

**2003 DIAMOND DRILLING and GRID WORK**

**on the**

**CANYON GOLD**

**MAVERICK PROSPECT**

**Whitehorse Mining District**

**NTS: 105 K/2**

**Latitude 62° 06', Longitude 132° 58'**

**MAVERICK & CANYON CLAIMS**

**(July 16<sup>th</sup> - Oct. 1<sup>st</sup>, 2003)**

**By: A. Carlos (owner of claims)**

**January 2004**

**File Number 03-051**

YUKON ENERGY, MINES  
& RESOURCES LIBRARY  
P.O. Box 2703  
Whitehorse, Yukon Y1A 2C6

## TABLE OF CONTENTS

	<b>PAGE</b>
<b>INTRODUCTION</b>	<b>1</b>
<b>PROGRAM 2003</b>	<b>1</b>
<b>RECOMMENDATIONS</b>	<b>1</b>
<b>DISCUSSION of DIAMOND DRILLING</b>	<b>1</b>
<b>HISTORY and PROJECT SUMMARY</b>	<b>3</b>
<b>CONCLUSIONS</b>	<b>5</b>

## LIST of FIGURES

- 1. ORTHOPHOTO: 2003 grid work extension & claim posts.**
- 2. ORTHOPHOTO: Maverick grid in total & D.D.H. locations (2003).**

## APPENDICES

- 1. STATEMENT OF QUALIFICATIONS**
- 2. DRILL HOLE CROSS SECTIONS**
- 3. ANALYTICAL RESULTS**
- 4. SUMMARY OF EXPENDITURES**
- 5. DRILL HOLE DESCRIPTIVE LOGS**



## **INTRODUCTION**

History of the Grew Creek deposit area leading to the present is detailed further on in this text. The summer and early fall of 2003 was spent assessing Enzyme Leach Anomaly B, determined during a 2002 soil survey.

## **PROGRAM 2003**

From July 16<sup>th</sup> to Oct. 1<sup>st</sup>, 2003, the following work was performed:

- a) Diamond drilling of 880' in 4 holes ( Canyon 61 ).
- b) Establishing 19.3 km. of additional chainsaw grid.
- c) Augering of 354 soil samples ( Enzyme Leach ).

## **RECOMMENDATIONS**

A host of features, such as alteration, veining, hydrothermal brecciation and the prevalence of pyrobitumen in this years drilling indirectly support the recommendations made last year for the testing of this specific Enzyme Leach anomaly ( B ). To date, negative drill assay results have been difficult to accept, due to prior optimism upon observing the core obtained.

Gregory Hill, of Enzyme Exploration Services, will shortly present his interpretation of this years additional soil sampling. We have been in contact regarding our drilling results – so they will be considered in his recommendations.

Other than for the high costs, I believe that an I.P. survey would be a distinct aid in the determining of further drill locations.

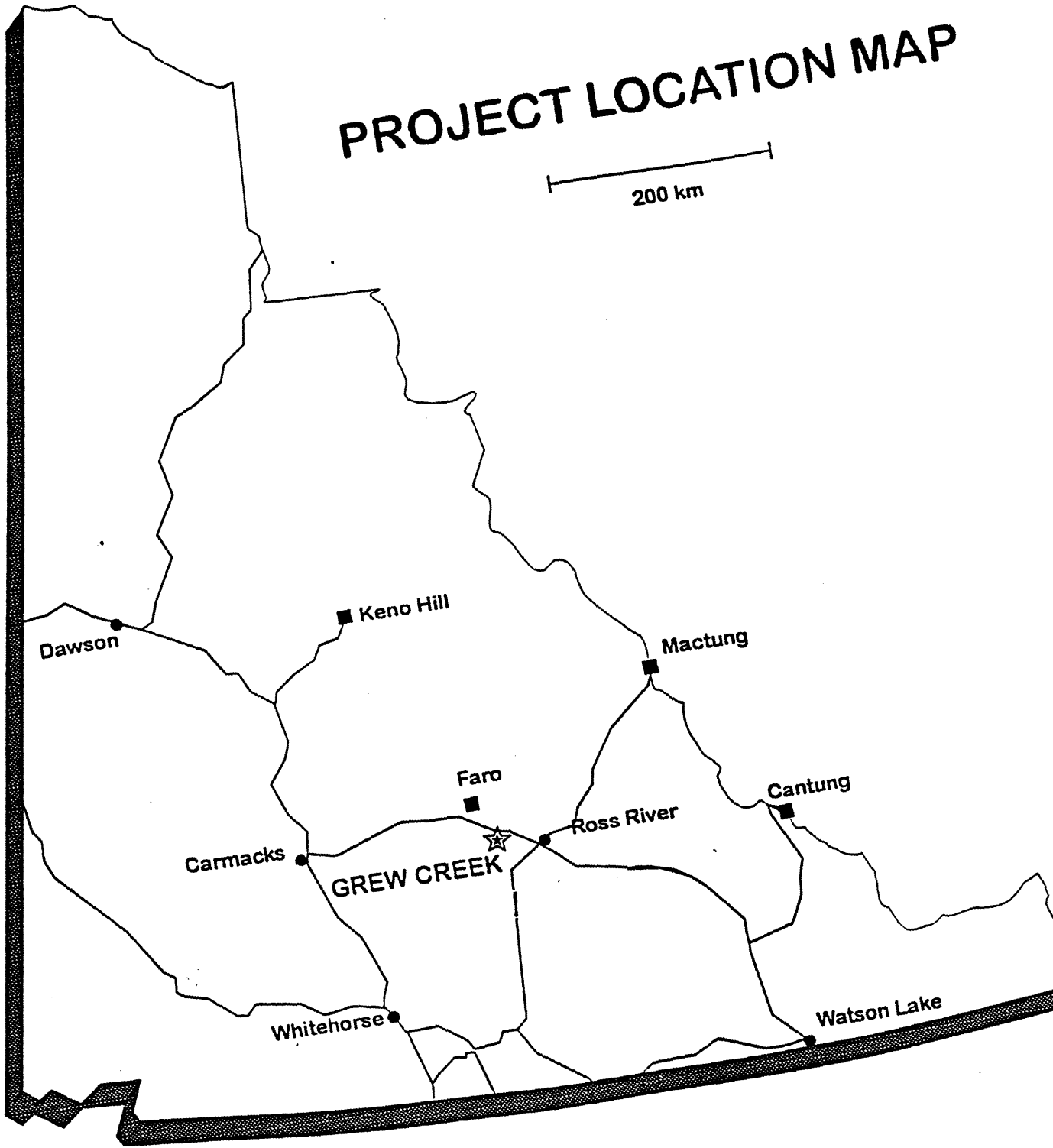
## **DISCUSSION OF DIAMOND DRILLING**

Detail drill log descriptions, cross sections, and assays are in appendix.

Hole MVK 1 was drilled upon recommendation by Gregory Hill, based upon the 2002 Enzyme Leach survey. It was visually encouraging, prompting us to drill 2 more holes from the same location.

# PROJECT LOCATION MAP

200 km



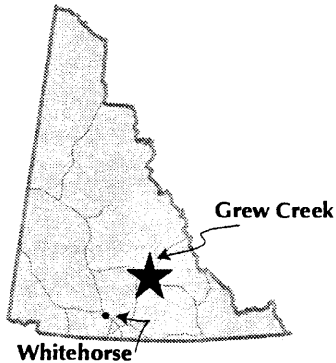
# GREW CREEK PROJECT

Owner: A. Carlos  
Whitehorse, Yukon

Phone (867) 668-6309

## PROJECT STATUS

Available for option



## HISTORY

The original Grew Creek claims were staked by Whitehorse prospector A. Carlos in 1983 and optioned by the Mincan JV (Hudson Bay Mining and Minerals), which carried out an extensive exploration program from 1984 to 1986.

In 1987, the claims were optioned by Noranda, who subsequently signed a joint-venture agreement with Golden Nevada Resources and Brenda Mines. Results of the 1987 program triggered a flurry of claimstaking and exploration activity in the area. A large-scale exploration program continued in 1988. In 1989, Golden Nevada changed its name to Goldnev Resources and renegotiated the joint venture agreement to give it a 100% interest in the property.

In 1992, Wheaton River Minerals took an option to conduct an underground development program, however, the option was dropped shortly after.

YGC Resources Ltd. optioned the property in 1993, and completed a \$150,000 drilling program at Grew Creek in 1995 and a 17 diamond-drill hole program in 1996. YGC terminated its option agreement with Carlos in January, 1997.

## Location

35 km west of Ross River

## Ownership

A. Carlos

## Commodity

Gold, silver

## Ore type

Oxide

## Geological resource (drill-indicated)

773,012 tonnes

Silver: 33 grams/tonne

Gold: 8.9 grams/tonne

## Proposed mining method

Open-pit, 365 days per year

## Processing method

Conventional mill, dore bar, 365 days per year

## Power

3 MW, on-site diesel generation

In 2000, a total of \$36,000 was spent by A. Carlos exploring a new area 1.8 km from the main zone. He returned in 2001 to drill an additional five holes totalling 262 m, and continued to drill six holes totalling 415 m in 2002.

## PROJECT SUMMARY

The Grew Creek deposit can be mined by open-pit methods with a stripping ratio of 9:1, waste to ore. Metallurgical testing by Noranda in 1988 indicated that recoveries of 92% to 94% are possible using simple cyanide processing.

The Grew Creek property is located approximately 35 km west of Ross River and one km from the Robert Campbell Highway and the Whitehorse power grid. The property consists of 192 claims and is owned by A. Carlos of Whitehorse.

## GEOLOGY, MINERALOGY AND ORE RESERVES

The Grew Creek epithermal gold deposit is hosted by Eocene volcanic and sedimentary rocks deposited in a pull-apart basin within the Tintina Fault zone. The gold

occurs in stockwork quartz veins and hydrothermal breccias cutting hydrothermally altered rhyolite.

In the main zone, rhyolitic tuffs are juxtaposed by an east-west fault against a cyclic sequence of fluvial sediments. The faulted contact is partly intruded by a quartz-feldspar porphyry dyke. The pyroclastic rocks, dyke, fault and sediments all dip steeply to the north. The volcanic rocks are hydrothermally altered to illite-quartz and illite-quartz-adularia assemblages, with an outer propylitic halo.

Mineralization consists of pyrite, marcasite, arsenopyrite, chalcopyrite, argentite, electrum, silver selenides, galena and sphalerite. Fluorite is also present in the Tarn zone. Gangue minerals include quartz, adularia, carbonates, and quartz pseudomorphs after calcite. In the main zone, gold and silver occur as micron-size grains in chalcedony stringer stockworks and adjacent silicified tuffs. There is a good correlation between gold and silver, with a gold:silver ratio of about 1:4 for ore-grade mineralization, which occurs in an elongated zone trending west northwest. The mineralization is strongly anomalous in arsenic and mercury, but mercury shows only a weak correlation with gold and silver. Most high mercury values lie along the fault, above the gold-silver zone.

Initial drilling on the main zone gave a best intersection of 11.7 grams/tonne Au and 150.9 grams/tonne Ag across 31.4 m while the best section exposed in a trench assayed 3.6 grams/tonne Au and 15.3 grams/tonne Ag across 13 m. The 1989 drilling focused on the main zone, with the best hole returning 10.5 grams/tonne Au over 13 m.

The Tarn zone, located 2 km to the east, consists of quartz-fluorite-chalcedony stockworks and localized silicification within a 900 x 100 m zone of sericitized rhyolite dykes and tuff. The best assays were 150 ppb Au across 2.0 m in a trench and 520 ppb Au over 1.5 m in a drill hole.

Prospecting in the area is difficult due to a thick cover of glacial till. Plouffe (1989) showed that gold is concentrated in the silt- and clay-size fraction down ice from the Grew Creek deposit, but the common pathfinder elements

Ag, Sb, As and Hg show little correlation with the gold distribution.

In 1991, a trench in the K410 zone, 15 km northwest of the deposit, uncovered intensely iron-stained, highly fractured acid-leached volcanic rocks. Carlos excavated four hand pits to bedrock in 1992 and encountered intensely clay-altered Eocene sediments with hematite-rich bands. Samples from the pits returned anomalous values of mercury and barium, and a heavy mineral concentrate from 45 kg of glacial till in Pit #2 assayed 9,320 ppb Au.

The 1993 diamond drilling intersected strongly altered volcanic rocks beneath a zone of hydrothermal alteration exposed in a surface trench.

The 1994 drilling showed that mineralization in the South Zone consists of an extensive quartz-adularia stringer stockwork of low-grade Au-Ag values. The best intersections were 2.33 grams/tonne Au and 4.1 grams/tonne Ag over 10.4 m. The South Zone mineralization appears to be connected with the Main Zone mineralization, but further drilling between the two zones needs to be carried out to confirm this theory. Drilling in the Main Zone confirmed earlier reported grades. The best intersection was 1.69 grams/tonne Au and 3.0 grams/tonne Ag over 24 m.

In 2000, a total of 450 soil samples were grid-collected over a 2 km area and analyzed by the enzyme leach method. Three new geochemical targets were delineated in a favourable structural area north of the Tarn zone, adjacent to the Robert Campbell Highway.

In 2001, five holes were drilled and a hydrothermal breccia was intersected. Additional drilling was conducted in 2002.

## PRODUCTION PLANS

In 1989, Orcan Mineral Associates estimated geological reserves of 773,012 tonnes grading 8.9 grams/tonne Au and 33.6 grams/tonne Ag at a cut-off grade of 0.2 grams/tonne and containing a higher grade reserve of 184,947 tonnes grading 12.1 grams/tonne Au.

D.D.H. MVK 4, the final hole, was located 100 meters easterly – guided by a subtle 50 gamma magnetic feature which extended to the new site from an intersection obtained in hole 3, sighted from the initial setup. It was drilled vertically to 202 ft. Again – stockwork veining – brecciation – silicification, all intimately associated with pyrobitumen, appeared encouraging.

## **CONCLUSIONS**

As noted earlier – core assays are disappointing for all 4 holes. However, many factors suggest that we are in an extremely interesting area. Further drilling, and certainly geophysics, are warranted.

# APPENDIX 1

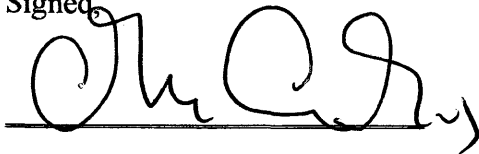
## STATEMENT OF QUALIFICATIONS

### ALLEN M. CARLOS, PROSPECTOR

I, Allen M. Carlos of Whitehorse, Yukon Territory, hereby certify that:

1. I have been actively engaged as a mineral prospector in Western Canada for 35 years, initially for a major company, then as an independent.
2. I studied 3 years at the University of Saskatchewan:  
One year of Engineering followed by 2 years Arts and Science (Geology).
3. I worked one year in northern Saskatchewan as a student assistant for the Department of Mineral Resources.
4. I have for the last 18 years spent much time researching papers regarding Volcanic Hosted Epithermal type deposits.
5. In 1983 I was responsible for discovering the Grew Creek precious metal deposit, the first epithermal deposit of this type along the Tintina Trench in Yukon.
6. I planned and with the aid of my sons, carried out the current program.

Signed

A handwritten signature in black ink, appearing to read 'A. M. Carlos', written over a horizontal line.

Allen M. Carlos, PROSPECTOR

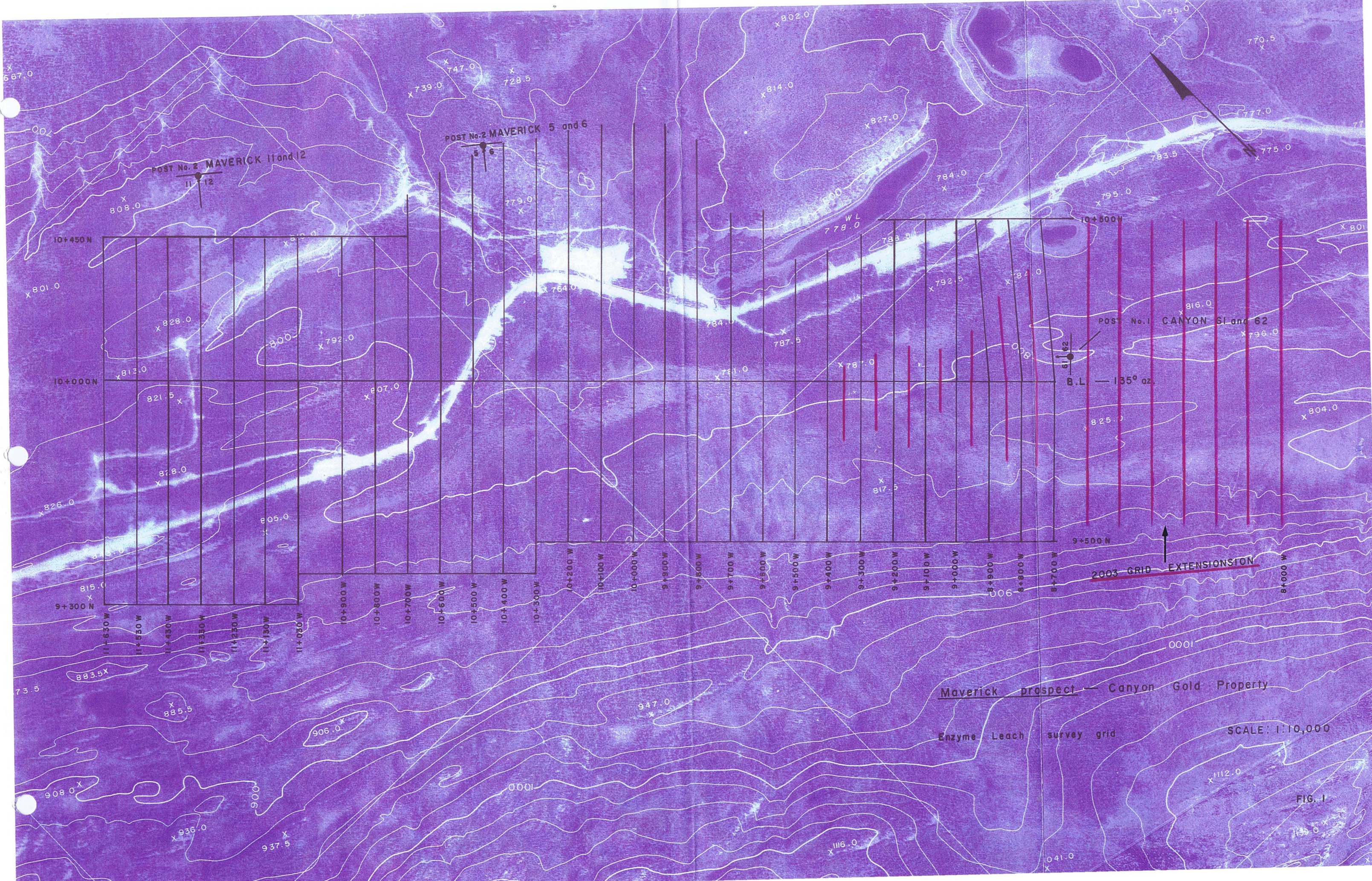
January 21, 2004

**APPENDIX 2**

**DIAMOND DRILL HOLE CROSS SECTIONS**

**2003 PROGRAM**





POST No. 2 MAVERICK 11 and 12

POST No. 2 MAVERICK 5 and 6

POST No. 1 CANYON 61 and 62

B.L. - 135° az.

2003 GRID EXTENSION

Maverick prospect - Canyon Gold Property

Enzyme Leach survey grid

SCALE: 1:10,000

FIG. 1

10+450 N

10+000 N

9+300 N

11+650 W  
11+550 W  
11+450 W  
11+350 W  
11+250 W  
11+150 W

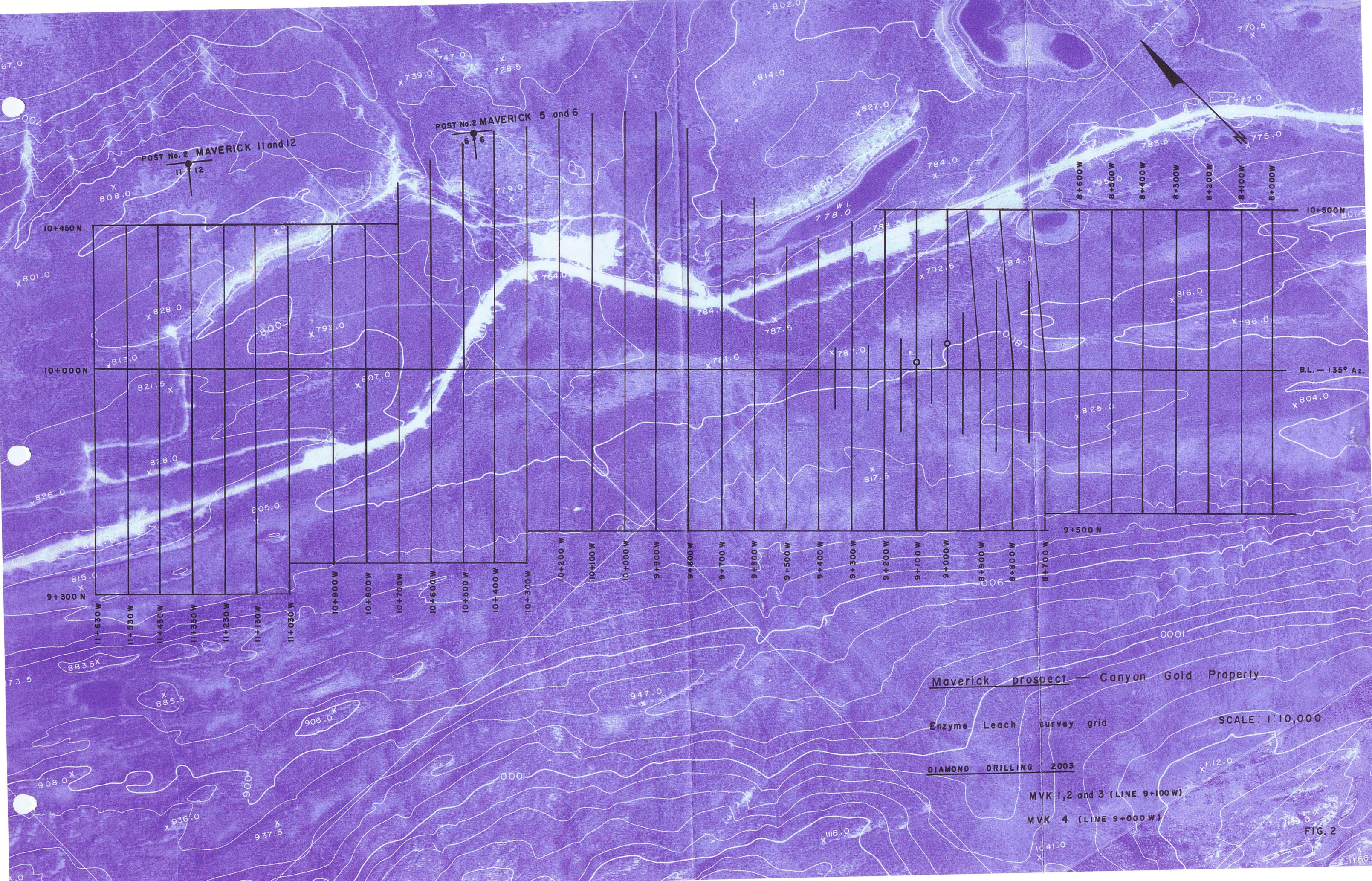
10+900 W  
10+800 W  
10+700 W  
10+600 W  
10+500 W  
10+400 W  
10+300 W  
10+200 W  
10+100 W  
10+000 W  
9+900 W  
9+800 W  
9+700 W  
9+600 W  
9+500 W  
9+400 W  
9+300 W  
9+200 W  
9+100 W  
9+000 W  
8+900 W  
8+800 W  
8+700 W

9+500 N

10+500 N

8+000 W  
8+100 W  
8+200 W  
8+300 W  
8+400 W  
8+500 W  
8+600 W  
8+700 W  
8+800 W  
8+900 W  
8+000 W





POST No. 2 MAVERICK 11 and 12

POST No. 2 MAVERICK 5 and 6

Maverick prospect — Canyon Gold Property

Enzyme Leach survey grid

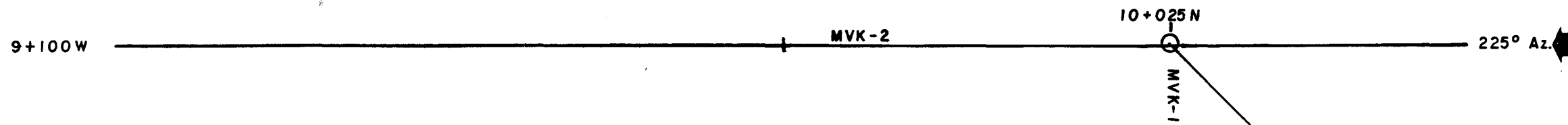
SCALE: 1:10,000

DIAMOND DRILLING 2003

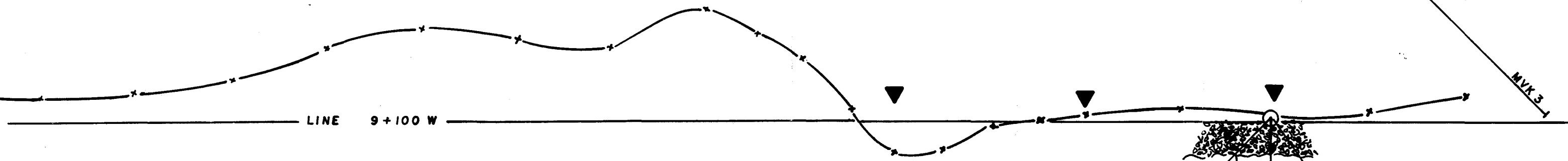
MYK 1, 2 and 3 (LINE 9+100W)  
 MYK 4 (LINE 9+000W)

FIG. 2







PLAN:

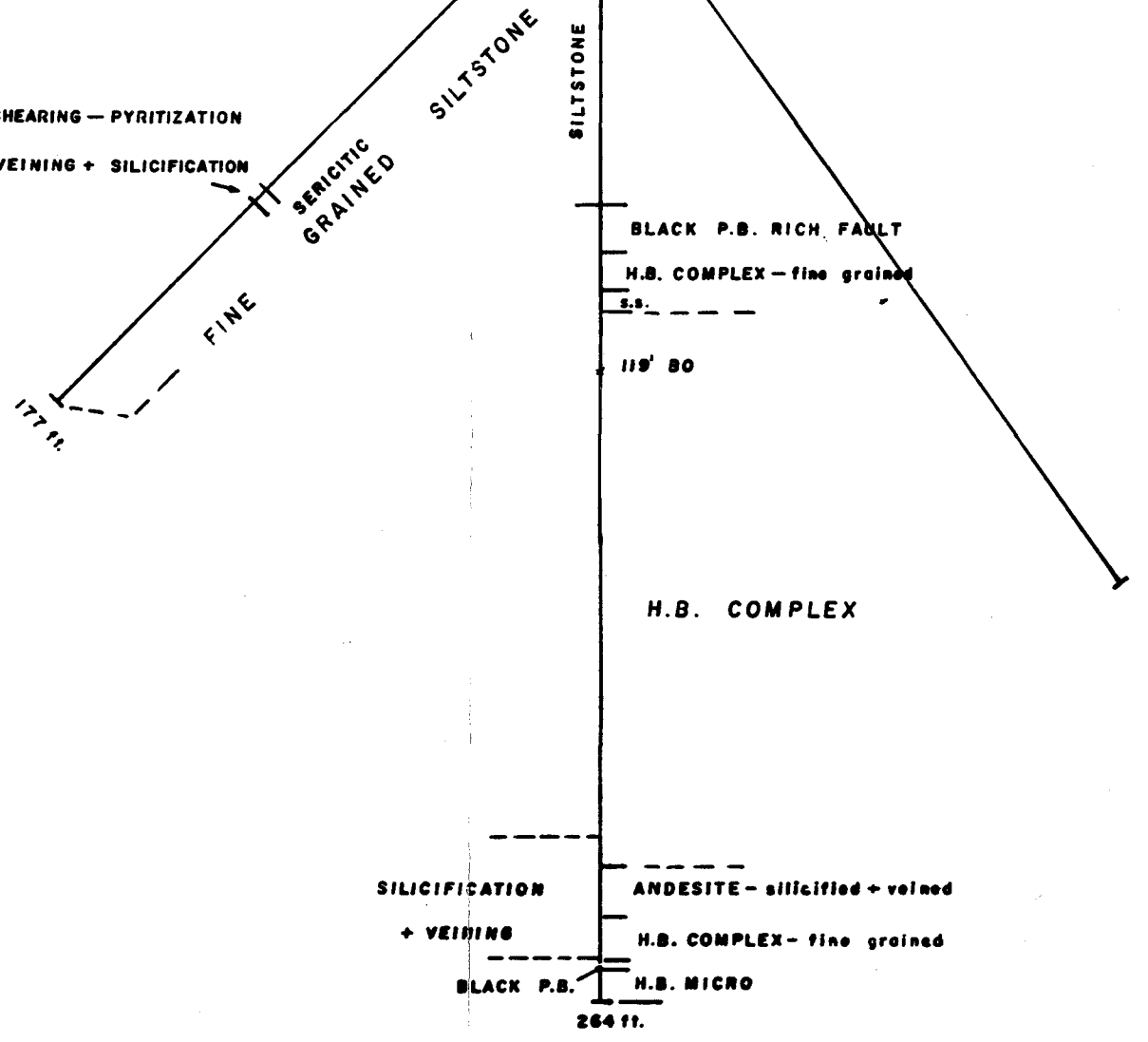


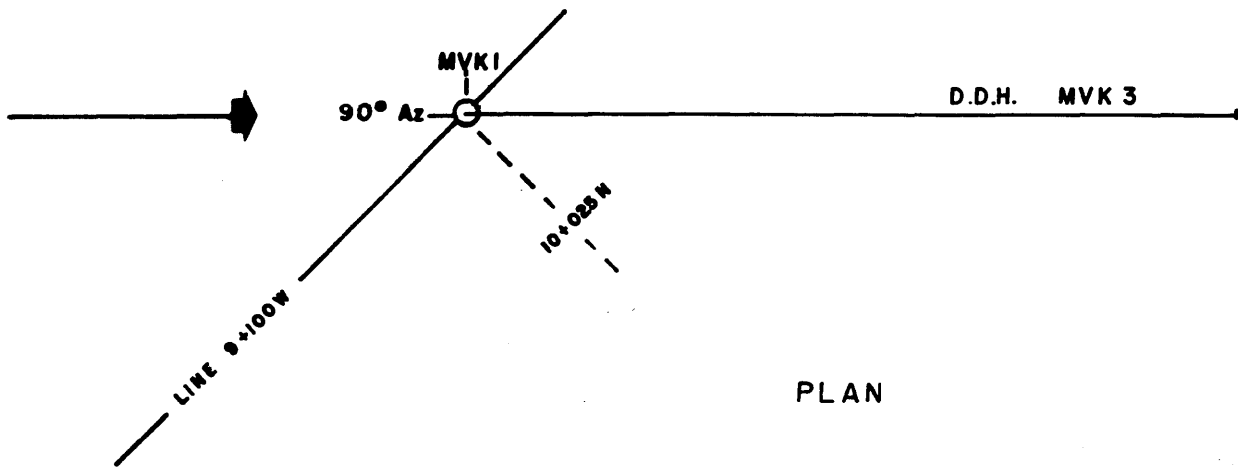
D.D.H. MVK 1,2 and 3 (2003)  
 LOOKING NORTHWEST  
 SCALE: 1:500

**LEGEND:**

-  MAGNETIC PROFILE (1 CM. = 50 GAMMAS)
-  ENZYME LEACH Au ANOMALOUS
- H.B. = HYDROTHERMAL BRECCIA

SHEARING - PYRITIZATION  
 SOME VEINING + SILICIFICATION





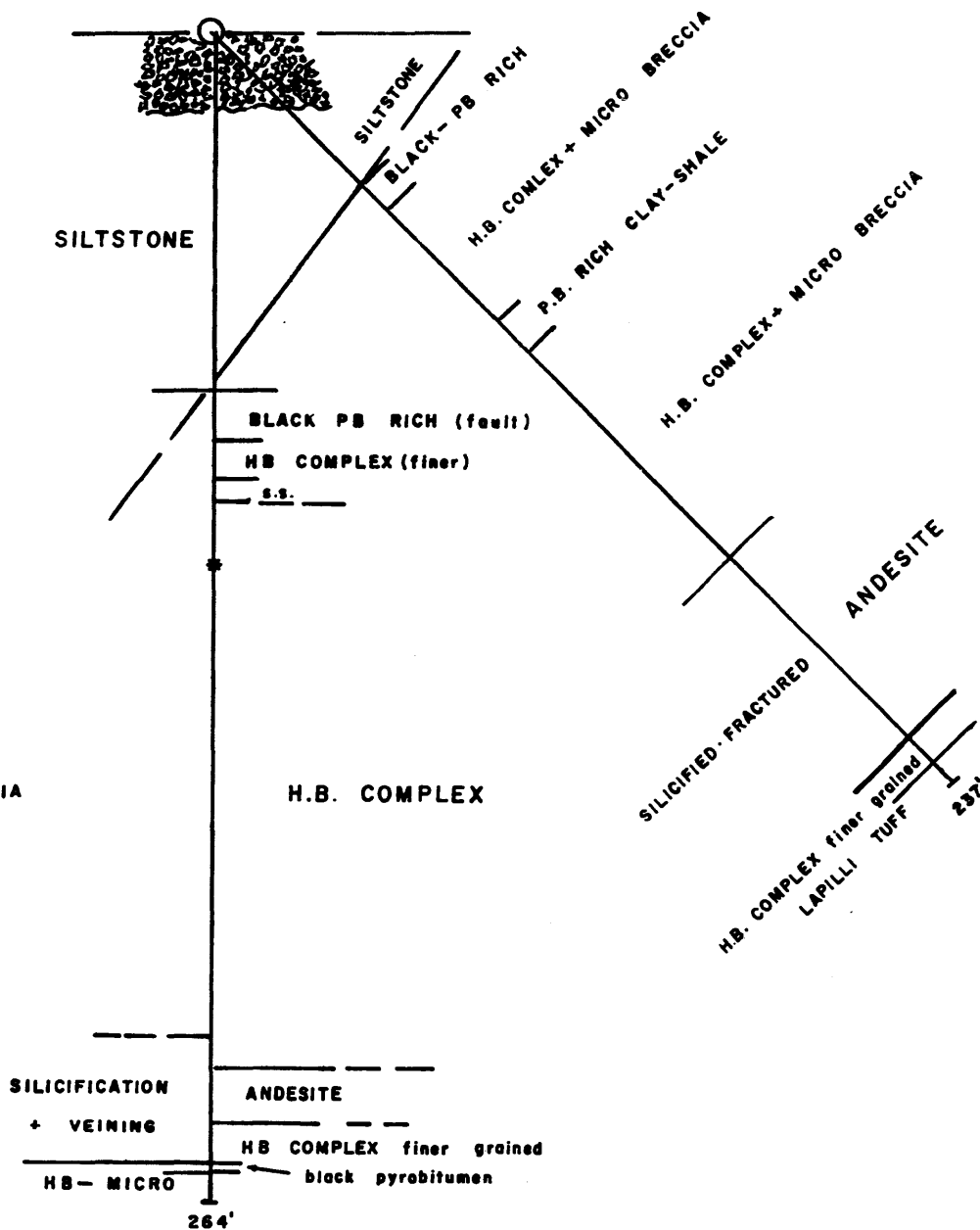
PLAN

D.D.H. MVK 1 and 3 (2003)  
 LOOKING NORTH  
 SCALE: 1:500

**LEGEND:**

H.B. = HYDROTHERMAL BRECCIA

P.B. = PYROBITUMEN



264'

237'

MVK-4

10 + 081.25 N

LINE 9+000 W



H.B. COMPLEX

ANDESITE - SILICIFIED + VEINED

H.B. - MICRO - P.B. RICH

H.B. - MICRO - LESS P.B.

H.B. COMPLEX + MICRO

ANDESITE (SILICIFIED + VEINED)

P.B. RICH AT CONTACTS

LAPILLI TUFF (andesitic)

P.B. RICH

H.B. - MICRO

202'

D.D.H. MVK 4 (2003)

LOOKING NORTHWEST

SCALE: 1:500

LEGEND:

H.B. = HYDROTHERMAL BRECCIA

P.B. = PYROBITUMEN

## **APPENDIX 3**

### **ANALYTICAL RESULTS**



# ALS Chemex

**EXCELLENCE IN ANALYTICAL CHEMISTRY**

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1 Canada

Phone: 604 984 0221 Fax: 604 984 0218

To: **CARLOS, ALLEN**  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

Page # : 1  
Date : 1-Dec-2003  
Account: TFI

## CERTIFICATE VA03049150

Project :

P.O. No:

This report is for 87 DRILL CORE samples submitted to our lab in Vancouver, BC, Canada on 20-Nov-2003.

The following have access to data associated with this certificate:

ALLEN CARLOS

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS
Ag-AA45	Trace Ag - aqua regia/AAS	AAS

To: **CARLOS, ALLEN**  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: \_\_\_\_\_



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1 Canada

Phone: 604 984 0221 Fax: 604 984 0218

To: CARLOS, ALLEN  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

Page #: 2 - A  
Total # of pages : 4 (A)  
Date : 1-Dec-2003  
Account: TFI

## CERTIFICATE OF ANALYSIS VA03049150

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt kg 0.02	Au-AA24 Au ppm 0.005	Ag-AA45 Ag ppm 0.2
053698		0.50	<0.005	<0.2
053699		0.74	<0.005	<0.2
053700		1.72	<0.005	<0.2
053701		1.62	<0.005	<0.2
053702		1.92	<0.005	<0.2
053703		1.60	<0.005	<0.2
053704		2.12	<0.005	<0.2
053705		1.90	<0.005	<0.2
053706		1.74	<0.005	<0.2
053707		1.60	<0.005	<0.2
053708		1.00	<0.005	<0.2
053709		1.50	<0.005	0.3
053710		1.36	<0.005	0.7
053711		2.12	<0.005	0.6
053712		1.80	<0.005	0.3
053713		1.60	0.010	<0.2
053714		1.56	<0.005	<0.2
053715		2.06	<0.005	<0.2
053716		1.74	<0.005	<0.2
053717		1.38	<0.005	0.2
053718		1.64	<0.005	<0.2
053719		1.84	<0.005	<0.2
053720		1.86	<0.005	<0.2
053721		2.24	<0.005	<0.2
053722		1.80	<0.005	<0.2
053723		2.06	<0.005	<0.2
053724		2.04	<0.005	<0.2
053725		1.92	<0.005	<0.2
053726		1.96	<0.005	<0.2
053727		2.56	<0.005	<0.2
053728		1.76	0.019	<0.2
053729		1.84	<0.005	<0.2
053730		1.80	<0.005	<0.2
053731		1.52	<0.005	<0.2
053732		1.26	<0.005	0.2
053733		1.66	<0.005	<0.2
053734		1.68	<0.005	<0.2
053735		1.68	<0.005	<0.2
053736		1.70	<0.005	<0.2
053737		1.64	<0.005	0.3



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue  
North Vancouver BC V7J 2C1 Canada  
Phone: 604 984 0221 Fax: 604 984 0218

To: CARLOS, ALLEN  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

Page #: 3 - A  
Total # of pages: 4 (A)  
Date: 1-Dec-2003  
Account: TFI

**CERTIFICATE OF ANALYSIS**      **VA03049150**

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA24	Ag-AA45
		Recvd Wt kg 0.02	Au ppm 0.005	Ag ppm 0.2
053738		2.14	<0.005	<0.2
053739		1.90	<0.005	<0.2
053740		2.18	<0.005	<0.2
053741		1.68	<0.005	<0.2
053742		2.12	<0.005	<0.2
053743		1.50	<0.005	<0.2
053744		1.86	<0.005	<0.2
053745		1.84	<0.005	<0.2
053746		1.92	<0.005	<0.2
053747		1.72	<0.005	<0.2
053748		1.72	<0.005	<0.2
053749		1.74	<0.005	<0.2
053750		1.74	<0.005	<0.2
053751		2.00	<0.005	<0.2
053767		1.14	<0.005	1.1
053768		2.50	<0.005	1.3
053769		1.60	<0.005	<0.2
053770		1.24	<0.005	0.4
053771		1.70	<0.005	<0.2
053772		1.38	<0.005	<0.2
053773		1.94	<0.005	<0.2
053774		1.30	<0.005	0.4
053775		1.54	<0.005	<0.2
053776		1.46	<0.005	<0.2
053777		1.58	<0.005	<0.2
053778		1.34	<0.005	<0.2
053779		1.58	<0.005	<0.2
053780		1.66	<0.005	<0.2
053781		1.60	<0.005	<0.2
053782		1.62	<0.005	<0.2
053783		1.84	<0.005	<0.2
053784		1.72	<0.005	<0.2
053785		1.70	<0.005	<0.2
053786		1.74	<0.005	<0.2
053787		1.50	<0.005	0.6
053788		1.50	<0.005	<0.2
053789		1.80	<0.005	<0.2
053790		2.14	<0.005	<0.2
053791		1.92	<0.005	<0.2
053792		1.66	<0.005	<0.2





# ALS Chemex

**EXCELLENCE IN ANALYTICAL CHEMISTRY**

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1 Canada

Phone: 604 984 0221 Fax: 604 984 0218

To: CARLOS, ALLEN  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

Page #: 4 - A  
Total # of pages: 4 (A)  
Date: 1-Dec-2003  
Account: TFI

## CERTIFICATE OF ANALYSIS VA03049150

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA24	Ag-AA45
		Recvd Wt kg 0.02	Au ppm 0.005	Ag ppm 0.2
053793		1.74	<0.005	<0.2
053794		2.08	<0.005	<0.2
053796		1.86	<0.005	<0.2
053797		1.80	<0.005	<0.2
053798		1.64	<0.005	0.2
053799		1.62	<0.005	<0.2
053800		1.86	<0.005	0.2



# ALS Chemex

**EXCELLENCE IN ANALYTICAL CHEMISTRY**

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1 Canada

Phone: 604 984 0221 Fax: 604 984 0218

To: CARLOS, ALLEN  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

Page #: 1  
Date: 1-Dec-2003  
Account: TFI

## CERTIFICATE VA03049152

Project :

P.O. No:

This report is for 16 DRILL CORE samples submitted to our lab in Vancouver, BC, Canada on 20-Nov-2003.

The following have access to data associated with this certificate:

ALLEN CARLOS

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um
SCR-21	Screen to -100 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA25D	Ore Grade Au 30g FA AA Dup	AAS
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
Au-SCR21	Au Screen Fire Assay - 100 um	WST-SIM
Au-AA25	Ore Grade Au 30g FA AA finish	AAS

To: CARLOS, ALLEN  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:



# ALS Chemex

**EXCELLENCE IN ANALYTICAL CHEMISTRY**

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1 Canada

Phone: 604 984 0221 Fax: 604 984 0218

To: CARLOS, ALLEN  
275 ALSEK RD  
WHITEHORSE YT Y1A 4T1

Page #: 2 - A  
Total # of pages : 2 (A)  
Date : 1-Dec-2003  
Account: TFI

## CERTIFICATE OF ANALYSIS VA03049152

Sample Description	Method Analyte Units LOR	WEI-21	Au-SCR21	Au-SCR21	Au-SCR21	Au-SCR21	Au-SCR21	Au-SCR21	Au-AA25	Au-AA25D	Ag-AA45
		Recvd Wt kg	Au Total ppm	Au (+) F ppm	Au (-) F ppm	Au (+) m mg	WT. + Fr g	WT. - Fr g	Au ppm	Au ppm	Ag ppm
		0.02	0.05	0.05	0.05	0.001	0.01	0.1	0.01	0.01	0.2
053752		1.84	<0.05	<0.05	<0.05	<0.001	34.53	878.5	<0.01	0.01	<0.2
053753		1.54	<0.05	<0.05	<0.05	<0.001	39.63	914.7	<0.01	<0.01	<0.2
053754		1.86	<0.05	<0.05	<0.05	<0.001	18.05	944.6	<0.01	<0.01	<0.2
053755		1.26	<0.05	<0.05	<0.05	<0.001	35.04	922.3	<0.01	<0.01	<0.2
053756		1.94	<0.05	<0.05	<0.05	<0.001	4.73	956.6	<0.01	<0.01	<0.2
053757		1.94	<0.05	<0.05	<0.05	<0.001	10.23	932.1	<0.01	<0.01	<0.2
053758		2.08	<0.05	<0.05	<0.05	<0.001	3.50	953.7	<0.01	<0.01	<0.2
053759		1.74	<0.05	<0.05	<0.05	<0.001	8.94	852.9	<0.01	<0.01	<0.2
053760		1.88	<0.05	<0.05	<0.05	<0.001	16.43	953.7	<0.01	<0.01	<0.2
053761		1.66	<0.05	<0.05	<0.05	<0.001	6.38	967.8	<0.01	<0.01	<0.2
053762		2.08	<0.05	<0.05	<0.05	<0.001	5.72	937.2	<0.01	<0.01	<0.2
053763		2.14	<0.05	<0.05	<0.05	<0.001	11.62	955.6	<0.01	<0.01	<0.2
053764		1.80	<0.05	<0.05	<0.05	<0.001	21.70	936.6	<0.01	<0.01	<0.2
053765		2.06	<0.05	<0.05	<0.05	<0.001	25.09	946.1	<0.01	<0.01	<0.2
053766		2.58	<0.05	<0.05	<0.05	<0.001	15.43	948.0	<0.01	<0.01	1.4
053795		3.12	<0.05	<0.05	<0.05	<0.001	29.30	870.9	<0.01	<0.01	<0.2

**APPENDIX 4**

**SUMMARY OF FIELD EXPENDITURES**

**2003 PROGRAM**

**MAVERICK & CANYON CLAIMS**

## Summary of Expenditures/Work Performed

### **Diamond Drilling and Grid Costs**

▪ Drill rental (Rated @ 10% of equipment value/month) \$45,000.00 x 2.5 months x 75%	\$ 8,437.50
▪ Drilling fluids & diamond products	\$ 2,971.84
▪ Core boxes	\$ 640.00
▪ Drill supplies other than diamond products	\$ 1,603.70
▪ Fuel	\$ 3,096.00
▪ Truck rental (3 months at \$1,450.00/month x 25%)	\$ 1,087.50
▪ Truck costs: Whitehorse – return & work (4,000 km x.42)	\$ 1,680.00
▪ Living expenses: \$35.00 x 199 man days	\$ 6,965.00
▪ Salaries: (Luke) 62 days x \$150.00	\$ 9,300.00
(Shane) 42 days x \$150.00	\$ 6,300.00
▪ Cutting chainsaw grid & chaining (9.35 km.) 18 man days @ \$275.00 per	\$ 4,950.00
▪ Soil sampling & supplies	\$ 1,763.02
▪ Core assays	\$ 2,274.00
▪ Soil survey analysis	\$11,395.00
▪ Enzyme Leach survey interpretation (estimate)	<u>\$ 4,000.00</u>
 <b>GRAND TOTAL FOR SUMMER 2003</b>	 <b>\$66,463.76</b>

# **APPENDIX 5**

## **DIAMOND DRILL HOLE**

### **DESCRIPTIVE LOGS**

YUKON ENERGY, MINES  
& DEVELOPMENT  
RESEARCH LIBRARY  
Whitehorse, Yukon Y1A 2C6

# DRILL HOLE LOG

MVK-1

## DIP TESTS

Property MAVERICK  
 At ..... Ft. ....  
 Claim No. ....  
 Working Place .....  
 Baseline Footage Q+100W  
 Baseline Offset W+0.25N  
 Date Started .....  
 Date Completed 2003

Hole Number .....  
 Dip Vent.  
 Length 264'  
 Bearing .....  
 Elev. Collar .....  
 Horiz. Trace .....  
 Vert. Trace .....  
 Date Logged .....

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY													
				ppm Au	ppm Ag												
0'	16'	OVERLYN NEW															
16'	80'	<u>FINE GRAINED SILTSTONE</u>															
		<p style="text-align: center;">Notable low color banding (tan to black) - trending along a preferred plane. There is no discernible reason as to what controls this "color banding", although it is a result of the relative concentration of disseminated dark pyrobitumen - or of its subsequent hypogene alteration (oxidation) along preferred planes.</p> <p style="text-align: center;">22'-24 1/2' - Ferritic together with intense white clay alteration.</p> <p style="text-align: center;"><u>Core Axis of Color banding:</u></p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>22' - 46°</td> <td>57' - 25°</td> </tr> <tr> <td>26' - 46°</td> <td>60' - 14°</td> </tr> <tr> <td>35' - 16°</td> <td>73' - 30°</td> </tr> <tr> <td>41' - 15°</td> <td>77' - 40°</td> </tr> <tr> <td>46' - 40°</td> <td>80' - 46°</td> </tr> <tr> <td>51 1/2' - 14°</td> <td></td> </tr> </table>	22' - 46°	57' - 25°	26' - 46°	60' - 14°	35' - 16°	73' - 30°	41' - 15°	77' - 40°	46' - 40°	80' - 46°	51 1/2' - 14°				
22' - 46°	57' - 25°																
26' - 46°	60' - 14°																
35' - 16°	73' - 30°																
41' - 15°	77' - 40°																
46' - 40°	80' - 46°																
51 1/2' - 14°																	
			Return 053767	60' - 8 1/2'	< 5												
					1.1												

Logged by CR Q. N.

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY	
				Pt	Pt
80'	90'	<u>PYROBITUMEN RICH CLAY-SHALE</u>  Black pyrobitumen with a preferred foliation. It has a shaly appearance. FAULT ZONE.		Au	Ag
90'	99'	<u>HYDROTHERMAL BRECCIA (COMPLEX)</u>  A finer grained version of this type breccia. It has a granular texture with a white clay matrix. General larger clasts of altered andesite One noted	U53768	89'-93'	<5 1.3
99'	102 1/2'	<u>FINE GRAINED SILTSTONE</u>  Color banding as noted from 16'-80'. A difference is that banding is much finer. Core axis of color banding: 100' = 65°.  102 1/2' - a concentration of black to gray pyrobitumen with an epigenetic-like contact with breccia.			
102 1/2'	236'	<u>HYDROTHERMAL BRECCIA (COMPLEX)</u>  The greater portion of this section consists of large fragment material - though most sections of a finer lensure core present. In individual clasts core often made up of various brecciation vents, together with variable	U53769 770 771 772 U53773	102 1/2'-107 1/2' 107 1/2'-112 1/2' 112 1/2'-117 1/2' 117 1/2'-124' 124'-129'	<5 " " " " " " " "



FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY		
				PMh	PPw	
		Numbers of altered and silicified andesite clasts. Larger andesite fragments are often internally disrupted by the fine matrix of the complex breccia.	US3774	129-134	<5	0.4
		Degrees of silicification are	775	134-139	"	<0.2
		noticeable, and many examples of a white	776	139-144	"	"
		quartz, in silicified breccia matrices are	777	144-149	"	"
		noted. Sporadic thin, milky white quartz	US3778	149-154	"	"
		veinlets occur thru-out, but a typical Stockwork system is not present.	US3779	154-159	"	"
		Pyrobitumen of black, grey and light	780	159-164	"	"
		brown color persists thru-out - often in the	781	164-169	"	"
		form of concentrated patches. Black PB is	782	169-174	"	"
		often noted in a wispy form. Quartz	783	174-179	"	"
		veinlets are at times bordered by thin	784	179-184	"	"
		veins of black pyrobitumen and/or pyrite.	785	184-189	"	"
			786	189-194	"	"
		154'-156' - Noticeable milky-white quartz	787	194-199	"	"
		healing of breccia	US3788	199-204	"	"
			789	204-209	"	"
		213'-236' - Much higher proportion	790	209-214	"	"
		of breccia and of larger andesite	791	214-219	"	"
		clasts.	792	219-224	"	"
		Silicification is more intense.	793	224-229	"	"
			794	229-235	"	"
			< SCRU53795	235-242	<50	"
236'	242 1/2'	<u>ANNESITE (SILICIFIED &amp; VEINED) 6 1/2 ft.</u>				
		Moderate quartz Stockwork within a				
		greenish and silicified andesite. A hanging				
		matrix of milky-tan and clear Qtz, often make				
		up the veinlets. Occasional blocks of dark				
		to gray pyrobitumen together with widely				
		disseminated black pyrobitumen blocks.				

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY		
				Ppb Au	Ppm Ag	
		242'-242½' - Silicified black pyrobitumen - nature of contact with andesite leaves little doubt that this pyrobitumen was once liquid oil. Magnetic.				
242½'	256'	<u>HYDROTHERMAL BRECCIA (COMPLEX)</u>  A fine fragment version of this type breccia previously noted. Strongly silicified. Dark gray to gray pyrobitumen patches occur locally. Short sections resemble that of Qw. 99', lacking only in the presence of clay. 242½'-245' - intense devitization. 247'-248' - white clay.				
			053796	242½'-248'	<5	<0.2
			053797	248'-256'	"	"
256'	258'	<u>PYROBITUMEN RICH CLAY SHALE</u>  Black - broken up pyrobitumen FAULT ZONE.				
258'	264'	<u>HYDROTHERMAL MICRO BRECCIA (Pb RICH)</u>  Has a sandstone look with a matrix filling of gray and black pyrobitumen. Clay rich - non-siliceous.  E.O.H.				
		<u>MAGNETICS:</u> Short section of silicified, black pyrobitumen at contact between hydrothermal breccia and andesite is magnetic.	053798	256'-264'	<5	0.2

# DRILL HOLE LOG

## DIP TESTS

At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....

Property MAURICIO  
 Claim No. ....  
 Working Place .....  
 Baseline Footage Q+100W  
 Baseline Offset W+0.25N  
 Date Started .....  
 Date Completed 2003

Hole Number MU12.2  
 Dip -45°  
 Length 177'  
 Bearing 225° A<sub>3</sub>  
 Elev. Collar .....  
 Horiz. Trace .....  
 Vert. Trace .....  
 Date Logged .....

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY	
				PPH	PPM
0'	17'	U.B.		Am	Ag
17'	177'	FINE GRAINED SILTSTONE (SERICITIC)			
		Notable low "color banding".			
		Banding varies from no coloration to gray black to lesser tan brown. Color bands vary from thin to several cm. in width.			
		Though core breakage tends to occur along these color planes, there is no discernible reason as to why this is so.			
		"Color banding" is a result of the relative concentration of disseminated dark pyrobitumen, or of its subsequent hydrogen alteration (oxidation) along preserved planes, turning the initial darker pyrobitumen to a tan-brown color.			
		<u>107'-124' -</u>			
		Color banding absent. This section is disrupted by fracture plus white clay alteration. Variable sections not milky white to clear qtz. veins - together with general host silicification - particularly from 108'-113'	U53799	108'-113'	<5
		Fine pyrite disseminated + along fractures			<0.2

Logged by C. M. Conroy

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY	
				PPH Au	PPM Ag
		A+ 112 1/2' - short section of a white mushy clay. E.O.H.			
			053800	113'-118'	< 5      0.2
<u>POLE AXIS OF COLOR BANDING:</u>					
		36' = 0°		105' = 7°	
		48' = 5°		125' = 8°	
		60' = 10°		134' = 15°	
		70' = 0°		140' = 3°	
		81' = 3°		154' = 5°	
		87' = 15°		163' = 10°	
		91' = 25°		177' = 10°	
		99' = 10°			
<u>MAGNETICS:</u>					
NONE					
<u>RESISTANCE:</u>					
Most readings were near 10 <sup>6</sup> Ohms					
Near the end of hole - a competent section of dark brecciated core averaged a 200,000 Ohms.					

# Drill Hole Log

## Dip Tests

At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....  
 At ..... Ft. ....

Property MAVERICK  
 At .....  
 Claim No. ....  
 Working Place .....  
 Baseline Footage 9+100 W  
 Baseline Offset 10+025 W  
 Date Started .....  
 Date Completed 2003

Hole Number M112.3  
 Dip -45°  
 Length 237'  
 Bearing 90° Az.  
 Elev. Collar .....  
 Horiz. Trace .....  
 Vert. Trace .....  
 Date Logged .....

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY
27'	55'	<u>Fine GRAINER SILTSTONE</u>  Dark gray with light to dark color changes across supposed foliation.  <u>Foliation:</u> 20' - 45° CA 32 1/2' - 40° CA 36' - 32° CA 43' - 30° CA 55' - 32° CA  48-55' - very black carbonaceous rock - becoming clay rich low last several feet. A black pyrobitumen - clay rich finest contact.		
55'	91'	<u>HYDROTHERMAL BRECCIA (COMPLEX + MICRO)</u>  Larger fragment complex breccia disrupts the fine grained micro breccia - which has a banded sandstone appearance marked by light to darker color changes. Evidence suggests that this "color foliation" may reflect hydrothermal breccia flow direction.		
END OF HOLE				

Logged by Orin C. Dray

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY		
				PPH	PPM	
		Individual Clasts within the complex breccia even often made up of previous brecciation events, together with variable numbers of altered and veined andesite clasts. Occasionally, larger andesite fragments are disrupted by the finer matrix of the complex breccia - leaving a jigsaw puzzle texture of the andesite.		Au	Ag	
		Spodic stockwork veining occurs thru-out the section - together with variable silicification. Black pyrobitumen is noted as small particles within breccia matrix as well as in larger concentrations, often as veinlike thick wispy material along the foliation directions. Quartz veins are often hindered by thin seams of black pyrobitumen and/or pyrite.				
		Roughly 2/3 of this section is comprised of the larger fragment breccia.				
			053734	55'-60'	<5	40.2
		61' - qtz. with pyrobitumen	735	60-65	"	"
		62 1/2' - fracture 32° CA	736	65-70	"	"
		69' - qtz. fragment with what appears to be visible Au!	053737	70'-75'	"	0.3
		74'-91' - a subtle section of clay alteration permeates the core - drill water return is white in color.	738	75-80	"	<0.2
		81' - quartz veinlet (3mm) @ 31° CA	739	80-85	"	"
		85 1/2' - somewhat more siliceous.	053740	85-91'	"	"
91'	100'	<u>PYROBITUMEN RICH-CLAY SHALE</u>				
		75% of section is black pyrobitumen with a preferred foliation. It has a block appearance, broken up by short sections of breccia - as noted above. Most likely a FAULT ZONE.				

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY		
				PPH	PPM	
				Au	Ag	
			053741	91'-96'	<S	<0.2
166'	166'	<u>HYDROTHERMAL BRECCIA (COMPLEX + MICRO)</u>				
		A <sub>2</sub> Sov 55'-91'. Approx. the same ratio of complex to micro breccia. Again - water return thru this section is milky - white, indicating pervasive clay alteration.				
			053742	100'-105'	"	"
		Color Section: 119' - 67°C A	743	105-110	"	"
		127' - 600°C A	744	110-115	"	"
		137' - 55°C A	745	115-120	"	"
			053746	120'-125'	"	"
			747	125-130	"	"
			748	130-135	"	"
			749	135-140	"	"
		158 1/2' - 166' - Very noticeable greater presence of a light to dark gray pyrobitumen within breccia hostng clay structures.	053750	140-145'	"	"
			751	145-150	"	"
		165 1/2' - Several inclusions (2") of silicified black pyrobitumen banded and cut by two generations of banded quartz.	SCR 752	150-155	<50	"
			SCR 753	155-160	<50	"
			SCR 754	160-166	<50	"
166'	221 1/2'	<u>ANDESITE SILICIFIED &amp; VEINED 55 1/2 ft.</u>				
		Stockwork veinng not as prominent as in the lower andesite unit of D.P.H # 9. However - The section in general appears to have been shattered to a greater degree. Black-gray-brown and light tan pyrobitumen is present thru-out in variable amounts.				

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY		
				PPb Au	PPM Ag	
		<u>170'-176'</u> - Prominent multi-directional and patchy tan-brown veinlets and $\text{Au}$ vein breccias make up the section, culminating in an erratic - general E-W. vein of Tan and milky Qtz. with possible $\text{Au}$ note cut 173 1/2'.	SCR 053755 756 757 758 SCR 053759 760 761	166'-171' 171-176 176-181 181-186 186-191 191-196 196-201	<50 " " " " " "	<0.2 " " " " " "
		<u>176 1/2'-188'</u> - Hematite visible within breccia matrix together with pyrite along fractures. Erratic network of thin tan and glassy Qtz. veinlets. 178' - Unique display of silicified, black pyrrhotite.	762	201-206	"	"
		<u>184 1/2'-187 1/2'</u> - Hematite (Thorp) - pyrite present. 187 1/2 - Rhoev - 600 CA.				
		<u>188'-209'</u> - Core has a block aspect due to pyrrhotite along fractures and disseminated. If present - hematite is not visible. Erratic, thin veinlets - tan colored.	SCR 053763 764 765	206'-211' 211-216 216-221 1/2	" " "	" " "
		200' - Visible $\text{Au}$ ? - Disperse. <u>209'-214'</u> - Erratic section of core of lighter color - due to lesser infiltration of block pyrrhotite - or perhaps subsequent variable alteration.				
		<u>214-221 1/2'</u> - Large blocks of andesite within section core cut by the larger fragment hydrothermal breccia complex.				





# DRILL HOLE LOG

**DIP TESTS**

Property MAVERICK Hole Number MVE. 4  
 At ..... Ft. ..... At ..... Dip Vert.  
 At ..... Ft. ..... Claim No. .... Length 202'  
 At ..... Ft. ..... Working Place ..... Bearing .....  
 At ..... Ft. ..... Baseline Footage G+000W Elev. Collar .....  
 At ..... Ft. ..... Baseline Offset W+081.25 N Horiz. Trace .....  
 At ..... Ft. ..... Date Started ..... Vert. Trace .....  
 Date Completed 2003 Date Logged .....

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY		
				PPG	PPM	
0'	7'	O.B.		Au	Pg	
7'	23 1/2'	<u>HYDROTHERMAL BRECCIA (COMPLEX)</u> Individual clasts core often made up of a previous brecciation event, together with various no's of altered and veined andesite fragments Surface orientation to 211	053698 699 700	7'-12' 12'-18' 10'-23 1/2'	LS " "	LS " "
23 1/2'	64 1/2'	<u>ANDESITE (Silicified &amp; Veined) 41 ft.</u> Typical blockwork veining together with vein breccias make up the section. Two short intervals of the complex H.B. noted above occur from 25'-27 1/2', and from 49'-49 1/2'. Large andesite clasts (silicified & veined) are present together with dark pyrobitumen.	053701 702 703 704 705 706 707 053708	23 1/2'-29 1/2' 29 1/2'-33 1/2' 33 1/2'-39 1/2' 39 1/2'-44 44-49 1/2' 49 1/2'-55 55-60 60-64 1/2'	LS " " " " " " "	LS " " " " " " "
		<u>MAGNETICS:</u> 28'-29 1/2' - strongly magnetic. 29 1/2' - 44' - Intermittently " 49 1/2' - 57' - " "				
		The last 7' of andesite is non-magnetic. Of the 41 ft. of andesite - 28' has a magnetic signature.				

Logged by .....

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY	
				PPH	PPM
01 1/2'	70'	<u>HYDROTHERMAL MICRO BRECCIA (PB rich)</u>		Au	Pg
		Has a sandstone look - peppered with black pyrobitumen - Together with a matrix of silty grey pyrobitumen.			
		60 1/2 - 62' - section of non-silicified, intense black pyrobitumen. The brecciated aspect is not noted.	US3709	61 1/2 - 70'	LS 0.3
70'	87'	<u>HYDROTHERMAL MICRO BRECCIA</u>			
		Has a sandstone look with less pyrobitumen than noted above. There is minor color silicification. Thin, glassy qtz. Stochwork present, but not intense.	US3710	70' - 75'	LS 0.7
		When well noted in other sections - evidence indicates the color silicification may reflect the breccia flow direction.	711	75 - 81	" 0.6
		Observation elsewhere also shows that the more complex breccia noted earlier is a later event - capping the micro breccia.	712	81 - 87	" 0.3
87'	98'	<u>HYDROTHERMAL BRECCIA (COMPLEX + MICRO)</u>			
		Fine grained micro breccia with a dark aspect due to fine black pyrobitumen, has been disrupted by the larger fragment breccia (complex) noted earlier at 7' - 23 1/2'. This section is more silicified than the micro breccia just previous.	US3713	87 - 92 1/2	10 20.2
		Sporadic stochwork veining thru-out.	714	92 1/2 - 98	LS "
		92 1/2' - very nice hundred weight!			

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY		
				PPb	PPm	
0'	164 1/2'	<u>ANDRESITE (Silicified &amp; Sintered)</u> 66 1/2 ft.		Au	Ag	
		Stockwork veining veins in intimacy	OS3715	90'-103'	<5	<0.2
		thru the section. Veinlets + vein breccias to 3 cent or cm. widths. Quartz color ranges from dark brown - light tan - clear - milky. Several instances of black Qtz present.	716	104-109	"	"
		In places note a banding mode of the various colors, together with what appears to be black-silicified pyrobitumen bordered by pyrite seams. In many places small clasts of black PB are dispersed within what appears to be a competent andesite matrix - which at some point had to have been disrupted. At times sulphides are noted. I believe more rare present - but of a fine nature.	717	108-113	"	"
			718	113-118	"	"
			719	118-123	"	"
			720	123-128	"	"
			721	128-133	"	"
			722	133-138	"	"
			723	138-143	"	"
		103' - Quartz phenocryst hosting what appears to be Au.	OS3724	143-148	"	"
		127' - A short section of larger fragment complex breccia involving Andesite.	725	148-153	"	"
		It is made up of quartz and black pyrobitumen to a great degree.	726	153-158	"	"
			OS3727	158-164 1/2	"	"
<u>MAGNETICS:</u>						
Very sporadic and slight until 109 ft. Magnetism was constant and relatively strong to 163'.						
Note: = The more strongly magnetic portions display a dark fracture that has a post-Bligney graphitic feel and conchoidal fracture. Most likely black pyrobitumen.						

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY	
				Pth	PZn
164 1/2'	176'	<u>HIDROTHERMAL BRECCIA (COMPLEX)</u>		Au	Ag
		Individual clasts present were often made up of previous brecciation events - Together with altered andesite. This H.B. is distinct from an earlier H.B. event where a micro breccia was developed. The 1 1/2' section is variably silicified with minor veining and occasional sulphides that can be seen by hand lens.			
		164 1/2' - 166' - Heavy pyrobitumen just post andesite contact - of a gray color - Proceed into a mixture of breccia 053728 with large andesite blocks and fragments. Silicified Together with quartz and pyrobitumen veining.	164 1/2 - 170	19	10.2
		169' - 174' - Roughly equal amounts of breccia material alternating with massive pyrobitumen - mostly of dark to light brown with some quartz. Black pyrobitumen occurs in wispy forms. PB is not that silicified - but appears to carry some sulphides. Andesite clasts are gray in color and resemble a porous type quartz.	170 - 175	15	10.2
		174' - 176' - Initially 1 St. of fragile black pyrobitumen passing into a very PB rich breccia. 053730	175 - 180	15	10.2
176'	195 1/2'	<u>LAPILLI TUFF (ANDESITIC)</u>			
		Tuff is of a dark gray color due to pyrobitumen dispersed thru out. Sulphides were noted by hand lens - suggesting that even finer sulphides may possibly be present in this section. Variably silicified with minor veining.			

FROM	TO	DESCRIPTION	SAMPLE NUMBER	ASSAY	
				Al <sub>2</sub> O <sub>3</sub>	FeO
	Cont.				
		179' - Beginning of a 6" piece of black-fragile pyrobitumen - Interesting in that it is very slightly magnetic.			
		181' - Just before this is a short section of tuff not infiltrated by pyrobitumen. Occurrence also of black-wispy pyrobitumen with numerous pyrite seams.	053731	180'-185'	45 40.2
	Note:	Further checking reveals that the PB rich tuff above is slightly magnetic. This may be a direct reduction of the pyrobitumen or the presence of unrelated magnetite. The magnetic response is relatively less than that from the heated andesite.			
		This pyrobitumen infilling of the tuff together with the related weak magnetic response persists to 184'.			
		189 1/2' - 190 1/2' - zone of shear. Veining + strong silicification to 191 1/2'.			
		At 191' a classic but much banded epithermal veinlet occurs.	053732	185-190	45 0.2
		194-195 1/2' - Mushy material - a dark black pyrobitumen rich clay.	053733	190-195	45 40.2
195'	202'	HYDROTHERMAL MICRO BRECCIA			
		Has a related pseudotachy appearance. Brecciate along silicification @ 50°C. Brown pyrobitumen is present as matrix filling - but patchy in nature. Black pyrobitumen occurs as thin wisps along silicification. Somewhat siliceous - non-magnetic.			
			E.O.H.		

# **Interpretation of Enzyme Leach<sup>SM</sup> Data for the Maverick Prospect**

by: Gregory T. Hill, Enzyme Exploration Services, Inc., an Actlabs Group company

28 March 2003

## **Summary**

A complex geochemical distribution is present within the Maverick Enzyme Leach<sup>SM</sup> soil survey. Three primary target areas are defined as Targets A, B, and C. Interference between electrochemical cells has significantly obscured these anomalies making definition of them more difficult. Nonetheless, these three well-developed robust oxidation anomalies are distinctive among the data set. Drilling is recommended to test the subsurface beneath linear Au trends that are surrounded by zoned halos and nested halos developed among oxidation suite and other elements at Targets A and B. Because of a paucity of Au detections in the Target C area, drill testing of this anomaly is not recommended at this time. However, additional soil sampling should be considered to the northeast of the current soil grid in order to better define the geochemical response in this area.

## **Selective Extraction Patterns**

Enzyme Leach<sup>SM</sup> analyses of *B*-horizon soils reveal trace element patterns related to reduced bodies including mineral deposits in the subsurface. These patterns form in response to active electrochemical cells that are fueled by the subtle oxidation and/or bio-oxidation of buried reduced bodies. As a reduced body sheds electrons toward the surface, a reduced chimney is established vertically above that body. Volatile species involving trace elements are formed at, or released from, the oxidation/reduction interface and these rise vertically along and outside the boundary of the reduced chimney and/or within this reduced column. The path a particular compound takes to the surface depends on the distribution of that compound (or predecessor compounds) in the subsurface, and the geochemistry of the transported compound. When the gasses reach the surface, a portion is trapped in and on mineral grains through adsorption and incorporation into amorphous oxide coatings and other mechanisms, thus forming halo patterns around a central low. In addition, voltage gradients set up at the top of the reduced chimney (i.e. at the surface directly above the reduced body) cause the redistribution of some elements, already present at the surface or in the subsurface above the reduced body, into halos and depletion zones. Some elements also form highs directly above reduced bodies or fault traces. The term oxidation anomaly refers to the combination of these patterns. While some compounds found at the surface are compositionally identical to those found in the subsurface, others cannot necessarily be traced directly back to the subsurface and thus, likely represent components of compounds that have undergone chemical changes during the various stages of formation, transport, and trapping.

*This report shall not be reproduced except in full without the written approval of Enzyme Exploration Services, Inc.*

Oxidation halos are typically asymmetrical, and may require comparison of a number of trace element patterns before they become apparent. Where a strong oxidation cell is present in the subsurface, nested halos often occur, in which one can recognize ring-shaped or elliptical highs of differing dimensions, positioned one within another, in a plot of a single element. Zoning in which different elements form halos of different dimensions is also typical in oxidation halos above mineral deposits. Recognizing nested halo patterns, zoning, and depletion can be of great assistance in vectoring toward the center of an oxidation anomaly. These features are also important in assessing the intensity of the system responsible for the formation of an oxidation anomaly.

Where more than one reduced body is present, oxidation anomalies are frequently combined or partially overlap. Under these circumstances, oxidation patterns related to reduced bodies tend to interfere with one another making recognition of anomalies above individual reduced bodies more difficult. Other difficulties stem from the fact that the oxidation anomalies commonly extend beyond the limits of the surveyed area. Sorting out these patterns requires a careful analysis of the data, a working model of the geochemical system, and experience. Where two or more deposits occur beneath the same soil survey, they will often have significantly different surface signatures. These differences can relate to variability in composition, depth, host rocks, size, or a number of other factors. The key to interpretation of selective extraction data is pattern recognition in conjunction with other available geologic and geophysical information. Thus, the interpretation of selective extraction data is enhanced by comparison with other available project data.

### **Geology and Mineralization**

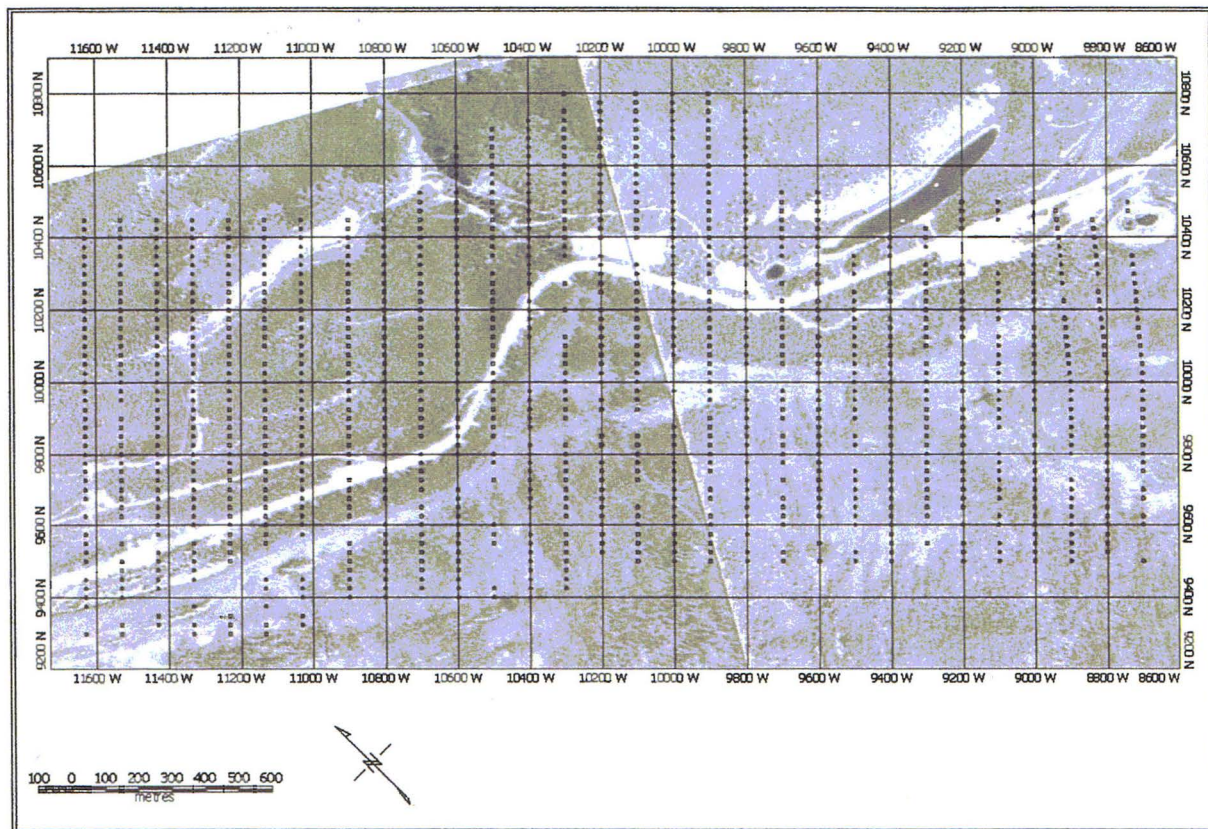
The Maverick prospect is located within the right-lateral Tintina fault zone. Pull apart basins have formed along the fault zone where Eocene sedimentation and volcanism has filled down-dropped blocks. Post-Eocene uplift and erosion has exposed Eocene rocks within some grabens. The south bounding fault of one such graben, the Canyon graben, occurs along the southwestern margin of the survey. Seven kilometers to the east, a 200,000 oz. Au deposit occurs immediately north of this fault which juxtaposes Permian cherts and Eocene volcanics. North-trending extensional faults are considered important within the area of known mineralization. Glacial overburden and recent alluvial cover conceal bedrock throughout the survey area.

Aerial photographs and geophysical data have been provided to the author for comparison purposes. A number of the geophysical features correspond with geochemical features, many of which are interpreted to represent faults or lithologic contacts. However, a comprehensive comparison between the geophysical and geochemical data sets was not undertaken as it is beyond the scope of this report.



## Design of Soil Survey, Sample Collection, and Analysis

B-horizon soils were collected from 1170 sites along 30 northeast-trending sample traverses designed and sampled by A. Carlos. The author has not visited the field area. Samples were collected at 25 m spacings along traverses separated by 100 m (Figure 1). Several gaps occur in the sample traverses because of surface disturbance or the presence of stream beds or permafrost conditions which exist intermittently within the project area. Samples were shipped to Activation Laboratories Ltd. in November 2002 and analyzed by Enzyme Leach<sup>SM</sup>. Data were reported in February 2003, data report number 26417rpt.



**Figure 1. Sample location map overlaid on aerial photographs. The northeast trending linear is a seam between two aerial photographs.**

The Cl and As distributions show clear evidence of analytical variation in the form of batch effects in which the values within adjacent sample blocks are shifted relative to each other. The problem is most pronounced with Cl; with As only one batch appears to have problems with background values shifted to lower values than the remainder of the data. No significant analytical problems were encountered within the remainder of the data set. Ratios of Cl/Mn and Cl/I are utilized in this interpretation because they provide key information. For better resolution, the Cl values used to calculate these ratios were leveled, prior to calculating these parameters. The leveled Cl values were calculated by defining contiguous blocks of data, calculating simple statistics for each of these blocks, and applying normalizing factors to each

block so that background and anomalous values are similar for each block. The leveled Cl and Cl/Mn and Cl/I values are included within the Geosoft database included with this report.

### **Data Treatment and Presentation**

Geosoft Oasis Montaj v. 5.1.4 software was used to process and display the geochemical data. The plots contained herein utilize a color image map based on Kriged data using a 15 m by 15 m cell spacing. Linear distributions were used when making these maps because various transforming methods, such as log transforms, conceals important features in the data and that non-transformed data yield plots with the most distinctive diagnostic geochemical patterns. It is important to recognize that different data treatments and plotting protocols can and often do have significant impacts on the resulting maps. Because of this, several different views or treatments of data are applied to the distributions of some elements. However, providing multiple maps for each element is impractical and unnecessary, so in most cases, only one map per element is included with this report. Nonetheless, the recognition of many of the patterns discussed here has benefited from multiple views of the data. The Geosoft workspace used for this interpretation, along with an installation CD containing a free Geosoft viewer, is included with this report so the reader can manipulate the plots of any element.

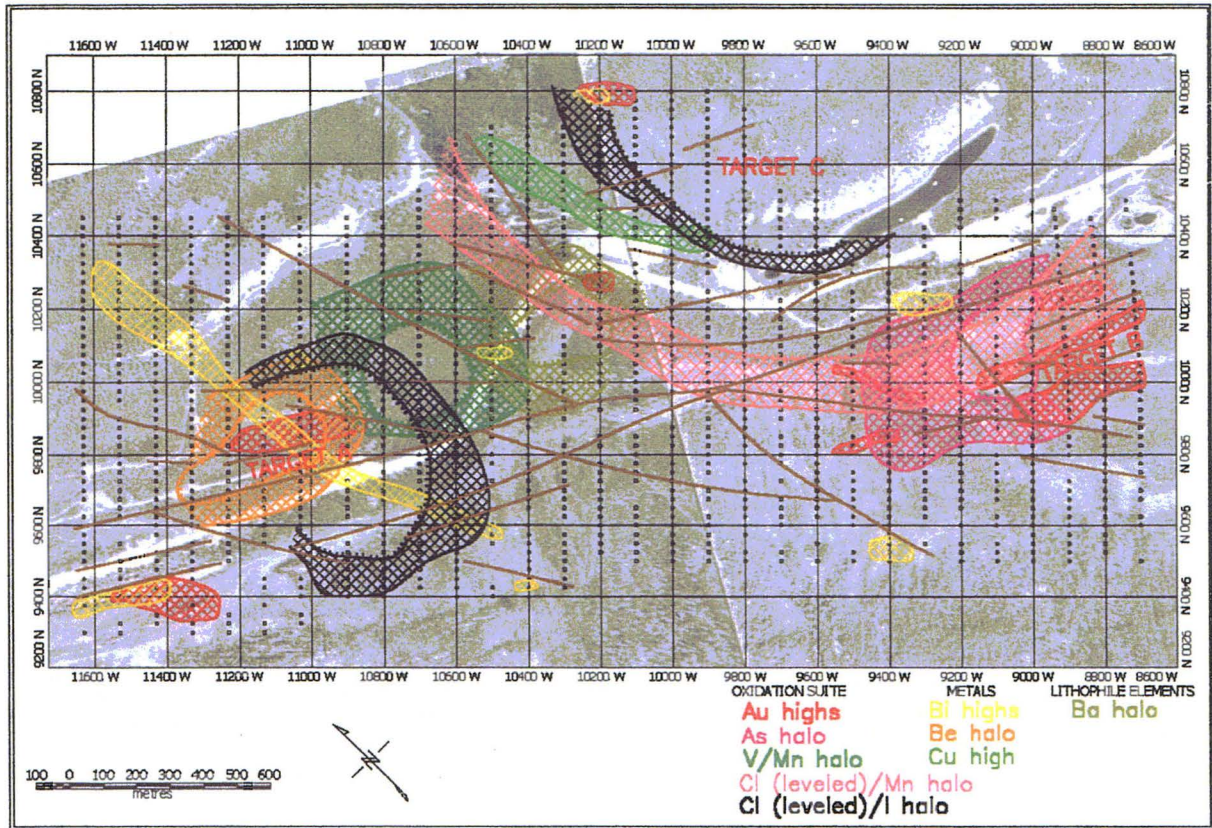
### **Interpretation**

The distribution of elements is complex and reflects the presence of several overlapping and zoned oxidation halos. Interference between the electrochemical cells responsible for the formation of these anomalies, significantly obscures them. In addition, variations in background are also present, which also make recognition of the oxidation anomalies difficult. The background variations are related to differences in surficial materials in some parts of the survey. Thus, interference between adjacent electrochemical cells and background variations must be taken into account when interpreting these data.

Three primary target areas have been defined as Targets A, B, and C (Figure 2). These are large areas defined primarily by oxidation suite element distributions. In addition to these broad target areas, at least one additional, but much smaller target area is also present in the northwestern corner of the survey. This area could be considered part of Target A because it occurs within the oxidation anomaly associated with that feature. Specific drill hole targeting, including this area, is presented at the conclusion of this report.

The Target A anomaly encompasses much of the northwestern half of the survey. Several oxidation suite elements form nested halos centered on a distinctive northwest-trending Au high where it intersects a north-northwest-trending Bi high. While many elements are distributed into distinctive halo or nested halo patterns here, Be forms the most distinctive halo around this Au zone. Other parameters such as V/Mn and Ba form distinctive halos centered progressively farther to the southeast, roughly along strike of the Au high. Thus, Target A could be considered





**Figure 2. Anomaly summary and structural interpretation overlaid on aerial photographs. Examples of interpreted halo outlines are shown along with Au, Bi, and Cu highs. Targets A, B, and C are defined in the northwest, southeast, and east, respectively.**

to extend to about the center of the grid where it intersects an I halo which may indicate a buried intrusion. The composition of the Target A anomaly changes considerably along this southeastern trend likely indicating an evolution of the hydrothermal fluids associated with a predicted buried mineralized system.

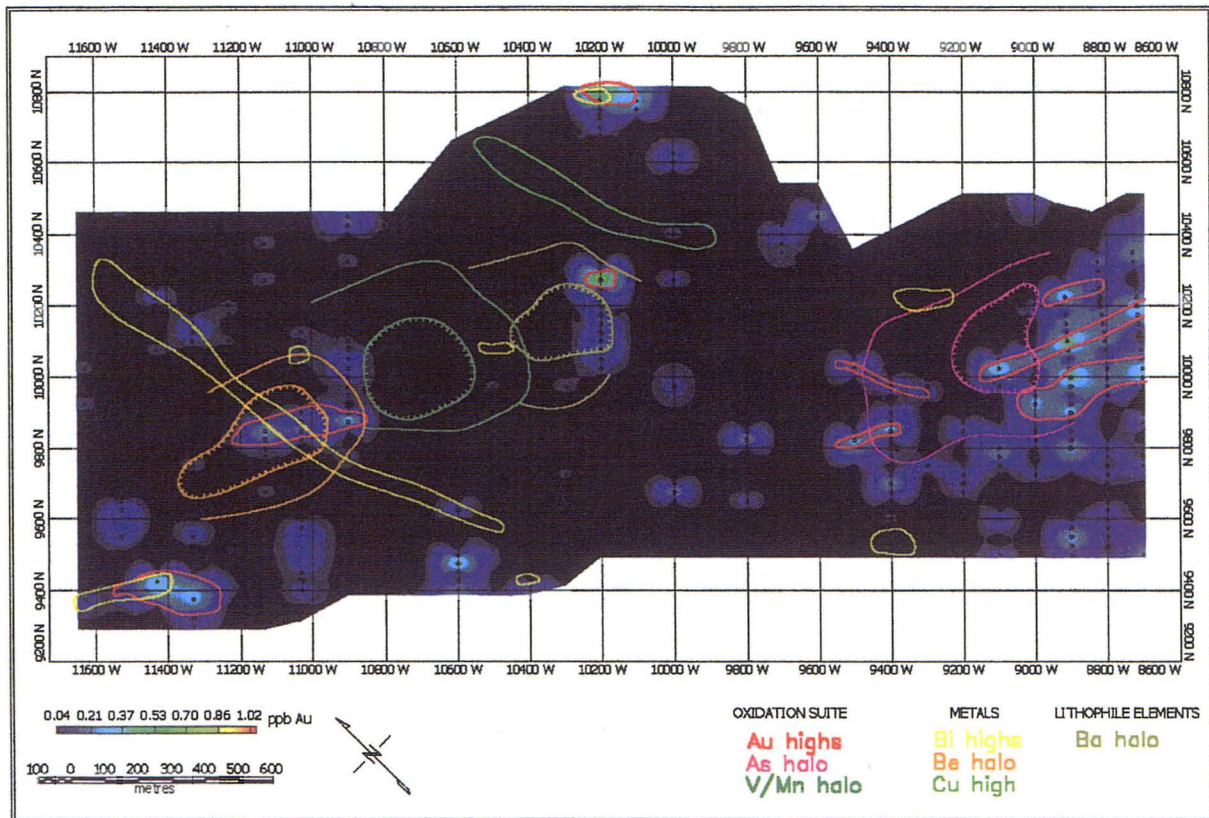
The Target B anomaly has a very different signature from Target A and occurs in a cloud of Au enrichment which envelopes several west-northwest and northwest-trending Au highs. Halo or nested halo patterns are formed by several oxidation suite elements although these are significantly obscured by interference from other geochemical features including the Target C oxidation anomaly and variations in background values related to differences in soil types.

Target C is centered in the northeastern portion of the survey and also has a unique geochemical signature. Arcing highs in several oxidation suite elements indicate the presence of nested halos. At least half of this anomaly appears to lie beyond the northeastern margin of the grid. This oxidation anomaly extends well into the survey and interferes with and is interfered by the Target A and B anomalies. In addition, this anomaly is significantly masked by the presence of high-background soil samples within the broad north-trending drainage that drains the survey area.



## Oxidation Suite Elements

Gold is distributed into west-northwest and northwest-trending highs reaching values up to about 0.7 ppb Au in the northwestern and southeastern portions of the soil survey (Figure 3). Several other Au responses are also present, occurring in less well-defined zones and spot anomalies including the highest Au value of 1.16 ppb near the center of the survey. Most of the well-defined Au high trends and many of the spotty gold responses occur within the oxidation anomalies or are associated with other important geochemical features such as the north-northwest-trending Bi high.

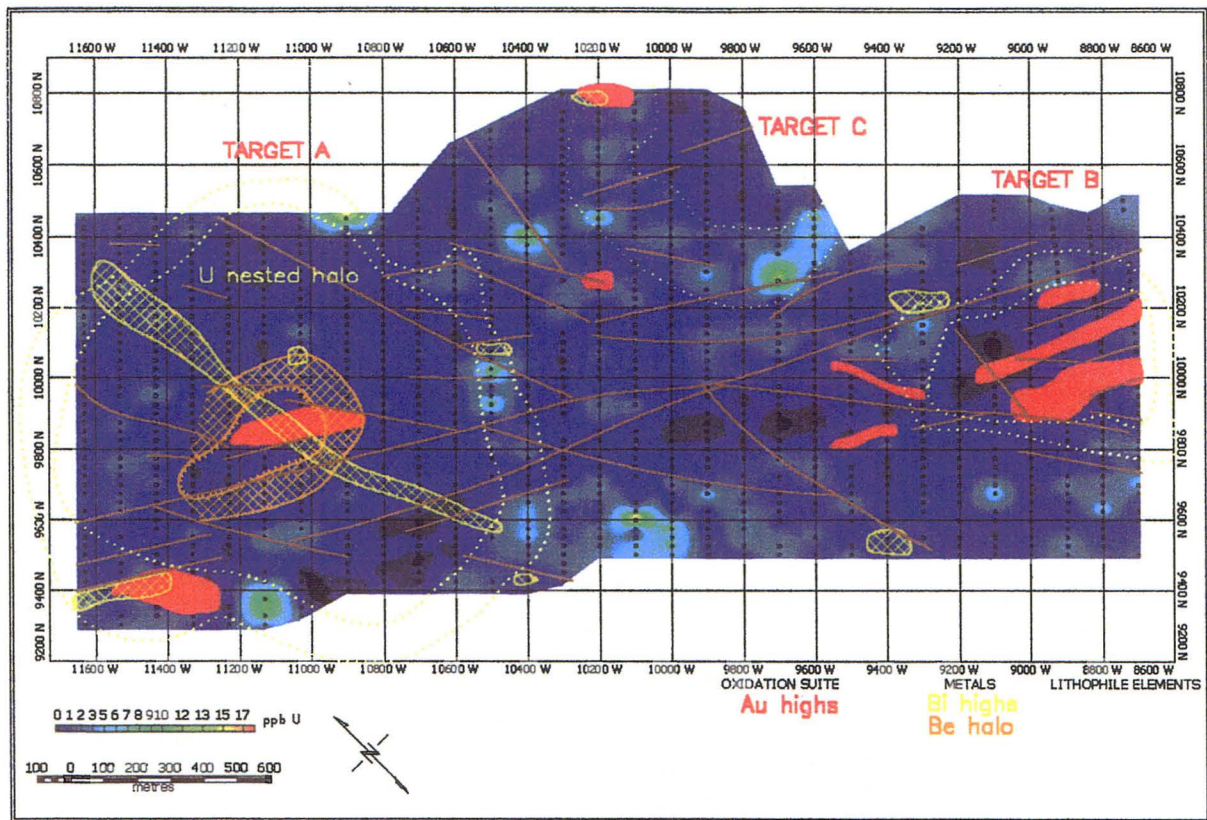


**Figure 3. Gold distribution overlaid by examples of interpreted halos and linear highs.**

Uranium forms some of the most distinctive halos at Targets A, B, and C (Figure 4). Nested U halos are particularly recognizable at Target A where a much smaller diameter inner halo surrounds the northwest-trending Au high and is surrounded by a much more distal U halo that extends to near the northern, northeastern, and northwestern margins of the soil survey. As illustrated by the example of the Be halo, Target A is clearly zoned with respect to many elements. In the case of U, the proximal halo occurs outboard of smaller-diameter halos developed in several elements including Be. The U patterns at Targets B and C are also indicative of oxidation cells but those patterns are somewhat less continuous and less well defined. Thorium is also distributed into a distinctive nested halo at Target A and less definitive



halo patterns at Target B. The Target A Th central low is centered directly on the northwest-trending Au high and extends at least 300 m to the southeast of that feature indicating that buried Au mineralization may extend significantly to the southeast of the Au high at the center of Target A. Th is also significantly enriched around the Au responses at Target B. In addition, the Th distribution provides strong evidence of structural features. One example is the north-trending Th gradient that truncates the northwestern ends of the strongest Target B Au highs. This gradient is interpreted to represent a fault that truncates mineralized zones in the subsurface.



**Figure 4. Uranium distribution overlaid by Be and U halos and Au and Bi highs and structural interpretation. Uranium halos and nested halos indicated by dotted outlines.**

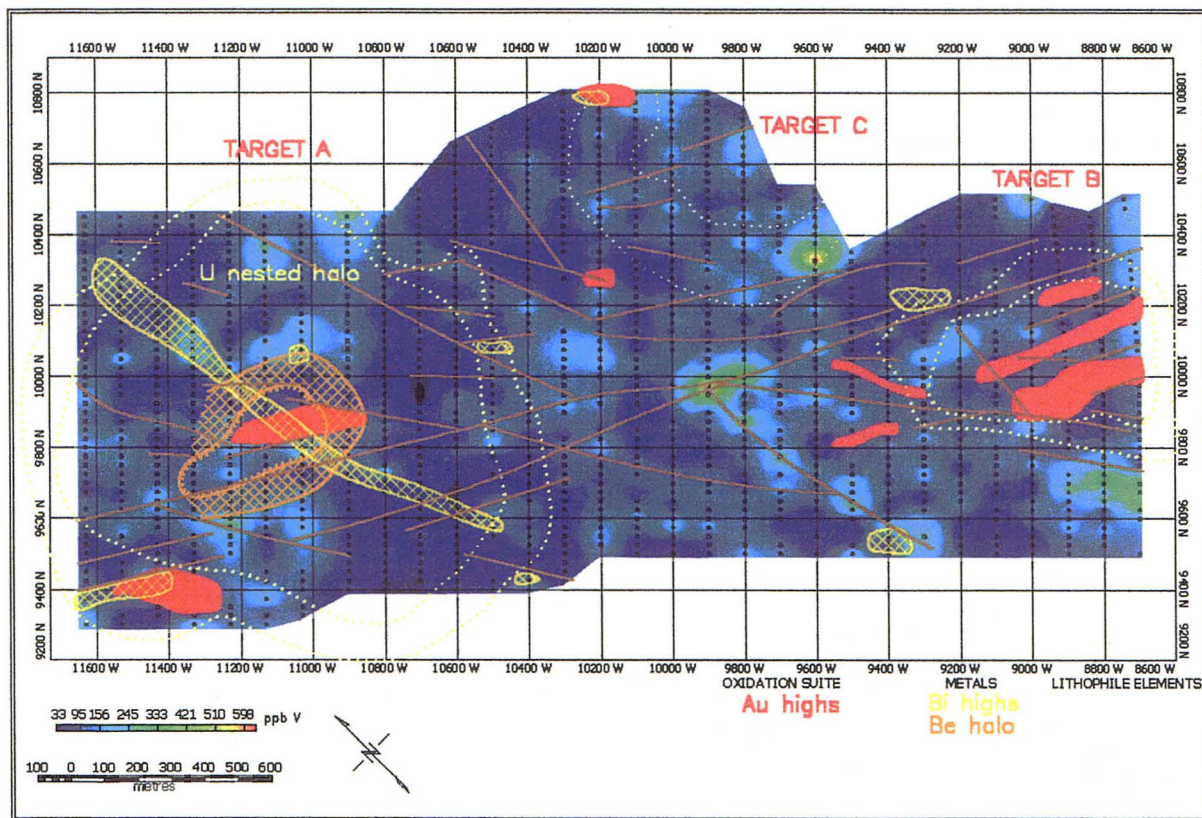
Vanadium, Mo, and Re are discontinuously enriched into the Target A and Target B anomalies but V forms higher-contrast and more distinctive nested-halo patterns at Target B (Figure 5). The distributions of these elements appear to be strongly structurally controlled throughout the survey. At Target A, V is clearly distributed into discontinuous nested halos surrounding an apical northwest-trending high that roughly corresponds with the Au high at the center of the anomaly. Molybdenum and Re have similar but less distinctive distributions at Target A. Target C is not strongly indicated by the V distribution but contains Mo and Re enrichments which, along with Cl responses may indicate an intrusive source for the Target C anomaly.



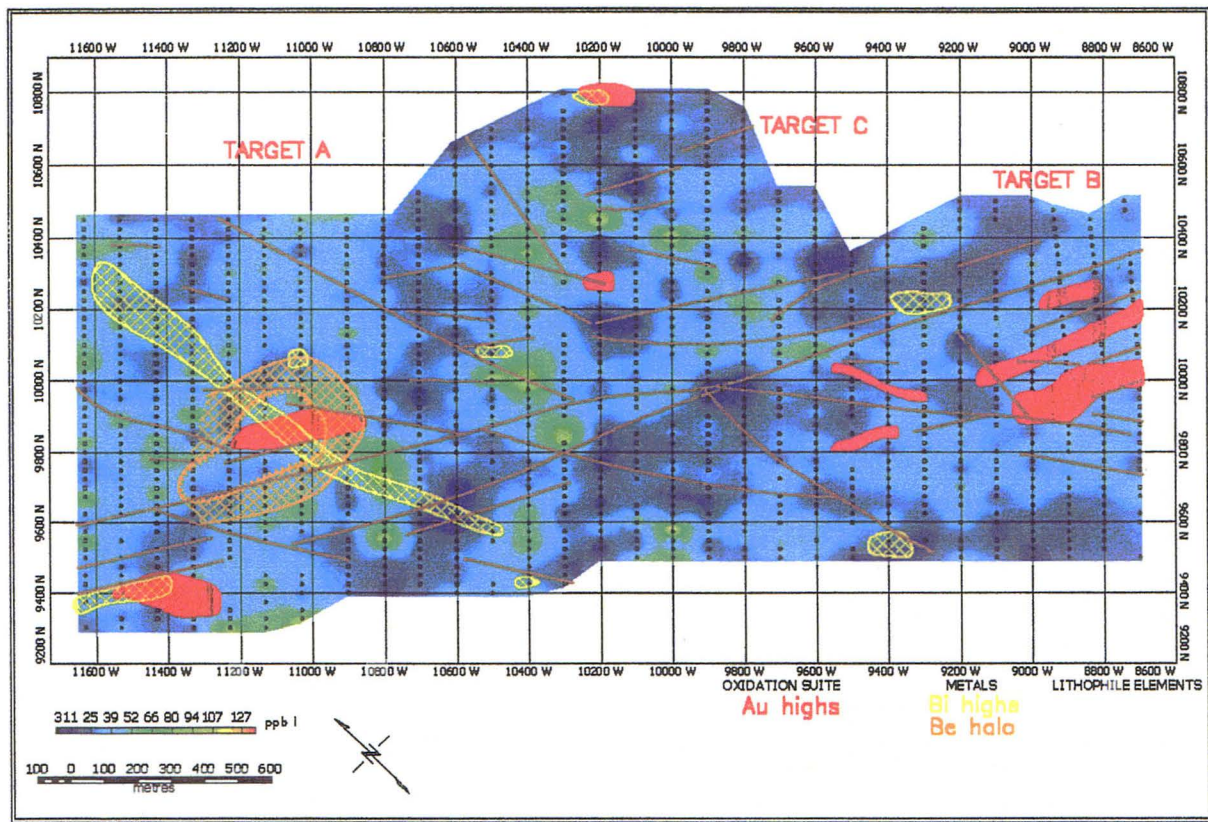
Arsenic and Sb are commonly associated with Au mineralization and show important indications of such in this survey. Antimony is distributed into nested halos at Targets A and B and is enriched into a possible halo at Target C. The most distinctive feature in the As distribution is a northwest-trending high that has a similar strike to the northwest-trending Au high at Target A and projects directly toward Target B. When truncated, it is apparent that this pathfinder element is distributed into subtle halos at Targets A and B.

The halogens are discontinuously distributed into halos at Targets A, B, and C. However, these elements also appear to be distributed into an approximately 600 m wide halo near the center of the grid which may represent an intrusive unit (Figure 6). Because only spotty Au detections are associated with this halo, it is not highly ranked as an exploration target. A ratio of Br/I shows strong indications of halos at Targets A, B, and C. Because different voltages are required to oxidize and reduce the halogen species, some are liberated in proximal zones while others ascend from more distal zones. This leads to halogen zoning at the surface which is reflected in halogen ratios.

Tellurium and Hg were only detected in a few samples and do not provide distinctive patterns.

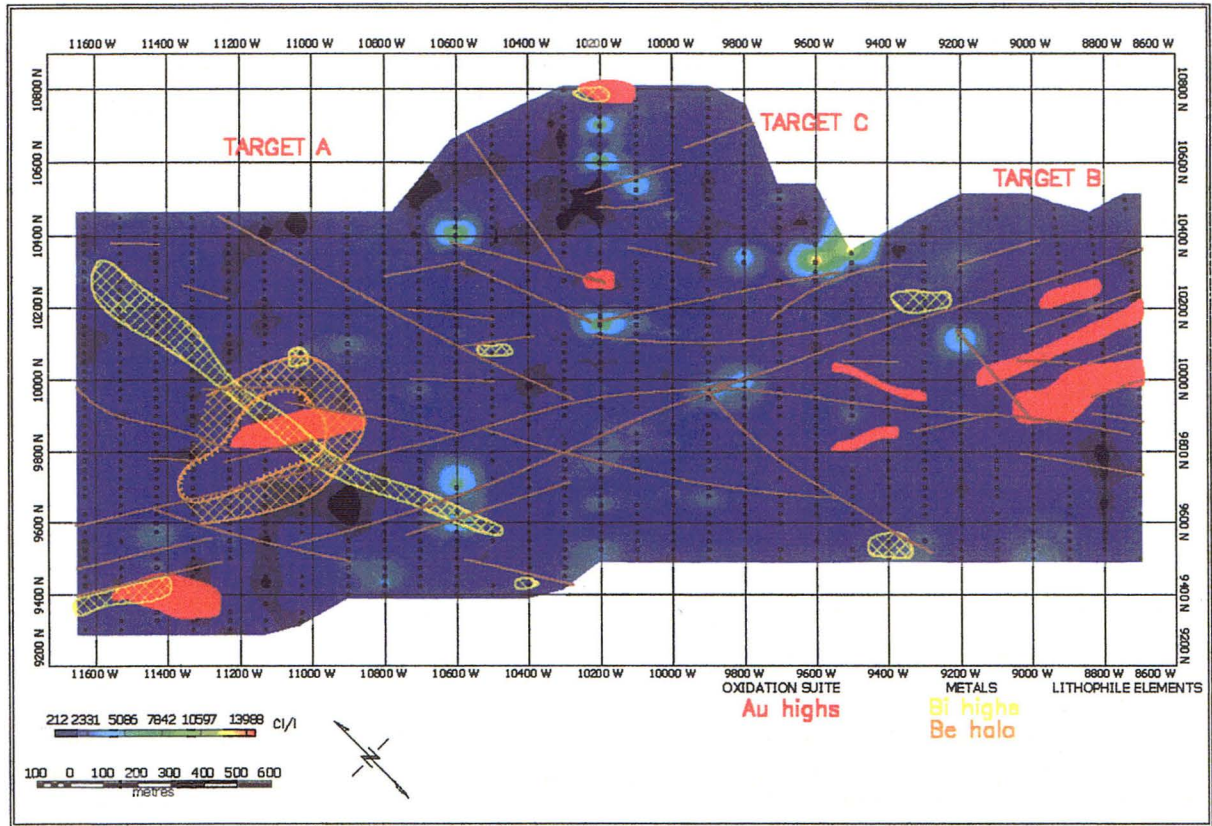


**Figure 5. Vanadium distribution overlaid by Be and U halos and Au and Bi highs and structural interpretation. Uranium halos and nested halos indicated by dotted outlines.**



**Figure 6. Iodine distribution overlaid by Be halo and Au and Bi highs and structural interpretation. Note several I lows occur at interpreted structural intersections. These areas may host sulfide accumulations which are generating small electrochemical cells. The apparent I halo near the center of the survey is associated with only a small number of spotty Au responses and may indicate the presence of an intrusion near the center of the grid.**





**Figure 7. Distribution of Br/I ratio overlaid by Be halo and Au and Bi highs and structural interpretation. The arcing halogen ratio patterns centered in the Target C area suggest the presence of an intrusive unit in that area. This intrusion may or may not be related to another interpreted intrusion near the center of the survey as suggested by the I distribution.**

### Rare Earth Elements

The REE are distributed into narrow halos around the Target A Au high as indicated by parallel REE high immediately northeast and southwest of the northwest-trending Au high. In addition, a more subtle REE distal halo is also present at Target A. At Target B, the REE form a distinctive halo from which the various Au highs radiate. These patterns are best developed among the Eu distribution (Figure 8) which suggests that these patterns, at least in part, represent feldspar alteration in the subsurface. The reason for this is that feldspars tend to contain anomalous concentrations of Eu relative to other REE. Therefore as alteration products are formed from feldspars, Eu is liberated into unstable or metastable phases in higher proportions than the remaining REE.



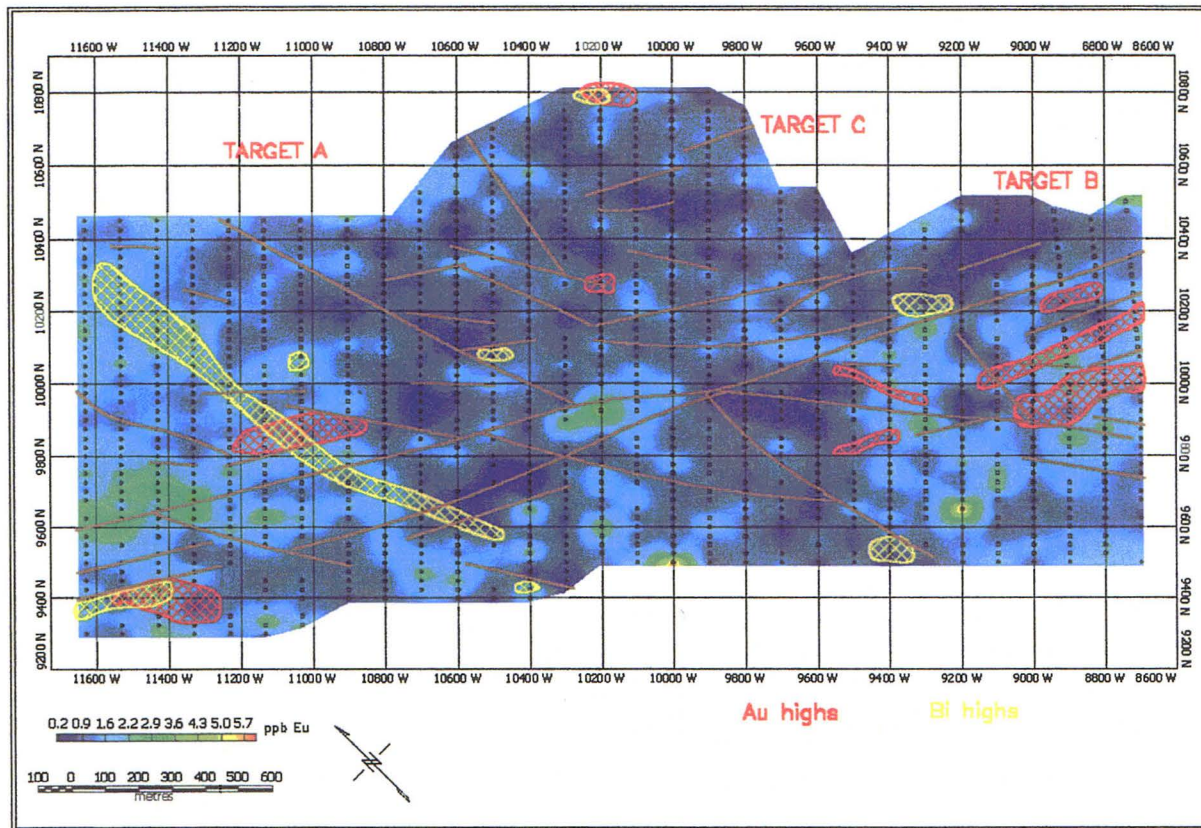


Figure 8. Distribution of Eu overlaid by Be halo and Au and Bi highs.

## Base Metals

Bismuth is distributed into a north-trending high that crosses the northern half of the survey

remainder of the grid. The Bi high intersects the northwest-trending Au high at the center of the Target A anomaly suggesting that this area of predicted subsurface Au mineralization occurs at a structural intersection between north- and northwest-trending faults. This metal is also enriched in the southeastern portion of the survey, although these responses are not clearly associated with Target B. In addition, analytical problems are suspected with the Bi responses in the southeastern part of the grid. In this area, two areas of Bi responses occur. In both cases, apparent Bi trends occur along sample lines and the highest responses occur at the southwestern ends of the lines. From those points, the Bi values become progressively smaller thus suggesting memory effects. Nonetheless, these results do indicate the presence of Bi in this area, but the northeast trends may be an analytical artifact.



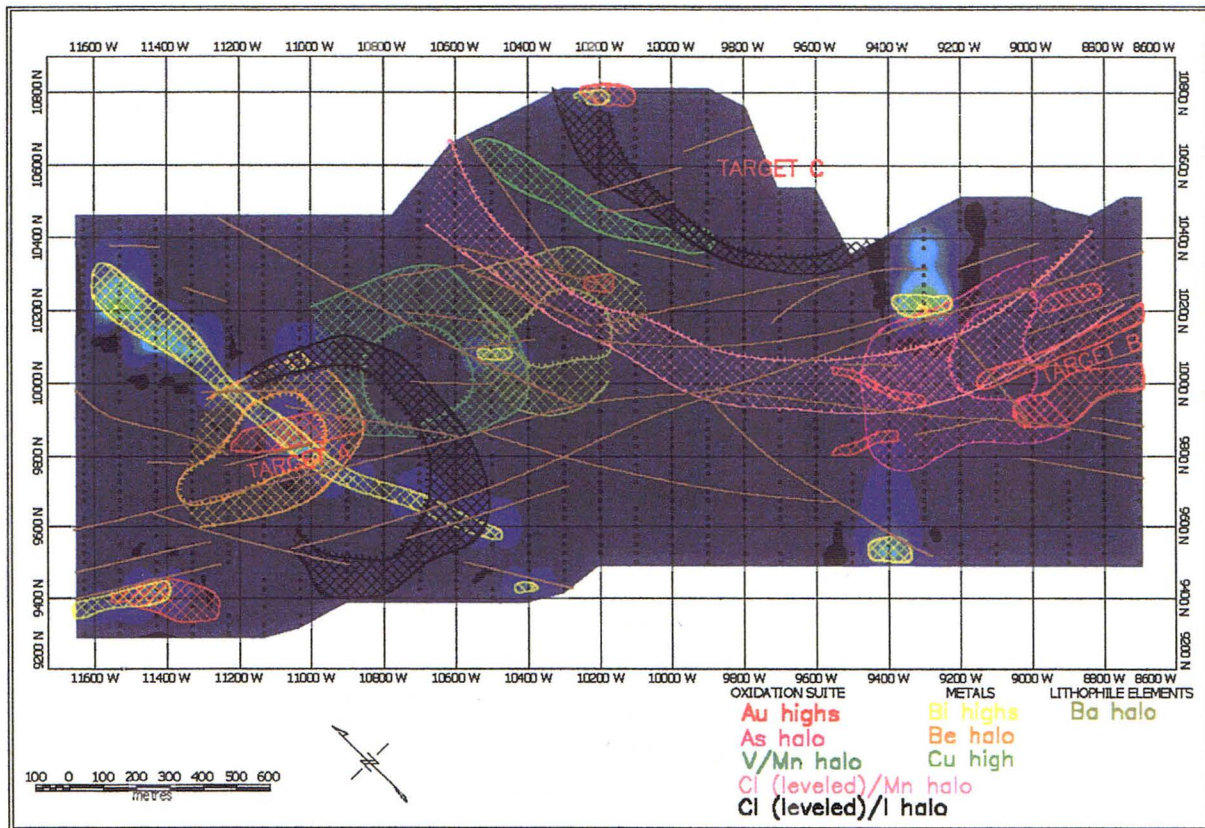


Figure 9. Distribution of Bi overlaid by examples of interpreted halos and linear highs.

Copper, Pb, Zn, and Cd are each distributed into the Target A and Target C oxidation anomalies although these base metals do not necessarily form distinctive patterns. However, linear trends are present within the distributions of these elements suggesting structural features in the subsurface. Zinc and Cd are enriched along with Ba and Mn in the area to the north of Target B. Interestingly, the strongest Cu, Pb, and Zn highs each occur in different parts of the grid suggesting that these metals are zoned relative to each other in the subsurface, suggesting the presence of a hydrothermal system or systems in the subsurface. Compared to numerous other Enzyme Leach<sup>SM</sup> soil surveys performed by this author and others throughout the world, the maximum Cu, Pb, and Zn values within this survey strongly suggest hydrothermal enrichments of these base metals in the subsurface.

The Ni and Co distributions are not clearly indicative of the oxidation anomalies although these elements do appear to have been subjected to a small degree of electrochemical influence. Nickel forms highs that correspond with most of the Au highs associated with Targets A, B, and C and Co is distributed into a discontinuous halo at Target A and possibly at Targets B and C.

Thallium, Ga, and Ge form distinctive highs in the northwestern corner of the grid and subtle or absent indications of oxidation anomalies at Targets A, B, and C. Silver and Sn do not form distinctive patterns.

## Lithophile Elements

The lithophile elements also tend to indicate alteration zones as many are typically highly enriched within igneous protoliths and alteration products. However, these elements also tend to be relatively abundant within surface materials. Therefore, the lithophile elements are often well distributed into oxidation anomalies but can also often be used to index variations in surface

lithophile element patterns.

Barium and Mn are each distributed into broad platform highs near 9200W-10000W and northeast of the base line. These highs likely reflect mechanically-transported Ba and Mn enrichments in the soil which were derived from alteration zones upstream. The Target B area is clearly indicated as a Ba halo and both elements clearly halo the northwest-trending Au high at Target A. Barium and Mn may be enriched in an oxidation anomaly associated with Target C. However, these elements are clearly enriched within the drainage in that area, thus obscuring the response of these elements associated with an electrochemical cell at Target C.

Lithium, Cs, and Rb each form high-contrast highs in the extreme northwestern corner of the survey. These occur along the Grew Creek fault and are also associated with Au and Bi enrichments. Strontium also forms a high here although it is much more subtle. These lithophile enrichments likely represent subsurface alteration in this area. They are also distributed into more subtle patterns associated with the Target A and B, and possibly Target C oxidation anomalies. These elements form apical highs that correspond with Au highs in these target areas, and some are also distributed into low-contrast halos. Some of the most useful information within the lithophile element patterns is contained in the more subtle patterning which indicates many structural features in the subsurface.

Beryllium forms a distinctive halo around the Target A northwest Au trend, clearly indicating this anomaly and suggesting an evolved intrusive influence on the composition of this anomaly. This incompatible element is also enriched in the Target B area although a halo does not appear to be present there.

## High Field Strength Elements

The HFSE Zr and Hf are distributed into well-formed halos around the northwest-trending Au high at Target A, strongly indicating this target. These elements may also be discontinuously enriched at Targets B and C but these distribution do not strongly support these targets. Like the lithophile elements, Zr and Hf also suggest many structural features and the northwest-trending main drainage extending from the Target B area. Titanium and Nb show similar patterns but these are obscured by the very high values measured in the northwestern corner of the grid. For this reason, a truncated plot of Ti is included so that patterns in the middle data range are more recognizable. Tantalum and Cr do not form distinctive patterns but show enrichments in the northwestern corner of the survey that likely indicate altered soil materials.

## Discussion and Recommendations

The trace element concentrations measured in this survey reveal a complex geochemical distribution which includes at least three significant oxidation anomalies, identified as Targets A, B, and C. There is significant interference between these and smaller electrochemical cells obscuring these features. The anomalies at Targets A and B are strong and contain the most highly ranked drill targets. It is suspected that Target C and perhaps the I halo near the center of the soil survey overlie buried intrusive units as suggested by the strong halogen responses associated with these anomalies.

Within Target A, drilling is recommended to test the northwest-trending Au high. Angled drill holes are suggested. Because the dip of the predicted Au mineralized zone is not known, northeast and southwest dipping drill holes should be considered. These drill holes should be oriented to target the intersection of the northwest-trending Au high where it intersects the north-trending Bi high. To accomplish this a  $-45^\circ$ ,  $225^\circ$  azimuth drill hole should be collared at approximately 11030W/9950N and drilled to a depth of 200 m. A second drill hole oriented at  $-45^\circ$ ,  $45^\circ$  azimuth should be collared at 11030W/9750N and drilled to a depth of 200 m. In addition, drill holes to the northwest and southeast along strike of this northwest-trending Au high should be considered. Assuming that Au mineralization is intercepted with this initial drilling, additional stepout drill tests of the subsurface should be undertaken to the southeast of the northwest-trending Au high because the distributions of several elements indicate that this zone extends to the southeast of the terminus of the Au high.

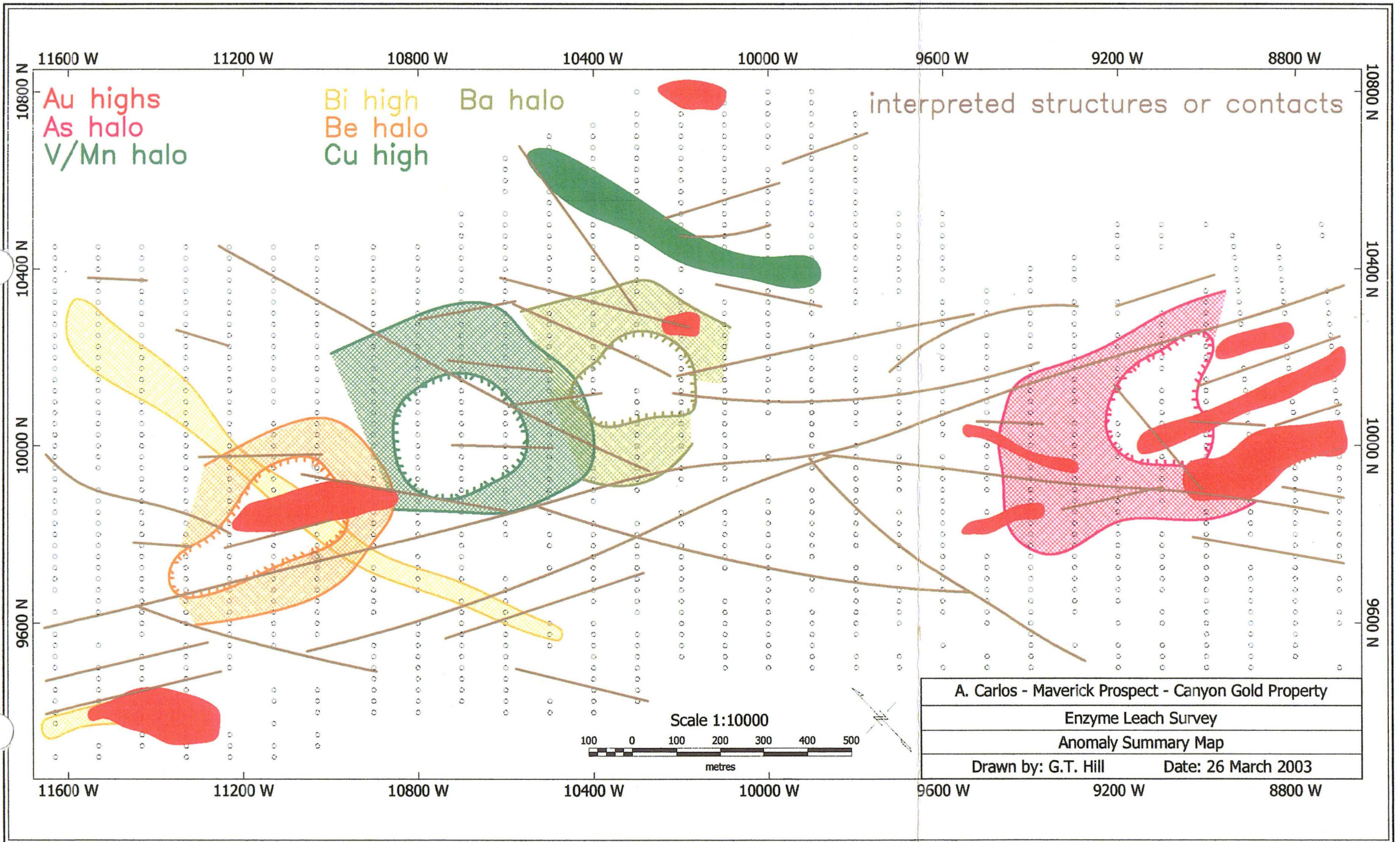
Drilling is also recommended to test the north-trending Au high and associated northwest-trending Bi high in the northwestern corner of the survey. Angled drill holes targeting the subsurface at 11430W/9425N and 11330W/9375N are recommended.

Drill testing of the Target B anomaly is also recommended. The highest priority drill target within this anomaly is at the apparent intersection between west-northwest and northwest-trending Au highs that occurs within the As central low. This intersection occurs at 9100W/10025N. A vertical drill hole collared at this location is recommended. In addition, angled drill holes at 8900W/10150N,  $-45^\circ$ ,  $225^\circ$  azimuth, and 8900W/9950N  $-45^\circ$ ,  $45^\circ$  azimuth are also recommended. Additionally, drill testing of the linear Au trends between 9300W and 9500W within the Target B area should also be considered.

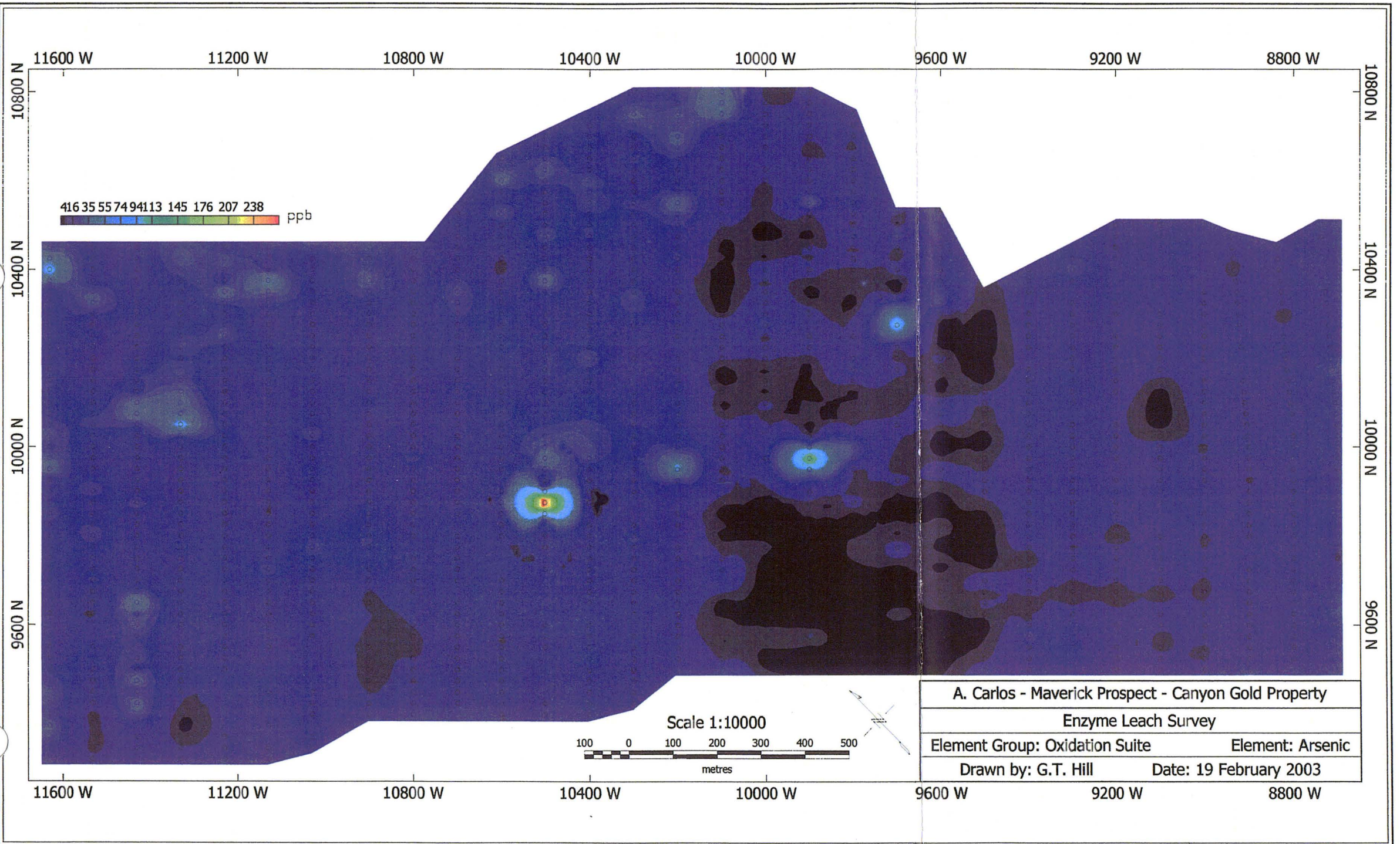
The Target C anomaly is assigned a lower priority for drill testing. This is largely due to a lack of Au detections within this anomaly and a paucity of well-developed oxidation suite element halos. Prior to drill testing of this anomaly, additional soil sampling to the northeast is recommended to better define the oxidation anomaly.

Finally, drill testing of the I halo near the center of the survey is also recommended. A vertical drill hole collared near the center of the I halo, and near the highest Au response in the survey, at 10200W/10275N is suggested.

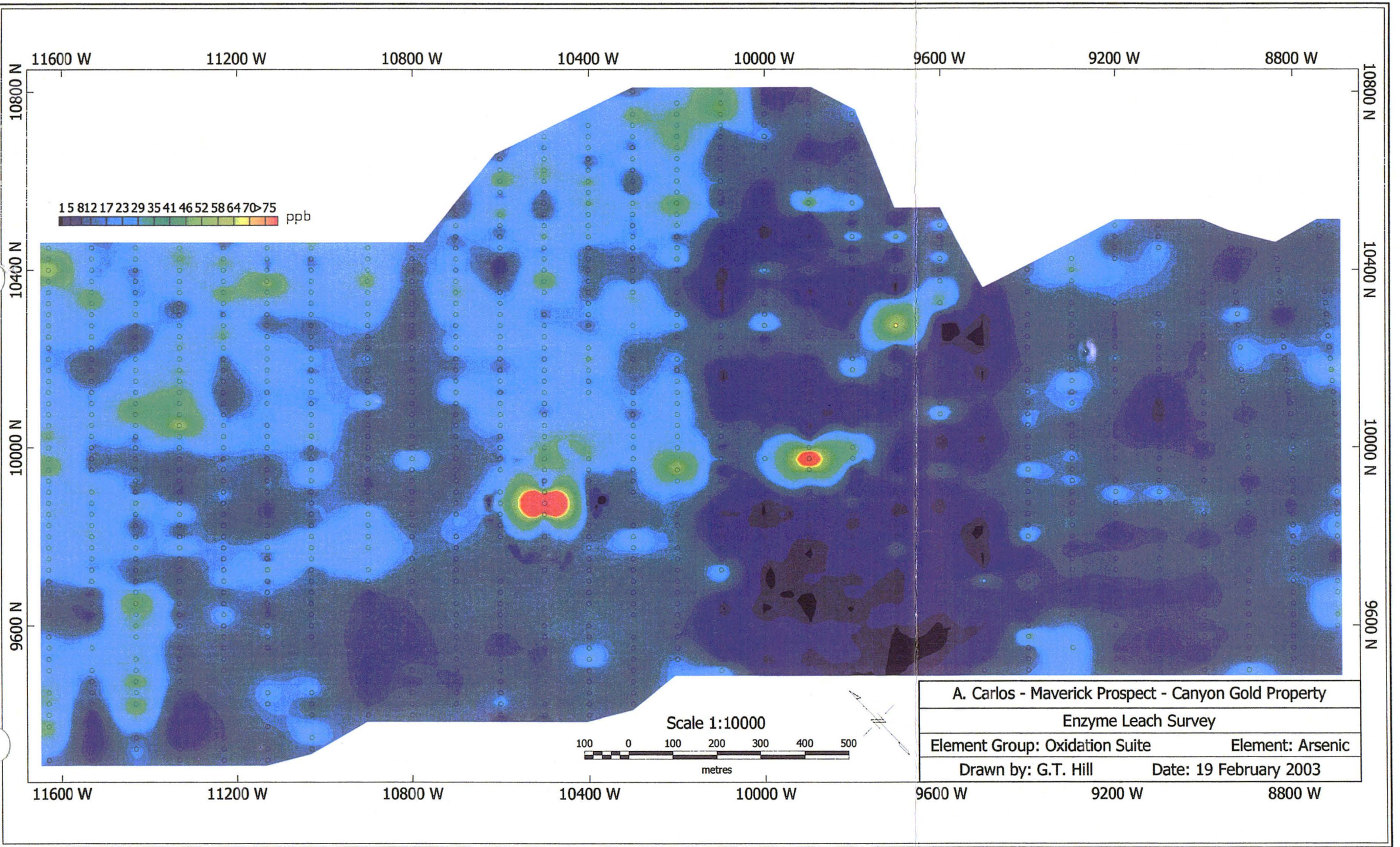






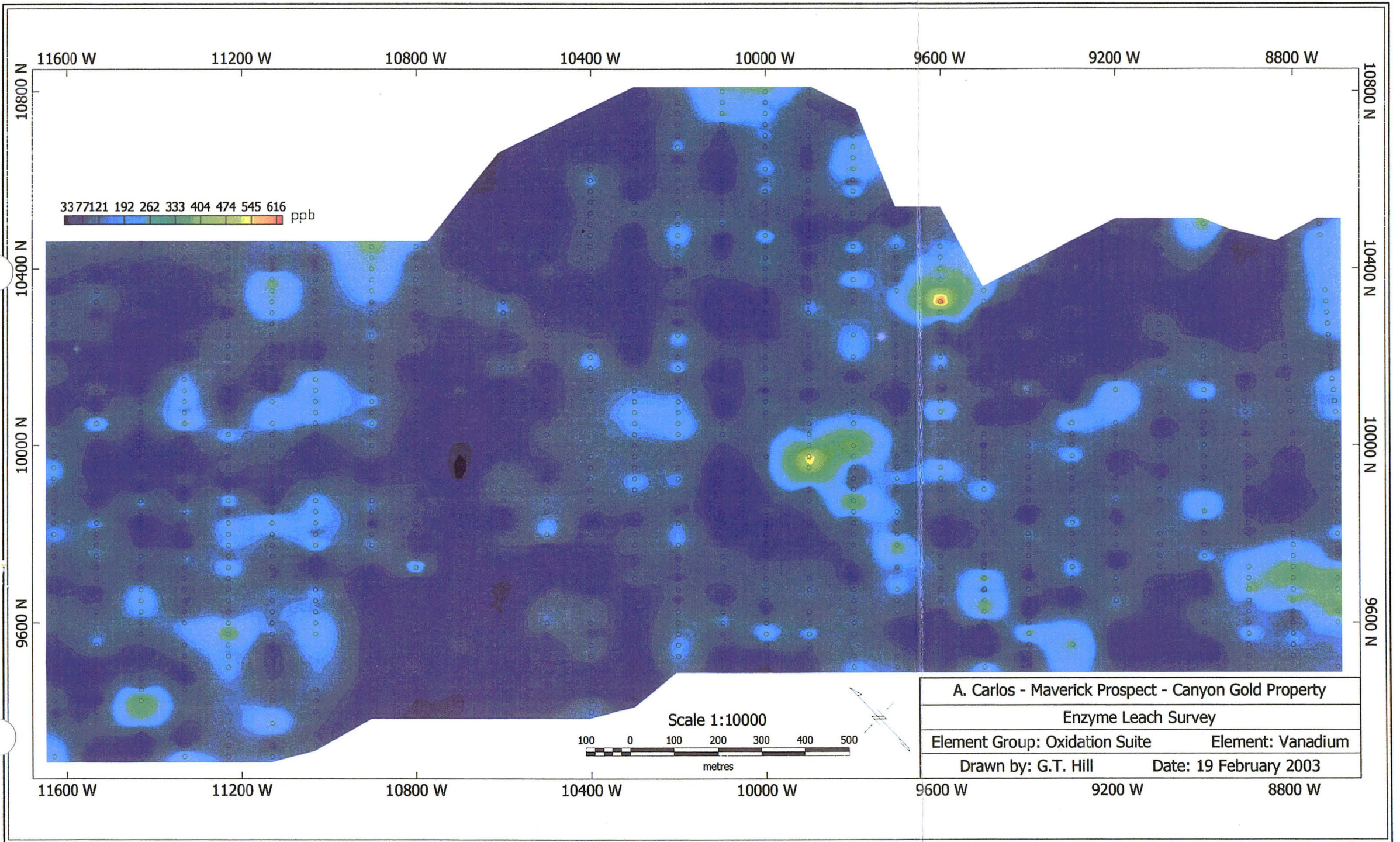




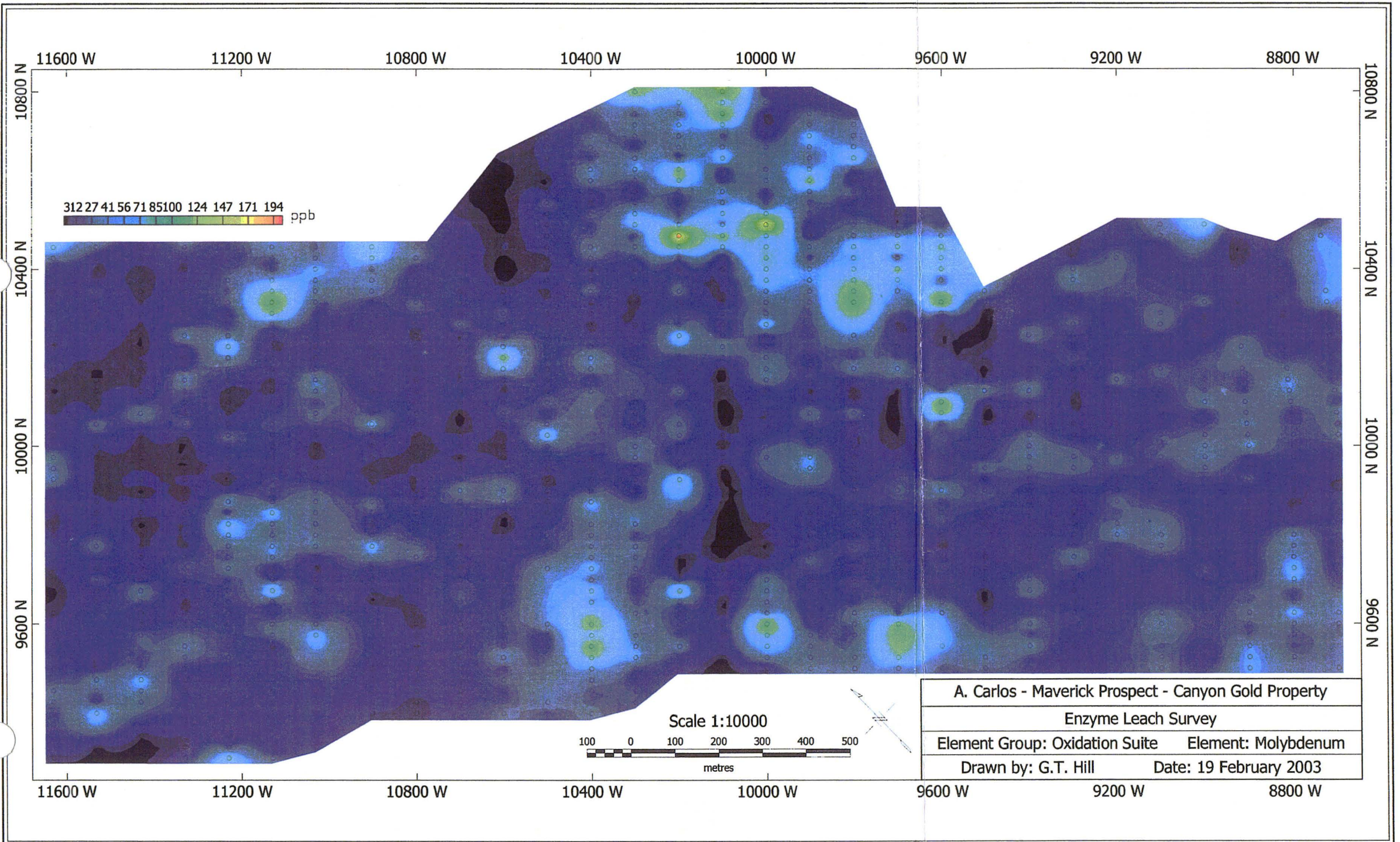


A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Oxidation Suite	Element: Arsenic
Drawn by: G.T. Hill	Date: 19 February 2003

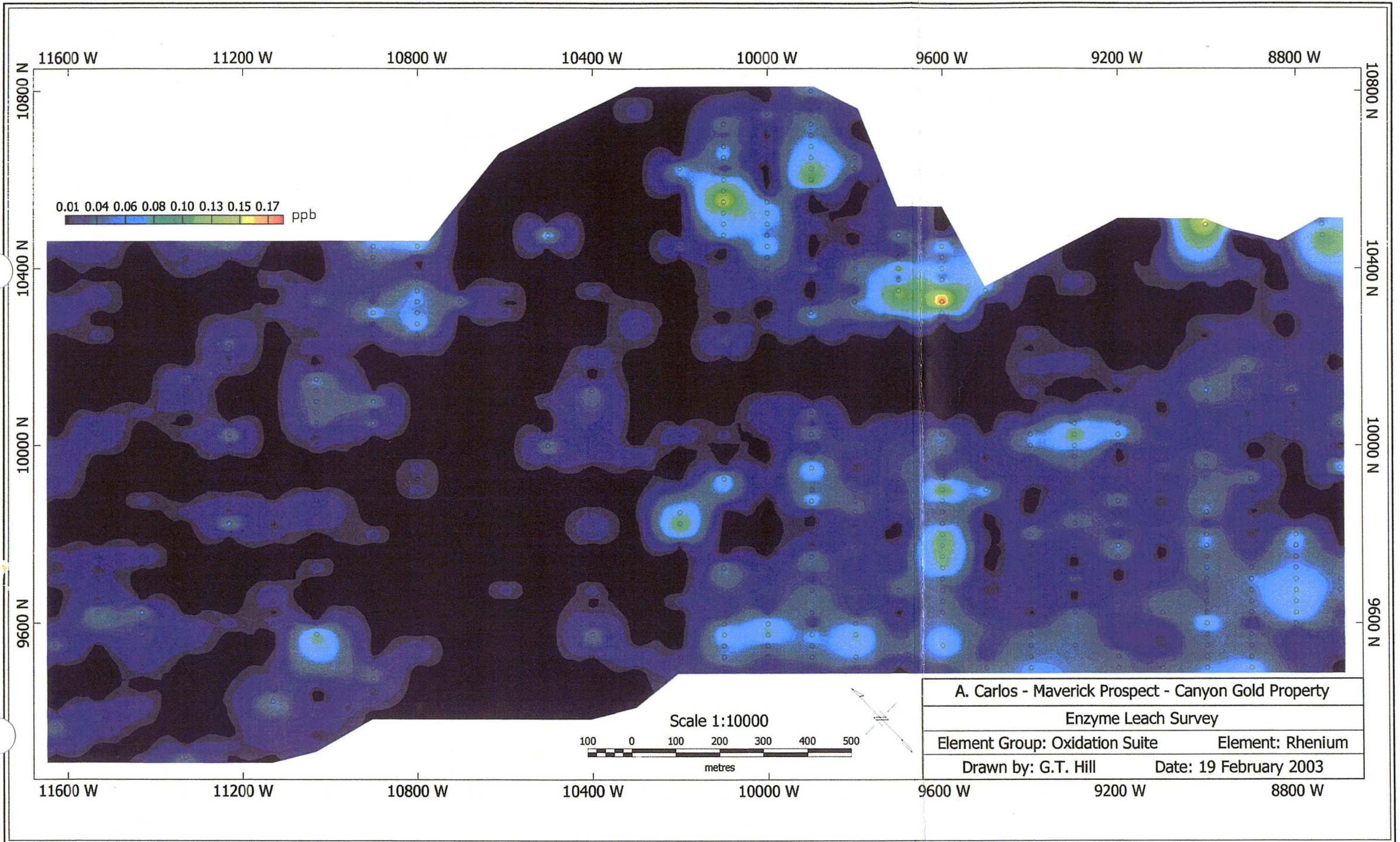




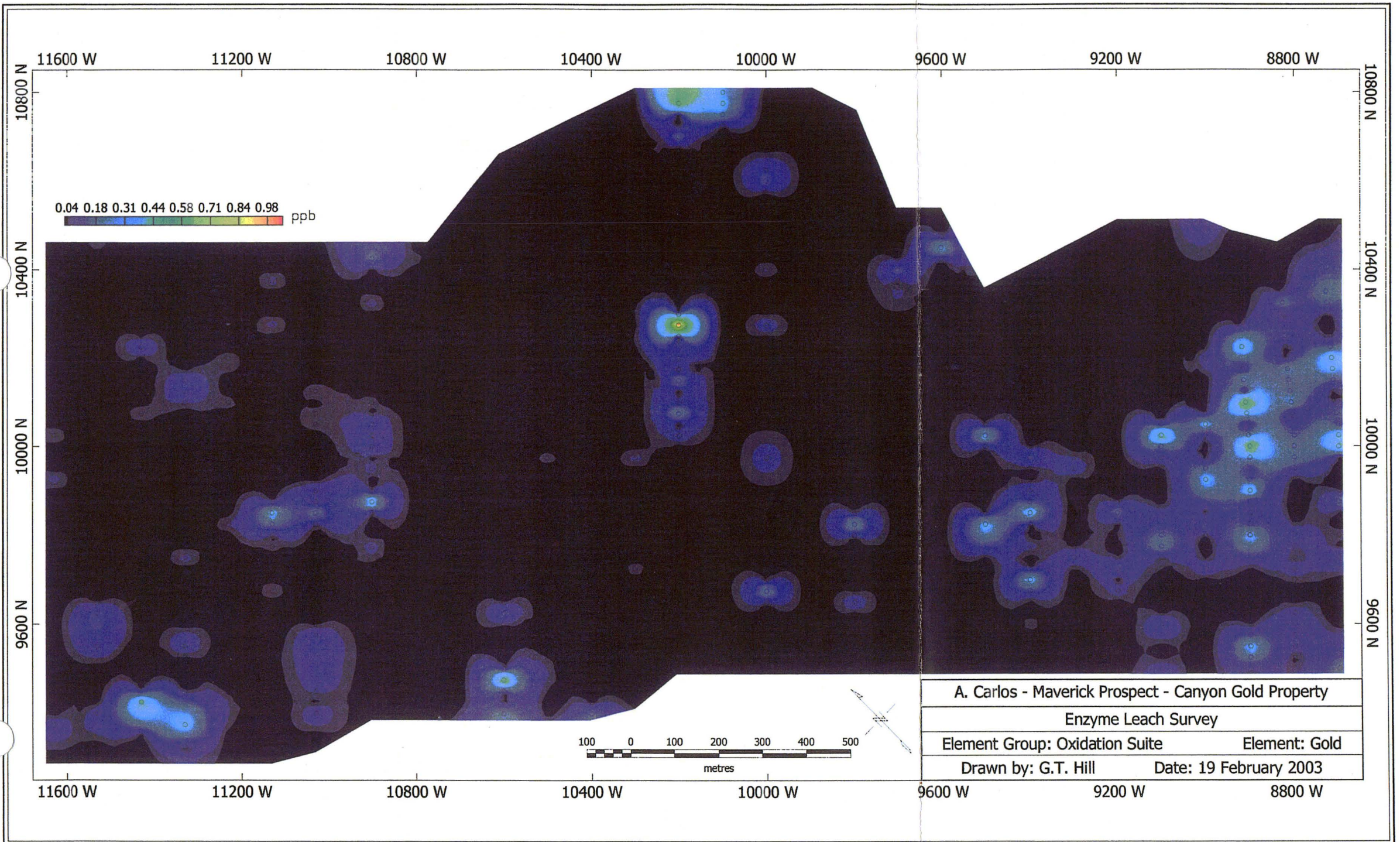




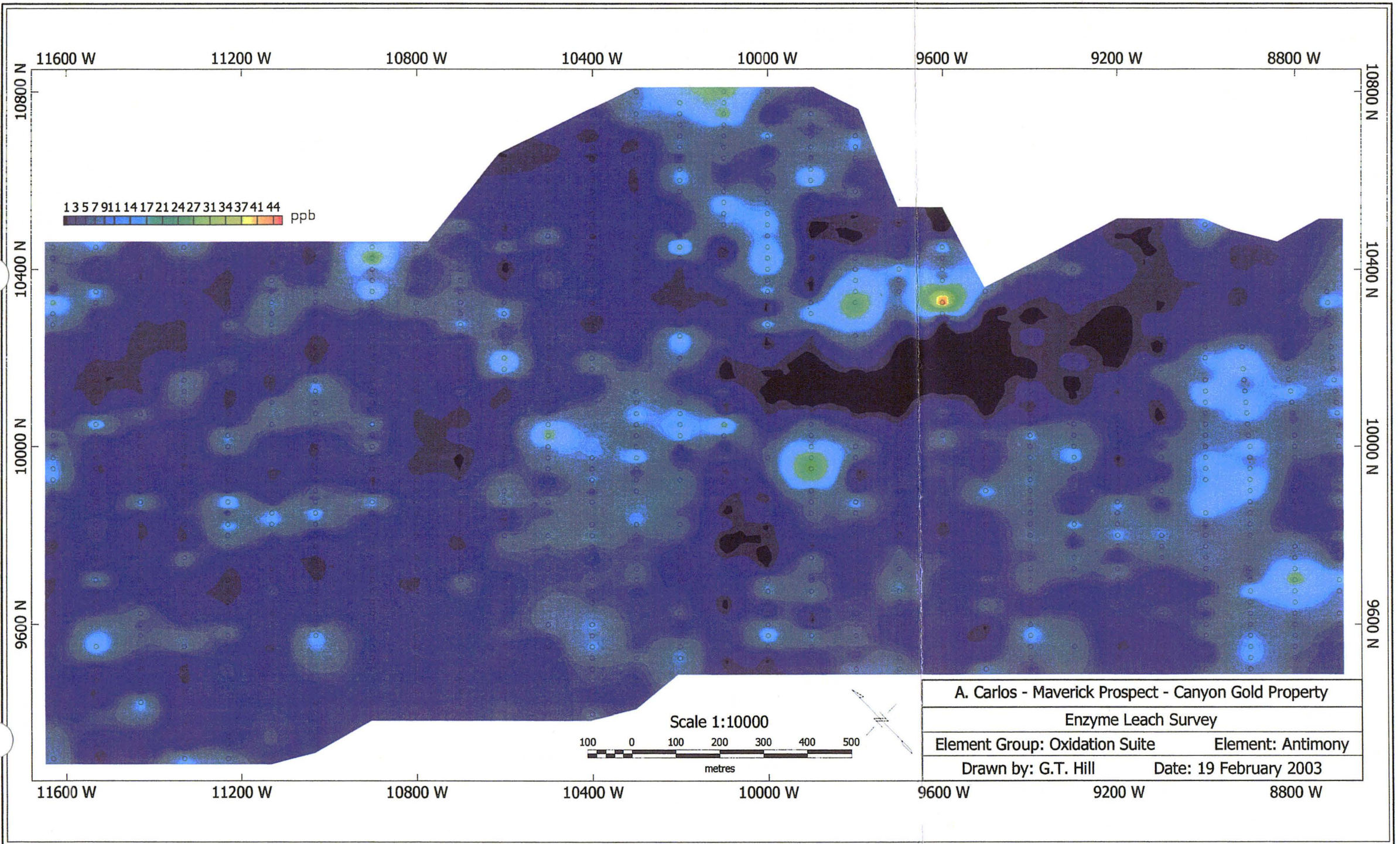




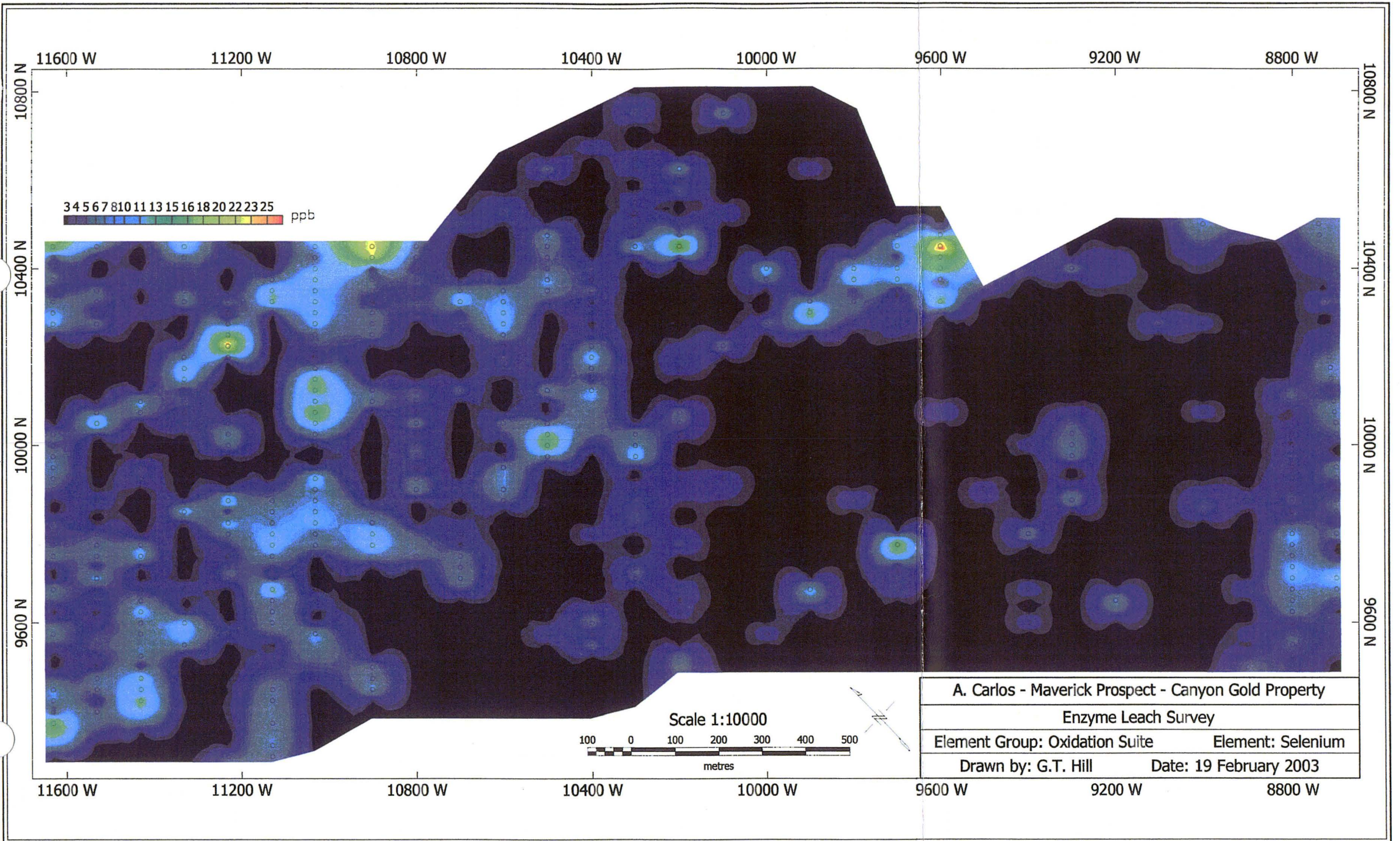




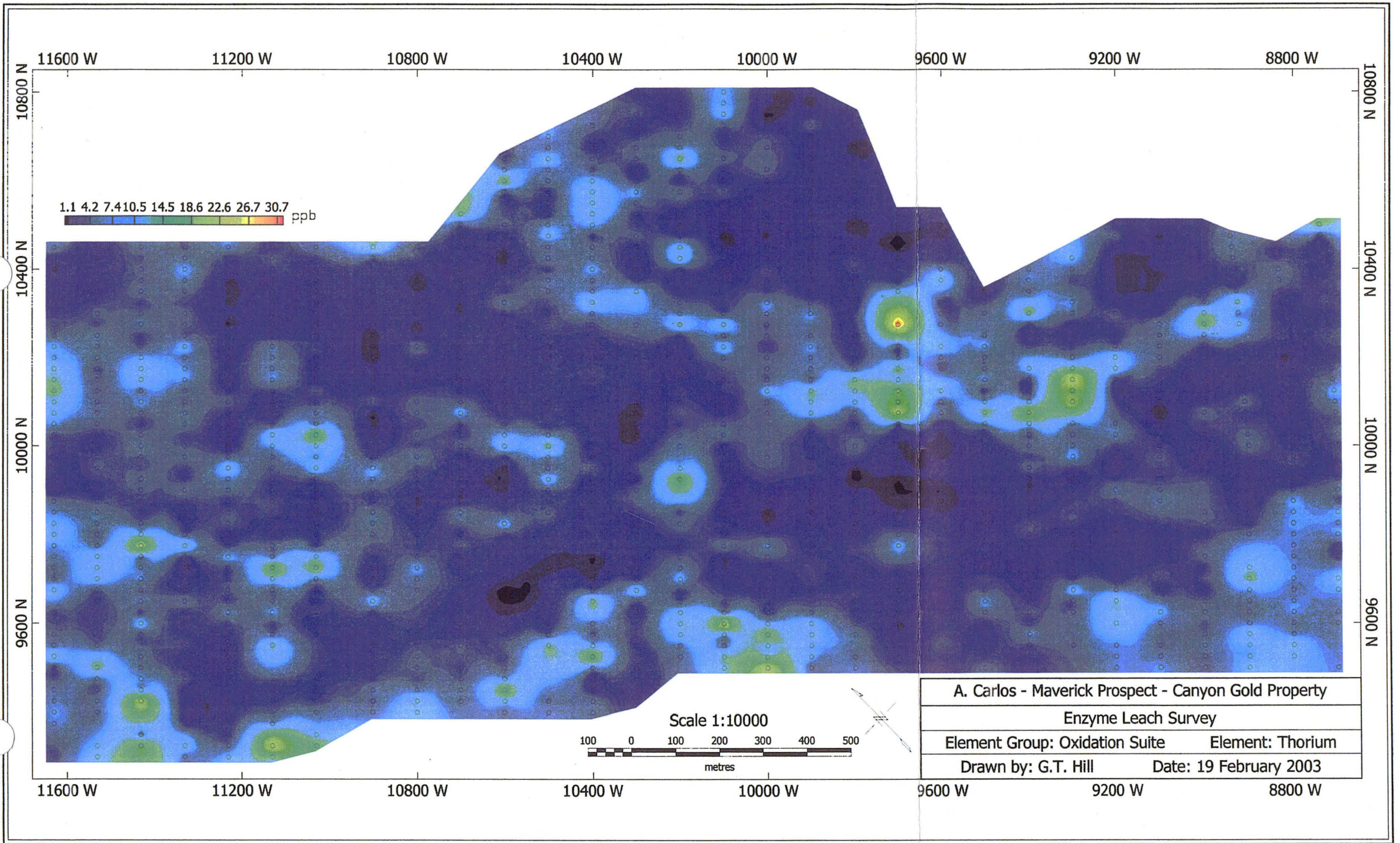






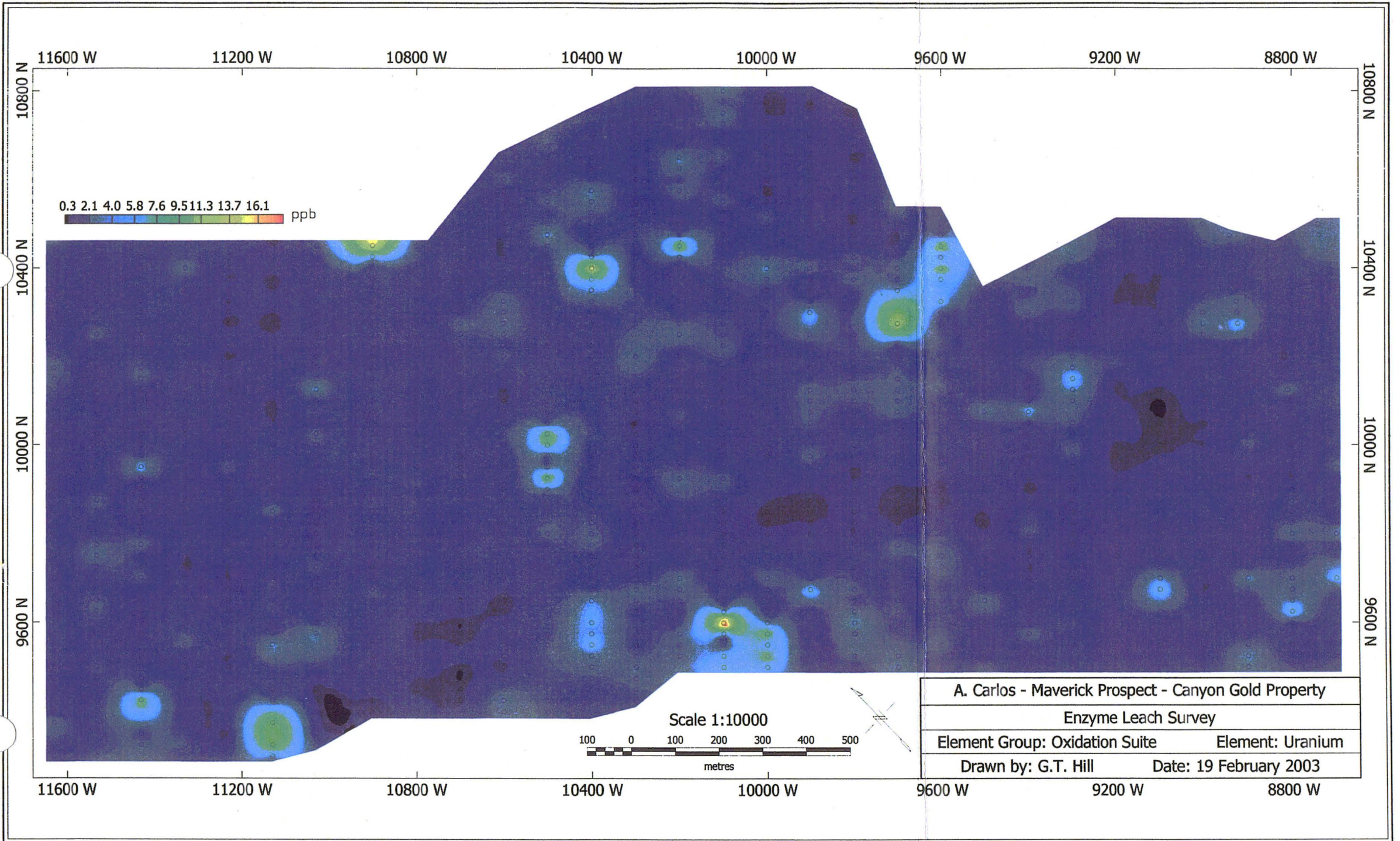




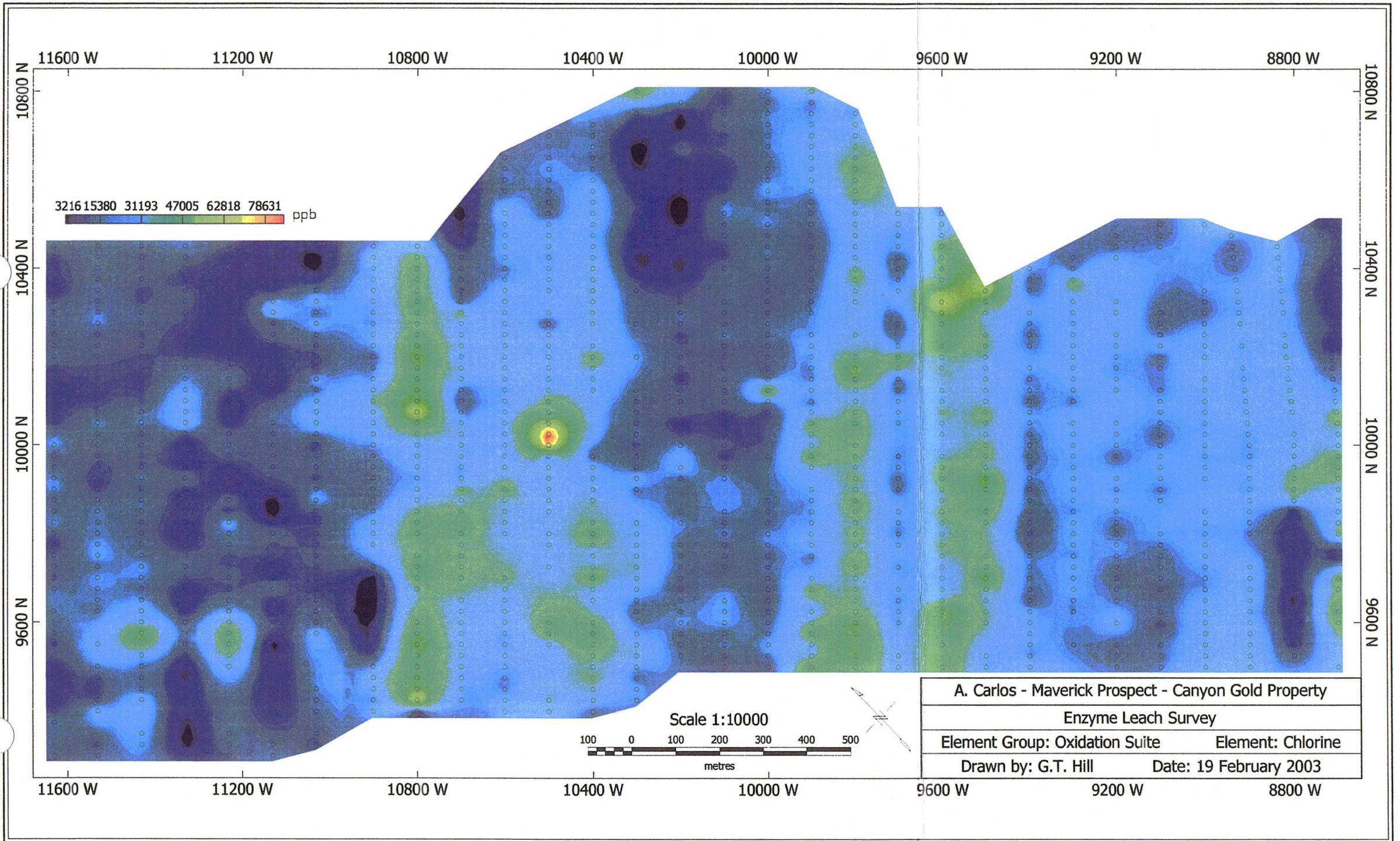


A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Oxidation Suite	Element: Thorium
Drawn by: G.T. Hill	Date: 19 February 2003

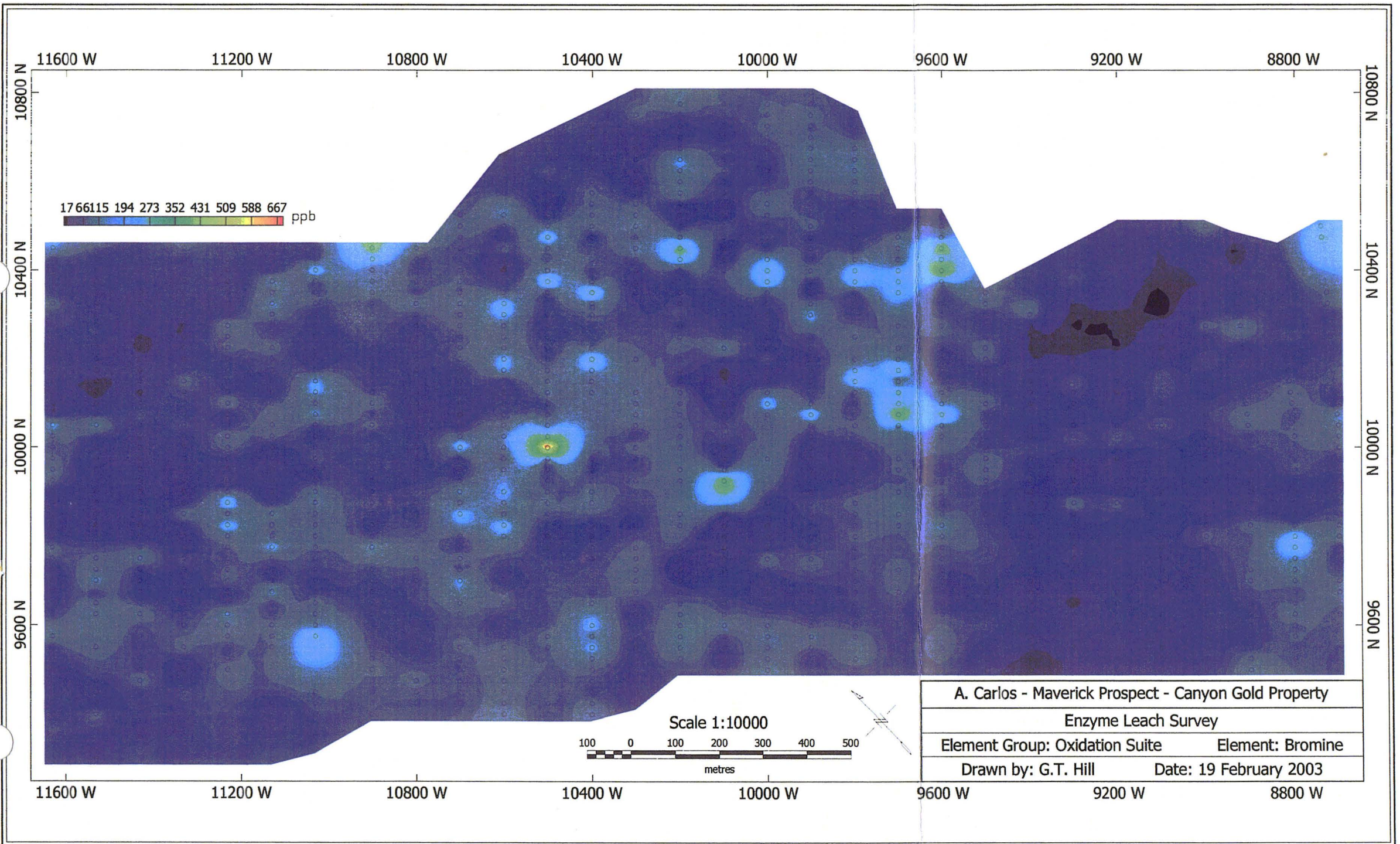




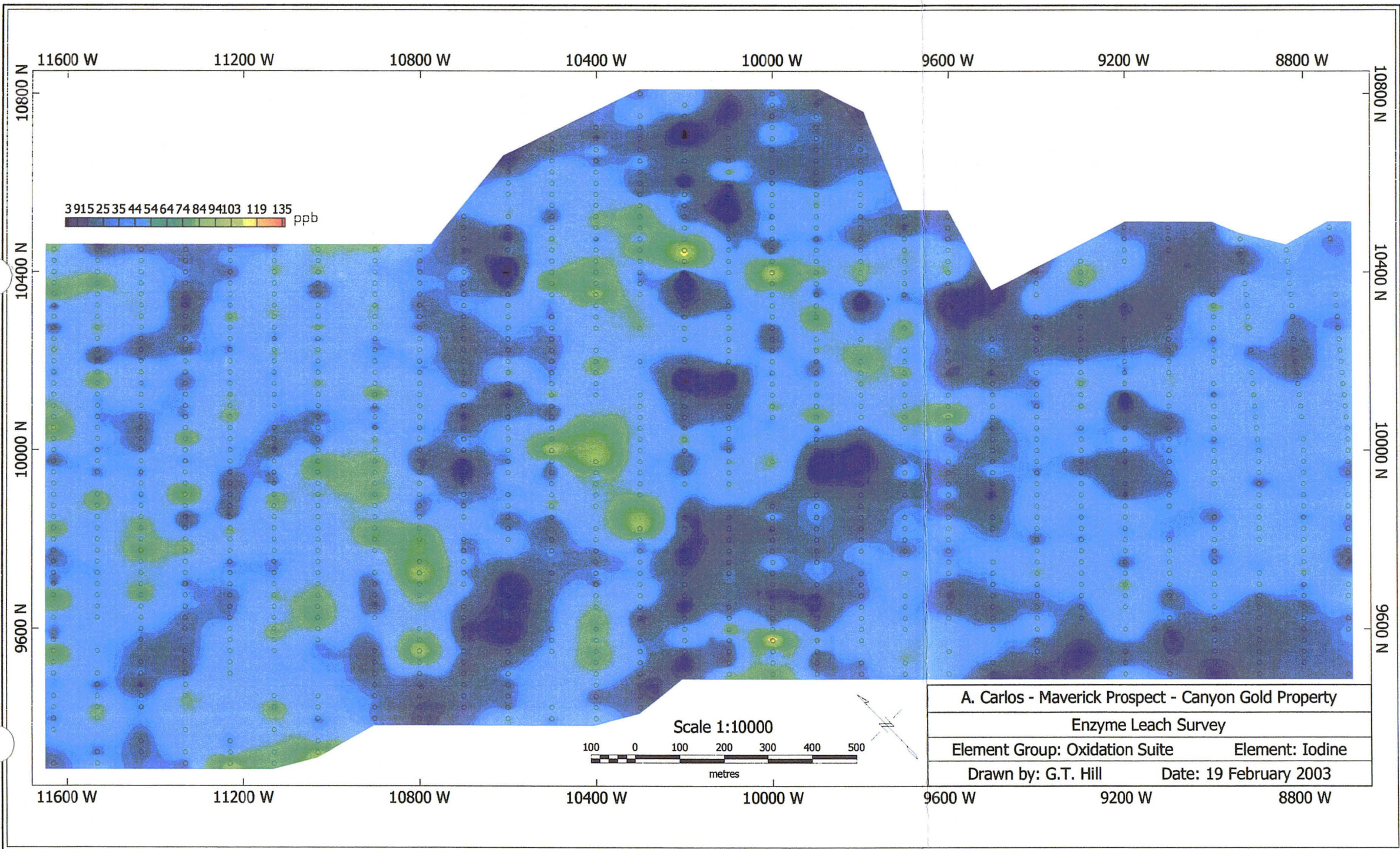






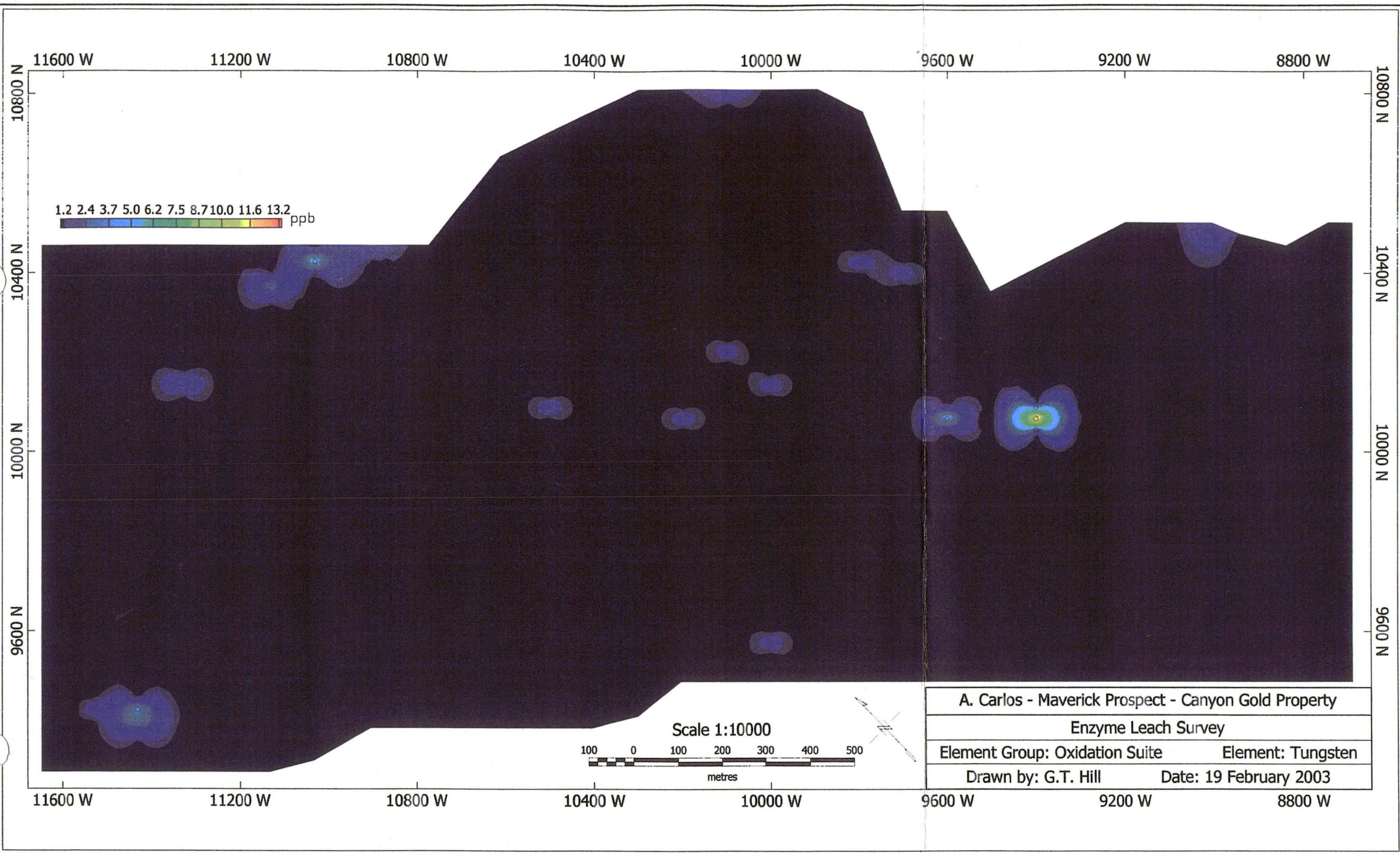




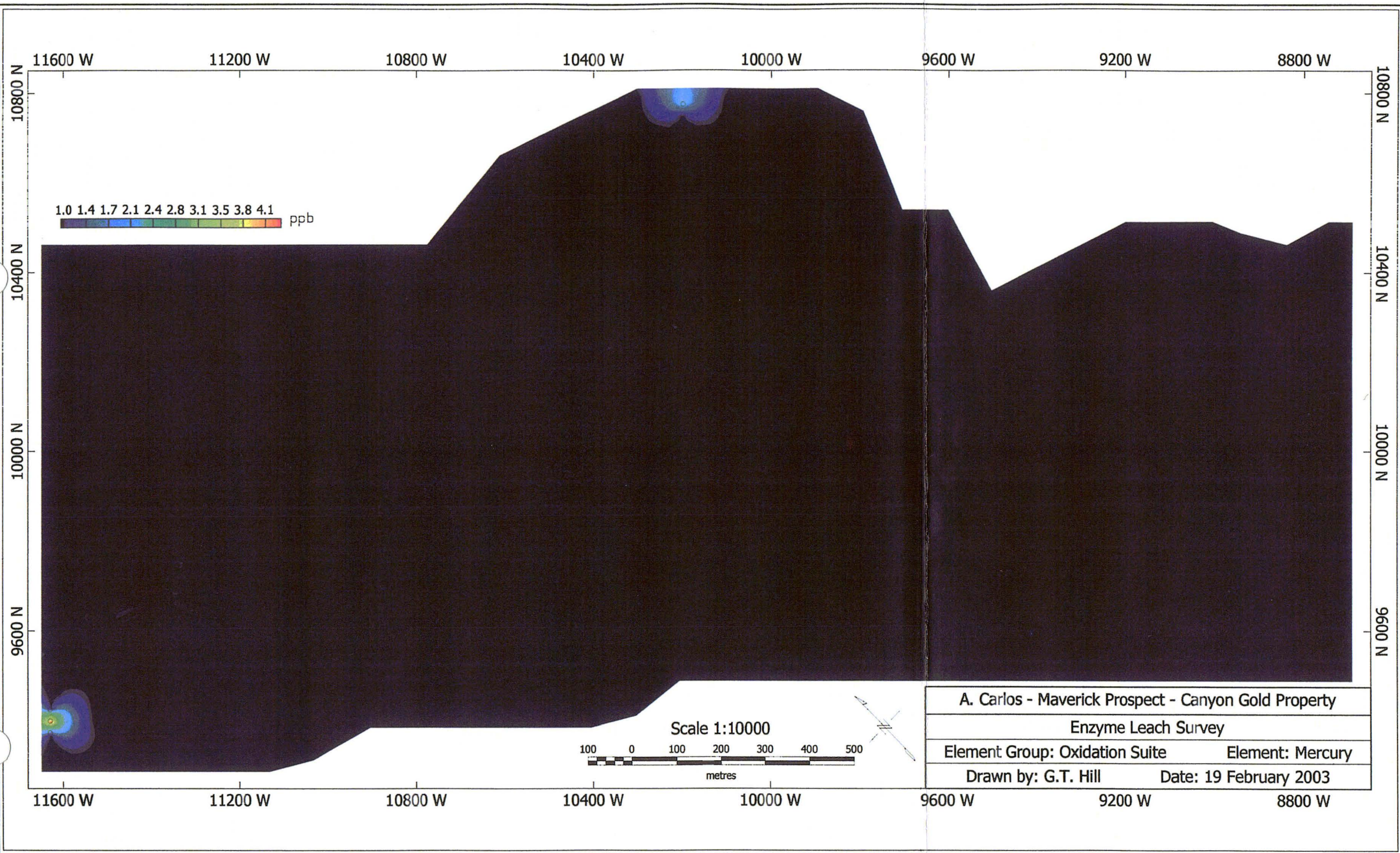


A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Oxidation Suite	Element: Iodine
Drawn by: G.T. Hill	Date: 19 February 2003



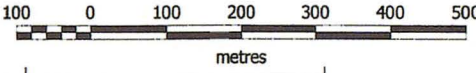






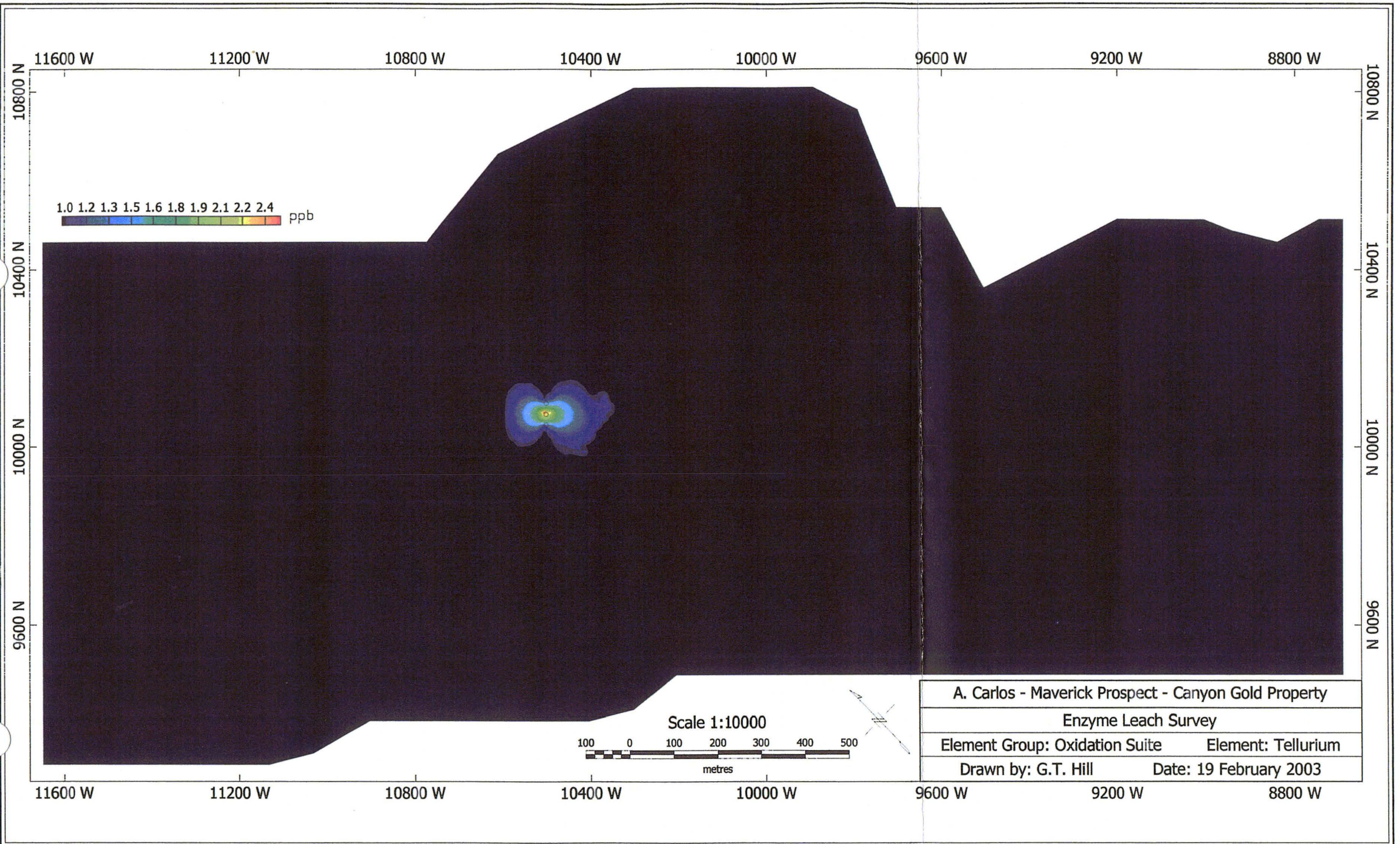
1.0 1.4 1.7 2.1 2.4 2.8 3.1 3.5 3.8 4.1 ppb

Scale 1:10000

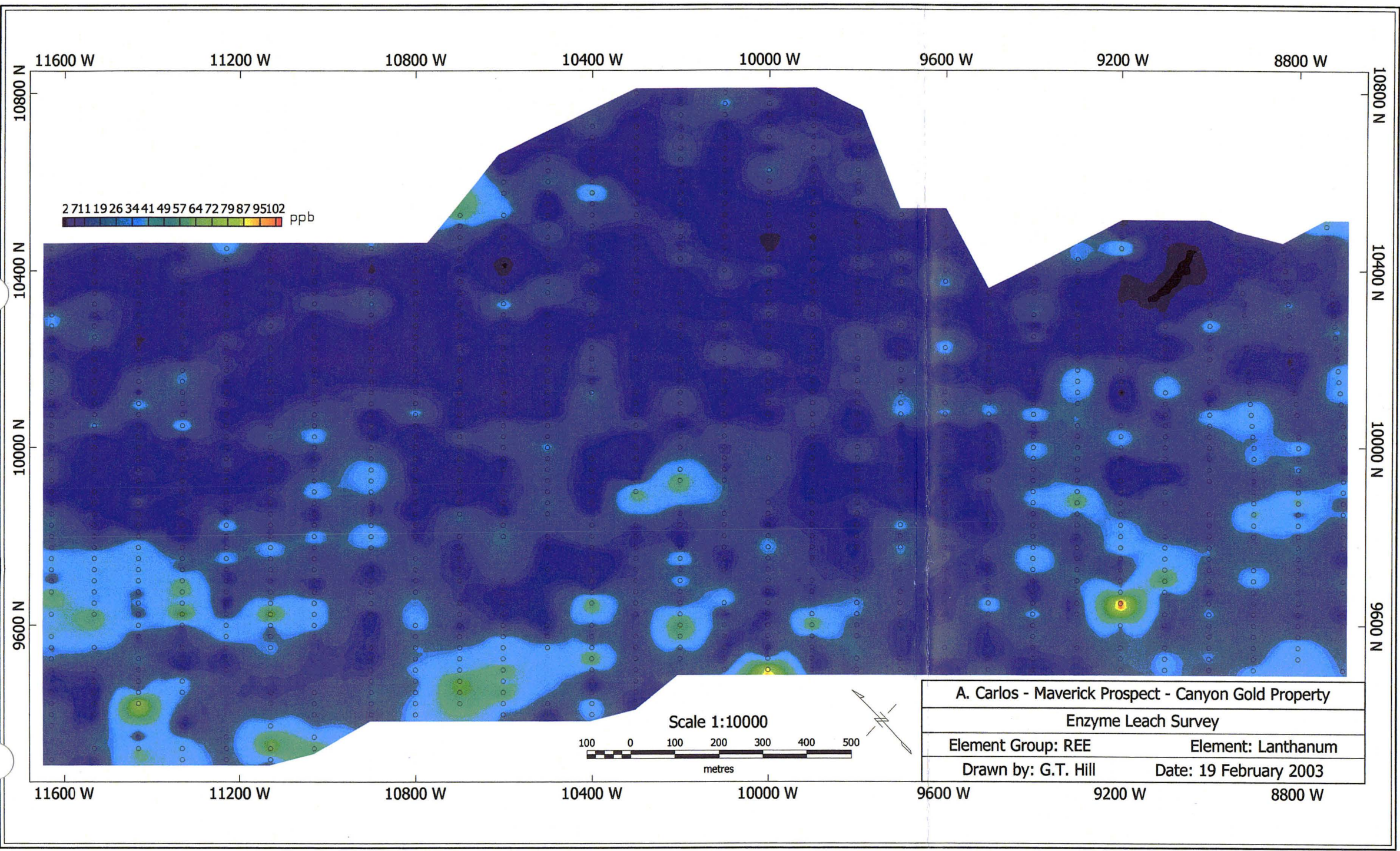


A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Oxidation Suite	Element: Mercury
Drawn by: G.T. Hill	Date: 19 February 2003

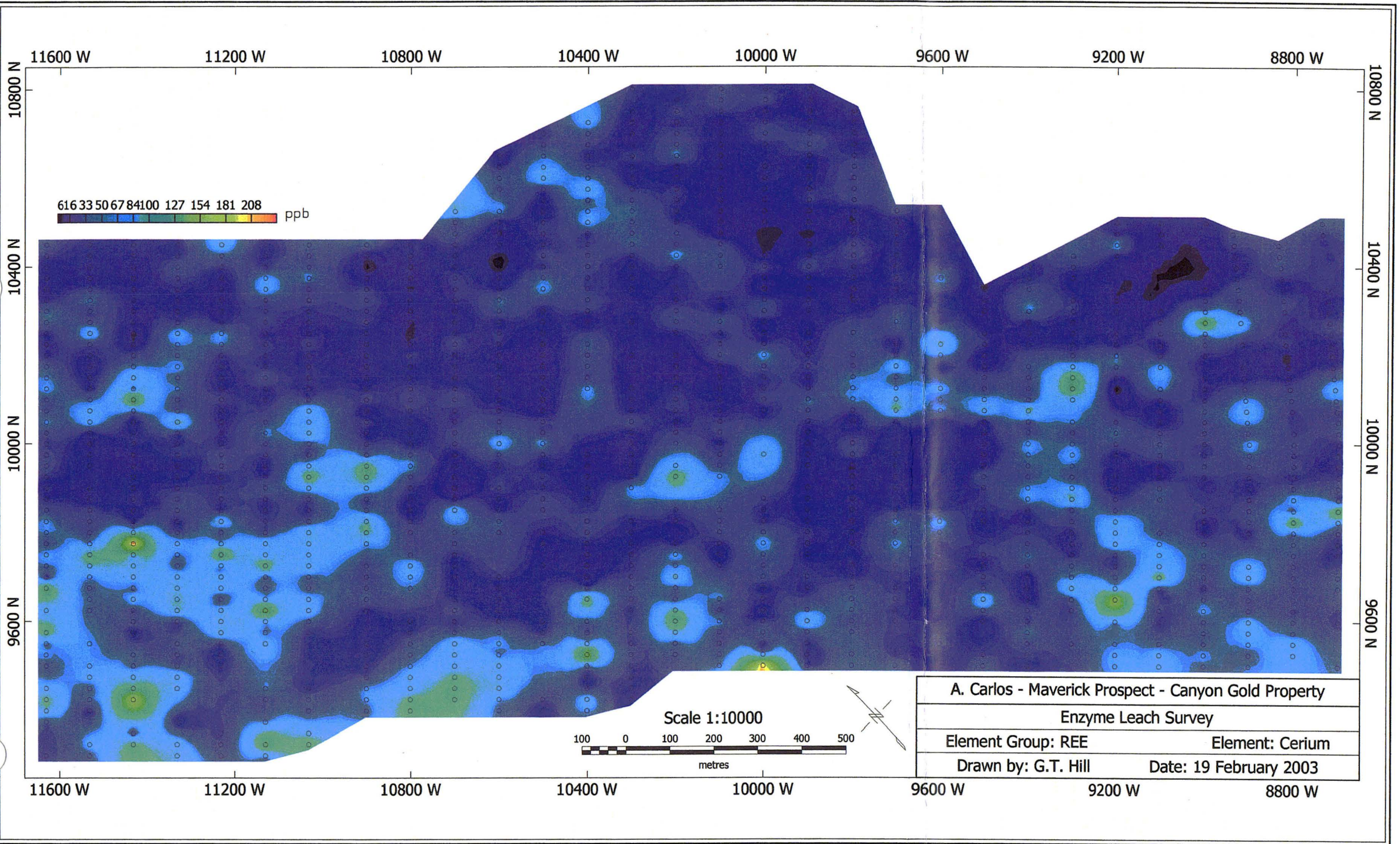




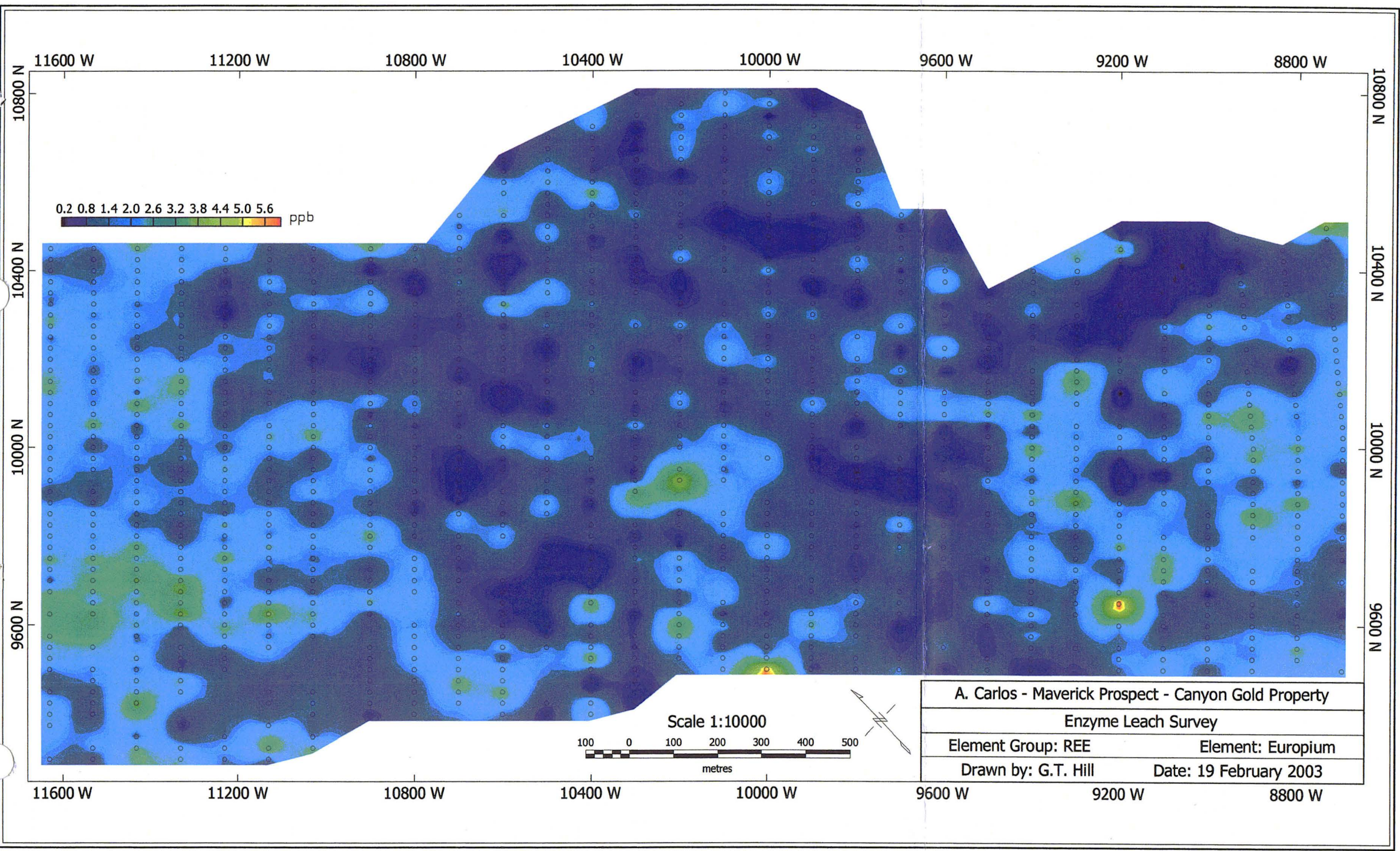




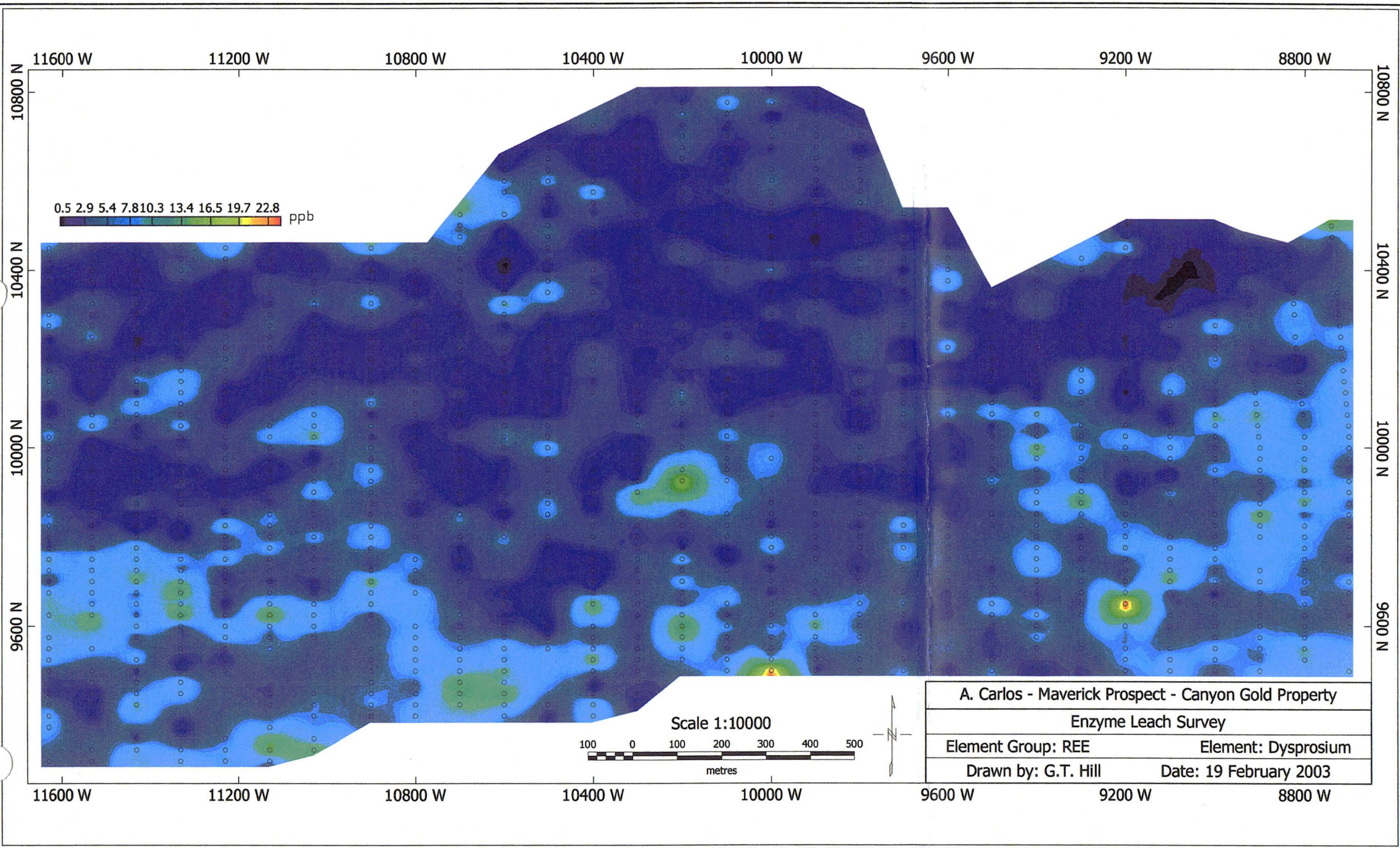




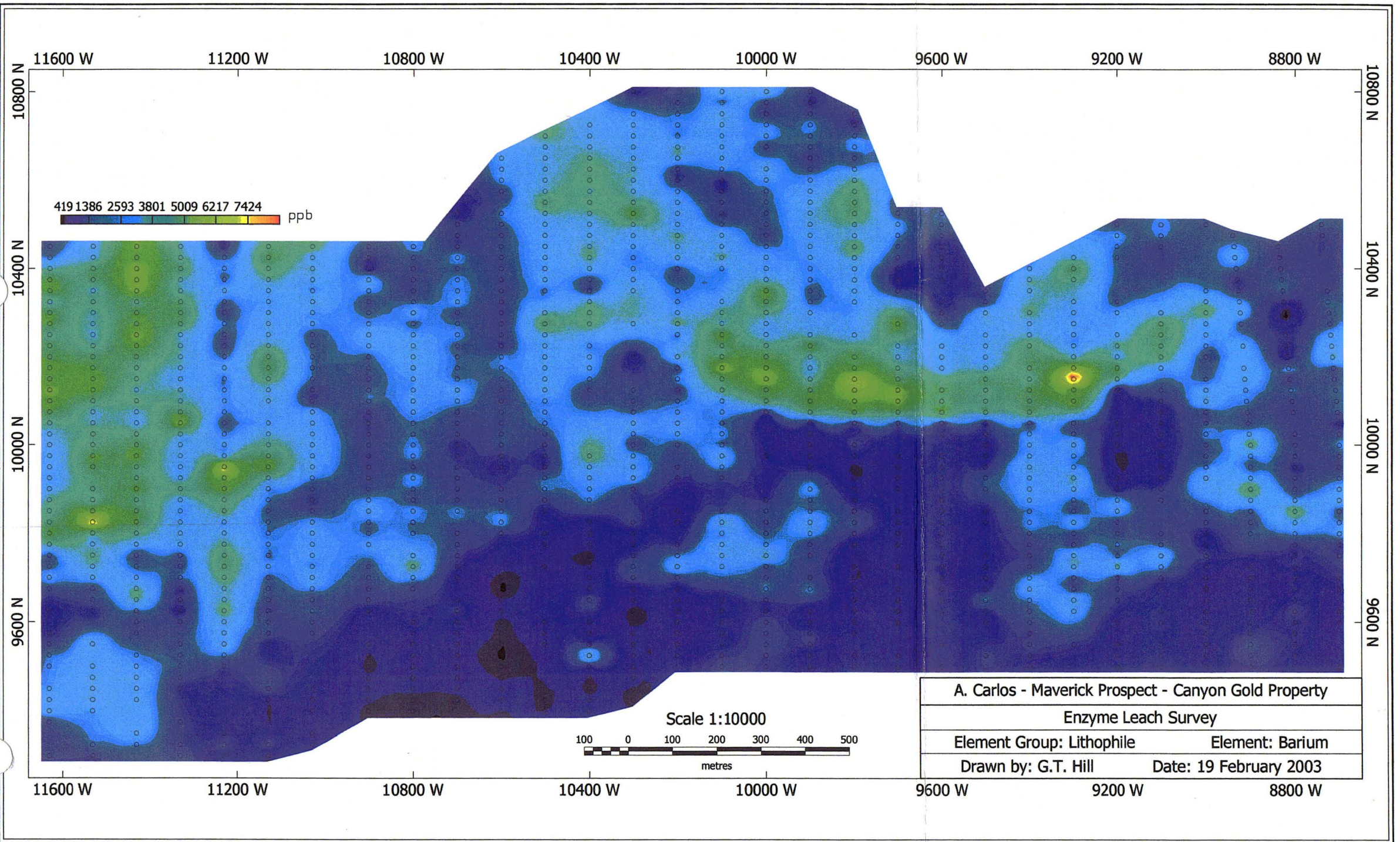




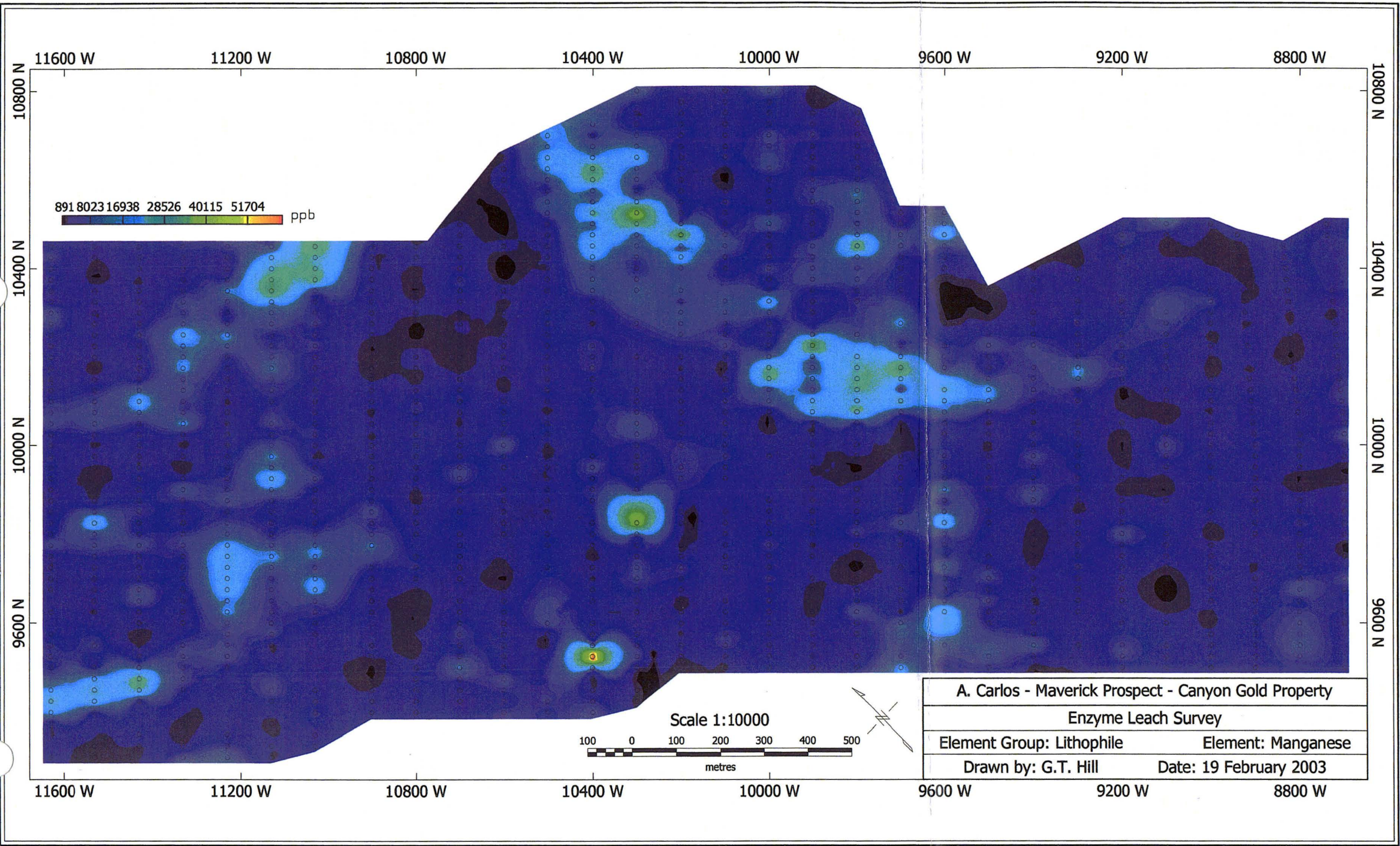




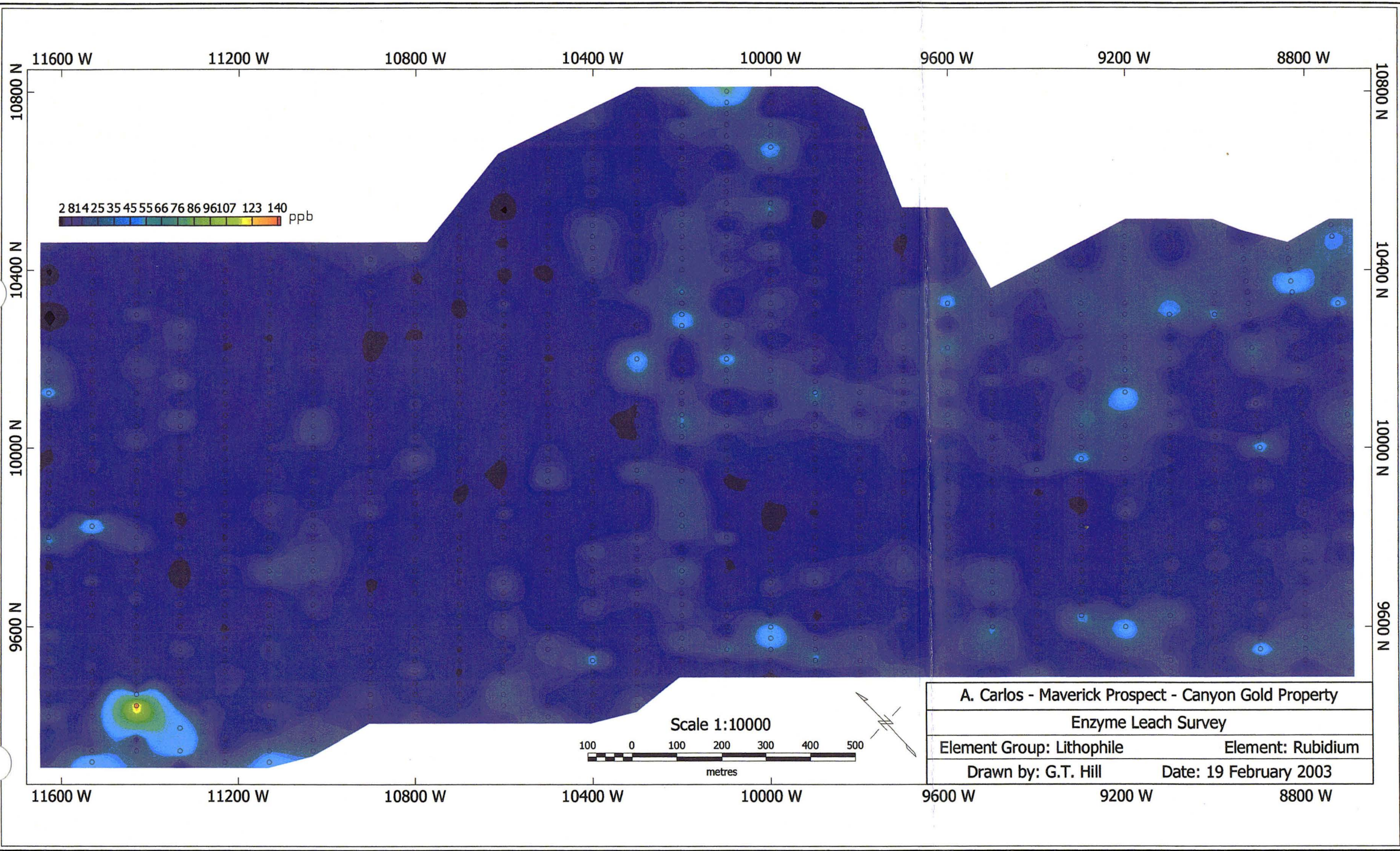






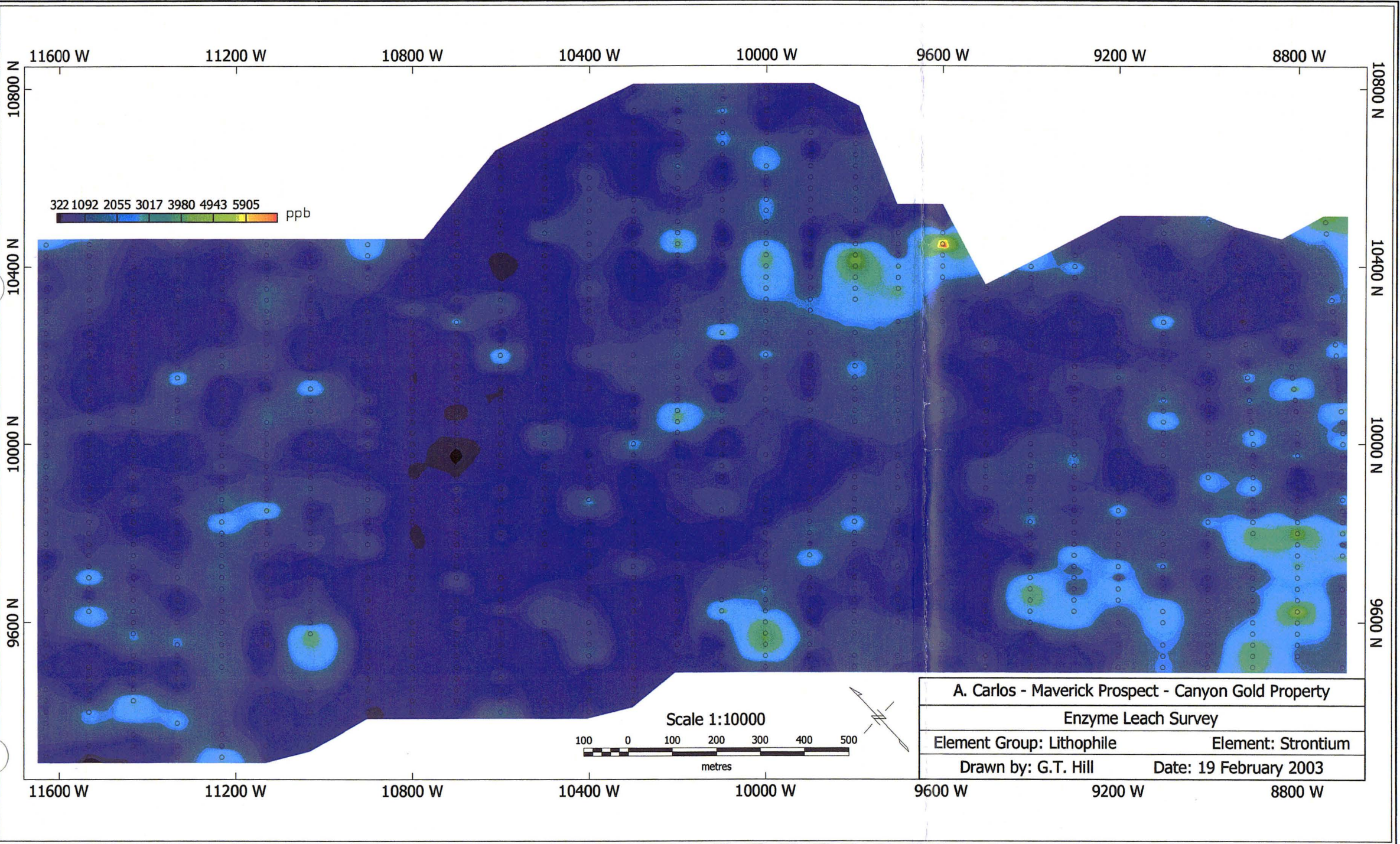




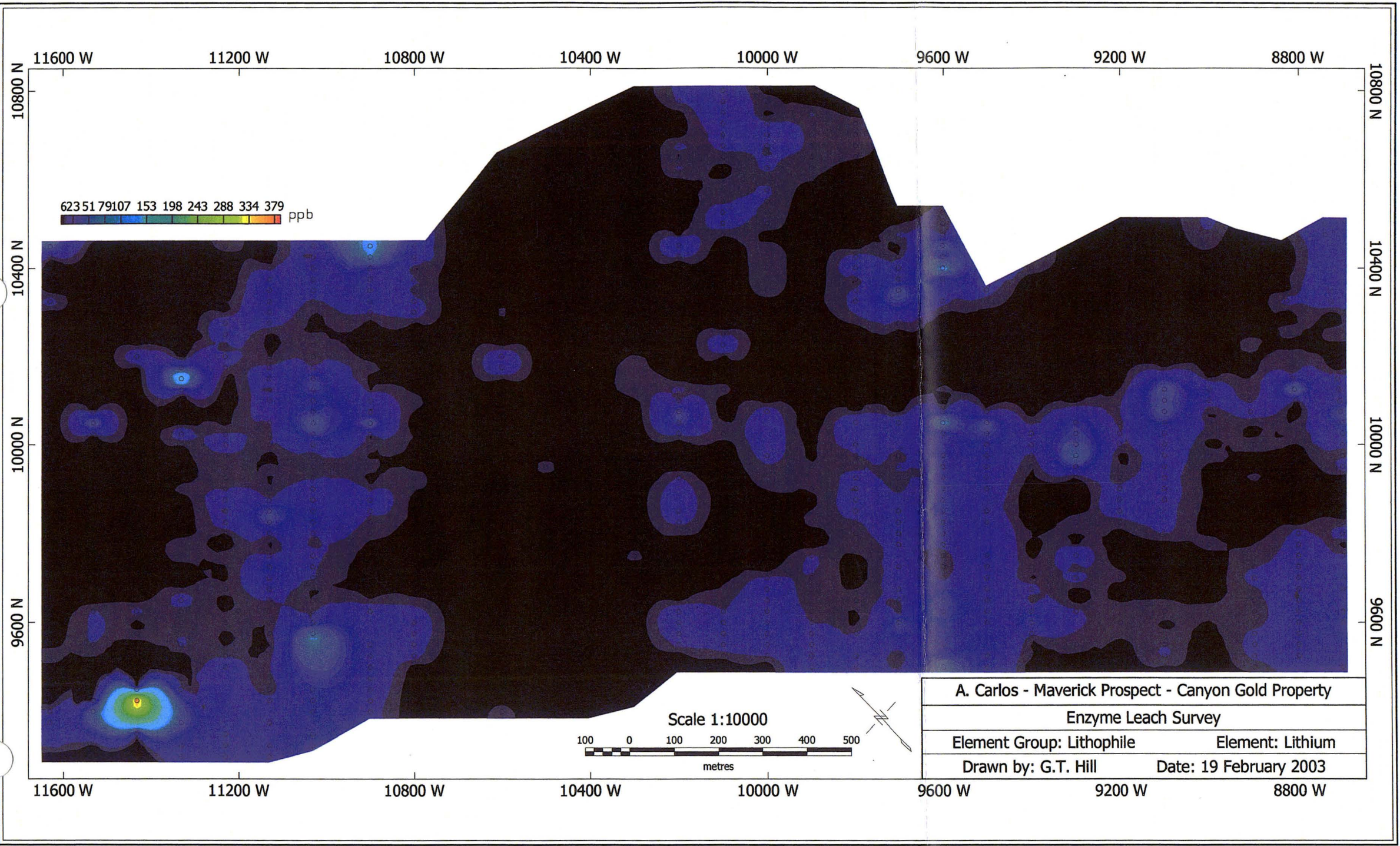


A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Lithophile	Element: Rubidium
Drawn by: G.T. Hill	Date: 19 February 2003



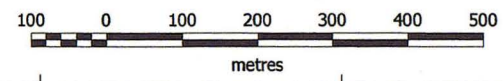






62 3 51 79 107 153 198 243 288 334 379 ppb

Scale 1:10000



A. Carlos - Maverick Prospect - Canyon Gold Property

Enzyme Leach Survey

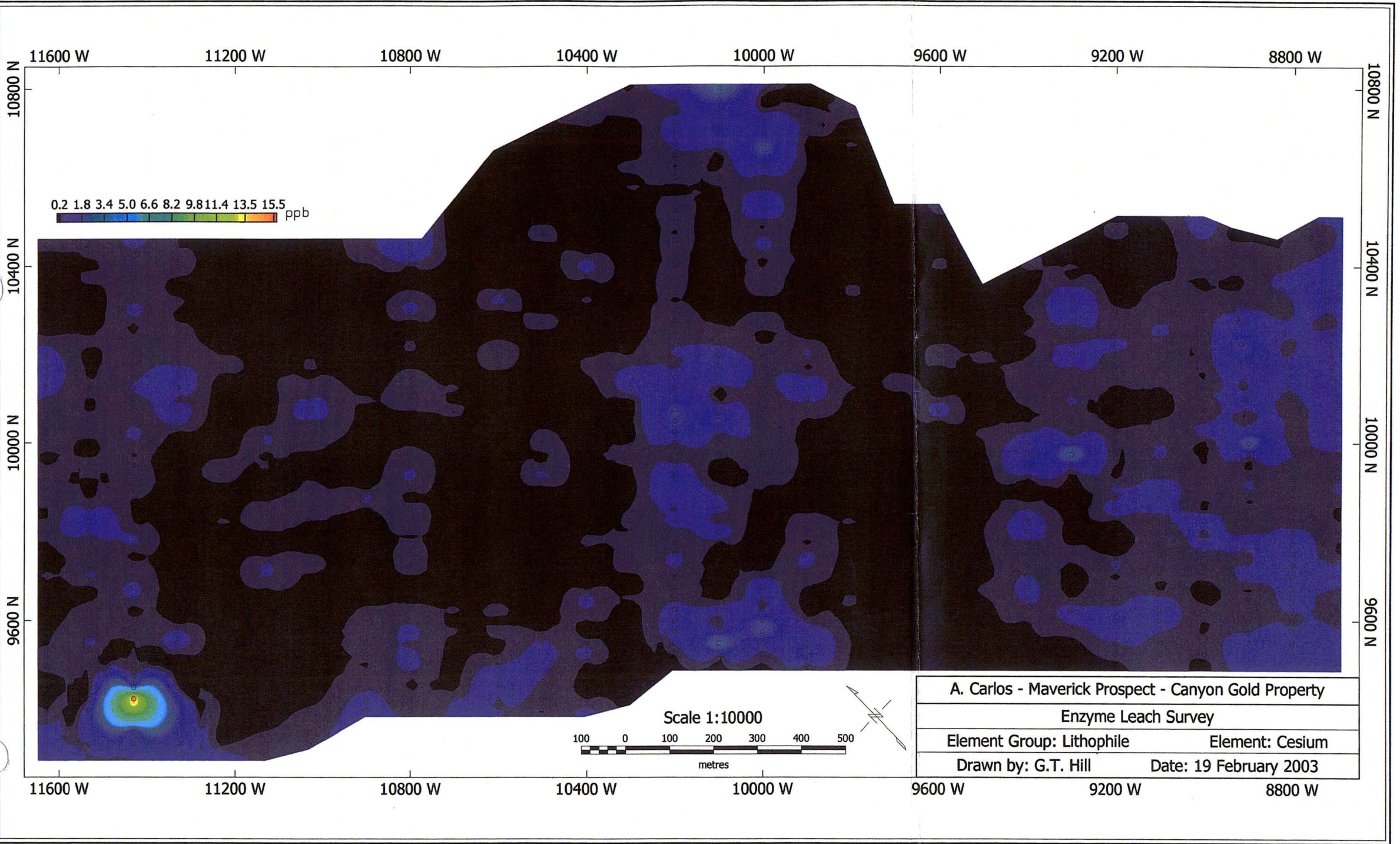
Element Group: Lithophile

Element: Lithium

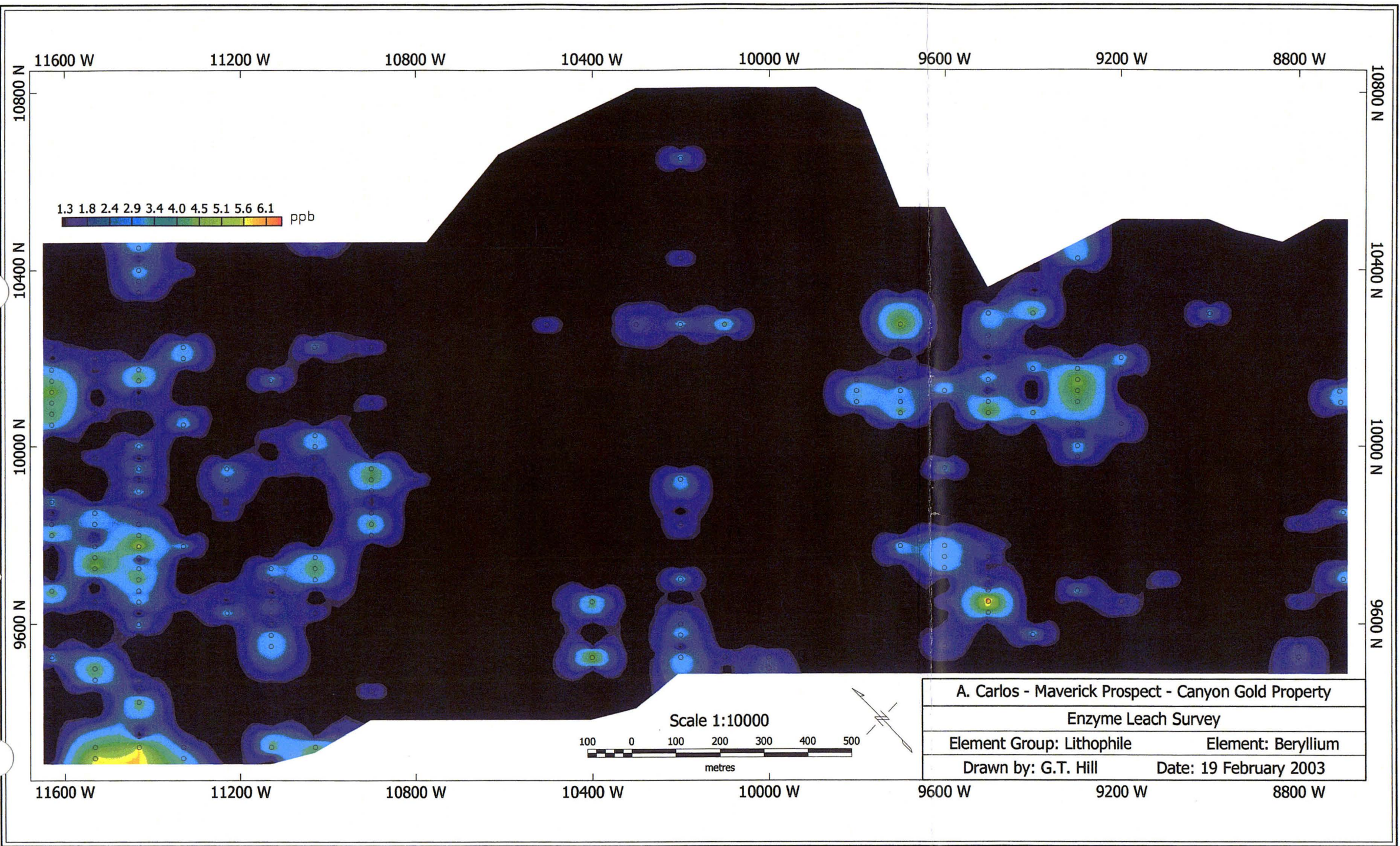
Drawn by: G.T. Hill

Date: 19 February 2003



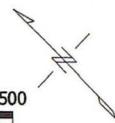
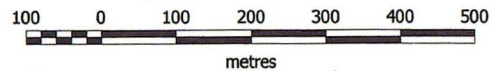






1.3 1.8 2.4 2.9 3.4 4.0 4.5 5.1 5.6 6.1 ppb

Scale 1:10000



A. Carlos - Maverick Prospect - Canyon Gold Property

Enzyme Leach Survey

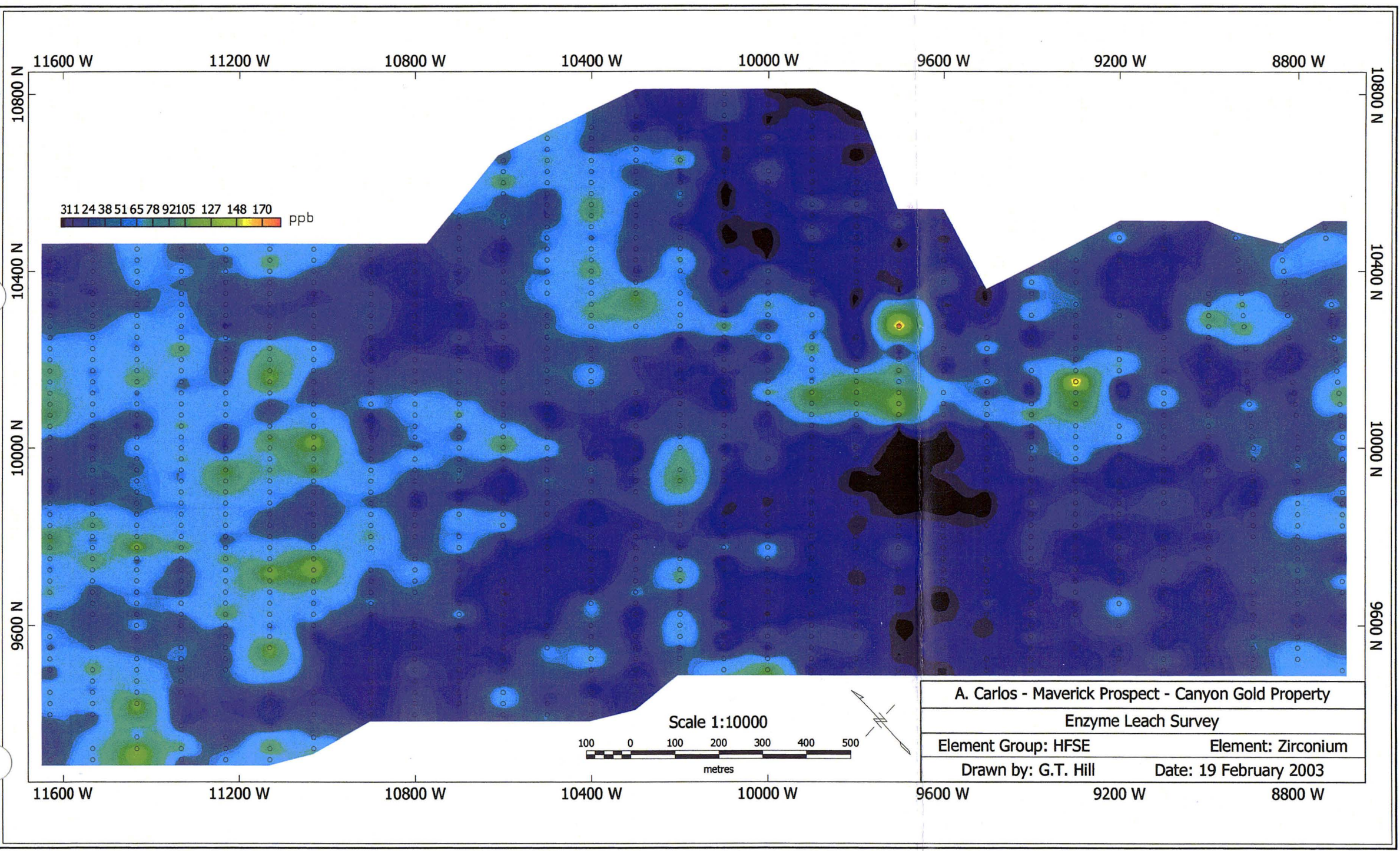
Element Group: Lithophile

Element: Beryllium

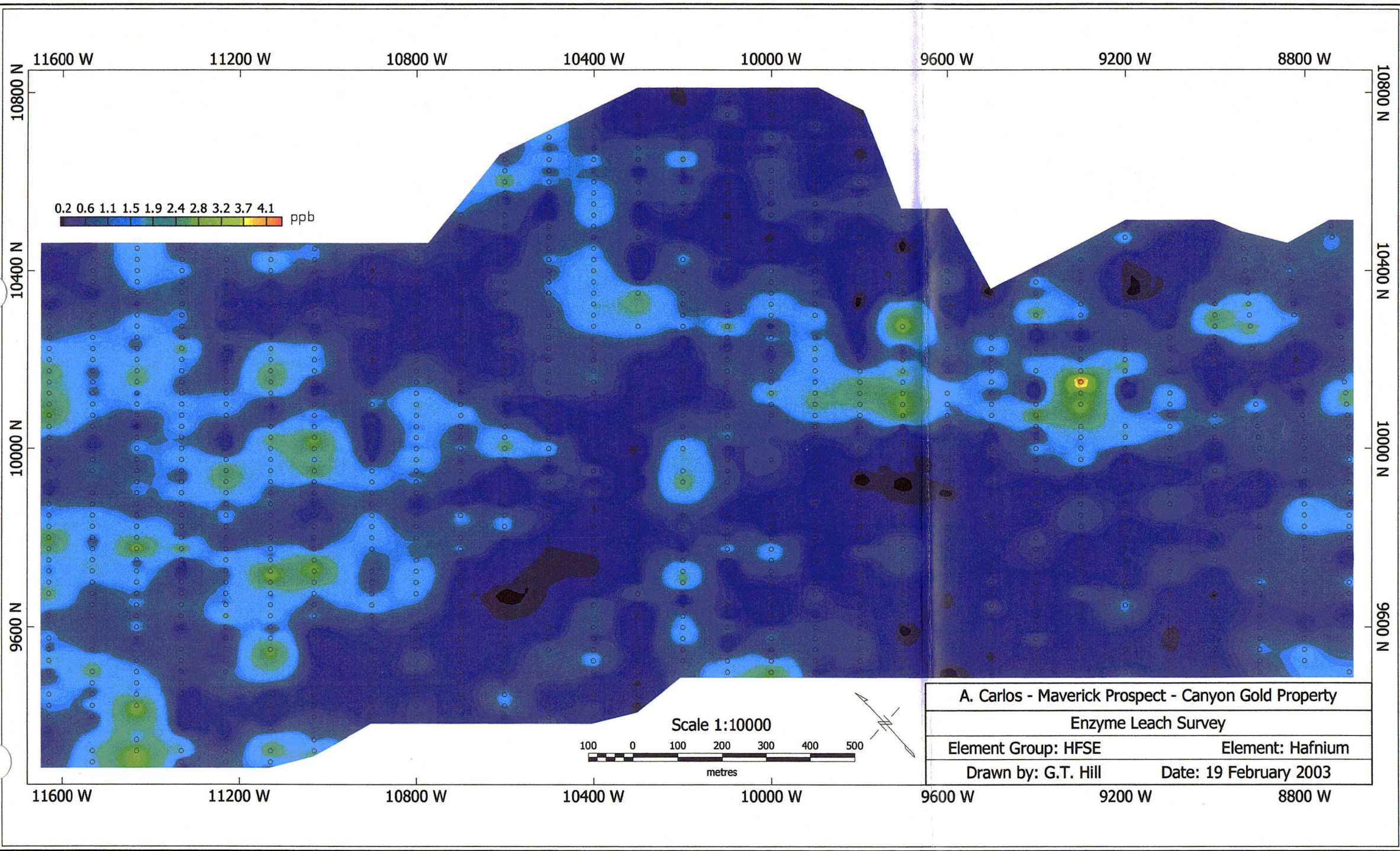
Drawn by: G.T. Hill

Date: 19 February 2003

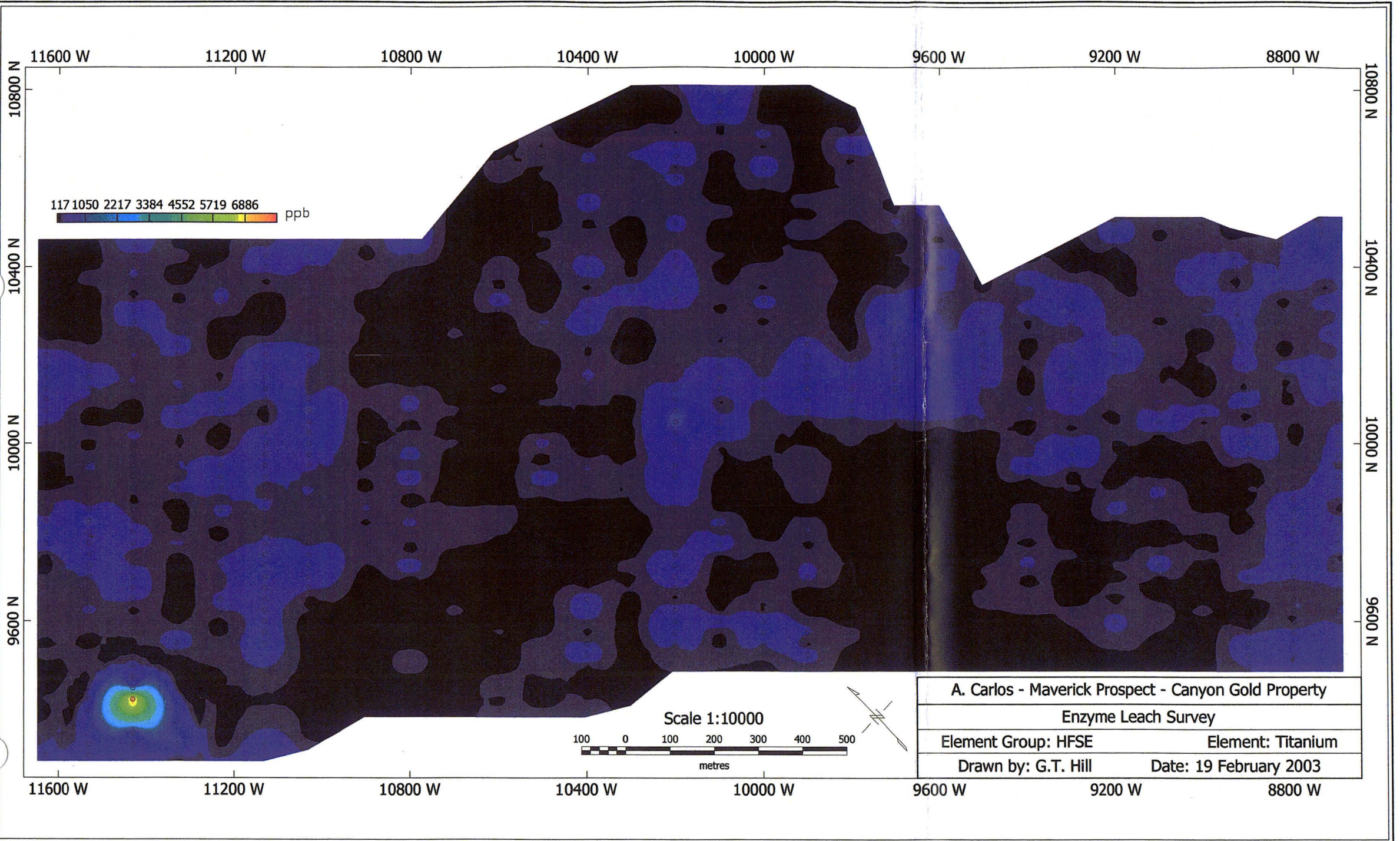




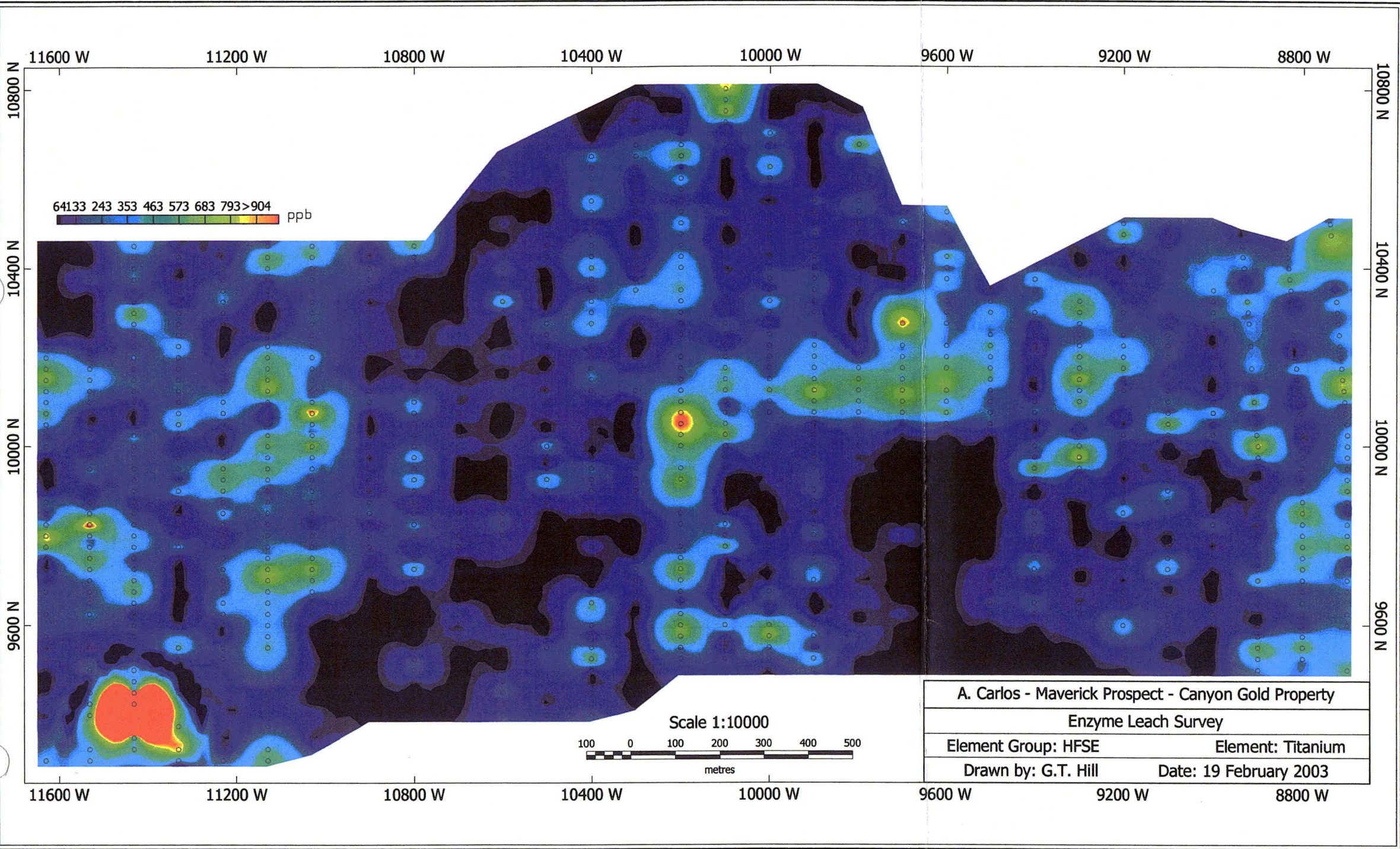




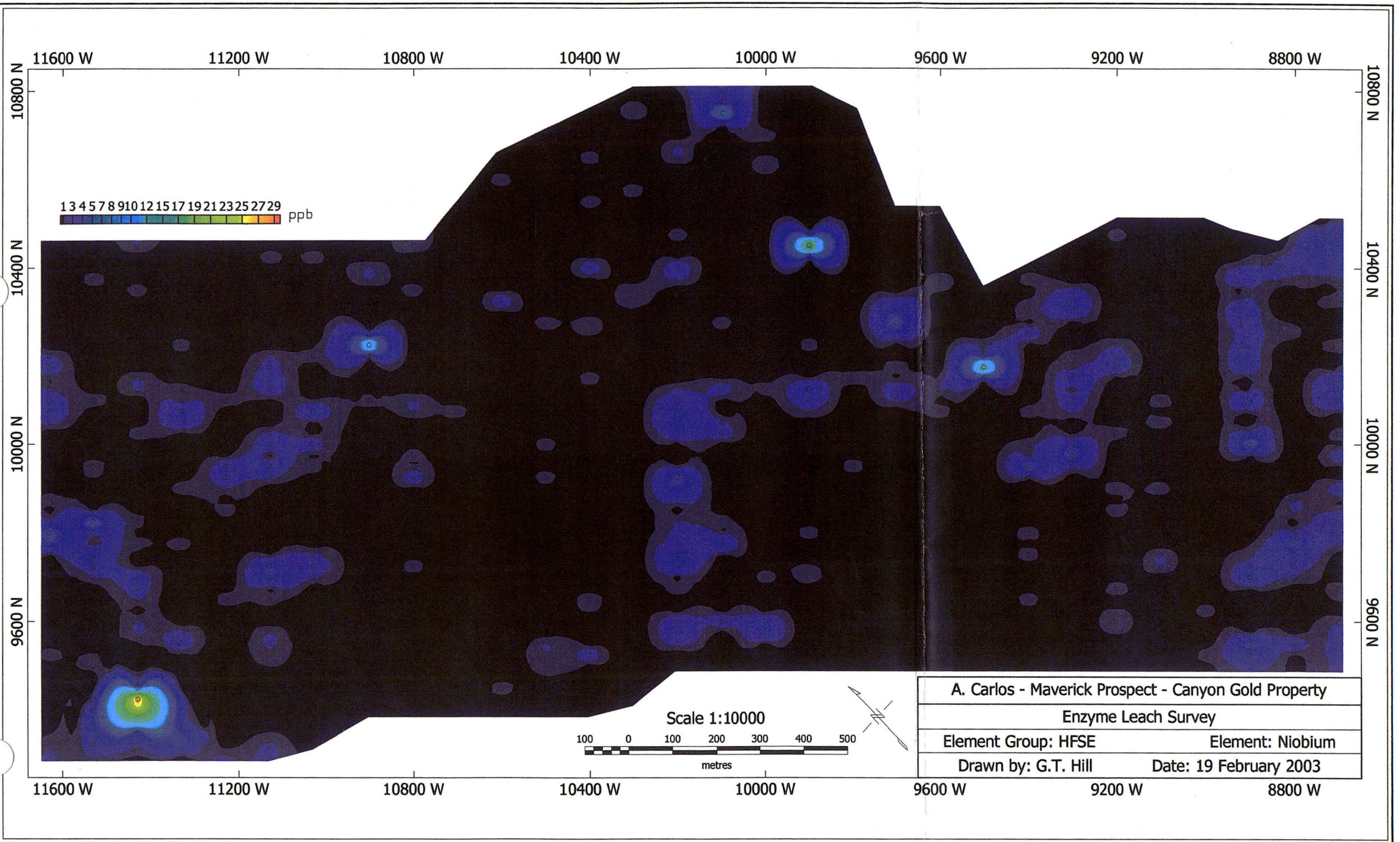




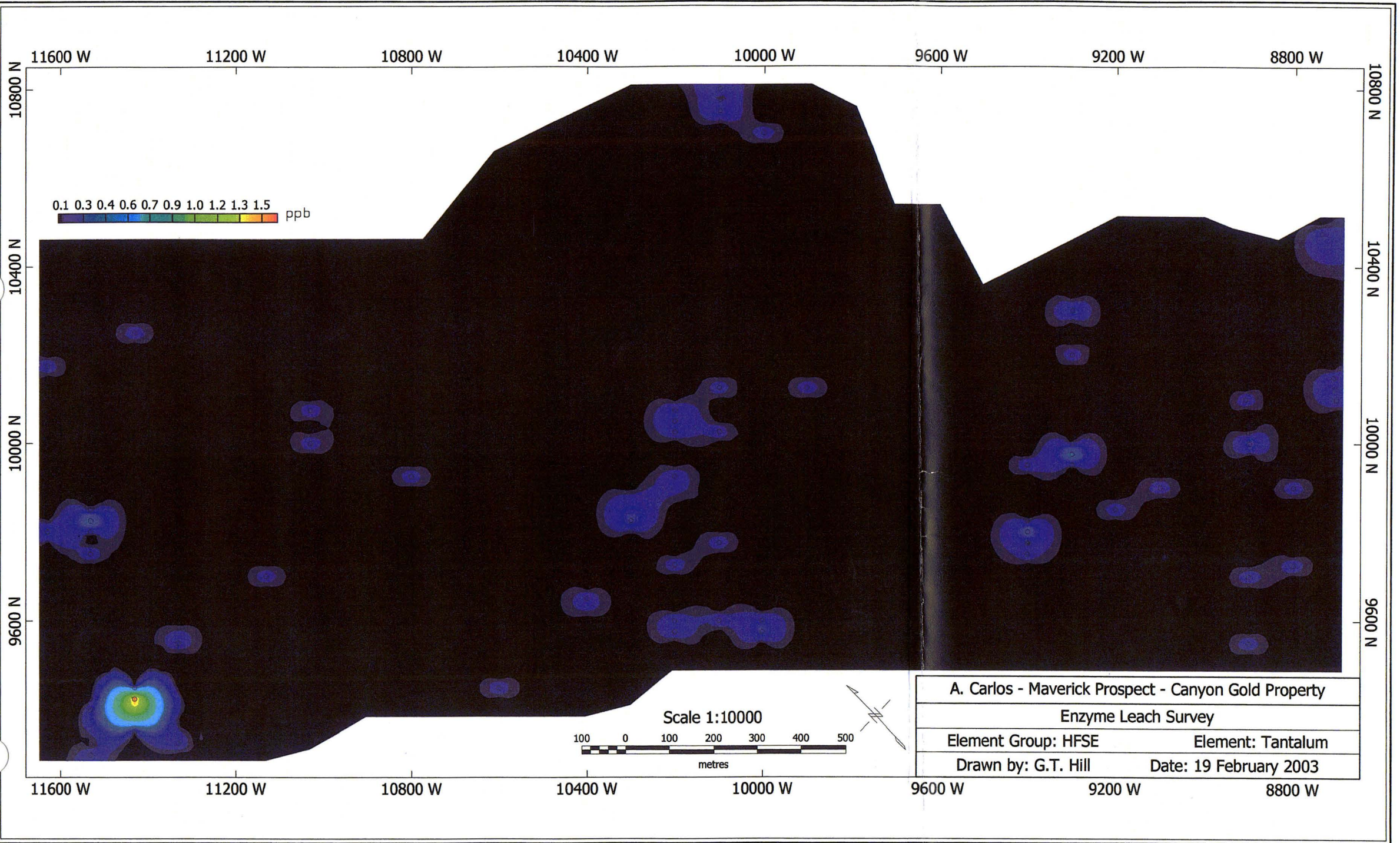










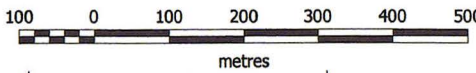






12 19 27 35 42 50 58 65 73 81 89 96 104 ppb

Scale 1:10000



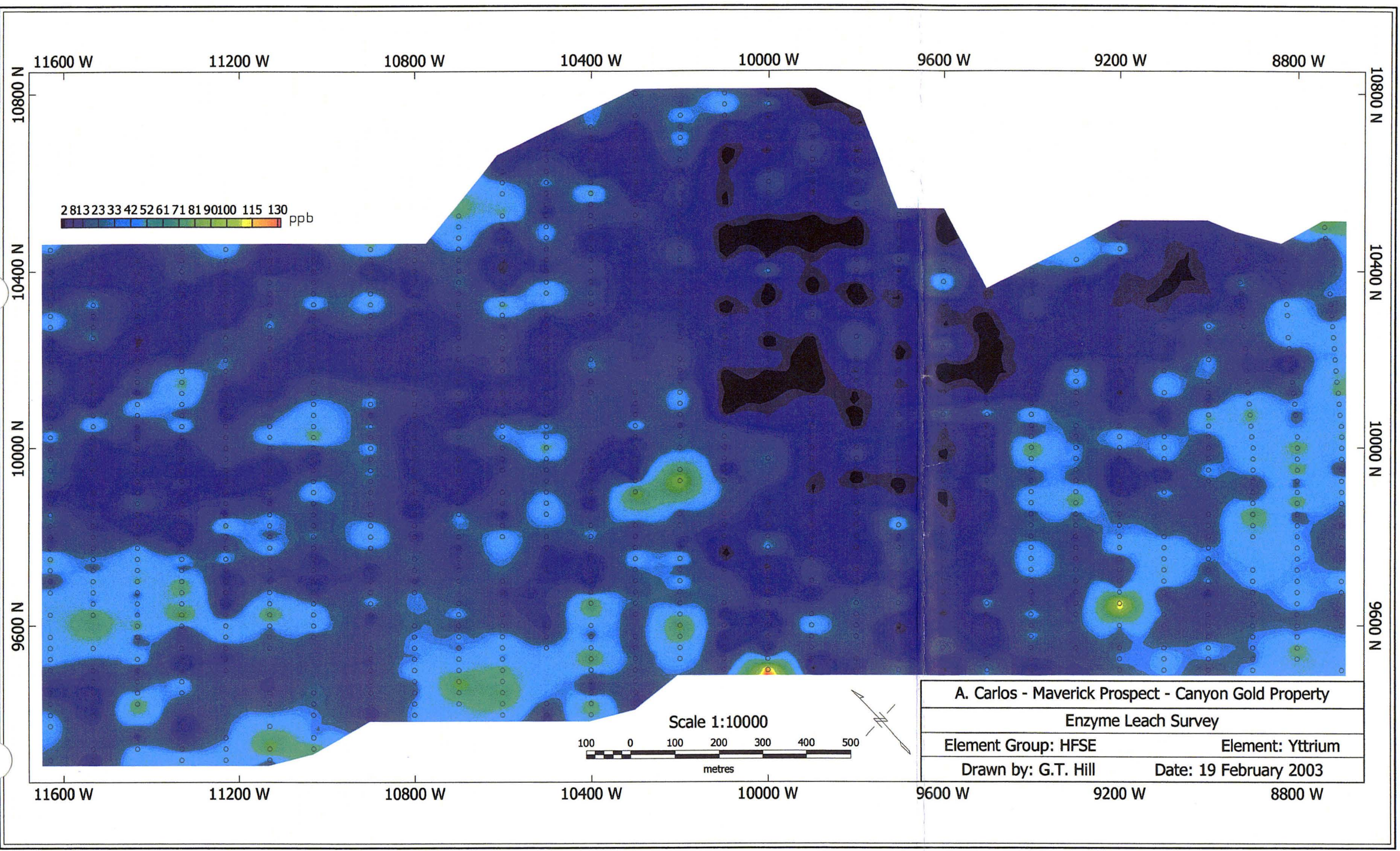
A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: HFSE	Element: Chromium
Drawn by: G.T. Hill	Date: 19 February 2003

11600 W      11200 W      10800 W      10400 W      10000 W      9600 W      9200 W      8800 W

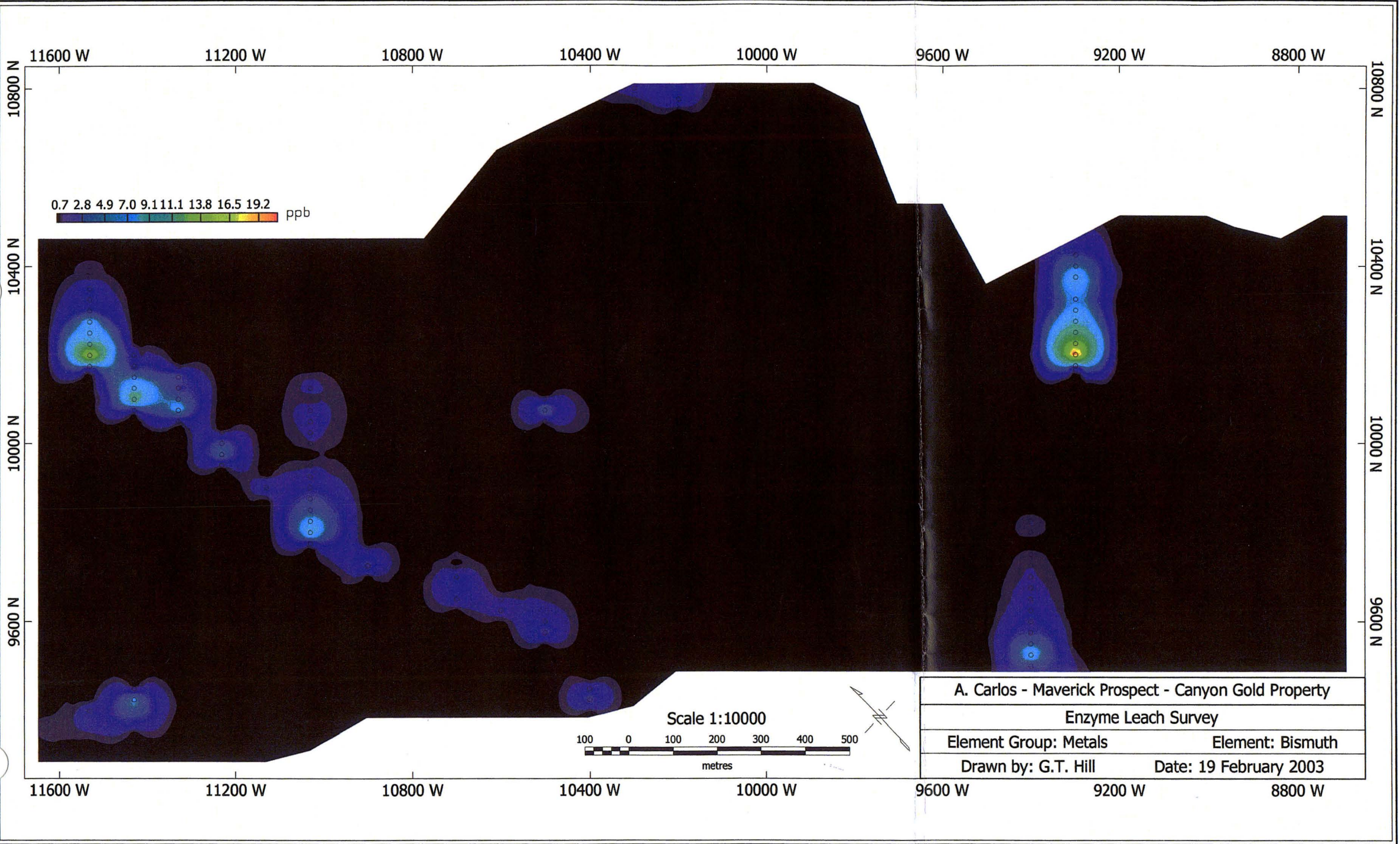
10800 N  
10400 N  
10000 N  
9600 N

10800 N  
10400 N  
10000 N  
9600 N

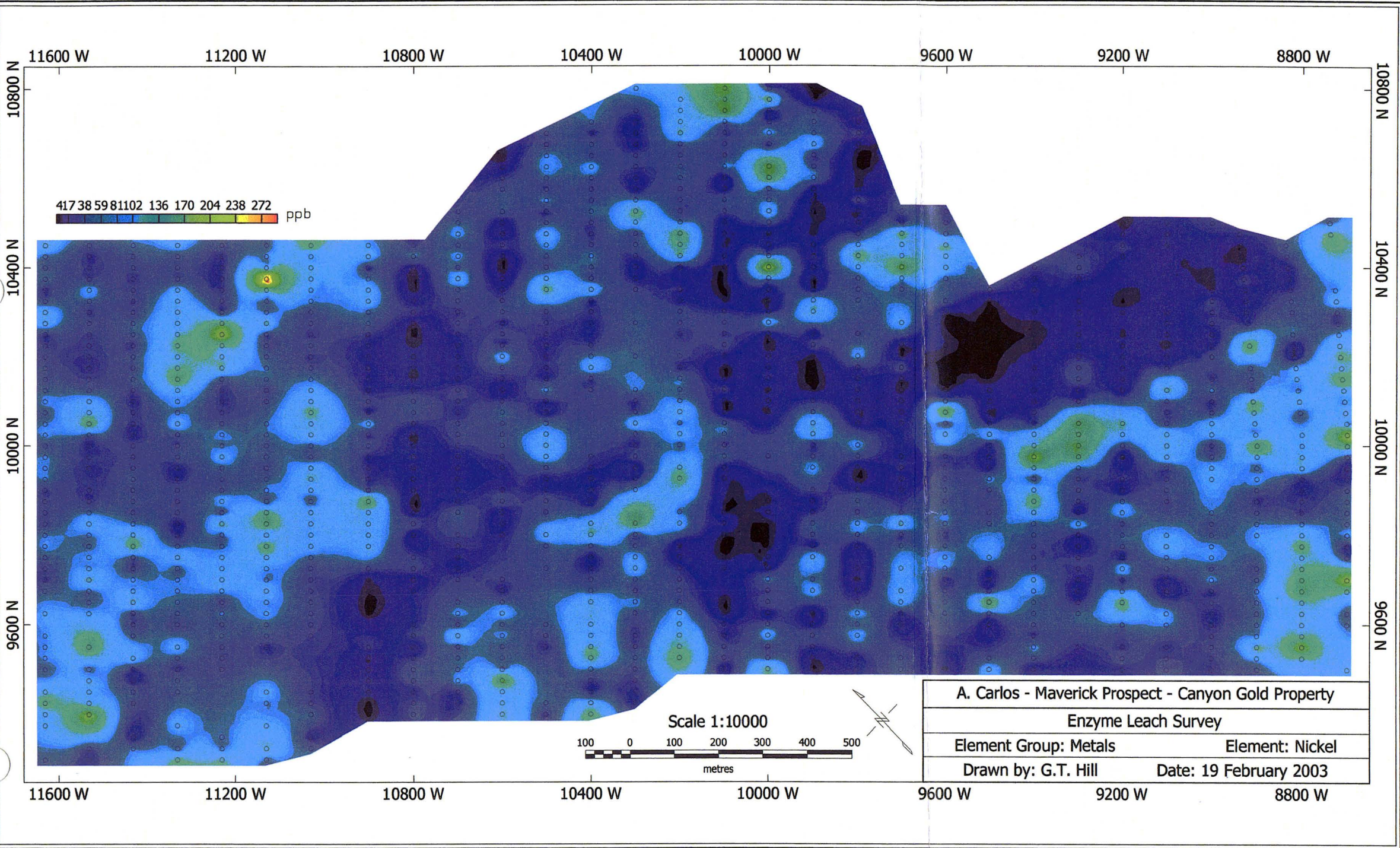




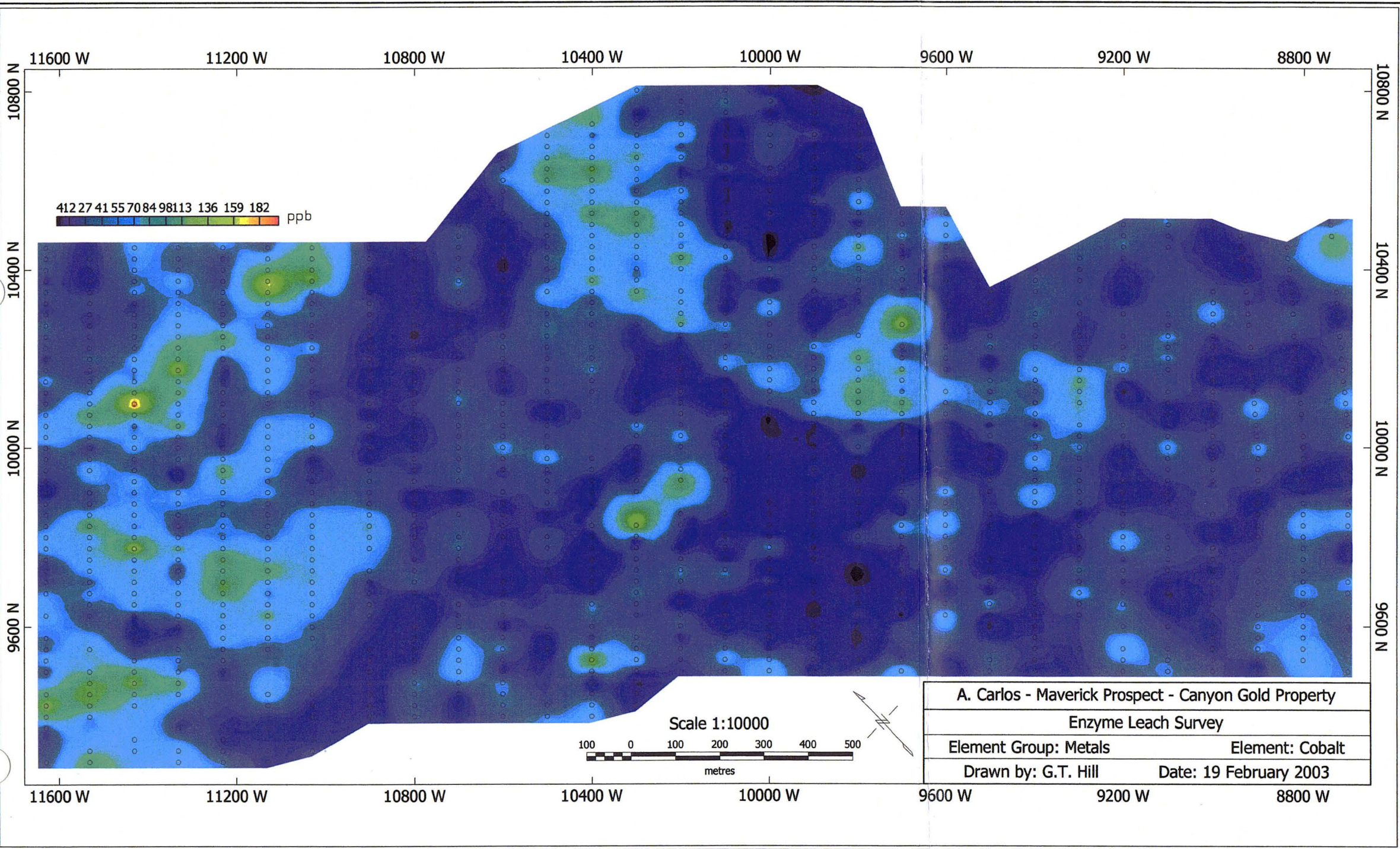




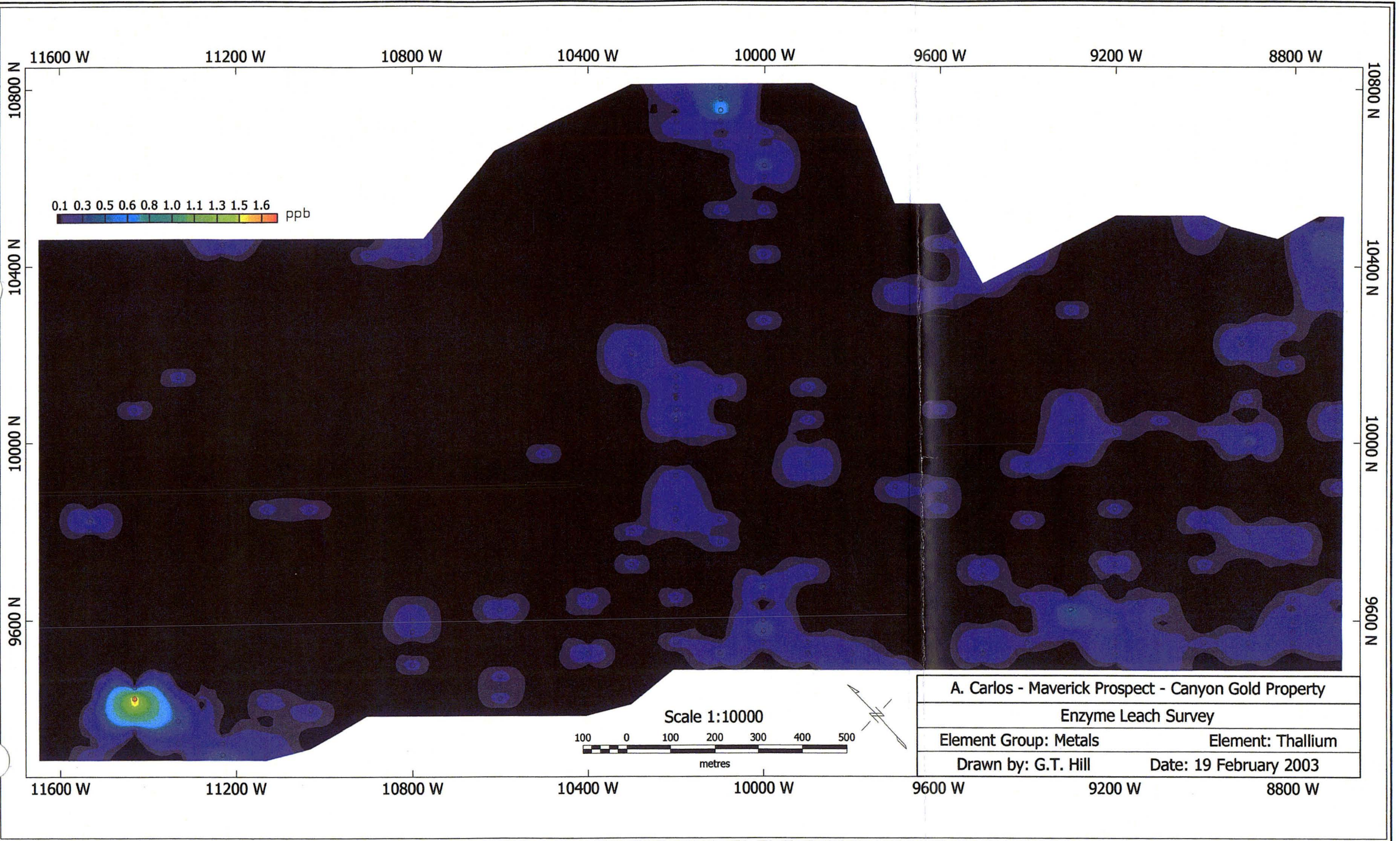




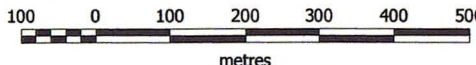




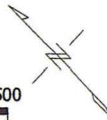




0.1 0.3 0.5 0.6 0.8 1.0 1.1 1.3 1.5 1.6 ppb



Scale 1:10000



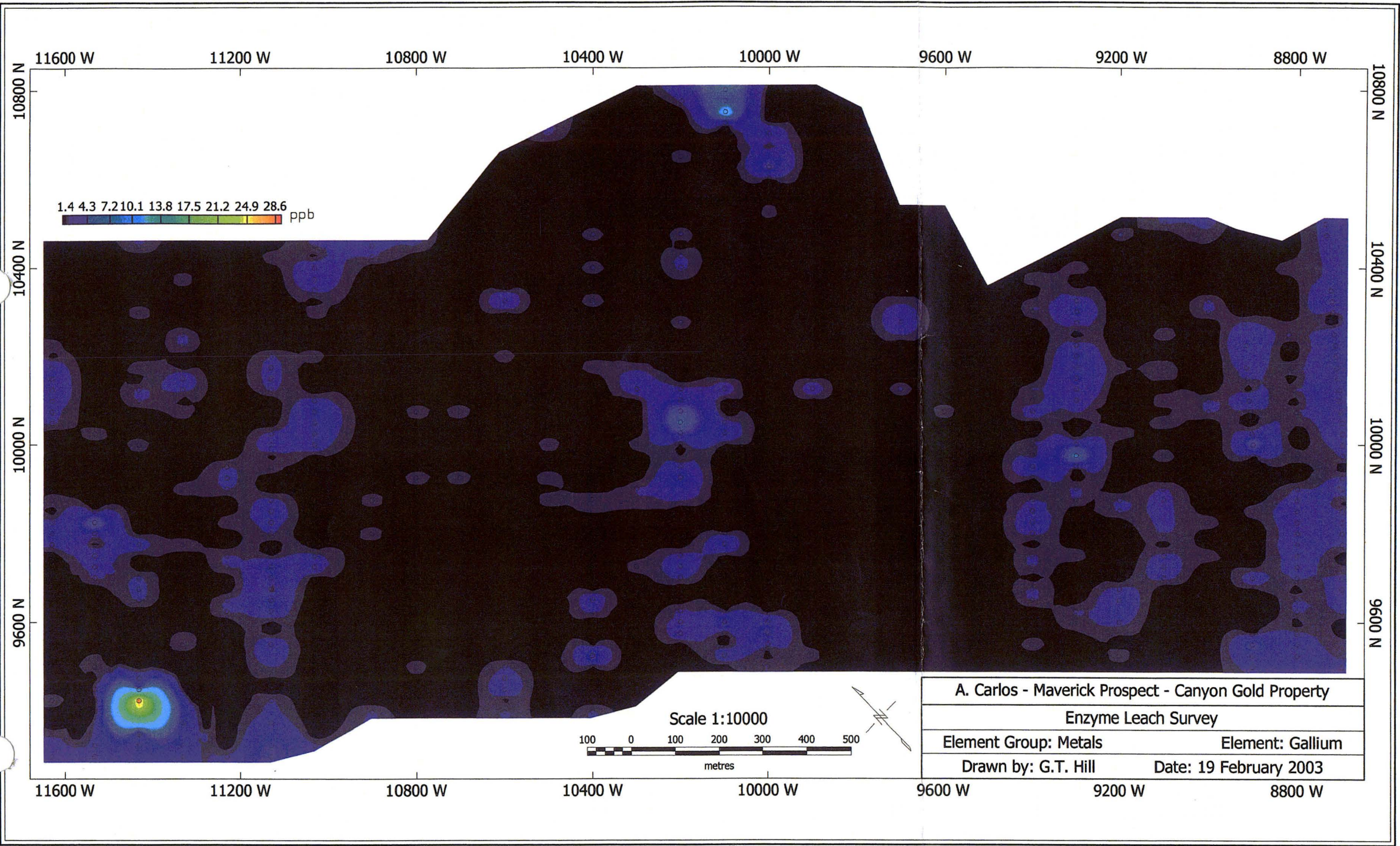
A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Metals	Element: Thallium
Drawn by: G.T. Hill	Date: 19 February 2003

11600 W 11200 W 10800 W 10400 W 10000 W 9600 W 9200 W 8800 W

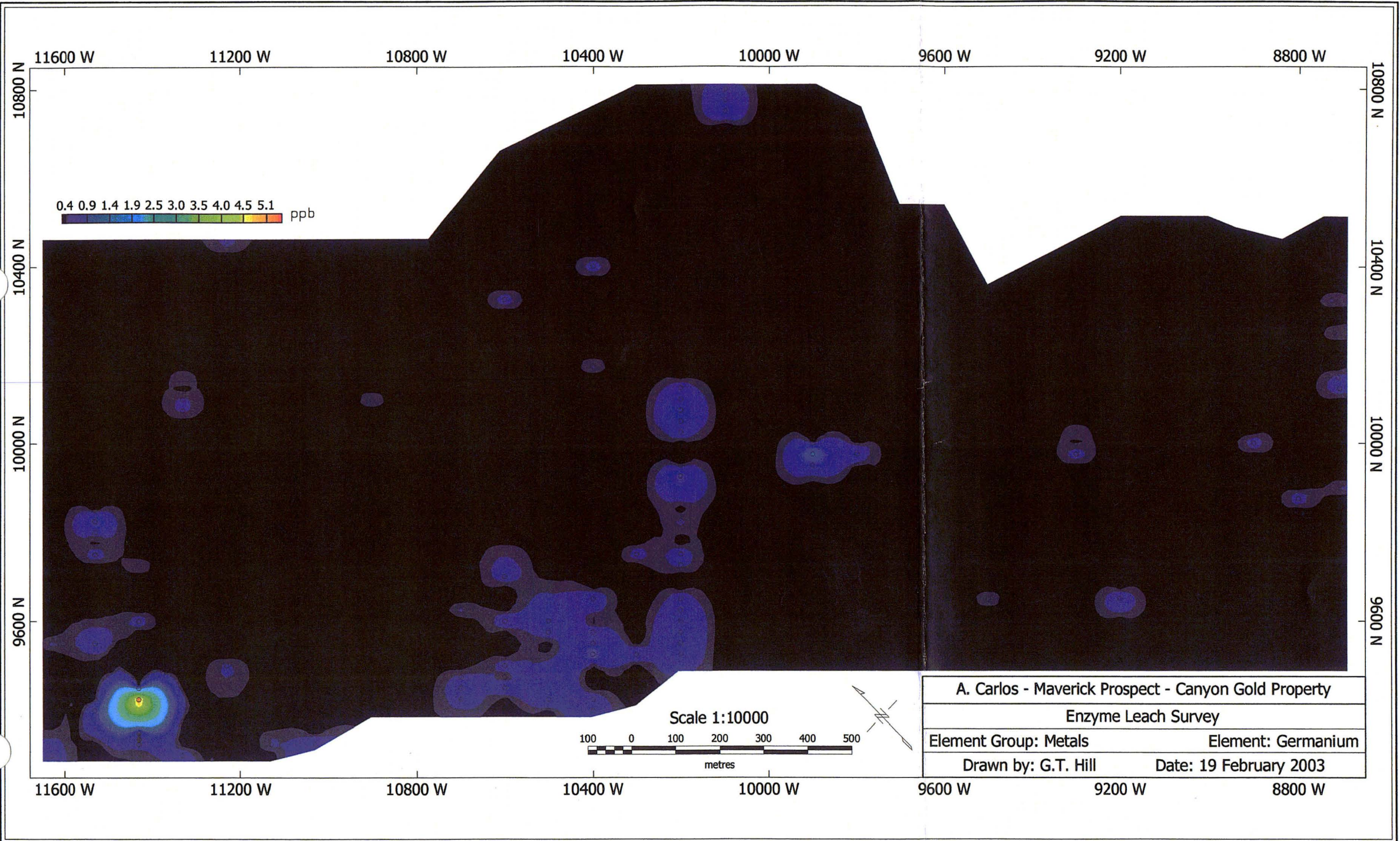
10800 N  
10400 N  
10000 N  
9600 N

10800 N  
10400 N  
10000 N  
9600 N



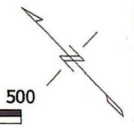
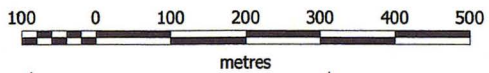






0.4 0.9 1.4 1.9 2.5 3.0 3.5 4.0 4.5 5.1 ppb

Scale 1:10000



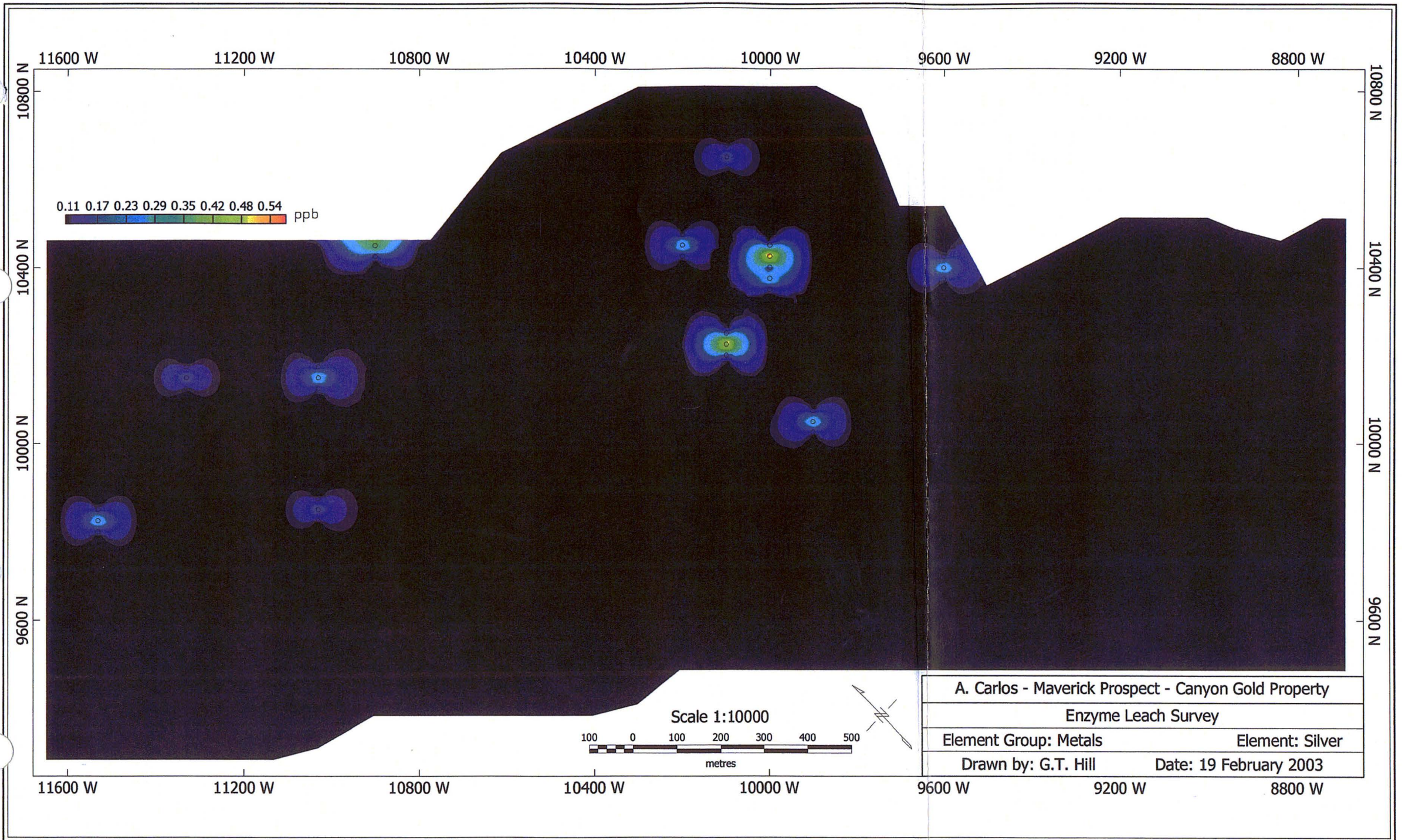
A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Metals	Element: Germanium
Drawn by: G.T. Hill	Date: 19 February 2003

11600 W 11200 W 10800 W 10400 W 10000 W 9600 W 9200 W 8800 W

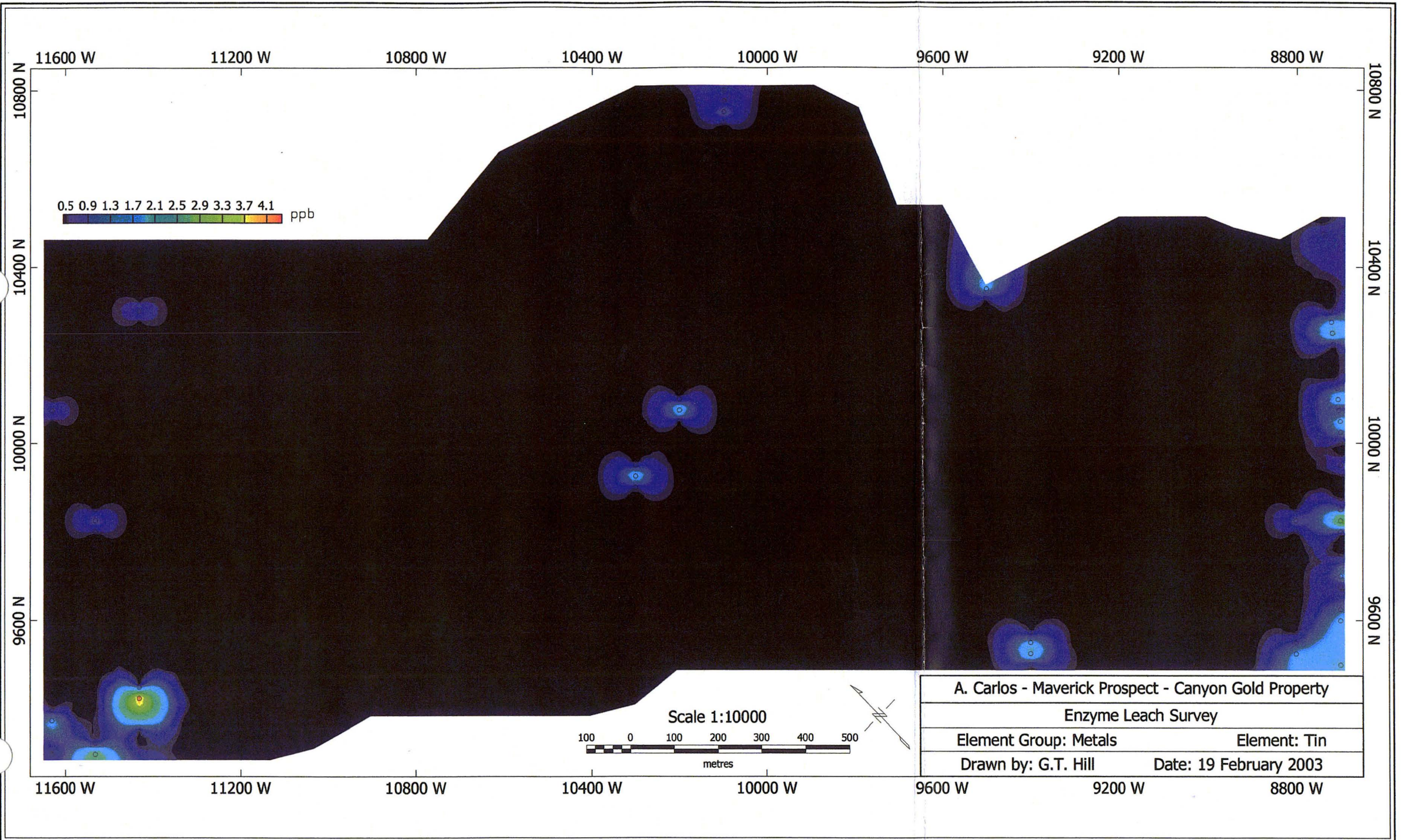
10800 N  
10400 N  
10000 N  
9600 N

10800 N  
10400 N  
10000 N  
9600 N

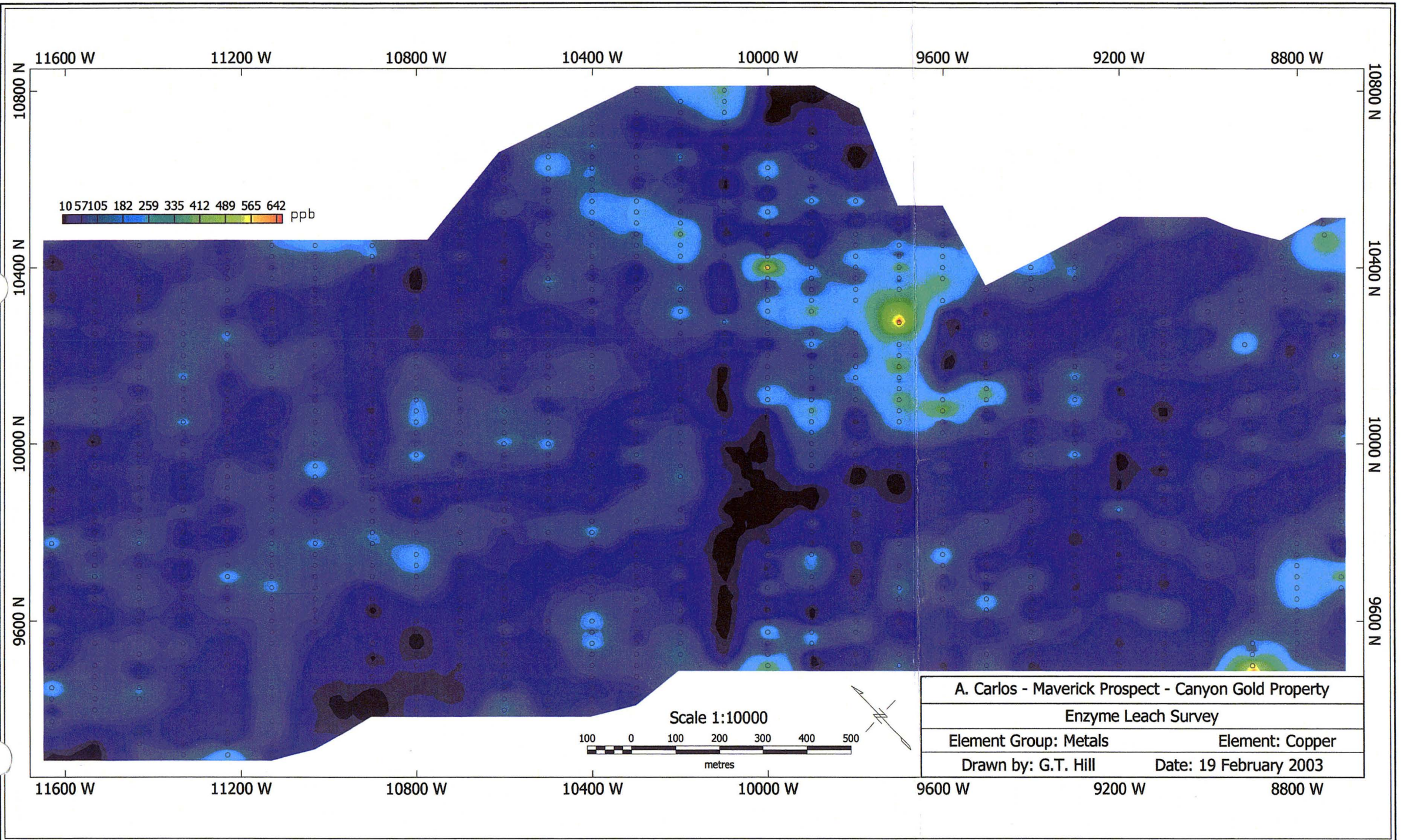




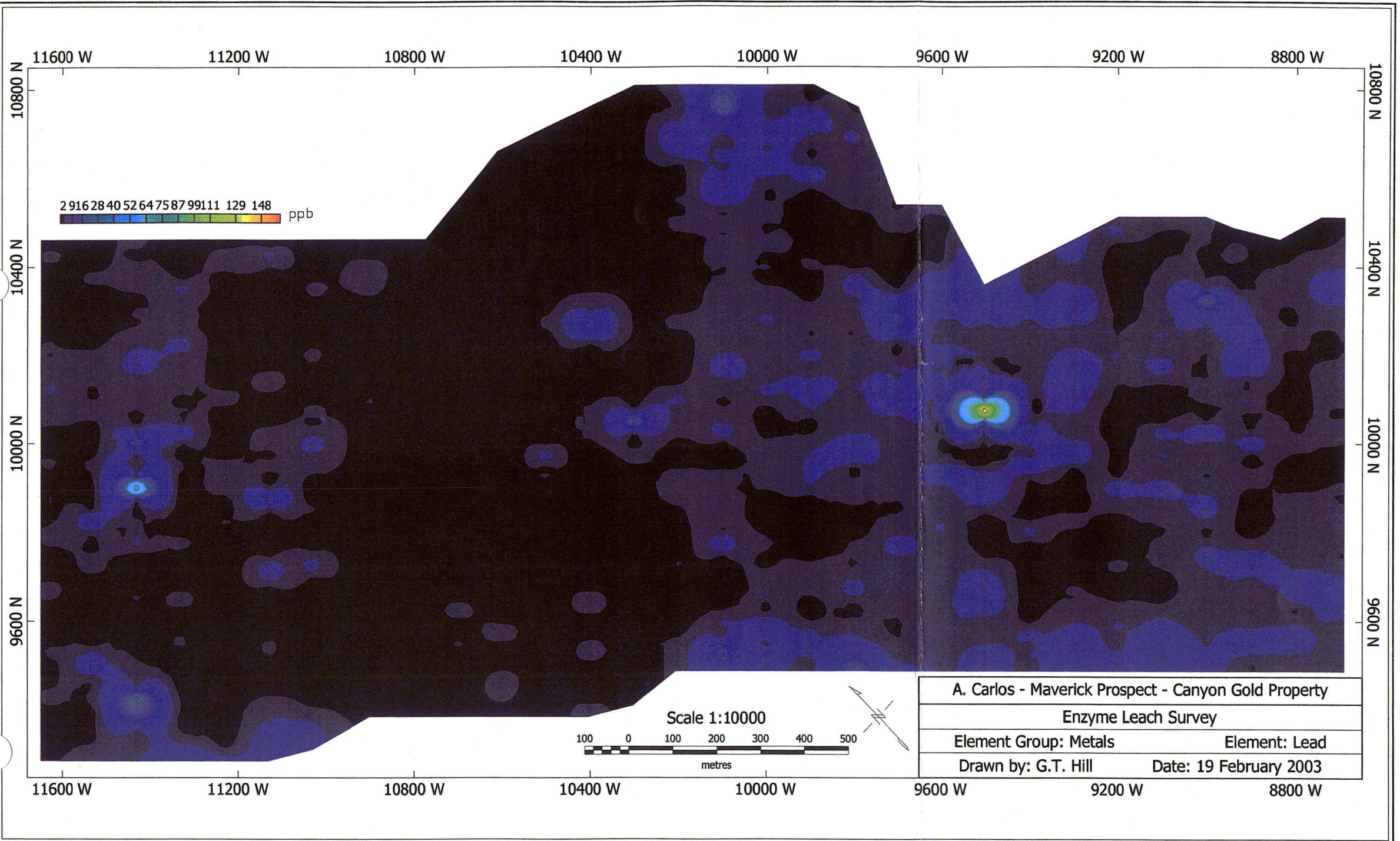






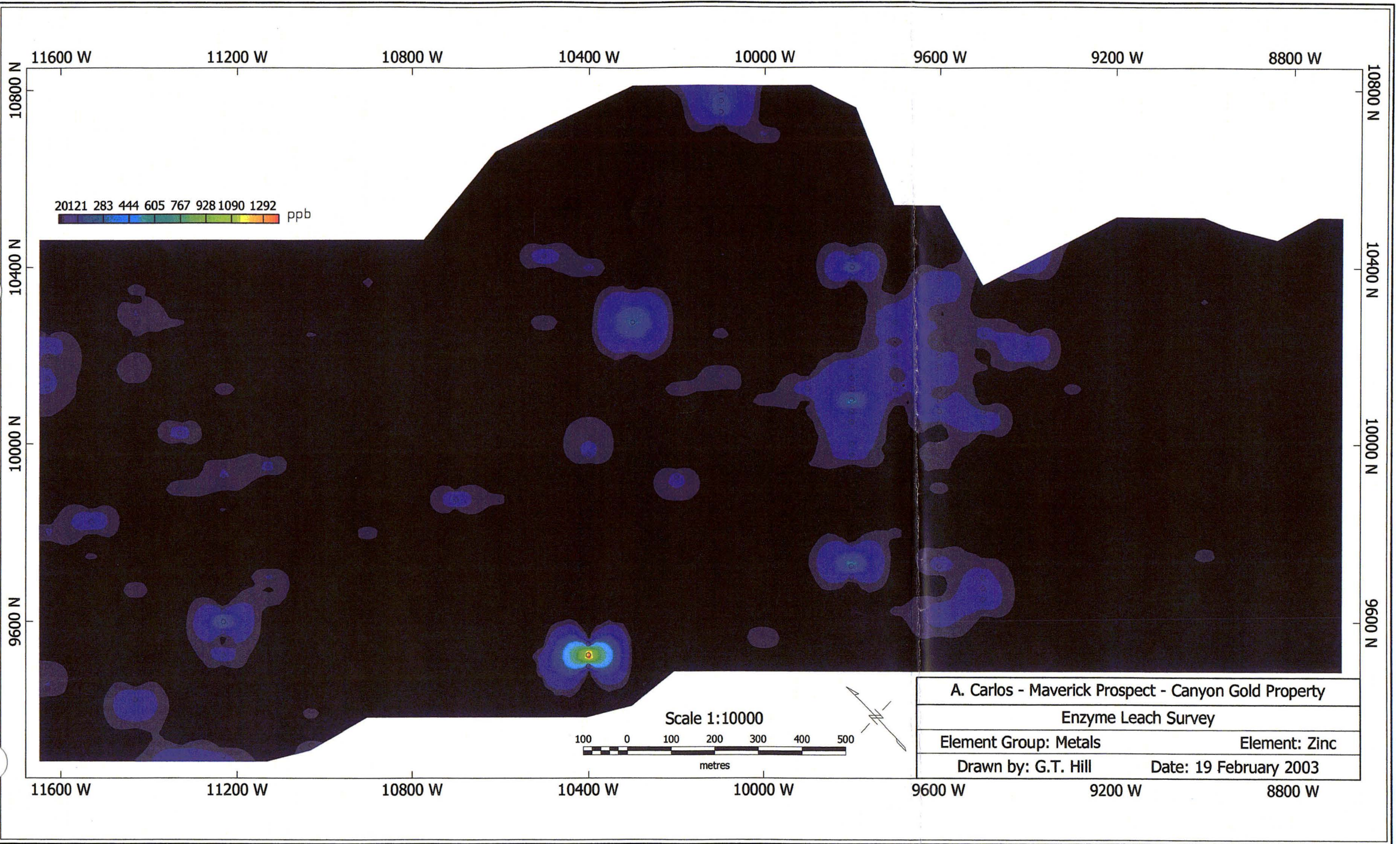




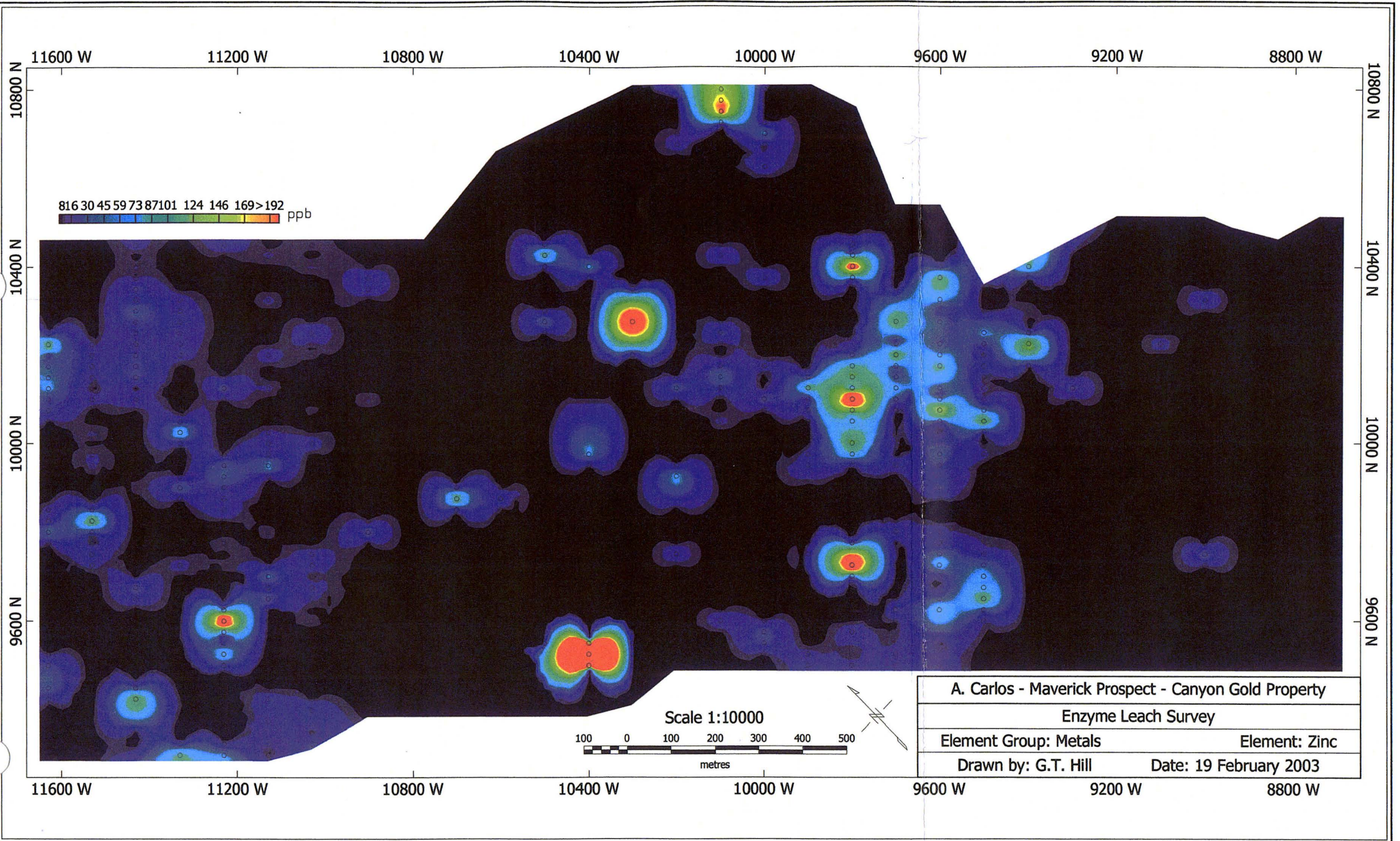


A. Carlos - Maverick Prospect - Canyon Gold Property	
Enzyme Leach Survey	
Element Group: Metals	Element: Lead
Drawn by: G.T. Hill	Date: 19 February 2003



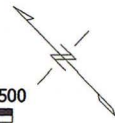
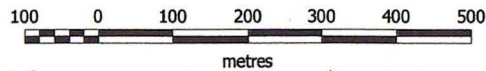






816 30 45 59 73 87 101 124 146 169 >192 ppb

Scale 1:10000



A. Carlos - Maverick Prospect - Canyon Gold Property

Enzyme Leach Survey

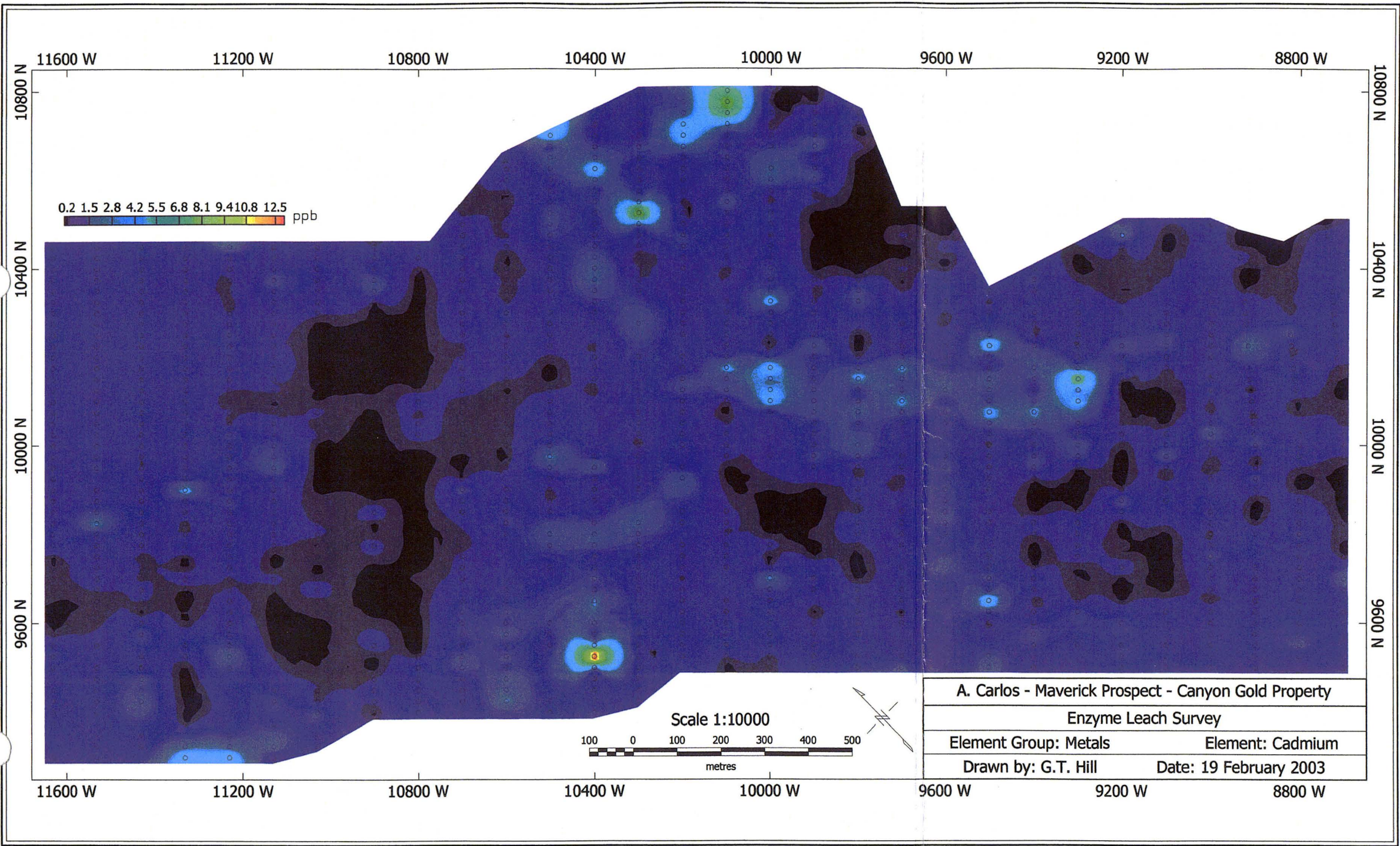
Element Group: Metals

Element: Zinc

Drawn by: G.T. Hill

Date: 19 February 2003





A. Carlos - Maverick Prospect - Canyon Gold Property

Enzyme Leach Survey

Element Group: Metals                      Element: Cadmium

Drawn by: G.T. Hill                      Date: 19 February 2003

Scale 1:10000

