight lines. A steeply dipping, wide tabular conductor is interpreted. - all responses are somewhat wide. - the 30200R response is interpreted as an 'up-dip' accessory response. - westward strike extent is terminated by an interpreted fault.

ANOMALY 321L		Priority 2
Type	Formational	
Conductance	20S	
Strike Length	+4000m	
Magnetic Coincidence	--	
Related Responses	30190H, 30200K, 30201J, 3930E	

Shape Characteristics

- horizon axis situated on a wider magnetic high (10-25nT) which is interpreted as stratigraphic in origin.
- responses are typically narrow and sharp, with no indication of dip.
- consistent response amplitudes on adjacent lines confirm a uniform steep dip.
- other responses along strike to the south are similar (ie., 30230N, 30241K).

ANOMALY 322C		Priority 1
Type	Isolated?	
Conductance	24S	
Strike Length	800m	
Magnetic Coincidence	--	
Related Responses	30210W, 30230AA	

Shape Characteristics

- an isolated conductance and amplitude improvement on a horizon which potentially extends westward in an irregular distribution.
- part of apparent amplitude improvement originates from superposition of higher amplitude responses to the south. This results in an underestimate of apparent

ANOMALY 322P	Priority 3
Type	Formational
Conductance	13S (background conductance 1-9S)
Strike Length	+6000m
Magnetic Coincidence	--
Related Responses	30190G, 30200L, 30201H, 30210K, 3930D, 30230M
Shape Characteristics	- responses selected for their longer transient decays. - profile width and peak shift of both 30210K and 30220P interpreted as a sign of conductor width, however less than massive source for the conductor exists because amplitudes are only moderate.

ANOMALY 323R	Priority 1
Type	Isolated
Conductance	36S
Strike Length	800 m
Magnetic Coincidence	-
Related Responses	30210N, 30220K
Shape Characteristics	- Response 30220K is shifted north, suggesting a northward dip with conductor axis location potentially further south than depicted. - Response 30230R is shifted to north, has exceptional profile width, transient decay characteristics and amplitude.

<u>ANOMALY 323WY</u> Priority 3

Type	2 similar parallel formational horizons
Average Conductance	35S (20-55)
Strike Length	+3200 m
Magnetic Coincidence	-
Related Responses	30201NP, 30210RS, 30220FG, 30230WY, 30241DE, 30250YZ, 30262CD, 30270Y, 3922NPRST
Shape Characteristics	- Extremely high response amplitudes are characteristics of this set of two similar horizons. - Similarities are such that possibility of folding should not be overlooked. - Northern horizon has highest amplitude, longest strike length. - Width of these massive conductors on individual horizons may be up to 300 m. - Ground follow-up is recommended for only a short segment, probably in conjunction with the 324C group.

ANOMALY 323BB	Priority 2
Type	Formational (?)
Conductance	20S
Strike Length	1600 m
Magnetic Coincidence	-
Related Responses	30220B, 30241B, 30250BB
Shape Characteristics	- Zone of wide responses with long decay transients. - Local conductance improvement in short segment of a horizon which may extend to west through 30200C and to east by 30250CC. - Strike change at west end of conductor leaves its true axis position (and direction) in question.

ANOMALY 324C	Priority 2
Type	Formational
Conductance	32S
Strike Length	+ 4000 m
Magnetic Coincidence	-
Related Responses	30210T, 30220D, 3922LM, 30230Z
Shape Characteristics	- Zone responses typically have very high amplitude peaks, however, with improving conductance to the east, amplitudes decrease. - Profile shapes also characteristic of narrower sources to the east. - Strike extent east of 30250AA is uncertain, as is its axis location.

ANOMALY 326J	Priority 1
Type	Isolated?
Conductance	21S
Strike Length	+ 800 m
Magnetic Coincidence	10 nT
Related Responses	30270P, 30281H
Shape Characteristics	- The prime intercept has a possible common axis with 328G - this should not be considered a negative factor. Follow-up should be in conjunction with 328G. - The minor magnetic coincidence may be a flanking feature. It continues eastward and is not directly related to conductance.

ANOMALY 328G	Priority 2
Type	Formational?
Conductance	26S
Strike Length	+ 1600 m
Magnetic Coincidence	-
Related Responses	30262H?, 30270R
Shape Characteristics	- Profiles of both prime intercepts are interpreted to originate from wide sources with high apparent conductance. - The width potential is confirmed by the leading peak positions relative to the interpreted axis. - The similarity of the 30262J response could be interpreted as an indication of a common axis.

7. CONCLUSIONS AND RECOMMENDATIONS

As a general comparison with other areas, the number of anomalies and their high apparent conductances make this project area somewhat unique. This, however, does create a selection and prioritization problem. The usually unique high conductance quality normally related with massive sulphide conductors, therefore, cannot be utilized for more than a first pass screening. Magnetic responses are seldom of the strength, shape and direct axis coincidence to infer a pyrrhotite source, along any section of conductors in this area. It is recommended that any and all other geoscience information be integrated with our target selection to further evaluate the priorities for follow-up. A first priority ranking may have either an "isolated" location or a direct magnetic correlation. Second priority selections are typically a distinct shape (width) improvement in a long stratigraphic conductor while third priority targets are an amplitude-conductance improvement along a conductive horizon, but very wide. The following summary excludes ZONES A-B which warrant independant evaluations:

Priority:	1	2	3
	302J	311G	311R
	310K	313GH	312B
	315E	323BB	312C
	318G	324C	313S
	322C	328G	318M
	323R		319L

Priority:	1	2	3
	326J		320J
			320P
			321F
			321L
			322P
			323WY

Respectfully submitted,

QUESTOR SURVEYS LIMITED,

Marcel H. Konings

Marcel H. Konings, P. Eng.
Senior Geophysicist.

APPENDIX A

BARRINGER/QUESTOR MARK VI INPUT$^{(R)}$ System

The INduced PUlse Transient (INPUT) method is a system whereby measurements are made, in the time domain, of a secondary electromagnetic field while the primary field is between pulses. Currents are induced into the ground by means of a pulsed primary electromagnetic field which is generated from a transmitting loop around the aircraft. By using half-sine wave current pulses (Figure A-1) and a transmitter loop of large turns-area, a high signal-to-noise ratio and the high output power needed for deep penetration, are achieved.

Induced current in a conductor produces a secondary electromagnetic field which is detected and measured after the termination of each primary pulse. Detection of the secondary field is accomplished by means of a receiving coil, wound on a ferrite rod, mounted in a fibreglass shell called a "bird" and towed behind and below the aircraft on 120 metres (400 feet) of coaxial cable. The received signal is processed and recorded by equipment within the aircraft.

The axis of the receiving coil is horizontal and parallel to the flight direction. This optimizes the discrimination between flat lying surficial conductors and bedrock conductors. The secondary field is in the form of a decaying voltage transient, measured in time, at the termination of the primary transmitted pulse. The amplitude of the transient is proportional to the amount of current induced into the conductor, the conductor dimensions, conductivity and the depth beneath the aircraft.

The rate of decay of the transient is inversely proportional to conductance. By sampling the decay curve at six different time intervals and recording the amplitude of each sample, an estimate of the relative conductance can be obtained. Transients due to strong conductors such as sulphides and graphite, usually exhibit long decay curves and are therefore commonly recorded on all six channels. Sheet-like surface conductive materials, on the other hand, have short decay curves and will normally only show a response in the first two or three channels.

For homogeneous conditions, the transient decay will be exponential and the time constant of decay is equal to the time difference at two successive sampling points divided by the log ratio of the amplitudes at this point.

TRANSMITTER SPECIFICATIONS

Pulse	Repetition Rate	180 per sec
Pulse	Shape	Half-sine
Pulse	Width	2.0 millisec
Off	Time	3.56 millisec
Output	Voltage	75 volts
Output	Current	275 amperes
Output	Current Average	54 amperes
Coil	Area	186 $m.^2$ (2,001 $ft.^2$)
Coil	Turns	6
Electromagnetic Field Strength (peak)		267,840 amp-turn-$meter^2$

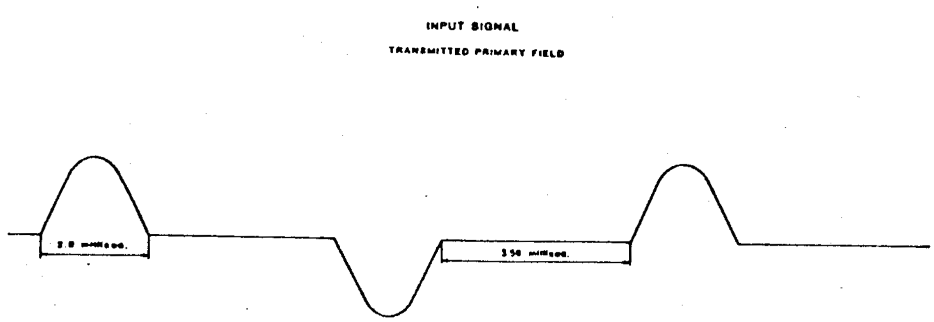


Figure A1

RECEIVER SPECIFICATIONS

Sample Gate	Windows (centre positions)	Widths
CH 1	300 μ sec	200 μ sec
CH 2	500	200
CH 3	800	400
CH 4	1200	400
CH 5	1700	600
CH 6	2300	600

Sample Interval	0.5 sec
Integration Time Constant	1.1 sec
Bird Position behind Aircraft (110 kt)	93 metres
Bird Position below Aircraft (110 kt)	69 metres

Receiver features: Power Monitor 50 or 60 Hz

50 or 60 Hz and Harmonic Filter

VLF Rejection

Spheric Rejection (tweak) Filter

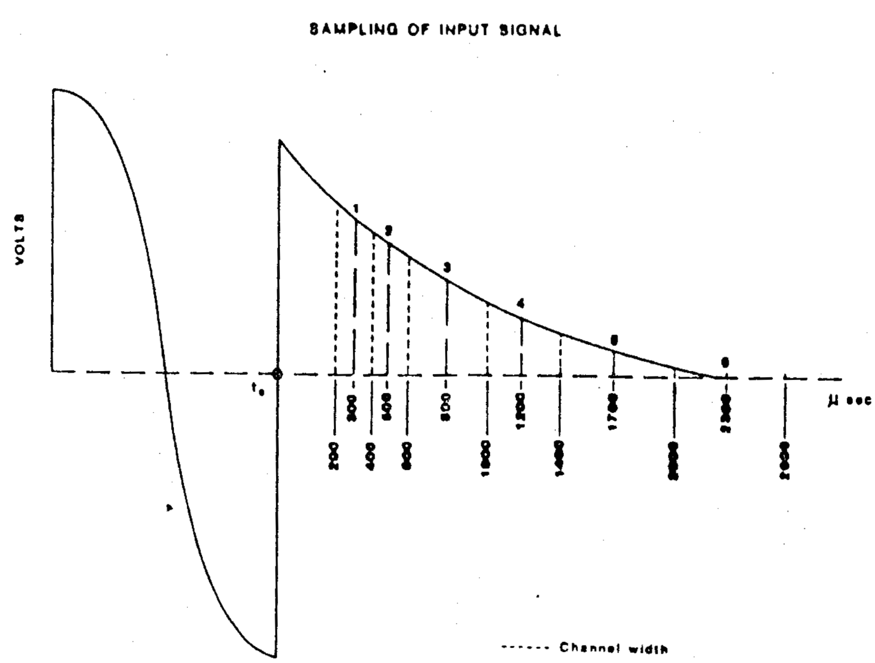


Figure A2

GEOMETRICS MODEL G-803 PROTON MAGNETOMETER

The airborne magnetometer is a proton free precession sensor which operates on the principle of nuclear magnetic resonance to produce a measurement of the total magnetic intensity. It has a sensitivity of 1 gamma and an operating range of 20,000 gammas to 100,000 gammas. The sensor is a solenoid type, oriented to optimize results in a low ambient magnetic field. The sensor housing is mounted on the tip of the nose boom supporting the INPUT transmitter cable loop. A 3 term compensating coil and perma-alloy strips are adjusted to counteract the effects of permanent and induced magnetic fields in the aircraft.

Because of the high intensity electromagnetic field produced by the INPUT transmitter, the magnetometer and INPUT results are sampled on a time share basis. The magnetometer head is energized while the transmitter is on, but the read-out is obtained during a short period when the transmitter is off. Using this technique the sensor head is energized for 0.80 seconds and subsequently the precession frequency is recorded and converted to gammas during the following 0.20 second when no current pulses are induced into the transmitter coil.

DATA ACQUISITION SYSTEM

Sonotek SDS 1200

9 track 800 BPI ASCII

Includes time base Intervalometer, Fiducial System

CAMERA

Geocam 75 SF

35 mm continuous strip or frame

TAPE DRIVE

Digidata Model 1139

OSCILLOSCOPE

Tektronix Model 305

ANALOG RECORDER

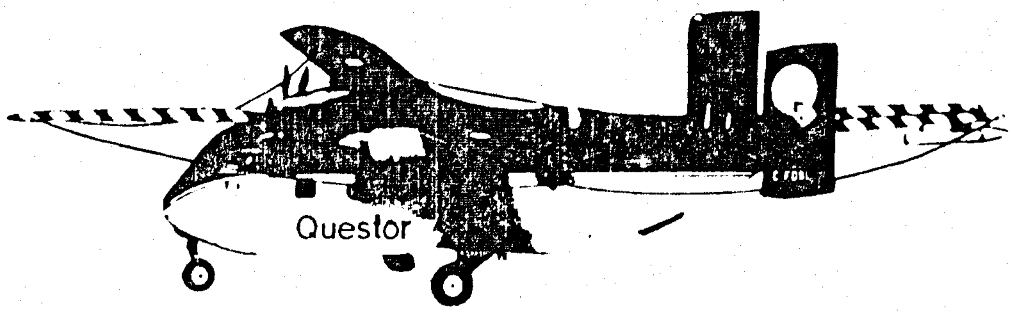
RMS INSTRUMENTS GR33 Graphic Recorder

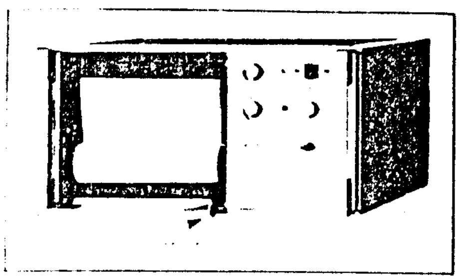
Kodak Light Sensitive Paper(15cm)

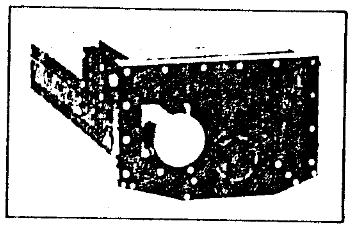
Recording 14 Channels: 50-60 Hz Monitor, 6 INPUT Channels, fine and coarse Magnetics, Altimeter, vertical and horizontal timing lines and fiducial markers.

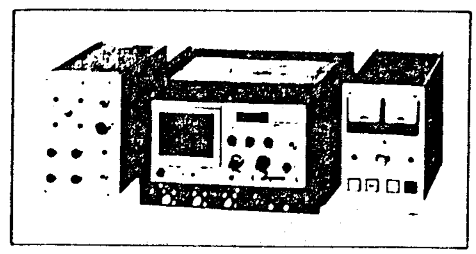
ALTIMETER

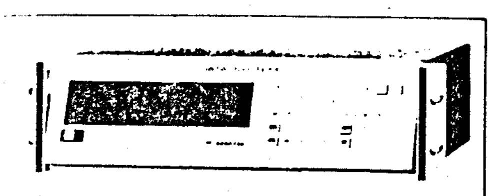
Sperry Radar Altimeter

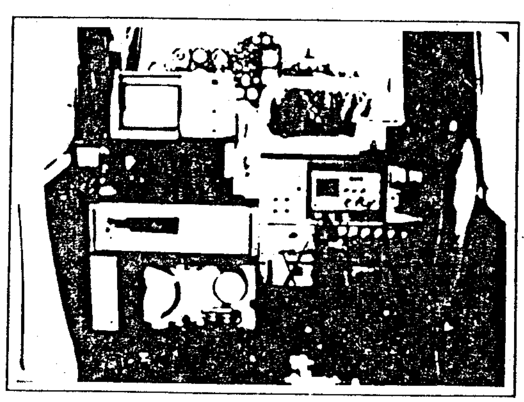


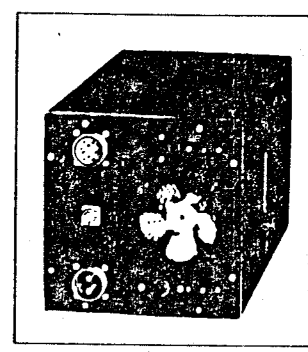

HONEYWELL ANALOGUE CHART RECORDER

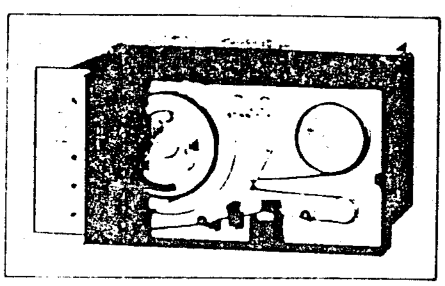

35mm TRACKING CAMERA

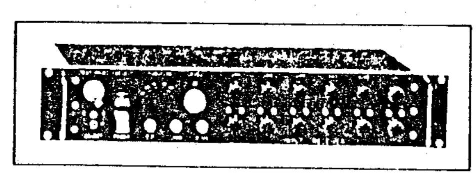

INTERFACE, OSCILLOSCOPE & T.C.U.

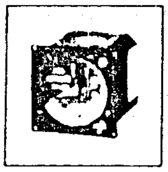

SONOTEK DATA SYSTEM

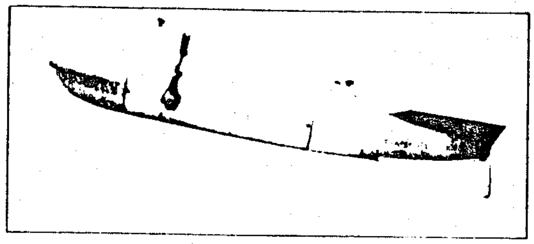

INPUT EQUIPMENT INSTALLATION

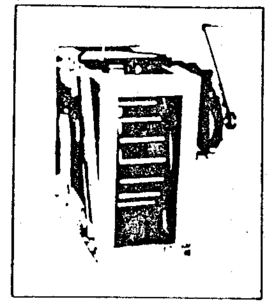

TRANSMITTER


9 TRACK TAPE RECORDER


MK VI INPUT RECEIVER


RADAR ALTIMETER


TOWED "BIRD" ASSEMBLY


"BIRD" WINCH

QUESTOR/BARRINGER MARK VI "INPUT" SYSTEM EQUIPMENT

APPENDIX B

The Survey Aircraft

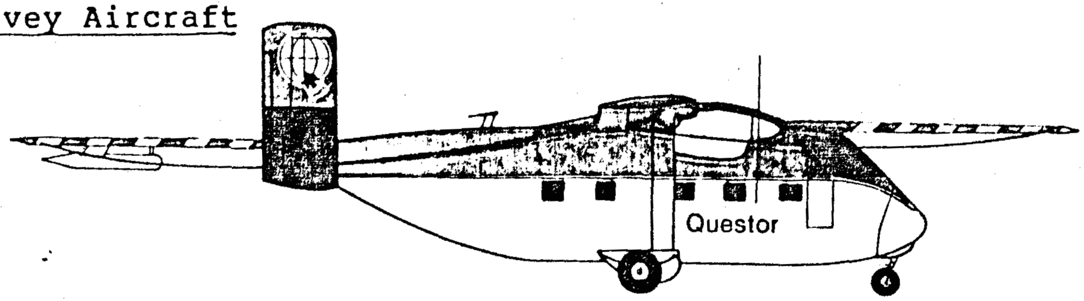


Figure B-1

Manufacturer	Short Brothers Ltd.,
Type	SHORT SKYVAN
Model	SH-7 Series 7
Canadian Registration	C-FQSL
Date of INPUT Installation	January 1971

Modifications:

1) Nose, tail and wing booms for coil mounting
2) Long range cabin fuel tank: 8 hours of air time
3) Winch, camera and altimeter ports
4) Aim 800 model - Slave directional gyro
5) Capable of spectrometry
6) Modified hydraulic driven generator system

The SKYVAN is a short take-off and landing aircraft. It is powered by two low maintenance turbine engines. The configuration of the aircraft provides for easy installation of equipment and extra fuel capability. These factors have proven the SKYVAN to be a reliable and efficient geophysical survey aircraft.

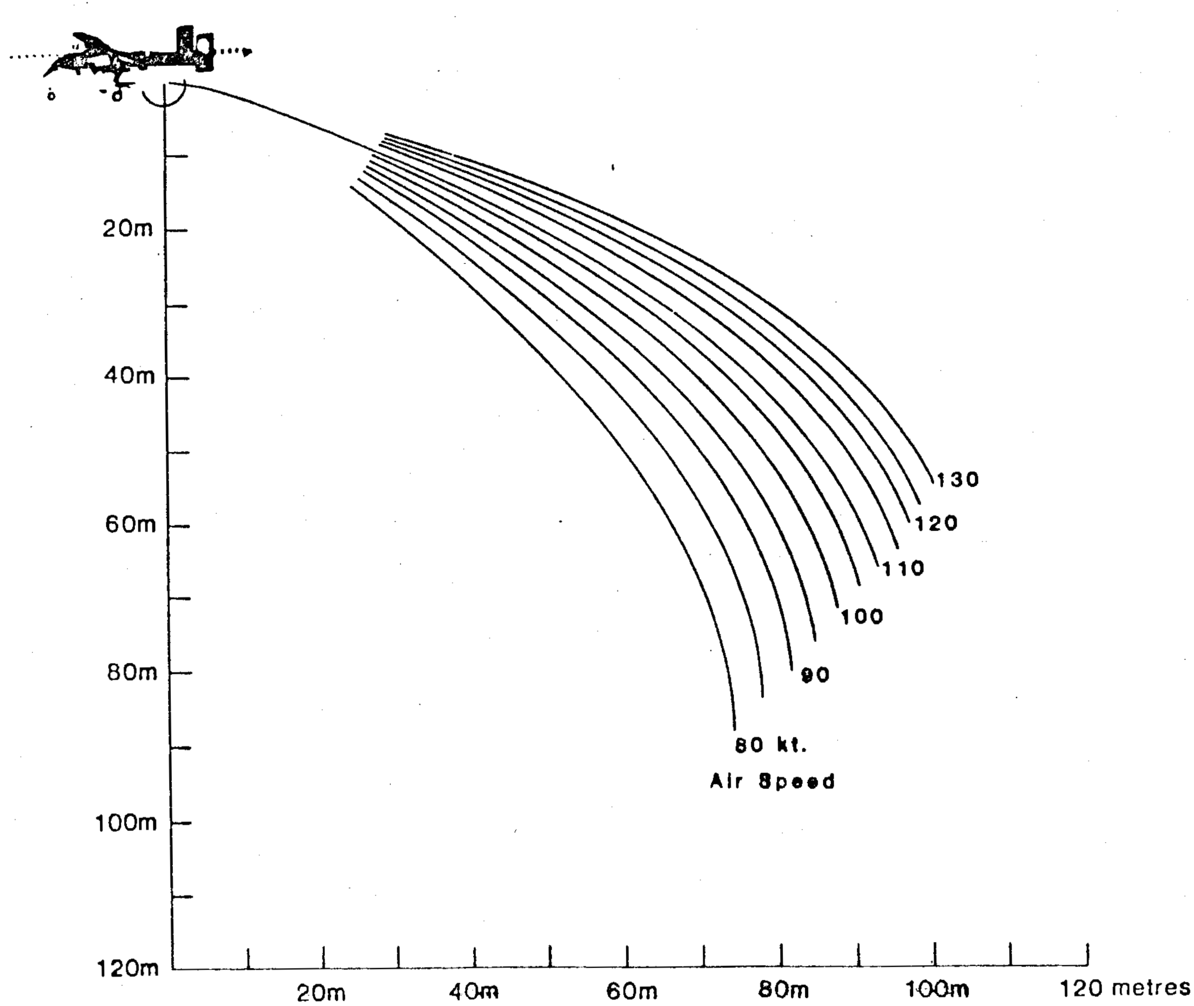
APPENDIX C

INPUT System Characteristics

a) Geometry

The INPUT system, a time domain airborne electromagnetic system, has the transmitter located on the aircraft while the receiver, referred to as the 'bird', typically is towed 93 metres behind and 68 metres below the aircraft at a survey airspeed of 110 knots. The actual spatial position of the bird is dependent on the airspeed of the survey aircraft, as can be seen in Figure C1. For the Skyvan and Trislander, air speed average 120 and 110 knots, respectively.

Figure C1 EFFECT OF AIR SPEED ON BIRD POSITION



b) The Lag Factor

The bird's spatial position along with the time constant of the system introduces a lag factor (Figure C2) or shift of the response past the actual conductor axis in the direction of the flight line. This is due to fiducial markers being generated and imprinted on the film in real time and then merged with E.M. data which has been delayed due to the two aforementioned parameters. This lag factor necessitates that the receiver response be normalized back to the aircraft's position for the map compilation process. The lag factor can be calculated by considering it in terms of time, plus the elapsed distance of the proposed shift and is given by:

$$\text{Lag (seconds)} = \text{time constant} + \frac{\text{bird lag (metres)}}{\text{ground speed (metres/sec)}}$$

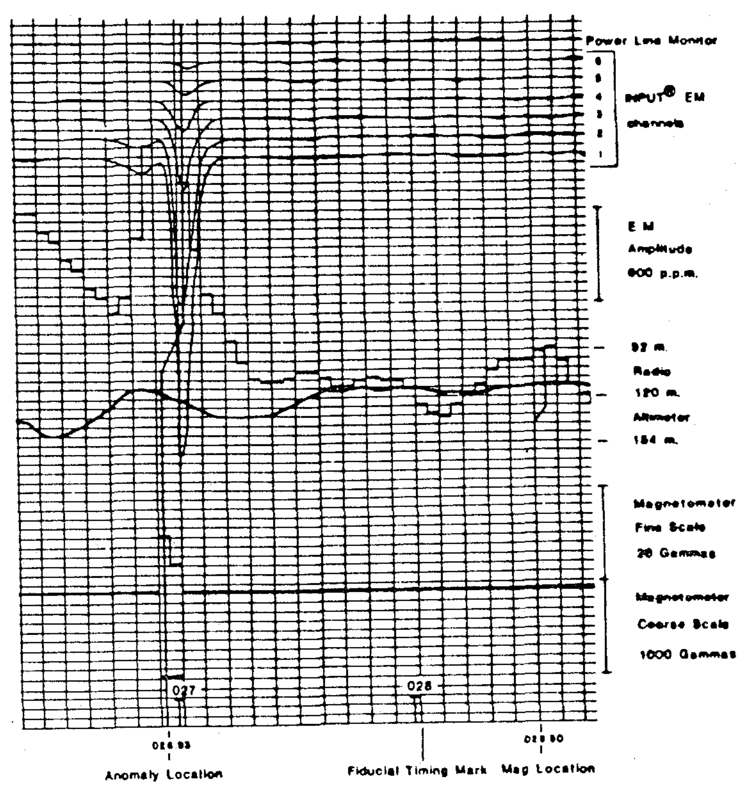


Figure C2

Representative INPUT®, Magnetometer and Altimeter Recording

The time constant introduces a 1.1 second lag while, at an aircraft velocity of 110 kt., the 'bird' lag is 1.7 seconds. The total lag factor which is to be applied to the INPUT E.M. data at 110 kts. is 2.8 seconds. It must be noted that these two parameters vary within a small range dependent on the aircraft velocity, though they are applied as constants for consistency. As such, the removal of this lag factor will not necessarily position the anomalies in a straight line over the real conductor axis. The offset of a conductor response peak is a function of the system and conductor geometry as well as conductivity.

The magnetic data has a 1.0 second lag factor introduced relative to the real time fiducial positions. This factor is software controlled with the magnetic value recorded relative to the leading edge (left end) of each step 'bar', for both the fine and coarse scales. For example, a magnetic value positioned at fiducial 10.00 on the records would be shifted to fiducial 9.95 along the flight path.

A lag factor of 2 seconds (0.1 fiducial) is introduced to correct 50-60 Hz monitor for the effects of bird position and signal processing. In cases where a 50-60 Hz signal is induced in along formational conductor, a 50-60 Hz secondary electromagnetic transient may be detected as much as 5 km. from the direct source over the conductive horizon.

The altimeter data has no lag introduced as it is recorded in real time relative to the fiducial markings.

c) Calibration

The major advance made during the transition from the INPUT MK V to the INPUT MK VI has been the ability to calibrate the equipment accurately and consistently. Field tests at established test sites are carried out on an average of once every 6 months to check the consistency of the INPUT installations available from QUESTOR.

To calibrate the equipment for a survey operation the following tests are used:

1) "ZERO" the digital and record background E.M. levels;
2) magnetometer scale calibrations;
3) altimeter calibration;
4) calibration of INPUT receiver gain;
5) aircraft compensation;
6) record background E.M. levels at 600 m.;
7) survey flight;
8) record background E.M. levels at 600 m.
9) record full scale INPUT receiver gain;
10) record compensation drift;
11) terminate or repeat from step 4.

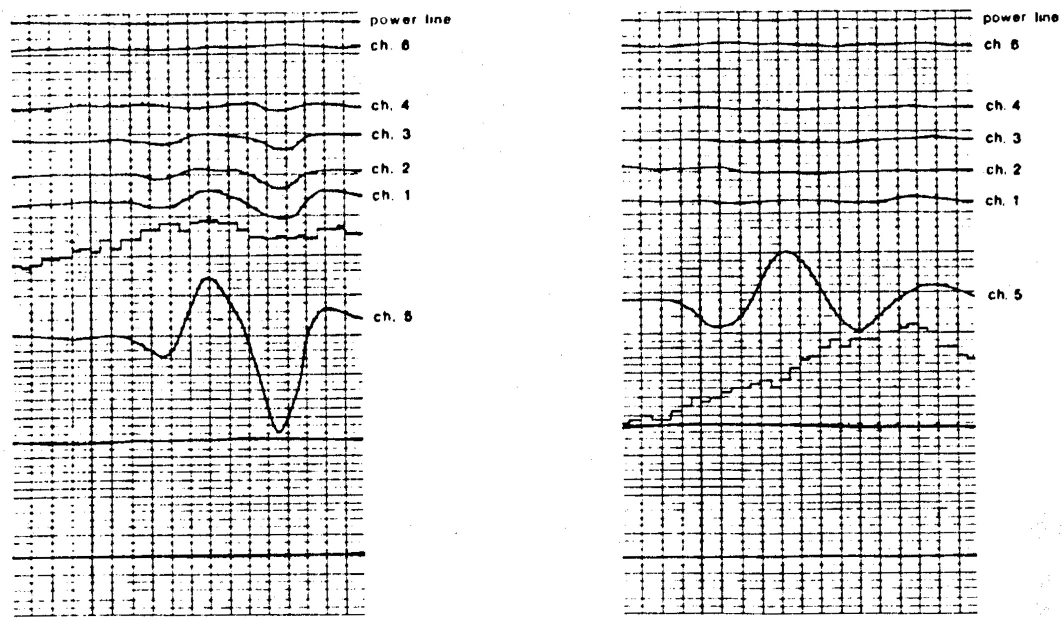
This sequence of tests may be repeated in midflight given that the duration of the flight is sufficiently long. Typically, this process is conducted every 3 hours of actual flying time and at the termination of every flight.

The background levels are recorded and then used to determine the drift that may occur in the E.M. channels during the progression of a survey flight. If drift has occurred, the E.M. channels are brought back to a levelled position by use of the linear interpolation technique during the data processing.

The primary electromagnetic field generated by the INPUT system induces eddy currents in the frame of the aircraft. This spurious secondary field is a significant source of noise which needs to be taken account of before every survey flight is initiated.

Compensation is the technique by which the effects of this spurious secondary field are eliminated. A reference signal, which is equal in amplitude and waveform but opposite in polarity, is obtained from the primary field voltage in the receiver coil and applied to each channel of the receiver. The compensation signal is not a constant value due to coupling differences induced by 'bird' motion relative to the aircraft. The signal applied is proportional to the inverse cube of the distance between the 'bird' and aircraft. Figure C3 displays the effect of compensation.

Typically, channel 5 is selected for compensation because it is not affected by geological noise due to its sampling location in the transient and then coupling changes are induced by precipitating 'bird' motion. Phase considerations of channel 5, relative to the remaining channels, dictates whether sufficient compensation has been applied. If the remaining channels are in-phase to channel 5 during this procedure, an over-compensated situation is indicated, whereas, out-of-phase would be indicative of an under-compensation case. Normally this adjustment is carried out at an altitude of 600 metres in order to eliminate the influence of external geological and cultural conductors.



Uncompensated

Compensated

Figure C3

The magnetometer, altimeter and INPUT receiver gain are also calibrated at the initiation of every survey flight. With the magnetometer, there are two scales, a coarse and a fine scale. The fine scale indicates a 10 gamma change for a 1 cm. change in amplitude (Figure C2). The coarse scale moves 2 mm. (or 1 division) for a 100 gamma change with full scale,2 cm., indicating a 1000 gamma shift.

The altimeter (Figure C4), is calibrated to indicate 400 feet altitude at the seventh major division (7 cm.), read from the bottom of the analog record. This is the nominal flying height of

INPUT surveys, wherever relief and aircraft performance are not limiting factors. The eighth major division correlates with 300 feet while the sixth corresponds with 500 feet in altitude.

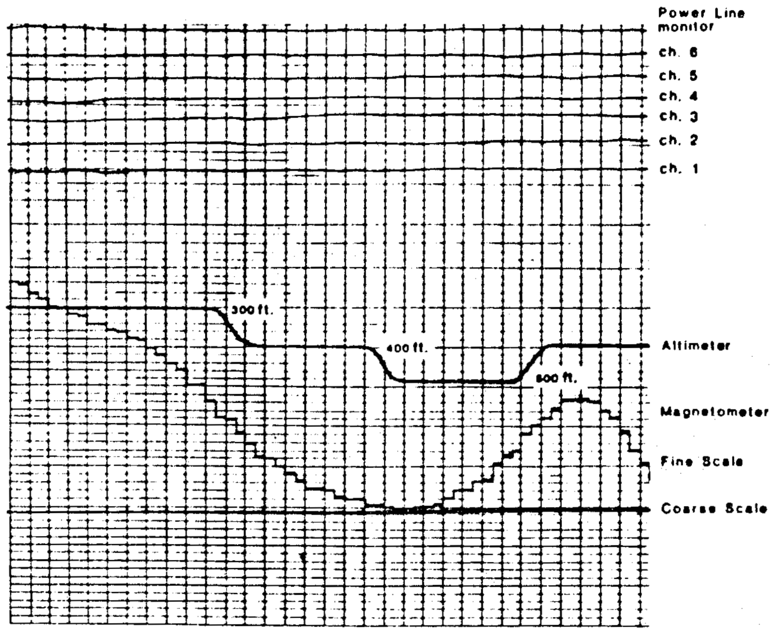


Figure C4

The INPUT receiver gain is expressed in parts per million of the primary field amplitude at the receiver coil. At the 'bird', the primary field strength is 2.1 volts peak-to-peak, or 1.05 volts peak amplitude. The calibration signal introduced at the input stage of the receiver is 4.0 mV. Expressed in parts-per-million, this induces a change of:

$$\frac{4 \times 10\text{-}3 \quad \times 10^6}{1.05} = 3800 \text{ ppm}$$

These calibration signals (Figure C5) cause an 8 cm. deflection of all 6 traces which translates to a sensitivity of 475 ppm/cm.

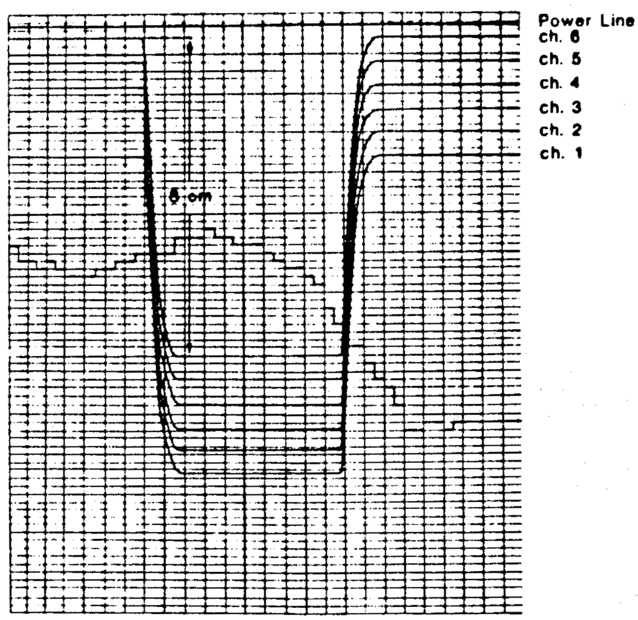


Figure C5

With the chart speed increased from the normal 0.25 cm. to 2.5 cm. per second, the time constant of the system (Figure C6), can be obtained by analysis of the exponential rise of the calibration signal for all 6 traces. The time constant, is defined as the time for the calibrated voltage to build up or decay to 63.2% of its final of initial value. A longer time constant reduces background noise but also has the effect of reducing the amplitude of the signal, especially for near surface responses.

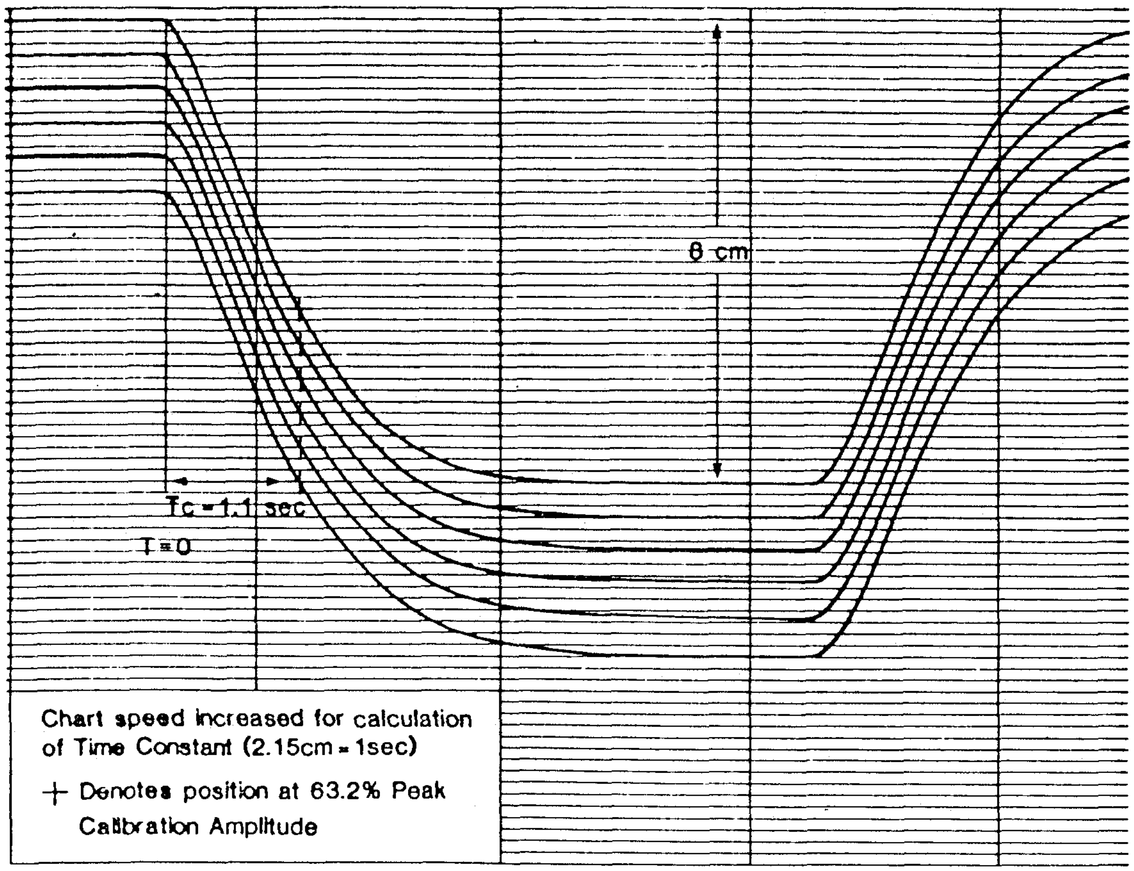


Figure C6

This trade-off indicates the importance of selecting an optimum value for the time constant. Experience and years of testing have indicated that a time constant of 1.1 second does not impede interpretation of bedrock source conductors.

d) Depth Penetration Capabilities

There are many factors which effect the depth of penetration. These factors consist of:

1) altitude of the aircraft above terrain;
2) conductivity contrast between conductor and host rock;
3) size and attitude of conductor;
4) type and conductivity of overburden present.

Of these factors, only the first parameter can be controlled. Typically, a survey altitude of 120 metres (400 feet) or less above the terrain is maintained. At this height, the INPUT MARK VI system has responded to conductors located at a depth of 300 metres (1,000 feet) below the surface.

APPENDIX D

INPUT Data Processing

The QUESTOR designed and implemented computer software routines for automatic interactive compilation and presentation, may be applied to all QUESTOR INPUT Systems. The software is compatible with the fixed-wing MARK VI INPUT, and the high power MARK VI INPUT. The procedures are all common, however, separate subroutines are accessed which contain the unique parameters to each system. Although many of the routines are standard data manipulations such as error detection, editing and levelling, several innovative routines are also optionally available for the reduction of INPUT data. The flow chart on the following page (Figure D1) illustrates some of the possibilities. Software and procedures are constantly under review to take advantage of new developments and to solve interpretational problems.

a) INPUT Data Entry and Verification

During the data entry stage, the digital data range is compared to the analog records and film. The raw data may be viewed on a high-resolution video graphics screen at any desirable scale. This technique is especially helpful in the identification of background level drift and instrument problems.

b) Levelling Electromagnetic Data

Instrument drift, recognized by viewing compressed data from several hours of survey flying, is corrected by an interactive levelling program. Although only two or three calibration sequences are normally recorded, the QUESTOR technique permits the use of multiple non-anomalous background recordings to divide a possible problematic situation into segments. All 6 INPUT channels are levelled simultaneously, yet independently. The sensitivity of the levelling process is normally better than 15 ppm on data with a peak-to-peak noise level of 30 ppm.

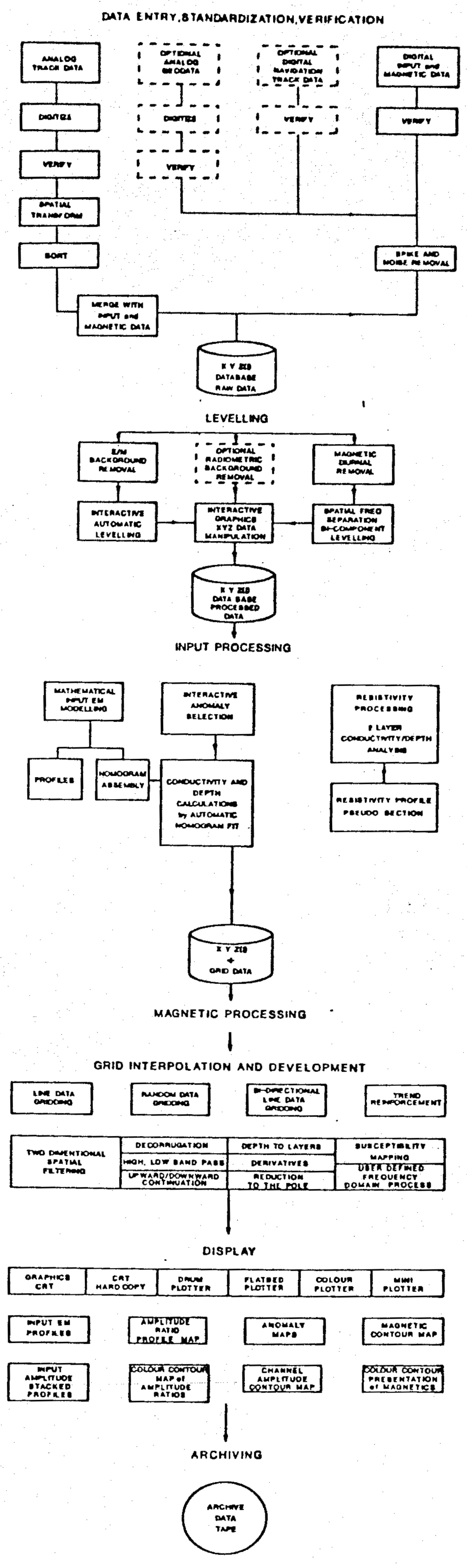
c) Data Enhancement

Normal INPUT processing does not include the filtering of electromagnetic data. The residual high frequency variations often apparent on analog INPUT data, is due almost wholly to "spherics", atmospheric static discharges. In conductive environments, spherics are apparently grounded and effectively filtered. In resistive environments, frequency spectrum analysis and subsequent FFT (Fast Fourier Transform) filters have been applied to data to reduce the noise envelope.

d) Selection of EM Anomalies

The levelled data may be viewed sequentially on a graphics screen for the selection of INPUT anomalies. Anomalies are selected by aligning a cursor to the position of the peaks. Some of the parameters of the response are manually entered during the picking of the response. These include the number of channels above background levels and the type of anomaly, e.g. cultural or natural.

QUESTOR INPUT DATA PROCESSING



APPENDIX E

INPUT INTERPRETATION PROCEDURES

The INPUT system is dependent upon a definite resistivity contrast and is most suitable for highly conductive massive sulphides. Differentiation is possible between flat-lying surface conductors and bedrock conductors.

The selection of anomalies is based on their characteristics and interpretation is sometimes enhanced by analyzing the magnetics. Spherics, due to atmospheric static discharges and lightning storms, are distinguishable from conductive anomalies. In the analysis of each conductor anomaly, the following parameters may be considered: anomaly shape with the conductor pattern, topography, corresponding magnetic features, anomaly decay rate, the number of channels affected, geological environment and strike direction and the interpreted dip relative to structural features.

For each anomaly selected, the following are recorded: location by fiducial, channel amplitudes in parts per million, number of channels, conductivity-thickness in siemens, corresponding magnetic association in gammas, magnetic fiducial location and altitude of aircraft above ground in metres. Also, the origin of the response (ie. surficial, bedrock, cultural) and the dip corrected depth for selected bedrock responses is listed.

Conductive responses are categorized into three main groups. These are bedrock, surficial and cultural.

Bedrock conductors can be sorted into conductive sources which are commonly encountered on INPUT surveys: massive sulphides, graphites, serpentinized peridotites and fault or shear zones. Magnetite and manganese concentrations may also yield INPUT responses in some circumstances. INPUT responses over alkalic intrusives and weathered basic volcanics have been well documented by Macnae (1979) and Palacky (1979).

Massive Sulphides

Massive sulphides occur as both syngenetic and stratified deposits and as vein infilling deposits. Nickel deposits often occur as magmatic injections of massive sulphides. Kuroko-type syngenetic copper-zinc massive sulphides usually occur at an interface of felsic intermediate rocks. In this environment, there are seldom any significant formations of carbonaceous sediments on the same horizon. Often, these deposits are overlain by a silicious zone which may contain stingers of continuous sulphides, which change to disseminated sulphides away from the main deposit. These often give a deposit the appearance of a long strike-length zone which may not fit the explorationist's target model. A careful analysis of conductivities and apparent widths (half-peak-width), will often reveal the geometry and source. Syngenetic deposits of base metal sulphides of up to 2 km strike length are not unknown, although most sizeable deposits have strike lengths between 500 and 1000 m.

The conductivity of most massive sulphide deposits may be attributed to the pyrrhotite and chalcopyrite content, as both minerals form elongated interconnected masses which are most amenable to the induction of electromagnetic secondary fields. Pyrite normally forms cubic crystals which must be interconnected electrically in order to produce a response. Massive pyrite often produces only a moderate response which may be difficult to distinguish from graphite. The in-situ conductivity of massive sulphides, although very high for individual crystals, often falls in the range of 5 to 20 S/m.

Sulphide conductive zones are rare in nature; economic sulphides are even more scarce. Long formational sulphide zones are known, but are not common. More often, sulphide concentrations may occur within formational graphitic zones.

The geometry of many syngenetic and injected sulphide deposits may fall within broad classifications of size, conductivity and magnetization but most of these bodies are anomalous within their local geological environment. There are often changes in dip, conductivity, thickness and magnetization with respect to the regional environment. There are no rules which apply universally to massive sulphide deposits. One observation which has consistently applied to sulphide deposits is that INPUT responses (amplitude and conductivity) are roughly proportional to mineral content.

The INPUT system is capable of detecting disseminated sulphides within zones of resistivity changes. These may have low conductivities and responses will normally be restricted to channels 1 through 4. The response amplitudes will vary with the horizontal and vertical extent of the zone. Gold deposits often fall within this response classification.

The magnetic response of a sulphide deposit is the most deceiving information available to the explorationist. Although many large economic deposits have a strong direct magnetic association, some of the largest base metal deposits have no magnetic association. An isolated magnetic anomaly caused by oxidation conditions at a volcanic vent flanking a conductor, may have more significance than a body which has a uniform magnetic anomaly along its strike length. Differing geochemical environments often results in the zoning of minerals so that non-homogeneous conductivities and magnetic responses may be favourable parameters.

Graphitic Carbonaceous Conductors

Carbonaceous sediments are usually found within the sedimentary facies of Archean greenstone belts. These represent a low energy, sedimentary environment with good bedding planes and little or no structural deformation. Graphites are often located in basins of the sub-aqueous environment, producing the same body shape as sulphide concentrations. Most often however, they form long, homogeneous planar sequences. These may have thicknesses from a metre to hundreds of metres. The recognition of graphites in this setting is normally straightforward.

Conductivities and apparent widths may be very consistent along strike. Strike lengths of tens of kilometres are common for individual horizons.

The conductivity of a graphite unit is a function of two variables:

a) the quality and quantity of the graphite and

b) the presence of pyrrhotite as an accessory conductive mineral

Pyrite is the most common sulphide mineral which occurs within carbonaceous beds. It does not contribute significantly to the overall conductivity as it will normally be found as disseminated crystals. Greenschist facies metamorphosis will often be sufficient to convert carbonaceous sediments to graphitic beds. Likewise, pyrite will often be transformed to pyrrhotite.

Without pyrrhotite, most graphitic conductors have less than 10 S conductivity-thickness value as detected by the INPUT system or 1 to 10 S/m conductivity from ground geophysical measurements. With pyrrhotite content, there may be little difference from sulphide conductors.

It is not unusual to find local concentrations of sulphides within graphitic sediments. These may be recognized by local increases in apparent width, conductivity or as a conductor offset from the main linear trends.

Graphite has also been noted in fault and shear zones which may cross geological formations at oblique angles.

Serpentinized Peridotites

Serpentinized peridotites are very distinguishable from other anomalies. Their conductivity is low and is caused partially by magnetite. They have a fast decay rates, large amplitudes and strong magnetic correlation.

Magnetite

INPUT anomalies over massive magnetites correlate to the total Fe content. Below 25-30% Fe, little or no response is obtained. However, as the Fe percentage increses, strong anomalies result with a distinguished rate of decay that usually is more pronounced than those for massive sulphides.

Contact zones are often predicted when anomaly trends coincide with lines of maximum gradient along a flanking magnetic anomaly.

Surficial Conductors

Surficial conductors are characterized by fast decay rates and usually have a conductivity-thickness of 1-5 siemens. This value is much higher in saline conditions. Overburden responses are broad, more so than bedrock conductors. Anomalies due to surficial conductivity are dependent on flight direction. This causes a staggering effect from line-to-line as the INPUT response is much stronger for the leading edge of the flat lying surface materials than for the trailing edge. Conductive deposits such as clay beds, may lie in valleys which can be checked on the altimeter trace and with the base maps.

Cultural Conductors

Cultural conductors are identifiable by examining the power line monitor and the film to locate railway tracks, power lines, buidings, fences or pipe lines. Power lines produce INPUT anomalies of high conductivity that are similar to bedrock responses. The strength of cultural anomalies is dependent on the grounding of the source. INPUT anomalies usually lag the power line monitor by 1 second, which should be consistent from line-to-line. If this distance between the INPUT response and the power line monitor differs between lines, then there is the possibility of an additional conductor present. The amplitude and conductivity-thickness of anomalies should be consistent from line-to-line.

APPENDIX F

INPUT Response Models

To the interpreter, one of the main advantages of the INPUT system geometry is the variation of the secondary response with conductor shape, size, depth and conductivity (Palacky 1976, 1977).

When we discuss the recognition parameters, one of the variables which is often omitted, is the plotting position of the main peaks in opposite flight directions on adjacent lines. In many cases, the responses may appear similar, but the plotting positions will show significant differences. These situations will be illustrated in the following section.

A third conductor identification factor is the INPUT decay transient for the main response peak. The decays may be used to identify the type of source, independent of the geometrical response which is dependent on the mutual coupling.

Model and Physical Conductors

Economic conductive mineral deposits have no unique feature which would make their identification a straightforward process. Most ore bodies do have conductivity contrasts and at least one dimension which is significantly small. A conductivity contrast is necessary to overcome the "skin depth" attenuation effects of conductive overburden or lateritic soils on the primary electromagnetic field (West and Macnae 1982). The recognition of dipping conductors is possible, mainly due to the double peaks encountered in an updip flight direction (Figure F1). A horizontal mineral deposit is potentially the most difficult to select because the horizontal sheet model also applies to conductive overburden and lateritic soils. The theoretical shapes may be matched to physical-geological situations as has been done in the following summary:

a) THIN DIPPING SHEET OR PLATE:

economic - stratiform tabular ore body, dyke, vein, fault, fracture mineralization;

non economic - graphitic-carbonaceous shales, barren sulphides

cultural - some grounded power lines, fences

b) SPHERE - CYLINDER:

economic - compact massive orebody; horizontal pipe-shaped conductor

cultural - some pipelines

c) HORIZONTAL SHEET:

economic - some stratabound massive sulphides

non economic - overburden, lateritic soils

- weathered rock
- sea water or saline formations
- graphitic metasediments

d) VERTICAL STRIP (RIBBON)

economic

and

non economic - rarely encountered in nature

cultural - grounded hydro lines, lightning arrestor lines, fences

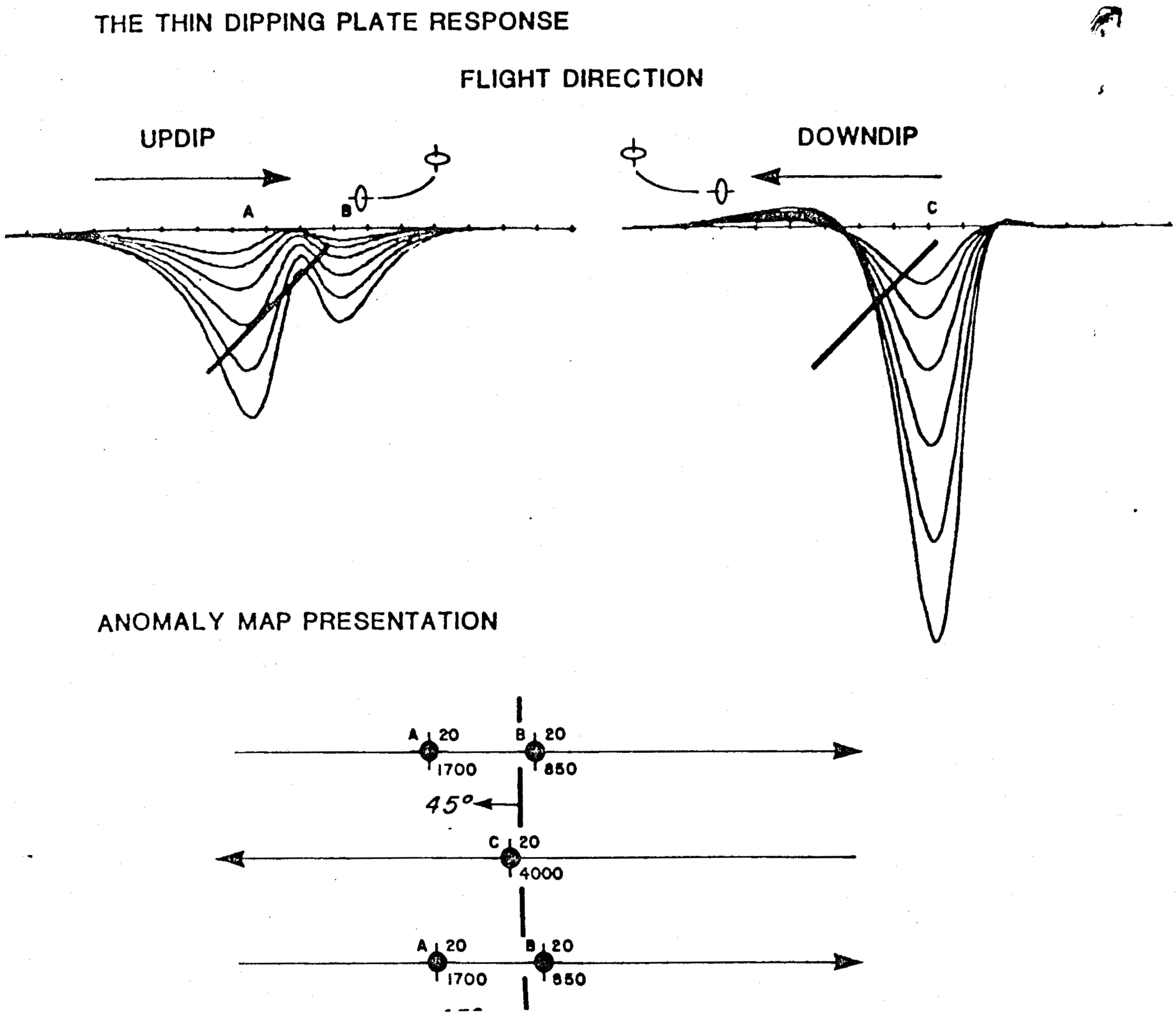
e) HORIZONTAL STRIP (RIBBON)

economic - some stratabound massive sulphides

non economic - some syngenetic mineral deposits

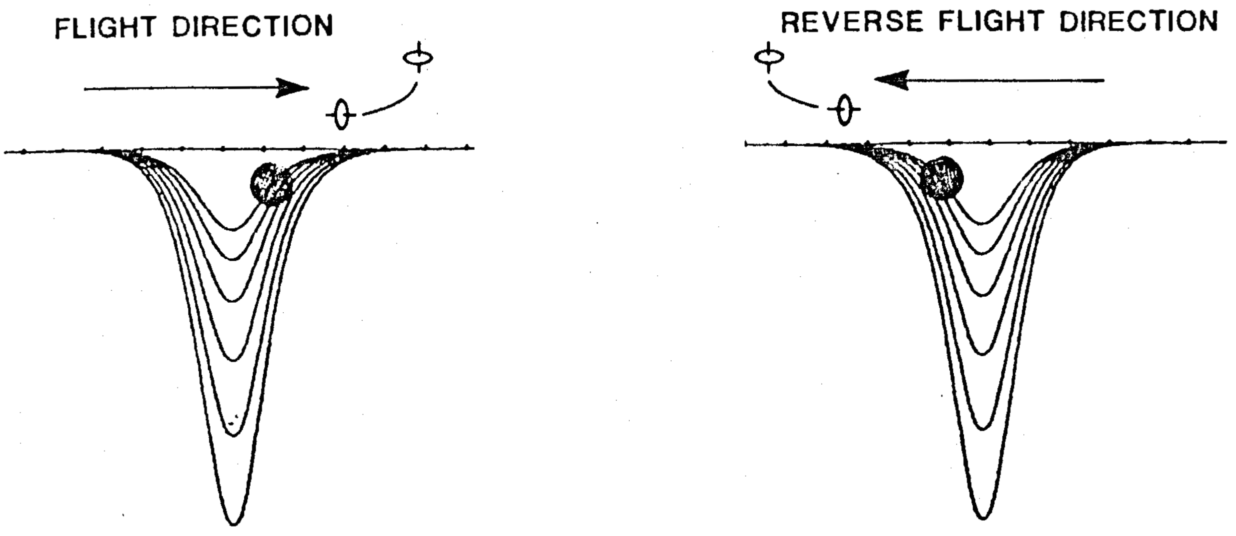
geological - weathering of narrow basic rock units with a high amphibolite content

cultural - grounded and interconnected fences, pipes

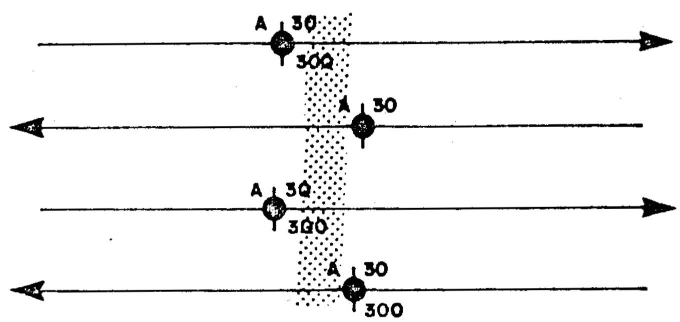


The interpreted conductor axis location varies with the source dip, conductivity, depth, thickness, depth extent and angle of intersection of the flight line to the conductor (strike direction).

THE SPHERE OR CYLINDER RESPONSE



ANOMALY MAP PRESENTATION

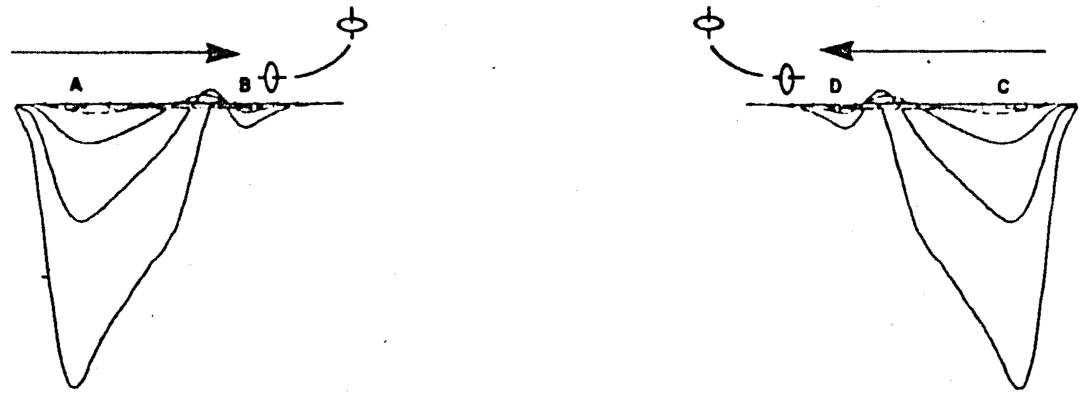


The response of a cylinder may be quite difficult to recognize from a thin strip. A cylinder or spherical model does not show a pronounced negative or upward peak following the main response. Due to the effect of the time constant of the INPUT receiver, the negative peaks which follow the theoretical response do not appear on the INPUT records (Mallick 1972, Morrison et al 1973). As the illustrations show, the sphere-cylinder response is perfectly symmetrical, but not centered over the body. The plotting position of the main peak leads the actual axis location because the most favourable mutual coupling occurs just before the transmitter coil passes the conductive body. The amplitude of the responses will be similar in both flight directions for a perfect cylinder.

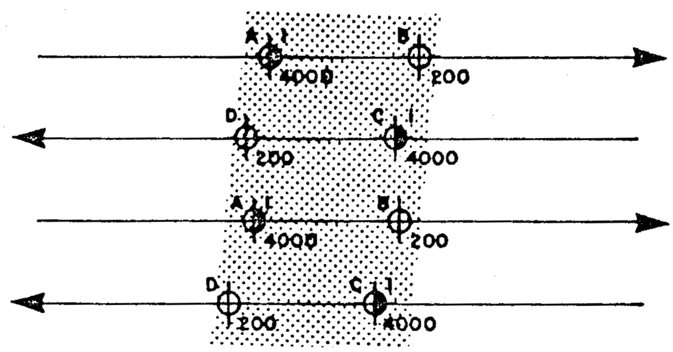
THE HORIZONTAL SHEET

FLIGHT DIRECTION

REVERSE FLIGHT DIRECTION



ANOMALY MAP PRESENTATION



The horizontal conducting sheet has many variations but it is essentially simple to recognize. The amplitudes of the earlier channels may reach 30,000 ppm where saline solutions are present, however, horizontal sheet responses of channels 4, 5 and 6 attenuate, much faster than for a vertical or steeply dipping plate.

The edge effect is a common interpretational problem where the conductive layer has low resistivities. A secondary peak may occur as the receiver coil crosses the far sheet edge. These responses are always very sharp and often have very high apparent conductivities.

The edges of the sheet are positioned approximately at the half-peak width positions which are usually the inflection points of the profile.

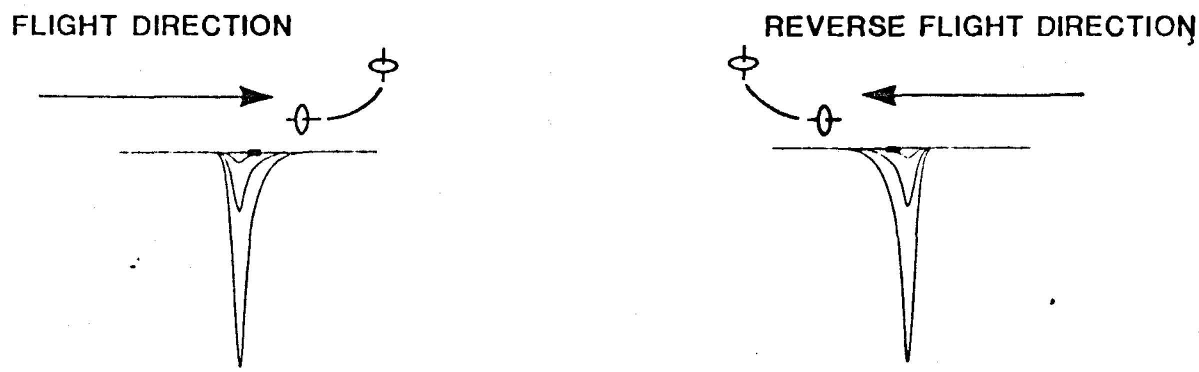
The variations in plotting positions observed for dipping sheets are not as evident for the plate.

It is not unusual to see a shift in the peaks, with the latter channels migrating towards a section of improved conductance and/or increasing thickness. Another characteristic of poorly conducting sheets which respond only on channels 1 through 4 is the inversion of responses on channels 5 and 6. This is a reaction of the compensation circuits to changes in the primary field in the presence of a strong conductor and it serves no practical end except as a recognition aid.

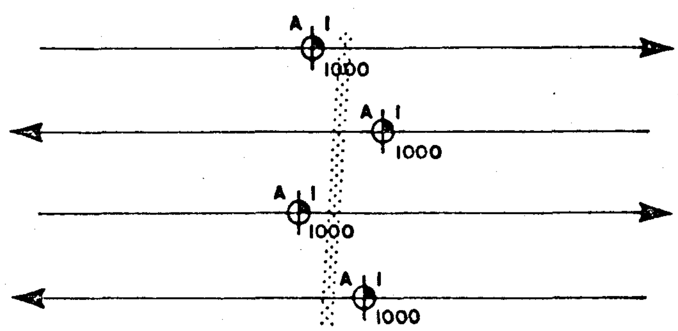
The horizontal sheet model also applies to residual soils or laterite as well as conducting rock units. As the thin overburden situation changes to a thick overburden or two layer case and finally to a half space or a uniformly conductive earth, the responses also vary. The latter cases will have progressively broader responses which would seldom be mistaken for true discrete conductive zones.

When flight lines in opposite directions cross a conductive sheet, an asymmetric mirror image response occurs when the sheet is uniform. If there are variations in the geometry or conductance across the sheet, it may be necessary to compare responses with a shallow dipping sheet conductor to determine the effects, which would not be similar when compared with adjacent lines.

THE HORIZONTAL STRIP (RIBBON) RESPONSE

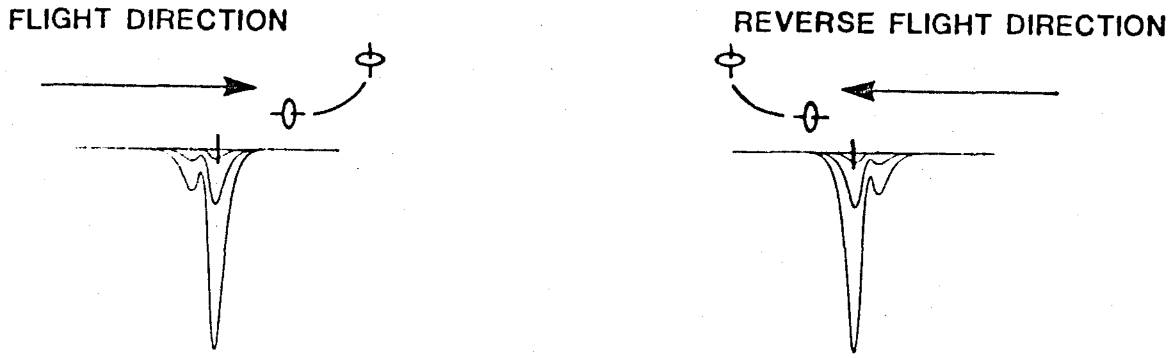


ANOMALY MAP PRESENTATION

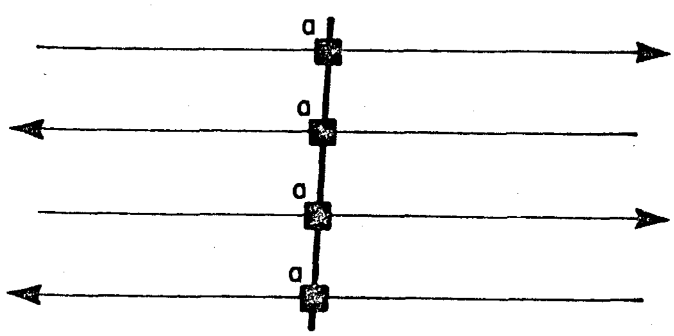


The plotting positions of the responses could easily be mistaken for a vertical plate conductor, however, careful consideration must be given to the line direction. The horizontal ribbon is a degeneration of the horizontal conducting sheet. It can be easily distinguished from a sphere or cylindrical body by its peak asymmetry, whereas the sphere model has a single symmetric main response.

THE VERTICAL STRIP (RIBBON) RESPONSE



ANOMALY MAP PRESENTATION



Due to the fact that this type of response is most commonly caused by fences, lightning protection lines and grounded power lines, the customary cultural presentation is a square symbol. This cultural response symbol may or may not have a power monitor (50-60 cycle) response but these will normally follow pipelines, fences, power lines, roads, railroads and other man made structures. The amplitude and apparent conductivity of such responses varies with the ground conductivity. In residual soils or conductive overburden, it is often possible to see a positive (up-dip type) peak followed by a small negative immediately before the main conductive response. The presence and amplitudes of such responses is normally very consistent. The cause of such responses is interpreted to be current gathering within the surficial sediments (West and Macnae 1982).

APPENDIX G

Quantitative Interpretation

The quantitative interpretation of the INPUT data is normally accomplished by comparing the resultant responses with type curves obtained from theoretical calculations, scale model studies and actual field measurements. A variety of results are available in literature for different conductor geometries and system configurations (see Ghosh 1972, Palacky 1974, Becker et al., 1972, Lodha 1977, Ramani 1980). They also examined the effects of varying such parameters as conductance, conductor depth, dip and depth extent. Their approach has been successfully applied in interpretation of past field surveys.

The nomograms which are currently available for the INPUT system are the Vertical Half-Plane, Homogeneous Half-Space, Thin Overburden and 135 Dipping Half-Plane nomograms. The first is particularly useful for the interpretation of vertical dyke-like conductors frequently found in the Precambrian Shield type environments. In the case of a thick, homogeneous, flat-lying (less than 30 dip) source, the Homogeneous Half-Space nomogram should be applied. While in a thin overburden or tropically weathered rock environment, the Thin Overburden nomogram may be referenced to determine the depth and conductance of the overburden (Palacky and Kadekaru, 1979).

As an example, INPUT anomalies due to vertical dyke-like conductors, are asymmetric and independent of the flight direction. Their shape is characterized by a minor first peak and a major second peak and their channel amplitudes are a function of the conductivity-thickness product and depth of the source. Anomaly A in Figure G1 illustrates one of these responses.

The channel amplitudes of anomaly A can be used in quantitative interpretation in the following way. Their values are plotted for each of the six channels on logarithmic (5 cycles K+E 46 6213) tracing paper in a straight line using the vertical logarithmic scale in parts per million as given on the right side of Figure G2. The six channel amplitudes for anomaly A, in ppm, are 840, 540, 390, 280, 180, 120, respectively. The amplitudes are measured in ppm (1mm - 30 ppm) from the flight records with reference to the normal background levels on respective channels. Those responses which are not at least three channels or whose first channel amplitude is less than 2 mm or 60 ppm over the normal background should be discarded in the present analysis. The six points on the semi-logarithmic paper are then fitted to the curves of the vertical half-plane nomogram (Figure G2) without any rotation. Having accomplished this, the lateral placement of the plot indicates the apparent conductivity-thickness value, in siemens, and the position of the 10,000 ppm line on the logarithmic paper indicates the conductor depth, in metres. In the example shown (Figure G2), the apparent conductivity-thickness value is 31 siemens and the depth is 46 metres.

The asymmetric Tx-Rx configuration is very sensitive to changes of dip, particularly in the case of conductors dipping against the flight direction. In this circumstance, there is a change in the magnitude of the second/first peak ratio for all

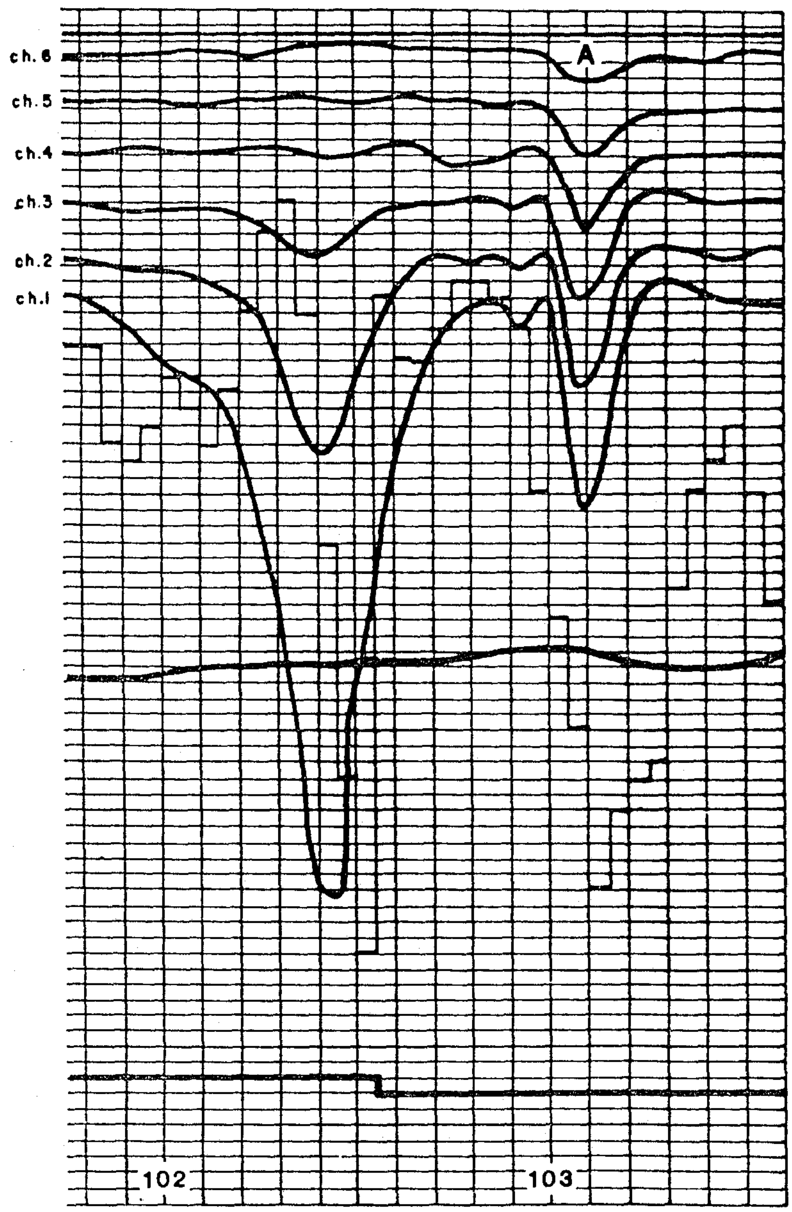


Figure G1

FIXED WING INPUT
VERTICAL HALF PLANE
CONDUCTIVITY / DEPTH NOMOGRAM

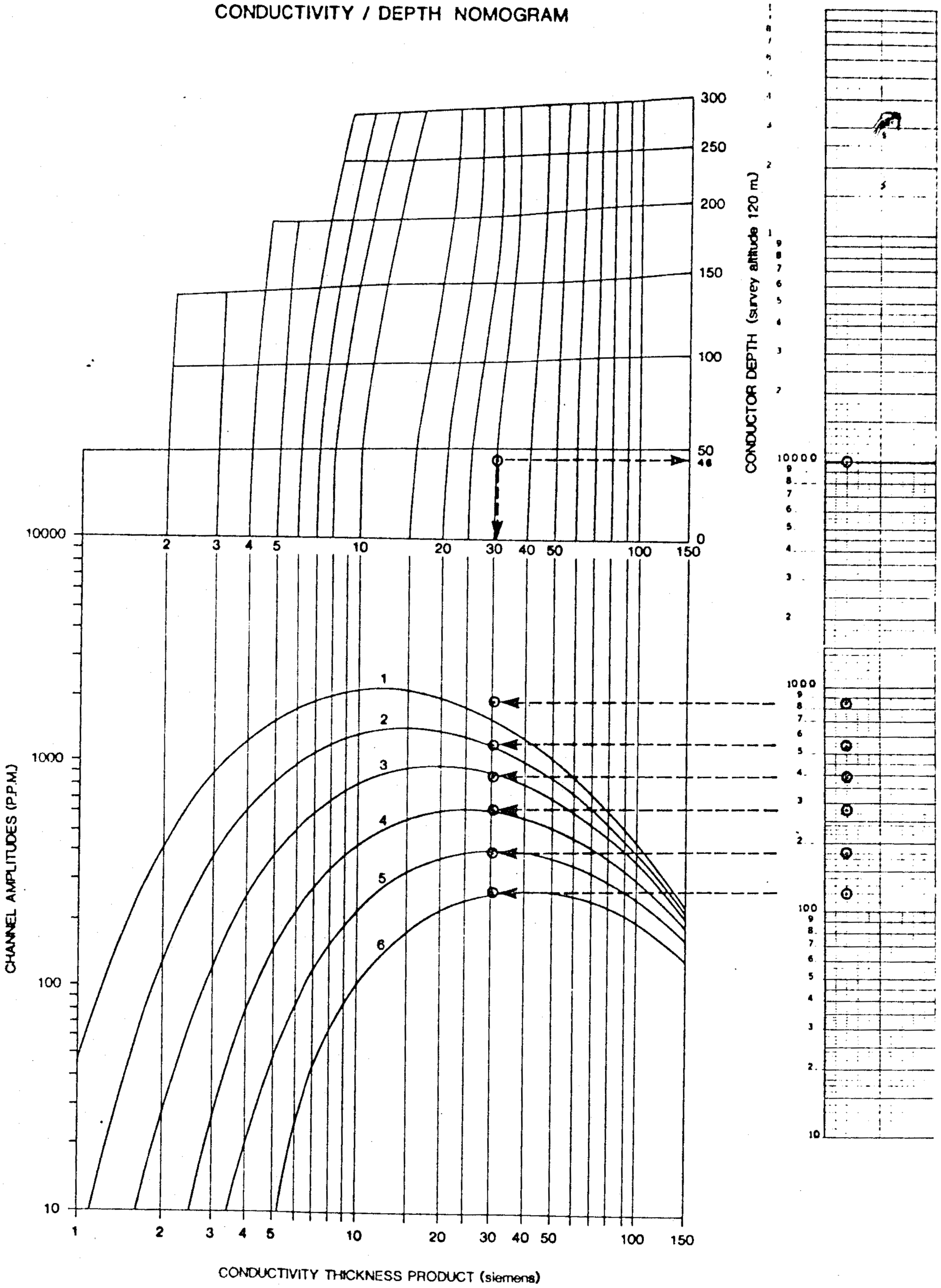


Figure G2

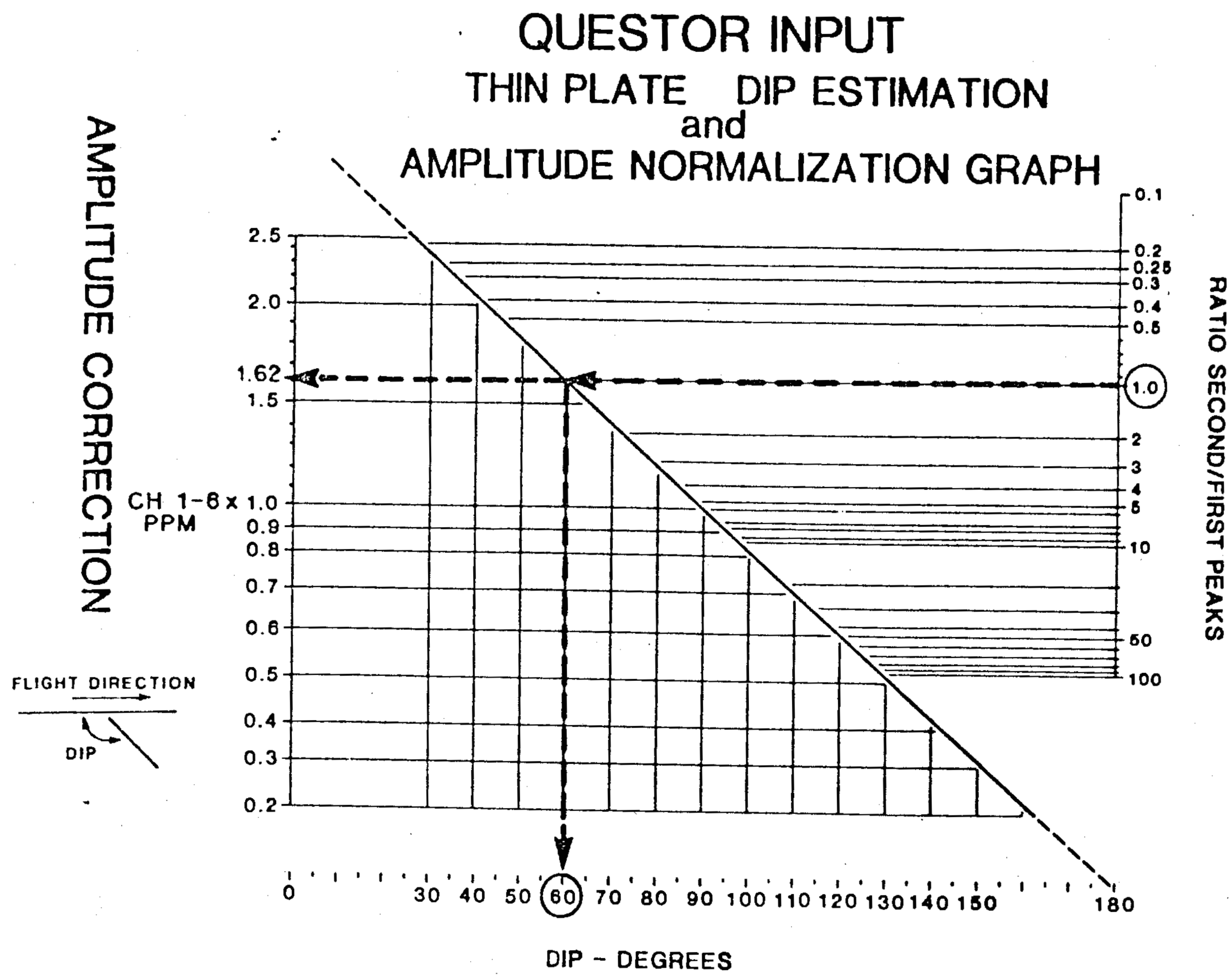

QUESTOR INPUT
THIN PLATE DIP ESTIMATION
and
AMPLITUDE NORMALIZATION GRAPH
AMPLITUDE CORRECTION
2.5
2.0
1.62
1.5
CH 1-6 x PPM
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
FLIGHT DIRECTION
DIP
RATIO SECOND/FIRST PEAKS
0.1
0.2
0.25
0.3
0.4
0.5
1.0
2
3
4
5
10
50
100
0
30 40 50 60 70 80 90 100 110 120 130 140 150
180
DIP - DEGREES

Figure G3

channels. The ratio of the amplitudes of the two peaks is a function of dip. The dip should be the first parameter determined in the quantitative interpretation of a dipping conductor. Before the amplitude is further used for an estimate of conductivity-thickness and depth, it must be normalized to a dip of 90°. This correction is performed by means of the Thin Plate Dip Estimation and Amplitude Normalization Graph, Figure G3.

From the graph, it can be seen that a vertical dyke conductor should have a second/first peak ratio of approximately 6, i.e., that the first peek will have 16% of the amplitude of the second peak. In the case of anomaly A, this condition is true. Conversely, should the dyke dip at 60°, the ratio will decrease to 1.0. Thus, the dip of a conductor can be estimated from the peak ratios of channel two by using the graph in Figure G3.

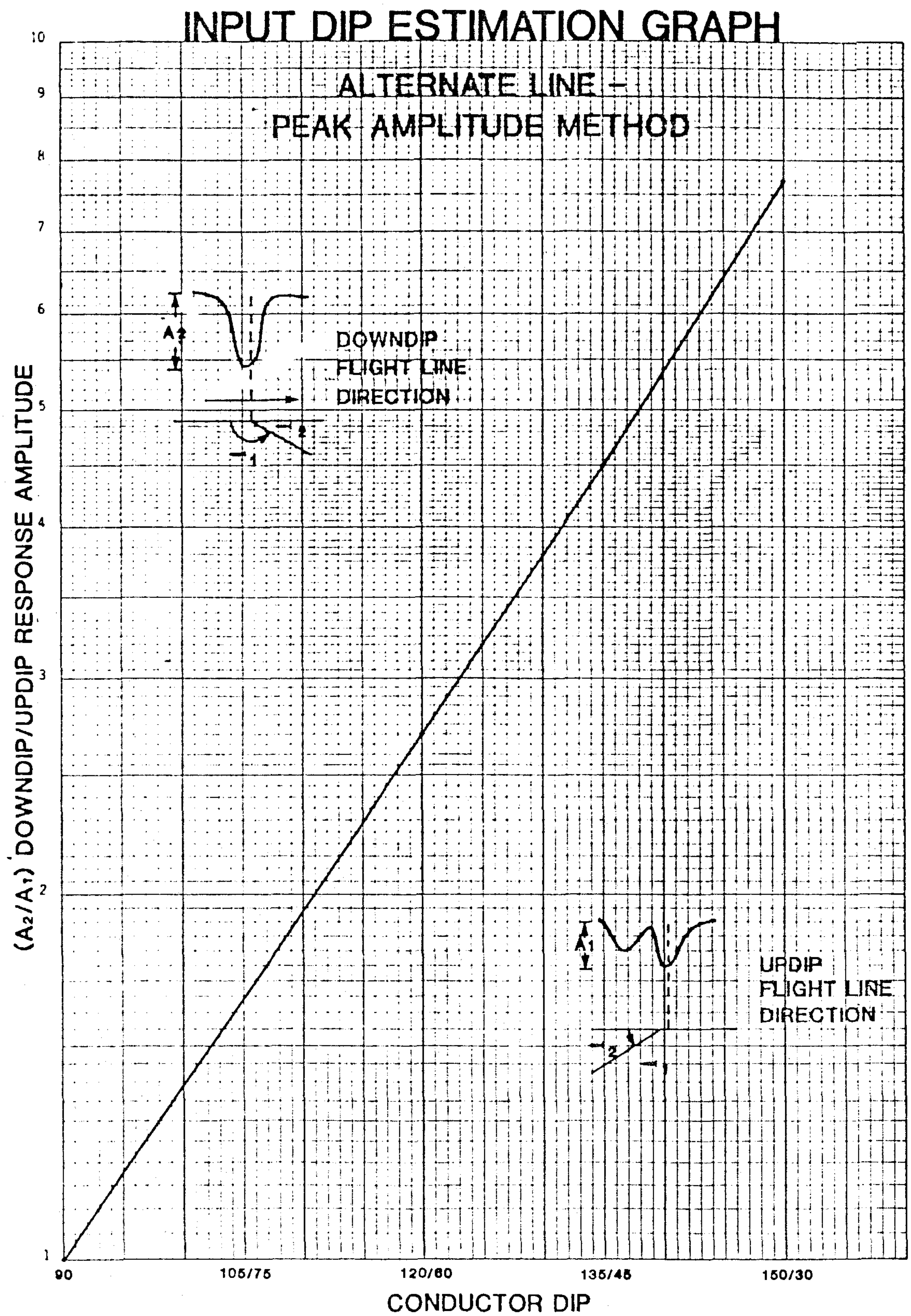
An example of amplitude correction determination is shown in Figure G3. A dipping conductor has an up-dip second-first peak ratio of 1.0 i.e., that the channel amplitudes of the minor first peak and major second peak of channel two are equal. Taking this ratio of 1.0 and applying the graph, we obtain a dip of 60° for the conductor and an amplitude correction of approximately 1.62. Consequently, the correction factor is applied to the six channel amplitudes of the associative down-dip response. This response is then fitted to the vertical half-plane nomogram for the determination of its apparent conductivity-thickness value and depth. It should be mentioned that without the dip correction, the depth would be overestimated.

An alternate method for estimating the dips of longer, tabular conductors, utilizes the peak amplitudes on adjacent lines, see Figure G4. It is especially useful in multiple conductive zones where the up-dip responses may be obscured or yield false values due to the superposition of other nearby anomalies.

Note that the depth determination is made with the assumption that the aircraft is at 120 metres above the ground surface at the time of measurement. If the aircraft is above or below the altitude of 120 metres, the depth determination can be corrected by respectively, subtracting or adding the difference in altitude, within limits.

The homogeneous half-space, thin overburden and the dipping half-plane 135° nomograms are used in the same fashion as that described above for the vertical half-plane.

To estimate the apparent strike length of a conductor, the ends of the conductive trend must be determined. Modelling has shown that the conductor ends are delineated by INPUT responses having channel amplitudes not less than 40% of those typical for the conductor. Responses with less than that of 40% are attributive to lateral coupling effects and are not considered as intercepts of the conductor. This is especially true for conductors of higher conductivity. Subsequently, the strike length of a conductor is equal to the distance between those responses representing the ends of the conductor.



INPUT DIP ESTIMATION GRAPH
ALTERNATE LINE -
PEAK AMPLITUDE METHOD
10
9
8
7
6
5
4
3
2
1
(A2/A1) DOWNDIP/UPDIP RESPONSE AMPLITUDE
A2
DOWNDIP
FLIGHT LINE
DIRECTION
A1
UPDIP
FLIGHT LINE
DIRECTION
90
105/75
120/60
135/45
150/30
CONDUCTOR DIP

Figure G4

APPENDIX H

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JOB NO:260070

INPUT LINE	EM FIDUCIAL	ANOMALY TYPE	CHS	PEAK CH1	RESPONSE CH2	CH3	AMPLITUDES CH4	CH5	(PPM) CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL	VALUE
39030A	252.455		3	1983	755	247	-	-	-	6	122	252.52	[illegible]
39030B	253.090	P	3	1171	427	117	-	-	-	5	152	-	
39030C	253.431	P	4	1282	484	175	33	-	-	6	110	-	
39030D	254.349		3	1195	500	184	-	-	-	7	121	-	
39030E	254.992	P	5	1735	605	206	22	21	-	6	127	-	
39030F	255.379	P	4	1156	479	217	73	-	-	9	118	-	
39030G	256.174		6	1680	865	443	235	137	35	17	147	-	
39030H	256.434		5	2607	1388	714	317	194	-	14	135	-	
39030J	256.733		5	1907	753	280	115	61	-	9	122	256.70	5
39030K	256.889		5	1863	855	392	148	77	-	11	121	257.13	5
39030L	257.225		6	3023	1645	836	409	224	78	16	115	-	
39030M	257.368		6	3067	1933	1019	585	355	174	22	130	-	
39030N	257.524		6	2729	1766	992	521	317	126	22	148	257.65	9
39030P	257.633		6	3071	1784	927	419	235	145	17	131	-	
39030R	257.915		5	2336	1556	864	400	246	-	18	113	-	
39030S	258.264		6	1417	1040	664	365	274	123	42	153	258.48	5
39030T	258.631		6	2922	2068	1326	823	567	318	49	199	-	
39030W	258.845		6	4132	2723	1609	949	614	343	35	145	-	
39030Y	259.228		6	2670	1720	1019	613	402	218	36	111	259.15	10
39030Z	259.687		6	8366	5473	3251	1777	979	456	26	112	259.58	17
39030AA	260.032		6	12379	9505	4909	4316	2761	1664	82	135	-	
39030BB	260.785		6	1287	568	273	139	132	32	17	131	260.63	8
39030CC	261.206		4	4551	2103	768	203	-	-	7	120	261.13	5
39022A	242.136	P	5	644	163	87	74	53	-	37	152	-	
39022B	243.634	P	5	526	285	117	59	56	-	12	141	-	
39022C	244.429	P	3	975	347	167	-	-	-	10	121	-	
39022D	244.732	P	3	1336	461	138	-	-	-	5	92	-	
39022E	245.127	P	3	1469	483	63	-	-	-	3	114	-	
39022F	245.581		3	560	255	74	-	-	-	5	161	-	
39022G	246.246		4	2910	1294	432	101	-	-	6	112	-	
39022H	246.486		5	2396	956	312	127	103	-	8	131	-	
39022J	246.709	P	5	1032	368	167	114	46	-	14	110	-	
39022K	247.443		3	487	194	41	-	-	-	4	116	-	
39022L	248.019		6	3958	2287	1152	551	214	104	14	143	-	
39022M	248.309		5	7969	3890	1564	528	205	-	8	111	-	
39022N	248.751		6	7397	5303	3475	2242	1362	844	52	123	-	
39022P	249.008		6	8539	6033	3996	2550	1598	1013	54	124	-	
39022R	249.462		4	4032	2076	877	252	-	-	8	138	-	
39022S	249.715		6	6509	3770	1857	845	354	85	13	113	-	
39022T	249.858		6	5828	3013	1316	489	192	16	9	116	-	
39022W	250.335	P	3	382	102	28	-	-	-	5	143	-	
39010A	266.860		5	2805	1258	522	101	47	-	7	128	267.02	48
39010B	267.533		4	1179	454	167	55	-	-	7	132	-	
39010C	268.249		4	2781	1114	437	132	-	-	7	138	268.05	46
30010A	232.783	P	5	928	514	247	103	83	-	13	183	-	

JOB NO:26007C

INPUT EM LINE	FIDUCIAL	ANOMALY TYPE	CHS	PEAK RESPONSE AMPLITUDES (PPM) CH1	CH2	CH3	CH4	CH5	CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL	V[illegible]
30010B	232.918		6	1612	1136	745	431	331	196	51	175	-	
30010C	233.170		6	1888	1287	824	434	223	167	35	171	-	
30010D	233.288		5	1501	978	687	324	142	-	32	162	-	
30010E	233.629		6	5713	2730	1195	514	218	119	12	140	-	
30010F	233.978		3	887	504	284	-	-	-	15	105	-	
30010G	234.286		6	2823	1967	1180	689	392	232	33	121	-	
30010H	234.513		6	2379	1688	1004	555	291	126	25	131	-	
30010J	235.102		4	730	352	134	75	-	-	9	126	-	
30010K	235.712		3	710	352	166	-	-	-	10	128	235.63	39
30010L	236.162		6	2424	1705	1013	600	291	150	28	120	-	
30010M	236.478		6	3002	1843	1041	553	332	155	23	123	-	
30010N	236.616		6	3243	2160	1354	791	443	259	38	174	-	
30010P	236.821	U	6	5168	2992	1491	732	357	209	16	166	-	
30010R	237.046		5	1934	1007	463	199	52	-	10	128	-	
30020A	215.188		5	2594	894	313	118	53	-	8	126	-	
30020B	215.794		6	13430	8403	4529	2209	980	398	16	109	-	
30020C	216.261		6	7778	4759	2543	1361	672	338	19	127	-	
30020D	216.366		6	5753	3846	2210	1290	732	435	29	159	-	
30020E	216.552		6	6076	3309	1585	725	284	100	13	151	-	
30020F	216.728		5	2831	1295	507	195	38	-	8	119	-	
30020G	217.078		2	454	49	-	-	-	-	NC	94	-	
30020H	217.591		4	819	343	166	83	-	-	12	146	-	
30020J	218.188		4	499	322	206	134	-	-	38	134	-	
30020K	218.659		6	2418	1909	1238	823	531	329	54	90	-	
30020L	219.042		5	1382	881	448	242	115	-	15	150	-	
30020M	219.387		6	1787	1092	562	285	118	101	17	142	-	
30020N	219.665		6	2809	1731	994	583	330	199	29	130	-	
30020P	220.136		6	8253	5283	3128	1845	1097	649	33	126	-	
30020R	220.275		6	10161	6303	3467	1776	823	367	19	116	-	
30030A	205.557		5	2365	988	309	132	23	-	7	156	-	
30030B	206.230	P	5	1447	489	90	57	34	-	6	140	-	
30030C	207.282	P	3	670	179	34	-	-	-	3	96	-	
30030D	209.229	P	5	909	385	170	43	26	-	9	141	209.10	40
30030E	209.760		6	19349	9793	4908	3602	1577	684	18	110	-	
30030F	209.907		6	9986	7229	4175	2450	1329	850	29	112	-	
30030G	210.311		6	4395	2937	1811	1137	674	400	42	134	-	
30030H	210.513		6	3465	2242	1274	614	325	177	21	122	-	
30030J	210.748		6	2225	1651	1081	680	397	302	51	131	-	
30030K	210.925		6	1887	1447	950	618	360	198	50	140	-	
30030L	211.224		6	2733	1889	1160	667	395	220	36	116	-	
30030M	212.527	P	4	585	408	201	30	-	-	8	155	-	
30030N	212.915		6	4176	2615	1347	611	230	111	14	119	-	
30030P	213.363	U	6	8023	5105	2978	1698	979	602	30	136	-	
30030R	213.533		6	7495	4478	2324	1215	657	321	18	130	-	
30030S	214.004		6	11906	7357	4517	2841	1698	960	41	99	-	
30030T	214.286		6	8131	5897	3782	2322	1344	735	43	143	-	
30040A	189.282		6	4871	3277	1905	1047	596	353	27	129	-	

JOB NO:26007C

INPUT EM		ANOMALY		PEAK RESPONSE AMPLITUDES (PPM)						TCP	ALT	MAGNETIC	
LINE	FIDUCIAL	TYPE	CHS	CH1	CH2	CH3	CH4	CH5	CH6	(S)	(M)	FIDUCIAL	VALUE
30040B	189.547		6	5467	3083	1581	790	395	279	18	145	-	
30040C	189.976		6	5728	4042	2437	1334	672	387	27	156	-	
30040D	190.195		6	6102	4096	2493	1460	881	586	38	131	-	
30040E	190.452		6	4062	2811	1736	1054	643	386	41	146	-	
30040F	190.658		6	3529	2351	1333	793	411	182	24	169	190.75	12
30040G	190.886		5	4213	1863	639	263	45	-	7	132	-	
30040H	192.508		6	4778	3192	1856	1012	582	331	27	160	-	
30040J	192.824		6	3984	2863	1885	1181	763	533	54	154	193.15	8
30041A	194.904		6	3806	2578	1555	948	483	268	31	151	-	
30041B	195.232		6	3986	2853	1811	1126	683	433	46	160	-	
30041C	195.497		6	2947	2047	1234	681	319	170	26	143	195.48	5
30041D	195.985		6	4071	2976	1911	1201	677	353	44	127	-	
30041E	196.351		6	5398	4090	2713	1740	1035	630	52	130	196.38	16
30041F	196.625		6	5046	3065	1591	837	410	206	18	155	-	
30041G	196.776		5	5477	2826	1134	370	43	-	7	183	-	
30041H	197.618	P	2	314	56	-	-	-	-	NC	138	-	
30041J	199.931		4	864	377	129	39	-	-	6	146	-	
30041K	200.958	P	4	1362	450	149	38	-	-	6	141	-	
30041L	201.556		4	1608	604	248	119	-	-	9	129	-	
30041M	202.072	P	4	1597	610	178	34	-	-	5	131	-	
30041N	202.211	P	4	1579	611	177	37	-	-	5	129	-	
30041P	202.825	P	2	323	113	-	-	-	-	NC	135	-	
30042A	92.154		3	883	364	83	-	-	-	4	153	-	
30042B	93.269		2	579	180	-	-	-	-	NC	145	-	
30042C	94.943		4	969	378	141	68	-	-	8	166	94.82	39
30042D	95.402		6	4510	2721	1475	776	418	206	20	159	-	
30042E	95.616		6	3372	1700	856	487	337	212	22	152	95.80	7
30042F	95.903		6	18006	9780	4859	4359	2329	1012	28	117	-	
30042G	96.138		6	6178	4021	2161	1218	680	412	23	134	-	
30042H	96.525		6	1833	1403	949	690	438	296	67	136	-	
30042J	96.748		6	1462	1066	690	452	290	175	52	130	96.87	7
30042K	97.030		6	2742	1843	1057	574	298	202	25	159	-	
30050A	179.254		4	1121	481	181	43	-	-	7	162	-	
30050B	179.431		4	1089	440	135	27	-	-	5	145	-	
30050C	179.789	P	4	1453	445	113	25	-	-	5	131	-	
30050D	180.100	P	3	1217	472	134	-	-	-	5	148	-	
30050E	180.760		4	1259	395	63	32	-	-	4	143	-	
30050F	181.197		3	731	201	12	-	-	-	1	129	-	
30050G	182.969		4	704	367	135	58	-	-	8	159	-	
30050H	183.461		6	3427	2351	1495	950	542	332	45	142	-	
30050J	183.734		6	3363	2556	1675	1086	576	369	48	145	-	
30050K	184.008		6	2589	1885	1185	804	518	345	52	180	-	
30050L	184.328		6	4041	2919	1983	1313	836	556	61	112	-	
30050M	184.656		6	4652	3049	1626	806	368	150	17	149	-	
30050N	184.934		6	6702	4549	2718	1611	889	508	32	161	-	

JOB NO:26007C

INPUT EM		ANOMALY		PEAK	RESPONSE	AMPLITUDES		(PPM)		TCP	ALT	MAGNETIC	
LINE	FIDUCIAL	TYPE	CHS	CH1	CH2	CH3	CH4	CH5	CH6	(S)	(M)	FIDUCIAL	VALUE
30050P	185.047		6	6037	4204	2645	1637	978	722	46	143	-	
30050R	185.253		6	4805	3123	1728	937	508	326	23	140	-	
30050S	185.514		6	5052	2315	901	303	93	30	8	125	-	
30050T	186.587	P	5	1191	383	111	43	20	-	7	145	-	
30050W	186.825		6	2383	1652	982	579	307	192	31	147	-	
30050Y	187.208		6	2995	2222	1386	842	516	315	42	159	-	
30050Z	187.364		6	3299	2398	1525	1009	652	450	52	141	-	
30050AA	187.646		6	7035	5266	3666	2461	1626	1127	68	139	-	
30050BB	187.949		6	10895	7299	4322	2403	1199	631	26	108	-	
30050CC	188.357		6	5061	3489	2147	1298	830	511	42	125	-	
30060A	161.755		6	4498	3327	2220	1464	963	700	60	131	-	
30060B	161.952		6	4488	3473	2350	1644	1044	707	65	138	-	
30060C	162.201		6	3972	2909	1872	1211	729	538	51	127	-	
30060D	162.579		6	2782	2048	1341	889	561	409	56	162	-	
30060E	162.844		6	3903	2659	1681	1009	596	385	43	173	-	
30060F	163.051		6	3312	2112	1166	648	320	151	21	157	-	
30060G	163.265		6	3519	1812	920	433	138	69	14	122	-	
30060H	164.687		3	850	372	141	-	-	-	7	176	164.57	37
30060J	165.006		6	4435	3307	2221	1483	947	673	61	157	-	
30060K	165.112		6	4302	3286	2189	1384	838	575	54	171	-	
30060L	165.402		6	3449	2580	1721	1144	708	493	58	156	-	
30060M	165.827		6	1645	1257	890	575	406	287	71	162	165.73	21
30060N	166.147		6	3490	2217	1265	728	379	263	27	128	166.27	15
30060P	166.471		6	4257	2986	1868	1127	684	420	42	97	-	
30060R	166.706		6	4009	2561	1424	672	252	129	16	133	-	
30060S	167.392	P	3	834	210	60	-	-	-	5	133	-	
30060T	169.500		4	1378	649	232	65	-	-	7	147	-	
30060W	169.841		4	1467	381	89	39	-	-	5	122	-	
30060Y	170.434	P	3	1339	437	110	-	-	-	5	137	-	
30060Z	170.835	P	3	779	214	48	-	-	-	4	170	-	
30060AA	171.109		3	1378	404	105	-	-	-	5	126	-	
30060BB	171.382	P	2	742	143	-	-	-	-	NC	114	-	
30060CC	171.807	P	4	643	201	90	44	-	-	10	116	-	
30060DD	172.535	P	3	893	247	29	-	-	-	2	174	-	
30061A	173.083	P	4	512	265	132	46	-	-	10	252	-	
30061B	173.542	P	4	1293	531	198	48	-	-	7	198	-	
30061C	174.080	P	3	1738	488	81	-	-	-	3	112	-	
30061D	174.438		3	1492	527	189	-	-	-	6	122	-	
30061E	174.838		3	693	282	61	-	-	-	4	136	-	
30061F	175.225	P	4	986	441	167	83	-	-	8	146	-	
30061G	175.848		3	1318	428	101	-	-	-	4	134	-	
30070A	148.479		4	1026	367	86	29	-	-	5	136	-	
30070B	149.438		3	1036	369	112	-	-	-	5	150	-	
30070C	150.313		4	611	229	67	43	-	-	7	147	-	
30070D	150.831		4	1090	348	149	52	-	-	9	157	-	

JOB NO:26007C

INPUT EM		ANOMALY		PEAK	RESPONSE		AMPLITUDES		(PPM)	TCP	ALT	MAGNETIC	
LINE	FIDUCIAL	TYPE	CHS	CH1	CH2	CH3	CH4	CH5	CH6	(S)	(M)	FIDUCIAL	VALUE
30070E	152.202		4	582	263	81	29	-	-	6	178	-	
30070F	153.115		4	1412	661	313	121	-	-	10	142	-	
30070G	153.307		6	1235	997	647	378	220	132	43	156	-	
30070H	153.694		6	1344	1046	696	461	290	213	59	135	-	
30071A	155.823		4	1191	438	121	98	-	-	7	150	-	
30071B	156.036		6	2555	1669	1004	560	295	195	30	120	-	
30071C	156.301		6	1228	951	620	439	256	169	56	146	-	
30071D	156.545		6	1270	976	617	416	233	171	49	152	-	
30071E	156.703		6	1897	1201	677	391	192	155	26	164	156.77	14
30071F	156.852		6	2022	1463	904	601	367	282	48	163	-	
30071G	157.079		6	2139	1681	1168	752	538	429	70	153	-	
30071H	157.357		6	3236	2434	1622	1120	773	564	65	143	-	
30071J	157.639		6	7684	4934	3007	1890	1177	775	43	139	-	
30071K	158.246	P	2	369	162	-	-	-	-	NC	105	-	
30071L	158.730	P	5	585	292	153	94	58	-	20	120	-	
30071M	159.219		6	3063	1811	950	455	197	101	16	156	-	
30071N	159.409		6	5258	2988	1418	603	258	99	12	138	-	
30071P	159.800		6	4685	2918	1679	871	429	241	22	168	-	
30071R	160.006		6	7999	4882	2675	1346	677	395	20	110	-	
30071S	160.217		6	7592	4782	2777	1592	940	624	31	123	-	
30071T	160.587		6	2522	1898	1194	821	538	378	54	134	-	
30080A	136.266		6	11131	7495	4451	2558	1405	816	30	126	-	
30080B	136.413		6	10210	6745	3908	2231	1236	732	28	117	-	
30080C	136.602		6	6014	4179	2421	1475	828	530	32	130	-	
30080D	136.754		6	4515	3302	2033	1288	742	497	42	174	-	
30080E	137.044		6	4291	2505	1265	589	227	107	14	157	-	
30080F	137.238		6	2769	1591	813	399	234	132	18	106	-	
30080G	137.743		6	8131	4916	2798	1561	798	417	23	118	-	
30080H	138.105		6	4617	2832	1507	752	335	170	17	134	-	
30080J	138.506		4	1928	982	457	229	-	-	11	103	-	
30080K	138.981		2	541	206	-	-	-	-	NC	120	-	
30080L	139.162		2	591	154	-	-	-	-	NC	122	-	
30080M	139.485		3	1253	628	212	-	-	-	6	121	-	
30080N	139.989		6	8139	5057	2960	1665	899	565	28	133	-	
30080P	140.090		6	5232	3554	2096	1310	754	503	37	135	-	
30080R	140.557		6	3845	2871	1918	1279	770	557	58	139	-	
30080S	140.780		6	4717	3638	2454	1612	959	643	57	161	-	
30080T	141.129		6	4362	3207	2030	1293	785	514	47	100	-	
30080W	141.357		6	1645	1126	627	359	134	123	22	127	-	
30080Y	141.811		2	499	143	-	-	-	-	NC	152	-	
30080Z	142.644		3	1197	298	88	-	-	-	5	130	-	
30080AA	144.137		3	1320	524	155	-	-	-	5	170	-	
30080BB	144.288		3	925	389	142	-	-	-	7	172	-	
30080CC	144.607		4	1612	447	156	64	-	-	7	107	-	
30080DD	145.235		4	909	226	70	23	-	-	6	116	-	
30080EE	145.808		3	642	173	47	-	-	-	5	133	-	
30080FF	147.372		4	1296	530	179	50	-	-	6	159	-	

JOB NO:26007C

INPUT EM LINE	INPUT EM FIDUCIAL	ANOMALY TYPE	ANOMALY CHS	PEAK RESPONSE AMPLITUDES (PPM) CH1	CH2	CH3	CH4	CH5	CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL	MAGNETIC VALUE
30090A	125.378	P	4	596	310	176	42	-	-	11	143	-	
30090B	126.283		3	605	228	98	-	-	-	8	108	-	
30090C	126.683		3	566	153	61	-	-	-	8	117	-	
30090D	127.259	P	4	567	262	98	58	-	-	9	160	-	
30090E	127.495	P	4	1025	392	104	33	-	-	5	152	-	
30090F	127.714	P	3	951	302	94	-	-	-	5	130	-	
30090G	129.034		4	910	329	148	31	-	-	8	155	-	
30090H	130.221	P	6	1928	1250	727	416	222	102	25	146	-	
30090J	130.396		6	2840	2052	1315	831	482	307	46	125	-	
30090K	130.800		6	1574	1136	678	428	264	144	38	149	131.00	5
30090L	131.175		6	1957	1471	1090	728	447	317	77	182	-	
30090M	131.440		6	3182	2074	1259	815	544	382	46	184	-	
30090N	131.633		6	5805	3589	1998	1081	571	275	22	154	-	
30090P	132.020		4	805	271	107	81	-	-	10	121	-	
30090R	132.420	P	3	1685	542	152	-	-	-	5	102	-	
30090S	132.567		4	1644	751	265	94	-	-	7	104	-	
30090T	133.140		5	1579	700	277	116	40	-	9	110	-	
30090W	133.288		4	1173	660	325	126	-	-	11	151	133.32	56
30090Y	133.657		6	5683	3226	1698	831	360	177	16	135	-	
30090Z	133.846		6	4362	2598	1391	763	337	138	18	106	133.95	18
30090AA	134.196		6	2225	1171	517	209	72	43	11	124	134.27	26
30090BB	134.441		5	1445	668	274	123	47	-	9	143	-	
30090CC	134.688		6	3342	2146	1265	727	383	224	27	143	-	
30090DD	134.856		6	5421	3400	1939	1153	639	361	28	131	-	
30100A	109.004	P	4	2650	1026	449	212	-	-	10	124	-	
30100B	109.294		6	5022	2478	1100	464	142	53	10	128	-	
30100C	109.412		6	7132	4196	2195	1092	548	226	17	115	-	
30100D	109.711		6	5659	3321	1718	861	415	192	16	155	-	
30100E	109.909		6	7275	4682	2778	1621	842	447	29	125	110.40	31
30100F	110.952		4	1466	747	306	109	-	-	8	128	110.82	26
30100G	111.188	P	4	1453	430	62	23	-	-	4	145	-	
30100H	111.461		4	2518	857	303	97	-	-	7	110	-	
30100J	111.878	P	3	439	145	12	-	-	-	1	147	-	
30100K	112.261		6	3190	2055	1224	749	366	191	30	111	112.25	9
30100L	112.830		6	2938	1689	828	424	140	129	15	111	113.03	17
30100M	113.048		6	3339	2055	1110	616	290	201	21	102	-	
30100N	113.250		6	3958	2464	1397	700	343	127	19	133	-	
30100P	113.431		6	3373	1910	930	458	191	87	14	140	-	
30101A	121.010		4	1845	581	179	46	-	-	6	152	-	
30102A	84.453		4	1386	545	195	41	-	-	6	127	-	
30102B	84.802		2	392	112	-	-	-	-	NC	143	-	
30102C	85.256		6	2205	1492	924	548	294	171	36	140	85.25	9
30102D	85.989		6	1248	898	547	245	177	118	29	181	86.05	8

JOB NO:26007C

INPUT EM		ANOMALY		PEAK RESPONSE AMPLITUDES (PPM)						TCP	ALT	MAGNETIC	
LINE	FIDUCIAL	TYPE	CHS	CH1	CH2	CH3	CH4	CH5	CH6	(S)	(M)	FIDUCIAL	VALUE
30102E	86.439		6	1750	1076	623	320	182	118	25	204	-	
30102F	86.540	P	4	1698	980	508	219	-	-	13	196	-	
30102G	89.909	P	3	1776	475	121	-	-	-	5	150	-	
30110A	99.726	P	2	199	105	-	-	-	-	NC	194	-	
30110B	102.318		6	2720	1346	702	377	165	88	18	131	101.78	22
30110C	102.545		6	3419	1962	1017	494	234	116	16	132	-	
30110D	102.680		6	3812	2431	1408	799	391	273	26	129	102.88	20
30110E	102.962		3	2879	1407	614	-	-	-	9	137	-	
30110F	103.121	P	6	2357	1117	521	274	103	62	14	132	-	
30110G	103.353		6	2100	1501	919	545	298	180	36	109	-	
30110H	103.774	P	2	978	407	-	-	-	-	NC	142	-	
30110J	104.123	P	3	2081	745	245	-	-	-	6	135	-	
30110K	104.429	P	4	5387	1894	596	216	-	-	6	112	-	
30110L	104.518		5	4652	2280	1059	445	119	-	10	114	-	
30110M	104.977	P	3	1577	475	124	-	-	-	5	97	105.07	12
30110N	105.309	P	2	276	127	-	-	-	-	NC	140	105.45	39
30110P	105.734	P	6	1212	586	283	197	55	26	15	142	-	
30110R	106.058		6	7666	5006	2938	1741	922	547	30	125	-	
30110S	106.256		6	6238	3524	1777	990	452	259	18	114	106.47	8
30110T	106.567		4	2869	1408	571	202	-	-	8	136	-	
30110W	106.740		5	3107	1492	689	302	99	-	11	140	-	
30110Y	107.085		4	4522	1695	492	155	-	-	6	135	107.40	31
30120A	88.086	P	5	2925	1249	512	191	24	-	8	140	-	
30120B	88.497		6	3190	2009	1168	671	410	199	29	133	-	
30120C	88.785	P	6	3678	2277	1360	795	465	278	34	121	-	
30120D	88.931		6	5307	3423	1875	979	469	232	20	147	-	
30120E	89.145		5	4098	2144	944	420	172	-	10	121	-	
30120F	89.874	P	2	1059	248	-	-	-	-	NC	146	-	
30120G	90.118	P	4	2467	645	150	21	-	-	4	93	-	
30120H	90.408	P	4	478	378	265	119	-	-	34	120	-	
30120J	90.950		5	3509	1583	543	164	35	-	7	112	-	
30120K	91.510		3	702	349	181	-	-	-	12	177	-	
30121A	92.556		4	1714	873	348	123	-	-	8	131	-	
30121B	92.795		3	1217	452	80	-	-	-	3	171	-	
30121C	93.065		4	3339	1260	383	116	-	-	6	139	-	
30121D	93.557		2	688	209	-	-	-	-	NC	159	-	
30121E	93.902		6	3907	2238	1211	683	234	174	19	116	-	
30121F	94.394		4	3547	1928	938	442	-	-	12	129	-	
30121G	94.512		6	4069	2353	1270	741	271	130	18	141	94.57	19
30121H	94.655		6	4268	2731	1549	894	417	221	23	124	-	
30121J	95.038		4	2021	969	501	242	-	-	13	128	-	
30121K	96.830	P	3	307	101	73	-	-	-	63	94	-	
30121L	97.490	P	3	425	156	65	-	-	-	8	159	-	
30121M	97.869	P	4	744	218	61	45	-	-	7	155	-	
30122A	78.249		2	418	126	-	-	-	-	NC	128	77.75	13

JOB NO:26007C

INPUT EM		ANOMALY		PEAK	RESPONSE	AMPLITUDES			(PPM)	TCP	ALT	MAGNETIC	
LINE	FIDUCIAL	TYPE	CHS	CH1	CH2	CH3	CH4	CH5	CH6	(S)	(M)	FIDUCIAL	VALUE
30122B	79.145		2	619	152	-	-	-	-	NC	147	79.22	34
30122C	80.045	P	4	1234	481	168	110	-	-	8	166	-	
30122D	80.198		5	1507	679	266	74	54	-	8	165	-	
30122E	80.485		5	1319	698	308	154	66	-	11	151	-	
30122F	80.783		6	2402	1267	640	328	150	98	17	142	-	
30122G	80.931		6	2352	1539	838	441	307	184	24	148	80.97	8
30122H	81.255		6	2609	1757	1087	642	387	211	38	161	-	
30122J	81.562		5	1625	981	485	249	136	-	14	131	-	
30122K	81.962		4	968	346	134	47	-	-	8	195	-	
30122L	82.227		3	2524	984	256	-	-	-	5	127	-	
30122M	82.497		4	5127	1970	535	96	-	-	5	98	-	
30122N	83.135		3	1499	413	28	-	-	-	1	116	-	
30122P	83.507	P	3	282	159	18	-	-	-	2	163	-	
30122R	83.802		3	1042	475	194	-	-	-	8	182	-	
30130A	80.687	P	2	647	137	-	-	-	-	NC	136	-	
30130B	81.305	P	3	402	71	27	-	-	-	7	140	-	
30130C	82.225		3	851	366	161	-	-	-	9	154	-	
30130D	82.503		5	1295	815	408	220	91	-	14	174	-	
30130E	82.812	P	5	1218	609	261	150	58	-	12	157	82.95	16
30130F	83.054		6	2856	1853	966	506	222	76	16	148	-	
30130G	83.256		6	1969	1436	922	601	260	168	41	145	-	
30130H	83.521		6	1276	846	481	290	138	172	32	145	-	
30130J	83.816		3	583	379	166	-	-	-	9	174	-	
30130K	84.317	P	3	2759	996	280	-	-	-	5	123	-	
30130L	84.459		3	2786	1275	449	-	-	-	6	104	-	
30130M	84.762		5	2611	1456	817	395	131	-	15	98	-	
30130N	85.180	P	1	704	-	-	-	-	-	NC	121	-	
30130P	85.495	P	2	1038	264	-	-	-	-	NC	108	85.78	133
30130R	86.049		2	598	219	-	-	-	-	NC	120	-	
30130S	86.588		6	4806	2942	1879	1185	681	416	45	116	-	
30130T	86.823		6	2023	1216	687	393	224	128	26	100	-	
30130W	87.160		5	4619	2491	1181	487	124	-	10	168	-	
30140A	67.353		5	2808	1202	444	176	58	-	8	149	-	
30140B	67.597	P	5	1208	552	209	80	39	-	9	106	-	
30140C	68.241	P	2	626	127	-	-	-	-	NC	138	-	
30140D	68.578	P	4	963	268	68	29	-	-	5	139	-	
30140E	68.830	P	4	1377	566	207	43	-	-	6	110	-	
30140F	69.087	P	3	2352	773	156	-	-	-	4	139	-	
30140G	69.268		4	3400	1360	437	112	-	-	6	108	-	
30140H	69.478	P	4	1165	326	119	59	-	-	8	108	-	
30140J	70.129	P	4	269	98	44	24	-	-	11	154	-	
30140K	70.710		5	2586	1183	442	158	57	-	8	135	-	
30140L	70.984	P	5	1252	655	445	217	108	-	32	117	-	
30141A	74.085	P	4	352	243	114	45	-	-	10	243	-	
30141B	74.939	P	5	396	293	164	81	24	-	15	274	-	

JOB NO:26007C

INPUT EM LINE	INPUT EM FIDUCIAL	ANOMALY TYPE	ANOMALY CHS	PEAK RESPONSE AMPLITUDES (PPM) CH1	CH2	CH3	CH4	CH5	CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL	MAGNETIC VALUE
30141C	75.469	P	4	452	222	105	50	-	-	11	275	-	
30141D	75.688	P	3	383	203	46	-	-	-	4	268	-	
30150A	60.066	P	3	507	245	12	-	-	-	1	190	-	
30150B	60.434		4	1099	478	189	87	-	-	9	171	60.42	10
30150C	60.733		4	1151	500	150	106	-	-	7	151	-	
30150D	61.048		4	1645	810	414	181	-	-	12	134	-	
30150E	61.448		6	2384	1365	789	465	180	115	23	130	-	
30150F	61.699	P	4	1101	482	197	98	-	-	9	152	-	
30150G	62.155		5	2220	1039	466	214	69	-	10	124	-	
30150H	63.266		3	1705	542	170	-	-	-	5	108	-	
30150J	63.481		3	2688	1108	358	-	-	-	6	103	-	
30150K	63.779		6	3354	1660	737	238	51	23	9	118	-	
30150L	64.037	P	2	541	48	-	-	-	-	NC	108	-	
30150M	64.639	P	2	269	55	-	-	-	-	NC	150	-	
30150N	64.930	P	4	537	229	81	49	-	-	8	106	-	
30150P	65.511		5	2802	1227	515	216	98	-	10	123	-	
30150R	65.663		6	1996	1100	571	315	138	48	16	143	-	
30160A	45.814		3	596	203	62	-	-	-	5	129	-	
30160B	46.327	P	2	258	41	-	-	-	-	NC	142	-	
30160C	46.740	P	3	358	133	48	-	-	-	7	148	-	
30160D	47.316	P	4	2692	1264	481	119	-	-	7	106	-	
30160E	47.459		4	3273	1805	735	209	-	-	8	119	-	
30160F	47.649	P	6	2309	877	289	142	71	62	10	129	-	
30160G	47.783	P	3	1019	318	115	-	-	-	7	128	-	
30160H	48.023		1	329	-	-	-	-	-	NC	142	-	
30160J	48.830	P	4	671	334	161	84	-	-	12	185	-	
30160K	49.019		4	1061	480	248	123	-	-	13	204	-	
30160L	49.415		5	1314	644	291	144	58	-	12	144	-	
30160M	49.651	P	4	736	278	79	33	-	-	6	109	-	
30160N	50.156		5	2031	977	446	184	87	-	11	162	-	
30160P	50.362		5	3125	1357	597	267	85	-	10	112	-	
30160R	50.804		4	729	317	101	73	-	-	8	104	-	
30160S	51.313		5	641	339	208	96	59	-	23	156	-	
30160T	51.666		3	948	407	123	-	-	-	5	192	-	
30160W	54.123	P	4	763	253	94	36	-	-	8	168	-	
30161A	72.311	P	2	475	185	-	-	-	-	NC	184	-	
30161B	72.677		5	2093	1045	461	192	81	-	10	150	-	
30161C	73.026	P	2	621	181	-	-	-	-	NC	133	-	
30161D	73.236	P	2	513	228	-	-	-	-	NC	161	-	
30161E	73.556		5	1850	806	366	146	29	-	9	124	-	
30161F	74.040		4	711	251	100	54	-	-	9	116	73.90	14
30161G	74.377		4	1510	649	219	41	-	-	6	164	-	
30161H	74.532		4	1804	882	420	177	-	-	11	154	-	
30161J	75.227		4	699	286	114	32	-	-	7	129	-	

JOB NO:26007C

INPUT EM		ANOMALY		PEAK	RESPONSE		AMPLITUDES		(PPM)	TCP	ALT	MAGNETIC	
LINE	FIDUCIAL	TYPE	CHS	CH1	CH2	CH3	CH4	CH5	CH6	(S)	(M)	FIDUCIAL	VALUE
30161K	75.520	P	3	1293	517	147	-	-	-	5	126	-	
30161L	75.689		4	2155	895	230	52	-	-	5	139	-	
30161M	75.870		5	2167	1216	576	219	52	-	9	143	-	
30170A	32.107	P	2	916	193	-	-	-	-	NC	160	-	
30170B	32.523	P	3	774	211	57	-	-	-	5	115	-	
30170C	33.765	P	3	1977	691	178	-	-	-	5	167	-	
30170D	33.935		5	3539	1707	762	290	55	-	9	148	-	
30170E	34.084	P	5	2167	1159	629	270	91	-	13	99	-	
30170F	34.469		2	256	15	-	-	-	-	NC	126	34.37	311
30170G	34.865		4	868	303	97	28	-	-	6	128	-	
30170H	35.286		3	1751	638	192	-	-	-	5	107	-	
30170J	35.500		4	949	477	210	105	-	-	10	141	-	
30170K	35.929		4	967	414	189	54	-	-	9	144	-	
30170L	36.093		5	1130	499	255	130	20	-	11	124	-	
30170M	36.485		3	839	491	225	-	-	-	9	174	-	
30170N	36.682		4	1157	711	436	274	-	-	29	192	-	
30171A	40.071	P	4	555	241	110	60	-	-	11	198	-	
30171B	40.257	P	3	792	296	130	-	-	-	9	135	-	
30171C	40.581	P	4	1080	546	225	60	-	-	8	198	-	
30171D	40.854	P	6	949	637	337	196	110	74	23	187	-	
30171E	41.300	P	3	596	228	120	-	-	-	13	126	-	
30171F	41.548	P	4	1042	297	105	44	-	-	7	134	-	
30171G	41.759	P	3	2058	756	234	-	-	-	5	128	-	
30171H	42.011		5	3665	2038	973	397	83	-	10	111	-	
30171J	42.617	P	1	271	-	-	-	-	-	NC	149	-	
30171K	43.538	P	4	492	181	56	43	-	-	8	145	-	
30172A	66.107		5	2975	1526	708	204	95	-	9	121	-	
30172B	66.359		5	1418	584	282	159	134	-	17	121	-	
30172C	66.864	P	2	662	209	-	-	-	-	NC	126	-	
30172D	67.218	P	4	351	275	187	104	-	-	41	150	-	
30172E	67.369		5	1126	672	357	165	113	-	16	167	-	
30172F	67.622		4	1019	530	194	75	-	-	7	179	-	
30172G	67.979		6	1620	868	455	252	151	94	22	128	-	
30172H	68.417	P	2	914	256	-	-	-	-	NC	130	-	
30172J	68.770	P	4	1129	538	248	158	-	-	13	154	-	
30172K	68.913		4	1671	731	315	92	-	-	8	130	68.95	7
30172L	69.763		3	353	241	108	-	-	-	9	182	-	
30172M	70.204		4	1090	555	251	66	-	-	8	172	-	
30180A	22.141	P	2	216	73	-	-	-	-	NC	145	-	
30180B	22.688	P	2	494	140	-	-	-	-	NC	139	-	
30180C	22.922		4	2167	863	328	79	-	-	7	133	-	
30180D	23.187		5	812	422	188	72	49	-	11	126	-	
30180E	23.638	P	2	401	56	-	-	-	-	NC	124	-	

JOB NO:26007C

INPUT EM		ANOMALY		PEAK RESPONSE AMPLITUDES (PPM)						TCP	ALT	MAGNETIC	
LINE	FIDUCIAL	TYPE	CHS	CH1	CH2	CH3	CH4	CH5	CH6	(S)	(M)	FIDUCIAL	VALUE
30180F	23.777	P	4	682	203	21	15	-	-	3	122	-	
30180G	24.311		6	1673	1007	583	332	145	110	25	167	-	
30180H	24.476	P	6	1095	516	257	89	73	33	14	173	-	
30180J	24.900		6	2585	1585	900	492	238	129	22	115	-	
30180K	25.350		3	1366	435	93	-	-	-	4	131	-	
30180L	25.581		4	1510	498	183	98	-	-	8	122	-	
30180M	25.906		5	1660	702	371	201	110	-	17	127	-	
30180N	26.078		5	2063	838	315	115	22	-	8	113	-	
30180P	26.478	P	2	409	15	-	-	-	-	NC	121	-	
30180R	26.886	P	3	463	210	95	-	-	-	9	162	-	
30180S	27.437	P	5	950	453	175	30	67	-	8	160	27.45	36
30180T	27.710		4	1632	842	373	121	-	-	9	137	-	
30180W	27.900	P	3	1715	684	212	-	-	-	5	164	28.05	9
30180Y	28.206		3	944	274	49	-	-	-	3	186	-	
30180Z	28.321	P	3	534	137	19	-	-	-	3	177	-	
30180AA	28.930	P	2	135	38	-	-	-	-	NC	167	-	
30180BB	29.570	P	3	563	153	42	-	-	-	5	173	-	
30180CC	30.125	P	4	569	219	69	49	-	-	8	195	-	
30190A	105.076		5	2954	1160	379	70	42	-	6	126	-	
30190B	105.750		4	1644	670	238	27	-	-	5	146	-	
30190C	106.036		6	1824	765	361	132	63	13	11	136	-	
30190D	106.637	P	2	872	182	-	-	-	-	NC	153	106.57	68
30190E	106.843	P	3	695	266	136	-	-	-	12	142	-	
30190F	107.436	P	4	1358	391	127	23	-	-	5	134	-	
30190G	107.689	P	5	1242	490	184	100	68	-	10	127	107.88	9
30190H	107.971		6	1059	579	287	149	72	59	17	143	-	
30190J	108.325		4	1155	486	167	39	-	-	6	145	-	
30190K	108.808		5	1403	705	356	153	76	-	13	134	-	
30190L	109.060		6	1586	918	568	309	191	30	24	131	-	
30190M	109.401		6	1567	1018	638	333	244	121	37	173	-	
30190N	109.616		3	738	352	126	-	-	-	6	162	-	
30190P	109.994		5	596	308	150	74	53	-	15	136	-	
30190R	110.524		1	164	-	-	-	-	-	NC	129	-	
30190S	110.961	P	2	324	105	-	-	-	-	NC	134	-	
30190T	111.597	P	3	409	143	33	-	-	-	4	107	-	
30200A	95.035	P	2	451	68	-	-	-	-	NC	127	-	
30200B	95.481	P	2	391	30	-	-	-	-	NC	138	-	
30200C	96.382	P	3	180	53	48	-	-	-	18	157	-	
30200D	96.727		3	1127	447	101	-	-	-	4	112	-	
30200E	96.855		5	2079	930	380	107	48	-	8	117	-	
30200F	97.118	P	6	748	345	172	115	65	53	24	159	-	
30200G	97.381		6	2069	1211	757	457	278	124	39	162	-	
30200H	97.755		6	3180	1622	719	311	122	59	12	111	-	
30200J	98.534		6	1570	754	384	180	83	60	16	128	98.72	9
30200K	98.828		5	1777	817	361	135	84	-	10	129	-	
30200L	99.081		4	1267	277	34	11	-	-	3	131	-	
30200M	99.406	P	2	358	55	-	-	-	-	NC	133	-	

JOB NO:26007C

INPUT LINE	EM FIDUCIAL	ANOMALY TYPE	CHS	PEAK RESPONSE AMPLITUDES (PPM) CH1	CH2	CH3	CH4	CH5	CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL	VALUE
30200N	99.978	P	3	649	243	77	-	-	-	6	162	-	
30200P	100.229		5	1069	496	313	147	86	-	24	157	-	
30200R	100.422		5	1757	698	259	86	26	-	8	131	-	
30200S	100.658		5	3123	1372	567	237	95	-	9	117	-	
30200T	100.983	P	3	1496	472	112	-	-	-	4	153	-	
30200W	101.219		3	1672	648	194	-	-	-	5	158	-	
30200Y	101.543		4	211	59	30	26	-	-	20	182	-	
30201A	13.511		3	2294	852	255	-	-	-	5	136	-	
30201B	13.890		5	1937	698	294	175	40	-	10	140	-	
30201C	14.130	P	3	1212	369	22	-	-	-	1	132	-	
30201D	14.442		5	1551	801	361	148	42	-	10	148	14.60	66
30201E	14.891		3	1082	275	13	-	-	-	1	142	-	
30201F	15.157	P	3	615	268	70	-	-	-	5	136	-	
30201G	15.632		4	1042	349	105	99	-	-	8	117	-	
30201H	15.932		5	1667	899	455	241	119	-	15	111	-	
30201J	16.109		6	1573	981	516	287	159	116	22	122	-	
30201K	16.420		6	2397	1432	731	291	85	34	12	128	-	
30201L	16.866		5	3095	1499	568	195	40	-	8	128	-	
30201M	17.039		6	2875	1581	697	268	53	2	8	132	-	
30201N	17.262		6	1538	960	574	367	249	137	42	125	-	
30201P	17.556		6	1765	1015	521	282	156	80	19	144	-	
30201R	17.947		5	3510	1966	1004	398	134	-	12	148	-	
30201S	19.361	P	3	1086	324	71	-	-	-	4	140	-	
30210A	86.037	P	3	869	205	84	-	-	-	8	133	-	
30210B	86.521	P	3	862	237	100	-	-	-	8	160	-	
30210C	86.748	P	3	927	296	173	-	-	-	18	136	-	
30210D	86.967	P	3	616	214	82	-	-	-	7	129	-	
30210E	87.430		4	2231	996	374	78	-	-	6	149	-	
30210F	87.619		6	1916	967	491	216	101	36	14	140	87.78	96
30210G	88.044	P	2	1506	321	-	-	-	-	NC	116	-	
30210H	88.621		4	650	222	88	50	-	-	9	123	-	
30210J	88.957		4	809	406	153	25	-	-	6	153	-	
30210K	89.374		6	2305	1156	593	231	153	33	14	111	89.57	16
30210L	89.685		6	1907	963	507	265	144	98	20	109	-	
30210M	89.959		6	2667	1772	962	431	165	54	14	141	-	
30210N	90.291		5	1395	573	174	100	84	-	9	122	-	
30210P	90.800		5	5243	2672	1192	394	114	-	9	131	-	
30210R	91.048		6	2368	1243	684	373	217	90	22	145	-	
30210S	91.229		6	3676	2306	1358	706	380	165	23	140	-	
30210T	91.746		6	3426	2141	1196	588	272	80	17	185	-	
30210W	91.973		5	1258	700	250	157	118	-	11	145	-	
30210Y	93.252		3	214	123	50	-	-	-	8	215	-	
30220A	75.535		3	303	141	85	-	-	-	21	181	-	
30220B	76.112		4	690	419	269	155	-	-	32	125	-	
30220C	76.381		6	3920	2383	1387	751	386	186	24	164	-	

JOB NO:26007C

INPUT EM LINE	FIDUCIAL	ANOMALY TYPE	CHS	PEAK RESPONSE AMPLITUDES (PPM) CH1	CH2	CH3	CH4	CH5	CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL	VALUE
30220D	76.579		6	8549	4614	2087	831	309	124	11	118	-	
30220E	76.751	P	6	5050	2727	1341	693	366	167	16	117	-	
30220F	77.021		6	6830	4112	2313	1324	794	481	27	109	-	
30220G	77.214		6	6189	3684	1958	1049	545	306	20	110	-	
30220H	77.500		4	2989	1223	414	139	-	-	7	139	-	
30220J	77.829		6	2764	1623	913	462	217	77	19	139	-	
30220K	78.018		6	4942	3278	1952	1065	538	265	25	136	-	
30220L	78.337		4	2704	1328	532	155	-	-	8	136	-	
30220M	78.429		4	3180	1538	588	137	-	-	7	139	78.57	23
30220N	78.615		3	1854	626	106	-	-	-	3	126	-	
30220P	78.913		6	1324	681	331	132	70	23	13	138	-	
30220R	79.385		3	1148	372	74	-	-	-	4	144	-	
30220S	79.826		5	895	428	205	87	68	-	13	143	79.95	119
30220T	80.247	P	4	1851	620	191	43	-	-	5	118	-	
30220W	80.386	P	3	1352	366	55	-	-	-	3	113	-	
30220Y	81.021		5	1383	563	208	65	48	-	8	141	-	
30220Z	81.261		4	1240	348	96	33	-	-	6	116	-	
30220AA	81.455	P	5	710	315	151	94	35	-	14	122	-	
30220BB	81.984	P	3	596	190	34	-	-	-	3	179	-	
30230A	65.893		4	915	356	163	60	-	-	9	138	-	
30230B	66.183		3	1464	436	129	-	-	-	5	119	-	
30230C	66.583		5	1059	471	217	34	38	-	8	134	-	
30230D	66.814	P	4	1725	732	293	105	-	-	8	142	-	
30230E	67.021	P	4	2168	972	413	144	-	-	8	120	-	
30230F	67.702		4	1367	427	141	28	-	-	6	112	-	
30230G	67.938	P	5	1187	518	290	118	23	-	12	150	-	
30230H	68.207	P	5	1115	364	98	66	45	-	8	123	-	
30230J	68.602	P	4	1124	379	123	33	-	-	6	132	-	
30230K	69.010	P	4	1731	552	169	35	-	-	5	131	-	
30230L	69.212	P	4	1466	461	175	81	-	-	8	142	-	
30230M	69.619		4	1562	587	189	22	-	-	5	118	-	
30230N	69.897		6	2426	1316	718	394	209	80	20	154	-	
30230P	70.146	P	6	2821	1277	679	399	217	76	20	139	-	
30230R	70.558		6	7746	5515	3441	1991	1120	579	36	110	-	
30230S	70.789		4	2752	1500	674	338	-	-	10	115	-	
30230T	71.231		5	2186	643	193	36	33	-	6	112	-	
30230W	71.660		6	6727	4817	3185	2039	1325	872	55	122	-	
30230Y	71.887		6	6889	4536	2713	1616	1042	658	38	135	-	
30230Z	72.165		6	3950	2476	1372	760	348	165	21	131	-	
30230AA	72.430	P	2	1419	592	-	-	-	-	NC	136	-	
30230BB	72.614		6	675	440	239	133	59	31	20	167	-	
30230CC	73.528		2	1108	308	-	-	-	-	NC	116	-	
30241A	58.076		4	612	271	115	81	-	-	11	146	-	
30241B	58.855		3	793	403	206	-	-	-	12	130	-	
30241C	59.124		6	1709	1075	677	380	215	78	32	168	-	
30241D	59.431		6	6045	4040	2485	1461	824	562	38	146	-	
30241E	59.709		6	1790	1174	665	386	217	85	24	141	-	

JOB NO:26007C

INPUT EM LINE	FIDUCIAL	ANOMALY TYPE	CHS	PEAK CH1	RESPONSE CH2	CH3	AMPLITUDES CH4	CH5	(PPM) CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL VALUE
30241F	60.168		6	3424	2074	1084	514	221	100	15	132	-
30241G	60.433		6	2770	1225	512	244	105	64	12	153	-
30241H	60.744		4	1218	382	103	37	-	-	6	135	-
30241J	60.996		1	968	-	-	-	-	-	NC	151	-
30241K	61.215		6	3131	1617	814	395	156	57	14	146	-
30241L	61.581		3	1236	311	19	-	-	-	1	112	-
30241M	61.934	P	4	1728	525	188	45	-	-	6	156	-
30241N	62.144		4	1705	591	215	52	-	-	6	142	-
30241P	62.620		4	2035	824	302	90	-	-	7	118	-
30241R	63.289	P	3	839	314	76	-	-	-	4	163	-
30241S	63.567		5	1455	706	345	175	40	-	12	118	-
30241T	63.840	P	3	1036	427	146	-	-	-	6	135	-
30241W	64.131	P	3	732	236	61	-	-	-	5	171	-
30250A	42.405		3	1037	315	91	-	-	-	5	151	-
30250B	42.683		5	1129	327	104	45	31	-	8	124	-
30250C	43.285	P	2	522	119	-	-	-	-	NC	127	-
30250D	43.630		4	1258	530	191	70	-	-	7	141	-
30250E	43.945	P	4	1386	473	227	81	-	-	10	125	-
30250F	44.152	P	5	1329	373	97	22	23	-	6	111	-
30250G	44.476	P	3	690	129	31	-	-	-	4	112	-
30250H	44.736	P	3	672	104	29	-	-	-	5	126	-
30250J	45.052	P	4	974	257	68	16	-	-	5	119	-
30250K	45.439		5	1691	604	224	43	33	-	7	119	-
30250L	46.507		5	2717	914	311	61	20	-	6	130	-
30250M	46.739		4	2099	641	220	42	-	-	6	129	-
30250N	47.395		4	2432	794	232	80	-	-	6	142	-
30250P	47.589		3	2163	699	203	-	-	-	5	121	-
30250R	48.175	P	5	781	424	206	101	69	-	14	132	-
30250S	48.741		5	2261	1080	513	211	87	-	11	139	-
30250T	48.914		6	2158	1346	776	399	215	87	22	152	-
30250W	49.200		5	1493	848	404	155	88	-	12	181	-
30250Y	49.688		6	2026	1056	544	307	187	96	21	132	-
30250Z	50.033		6	7065	4502	2721	1675	1019	601	39	126	-
30250AA	50.207		6	3894	2516	1424	839	442	223	25	131	-
30250BB	50.780	P	2	514	95	-	-	-	-	NC	141	-
30250CC	51.186		5	823	500	259	121	52	-	14	138	-
30262A	34.620		6	1387	782	421	204	113	47	18	180	-
30262B	34.990		6	3266	2106	1370	849	520	351	49	143	-
30262C	35.209		6	2089	1298	745	459	279	196	34	164	-
30262D	35.701		4	1165	343	101	41	-	-	6	149	-
30262E	35.945		6	3515	2122	1191	600	271	84	18	135	-
30262F	36.160		6	1474	967	548	289	179	126	26	170	-
30262G	36.522		3	916	373	114	-	-	-	5	178	-
30262H	36.749		3	1689	504	141	-	-	-	5	136	-
30262J	37.056		5	849	514	284	142	116	-	21	129	-
30262K	37.406		5	1060	522	216	93	43	-	10	136	-
30262L	37.721		3	1720	426	102	-	-	-	4	125	-

JOB NO:26007C

INPUT EM LINE	FIDUCIAL	ANOMALY TYPE	CHS	PEAK RESPONSE AMPLITUDES (PPM) CH1	CH2	CH3	CH4	CH5	CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL VALUE
[illegible]262M	37.923		4	1486	631	252	103	-	-	8	135	-
30262N	38.284		3	1252	443	105	-	-	-	4	160	-
30262P	38.541		4	1543	521	174	57	-	-	6	151	-
30262R	38.755		4	803	273	124	30	-	-	8	113	-
30262S	39.180		3	1407	440	195	-	-	-	9	131	-
30262T	39.328		4	1837	628	174	23	-	-	5	126	-
30262W	39.997		4	766	170	39	27	-	-	6	136	-
30262Y	40.359		4	837	351	149	101	-	-	11	135	-
30262Z	40.691		5	938	420	176	84	38	-	10	130	-
30262AA	40.939		3	920	366	125	-	-	-	6	138	-
30262BB	41.469		4	615	171	88	24	-	-	10	126	-
30262CC	42.079		4	928	325	80	34	-	-	5	173	-
30270A	19.842		4	795	317	112	45	-	-	7	116	-
30270B	20.435		4	917	260	85	66	-	-	8	144	-
30270C	20.721		4	961	415	155	52	-	-	7	105	-
30270D	21.079		4	1397	589	273	79	-	-	9	104	-
30270E	21.378		4	1069	325	93	21	-	-	5	121	-
30270F	22.093		3	544	143	42	-	-	-	5	123	-
30270G	22.396		3	818	174	45	-	-	-	5	124	-
30270H	22.699		5	1416	629	278	73	39	-	9	128	-
30270J	22.997		4	1335	496	201	83	-	-	8	133	-
30270K	23.948		5	2236	746	268	90	36	-	8	106	-
30270L	24.137		5	1209	513	248	134	62	-	14	123	-
30270M	24.549		5	1775	738	304	124	33	-	9	126	-
30270N	25.033		4	954	358	135	48	-	-	8	144	-
30270P	25.429		3	749	211	47	-	-	-	4	138	-
30270R	25.733		6	2720	1451	768	432	206	101	19	141	-
30270S	26.196		5	1167	607	311	137	76	-	14	149	-
30270T	26.671		5	6468	2787	1062	321	44	-	7	98	-
30270W	27.328		3	703	206	85	-	-	-	8	124	-
30270Y	28.161		6	6749	4659	2888	1743	1009	613	40	128	-
30281A	11.505		6	1119	729	442	237	123	54	25	214	-
30281B	11.981		4	441	184	71	19	-	-	7	252	-
30281C	12.330		3	670	244	37	-	-	-	3	192	-
30281D	12.532		5	741	258	123	67	28	-	13	169	-
30281E	12.848		4	739	382	172	46	-	-	8	155	-
30281F	13.268		6	1830	994	582	327	149	97	25	120	-
30281G	13.601		6	2659	1411	848	422	252	127	26	139	-
30281H	14.085		6	1565	795	399	172	86	46	15	139	-
30281J	14.278		5	2385	1028	427	130	30	-	8	123	-
30281K	14.468		5	4409	2298	1096	432	140	-	10	131	-
30281L	14.783		4	2476	1040	317	138	-	-	6	146	-
30281M	15.137		3	1374	356	47	-	-	-	3	147	-
30281N	15.380		4	1287	330	87	36	-	-	6	102	-
30281P	15.977	P	4	1225	516	193	81	-	-	8	138	-
30281R	16.217		4	1526	590	242	52	-	-	7	109	-
30281S	16.575		3	800	169	36	-	-	-	4	145	-

JOB NO:26007C

LINE	INPUT EM FIDUCIAL	ANOMALY TYPE	CHS	PEAK CH1	RESPONSE CH2	CH3	AMPLITUDES CH4	CH5	(PPM) CH6	TCP (S)	ALT (M)	MAGNETIC FIDUCIAL VALUE
30281T	16.962		3	660	209	109	-	-	-	12	135	-
30281W	17.787		3	783	293	124	-	-	-	8	130	-
30281Y	18.233		4	1370	662	215	44	-	-	6	154	-
30281Z	18.351		3	1323	643	211	-	-	-	6	148	-

MAGNETIC CONTOURS

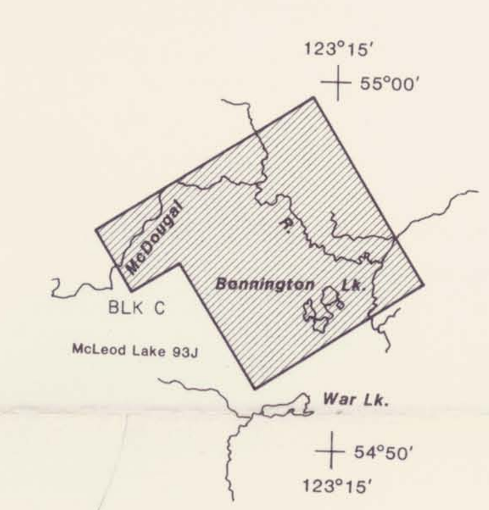
10 Gamma Contour Line

50 Gamma Contour Line

250 Gamma Contour Line

Magnetic Depression

1 Gamma = 1 Nanotesla in SI Units



Scale 1: 20000

2000 0 6000 Ft

500 0 1000 2000 M

TOTAL MAGNETIC INTENSITY SURVEY

NORANDA EXPLORATION COMPANY LIMITED
(no personal liability)

G. NORTH AREA

Province of BRITISH COLUMBIA

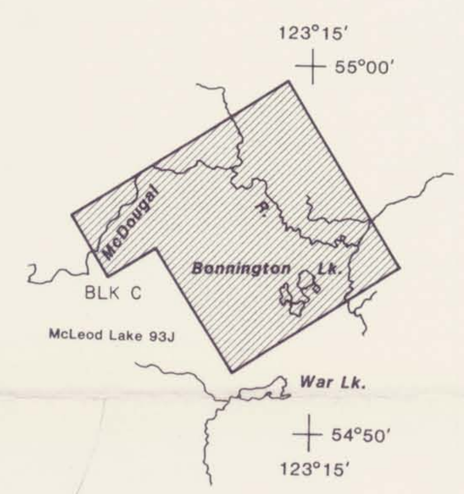
FILE NO.	SHEET NO.	DATE	COMPILED BY
26007C	1 of 1	April, May'84	Questor Surveys Limited

Questor Surveys Limited
Mississauga Ontario Canada

MAP 1.2

MAGNETIC CONTOURS

10 Gamma Contour Line
50 Gamma Contour Line
250 Gamma Contour Line
Magnetic Depression
1 Gamma = 1 Nanotesla in SI Units



Scale 1: 20000

2000 0 6000 Ft
500 0 1000 2000 M

TOTAL MAGNETIC INTENSITY SURVEY

NORANDA EXPLORATION COMPANY LIMITED
(no personal liability)

G. NORTH AREA

Province of BRITISH COLUMBIA

FILE NO.	SHEET NO.	DATE	COMPILED BY
26007C	1 of 1	April, May'84	Questor Surveys Limited

Questor Surveys Limited
Mississauga Ontario Canada
MAP 1.2