Bergvesenet
Postboks 3021, 7002 Trondheim

Rapportarkivet

Bergvesenet rapport nr	Intern Journal nr	Internt arkiv nr	Rapport lokalisering	Gradering
BV 2099				**Fortrolig**
Kommer fra ..arkiv	Ekstern rapport nr	Oversendt fra	Fortrolig pga	Fortrolig fra dato:
Sulitjelma Bergverk A/S	"542100020"			

Tittel

Dighem survey of the Sulitjelma area, Norway. Helikoptermåling. EM.

Forfatter	Dato	Bedrift
KILTY S. DIGHEM	1983	Sulitjelma Gruber A/S

Kommune	Fylke	Bergdistrikt	1: 50 000 kartblad	1: 250 000 kartblad

Fagområde	Dokument type	Forekomster
Råstofftype	**Emneord**	

Sammendrag

Totalt 992 km flylinje ble undersökt med helikoptermüling i Sulitjelma i juni og juli 1983 av DIGHEM. Metodene som ble brukt var EM, magnetiske og VLF müling. En rekke ledende horisonter ble püvist ('nye' og 'gamle') og anbefales fulgt opp med detaljundersökelser. Kartmateriale i kartarkiv. Magnetometri.

REPORT NO. 703

DIGHEM^{III} SURVEY

OF THE

SULITJELMA AREA, NORWAY

FOR

A/S SULITJELMA BERGVERT

BY

DIGHEM LIMITED

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TORONTO, CANADA
OCTOBER 28, 1983

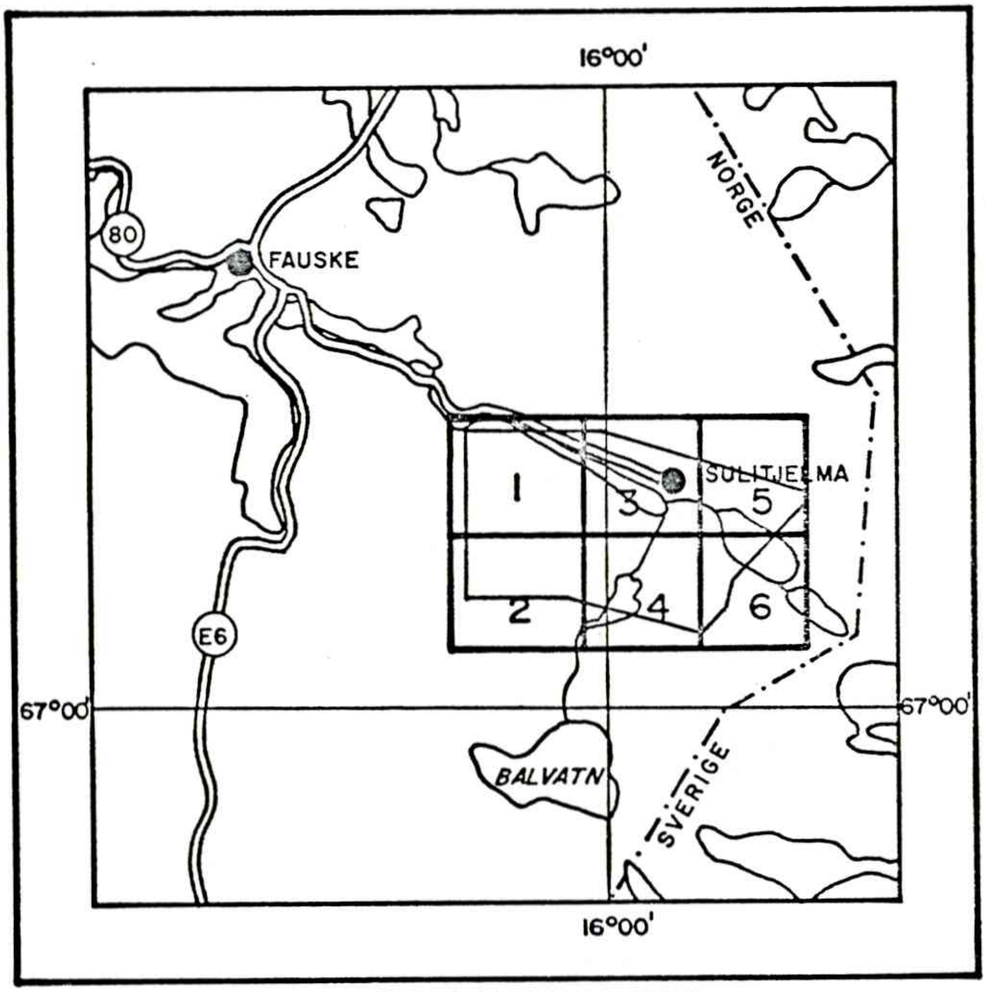
SUMMARY AND RECOMMENDATIONS

A total of 992 km of survey was flown in June and July, 1983, over a property held by A/S Sulitjelma Bergverk near Sulitjelma, Norway.

The survey outlined several discrete bedrock conductors associated with areas of low resistivity. Most of these anomalies appear to warrant further investigation using appropriate surface exploration techniques. Areas of interest may be assigned priorities for follow-up work on the basis of supporting geological and/or geochemical information.

The area is generally very resistive allowing ready recognition of the bedrock conductors. Conductive surficial material is generally limited to lake sediments. The survey area is also magnetically inactive.

LOCATION MAP



SCALE 1:500,000

Figure 1

The Survey Area

CONTENTS

INTRODUCTION

A DIGHEM^{III} survey totalling 992 line-km was flown with a 200 m line-spacing for A/S Sulitjelma Bergverk, from June 22 to July 3, 1983, in the Sulitjelma area of Norway (Figure 1).

The Lama SE HGY turbine helicopter flew at an average airspeed of 100 km/h with an EM bird height of approximately 35 m. Ancillary equipment consisted of a Geometrics G803 magnetometer with its bird at an average height of 50 m, a Sperry radio altimeter, a Geocam sequence camera, a Numec 8-channel heat pen analog recorder, a Geometrics G714 digital data acquisition system, a Kennedy 9-track 800-bpi magnetic tape recorder, and a Herz Totem-1A electromagnetometer with its sensor towed at an average height of 58 m. The VLF-EM receiver was tuned to GBR Rugby, England, which operates at 16.0 kHz. The analog equipment recorded four channels of EM data at approximately 900 Hz, two channels of EM data at approximately 7200 Hz, two ambient EM noise channels (for the coaxial and coplanar receivers), two channels of VLF data, one channel of magnetic data, and a channel of radio altitude. The digital equipment recorded the EM data with a sensitivity of 0.20 ppm at 900 Hz and 0.40 ppm at 7200 Hz, the magnetic field to one nT (i.e., one gamma), and the VLF-EM field to 0.10 percent.

Appendix A provides details on the data channels, their respective sensitivities, and the flight path recovery procedure. Noise levels of less than 2 ppm are generally maintained for wind speeds up to 35 km/h. Higher winds may cause the system to be grounded because excessive bird swinging produces difficulties in flying the helicopter. The swinging results from the 5 m^2 of area which is presented by the bird to broadside gusts. The DIGHEM system nevertheless can be flown under wind conditions that seriously degrade other AEM systems.

It should be noted that the anomalies shown on the electromagnetic anomaly map are based on a near-vertical, half plane model. This model best reflects "discrete" bedrock conductors. Wide bedrock conductors or flat-lying conductive units, whether from surficial or bedrock sources, may give rise to very broad anomalous responses on the EM profiles. These may not appear on the electromagnetic anomaly map if they have a regional character rather than a locally anomalous character. These broad conductors, which more closely approximate a half space model, will be maximum coupled to the horizontal (coplanar) coil-pair and are clearly evident on the resistivity map. The resistivity map, therefore, may be more valuable than the electromagnetic anomaly map, in areas where broad or flat-lying conductors are considered to be of importance.

In areas where magnetite causes the inphase components to become negative, the apparent conductance and depth of EM anomalies may be unreliable.

There are several areas where EM responses are evident only on the quadrature components, indicating zones of poor conductivity. Where these responses are coincident with strong magnetic anomalies, it is possible that the inphase component amplitudes have been suppressed by the effects of magnetite. Most of these poorly-conductive magnetic features give rise to resistivity anomalies which are only slightly below background. These weak features are evident on the resistivity map but may not be shown on the electromagnetic anomaly map. If it is expected that poorly-conductive sulphides may be associated with magnetite-rich units, some of these weakly anomalous features may be of interest.

SECTION I: SURVEY RESULTS

CONDUCTORS IN THE SURVEY AREA

The survey covered a single grid with 992 km of flying, the results of which are shown on six separate map sheets. Tables I-1 to I-6 summarizes the EM responses on the six sheets with respect to conductance grade and interpretation.

The electromagnetic anomaly map shows the anomaly locations with the interpreted conductor shape, dip, conductance and depth being indicated by symbols. Direct magnetic correlation is also shown if it exists. The strike direction and length of the conductors are indicated when anomalies can be correlated from line to line. When studying the map sheets for follow-up planning, consult the anomaly listings appended to this report to ensure that none of the conductors are overlooked.

Numerous cultural sources, such as powerlines, buildings and the like, occur within the survey area. These cultural sources may influence the resistivity and electromagnetic anomaly patterns but can usually be identified on the profiles due to their characteristic

TABLE I-1

708 SHEET 1 SULITJELMA

CONDUCTOR GRADE	CONDUCTANCE RANGE	NUMBER OF RESPONSES
6	> 99 MHOS	5
5	50-99 MHOS	8
4	20-49 MHOS	22
3	10-19 MHOS	16
2	5- 9 MHOS	31
1	< 5 MHOS	121
X	INDETERMINATE	39
TOTAL		242

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK	39
T	DISCRETE BEDROCK	1
P	DISCRETE BEDROCK	9
B	DISCRETE BEDROCK	91
E	BEDROCK OR EDGE EFFECT	9
G	ROCK OR COVER	0
H	ROCK OR COVER	0
S	COVER	46
R	CULTURE	0
C	CULTURE	1
L	CULTURE	43
?	QUESTIONABLE	2
(BLANK)		1
TOTAL		242

(SEE EM MAP LEGEND FOR EXPLANATIONS)

TABLE I-2

708 SHEET 2 SULITJELMA

CONDUCTOR GRADE	CONDUCTANCE RANGE	NUMBER OF RESPONSES
6	> 99 MHOS	13
5	50-99 MHOS	16
4	20-49 MHOS	29
3	10-19 MHOS	16
2	5- 9 MHOS	21
1	< 5 MHOS	72
X	INDETERMINATE	17
TOTAL		184

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK	15
T	DISCRETE BEDROCK	1
P	DISCRETE BEDROCK	14
B	DISCRETE BEDROCK	129
E	BEDROCK OR EDGE EFFECT	7
G	ROCK OR COVER	1
H	ROCK OR COVER	0
S	COVER	11
R	CULTURE	0
C	CULTURE	4
L	CULTURE	2
?	QUESTIONABLE	0
(BLANK)		0
TOTAL		184

(SEE EM MAP LEGEND FOR EXPLANATIONS)

TABLE I-3

708 SHEET 3 SULITJELMA

CONDUCTOR GRADE	CONDUCTANCE RANGE	NUMBER OF RESPONSES
6	> 99 MHOS	12
5	50-99 MHOS	17
4	20-49 MHOS	52
3	10-19 MHOS	48
2	5- 9 MHOS	67
1	< 5 MHOS	135
X	INDETERMINATE	26
TOTAL		357

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK	57
T	DISCRETE BEDROCK	6
P	DISCRETE BEDROCK	33
B	DISCRETE BEDROCK	110
E	BEDROCK OR EDGE EFFECT	27
G	ROCK OR COVER	0
H	ROCK OR COVER	0
S	COVER	56
R	CULTURE	0
C	CULTURE	0
L	CULTURE	68
?	QUESTIONABLE	0
(BLANK)		0
TOTAL		357

(SEE EM MAP LEGEND FOR EXPLANATIONS)

TABLE I-4

708 SHEET 4 SULITJELMA

CONDUCTOR GRADE	CONDUCTANCE RANGE	NUMBER OF RESPONSES
6	> 99 MHOS	9
5	50-99 MHOS	6
4	20-49 MHOS	7
3	10-19 MHOS	12
2	5- 9 MHOS	14
1	< 5 MHOS	42
X	INDETERMINATE	28
TOTAL		118

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK	18
T	DISCRETE BEDROCK	0
P	DISCRETE BEDROCK	4
B	DISCRETE BEDROCK	31
E	BEDROCK OR EDGE EFFECT	2
G	ROCK OR COVER	3
H	ROCK OR COVER	2
S	COVER	29
R	CULTURE	0
C	CULTURE	0
L	CULTURE	24
?	QUESTIONABLE	0
(BLANK)		5
TOTAL		118

(SEE EM MAP LEGEND FOR EXPLANATIONS)

TABLE I-5

708 SHEET 5 SULITJELMA

CONDUCTOR GRADE	CONDUCTANCE RANGE	NUMBER OF RESPONSES
6	> 99 MHOS	3
5	50-99 MHOS	2
4	20-49 MHOS	24
3	10-19 MHOS	20
2	5- 9 MHOS	31
1	< 5 MHOS	48
X	INDETERMINATE	24
TOTAL		152

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK	60
T	DISCRETE BEDROCK	3
P	DISCRETE BEDROCK	1
B	DISCRETE BEDROCK	74
E	BEDROCK OR EDGE EFFECT	3
G	ROCK OR COVER	1
H	ROCK OR COVER	1
S	COVER	7
R	CULTURE	0
C	CULTURE	0
L	CULTURE	0
?	QUESTIONABLE	0
(BLANK)		2
TOTAL		152

(SEE EM MAP LEGEND FOR EXPLANATIONS)

TABLE I-6

708 SHEET 6 SULITJELMA

CONDUCTOR GRADE	CONDUCTANCE RANGE	NUMBER OF RESPONSES
6	> 99 MHOS	0
5	50-99 MHOS	1
4	20-49 MHOS	8
3	10-19 MHOS	10
2	5- 9 MHOS	14
1	< 5 MHOS	22
X	INDETERMINATE	14
TOTAL		69

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK	10
T	DISCRETE BEDROCK	0
P	DISCRETE BEDROCK	0
B	DISCRETE BEDROCK	44
E	BEDROCK OR EDGE EFFECT	3
G	ROCK OR COVER	0
H	ROCK OR COVER	8
S	COVER	3
R	CULTURE	0
C	CULTURE	0
L	CULTURE	0
?	QUESTIONABLE	0
(BLANK)		1
TOTAL		69

(SEE EM MAP LEGEND FOR EXPLANATIONS)

signatures. A separate map can be produced for the survey area, if requested. The resulting map of probable bedrock conductors would display only those anomalies which are interpreted as D, T, B and P (see EM map legend). All other anomalies attributed to horizontal layers (interpreted as S, H, and G) and cultural features (L and C) are intentionally deleted from this presentation to provide an uncluttered view of the more interesting anomalies.

Sheet 1

Sheet 1 is dominated by a strong electromagnetic response which strikes across the entire map sheet. This narrow rim-like belt appears to be associated with greenstone-graphite/sulphides horizon. This belt continues into sheets 2 and 3.

The geologic environment appears to have a resistivity varying from 0.2 ohm-m to in excess of 8,000 ohm-m. This sheet also contains several responses due to cultural sources. These responses have been categorized as L type responses on the electromagnetic map sheet.

The magnetic field on sheet 1 is characterized by very low gradient. The total magnetic field is generally increasing towards the south-west.

The VLF-EM map is barren except for a few strong north-west striking anomalies. These anomalies appear to be predominantly located near lakes and may be due to conductive surficial material.

The EM anomalies of interest are discussed below.

Group 1-1

The grade 1 to 6 anomalies of this grouping reflect bedrock conductors associated with the sulphide horizon which contains several known deposits. This group extends south and east into sheets 2 and 3 as groups 2-1 and 3-2. The line-to-line correlation of conductors in this group may not be fully satisfactory because of the extreme strike changes and because of what appears to be anomaly misalignment because of possible fault zones. The resistivity map should be consulted to evaluate the relative merits of individual anomalies because it is an excellent source of information regarding the distribution of conductive material within the group.

Priorities within this group should be defined by examining anomalies of higher conductivity thickness product, thick anomalies and anomalies characterized by short strike length. Using these criteria, anomalies such as 9D, 10A, 10B, 14D-21E, 21F, 26C-31B and 35D should be examined on the ground.

Anomalies 22G-25C, 23D-24I, 24J-27C, 24G-25B

These grade 1 to 6 anomalies reflect a conductive horizon located beside a long formational conductive horizon. This is a very conductive zone that may be due to graphite. These conductors warrant ground investigation.

Group 1-2

This group represents a broad conductive horizon that continues into sheet 3 as group 3-1. Conductivity within this group varies drastically and conductors are best defined by the resistivity contours. The criterion of isolated anomalies, dislocation due to faults and anomalies of higher conductivity-thickness and greater width should be used to define targets for ground follow-up.

Anomaly 27G

This is an isolated thin-dipping dike located near culture. The anomaly appears to be associated with a weak magnetic low. This anomaly should be investigated on the ground. The presence of nearby culture indicates that this may be the source of the conductivity.

Sheet 2

Sheet 2 is dominated by two prominent resistivity lows, one located near the western boundary of the survey area and the other striking southwards along the map boundary between sheet 2 and sheet 4. The resistivity on this map sheet varies from less than 0.2 ohm-m to in excess of 8,000 ohm-m.

Sheet 2 contains no anomalies due to known cultural sources. All anomalies on this sheet appear to be due to either bedrock anomalies or surficial material.

The magnetic field in the area of sheet 2 displays very little gradient. There is a general magnetic gradient increasing to the southeast. The VLF map is again rather featureless, with the exception of some anomalies near the sheet 2/sheet 4 border.

Group 2-1

This long conductive horizon represents an extension of group 1-1 located on sheet 1. This horizon is associated with a sulphide/graphite greenstone belt along which are several known deposits. Follow-up emphasis should be placed on any points along the conductor axis which are disjointed or of a different resistivity. The resistivity contours define this horizon in a manner superior to the electromagnetic sheet.

Group 2-2

These group of anomalies are best defined by the resistivity map. The electromagnetic sheet is very confusing because the flight lines appear to be parallel to the strike of this non-magnetic, conductive horizon. Ground geological, geophysical and geochemical techniques should be utilized to better define these conductors. Within this group, anomaly 45A is a particularly attractive anomaly because of its thickness and its isolation. It should be investigated on the ground.

Anomaly 32B

This grade 6 anomaly represents an excellent short strike length anomaly that is located to one side of the flight line. This anomaly should be investigated on the ground.

Anomalies 28A-29A, 31A-32A

These grade 1 and grade 2 anomalies reflect isolated bedrock conductors located in an area that has been mapped as granites. These are all good bedrock conductors that warrant ground follow-up.

Anomaly 34A-35A

These grade 1 anomalies reflect weak bedrock conductors. The strike as indicated on the EM map may not reflect the true strike. This conductor should be investigated on the ground.

Sheet 3

This sheet is the most active of the six map sheets in the survey area. Both the EM and magnetic channels are active. This area appears to contain a varied mixture of greenstone and sedimentary horizons. In addition to the geological response, there are numerous anomalies that are due to cultural and overburden sources.

Group 3-1

This group of grade 1 to grade 6 anomalies reflect a broad, generally non-magnetic, conductive horizon. This group is best defined by the resistivity contours.

The large number of responses generally make the interpretation of conductor axis very difficult. All known geology, ground geophysics and geochemistry should be combined with these survey results in order to differentiate anomalies. This group extends into sheet 1 where it continues as group 1-2.

Group 3-2

This group of grade 1 to 6 bedrock anomalies continues into sheet 1 as group 1-1, into sheet 2 as group 2-1 and into sheet 4 as group 4-1. This group represents the known sulphide horizon in which the majority of known ore bodies are located.

Group 3-3

These grade 1 to 6 anomalies reflect a very conductive bedrock horizon whose strike appears to change from southeast to northeast in the vicinity of line 43. Of particular interest in this group are anomalies 39F and anomalies 41H-43J because of their location adjacent to the main horizon. Also of interest in this group is anomaly 40J which is one of the few anomalies in the survey area which has a negative inphase response indicative of the presence of magnetite.

Anomalies 28A-30B, 29B-33C, 32B-36C

These grade 2 to 6 anomalies reflect three bedrock conductors that are associated with a geological horizon known to contain sulphide mineralization. These conductors warrant ground investigation.

Anomalies 46N-47N

These grade 4 and grade 6 anomalies reflect a weak bedrock conductor at depth. The conductor appears to have some magnetic association. This conductor should be investigated.

Anomalies 49N, 50P	These two bedrock anomalies are very similar to anomalies 46N and 47N. They should be investigated on the ground.
Anomalies 48O-53H, 48Q-53K, 50I-51L, 53J-54I	This group of anomalies appear to be due to similar sources of conductivity, and they have variable magnetic signatures along their strike lengths. These anomalies should be correlated with known geological information and, if warranted, be investigated on the ground.

Sheet 4

The area of sheet 4 occurs just east of the Sulitjelma granitic pluton. In the west, the sheet extends over a narrow rim-like belt consisting of greenstones, graphite and sulphides. The strike of this rim belt is north-south, i.e., about 45° to the flight line direction. The southeast corner of the sheet is underlain by a northeasterly striking belt made of a multiple sequence of greenstones(?), granite and other unidentified rocks. This belt, which extends into sheet 6, displays strikes parallel to the flight line direction. The central part of the sheet contains volcanics.

The resistivity of the geologic environment varies from less than 0.2 ohm-m to in excess of 8,000 ohm-m correlating well with geology. While the central part of the sheet (presumably volcanics) is highly resistive, two prominent conductive zones exist, reflecting the conductive greenstone-graphite/sulphides of the rim belt, as well as the southeastern greenstone/granitic(?) belt.

Several cultural sources, such as powerlines, buildings and the like, occur within sheet 4. These cultural sources gave rise to spurious responses which, in turn, influenced the resistivity and electromagnetic patterns. For example, prominent narrow conductive trend, extending from line 55 at the north sheet boundary in a south direction toward anomaly 64C, appears to reflect a cultural source, such as a power line or a buried cable. Similarly, single-line conductive anomalies associated with the EM anomalies 65A, 67A, 68B, and 70B are indicative of cultural sources, i.e., small buildings most likely used to store metal objects or containing large metal parts.

The magnetic field in the area of sheet 4 is only slowly changing. Exceptions occur in the southeast corner over the greenstone/granitic belt and in the central portion of the sheet where a poorly defined east-northeasterly trend can be distinguished, extending from fiducial 214 on line 68 toward fiducial 1316 on line 75. It is better portrayed on the enhanced magnetic map. It is interesting to note that two other, very weak magnetic trends are indicated by enhanced magnetics. The first trend parallels the one just described, extending from fiducial 2831 on line 70 toward fiducial 1274 on line 75. The second trend appears to cross-cut the two parallel trends in a north-southerly direction. It extends from fiducial 1786 on line 73 to fiducial 175 on line 65.

The VLF-EM map is relatively featureless except for a prominent northwest striking anomaly near 59E and a couple isolated anomalies west of 56C and west of 59D. While the former anomaly may be of geologic origin, e.g., indicating a fault, the latter anomalies appear to be caused by near surface conduction.

The EM anomalies of interest are discussed below.

Group 4-1 — The grade 1 to 6 anomalies of this grouping reflect bedrock conductors which are confined to the greenstone/graphite/sulphide rim belt of the Sulitjelma granite pluton. The group extends north and west into sheets 2 and 3 as groups 2-1 and 3-2. The line-to-line correlation of the individual anomalies may not be fully satisfactory because of low angles between the geologic strike and the flight line direction. Consequently, the resistivity map should be consulted while evaluating the relative merits of the individual anomalies because it provides better information regarding the distribution of conductive material within this group than the EM anomaly map.

Anomalies 60B-62C, 62A, 62B, 62D, 63A, and 63B are of particular interest. Anomaly 60B is definitely of bedrock origin and reflects a conductor whose life occurs to the side of the flight line. The adjacent anomaly, 61D, is relatively poorly defined but it is deemed to reflect bedrock source. Anomalies 62B, 62C, and 62D occur in a quick succession and it is difficult to correlate these with anomalies on the adjacent line. However, 62C joins most likely with 60B and 61D, while 62D may correlate with 632B. Caution must be exercised because of a number of cultural sources in the area. For example, a small shed was noted on the flight path film at 62B. Similarly, 632A and 632B gave responses which are compatible with man-made sources. No obvious culture was, however, noted on the film at the corresponding locations. Care should be taken during the follow-up work of anomaly 62A. The flight path film shows a man-made object at this location (drill platform?). Should the results indicate a bedrock conductor, its correlation with adjacent anomalies, e.g., 61B, 632A, must be established.

A string of grade 1 to 5 anomalies between 55C and 64C has a definite culture signature although no visible man-made objects can be recognized on the flight path film. A buried cable or a pipeline would give rise to such responses. Only at 59E a three-cable powerline is apparent on the film extending toward anomaly 58G.

Anomaly 68C-69C

These grade 1 anomalies may reflect weak bedrock conductors. Both anomalies are evident on the 7200 Hz channels only suggesting poorly conducting targets. The resistivity/depth analysis of the data suggests possible bedrock source.

Group 4-2

This group of grade 1 to 6 anomalies reflects a system of bedrock conductors which are confined to the greenstone/granitic belt. Both the magnetic and the resistivity patterns support the EM analysis suggesting that the conductors strike parallel to the flight line direction. This is particularly true within group 4-1. However, the group extends further northeast into sheet 6 where it continues as group 6-1. It is conceivable that at the east end of group 6-1 the strikes change from northeast to southeast, i.e., from parallel to almost perpendicular to the flight line direction.

Many EM anomalies in this grouping display characteristics of a conductive unit buried under a resistive cover. Majority of these anomalies were, however, assigned the interpretation symbol B becuase they are believed to reflect bedrock conductors which occurred parallel to the flight line. The side-looking ability of the coplanar coil-pair could, under these circumstances, create an impression of a buried wide conductive unit.

Note that in the northeast part of the unit (group 6-1) the magnetic and resistivity patterns are arranged in an arcuate fashion suggesting complex structure of the group. It is interesting to note that the arcuate patterns are preserved and enhanced by the enhanced magnetics along the margins of the circular pattern.

Sheet 5

The dominant feature of sheet 5 is the greenstone belt which crosses the sheet in a northwest-southeast direction. From the south, it is surrounded presumably by volcanics. The rock type north of the belt is unknown.

All the geophysical maps reflect the presence of the greenstone belt. The resistivity in the area varies from less than 1 ohm-m within the greenstone belt to in excess of 8,000 ohm-m over the volcanics. The resistivity data suggests a rather complex structure of the belt. A single conductive trend at the southeast boundary of the sheet appears to terminate in the vicinity of line 71. An apparent offset to the north and east occurs at this location resulting in a parallel conductive trend extending from 61B toward 75E. The conductive trend is interrupted by an east-west striking resistivity high from about fiducial 308 on line 57 toward fiducial 1280 on line 62. This resistive trend separates the central part of the greenstone belt from a pair of conductive parallel trends which occur further northwest. Their strike in the area of sheet 5 is northwest-southeast but becomes close to east-west on sheet 3 in general agreement with the extent of the greenstone belt.

The magnetic and enhanced magnetic maps show a generally similar activity to the resistivity map, i.e., a narrowish band of increased magnetic activity trending in a northwest-southeast direction through sheet 5 corresponds to the greenstone belt. Several features are worth mentioning: the most prominent anomalous trend is confined between 61A and 73C; the magnetic activity in the northwest part of the greenstone belt is confined to two poorly defined parallel trends; there appears to exist an east-west break whose location corresponds to a similar high resistivity break; the enhanced magnetic map suggests that series of north-northwesterly trends may exist the most pronounced of which extends from anomaly 73C towards fiducial 2572 on line 59.

The VLF-EM map shows some activity to be confined to the south boundary of the greenstone belt between lines 55 and 70. A northwest trending anomaly extending from fiducial 2687 on line 70 toward fiducial 1990 on line 60 is believed to reflect conductive overburden along a river valley.

Individual EM anomalies of interest on sheet 5 are discussed below.

Anomalies 50A, 51B, 54E, 54F — These grade 1 and 3 single-line anomalies reflect bedrock conductors which occur outside the main conductive trend reflecting the greenstone belt. Note that the location of 54F is questionable because it lies beyond the last recovered fiducial on the line. Apart from EM and resistivity, these conductors do not appear geophysically anomalous.

Anomalies 68K-74D, 68L

A weak conductive trend paralleling the greenstone belt from the north is indicated by the grade 1 and 2 anomalies 68K to 74D. The quality and definition of this trend varies from line to line. For example, anomaly 70D is defined by the 7200 Hz field only suggesting either a very weak bedrock source or a poorly conductive overburden.

Anomaly 68L is also defined mainly by the 7200 Hz field, although a slight indication of a conductor is evident on the 900 Hz channels.

Both conductors appear weak. They may reflect bedrock sources.

Anomaly 81F

A weak bedrock conductor is indicated by this grade 1 anomaly.

This is a single-line anomaly which occurs on the flank of a magnetic anomaly and at the tip of a VLF-EM trend.

Anomalies 50xA-60B, 53A, 58A-59A, 58B, 59D-60C

These grade 1 to 4 anomalies reflect a set of three or four parallel bedrock conductors which have produced the north conductive trend in the northwest part of sheet 5. They are confined to intermittent magnetic and VLF-EM trends. Anomaly 53A, which appears satellitic to the main conductor 50xA-60B, could occur along the same horizon as 58A-59A and/or 58B. Conductor 58xA-60B extends further west into sheet 3. The most interesting anomalies in this grouping are 53A, 57B, 58A-59A, 58B, and 59D-60C because they are satellitic to the main trend or display characteristics of a thick conductor (e.g., 57B).

Anomalies 54A, 54B-57A

These anomalies have produced the southern conductive trend in the northwest part of sheet 5, extending into sheet 3. They occur along the flank of a magnetic anomaly; they also correlate with a weak VLF-EM trend. The grade 4 and 6 anomalies of 54B-57A reflect an excellent bedrock conductor of a northeasterly dip. They should be investigated on the ground.

Group 5-1

The grade 1 to 5 anomalies of this grouping reflect a suite of parallel conductors which are confined to the central part of the greenstone belt portrayed on sheet 5. Although the EM data suggests good line-to-line correlation of individual anomalies across almost the entire length of group 5-1, the resistivity, magnetic and VLF-EM data suggest that the west part of the group is quite distinct from its southeastern part, being more conductive and associated with magnetic and limited VLF-EM activity. Consequently, the western part of the group appears more attractive. A number of satellitic, thick, and high conductance anomalies occur here, which should be investigated on the ground. They include 61C, 61D, 62C-63A, possibly 66D, 67D, 68G-69C, and 70B. However, some anomalies in the southeast part of the group also appear to warrant follow-up work, e.g., 71C-75E, 772xA, and 792xA.

Anomalies 64B-67xB, 65xA-84A, 73D, 75C-83B, 782D-822D, 79xA, 80B-81B, 81D-84B

These grade 1 to 4 anomalies and x-type responses are associated with the southeastern conductive zone which appears to occur along the south boundary of the greenstone belt. They reflect bedrock conductors of variable quality which sporadically correlate with magnetic anomalies but display only very limited correlation with VLF-EM anomalies.

The data suggest that conductors 64B-67xB and 65xA-70xB may occur at great depth, particularly on lines 66, 68, 69, and 70. The southeast part of 65xA-84A south of line 70 appears to occur close to the surface, probably not exceeding 35 m on lines 71 to 77, and between 0 and 15 m on lines 78 to 84. The other conductors appear to occur at greater depth. Conductor 75C-83B may be as deep as 45 to 90 m on lines 75 to 822, becoming shallower on lines 82 and 83. Similarly, conductor 81D-84B appears to occur at depth ranging from 35 m to as much as 100 m. Note that this conductor may continue further southeast beyond the survey boundary.

A number of anomalies appear to warrant ground follow-up, e.g., 75C-83B, 81D-84B.

Anomaly 84C

This grade 3 anomaly reflects a deep bedrock conductor. It is associated with weak magnetic and VLF-EM anomalies and may extend beyond the survey boundary.

Anomaly 62A,
Responses 61xA, 64xA, 72xA, 73xA

These x-type responses, and a single grade 1 anomaly are indicative of weak conductors which may occur in the bedrock. They are generally of questionable quality and appear to constitute low priority exploration targets.

Anomaly 82A-83A

A possible bedrock conductor is indicated by these grade 1 anomalies. Its location in the lake, however, downgrades the significance of this conductor.

Sheet 6

Sheet 6 covers a small portion of the survey area in its southeast part. It is mostly covered by volcanics(?) which appear to be highly resistive and uniformly magnetic.

The southwest part of the sheet (lines 81 to 90) extends over the greenstone/granitic(?) belt which is characterized by low resistivities (100 ohm-m values are common with the lows of 1-2 ohm-m) and moderately active magnetics.

There is very little VLF-EM activity on the sheet. Only two anomalies occur here, one within the greenstone/granitic belt, the other vaguely associated with conductor 75A-76A.

Anomaly 75A-76A	A weak conductor of possible bedrock origin is indicated by these grade 1 anomalies. It is vaguely associated with a very weak VLF anomaly and constitutes a low priority target.
Anomaly 802A	This single-line, poorly defined grade 1 anomaly may reflect a weak bedrock conductor. There is a vague suggestion from resistivity and enhanced magnetics that this anomaly may occur on strike with 75A-76A. It appears to be a low priority target.

Group 6-1

This group was described previously as group 4-2 which constitutes the southwest extension of this group.

I SK-184

SECTION II: BACKGROUND INFORMATION

ELECTROMAGNETICS

DIGHEM electromagnetic responses fall into two general classes, discrete and broad. The discrete class consists of sharp, well-defined anomalies from discrete conductors such as sulfide lenses and steeply dipping sheets of graphite and sulfides. The broad class consists of wide anomalies from conductors having a large horizontal surface such as flatly dipping graphite or sulfide sheets, saline water-saturated sedimentary formations, conductive overburden and rock, and geothermal zones. A vertical conductive slab with a width of 200 m would straddle these two classes.

The vertical sheet (half plane) is the most common model used for the analysis of discrete conductors. All anomalies plotted on the electromagnetic map are analyzed according to this model. The following section entitled **Discrete conductor analysis** describes this model in detail, including the effect of using it on anomalies caused by broad conductors such as conductive overburden.

The conductive earth (half space) model is suitable for broad conductors. Resistivity contour maps result from the use of this model. A later section entitled **Resistivity mapping** describes the method further, including the effect of using it on anomalies caused by discrete conductors such as sulfide bodies.

Geometric interpretation

The geophysical interpreter attempts to determine the geometric shape and dip of the conductor. This qualitative interpretation of anomalies is indicated on the map by means of interpretive symbols (see EM map legend). Figure II-1 shows typical DIGHEM anomaly shapes and the interpretive symbols for a variety of conductors. These classic curve shapes are used to guide the geometric interpretation.

Discrete conductor analysis

The EM anomalies appearing on the electromagnetic map are analyzed by computer to give the conductance (i.e., conductivity-thickness product) in mhos of a vertical sheet model. This is done regardless of the interpreted geometric shape of the conductor. This is not an unreasonable procedure, because the computed conductance increases as the electrical quality of the conductor increases, regardless of its true shape. DIGHEM anomalies are divided into six

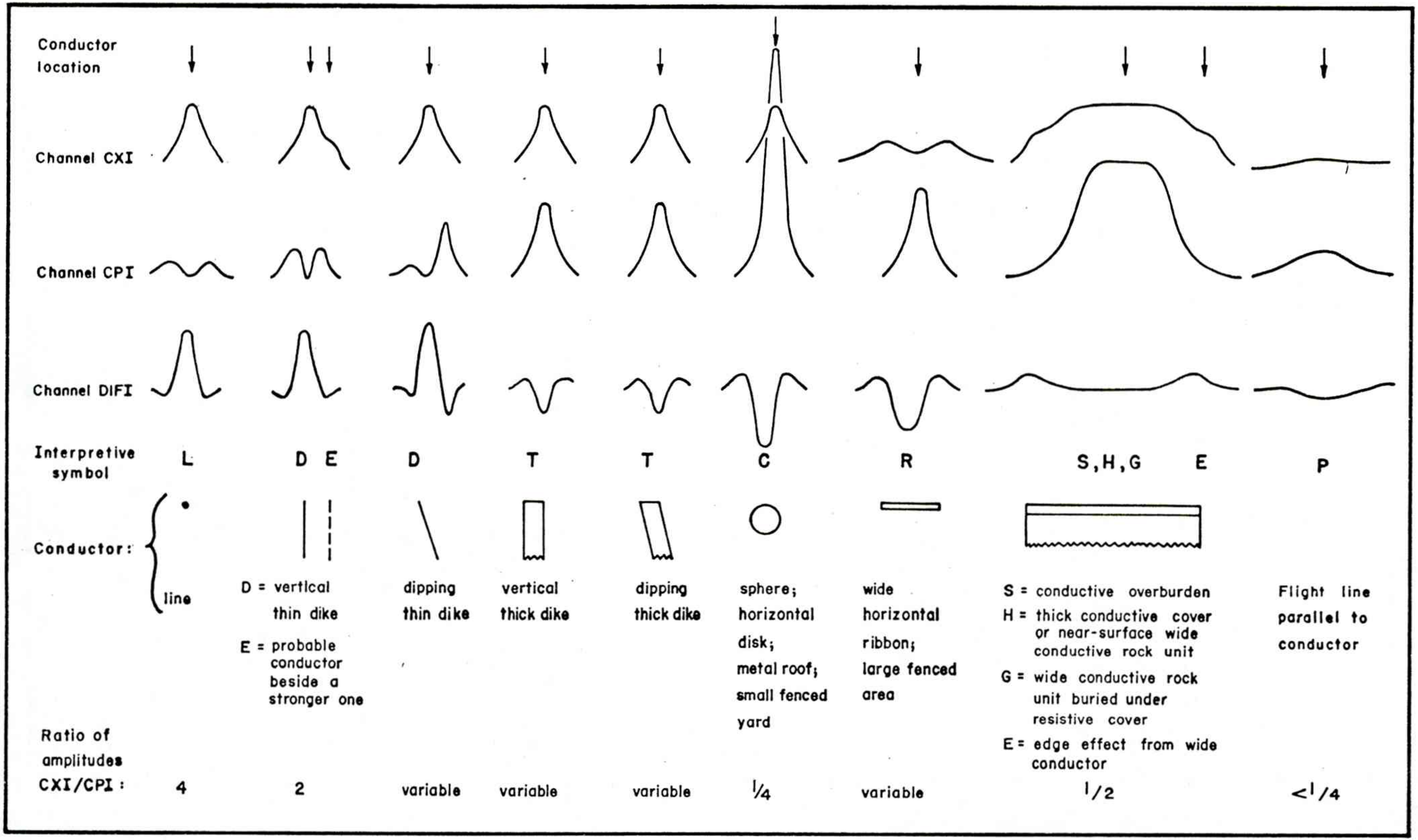


Figure II -1 Typical DIGHEM anomaly shapes grades of conductance, as shown in Table II-1. The conductance in mhos is the reciprocal of resistance in ohms.

Table II-1. EM Anomaly Grades

Anomaly Grade	Mho Range
6	> 99
5	50 - 99
4	20 - 49
3	10 - 19
2	5 - 9
1	< 5

The conductance value is a geological parameter because it is a characteristic of the conductor alone; it generally is independent of frequency, and of flying height or depth of burial apart from the averaging over a greater portion of the conductor as height increases.[1] Small anomalies from deeply buried strong conductors are not confused with small anomalies from shallow weak conductors because the former will have larger conductance values.

Conductive overburden generally produces broad EM responses which are not plotted on the EM maps. However, patchy conductive overburden in otherwise resistive areas

[1] This statement is an approximation. DIGHEM, with its short coil separation, tends to yield larger and more accurate conductance values than airborne systems having a larger coil separation.

can yield discrete anomalies with a conductance grade (cf. Table II-1) of 1, or even of 2 for conducting clays which have resistivities as low as 50 ohm-m. In areas where ground resistivities can be below 10 ohm-m, anomalies caused by weathering variations and similar causes can have any conductance grade. The anomaly shapes from the multiple coils often allow such conductors to be recognized, and these are indicated by the letters S, H, G and sometimes E on the map (see EM legend).

For bedrock conductors, the higher anomaly grades indicate increasingly higher conductances. Examples: DIGHEM's New Insco copper discovery (Noranda, Canada) yielded a grade 4 anomaly, as did the neighbouring copper-zinc Magusi River ore body; Mattabi (copper-zinc, Sturgeon Lake, Canada) and Whistle (nickel, Sudbury, Canada) gave grade 5; and DIGHEM's Montcalm nickel-copper discovery (Timmins, Canada) yielded a grade 6 anomaly. Graphite and sulfides can span all grades but, in any particular survey area, field work may show that the different grades indicate different types of conductors.

Strong conductors (i.e., grades 5 and 6) are characteristic of massive sulfides or graphite. Moderate conductors (grades 3 and 4) typically reflect sulfides of a less massive character or graphite, while weak bedrock conductors (grades 1 and 2) can signify poorly connected graphite or heavily disseminated sulfides. Grade 1 conductors may not respond to ground EM equipment using frequencies less than 2000 Hz.

The presence of sphalerite or gangue can result in ore deposits having weak to moderate conductances. As an example, the three million ton lead-zinc deposit of Restigouche Mining Corporation near Bathurst, Canada, yielded a well defined grade 1 conductor. The 10 percent by volume of sphalerite occurs as a coating around the fine grained massive pyrite, thereby inhibiting electrical conduction.

Faults, fractures and shear zones may produce anomalies which typically have low conductances (e.g., grades 1 and 2). Conductive rock formations can yield anomalies of any conductance grade. The conductive materials in such rock formations can be salt water, weathered products such as clays, original depositional clays, and carbonaceous material.

On the electromagnetic map, a letter identifier and an interpretive symbol are plotted beside the EM grade symbol. The horizontal rows of dots, under the interpretive symbol, indicate the anomaly amplitude on the flight record. The vertical column of dots, under the anomaly letter, gives the estimated depth. In areas where anomalies are crowded, the letter identifiers, interpretive symbols and dots may be obliterated. The EM grade symbols, however, will always be discernible, and the obliterated information can be obtained from the anomaly listing appended to this report.

The purpose of indicating the anomaly amplitude by dots is to provide an estimate of the reliability of the conductance calculation. Thus, a conductance value obtained from a large ppm anomaly (3 or 4 dots) will tend to be accurate whereas one obtained from a small ppm anomaly (no dots) could be quite inaccurate. The absence of amplitude dots indicates that the anomaly from the coaxial coil-pair is 5 ppm or less on both the inphase and quadrature channels. Such small anomalies could reflect a weak conductor at the surface or a stronger conductor at depth. The conductance grade and depth estimate illustrates which of these possibilities fits the recorded data best.

Flight line deviations occasionally yield cases where two anomalies, having similar conductance values but dramatically different depth estimates, occur close together on the same conductor. Such examples illustrate the reliability of the conductance measurement while showing that the depth estimate can be unreliable. There are a number of factors which can produce an error in the depth estimate, including the averaging of topographic variations by the altimeter, overlying conductive overburden, and the location and attitude of the conductor relative to the flight line. Conductor location and attitude can provide an erroneous depth estimate because the stronger part of the conductor may be deeper or to one side of the flight line, or because it has a shallow dip. A heavy tree cover can also produce errors in depth estimates. This is because the depth estimate is computed as the distance of bird from conductor, minus the altimeter reading. The altimeter can lock onto the top of a dense forest canopy. This situation yields an erroneously large depth estimate but does not affect the conductance estimate.

Dip symbols are used to indicate the direction of dip of conductors. These symbols are used only when the anomaly shapes are unambiguous, which usually requires a fairly resistive environment.

A further interpretation is presented on the EM map by means of the line-to-line correlation of anomalies, which is based on a comparison of anomaly shapes on adjacent lines. This provides conductor axes which may define the geological structure over portions of the survey area. The absence of conductor axes in an area implies that anomalies could not be correlated from line to line with reasonable confidence.

DIGHEM electromagnetic maps are designed to provide a correct impression of conductor quality by means of the conductance grade symbols. The symbols can stand alone with geology when planning a follow-up program. The actual conductance values are printed in the attached anomaly list for those who wish quantitative data. The anomaly ppm and depth are indicated by inconspicuous dots which should not distract from the conductor patterns, while being helpful to those who wish this information. The map provides an interpretation of conductors in terms of length, strike and dip, geometric shape, conductance, depth, and thickness (see below). The accuracy is comparable to an interpretation from a high quality ground EM survey having the same line spacing.

The attached EM anomaly list provides a tabulation of anomalies in ppm, conductance, and depth for the vertical sheet model. The EM anomaly list also shows the conductance and depth for a thin horizontal sheet (whole plane) model, but only the vertical sheet parameters appear on the EM map. The horizontal sheet model is suitable for a flatly dipping thin bedrock conductor such as a sulfide sheet having a thickness less than 10 m. The list also shows the resistivity and depth for a conductive earth (half space) model, which is suitable for thicker slabs such as thick conductive overburden. In the EM anomaly list, a depth value of zero for the conductive earth model, in an area of thick cover, warns that the anomaly may be caused by conductive overburden.

Since discrete bodies normally are the targets of EM surveys, local base (or zero) levels are used to compute local anomaly amplitudes. This contrasts with the use of true zero levels which are used to compute true EM amplitudes. Local anomaly amplitudes are shown in the EM anomaly list and these are used to compute the vertical sheet parameters of conductance and depth. Not shown in the EM anomaly list are the true amplitudes which are used to compute the horizontal sheet and conductive earth parameters.

X-type electromagnetic responses

DIGHEM maps contain x-type EM responses in addition to EM anomalies. An x-type response is below the noise threshold of 3 ppm, and reflects one of the following: a weak conductor near the surface, a strong conductor at depth (e.g., 100 to 120 m below surface) or to one side of the flight line, or aerodynamic noise. Those responses that have the appearance of valid bedrock anomalies on the flight profiles are indicated by appropriate interpretive symbols (see EM map legend). The others probably do not warrant further investigation unless their locations are of considerable geological interest.

The thickness parameter

DIGHEM can provide an indication of the thickness of a steeply dipping conductor. The amplitude of the coplanar anomaly (e.g., CPI) increases relative to the coaxial anomaly (e.g., CXI) as the apparent thickness increases, i.e., the thickness in the horizontal plane. (The thickness is equal to the conductor width if the conductor dips at 90 degrees and strikes at right angles to the flight line.) This report refers to a conductor as thin when the thickness is likely to be less than 3 m, and thick when in excess of 10 m. Thin conductors are indicated on the EM map by the interpretive symbol "D", and thick conductors by "T". For base metal exploration in steeply dipping geology, thick conductors can be high priority targets because many massive sulfide ore bodies are thick, whereas non-economic bedrock conductors are often thin. The system cannot sense the thickness when the strike of the conductor is subparallel to the flight line, when the conductor has a shallow dip, when the anomaly amplitudes are small, or when the resistivity of the environment is below 100 ohm-m.

Resistivity mapping

Areas of widespread conductivity are commonly encountered during surveys. In such areas, anomalies can be generated by decreases of only 5 m in survey altitude as well as by increases in conductivity. The typical flight record in conductive areas is characterized by inphase and quadrature channels which are continuously active. Local EM peaks reflect either increases in conductivity of the earth or decreases in survey altitude. For such conductive areas, apparent resistivity profiles and contour maps are necessary for the correct interpretation of the airborne data. The advantage of the resistivity parameter is that anomalies caused by altitude changes are virtually eliminated, so the resistivity data reflect only those anomalies caused by conductivity changes. The resistivity analysis also helps the interpreter to differentiate between conductive trends in the bedrock and those patterns typical of conductive overburden. For example, discrete conductors will generally appear as narrow lows on the contour map and broad conductors (e.g., overburden) will appear as wide lows.

The resistivity profile (see table in Appendix A) and the resistivity contour map present the apparent resistivity using the so-called pseudo-layer (or buried) half space model defined in Fraser (1978)[2]. This model consists of a resistive layer overlying a conductive half space. The depth channel (see Appendix A) gives the apparent depth below surface of the conductive material. The apparent depth is simply the apparent thickness of the overlying resistive layer. The apparent depth (or thickness) parameter will be positive when the upper layer is more resistive than the underlying material, in which case the apparent depth may be quite close to the true depth.

The apparent depth will be negative when the upper layer is more conductive than the underlying material, and will be zero when a homogeneous half space exists. The apparent depth parameter must be interpreted cautiously because it will contain any errors which may exist in the measured altitude of the EM bird (e.g., as caused by a dense tree cover). The inputs to the resistivity algorithm are the inphase and quadrature components of the coplanar coil-pair. The outputs are the apparent resistivity of the

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2 Resistivity mapping with an airborne multicoil electromagnetic system: Geophysics, v. 43, p. 144-172.

conductive half space (the source) and the sensor-source distance. The flying height is not an input variable, and the output resistivity and sensor-source distance are independent of the flying height. The apparent depth, discussed above, is simply the sensor-source distance minus the measured altitude or flying height. Consequently, errors in the measured altitude will affect the apparent depth parameter but not the apparent resistivity parameter.

The apparent depth parameter is a useful indicator of simple layering in areas lacking a heavy tree cover. The DIGHEM system has been flown for purposes of permafrost mapping, where positive apparent depths were used as a measure of permafrost thickness. However, little quantitative use has been made of negative apparent depths because the absolute value of the negative depth is not a measure of the thickness of the conductive upper layer and, therefore, is not meaningful physically. Qualitatively, a negative apparent depth estimate usually shows that the EM anomaly is caused by conductive overburden. Consequently, the apparent depth channel can be of significant help in distinguishing between overburden and bedrock conductors.

The resistivity map often yields more useful information on conductivity distributions than the EM map. In comparing the EM and resistivity maps, keep in mind the following:

(a) The resistivity map portrays the absolute value of the earth's resistivity. (Resistivity = 1/conductivity.)

(b) The EM map portrays anomalies in the earth's resistivity. An anomaly by definition is a change from the norm and so the EM map displays anomalies, (i) over narrow, conductive bodies and (ii) over the boundary zone between two wide formations of differing conductivity.

The resistivity map might be likened to a total field map and the EM map to a horizontal gradient in the direction of flight[3]. Because gradient maps are usually more sensitive than total field maps, the EM map therefore is to be preferred in resistive areas. However, in conductive areas, the absolute character of the resistivity map usually causes it to be more useful than the EM map.

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[3] The gradient analogy is only valid with regard to the identification of anomalous locations.

Interpretation in conductive environments

Environments having background resistivities below 30 ohm-m cause all airborne EM systems to yield very large responses from the conductive ground. This usually prohibits the recognition of discrete bedrock conductors. The processing of DIGHEM data, however, produces six channels which contribute significantly to the recognition of bedrock conductors. These are the inphase and quadrature difference channels (DIFI and DIFQ), and the resistivity and depth channels (RES and DP) for each coplanar frequency; see table in Appendix A.

The EM difference channels (DIFI and DIFQ) eliminate up to 99% of the response of conductive ground, leaving responses from bedrock conductors, cultural features (e.g., telephone lines, fences, etc.) and edge effects. An edge effect arises when the conductivity of the ground suddenly changes, and this is a source of geologic noise. While edge effects yield anomalies on the EM difference channels, they do not produce resistivity anomalies. Consequently, the resistivity channel aids in eliminating anomalies due to edge effects. On the other hand, resistivity anomalies will coincide with the most highly conductive sections of conductive ground, and this is another source of geologic noise. The recognition of a bedrock conductor in a conductive environment therefore is based on the anomalous responses of the two difference channels (DIFI and DIFQ) and the two resistivity channels (RES). The most favourable situation is where anomalies coincide on all four channels.

The DP channels, which give the apparent depth to the conductive material, also help to determine whether a conductive response arises from surficial material or from a conductive zone in the bedrock. When these channels ride above the zero level on the electrostatic chart paper (i.e., depth is negative), it implies that the EM and resistivity profiles are responding primarily to a conductive upper layer, i.e., conductive overburden. If both DP channels are below the zero level, it indicates that a resistive upper layer exists, and this usually implies the existence of a bedrock conductor. If the low frequency DP channel is below the zero level and the high frequency DP is above, this suggests that a bedrock conductor occurs beneath conductive cover.

Channels REC1, REC2, REC3 and REC4 are the anomaly recognition functions. They are used to trigger the conductance channel CDT which identifies discrete conductors. In highly conductive environments, channel REC2 is deactivated because it is subject to corruption by highly conductive earth signals. Similarly, in moderately conductive environments, REC4 is deactivated. Some of the automatically selected anomalies (channel CDT) are discarded by the geophysicist. The automatic selection algorithm is intentionally oversensitive to assure that no meaningful responses are missed. The interpreter then classifies the anomalies according to their source and eliminates those that are not substantiated by the data, such as those arising from geologic or aerodynamic noise.

Reduction of geologic noise

Geologic noise refers to unwanted geophysical responses. For purposes of airborne EM surveying, geologic noise refers to EM responses caused by conductive overburden and magnetic permeability. It was mentioned above that the EM difference channels (i.e., channel DIFI for inphase and DIFQ for quadrature) tend to eliminate the response of conductive overburden. This marked a unique development in airborne EM technology, as DIGHEM is the only EM system which yields channels having an exceptionally high degree of immunity to conductive overburden.

Magnetite produces a form of geological noise on the inphase channels of all EM systems. Rocks containing less than 1% magnetite can yield negative inphase anomalies caused by magnetic permeability. When magnetite is widely distributed throughout a survey area, the inphase EM channels may continuously rise and fall reflecting variations in the magnetite percentage, flying height, and overburden thickness. This can lead to difficulties in recognizing deeply buried bedrock conductors, particularly if conductive overburden also exists. However, the response of broadly distributed magnetite generally vanishes on the inphase difference channel DIFI. This feature can be a significant aid in the recognition of conductors which occur in rocks containing accessory magnetite.

EM magnetite mapping

The information content of DIGHEM data consists of a combination of conductive eddy current response and magnetic permeability response. The secondary field resulting from conductive eddy current flow is frequency-dependent and consists of both inphase and quadrature components, which are positive in sign. On the other hand, the secondary field resulting from magnetic permeability is independent of frequency and consists of only an inphase component which is negative in sign. When magnetic permeability manifests itself by decreasing the measured amount of positive inphase, its presence may be difficult to recognize. However, when it manifests itself by yielding a negative inphase anomaly (e.g., in the absence of eddy current flow), its presence is assured. In this latter case, the negative component can be used to estimate the percent magnetite content.

A magnetite mapping technique was developed for the coplanar coil-pair of DIGHEM. The technique yields channel "FEO" (see Appendix A) which displays apparent weight percent magnetite according to a homogeneous half space model.[4] The method can be complementary to magnetometer mapping in certain cases. Compared to magnetometry, it is far less sensitive but is more able to resolve closely spaced magnetite zones, as well as providing an estimate of the amount of magnetite in the rock. The method is sensitive to 1/4% magnetite by weight when the EM sensor is at a height of 30 m above a magnetitic half space. It can individually resolve steeply dipping narrow magnetite-rich bands which are separated by 60 m. Unlike magnetometry, the EM magnetite method is unaffected by remanent magnetism or magnetic latitude.

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[4] Refer to Fraser, 1981, Magnetite mapping with a multi-coil airborne electromagnetic system: Geophysics, v. 46, p. 1579-1594.

The EM magnetite mapping technique provides estimates of magnetite content which are usually correct within a factor of 2 when the magnetite is fairly uniformly distributed. EM magnetite maps can be generated when magnetic permeability is evident as indicated by anomalies in the magnetite channel FEO.

Like magnetometry, the EM magnetite method maps only bedrock features, provided that the overburden is characterized by a general lack of magnetite. This contrasts with resistivity mapping which portrays the combined effect of bedrock and overburden.

Recognition of culture

Cultural responses include all EM anomalies caused by man-made metallic objects. Such anomalies may be caused by inductive coupling or current gathering. The concern of the interpreter is to recognize when an EM response is due to culture. Points of consideration used by the interpreter, when coaxial and coplanar coil-pairs are operated at a common frequency, are as follows:

1. Channels CXS and CPS (see Appendix A) measure 50 and 60 Hz radiation. An anomaly on these channels shows

that the conductor is radiating cultural power. Such an indication is normally a guarantee that the conductor is cultural. However, care must be taken to ensure that the conductor is not a geologic body which strikes across a power line, carrying leakage currents.

2. A flight which crosses a line (e.g., fence, telephone line, etc.) yields a center-peaked coaxial anomaly and an m-shaped coplanar anomaly.[5] When the flight crosses the cultural line at a high angle of intersection, the amplitude ratio of coaxial/coplanar (e.g., CXI/CPI) is 4. Such an EM anomaly can only be caused by a line. The geologic body which yields anomalies most closely resembling a line is the vertically dipping thin dike. Such a body, however, yields an amplitude ratio of 2 rather than 4. Consequently, an m-shaped coplanar anomaly with a CXI/CPI amplitude ratio of 4 is virtually a guarantee that the source is a cultural line.

3. A flight which crosses a sphere or horizontal disk yields center-peaked coaxial and coplanar anomalies with a CXI/CPI amplitude ratio (i.e., coaxial/coplanar) of 1/4. In the absence of geologic bodies of this geometry, the most likely conductor is a metal roof or

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5 See Figure II-1 presented earlier.

small fenced yard.[4] Anomalies of this type are virtually certain to be cultural if they occur in an area of culture.

4. A flight which crosses a horizontal rectangular body or wide ribbon yields an m-shaped coaxial anomaly and a center-peaked coplanar anomaly. In the absence of geologic bodies of this geometry, the most likely conductor is a large fenced area.[4] Anomalies of this type are virtually certain to be cultural if they occur in an area of culture.

5. EM anomalies which coincide with culture, as seen on the camera film, are usually caused by culture. However, care is taken with such coincidences because a geologic conductor could occur beneath a fence, for example. In this example, the fence would be expected to yield an m-shaped coplanar anomaly as in case #2 above. If, instead, a center-peaked coplanar anomaly occurred, there would be concern that a thick geologic conductor coincided with the cultural line.

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[4] It is a characteristic of EM that geometrically identical anomalies are obtained from: (1) a planar conductor, and (2) a wire which forms a loop having dimensions identical to the perimeter of the equivalent planar conductor.

6. The above description of anomaly shapes is valid when the culture is not conductively coupled to the environment. In this case, the anomalies arise from inductive coupling to the EM transmitter. However, when the environment is quite conductive (e.g., less than 100 ohm-m at 900 Hz), the cultural conductor may be conductively coupled to the environment. In this latter case, the anomaly shapes tend to be governed by current gathering. Current gathering can completely distort the anomaly shapes, thereby complicating the identification of cultural anomalies. In such circumstances, the interpreter can only rely on the radiation channels CXS and CPS, and on the camera film.

MAGNETICS

The existence of a magnetic correlation with an EM anomaly is indicated directly on the EM map. An EM anomaly with magnetic correlation has a greater likelihood of being produced by sulfides than one that is non-magnetic. However, sulfide ore bodies may be non-magnetic (e.g., the Kidd Creek deposit near Timmins, Canada) as well as magnetic (e.g., the Mattabi deposit near Sturgeon Lake, Canada).

The magnetometer data are digitally recorded in the aircraft to an accuracy of one nT (i.e., one gamma). The digital tape is processed by computer to yield a total field magnetic contour map. When warranted, the magnetic data also may be treated mathematically to enhance the magnetic response of the near-surface geology, and an enhanced magnetic contour map is then produced. The response of the enhancement operator in the frequency domain is illustrated in Figure II-2. This figure shows that the passband components of the airborne data are amplified 20 times by the enhancement operator. This means, for example, that a 100 nT anomaly on the enhanced map reflects a 5 nT anomaly for the passband components of the airborne data.

The enhanced map, which bears a resemblance to a downward continuation map, is produced by the digital bandpass filtering of the total field data. The enhancement is equivalent to continuing the field downward to a level (above the source) which is 1/20th of the actual sensor-source distance.

Because the enhanced magnetic map bears a resemblance to a ground magnetic map, it simplifies the recognition of trends in the rock strata and the interpretation of

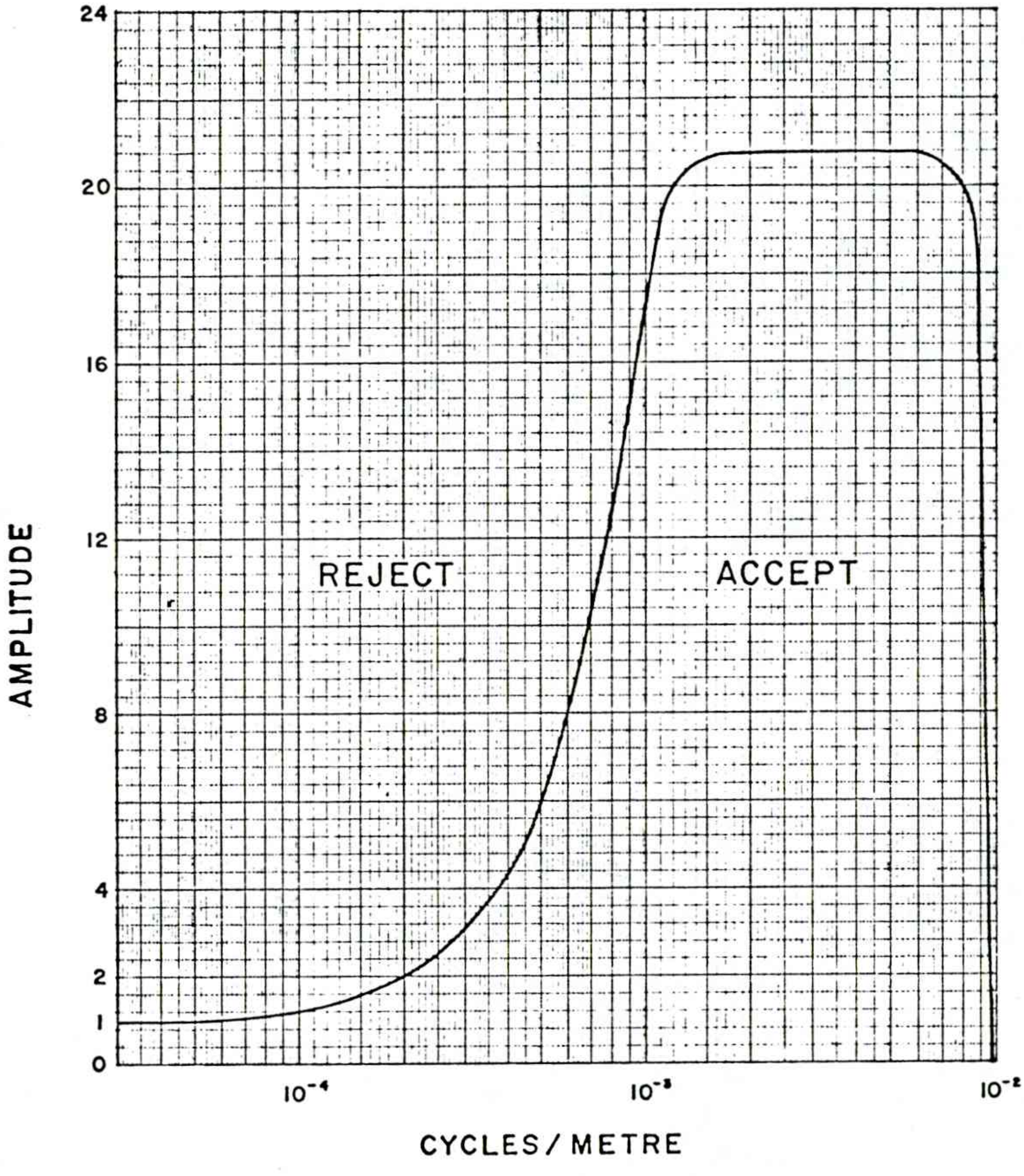

Figure II-2 Frequency response of magnetic enhancement operator.

geological structure. It defines the near-surface local geology while de-emphasizing deep-seated regional features. It primarily has application when the magnetic rock units are steeply dipping and the earth's field dips in excess of 60 degrees.

VLF-EM

VLF-EM anomalies are not EM anomalies in the conventional sense. EM anomalies primarily reflect eddy currents flowing in conductors which have been energized inductively by the primary field. In contrast, VLF-EM anomalies primarily reflect current gathering, which is a non-inductive phenomenon. The primary field sets up currents which flow weakly in rock and overburden, and these tend to collect in low resistivity zones. Such zones may be due to massive sulfides, shears, river valleys and even unconformities.

The Herz Industries Ltd Totem VLF-electromagnetometer measures the total field and vertical quadrature components. Both these components are digitally recorded in the aircraft with a sensitivity of 0.1 percent. The total field yields peaks over VLF-EM current concentrations

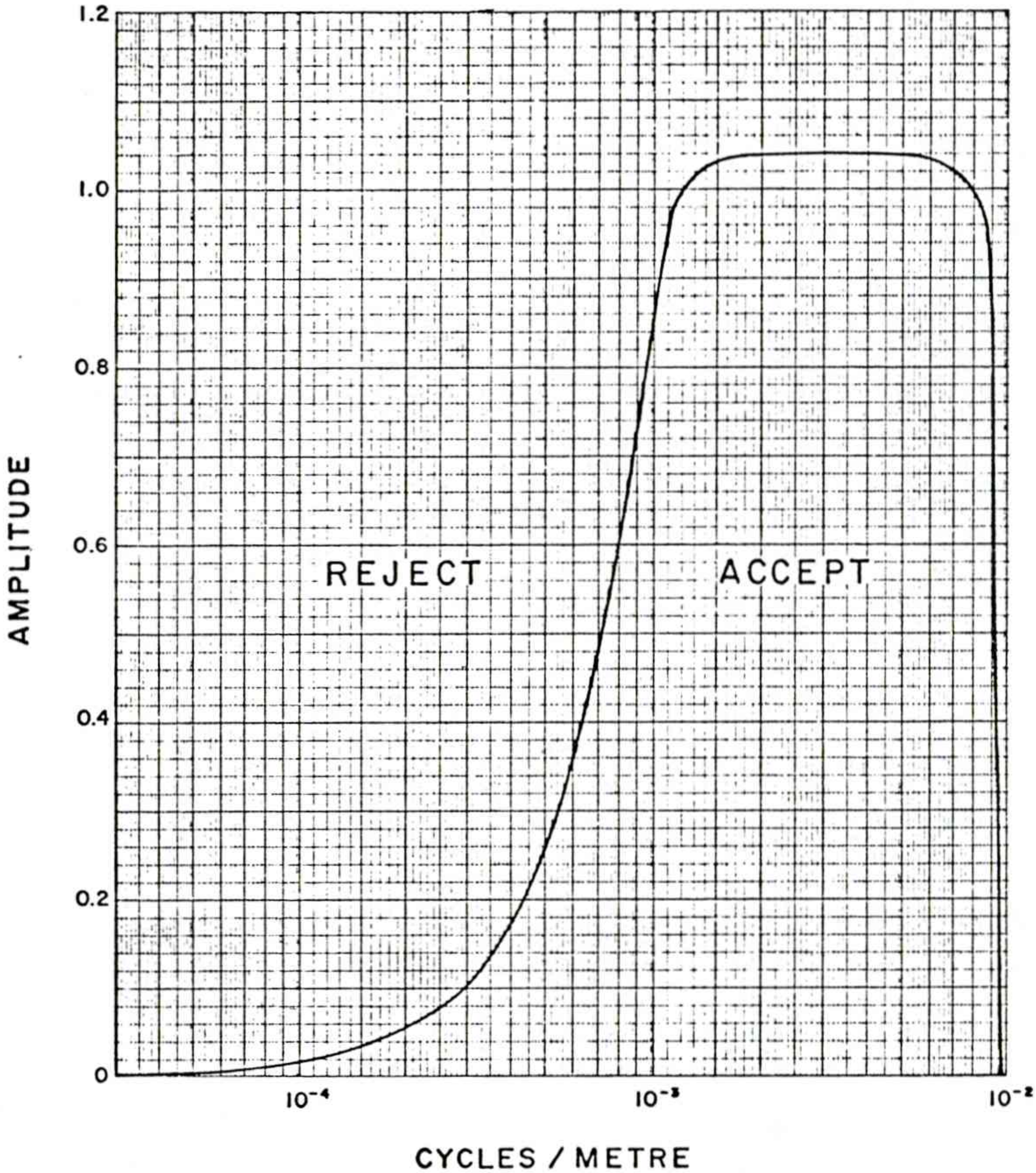

Figure II-3 Frequency response of VLF-EM operator.

whereas the quadrature component tends to yield crossovers. Both appear as traces on the profile records. The total field data also are filtered digitally and displayed on a contour map, to facilitate the recognition of trends in the rock strata and the interpretation of geologic structure.

The response of the VLF-EM total field filter operator in the frequency domain (Figure II-3) is basically similar to that used to produce the enhanced magnetic map (Figure II-2). The two filters are identical along the abscissa but different along the ordinant. The VLF-EM filter removes long wavelengths such as those which reflect regional and wave transmission variations. The filter sharpens short wavelength responses such as those which reflect local geological variations. The filtered total field VLF-EM contour map is produced with a contour interval of one percent.

MAPS ACCOMPANYING THIS REPORT

30 map sheets accompany this report:

Electromagnetic Anomalies	6 map sheets
Resistivity	6 map sheets
Magnetics	6 map sheets
Enhanced Magnetics	6 map sheets
Filtered VLF Total Field	6 map sheets

Respectfully submitted,
DIGHEM LIMITED

S. Kilty

S. Kilty
Operations Manager

Z. Dvorak

Z. Dvorak
Vice-President

I SK-184

A P P E N D I X A

THE FLIGHT RECORD AND PATH RECOVERY

Both analog and digital flight records were produced. The analog profiles were recorded on chart paper in the aircraft during the survey. The digital profiles were generated later by computer and plotted on electrostatic chart paper at a scale of 1:10,000. The digital profiles are listed in Table A-1.

In Table A-1, the log resistivity scale of 0.03 decade/mm means that the resistivity changes by an order of magnitude in 33 mm. The resistivities at 0, 33, 67, 100 and 133 mm up from the bottom of the digital flight record are respectively 1, 10, 100, 1,000 and 10,000 ohm-m.

The fiducial marks on the flight records represent points on the ground which were recovered from camera film. Continuous photographic coverage allowed accurate photo-path recovery locations for the fiducials, which were then plotted on the geophysical maps to provide the track of the aircraft.

The fiducial locations on both the flight records and flight path maps were examined by a computer for unusual helicopter speed changes. Such speed changes may denote an error in flight path recovery. The resulting flight path locations therefore reflect a more stringent checking than is provided by standard flight path recovery techniques.

Table A-1. The Digital Profiles

Channel Name	(Freq)	Observed parameters	Scale units/mm
MAG		magnetics	10 nT
ALT		bird height	3 m
CXI	(900 Hz)	vertical coaxial coil-pair inphase	1 ppm
CXQ	(900 Hz)	vertical coaxial coil-pair quadrature	1 ppm
CXS	(900 Hz)	ambient noise monitor (coaxial receiver)	1 ppm
CPI	(900 Hz)	horizontal coplanar coil-pair inphase	1 ppm
CPQ	(900 Hz)	horizontal coplanar coil-pair quadrature	1 ppm
CPS	(900 Hz)	ambient noise monitor (coplanar receiver)	1 ppm
CPI	(7200 Hz)	horizontal coplanar coil-pair inphase	1 ppm
CPQ	(7200 Hz)	horizontal coplanar coil-pair quadrature	1 ppm
CPS	(7200 Hz)	ambient noise monitor (coplanar receiver)	1 ppm
VLFT		VLF-EM total field	1 %
VLFQ		VLF-EM vertical quadrature	1 %
		Computed Parameters	
DIFI	(900 Hz)	difference function inphase from CXI and CPI	1 ppm
DIFQ	(900 Hz)	difference function quadrature from CXQ and CPQ	1 ppm
REC1		first anomaly recognition function	1 ppm
REC2		second anomaly recognition function	1 ppm
REC3		third anomaly recognition function	1 ppm
REC4		fourth anomaly recognition function	1 ppm
CDT		conductance	1 grade
RES	(900 Hz)	log resistivity	.03 decade
RES	(7200 Hz)	log resistivity	.03 decade
DP	(900 Hz)	apparent depth	3 m
DP	(7200 Hz)	apparent depth	3 m
FEO%	(900 Hz)	apparent weight percent magnetite	0.25%

APPENDIX B

EM ANOMALY LIST

708 SH1 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 2 (FLIGHT 3)												
A 386 B	1	1	0	3	4	22	1	2	1	32	1783	0
LINE 3 (FLIGHT 3)												
A 467 B	1	3	1	6	9	52	1	0	1	15	1401	0
LINE 4 (FLIGHT 3)												
A 637 L?	3	0	0	5	3	44	6	36	1	180	1035	0
B 578 S?	0	1	0	0	3	3	1	51	1	165	8280	0
LINE 5 (FLIGHT 3)												
A 838 B	1	2	0	5	13	36	1	0	1	35	773	4
LINE 6 (FLIGHT 3)												
A 1116 B?	1	1	0	1	4	8	1	25	1	149	7947	21
B 1081 S?	2	1	0	0	0	5	1	0	1	210	8280	0
C 1053 D	27	17	86	53	180	66	28	5	4	72	8	52
F 973 C	7	6	26	31	0	10	9	10	1	202	453	77
LINE 7 (FLIGHT 3)												
A 1425 L	5	5	21	48	11	19	7	0	1	63	287	12
LINE 8 (FLIGHT 3)												
A 1566 B	4	5	4	13	21	76	3	20	1	92	169	43
B 1493 L	2	8	10	27	0	12	2	0	1	112	1035	0
LINE 9 (FLIGHT 3)												
C 1846 S?	0	1	0	2	7	11	1	21	1	62	1006	22
D 1899 D	44	12	46	13	72	18	79	8	16	79	1	67
E 1962 L	0	8	0	16	0	46	4	0	1	5	962	0
LINE 10 (FLIGHT 4)												
A 367 D	17	14	23	18	75	44	15	13	2	95	41	61
B 371 B	17	2	1	17	12	2	19	38	3	118	5	110
C 416 L	2	2	7	20	10	6	3	0	6	131	5	106
D 421 L	2	3	0	20	10	6	2	11	1	125	18	109
E 443 S	1	3	0	5	7	37	1	0	1	24	748	0
F 470 L	1	0	0	1	11	8	2	32	1	113	118	86
LINE 11 (FLIGHT 4)												
B 625 D	29	17	61	46	148	96	24	5	4	60	12	40
C 586 L	6	2	8	10	0	7	14	11	4	164	12	132

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708 SH1 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 12 (FLIGHT 4)												
A 1076 S	0	1	0	1	4	2	2	65	1	204	8280	0
B 1133 B	1	2	0	2	4	21	1	0	1	27	2679	0
C 1172 L	2	2	5	10	0	4	4	3	3	167	16	134
D 1197 S	1	3	0	5	4	50	1	0	1	4	3010	0
LINE 13 (FLIGHT 4)												
D 1750 B	4	11	4	25	80	134	2	4	1	35	277	0
E 1755 B	1	2	1	8	36	78	1	0	1	25	229	3
F 1760 B	1	5	1	5	17	37	1	1	1	63	307	33
G 1819 S	1	4	1	7	13	69	1	0	1	16	822	0
LINE 14 (FLIGHT 4)												
B 2071 S?	1	0	0	0	7	4	2	52	1	180	51	154
C 2052 B?	0	1	0	1	8	13	1	10	1	143	107	116
D 2024 B	3	7	5	18	65	65	2	0	1	25	90	7
E 2017 B	6	28	21	76	303	179	3	0	1	16	77	0
F 1992 L	0	3	0	5	4	19	1	0	1	208	1455	123
G 1965 S	0	3	0	7	12	10	1	24	1	15	1048	0
H 1960 S	1	3	0	7	12	10	1	25	1	18	983	0
LINE 15 (FLIGHT 4)												
A 2323 S?	1	0	1	0	6	4	1	41	1	84	637	42
B 2328 S?	1	0	1	1	8	6	1	36	1	89	478	50
C 2361 B?	0	0	0	1	3	4	1	41	1	133	8280	0
D 2378 S?	0	0	0	1	7	5	1	33	1	58	982	18
E 2400 S?	0	0	0	2	11	10	1	30	1	131	95	106
F 2428 B?	0	0	0	1	5	6	1	33	1	179	85	149
G 2461 B	1	5	4	11	26	38	1	0	1	55	116	34
H 2470 B	6	13	35	35	132	78	8	8	2	58	50	26
I 2477 D	16	10	35	21	83	46	23	22	1	131	147	75
J 2510 S	0	3	0	6	7	54	1	0	1	15	1187	0
K 2517 S	0	2	0	5	1	12	1	0	1	14	1202	0
L 2522 S	0	4	0	7	1	55	1	0	1	13	1379	0
LINE 16 (FLIGHT 5)												
B 307 B	0	3	2	3	11	24	1	8	1	49	647	17
C 311 B	1	2	3	2	13	24	1	0	1	53	191	27
D 317 B	1	1	1	4	17	9	3	7	1	51	153	28
E 326 B	5	6	14	18	37	10	8	15	1	59	28	45
F 332 D	6	14	13	9	20	7	6	11	2	56	49	24
G 339 D	20	22	33	35	102	35	12	13	2	78	36	47

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708 SH1 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 16 (FLIGHT 5)												
H 354 L	3	4	1	7	7	6	4	5	1	103	1035	0
I 357 L	1	1	1	4	12	11	1	0	1	78	44	56
J 378 S	1	4	1	10	20	28	1	1	1	19	543	0
K 383 S	0	4	0	10	21	28	1	8	1	14	620	0
L 445 B?	0	1	0	1	0	8	1	4	1	91	8280	0
LINE 17 (FLIGHT 5)												
C 633 D	2	7	5	17	62	50	2	5	1	45	180	6
D 613 D	25	33	68	73	222	85	12	0	2	37	28	12
E 586 L	2	1	6	19	15	6	3	0	2	107	54	67
F 568 S	1	4	0	6	19	27	1	9	1	15	679	0
G 522 D	6	8	5	8	39	22	5	3	1	91	151	38
H 519 D	10	10	21	26	53	22	9	0	2	49	28	21
LINE 18 (FLIGHT 5)												
A 986 S	0	1	0	1	5	8	1	32	1	66	7939	0
B 1063 B	1	8	7	15	50	68	1	0	1	26	148	4
C 1070 B	7	7	9	12	34	18	7	11	1	82	75	40
D 1074 B	5	7	7	12	50	25	5	21	1	85	640	8
E 1099 L	8	7	17	23	13	7	9	5	2	58	39	27
F 1110 S	1	3	0	6	10	58	1	0	1	11	1092	0
G 1158 D	42	22	97	39	166	62	44	0	5	57	7	39
LINE 19 (FLIGHT 5)												
A 1399 D	4	22	8	40	128	169	2	0	1	62	82	25
B 1394 B	23	10	56	5	116	47	96	9	15	61	1	50
C 1390 B	23	10	56	14	51	26	4	0	1	42	74	24
D 1384 B	2	2	1	3	7	22	1	1	1	37	972	3
E 1366 L	0	0	3	19	4	3	1	0	1	198	1035	0
F 1360 L	2	9	8	29	10	5	5	0	1	35	607	0
G 1346 S	1	4	1	8	15	57	1	0	1	13	693	0
H 1328 B?	0	0	1	1	8	19	1	0	1	42	769	7
I 1311 B?	1	2	3	7	20	12	2	0	1	64	143	39
LINE 20 (FLIGHT 5)												
B 1809 D	20	9	47	18	71	35	40	10	4	66	13	45
C 1816 B	2	6	1	8	27	49	1	0	1	41	326	14
D 1841 L	0	13	4	18	25	33	3	0	1	168	152	105
E 1854 S	1	3	0	8	14	73	1	0	1	14	886	0
F 1866 B	1	0	1	2	8	10	1	27	1	86	567	46
I 1886 B	4	6	3	3	38	16	4	8	1	76	172	24

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708 SH1 SULITJELMA

ANOMALY/	FID/	INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 20			(FLIGHT 5)											
J	1899	B	6	15	9	4	64	17	5	12	1	93	130	45
K	1908	D	20	29	23	24	115	50	9	10	2	51	39	23
LINE 21			(FLIGHT 6)											
A	314	B	7	11	28	21	69	83	2	0	1	22	103	3
B	321	D	230	112	413	223	769	187	65	0	7	22	3	12
C	337	L	23	27	19	23	6	6	1	7	1	75	740	29
D	339	L	23	27	19	23	7	11	10	0	1	82	67	41
E	349	S	1	3	0	6	15	24	1	9	1	15	837	0
F	373	D	5	15	15	31	91	36	4	0	1	50	99	13
H	387	B	9	17	17	16	31	16	6	5	1	80	117	35
I	391	B	16	19	17	16	86	31	10	13	2	63	37	33
J	397	B	5	6	12	12	37	32	2	17	1	70	79	51
K	401	B	4	6	12	11	37	32	6	12	1	139	127	82
LINE 22			(FLIGHT 6)											
C	788	B?	2	1	1	4	14	16	1	0	1	80	53	60
D	781	B	1	8	7	16	49	56	2	0	1	35	110	16
E	775	B	6	10	30	18	52	80	11	27	1	69	95	32
F	770	D	30	37	77	45	168	94	18	3	3	52	17	30
G	751	P	1	1	5	2	10	3	12	67	4	187	15	154
H	740	L	16	13	21	40	17	12	9	0	1	135	498	37
I	719	S	1	7	0	11	19	99	1	0	1	18	682	0
J	708	L?	0	0	0	0	7	17	1	13	1	66	975	27
K	699	B	5	14	8	27	86	47	3	0	1	40	144	3
L	690	B	2	2	2	3	15	14	1	8	1	78	109	53
M	683	B	6	4	10	9	25	32	12	29	1	107	68	65
N	681	B	6	5	10	9	24	25	10	27	2	104	37	71
O	678	E	6	5	10	7	24	25	1	5	1	48	125	27
P	672	B	2	2	1	4	17	12	2	22	1	68	168	44
LINE 23			(FLIGHT 6)											
A	1130	S	0	1	0	1	5	6	1	35	1	25	5359	0
B	1254	B	2	9	2	15	42	53	1	6	1	38	155	17
C	1274	T	104	23	196	45	293	23	161	0	29	28	1	22
D	1276	B	37	9	196	45	293	11	131	0	9	51	2	36
G	1283	L	0	8	1	76	7	4	1	0	1	162	1035	0
I	1301	L?	1	2	0	1	15	6	4	19	1	90	118	64
J	1305	B?	2	3	0	1	14	9	3	61	1	213	1035	0
K	1315	B?	1	1	0	3	9	6	2	34	1	119	31	99
L	1324	D	8	8	13	12	43	22	9	19	2	110	41	76

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708 SH1 SULITJELMA

ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 23	(FLIGHT	6)										
M 1348 B?	9	9	3	4	13	12	1	18	7	92	1	89
N 1353 B?	9	9	5	5	21	18	8	34	1	124	107	74
LINE 24	(FLIGHT	23)										
E 332 E	4	5	9	11	28	37	6	16	2	84	47	48
F 334 B	4	4	9	10	33	24	2	7	1	47	143	25
G 342 B	1	2	0	7	30	67	1	0	1	27	410	4
H 345 D	65	22	177	35	256	64	120	2	16	50	1	40
I 348 B	48	48	136	94	248	116	23	1	6	40	5	26
J 349 B	42	48	136	94	281	116	22	0	4	57	9	38
K 355 L	4	1	2	1	6	4	23	29	1	166	565	33
L 365 S	3	3	0	6	12	53	1	0	1	17	752	0
M 391 B?	2	4	1	7	18	24	1	0	1	60	148	37
LINE 25	(FLIGHT	23)										
B 561 B	3	3	2	4	19	31	1	0	1	33	528	3
C 558 D	42	23	116	47	218	40	45	4	8	53	3	40
D 554 D	126	54	212	91	340	140	67	0	6	34	4	21
E 546 L	4	2	4	3	7	4	15	19	3	166	23	130
G 526 L?	1	1	2	3	6	22	1	0	1	5	1710	0
LINE 26	(FLIGHT	11)										
A 357 B	37	21	70	57	218	202	25	6	5	52	8	35
B 360 B	49	21	48	57	218	202	25	9	8	60	2	48
C 364 B	45	17	39	25	44	80	41	0	4	65	10	44
D 374 D	10	1	30	8	44	3	94	0	9	102	3	84
E 379 L	4	5	6	13	6	29	4	0	2	104	46	67
F 381 L	1	5	6	13	7	29	1	0	1	45	1162	6
G 393 S	1	4	1	7	10	61	1	0	1	14	1188	0
H 403 L?	3	8	1	5	13	39	2	3	1	133	1035	0
I 419 E	3	6	2	5	19	34	3	17	1	140	1035	0
LINE 27	(FLIGHT	11)										
A 630 B	20	17	28	32	100	108	2	0	1	24	55	10
B 626 B	20	17	30	23	126	37	16	0	2	53	30	25
C 611 D	38	7	59	16	89	9	110	10	7	94	4	76
D 601 L	3	4	2	3	5	34	5	12	1	177	1035	0
E 595 L	5	5	1	1	2	35	8	34	1	184	1035	0
F 584 S	1	6	0	10	18	97	1	0	1	15	690	0
G 576 D	26	2	17	2	22	18	357	17	1	187	992	32
LINE 28	(FLIGHT	11)										
A 1134 B	61	41	101	88	297	147	25	0	4	30	12	12

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 28 (FLIGHT 11)												
B 1137 B	88	39	158	98	329	90	45	0	6	44	4	30
C 1153 L	2	2	1	3	7	9	1	0	1	33	780	0
E 1165 S	0	4	0	7	16	66	1	0	1	19	503	0
F 1174 L	9	7	74	27	128	1	38	14	1	183	140	120
LINE 29 (FLIGHT 11)												
A 1395 B	4	17	5	21	82	79	2	0	1	38	229	0
B 1393 B	6	17	5	21	82	48	2	0	1	61	546	1
C 1386 D	4	26	5	42	154	160	1	0	1	24	291	0
D 1372 L	3	10	3	7	20	12	2	0	1	121	149	62
E 1355 S	1	4	0	9	22	77	1	0	1	16	576	0
LINE 30 (FLIGHT 11)												
A 1933 E	7	47	104	89	263	79	9	0	1	35	136	0
B 1936 D	49	47	104	89	263	79	20	0	4	39	11	21
C 1940 L	4	8	7	17	53	54	3	0	1	64	151	18
D 1964 S	0	4	0	9	24	21	2	13	1	21	540	0
LINE 31 (FLIGHT 22)												
A 2000 P	1	2	1	1	9	6	2	0	1	50	83	27
B 1996 P	0	2	0	3	9	16	1	0	1	55	501	16
C 1986 L	0	1	0	1	8	4	2	0	1	92	30	70
D 1975 S	0	4	0	7	18	47	1	0	1	20	506	0
LINE 32 (FLIGHT 22)												
B 1758 B	9	12	4	15	58	39	5	0	1	32	159	0
C 1786 L	0	1	0	0	6	4	1	0	1	81	152	49
LINE 33 (FLIGHT 22)												
A 1394 P?	4	1	6	9	35	18	9	25	4	155	13	126
B 1391 P?	7	6	6	9	35	20	7	0	1	58	128	7
LINE 34 (FLIGHT 22)												
A 966 P?	6	4	2	11	33	19	5	0	1	105	70	60
B 970 P?	3	6	5	11	33	19	3	0	1	71	88	26
C 987 L	5	2	9	2	15	3	31	0	3	143	17	110
D 993 L	1	1	1	1	9	4	3	0	1	96	25	76
LINE 35 (FLIGHT 22)												
A 612 D	10	4	17	6	29	6	39	9	6	94	6	73
LINE 36 (FLIGHT 22)												
B 329 D	11	3	8	3	14	2	53	0	3	90	18	59

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 36 (FLIGHT 22)												
C 336 B	1	3	3	4	9	6	2	14	1	93	17	77
D 341 B	1	4	0	3	16	11	2	0	1	75	85	52
LINE 37 (FLIGHT 21)												
B 936 D	24	7	17	6	24	7	55	0	4	82	10	58
C 942 B	2	4	7	10	24	15	3	16	1	69	37	53
D 945 B	2	5	5	8	3	28	3	0	1	91	163	35
LINE 382 (FLIGHT 21)												
B 587 D	6	2	11	3	13	5	36	0	7	102	4	80
LINE 39 (FLIGHT 21)												
A 274 D	25	7	21	7	31	6	57	0	4	80	12	55
B 278 B	1	6	4	2	6	31	1	0	1	87	74	65
LINE 40 (FLIGHT 20)												
A 2121 D	21	16	5	7	24	39	14	0	2	90	28	59
C 2126 D	2	12	5	15	56	57	2	0	2	87	48	51
LINE 41 (FLIGHT 20)												
A 1797 B	3	3	1	2	14	11	6	12	3	139	16	108
LINE 42 (FLIGHT 20)												
A 1477 D	44	27	47	52	151	30	21	0	5	43	8	24
B 1481 D	33	39	47	52	151	66	12	0	3	38	21	14
LINE 43 (FLIGHT 20)												
A 1185 D	24	10	38	16	70	15	41	8	6	72	4	56
B 1181 D	6	11	63	84	241	81	9	0	3	75	23	49
LINE 44 (FLIGHT 20)												
A 846 B	17	29	9	25	88	52	5	0	1	48	61	14
LINE 45 (FLIGHT 20)												
A 573 D	16	22	12	20	59	31	7	0	2	73	35	42
LINE 46 (FLIGHT 20)												
A 224 B	3	11	4	33	108	112	1	0	1	70	85	29
LINE 48 (FLIGHT 19)												
A 2891 E	7	16	26	19	98	15	28	0	2	28	6	19

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708 SHEET 2 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 28 (FLIGHT 11)												
A 956 C	1	1	5	3	14	5	7	49	2	150	52	109
LINE 29 (FLIGHT 11)												
A 1590 B	1	1	2	3	13	8	2	24	1	103	157	74
LINE 31 (FLIGHT 22)												
A 2122 B	0	1	2	3	15	5	4	28	1	100	134	73
B 2118 C	3	7	12	19	58	48	4	17	1	71	95	32
LINE 32 (FLIGHT 22)												
A 1629 B	0	1	1	2	8	8	1	33	1	154	129	125
B 1639 C	3	1	16	2	22	2	131	38	24	117	1	109
LINE 34 (FLIGHT 22)												
A 822 B	1	3	1	7	25	45	1	0	1	46	302	18
LINE 35 (FLIGHT 22)												
A 745 C	3	7	12	28	84	72	3	7	1	61	73	25
B 738 B	1	1	4	2	5	3	1	42	1	119	1543	59
LINE 36 (FLIGHT 22)												
A 179 D	4	7	14	19	50	68	5	13	2	79	38	46
C 182 P	0	1	0	1	6	12	1	20	1	65	1151	24
D 185 P	1	0	10	4	20	5	27	51	6	139	7	114
E 188 D	4	10	11	18	60	40	4	10	1	78	126	34
F 205 P	2	2	8	7	24	12	7	30	2	117	38	83
LINE 37 (FLIGHT 21)												
A 762 B	1	5	3	11	37	27	2	0	1	32	77	12
B 765 B	0	2	2	5	22	15	2	0	1	31	97	11
C 768 B	0	7	0	15	52	62	1	0	1	24	177	1
D 778 B	1	3	4	8	16	16	2	20	1	149	89	98
E 786 B	1	2	0	3	1	5	1	4	1	81	7026	0
F 789 B	5	5	19	14	41	12	12	19	4	94	11	71
G 792 B	26	30	92	58	196	78	20	4	7	72	4	56
H 796 B	0	3	0	10	23	33	1	8	1	59	267	30
I 805 B	9	11	29	31	102	65	10	9	3	68	21	43
J 811 B	7	4	17	10	38	17	18	28	4	105	10	82
K 817 B	3	6	15	5	46	21	5	12	1	59	73	41
L 818 B	5	6	15	5	22	21	1	8	1	40	75	23
M 823 B	88	33	195	63	305	51	83	0	14	35	1	25

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708 SHEET 2 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 37 (FLIGHT 21)												
O 832 P	6	4	24	13	42	16	19	17	5	102	8	80
LINE 382 (FLIGHT 21)												
A 737 B	3	7	9	16	40	30	3	1	1	50	98	12
B 733 B	2	11	4	19	59	119	1	0	1	28	193	7
C 728 D	4	7	7	11	39	23	5	23	1	85	202	36
D 722 B	25	15	82	49	176	82	28	4	4	60	13	40
E 719 B	8	11	47	64	183	71	9	1	3	45	22	20
F 711 B	3	3	12	14	46	24	7	23	2	84	43	49
G 704 B	3	0	5	2	13	2	11	31	1	106	32	86
H 702 B	1	2	0	4	10	11	1	15	1	78	211	51
I 700 B	1	2	5	5	19	8	4	17	1	98	45	77
J 688 B	6	4	24	3	30	3	34	13	8	80	1	77
LINE 39 (FLIGHT 21)												
A 119 B	1	3	3	6	24	22	2	0	1	53	199	27
B 121 B	2	3	1	5	16	21	1	2	1	57	346	25
C 126 B	1	4	6	5	12	58	1	0	1	18	828	0
E 130 B	17	26	66	84	251	118	10	0	2	30	21	8
F 133 B	17	17	40	38	111	42	13	6	3	66	16	44
G 141 B	24	11	94	40	158	26	44	0	9	39	2	27
I 147 B	2	2	10	8	33	12	6	11	1	65	40	49
J 150 B	24	15	94	50	171	53	32	0	7	41	3	28
K 154 B	1	1	8	3	12	10	1	26	1	71	112	49
L 158 B	4	6	14	14	41	21	7	17	2	90	37	57
M 171 B	2	9	14	22	75	116	1	0	1	23	126	4
N 172 P	2	9	14	22	75	116	4	1	2	69	36	38
O 182 B	0	1	0	3	14	19	1	13	1	61	446	27
P 185 B	1	1	0	1	8	16	1	11	1	66	773	26
LINE 40 (FLIGHT 20)												
A 1959 S	2	5	5	9	32	41	3	14	1	86	111	39
B 1963 S	1	3	2	4	12	23	1	11	1	54	579	21
C 1970 B	3	3	9	7	28	10	8	25	2	111	36	77
D 1974 B	14	13	40	44	152	57	12	9	3	53	17	31
E 1977 B	20	5	63	44	152	19	32	0	7	52	3	37
F 1981 B	25	23	144	53	249	131	40	5	7	47	4	34
G 1982 B	44	23	144	53	249	131	54	0	9	46	2	34
H 1984 B	44	15	17	16	53	54	2	0	1	53	31	39
J 1990 B	181	103	394	273	816	191	47	0	9	20	2	11
K 1994 B	65	45	167	118	362	176	31	0	44	23	1	19

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708 SHEET 2 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 40 (FLIGHT 20)												
L 1996 B	106	45	269	118	362	196	67	0	8	26	2	15
N 2002 B	76	41	163	125	454	106	34	0	7	32	3	20
P 2006 B	1	4	8	18	57	34	3	7	1	202	938	42
Q 2016 B	3	6	8	17	28	70	3	11	2	111	45	76
R 2018 B	3	6	8	17	71	72	2	3	1	42	96	24
LINE 41 (FLIGHT 20)												
A 1923 B	1	1	2	2	11	3	7	47	1	97	342	63
B 1918 B	8	8	17	14	49	33	11	19	3	87	25	60
C 1913 B	19	13	41	31	97	82	19	10	5	65	7	47
D 1903 B	102	23	257	101	251	88	102	0	9	31	2	20
E 1902 B	102	23	257	53	251	88	180	0	14	29	1	19
F 1899 B	54	35	20	99	278	83	11	0	9	33	2	22
G 1898 B	54	35	126	99	278	83	27	0	6	26	4	12
I 1892 B	2	2	4	11	36	26	2	10	1	60	119	39
J 1882 B	1	2	1	8	29	27	2	12	1	67	156	43
LINE 42 (FLIGHT 20)												
A 1339 B	2	6	10	14	44	66	1	0	1	35	169	13
B 1345 D	12	9	38	19	84	74	22	13	2	95	56	56
C 1355 B	10	5	2	13	49	74	8	28	1	54	764	0
D 1358 B	0	4	2	8	30	58	1	0	1	35	248	11
E 1377 B	1	2	1	4	19	31	1	0	1	44	374	14
LINE 43 (FLIGHT 20)												
A 1305 B	0	1	1	2	6	14	1	9	1	64	1030	23
B 1299 B	2	5	2	16	55	76	1	0	1	32	150	11
C 1286 P	2	1	5	1	7	2	41	69	4	187	12	156
D 1278 P	0	1	1	3	15	17	1	19	1	79	325	46
LINE 44 (FLIGHT 20)												
A 713 E	1	3	1	6	14	25	1	0	1	56	442	22
B 716 B	0	5	0	8	24	37	1	8	1	39	342	13
C 718 B	1	4	0	8	35	78	1	0	1	91	1035	0
D 722 B	1	6	3	17	69	84	1	0	1	50	266	6
E 725 B	6	9	15	9	37	15	5	20	1	68	60	49
F 727 B	7	9	15	18	63	63	7	12	2	82	31	52
G 739 B	1	2	5	4	13	5	6	46	2	158	39	118
H 751 B	1	8	2	18	65	68	1	0	1	54	621	0
LINE 45 (FLIGHT 20)												
A 681 T	25	19	65	47	151	43	21	2	4	55	13	35

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 45 (FLIGHT 20)												
B 669 P	3	4	28	18	57	14	12	19	4	82	13	59
C 662 B	1	1	0	2	7	16	1	6	1	59	1029	19
LINE 46 (FLIGHT 20)												
A 100 B	0	11	0	16	50	118	1	0	1	18	257	0
B 104 B	3	10	8	28	117	160	2	0	1	30	151	0
C 107 B	2	10	0	14	50	129	1	0	1	31	135	11
D 110 B	1	5	4	12	46	69	1	0	1	29	150	8
E 117 B	2	5	4	13	45	32	3	6	1	50	73	32
F 121 P	1	4	8	14	46	14	3	16	1	59	90	22
G 127 B	7	9	23	25	87	46	9	8	2	78	29	49
J 136 B	16	27	0	2	7	22	5	2	1	201	1035	0
L 211 L?	0	7	1	1	2	2	1	0	1	210	1035	0
LINE 47 (FLIGHT 19)												
A 3002 P	2	6	9	13	44	27	4	11	1	87	140	38
C 3010 D	11	17	33	43	130	53	8	7	2	60	55	27
LINE 49 (FLIGHT 19)												
B 2511 B	13	10	25	9	63	22	23	1	6	71	5	52
C 2517 B	40	14	381	14	106	69	639	0	19	49	1	41
LINE 50 (FLIGHT 19)												
A 2317 E	12	5	29	3	31	17	68	0	8	79	3	61
B 2312 B	33	21	62	24	102	44	33	7	27	57	1	51
LINE 51 (FLIGHT 19)												
B 1898 B	17	5	37	12	72	28	55	11	11	68	1	54
D 1903 B	100	40	187	89	350	71	62	0	11	31	1	21
LINE 52 (FLIGHT 19)												
A 1748 B	14	12	33	32	139	81	13	3	4	59	9	39
B 1747 B	14	9	14	11	51	39	2	0	1	29	19	17
LINE 53 (FLIGHT 19)												
A 1340 B	38	29	80	66	228	62	21	0	8	53	3	40
B 1345 B	173	66	253	151	510	171	64	0	9	18	2	8
LINE 54 (FLIGHT 19)												
A 1138 E	70	26	170	83	325	71	24	0	6	31	1	27
C 1133 B	152	80	222	159	541	196	44	0	12	20	1	12

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 54 (FLIGHT 19)												
D 1129 B	163	72	344	203	753	196	59	0	11	18	1	9
LINE 55 (FLIGHT 19)												
A 691 D	188	109	331	229	486	345	46	0	5	19	5	7
LINE 56 (FLIGHT 19)												
A 587 B	69	21	69	16	56	43	96	4	25	46	1	39
B 583 B	32	23	233	100	68	85	48	0	92	27	1	25
C 580 B	99	54	226	100	335	85	54	0	5	29	6	15
LINE 57 (FLIGHT 19)												
A 125 B	9	2	26	5	32	13	97	20	14	84	1	71
B 129 B	15	0	21	2	26	1	49	17	2	52	8	42
D 134 B	121	24	213	43	298	72	195	0	32	28	1	23
LINE 58 (FLIGHT 18)												
A 2900 B	41	7	148	28	190	10	185	0	5	43	1	38
B 2904 B	120	43	211	70	362	60	89	0	10	34	2	23
LINE 59 (FLIGHT 18)												
A 2784 E	8	27	2	56	172	68	2	0	1	74	75	33
B 2781 B	34	27	92	56	172	68	25	0	7	57	4	43
D 2777 B	77	45	92	38	138	26	42	1	2	78	27	50
LINE 60 (FLIGHT 18)												
A 1811 D	38	4	43	5	56	8	344	0	30	77	1	70
B 1821 B	5	4	16	6	14	3	10	39	2	97	10	85
C 1829 B	16	8	41	27	83	76	25	16	3	63	16	42
LINE 61 (FLIGHT 18)												
A 1643 D	7	7	15	18	53	26	8	4	8	80	3	63
B 1642 G	7	7	15	18	53	32	3	0	2	38	11	27
C 1641 E	13	7	130	46	203	31	55	0	2	65	34	34
D 1639 D	61	31	130	46	203	31	54	0	6	46	4	31
LINE 62 (FLIGHT 18)												
A 1037 D	77	16	64	21	88	34	113	0	8	62	3	47
B 1050 B	2	8	33	25	80	41	9	11	1	52	107	15
C 1053 B	7	8	31	26	16	40	12	14	2	56	49	24
LINE 632 (FLIGHT 18)												
A 909 D	8	4	22	6	27	8	40	7	6	103	6	81

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 632 (FLIGHT 18)												
B 904 D	49	3	61	8	78	8	457	4	14	77	1	64
C 894 B	3	11	11	23	71	57	3	11	2	67	49	35
E 889 B	4	11	11	19	69	52	3	9	1	37	62	22
LINE 64 (FLIGHT 18)												
B 162 D	68	58	93	88	310	208	21	0	4	35	11	17
C 167 B	127	18	137	17	178	11	330	0	9	62	2	47
D 173 B	8	8	33	24	63	27	14	19	4	67	11	47
G 181 B	2	11	6	21	92	82	2	2	1	43	183	5
LINE 65 (FLIGHT 17)												
A 108 D	55	13	65	20	87	21	98	0	5	61	6	43
B 114 B	8	29	15	46	156	122	3	0	1	32	77	4
C 119 B	4	3	7	5	19	24	1	18	1	54	105	35
LINE 66 (FLIGHT 16)												
B 907 E	28	2	63	3	75	32	6	4	1	59	42	43
C 911 B	60	2	80	20	96	16	324	4	79	46	1	43
D 913 B	68	15	120	24	164	30	153	5	11	62	1	50
E 919 B	9	22	22	46	145	61	4	0	1	47	61	15
F 927 P	7	34	22	66	294	269	3	0	1	26	70	0
LINE 67 (FLIGHT 16)												
A 758 B	38	11	71	16	89	18	94	0	39	50	1	45
B 756 B	53	11	71	16	89	10	130	0	4	94	9	73
C 748 S	3	9	4	15	36	94	1	0	1	23	235	2
E 741 B	6	19	15	27	107	181	1	0	1	25	66	10
LINE 68 (FLIGHT 16)												
A 152 B	19	12	32	23	91	41	20	9	3	59	18	36
B 162 S	0	6	1	13	45	94	1	0	1	21	196	1
C 167 S	0	5	0	13	37	76	1	0	1	17	328	0
LINE 69 (FLIGHT 15)												
B 2911 S	0	4	0	8	26	44	1	2	1	18	470	0
LINE 70 (FLIGHT 15)												
A 2879 S	1	13	5	17	51	116	1	0	1	36	929	0

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 23	(FLIGHT 6)											
A 1358 B	7	9	7	5	21	24	1	12	1	74	71	54
B 1364 B	3	3	7	5	17	24	1	8	1	75	73	54
LINE 24	(FLIGHT 23)											
A 401 B	2	9	5	13	52	50	2	8	1	86	87	45
B 413 P?	3	2	4	3	6	9	7	37	3	150	24	116
LINE 25	(FLIGHT 23)											
A 505 B	3	15	4	23	85	81	2	0	1	59	202	15
B 497 P	3	4	5	6	23	15	5	23	2	104	56	64
C 489 P	2	3	5	3	6	10	1	1	1	83	609	39
LINE 26	(FLIGHT 11)											
A 423 B	3	2	2	8	46	47	2	7	1	47	115	27
B 429 D	49	45	104	98	315	168	19	0	3	30	18	9
C 440 B	8	21	19	45	147	110	4	0	1	44	58	14
D 446 B	2	7	5	12	45	1	2	13	1	78	242	29
E 458 P	3	1	2	3	7	12	9	37	1	122	440	32
LINE 27	(FLIGHT 11)											
A 561 B	2	7	3	10	34	24	2	0	1	27	190	2
B 555 D	47	26	63	49	143	48	28	0	3	46	13	26
C 550 B	10	8	60	7	32	58	66	16	2	88	39	54
D 545 P	1	5	4	16	73	91	2	0	1	31	74	15
E 537 B	2	8	4	11	39	44	1	0	1	42	172	18
F 526 P	1	3	2	7	18	12	2	13	1	78	393	42
G 523 B	5	3	7	5	15	12	13	25	2	111	48	74
LINE 28	(FLIGHT 11)											
A 1180 B	135	45	162	69	283	34	81	0	11	39	1	29
B 1193 B	5	18	32	30	112	87	7	3	4	101	10	77
C 1197 B	12	2	16	30	112	87	12	13	2	69	47	35
D 1200 B	12	2	16	3	17	143	1	0	2	83	9	72
E 1208 B	38	66	58	116	393	245	8	0	2	33	34	11
F 1216 B	5	4	8	6	13	31	10	34	1	87	98	43
G 1223 B	3	11	6	19	76	76	2	0	1	45	104	11
H 1229 B	5	13	13	36	124	66	3	0	1	40	79	10
I 1244 B	6	5	12	10	27	15	10	32	2	99	28	71
LINE 29	(FLIGHT 11)											
A 1341 B	64	48	45	60	190	64	19	0	8	36	3	23

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708 SHEET 3 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 29	(FLIGHT 11)											
B 1339 B	17	0	30	0	73	20	48	16	40	53	1	49
C 1330 B	8	7	14	5	22	7	16	11	2	91	30	61
D 1320 B	28	13	55	34	66	56	31	3	4	44	9	27
E 1318 B	15	16	55	34	60	56	18	6	3	58	17	36
F 1311 B	5	8	10	8	32	47	1	0	1	24	111	5
G 1307 B	9	13	26	38	107	87	7	5	2	50	47	20
H 1302 D	35	19	71	34	116	27	35	0	4	46	11	26
LINE 30	(FLIGHT 11)											
A 1981 L	8	16	6	2	44	40	5	15	1	97	299	41
B 1989 B	109	55	147	91	248	181	44	0	3	46	13	26
C 1991 B	109	55	147	91	248	181	44	3	12	41	1	32
D 1996 B	139	31	233	74	366	52	135	0	18	29	1	21
E 2005 B	10	9	38	17	62	36	21	18	3	100	22	72
F 2012 D	73	55	108	88	285	118	25	1	4	35	11	18
G 2016 B	33	32	66	63	214	111	16	0	4	49	10	31
H 2020 B	10	18	40	25	69	147	11	9	2	79	37	47
I 2029 B	35	8	3	10	36	107	1	0	1	26	136	6
J 2033 B	35	22	67	49	165	48	25	0	2	53	35	24
K 2037 B	16	5	53	49	165	15	20	10	9	82	2	67
L 2050 B	27	24	46	45	120	50	15	0	3	52	20	27
LINE 303	(FLIGHT 11)											
A 2134 D	36	23	56	43	151	69	24	3	3	52	15	31
B 2128 B	26	20	47	29	98	82	21	5	2	51	31	24
C 2126 B	26	25	28	44	116	200	11	10	3	47	14	27
D 2122 B	21	17	23	32	116	111	2	0	1	21	44	8
F 2116 B	5	3	8	8	18	12	2	15	1	43	93	25
G 2107 B	1	5	2	5	21	41	1	0	1	29	135	8
H 2104 D	40	17	86	43	137	41	42	0	5	57	7	39
J 2099 B	8	12	21	15	53	46	9	17	1	52	137	15
K 2094 B	7	19	24	44	156	136	5	0	2	41	45	13
LINE 31	(FLIGHT 22)											
A 1960 D	59	18	82	29	116	37	74	0	5	35	8	16
B 1951 D	7	6	13	7	22	20	13	13	2	92	36	59
C 1944 D	25	23	49	31	103	66	19	0	2	41	24	16
D 1939 B	7	5	40	9	32	46	43	20	2	72	49	37
E 1934 B	2	9	5	18	79	81	2	0	1	30	63	15
F 1927 E	2	6	4	8	26	25	1	0	1	56	81	36
G 1918 P	1	3	3	1	6	4	1	0	2	81	15	67

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 32 (FLIGHT 22)												
A 1802 S	1	3	1	5	16	40	1	0	1	21	673	0
B 1818 D	70	39	153	97	307	82	37	0	5	32	5	18
C 1822 B	31	14	153	24	155	38	118	0	10	61	2	48
D 1827 B	7	9	26	21	74	13	11	0	2	88	37	56
E 1837 D	11	18	18	25	74	33	6	12	2	79	49	44
F 1846 B	1	3	7	8	30	21	2	5	1	55	60	37
G 1849 D	45	32	70	51	159	58	24	1	2	47	27	21
I 1854 B	9	3	26	18	39	37	22	22	3	81	17	56
J 1861 B	1	5	2	14	61	122	1	0	1	25	203	5
K 1867 B	3	10	11	25	121	60	3	0	1	47	149	8
L 1871 B	1	8	7	10	26	13	3	16	1	47	192	22
LINE 33 (FLIGHT 22)												
A 1363 S	0	5	0	10	22	83	1	0	1	16	628	0
B 1348 D	40	45	56	62	173	64	14	0	3	16	17	0
D 1338 D	13	6	10	6	14	8	26	1	3	104	15	76
E 1330 D	20	26	19	22	55	36	9	0	2	72	27	45
F 1322 B	14	15	13	26	70	32	7	5	2	57	25	31
G 1321 B	14	15	15	26	28	11	8	6	3	60	19	36
H 1319 B	8	7	24	23	44	7	19	8	1	63	35	48
I 1312 S?	0	2	1	4	12	18	1	4	1	22	884	0
J 1309 B	10	22	28	79	260	175	5	0	1	27	65	1
K 1303 B	2	5	4	9	31	38	1	0	1	30	268	4
LINE 34 (FLIGHT 22)												
A 1006 S	1	4	1	7	17	58	1	0	1	17	714	0
B 1023 D	27	23	46	41	121	40	17	0	2	49	31	21
C 1036 D	13	7	13	11	32	9	17	16	4	98	9	76
D 1068 E	2	5	15	14	46	37	6	26	1	78	177	33
E 1075 B	12	18	20	31	46	28	7	5	3	49	17	27
F 1077 B	12	18	26	31	46	27	8	0	4	55	10	35
G 1084 B	2	0	11	5	20	20	1	0	1	51	158	28
LINE 35 (FLIGHT 22)												
A 593 L	2	3	0	8	2	9	1	0	1	180	8280	0
B 591 L	2	4	12	8	1	9	7	19	4	174	11	143
C 583 S	1	3	0	5	16	41	1	0	1	22	674	0
D 569 D	14	7	7	4	16	14	22	0	1	121	98	68
E 560 D	14	7	12	7	23	7	24	8	3	106	18	76
F 547 D	5	11	13	14	50	41	5	0	1	53	157	10
H 540 D	7	6	11	12	45	32	9	7	2	56	51	21

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 35 (FLIGHT 22)												
I 531 P	0	2	6	15	42	37	2	0	1	34	79	17
J 527 B	14	12	34	31	83	11	14	0	3	45	15	24
LINE 36 (FLIGHT 22)												
A 371 S	1	5	0	9	21	11	3	20	1	24	569	0
B 374 S	0	4	0	9	16	58	1	0	1	23	625	0
C 388 B	4	3	6	7	26	11	8	12	1	86	74	41
D 405 D	9	12	10	17	50	31	6	12	1	67	220	21
E 439 D	24	28	79	85	246	94	14	0	3	40	14	20
F 444 E	17	13	85	137	462	171	10	0	5	39	7	24
G 447 T	164	103	322	198	613	171	46	0	10	16	1	8
H 453 E	5	5	18	18	6	20	10	0	2	67	29	38
I 455 E	6	3	17	8	4	12	24	0	8	60	3	40
LINE 37 (FLIGHT 21)												
B 971 L	0	0	5	14	0	5	2	0	4	157	11	126
C 978 S	0	21	0	14	10	66	1	0	1	129	1035	0
D 979 S	0	21	0	9	17	66	1	0	1	96	1035	0
F 1010 B	5	10	4	9	37	38	2	0	1	53	105	32
H 1014 B	4	8	7	10	11	29	4	10	2	99	42	65
I 1053 D	35	25	74	39	155	55	28	5	5	60	6	43
K 1058 E	10	5	19	4	40	7	37	0	8	54	3	36
LINE 38 (FLIGHT 21)												
A 517 S	1	3	2	6	10	13	1	18	1	19	557	0
B 504 L	3	2	2	1	10	0	766	5	1	83	107	57
E 484 D	41	37	46	39	101	34	17	0	3	74	17	49
F 448 E	1	9	5	11	32	52	1	0	1	99	555	15
G 446 D	34	30	46	37	139	57	18	1	1	50	58	18
H 443 D	173	90	233	105	486	113	60	0	10	41	2	31
J 437 D	26	26	75	48	129	27	20	0	6	50	5	34
K 434 B	24	27	75	48	129	27	19	0	4	42	12	22
LINE 382 (FLIGHT 21)												
A 566 L	0	3	3	21	2	4	4	0	1	159	1035	0
B 564 L	0	1	12	21	2	2	4	0	16	102	1	91
C 561 L	0	1	5	19	8	58	1	0	4	152	11	121
D 557 S	0	6	0	15	20	46	1	0	1	17	653	0
LINE 39 (FLIGHT 21)												
A 301 L	0	9	4	35	0	2	2	0	1	0	851	0

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LINE 39 (FLIGHT 21)												
B 304 L	0	9	9	30	0	1	1	0	2	126	28	93
C 312 S	0	6	0	11	18	94	1	0	1	58	983	0
E 318 S	0	7	0	13	14	38	1	3	1	18	625	0
F 337 B	0	1	0	2	7	6	1	30	1	164	72	136
G 347 D	10	19	25	38	108	62	6	0	1	54	114	16
H 384 E	17	13	43	28	91	25	20	0	2	69	42	35
I 386 B	17	13	43	28	91	25	20	7	5	63	7	44
J 387 B	52	44	75	69	215	73	20	0	5	39	6	24
K 390 D	35	23	75	37	215	55	32	0	5	55	8	37
LINE 40 (FLIGHT 20)												
A 2135 D	136	59	109	55	188	51	58	0	4	55	8	37
C 2152 L	0	3	3	17	7	13	3	0	1	153	1035	0
D 2155 L	0	3	10	20	7	5	6	0	1	165	1035	0
F 2171 S	0	3	0	5	29	8	7	25	1	23	406	0
G 2174 S	1	11	4	4	14	82	1	0	1	28	277	5
H 2175 S	1	11	4	4	14	82	1	0	1	46	822	0
I 2179 E	4	2	4	12	9	36	5	0	1	70	231	10
J 2200 B	0	1	0	1	5	13	1	8	1	186	103	155
K 2242 D	65	51	77	48	156	41	26	0	3	48	19	25
L 2245 D	30	33	72	68	225	69	15	0	4	42	11	24
M 2248 E	19	18	23	22	75	53	3	0	1	42	12	30
LINE 41 (FLIGHT 20)												
A 1786 D	57	14	99	28	146	11	103	0	14	48	1	36
B 1771 L	0	1	10	14	11	6	4	0	6	101	6	77
C 1768 L	0	1	10	13	11	5	8	0	1	154	1035	0
D 1767 L	0	1	10	15	2	5	3	0	11	106	2	90
E 1761 L	0	0	3	6	2	1	2	38	2	197	44	152
F 1754 S	1	2	1	4	12	26	1	0	1	37	455	3
G 1751 S	1	2	1	2	6	21	1	0	1	49	213	21
I 1722 B	39	13	5	6	23	28	1	7	1	61	152	38
J 1720 D	39	13	24	6	37	28	62	1	4	94	9	72
K 1682 D	15	11	28	27	93	44	14	3	3	82	26	55
L 1673 D	22	12	14	10	44	34	22	10	3	96	16	69
LINE 42 (FLIGHT 20)												
B 1489 E	26	21	350	83	529	40	101	0	19	63	1	54
C 1494 D	350	90	405	212	738	244	116	0	10	18	1	9
D 1498 D	62	69	125	134	455	174	17	0	3	29	14	11
E 1519 L	3	6	7	8	11	12	4	0	7	111	5	87

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LINE 42		(FLIGHT 20)											
F 1522	L	3	6	7	8	11	12	4	0	1	75	1035	0
G 1545	S	8	15	4	11	16	1	4	13	1	46	525	0
H 1553	L	3	4	6	4	18	16	1	0	1	67	28	49
I 1568	B	6	4	2	6	20	19	1	7	1	64	89	43
J 1571	B	6	5	6	12	37	19	7	18	1	127	86	79
K 1587	P	1	2	1	3	16	23	1	8	1	65	160	42
L 1628	D	33	31	69	62	199	91	17	4	3	54	21	30
M 1630	E	15	4	67	19	75	48	68	4	7	67	4	51
LINE 43		(FLIGHT 20)											
A 1179	D	20	31	63	84	241	81	10	0	3	43	18	20
B 1172	E	9	9	84	11	56	7	28	2	10	49	1	47
C 1169	B	73	45	144	96	388	145	34	0	7	23	3	10
D 1165	D	29	26	65	57	168	49	17	3	2	74	30	45
E 1148	L	2	9	2	3	4	2	2	0	2	145	56	98
F 1144	L	5	2	3	1	5	1	20	21	1	170	1035	0
H 1124	L	22	27	5	8	20	6	8	7	1	43	950	0
I 1116	L	4	3	4	10	20	23	4	0	6	126	7	98
J 1101	P	1	17	6	26	122	106	1	0	1	57	613	0
K 1098	D	52	30	102	46	180	16	40	0	6	39	5	23
L 1094	P	4	4	66	33	118	8	26	8	2	92	51	55
M 1087	P	0	1	2	4	13	46	1	0	1	25	628	0
N 1080	P	6	13	20	28	92	53	6	4	1	63	76	26
O 1052	L?	3	3	0	0	1	4	7	52	1	201	1035	0
LINE 44		(FLIGHT 20)											
A 851	B	4	9	9	21	82	84	2	1	1	42	55	27
C 861	D	238	123	392	236	820	186	59	0	9	17	2	8
D 863	B	238	123	392	236	130	186	2	0	2	24	10	16
E 865	B	53	40	138	74	130	186	33	0	5	52	8	34
H 889	L	0	3	7	10	3	9	2	0	2	169	52	123
K 909	S	2	6	1	14	44	94	1	0	1	28	245	6
L 913	S	16	18	8	22	43	25	7	10	1	30	416	0
M 916	S	16	18	8	22	50	25	4	7	1	33	103	14
N 917	S	4	14	8	22	50	77	2	0	1	31	302	0
O 927	L	3	1	6	3	5	10	36	29	6	146	6	119
P 933	S	3	4	2	7	14	22	1	3	1	65	178	40
R 937	S	3	5	4	6	23	7	4	22	1	119	86	71
S 951	P	4	7	4	14	52	43	3	11	1	66	207	20
T 955	P	2	6	4	14	47	28	2	6	1	94	643	11
U 966	P	2	5	4	6	23	72	1	0	1	78	126	55

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LINE 44 (FLIGHT 20)														
V	969	P	1	5	2	12	41	73	1	0	1	30	190	8
W	972	P	7	12	6	12	50	80	1	0	1	36	115	16
X	975	P	7	12	21	30	95	80	6	17	1	62	76	28
LINE 45 (FLIGHT 20)														
A	566	B	14	3	42	9	64	0	94	23	45	92	1	87
B	563	B	16	8	194	10	321	62	362	9	21	75	1	66
C	560	D	153	65	194	125	387	121	55	0	7	25	3	13
D	557	B	17	65	154	125	381	121	12	0	6	96	5	76
E	542	P	2	8	9	20	55	52	3	8	1	116	113	66
F	528	L	5	4	8	9	2	13	7	0	7	121	4	99
G	523	L	4	3	2	9	0	13	7	0	1	169	1035	0
H	511	L	2	1	1	0	3	6	1	31	1	163	1475	98
I	503	L?	8	17	2	18	47	98	3	0	1	42	763	0
J	490	L	7	1	4	1	6	13	92	22	4	163	15	130
K	486	B?	4	7	5	6	23	15	4	6	2	132	37	95
L	478	P?	2	2	1	4	8	32	1	0	1	35	1148	0
M	476	P?	2	1	1	4	7	32	1	0	1	60	1207	21
N	467	P?	0	1	1	2	10	14	1	15	1	67	581	29
O	453	D	6	5	8	6	22	22	9	24	1	133	90	83
P	430	B?	1	2	0	4	10	20	1	1	1	46	774	10
Q	427	B?	1	2	2	5	20	22	1	10	1	80	173	55
LINE 46 (FLIGHT 20)														
A	227	B	5	25	14	43	136	131	2	0	2	55	52	25
B	236	D	190	17	229	24	289	19	656	0	50	32	1	28
D	249	S	29	16	1	6	1	34	21	17	1	116	1035	0
G	258	L	2	0	1	4	4	13	1	0	1	143	700	94
H	271	L	0	10	18	27	0	12	5	0	1	188	1035	0
I	273	L	0	10	12	27	0	3	3	0	1	200	1035	0
J	275	L	0	0	8	17	0	3	3	9	2	116	36	82
K	291	S	7	10	2	13	38	81	4	16	1	48	791	0
L	295	S	0	6	2	8	7	19	1	1	1	23	359	0
M	306	L	11	7	5	5	21	12	13	14	2	168	39	126
N	319	B?	4	1	4	2	7	3	22	66	4	190	12	159
S	355	L?	12	1	5	3	6	7	117	37	3	186	21	152
T	367	D	21	12	33	16	50	16	27	6	5	78	7	58
U	381	B	5	11	7	7	28	16	5	9	1	114	98	65
LINE 47 (FLIGHT 19)														
A	3108	D	85	54	149	75	279	106	40	0	4	35	9	19

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 47 (FLIGHT 19)												
B 3115 E	28	5	242	19	315	30	86	0	3	53	4	45
C 3118 D	200	31	312	54	407	55	316	0	25	27	1	20
D 3120 B	200	30	41	12	76	31	6	7	2	59	8	49
G 3164 L	2	3	9	8	0	8	6	0	4	109	14	81
I 3184 S	11	15	4	7	27	26	6	19	1	65	642	2
J 3190 S	2	13	1	25	145	83	1	0	1	20	282	0
K 3195 S	0	15	2	35	79	196	1	0	1	11	101	0
L 3198 E	19	6	20	34	69	192	15	3	3	104	20	75
M 3200 L	11	6	20	11	30	43	22	4	13	122	1	108
N 3214 D	10	2	9	2	14	5	102	40	3	201	23	165
O 3283 T	92	38	247	96	435	79	72	0	16	33	1	24
LINE 48 (FLIGHT 19)												
A 2888 B	7	17	26	27	176	53	6	0	6	47	5	30
B 2884 B	35	17	96	56	209	63	35	0	6	44	5	29
D 2873 D	181	32	258	49	358	42	250	0	22	28	1	21
E 2864 S	1	3	1	5	22	34	1	2	1	41	375	12
G 2826 L	1	7	2	8	10	9	1	0	1	107	19	91
I 2810 S	12	14	4	1	23	15	8	21	1	69	290	19
J 2808 S	12	14	4	20	23	67	1	0	1	27	234	5
K 2804 S	3	18	6	32	115	169	1	0	1	19	156	0
L 2800 S	2	44	11	59	225	358	1	0	1	6	203	0
M 2798 S	8	6	11	41	94	175	5	1	1	35	94	3
N 2796 S	8	4	9	23	65	44	7	0	1	62	71	22
O 2780 B	11	9	28	22	61	38	14	13	4	73	11	52
Q 2775 B	11	22	24	37	125	63	6	0	3	65	14	44
LINE 49 (FLIGHT 19)												
A 2538 S	3	5	6	9	34	38	1	9	1	56	106	37
B 2576 L	0	4	15	13	8	10	7	2	1	122	1035	0
D 2594 S	8	9	5	16	67	37	5	15	1	42	329	0
E 2600 S	4	17	7	32	93	10	2	0	1	27	105	0
F 2606 E	5	3	9	13	26	29	7	0	3	61	23	31
G 2619 S	1	1	2	2	5	15	1	5	1	146	439	106
H 2628 L	0	4	2	8	27	41	1	0	1	42	284	15
I 2639 D	92	39	137	59	225	62	59	0	6	57	4	42
J 2642 E	16	6	137	59	225	62	50	10	5	76	6	58
L 2649 B	4	2	13	5	23	5	21	47	6	132	6	109
M 2663 P	2	0	5	1	6	4	48	72	4	184	12	153
N 2685 P	3	2	13	2	15	10	38	42	16	131	1	119
LINE 50 (FLIGHT 19)												
B 2288 D	14	34	28	60	195	100	5	0	1	25	86	0

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 50 (FLIGHT 19)												
C 2245 L	1	2	7	13	5	4	3	14	1	195	1035	0
D 2241 L	1	3	2	3	7	0	54	0	1	86	19	70
E 2228 S	8	13	7	3	6	10	7	22	1	23	320	0
F 2224 S	2	16	2	28	114	152	2	0	1	20	46	8
G 2220 E	5	5	8	21	66	50	4	0	2	33	40	0
H 2190 D	23	24	29	36	92	47	11	0	2	52	34	22
I 2186 B	3	9	14	5	59	42	8	19	4	78	12	55
K 2178 P	16	20	62	92	297	137	9	0	3	31	19	9
L 2175 P	15	20	86	113	341	113	11	0	4	29	9	12
M 2173 P	17	16	86	113	341	113	12	0	4	89	12	65
N 2171 P	17	16	33	26	86	12	15	5	4	64	11	43
O 2160 D	15	15	43	35	108	39	14	7	3	81	17	57
LINE 51 (FLIGHT 19)												
A 1962 L	1	1	1	0	8	3	4	32	1	138	22	120
B 1968 L	3	4	4	6	10	2	7	0	3	82	6	72
C 1971 L	3	4	1	3	7	6	1	30	1	140	18	125
D 1984 S	4	15	6	25	89	69	2	0	1	41	158	5
E 1989 S	2	12	2	29	129	147	2	0	1	18	47	5
F 1994 E	6	5	5	15	53	44	5	0	2	79	57	38
G 1997 L	2	3	5	4	19	13	2	0	1	64	83	41
I 2038 B	48	43	227	153	460	273	29	0	3	48	15	28
J 2040 T	96	108	227	153	460	273	26	0	7	19	3	8
K 2042 B	96	108	80	49	185	273	2	0	2	28	8	19
L 2048 B	32	38	27	53	176	100	9	0	3	44	13	24
M 2053 B	1	2	28	13	45	15	7	17	1	53	30	39
N 2057 B	5	6	25	24	75	43	9	18	2	98	51	61
O 2060 B	26	26	42	42	141	81	14	5	3	57	17	35
LINE 52 (FLIGHT 19)												
B 1677 L	0	2	55	30	5	4	21	12	1	44	965	0
E 1661 E	0	9	6	18	38	119	2	0	1	154	1035	0
F 1658 S	0	9	3	18	39	119	1	0	1	21	344	0
G 1650 L	6	2	6	10	29	35	9	0	1	85	71	40
H 1609 T	114	60	260	161	474	170	46	0	12	29	1	20
I 1598 T	46	43	89	90	281	111	17	0	5	29	8	14
J 1597 B	40	36	69	57	184	71	18	0	5	43	6	27
LINE 53 (FLIGHT 19)												
A 1426 L	0	1	5	7	1	3	3	0	4	143	12	112
B 1430 L	0	1	4	9	4	6	5	0	1	143	1035	0

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708 SHEET 3 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 53 (FLIGHT 19)												
C 1434 L	3	5	8	4	6	9	7	0	3	97	18	66
D 1437 L	3	5	8	3	17	22	8	2	1	144	1035	0
E 1439 L	3	5	1	2	17	22	1	0	1	52	213	24
F 1449 S	0	1	0	1	6	11	1	18	1	110	506	68
H 1487 T	31	23	61	47	146	78	21	3	4	48	8	31
I 1490 B	11	23	43	47	146	78	8	0	5	69	7	49
J 1492 B	14	4	43	12	56	31	63	7	6	58	5	41
K 1499 B	27	27	30	48	167	120	11	0	2	45	23	20
LINE 54 (FLIGHT 19)												
C 1040 L	0	2	12	10	7	5	6	9	15	115	1	104
D 1038 L	0	4	14	24	7	5	6	0	1	176	1035	0
E 1036 L	0	4	14	24	7	5	3	0	7	136	5	113
F 1023 S	2	2	2	6	9	24	1	0	1	72	65	51
G 1020 L?	1	1	1	1	15	17	1	0	1	58	123	32
H 1012 S?	0	0	1	0	7	9	1	24	1	141	220	106
I 978 D	5	6	9	5	23	10	10	2	3	166	23	130
LINE 55 (FLIGHT 19)												
A 762 S	1	1	0	0	7	9	1	31	1	86	846	42
B 786 L	4	5	8	8	12	7	8	0	1	66	149	14
D 797 L	3	4	13	12	44	33	8	18	1	197	1035	0
LINE 56 (FLIGHT 19)												
A 508 L	2	1	0	0	6	8	1	31	1	83	1087	39
B 490 L	2	1	2	3	3	6	1	37	1	99	8280	0
LINE 57 (FLIGHT 19)												
A 207 L	5	1	2	5	0	4	12	44	1	128	135	72
B 275 L?	1	1	0	0	6	1	10	45	1	91	694	44

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708 SHEET 4 SULITJELMA

	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 49 (FLIGHT 19)												
A 2520 D	400	131	405	242	839	205	95	0	15	19	1	12
B 2526 D	141	54	274	112	476	95	80	0	11	30	1	20
LINE 50 (FLIGHT 19)												
A 2310 D	35	21	64	24	111	44	36	0	22	34	1	26
B 2305 D	224	46	359	82	515	65	213	0	21	32	1	25
C 2295 B	5	7	9	9	18	28	6	21	2	111	32	79
LINE 51 (FLIGHT 19)												
A 1907 B	89	20	143	41	207	52	123	0	20	39	1	30
B 1922 D	8	16	21	28	86	52	6	0	1	50	64	16
LINE 52 (FLIGHT 19)												
A 1741 D	97	32	174	74	309	97	75	0	7	34	3	21
B 1725 D	23	18	54	45	138	62	18	4	2	47	28	21
LINE 53 (FLIGHT 19)												
A 1361 B?	1	1	1	2	18	18	1	23	1	60	156	36
B 1366 S	1	6	1	9	15	75	1	0	1	29	284	4
LINE 54 (FLIGHT 19)												
A 1125 B?	5	10	17	12	17	30	1	0	1	44	159	21
B 1113 S?	2	8	2	16	19	86	1	0	1	38	215	13
C 1111 S	2	8	2	16	59	86	1	0	1	23	179	2
LINE 55 (FLIGHT 19)												
B 713 B	16	24	40	62	185	51	8	0	2	37	26	13
C 750 L?	5	1	3	1	2	4	90	38	2	180	32	139
LINE 56 (FLIGHT 19)												
A 565 B	5	3	18	7	25	20	24	24	4	89	13	64
B 561 S	1	6	2	5	27	44	1	13	1	99	1035	0
C 517 L?	4	1	1	1	5	2	44	44	2	182	37	139
LINE 57 (FLIGHT 19)												
A 150 B?	4	13	4	21	73	112	2	0	1	51	293	7
B 165 S	1	1	0	0	0	6	1	0	1	84	8280	0
C 190 L?	4	1	3	1	3	8	24	41	2	189	62	139
LINE 58 (FLIGHT 18)												
A 2918 B?	1	1	2	4	12	8	2	29	1	80	67	59

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708 SHEET 4 SULITJELMA

ANOMALY/ FID/INTERP		COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 58		(FLIGHT		18)									
B 2924	B?	3	18	10	35	151	90	2	0	1	34	123	0
C 2928	L?	1	4	1	6	18	6	5	34	1	44	506	14
F 2963	L	6	1	5	7	2	7	15	35	1	116	136	61
G 2976	L	0	1	13	14	1	7	8	17	1	193	1035	0
LINE 59		(FLIGHT		18)									
A 2765	S?	1	3	0	8	37	48	1	0	1	39	121	19
B 2760	D	3	3	11	18	72	73	5	23	1	47	386	2
D 2718	S	1	0	1	2	2	25	1	0	1	0	4660	0
E 2715	L	5	1	5	2	6	25	62	36	5	165	9	136
LINE 60		(FLIGHT		18)									
B 1842	P	5	4	27	21	66	26	13	23	3	86	14	63
C 1844	B?	5	2	2	4	16	7	4	36	1	101	159	74
D 1884	L?	2	4	7	3	6	17	8	28	4	150	10	121
LINE 61		(FLIGHT		18)									
B 1628	D	6	3	17	11	61	57	18	22	1	83	141	35
C 1626	S?	1	5	3	11	61	58	2	0	1	41	53	25
D 1617	B?	3	1	1	2	3	12	24	74	1	203	1035	0
E 1574	L	2	5	3	3	8	17	2	12	1	135	171	73
LINE 62		(FLIGHT		18)									
A 1061	D	5	2	4	5	8	34	14	35	2	176	65	129
B 1071	D	11	0	10	0	12	5	1311	40	3	197	19	162
C 1074	D	12	0	14	0	15	4	2000	43	21	134	1	125
D 1075	D	12	0	14	0	15	0	2000	35	4	191	15	158
E 1105	L	2	5	8	6	31	17	5	14	2	115	31	81
LINE 632		(FLIGHT		18)									
A 875	D	12	1	3	1	3	25	223	37	1	201	1035	0
B 857	D	12	0	5	0	5	5	2000	37	1	200	93	147
D 819	L?	4	4	5	5	27	11	7	21	1	117	173	58
LINE 64		(FLIGHT		18)									
A 193	L?	2	1	0	0	1	4	12	94	1	200	1035	0
B 215	S	0	1	0	1	4	6	1	40	1	91	1282	43
C 248	L	8	11	8	16	27	25	6	20	1	80	113	38
LINE 65		(FLIGHT		17)									
A 148	L	2	1	8	1	12	2	42	69	7	168	5	144

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708 SHEET 4 SULITJELMA

ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 65	(FLIGHT 17)											
B 190 L	1	2	2	3	8	4	2	47	1	150	139	119
LINE 66	(FLIGHT 16)											
A 947 L	0	1	0	3	11	7	2	37	1	119	189	89
B 975 S	0	1	0	0	0	8	1	0	1	46	7637	0
LINE 67	(FLIGHT 16)											
A 669 L?	2	0	4	0	5	5	181	75	3	195	22	160
LINE 68	(FLIGHT 16)											
B 218 L	2	1	4	1	8	2	12	66	3	195	18	161
C 293 B?	2	1	2	1	6	5	1	35	1	138	274	102
LINE 69	(FLIGHT 15)											
C 3051 B?	2	1	2	1	5	6	1	35	1	132	694	83
LINE 70	(FLIGHT 15)											
A 2846 S	1	2	0	3	9	42	1	0	1	18	1170	0
B 2816 L	6	1	17	8	26	4	31	42	6	122	5	101
LINE 71	(FLIGHT 15)											
A 2346 H	0	2	0	2	8	11	1	23	1	25	639	0
LINE 82	(FLIGHT 14)											
A 1844 B	1	1	2	2	12	5	3	35	1	97	143	70
LINE 83	(FLIGHT 15)											
A 228 B	5	4	7	7	22	14	10	33	2	101	48	64
LINE 84	(FLIGHT 14)											
A 1364 P	0	2	4	4	19	19	3	45	1	125	107	73
C 1370 P?	36	52	103	141	451	181	12	0	3	29	12	11
D 1378 D	8	6	24	17	56	8	15	21	2	80	59	43
E 1388 G	79	32	189	63	191	74	75	1	29	32	1	26
F 1394 E?	19	1	105	23	127	68	168	13	3	90	21	64
G 1398 B?	0	12	1	13	29	68	1	0	1	40	293	13
LINE 85	(FLIGHT 14)											
B 1315 B?	0	5	0	11	41	75	1	0	1	41	950	0
C 1313 S?	4	5	0	10	25	74	1	0	1	14	564	0
D 1298 B	0	3	3	7	22	13	1	6	1	86	298	31

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708 SHEET 4 SULITJELMA

ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 86 (FLIGHT 14)												
A 1032 S?	1550	2	1	2	8	9	1	1	1	86	406	48
B 1036 B?	2	2	1	3	7	11	1	15	1	60	692	22
C 1053 B?	1	5	2	9	35	34	2	5	1	54	149	31
D 1063 B	3	3	5	11	20	17	2	0	1	54	118	32
E 1071 D	4	5	14	18	69	20	6	12	2	53	45	21
LINE 87 (FLIGHT 14)												
A 999 B	4	4	6	9	32	20	3	0	1	49	67	29
B 996 B	5	4	13	9	34	5	11	12	3	89	24	59
C 990 S?	0	1	0	2	12	11	1	16	1	64	438	28
D 985 S?	0	1	0	4	23	28	1	4	1	39	333	10
E 981 E?	5	14	16	34	135	117	3	0	1	29	38	16
F 979 B	10	13	16	47	162	117	5	7	1	38	85	8
H 975 P	7	6	39	24	72	23	17	8	3	51	17	29
I 974 B?	7	6	39	24	49	23	5	0	1	29	47	14
LINE 88 (FLIGHT 14)												
A 772 B	0	3	6	6	24	19	2	25	1	107	89	60
C 782 D	4	10	5	4	22	20	4	20	2	139	66	96
LINE 89 (FLIGHT 14)												
A 728 G	0	7	7	19	39	12	2	0	1	37	145	0
B 726 G	1	5	7	18	39	12	7	14	1	48	29	34
LINE 90 (FLIGHT 14)												
A 553 S?	2	4	1	5	21	31	1	0	1	42	275	12
B 558 S?	4	9	0	1	23	35	3	9	1	47	985	0

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708 SHEET 5 SULITJELMA

ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 50 (FLIGHT 19)												
A 2140 B?	1548	2	0	5	6	33	1	0	1	27	1546	0
LINE 51 (FLIGHT 19)												
A 2081 D	29	18	49	26	92	31	28	18	1	101	83	59
B 2093 D	4	10	2	5	30	25	3	13	1	156	757	33
LINE 52 (FLIGHT 19)												
A 1578 D	9	12	11	12	46	31	7	18	2	102	34	71
LINE 53 (FLIGHT 19)												
A 1520 D	31	20	90	37	148	72	37	0	10	42	2	30
B 1521 D	19	20	90	37	148	72	28	7	4	67	11	46
LINE 54 (FLIGHT 19)												
A 970 B	12	4	15	7	23	10	4	8	1	66	16	52
B 969 D	12	4	14	7	23	10	32	5	4	90	11	65
D 949 D	13	24	24	49	157	90	5	0	1	46	67	14
E 933 B	1	2	6	11	34	27	3	23	1	87	96	43
F 929 B	3	3	8	5	21	11	10	7	2	98	43	62
LINE 55 (FLIGHT 19)												
A 870 D	54	9	62	10	89	8	195	11	12	97	1	84
B 888 T	38	25	77	44	164	55	29	2	8	55	2	42
LINE 56 (FLIGHT 19)												
A 405 G	2	1	8	4	23	13	3	12	1	78	68	58
B 402 D	37	6	39	5	56	5	186	6	8	103	3	84
C 382 B	58	37	148	79	281	78	37	0	7	34	4	21
LINE 57 (FLIGHT 19)												
A 312 D	34	8	42	8	63	10	115	15	5	132	8	108
B 329 T	47	26	122	56	222	50	42	0	8	36	2	24
LINE 58 (FLIGHT 18)												
A 3106 B?	0	3	14	7	23	33	1	3	1	50	304	21
B 3110 B	7	12	22	28	89	23	7	0	2	44	33	15
C 3112 D	22	28	34	42	145	72	10	0	1	37	59	7
LINE 59 (FLIGHT 18)												
A 2587 B	3	10	9	27	115	81	3	0	1	49	158	10
C 2583 B	1	6	12	22	73	28	7	0	1	32	30	19

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 59	(FLIGHT 18)											
D 2580 B	17	38	29	78	256	138	5	0	2	28	34	4
LINE 60	(FLIGHT 18)											
A 2010 B	0	2	0	2	11	14	1	17	1	104	244	74
B 2028 P	4	8	22	14	56	9	9	17	2	112	31	80
C 2033 D	22	31	40	42	139	63	10	2	2	56	26	29
LINE 61	(FLIGHT 18)											
A 1448 B	1	2	1	3	9	13	1	21	1	95	436	57
B 1445 B	1	2	1	3	9	13	3	53	1	120	657	22
C 1441 B	21	40	9	24	84	119	1	0	1	38	27	25
D 1437 T	21	40	31	75	251	119	6	0	2	36	31	11
LINE 62	(FLIGHT 18)											
A 1201 B?	0	1	0	1	8	17	1	14	1	76	676	37
C 1251 D	4	6	4	4	18	9	6	15	1	131	126	75
D 1256 B	0	5	4	10	36	31	1	13	1	123	359	56
E 1262 D	21	17	57	34	122	22	21	0	4	55	10	35
F 1266 D	30	37	29	48	161	100	9	2	1	43	64	14
LINE 63	(FLIGHT 18)											
A 593 B?	3	3	1	3	9	4	4	14	1	174	453	49
B 584 B?	0	0	1	1	8	7	2	66	1	198	1035	0
C 573 D	35	22	39	27	90	41	6	0	2	50	8	40
D 572 B	35	22	39	27	90	41	24	1	7	71	4	55
LINE 64	(FLIGHT 18)											
B 391 B	0	1	1	3	10	17	1	12	1	69	465	33
C 412 B	5	6	21	13	51	17	12	14	3	96	19	68
D 417 D	23	28	42	46	140	47	11	0	4	53	13	33
LINE 65	(FLIGHT 17)											
A 340 B	10	10	34	28	86	26	13	0	4	49	10	28
B 343 D	21	21	34	32	97	46	13	0	1	54	62	20
LINE 66	(FLIGHT 16)											
B 1147 B?	1	1	2	3	13	3	8	25	2	119	9	108
C 1150 B?	1	2	2	3	13	3	3	30	1	186	1035	0
D 1166 B	29	22	36	30	91	28	18	5	4	64	13	43
E 1168 B	17	16	36	15	64	50	20	20	4	100	10	78
LINE 67	(FLIGHT 16)											
B 517 D	75	37	93	50	202	70	43	0	4	48	10	31

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 67 (FLIGHT 16)												
C 514 B	15	11	93	15	64	28	68	0	6	85	5	66
D 499 B	2	3	2	5	17	17	1	0	1	69	214	41
LINE 68 (FLIGHT 16)												
D 380 B	3	3	2	2	18	5	7	37	1	193	351	77
G 392 B	0	3	0	3	18	26	1	13	1	60	393	28
H 396 D	26	20	37	37	117	42	15	2	2	50	29	23
I 399 D	21	14	41	25	80	18	22	1	4	64	11	42
J 408 B?	1	1	1	2	5	21	1	0	1	57	953	19
K 415 D	4	8	7	9	30	18	5	17	1	117	179	60
L 423 B?	2	0	1	0	5	1	4	68	1	193	126	160
LINE 69 (FLIGHT 15)												
B 3139 D	5	9	3	6	24	14	4	11	1	150	1035	0
C 3149 D	21	25	31	35	95	38	11	5	1	78	72	39
D 3156 B	10	5	33	16	57	19	27	3	4	65	10	44
E 3158 D	38	28	62	47	147	38	22	2	4	51	8	33
F 3173 B?	1	3	1	3	10	16	1	9	1	76	466	39
LINE 70 (FLIGHT 15)												
B 2650 B	32	1	69	44	148	44	58	11	6	55	4	40
C 2647 D	45	38	49	52	159	61	17	0	2	50	24	25
D 2638 S?	1	1	0	1	4	14	1	0	1	45	1536	3
LINE 71 (FLIGHT 15)												
A 2550 D	11	16	4	6	20	6	6	13	1	192	280	93
B 2566 B	27	29	36	37	109	97	13	2	2	51	43	22
C 2568 D	68	42	105	73	218	46	31	2	5	55	6	38
D 2575 B?	1	1	5	2	9	13	1	11	1	75	448	38
LINE 72 (FLIGHT 15)												
B 2070 D	6	6	4	4	16	7	7	8	2	174	48	129
C 2055 D	42	33	64	56	184	67	20	0	2	50	31	22
E 2045 B	1	2	0	4	12	13	1	12	1	63	325	31
LINE 73 (FLIGHT 15)												
C 1963 D	20	27	12	20	65	30	8	2	1	109	162	55
D 1968 E?	5	4	12	20	61	24	6	25	1	150	129	93
E 1982 D	14	13	17	15	68	63	11	14	1	64	88	26
F 1983 B	14	10	16	15	68	63	14	17	2	79	26	52
G 1990 B	1	3	3	4	11	18	1	0	1	73	393	37

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 74	(FLIGHT	15)										
A 1570 D	14	20	7	9	32	20	7	0	1	111	108	60
B 1552 B	8	12	9	14	48	27	3	8	1	50	77	33
C 1550 B	8	6	8	14	48	27	8	25	2	103	51	66
D 1544 B?	1	6	1	10	32	36	1	0	1	76	368	21
LINE 75	(FLIGHT	15)										
B 1457 D	22	38	11	19	49	64	6	0	1	48	475	0
C 1461 D	8	3	12	18	52	23	10	19	2	140	65	97
D 1471 D	8	9	16	20	61	20	7	10	1	93	97	47
E 1476 B	2	4	1	3	15	14	1	0	1	72	116	47
LINE 762	(FLIGHT	18)										
A 2392 D	20	35	8	8	41	50	7	2	1	56	552	0
B 2398 D	28	17	12	7	29	5	23	20	1	125	100	75
C 2410 B	3	3	2	2	5	4	5	27	1	182	1035	0
LINE 77	(FLIGHT	15)										
A 932 D	18	25	8	10	30	26	8	7	1	111	751	13
B 937 B	4	2	7	8	14	3	10	32	1	161	89	110
C 950 D	3	4	3	6	21	12	4	21	1	126	730	14
LINE 772	(FLIGHT	18)										
A 2252 B	2	1	1	3	10	9	1	4	1	108	136	79
LINE 782	(FLIGHT	18)										
A 2137 D	11	18	8	9	33	34	6	4	1	68	369	14
B 2142 D	23	13	15	10	34	5	22	16	1	140	79	93
D 2147 D	3	7	8	5	28	19	5	30	2	155	51	115
E 2154 D	3	2	2	2	11	6	8	41	1	183	1035	0
LINE 79	(FLIGHT	14)										
A 2939 D	9	18	6	14	45	81	4	3	1	42	520	0
B 2947 D	26	10	27	15	63	10	36	14	4	81	13	58
C 2952 D	4	9	27	7	47	34	16	34	2	116	36	84
D 2966 D	3	2	1	6	13	33	3	31	1	157	981	19
E 2970 S?	3	2	2	6	14	33	1	5	1	34	663	6
LINE 80	(FLIGHT	14)										
A 2423 D	4	14	1	11	30	61	2	0	1	75	602	3
B 2426 B	2	5	8	11	30	61	4	14	1	70	174	23
C 2433 D	81	41	63	29	138	62	44	9	2	86	27	58

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 80 (FLIGHT 14)												
D 2439 B	17	22	63	26	98	78	3	3	1	42	37	28
E 2450 D	2	3	3	2	13	7	4	44	1	161	971	26
LINE 802 (FLIGHT 14)												
A 2535 B	0	7	5	11	36	34	2	0	1	32	102	12
LINE 81 (FLIGHT 14)												
A 2088 D	10	22	13	33	132	111	4	0	1	31	195	0
B 2090 B	10	22	13	33	132	111	4	0	1	54	57	20
C 2099 D	24	12	35	12	55	12	37	9	3	108	23	78
D 2102 B	24	12	35	12	55	12	37	20	11	88	2	74
E 2114 B?	0	0	3	3	14	7	2	18	1	97	22	80
F 2163 B	0	1	1	3	9	7	1	26	1	130	114	103
LINE 82 (FLIGHT 14)												
A 1725 B?	2	6	3	9	39	21	3	15	1	41	144	19
B 1720 S	0	2	0	2	10	27	1	0	1	25	423	0
C 1716 D	32	50	58	107	379	226	9	0	2	24	21	4
LINE 822 (FLIGHT 14)												
A 2260 D	36	43	68	92	281	119	12	0	3	28	19	6
B 2272 D	7	7	5	3	18	17	8	32	2	156	42	117
C 2276 B	4	7	8	8	36	29	5	23	3	111	23	82
D 2282 B	1	3	9	6	22	7	6	34	2	111	36	79
LINE 83 (FLIGHT 15)												
A 336 B?	1	3	3	7	24	10	4	18	1	47	161	24
B 344 D	40	52	62	108	336	217	10	0	2	26	23	5
C 355 D	15	4	6	3	12	13	42	27	3	154	25	119
LINE 84 (FLIGHT 14)												
A 1535 B	6	23	11	40	153	176	2	0	1	39	103	7
B 1553 D	20	12	14	10	37	13	21	15	2	139	42	102
C 1568 D	7	5	2	2	10	6	11	29	1	196	181	111

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ANOMALY/ FID/INTERP	COAXIAL 900 HZ REAL PPM	COAXIAL 900 HZ QUAD PPM	COPLANAR 900 HZ REAL PPM	COPLANAR 900 HZ QUAD PPM	COPLANAR 7200 HZ REAL PPM	COPLANAR 7200 HZ QUAD PPM	VERTICAL DIKE COND MHOS	VERTICAL DIKE DEPTH* M	HORIZONTAL SHEET COND MHOS	HORIZONTAL SHEET DEPTH M	CONDUCTIVE EARTH RESIS OHM-M	CONDUCTIVE EARTH DEPTH M
LINE 75	(FLIGHT	15)										
A 1361 B?	1	3	0	8	28	51	1	2	1	40	330	13
LINE 76	(FLIGHT	15)										
A 1129 B?	1	1	0	2	10	12	1	13	1	86	409	49
LINE 802	(FLIGHT	14)										
A 2631 B	1	0	2	1	5	2	3	46	1	151	248	114
B 2578 H	0	3	1	6	8	53	1	0	1	24	1130	0
LINE 83	(FLIGHT	15)										
A 244 B?	0	1	1	3	14	9	2	29	1	65	346	33
B 248 B	2	3	6	9	29	18	4	23	1	160	103	106
C 253 D	6	19	22	48	156	96	4	0	1	35	93	5
LINE 84	(FLIGHT	14)										
A 1430 B	3	1	7	2	4	4	34	55	5	150	7	124
B 1434 B	3	2	7	5	17	5	6	27	1	102	57	81
LINE 85	(FLIGHT	14)										
A 1271 B	2	1	2	3	9	4	3	39	1	101	198	72
B 1264 B	3	2	10	4	16	3	18	44	7	125	4	104
C 1260 D	6	2	7	4	18	3	24	34	2	128	63	86
D 1246 B?	0	0	0	1	4	3	1	51	1	29	6337	0
LINE 86	(FLIGHT	14)										
A 1077 B	3	3	3	3	15	46	1	0	1	46	211	21
B 1081 D	3	3	7	7	34	46	7	30	1	87	62	47
C 1094 B	2	2	5	4	9	2	10	40	2	135	15	121
E 1109 D	23	16	75	48	140	48	24	0	6	41	4	26
F 1113 B	10	13	75	49	118	48	17	0	3	26	12	7
G 1116 D	23	20	32	41	137	28	13	0	3	42	23	17
H 1125 B?	0	0	0	0	2	2	1	81	1	58	7854	0
LINE 87	(FLIGHT	14)										
B 969 B	14	21	34	34	92	23	9	0	3	38	18	15
C 968 B?	14	21	34	26	83	23	11	0	1	20	17	9
D 963 D	31	29	69	63	191	71	17	0	5	35	7	18
E 956 B?	1	2	2	3	12	6	2	33	1	78	329	44
F 945 D	5	2	14	7	33	19	23	26	1	121	151	64
G 941 D	4	5	5	8	29	19	5	21	1	88	236	34
H 936 B	2	5	3	5	16	6	4	21	1	55	170	30

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	COAXIAL 900 HZ		COPLANAR 900 HZ		COPLANAR 7200 HZ		VERTICAL DIKE		HORIZONTAL SHEET		CONDUCTIVE EARTH	
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND MHOS	DEPTH* M	COND MHOS	DEPTH M	RESIS OHM-M	DEPTH M
LINE 87 (FLIGHT 14)												
I 932 B?	2	1	1	3	11	6	2	18	1	54	271	24
J 927 S?	0	0	1	0	9	2	1	17	1	185	1035	0
LINE 88 (FLIGHT 14)												
A 791 B	6	4	11	13	47	53	10	17	4	92	10	69
C 795 D	12	26	27	53	155	114	5	0	2	37	30	11
D 798 D	10	30	27	40	155	114	5	3	1	42	53	14
F 803 E?	3	5	15	33	36	28	4	7	2	102	52	64
G 819 B	1	3	1	10	39	23	3	10	1	50	59	32
H 827 B	11	19	17	39	129	107	5	10	2	52	46	23
I 834 B	5	7	22	18	46	10	10	15	2	58	38	28
J 839 B?	0	4	4	11	41	10	1	0	1	56	217	11
LINE 89 (FLIGHT 14)												
A 718 B	16	10	43	13	56	1	37	13	8	60	2	46
B 714 B	16	8	30	21	48	7	24	6	3	43	3	36
D 707 B	23	9	72	25	114	15	54	3	14	44	1	33
E 704 B	5	1	21	6	31	3	49	30	11	70	1	56
G 700 B	11	4	32	25	58	29	21	21	5	75	7	56
I 695 B?	0	2	5	9	41	26	3	7	1	41	50	26
K 689 B	8	14	29	42	157	73	7	0	1	37	54	8
L 686 B	8	6	29	42	157	73	9	3	3	47	22	22
M 682 B	8	18	16	35	107	47	5	0	2	39	50	10
N 680 E	4	18	16	35	107	44	3	0	1	60	109	16
LINE 90 (FLIGHT 14)												
D 581 E?	0	7	9	12	177	43	5	19	1	15	725	0
E 586 B	39	44	14	43	177	201	9	4	1	25	129	0
F 591 B	50	38	6	18	90	89	16	5	1	19	738	0
H 598 B?	0	8	0	16	62	58	1	0	1	17	728	0
I 601 B	12	10	19	41	168	104	7	0	2	44	48	13
J 604 B	12	31	57	41	168	220	10	0	2	41	26	16
K 607 B	17	31	22	52	160	220	6	0	1	39	52	12
L 617 B?	1548	1	2	7	29	35	1	2	1	42	221	16

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