

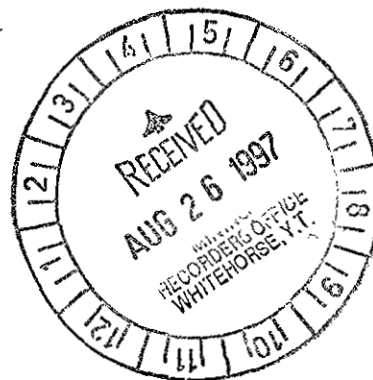
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GEOCHEMICAL SURVEY
AND
HELICOPTER-BORNE GEOPHYSICAL SURVEY
OF THE
BOZO 1 - 24 and BIGTOP 1 - 30 CLAIMS

Located in the Sidney Creek Valley Area
Whitehorse Mining District
Yukon Territory, Canada
NTS 105 C 14

60 52' North Latitude
133 19' West Longitude



-prepared by-

Steve Traynor

DATE WORK PERFORMED: Aug. 18 - Sept. 17, 1996, May 6 - 12, 1997
and May 24, 29 and 30, 1997.

DATE OF REPORT: August 1997

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 27,000.

M. B. B.
for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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1.0 INTRODUCTION

The following report and the Aerodat report appended, detail the results of geochemical sampling conducted on the Bozo and Bigtop quartz mining claims during the period from Aug. 18 -Sept. 17, 1996 and of a helicopter-borne geophysical survey completed in the period May 6 to 12, 1997. Preliminary ground followup was completed on May 23, 24, 29 and 30, 1997. The property, known as the Big Top massive sulfide prospect, is wholly owned by 15053 Yukon Inc. of Whitehorse, Yukon.

The mineralogy, textures, structures, rock types and anomalous, often coincident geochemical and geophysical responses identified during the course of these investigations indicate an environment that is highly prospective for the discovery of a massive sulfide deposit(s), of the Kuroko type.

Recommendations for additional staking, grid work and more detailed geochemical sampling and geological mapping are made.

2.0 PROPERTY LOCATION AND ACCESS

The property is located in the Whitehorse Mining District, approximately 80 km. east-northeast of Whitehorse, Yukon (see Figure 1). It is situated in the southern regions of the Big Salmon Range of the Pelly Mountains, southwest of Quiet Lake and west of the south Canol Road, near the confluence of Iron and Sidney Creeks.

Access to the area is possible from the Alaska Highway at Johnsons Crossing, north via the Canol Road for approximately 50 km to the Sidney Creek tote road. This tote road leads directly to the property and together with a number of trails provides easy access to most of it. In dry conditions this tote road is navigable by 2 wheel drive vehicle. A number of sites suitable for helicopter landings are also present along Iron Creek.

15053 Yukon Inc.

IRON CREEK PROJECT

BOZO 1-24 & BIGTOP 1-30 CLAIMS

YUKON LOCATION MAP

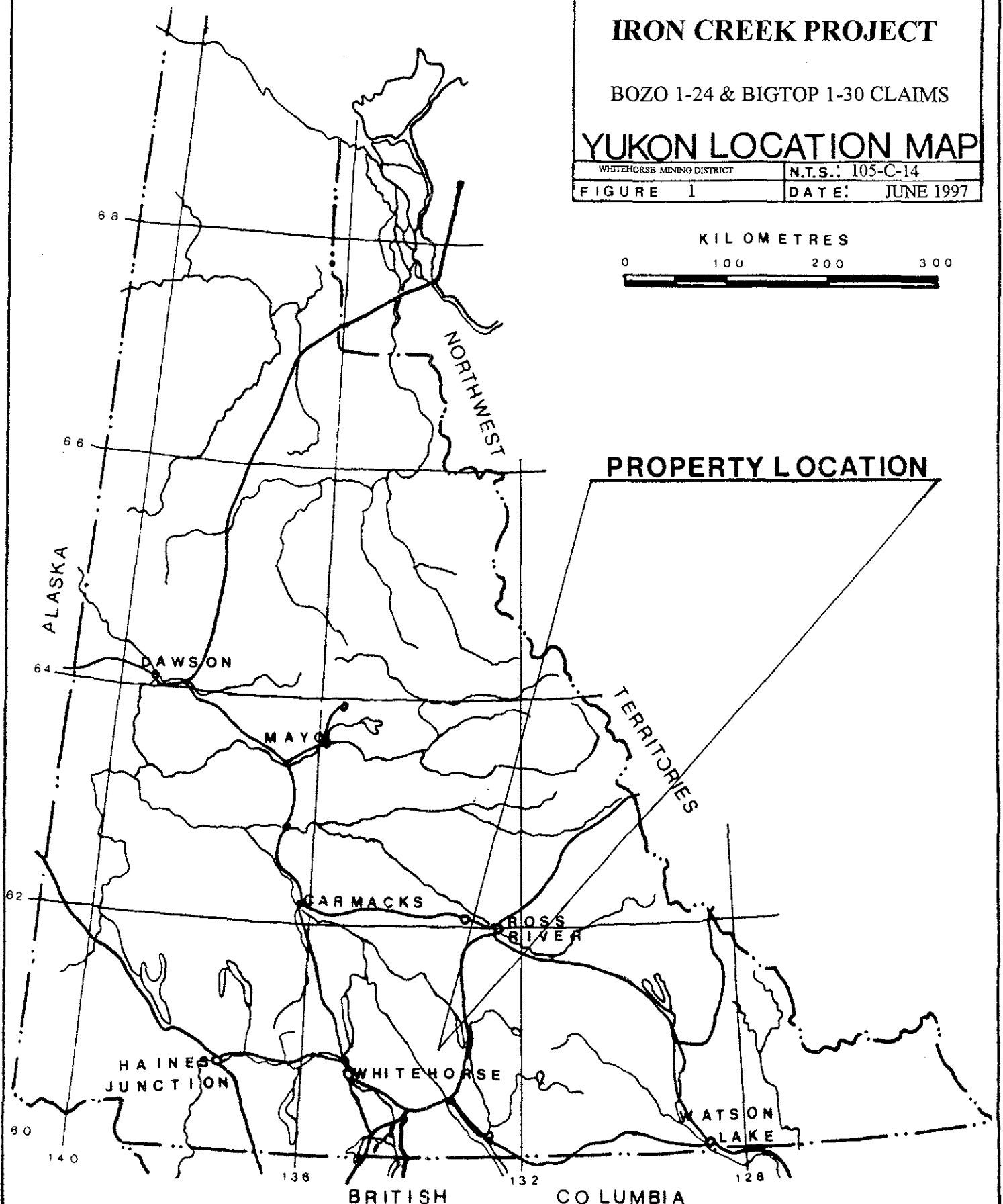
WHITEHORSE MINING DISTRICT

N.T.S.: 105-C-14

FIGURE 1

DATE: JUNE 1997

K I L O M E T R E S



3.0 LIST OF CLAIMS AND PROPERTY DESCRIPTION

The property currently comprises a contiguous block of 54 quartz mineral claims situated predominately north of Sidney Creek and lying in a roughly east-west group centered around the lower canyon of Iron Creek. The claims are shown on claim map sheet 105 C 14 (see Figure 2).

Details of the claims are as follows:

<u>Claim Name</u>	<u>Grant No.</u>
BOZO 1 - 8	YB67080 - YB67087
BOZO 9 - 24	YB67298 - YB67313
BIGTOP 1 - 30	YB67268 - YB67297

The claims were located and staked in June 1996 and were recorded and transferred to 15053 Yukon Inc., the sole owner of these claims.

4.0 PHYSIOGRAPHY AND GLACIATION

Physiographically the property lies in an area of the northern Cordillera known as the Yukon Plateau. Subdued, often rounded mountains becoming broadly rolling, open valleys predominate much of the area.

Extensively glaciated during the McConnell glaciation, the area was probably covered by a major ice stream flowing northwest, that resulted from a bifurcation of the Cassiar Lobe of the Cordilleran Ice Sheet. Much of the eastern areas of the property, east of Iron Creek, are extensively drift covered by fluvio-glacial, lacustrine and alluvial deposits.

With the exception of the Iron Creek valley, outcrop on the rest of the property is

present at less than 1%, although suboutcrop of frost-heaved felsenmeer can be located through careful prospecting.

5.0 EXPLORATION HISTORY

5.1 Previous Work and Exploration Activity

The area was first investigated by E.J. Lees for the GSC in 1936 during regional mapping of the Teslin - Quiet Lake area. A tote trail connected the area to the southern end of Quiet Lake and was used at the time by placer miners active in the area. Placer activity in the area has taken place intermittently over the years, but limited production due mainly to the irregular and sporadic occurrence of the paystreaks has kept most of the operations at a very small scale.

The Teslin map sheet was also mapped by Robert Mulligan of the GSC during the early 1950's the results of which are reported on Map 1125A accompanying the GSC Memoir 326.

A number of claims staked in the area now covered by the BOZO 3 - 6 claims were supposedly trenched in 1968. Restaked in 1981 and again in 1989 they are reported to have produced an assay result of 130.3 g/ton Ag and traces of Au. Traverses completed during this investigation failed to find any signs of this activity.

5.2 Regional and General Geology

A wide west-northwest trending band of marine volcanic rocks associated with thinly laminated terrigenous clastic rocks has been traced from the Canol Road through the Sidney Creek valley past the head waters of Red Mountain Creek. Drift cover east of

Iron Creek and in the lower Sidney Creek valley restricts outcrop exposure in the area.

The rocks are generally steeply dipping, but occasionally are seen to have a more moderate dip. The main rock types identified in the area include quartzites, shales, schists, argillites, recrystallized limestone and chloritized, occasionally phyllitic mafic volcanics. In the Iron Creek valley these units are well exposed along the whole length of the valley, north of the tote road for a few thousand meters before drift and glacial deposits obscure them. Contacts between the units are often gradational and are generally interbedded over a few meters of the stratigraphic sequence.

The main unit of interest is a fine grained, black, thinly to moderately layered shaley argillite, that contains up to 25 to 30 % massive sulphide mineralization. Pyrite is by far the most abundant sulphide present, magnetite and pyrrhotite are also found in abundance at times, traces of chalcopyrite, sphalerite, galena, and possibly cobaltite and gold were also noted. This unit weathers to a dark rusty brown gossan, often with a polished appearance in exposures along the creek bed. Whole rock analysis of samples collected from this unit returned values, most notably anomalous in Cu, Zn, Ag, Cd, Ni and Mo.

Structurally the area shows moderate shearing and faulting, all of the rocks in the area show strong deformational textures, particularly the unit described in the preceeding paragraph. Widespread cross fracturing and rotational faulting was noted, at least three distinct sets are apparent from preliminary mapping. The most obvious, which is approximately perpendicular at right angles to the plane of schistosity in the area, roughly parallels the Iron Creek valley. The second set follows the trend of the schistosity at a high angle and appears as a terraced pattern on a regional scale. Ground observations

show well developed shearing often associated with this set, possibly related on a regional scale to the formation of the Teslin Suture. The third set is weakly developed at approximately right angles to the first set and does not often form obvious planes.

6.0 DESCRIPTION AND SUMMARY OF WORK

During the course of the 1996 field season a total of 24 days (or 68 man days) were spent exploring this region, another 4 days (or 8 man days) were carried out early in the 1997 season. In addition Areodat Inc. was contracted to complete a helicopter-borne geophysical survey early in May 1997. Detailed whole rock and soil geochemical sampling, some preliminary geological mapping and detailed prospecting of the property in the immediate vicinity of Iron Creek was carried out and accounted for 12 of these days (or 32 man days). The remaining 16 days (or 44 man days) was spent prospecting in areas peripheral to and along strike in both directions from the Iron Creek property and was aimed at extending the known extent of the anomalous argillite unit and indicated a possible strike length in excess of 15 km.

Approximately 50 whole rock samples and 220 soil samples were taken, of these 27 whole rock and 109 soil samples were submitted for assay and analysis, in the course of work on the property. The location of the whole rock samples and the soil grid are shown on the map included in the pocket at the end of this report (Figure 3).

Total coverage of the helicopter-borne geophysical survey was approximately 542 line kilometers, the survey report and results are appended to this report (Appendix G).

The soil sampling grid was located and oriented to provide maximum coverage of

the inferred position of the anomalous argillite unit. A baseline was setup with a starting point on each side of the creek valley, as the depth of the valley in this area made a single continuous line impractical. Using pickets to forward and backsight and a compass, set to a bearing of 310 degrees and corrected for the local declination, a slashed and flagged baseline was extended out 900 meters east and west from the respective starting points on each side of Iron Creek. The baseline was then chained using a belt chain measuring device and grid line stations were flagged in at 100 meter intervals. The grid lines themselves were run at a bearing of 040 degrees, from the baseline stations, and these lines were chained and flagged in during the collection of the soil samples. Sampling on the grid lines was done at 50 meter intervals and were extended for 500 meters on the north side of the baseline. Offsets to the next line were chained over 100 meters and closed to the baseline, no correction was applied when plotting the results as all closures were completed with little or no error. The grid line was positioned and tied in relative to known topographic and physical features in the area. Every effort was made to collect 'B' horizon material with a soil mattock during the program.

The decision was made following the completion of the soil sampling program to only submit the samples from the grid on the west side of Iron Creek for analysis. This decision was based on the recognition of the deeply drift and alluvium covered nature of the ground underlying the grid on the east side of the creek and concerns that this cover could seriously mask the geochemical response in this area.

7.0 GEOCHEMICAL ANALYSIS AND RESULTS

A total of 27 whole rock and 109 soil samples were submitted for a standard 34

element analysis and in some cases gold. The soil samples were dried and sieved to -80 mesh and the rock samples crushed/split and pulverized (a total sample preparation was also done before splitting in the case of a limited number of whole rock samples). Geochemical analysis for gold was carried out by a 30g fire assay and atomic absorption, while analysis of the other 34 elements was by ICP-Atomic Emission Spectroscopy preceded by aqua regia digestion. The majority of the whole rock and all of the soil samples were shipped to Bondar-Clegg in North Vancouver, B.C. for preparation and analysis, while a limited number of whole rock samples were submitted to a local lab (NAL) for similar treatment. Analytical procedures and complete results are presented in the appendices of this report.

7.1 Rock Samples

Sample locations are plotted on Figure 3 (in the map pocket) and a rock sample description form follows in Appendix C. All rock samples submitted for analysis contained some sulfides, with concentrations often in excess of 20%. Sulfides present and identified in hand specimen, included pyrite, chalcopyrite, pyrrhotite, sphalerite, galena and magnetite. Samples were commonly stained with iron and sometimes manganese oxides along jointing, fracture and schistosity planes. Chloritic alteration of the various units, particularly the greenstone unit, is at times quite pervasive.

Analytical results indicate that the shale/argillite unit is the most consistently anomalous unit found in the area, anomalous Cu, Zn and Ag values at levels that are five to ten times above average for this type of rock were noted in over half the samples. Minor precious metal values were also noted, in the more silicified of these samples.

7.2 Soil Samples

Statistical analysis of the soil geochemistry results and subsequent plotting and contouring of these results (see Appendix D) were completed for selected elements. All other elements can be crossed referenced in Appendix E. Threshold values were calculated as the mean plus two (2) standard deviation and rounded to the closest whole numbered intervals for contouring.

Based on the results of geochemical analysis of the samples from the grid on the west side of Sidney Creek, at least two and possibly three, coincident multi-element anomalies with values three to four times background have been identified. Fill-in sampling and an extension of the existing grid to the west will be necessary to accurately determine the extent and number of individual zones in this part of the property.

8.0 GEOPHYSICAL RESULTS AND ANALYSIS

Appendix G and the map pockets at the end of the report contain the results and analysis of the helicopter-borne electromagnetic and magnetic survey contracted and flown by Aerodat Inc.

Briefly, the results of the survey show a number of conductors coincident with the anomalous geochemical response patterns previously discussed. Numerous other conductors identified by the survey occur on the property and along the 15 km trend of favourable host rocks.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The mineralogy, textures, structures, rock and alteration types and the survey responses of the occurrence, noted in the anomalous whole rock, geochemical and

geophysical results, suggests an environment that is highly prospective for the discovery of a massive sulfide deposit of the Kuroko type.

An additional 80 or so claims should be staked as soon as possible to fill in areas across the northern edge of the existing property and along strike at the east and west ends of the present claim block. The baseline should be extended out approximately another 2500 meters to the west from its current termination at 900W. Fill-in of the existing soil grid, particularly in the 600W to 800W area and collection of approximately 400 more soil samples in the area covered by the proposed extension of the grid should be completed as soon as conditions permit.

A program of detailed geological mapping and prospecting, with particular attention being paid to possible structural controls of mineralization should also be carried out during the 1997 season.

Machine trenching and bedrock sampling in the area of the soil anomalies identified in 1996 and of other favourable zones identified through continuing work on the property, can then be completed. If warranted by results, drilling should be considered. It is expected that expenditures of approximately another \$ 125,000 will be required to bring the project to this point in the decision making process.

Respectively submitted,

Steve Traynor

APPENDIX A
LIST OF PERSONNEL

Steve Traynor(Geologist)
214 Alsek Road
Whitehorse, Yukon Y1A 5B8

Clayton Wilson(Prospector)
501 Main Street
Whitehorse, Yukon Y1A 2B8

Wade Carrell(Prospector)
27 Tutshi Road
Whitehorse, Yukon Y1A 3R4

APPENDIX B

STATEMENT OF EXPENDITURES

CANADA -- In the matter of geochemical and geophysical survey assessment work filed on the BOZO 1 - 24 and BIGTOP 1 - 30 claims.

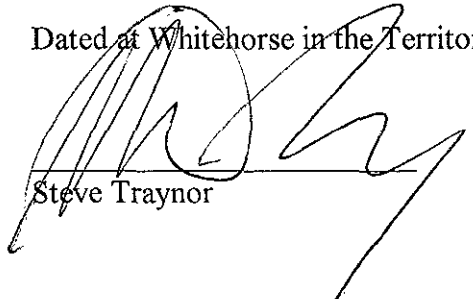
I, Steve Traynor a geologist with 15053 Yukon Inc. of Whitehorse, Yukon do solemnly declare that a program consisting of a geochemical and helicopter-borne geophysical survey and preliminary follow-up was carried out on the BOZO 1 - 24 and BIGTOP 1 - 30 mineral claims during the period from Aug. 18 - Sept. 17, 1996, May 6 - 12, 1997 and May 23, 24, 29 and 30, 1997.

The following expenses were incurred during the course of this work and in the compilation and reporting of the results.

LABOUR:	Steve Traynor(Geologist)	8 days @ \$325	\$2,600.00	
	Clayton Wilson(Prospector)	12 days @ \$200	2,400.00	
	Wade Carrell(Prospector)	12 days @ \$200	<u>2,400.00</u>	\$ 7,400.00
CONTRACTED SERVICES	Aerodat Inc., Geophysical survey			56,674.69
FOOD:	32 man days @ \$ 35.00			1,120.00
TRANSPORTATION:	Company Truck	12 days @ \$75		900.00
ANALYSIS:	27 whole rock samples			1,077.50
	109 soil samples			1,071.24
REPORT PREPARATION:	Author	2 days @ \$325		650.00
	Drafting	1 day at \$150		150.00
	Supplies	estimated		<u>50.00</u>
TOTAL COST				<u>\$69,093.43</u>

And I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Dated at Whitehorse in the Territory of the Yukon this 26th day of August, 1997.

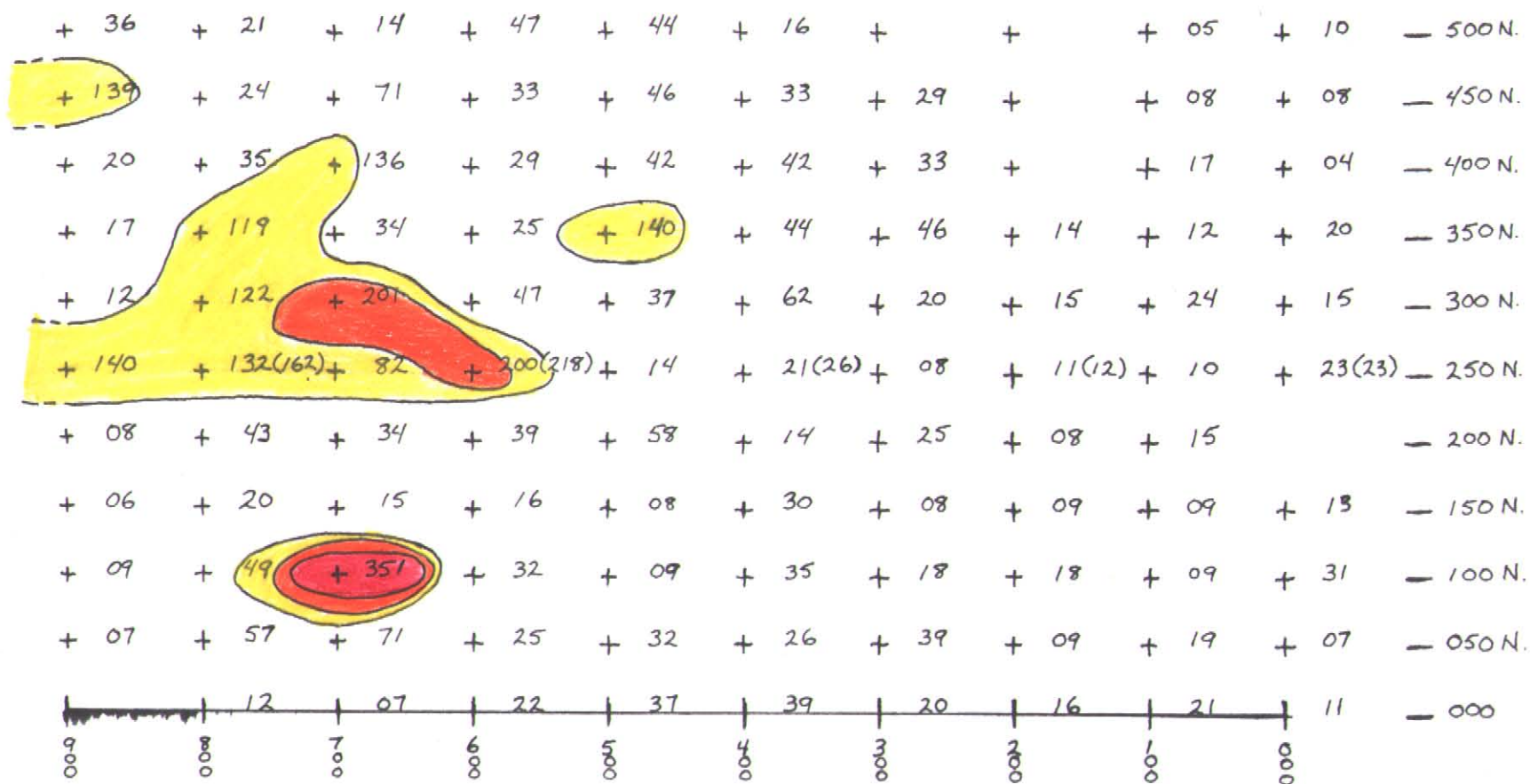

Steve Traynor

APPENDIX C

ROCK SAMPLE DESCRIPTIONS

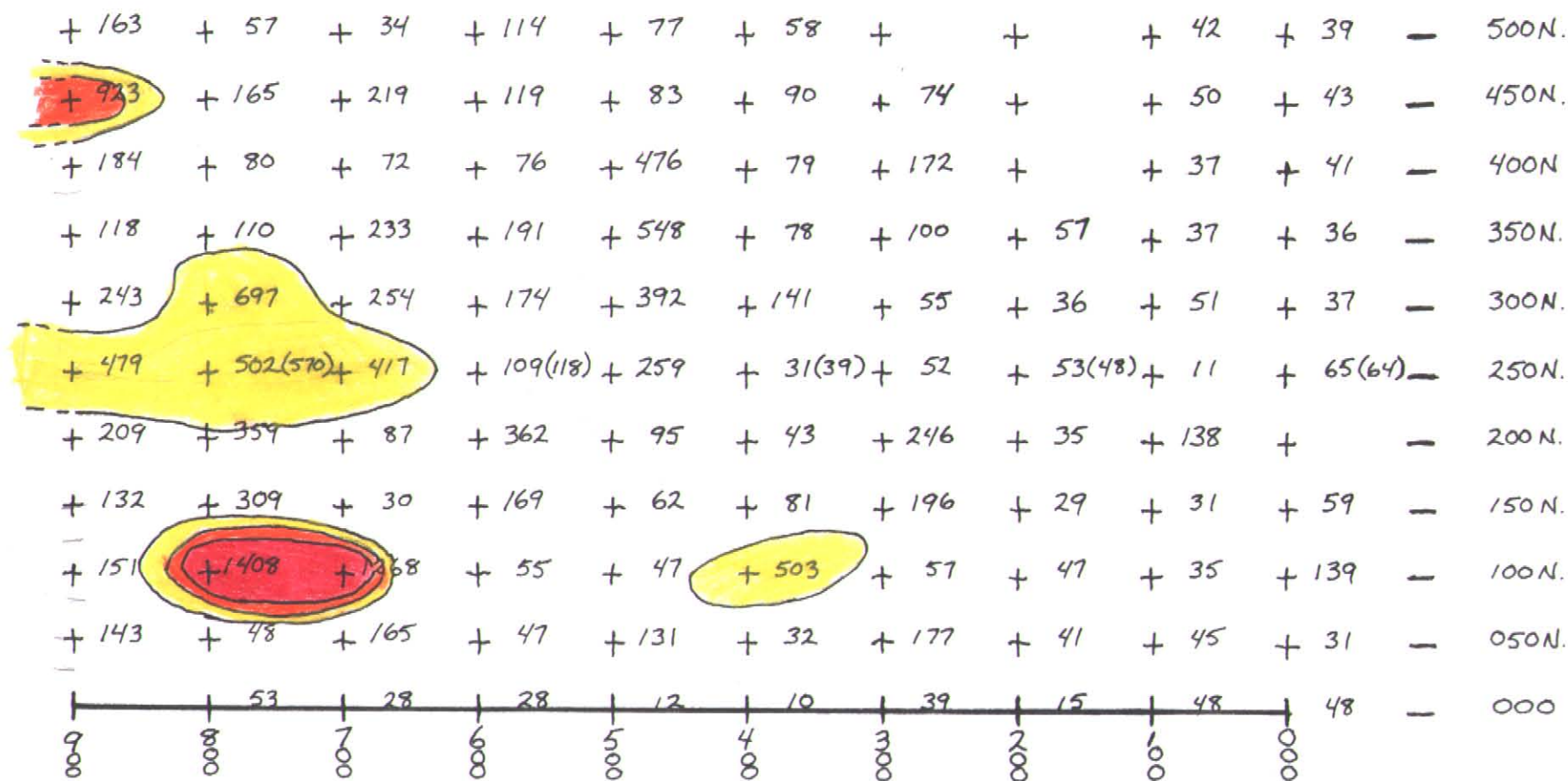
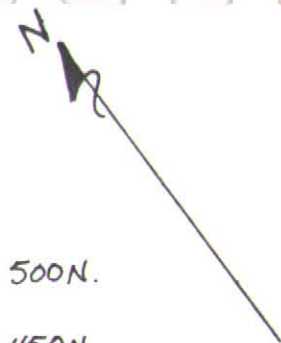
SAMPLE			DESCRIPTION			ADDITIONAL	ASSAYS					
Number	Type	Width	Rock Type	Alteration	Mineralization	OBSERVATIONS	Cu	Zn	Ag	Ni	Co	Mo
96R006-02	Grab	.1m	Quartzite	Fe Ox.	Pyrite		35	54	0.5	39	11	8
008-02	Grab	.2m	Shaly argillite	Fe Ox	Sulfides	Interrbedded with mm or	104	1134	<2	121	7	11
013-02	Grab	.1m	Argillite	Mn Ox. Fe Ox	Pyrite, chalc., sphalerite(?)	Au 30 gave result of 32 ppb Au	148	438	2.6	73	8	3
96R002-03	Chip	5m	Chloritic greenstone	Chloritic	Pyrite, chalc., magnetite	Pyrite as porphyroblasts	63	44	<2	12	17	<1
005-03	Grab	.1m	Schist	Talcose	Pyrite	Heavily sheared	12	17	<2	720	51	<1
008-03	Grab	.1m	Shale	Fe Ox	Pyrite		30	534	<2	37	6	17
011-03	Grab	.1m	Quartzite (tuff?)	Fe Ox	30% Sulfides	Mainly pyrite	62	195	0.6	116	<1	22
015-03	Grab	.2m	Greenstone		Pyrite, magnetite	Very magnetic	47	28	0.2	15	32	<1
017-03	Grab	.1m	Greenstone with quartzite		Pyrite	Au 30 gave result of 37 ppb Au	55	71	0.6	14	15	<1
018-03	Grab	.1m	Shale	Fe Ox.	Pyrite	Thinly banded, distinct sulfide bands	122	1612	0.2	71	20	20
020-03	Grab	.1m	Greenstone	Chloritic	Pyrite	Magnetic	72	124	<2	29	36	3
96R024	Grab	30m	Quartzite (tuff?)	Fe Ox.	Pyrite, chalc., sphalerite		85	460	3.1	49	7	22
025	Chip	.5m	Shale interbedded with tuff (?)	Mn Ox Fe Ox	20-30% Sulfides	Highly magnetic	175	1035	1.5	189	6	13
026	Grab	.1m	Quartzite	Fe Ox	Magnetite, sphalerite, pyrite	Magnetic	152	1248	0.9	153	6	12
027	Grab	.2m	Quartzite	Fe Ox	10% sulfides	Well banded.	235	1181	2.3	141	1	14
028	Grab	.3m	Tuff (?) possibly rhyolite	Fe Ox	Pyrite	Bedrock fragments in till	51	397	0.6	124	3	20
029	Chip	3m	Quartzite	Fe Ox	Pyrite	Same area as 027, except chip	227	706	1.8	151	2	11
030	Grab	.1m	Quartzite	Fe Ox	30+ % Sulfides	Possibly a quartzite-magnetite iron formation	83	500	<2	79	<1	12
031	Grab	.1m	Shale argillite	Fe Ox	Massive pyrite	Heavily distorted may indicate flow textures	346	730	2.4	199	<1	11
032	Grab	.5m	Shale argillite		Pyrite	Heavily contorted.	38	41	<2	29	16	2
033	Chip	15m	Silicified argillite	Fe Ox	Pyrite, possibly sphalerite, V, Cr	Magnetic	649	1334	4.5	100	<1	<1
037	Chip	15m	Silicified shale		Pyrite	Very magnetic	114	204	2.2	42	7	9
038	Grab	.2m	Phyllitic greenstone	Chloritic	Pyrite porphyroblasts		28	71	<2	106	44	<1
96R233	Grab	.1m	Shale	Mn Ox Fe Ox	Pyrite	Sulfides in thin bands	25	163	<2	13	5	3
235	Grab	.1m	Shale	Fe Ox	Pyrite with trace of chalc.		263	336	2.2	112	2	7
236	Grab	.1m	Shale argillite	Fe Ox	Sulfides		176	1241	1.4	142	31	12
237	Chip	40m	Shale or argillite		Pyrite, pyrrhotite	Netted textures in sulfides	195	989	1.4	134	23	18

APPENDIX D
CONTOURED MAPS
OF
SOIL GEOCHEMISTRY RESULTS



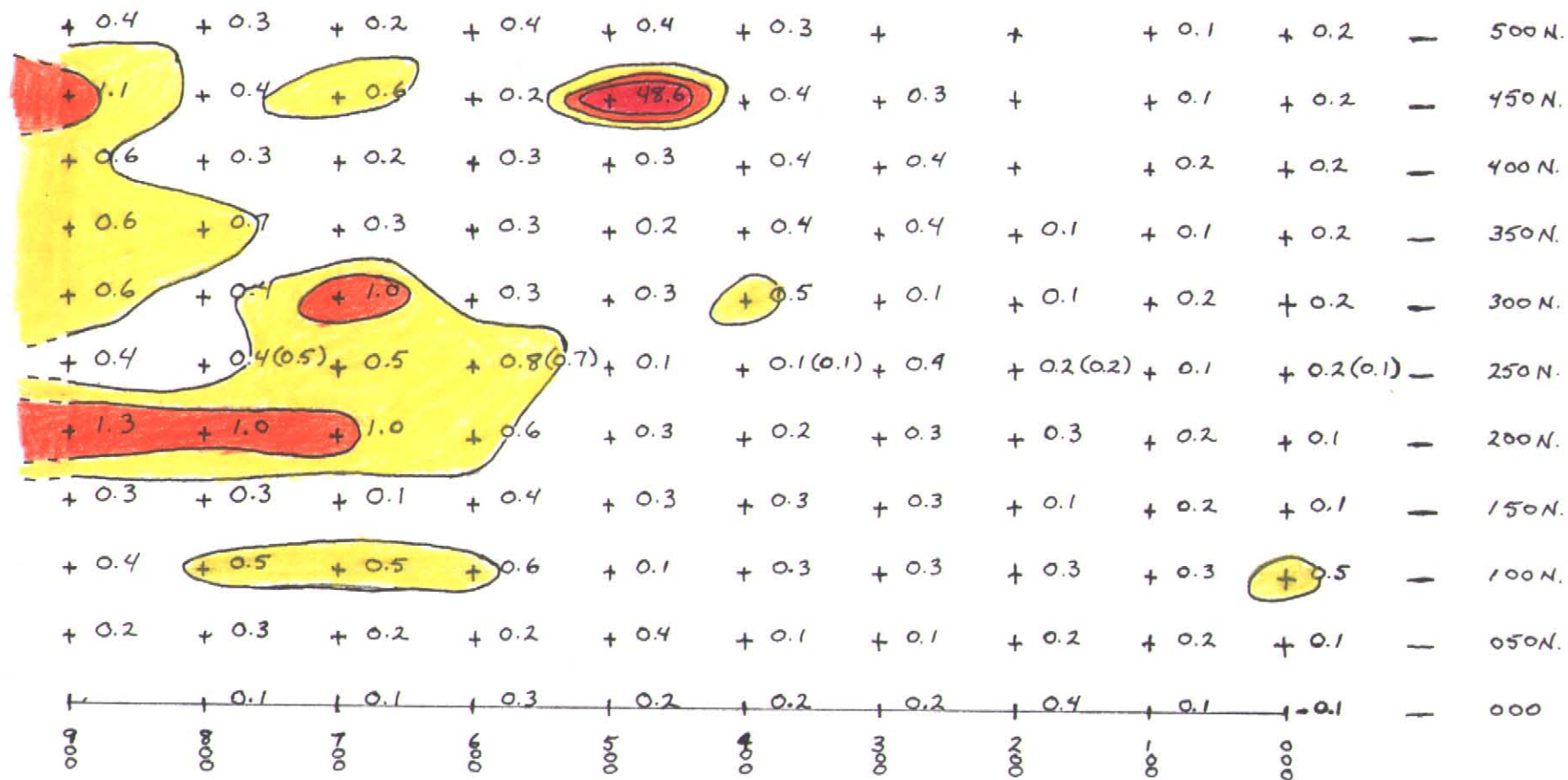
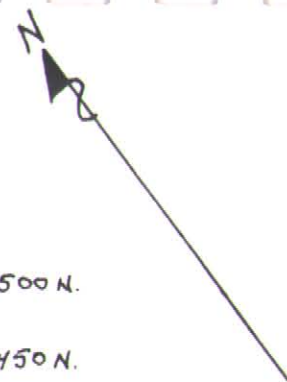
IRON CREEK - SOIL GEOCHEMISTRY - Cu in ppm
0+00 W to 9+00 W

- + sample location
- + 0-81 ppm
- 80-160 ppm
- 161-240 ppm
- 241+



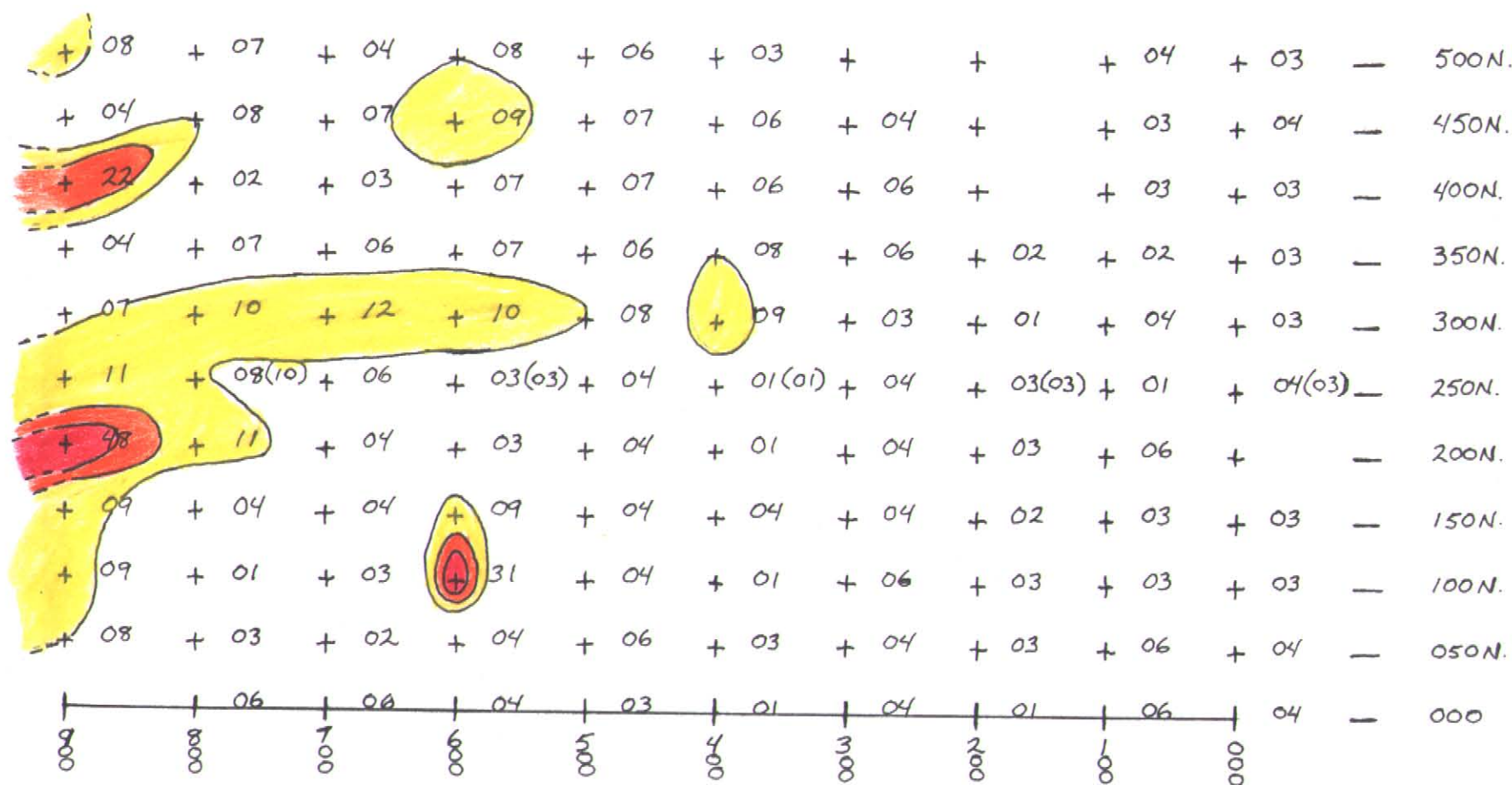
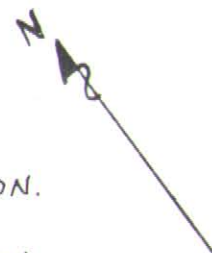
IRON CREEK - SOIL GEOCHEMISTRY - Zn in ppm
0+00W to 9+00W

- + sample location
- + 0 - 400 ppm
 - 401 - 800 ppm
 - 801 - 1200 ppm
 - 1201 +



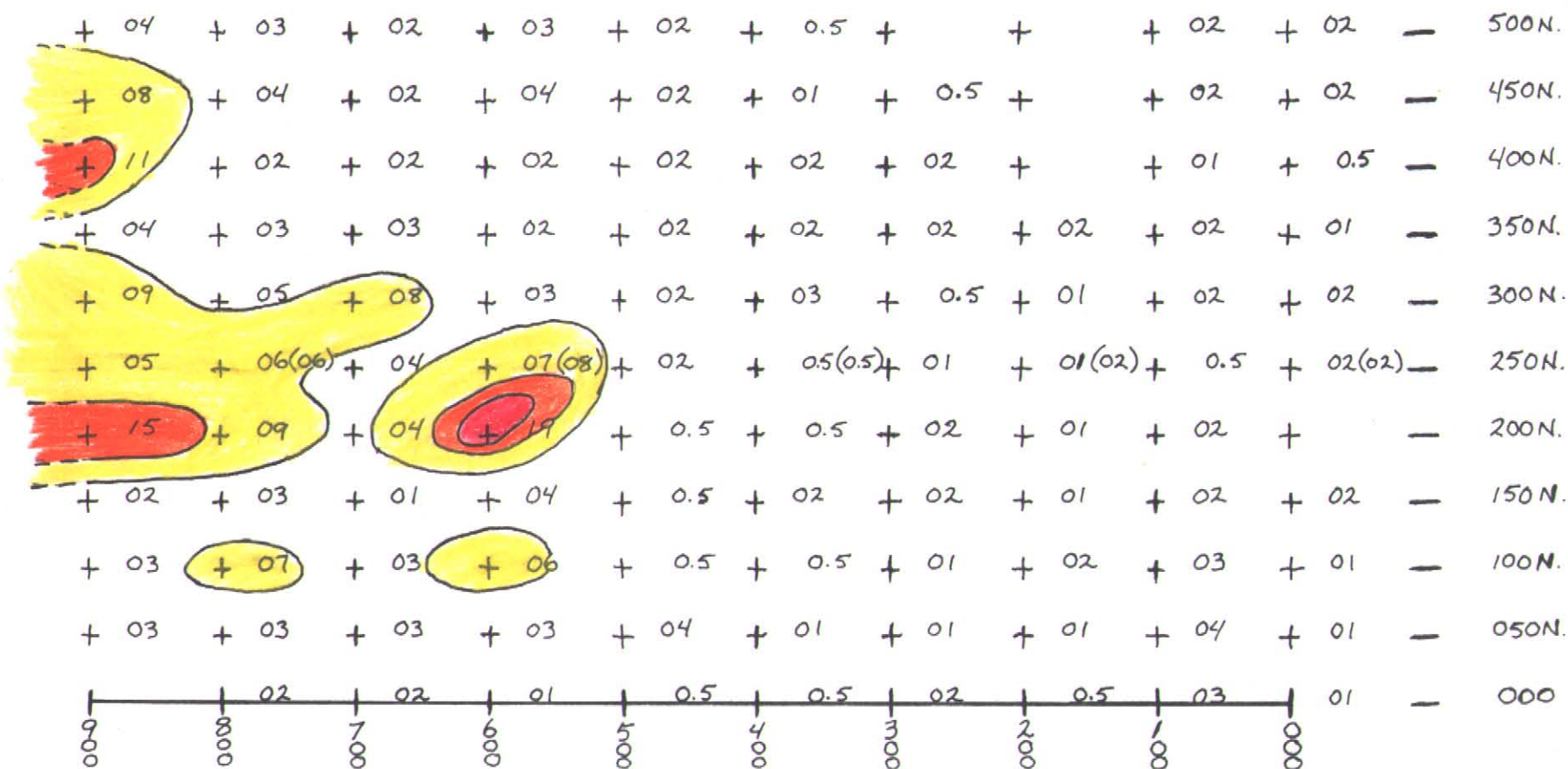
IRON CREEK - SOIL GEOCHEMISTRY - Ag in ppm
0+00W to 9+00W

- + Sample location
- + 0 - 0.4 ppm
- 0.5 - 1.0 ppm
- 1.1 - 1.5 ppm
- 1.51 +



IRON CREEK - SOIL GEOCHEMISTRY - Pb in ppm 0+00W to 9+00W

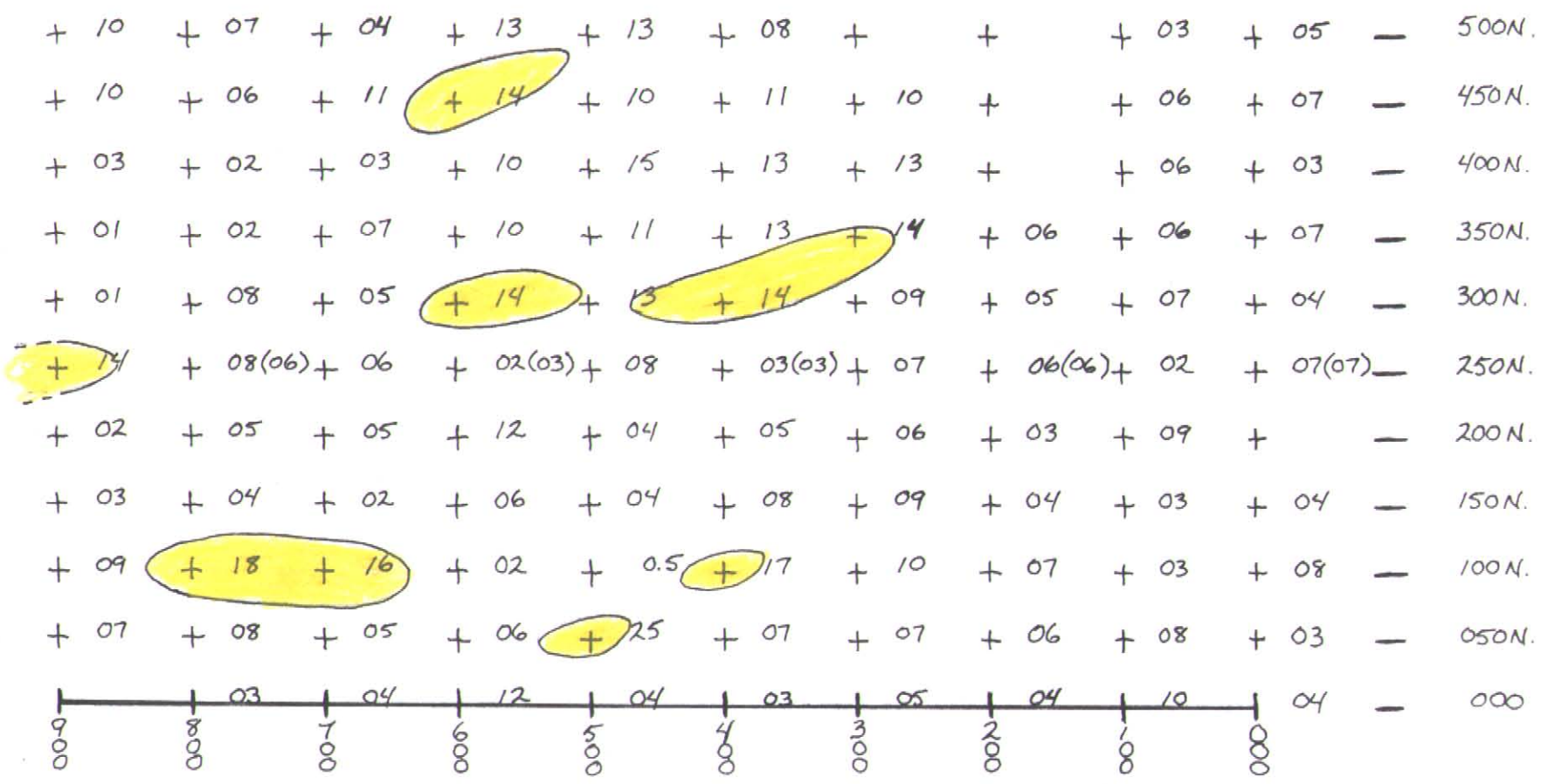
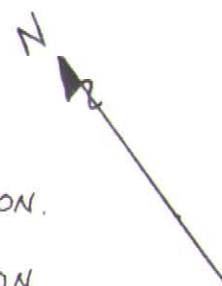
- + Sample location
- + 0 - 7 ppm
- 8 - 16 ppm
- 17 - 24 ppm
- 25 +



IRON CREEK - SOIL GEOCHEMISTRY - Mo in ppm
0+00W to 9+00W

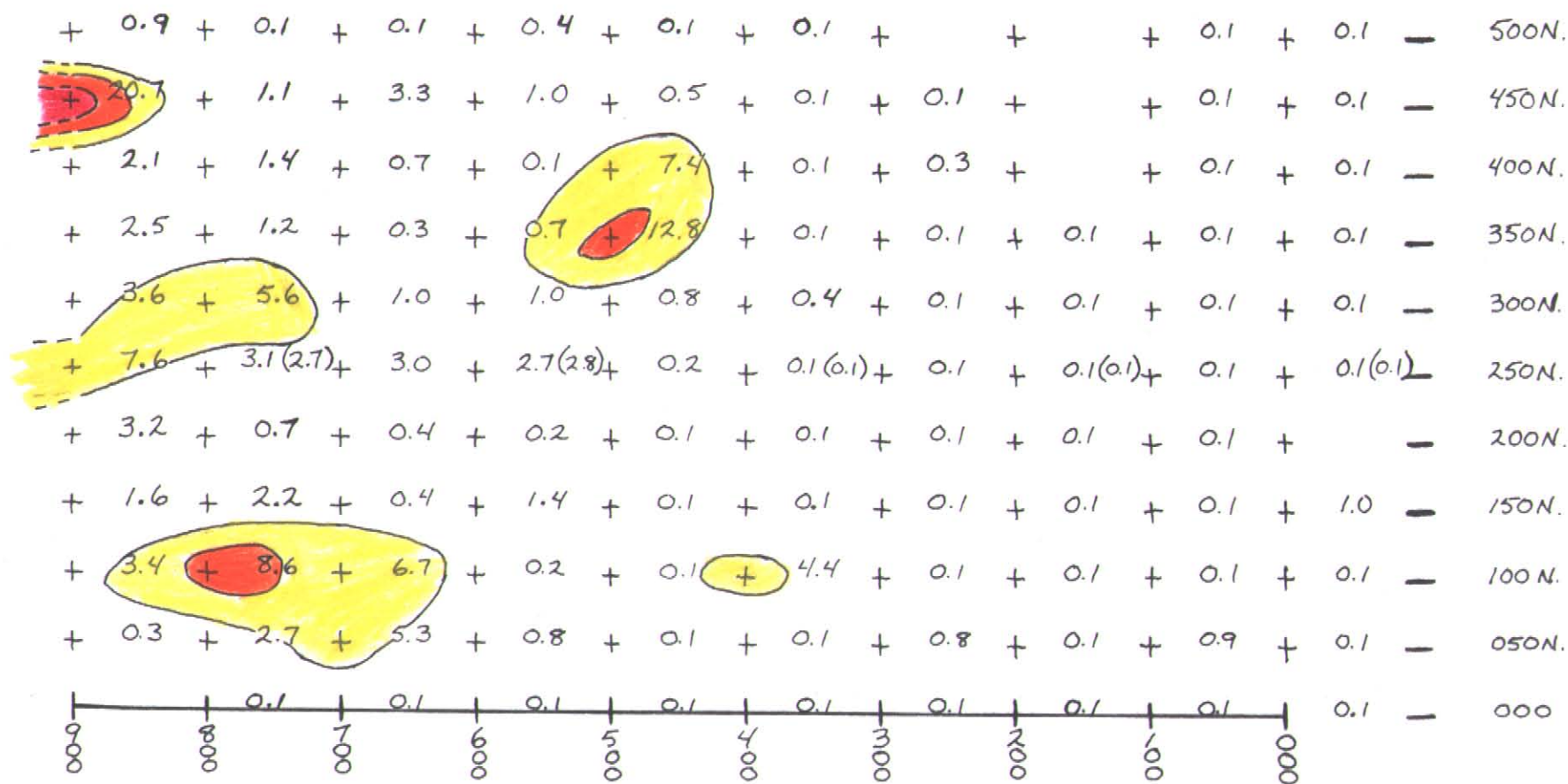
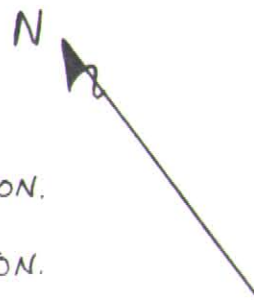
+ Sample location

- + 0-5 ppm
- 6-10 ppm
- 11-15 ppm
- 16-20 ppm



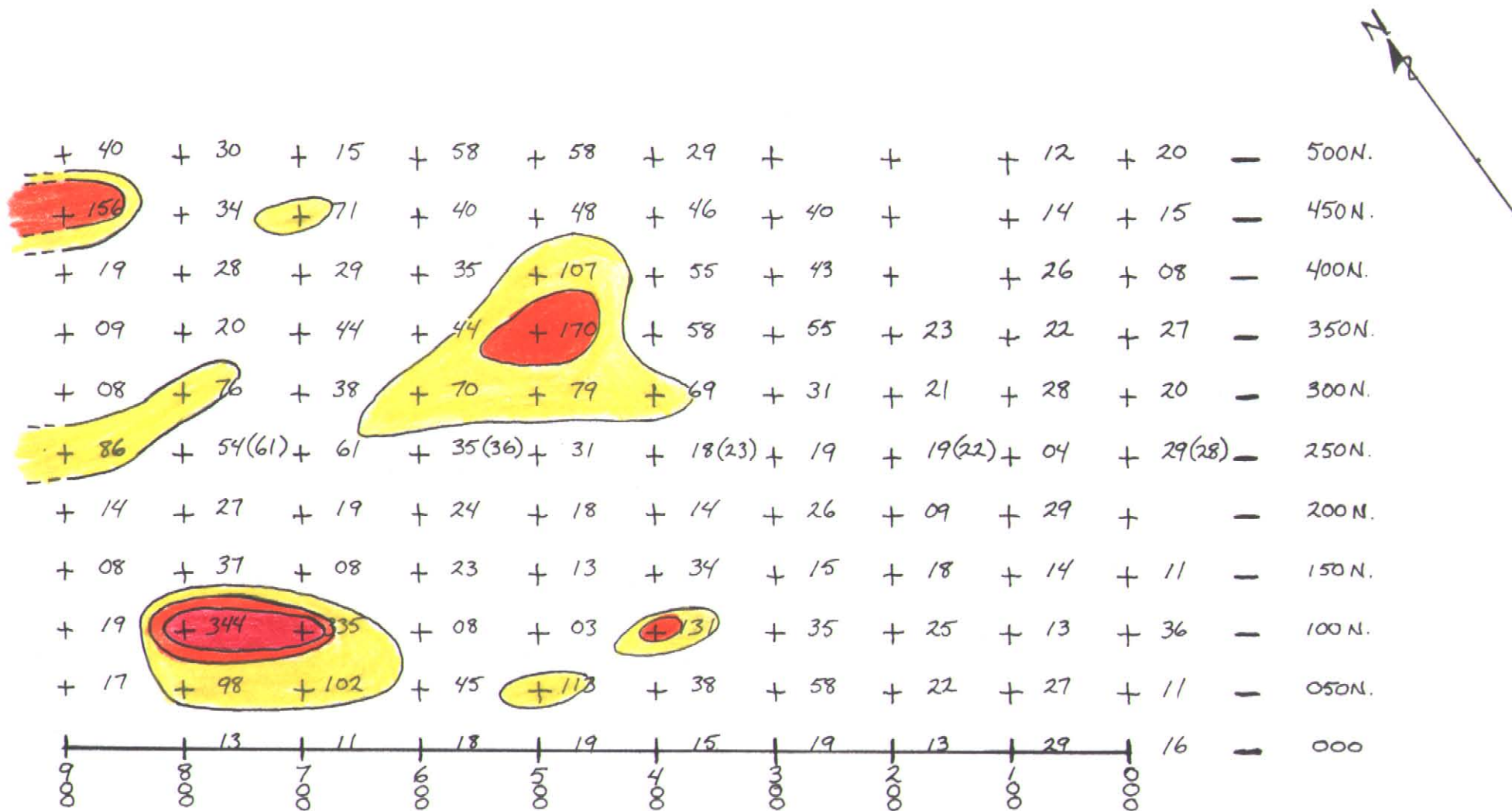
IRON CREEK - SOIL GEOCHEMISTRY - Co in ppm
 0+00W to 9+00W

+ Sample location
 + 0 - 12 ppm
 ● > 12 ppm



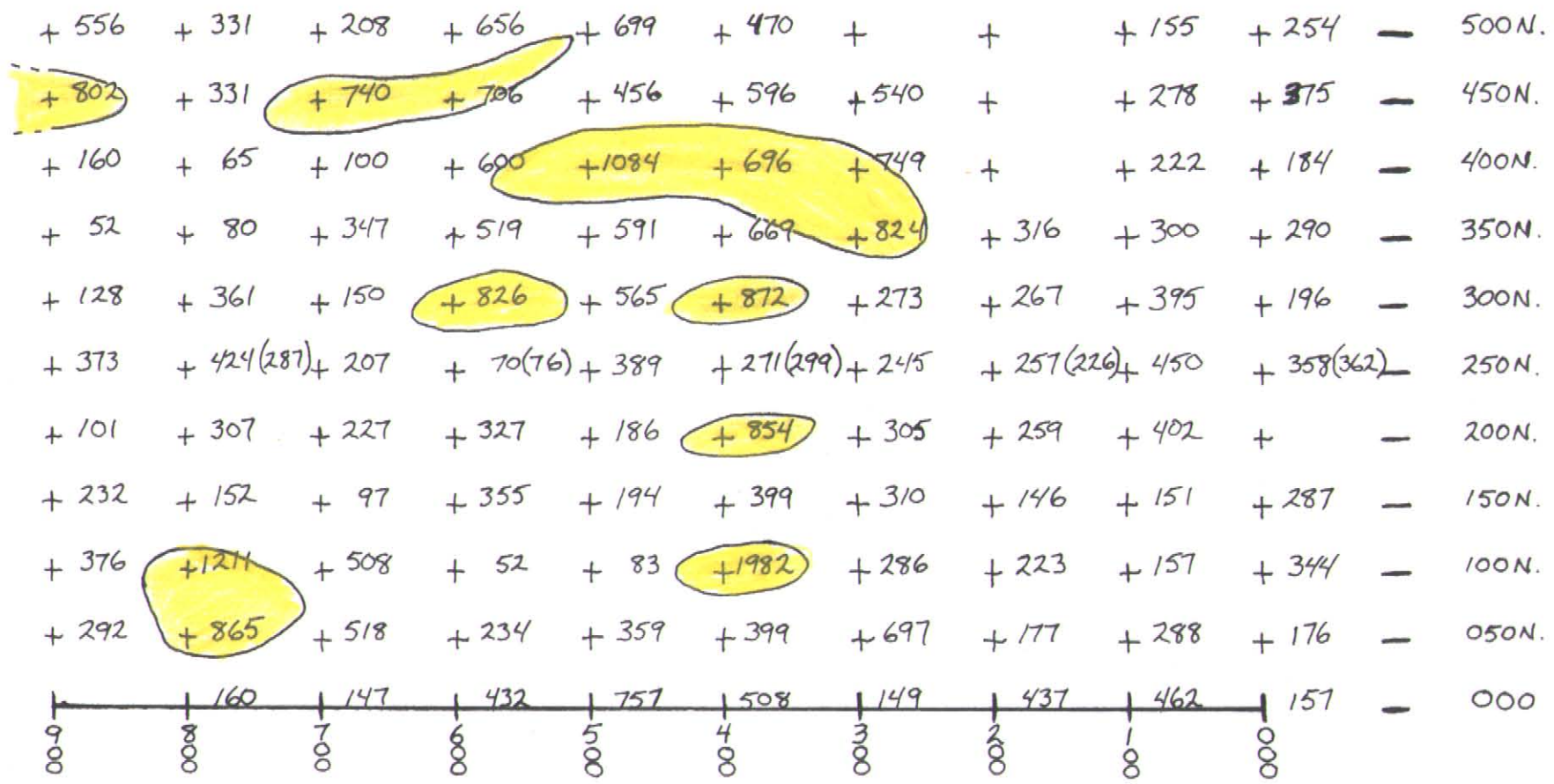
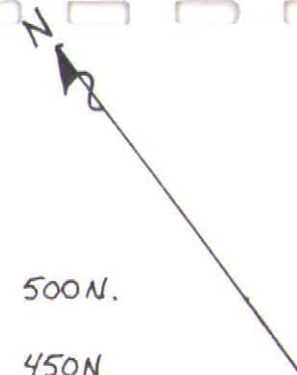
IRON CREEK - SOIL GEOCHEMISTRY - Cd in ppm
0+00W to 9+00W

- + Sample location
- + 0 - 4 ppm
- 4.1 - 8 ppm
- 8.1 - 12 ppm
- 12.1 +



IRON CREEK - SOIL GEOCHEMISTRY - Ni in ppm
0+00W to 9+00W

- + Sample location
- + 0 - 65 ppm
- 66 - 130 ppm
- 131 - 195 ppm
- 196 +



IRON CREEK - SOIL GEOCHEMISTRY - Mn in ppm
0+00W to 9+00W

+ Sample location
+ 0 - 700 ppm
● > 700 ppm

APPENDIX E

ANALYTICAL PROCEEDURES
AND
CERTIFICATES OF ANALYSES



Bondar Clegg Inchcape Testing Services

Certificate of Analysis

REPORT: V96-02108.4 (COMPLETE)

REFERENCE:

CLIENT: TANANA EXPLORATION

SUBMITTED BY: S. TRAYNOR

PROJECT: NONE GIVEN

DATE PRINTED: 5-DEC-96

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Wt-150 Pulp Weight -150	1	0.1 GM		FIRE ASSAY
2	WT+150 +150 Pulp Weight	1	0.01 g		FIRE ASSAY
3	Au-150 Gold -150 mesh	1	0.001 OPT		FIRE ASSAY
4	Au+150 Gold +150 mesh	1	0.01 OPT		FIRE ASSAY
5	Au Tot Gold in total sample	1	0.001 OPT		FIRE ASSAY

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	1	W +150/-150	1	CRUSH ONLY	1
				PULVERIZATION	1
				METALLICS SCREENING	1

REPORT COPIES TO: 8 - 4078 4TH AVE.

INVOICE TO: 8 - 4078 4TH AVE.



Bondar Clegg Inchcape Testing Services

Certificate of Analysis

CLIENT: TANANA EXPLORATION

REPORT: V96-02108.4 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 5-DEC-96

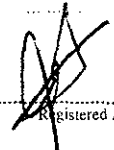
PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Wt-150 GM	WT+150 g	Au-150 OPT	Au+150 OPT	Au Tot OPT
RW 96R240		813.0	29.67	0.001	<0.01	0.001

Bondar-Clegg & Company Ltd.

130 Pemberton Avenue, North Vancouver, B.C., V7P 2R5, Canada

Tel: (604) 985-0681, Fax: (604) 985-1071


Registered Assayer, Province of British Columbia



Inchcape Testing Services

Bondar Clegg

Geochemical Lab Report

REPORT: V96-02108.0 (COMPLETE)

CLIENT: TANANA EXPLORATION

PROJECT: NONE GIVEN

REFERENCE:

SUBMITTED BY: S. TRAYNOR

DATE PRINTED: 5-DEC-96

ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
1 Ag Silver	1	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
2 Cu Copper	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
3 Pb Lead	1	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
4 Zn Zinc	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
5 Mo Molybdenum	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
6 Ni Nickel	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
7 Co Cobalt	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
8 Cd Cadmium	1	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
9 Bi Bismuth	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
10 As Arsenic	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
11 Sb Antimony	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
12 Fe Iron	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
13 FeOL Iron semiquant	1	0.1 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
14 Mn Manganese	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
15 Te Tellurium	1	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
16 Ba Barium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
17 Cr Chromium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
18 V Vanadium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
19 Sn Tin	1	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
20 W Tungsten	1	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
21 La Lanthanum	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
22 Al Aluminum	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
23 Mg Magnesium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
24 Ca Calcium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
25 Na Sodium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
26 K Potassium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
27 Sr Strontium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
28 Y Yttrium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
29 Ga Gallium	1	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
30 Li Lithium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
31 Nb Niobium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
32 Sc Scandium	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
33 Ta Tantalum	1	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
34 Ti Titanium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
35 Zr Zirconium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	1	2 -150	1	CRUSH ONLY	1
				PULVERIZATION	1
				METALLICS SCREENING	1

REPORT COPIES TO: 8 - 4078 4TH AVE.

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Inchcape Testing Services

Bondar Clegg

Geochemical Lab Report

CLIENT: TANANA EXPLORATION

REPORT: V96-02108.0 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 5-DEC-96

PAGE 1

SAMPLE	ELEMENT	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	FeOL	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr
NUMBER	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM
96R240		2.6	185	48	658	24	113	1	5.8	<5	148	10	>10.00	16.1	164	15	5	136	338	<20	<20	<1	0.33	0.16	1.32	0.01	0.11	52	71	<2	2	58	<5	<10	0.03	7



Bondar Clegg

Inchcape Testing Services

Certificate of Analysis

REPORT: V96-00983.4 (COMPLETE)

REFERENCE:

CLIENT: MR. CLAYTON WILSON

SUBMITTED BY: UNKNOWN

PROJECT: NONE GIVEN

DATE PRINTED: 12-JUL-96

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Ag	Silver	3	0.1 OPT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
2	Cu	Copper	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
3	Pb	Lead	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
4	Zn	Zinc	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
5	Mo	Molybdenum	3	0.001 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
6	Ni	Nickel	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
7	Co	Cobalt	3	0.005 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
8	Cd	Cadmium	3	0.005 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
9	Bi	Bismuth	3	0.005 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
10	As	Arsenic	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
11	Sb	Antimony	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
12	Fe	Iron	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
13	Mn	Manganese	3	0.005 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
14	V	Vanadium	3	0.005 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
15	Al	Aluminum	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
16	Mg	Magnesium	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
17	Ca	Calcium	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
18	Na	Sodium	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA
19	K	Potassium	3	0.01 PCT	HF-HNO3-HClO4-HCL	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	3	2 -150	3	CRUSH/SPLIT & PULV.	3
				OVERWEIGHT/KG	7

REPORT COPIES TO: c/o TANANA EXPLORATION

INVOICE TO: c/o TANANA EXPLORATION

Bondar-Clegg & Company Ltd.

130 Pemberton Avenue, North Vancouver, B.C., V7P 2R5, Canada

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Bondar Clegg

Inchcape Testing Services

Certificate of Analysis

CLIENT: MR. CLAYTON WILSON

PROJECT: NONE GIVEN

REPORT: V96-00983.4 (COMPLETE)

DATE PRINTED: 12-JUL-96

PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Ag OPT	Cu PCT	Pb PCT	Zn PCT	Mo PCT	Ni PCT	Co PCT	Cd PCT	Bi PCT	As PCT	Sb PCT	Fe PCT
96R-021		<0.1	<0.01	<0.01	0.01	0.001	<0.01	<0.005	<0.005	<0.005	<0.01	<0.01	11.34
96R-022		<0.1	<0.01	<0.01	0.09	<0.001	<0.01	<0.005	<0.005	<0.005	<0.01	<0.01	5.73
96R-023		<0.1	<0.01	<0.01	0.02	<0.001	<0.01	<0.005	<0.005	<0.005	<0.01	<0.01	18.38



Bondar Clegg Inchcape Testing Services

Certificate of Analysis

CLIENT: MR. CLAYTON WILSON
REPORT: V96-00983.4 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 12-JUL-96

PAGE 18

SAMPLE NUMBER	ELEMENT UNITS	Mn PCT	V PCT	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT
R2 96R-021		0.175	0.041	7.16	3.62	6.10	2.69	0.17
R2 96R-022		0.094	0.067	6.59	1.44	2.99	1.26	1.70
R2 96R-023		0.006	0.033	1.65	0.11	0.80	1.08	0.11



Bondar Clegg

Inchcape Testing Services

Geochemical Lab Report

REPORT: V96-01477.0 (COMPLETE)

CLIENT: TANANA EXPLORATION

PROJECT: NONE GIVEN

REFERENCE:

SUBMITTED BY: S. TRAYNOR

DATE PRINTED: 9-SEP-96

ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
1 Au30 Gold	4	5 PPB	Fire Assay of 30g	30g Fire Assay - AA
2 Ag Silver	9	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
3 Cu Copper	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
4 Pb Lead	9	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
5 Zn Zinc	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
6 Mo Molybdenum	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
7 Ni Nickel	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
8 Co Cobalt	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
9 Cd Cadmium	9	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
10 Bi Bismuth	9	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
11 As Arsenic	9	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
12 Sb Antimony	9	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
13 Fe Iron	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
14 Mn Manganese	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
15 Te Tellurium	9	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
16 Ba Barium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
17 Cr Chromium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
18 V Vanadium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
19 Sn Tin	9	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
20 W Tungsten	9	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
21 La Lanthanum	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
22 Al Aluminum	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
23 Mg Magnesium	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
24 Ca Calcium	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
25 Na Sodium	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
26 K Potassium	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
27 Sr Strontium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
28 Y Yttrium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
29 Ga Gallium	9	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
30 Li Lithium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
31 Nb Niobium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
32 Sc Scandium	9	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
33 Ta Tantalum	9	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
34 Ti Titanium	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
35 Zr Zirconium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	9	2 -150	9	CRUSH/SPLIT & PULV.	4

REPORT COPIES TO: 8-4078 4TH AVE

INVOICE TO: 8-4078 4TH AVE



Bondar Clegg

Inchcape Testing Services

Geoenvironmental Lab Report

CLIENT: TANANA EXPLORATION

REPORT: V96-01477.0 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 9-SEP-96

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Al	Si	Fe	Mn	Zn	Co	Ni	Cu	Pb	Ag	As	Sb	Bi	Cd	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr		
		PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM		
96R024		3.1	85	49	460	22	49	7	3.9	<5	<5	5	2.50	216	<10	91	73	104	<20	<20	2	1.06	0.51	0.57	0.06	0.10	32	7	3	6	<1	<5	<10	0.04	5	
96R025		10	1.5	175	15	1035	13	189	6	4.6	18	65	10	>10.00	163	<10	26	136	285	<20	<20	5	0.66	0.22	1.27	0.04	0.12	68	34	<2	5	1	<5	<10	0.03	8
96R026		18	0.9	152	29	1248	12	153	6	7.7	10	59	10	8.71	281	<10	24	141	344	<20	<20	5	0.63	0.42	1.34	0.03	0.23	66	42	<2	7	1	<5	<10	0.03	9
96R027		2.3	235	32	1181	14	141	1	10.9	13	60	12	>10.00	208	<10	30	90	336	<20	<20	6	0.50	0.28	2.00	0.02	0.12	108	42	<2	4	2	<5	<10	0.03	7	
96R028		0.6	51	54	397	20	124	3	2.9	19	67	7	>10.00	157	<10	17	124	182	<20	<20	4	0.12	0.27	1.77	0.03	0.05	150	33	<2	2	2	<5	<10	0.04	16	
96R029		1.8	227	24	706	11	151	2	4.8	15	60	9	>10.00	229	<10	25	96	248	<20	<20	3	0.39	0.27	2.05	0.01	0.11	94	37	<2	4	2	<5	<10	0.02	6	
96R030		16	<.2	83	25	500	12	79	<1	4.1	16	121	7	>10.00	149	<10	27	156	486	<20	<20	8	0.61	0.58	2.37	0.01	0.23	243	46	<2	4	1	<5	<10	0.03	8
96R031		2.4	346	33	730	11	199	<1	6.6	15	17	13	>10.00	241	<10	25	86	295	<20	<20	5	0.42	0.36	3.56	0.03	0.10	132	53	<2	<1	<1	<5	<10	0.02	6	
96R032		<5	<.2	38	6	41	2	29	16	<0.2	<5	<5	<5	3.04	426	<10	25	75	133	<20	<20	<1	1.17	1.51	1.93	0.19	0.06	8	16	5	2	<1	9	<10	0.12	<1



Inchcape Testing Services

Bondar Clegg

Geochemical Lab Report

REPORT: V96-00983.0 (COMPLETE)

REFERENCE:

CLIENT: MR. CLAYTON WILSON

SUBMITTED BY: UNKNOWN

PROJECT: NONE GIVEN

DATE PRINTED: 16-JUL-96

ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
1 Au30 Gold	9	5 PPB	Fire Assay of 30g	30g Fire Assay - AA
2 Ag Silver	9	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
3 Cu Copper	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
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12 Sb Antimony	9	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
13 Fe Iron	9	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
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35 Zr Zirconium	9	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	9	2 -150	9	CRUSH/SPLIT & PULV. OVERWEIGHT/KG	12 7

REPORT COPIES TO: c/o TANANA EXPLORATION

INVOICE TO: c/o TANANA EXPLORATION



Inchcape Testing Services

Bondar Clegg

Geochemical Lab Report

CLIENT: MR. CLAYTON WILSON

REPORT: V96-00983.0 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 16-JUL-96

PAGE 1

SAMPLE	ELEMENT	Al	Si	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr
NUMBER	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM
96R-006-02		10	0.5	35	26	54	8	39	11	0.6	<5	18	6	2.79	129	<10	35	95	29	<20	<20	2	0.47	0.65	0.29	0.04	0.29	11	1	<2	5	<1	<5	<10	0.02	<1	
96R-013-02		32	2.6	148	25	438	3	73	8	3.2	13	88	6	>10.00	224	<10	16	182	256	<20	23	17	1.03	1.14	1.89	0.02	0.53	106	22	2	7	2	<5	<10	0.03	5	
96R-002-03		<5	<2	63	<2	44	<1	12	17	0.6	<5	8	<5	4.59	251	<10	22	34	155	<20	<20	2	0.54	0.73	1.04	0.08	0.10	10	11	<2	2	<1	<5	<10	0.11	<1	
96R-008-03		10	<2	30	14	534	17	37	6	7.9	<5	35	<5	2.70	235	<10	33	115	251	<20	<20	1	0.46	0.72	0.22	0.03	0.23	10	8	<2	4	<1	<5	<10	0.06	4	
96R-011-03		7	0.6	62	73	195	22	116	<1	1.9	21	66	10	>10.00	44	15	6	162	136	24	<20	21	0.12	0.16	0.55	0.03	0.07	48	13	<2	2	2	<5	<10	0.02	7	
96R-015-03		<5	0.2	47	<2	28	<1	15	32	0.5	<5	<5	<5	7.67	328	<10	20	34	162	<20	<20	3	0.37	0.56	1.34	0.06	0.04	9	9	<2	2	2	<5	<10	0.21	<1	
96R-017-04 s/B 03		37	0.6	55	6	71	<1	14	15	0.3	<5	7	<5	4.49	842	<10	37	54	152	<20	<20	4	1.91	2.08	3.07	0.05	1.34	58	5	8	17	<1	11	<10	0.19	2	
96R-018-03		9	0.2	122	<2	1612	20	71	20	21.6	<5	<5	<5	5.12	351	<10	36	46	435	<20	<20	2	1.51	1.30	0.27	0.04	1.12	6	3	<2	15	<1	11	<10	0.18	5	
96F-020-03		9	<2	72	4	124	3	29	36	0.8	7	<5	<5	6.51	679	<10	24	46	168	<20	<20	5	1.57	2.00	4.16	0.04	0.73	56	6	6	13	<1	7	<10	0.17	<1	



Bondar Clegg

Inchcape Testing Services

Geochemical Lab Report

REPORT: V96-01604.0 (COMPLETE)

CLIENT: TANANA EXPLORATION

PROJECT: NONE GIVEN

REFERENCE:

SUBMITTED BY: S. TRAYNOR

DATE PRINTED: 9-OCT-96

ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
1 Ag Silver	1	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
2 Cu Copper	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
3 Pb Lead	1	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
4 Zn Zinc	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
5 Mo Molybdenum	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
6 Ni Nickel	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
7 Co Cobalt	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
8 Cd Cadmium	1	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
9 Bi Bismuth	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
10 As Arsenic	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
11 Sb Antimony	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
12 Fe Iron	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
13 Mn Manganese	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
14 Te Tellurium	1	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
15 Ba Barium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
16 Cr Chromium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
17 V Vanadium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
18 Sn Tin	1	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
19 W Tungsten	1	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
20 La Lanthanum	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
21 Al Aluminum	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
22 Mg Magnesium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
23 Ca Calcium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
24 Na Sodium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
25 K Potassium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
26 Sr Strontium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
27 Y Yttrium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
28 Ga Gallium	1	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
29 Li Lithium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
30 Nb Niobium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
31 Sc Scandium	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
32 Ta Tantalum	1	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
33 Ti Titanium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
34 Zr Zirconium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	1	2 -150	1	TOTAL SAMPLE PREP	1
				METALLICS SCREENING	1

REPORT COPIES TO: 8-4078 4TH AVE

INVOICE TO: 8-4078 4TH AVE



Bondar Clegg

Inchcape Testing Services

Geochemical Lab Report

CLIENT: TANANA EXPLORATION

REPORT: V96-01604.0 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 9-OCT-96

PAGE 1

SAMPLE NUMBER	ELEMENT	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr
	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM
96R235		2.2	263	10	336	7	112	2	2.7	14	<5	6	8.45	213	<10	15	177	80	<20	<20	<1	1.02	0.41	1.13	0.05	0.17	63	16	<2	3	1	<5	<10	0.03	3



Bondar Clegg

Inchcape Testing Services

Certificate of Analysis

REPORT: V96-01604.4 (COMPLETE)

REFERENCE:

CLIENT: TANANA EXPLORATION

SUBMITTED BY: S. TRAYNOR

PROJECT: NONE GIVEN

DATE PRINTED: 26-SEP-96

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Wt-150 Pulp Weight -150	1	0.1 GM		FIRE ASSAY
2	WT+150 +150 Pulp Weight	1	0.01 g		FIRE ASSAY
3	Au-150 Gold -150 mesh	1	0.001 OPT		FIRE ASSAY
4	Au+150 Gold +150 mesh	1	0.001 OPT		FIRE ASSAY
5	Au Tot Gold in total sample	1	0.001 OPT		FIRE ASSAY

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	1	W +150/-150	1	TOTAL SAMPLE PREP	1
				METALLICS SCREENING	1

REPORT COPIES TO: 8-4078 4TH AVE

INVOICE TO: 8-4078 4TH AVE



Bondar Clegg Inchcape Testing Services

Certificate of Analysis

CLIENT: TANANA EXPLORATION

REPORT: V96-01604.4 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 26-SEP-96

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Wt-150 GM	WT+150 g	Au-150 OPT	Au+150 OPT	Au Tot OPT
RW 96R235		1149.7	3.01	<0.001	<0.005	<0.001



Inchcape Testing Services

Bondar Clegg

Geocchemical Lab Report

REPORT: V96-01817.0 (COMPLETE)

REFERENCE:

CLIENT: TANANA EXPLORATION

SUBMITTED BY: S. TRAYNOR

PROJECT: NONE GIVEN

DATE PRINTED: 18-NOV-96

ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
1 Au30 Gold	9	5 PPB	Fire Assay of 30g	30g Fire Assay - AA
2 Ag Silver	20	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
3 Cu Copper	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
4 Pb Lead	20	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
5 Zn Zinc	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
6 Mo Molybdenum	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
7 Ni Nickel	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
8 Co Cobalt	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
9 Cd Cadmium	20	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
10 Bi Bismuth	20	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
11 As Arsenic	20	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
12 Sb Antimony	20	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
13 Fe Iron	20	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
14 Mn Manganese	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
15 Te Tellurium	20	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
16 Ba Barium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
17 Cr Chromium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
18 V Vanadium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
19 Sn Tin	20	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
20 W Tungsten	20	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
21 La Lanthanum	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
22 Al Aluminum	20	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
23 Mg Magnesium	20	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
24 Ca Calcium	20	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
25 Na Sodium	20	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
26 K Potassium	20	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
27 Sr Strontium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
28 Y Yttrium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
29 Ga Gallium	20	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
30 Li Lithium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
31 Nb Niobium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
32 Sc Scandium	20	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
33 Ta Tantalum	20	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
34 Ti Titanium	20	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
35 Zr Zirconium	20	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
T STREAM SED, SILT	20	1 -80	20	DRY, SIEVE -80 CRUSH/SPLIT & PULV.	3 17

REPORT COPIES TO: 8-4078 4TH AVE

INVOICE TO: 8-4078 4TH AVE



Inchcape Testing Services

Bondar Clegg

Geotechnical Lab Report

CLIENT: TANANA EXPLORATION

REPORT: V96-01817.0 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 18-NOV-96

PAGE 1

SAMPLE NUMBER	ELEMENT	AU30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr
	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM

96R005	<.2	12	<2	17	<1	720	51	<0.2	<5	<5	9	3.15	616	<10	<1	1253	33	<20	<20	<1	0.31	7.07	0.66	<.01	<.01	11	<1	<2	<1	6	<5	<10	<.01	2	
96R008	<5	<.2	104	11	1134	11	121	7	8.6	<5	12	<5	2.66	207	<10	36	119	232	<20	<20	3	0.84	0.79	0.21	0.04	0.49	3	14	2	8	18	<5	<10	0.06	17
96R032	2.0	157	21	940	4	183	22	3.7	<5	79	8	>10.00	290	<10	7	200	180	<20	<20	3	0.86	0.66	1.46	0.02	0.25	66	21	7	4	12	<5	<10	0.03	12	
96R037	2.2	114	76	204	9	42	7	1.9	<5	86	12	8.57	211	<10	16	225	226	<20	<20	6	0.84	0.59	1.14	0.04	0.37	51	25	7	4	17	<5	<10	0.04	16	
96R038	<5	<.2	28	<2	71	<1	106	44	<0.2	<5	<5	<5	6.34	503	<10	3	152	208	<20	<20	<1	6.27	9.55	0.25	<.01	<.01	9	3	11	17	25	10	<10	0.04	3

96R233	<.2	25	3	163	3	13	5	0.2	<5	<5	<5	2.12	174	<10	250	66	56	<20	<20	6	0.98	0.40	0.04	0.08	0.58	3	2	4	8	5	<5	<10	0.09	3	
96R236	14	1.4	176	35	1241	12	142	31	14.1	<5	215	10	>10.00	194	<10	7	172	252	<20	<20	3	0.79	0.37	1.28	0.03	0.23	23	25	8	4	18	<5	<10	0.04	11
96R237	14	1.4	195	29	989	18	134	23	11.1	<5	121	8	9.34	212	<10	9	180	223	<20	<20	3	0.81	0.38	1.19	0.03	0.25	21	23	7	5	16	<5	<10	0.05	11



Inchcape Testing Services

Bondar Clegg

Geochemical Lab Report

REPORT: V96-01730.0 (COMPLETE)

CLIENT: TANANA EXPLORATION

PROJECT: NONE GIVEN

REFERENCE:

SUBMITTED BY: S. TRAYNOR

DATE PRINTED: 30-OCT-96

ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
1 Ag Silver	109	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
2 Cu Copper	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
3 Pb Lead	109	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
4 Zn Zinc	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
5 Mo Molybdenum	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
6 Ni Nickel	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
7 Co Cobalt	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
8 Cd Cadmium	109	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
9 Bi Bismuth	109	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
10 As Arsenic	109	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
11 Sb Antimony	109	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
12 Fe Iron	109	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
13 Mn Manganese	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
14 Te Tellurium	109	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
15 Ba Barium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
16 Cr Chromium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
17 V Vanadium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
18 Sn Tin	109	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
19 W Tungsten	109	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
20 La Lanthanum	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
21 Al Aluminum	109	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
22 Mg Magnesium	109	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
23 Ca Calcium	109	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
24 Na Sodium	109	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
25 K Potassium	109	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
26 Sr Strontium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
27 Y Yttrium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
28 Ga Gallium	109	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
29 Li Lithium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
30 Nb Niobium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
31 Sc Scandium	109	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
32 Ta Tantalum	109	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
33 Ti Titanium	109	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
34 Zr Zirconium	109	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
S SOIL	110	1 -80	110	DRY, SIEVE -80	109

REMARKS: IS indicates Insufficient Sample

REPORT COPIES TO: 8-4078 4TH AVE

INVOICE TO: 8-4078 4TH AVE



Inchcape Testing Services

Bondar Clegg

Geochemical Lab Report

CLIENT: TANANA EXPLORATION
REPORT: V96-01730.0 (COMPLETE)

PROJECT: NONE GIVEN
DATE PRINTED: 30-OCT-96 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
000W 000N		<0.2	11	4	48	1	16	4	<0.2	<5	<5	<5	1.79	157	<10	82	22	41	<20	<20	12	1.05	0.39	0.38	<0.01	0.08	17	4	3	11	<1	<5	<10	0.08	2
000W 050W		<0.2	7	4	31	1	11	3	<0.2	<5	<5	<5	1.33	176	<10	90	17	34	<20	<20	10	0.77	0.27	0.30	<0.01	0.05	14	3	3	6	<1	<5	<10	0.08	1
000W 100N		0.5	31	3	139	1	36	8	<0.2	<5	<5	<5	1.80	344	<10	272	23	49	<20	<20	5	1.48	0.94	2.99	0.06	0.19	108	4	3	11	<1	<5	<10	0.08	2
000W 150N		<0.2	13	3	59	2	11	4	1.0	<5	<5	<5	0.81	287	<10	135	13	20	<20	<20	5	0.65	0.29	1.15	0.02	0.06	44	2	<2	3	<1	<5	<10	0.06	1
000W 250N PUP		<0.2	23	3	64	2	28	7	<0.2	<5	<5	<5	2.22	362	<10	142	31	48	<20	<20	12	1.11	0.61	0.56	<0.01	0.12	24	7	<2	8	<1	<5	<10	0.10	3
000W 250N		0.2	23	4	65	2	29	7	<0.2	<5	<5	<5	2.17	358	<10	146	33	49	<20	<20	11	1.12	0.63	0.55	0.01	0.12	24	6	2	8	<1	<5	<10	0.10	3
000W 300N		0.2	15	3	37	2	20	4	<0.2	<5	<5	<5	1.73	196	<10	130	24	39	<20	<20	11	1.00	0.47	0.37	0.01	0.08	19	4	2	7	<1	<5	<10	0.09	2
000W 350N		0.2	20	3	36	1	27	7	<0.2	<5	<5	<5	2.10	290	<10	119	39	46	<20	<20	12	0.95	0.63	0.46	<0.01	0.08	20	7	<2	8	<1	<5	<10	0.08	2
000W 400N		0.2	4	3	41	<1	8	3	<0.2	<5	<5	<5	1.73	184	<10	69	21	39	<20	<20	10	0.91	0.31	0.27	<0.01	0.07	12	3	3	7	<1	<5	<10	0.08	2
000W 450N		0.2	8	4	43	2	15	7	<0.2	<5	<5	<5	2.07	374	<10	115	26	48	<20	<20	11	1.24	0.40	0.31	<0.01	0.06	16	3	3	8	<1	<5	<10	0.10	2
000W 500N		0.2	10	3	39	2	20	5	<0.2	<5	<5	<5	1.78	254	<10	119	29	42	<20	<20	13	1.15	0.57	0.38	<0.01	0.05	20	6	2	8	<1	<5	<10	0.11	3
100W 000N		<0.2	21	6	48	3	29	10	<0.2	<5	<5	<5	2.47	462	<10	190	43	60	<20	<20	9	1.62	1.05	0.55	<0.01	0.07	21	4	3	11	<1	<5	<10	0.14	3
100W 050N		0.2	19	6	45	4	27	8	0.9	<5	<5	<5	2.27	288	<10	133	39	53	<20	<20	10	1.46	0.78	0.41	<0.01	0.07	18	4	3	11	<1	<5	<10	0.11	3
100W 100N		0.3	9	3	35	3	13	3	<0.2	<5	32	<5	2.37	157	<10	89	28	69	<20	<20	7	1.16	0.51	0.28	<0.01	0.07	13	4	4	7	<1	<5	<10	0.18	3
100W 150N		0.2	9	3	31	2	14	3	<0.2	<5	<5	<5	1.66	151	<10	88	21	45	<20	<20	9	0.97	0.39	0.22	<0.01	0.08	15	3	3	7	<1	<5	<10	0.10	2
100W 200N		0.2	15	6	138	2	29	9	<0.2	<5	<5	<5	2.02	402	<10	188	34	46	<20	<20	11	1.54	0.66	0.66	0.01	0.09	29	5	3	11	<1	<5	<10	0.11	3
100W 250N		<0.2	10	<2	11	<1	4	2	<0.2	<5	<5	<5	0.25	450	<10	148	2	6	<20	<20	<1	0.23	0.20	3.91	<0.01	0.02	111	<1	<2	<1	<1	<5	<10	0.01	<1
100W 300N		0.2	24	4	51	2	28	7	<0.2	<5	<5	<5	2.21	395	<10	170	30	47	<20	<20	13	1.18	0.64	0.47	<0.01	0.16	21	7	2	10	<1	<5	<10	0.10	3
100W 350N		<0.2	12	2	37	2	22	6	<0.2	<5	<5	<5	2.03	300	<10	121	28	43	<20	<20	11	1.13	0.52	0.41	<0.01	0.11	19	4	2	10	<1	<5	<10	0.10	2
100W 400N		0.2	17	3	37	1	26	6	<0.2	<5	<5	<5	2.16	222	<10	103	28	45	<20	<20	15	0.96	0.52	0.43	<0.01	0.10	18	7	<2	8	<1	<5	<10	0.09	4
100W 450N		<0.2	8	3	50	2	14	6	<0.2	<5	<5	<5	1.80	278	<10	155	26	41	<20	<20	9	1.29	0.38	0.26	<0.01	0.04	14	3	3	8	<1	<5	<10	0.09	2
100W 500N		<0.2	5	4	42	2	12	3	<0.2	<5	<5	<5	1.81	155	<10	81	23	44	<20	<20	10	1.23	0.38	0.25	<0.01	0.06	13	3	3	8	<1	<5	<10	0.10	2
200W 000N		0.4	16	<2	15	<1	13	4	<0.2	<5	<5	<5	0.74	437	<10	147	6	15	<20	<20	4	0.60	0.15	2.37	0.02	0.02	68	1	<2	2	<1	<5	<10	0.02	<1
200W 050N		0.2	9	3	41	1	22	6	<0.2	<5	<5	<5	1.91	177	<10	76	24	41	<20	<20	13	1.12	0.44	0.37	<0.01	0.08	15	5	<2	11	<1	<5	<10	0.07	3
200W 100N		0.3	18	3	47	2	25	7	<0.2	<5	<5	<5	2.33	223	<10	139	28	53	<20	<20	20	1.16	0.57	0.46	<0.01	0.15	19	6	3	11	<1	<5	<10	0.09	3
200W 150N		<0.2	9	2	29	1	18	4	<0.2	<5	<5	<5	1.39	146	<10	114	18	34	<20	<20	13	0.84	0.38	0.33	<0.01	0.08	16	4	<2	7	<1	<5	<10	0.07	2
200W 200N		0.3	8	3	35	1	9	3	<0.2	<5	<5	<5	1.75	259	<10	127	21	43	<20	<20	14	0.55	0.21	0.31	<0.01	0.08	15	3	2	4	<1	<5	<10	0.08	1
200W 250N PUP		0.2	12	3	48	2	22	6	<0.2	<5	<5	<5	2.04	226	<10	130	26	46	<20	<20	12	0.99	0.50	0.44	<0.01	0.09	16	5	2	12	<1	<5	<10	0.08	2
200W 250N		0.2	11	3	53	1	19	6	<0.2	<5	<5	<5	1.94	257	<10	145	25	46	<20	<20	10	0.96	0.46	0.41	<0.01	0.09	16	5	2	10	<1	<5	<10	0.08	2
200W 300N		<0.2	15	<2	36	1	21	5	<0.2	<5	<5	<5	1.63	267	<10	129	21	31	<20	<20	7	0.85	0.50	0.40	<0.01	0.09	16	4	<2	6	<1	<5	<10	0.08	3



Inchcape Testing Services

Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V96-01730.0 (COMPLETE)

Geochemical Lab Report

PROJECT: NONE GIVEN

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SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
200W 350N		<0.2	14	2	57	2	23	6	<0.2	<5	<5	<5	2.08	316	<10	147	32	46	<20	<20	13	1.08	0.59	0.66	<.01	0.11	26	6	2	7	<1	<5	<10	0.10	4
300W 000N		0.2	20	4	39	2	19	5	<0.2	<5	<5	<5	1.33	149	<10	267	23	33	<20	<20	8	1.10	0.46	1.70	0.01	0.07	52	4	3	6	<1	<5	<10	0.06	2
300W 050N		<0.2	39	4	177	1	58	7	0.8	<5	<5	<5	1.42	697	<10	228	22	28	<20	<20	9	1.24	0.48	2.35	0.02	0.05	102	8	3	8	<1	<5	<10	0.04	1
300W 100N		0.3	18	6	57	1	35	10	<0.2	<5	5	<5	2.81	268	<10	161	38	60	<20	<20	16	2.07	0.61	0.32	<.01	0.12	17	5	3	12	<1	<5	<10	0.09	4
300W 150N		0.3	8	4	196	2	15	9	<0.2	<5	<5	<5	2.86	310	<10	146	33	70	<20	<20	8	1.36	0.53	0.23	<.01	0.10	15	3	4	14	<1	<5	<10	0.13	2
300W 200N		0.3	25	4	246	2	26	6	<0.2	<5	<5	<5	2.51	305	<10	122	35	61	<20	<20	14	1.50	0.54	0.35	<.01	0.08	23	7	4	13	<1	<5	<10	0.11	3
300W 250N		0.4	8	4	52	1	19	7	<0.2	<5	<5	<5	2.32	245	<10	178	30	59	<20	<20	14	1.28	0.46	0.31	<.01	0.08	18	4	4	12	<1	<5	<10	0.09	2
300W 300N		<0.2	20	3	55	<1	31	9	<0.2	<5	<5	<5	2.41	273	<10	122	29	48	<20	<20	12	1.19	0.55	0.41	0.01	0.08	19	4	2	8	<1	<5	<10	0.08	2
300W 350N		0.4	46	6	100	2	55	14	<0.2	<5	<5	<5	3.43	824	<10	369	51	66	<20	<20	16	2.44	1.40	0.96	0.02	0.32	49	10	5	18	<1	<5	<10	0.13	7
300W 400N		0.4	33	6	172	2	43	13	0.3	<5	<5	<5	2.98	749	<10	249	43	54	<20	<20	13	1.85	0.98	1.19	0.01	0.24	55	9	4	13	<1	<5	<10	0.11	5
300W 450N		0.3	29	4	74	<1	40	10	<0.2	<5	<5	<5	2.47	540	<10	219	36	47	<20	<20	15	1.38	0.85	0.87	0.01	0.16	36	9	3	10	<1	<5	<10	0.11	8
400W 000N		0.2	39	<2	10	<1	15	3	<0.2	<5	<5	<5	0.42	508	<10	183	4	10	<20	<20	3	0.38	0.16	4.73	0.01	0.03	100	3	<2	2	<1	<5	<10	0.01	<1
400W 050N		<0.2	26	3	32	1	38	7	<0.2	<5	<5	<5	1.51	399	<10	118	22	30	<20	<20	9	1.11	0.48	1.22	0.01	0.07	42	5	3	8	<1	<5	<10	0.06	2
400W 100N		0.3	35	<2	503	<1	131	17	4.4	<5	<5	<5	0.53	1982	<10	294	5	9	<20	<20	4	1.07	0.16	3.54	0.01	0.02	140	4	<2	<1	<1	<5	<10	<.01	1
400W 150N		0.3	30	4	81	2	34	8	<0.2	<5	<5	<5	2.44	399	<10	226	36	49	<20	<20	12	1.66	0.74	1.11	0.01	0.13	56	6	4	10	<1	<5	<10	0.10	4
400W 200N		0.2	14	<2	43	<1	14	5	<0.2	<5	<5	<5	0.82	854	<10	284	7	13	<20	<20	6	0.65	0.20	1.43	0.03	0.03	66	4	<2	2	<1	<5	<10	0.03	1
400W 250N PUP		<0.2	26	<2	39	<1	23	3	<0.2	<5	<5	<5	0.69	299	<10	199	6	11	<20	<20	7	0.56	0.31	2.55	0.02	0.05	99	7	<2	2	<1	<5	<10	0.02	2
400W 250N		<0.2	21	<2	31	<1	18	3	<0.2	<5	<5	<5	0.60	271	<10	155	5	11	<20	<20	6	0.47	0.24	1.68	0.03	0.04	68	6	<2	2	<1	<5	<10	0.02	2
400W 300N		0.5	62	9	141	3	69	14	0.4	<5	10	<5	3.39	872	<10	318	43	54	<20	<20	23	2.13	1.03	0.82	0.02	0.19	40	19	4	16	<1	<5	<10	0.11	6
400W 350N		0.4	44	8	78	2	58	13	<0.2	<5	8	<5	3.28	669	<10	268	50	56	<20	<20	17	1.98	1.14	1.00	0.01	0.21	46	11	4	15	<1	<5	<10	0.12	10
400W 400N		0.4	42	6	79	2	55	13	<0.2	<5	<5	<5	3.35	696	<10	233	46	66	<20	<20	16	1.95	1.15	1.00	0.01	0.20	48	11	4	14	<1	<5	<10	0.16	14
400W 450N		0.4	33	6	90	1	46	11	<0.2	<5	<5	<5	2.70	596	<10	190	39	56	<20	<20	16	1.53	0.87	0.74	0.01	0.16	37	10	3	10	<1	<5	<10	0.13	10
400W 500N		0.3	16	3	58	<1	29	8	<0.2	<5	<5	<5	2.34	470	<10	150	33	54	<20	<20	18	1.06	0.64	0.66	0.01	0.13	28	8	2	10	<1	<5	<10	0.10	3
500W 000N		0.2	37	3	12	<1	19	4	<0.2	<5	<5	<5	0.88	757	<10	104	11	16	<20	<20	5	0.92	0.40	3.18	0.02	0.02	70	6	2	4	<1	<5	<10	0.03	<1
500W 050N		0.4	32	6	131	4	113	25	<0.2	<5	<5	<5	3.21	359	<10	79	59	90	<20	<20	8	2.35	1.13	0.30	<.01	0.06	15	5	7	23	<1	<5	<10	0.13	2
500W 100N		<0.2	9	4	47	<1	3	<1	<0.2	<5	<5	<5	1.14	83	<10	50	12	38	<20	<20	8	0.55	0.12	0.23	<.01	0.03	15	2	3	2	<1	<5	<10	0.10	1
500W 150N		0.3	8	4	62	<1	13	4	<0.2	<5	<5	<5	1.88	194	<10	89	23	52	<20	<20	9	1.14	0.45	0.24	<.01	0.07	14	3	4	6	<1	<5	<10	0.12	3
500W 200N		0.3	58	4	95	<1	18	4	<0.2	<5	<5	<5	1.87	186	<10	100	25	43	<20	<20	19	1.53	0.40	0.23	<.01	0.05	11	23	3	8	<1	<5	<10	0.09	4
500W 250N		<0.2	14	4	259	2	31	8	0.2	<5	<5	<5	2.72	389	<10	144	32	56	<20	<20	9	1.97	0.63	0.30	<.01	0.11	18	3	5	13	<1	<5	<10	0.11	2
500W 300N		0.3	37	8	392	2	79	13	0.8	<5	6	<5	3.27	565	<10	226	41	54	<20	<20	17	2.09	0.91	0.53	<.01	0.21	34	12	4	14	<1	<5	<10	0.11	5



Inchcape Testing Services

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Geotechnical Lab Report

CLIENT: TANANA EXPLORATION
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SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
500W 350N		0.2	140	6	548	2	170	11	12.8	<5	<5	<5	2.17	591	<10	166	33	37	<20	<20	23	1.79	0.57	0.71	0.02	0.12	58	64	3	11	<1	<5	<10	0.05	2
500W 400N		0.3	42	7	476	2	107	15	7.4	<5	7	<5	3.29	1084	<10	208	43	58	<20	<20	18	2.05	1.02	0.76	0.01	0.21	48	18	4	15	<1	<5	<10	0.12	5
500W 450N		48.6	46	7	83	2	48	10	0.5	<5	6	<5	2.55	456	<10	312	36	40	<20	<20	15	1.82	0.97	1.93	0.01	0.19	76	11	3	12	<1	<5	<10	0.09	7
500W 500N		0.4	44	6	77	2	58	13	<0.2	<5	<5	<5	3.32	699	<10	212	46	61	<20	<20	15	1.95	1.21	1.26	0.01	0.20	53	10	4	13	<1	<5	<10	0.15	15
600W 000N		0.3	22	4	28	1	18	12	<0.2	<5	<5	<5	1.61	432	<10	174	17	29	<20	<20	7	1.15	0.65	1.44	0.04	0.05	44	5	4	7	<1	<5	<10	0.06	1
600W 050N		0.2	25	4	47	3	45	6	0.8	<5	<5	<5	1.44	234	<10	115	22	26	<20	<20	8	0.92	0.38	1.70	<0.01	0.08	64	4	2	8	<1	<5	<10	0.06	2
600W 100N		0.6	32	31	55	6	8	2	0.2	<5	78	<5	7.35	52	<10	98	28	84	<20	<20	5	0.41	0.08	0.10	<0.01	0.04	32	2	<2	<1	<1	<5	12	0.05	3
600W 150N		0.4	16	9	169	4	23	6	1.4	<5	5	<5	3.03	355	<10	140	33	71	<20	<20	10	1.84	0.61	0.30	<0.01	0.10	19	4	5	14	<1	<5	<10	0.13	4
600W 200N		0.6	39	3	362	19	24	12	0.2	<5	<5	<5	4.54	327	<10	58	60	158	<20	<20	7	1.60	0.90	0.18	<0.01	0.05	12	5	4	16	<1	<5	<10	0.17	5
600W 250N PUP		0.8	218	3	118	8	36	3	2.8	<5	5	<5	3.32	76	<10	33	35	24	<20	<20	26	3.07	0.11	0.13	0.02	0.03	9	84	<2	4	<1	<5	<10	0.03	3
600W 250N		0.7	200	3	109	7	35	2	2.7	<5	5	<5	3.01	70	<10	32	32	22	<20	<20	25	2.99	0.10	0.12	0.02	0.03	8	80	<2	4	<1	<5	<10	0.03	3
600W 300N		0.3	47	10	174	3	70	14	1.0	<5	7	<5	3.28	826	<10	293	42	54	<20	<20	21	1.83	0.99	0.64	0.01	0.25	32	19	3	16	<1	<5	<10	0.11	6
600W 350N		0.3	25	7	191	2	44	10	0.7	<5	<5	<5	2.61	519	<10	207	35	47	<20	<20	14	1.42	0.74	0.57	0.01	0.15	33	10	3	12	<1	<5	<10	0.10	3
600W 400N		0.3	29	7	76	2	35	10	<0.2	<5	<5	<5	2.65	600	<10	238	33	45	<20	<20	14	1.29	0.72	0.83	0.01	0.15	38	7	2	11	<1	<5	<10	0.09	4
600W 450N		0.2	33	9	119	4	40	14	1.0	<5	10	<5	3.42	706	<10	215	42	60	<20	<20	15	1.99	0.88	0.36	<0.01	0.19	22	5	4	16	<1	<5	<10	0.11	3
600W 500N		0.4	47	8	114	3	58	13	0.4	<5	8	<5	3.27	656	<10	246	48	53	<20	<20	17	1.71	1.06	0.84	0.01	0.23	39	11	3	14	<1	<5	<10	0.12	8
700W 000N		<0.2	7	6	28	2	11	4	<0.2	<5	<5	<5	1.68	147	<10	69	22	48	<20	<20	9	0.75	0.36	0.26	<0.01	0.10	14	3	3	5	<1	<5	<10	0.12	2
700W 050N		0.2	71	2	165	3	102	5	5.3	<5	<5	<5	0.69	518	<10	123	10	11	<20	<20	6	0.53	0.21	3.78	<0.01	0.04	133	9	<2	3	<1	<5	<10	0.01	<1
700W 100N		0.5	351	3	1268	3	335	16	6.7	<5	<5	<5	2.39	508	<10	195	19	17	<20	<20	19	1.49	0.16	1.57	0.02	0.06	92	40	<2	4	<1	<5	<10	0.04	4
700W 150N		<0.2	15	4	30	1	8	2	0.4	<5	<5	<5	1.49	97	<10	52	14	39	<20	<20	7	0.55	0.14	0.12	0.01	0.04	10	2	2	2	<1	<5	<10	0.06	<1
700W 200N		1.0	34	4	87	4	19	5	0.4	<5	11	<5	8.50	227	<10	84	79	72	<20	<20	9	1.64	0.49	0.18	<0.01	0.08	12	2	4	7	<1	<5	10	0.13	7
700W 250N		0.5	82	6	417	4	61	6	3.0	<5	<5	<5	3.03	207	<10	119	35	40	<20	<20	14	1.47	0.45	0.38	<0.01	0.08	27	17	2	11	<1	<5	<10	0.06	2
700W 300N		1.0	201	12	254	8	38	5	1.0	<5	10	<5	4.68	150	<10	112	65	75	<20	<20	17	3.23	0.39	0.21	<0.01	0.07	14	29	3	10	<1	<5	<10	0.08	7
700W 350N		0.3	34	6	233	3	44	7	0.3	<5	5	<5	2.90	347	<10	148	39	55	<20	<20	13	1.86	0.69	0.32	<0.01	0.08	18	9	3	20	<1	<5	<10	0.12	5
700W 400N		0.2	136	3	72	2	29	3	0.7	<5	<5	<5	1.73	100	<10	219	23	23	<20	<20	21	2.05	0.14	0.24	0.03	0.03	15	69	<2	5	<1	<5	<10	0.03	<1
700W 450N		0.6	71	7	219	2	71	11	3.3	<5	<5	<5	2.33	740	<10	253	29	42	<20	<20	14	1.35	0.61	1.10	0.02	0.11	49	13	3	9	<1	<5	<10	0.07	2
700W 500N		0.2	14	4	34	2	15	4	<0.2	<5	<5	<5	1.42	208	<10	180	17	31	<20	<20	6	0.87	0.33	0.40	0.03	0.10	21	2	3	5	<1	<5	<10	0.07	1
800W 000N		<0.2	12	6	53	2	13	3	<0.2	<5	<5	<5	1.37	160	<10	90	18	32	<20	<20	11	0.79	0.31	0.37	<0.01	0.07	17	3	3	4	<1	<5	<10	0.10	<1
800W 050N		0.3	57	3	48	3	98	8	2.7	<5	<5	<5	1.03	865	<10	204	10	13	<20	<20	21	0.80	0.18	2.04	0.02	0.04	89	32	<2	3	<1	<5	<10	0.02	1
800W 100N		0.5	49	<2	1408	7	344	18	8.6	<5	<5	<5	1.90	1211	<10	272	12	13	<20	<20	6	0.78	0.17	2.72	0.01	0.02	127	10	<2	4	<1	<5	<10	0.01	<1



Inchcape Testing Services

Bondar Clegg

Geochemical Lab Report

CLIENT: TANANA EXPLORATION
REPORT: V96-01730.0 (COMPLETE)

PROJECT: NONE GIVEN
DATE PRINTED: 30-OCT-96 PAGE 4

SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
800W 150N		0.3	20	4	309	3	37	4	2.2	<5	<5	<5	1.80	152	<10	84	20	41	<20	<20	8	0.85	0.28	0.24	0.01	0.07	22	6	2	7	<1	<5	<10	0.07	<1
800W 200N		1.0	43	11	359	9	27	5	0.7	<5	9	<5	7.24	307	<10	67	38	125	<20	<20	8	1.25	0.47	0.22	<0.01	0.08	39	10	2	7	<1	<5	11	0.10	5
800W 250N PUP		0.5	162	10	570	6	61	6	2.7	<5	6	<5	2.61	287	<10	158	34	59	<20	<20	12	1.86	0.44	0.70	0.01	0.04	30	21	3	15	<1	<5	<10	0.08	2
800W 250N		0.4	132	8	502	6	54	8	3.1	<5	<5	<5	2.25	424	<10	136	28	49	<20	<20	11	1.64	0.36	0.69	0.02	0.04	30	20	3	12	<1	<5	<10	0.06	2
800W 300N		0.4	122	10	697	5	76	8	5.6	<5	<5	<5	2.19	361	<10	166	28	55	<20	<20	12	1.54	0.48	0.78	0.01	0.05	38	27	3	13	<1	<5	<10	0.05	1
800W 350N		0.7	119	7	110	3	20	2	1.2	<5	<5	<5	1.37	80	<10	126	17	28	<20	<20	10	0.72	0.15	0.26	<0.01	0.04	18	7	2	3	<1	<5	<10	0.06	<1
800W 400N		0.3	35	2	80	2	28	2	1.4	<5	<5	<5	1.16	65	<10	106	15	15	<20	<20	7	0.69	0.17	0.55	0.01	0.08	27	6	<2	3	<1	<5	<10	0.03	1
800W 450N		0.4	24	8	165	4	34	6	1.1	<5	6	<5	2.58	331	<10	174	40	58	<20	<20	14	1.75	0.64	0.58	0.01	0.15	31	6	5	10	<1	<5	<10	0.12	2
800W 500N		0.3	21	7	57	3	30	7	<0.2	<5	<5	<5	2.64	331	<10	166	46	64	<20	<20	15	1.85	0.83	0.46	<0.01	0.12	26	6	5	14	<1	<5	<10	0.15	5
900W 000N	IS																																		
900W 050N		0.2	7	8	143	3	17	7	0.3	<5	<5	<5	2.60	292	<10	112	32	59	<20	<20	11	1.47	0.50	0.36	<0.01	0.12	17	4	5	11	<1	<5	<10	0.14	2
900W 100N		0.4	9	9	151	3	19	9	3.4	<5	<5	<5	2.49	376	<10	156	32	59	<20	<20	13	1.28	0.46	0.32	<0.01	0.10	19	3	4	11	<1	<5	<10	0.12	2
900W 150N		0.3	6	9	132	2	8	3	1.6	<5	<5	<5	1.48	232	<10	133	17	40	<20	<20	9	0.73	0.20	0.18	<0.01	0.04	14	2	4	4	<1	<5	<10	0.11	<1
900W 200N		1.3	8	48	209	15	14	2	3.2	<5	25	<5	4.31	101	<10	235	36	251	<20	<20	9	0.65	0.15	0.11	0.02	0.14	116	2	3	3	<1	<5	<10	0.13	2
900W 250N		0.4	140	11	479	5	86	14	7.6	<5	<5	<5	1.80	373	<10	133	25	38	<20	<20	10	1.33	0.25	1.18	0.01	0.04	60	36	<2	7	<1	<5	<10	0.03	<1
900W 300N		0.6	12	7	243	9	8	1	3.6	<5	<5	<5	2.11	128	<10	136	13	117	<20	<20	5	0.65	0.21	0.12	0.02	0.04	24	5	3	4	<1	<5	<10	0.12	2
900W 350N		0.6	17	4	118	4	9	1	2.5	<5	<5	<5	1.13	52	<10	43	6	36	<20	<20	2	0.27	0.08	0.07	0.03	0.03	9	2	<2	1	<1	<5	<10	0.05	<1
900W 400N		0.6	20	22	184	11	19	3	2.1	<5	6	<5	3.21	160	<10	62	26	104	<20	<20	8	1.15	0.32	0.16	<0.01	0.04	15	3	5	6	<1	<5	<10	0.13	2
900W 450N		1.1	139	4	923	8	156	10	20.7	<5	<5	<5	1.72	802	<10	177	17	41	<20	<20	18	1.31	0.29	1.45	0.03	0.06	63	59	2	7	<1	<5	<10	0.04	2
900W 500N		0.4	36	8	163	4	40	10	0.9	<5	<5	<5	3.18	556	<10	209	50	71	<20	<20	18	2.06	0.90	0.61	0.01	0.23	34	7	5	15	<1	<5	<10	0.16	5



Bondar Clegg

Inchcape Testing Services

Geochemical

Lab

Report

REPORT: V96-01514.0 (COMPLETE)

REFERENCE:

CLIENT: TANANA EXPLORATION

SUBMITTED BY: S. TRAYNOR

PROJECT: NONE GIVEN

DATE PRINTED: 16-SEP-96

ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
1 Au30 Gold	1	5 PPB	Fire Assay of 30g	30g Fire Assay - AA
2 Ag Silver	1	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
3 Cu Copper	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
4 Pb Lead	1	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
5 Zn Zinc	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
6 Mo Molybdenum	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
7 Ni Nickel	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
8 Co Cobalt	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
9 Cd Cadmium	1	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
10 Bi Bismuth	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
11 As Arsenic	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
12 Sb Antimony	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
13 Fe Iron	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
14 Mn Manganese	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
15 Te Tellurium	1	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
16 Ba Barium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
17 Cr Chromium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
18 V Vanadium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
19 Sn Tin	1	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
20 W Tungsten	1	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
21 La Lanthanum	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
22 Al Aluminum	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
23 Mg Magnesium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
24 Ca Calcium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
25 Na Sodium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
26 K Potassium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
27 Sr Strontium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
28 Y Yttrium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
29 Ga Gallium	1	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
30 Li Lithium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
31 Nb Niobium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
32 Sc Scandium	1	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
33 Ta Tantalum	1	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
34 Ti Titanium	1	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
35 Zr Zirconium	1	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK	1	2 -150	1	CRUSH/SPLIT & PULV.	1

REPORT COPIES TO: 8-4078 4TH AVE

INVOICE TO: 8-4078 4TH AVE



Bondar Clegg

Inchcape Testing Services

Geochemical Lab Report

CLIENT: TANANA EXPLORATION

REPORT: V96-01514.0 (COMPLETE)

PROJECT: NONE GIVEN

DATE PRINTED: 16-SEP-96

PAGE 1

SAMPLE NUMBER	ELEMENT	Au	30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr
	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM
96R033		20	4.5	649	28	133	<1	100	<1	1.3	15	58	<5	>10.00	366	31	246	82	566	31	<20	89	0.57	0.73	0.62	0.04	0.35	58	9	<2	7	2	<5	<10	0.04	8	

26/06/96

Assay Certificate

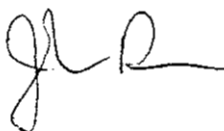
Page 1

Tan-ex
Wade Carrell

WO#10324

Sample #	Au oz/ton	Ag g/mt	Cu %	Zn %	As %
96R-003-01	0.001	<1.0	0.004	0.013	<0.01
96R-008-02	0.001	<1.0	0.009	1.210	<0.01

Certified by



24/09/96

Assay Certificate

Page 1

Tanana Exploration

WO#07098

Sample #	total pulp wt gm	wt of +150 gm	Au in -150 oz/ton	Au in +150 mg	total Au oz/ton
96 R 235	659.6	14.581	<0.010	<0.010	<0.010

Certified by

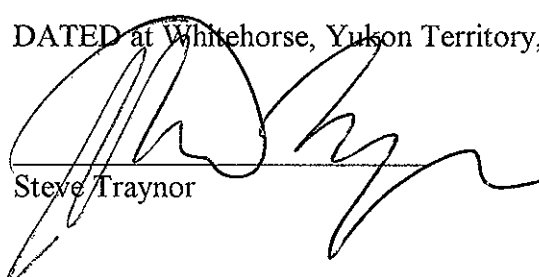
APPENDIX F

GEOLOGIST'S CERTIFICATE

I, Steve Traynor, of 214 Alsek Road, Whitehorse, in the Territory of the Yukon,
DO HEREBY CERTIFY:

1. THAT I am a Geologist with 15053 Yukon Inc. in Whitehorse, Yukon.
2. THAT I am a graduate of Queen's University(1982), Kingston, Ontario with a B.Sc.(Honours) degree in Geology.
3. THAT I have practiced my profession independently and with various mining companies in the Yukon, Manitoba, Ontario and Quebec for 11 years.
4. THAT this report is based in part on property work that I completed ,supervised or contracted during August and September 1996 and May 1997 on the Bozo and Bigtop mining claims.

DATED at Whitehorse, Yukon Territory, this 26th day of August, 1997.


Steve Traynor

APPENDIX G

REPORT ON A COMBINED HELICOPTER-BORNE ELECTROMAGNETIC AND MAGNETIC SURVEY

REPORT

**ON A
COMBINED HELICOPTER-BORNE
ELECTROMAGNETIC AND MAGNETIC SURVEY
SIDNEY CREEK VALLEY
YUKON TERRITORY
NTS 105 C/14**

FOR

**15053 YUKON INC.
SUITE 8, 4078 4th AVENUE
WHITEHORSE, YUKON
CANADA Y1A 4K8**

BY

**AERODAT INC.
6300 NORTHWEST DRIVE
MISSISSAUGA, ONTARIO
CANADA L4V 1J7
PHONE: 905-671-2446**

July 10, 1997

**R. W. Woolham, P. Eng.
Consulting Geophysicist
J9744**

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**REPORT ON A
COMBINED HELICOPTER-BORNE
ELECTROMAGNETIC AND MAGNETIC SURVEY
SIDNEY CREEK VALLEY
YUKON TERRITORY**

1. INTRODUCTION

This is a report on an airborne geophysical survey carried out for 15053 Yukon Inc. by Aerodat Inc. under a contract dated April 8, 1997. Principal geophysical sensors included a five frequency electromagnetic system and a high sensitivity cesium vapour magnetometer. Ancillary equipment included a colour video tracking camera, Global Positioning System (GPS) navigation instrumentation, a radar altimeter, a power line monitor and a base station magnetometer.

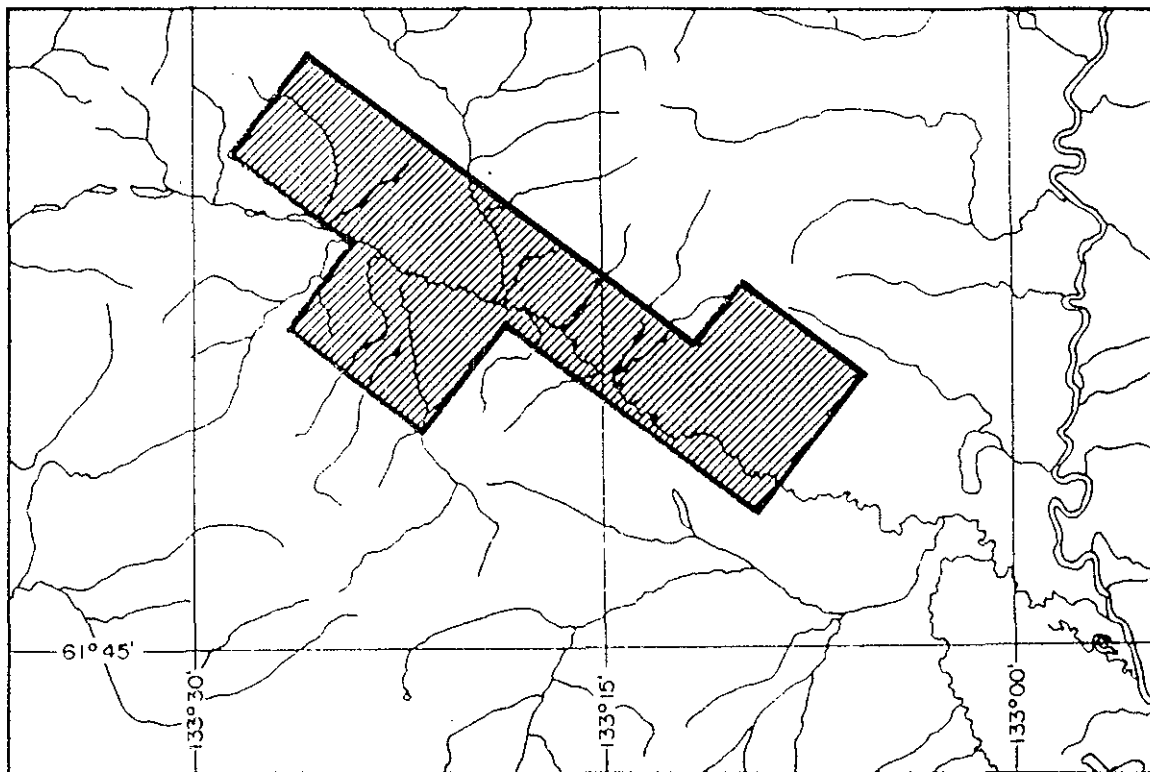
The survey covered an area of about 110 square kilometres located 100 km east-northeast of Whitehorse. Total survey coverage is approximately 542 line kilometres including 53 kilometres of tie lines. The Aerodat Job Number is J9744.

This report describes the survey, the data processing, data presentation and interpretation of the geophysical results. Identified electromagnetic anomalies appear on selected map products as anomaly symbols with interpreted source characteristics. The interpretation map indicates conductive areas of possible interest. It also shows prominent structural features interpreted from the magnetic results. Significant structural, conductive and/or magnetic associations are the basis for the selection of specific geophysical anomalies for further investigation.

2. SURVEY AREA

The area is about 16 km. southwest of Quiet Lake and the east boundary of the survey block is 4 km west of Canol Road #6. Topography is shown on the 1:50,000 scale NTS map sheets 105 C/14. Local relief is rugged. Elevations range from 750 m to over 1,600 m above mean sea level. The survey area is shown in the attached index map that includes local topography and latitude - longitude coordinates. This index map also appears on all map products. The flight line direction is north 35° east. Line spacing is 200 metres.

INDEX MAP



3. AIRCRAFT AND SURVEY EQUIPMENT

3.1 Aircraft

The survey aircraft was an Aerospatiale AS 315B helicopter (C-FJJW), piloted by D. Rokosh, owned and operated by Turbowest Helicopters Ltd. J. Douglas of Aerodat acted as navigator and equipment operator. Aerodat performed the installation of the geophysical and ancillary equipment. The survey aircraft is flown at a mean terrain clearance of 60 metres and speed of 60 knots.

3.2 Electromagnetic System

The **Helicopter ElectroMagnetic** system (HEM) is an Aerodat multi-frequency configuration. Two vertical coaxial coil pairs operate at frequency ranges of 900 Hz and 4,500 Hz and two or three horizontal coplanar coil pairs at frequency ranges of 900, 4,500 Hz and 33 kHz. The actual frequencies used depend on the particular bird configuration. At the present time Aerodat has ten bird systems.

This survey utilized the Harrier bird with frequencies of 913 Hz and 4,427 Hz for the coaxial coil pairs and 858 Hz, 4,830 Hz and 32,550 Hz for the coplanar coil pairs. The transmitter-receiver separation is 6.4 metres. Inphase and quadrature signals are measured simultaneously for the five frequencies with a time constant of 0.1 seconds. The HEM bird is towed 30 metres below the helicopter.

3.3 Magnetometer

A Scintrex H8 cesium, optically pumped magnetometer sensor, measures the earth's magnetic field. The sensitivity of this instrument is 0.001 nanoTesla at a sampling rate of 0.2 second. The sensor is towed in a bird 15 metres below the helicopter 45 metres above the ground.

3.4 Ancillary Systems

Base Station Magnetometer

A Gem Systems, Inc. GSM19 magnetometer, or similar unit, is set up at the base of operations to record diurnal variations of the earth's magnetic field. Synchronization of the clock of the base station with that of the airborne system is checked each day to insure diurnal corrections will be accurate. Recording resolution is 1 nT with an update rate of four seconds. Magnetic field variation data are plotted on a 3" wide gridded paper chart analog recorder. Each division of the grid (0.25") is equivalent to one minute (chart speed) or five nT (vertical sensitivity). The date, time and current total field magnetic value are automatically recorded every 10 minutes. The data is also saved to digital tape.

Radar Altimeter

A King KRA-10 radar altimeter records terrain clearance. The output from the instrument is a linear function of altitude. The radar altimeter is pre-calibrated by the manufacturer and is checked after installation using an internal calibration procedure.

Tracking Camera

A Panasonic colour video camera records the flight path on VHS video tape. The camera operates in continuous mode. The video tape also shows the flight number, 24 hour clock time (to .01 second), and manual fiducial number.

Global Positioning System (GPS)

Global Positioning Systems utilize at present 25 active satellites orbiting the earth. The orbital period for each satellite is approximately 12 hours with an altitude of approximately 12,600 miles (~ 20,000 km). Each satellite contains a very accurate cesium clock which is synchronized to a common clock by the ground control stations (operated by the U.S. Air Force).

The satellites radiate individually coded radio signals which are received by the user's GPS receiver. Along with timing information, each satellite transmits ephemeris (astronomical almanac or table) information which enables the receiver to compute the satellite's precise spatial position. The receiver decodes the timing signals from the satellites in view (4 or more for a three dimensional fix) and, knowing their respective locations from the ephemeris information, computes a latitude, longitude, and altitude for the user. This position fix process is continuous and can be updated once per second.

Differential GPS is employed to eliminate the problem of selective availability where the US Defence Department corrupts the satellite's timing signal. Differential GPS utilizes a GPS reference receiver which must be established within a few hundred miles from the survey aircraft. The GPS System computes differential corrections as a post-processing operation to achieve accuracies in the 2 to 5 metre range.

A Magnavox 9212 (12 channel) GPS receiver is used in the aircraft. Nortech differential GPS processing software is used to compute the differentially corrected GPS positions on a daily flight basis. The navigational unit in the aircraft supplies continuous information to the pilot and allows multiple way point entry.

The Picodas PNAV 2001 survey navigation system is utilized on the aircraft to provide a left/right indicator for the pilot. The single point GPS positions are logged onto the PICODAS or RMS digital acquisition systems along with the magnetometer data. The single point GPS accuracy is much better than 25 metres. The GPS positions are converted to NAD27 format for inclusion in the technical report and in the digital archive data.

Analog Recorder

An RMS dot matrix recorder displays the data during the survey. Record contents are as follows:

LABEL	PARAMETER	CHART SCALE
MAGF	Total Field Magnetics, Fine	2.5 nT/mm
MAGC	Total Field Magnetics, Coarse	25 nT/mm
L9XI	900 Hz, Coaxial, Inphase	2.5 ppm/mm
L9XQ	900 Hz, Coaxial, Quadrature	2.5 ppm/mm
M4XI	4,500 Hz, Coaxial, Inphase	2.5 ppm/mm
M4XQ	4,500 Hz, Coaxial, Quadrature	2.5 ppm/mm
L8PI	900 Hz, Coplanar, Inphase	10 ppm/mm
L8PQ	900 Hz, Coplanar, Quadrature	10 ppm/mm
M4PI	4,500 Hz, Coplanar, Inphase	10 ppm/mm
M4PQ	4,500 Hz, Coplanar, Quadrature	10 ppm/mm
H3PI	33,000 Hz, Coplanar, Inphase	20 ppm/mm
H3PQ	33,000 Hz, Coplanar, Quadrature	20 ppm/mm
BALT	Barometer	50 ft/mm
RALT	Radar Altimeter	10 ft/mm
PWRL	50/60 Hz Power Line Monitor	-

Data is recorded with positive - up, negative - down. The analog zero of the radar altimeter is 5 cm from the top of the analog record. A helicopter terrain clearance of 60 m should therefore be seen some 3 cm from the top of the analog record.

Chart speed is 2 mm/second. The 24-hour clock time is printed every 20 seconds. The total magnetic field value is printed every 30 seconds. The ranges from the radar navigation system are printed every minute.

Vertical lines crossing the record are manual fiducial markers activated by the operator. The start of any survey line is identified by two closely spaced manual fiducials. The end of any survey line is identified by three closely spaced manual fiducials. Manual fiducials are numbered in order. Every tenth manual fiducial is indicated by its number, printed at the bottom of the record.

Calibration sequences are located at the start and end of each flight and at intermediate times where needed.

Digital Recorder

A DGR-33 data system records the digital survey data on magnetic media. Contents and update rates are as follows:

DATA TYPE	RECORDING INTERVAL	RECORDING RESOLUTION
Magnetometer	0.1 second	0.001 nT
HEM, (8 or 10 Channels)	0.1 second	
HEM, coaxial- 900 Hz/4,500 Hz		0.03 ppm
HEM, coplanar- 900 Hz/4,500 Hz		0.06 ppm
HEM, coplanar- 33,000 Hz		0.125 ppm
Position (2 Channels)	0.2 second	0.1 m
Altimeter	0.2 second	0.05 m
Power Line Monitor	0.2 second	
Manual Fiducial		
Clock Time		

4. SURVEY LOGISTICS AND CALIBRATION

4.1 Survey

The survey was completed in the period May 6 to 12, 1997. Principal personnel are listed in Appendix I. A total of seven survey flights was required to complete the project. Aircraft ground speed is maintained at approximately 60 knots (30 metres per second) and mean terrain clearance of 60 metres consistent with the safety of the aircraft and crew.

4.2 Navigation

A global positioning system (GPS) consisting of a Magnavox MX 9212, or similar system, operated in differential mode guides aircraft navigation and flight line control. Field processing of the differential GPS data in the field utilizes a PC using software supplied by the manufacturer. One system is installed in the survey helicopter. This involves mounting the receiver antenna on the casing ("bird") containing the magnetometer sensor. A second system acts as the base station.

The published NTS maps provide the Universal Transverse Mercator (UTM) coordinates of the survey area corners. These coordinates program the navigation system. A test flight confirms if area coverage is correct. Thereafter the navigation system guides the pilot along the survey traverse lines marked on the topographic map. The operator also enters manual fiducials over prominent topographic features. Survey lines showing excessive deviation are re-flown.

The operator calibrates the geophysical systems at the start, middle (if required) and end of every survey flight. During calibration the aircraft is flown away from ground effects to record electromagnetic zero levels.

4.3 Calibration and Data Verification

The operator calibrates the geophysical systems including the barometric altimeter at the start, middle (if required) and end of every survey flight. Immediately after takeoff and before landing the altimeter values are compared with the 30 m separation between the helicopter and EM sensor. The geophysical systems are calibrated and monitored as follows:

Electromagnetics

The system is nulled and phased according to Aerodat's standard procedures. Any discrepancies from previous surveys require an external Q coil calibration. The External Calibration Procedure is done at the start of every survey and every week thereafter until the survey has been completed. There are four parts to the External Calibration Procedure. After system has warmed up, they are:

- 1.) Null each frequency
- 2.) Phase each frequency
- 3.) Set the gain for each frequency
- 4.) Note the response of the internal Cal-coil

The phasing is done with a ferrite bar. The gain calibration is done using a calibration coil which is mounted at a pre-set location off the end of the bird.

The phasing and calibration is checked with the internal Q coil. The internal Q coil is activated prior to and at the end of each flight with the system flying out of ground effect (250 m or higher) to assure correct EM calibration. Analog trace locations are corrected for all channels when the system is out of ground effect. If excessive drift is present on the EM system the preceding procedures are repeated as required.

Magnetics

The airborne magnetic data is monitored in the aircraft by means of a 4th difference of the data which is calculated and presented on the airborne analog recorder. Should the 4th difference exceed the allowable specification, the portion of the flight line thereby affected is reflown.

The fourth difference is defined as:

$$FD_i = X_{i+2} - 4X_{i+1} + 6X_i - 4X_{i-1} + X_{i-2}$$

where X_i is the i^{th} total field sample. The fourth difference in this form has units of nT. High frequency noise should be such that the fourth differences divided by 16 are generally less than ± 0.1 nT. The fourth difference is displayed on analog at scales of 0.20 nT/cm.

Altimeters

The radar altimeter test is carried out before and after the survey and if any of the altitude equipment is changed. The radar altimeter reading is determined when flying at barometric altitudes of 60, 120, 180 and 240 meters above the base airstrip. Also, the barometric altimeter is calibrated pre-flight and post-flight using the radar altimeter to determine the drift and this drift is applied to the data in the subsequent data processing.

Video Flight Path Verification

The record from the video camera is monitored continuously in flight. The video tape is reviewed immediately after each flight to ensure that the quality is acceptable. Selective flight path verification is performed as necessary.

5. DATA PROCESSING AND PRESENTATION

5.1 Base Map

The base map is taken from a photographic enlargement of the NTS topographic maps. A UTM reference grid (grid lines usually every kilometre) and the survey area boundaries are added. After registration of the flight path to the topographic base map, some topographic detail and the survey boundary are added digitally. This digital image forms the base for the colour and shadow maps.

5.2 Flight Path Map

Global Positioning System

The GPS receiver takes in coded data from satellites in view and there after calculates the range to each satellite. The coded data must therefore include the instantaneous position of the satellite relative to some agreed earth-fixed coordinate system.

A further calculation using ranges to several satellites gives the position of the receiver in that coordinate system (eg. UTM, lat/long.). The elevation of the receiver is given with respect to a model ellipsoidal earth.

Normally the receiver must see four satellites for a full positional determination (three space coordinates and time). If the elevation is known in advance, only three satellites are needed. These are termed 3D and 2D solutions.

The position of the receiver is updated every tenth of a second. The accuracy of any one position determination is described by the Circular Error Probability (CEP). Ninety-five percent of all position determinations will fall within a circle of a certain radius. If the horizontal position accuracy is 25 m CEP, for example, 95% of all trials will fall within a circle of 25 m radius centred on the mean. The system may be degraded for civilian use and the autonomous accuracy is then 100 m CEP. This situation is called selective availability (SA). Much of this error (due principally to satellite position/time errors and atmospheric delays) can be removed using two GPS receivers operating simultaneously.

One receiver acting as the base station, is at a known position. The second remote receiver is in the unknown position. Differential corrections determined for the base station may then be applied to the remote station. Differential positions are accurate to five m CEP (for a one second sample). Averaging will reduce this error further.

Flight Path

The flight path is drawn using linear interpolation between x,y positions from the navigation system. These positions are updated every second (or about 1.5 mm at a scale of 1:20,000). Occasional dropouts occur when the optimum number of satellites are not available for the GPS to make accurate positional determinations. Interpolation is

used to cover short flight path gaps. The navigator's flight path and/or the flight path recovered from the video tape may be stitched in to cover larger gaps. Such gaps may be recognized by the distinct straight line character of the flight path.

The manual fiducials are shown as a small circle and labelled by fiducial number. The 24-hour clock time is shown as a small square, plotted every 30 seconds. Small tick marks are plotted every two seconds. Larger tick marks are plotted every 10 seconds. The line and flight numbers are given at the start and end of each survey line.

The aircraft position is expressed in geographic latitude and longitude coordinates, using the international **North American Datum NAD27** based on the Clarke 1866 ellipsoid. Any particular survey area located on the globe has a specific reference ellipsoid or projection zone. A further refinement for a better fit to the earth's surface at the survey location is applied by adding or subtracting slight x, y and/or z datum shifts (a few metres to hundreds of metres) to the origin of the ellipsoid. The geographic coordinates are converted to fit this ellipsoid before calculating the UTM coordinates. The UTM coordinates are expressed as UTM eastings (x) and UTM northings (y).

The flight path map is merged with the base map by matching UTM coordinates from the base maps and the flight path record. The match is confirmed by checking the position of prominent topographic features as recorded by manual fiducial marks or as seen on the flight path video record.

5.3 Electromagnetic Survey Data

The electromagnetic data are recorded digitally at a sample rate of 10 per second with a time constant of 0.1 seconds. A two stage digital filtering process rejects major sferic events and reduces system noise. Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events. This is referred to as a "surgical mute" in signal processing terms. The signal to noise ratio is further enhanced by the application of a low pass digital filter. This filter has zero phase shift that prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 0.25 seconds. This low effective time constant gives minimal profile distortion.

Following the filtering process, a base level correction is made using electromagnetic zero levels determined during high altitude calibration sequences. The correction applied is a linear function of time that ensures the corrected amplitude of the various inphase and quadrature components is zero when no conductive or permeable source is present. The filtered and levelled data are the basis for the determination of apparent resistivity (see following section). The inphase and quadrature responses along the flight line are presented in profile form offset along the flight lines. Differentiation of the various profiles

is achieved using two colours (coaxial and coplanar) and two line weights (inphase and quadrature). For interpretation purposes the coaxial and coplanar data sets for a similar frequency range are presented together on one map (900 Hz and/or 4,500 Hz)

5.4 Total Field Magnetics

The aeromagnetic data is corrected for diurnal variations by adjustment with the recorded base station magnetic values. No corrections for regional variations are applied. The corrected profile data are interpolated on to a regular grid using an Akima spline technique. The grid provided the basis for threading the presented contours. The minimum contour interval is 5 nT with a grid cell size of 50 m. Magnetic high areas are assigned warm colours (orange/red) while magnetic low areas show as cool colours (blue).

5.5 Calculated Vertical Magnetic Gradient

The vertical magnetic gradient is calculated from the gridded total field magnetic data. The calculation is based on a 17 x 17 point convolution in the space domain or FFT processing which involves using a two dimensional Fourier Transform, applying a vertical derivative operator and transforming the filtered data back into the space domain. The results are contoured using a minimum contour interval of 0.05 nT/m. Grid cell sizes are the same as those used in processing the total field data. The high and low amplitude responses are give the same colour representation as the total field contours.

5.6 Colour Relief or Shadow Map of Total Field Magnetics

A useful manipulation of the magnetic data is the production of a colour shadow map. It is an aid in the interpretation and presentation of the magnetic information. The shadow map displays two independent variables simultaneously on the same map. The two variables are the amplitude and the gradient of the quantity measured over the mapping region. At every point or grid cell on the map the hue represents the amplitude of the magnetic value and the lightness/darkness of the hue is varied according to the slope or gradient of the data at the cell location. The gradient is translated into a reflectance parameter with respect to a chosen illumination direction. Subtle magnetic structures having a specific trend are enhanced or attenuated depending on the position and angle to the horizon of the light source relative to the trend. If the light source is orthogonal to the trend there will be maximum shadow relief. Regional discontinuities representing fault structures are easily recognized with shadow enhancement.

5.7 Apparent Resistivity

The apparent resistivity is calculated by assuming a 200 metre thick conductive layer over resistive bedrock. The computer determines the resistivity that would be consistent with the sensor elevation and recorded inphase and quadrature response amplitudes at the selected frequency. The apparent resistivity profile data is re-interpolated onto a regular grid at a 50 metres true scale interval using an Akima spline technique and contoured using logarithmically arranged contour intervals. The minimum contour interval depends on the selected frequency and is in units of log(ohm.m) in logarithmic intervals of 0.1, 0.5, 2.0 etc. The colour presentation assigns warmer colours (reds) to low resistivity or very conductive responses and cooler colours (blues) to high resistivity or poor conductivity responses.

The highest measurable resistivity is approximately equal to the transmitter frequency. The lower limit on apparent resistivity is rarely reached.

6. DELIVERABLES

The report on the results of the survey is presented in two copies. The report includes folded white print copies of all black line maps. Two copies of the colour and shadow maps are in accompanying map tube(s).

The black line maps show topography, UTM grid coordinates and the survey boundary. The survey data are presented in a set of numbered maps in the following format:

I **BLACK LINE MAPS: (Scale 1:20,000)**

Map No.	Description
1.	BASE MAP; screened topographic base map plus survey area boundary, and UTM grid.
2.	COMPILATION / INTERPRETATION MAP; with base map, flight path map and HEM anomaly symbols with interpretation .
3.	TOTAL FIELD MAGNETIC CONTOURS; with base map, HEM anomaly symbols and flight lines.
4.	VERTICAL MAGNETIC GRADIENT CONTOURS; with base map, HEM anomaly symbols and flight lines.
5A.	APPARENT RESISTIVITY CONTOURS; apparent resistivity calculated for the coplanar 900 Hz data, with base map, HEM anomaly symbols and flight lines.

- 5B. APPARENT RESISTIVITY CONTOURS; apparent resistivity calculated for the coplanar 4,500 Hz data, with base map, HEM anomaly symbols and flight lines.

II COLOUR MAPS: (Scale 1:20,000)

1. TOTAL FIELD MAGNETICS; with superimposed contours, flight lines, topographic features and HEM anomaly symbols.
2. VERTICAL MAGNETIC GRADIENT; with superimposed contours, flight lines, topographic features and HEM anomaly symbols.
- 3A. HEM OFFSET PROFILES; coplanar 900 Hz and coaxial 900 Hz data with flight lines, topographic features and HEM anomaly symbols.
- 3B. HEM OFFSET PROFILES; coplanar 4,500 Hz and coaxial 4,500 Hz data with flight lines, topographic features and HEM anomaly symbols.
- 3C. HEM OFFSET PROFILES; coplanar 33,000 Hz data with flight lines, topographic features and HEM anomaly symbols.
- 4A. APPARENT RESISTIVITY; calculated for the coplanar 900 Hz data with superimposed contours, flight lines, topographic features and HEM anomaly symbols.
- 4B. APPARENT RESISTIVITY; calculated for the coplanar 4,500 Hz data with superimposed contours, flight lines, topographic features and HEM anomaly symbols.

III SHADOW DERIVATIVE: (Scale 1:20,000)

1. TOTAL FIELD MAGNETICS SHADOW MAP; with suitable sun angle

The processed digital data, including both the profile and the gridded data, is on CD ROM'S (ISO 9660). Profile data is written as columnar ASCII records and the gridded data as standard Geosoft PC grids. A full description of the format is included with the package. All gridded data can be displayed on IBM compatible microcomputers using the Aerodat AXIS (Aerodat Extended Imaging System) or RTI (Real Time Imaging) software package. The complete data package includes all analog records, base station magnetometer records, flight path video tape and original map cronaflexes.

7. INTERPRETATION

7.1 Area Geology

The property covers the mid-Palaeozoic volcanic-plutonic rocks of the Yukon-Tanana Terrane comprising, in part, mafic and felsic metavolcanics, carbonaceous metasediments, quartzite grits and orthogneiss intruded by felsic and mafic stocks. Cominco Ltd.'s ABM deposit at its Kudzu Kayah project in the Finlayson Lake area is within the same geological environment. The massive sulphide, Kuroko-style, base metal deposit is hosted by Devonian to Mississippian age interlayered metavolcanic and metasedimentary rocks of the Yukon-Tanana Terrane. The deposit hosts a reserve, minable by open-pit methods, of 11.3 million tonnes grading 5.9% zinc, 1.5% lead and 0.9% copper. (The Northern Miner, June 23, 1997) The Wolverine deposit discovered by Westmin Resources is a similar orebody located about 25 km east of the ABM deposit.

7.2 Magnetic Interpretation

The total field magnetic responses reflect major changes in the magnetite content of the underlying rock units. The amplitude of the magnetic responses relative to the regional background help to assist in identifying specific magnetic and nonmagnetic units related to, for example, mafic flows or tuffs, mafic to ultramafic intrusives, felsic intrusives, felsic volcanics and/or sediments etc. Obviously, several geological sources can produce the same magnetic response. These ambiguities can be reduced considerably if basic geological information on the area is available to the geophysical interpreter.

In addition to amplitude variations, magnetic patterns related to the geometry of the particular rock unit also help in determining the probable source of the magnetic response. For instance, long narrow magnetic linears usually reflect mafic tuff/flow horizons or mafic intrusive dyke structures while semi-circular features with complex magnetic amplitudes may be produced by local plug-like intrusive sources such as pegmatites, carbonatites or kimberlites.

The calculated vertical magnetic gradient assists considerably in mapping weaker magnetic linears that are partially masked by nearby higher amplitude magnetic features. The broad zones of higher magnetic amplitude, however, are severely attenuated in the vertical magnetic gradient results. These higher amplitude zones reflect rock units having magnetic susceptibility signatures. For this reason both the total and gradient magnetic data sets must be evaluated.

Theoretically the magnetic gradient zero contour line marks the contacts or limits of large magnetic sources. This applies to wide sources, greater than 50 metres, having simple slab geometries and shallow depth. (See discussion in Appendix II) Thus the gradient map also aids in the more accurate delineation of contacts between differing magnetic rock units.

The cross cutting structures, shown on the interpretation map as faults, are based on interruptions and discontinuities in the magnetic trends. Generally, sharp folding of magnetic units will produce a magnetic pattern indistinguishable from a fault break. Thus, if anomaly displacements are small such fault structures, where they mark an anomaly interruption, may actually represent a deformation node rather than faulting.

7.3 Magnetic Survey Results and Conclusions

To facilitate the following discussion of the magnetic results it is suggested the interpretation map be compared with the total field and vertical gradient magnetic colour contour maps either as overlays or side by side.

The magnetic background is interpreted to be approximately 57,750 nanoTesla (nT). Amplitudes range from about 300 nT below background to 1,750 nT above background. On the interpretation map the relatively higher amplitude magnetic horizons and trends are indicated with thick lines while lower amplitude more subtle linears are shown with thinner lines. These linears and trends probably reflect mafic intrusive and extrusive rocks related to mafic volcanic units, sills or dyke structures. Below background non-magnetic zones are outlined with thick dashed lines and depression symbols. Such zones usually map felsic or sedimentary rocks. Local smaller negative zones can also indicate possible alteration effects, felsic intrusives or diatremes.

The higher amplitude responses are at locations A, B, C1, C2 and D on the interpretation map. Anomaly A, in the extreme south central part of the survey block, has the highest amplitude at over 1,750 nT above background while the other higher amplitude horizons are about 400 to 1,000 nT above background. Anomaly A is a circular feature and has the characteristics typical of an intrusive vertical plug-like body. It flanks a small topographic peak just to the south off the survey area suggesting a possible topographic association with the anomaly and the source of the response may be readily investigated by prospecting. This is also true to some extent for anomalous areas B, C1 and D which flank or cross topographic highs.

Anomaly areas B and D are part of a larger area of contorted sinuous magnetic trends which flank a central zone of long linear horizons, containing linears C1 and C2 as well as long formational conductive horizons, which follow the Sidney Creek valley. The central zone of formational horizons probably maps mafic volcanic flows and tuff. The more contorted magnetics either side of this zone may reflect later stage mafic extrusive or intrusive activity.

7.4 Electromagnetic Anomaly Selection/Interpretation

Vertical to Near Vertical Tabular Conductive Sources

Usually two sets of stacked colour coded profile maps of one coaxial and one coplanar inphase and quadrature responses are used to select conductive anomalies of interest. These HEM intercepts are automatically plotted on the various map products listed previously. Selection of HEM anomaly intercepts is based on conductivity as indicated by the inphase to quadrature ratios of the 900 Hz and/or 4,500 Hz coaxial data, anomaly shape, and anomaly profile characteristics relative to coaxial and corresponding coplanar responses. The peak of the coaxial responses is picked for digitizing as that defines the position of any near vertical to dipping tabular source.

These response shapes are illustrated in Appendix II, in the figure entitled "HEM Response Profile Shapes". Profile A illustrates the coaxial and coplanar signature of a vertical source while profiles B and C show the effect of dip on the coplanar and coaxial profiles. For a gently dipping source the small up-dip tail of the coplanar profiles B and C is not present and there is just a shift of the coplanar peak down dip from the coaxial peak.

Flat Lying Conductive Sources

Flat lying responses are characterized by identically shaped coaxial and coplanar response profiles. Profile I, Appendix II, illustrates a flat source response. Variations in the conductivity and thickness of flat lying sources produces peaks and valleys in the profile data. Ordinarily the anomaly peaks from flat lying sources are not selected for plotting as HEM intercepts. Their locations have little meaning if the source is flat lying. Nevertheless, if the sources are gently dipping the peaks sometimes have line to line continuity and may show the "grain" of the underlying geology. A much better presentation of conductive flat lying sources is achieved by the resistivity calculations and map plots. Comparison of the resistivity data with geological information can then ascertain if the source of the responses are of possible geological interest.

It is difficult to differentiate between responses associated with the edge effects of flat lying conductors and actual poor conductivity bedrock conductors on the edge of or overlain by flat lying conductors. Extensive flat lying to gently dipping conductors often have an "edge effect" anomaly which is a coaxial peak on the flank of the coplanar responses similar to one side of profile E, G or H, Appendix II. Often only one edge can be seen if the source is dipping. Such edge effect anomalies are often seen marking the perimeter of lakes or swamps containing conductive material.

Poor conductivity bedrock conductors having low dips will also exhibit responses that may be interpreted as surficial overburden conductors. In such cases, where the source of the conductive response appears to be ambiguous, the coaxial peak of the anomaly is still selected for plotting. In some situations the conductive response has line to line continuity and some magnetic association thus providing possible evidence that the response is related to an actual bedrock source.

Flat lying limited width ribbon type conductive responses with some strike length are sometimes also present. These responses are characterized by a "M" shaped coaxial anomaly with a single peaked coplanar anomaly centred in the trough between the two coaxial peaks. This is illustrated in Appendix II in the same figure as previously mentioned (see profile shape E or G). The actual geometry of the source of these ribbon type responses is difficult to determine. They could represent a synclinal structure such as would be produced by combining dipping profiles C and B.

Negative Inphase Responses

In some areas the inphase profile component exhibits a negative anomaly response usually over obvious magnetic areas. This is produced by local concentrations of magnetite and usually occurs when the sensor is flying close to the ground surface. If only magnetite is present there will be no quadrature response associated with the negative inphase response. If conductive material is present, however, such as graphite or sulphides, a positive quadrature response will be evident with the negative inphase response. In this case the anomaly is selected for plotting and evaluation and designated as a magnetic/conductive response.

Depth and Conductivity Calculation

The calculation of the depth to the conductive source and its conductivity is based on the 4,500 Hz coaxial data assuming a thin vertical sheet model. The amplitude of the inphase and quadrature responses are used for the calculations which are automatically determined by computer. These data are listed in Appendix III and the depth and conductivity values are shown with each plotted anomaly. Further detailed discussion and illustration of the determination of these values is contained in Appendix II. Note the depth calculation for those conductors having a gently dipping to flat lying profile signature will not be accurate although the conductivity value will have some relative meaning.

The selected HEM intercepts are automatically categorized according to their conductivity and amplitude. The calculation of the conductivity of low amplitude anomalies can be very inaccurate. Therefore, anomalies having amplitudes below a certain level and/or low conductivity value are given a zero rating with the category increasing for increasing conductivity values that are statistically reliable.

7.5 Electromagnetic Survey Results and Conclusions

There are a great many conductive intercepts throughout the survey block. Suggested line to line continuity is indicated for intercepts with continuity across more than two lines using short dashed line segments. Many of these conductive trends are quite long and form several parallel horizons suggesting a conductive sedimentary origin. An example is the cluster of conductive horizons in the north part of the property northeast of the long high amplitude magnetic horizon. Of possible interest are the conductive horizons which correlate with magnetic linears or have a close spatial association with them. The linear conductors paralleling the magnetic linear horizon form a belt about 2,000 metres wide. Note there are very few conductive horizons on the southwest side of the magnetic linear zone suggesting possible volcanic rocks dominate this area. In fact the below background non-magnetic zone further to the southwest may map felsic rocks.

To the north and south of the main conductive belt the few conductive zones associated with magnetic areas B and D have much poorer conductivity and are more contorted and discontinuous. This again suggests a different geological environment exists to the north and south of the main central formational magnetic/conductive zone.

An orebody of the type associated with those present in the Finlayson Lake area would be expected to have a high conductivity signature. Graphitic sediments can have the same type of signature. Thus an orebody could be hidden anywhere within the numerous conductive horizons within the central magnetic/conductive zone. A specific horizon, however, may have more geological potential for hosting an orebody. Therefore a number of areas along the conductive horizons are circled and designated for investigation. Selection is based on sampling as many horizons as possible with the best conductivity. Examples are numbers 1 to 7 and 13. Admittedly, an orebody could be present having poor conductivity and therefore some of the lower conductivity zones are also designated for investigation as well as a few of the poorer conductors outside the main central zone.

8. RECOMMENDATIONS

Selection of geophysical anomalies for further investigation is based on the structural and magnetic associations of the designated conductors as well as their relative conductivity as discussed in the body of this report. Prior to any ground follow-up, the following priority categories should be reviewed with respect to the specific geological target model being sought and known geology and mineralization in the area.

The conductors are prioritized as first, second or third priority investigation targets based on conductivity and magnetic correlations as follows:

First Priority 1, 2, 3, 4, 6, 7, 13

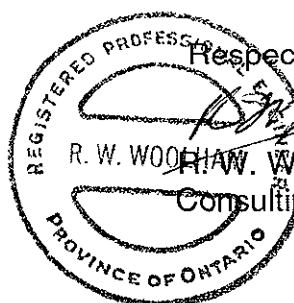
Second Priority 5, 8, 14, 15, 16, 17

Third Priority 9, 10, 11, 12, 18

Conductors 4, 5, and 11 have direct magnetic correlation while 1, 2, 6, 8 and 10 have spatial associations with magnetic responses. Anomalies 1 to 12 are in topographically high areas or flanks of topographic highs and may be explained by prospecting. Ground geophysical surveys will probably be necessary to locate the other conductors for possible drill testing.

The magnetic areas A to D are suggested for investigation as a low priority to further understand the geological setting of the area.

The magnetic and conductive anomalies recommended for investigation represent only a first phase exploration program. Additional work will be contingent on the results of this program. More detailed geological information used in conjunction with geophysics may help to direct further exploration efforts.



Respectfully submitted,

R. W. Woolham, P.Eng.
Consulting Geophysicist

for

AERODAT INC.

J9744

July 10, 1997

APPENDIX I
PERSONNEL

FIELD

Flown	May 6 to 12, 1997
Pilot(s)	D. Rokosh
Operator(s)	J. Douglas

OFFICE

Processing	Doug Oneschuk George McDonald
Report	R. W. Woolham

APPENDIX II

GENERAL INTERPRETIVE CONSIDERATIONS

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GENERAL INTERPRETIVE CONSIDERATIONS

Electromagnetic

The Aerodat electromagnetic system utilized two different transmitter-receiver coil geometries. The traditional coaxial coil configuration is operated at widely separated frequencies. The horizontal coplanar coil configuration is similarly operated at different frequencies where at least one pair is approximately aligned with one of the coaxial frequencies.

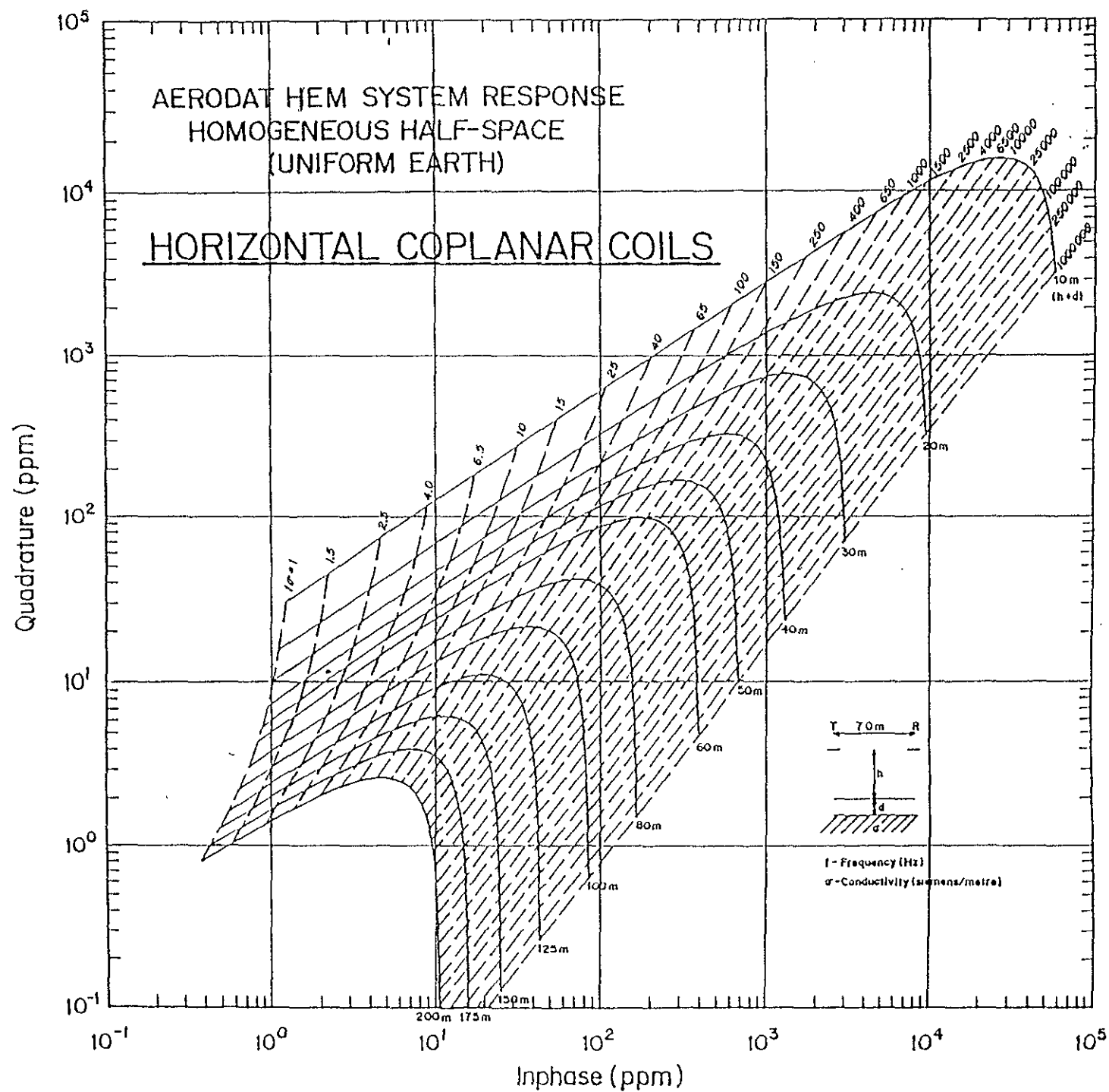
The electromagnetic response measured by the helicopter system is a function of the "electrical" and "geometrical" properties of the conductor. The "electrical" property of a conductor is determined largely by its electrical conductivity, magnetic susceptibility and its size and shape; the "geometrical" property of the response is largely a function of the conductor's shape and orientation with respect to the measuring transmitter and receiver.

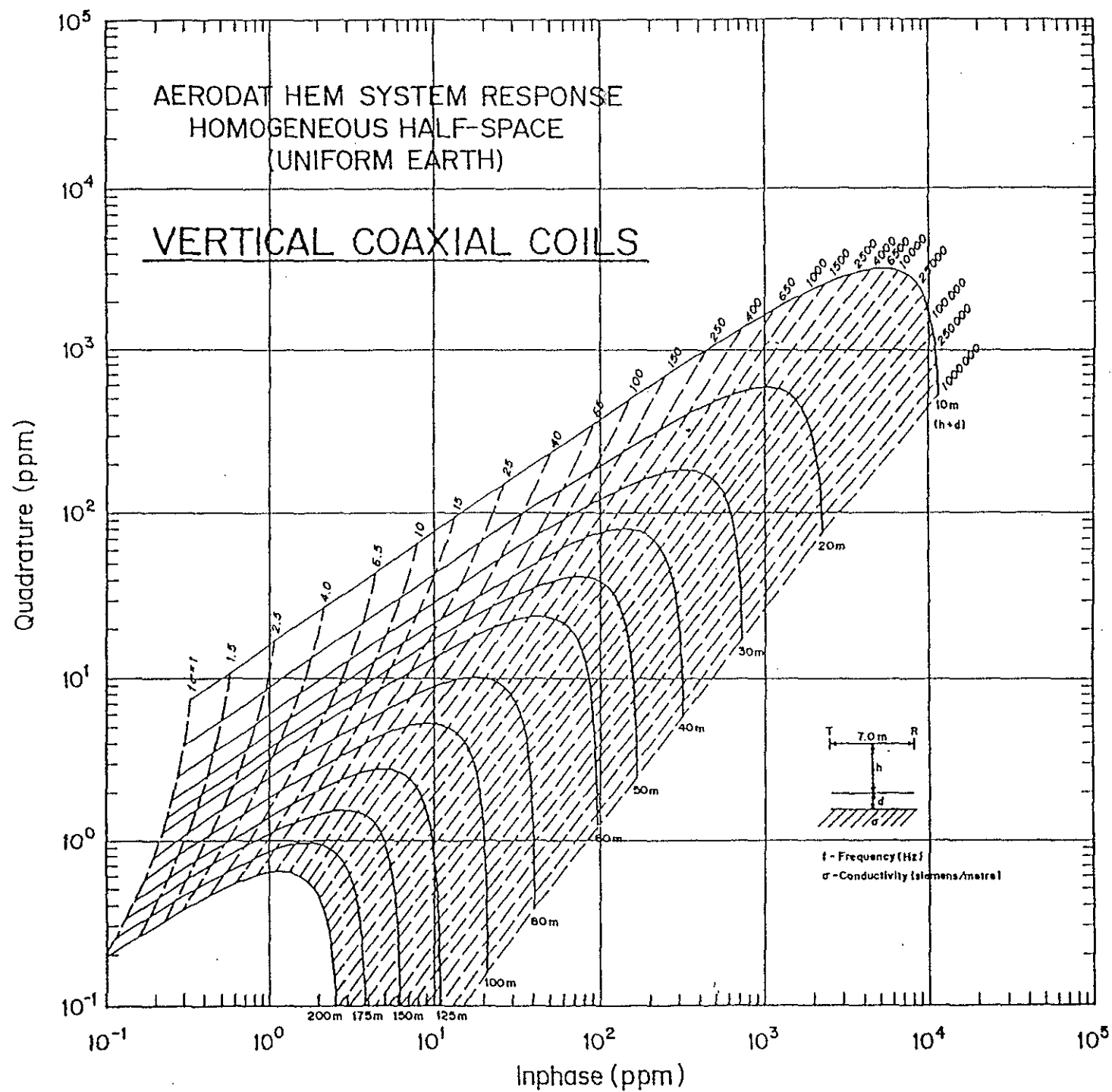
Electrical Considerations

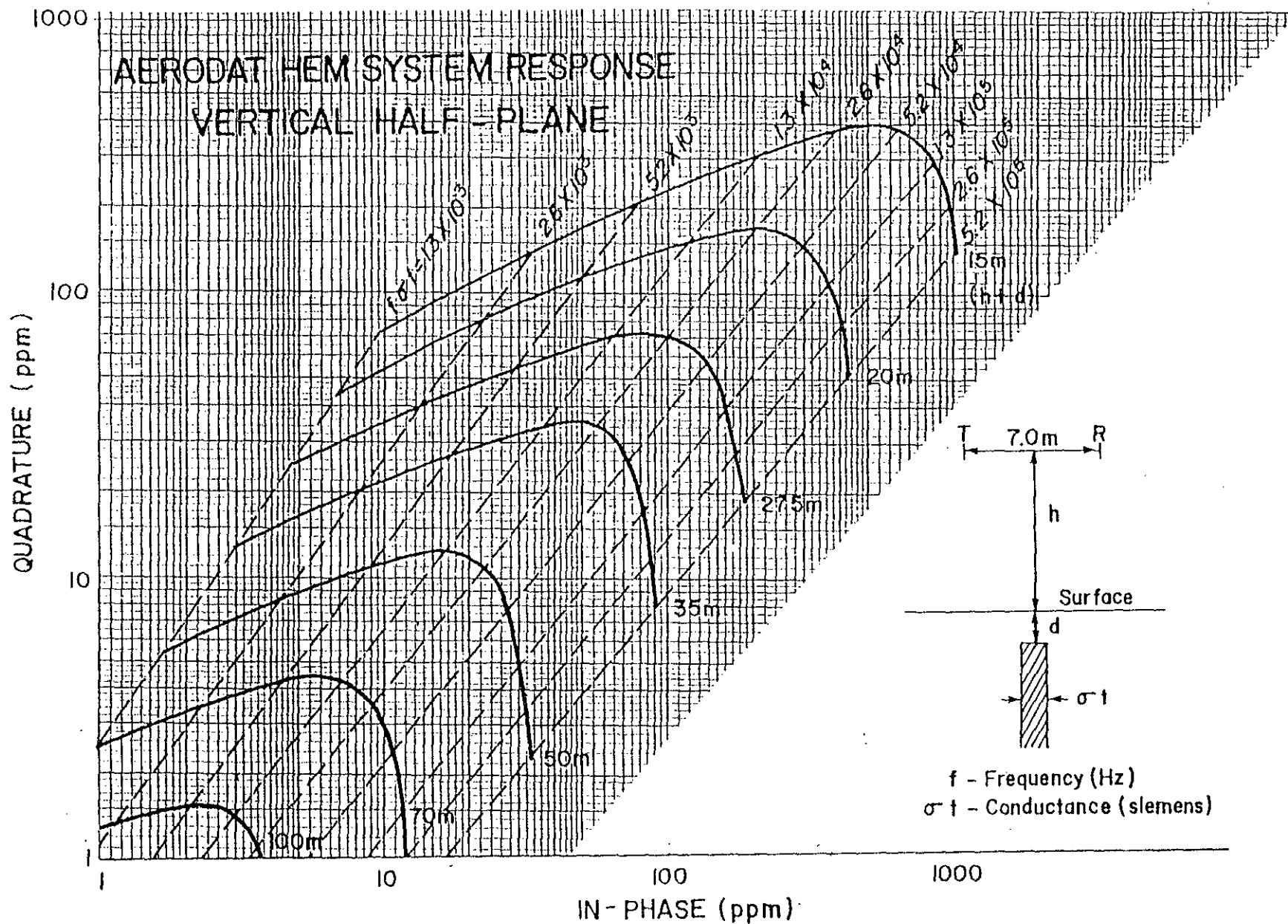
For a given conductive body the measure of its conductivity or conductance is closely related to the measured phase shift between the received and transmitted electromagnetic field. A small phase shift indicates a relatively high conductance, a large phase shift lower conductance. A small phase shift results in a large inphase to quadrature ratio and a large phase shift a low ratio. This relationship is shown quantitatively for a non-magnetic vertical half-plane and half space models on the accompanying phasor diagrams. Other physical models will show the same trend but different quantitative relationships.

The phasor diagram for the vertical half-plane model, as presented, is for the coaxial coil configuration with the amplitudes in parts per million (ppm) of the primary field as measured at the response peak over the conductor. To assist the interpretation of the survey results the computer is used to identify the apparent conductance and depth at selected anomalies. The results of this calculation are presented in anomaly listings included in the survey report and the conductance and inphase amplitude are presented in symbolized form on the map presentation.

The conductance estimate is most reliable when anomaly amplitudes are large and background resistivities are high. Where the anomaly is of low amplitude and background resistivities are low, the conductance estimates are much less reliable. In such situations, the conductance estimate is often quite low regardless of the true nature of the conductor. This is due to the elevated background response levels in the quadrature channel. In an extreme case, the conductance estimate should be discounted and should not prejudice target selection.







The conductance and depth values as presented are correct only as far as the model approximates the real geological situation. The actual geological source may be of limited length, have significant dip, may be strongly magnetic. Its conductivity and thickness may vary with depth and/or strike and adjacent bodies and overburden may have modified the response. In general the conductance estimate is less affected by these limitations than is the depth estimate, but both should be considered as relative rather than absolute guides to the anomaly's properties.

Conductance in mhos is the reciprocal of resistance in ohms and in the case of narrow slab-like bodies is the product of electrical conductivity and thickness.

The higher ranges of conductance, greater than 2-4 mhos, indicate that a significant fraction of the electrical conduction is electronic rather than electrolytic in nature. Materials that conduct electronically are limited to certain metallic sulphides and to graphite. High conductance anomalies, roughly 10 mhos or greater, are generally limited to massive sulphides or graphites.

Sulphide minerals, with the exception of such ore minerals as sphalerite, cinnabar and stibnite, are good conductors. Sulphides may occur in a disseminated manner that inhibits electrical conduction through the rock mass. In this case the apparent conductance can seriously underrate the quality of the conductor in geological terms. In a similar sense the relatively non-conducting sulphide minerals noted above may be present in significant concentrations in association with minor conductive sulphides, and the electromagnetic response will only relate to the minor associated mineralization. Indicated conductance is also of little direct significance for the identification of gold mineralization. Although gold is highly conductive, it would not be expected to exist in sufficient quantity to create a recognizable anomaly. Minor accessory sulphide mineralization may however provide a useful indirect indication.

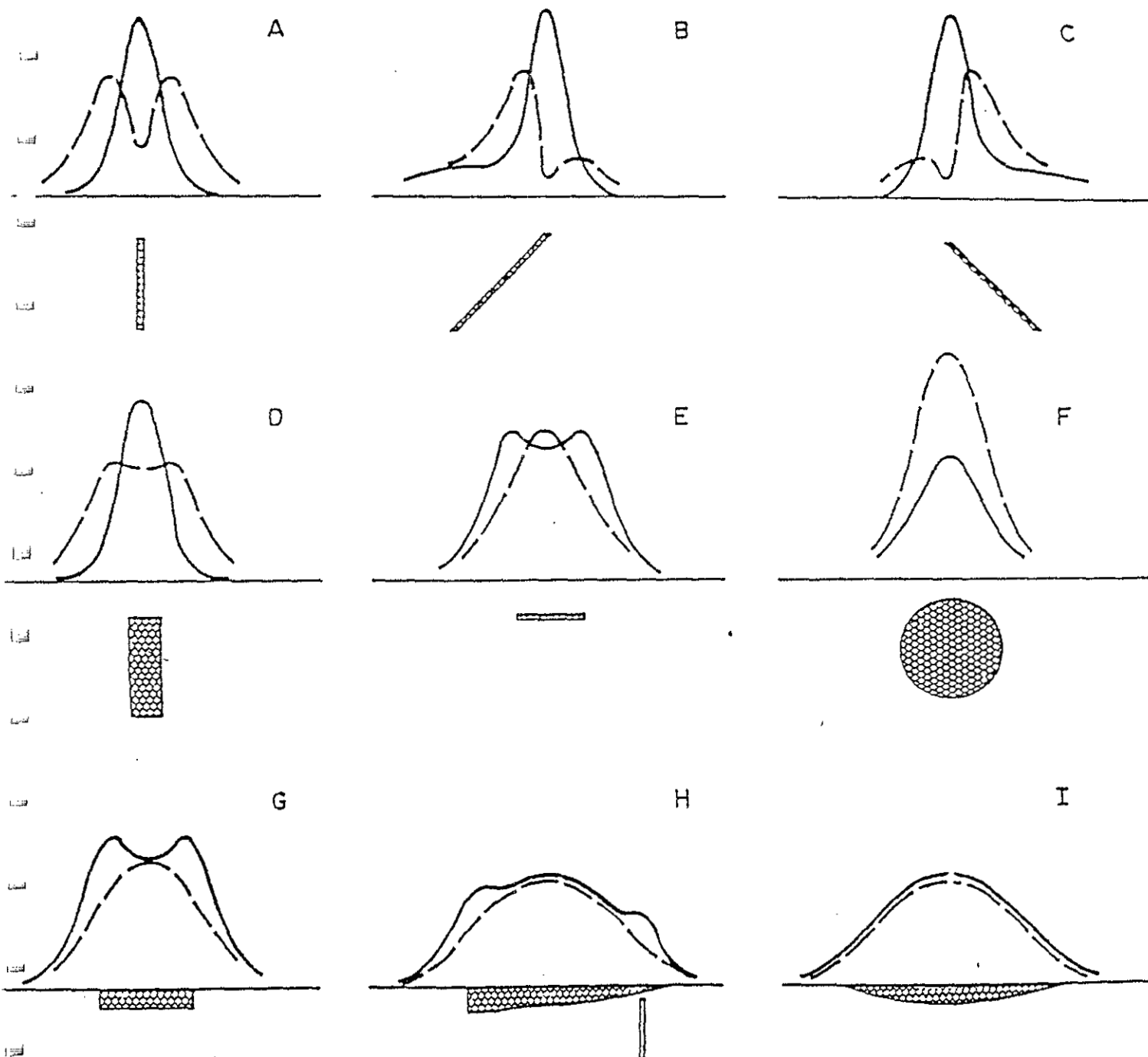
In summary, the estimated conductance of a conductor can provide a relatively positive identification of significant sulphide or graphite mineralization. A moderate to low conductance value does not rule out the possibility of significant economic mineralization.

Geometrical Considerations

Geometrical information about the geologic conductor can often be interpreted from the profile shape of the anomaly. The change in shape is primarily related to the change in inductive coupling among the transmitter, the target, and the receiver. The accompanying figure shows a selection of HEM response profile shapes from nine idealized targets. Response profiles are labelled A through I. These labels are used in the discussion which follows.

HEM RESPONSE PROFILE SHAPE AS AN INDICATOR OF CONDUCTOR GEOMETRY

————— COAXIAL vertical scale 1 ppm/unit
 - - - - - COPLANAR vertical scale 4 ppm/unit



In the case of a thin, steeply dipping, sheet-like conductor, the coaxial coil pair will yield a near symmetric peak over the conductor. On the other hand, the coplanar coil pair will pass through a null couple relationship and yield a minimum over the conductor, flanked by positive side lobes (Profile A). As the dip of the conductor decrease from vertical, the coaxial anomaly shape changes only slightly, but in the case of the coplanar coil pair the side lobe on the down dip side strengthens relative to that on the up dip side (Profiles B and C).

As the thickness of the conductor increases, induced current flow across the thickness of the conductor becomes relatively significant and complete null coupling with the coplanar coils is no longer possible (Profile D). As a result, the apparent minimum of the coplanar response over the conductor diminishes with increasing thickness, and in the limiting case of a fully 3 dimensional body or a horizontal layer or half-space, the minimum disappears completely.

A horizontal conducting layer such as a horizontal thin sheet or overburden will produce a response in the coaxial and coplanar coils that is a function of altitude (and conductivity if not uniform). The profile shape will be similar in both coil configurations with an amplitude ratio (coplanar:coaxial) of about 4:1* (Profiles E and G).

In the case of a spherical conductor, the induced currents are confined to the volume of the sphere, but not relatively restricted to any arbitrary plane as in the case of a sheet-like form. The response of the coplanar coil pair directly over the sphere may be up to 8* times greater than that of the coaxial pair (Profile F).

In summary, a steeply dipping, sheet-like conductor will display a decrease in the coplanar response coincident with the peak of the coaxial response. The relative strength of this coplanar null is related inversely to the thickness of the conductor. A pronounced null indicates a relatively thin conductor. The dip of such a conductor can be inferred from the relative amplitudes of the side-lobes.

Massive conductors that could be approximated by a conducting sphere will display a simple single peak profile form on both coaxial and coplanar coils, with a ratio between the coplanar to coaxial response amplitudes as high as 8*.

Overburden anomalies often produce broad poorly defined anomaly profiles (Profile I). In most cases, the response of the coplanar coils closely follows that of the coaxial coils with a relative amplitude ration of 4*.

Occasionally, if the edge of an overburden zone is sharply defined with some significant depth extent, an edge effect will occur in the coaxial coils. In the case of a horizontal conductive ring or ribbon, the coaxial response will consist of two peaks, one over each edge; whereas the coplanar coil will yield a single peak (Profile H).

* It should be noted at this point that Aerodat's definition of the measured ppm unit is related to the primary field sensed in the receiving coil without normalization to the maximum coupled (coaxial configuration). If such normalization were applied to the Aerodat units, the amplitude of the coplanar coil pair would be halved.

Magnetics

The Total Field Magnetic Map shows contours of the total magnetic field, uncorrected for regional variation. Whether an EM anomaly with a magnetic correlation is more likely to be caused by a sulphide deposit than one without depends on the type of mineralization. An apparent coincidence between an EM and a magnetic anomaly may be caused by a conductor which is also magnetic, or by a conductor which lies in close proximity to a magnetic body. The majority of conductors which are also magnetic are sulphides containing pyrrhotite and/or magnetite. Conductive and magnetic bodies in close association can be, and often are, graphite and magnetite. It is often very difficult to distinguish between these cases. If the conductor is also magnetic, it will usually produce an EM anomaly whose general pattern resembles that of the magnetics. Depending on the magnetic permeability of the conducting body, the amplitude of the inphase EM anomaly will be weakened, and if the conductivity is also weak, the inphase EM anomaly may even be reversed in sign.

The interpretation of contoured aeromagnetic data is a subject on its own involving an array of methods and attitudes. The interpretation of source characteristics for example from total field results is often based on some numerical modelling scheme. The vertical gradient data is more legible in some aspects however and useful inferences about source characteristics can often be read off the contoured VG map.

The zero contour lines in contoured VG data are often sited as a good approximation to the outline of the top of the magnetic source. This only applies to wide (relative to depth of burial) near vertical sources at high magnetic latitudes. It will give an incorrect interpretation in most other cases.

Theoretical profiles of total field and vertical gradient anomalies from tabular sources at a variety of magnetic inclinations are shown in the attached figure. Sources are 10, 50 and 200 m wide. The source-sensor separation is 50 m. The thin line is the total field profile. The thick line is the vertical gradient profile.

The following comments about source geometry apply to contoured vertical gradient data for magnetic inclinations of 70 to 80°.

Outline

Where the VG anomaly has a single sharp peak, the source may be a thin near-vertical tabular source. It may be represented as a magnetic axis or as a tabular source of measurable width - the choice is one of geological preference.

Where the VG anomaly has a broad, flat or inclined top, the source may be a thick tabular source. It may be represented as a thick body where the width is taken from the zero contour lines if the body dips to magnetic north. If the source appears to be dipping to the south (i.e. the VG anomaly is asymmetric), the zero contours are less reliable indicators of outline. The southern most zero contour line should be ignored and the outline taken from the northern zero contour line and the extent of the anomaly peak width.

Dip

A symmetrical vertical gradient response is produced by a body dipping to magnetic north. An asymmetrical response is produced by a body which is vertical or dipping to the south. For southern dips, the southern most zero contour line may be several hundred meters south of the source.

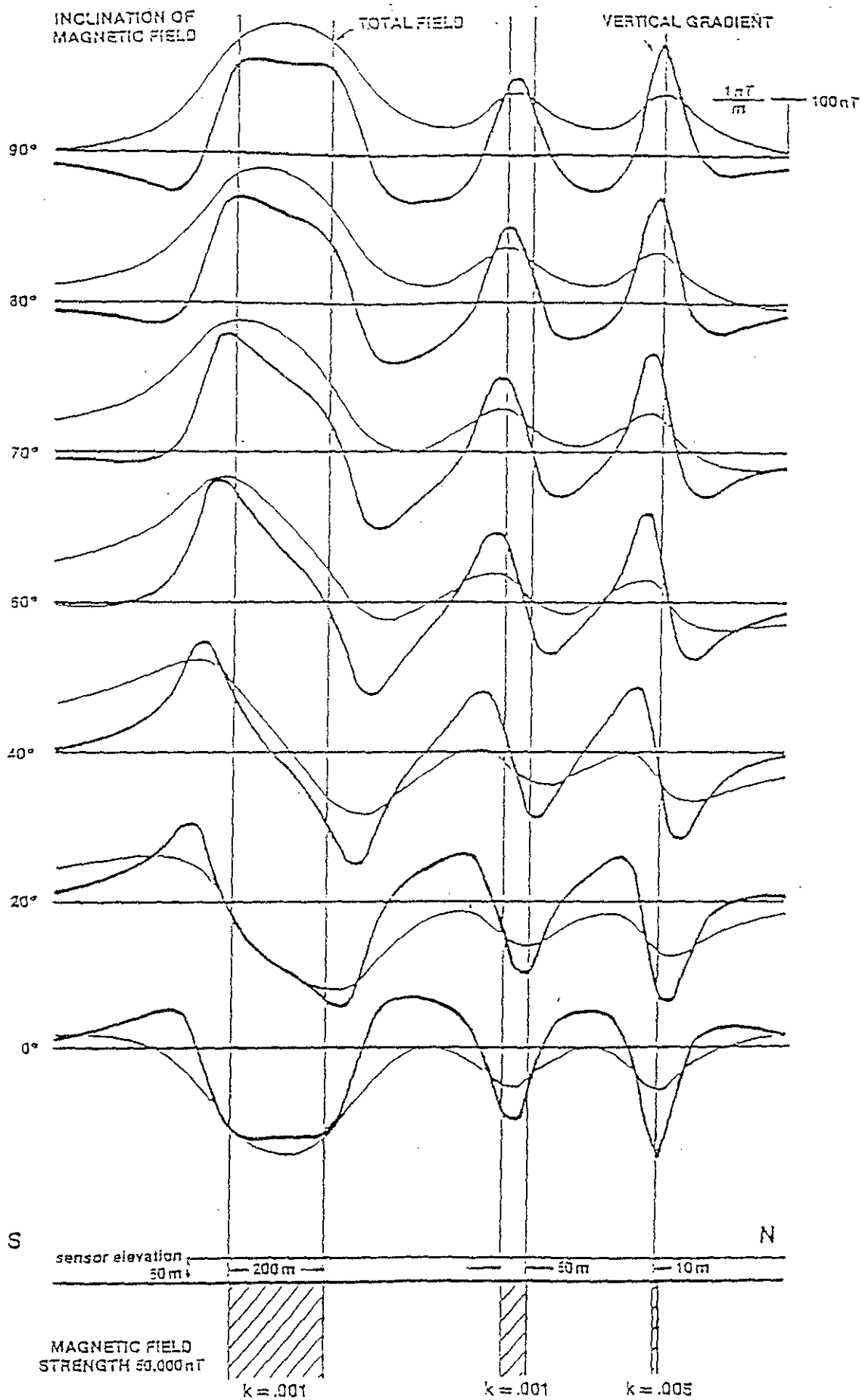
Depth of Burial

The source-sensor separation is about equal to half of the distance between the zero contour lines for thin near-vertical sources. The estimated depth of burial for such sources is this separation minus 50 m. If a variety of VG anomaly widths are seen in an area, use the narrowest width seen to estimate local depths.

VLF Electromagnetics

The VLF-EM method employs the radiation from powerful military radio transmitters as the primary signals. The magnetic field associated with the primary field is locally horizontal and normal to a line pointing at the transmitter.

The Herz Totem uses three coils in the X, Y, Z configuration to measure the total field and vertical quadrature component from two VLF stations. These stations are designated Line and Ortho. The line station is ideally in a direction from the survey area at right angles to the flight line direction. Conductors normal to the flight line direction point at the line station and are therefore optimally coupled to VLF magnetic fields and in the best situation to gather secondary VLF currents. The ortho station is ideally 90 degrees in azimuth from the line station.



The relatively high frequency of VLF (15-25) kHz provides high response factors for bodies of low conductance. Relatively "disconnected" sulphide ores have been found to produce measurable VLF signals. For the same reason, poor conductors such as sheared contacts, breccia zones, narrow faults, alteration zones and porous flow tops normally produce VLF anomalies. The method can therefore be used effectively for geological mapping. The only relative disadvantage of the method lies in its sensitivity to conductive overburden. In conductive ground to depth of exploration is severely limited.

The effect of strike direction is important in the sense of the relation of the conductor axis relative to the energizing electromagnetic field. A conductor aligned along a radius drawn from a transmitting station will be in a maximum coupled orientation and thereby produce a stronger response than a similar conductor at a different strike angle. Theoretically, it would be possible for a conductor, oriented tangentially to the transmitter to produce no signal. The most obvious effect of the strike angle consideration is that conductors favourably oriented with respect to the transmitter location and also near perpendicular to the flight direction are most clearly rendered and usually dominate the map presentation.

The total field anomaly is an indicator of the existence and position of a conductor. The response will be a maximum over the conductor, without any special filtering, and strongly favour the upper edge of the conductor even in the case of a relatively shallow dip.

Conversely a negative total field anomaly is often seen over local resistivity highs. This is because the VLF field produces electrical currents which flow towards (or away from) the transmitter. These currents are gathered into a conductor and are taken from resistive bodies. The VLF system sees the currents gathered into the conductor as a total field high. It sees the relative absence of secondary currents in the resistor as a total field low.

As noted, VLF anomaly trends show a strong bias towards the VLF transmitter. Structure which is normal to this direction may have no associated VLF anomaly but may be seen as a break or interruption in VLF anomalies. If these structures are of particular interest, maps of the ortho station data may be worthwhile.

Conductive overburden will obscure VLF responses from bedrock sources and may produce low amplitude, broad anomalies which reflect variations in the resistivity of thickness of the overburden.

Extreme topographic relief will produce VLF anomalies which may bear no relationship to variations in electrical conductivity. Deep gullies which are too narrow to have been surveyed at a uniform sensor height often show up as VLF total field lows. Sharp ridges show up as total field highs.

The vertical quadrature component over steeply dipping sheet-like conductor will be a cross-over type response with the cross-over closely associated with the upper edge of the conductor.

The response is a cross-over type due to the fact that it is the vertical rather than total field quadrature component that is measured. The response shape is due largely to geometrical rather than conductivity considerations and the distance between the maximum and minimum on either side of the cross-over is related to target depth. For a given target geometry, the larger this distance the greater the depth.

The vertical quadrature component is rarely presented. Experience has shown the total field to be more sensitive to bedrock conductors and less affected by variations in conductive overburden.

Apparent Resistivity/Conductivity Maps

Overburden and different types of bedrock may be modelled as a large area horizontal conductor of fixed thickness. A phasor diagram may be constructed, in the same fashion as for the vertical sheet, to convert the measured HEM in-phase and quadrature response to a depth and conductivity value for a horizontal layer. Traditionally if the thickness is large, an infinite half-space, the associated conductivity value is referred to as "apparent conductivity". We have generalized the use of the word "apparent" to include any model where the thickness of the layer is a fixed as opposed to a variable parameter.

The units of apparent resistivity are ohm-m and those of apparent conductivity are the inverse mhos/m or siemen/m. If the chosen model layer thickness is close to the true thickness of the conductor then the apparent conductivity will closely conform to the true value; however, if the thickness is inappropriate the apparent value may be considerably different from the true value.

The benefit of the apparent conductivity mapping is that it provides a simple robust method of converting the HEM in-phase and quadrature response to apparent change in ground conductivity.

A phasor diagram for several apparent resistivity models is presented. The general forms for the various thicknesses is very similar and also closely resembles the diagram for the vertical sheet. The diagrams also show the curves for apparent depth. As with the conductivity value the depth value is meaningful if the model thickness closely resembles the true conductive layer thickness. If the HEM response from a thin conducting layer is applied to a thick layer model the apparent conductivity and depth will be less than the true conductivity and depth.

APPENDIX III

ANOMALY LISTINGS

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
2	10130	A FEO/	0	-18.6	11.7	0.0	0	34	587965.6 6746672.0
4	10760	B FEO/	0	-35.8	24.1	0.0	0	19	602374.8 6745031.5
5	10771	G FEO/	0	-2.1	13.8	0.0	0	29	602459.3 6744870.5
6	10001	A/	0	8.8	15.7	0.4	0	44	586757.2 6749159.0
6	10001	B/	1	20.0	18.0	1.5	0	48	588266.8 6751219.5
6	10001	C/	0	12.7	27.8	0.4	0	33	588363.6 6751360.0
6	10001	D/	0	25.7	38.2	0.8	3	28	588481.1 6751498.0
6	10001	E/	1	47.1	73.2	1.0	0	26	588525.5 6751537.0
6	10001	F/	0	3.9	14.0	0.1	6	28	588571.8 6751582.0
6	10001	G/	1	24.4	22.0	1.6	4	36	588749.1 6751852.0
6	10001	H/	1	17.5	20.6	1.0	0	48	588818.1 6751933.0
6	10003	A/	0	12.0	28.9	0.3	0	37	589477.2 6752024.5
6	10003	B/	0	4.9	15.7	0.1	0	41	589309.9 6751911.0
6	10003	C/	0	14.5	24.4	0.6	0	38	589091.6 6751714.5
6	10003	D/	0	14.1	32.4	0.3	0	29	588869.6 6751383.5
6	10003	E/	0	19.0	24.7	0.9	11	25	588782.9 6751209.5
6	10003	F/	0	18.1	24.2	0.8	5	31	588737.4 6751133.5
6	10003	G/	2	15.4	9.3	2.4	0	69	588613.1 6750926.0
6	10003	H/	3	30.2	14.6	4.1	0	54	588506.3 6750772.5
6	10003	J/	0	4.6	24.2	0.0	0	34	587738.6 6749724.0
6	10003	K/	0	3.8	26.1	0.0	0	37	587612.6 6749537.0
6	10003	M/	0	8.1	15.7	0.3	0	45	587213.3 6748984.5
6	10003	N/	0	1.9	9.2	0.0	0	43	586960.6 6748624.0
6	10003	O/	0	11.4	27.5	0.3	0	45	586251.0 6747742.5
6	10005	A/	0	5.9	24.7	0.1	0	29	588660.1 6750396.5
6	10005	B/	3	90.1	35.2	7.5	0	33	588793.9 6750603.5
6	10005	C/	4	133.6	45.4	10.1	0	32	588824.2 6750651.0
6	10005	D/	2	81.1	54.7	3.6	0	37	588904.8 6750755.5
6	10005	E/	2	89.3	98.5	2.0	0	29	588936.9 6750796.0
6	10005	F/	1	84.1	92.4	1.9	1	22	588997.2 6750871.0
6	10005	G/	2	110.5	75.5	3.9	2	23	589053.4 6750935.0
6	10005	H/	1	24.6	20.6	1.8	2	39	589141.1 6751046.0
6	10005	J/	2	14.3	8.8	2.3	0	60	589240.3 6751191.5
6	10005	K/	0	10.2	12.2	0.8	0	74	589436.4 6751567.5
6	10005	M/	0	6.6	19.2	0.1	0	42	589582.2 6751714.5
1	10020	A/	0	20.0	39.5	0.5	3	25	589138.4 6752116.0
1	10020	B/	0	10.1	34.1	0.1	1	24	589079.6 6752049.5
1	10020	C/	0	25.7	49.3	0.6	1	25	588963.9 6751876.5

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
1	10020	D/	0	32.4	52.2	0.8	1	26	588946.1 6751850.0
1	10020	E/	1	44.0	67.8	1.0	0	24	588902.8 6751783.5
1	10020	F/	0	4.4	30.8	0.0	5	16	588821.9 6751651.0
1	10020	G/	1	24.5	32.7	1.0	9	24	588667.4 6751432.5
1	10020	H/	0	20.2	47.4	0.4	2	23	588612.4 6751369.0
1	10020	J/	1	35.3	50.3	1.0	7	21	588470.0 6751177.5
1	10020	K/	1	28.1	37.5	1.0	7	24	588395.4 6751064.5
1	10020	M/	1	27.1	28.3	1.4	12	24	588300.9 6750928.0
1	10020	N/	1	26.4	33.5	1.1	12	21	588214.1 6750806.0
1	10020	O/	0	13.3	70.8	0.1	0	19	587481.9 6749782.0
1	10020	P/	0	-0.3	16.2	0.0	0	27	587248.4 6749433.0
1	10020	Q/	0	6.6	22.4	0.1	0	29	587003.1 6749113.0
1	10020	R/	0	2.6	13.8	0.0	0	33	586851.9 6748886.5
1	10020	S/	0	0.1	7.6	0.0	0	36	586669.6 6748638.5
1	10020	T/	0	8.5	46.0	0.0	0	27	586282.4 6748108.5
1	10020	U/	0	16.3	58.7	0.2	0	23	586087.8 6747851.5
1	10020	V/	0	17.6	62.2	0.2	3	18	585993.9 6747721.5
1	10020	W/	0	17.4	64.7	0.2	3	17	585935.5 6747639.5
6	10021	A/	0	10.5	17.8	0.5	0	64	589587.5 6746123.5
6	10021	B/	0	24.6	40.6	0.7	0	37	589815.1 6746441.0
6	10021	C/	1	28.1	35.5	1.1	0	42	590025.3 6746730.0
6	10021	D/	0	24.8	35.3	0.9	0	48	590157.4 6746936.0
6	10021	E/	0	16.3	27.8	0.6	0	51	590194.1 6746993.0
6	10021	F/	0	4.3	13.6	0.1	0	60	590651.3 6747602.0
6	10021	G/	1	18.8	18.1	1.4	0	45	591529.3 6748897.5
6	10021	H/	1	23.8	19.3	1.9	0	60	591608.4 6748978.0
6	10021	J/	0	22.9	36.7	0.7	0	46	591899.3 6749339.0
6	10022	A/	0	18.0	39.5	0.4	0	36	590342.8 6746896.5
6	10022	B/	1	20.8	25.4	1.0	0	47	590188.0 6746652.5
7	10023	A/	0	1.3	27.1	0.0	0	26	585144.9 6755058.0
7	10023	B/	0	2.9	16.9	0.0	0	46	584443.9 6754151.5
6	10027	B/	1	42.6	56.8	1.2	0	33	592825.1 6748611.5
6	10027	C/	2	18.0	12.5	2.1	5	44	592521.5 6748140.0
6	10027	D/	0	8.4	13.7	0.4	9	34	592444.4 6748041.5
6	10027	E/	0	4.1	8.8	0.2	0	54	592167.7 6747698.5
7	10031	B/	1	23.1	20.2	1.7	6	35	582952.3 6751773.0
7	10031	C/	0	5.8	14.9	0.2	1	36	583224.3 6752224.0
1	10040	A/	0	15.6	64.4	0.1	0	19	589485.8 6751871.0
1	10040	B/	0	15.8	25.3	0.6	6	29	589316.5 6751660.0

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
1	10040	C/	0	13.1	19.9	0.6	1	38	589225.8 6751520.5
1	10040	D/	0	17.0	29.3	0.6	13	20	589067.0 6751292.5
1	10040	E/	1	124.2	199.5	1.4	3	13	588977.0 6751176.5
1	10040	F/	1	32.6	40.9	1.2	8	23	588867.0 6751014.0
1	10040	G/	2	113.9	91.4	3.2	0	28	588770.9 6750867.0
1	10040	H/	3	152.8	108.6	4.1	0	26	588744.1 6750832.5
1	10040	J/	3	174.6	98.5	5.7	0	24	588690.8 6750756.5
1	10040	K/	0	-2.0	41.7	0.0	0	24	588099.2 6750001.0
1	10040	M/	0	9.0	14.6	0.5	12	30	587338.8 6748934.0
1	10040	N/	0	14.0	38.9	0.3	1	25	586433.1 6747659.0
1	10040	O/	0	12.6	40.9	0.2	2	22	586176.9 6747304.0
7	10041	A/	1	23.5	27.8	1.1	0	44	583406.9 6752077.5
7	10041	B/	1	23.7	19.6	1.8	5	37	583121.8 6751743.0
6	10043	A/	1	14.1	14.3	1.1	0	58	594875.3 6746037.0
6	10043	B/	1	18.2	19.8	1.1	0	46	594944.8 6746137.0
6	10043	C/	3	31.1	13.7	4.6	0	51	595857.3 6747345.0
7	10052	A/	1	19.6	17.3	1.6	0	44	583425.5 6751752.0
7	10052	B/	0	10.5	12.5	0.8	0	54	583632.8 6752005.0
6	10053	C/	1	12.3	12.6	1.1	0	61	596014.6 6745200.5
6	10053	D/	0	6.6	26.3	0.1	0	38	595235.8 6744127.5
1	10060	A/	0	18.6	46.2	0.3	0	26	589682.2 6751395.0
1	10060	B/	1	29.1	38.2	1.0	0	31	589443.3 6751078.0
1	10060	C/	0	20.7	35.9	0.6	3	27	589426.6 6751045.0
1	10060	D/	2	91.3	94.7	2.2	1	23	589309.7 6750880.5
1	10060	E/	2	133.9	116.4	3.0	0	23	589291.1 6750857.5
1	10060	F/	2	141.5	104.2	3.8	0	22	589273.1 6750825.0
1	10060	G/	2	49.0	43.7	2.1	1	30	589171.5 6750648.5
1	10060	H/	3	145.9	76.4	5.9	0	27	589048.9 6750493.0
1	10060	J/	4	151.4	55.7	9.4	0	31	589002.9 6750449.5
1	10060	K/	0	2.2	27.2	0.0	0	22	587254.6 6748069.5
1	10060	M/	0	-1.6	8.1	0.0	0	32	586262.2 6746699.0
6	10061	A/	2	31.9	17.6	3.5	0	44	598222.1 6744456.5
6	10061	B/	0	24.4	36.5	0.8	0	33	598016.1 6744211.0
6	10061	C/	0	12.6	32.1	0.3	0	35	597869.7 6744011.5
6	10061	D/	0	15.9	35.1	0.4	0	37	597708.6 6743782.5
6	10061	E/	1	23.1	26.1	1.2	3	34	597615.9 6743661.0
6	10061	F/	0	17.1	27.2	0.6	1	33	597579.0 6743608.5
6	10061	G/	0	7.7	15.7	0.3	0	52	597040.7 6742849.5
7	10062	A/	0	14.6	20.4	0.7	2	37	583801.1 6751987.0

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J9744

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
7	10062	B/	2	37.4	29.7	2.3	0	43	583627.8 6751739.0
7	10062	C/	0	20.3	25.9	0.9	0	38	583587.3 6751671.0
7	10062	D/	1	12.7	12.3	1.2	4	45	583471.6 6751545.0
7	10062	E/	1	17.2	16.1	1.4	1	43	583395.9 6751463.0
6	10068	A/	0	5.8	19.9	0.1	0	41	599724.3 6744186.0
2	10070	A/	0	-4.2	11.1	0.0	0	29	586380.4 6746568.5
2	10070	B/	0	0.3	15.5	0.0	0	31	587160.4 6747610.0
2	10070	C/	0	-0.2	16.7	0.0	0	29	587362.0 6747909.0
2	10070	D/	0	1.3	10.4	0.0	2	27	588693.5 6749723.5
2	10070	E/	3	79.5	36.9	5.8	2	30	589166.1 6750350.0
2	10070	F/	2	73.5	47.3	3.7	0	35	589191.9 6750387.5
2	10070	G/	2	69.9	54.1	2.9	0	34	589417.8 6750689.5
2	10070	H/	2	90.4	80.5	2.6	0	33	589448.7 6750718.5
2	10070	J/	2	48.8	35.6	2.8	0	37	589482.6 6750755.5
2	10070	K/	1	23.1	24.0	1.3	0	40	589589.8 6750910.5
2	10070	M/	0	14.2	44.7	0.2	3	21	589778.4 6751132.5
2	10070	N/	0	23.1	49.8	0.5	2	23	589867.3 6751266.0
2	10070	O/	0	9.7	24.7	0.2	0	31	589978.8 6751431.0
7	10072	A/	1	12.7	9.6	1.6	4	50	583556.4 6751390.5
7	10072	B/	0	13.4	16.1	0.9	0	48	584080.0 6751966.5
2	10080	A/	0	14.4	25.8	0.5	0	33	590190.2 6751405.5
2	10080	B/	0	11.2	25.5	0.3	2	29	590000.3 6751135.0
2	10080	C/	0	16.7	23.1	0.8	2	35	589738.9 6750761.0
2	10080	D/	2	41.9	34.1	2.3	0	34	589647.4 6750631.5
2	10080	E/	2	53.8	33.9	3.4	0	34	589634.9 6750612.5
2	10080	F/	2	70.6	48.2	3.4	0	40	589605.6 6750569.0
2	10080	G/	2	65.7	42.4	3.6	0	37	589588.9 6750543.5
2	10080	H/	3	82.0	34.6	6.6	0	37	589547.0 6750481.0
2	10080	J/	4	250.8	91.9	10.9	0	35	589410.8 6750263.0
2	10080	K/	3	253.0	157.2	5.6	0	26	589380.5 6750218.5
2	10080	M/	3	308.3	233.0	4.7	0	21	589343.9 6750162.5
2	10080	N/	0	1.6	12.0	0.0	0	34	588918.0 6749562.5
2	10080	O/	0	3.4	20.5	0.0	0	27	587454.2 6747601.0
2	10080	P/	0	5.7	29.6	0.0	0	29	587409.6 6747530.0
7	10082	A/	0	4.4	29.9	0.0	0	35	585599.1 6753639.5
7	10082	B/	0	4.0	32.3	0.0	0	28	585153.6 6752964.0
7	10082	C/	0	12.4	25.5	0.4	1	32	584464.5 6752072.5
7	10082	D/	1	25.4	26.0	1.4	5	32	584232.8 6751761.5
7	10082	E/	1	22.1	22.3	1.3	2	37	584127.0 6751625.0
7	10082	F/	0	17.3	24.6	0.8	0	39	584042.1 6751501.5

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J9744

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
7	10082	G/	2	37.2	30.2	2.2	0	42	583943.0 6751358.0
7	10082	H/	2	47.5	44.3	2.0	0	34	583885.7 6751285.5
2	10090	A/	0	8.5	33.9	0.1	0	28	587505.6 6747413.0
2	10090	B/	0	5.0	40.5	0.0	0	27	587634.8 6747577.0
2	10090	C/	0	-1.3	8.9	0.0	0	37	587751.3 6747715.0
2	10090	D/	4	138.4	46.4	10.3	0	31	589414.9 6750095.0
2	10090	E/	4	118.9	38.4	10.4	0	37	589511.2 6750203.0
2	10090	F/	4	122.7	39.4	10.6	0	36	589535.9 6750236.0
2	10090	G/	3	140.4	70.2	6.2	0	28	589649.6 6750412.5
2	10090	H/	3	204.1	154.3	4.1	0	27	589689.1 6750467.5
2	10090	J/	3	122.2	72.2	4.8	0	28	589735.3 6750518.5
2	10090	K/	0	13.5	23.4	0.5	6	29	589837.8 6750674.0
2	10090	M/	0	13.2	22.0	0.5	11	25	590094.3 6751030.5
2	10090	N/	0	10.3	21.3	0.3	9	26	590297.3 6751300.5
7	10091	A/	0	7.8	37.9	0.1	0	31	585230.7 6752862.5
7	10091	B/	0	4.6	11.5	0.2	3	38	584756.8 6752272.5
7	10091	C/	1	21.1	24.8	1.1	0	39	584607.8 6752068.0
7	10091	D/	2	56.5	39.8	3.0	1	32	584361.4 6751694.5
7	10091	E/	2	37.9	31.6	2.1	3	32	584269.5 6751550.0
7	10091	F/	2	34.7	30.1	2.0	0	40	584004.7 6751215.5
2	10100	C/	0	20.0	42.3	0.5	0	35	590521.3 6751222.5
2	10100	D/	0	18.4	33.0	0.6	6	25	590417.4 6751102.5
2	10100	E/	0	13.1	26.1	0.4	6	27	590240.0 6750883.0
2	10100	F/	0	15.9	38.5	0.3	0	30	590026.7 6750576.5
2	10100	G/	3	81.3	38.6	5.6	0	31	589895.8 6750398.5
2	10100	H/	3	132.6	76.6	5.1	0	28	589830.3 6750327.0
2	10100	J/	2	116.7	84.1	3.7	0	24	589795.1 6750283.0
2	10100	K/	4	331.5	106.7	13.9	0	33	589667.9 6750099.0
2	10100	M/	4	92.8	27.5	10.8	0	40	589580.6 6749980.5
2	10100	N/	0	3.9	28.8	0.0	0	24	589208.8 6749434.0
2	10100	O/	0	1.9	16.8	0.0	0	29	587831.8 6747565.5
2	10100	P/	0	4.8	20.8	0.0	0	33	587761.1 6747464.5
2	10100	Q/	0	6.9	20.7	0.1	0	34	587608.6 6747234.5
7	10101	A/	2	32.2	18.0	3.4	0	43	584620.7 6751664.5
7	10101	B/	1	18.4	18.1	1.3	0	45	584878.5 6752002.0
7	10101	C/	1	13.2	13.7	1.1	3	44	584923.2 6752060.0
7	10101	D/	0	5.1	8.2	0.4	0	54	585066.9 6752257.0
2	10110	A/	0	1.0	21.6	0.0	0	27	587775.1 6747146.0
2	10110	B/	0	1.7	18.4	0.0	0	32	587895.0 6747309.0
2	10110	C/	0	6.2	7.5	0.6	1	55	588698.6 6748396.0

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
2	10110	D/	0	10.6	36.3	0.1	0	34	589219.9 6749137.5
2	10110	E/	0	5.8	23.0	0.1	0	30	589379.7 6749353.0
2	10110	F/	3	99.6	41.0	7.2	0	33	589768.2 6749850.0
2	10110	G/	3	90.5	39.9	6.4	0	35	589796.6 6749896.0
2	10110	H/	5	139.6	33.0	16.3	0	37	589832.0 6749955.5
2	10110	J/	5	211.8	55.2	16.1	0	36	589867.6 6750006.0
2	10110	K/	2	60.6	36.6	3.8	2	31	589955.2 6750127.0
2	10110	M/	3	124.7	69.7	5.2	0	32	589987.8 6750173.5
2	10110	N/	2	93.5	74.3	3.0	0	29	590029.9 6750220.5
2	10110	O/	2	83.2	64.9	3.0	0	29	590056.5 6750244.5
2	10110	P/	0	17.5	30.9	0.6	1	31	590170.6 6750425.5
2	10110	Q/	0	19.2	28.4	0.7	0	35	590531.3 6750903.0
2	10110	R/	1	28.7	24.9	1.8	0	40	590623.6 6751036.0
7	10111	A/	1	15.6	16.0	1.2	0	56	585925.6 6753055.5
7	10111	B/	0	11.8	15.8	0.7	0	42	585253.3 6752226.5
7	10111	C/	0	12.1	16.4	0.7	2	40	585100.3 6752030.0
7	10111	D/	0	16.1	22.1	0.8	0	37	585043.0 6751947.5
7	10111	E/	2	28.0	21.0	2.2	4	37	584850.2 6751702.0
7	10111	F/	2	34.3	28.9	2.0	0	38	584775.0 6751596.5
7	10111	G/	1	30.9	35.4	1.3	0	35	584615.9 6751391.0
7	10111	H/	1	45.3	50.5	1.5	0	29	584533.0 6751281.0
7	10111	J/	1	36.9	37.7	1.6	1	31	584492.9 6751218.5
2	10120	A/	1	36.1	33.1	1.8	10	25	590771.1 6750948.0
2	10120	B/	1	22.6	27.9	1.0	0	41	590729.3 6750862.5
2	10120	C/	0	15.1	35.0	0.4	3	25	590602.8 6750704.0
2	10120	D/	0	12.8	26.4	0.4	2	30	590322.1 6750289.0
2	10120	E/	2	36.3	29.1	2.2	2	34	590205.3 6750170.5
2	10120	F/	3	56.4	25.8	5.3	0	44	590122.8 6750056.0
2	10120	G/	3	133.5	66.8	6.1	0	31	590014.9 6749871.5
2	10120	H/	3	189.7	84.5	7.9	0	34	589983.3 6749823.5
2	10120	J/	3	146.8	97.7	4.4	0	29	589939.9 6749766.5
2	10120	K/	0	6.1	18.0	0.1	0	36	589475.9 6749143.5
2	10120	M/	0	13.9	45.5	0.2	0	33	589305.9 6748903.5
2	10120	N/	0	1.8	10.0	0.0	0	41	588293.3 6747482.0
2	10120	O/	0	6.0	43.2	0.0	0	24	588164.5 6747311.5
7	10121	A/	2	25.9	13.9	3.4	0	48	585004.8 6751589.5
7	10121	B/	2	25.2	19.4	2.1	0	43	585084.7 6751691.5
7	10121	C/	1	15.4	14.7	1.3	1	44	585305.7 6751969.5
7	10121	D/	0	9.1	9.7	0.9	0	56	585460.3 6752178.5
7	10121	E/	0	13.3	20.7	0.6	0	44	585750.6 6752593.0
7	10121	F/	1	23.1	26.3	1.2	0	46	586050.6 6752963.0
2	10130	B/	0	-6.5	21.4	0.0	0	24	588094.4 6746855.0

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
2	10130	C/	0	-2.8	16.2	0.0	0	29	588143.4 6746915.0
2	10130	D/	0	0.3	12.1	0.0	0	35	588540.9 6747452.0
2	10130	E/	0	6.1	11.6	0.3	3	41	589095.2 6748233.5
2	10130	F/	0	0.7	10.0	0.0	0	32	589283.2 6748487.0
2	10130	G/	0	11.0	46.7	0.1	0	25	589701.5 6749075.5
2	10130	H/	3	86.9	48.0	4.7	1	29	590103.1 6749609.0
2	10130	J/	3	121.7	75.7	4.5	0	30	590137.8 6749656.5
2	10130	K/	3	135.7	85.9	4.6	0	30	590160.8 6749692.0
2	10130	M/	3	91.0	54.0	4.4	0	30	590266.1 6749826.0
2	10130	N/	3	109.9	62.6	4.9	0	33	590313.1 6749883.5
2	10130	O/	3	136.2	78.8	5.1	0	34	590349.2 6749935.0
2	10130	P/	0	3.6	13.8	0.0	1	33	590516.6 6750168.5
2	10130	Q/	0	6.0	18.0	0.1	0	42	590780.6 6750529.0
2	10130	R/	0	14.8	31.7	0.4	0	36	590903.8 6750687.0
7	10131	A/	0	25.1	44.0	0.7	0	35	586269.9 6752885.0
7	10131	B/	0	17.1	25.7	0.7	0	38	585986.7 6752528.0
7	10131	C/	1	19.3	20.3	1.2	0	46	585697.2 6752126.5
7	10131	D/	1	19.1	23.8	1.0	1	37	585497.1 6751887.0
7	10131	E/	2	38.7	34.1	2.0	0	37	585357.9 6751691.5
7	10131	F/	2	46.8	27.4	3.6	0	37	585289.5 6751609.5
7	10131	G/	1	32.1	28.3	1.9	0	38	585214.9 6751490.5
7	10131	H/	0	25.4	49.5	0.6	0	31	584898.4 6751098.0
7	10131	J/	0	12.4	27.5	0.3	0	37	584685.3 6750825.5
2	10140	A/	0	13.1	34.7	0.3	0	36	591023.9 6750522.5
2	10140	B/	1	34.1	46.8	1.1	0	31	590544.0 6749904.0
2	10140	C/	3	114.6	72.4	4.3	0	32	590481.3 6749849.5
2	10140	D/	3	127.4	82.2	4.4	0	29	590428.6 6749792.0
2	10140	E/	3	160.3	102.1	4.8	0	27	590405.8 6749760.5
2	10140	F/	2	149.5	154.9	2.5	0	25	590388.8 6749730.5
2	10140	G/	4	231.1	96.8	9.0	0	23	590346.6 6749646.5
2	10140	H/	3	204.8	116.9	5.9	0	26	590295.4 6749572.5
2	10140	J/	0	0.2	11.4	0.0	0	34	589932.8 6749098.5
2	10140	K/	0	-1.5	12.9	0.0	0	29	589849.9 6748984.5
2	10140	M/	0	15.1	76.9	0.1	0	25	589645.0 6748693.0
2	10140	N/	0	15.1	68.4	0.1	0	26	589598.6 6748627.0
2	10140	O/	0	2.0	15.7	0.0	0	33	588682.9 6747404.5
2	10140	P/	0	9.3	52.0	0.0	0	26	588613.5 6747279.5
2	10140	Q/	0	4.3	40.2	0.0	0	32	588488.6 6747086.5
2	10140	R/	0	-5.1	20.7	0.0	0	24	588206.6 6746716.0
7	10141	A/	0	23.1	33.2	0.8	0	35	585116.9 6751145.0
7	10141	B/	2	51.1	42.3	2.4	4	28	585197.3 6751254.5
7	10141	C/	1	43.7	41.8	1.9	3	28	585315.2 6751396.5

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J9744

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
7	10141	D/	2	48.7	45.7	2.0	0	32	585375.4 6751469.5
7	10141	E/	3	80.6	30.2	7.7	1	32	585516.2 6751656.5
7	10141	F/	0	16.0	22.7	0.7	2	35	585664.4 6751828.0
7	10141	G/	2	23.4	17.2	2.1	4	40	585830.3 6752074.0
7	10141	H/	0	20.6	28.3	0.9	0	42	586240.7 6752655.0
7	10141	J/	0	19.3	27.7	0.8	0	36	586391.0 6752851.0
7	10141	K/	0	5.3	25.7	0.0	0	33	586751.5 6753292.5
7	10141	M/	0	1.3	12.8	0.0	0	25	586899.7 6753505.0
2	10150	A/	0	5.0	30.9	0.0	0	34	588659.8 6746966.0
2	10150	B/	0	26.2	89.2	0.3	0	24	588887.8 6747261.5
2	10150	C/	0	5.7	30.0	0.0	0	30	589059.3 6747524.5
2	10150	D/	0	4.5	10.2	0.2	1	43	589480.1 6748106.5
2	10150	E/	0	8.9	33.2	0.1	0	32	589718.6 6748441.5
2	10150	F/	4	78.6	21.3	11.6	0	39	590445.9 6749490.5
2	10150	G/	3	78.0	31.3	6.9	0	40	590474.9 6749524.5
2	10150	H/	4	131.3	41.0	11.1	0	36	590519.5 6749577.5
2	10150	J/	3	135.3	64.8	6.5	0	36	590595.5 6749666.5
2	10150	K/	3	139.1	67.8	6.4	0	41	590625.6 6749699.0
2	10150	M/	2	90.6	58.8	3.9	0	34	590655.8 6749730.5
7	10151	A/	0	6.0	22.4	0.1	6	22	587068.9 6753360.5
7	10151	B/	0	6.9	20.2	0.2	10	22	587031.3 6753316.0
7	10151	C/	0	20.5	35.8	0.6	0	34	586644.4 6752786.5
7	10151	D/	1	23.2	30.2	1.0	0	37	586486.7 6752532.0
7	10151	E/	2	25.1	15.4	2.8	0	45	586077.8 6751996.0
7	10151	F/	1	32.7	36.3	1.4	1	32	585818.3 6751646.5
7	10151	G/	3	68.0	33.9	5.0	0	35	585730.9 6751551.5
7	10151	H/	2	32.8	22.2	2.7	0	44	585619.4 6751398.5
7	10151	J/	2	33.5	25.1	2.3	0	43	585564.7 6751320.5
7	10151	K/	0	17.2	45.4	0.3	0	29	585228.6 6750790.5
7	10151	M/	0	8.6	28.3	0.1	0	35	585058.6 6750577.5
2	10160	A/	0	16.0	28.7	0.5	0	42	591266.1 6750224.5
2	10160	B/	0	15.1	35.8	0.3	0	30	590877.6 6749709.0
2	10160	C/	2	81.9	58.1	3.4	0	29	590828.8 6749626.0
2	10160	D/	3	195.3	87.0	7.9	0	35	590775.6 6749558.5
2	10160	E/	3	110.8	56.5	5.6	0	31	590687.0 6749434.0
2	10160	F/	3	145.5	79.0	5.7	0	26	590650.5 6749381.0
2	10160	G/	0	17.1	56.0	0.2	0	31	589984.4 6748498.0
2	10160	H/	0	26.5	72.8	0.4	0	30	589903.9 6748382.0
2	10160	J/	0	3.6	23.1	0.0	0	27	589222.8 6747455.0
2	10160	K/	0	2.9	24.4	0.0	0	26	589179.2 6747394.0
2	10160	M/	0	33.7	82.6	0.5	0	27	588990.4 6747121.0
2	10160	N/	0	19.5	73.1	0.2	0	28	588745.3 6746780.5

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
7	10161	A/	3	21.7	7.7	5.5	4	48	585957.6 6751369.5
7	10161	B/	1	12.5	12.1	1.1	6	43	586421.1 6751964.0
7	10161	C/	0	23.6	34.2	0.8	0	34	586799.6 6752511.5
7	10161	D/	1	28.5	35.7	1.1	1	31	587010.3 6752782.5
7	10161	E/	0	7.1	20.2	0.2	5	28	587269.4 6753094.5
7	10161	F/	0	9.8	14.6	0.6	13	30	587319.1 6753194.0
2	10170	A/	0	11.9	32.3	0.2	0	39	588722.6 6746379.0
2	10170	B/	0	22.1	42.6	0.6	0	41	588985.9 6746745.5
2	10170	C/	1	49.0	80.4	1.0	0	26	589174.6 6747008.0
2	10170	D/	0	24.2	66.0	0.3	0	30	590112.1 6748307.0
2	10170	E/	0	43.6	116.0	0.5	0	25	590249.6 6748508.0
2	10170	F/	0	33.7	112.2	0.3	0	24	590294.4 6748570.5
2	10170	G/	0	0.2	14.8	0.0	0	25	590453.7 6748760.5
2	10170	H/	3	104.6	45.3	6.9	0	31	590853.4 6749302.5
2	10170	J/	3	155.6	95.5	4.9	0	25	590940.6 6749433.5
2	10170	K/	0	16.4	30.5	0.5	0	37	591046.8 6749581.0
2	10170	M/	0	14.2	57.3	0.1	0	26	591118.3 6749681.5
2	10170	N/	0	18.5	45.2	0.4	0	41	591330.6 6749959.5
7	10171	A/	0	13.6	31.9	0.3	2	27	587467.2 6753134.5
7	10171	B/	0	13.5	26.9	0.4	10	22	587423.1 6753048.5
7	10171	C/	1	13.8	14.2	1.1	2	44	587204.6 6752772.0
7	10171	D/	1	34.2	45.9	1.1	0	30	586993.3 6752471.5
7	10171	E/	0	16.8	24.2	0.7	5	31	586884.7 6752329.0
7	10171	F/	2	25.4	15.6	2.8	11	34	586598.0 6751918.0
7	10171	G/	0	11.2	23.1	0.4	4	29	586395.8 6751665.5
7	10171	H/	2	35.2	20.2	3.4	0	41	586124.2 6751332.0
7	10171	J/	2	24.9	18.9	2.1	0	44	586006.4 6751177.0
7	10171	K/	0	5.4	20.4	0.1	0	33	585589.4 6750548.5
2	10180	A/	0	25.0	41.4	0.7	0	33	591513.7 6749857.5
2	10180	B/	0	16.6	41.8	0.3	0	41	591284.6 6749535.5
2	10180	C/	3	185.8	104.8	5.8	0	29	591094.3 6749291.0
2	10180	D/	3	218.8	110.6	7.0	0	27	591021.2 6749188.5
2	10180	E/	3	27.3	11.0	5.0	24	23	590947.1 6749082.5
2	10180	F/	1	8.3	6.1	1.4	39	24	590906.9 6749032.0
2	10180	G/	0	0.0	14.1	0.0	0	34	590617.4 6748669.0
2	10180	H/	0	45.9	103.4	0.6	0	28	590421.0 6748414.5
2	10180	J/	0	39.8	65.4	0.9	0	26	589320.1 6746849.5
2	10180	K/	0	35.4	69.2	0.7	0	24	589181.5 6746653.0
2	10180	M/	0	26.2	43.3	0.7	0	33	588957.3 6746344.5
2	10180	N/	0	15.2	35.8	0.3	0	31	588802.1 6746127.0
7	10181	A/	3	22.5	10.3	4.0	6	44	586775.3 6751902.5

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD		
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS			
7	10181	B/	1	27.6	27.4	1.5	1	35	587185.7	6752451.0
7	10181	C/	1	24.1	30.6	1.0	0	36	587376.1	6752743.5
7	10181	D/	0	13.7	38.3	0.2	2	23	587475.4	6752861.5
7	10181	E/	0	13.9	18.0	0.8	0	45	587665.9	6753089.5
2	10190	A/	0	11.0	24.6	0.3	0	50	588891.2	6745937.0
2	10190	B/	0	23.9	42.0	0.6	0	34	589194.3	6746325.5
2	10190	C/	1	40.4	60.5	1.0	0	27	589447.6	6746694.5
2	10190	D/	0	21.7	46.9	0.5	0	35	589640.4	6746969.5
2	10190	E/	0	4.2	23.8	0.0	0	35	589748.4	6747113.5
2	10190	F/	0	7.1	25.1	0.1	0	33	590575.6	6748335.5
2	10190	G/	0	10.4	58.7	0.1	0	32	590711.1	6748519.0
2	10190	H/	2	12.5	5.7	3.3	29	32	591081.8	6749009.5
2	10190	J/	3	84.8	31.7	7.8	0	32	591131.9	6749072.0
2	10190	K/	3	89.0	56.7	4.0	0	32	591217.9	6749180.0
2	10190	M/	0	33.0	61.2	0.7	0	30	591651.8	6749755.5
7	10191	A/	0	14.3	34.6	0.3	0	30	587801.6	6753014.5
7	10191	B/	0	9.6	17.8	0.4	0	40	587725.3	6752917.5
7	10191	C/	2	34.5	27.7	2.2	0	38	587617.7	6752748.0
7	10191	D/	2	42.0	33.3	2.3	0	43	587587.8	6752692.0
7	10191	E/	1	25.7	27.0	1.3	0	39	587357.1	6752390.5
7	10191	F/	1	33.7	34.7	1.5	0	35	587302.8	6752324.0
7	10191	G/	2	27.2	15.0	3.3	15	30	586938.6	6751847.0
7	10191	H/	0	20.8	40.6	0.5	0	30	586611.8	6751421.0
7	10191	J/	0	26.5	45.7	0.7	0	35	586442.0	6751139.5
7	10191	K/	0	26.7	50.4	0.6	0	29	586242.0	6750871.5
7	10191	M/	0	11.8	32.7	0.2	0	28	586073.2	6750616.0
6	10201	A/	0	23.3	33.0	0.9	0	48	591734.1	6749494.0
6	10201	B/	0	18.7	29.8	0.7	0	46	591667.2	6749414.5
6	10201	C/	1	21.3	16.6	1.9	0	65	591433.7	6749106.5
6	10201	D/	2	22.8	16.2	2.2	0	48	591326.4	6748926.5
6	10201	E/	0	8.0	22.4	0.2	0	53	590839.8	6748317.5
6	10201	F/	0	15.1	43.2	0.3	0	32	589871.2	6746991.0
7	10202	A/	1	32.3	31.4	1.6	1	34	587001.4	6751532.5
7	10202	B/	3	39.7	20.0	4.2	3	37	587187.8	6751800.5
7	10202	C/	2	29.9	24.7	2.0	0	42	587555.1	6752298.5
7	10202	D/	1	31.0	27.2	1.8	0	45	587607.1	6752371.5
7	10202	E/	1	20.5	17.6	1.6	5	38	587813.2	6752665.0
7	10211	A/	0	25.1	49.0	0.6	4	22	588133.3	6752702.0
7	10211	B/	2	77.5	75.1	2.2	3	22	588077.4	6752639.0
7	10211	C/	0	6.9	24.4	0.1	13	15	587990.9	6752535.0

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD		
				INPHASE	QUAD.	CTP	DEPTH			
						MHOS	MTRS	HEIGHT		
								MTRS		
7	10211	D/	1	34.3	31.5	1.8	8	27	587941.4	6752440.0
7	10211	E/	2	48.9	33.8	3.0	0	35	587827.8	6752299.5
7	10211	F/	2	40.2	25.3	3.1	6	32	587745.6	6752221.0
7	10211	G/	2	29.8	21.7	2.3	8	32	587696.2	6752170.0
7	10211	H/	0	19.1	25.0	0.9	4	32	587343.6	6751687.0
7	10211	J/	1	39.9	39.7	1.7	2	30	587293.6	6751613.5
7	10211	K/	2	66.4	52.5	2.7	2	27	587202.1	6751493.0
7	10211	M/	2	39.6	22.6	3.6	3	36	587130.1	6751386.0
7	10211	N/	1	31.8	31.6	1.6	4	30	586970.6	6751132.0
7	10211	O/	0	18.6	25.1	0.8	1	35	586797.4	6750890.0
7	10211	P/	0	10.0	18.6	0.4	0	43	586511.1	6750536.5
7	10211	Q/	0	7.3	21.4	0.2	0	37	586187.5	6750089.0
2	10220	A/	0	41.3	72.7	0.8	0	32	592028.3	6749199.0
2	10220	B/	0	37.2	69.4	0.7	0	32	591948.3	6749086.5
2	10220	C/	3	64.6	30.0	5.4	0	41	591658.9	6748670.5
2	10220	D/	0	-1.0	17.6	0.0	0	26	591424.7	6748337.0
7	10221	A/	1	14.8	15.6	1.1	6	39	587087.2	6750870.5
7	10221	B/	3	50.4	27.9	4.0	0	37	587258.9	6751073.0
7	10221	C/	3	62.1	34.9	4.2	0	39	587314.2	6751144.0
7	10221	D/	2	47.6	31.8	3.1	0	35	587464.4	6751362.5
7	10221	E/	1	26.9	25.8	1.6	3	35	587540.0	6751447.0
7	10221	F/	0	16.0	32.1	0.5	0	34	587618.3	6751556.0
7	10221	G/	2	20.9	10.4	3.4	8	42	587789.4	6751833.5
7	10221	H/	3	42.5	20.2	4.6	7	32	588071.3	6752190.0
7	10221	J/	2	21.3	11.8	3.0	12	37	588213.8	6752432.5
3	10230	A/	0	2.0	15.0	0.0	0	48	589019.6	6744729.0
3	10230	B/	0	26.9	53.1	0.6	0	30	590143.8	6746270.0
3	10230	C/	0	27.8	42.6	0.8	0	32	590331.8	6746525.0
3	10230	D/	0	28.9	64.3	0.5	0	29	590487.2	6746731.0
3	10230	E/	3	26.6	12.0	4.3	0	56	591793.3	6748581.5
3	10230	F/	0	20.2	33.7	0.6	0	33	592020.9	6748885.0
3	10230	G/	1	40.4	61.5	1.0	0	32	592220.9	6749158.0
3	10230	H/	1	50.3	80.2	1.0	0	25	592431.0	6749460.0
7	10231	A/	3	86.1	54.3	4.0	0	30	588334.1	6752311.0
7	10231	B/	2	74.9	55.7	3.1	0	32	588214.8	6752134.5
7	10231	C/	2	69.5	59.3	2.5	0	28	588187.1	6752096.0
7	10231	D/	2	17.5	8.4	3.4	13	41	587924.9	6751769.0
7	10231	E/	0	15.9	20.3	0.9	0	39	587710.3	6751472.5
7	10231	F/	2	33.4	20.2	3.1	0	44	587533.6	6751253.0
7	10231	G/	2	35.4	18.9	3.8	0	47	587412.5	6751100.5
7	10231	H/	3	54.9	28.1	4.5	0	40	587332.4	6750994.5

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
7	10231	J/	1	22.2	28.0	1.0	5	30	587214.2 6750835.5
7	10231	K/	0	7.5	26.5	0.1	0	38	586851.9 6750292.0
3	10240	A/	1	23.4	25.6	1.2	7	30	591983.1 6748488.5
3	10240	B/	0	1.8	11.4	0.0	0	32	591607.6 6747989.0
3	10240	C/	0	18.0	49.5	0.3	0	25	590774.2 6746811.0
3	10240	D/	0	31.8	62.5	0.6	0	33	590695.9 6746706.0
3	10240	E/	1	46.4	70.8	1.0	0	29	590542.9 6746482.5
7	10241	A/	2	25.2	15.9	2.7	0	49	587793.1 6751286.0
7	10241	B/	0	11.3	17.7	0.5	3	37	587986.7 6751556.5
7	10241	C/	2	37.1	26.9	2.5	1	37	588106.0 6751705.5
7	10241	D/	2	16.2	10.9	2.1	9	42	588375.4 6752081.0
7	10241	E/	1	21.3	17.2	1.8	0	47	588462.8 6752192.5
7	10241	F/	1	18.6	16.9	1.5	1	43	588574.1 6752332.0
3	10250	A/	0	36.0	64.4	0.7	0	28	590582.2 6746249.0
3	10250	B/	1	49.4	75.2	1.1	0	27	590747.8 6746467.5
3	10250	C/	0	41.6	68.5	0.9	0	32	590910.8 6746671.5
3	10250	D/	0	5.3	20.0	0.1	0	37	591157.4 6747008.5
3	10250	E/	0	5.4	15.9	0.1	0	39	591384.9 6747335.5
3	10250	F/	0	4.7	14.6	0.1	0	37	591598.3 6747657.5
3	10250	G/	0	4.3	10.8	0.1	0	48	591770.6 6747891.5
3	10250	H/	0	16.3	30.2	0.5	8	24	592125.6 6748344.5
3	10250	J/	0	23.4	34.1	0.8	3	29	592274.6 6748539.5
7	10251	A/	0	18.5	23.0	0.9	0	42	588621.2 6752074.0
7	10251	B/	1	16.1	15.5	1.3	2	42	588536.3 6751979.0
7	10251	C/	1	15.8	14.2	1.4	1	46	588248.0 6751576.5
7	10251	D/	1	16.0	15.5	1.3	0	51	588061.8 6751316.5
7	10251	E/	2	24.3	15.0	2.7	0	54	587998.7 6751206.5
7	10251	F/	0	18.4	24.2	0.9	6	31	587858.9 6751041.0
7	10251	G/	0	16.0	21.7	0.8	6	32	587801.9 6750986.0
7	10251	H/	0	18.8	44.5	0.4	0	33	587456.6 6750554.5
3	10260	B/	0	32.0	61.9	0.6	0	25	593061.1 6749323.0
3	10260	C/	0	29.5	43.5	0.9	0	39	592856.4 6749007.0
3	10260	D/	2	16.7	10.3	2.4	12	39	592309.7 6748243.5
3	10260	E/	0	8.4	13.8	0.4	0	49	592228.5 6748138.5
3	10260	F/	0	3.2	12.6	0.0	0	36	591964.9 6747795.5
3	10260	G/	0	5.0	11.6	0.2	0	51	591580.5 6747246.5
3	10260	H/	0	25.3	90.1	0.2	0	23	591322.1 6746897.0
3	10260	J/	0	39.5	67.3	0.8	0	31	591161.4 6746662.5
3	10260	K/	1	43.8	56.1	1.3	0	31	591028.4 6746471.0
3	10260	M/	0	25.0	43.0	0.7	0	32	590673.8 6745956.0

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD			
				INPHASE	QUAD.	CTP	DEPTH				
						MHOS	MTRS	HEIGHT			
								MTRS			
3	10260	N/	0	8.8	28.8	0.1	0	30	590420.4	6745608.0	
3	10270	A/	0	6.5	31.2	0.0	0	30	590572.6	6745509.0	
3	10270	B/	1	47.7	56.5	1.4	0	31	591227.4	6746391.5	
3	10270	C/	1	45.1	52.5	1.5	0	30	591279.8	6746464.5	
3	10270	D/	1	49.0	66.3	1.2	0	28	591388.1	6746616.5	
3	10270	E/	1	42.6	53.1	1.3	0	33	591460.4	6746713.5	
3	10270	F/	0	20.1	38.8	0.5	0	41	591595.6	6746902.5	
3	10280	C/	1	36.9	34.9	1.8	0	35	593383.1	6749091.0	
3	10280	D/	1	45.9	62.7	1.2	0	30	592947.8	6748446.0	
3	10280	E/	2	20.2	13.3	2.3	15	32	592753.0	6748187.0	
3	10280	F/	2	12.0	4.9	3.8	24	39	592632.1	6748036.0	
3	10280	G/	0	6.4	14.9	0.2	0	45	591821.3	6746884.5	
3	10280	H/	0	16.0	23.9	0.7	0	40	590989.8	6745753.0	
3	10280	J/	0	5.2	21.0	0.1	0	38	590676.9	6745339.0	
3	10290	A/	0	29.3	51.2	0.7	0	41	591674.4	6746361.0	
3	10290	B/	1	19.5	17.0	1.6	16	28	592816.3	6747943.0	
3	10290	C/	1	20.7	18.7	1.5	6	36	592886.5	6748042.0	
3	10290	D/	0	45.4	81.3	0.8	0	29	593248.7	6748545.0	
3	10290	E/	1	50.5	75.6	1.1	0	30	593291.2	6748599.5	
3	10290	F/	0	43.6	82.7	0.8	0	24	593473.3	6748854.0	
3	10290	G/	1	32.9	28.9	1.9	1	35	593614.3	6749058.0	
3	10300	B/	1	47.4	50.9	1.6	0	34	593692.9	6748881.5	
3	10300	C/	1	62.6	79.5	1.5	0	32	593658.3	6748810.0	
3	10300	D/	0	25.9	44.7	0.7	0	31	593099.5	6748002.0	
3	10300	E/	1	24.8	25.5	1.4	0	39	592982.0	6747858.5	
3	10300	F/	1	26.7	26.5	1.5	10	27	592934.9	6747801.0	
3	10300	G/	0	11.7	49.9	0.1	0	33	592221.3	6746814.0	
3	10310	B/	0	48.8	126.5	0.5	0	23	592058.7	6746331.5	
3	10310	C/	0	46.8	78.8	0.9	0	34	592228.0	6746489.5	
3	10310	D/	0	25.2	60.3	0.4	0	31	592382.2	6746687.5	
3	10310	E/	1	19.6	21.4	1.2	16	23	593075.4	6747665.5	
3	10310	F/	1	29.7	39.4	1.0	0	34	593327.3	6747981.0	
3	10310	G/	0	21.3	36.5	0.6	0	33	593417.5	6748127.0	
3	10310	H/	1	32.7	47.2	1.0	0	31	593506.4	6748249.0	
3	10310	J/	1	36.5	47.6	1.2	0	30	593703.0	6748518.0	
3	10310	K/	0	27.9	46.6	0.7	0	31	593879.9	6748749.0	
3	10320	A/	0	14.6	28.2	0.5	0	38	594090.6	6748757.0	
3	10320	B/	1	25.7	31.2	1.1	0	38	594015.1	6748626.5	
3	10320	C/	1	50.3	67.5	1.3	0	30	593737.6	6748241.0	

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
3	10320	D/	0	29.9	57.7	0.6	0	31	593501.4 6747890.5
3	10320	E/	0	14.6	21.3	0.7	10	27	593258.6 6747532.5
3	10320	F/	0	11.0	27.9	0.3	0	46	592664.0 6746697.5
3	10330	A/	0	23.3	42.3	0.6	0	36	592548.1 6746238.5
3	10330	B/	0	34.4	77.2	0.5	0	29	592750.4 6746515.5
3	10330	C/	0	29.3	62.6	0.5	0	30	592790.6 6746578.0
3	10330	D/	0	15.1	21.4	0.7	14	24	593398.3 6747430.5
3	10330	E/	0	21.5	39.9	0.6	0	36	593669.3 6747812.0
3	10330	F/	0	22.6	35.3	0.7	0	36	594067.3 6748317.0
3	10330	G/	1	28.1	35.6	1.1	0	40	594196.5 6748513.5
3	10340	A/	0	31.3	50.1	0.8	0	30	593985.9 6747878.0
3	10340	B/	0	18.5	29.0	0.7	0	35	593682.3 6747414.5
3	10340	C/	0	25.7	69.6	0.4	0	27	592912.9 6746335.0
3	10340	D/	0	38.8	99.5	0.5	0	27	592746.2 6746101.0
3	10350	A/	0	42.3	89.0	0.6	0	33	593063.6 6746225.0
3	10350	B/	0	28.4	52.8	0.6	0	28	593133.4 6746331.5
3	10350	C/	1	53.0	79.2	1.1	0	31	593222.3 6746446.5
3	10350	D/	0	54.4	118.2	0.7	0	18	593952.1 6747466.0
3	10350	E/	0	26.5	42.7	0.8	1	28	594067.2 6747631.5
3	10350	F/	3	64.8	38.1	4.0	6	27	594288.4 6747924.5
3	10350	G/	2	48.4	29.7	3.4	6	30	594380.7 6748046.5
3	10350	H/	2	45.7	41.1	2.1	6	26	594426.0 6748114.0
3	10350	J/	0	15.4	57.1	0.2	0	24	594545.5 6748299.0
3	10360	A/	0	9.4	36.5	0.1	1	22	594689.4 6748248.0
3	10360	B/	0	9.9	32.4	0.2	2	25	594651.9 6748197.0
3	10360	C/	2	75.9	71.0	2.3	0	30	594597.3 6748099.5
3	10360	D/	2	70.1	56.9	2.7	0	30	594571.6 6748045.5
3	10360	E/	2	53.8	39.6	2.8	2	31	594472.8 6747888.5
3	10360	F/	2	51.7	46.9	2.1	0	32	594393.0 6747776.5
3	10360	G/	0	31.7	77.7	0.5	0	24	594001.3 6747223.5
3	10360	H/	0	18.1	27.5	0.7	5	29	593862.4 6747036.0
3	10360	J/	0	16.5	39.6	0.3	0	38	593498.6 6746465.5
3	10360	K/	0	18.6	45.4	0.4	0	34	593456.4 6746410.0
3	10370	A/	0	5.1	24.6	0.0	0	28	593111.1 6745654.0
3	10370	B/	0	19.4	40.4	0.5	3	25	594129.1 6747057.5
3	10370	C/	0	23.5	47.3	0.5	5	22	594205.4 6747166.5
3	10370	D/	0	21.3	50.2	0.4	1	24	594283.6 6747279.5
3	10370	E/	3	134.3	75.7	5.3	0	28	594652.3 6747777.5
3	10370	F/	3	123.9	79.2	4.4	0	26	594696.4 6747834.5
3	10380	A/	1	49.2	69.7	1.2	0	28	594827.3 6747687.0

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP	DEPTH	HEIGHT	
						MHOS	MTRS	MTRS	
3	10380	B/	2	99.0	102.4	2.2	0	30	594770.7 6747616.0
3	10380	C/	2	106.5	87.5	3.0	0	30	594733.6 6747559.0
3	10380	D/	0	12.7	21.3	0.5	3	33	594443.7 6747197.0
3	10380	E/	0	16.0	26.6	0.6	5	29	594229.2 6746882.0
3	10380	F/	0	16.1	20.3	0.9	8	32	594141.4 6746740.5
3	10380	G/	0	27.4	55.9	0.6	0	29	593627.3 6746066.5
3	10390	A/	0	12.1	26.4	0.3	0	40	593801.9 6745935.5
3	10390	B/	0	16.2	27.9	0.6	8	25	594272.6 6746571.0
3	10390	C/	0	33.5	66.9	0.6	2	21	594410.3 6746773.0
3	10390	D/	0	14.4	48.5	0.2	0	23	594467.7 6746859.0
3	10390	E/	0	12.1	26.4	0.3	4	28	594619.1 6747093.0
3	10390	F/	3	173.1	86.3	6.6	0	32	594897.3 6747471.5
3	10390	G/	2	199.3	181.4	3.3	0	25	594969.0 6747569.5
3	10390	H/	0	4.1	22.5	0.0	2	23	595034.8 6747660.5
3	10400	A/	0	3.9	30.9	0.0	0	34	595324.3 6747751.5
3	10400	B/	2	79.1	68.8	2.6	0	31	595074.4 6747393.5
3	10400	C/	3	118.9	60.3	5.8	0	33	595037.1 6747339.0
3	10400	D/	1	47.0	45.8	1.9	0	36	594926.4 6747176.5
3	10400	E/	0	28.8	51.7	0.7	0	32	594519.8 6746629.0
3	10400	F/	1	25.5	34.2	1.0	0	43	594375.9 6746418.5
3	10400	G/	0	15.9	64.3	0.1	0	21	594305.7 6746286.0
3	10400	H/	0	36.9	113.5	0.4	0	24	593738.8 6745538.5
3	10410	A/	1	26.3	29.6	1.2	2	33	594559.4 6746246.5
3	10410	B/	0	15.7	47.5	0.2	1	22	594696.0 6746430.5
3	10410	C/	0	6.3	55.4	0.0	0	15	594775.6 6746541.0
3	10410	D/	0	6.3	19.8	0.1	0	33	594874.1 6746692.0
3	10410	E/	1	23.3	22.4	1.5	0	40	595056.6 6746955.5
3	10410	F/	2	32.6	25.6	2.2	0	45	595186.7 6747141.5
3	10410	G/	3	64.0	34.9	4.4	0	38	595281.2 6747261.5
3	10410	H/	2	65.4	40.4	3.8	0	34	595329.5 6747321.0
3	10420	A/	3	51.7	25.2	4.7	0	37	595551.6 6747294.0
3	10420	B/	2	44.1	38.2	2.1	0	33	595438.8 6747140.0
3	10420	C/	0	10.3	21.8	0.3	0	36	595113.5 6746750.0
3	10420	D/	0	5.7	22.0	0.1	0	31	594864.3 6746419.0
3	10420	E/	0	10.7	24.1	0.3	0	34	594787.8 6746323.0
3	10420	F/	0	15.5	18.4	0.9	3	38	594691.8 6746202.5
3	10440	C/	3	105.5	62.2	4.6	1	26	595934.3 6747173.5
3	10440	D/	2	52.5	32.8	3.5	7	27	595743.9 6746904.5
3	10440	E/	1	33.1	39.7	1.2	1	30	595097.8 6746023.0
3	10440	F/	1	27.5	34.1	1.1	4	29	595037.7 6745952.0

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
3	10440	G/	0	16.3	41.8	0.3	0	32	594327.9 6744911.0
3	10440	H/	0	19.1	67.0	0.2	0	28	594271.7 6744835.0
3	10450	A/	1	45.0	45.0	1.8	0	39	595188.4 6745747.5
3	10450	B/	2	73.3	71.1	2.2	0	34	595228.9 6745805.5
3	10450	C/	3	23.2	9.7	4.5	24	25	596081.3 6746979.5
3	10460	A/	1	24.0	26.4	1.2	1	36	595437.3 6745778.5
3	10460	B/	2	50.3	39.3	2.5	0	42	595368.3 6745677.0
3	10470	A/	0	11.8	56.4	0.1	0	24	594708.8 6744463.5
3	10470	B/	2	53.4	45.2	2.3	0	34	595522.3 6745579.5
3	10470	C/	2	68.6	67.1	2.1	0	30	595576.6 6745668.5
3	10470	D/	0	10.6	39.5	0.1	0	28	595831.9 6746019.0
3	10480	A/	0	49.8	120.9	0.6	0	25	596651.7 6746772.0
3	10480	B/	0	21.7	63.2	0.3	0	27	596491.4 6746574.0
3	10480	C/	0	14.5	48.8	0.2	0	31	595968.4 6745850.5
3	10480	D/	2	48.0	43.9	2.0	2	29	595774.8 6745595.0
3	10480	E/	2	82.0	81.4	2.2	0	38	595700.1 6745486.0
3	10480	F/	0	9.7	30.6	0.2	0	32	595503.2 6745209.0
3	10480	G/	0	10.9	29.4	0.2	0	35	595036.3 6744497.5
3	10480	H/	0	10.3	47.4	0.1	0	28	594916.8 6744320.0
3	10490	B/	0	8.3	44.4	0.0	0	28	595102.6 6744246.5
3	10490	C/	1	33.7	48.2	1.0	0	33	595944.9 6745292.5
3	10490	D/	1	49.7	48.4	1.9	1	29	596017.8 6745396.0
3	10490	E/	0	19.6	58.1	0.3	3	19	596164.2 6745600.5
3	10490	F/	0	25.2	54.7	0.5	0	32	596332.4 6745825.0
3	10490	G/	0	37.7	59.6	0.9	0	36	596753.4 6746368.5
3	10490	H/	0	32.1	51.8	0.8	0	35	596946.8 6746641.0
3	10510	A/	0	19.0	49.4	0.3	0	34	595448.2 6743956.0
3	10510	B/	0	14.2	51.4	0.2	0	27	596011.3 6744755.0
3	10510	C/	0	18.1	41.7	0.4	0	26	596209.1 6745041.0
3	10510	D/	0	27.5	75.6	0.4	0	22	596337.8 6745226.0
3	10520	A/	2	70.9	58.0	2.7	3	26	597304.2 6746261.0
3	10520	B/	0	20.9	73.6	0.2	0	25	597079.3 6745936.5
3	10520	C/	0	26.6	55.3	0.5	0	31	596443.1 6745077.0
3	10520	D/	0	16.3	44.3	0.3	0	29	596317.9 6744917.5
3	10520	E/	0	10.1	30.7	0.2	0	36	596125.8 6744653.0
3	10530	A/	0	15.5	44.2	0.3	0	33	596310.9 6744592.5
3	10530	B/	0	53.2	90.4	0.9	0	27	597168.1 6745756.0

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD		
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS			
3	10530	C/	2	89.6	67.4	3.2	0	27	597397.9	6746049.5
3	10540	A/	2	55.7	52.9	2.0	0	30	597509.3	6745864.5
3	10540	B/	2	89.2	76.0	2.7	0	28	597459.5	6745800.5
3	10540	C/	1	32.0	42.4	1.1	0	31	597323.6	6745601.5
3	10540	D/	0	24.1	41.0	0.7	0	29	597278.9	6745536.5
3	10540	E/	0	23.5	62.0	0.4	0	30	596923.9	6745044.5
3	10540	F/	0	20.0	41.3	0.5	0	38	596537.8	6744479.0
3	10540	G/	0	18.3	62.1	0.2	0	27	596489.0	6744410.0
3	10540	H/	0	12.4	39.0	0.2	0	26	596288.7	6744124.5
3	10540	J/	0	14.9	55.6	0.2	0	26	596141.9	6743920.0
3	10550	A/	0	11.8	35.0	0.2	0	34	596463.2	6744105.0
3	10550	B/	0	34.0	98.2	0.4	0	23	597027.5	6744855.5
3	10550	C/	0	18.8	38.1	0.5	0	30	597459.9	6745444.5
3	10550	D/	1	40.8	37.7	1.9	3	30	597566.6	6745591.5
3	10550	E/	2	54.3	38.9	2.9	0	32	597632.7	6745681.5
3	10560	A/	0	13.4	39.2	0.2	0	29	599125.9	6747393.5
3	10560	B/	0	9.2	26.4	0.2	0	34	598790.6	6746934.5
3	10560	C/	0	11.1	35.0	0.2	0	28	598569.4	6746634.5
3	10560	D/	1	33.8	49.5	1.0	0	29	597768.0	6745504.0
3	10560	E/	1	43.8	49.5	1.5	2	27	597726.0	6745440.5
3	10560	F/	0	10.6	36.2	0.2	0	31	597574.1	6745232.0
3	10560	G/	1	40.3	43.5	1.5	3	28	597125.1	6744630.5
3	10560	H/	0	18.0	58.2	0.2	0	29	596857.1	6744262.0
3	10560	J/	0	12.5	58.3	0.1	0	24	596798.9	6744181.5
3	10560	K/	0	14.4	59.6	0.1	0	27	596613.3	6743942.5
3	10560	M/	0	12.4	42.7	0.2	0	28	596401.5	6743666.0
3	10570	A/	0	6.7	45.6	0.0	0	21	596324.4	6743255.5
3	10570	B/	0	8.9	30.5	0.1	0	30	596448.9	6743381.5
3	10570	C/	0	11.8	33.7	0.2	0	29	596679.0	6743661.0
3	10570	D/	1	31.4	33.0	1.5	1	33	597271.3	6744510.5
3	10570	E/	0	14.6	50.4	0.2	0	30	597672.6	6745119.0
3	10570	F/	0	24.8	51.5	0.5	0	32	598570.8	6746337.0
3	10570	G/	0	8.2	28.3	0.1	0	30	598910.3	6746772.0
3	10570	H/	0	4.8	28.8	0.0	0	33	599288.9	6747313.5
3	10570	J/	0	6.0	29.3	0.0	0	33	599351.3	6747402.5
3	10580	A/	0	13.7	37.6	0.3	0	34	598836.0	6746345.0
3	10580	B/	0	32.6	67.4	0.6	0	25	597879.8	6744908.5
3	10580	C/	0	9.5	27.3	0.2	0	32	597562.2	6744478.0
3	10580	D/	0	15.5	22.1	0.7	0	38	597340.4	6744226.0
3	10580	E/	0	13.8	58.9	0.1	0	29	597033.9	6743716.5

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD		
				INPHASE	QUAD.	CTP	DEPTH			
						MHOS	MTRS	HEIGHT		
								MTRS		
6	10591	A/	1	15.0	15.3	1.1	0	52	597305.5	6743848.5
6	10591	B/	0	8.9	15.4	0.4	0	54	597493.1	6744164.0
3	10600	A/	0	13.7	49.8	0.2	0	31	599086.8	6745975.0
3	10600	B/	0	10.8	32.6	0.2	0	36	598841.4	6745621.5
3	10600	C/	0	29.0	52.0	0.7	0	28	597998.1	6744426.5
3	10600	D/	0	14.3	46.2	0.2	0	26	597729.9	6744043.5
3	10600	E/	0	19.9	36.6	0.6	0	30	597637.3	6743921.5
3	10600	F/	1	36.4	34.7	1.8	0	33	597520.6	6743767.5
3	10600	G/	1	29.7	38.3	1.1	1	30	597463.8	6743702.5
3	10600	H/	0	15.6	40.0	0.3	0	30	596940.4	6742965.0
4	10610	A/	0	11.4	33.2	0.2	0	36	598969.7	6745504.5
4	10610	B/	0	10.0	33.2	0.2	0	38	599113.9	6745693.5
4	10610	C/	0	10.3	34.8	0.2	0	32	599173.8	6745780.0
4	10620	A/	2	49.1	41.8	2.3	2	29	598365.5	6744298.0
4	10620	B/	2	50.6	34.1	3.1	7	27	598283.9	6744191.0
4	10620	C/	0	19.9	45.1	0.4	0	31	598081.2	6743905.5
4	10620	D/	1	30.3	37.9	1.1	0	35	597902.3	6743649.5
4	10620	E/	1	26.1	25.1	1.5	7	31	597794.6	6743508.0
4	10620	F/	0	13.9	27.1	0.4	0	40	597274.6	6742804.0
4	10630	A/	0	12.7	29.9	0.3	0	41	597413.9	6742672.5
4	10630	B/	1	22.1	25.8	1.1	0	42	597946.1	6743364.0
4	10630	C/	0	16.9	28.8	0.6	0	37	598004.4	6743436.5
4	10630	D/	0	14.0	36.4	0.3	0	33	598221.3	6743758.0
4	10630	E/	0	23.6	48.7	0.5	0	30	598389.2	6743999.0
4	10630	F/	0	5.1	18.7	0.1	0	42	599482.4	6745454.5
4	10640	A/	0	18.6	37.9	0.5	0	42	598881.6	6744375.5
4	10640	B/	0	12.1	26.4	0.3	0	36	598221.2	6743478.0
4	10640	C/	1	18.4	22.6	1.0	0	50	598018.7	6743219.5
4	10640	D/	0	13.8	26.9	0.4	0	42	597708.0	6742809.5
4	10640	E/	0	12.8	25.9	0.4	0	42	597552.8	6742585.0
4	10650	A/	0	8.3	24.6	0.2	0	37	597696.4	6742418.0
4	10650	B/	0	18.2	40.9	0.4	0	35	597905.4	6742709.0
4	10650	C/	0	12.4	31.6	0.3	0	32	598328.3	6743301.0
4	10650	D/	0	22.3	68.9	0.3	0	24	598688.9	6743779.5
4	10650	E/	0	18.7	52.0	0.3	0	25	598791.9	6743927.5
4	10650	F/	0	29.3	61.5	0.6	0	28	599173.9	6744422.0
4	10650	G/	0	47.3	102.5	0.6	0	22	599289.0	6744590.5
4	10650	H/	0	31.9	55.3	0.7	0	29	599396.4	6744758.0

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

J9744

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
4	10660	A/	0	14.3	37.9	0.3	0	37	599619.9 6744714.0
4	10660	B/	0	12.8	37.2	0.2	0	42	599307.2 6744235.0
4	10660	C/	0	11.1	35.6	0.2	0	39	598808.3 6743602.0
4	10660	D/	0	10.6	33.5	0.2	0	33	598718.4 6743485.0
4	10660	E/	0	14.1	24.7	0.5	0	35	598572.7 6743302.0
4	10660	F/	0	12.2	23.4	0.4	0	48	598516.4 6743229.5
4	10660	G/	0	7.8	20.0	0.2	0	39	597888.4 6742328.0
4	10670	A/	0	2.5	23.4	0.0	0	23	597962.9 6742078.5
4	10670	B/	0	20.8	50.3	0.4	0	34	598197.3 6742445.5
4	10670	C/	0	18.3	23.0	0.9	0	44	598766.3 6743228.5
4	10670	D/	0	7.3	31.5	0.1	0	27	598919.4 6743426.0
4	10670	E/	0	8.7	29.3	0.1	0	34	598996.1 6743533.5
4	10680	A/	0	12.3	49.3	0.1	0	31	599415.1 6743741.0
4	10680	B/	0	6.0	20.6	0.1	0	32	599048.8 6743224.0
4	10680	C/	0	16.6	25.5	0.7	0	42	598932.3 6743062.0
4	10680	D/	0	23.8	50.9	0.5	0	27	598456.9 6742422.5
4	10680	E/	0	5.0	26.3	0.0	0	30	598120.7 6741985.0
4	10690	A/	0	25.5	72.8	0.3	0	23	598515.8 6742188.0
4	10690	B/	0	17.4	33.9	0.5	0	33	598802.9 6742596.5
4	10690	C/	0	7.6	24.5	0.1	0	35	599200.1 6743134.5
4	10690	D/	0	4.5	18.3	0.0	0	33	599322.9 6743305.0
4	10690	E/	0	20.3	58.4	0.3	0	24	599759.9 6743917.0
4	10690	F/	0	15.4	72.7	0.1	0	20	599817.1 6743994.0
4	10690	G/	0	14.9	93.2	0.1	0	19	599871.6 6744065.5
4	10690	H/	0	1.2	57.0	0.0	0	21	600160.4 6744459.0
4	10690	J/	0	-2.6	10.8	0.0	0	25	600216.9 6744528.5
4	10700	A/	0	5.3	28.8	0.0	0	29	602060.3 6746683.5
4	10700	B/	0	9.4	90.1	0.0	0	25	600389.3 6744400.0
4	10700	C/	0	21.5	75.3	0.2	0	28	600188.7 6744081.0
4	10700	D/	0	7.6	32.4	0.1	0	36	600067.1 6743887.0
4	10700	E/	0	12.4	59.4	0.1	0	32	600004.6 6743813.0
4	10700	F/	0	10.6	61.6	0.0	0	26	599937.0 6743734.5
4	10700	G/	0	16.6	28.8	0.6	0	39	598852.7 6742279.5
4	10700	H/	0	13.7	24.4	0.5	0	39	598779.6 6742194.0
4	10700	J/	0	15.4	28.1	0.5	0	35	598675.4 6742068.0
4	10710	A/	0	23.5	58.5	0.4	0	26	598776.3 6741815.5
4	10710	B/	0	12.6	32.4	0.3	0	31	598958.3 6742073.0
4	10710	C/	0	13.4	31.9	0.3	2	26	599030.4 6742162.0
4	10710	D/	0	44.2	135.5	0.4	0	19	600484.9 6744166.5

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

J9744

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD		
				INPHASE	QUAD.	CTP	DEPTH	HEIGHT		
						MHOS	MTRS	MTRS		
4	10710	E/	0	20.2	107.3	0.1	0	20	600566.9	6744286.0
4	10710	F/	0	12.2	95.6	0.0	0	18	600680.1	6744455.5
4	10710	G/	0	5.0	26.6	0.0	0	35	602242.7	6746553.5
4	10720	A/	0	15.3	84.7	0.1	0	26	600840.0	6744328.5
4	10720	B/	0	16.0	70.9	0.1	0	29	600725.3	6744186.5
4	10720	C/	0	16.7	63.3	0.2	0	30	600650.3	6744097.0
4	10720	D/	0	13.5	69.0	0.1	0	31	600443.1	6743796.0
4	10720	E/	0	10.7	45.2	0.1	0	26	600016.7	6743184.0
4	10720	F/	0	3.9	25.5	0.0	0	27	599846.6	6742948.5
4	10720	G/	0	12.7	32.6	0.3	4	24	599143.6	6742104.5
4	10720	H/	0	12.6	32.4	0.3	2	26	599093.8	6742034.0
4	10720	J/	0	13.5	41.6	0.2	0	29	599031.9	6741923.0
4	10720	K/	0	20.8	49.3	0.4	0	31	598923.3	6741710.5
4	10730	A/	0	10.7	31.0	0.2	0	30	599095.1	6741633.0
4	10730	B/	0	11.7	29.1	0.3	0	36	599156.1	6741715.0
4	10730	C/	0	6.9	23.3	0.1	0	40	599274.0	6741878.0
4	10730	D/	0	10.9	24.3	0.3	0	39	599336.4	6741962.0
4	10730	E/	0	17.2	38.3	0.4	0	29	599523.8	6742212.0
4	10730	F/	0	17.4	64.0	0.2	0	24	599903.1	6742754.5
4	10730	G/	0	5.8	24.3	0.1	0	35	600050.1	6742942.0
4	10730	H/	0	9.1	39.0	0.1	0	25	600188.4	6743126.5
4	10730	J/	0	11.5	70.7	0.0	0	21	600723.3	6743876.0
4	10730	K/	0	24.0	86.1	0.2	0	24	600929.3	6744126.5
4	10730	M/	0	6.4	50.7	0.0	0	28	601157.2	6744443.5
4	10740	A/	0	12.3	43.3	0.2	0	30	602584.1	6746093.5
4	10740	B/	0	3.5	49.2	0.0	0	27	601607.5	6744750.5
4	10740	C/	0	10.8	64.3	0.0	0	27	601369.3	6744391.5
4	10740	D/	0	22.3	80.5	0.2	0	24	601068.1	6743977.5
4	10740	E/	0	0.9	56.1	0.0	0	25	600844.3	6743694.0
4	10750	A/	0	17.2	48.3	0.3	0	30	599503.4	6741464.5
4	10750	B/	0	9.4	40.1	0.1	0	28	599680.6	6741673.0
4	10750	C/	0	12.0	31.3	0.3	0	31	599808.6	6741852.5
4	10750	D/	0	20.3	38.3	0.5	0	42	599965.9	6742059.0
4	10750	E/	0	18.4	43.3	0.4	0	39	600484.2	6742786.5
4	10750	F/	0	7.5	38.0	0.0	0	32	600660.0	6743050.5
4	10760	A/	0	20.8	78.4	0.2	0	23	602906.2	6745895.0
4	10760	C/	0	11.3	31.5	0.2	0	36	599804.1	6741634.0
4	10760	D/	0	14.9	39.8	0.3	0	27	599626.3	6741360.0
5	10771	A/	0	11.3	21.9	0.4	0	43	600035.0	6741508.0

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

J9744

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM)		CONDUCTOR		BIRD	
				INPHASE	QUAD.	CTP MHOS	DEPTH MTRS	HEIGHT MTRS	
5	10771	B/	0	13.6	32.2	0.3	0	39	600795.8 6742567.0
5	10771	C/	0	2.3	17.9	0.0	0	31	601003.4 6742832.0
5	10771	D/	0	-0.4	21.2	0.0	0	28	601145.8 6743026.0
5	10771	E/	0	11.9	64.5	0.1	0	24	601253.3 6743186.5
5	10771	F/	0	35.2	88.6	0.5	0	23	601322.5 6743280.0
5	10780	C/	0	0.9	14.2	0.0	0	39	602603.4 6744794.0
5	10780	D/	0	11.2	28.7	0.3	0	44	600953.4 6742469.0
5	10780	E/	0	15.0	36.5	0.3	0	35	600826.7 6742325.0
5	10780	F/	0	20.7	45.7	0.4	0	33	600651.3 6742062.5
5	10790	A/	0	16.5	61.8	0.2	0	26	600381.6 6741284.5
5	10790	B/	0	23.7	56.0	0.4	0	26	600944.4 6742071.0
5	10790	C/	0	10.1	28.2	0.2	0	40	601143.8 6742379.0
6	10791	A/	0	3.1	18.2	0.0	0	44	602698.3 6744498.5
5	10800	A/	0	5.9	22.9	0.1	0	38	602988.6 6744583.0
5	10800	B/	0	7.7	34.2	0.1	0	39	602792.1 6744283.5
5	10800	C/	0	2.7	25.2	0.0	0	32	601771.8 6742901.0
5	10800	D/	0	0.7	20.4	0.0	0	29	601720.2 6742823.0
5	10800	E/	0	15.1	33.9	0.4	0	37	601126.4 6742010.0
5	10800	F/	0	11.5	32.6	0.2	0	37	600795.6 6741552.0
5	10800	G/	0	4.8	30.4	0.0	0	30	600160.3 6740719.5
5	10810	A/	0	5.4	31.9	0.0	0	30	600319.9 6740550.5
5	10810	B/	0	10.9	40.1	0.1	0	32	600728.1 6741156.0
5	10810	C/	0	8.4	30.1	0.1	0	33	600959.2 6741452.5
5	10810	D/	0	22.1	49.6	0.4	0	31	601219.9 6741790.0
5	10810	E/	0	19.9	52.5	0.3	0	28	601263.9 6741849.5
5	10810	F/	0	14.5	41.8	0.2	0	26	601338.7 6741946.5
5	10810	G/	0	13.7	35.9	0.3	0	30	601410.3 6742047.5
5	10810	H/	0	2.9	22.8	0.0	0	31	601598.3 6742337.5
5	10810	J/	0	3.9	37.4	0.0	0	25	601767.6 6742560.0
5	10810	K/	0	2.7	20.1	0.0	0	29	601916.7 6742744.0
5	10810	M/	0	-0.1	37.4	0.0	0	29	602321.9 6743378.0
5	10810	N/	0	0.5	17.2	0.0	0	36	602481.1 6743565.0

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

APPENDIX IV

CERTIFICATE OF QUALIFICATION

I, Roderick W. Woolham of the town of Pickering, Province of Ontario, do hereby certify that:-

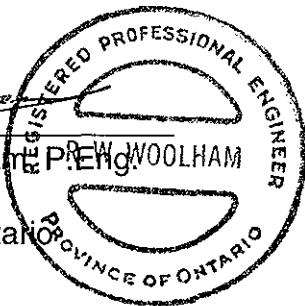
1. I am a geophysicist and reside at 1463 Fieldlight Blvd., Pickering, Ontario, L1V 2S3
2. I graduated from the University of Toronto in 1961 with a degree of Bachelor of Applied Science, Engineering Physics, Geophysics Option. I have been practising my profession since graduation.
3. I am a member in good standing of the following organizations: Professional Engineers Ontario (Mining Branch); Society of Exploration Geophysicists; South African Geophysical Association; Prospectors and Developers Association of Canada.
4. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the properties or securities of 15053 Yukon Inc. or any affiliate.
5. The statements contained in this report and the conclusions reached are based upon evaluation and review of maps and information supplied by Aerodat.
6. I consent to the use of this report in submissions for assessment credits or similar regulatory requirements.

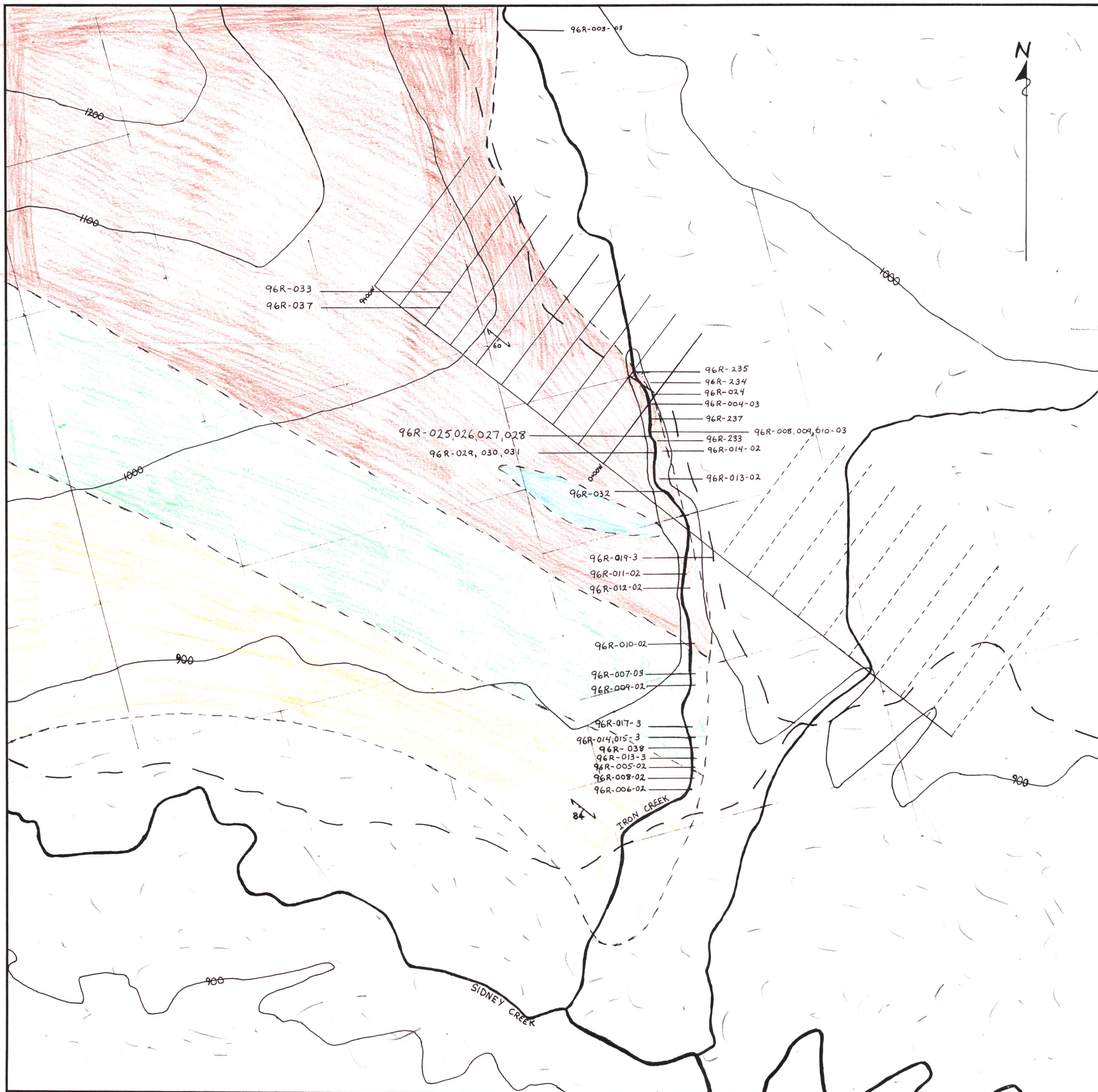

R. W. Woolham P. Eng.

Pickering, Ontario

J9744

July 10, 1997





LEGEND

-  Recent Surficial Deposits
-  Quartzite, fine grained, occasionally interbedded with shale and mica schist
-  Limestone, recrystallized
-  Shale and shaly argillite, with minor quartzite and schist
-  Greenstone, schistose to occasionally phyllitic

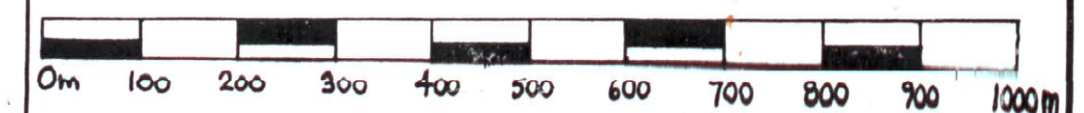
Schistosity

Sample Location

Soil Grid

Contour

Tote Road

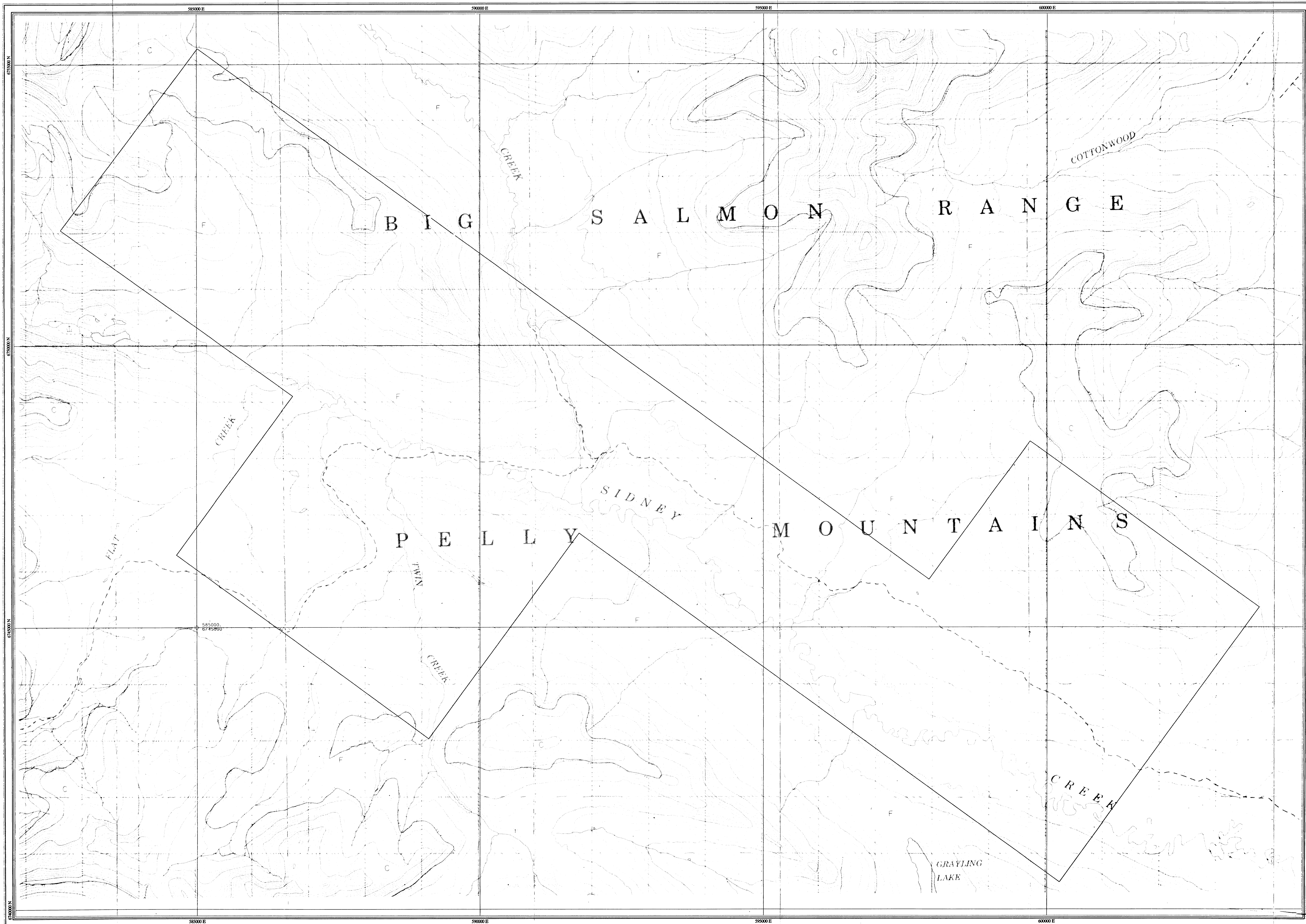


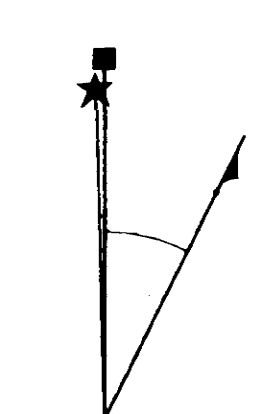
093725
093725
DWG ①

15053 Yukon Inc.
IRON CREEK PROJECT
 BOZO 1-24 & BIGTOP 1-30 CLAIMS
 YUKON TERRITORY
SAMPLE LOCATION MAP

WHITEHORSE MINING DISTRICT
 FIGURE: 3

N.T.S.: 105-C-14
 DATE: JUNE 1997





 Square: Grid North
 Star: True North
 Arrow: Magnetic North

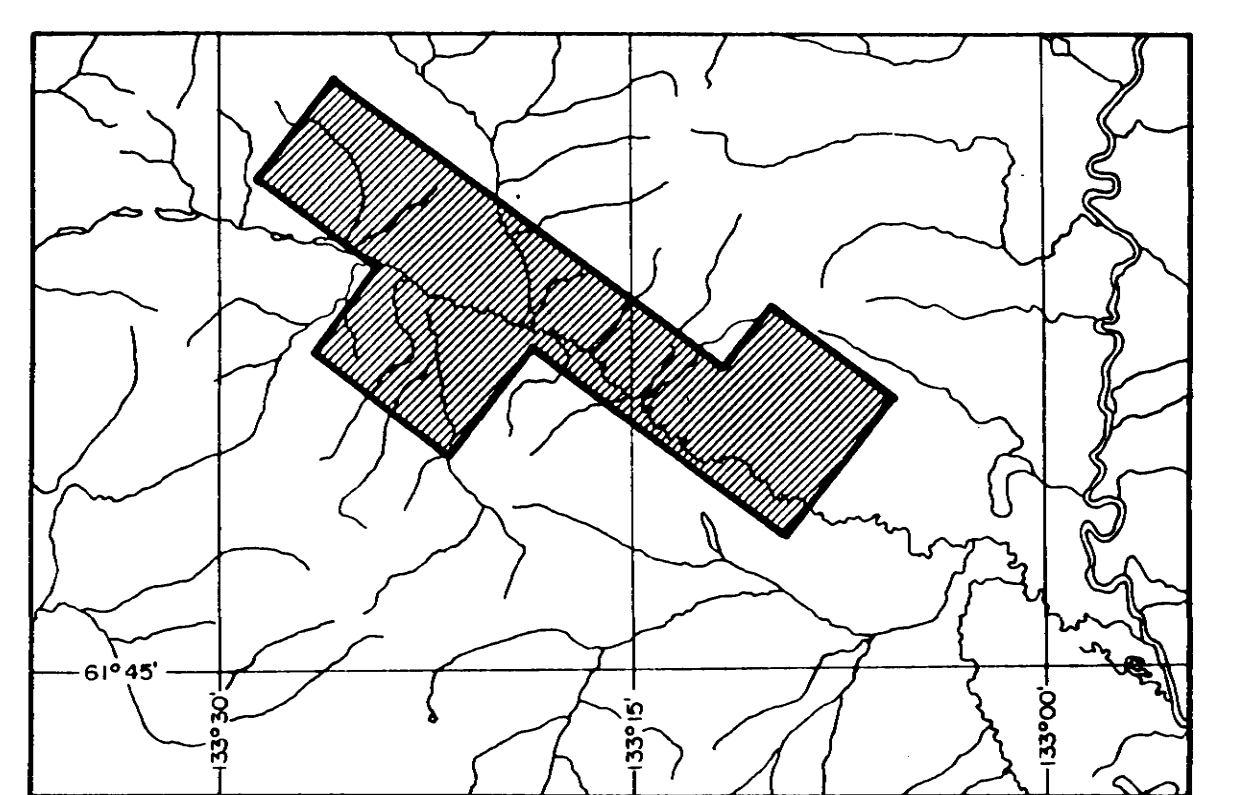
 Angles presented are approximate mean
 deviations for center of NTS mapsheet
 105C/14. Use diagram for reference only.

 Grid North - True North: 1° 32' W
 True North - Magnetic North: 27° 57' E
 Annual change: 17' from 1997.5

 Inclination = 77°
 Annual change: -13.8' from 1997.5

PLANIMETRY
 Planimetric information was derived
 from enlarged 1:50,000 government maps.

 Clarke 1866 Ellipsoid
 North American Datum 1927, UTM Projection.
 Local Transformation: Canada
 (DX = -10m, DY = -150m, DZ = -187m)



15053 YUKON INC.

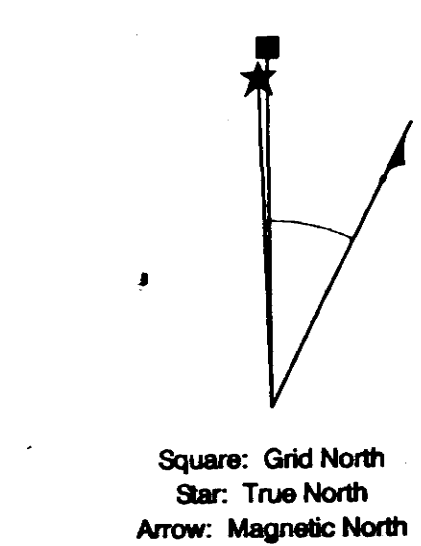
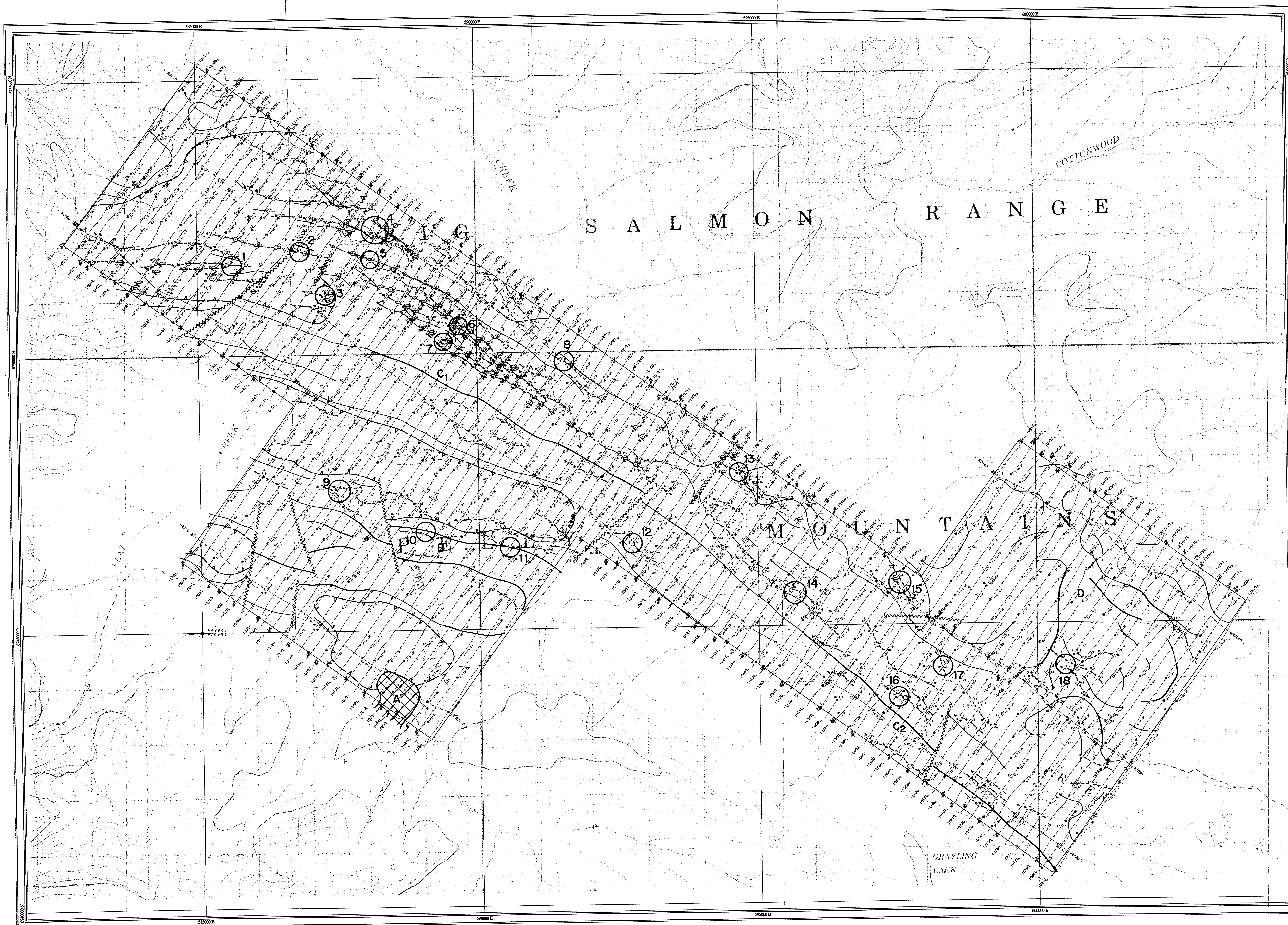
BASE MAP

093725 SIDNEY CREEK VALLEY
Yukon Territory

DWG 1:20 000
0 100 200 metres

 aerodat
AERODAT INC.

Date Flown: May, 1997
Map Ref: 105C/14
Project Ref: J9744-1



Angles presented are approximate mean
directions for center of NTS magnet
105C14. Use diagram for reference only.

Grid North - True North: 1° 32' W
True North - Magnetic North: 27° 57' E
Annual change: 0° from 1997.5

Inclination = 77°
Annual change: -13.8 from 1997.5

FLIGHT PATH AND PLANIMETRY

Navigation and flight path recovery was conducted
using a satellite Global Positioning System (GPS)
and has been differentially corrected.

Lines were flown at an altitude of 45-120'
with an average line spacing of 200 m.

Average aircraft-terrain clearance of
67 m was monitored by radar altimeter.

Planimetric information was derived
from enlarged 1:50 000 government maps.

Clarke 1866 Ellipsoid
North American Datum 1983, UTM Projection
Local Transformation: Canada
(DX = -10m, DY = 168m, DZ = 187m)

EM ANOMALIES

EM anomalies selected by computer algorithm
and manually confirmed. Selection is based
on the response correlation to theoretical
sources such as a steeply dipping conductor.

Calculation of conductance is based on the
response of the 4600 Hz coaxial data, and
forms the basis for anomaly classification.

Letter codes are used to identify individual
anomalies on a line, and the inphase amplitude
of the 4600 Hz response is annotated opposite.

- 0 - 1 mhos
- 1 - 2 mhos
- 2 - 4 mhos
- 4 - 8 mhos
- 8 - 16 mhos
- 16 - 32 mhos
- > 32 mhos
- M Magnetite

INTERPRETATION

High amplitude magnetic zone, possible intrusive centre

High amplitude magnetic trend

Other magnetic trend

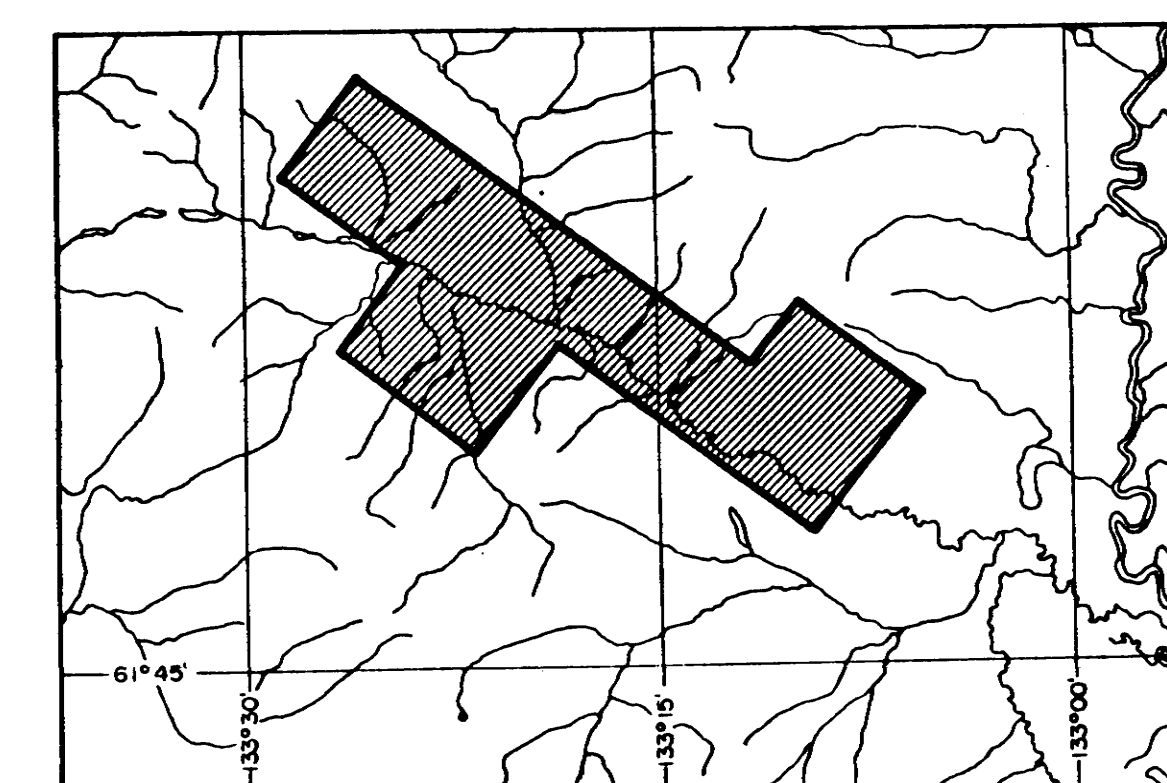
Non-magnetic below background zone

Conductive trend

Fractured structure interpreted from magnetics

B Anomalous magnetic area designated for investigation

4 Anomalous conductive response designated for investigation



15053 YUKON INC.

INTERPRETATION

SIDNEY CREEK VALLEY

Yukon Territory

SCALE 1:20 000

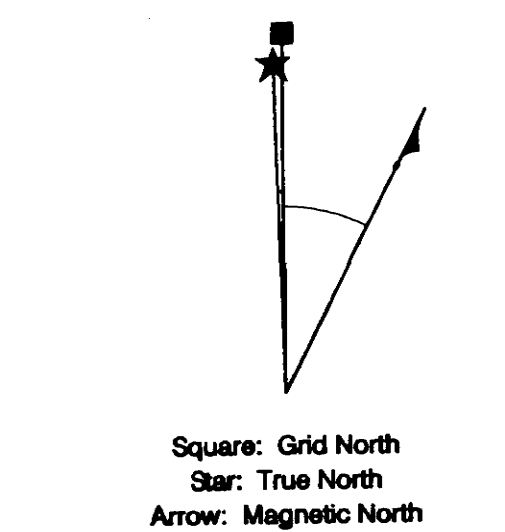
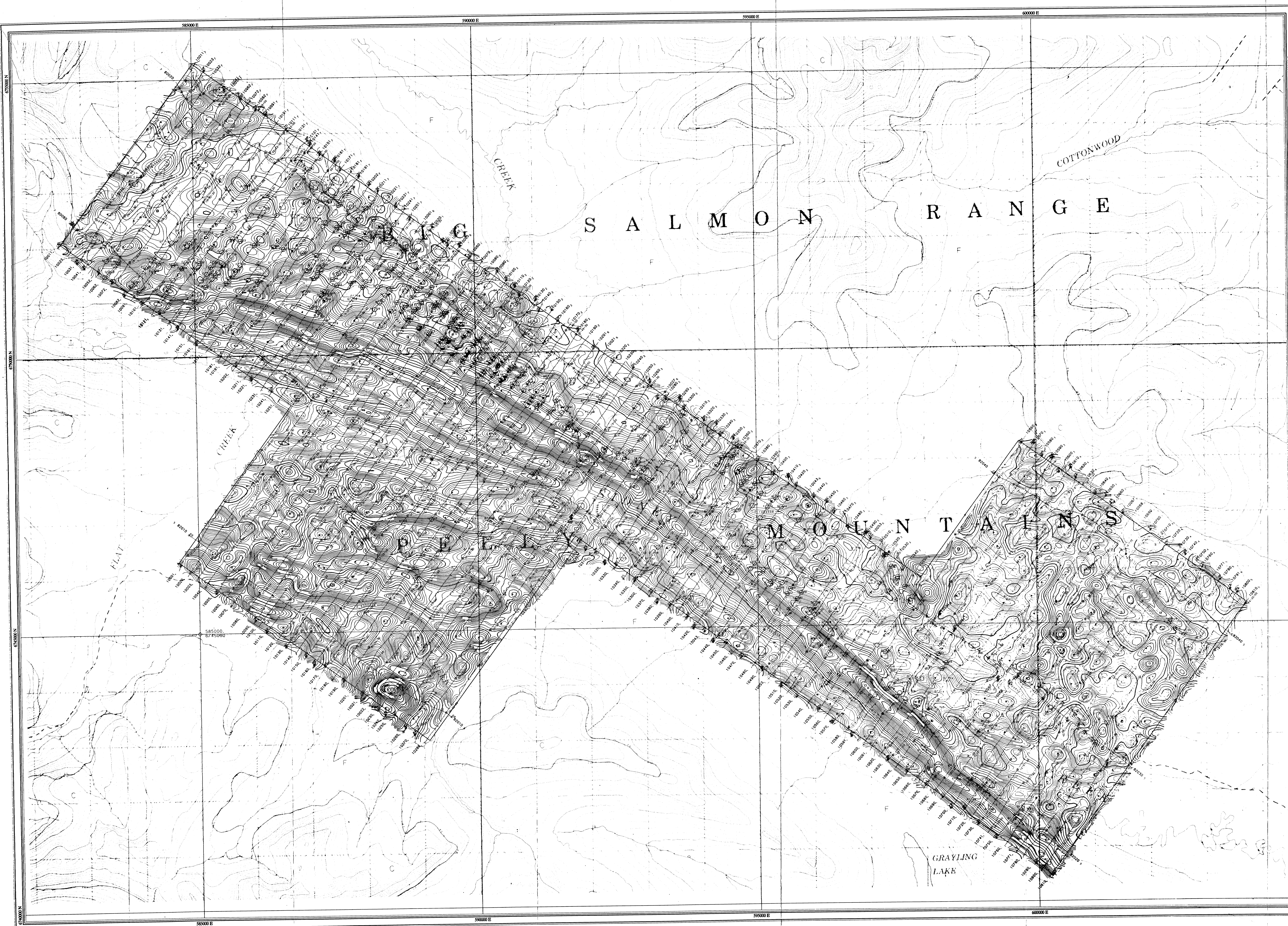


Date Flown: May, 1997

Map Ref: 105C14

Project Ref: J5744-2

093725 DWG 3 017-84950 DAVID - YUKON REGION, LIBRARY



Square: Grid North
Bar: True North
Arrow: Magnetic North
Angles presented are approximate mean
deviations for center of NTS mapsheet
105C/14. Use diagram for reference only.
Grid North - True North: 1° 32' W
True North - Magnetic North: 27° 57' E
Annual change: 0' from 1987.5
Inclination = 77°
Annual change: -13.2' from 1987.5

FLIGHT PATH AND PLANIMETRY

Navigation and flight path recovery was conducted
using a satellite Global Positioning System (GPS)
and has been differentially corrected.
Lines were flown at an altitude of 45-120'
with an average line spacing of 200 m.
Average aircraft terrain clearance of
67 m was monitored by radar altimeter.
Planimetric information was derived
from enlarged 1:50 000 government maps.
Clarke 1866 Ellipsoid.
North American Datum 1987, UTM Projection.
Local Transformation: Canada
(DX = -10m, DY = 158m, DZ = 187m)

VERTICAL GRADIENT

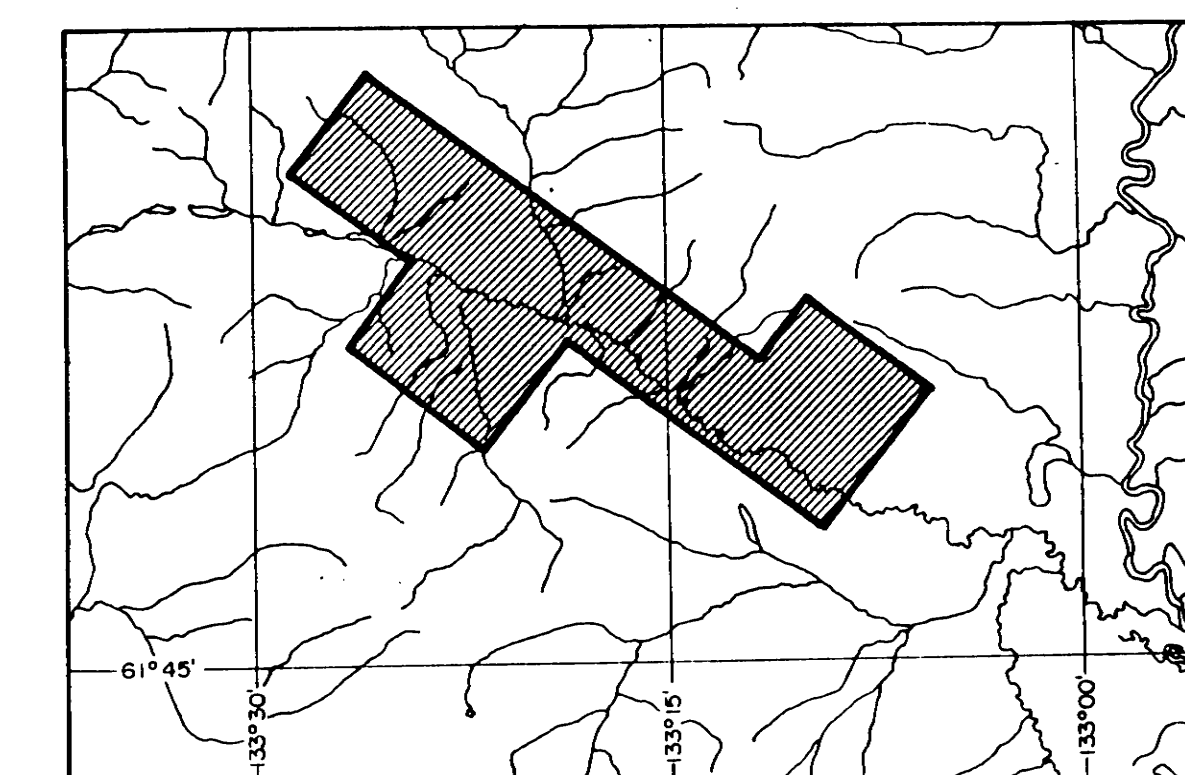
Vertical magnetic gradient contour data,
calculated from the gridded total field
magnetic data by an FFT algorithm.
Map contours are in nanoTeslas/metre,
and are multiples of those listed below:

- 0.05 nT/m
- 0.2 nT/m
- 1 nT/m
- 5 nT/m
- 20 nT/m

EM ANOMALIES

EM anomalies selected by computer algorithm
and manually confirmed. Selection is based
on the response correlation to theoretical
sources such as a steeply dipping conductor.
Calculation of conductance is based on the
response of the 4600 Hz coaxial data, and
forms the basis for anomaly classification.
Letter codes are used to identify individual
anomalies on a line, and the inphase amplitude
of the 4600 Hz response is annotated opposite.

- 0 - 1 mhos
- 1 - 2 mhos
- 2 - 4 mhos
- 4 - 8 mhos
- 8 - 16 mhos
- 16 - 32 mhos
- > 32 mhos
- M Magnetite

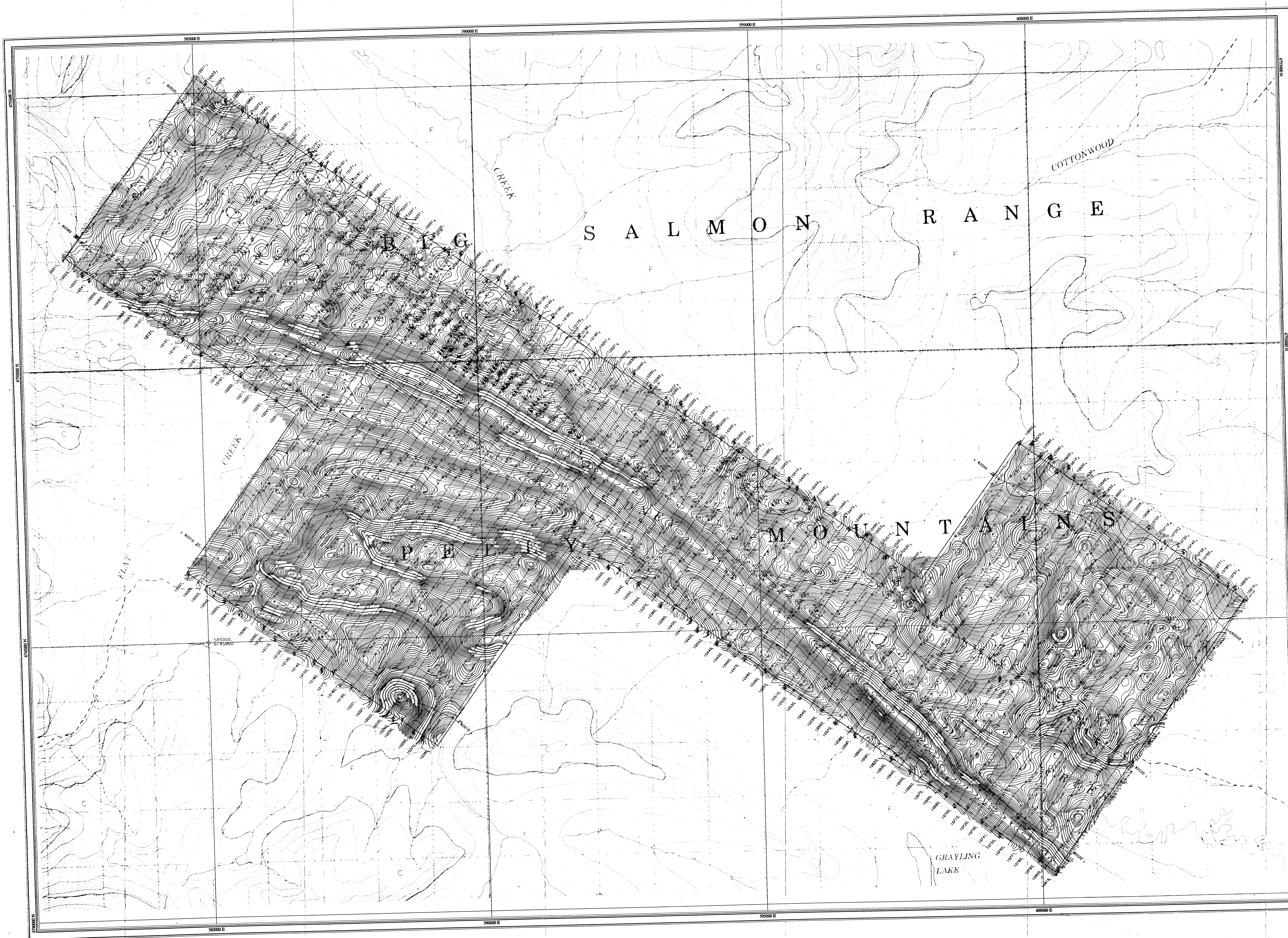


15053 YUKON INC.
VERTICAL MAGNETIC GRADIENT
SIDNEY CREEK VALLEY
Yukon Territory

SCALE 1:20 000



Date Flown: May, 1997
Map Ref: 105C/14
Project Ref: J9744-4



Scale: Grid North
Star: True North
Arrow: Magnetic North
Angles presented are approximate mean
deviations for center of NTS mapsheet
105C/14. Use diagram for reference only.
Grid North - True North: 1° 32' W
True North - Magnetic North: 27° 57' E
Annual change: 0' from 1987.5
Inclination = 77°
Annual change: -13.8' from 1987.5

FLIGHT PATH AND PLANIMETRY

Navigation and flight path recovery was conducted
using a satellite Global Positioning System (GPS)
and has been differentially corrected.

Lines were flown at an altitude of 40-120'
with an average line spacing of 500 m.

Average aircraft terrain clearance of
67 m was monitored by radar altimeter.

Planimetric information was derived
from enlarged 1:50 000 government maps.

Clarke 1886 Ellipsoid.
North American Datum 1987, UTM Projection.
Local Transformation: Canada
(DX = -10m, DY = -150m, DZ = 187m)

TOTAL FIELD MAGNETICS

Total field magnetic intensity contour data,
measured by a caesium high sensitivity
magnetometer at an average sensor elevation
of 52 m, and corrected for diurnal variation.

Map contours are in nanoTeslas,
and are multiples of those listed below:

- 5 nT
- 20 nT
- 100 nT
- 500 nT
- 2000 nT

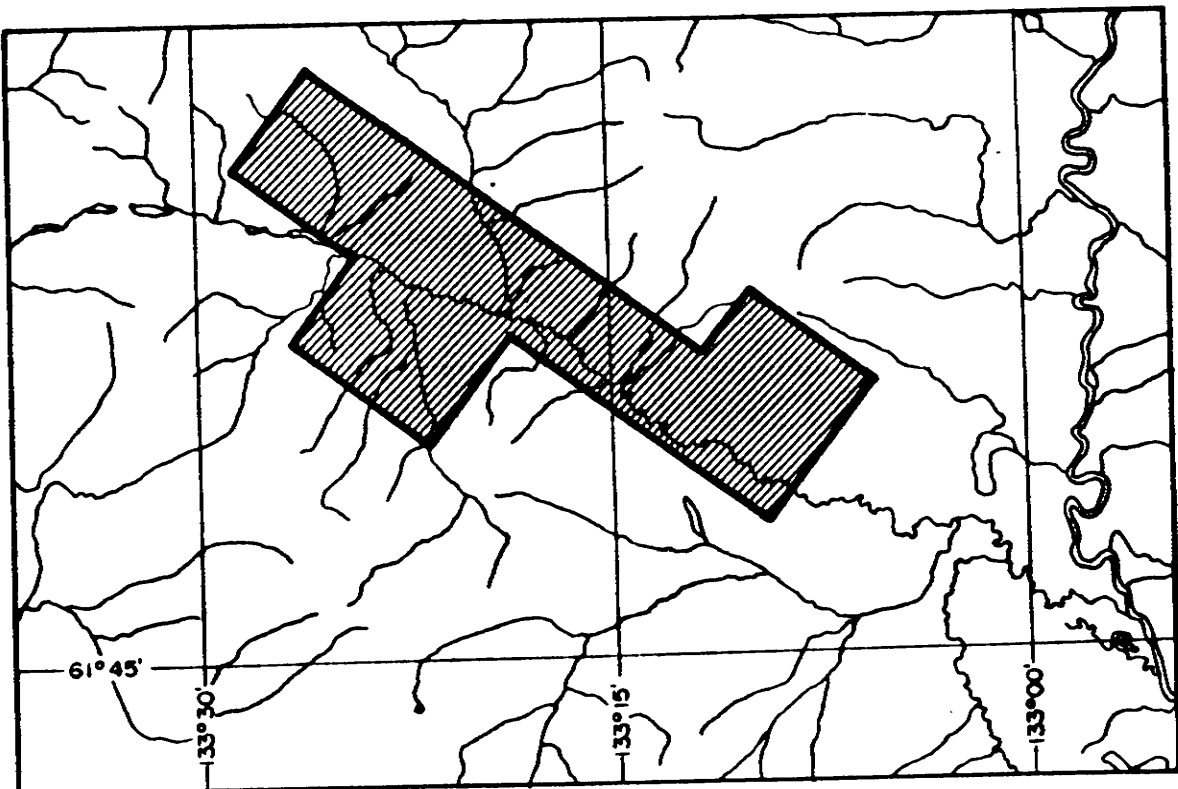
EM ANOMALIES

EM anomalies selected by computer algorithm
and manually confirmed. Selection is based
on the response correlation to theoretical
sources such as a steeply dipping conductor.

Calculation of conductance is based on the
response of the 4000 Hz coastal data, and
forms the basis for anomaly classification.

Letter codes are used to identify individual
anomalies on a line, and the inphase amplitude
of the 4000 Hz response is annotated opposite.

- 0 - 1 mhos
- 1 - 2 mhos
- 2 - 4 mhos
- 4 - 8 mhos
- 8 - 16 mhos
- 16 - 32 mhos
- > 32 mhos
- M Magnetic



15053 YUKON INC.

TOTAL FIELD MAGNETICS

003725 SIDNEY CREEK VALLEY

Yukon Territory

5

SCALE 1:20 000

500 0 200 400 600 800 1000 1200 1400 1600 1800 2000 metres



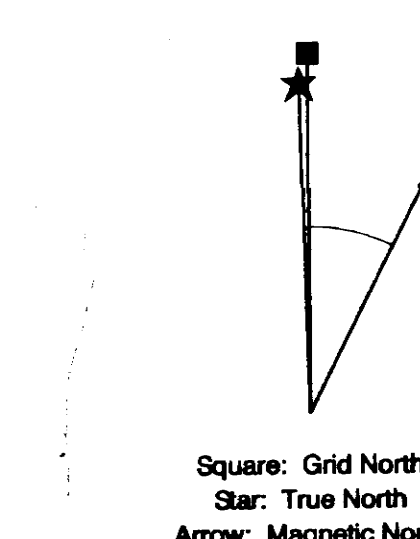
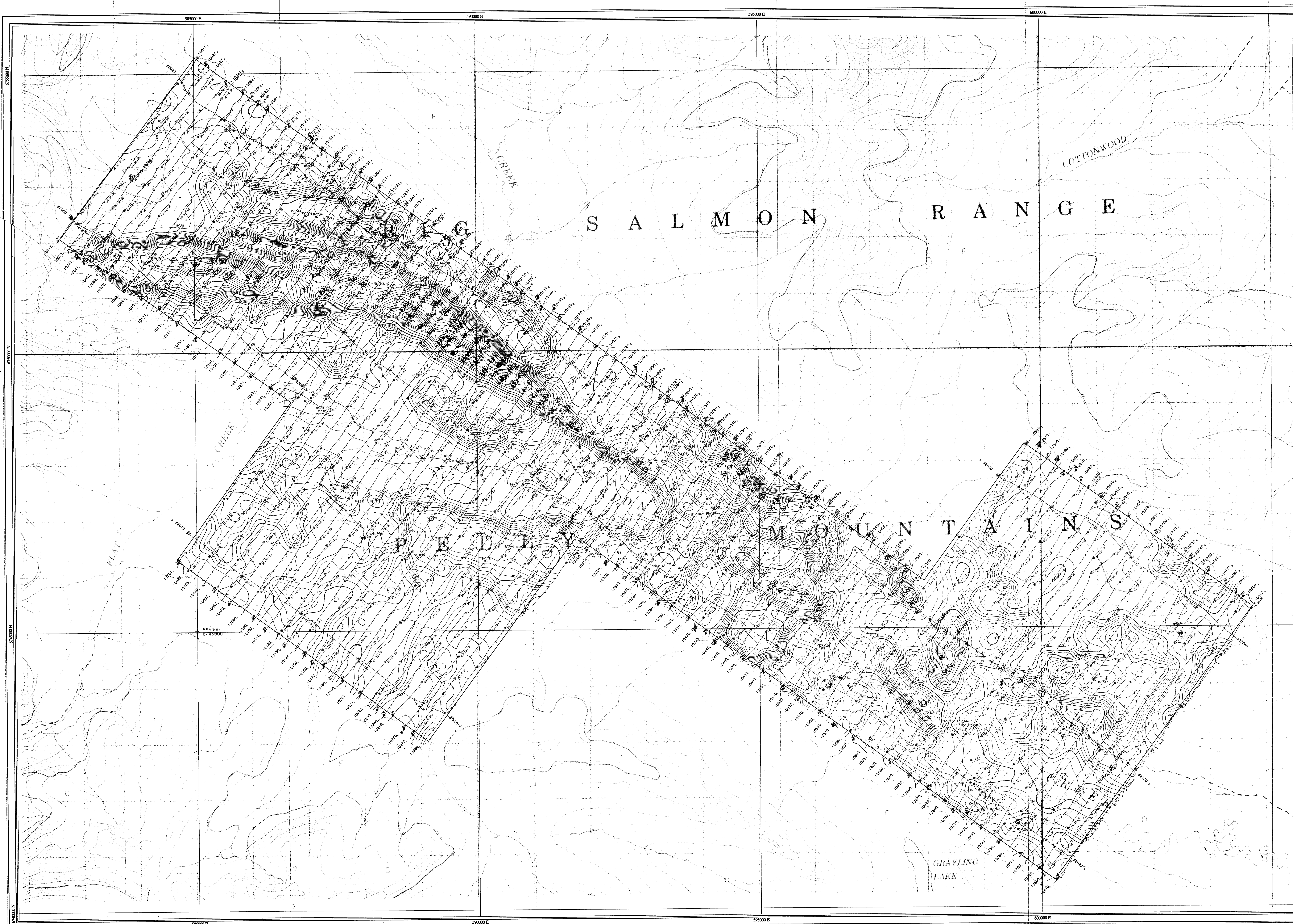
Date Flown: May, 1997

Map Ref: 105C/14

Project Ref: J9744-3

DWG 5

DAVID - YUKON REGION, LIBRARY



Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean
deviations for center of NTS mapsheet
105C/14. Use diagram for reference only.

Grid North - True North: 1° 32' W
True North - Magnetic North: 27° 57' E
Annual change: 5" from 1987.5
Inclination = 77°
Annual change: -13.8" from 1987.5

FLIGHT PATH AND PLANIMETRY

Navigation and flight path recovery was conducted
using a satellite Global Positioning System (GPS)
and has been differentially corrected.

Lines were flown at an azimuth of 45-125°
with an average line spacing of 200 m.

Average aircraft-terrain clearance of
67 m was monitored by radar altimeter.

Planimetric information was derived
from enlarged 1:50 000 government maps.

Clarke 1866 Ellipsoid
North American Datum 1987, UTM Projection.
Local Transformation: Canada
(GX=-10m, DY=126m, DZ=-187m)

APPARENT RESISTIVITY

Apparent resistivity calculated from the
measured 860 Hz coplanar EM response,
assuming a resistive half-space (200 m)
model. Average sensor elevation was 37 m.

Map contours are in ohm-m, at logarithmic
intervals, in multiples of those listed below:

- 0.1 log(ohm-m)
- 0.5 log(ohm-m)
- 2.0 log(ohm-m)

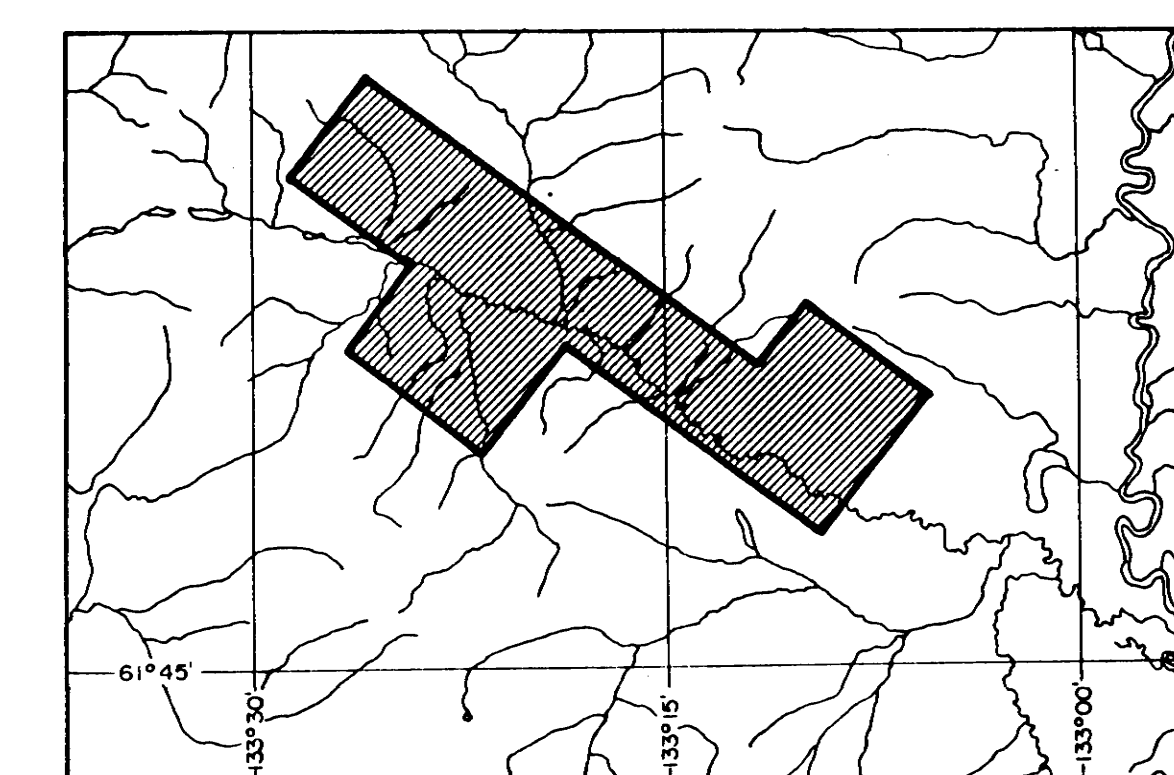
EM ANOMALIES

EM anomalies selected by computer algorithm
and manually confirmed. Selection is based
on the response correlation to theoretical
sources such as a steeply dipping conductor.

Calculation of conductance is based on the
response of the 4600 Hz coaxial data, and
forms the basis for anomaly classification.

Letter codes are used to identify individual
anomalies on a line, and the response amplitude
of the 4600 Hz response is annotated opposite.

- 0 - 1 mhos
- 1 - 2 mhos
- 2 - 4 mhos
- 4 - 8 mhos
- 8 - 16 mhos
- 16 - 32 mhos
- > 32 mhos
- M Magnetite



15053 YUKON INC.

APPARENT RESISTIVITY
860 Hz COPLANAR

SIDNEY CREEK VALLEY
Yukon Territory

6

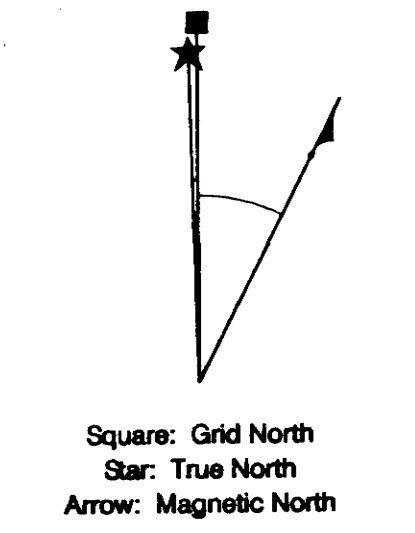
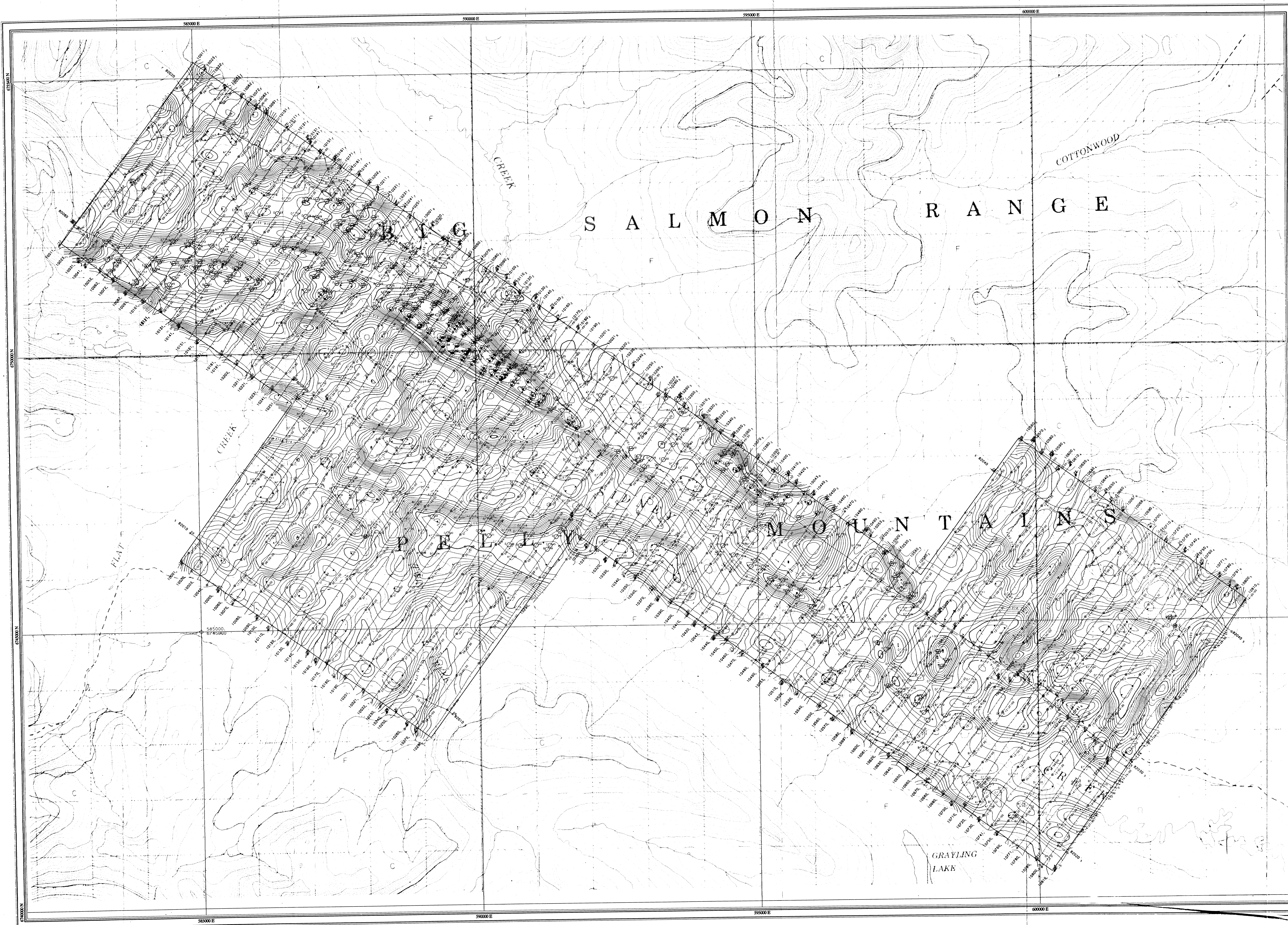
SCALE 1:20 000
50 0 200 300 metres



Date Flown: May, 1997

Map Ref: 105C/14

Project Ref: J8744-SA



Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean
deviations for center of NTS mapsheet
105214. Use diagram for reference only.

Grid North - True North: 1° 32' W
True North - Magnetic North: 27° 57' E
Annual change: 0' from 1987.5

Inclination = 7°
Annual change: -13.6' from 1987.5

FLIGHT PATH AND PLANIMETRY

Navigation and flight path recovery was conducted
using a satellite Global Positioning System (GPS)
and has been differentially corrected.

Lines were flown at an altitude of 45-120'
with an average line spacing of 200 m.

Average aircraft terrain clearance of
67 m was monitored by radar altimeter.

Planimetric information was derived
from enlarged 1:50 000 government maps.

Clarke 1866 Ellipsoid.
North American Datum 1983, UTM Projection.
Local Transformation: Canada
(DX = -10m, DY = 158m, DZ = 187m)

APPARENT RESISTIVITY

Apparent resistivity calculated from the
measured 4175 Hz coplanar EM response,
assuming a resistive half-space (200 m)
model. Average sensor elevation was 37m.

Map contours are in ohm-m, at logarithmic
intervals, in multiples of those listed below:

- 0.1 log(ohm-m)
- 0.5 log(ohm-m)
- 2.0 log(ohm-m)

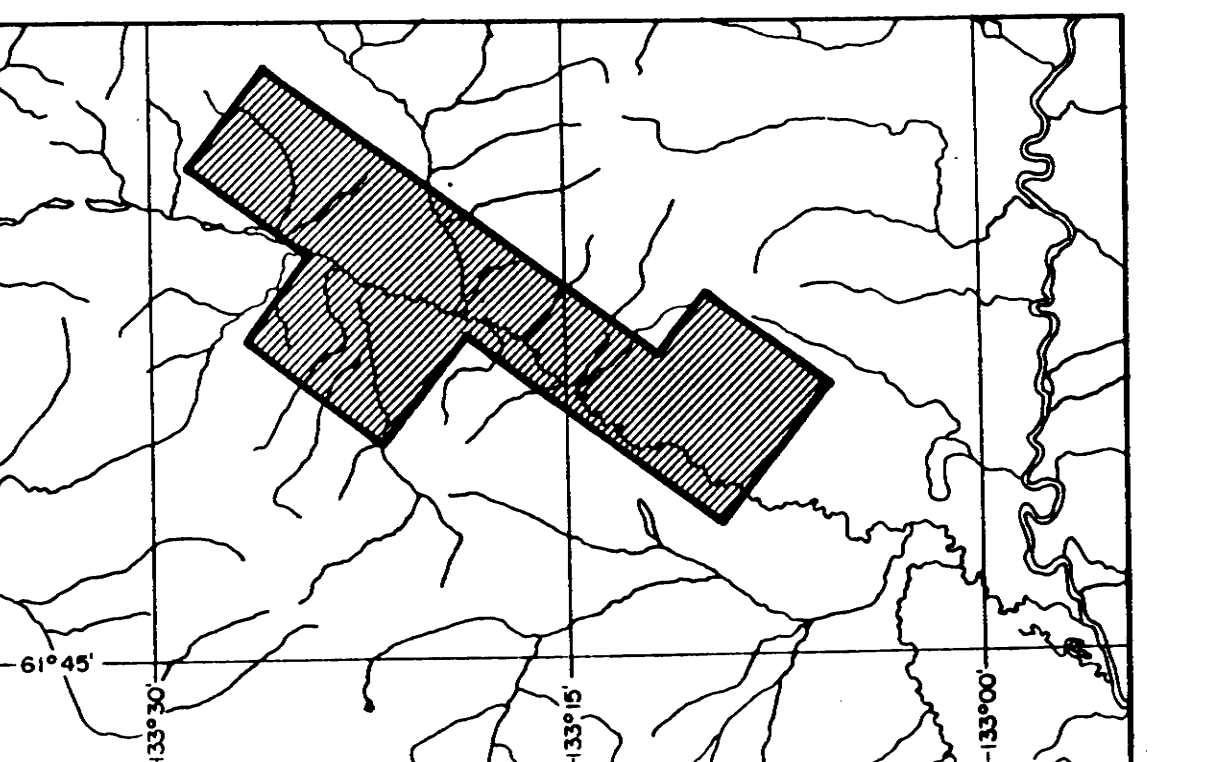
EM ANOMALIES

EM anomalies selected by computer algorithm
and manually confirmed. Selection is based
on the response correlation to theoretical
sources such as a steeply dipping conductor.

Calculation of conductance is based on the
response of the 4600 Hz coaxial data, and
forms the basis for anomaly classification.

Letter codes are used to identify individual
anomalies on a line, and the inphase amplitude
of the 4600 Hz response is annotated opposite.

- 0 - 1 mhos
- 1 - 2 mhos
- 2 - 4 mhos
- 4 - 8 mhos
- 8 - 16 mhos
- 16 - 32 mhos
- > 32 mhos
- M Magnetite



15053 YUKON INC.

APPARENT RESISTIVITY
4175 Hz COPLANAR

SIDNEY CREEK VALLEY
Yukon Territory

SCALE 1:20 000

7

500 0 200 400 600 800 METERS

50° 21' 30" N
137° 00' 00" W

aerodat
AERODAT INC.

Date Flown: May, 1997
Map Ref: 105C/14
Project Ref: J9744-5B