

RSGM R. Somerville Geological & Mining Engineering Ltd.

Ste. 103 - 255 West 1st Street • North Vancouver, B.C., Canada V7M 3G8 • Telephone (604) 986-5766

SUB-RECORDER RECEIVED
MAY 9 1990
M.R. # \$
VANCOUVER, B.C.

LOG NO: 0516	RD.
ACTION:	
FILE NO:	

A GEOCHEMICAL REPORT

on the

TAS 2 & 6 Claims of the TAS PROPERTY

OMINECA MINING DIVISION
BRITISH COLUMBIA

N.T.S. 93 K/16W

by

A.J. Boronowski, B.Sc., F.G.A.C.

Owners: Noranda Exploration Company Ltd.
Goldcap Inc.
Black Swan Gold Mines Ltd

Operator: Black Swan Gold Mines Ltd.

Contractor: R.Somerville Geological & Mining
Engineering Ltd.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,981

December 1, 1989

LAT. ⁵⁴~~55~~ degrees 52' N.
LONG. 124 degrees 16' W.

◆

TABLE OF CONTENTS

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS	1
INTRODUCTION	4
LOCATION AND ACCESS	4
TENURE	4
HISTORY	5
GEOCHEMICAL SURVEY	9
DETAILED TECHNICAL DATA	11
INTERPRETATIONS	12
STATEMENT OF COST	14
STATEMENT OF AUTHOR'S QUALIFICATIONS	15

APPENDICES

1. GEOCHEMICAL ANALYSIS CERTIFICATES	16
2. TAS PROJECT DATABASE - DETAIL GEOCHEMICAL REPORT LOCATION, GOLD PPB, COPPER PPM, SAMPLE NO.	17
3. TAS PROPERTY - CLASSICAL STATISTICS AND HISTOGRAMS - GOLD & COPPER	18

FIGURES & MAPS

FIGURE 1	Location Map	6
FIGURE 2	Claim Location Map	7
FIGURE 3	Claim Map	8
MAP 1	Soil Sample Location & Gold values PPB	pocket
MAP 2	Soil Sample Location & Gold Symbols	pocket
MAP 3	Soil Sample Location & Copper values PPM	pocket
MAP 4	Soil Sample Location & Copper Symbols	pocket

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

A geochemical soil sampling survey was conducted over the southeastern portion of the TAS 6 claim and the northeastern portion of the TAS 2 claim. The claims are located approximately 40 kilometres north of Fort St. James, B.C. in the Omenica Mining Division.

The survey evaluated the potential of the area for hosting a porphyry intrusive-related Cu-Au deposit or high-grade gold-copper mineralization hosted within shear zones. The nearby Mt. Milligan porphyry Cu-Au deposit contains an aeromagnetic high anomaly associated with the economic mineralization. As well, on the periphery of the deposit are high-grade gold-copper vein systems hosted within shear zones. The surveyed area lies to the east of the Ridge Area, along which numerous high-grade gold-copper shear zones have been drill indicated.

Soil samples were analyzed for gold and copper. A total of eighteen samples contain values greater than 105 ppb gold and eleven samples contain values greater than 300 ppm copper. These anomalous values represent threshold plus two standard deviation.

Glacial till cover increases from near surface in the west to in excess of 5 metres in the east of the surveyed area. Therefore geochemical soil sampling over the eastern portion of the area has limited value. Nevertheless three independent areas of interest were outlined and should be followed up by further exploration.

Area 1 occurs in the region of L49900N-50200E. A gold bull's-eye target, which contains a clustering of the highest gold values, is underlain by near surface chargeability high (14-18 milliseconds) and resistivity high (600-800 ohm metres) anomalies. The gold target has a semi-circular shaped copper anomaly aureole to the east. The gold-copper anomaly is open to the west. The anomaly is underlain by sheared and hornfelsed latite tuffs. No significant assays were obtained. A magnetic anomaly (58100nT) was outlined to the west (L49850N-50150E) of the open geochemical anomaly, which may represent the centre of the open geochemical anomaly. As well, the geophysical survey indicates a southeasterly-trending response which intersects the target area. The geochemical soil sampling and geophysical I.P. surveys should be extended westward to test the magnetic anomaly and the northwesterly extension of the geophysical trend which intersects the target area.

Area 2 occurs along a northeast trend between approximately L49900N-50350E and L50200N-50600E. This trend, which contains numerous anomalous gold and copper values, is more apparent when plotted geochemical values are overlaid on the resistivity and chargeability results. The trend overlies chargeability high (14-50 milliseconds) and resistivity low (500-100 ohm-metres) anomalies located between 50 and 75 from the surface.

Area 3 occurs between L50300E-50500E and L50300N-50150N. This region contains several anomalous gold and copper values. Once again the anomalous area is more apparent when the plotted geochemical values are overlaid on the resistivity and chargeability results. The anomalous area overlies chargeability high (14-50 milliseconds) and resistivity low (350-250 ohm-metres) anomalies located between 50 and 75 metres from the surface.

The three copper and gold geochemically anomalous areas should be followed up with further exploration. As well, geophysical responses indicating NE and NW trends with coincident geochemical anomalies should be evaluated for their shear related potential for hosting high-grade gold-copper mineralization. The eastern portion of the surveyed area is underlain by deep glacial drift, and therefore geophysics must be utilized to evaluate this region.

INTRODUCTION

A geochemical soil sampling survey was conducted over portions of the TAS 2 & 6 claims. The survey tested the eastward extension of the Ridge Area for the potential of the area for hosting shear related gold-copper mineralization and porphyry copper-gold mineralization similar to the Mt. Milligan prospect.

LOCATION AND ACCESS

The TAS 2 & 6 claims are located approximately 40 kilometres north of Fort St. James, B.C. and 6 kilometres east of the Germansen Highway (FIGURES 1 & 2). Access to the claims for this geochemical soil sampling survey was by four-wheel-drive truck. The physiography of the TAS 2 & 6 claims is characterized by pine, spruce and poplar flats. The surveyed area has been covered with glacial till and numerous east-west trending eskers cross the area. Glacial drift in the surveyed area ranges from 0 metres in the west to greater than 5 metres in the east.

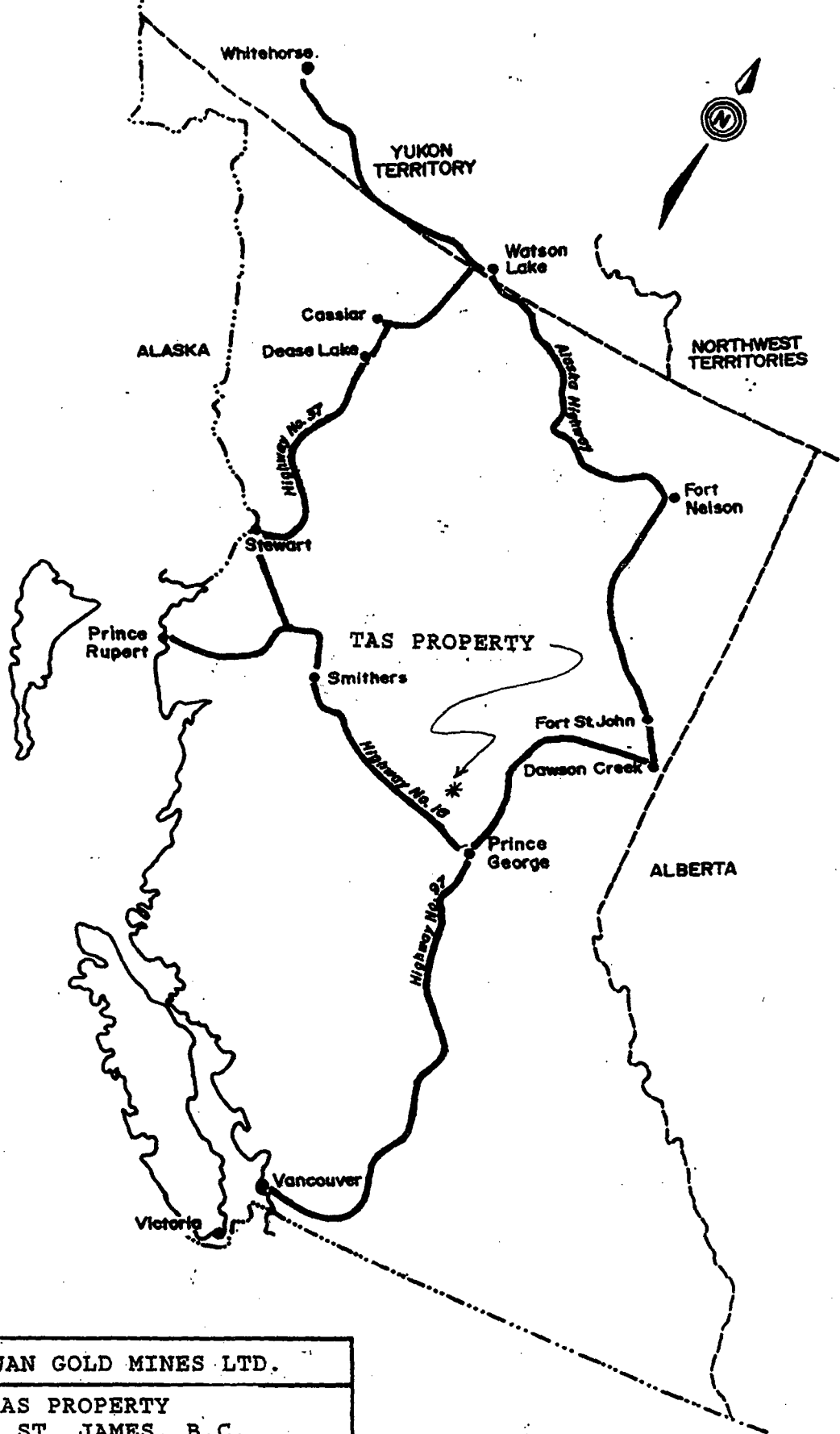
TENURE

The TAS 2 & 6 claims are part of the East Group of the TAS property (FIGURE 3).

<u>CLAIM</u>	<u>UNITS</u>	<u>RECORD NUMBER</u>	<u>EPIRY DATE</u>	<u>AREA</u>
TAS 2	12	10564	MAY 20, 1990	300 Ha.
TAS 6	15	7700	JUNE 24, 1991	375 Ha.
TAS 8	20	7702	JUNE 24, 1991	500 Ha.
TAS 9	20	7703	JUNE 24, 1991	500 Ha.
TAS 10	15	7704	JUNE 24, 1991	375 Ha.
TAS 12	2	10010	NOV 5, 1992	50 Ha.

HISTORY

Prior exploration on the TAS property was conducted by Noranda between 1985 and the winter of 1987, Goldcap Inc. from 1987 to the fall of 1988, and Black Swan Gold Mines Ltd. from 1988 to present. During this period the exploration programs have included geochemical, geological, and geophysical surveying, trenching, and diamond drilling.

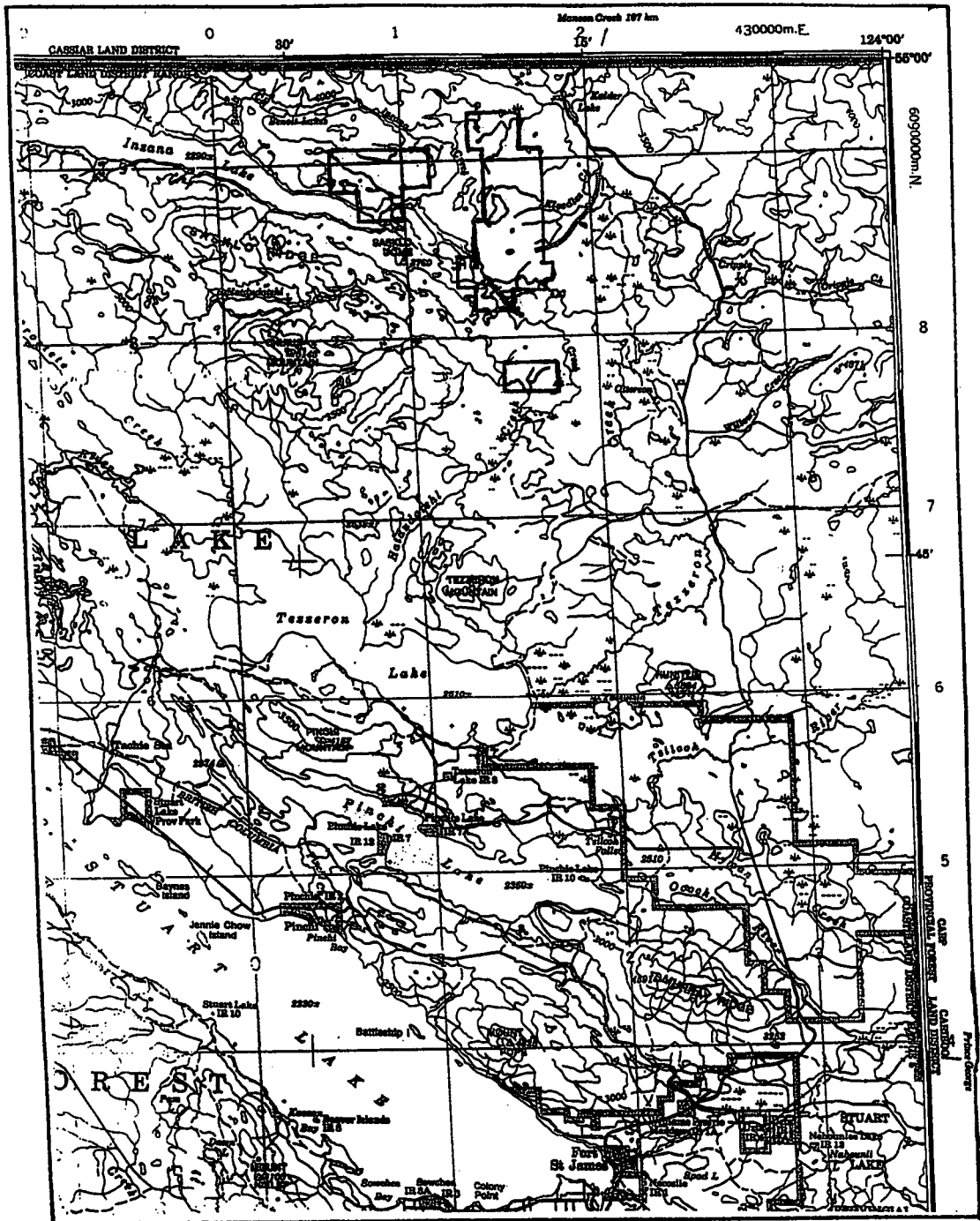


BLACK SWAN GOLD MINES LTD.
TAS PROPERTY FORT ST. JAMES, B.C.
LOCATION MAP

DATE: Dec. 31/88

100 50 0 100 200 km
SCALE 1:7,500,000

FIGURE 1

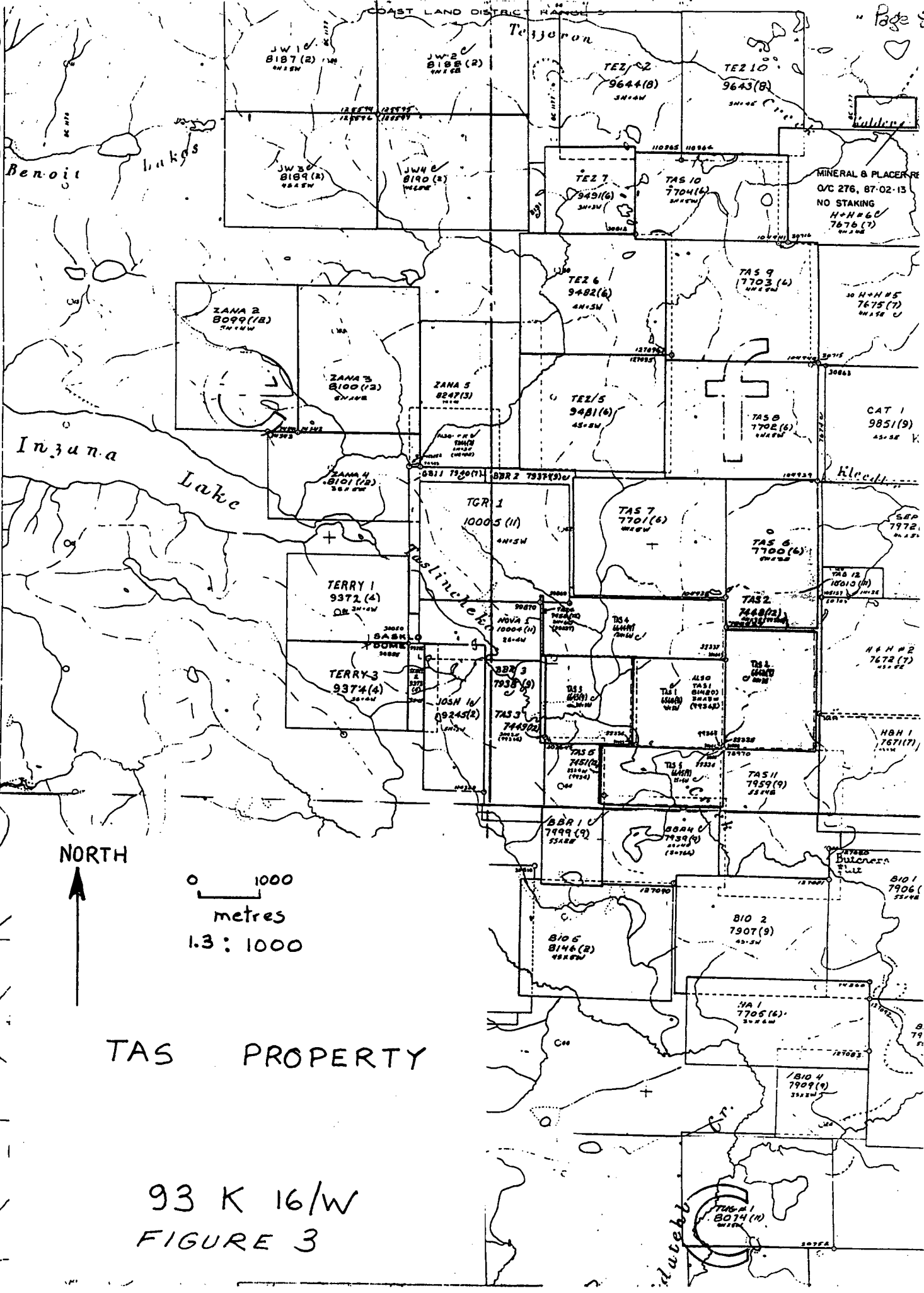


TAS PROPERTY
CLAIM LOCATION MAP

Figure 2

(FOR PLACER SEE P. 93K/16W)

TO WEST SEE MAP S. K/15 E



93 K 16/W
FIGURE 3

GEOCHEMICAL SURVEY

The soil sampling survey was conducted by R. Somerville Geological & Mining Engineering Limited. Hewitt Company & Associates established the grid. Mr. T. Lloyd collected the samples, and noted the following data from each sample location: location, soil composition, colour of soil, depth of sample.

A grid was established over the northeastern portion of TAS 2 and the southeastern portion of TAS 6 claims and control was established from the Ridge Area baseline at 50000N-50200E (Maps 1-4). The baseline (50000N) was continued eastward to 50900E. The baseline was established by compass and topofill survey. Two tielines were established at 50200N and 50900N. From these tielines the crosslines were established at 50 metre spacing. The baseline and crosslines were cut, chained, and picketed.

Soil samples were collected at 25 metre intervals along the crosslines, tielines and baseline. The stations were flagged with orange ribbon and station locations were noted on aluminum tags. Samples were collected using Eijkelkamp soil auger (7 cm. diameter).

A total of 401 B-horizon soil samples were collected. The most common soil type is a tan-colored till which is sandy clay in composition. Samples were collected from a depth between 10 cm. and 120 cm. from surface.

The soils were analyzed by Min En Laboratories of North Vancouver for Gold and Copper. The soils were dried at approximately 80 degrees celsius and sieved with a 80 mesh nylon screen. The -80 fraction (0.18 mm.) is used for geochemical analysis.

Copper analysis - (1.0 ppm.)

Decomposition of a 0.200 g. sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature.

The concentrations of Cu can be determined directly from the digest (dissolution) with conventional atomic absorption spectrometric procedure. A Varian-Techtron, Model AA-5 or Model AA-475 is used to measure elemental concentrations.

Gold Analysis - (5.0 ppb.)

5.0 g. sample is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with MIBX from the aqueous solution. AA is used to determine gold.

DETAILED TECHNICAL DATA

A total of 401 soil samples were collected and analyzed for copper and gold.

The results were plotted on MAPS 1 to 4 found in the pocket of the report. MAPS 1 and 3 contain the sample location and gold and copper values, respectively. MAPS 2 and 4 represent the gold and copper values as linear symbol plots. All maps indicate the grid lines and co-ordinates of the lines.

The data was extracted and presented in the TABLE - Tas Project Database -Detailed Geochemical Report in an ascending order for sample numbers.

The data was analyzed using a histogram and line graph (Appendices).

Gold The lowest value is 5.0 ppb. and the highest value is 300.0 ppb. The mean is 23.7 ppb. and the standard deviation is 40.5 ppb. Any value greater than 105.0 ppb. is considered anomalous. A total of 18 samples contained values in excess of 105.0 ppb gold.

Copper The lowest value is 8.0 ppm. and the highest value is 1150.0 ppm. The mean is 76.3 ppm. and the standard deviation is 108.3 ppm. Any value greater than 300.0 ppm. is considered anomalous. A total of 11 samples contained values in excess of 300.0 ppm copper.

Previous geochemical surveys by Noranda on other portions of the TAS property have calculated threshold values of 10 ppb gold and 100 ppm copper.

INTERPRETATIONS

Area 1 occurs in the region of L49900N-50200E. A gold bull's-eye target, which contains a clustering of the highest gold values, is underlain by near surface chargeability high (14-18 milliseconds) and resistivity high (600-800 ohm metres) anomalies. The gold target has a semi-circular shaped copper anomaly aureole to the east. The gold-copper anomaly is open to the west. The anomaly is underlain by sheared and hornfelsed latite tuffs. No significant assays were obtained. A magnetic anomaly (58100nT) was outlined to the west (L49850N-50150E) of the open geochemical anomaly, which may represent the centre of the open geochemical anomaly. As well, the geophysical survey indicates a southeasterly-trending response which intersects the target area. The geochemical soil sampling and geophysical I.P. surveys should be extended westward to test the magnetic anomaly and the northwesterly extension of the geophysical trend which intersects the target area.

Area 2 occurs along a northeast trend between approximately L49900N-50350E and L50200N-50600E. This trend, which contains numerous anomalous gold and copper values, is more apparent when plotted geochemical values are overlaid on the resistivity and chargeability results. The trend overlies chargeability high (14-50 milliseconds) and resistivity low (500-100 ohm-metres) anomalies located between 50 and 75 from the surface.

Area 3 occurs between L50300E-50500E and L50300N-50150N. This region contains several anomalous gold and copper values. Once again the anomalous area is more apparent when the plotted geochemical values are overlaid on the resistivity and chargeability results. The anomalous area overlies chargeability high (14-50 milliseconds) and resistivity low (350-250 ohm-metres) anomalies located between 50 and 75 metres from the surface.

The three copper and gold geochemically anomalous areas should be followed up with further exploration. As well, geophysical responses indicating NE and NW trends with coincident geochemical anomalies should be evaluated for their shear-related potential for hosting high-grade gold-copper mineralization. The eastern portion of the surveyed area is underlain by deep glacial drift, and therefore geophysics must be utilized to evaluate this region.

ITEMIZED COST STATEMENT

1. Soil Sampling		
sampling - 8 days x \$130/day		1,040.00
room & board - 8 days x \$50/day		400.00
2. Analysis		
401 samples x \$8.25/sample		3,308.25
3. Map preparation & reproduction		
Dave Carr (\$700/2=\$350)		350.00
reproduction		100.00
5. Miscellaneous		
sample bags, shipping, Fax etc.		500.00
6. Vehicle rental		
8 days x \$50/day		400.00
7. Report Writing		
3 days x \$350/day		<u>1,050.00</u>
	Sub-total	\$ 7,148.25
Management Fee (10% of Costs)		<u>714.75</u>
	TOTAL COST	<u>\$ 7,863.00</u>

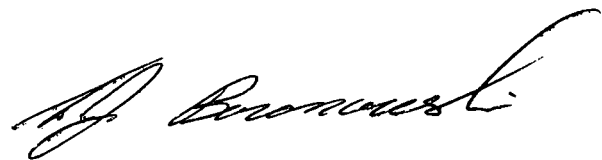
STATEMENT OF AUTHOR'S QUALIFICATIONS

I, Alexander J. Boronowski, B.Sc., 103 - 255 West 1st Street
North Vancouver, B.C. V7M 3G8

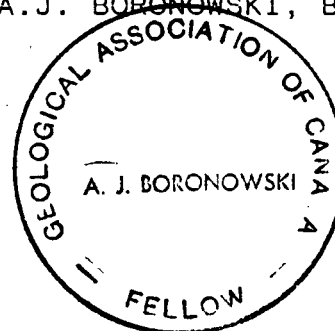
do hereby certify that:

1. I am a Geology graduate from the University of British Columbia (B.Sc. 1970).
2. I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.
3. I have practised my profession as a Geologist continuously since graduation in exploration and mining for Cominco Ltd., Texas Gulf Inc., Kidd Creek Mines Ltd., British Columbia Ministry of Mines, and TOTAL Energold Corporation in North America, Mexico, and Europe.
4. My report is based upon information and data supplied by R.Somerville Geological & Mining Engineering Limited.
5. I currently hold stock in Black Swan Gold Mines Ltd. and GoldCap Inc.

Dated at VANCOUVER, B.C. on this 1st. day of December, 1989.



A.J. BORONOWSKI, B.Sc., F.G.A.C.



APPENDIX 1

GEOCHEMICAL ANALYSIS CERTIFICATES

Pages (1121) 1 to 7
Pages (1147) 1 to 5
Pages (1164) 1 to 4



Geochemical Analysis Certificate

9V-1121-SG1

Company: R.S.G.M.
Project: TAS
Attn: R. SOMMERVILLE

Date: SEP-20-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-14-89 by T LLOYD.

Sample Number	AU-WET PPB	CU PPM
500	5	59
501	5	77
502	5	99
504	5	86
505	10	87

506	5	30
507	5	33
508	65	34
509	10	237
510	35	25

511	10	27
512	10	42
513	5	38
514	5	40
515	5	59

516	5	32
517	60	41
519	20	41
520	5	29
521	5	56

522	5	34
523	5	41
525	5	40
526	50	24
527	5	80

528	5	43
529	5	37
530	5	64
531	5	48
532	5	40

Certified by _____

MIN-EN LABORATORIES



**MIN
• EN**

LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1121-SG2

Company: R.S.G.M.
Project: TAS
Attn: R. SOMMERVILLE

Date: SEP-20-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-14-89 by T LLOYD.

Sample Number	AU-WET PPB	CU PPM
533	5	51
534	10	38
535	5	38
536	5	36
537	5	49

538	5	47
539	5	31
540	5	41
541	5	80
542	5	50

543	5	44
544	5	42
545	5	86
546	5	29
548	5	24

549	5	42
550	25	62
551	20	27
552	25	21
553	5	39

554	5	68
555	10	70
556	20	40
557	25	101
561	30	45

562	20	98
563	35	41
564	60	13
565	5	58
566	160	67

Certified by

MIN-EN LABORATORIES



SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1121-SG3

Company: R.S.G.M.
Project: TAS
Attn: R. SOMMERVILLE

Date: SEP-20-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-14-89 by T LLOYD.

Sample Number	AU-WET PPB	CU PPM
567	5	39
568	140	16
569	200	36
571	5	48
572	5	54

573	10	32
574	15	1010
575	20	23
576	40	55
577	35	44

578	100	99
581	50	100
582	10	70
583	35	30
585	5	27

586	5	23
587	5	42
588	5	38
589	10	32
590	5	17

591	5	25
592	5	21
593	10	33
594	5	24
596	5	8

597	5	21
598	5	49
599	10	20
600	5	20
602	175	53

Certified by _____

MIN-EN LABORATORIES



Geochemical Analysis Certificate

9V-1121-SG4

Company: R.S.G.M.
Project: TAS
Attn: R. SOMMERVILLE

Date: SEP-20-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-14-89 by T LLOYD.

Sample Number	AU-WET PPB	CU PPM
603	5	74
604	30	36
605	5	70
606	60	52
607	40	41

608	50	47
609	10	51
610	15	49
611	80	59
612	25	25

613	130	106
614	100	73
615	35	92
616	30	60
618	5	64

620	5	74
621	5	42
622	5	48
623	10	66
624	25	69

625	10	46
626	280	44
627	75	49
628	25	30
629	25	45

630	30	81
631	5	13
632	5	33
633	10	60
634	55	61

Certified by _____

MIN-EN LABORATORIES



Geochemical Analysis Certificate

9V-1121-SG5

Company: R.S.G.M.
Project: TAS
Attn: R. SOMMERVILLE

Date: SEP-20-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-14-89 by T LLOYD.

Sample Number	AU-WET PPB	CU PPM
635	25	80
636	15	51
637	50	34
638	5	42
639	5	52

641	50	43
643	5	40
644	5	25
645	5	24
646	5	20

647	5	27
648	5	49
649	5	32
650	5	40
651	10	42

652	5	32
653	5	31
654	5	42
655	5	25
656	5	57

657	5	44
658	5	34
659	5	35
660	5	26
661	5	23

662	5	25
663	5	38
664	5	26
665	5	24
666	5	18

Certified by _____

MIN-EN LABORATORIES



Geochemical Analysis Certificate

9V-1121-SG6

Company: R.S.G.M.
Project: TAS
Attn: R. SOMMERVILLE

Date: SEP-20-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 11 SOIL samples submitted SEP-14-89 by T LLOYD.

Sample Number	AU-WET PPB	CU PPM
667	5	23
668	60	42
669	5	47
671	5	122
672	125	106

674	20	62
675	55	58
676	15	91
677	110	67
678	175	53

679	10	44

Certified by _____



**MIN
• EN
LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1121-SG7

Company: R.S.G.M.
Project: TAS
Attn: R. SOMMERVILLE

Date: SEP-20-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 19 SOIL samples submitted SEP-14-89 by T LLOYD.

Sample Number	AU-WET PPB	CU PPM
503	20	156
518	20	25
524	5	273
547	20	140
558	5	360

559	5	129
560	5	370
570	70	76
579	5	30
580	5	385

584	5	116
595	5	26
601	5	292
617	5	43
619	5	94

640	10	205
642	5	44
670	5	257
675	15	1150

Certified by _____

MIN-EN LABORATORIES



Geochemical Analysis Certificate

9V-1147-SG1

Company: R.S.G.M.
Project: TAS
Attn: R. SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-18-89 by T.LLOYD.

Sample Number	AL-WET PPB	CU PPM
680	30	154
682	30	210
683	10	215
684	50	54
685	5	54

686	5	38
690	10	295
691	10	80
692	30	140
693	60	100

694	10	71
695	5	107
696	5	118
697	5	130
698	20	75

699	75	153
700	85	34
701	10	40
702	5	35
703	30	34

704	5	24
705	10	36
706	5	23
707	5	29
708	5	24

709	10	26
710	35	57
711	15	50
712	30	22
713	5	50

Certified by _____

MIN-EN LABORATORIES



Geochemical Analysis Certificate

9V-1147-SG2

Company: R.S.G.M.
Project: TAS
Attn: R. SOMERVILLE

Date: SEP-24-89
Copy to: R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-18-89 by T.LLOYD.

Sample Number	AU-WET PPB	CU PPM
714	5	42
715	5	38
716	10	64
717	30	63
718	40	50

719	5	23
720	10	130
721	5	95
722	10	34
723	5	54

724	20	72
725	5	42
726	5	32
727	5	93
728	5	22

729	10	42
730	5	59
731	60	96
732	75	59
733	20	23

734	5	44
735	40	45
736	45	134
737	5	47
738	40	144

739	140	117
740	50	105
741	55	112
742	25	56
743	130	122

Certified by

MIN-EN LABORATORIES

Geochemical Analysis Certificate

9V-1147-SG3

Company: R.S.G.M.
Project: TAE
Attn: R.SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-18-89 by T.LLOYD.

Sample Number	AL-WET PFB	CU PPM
744	10	110
745	180	84
748	30	29
749	5	78
750	10	59

751	5	29
752	10	42
753	3	50
754	5	41
755	10	36

756	5	50
757	5	49
758	5	46
759	5	33
760	10	66

761	85	62
762	40	35
763	110	104
764	5	54
765	95	54

766	25	129
767	20	270
768	10	142
769	30	100
770	40	104

771	100	220
772	40	109
773	10	60
774	270	146
775	300	410

Certified by 
MIN-EN LABORATORIES



**MIN
• EN**

LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1147-SG4

Company: R.S.G.M.
Project: TAS
Attn: R. SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 9 SOIL samples submitted SEP-18-89 by T.LLOYD.

Sample Number	AU-WET PPB	CU PPM
776	75	51
777	40	134
778	30	38
779	20	90
780	30	37

783	10	118
784	245	97
785	130	46
786	20	91

Certified by _____

MIN-EN LABORATORIES



Geochemical Analysis Certificate

9V-1147-SG5

Company: R.S.G.M.
Project: TAS
Attn: R. SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 23 SOIL samples submitted SEP-18-89 by T.LLOYD.

Sample Number	AU-WET PPB	DU PPM
681	5	260
687	10	805
688	10	340
689	45	370
746	5	57

747	5	33
781	5	225
782	40	480
787	5	42
788	5	47

789	65	88
790	10	30
791	5	36
792	5	38
793	5	32

794	5	45
795	5	38
796	5	40
797	5	60
798	10	30

799	20	66
800	5	78
801	15	24

Certified by _____

MIN-EN LABORATORIES



MIN
• EN

LABORATORIES



SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7501067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1164-SG1

Company: R.S.G.M.
Project: TAS
Attn: R. SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-19-89 by TIM LLOYD.

Sample Number	AU-WET PPB	CU PPM
802	5	24
803	10	174
804	5	240
805	5	33
806	10	36

807	5	167
808	25	32
809	5	33
810	5	35
811	10	40

812	5	59
813	20	30
814	5	58
815	5	72
816	5	39

817	10	37
818	40	47
819	5	64
820	5	50
821	5	41

822	10	30
823	5	32
824	5	34
825	10	44
826	90	50

827	20	60
828	5	40
829	5	54
830	20	126
831	50	74

RECEIVED
OCT 02 1989
LABORATORY

Certified by

MIN-EN LABORATORIES



**MIN
• EN**

LABORATORIES



SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1164-SG2

Company: R.S.G.M.
Project: TAS
Attn: R.SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-19-89 by TIM LLOYD.

Sample Number	AU-WET PPB	CU PPM
832	100	84
833	25	57
834	5	63
835	5	116
836	10	67

837	5	78
838	5	94
839	5	108
840	20	108
841	5	84

842	10	138
843	5	53
844	5	42
845	5	34
846	10	54

847	170	94
848	10	82
849	5	32
850	5	20
851	5	27

852	5	34
853	5	30
854	10	39
855	5	35
856	10	46

857	5	50
858	5	28
859	70	35
860	5	40
861	5	31

Certified by

MIN-EN LABORATORIES



MIN
• EN

LABORATORIES



SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1164-SG3

Company: R.S.G.M.
Project: TAS
Attn: R. SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted SEP-19-89 by TIM LLOYD.

Sample Number	AU-WET PPB	CU PPM
862	10	44
863	5	36
864	10	47
865	5	38
866	5	46

867	5	58
868	5	70
869	5	30
870	10	84
871	10	52

872	5	25
873	5	42
874	5	60
875	45	57
876	10	31

877	10	122
878	5	41
879	5	33
880	5	38
881	10	42

882	10	44
883	5	86
884	10	62
885	10	42
886	20	36

887	5	55
888	60	27
889	5	39
890	5	34
891	5	49

Certified by

MIN-EN LABORATORIES



**MIN
• EN**

LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-1164-SG4

Company: R.S.G.M.
Project: TAS
Attn: R.SOMERVILLE

Date: SEP-24-89
Copy 1. R.S.G.M., NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 19 SOIL samples submitted SEP-19-89 by TIM LLOYD.

Sample Number	AU-WET PPB	CU PPM
892	5	78
893	20	84
894	5	107
895	10	61
896	40	66

897	40	50
898	15	34
899	100	65
900	5	315
290	5	80

119-1	10	32
119-2	5	51
119-3	5	112
119-4	5	104
119-5	10	119

119-6	5	205
119-7	5	176
121-1	5	142
121-2	5	93

Certified by

MIN-EN LABORATORIES

APPENDIX 2

TAS PROJECT DATABASE - DETAIL GEOCHEMICAL REPORT
on the
TAS 2 & 6 CLAIMS - LOCATION, GOLD PPB, COPPER PPM, SAMPLE NO.

Pages 1 to 8

19/10/89

*** R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
*** BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

TAS PROJECT DATABASE - DETAILED GEOCHEMICAL REPORT

EAST	NORTH	AU PPB	CU PPM	SAMPLE NO.
50200.0	50275.0	5.00	59.00	500
50200.0	50300.0	5.00	77.00	501
50225.0	50300.0	5.00	99.00	502
50250.0	50300.0	20.00	156.00	503
50275.0	50300.0	5.00	86.00	504
50300.0	50300.0	10.00	87.00	505
50325.0	50300.0	5.00	30.00	506
50350.0	50300.0	5.00	33.00	507
50375.0	50300.0	65.00	34.00	508
50400.0	50300.0	10.00	237.00	509
50425.0	50300.0	35.00	25.00	510
50450.0	50300.0	10.00	27.00	511
50475.0	50300.0	10.00	42.00	512
50500.0	50300.0	5.00	38.00	513
50525.0	50300.0	5.00	40.00	514
50550.0	50300.0	5.00	59.00	515
50575.0	50300.0	5.00	32.00	516
50600.0	50300.0	60.00	41.00	517
50625.0	50300.0	20.00	25.00	518
50650.0	50300.0	20.00	41.00	519
50675.0	50300.0	5.00	29.00	520
50700.0	50300.0	5.00	56.00	521
50725.0	50300.0	5.00	34.00	522
50750.0	50300.0	5.00	41.00	523
50775.0	50300.0	5.00	273.00	524
50800.0	50300.0	5.00	40.00	525
50825.0	50300.0	50.00	24.00	526
50850.0	50300.0	5.00	80.00	527
50875.0	50300.0	5.00	43.00	528
50900.0	50300.0	5.00	37.00	529
50900.0	50275.0	5.00	64.00	530
50900.0	50250.0	5.00	48.00	531
50875.0	50250.0	5.00	40.00	532
50850.0	50250.0	5.00	51.00	533
50825.0	50250.0	10.00	38.00	534
50800.0	50250.0	5.00	38.00	535
50775.0	50250.0	5.00	36.00	536
50750.0	50250.0	5.00	49.00	537
50725.0	50250.0	5.00	47.00	538
50700.0	50250.0	5.00	31.00	539
50675.0	50250.0	5.00	41.00	540
50650.0	50250.0	5.00	80.00	541
50625.0	50250.0	5.00	50.00	542
50600.0	50250.0	5.00	44.00	543
50575.0	50250.0	5.00	42.00	544
50550.0	50250.0	5.00	86.00	545
50525.0	50250.0	5.00	29.00	546
50500.0	50250.0	20.00	140.00	547

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

50475.0	50250.0	5.00	24.00	548
50450.0	50250.0	5.00	42.00	549
50425.0	50250.0	25.00	62.00	550
50400.0	50250.0	20.00	27.00	551
50375.0	50250.0	25.00	21.00	552
50350.0	50250.0	5.00	39.00	553
50325.0	50250.0	5.00	68.00	554
50300.0	50250.0	10.00	70.00	555
50275.0	50250.0	20.00	40.00	556
50250.0	50250.0	25.00	101.00	557
50225.0	50250.0	5.00	360.00	558
50200.0	50250.0	5.00	129.00	559
50200.0	50225.0	5.00	370.00	560
50200.0	50175.0	30.00	45.00	561
50200.0	50200.0	20.00	98.00	562
50225.0	50200.0	35.00	41.00	563
50250.0	50200.0	60.00	13.00	564
50275.0	50200.0	5.00	58.00	565
50300.0	50200.0	160.00	67.00	566
50325.0	50200.0	5.00	39.00	567
50350.0	50200.0	140.00	16.00	568
50375.0	50200.0	200.00	36.00	569
50400.0	50200.0	70.00	76.00	570
50425.0	50200.0	5.00	48.00	571
50450.0	50200.0	5.00	54.00	572
50475.0	50200.0	10.00	32.00	573
50500.0	50200.0	15.00	1010.00	574
50525.0	50200.0	20.00	23.00	575
50550.0	50200.0	40.00	55.00	576
50575.0	50200.0	35.00	44.00	577
50600.0	50200.0	100.00	99.00	578
50625.0	50200.0	5.00	30.00	579
50650.0	50200.0	5.00	385.00	580
50675.0	50200.0	50.00	100.00	581
50700.0	50200.0	10.00	70.00	582
50725.0	50200.0	35.00	30.00	583
50750.0	50200.0	5.00	116.00	584
50775.0	50200.0	5.00	27.00	585
50800.0	50200.0	5.00	23.00	586
50825.0	50200.0	5.00	42.00	587
50850.0	50200.0	5.00	38.00	588
50875.0	50200.0	10.00	32.00	589
50900.0	50200.0	5.00	17.00	590
50900.0	50225.0	5.00	25.00	591
50900.0	50175.0	5.00	21.00	592
50900.0	50150.0	10.00	33.00	593
50900.0	50125.0	5.00	24.00	594
50875.0	50150.0	5.00	26.00	595
50850.0	50150.0	5.00	8.00	596
50825.0	50150.0	5.00	21.00	597
50800.0	50150.0	5.00	49.00	598
50775.0	50150.0	10.00	20.00	599
50750.0	50150.0	5.00	20.00	600
50725.0	50150.0	5.00	292.00	601

19/10/89

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.

BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

50700.0	50150.0	175.00	53.00	602
50675.0	50150.0	5.00	74.00	603
50650.0	50150.0	30.00	36.00	604
50625.0	50150.0	5.00	70.00	605
50600.0	50150.0	60.00	52.00	606
50575.0	50150.0	40.00	41.00	607
50550.0	50150.0	50.00	47.00	608
50525.0	50150.0	10.00	51.00	609
50500.0	50150.0	15.00	49.00	610
50475.0	50150.0	80.00	59.00	611
50450.0	50150.0	25.00	25.00	612
50425.0	50150.0	130.00	106.00	613
50400.0	50150.0	100.00	73.00	614
50375.0	50150.0	35.00	92.00	615
50350.0	50150.0	30.00	60.00	616
50325.0	50150.0	5.00	43.00	617
50300.0	50150.0	5.00	64.00	618
50275.0	50150.0	5.00	84.00	619
50250.0	50150.0	5.00	74.00	620
50225.0	50150.0	5.00	42.00	621
50200.0	50150.0	5.00	48.00	622
50200.0	50125.0	10.00	66.00	623
50200.0	50100.0	25.00	69.00	624
50200.0	50075.0	10.00	46.00	625
50225.0	50100.0	280.00	44.00	626
50250.0	50100.0	75.00	49.00	627
50275.0	50100.0	25.00	30.00	628
50300.0	50100.0	25.00	45.00	629
50325.0	50100.0	30.00	81.00	630
50350.0	50100.0	5.00	13.00	631
50375.0	50100.0	5.00	33.00	632
50400.0	50100.0	10.00	60.00	633
50425.0	50100.0	55.00	61.00	634
50450.0	50100.0	25.00	80.00	635
50475.0	50100.0	15.00	51.00	636
50500.0	50100.0	50.00	34.00	637
50525.0	50100.0	5.00	42.00	638
50550.0	50100.0	5.00	52.00	639
50575.0	50100.0	10.00	205.00	640
50600.0	50100.0	50.00	43.00	641
50625.0	50100.0	5.00	44.00	642
50650.0	50100.0	5.00	40.00	643
50675.0	50100.0	5.00	25.00	644
50700.0	50100.0	5.00	24.00	645
50725.0	50100.0	5.00	20.00	646
50750.0	50100.0	5.00	27.00	647
50775.0	50100.0	5.00	49.00	648
50800.0	50100.0	5.00	32.00	649
50825.0	50100.0	5.00	40.00	650
50850.0	50100.0	10.00	42.00	651
50875.0	50100.0	5.00	32.00	652
50900.0	50100.0	5.00	31.00	653
50900.0	50075.0	5.00	42.00	654
50900.0	50050.0	5.00	25.00	655

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.

19/10/89

BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

50900.0	50025.0	5.00	57.00	656
50875.0	50050.0	5.00	44.00	657
50850.0	50050.0	5.00	34.00	658
50825.0	50050.0	5.00	35.00	659
50800.0	50050.0	5.00	26.00	660
50775.0	50050.0	5.00	23.00	661
50750.0	50050.0	5.00	23.00	662
50725.0	50050.0	5.00	38.00	663
50700.0	50050.0	5.00	26.00	664
50675.0	50050.0	5.00	24.00	665
50650.0	50050.0	5.00	18.00	666
50625.0	50050.0	5.00	23.00	667
50600.0	50050.0	60.00	42.00	668
50575.0	50050.0	5.00	47.00	669
50550.0	50050.0	5.00	257.00	670
50525.0	50050.0	5.00	122.00	671
50500.0	50050.0	125.00	106.00	672
50475.0	50050.0	15.00	1150.00	673
50450.0	50050.0	20.00	62.00	674
50425.0	50050.0	55.00	58.00	675
50400.0	50050.0	15.00	91.00	676
50375.0	50050.0	110.00	67.00	677
50350.0	50050.0	175.00	53.00	678
50325.0	50050.0	10.00	44.00	679
50300.0	50050.0	30.00	154.00	680
50275.0	50050.0	5.00	260.00	681
50250.0	50050.0	30.00	210.00	682
50225.0	50050.0	10.00	215.00	683
50200.0	50050.0	80.00	54.00	684
50200.0	50025.0	5.00	54.00	685
50200.0	50000.0	5.00	38.00	686
50225.0	50000.0	10.00	805.00	687
50250.0	50000.0	10.00	340.00	688
50275.0	50000.0	45.00	370.00	689
50300.0	50000.0	10.00	295.00	690
50325.0	50000.0	10.00	80.00	691
50350.0	50000.0	30.00	140.00	692
50375.0	50000.0	60.00	100.00	693
50400.0	50000.0	10.00	71.00	694
50425.0	50000.0	5.00	107.00	695
50450.0	50000.0	5.00	118.00	696
50475.0	50000.0	5.00	130.00	697
50500.0	50000.0	20.00	75.00	698
50525.0	50000.0	75.00	153.00	699
50550.0	50000.0	85.00	34.00	700
50575.0	50000.0	10.00	40.00	701
50600.0	50000.0	5.00	35.00	702
50625.0	50000.0	30.00	34.00	703
50650.0	50000.0	5.00	24.00	704
50675.0	50000.0	10.00	36.00	705
50700.0	50000.0	5.00	23.00	706
50725.0	50000.0	5.00	29.00	707
50750.0	50000.0	5.00	24.00	708
50775.0	50000.0	10.00	26.00	709

19/10/89

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

50800.0	50000.0	35.00	57.00	710
50825.0	50000.0	15.00	50.00	711
50850.0	50000.0	30.00	22.00	712
50875.0	50000.0	5.00	50.00	713
50900.0	50000.0	5.00	42.00	714
50900.0	49975.0	5.00	38.00	715
50900.0	49925.0	10.00	64.00	716
50900.0	49900.0	30.00	63.00	717
50900.0	49950.0	40.00	50.00	718
50875.0	49950.0	5.00	23.00	719
50850.0	49950.0	10.00	130.00	720
50825.0	49950.0	5.00	95.00	721
50800.0	49950.0	10.00	34.00	722
50775.0	49950.0	5.00	54.00	723
50750.0	49950.0	20.00	72.00	724
50725.0	49950.0	5.00	42.00	725
50700.0	49950.0	5.00	32.00	726
50675.0	49950.0	5.00	93.00	727
50650.0	49950.0	5.00	22.00	728
50625.0	49950.0	10.00	42.00	729
50600.0	49950.0	5.00	59.00	730
50575.0	49950.0	60.00	96.00	731
50550.0	49950.0	75.00	39.00	732
50525.0	49950.0	20.00	23.00	733
50500.0	49950.0	5.00	44.00	734
50475.0	49950.0	40.00	45.00	735
50450.0	49950.0	45.00	134.00	736
50425.0	49950.0	5.00	47.00	737
50400.0	49950.0	40.00	144.00	738
50375.0	49950.0	140.00	117.00	739
50350.0	49950.0	60.00	105.00	740
50325.0	49950.0	65.00	112.00	741
50300.0	49950.0	25.00	56.00	742
50275.0	49950.0	130.00	122.00	743
50250.0	49950.0	10.00	110.00	744
50225.0	49950.0	180.00	84.00	745
50200.0	49950.0	5.00	57.00	746
50200.0	49975.0	5.00	33.00	747
50875.0	49900.0	30.00	29.00	748
50850.0	49900.0	5.00	78.00	749
50825.0	49900.0	10.00	39.00	750
50800.0	49900.0	5.00	29.00	751
50775.0	49900.0	10.00	42.00	752
50750.0	49900.0	5.00	50.00	753
50725.0	49900.0	5.00	41.00	754
50700.0	49900.0	10.00	36.00	755
50675.0	49900.0	5.00	50.00	756
50650.0	49900.0	5.00	49.00	757
50625.0	49900.0	5.00	46.00	758
50600.0	49900.0	5.00	33.00	759
50575.0	49900.0	10.00	63.00	760
50550.0	49900.0	85.00	62.00	761
50525.0	49900.0	40.00	35.00	762
50500.0	49900.0	110.00	104.00	763

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

50475.0	49900.0	5.00	54.00	764
50450.0	49900.0	95.00	54.00	765
50425.0	49900.0	25.00	129.00	766
50400.0	49900.0	20.00	270.00	767
50375.0	49900.0	10.00	142.00	768
50350.0	49900.0	30.00	100.00	769
50325.0	49900.0	40.00	104.00	770
50300.0	49900.0	100.00	220.00	771
50275.0	49900.0	40.00	109.00	772
50250.0	49900.0	10.00	60.00	773
50225.0	49900.0	270.00	146.00	774
50200.0	49900.0	300.00	410.00	775
50200.0	49925.0	75.00	51.00	776
50200.0	49875.0	40.00	134.00	777
50200.0	49850.0	30.00	38.00	778
50225.0	49850.0	20.00	90.00	779
50250.0	49850.0	30.00	37.00	780
50275.0	49850.0	5.00	225.00	781
50300.0	49850.0	40.00	480.00	782
50325.0	49850.0	10.00	118.00	783
50350.0	49850.0	245.00	97.00	784
50375.0	49850.0	130.00	46.00	785
50400.0	49850.0	20.00	91.00	786
50425.0	49850.0	5.00	42.00	787
50450.0	49850.0	5.00	47.00	788
50475.0	49850.0	65.00	88.00	789
50500.0	49850.0	10.00	30.00	790
50525.0	49850.0	5.00	36.00	791
50550.0	49850.0	5.00	38.00	792
50575.0	49850.0	5.00	32.00	793
50600.0	49850.0	5.00	45.00	794
50625.0	49850.0	5.00	38.00	795
50650.0	49850.0	5.00	40.00	796
50675.0	49850.0	5.00	60.00	797
50700.0	49850.0	10.00	30.00	798
50725.0	49850.0	20.00	66.00	799
50750.0	49850.0	5.00	78.00	800
50775.0	49850.0	15.00	24.00	801
50800.0	49850.0	5.00	24.00	802
50825.0	49850.0	10.00	174.00	803
50850.0	49850.0	5.00	240.00	804
50875.0	49850.0	5.00	33.00	805
50900.0	49850.0	10.00	36.00	806
50900.0	49875.0	5.00	167.00	807
50900.0	49825.0	25.00	32.00	808
50900.0	49800.0	5.00	33.00	809
50875.0	49800.0	5.00	35.00	810
50850.0	49800.0	10.00	40.00	811
50825.0	49800.0	5.00	59.00	812
50800.0	49800.0	20.00	30.00	813
50775.0	49800.0	5.00	58.00	814
50750.0	49800.0	5.00	72.00	815
50725.0	49800.0	5.00	39.00	816
50700.0	49800.0	10.00	37.00	817

19/10/89

*** R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
*** BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

50675.0	49800.0	40.00	47.00	818
50650.0	49800.0	5.00	64.00	819
50625.0	49800.0	5.00	50.00	820
50600.0	49800.0	5.00	41.00	821
50575.0	49800.0	10.00	30.00	822
50550.0	49800.0	5.00	32.00	823
50525.0	49800.0	5.00	34.00	824
50500.0	49800.0	10.00	44.00	825
50475.0	49800.0	90.00	50.00	826
50450.0	49800.0	20.00	60.00	827
50425.0	49800.0	5.00	40.00	828
50400.0	49800.0	5.00	54.00	829
50375.0	49800.0	20.00	126.00	830
50350.0	49800.0	50.00	74.00	831
50325.0	49800.0	100.00	84.00	832
50300.0	49800.0	25.00	57.00	833
50275.0	49800.0	5.00	63.00	834
50250.0	49800.0	5.00	116.00	835
50225.0	49800.0	10.00	67.00	836
50200.0	49800.0	5.00	78.00	837
50200.0	49825.0	5.00	94.00	838
50200.0	49775.0	5.00	108.00	839
50200.0	49750.0	20.00	108.00	840
50225.0	49750.0	5.00	84.00	841
50250.0	49750.0	10.00	138.00	842
50275.0	49750.0	5.00	53.00	843
50300.0	49750.0	5.00	42.00	844
50325.0	49750.0	5.00	34.00	845
50350.0	49750.0	10.00	51.00	846
50375.0	49750.0	170.00	94.00	847
50400.0	49750.0	10.00	82.00	848
50425.0	49750.0	5.00	32.00	849
50450.0	49750.0	5.00	20.00	850
50475.0	49750.0	5.00	27.00	851
50500.0	49750.0	5.00	34.00	852
50525.0	49750.0	5.00	30.00	853
50550.0	49750.0	10.00	39.00	854
50575.0	49750.0	5.00	35.00	855
50600.0	49750.0	10.00	46.00	856
50625.0	49750.0	5.00	50.00	857
50650.0	49750.0	5.00	28.00	858
50675.0	49750.0	70.00	35.00	859
50700.0	49750.0	5.00	40.00	860
50725.0	49750.0	5.00	31.00	861
50750.0	49750.0	10.00	44.00	862
50775.0	49750.0	5.00	36.00	863
50800.0	49750.0	10.00	47.00	864
50825.0	49750.0	5.00	38.00	865
50850.0	49750.0	5.00	46.00	866
50875.0	49750.0	5.00	58.00	867
50900.0	49750.0	5.00	70.00	868
50900.0	49775.0	5.00	30.00	869
50900.0	49725.0	10.00	84.00	870
50900.0	49700.0	10.00	52.00	871

19/10/89

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.

BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

50875.0	49700.0	5.00	25.00	872
50850.0	49700.0	5.00	42.00	873
50825.0	49700.0	5.00	60.00	874
50800.0	49700.0	45.00	57.00	875
50775.0	49700.0	10.00	31.00	876
50750.0	49700.0	10.00	122.00	877
50725.0	49700.0	5.00	41.00	878
50700.0	49700.0	5.00	33.00	879
50675.0	49700.0	5.00	38.00	880
50650.0	49700.0	10.00	42.00	881
50625.0	49700.0	10.00	44.00	882
50600.0	49700.0	5.00	36.00	883
50575.0	49700.0	10.00	62.00	884
50550.0	49700.0	10.00	42.00	885
50525.0	49700.0	20.00	36.00	886
50500.0	49700.0	5.00	55.00	887
50475.0	49700.0	60.00	27.00	888
50450.0	49700.0	5.00	39.00	889
50425.0	49700.0	5.00	34.00	890
50400.0	49700.0	5.00	49.00	891
50375.0	49700.0	5.00	78.00	892
50350.0	49700.0	20.00	84.00	893
50325.0	49700.0	5.00	107.00	894
50300.0	49700.0	10.00	61.00	895
50275.0	49700.0	40.00	66.00	896
50250.0	49700.0	40.00	50.00	897
50225.0	49700.0	15.00	34.00	898
50200.0	49700.0	100.00	65.00	899
50200.0	49725.0	5.00	815.00	900

APPENDIX 3

CLASSICAL STATISTICS AND HISTOGRAMS

GOLD AND COPPER

PC-XPLOR VERSION 1.21
Exploration Data Manager
BEMCOM SERVICES INC.

R. SOMERVILLE
13:57:38 Serial no: 22380
19/10/89 Page : 1

*** R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD. ***
*** BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION ***

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTAU.MEX
DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - GOLD PPB
USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID

DATA VALUES ENTERED

MINIMUM CUTOFF VALUE : 5.000
MAXIMUM CUTOFF VALUE : 300.000
TOTAL NUMBER OF SAMPLES USED : 401

MINIMUM HISTOGRAM VALUE : 5.000
MAXIMUM HISTOGRAM VALUE : 300.000
CLASS INTERVAL : 36.875

MINIMUM POPULATION DATA POINT : 5.000
MAXIMUM POPULATION DATA POINT : 300.000
TOTAL POPULATION : 401

UNGROUPED DATA GROUPED DATA

TOTAL NO OF SAMPLES	401	
ARITHMETIC MEAN	23.7406	34.8402
MEDIAN		26.4926
GEOMETRIC MEAN	11.4110	28.4232
NATURAL LOG MEAN	2.4346	3.3472
STANDARD DEVIATION	40.5338	36.0687
VARIANCE	1642.9900	1300.9530
COEFFICIENT OF VARIATION	1.7074	1.0353
MOMENT 1 ABOUT ARITHMETIC MEAN	.0000	.0000
MOMENT 2 ABOUT ARITHMETIC MEAN	1642.9900	1300.9530
MOMENT 3 ABOUT ARITHMETIC MEAN	245319.3000	202095.0000
MOMENT 4 ABOUT ARITHMETIC MEAN	52222820.0000	41051060.0000
MOMENT COEFFICIENT OF SKEWNESS	3.6837	4.3069
MOMENT COEFFICIENT OF KURTOSIS	19.3460	24.2550

NB. LOG MEANS CALCULATED ON SAMPLES ABOVE ZERO

PC-XPLOR VERSION 1.21
 Exploration Data Manager
 BY MEMCOM SERVICES INC.

R. SOMERVILLE
 13:57:43 Serial no: 22380
 19/10/89 Page : 2

*** R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD. ***
 *** BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION ***

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTAU.MEX
 DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - GOLD PPB
 USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID

FREQUENCY DISTRIBUTIONS

CLASS INTERVAL		<--INCREMENTAL--><-----INCREASING-----><-----DECREASING----->					< UPPER BND >= LOWER BND				
>= FROM	< TO	COUNT	MEAN	CUM COUNT	CUM MEAN	CUM PERCENT	FREQ	CUM COUNT	CUM MEAN	CUM PERCENT	FREQ
5.000	41.875	344	10.683	344	10.683	85.79		401	23.741	100.00	
41.875	78.750	28	59.286	372	14.341	92.77		57	102.544	14.21	
78.750	115.625	13	95.000	385	17.065	96.01		29	144.310	7.23	
115.625	152.500	6	132.500	391	18.836	97.51		16	184.375	3.99	
152.500	189.375	5	172.000	396	20.770	98.75		10	215.500	2.49	
189.375	226.250	1	200.000	397	21.222	99.00		5	259.000	1.25	
226.250	263.125	1	245.000	398	21.784	99.25		4	273.750	1.00	
263.125	300.000	3	283.333	401	23.741	100.00		3	283.333	.75	

NB : (GM) - GEOMETRIC MEAN

PC-XPLOR VERSION 1.21
Exploration Data Manager
BEMCOM SERVICES INC.
**

13:57:47
19/10/89

R. SOMERVILLE
Serial no: 22380
Page : 3

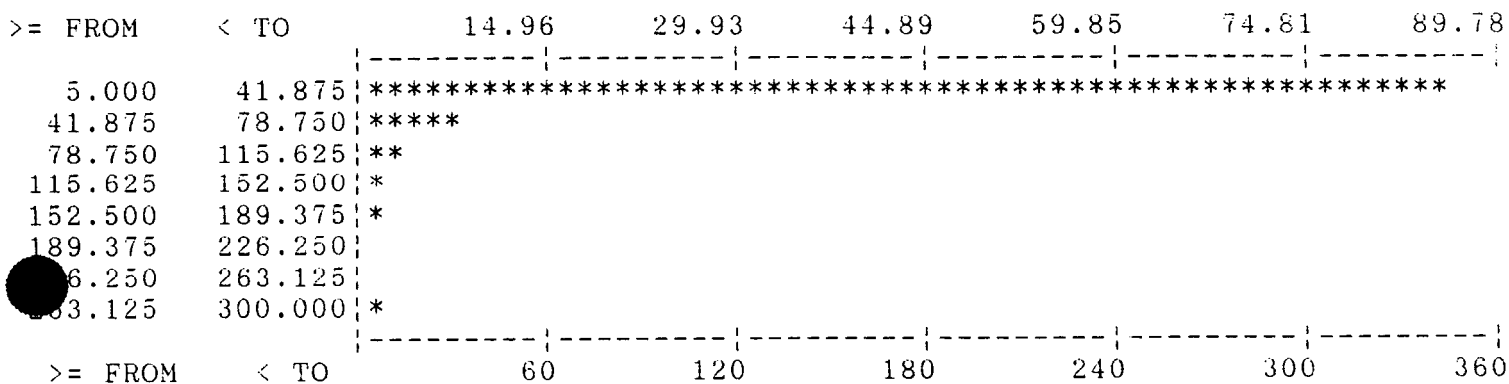
R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTAU.MEX
DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - GOLD PPB
USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID

NORMAL HISTOGRAM

FREQUENCY 1.4963 PERCENT PER STAR



6.0000 COUNTS PER STAR

```

-----
PC-XPLOR VERSION 1.21
Exploration Data Manager
B. EMCOM SERVICES INC.
***
***
R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION
***
***
R. SOMERVILLE
Serial no: 22380
Page : 1
14: 3:38
19/10/89
-----

```

CLASSICAL STATISTICS AND HISTOGRAMS

```

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTCU.MEX
DATA DESCRIPTION    : TAS PROPERTY - EAST RIDGE GRID - COPPER PPM
USER DESCRIPTION    : TAS PROPERTY - EAST RIDGE GRID - COPPER

```

DATA VALUES ENTERED

```

MINIMUM CUTOFF VALUE           :      8.000
MAXIMUM CUTOFF VALUE           :     1150.000
TOTAL NUMBER OF SAMPLES USED   :      401

MINIMUM HISTOGRAM VALUE        :      8.000
MAXIMUM HISTOGRAM VALUE        :     1150.000
CLASS INTERVAL                  :     142.750

MINIMUM POPULATION DATA POINT :      8.000
MAXIMUM POPULATION DATA POINT :     1150.000
TOTAL POPULATION                :      401

```

UNGROUPED DATA GROUPED DATA

	UNGROUPED DATA	GROUPED DATA
TOTAL NO OF SAMPLES	401	
ARITHMETIC MEAN	76.2569	100.0221
MEDIAN		84.9392
GEOMETRIC MEAN	54.4857	87.6681
NATURAL LOG MEAN	3.9979	4.4736
STANDARD DEVIATION	108.3070	99.1902
VARIANCE	11730.4100	9838.7020
COEFFICIENT OF VARIATION	1.4203	.9917
MOMENT 1 ABOUT ARITHMETIC MEAN	.0000	.0000
MOMENT 2 ABOUT ARITHMETIC MEAN	11730.4100	9838.7020
MOMENT 3 ABOUT ARITHMETIC MEAN	7794181.0000	6897031.0000
MOMENT 4 ABOUT ARITHMETIC MEAN	*****	*****
MOMENT COEFFICIENT OF SKEWNESS	6.1348	7.0673
MOMENT COEFFICIENT OF KURTOSIS	49.9772	60.8418

NB. LOG MEANS CALCULATED ON SAMPLES ABOVE ZERO

PC-XPLOR VERSION 1.21
 Exploration Data Manager
 BEMCOM SERVICES INC.

R. SOMERVILLE
 14: 3:43
 19/10/89
 Serial no: 22380
 Page : 2

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
 BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTCU.MEX
 DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - COPPER PPM
 USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - COPPER

FREQUENCY DISTRIBUTIONS

CLASS INTERVAL		< UPPER BND					>= LOWER BND			
>= FROM < TO		<-INCREMENTAL->		<-----INCREASING----->			<-----DECREASING----->			
		COUNT	MEAN	CUM COUNT	CUM MEAN	CUM PERCENT	FREQ COUNT	CUM MEAN	CUM PERCENT	FREQ
8.000	150.750	372	53.981	372	53.981	92.77	401	76.257	100.00	
150.750	293.500	17	218.113	389	61.154	97.01	29	362.000	7.23	
293.500	436.250	7	361.429	396	66.462	98.75	12	565.833	2.99	
436.250	579.000	1	480.000	397	67.504	99.00	5	852.000	1.25	
579.000	721.750	0	.000	397	67.504	99.00	4	945.000	1.00	
721.750	864.500	2	810.000	399	71.226	99.50	4	945.000	1.00	
864.500	1007.250	0	.000	399	71.226	99.50	2	1080.000	.50	
1007.250	1150.000	2	1080.000	401	76.257	100.00	2	1080.000	.50	

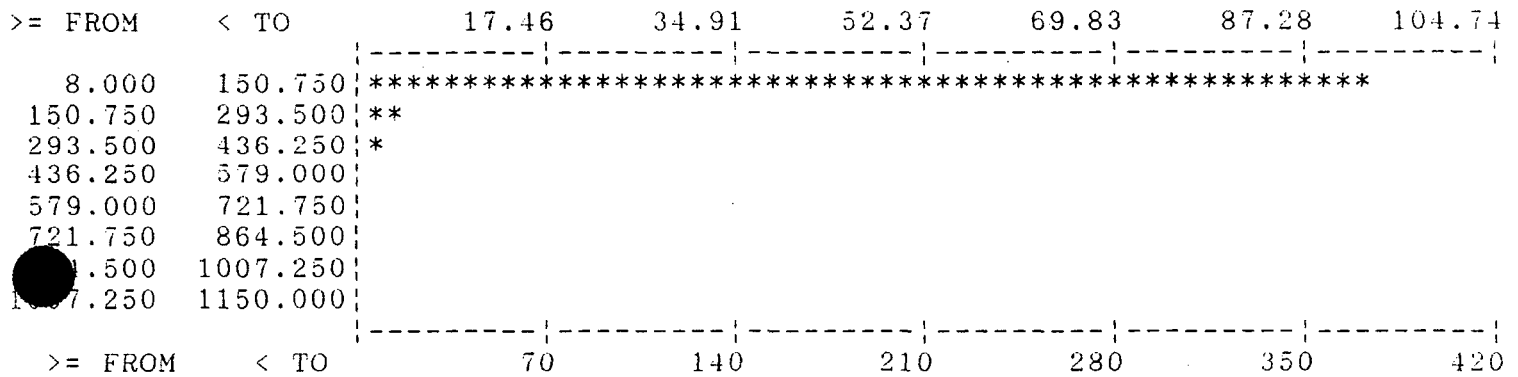
NB : (GM) - GEOMETRIC MEAN

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTCU.MEX
DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - COPPER PPM
USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - COPPER

NORMAL HISTOGRAM

FREQUENCY 1.7456 PERCENT PER STAR



7.0000 COUNTS PER STAR

PC-XPLOR VERSION 1.21
Exploration Data Manager
BEMCOM SERVICES INC.
**

R. SOMERVILLE
14:20:47 Serial no: 22380
19/10/89 Page : 1

R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTAU.MEX
DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - GOLD PPB
USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID

DATA VALUES ENTERED

MINIMUM CUTOFF VALUE : 5.000
MAXIMUM CUTOFF VALUE : 190.000
TOTAL NUMBER OF SAMPLES USED : 396

MINIMUM HISTOGRAM VALUE : 5.000
MAXIMUM HISTOGRAM VALUE : 190.000
CLASS INTERVAL : 23.125

MINIMUM POPULATION DATA POINT : 5.000
MAXIMUM POPULATION DATA POINT : 300.000
TOTAL POPULATION : 401

UNGROUPED DATA GROUPED DATA

TOTAL NO OF SAMPLES	396	
ARITHMETIC MEAN	20.7702	27.8914
MEDIAN		19.7227
GEOMETRIC MEAN	10.9713	21.8970
NATURAL LOG MEAN	2.3953	3.0863
STANDARD DEVIATION	30.6779	28.2496
VARIANCE	941.1366	798.0426
COEFFICIENT OF VARIATION	1.4770	1.0128
MOMENT 1 ABOUT ARITHMETIC MEAN	.0000	.0000
MOMENT 2 ABOUT ARITHMETIC MEAN	941.1366	798.0426
MOMENT 3 ABOUT ARITHMETIC MEAN	82198.3700	71916.1900
MOMENT 4 ABOUT ARITHMETIC MEAN	10433910.0000	8772358.0000
MOMENT COEFFICIENT OF SKEWNESS	2.8470	3.1900
MOMENT COEFFICIENT OF KURTOSIS	11.7799	13.7741

NB. LOG MEANS CALCULATED ON SAMPLES ABOVE ZERO

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTAU.MEX
 DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - GOLD PPD
 USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID

FREQUENCY DISTRIBUTIONS

CLASS INTERVAL		< UPPER BND					>= LOWER BND			
>= FROM < TO		<-INCREMENTAL->		<-----INCREASING----->			<-----DECREASING----->			
		COUNT	MEAN	CUM COUNT	CUM MEAN	CUM FREQ PERCENT	CUM COUNT	CUM MEAN	CUM FREQ PERCENT	
5.000	28.125	311	8.119	311	8.119	78.54	396	20.770	100.00	
28.125	51.250	42	37.738	353	11.643	89.14	85	67.059	21.46	
51.250	74.375	15	61.667	368	13.682	92.93	43	95.698	10.86	
74.375	97.500	10	81.500	378	15.476	95.45	28	113.929	7.07	
97.500	120.625	7	102.857	385	17.065	97.22	18	131.944	4.55	
120.625	143.750	6	132.500	391	18.836	98.74	11	150.455	2.78	
143.750	166.875	1	160.000	392	19.196	98.99	5	172.000	1.26	
166.875	190.000	4	175.000	396	20.770	100.00	4	175.000	1.01	

NB : (GM) - GEOMETRIC MEAN

PC-XPLOR VERSION 1.21
 Exploration Data Manager
 BEMCOM SERVICES INC.

R. SOMERVILLE
 14:20:56 Serial no: 22330
 19/10/89 Page : 3

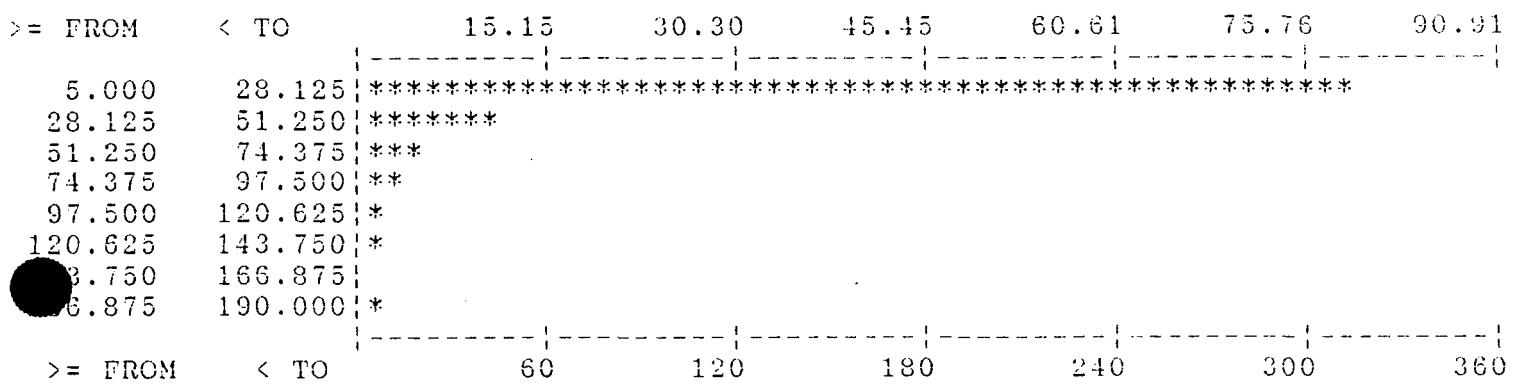
R. SOMERVILLE GEOLOGICAL & MINING ENG. LTD.
 BLACK SWAN/GOLDCAP/NORANDA - TAS OPTION

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTAU.MEX
 DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - GOLD PPB
 USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID

NORMAL HISTOGRAM

FREQUENCY 1.5152 PERCENT PER STAR



6.0000 COUNTS PER STAR

CLASSICAL STATISTICS AND HISTOGRAMS

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTCU.MEX
DATA DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - COPPER PPM
USER DESCRIPTION : TAS PROPERTY - EAST RIDGE GRID - COPPER

DATA VALUES ENTERED

MINIMUM CUTOFF VALUE : 8.000
MAXIMUM CUTOFF VALUE : 579.000
TOTAL NUMBER OF SAMPLES USED : 397

MINIMUM HISTOGRAM VALUE : 8.000
MAXIMUM HISTOGRAM VALUE : 579.000
CLASS INTERVAL : 71.375

MINIMUM POPULATION DATA POINT : 8.000
MAXIMUM POPULATION DATA POINT : 1150.000
TOTAL POPULATION : 401

UNGROUPED DATA GROUPED DATA

TOTAL NO OF SAMPLES	397	
ARITHMETIC MEAN	67.5038	70.1160
MEDIAN		34.4523
GEOMETRIC MEAN	52.9477	37.5552
NATURAL LOG MEAN	3.9693	4.0527
STANDARD DEVIATION	62.9235	62.5164
VARIANCE	3959.3640	3908.2990
COEFFICIENT OF VARIATION	.9321	.8916
MOMENT 1 ABOUT ARITHMETIC MEAN	.0000	.0000
MOMENT 2 ABOUT ARITHMETIC MEAN	3959.3640	3908.2990
MOMENT 3 ABOUT ARITHMETIC MEAN	818089.9000	828449.9000
MOMENT 4 ABOUT ARITHMETIC MEAN	249493600.0000	250068500.0000
MOMENT COEFFICIENT OF SKEWNESS	3.2837	3.3907
MOMENT COEFFICIENT OF KURTOSIS	15.9151	16.3713

NB. LOG MEANS CALCULATED ON SAMPLES ABOVE ZERO

CLASSICAL STATISTICS AND HISTOGRAMS

```

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTCU.MEX
DATA DESCRIPTION    : TAS PROPERTY - EAST RIDGE GRID - COPPER PPM
USER DESCRIPTION    : TAS PROPERTY - EAST RIDGE GRID - COPPER

```

FREQUENCY DISTRIBUTIONS

CLASS INTERVAL		< UPPER BND					>= LOWER BND				
>= FROM < TO		<-INCREMENTAL->		<-----INCREASING----->			<-----DECREASING----->				
		COUNT	MEAN	CUM	CUM	CUM	FREQ	CUM	CUM	CUM	FREQ
				COUNT	MEAN	PERCENT	COUNT	MEAN	PERCENT		
8.000	79.375	305	42.728	305	42.728	76.83	397	67.504	100.00		
79.375	150.750	67	105.209	372	53.981	93.70	92	149.641	23.17		
150.750	222.125	9	183.778	381	57.047	95.97	25	268.720	6.30		
222.125	293.500	8	256.750	389	61.154	97.98	16	316.500	4.03		
293.500	364.875	3	331.667	392	63.224	98.74	8	376.250	2.02		
364.875	436.250	4	383.750	396	66.462	99.75	5	403.000	1.26		
436.250	507.625	1	480.000	397	67.504	100.00	1	480.000	.25		
507.625	579.000	0	.000	397	67.504	100.00	0	480.000	.00		

NB : (GM) - GEOMETRIC MEAN

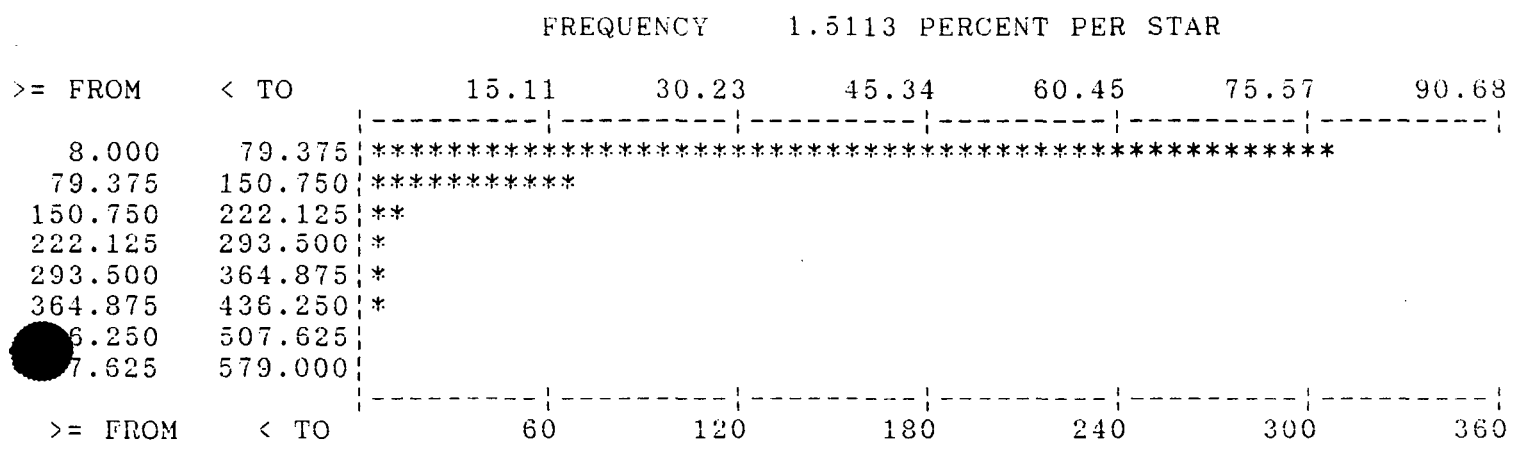
CLASSICAL STATISTICS AND HISTOGRAMS

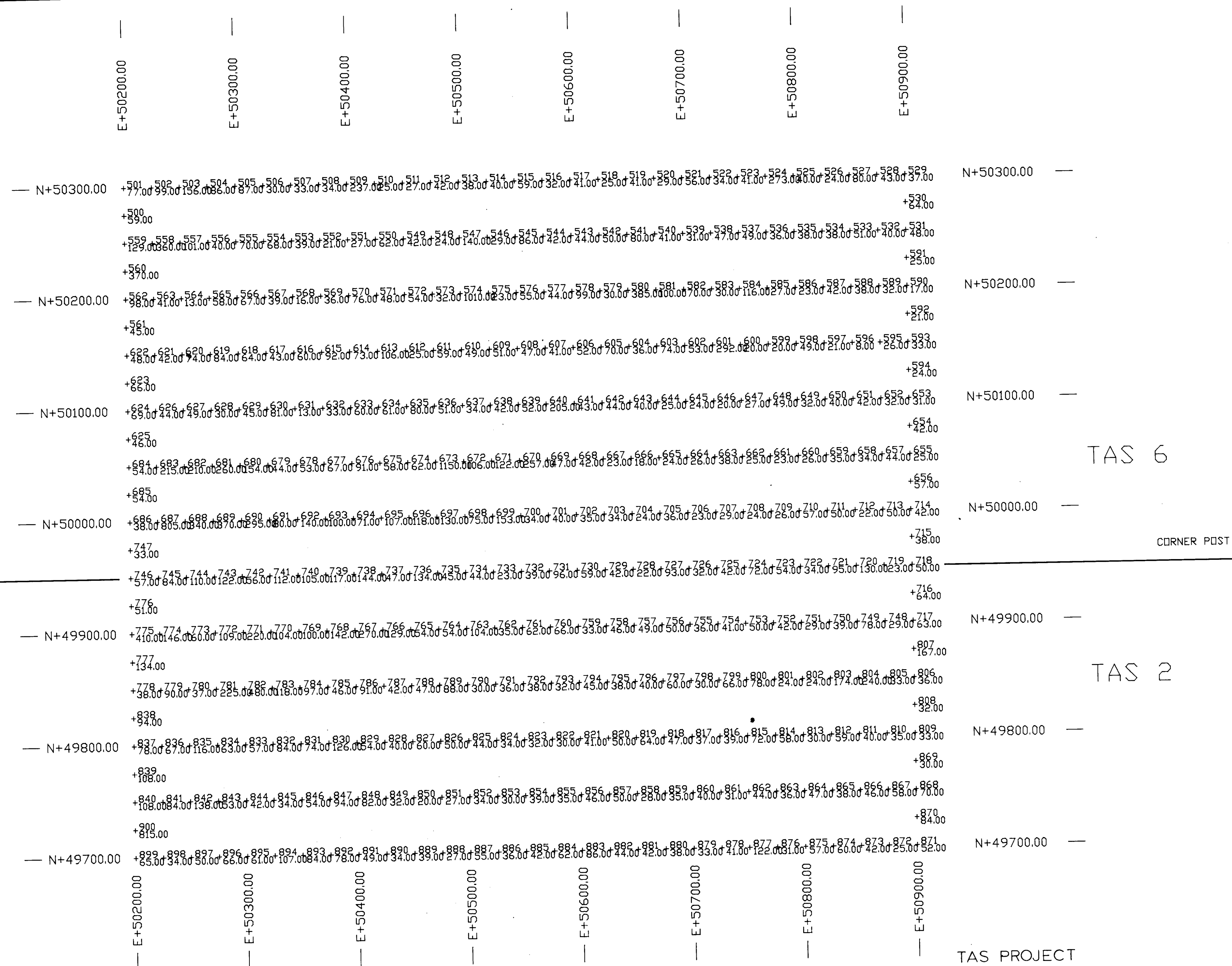
```

EXTRACTION FILENAME : \PCXPLOR\TAS\EASTCU.MEX
DATA DESCRIPTION    : TAS PROPERTY - EAST RIDGE GRID - COPPER PPM
USER DESCRIPTION    : TAS PROPERTY - EAST RIDGE GRID - COPPER

```

NORMAL HISTOGRAM





↑

TAS 6 H & H #2

CORNER POST

LEGEND

+807 SAMPLE NUMBER
+167.00 Cu (ppm)

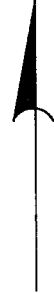
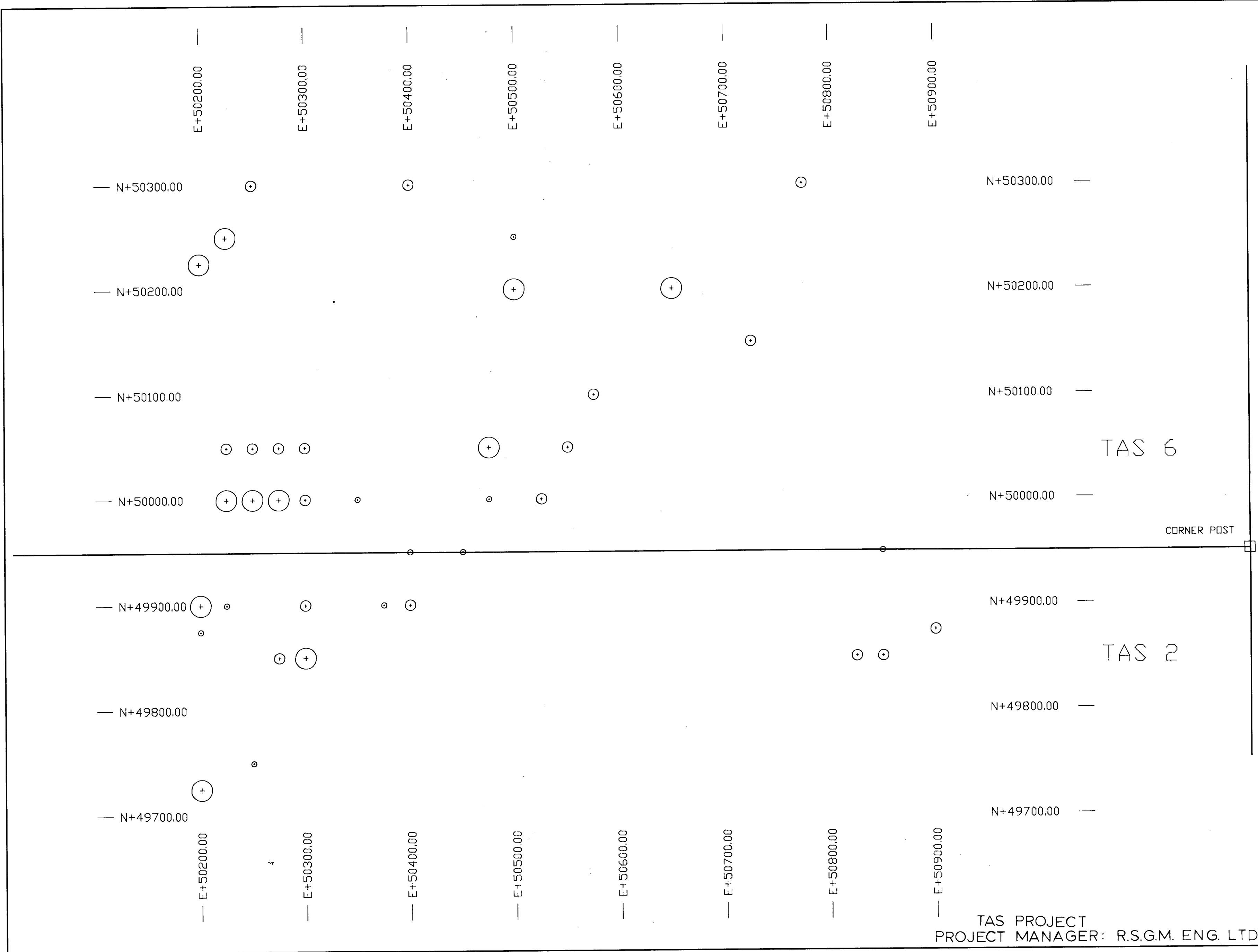
0 10 50m

GEOLOGICAL ASSOCIATION OF CANADA
A. J. EGORNOWSKI
FELLOW

BLACK SWAN GOLD MINES LTD.	
EAST RIDGE GRID SAMPLE LOCATIONS AND Cu SOIL GEOCHEMISTRY	
MAP No 3	NTS No 93K16
SCALE: 1:2500	DEC 1, 1989

TAS PROJECT
PROJECT MANAGER: R.S.G.M. ENG. LTD.

19,981



CORNER POST

TAS 6

H & H #2

TAS 2

LEGEND

- (+) > 300 ppm Cu
- ⊕ 150 - 300 ppm Cu
- o 130 - 150 ppm Cu



GEOLOGICAL BRANCH
ASSESSMENT REPORT

BLACK SWAN GOLD MINES LTD.	
EAST RIDGE GRID	
Cu VARIABLE SYMBOL PLOT	
MAP No 4	NTS No 93K16
SCALE: 1:2500	DEC 1, 1989

TAS PROJECT
PROJECT MANAGER: R.S.G.M. ENG. LTD.

19,981

	E+50200.00	E+50300.00	E+50400.00	E+50500.00	E+50600.00	E+50700.00	E+50800.00	E+50900.00																								
— N+50300.00	+501 5.00	+502 5.00	+503 20.00	+504 5.00	+505 10.00	+506 5.00	+507 5.00	+508 25.00	+509 10.00	+510 35.00	+511 10.00	+512 10.00	+513 5.00	+514 5.00	+515 5.00	+516 5.00	+517 20.00	+518 20.00	+519 20.00	+520 5.00	+521 5.00	+522 5.00	+523 5.00	+524 5.00	+525 5.00	+526 50.00	+527 5.00	+528 5.00	+529 5.00	N+50300.00	—	
	+500																													+530		
	+559 5.00	+558 5.00	+557 25.00	+556 20.00	+555 10.00	+554 5.00	+553 5.00	+552 25.00	+551 20.00	+550 25.00	+549 5.00	+548 5.00	+547 20.00	+546 5.00	+545 5.00	+544 5.00	+543 5.00	+542 5.00	+541 5.00	+540 5.00	+539 5.00	+538 5.00	+537 5.00	+536 5.00	+535 5.00	+534 10.00	+533 5.00	+532 5.00	+531			
— N+50200.00	+562 20.00	+563 35.00	+564 20.00	+565 5.00	+566 10.00	+567 5.00	+568 140.00	+569 20.00	+570 10.00	+571 5.00	+572 5.00	+573 10.00	+574 15.00	+575 20.00	+576 40.00	+577 35.00	+578 10.00	+579 5.00	+580 5.00	+581 50.00	+582 10.00	+583 35.00	+584 5.00	+585 5.00	+586 5.00	+587 5.00	+588 5.00	+589 10.00	+590	N+50200.00	—	
	+561																													+592		
	+622 5.00	+621 5.00	+620 5.00	+619 5.00	+618 5.00	+617 5.00	+616 30.00	+615 35.00	+614 10.00	+613 130.00	+612 25.00	+611 80.00	+610 15.00	+609 10.00	+608 50.00	+607 40.00	+606 20.00	+605 5.00	+604 30.00	+603 5.00	+602 175.00	+601 5.00	+599 10.00	+598 5.00	+597 5.00	+596 5.00	+595 5.00	+594				
— N+50100.00	+624 25.00	+623 20.00	+622 5.00	+621 25.00	+620 25.00	+619 30.00	+618 5.00	+617 5.00	+616 10.00	+615 5.00	+614 5.00	+613 5.00	+612 25.00	+611 15.00	+610 5.00	+609 5.00	+608 5.00	+607 5.00	+606 5.00	+605 5.00	+604 5.00	+603 5.00	+602 5.00	+601 5.00	+599 5.00	+598 5.00	+597 5.00	+596 5.00	+595 5.00	+594	N+50100.00	—
	+625																													+623		
	+684 80.00	+683 10.00	+682 30.00	+681 5.00	+680 30.00	+679 10.00	+678 175.00	+677 10.00	+676 15.00	+675 55.00	+674 20.00	+673 15.00	+672 125.00	+671 5.00	+670 5.00	+669 5.00	+668 5.00	+667 5.00	+666 5.00	+665 5.00	+664 5.00	+663 5.00	+662 5.00	+661 5.00	+660 5.00	+659 5.00	+658 5.00	+657 5.00	+656			
— N+50000.00	+686 5.00	+687 10.00	+688 10.00	+689 45.00	+690 10.00	+691 10.00	+692 30.00	+693 30.00	+694 10.00	+695 5.00	+696 5.00	+697 5.00	+698 20.00	+699 75.00	+700 25.00	+701 10.00	+702 5.00	+703 30.00	+704 5.00	+705 10.00	+706 5.00	+707 5.00	+708 5.00	+709 10.00	+710 35.00	+711 15.00	+712 30.00	+713 5.00	+714	N+50000.00	—	
	+747																													+715		
	+746 5.00	+745 100.00	+744 10.00	+743 130.00	+742 25.00	+741 5.00	+740 60.00	+739 140.00	+738 40.00	+737 5.00	+736 45.00	+735 40.00	+734 5.00	+733 20.00	+732 75.00	+731 20.00	+730 5.00	+729 10.00	+728 5.00	+727 5.00	+726 5.00	+725 5.00	+724 5.00	+723 5.00	+722 5.00	+721 5.00	+720 5.00	+719 5.00	+718			
— N+49900.00	+775 30.00	+774 20.00	+773 70.00	+772 40.00	+771 100.00	+770 40.00	+769 30.00	+768 10.00	+767 20.00	+766 25.00	+765 95.00	+764 5.00	+763 110.00	+762 40.00	+761 25.00	+760 10.00	+759 5.00	+758 5.00	+757 5.00	+756 5.00	+755 10.00	+754 5.00	+753 5.00	+752 10.00	+751 5.00	+750 10.00	+749 5.00	+748 30.00	+747	N+49900.00	—	
	+776																													+807		
	+778 30.00	+777 20.00	+776 30.00	+775 5.00	+774 40.00	+773 10.00	+772 245.00	+771 30.00	+770 20.00	+769 5.00	+768 5.00	+767 5.00	+766 5.00	+765 5.00	+764 5.00	+763 5.00	+762 5.00	+761 5.00	+760 5.00	+759 5.00	+758 5.00	+757 5.00	+756 5.00	+755 5.00	+754 5.00	+753 5.00	+752 5.00	+751 5.00	+750 5.00	+749		
— N+49800.00	+837 5.00	+836 10.00	+835 5.00	+834 5.00	+833 25.00	+832 100.00	+831 50.00	+830 20.00	+829 5.00	+828 5.00	+827 20.00	+826 90.00	+825 10.00	+824 5.00	+823 5.00	+822 10.00	+821 5.00	+820 5.00	+819 5.00	+818 40.00	+817 10.00	+816 5.00	+815 5.00	+814 5.00	+813 20.00	+812 5.00	+811 10.00	+810 5.00	+809	N+49800.00	—	
	+838																													+808		
	+840 20.00	+841 5.00	+842 10.00	+843 5.00	+844 5.00	+845 5.00	+846 10.00	+847 170.00	+848 10.00	+849 5.00	+850 5.00	+851 5.00	+852 5.00	+853 5.00	+854 10.00	+855 5.00	+856 10.00	+857 5.00	+858 5.00	+859 70.00	+860 5.00	+861 5.00	+862 10.00	+863 5.00	+864 10.00	+865 5.00	+866 5.00	+867 5.00	+868			
— N+49700.00	+899 100.00	+898 15.00	+897 40.00	+896 40.00	+895 10.00	+894 5.00	+893 20.00	+892 5.00	+891 5.00	+890 5.00	+889 20.00	+888 5.00	+887 20.00	+886 20.00	+885 10.00	+884 10.00	+883 5.00	+882 10.00	+881 10.00	+880 5.00	+879 5.00	+878 5.00	+877 10.00	+876 10.00	+875 45.00	+874 5.00	+873 5.00	+872 5.00	+871	N+49700.00	—	
	+899																													+870		

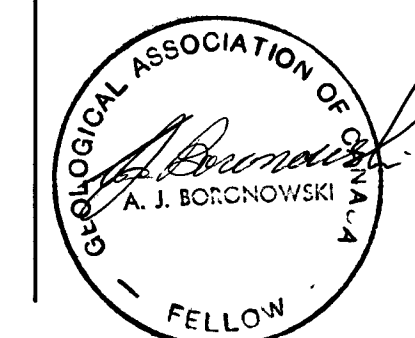
TAS 6

H & H #2

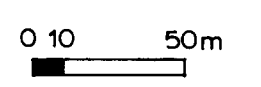
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,981

LEGEND



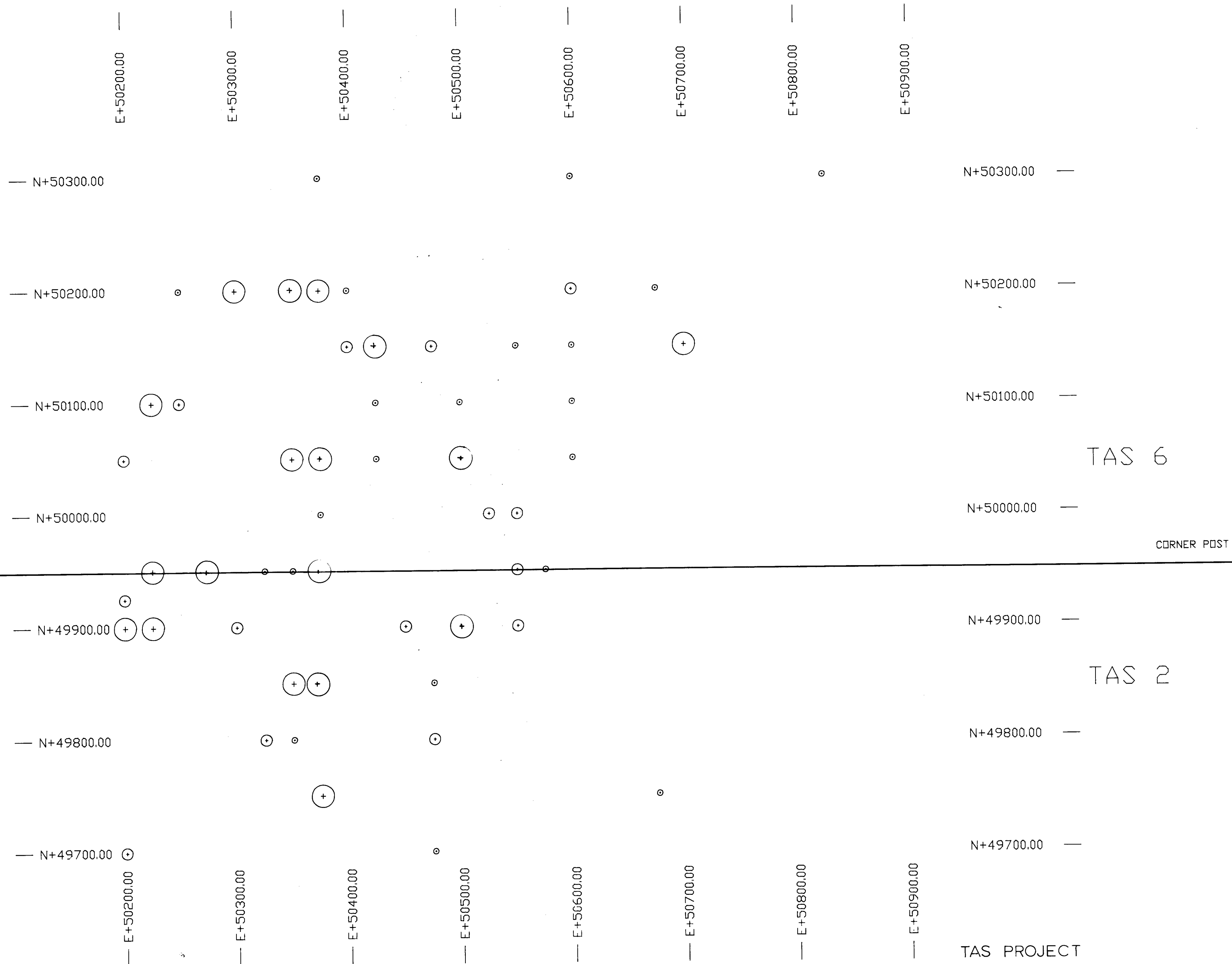
+808
25.00 SAMPLE NUMBER
Au (ppb)



BLACK SWAN GOLD MINES LTD.	
EAST RIDGE GRID SAMPLE LOCATIONS AND Au SOIL GEOCHEMISTRY	
MAP No 1	NTS No 93K16
SCALE: 1:2500	DEC 1, 1989

TAS PROJECT
PROJECT MANAGER: R.S.G.M. ENG. LTD.





TAS 6

H & H #2

CORNER POST

TAS 2

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,981
LEGEND



- ⊕ > 105 ppb Au
- ⊙ 75 - 105 ppb Au
- 50 - 75 ppb Au



BLACK SWAN GOLD MINES LTD.	
EAST RIDGE GRID	
Au VARIABLE SYMBOL PLOT	
MAP No 2	NTS 93K16
SCALE: 1:2500	DEC 1, 1989

TAS PROJECT
PROJECT MANAGER: R.S.G.M. ENG. LTD.