REPORT ON

1995 SOIL GEOCHEMICAL SURVEY

OF THE

MATSON CREEK PROPERTY

BOR 31 CLAIM

DAWSON MINING DISTRICT

NTS 115N/10

Lat.: 63° 31' N. Long.: 139° 50' W.

BY

Uwe Schmidt, P.Geo.

FOR

ATNA RESOURCES LTD.

April 28, 1996

RECEIVED
MAY 09 1996
MINING
RECORDERS OFFICE
DAWSON, Y.T.

Work performed on August 6,1995

OFFICE OF THE REGIONAL MANAGER
MINERAL RIGHTS
MAY 17 1996
WHITEHORSE
YUKON TERRITORY

093462

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1. INTRODUCTION

The recent discovery of the ABM polymetallic massive sulphide deposit by Cominco Ltd. in Finlayson Lake area of south-central Yukon has renewed an interest in volcanogenic massive sulphide (VMS) deposits within Yukon-Tanana Terrane. The fault-displaced extension of Yukon-Tanana which hosts this deposit, lies west of Dawson City, southwest of the Tintina Fault Zone. It is this geological setting which attracted Atna Resources to the area and led to an option agreement with YGC Resources covering five mineral properties, including the Matson Creek property (Bor claims).

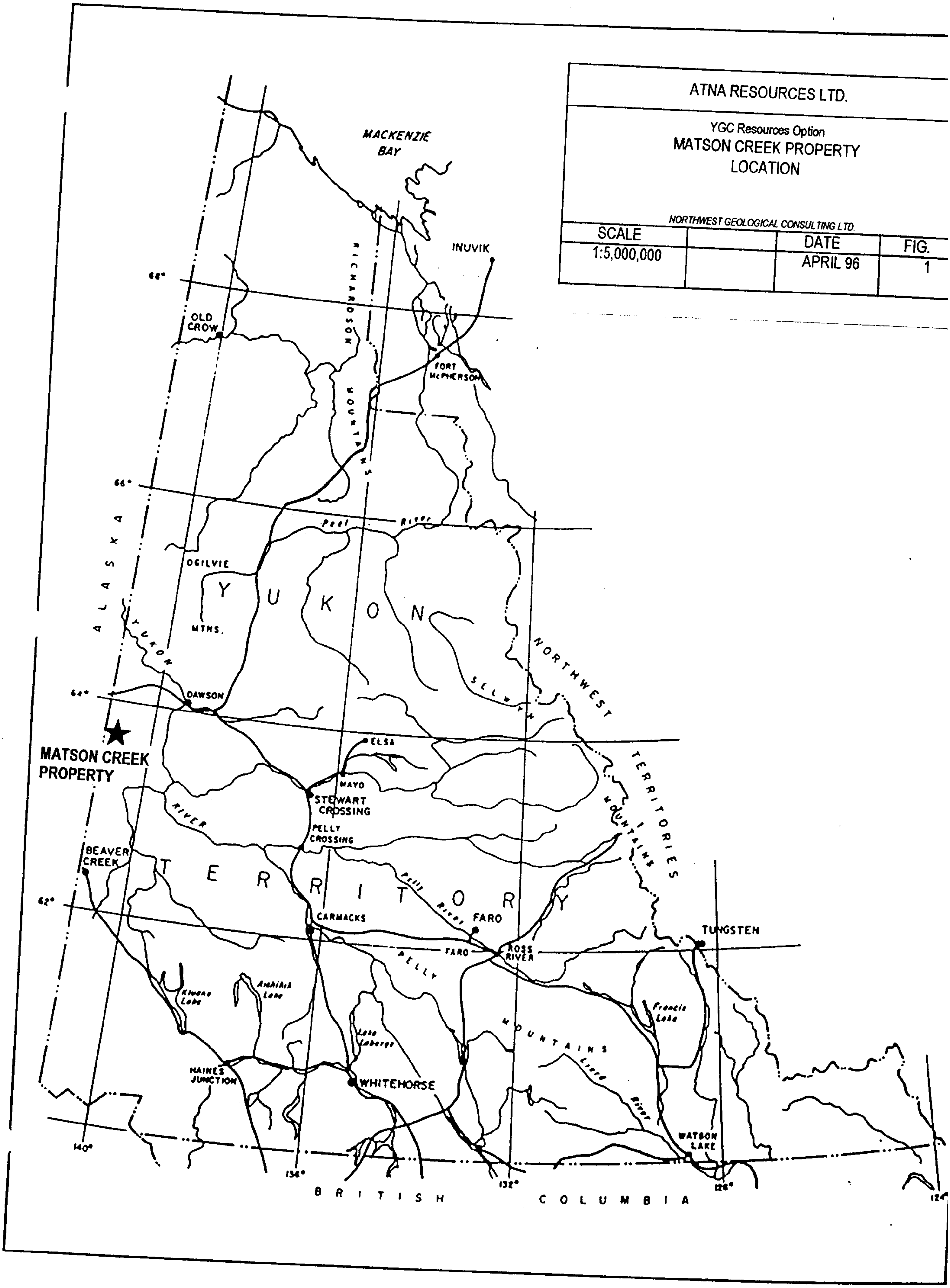
On August 6, 1995, the writer and Peter DeLancey, president of Atna Resources Ltd, accompanied by two field assistants, examined the Matson Creek property. The four man field crew examined the Bor claims and soil sampled the western limit of a previous soil grid along 5 north-south trending grid lines. This work was intended to provide additional information on the soil geochemistry of the property and optimize the expensive helicopter mobilization to the property.

Work was carried out by Northwest Geological Consulting Ltd. employees. A total of 79 soil samples were collected along 3.8 km of line. The writer was contracted by Atna Resources to carry out field management and supply field crews. Field crew consisted of the writer and field assistants Ron Beauchamp and Regan Moran. Overall program supervision was provided by Peter DeLancey, P.Eng.

2. PROPERTY, LOCATION AND ACCESS

The Matson Creek property consists of 58 Bor quartz mineral claims, covering an area of 1220 hectares, located approximately 90 km southwest of Dawson City, Yukon. The claims are registered in the Dawson Mining District in the name of YGC Resources Ltd.

The property is accessible by four-wheel drive vehicles along a 100 km road which passes through Sixtymile and services placer mines in the Matson Creek area at the east end of the property. A 600 metre long airstrip located at the western end of the property, allows fixed-wing aircraft access to the property.



ATNA RESOURCES LTD.

YGC Resources Option
MATSON CREEK PROPERTY
LOCATION

NORTHWEST GEOLOGICAL CONSULTING LTD.

SCALE		DATE	FIG.
1:5,000,000		APRIL 96	1

The coordinates of the approximate centre of the property are latitude 63° 31' N and longitude 139' 50 W, located within NTS map areas 115N/2.

Name	**Grant Numbers**	**Lapse Date**
Bor 1-16	YB30561-YB30576	Mar. 4, 2000
Bor 21-42	YB30577-YB30598	Mar. 4, 2000
Bor 43-62	YB40069-YB40104	Mar. 4, 2000

3. PHYSIOGRAPHY

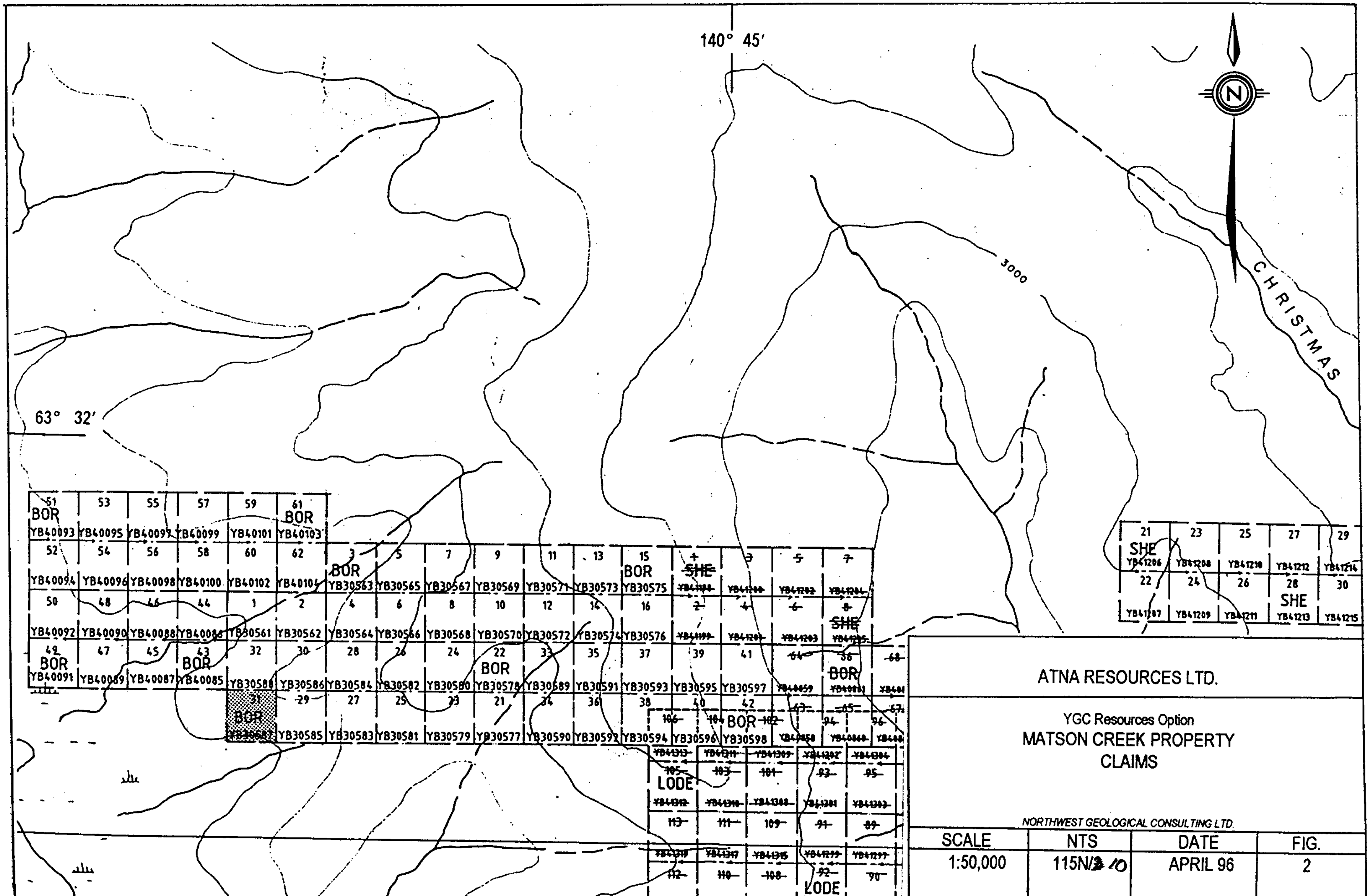
The property lies within gently rolling terrain of the Klondike Plateau, a minor, unglaciated, subdivision of the Yukon Plateau. Major streams and rivers and their tributaries have gentle gradients and well developed dendritic patterns. The claims lie between tributaries of Matson Creek and Ladue River. Bedrock exposure in the area is limited to road cuts, creek valleys and sporadic outcrops along the ridge tops. Overburden thickness varies over the property but thicknesses encountered during sampling are estimated to be between 1 and 4 metres.

Elevations, on the property range from approximately 580 to 1160 metres. The area examined and sampled in 1995 is a forested area covered by moderately sized, mixed deciduous and coniferous trees.

4. HISTORY

The area was first staked and explored by Moose Creek Exploration Ltd. 1977 and 1978. Archer, Cathro and Associates Ltd. staked the property in 1990 for YGC Resources Ltd. ~~in 1990~~. YGC carried out soil geochemical surveys in 1990 and 1991. In 1992, exploration was funded by Kennecott Canada Inc. under an option agreement with YGC Resources. Work included road building, line-cutting, soil sampling, geological mapping, a Max-Min EM survey and 796 metres of diamond drilling in five holes (Carne,1992).

Previous soil surveys have outlined coincident lead-zinc-copper soil geochemical anomalies over a 7 km length. Work by Atna Resources Ltd. in 1995 is limited to a one day property


140° 45′
63° 32′
N
3000
CHRISTMAS
BOR
SHE
LODE
ATNA RESOURCES LTD.
YGC Resources Option
MATSON CREEK PROPERTY
CLAIMS
NORTHWEST GEOLOGICAL CONSULTING LTD.
SCALE
1:50,000
NTS
115N/2 10
DATE
APRIL 96
FIG.
2

examination which included limited grid soil sampling. Soil samples taken in 1995 extended the sampling westward by 500 metres.

5. REGIONAL GEOLOGY

A large area of the western to southeastern Yukon is underlain by the Yukon-Tanana Terrane (YTT). This geologically complex terrane consists of polydeformed metamorphic rocks derived from a variety of igneous and sedimentary protoliths thought to have originated outboard of North American autochthonous strata, and ranges in age from Precambrian to Recent. Yukon-Tanana Terrane is host to a variety of economically important classes of mineral deposits. Recently, exploration has focussed on stratabound massive sulphide deposits that occur in subdivisions of this terrane in two areas of the Yukon. A number of stratabound base metal occurrences are known west and south of Dawson City. A second group of similar but economically more important mineral occurrences is known in YTT of Finlayson Lake area. The geology is similar to Dawson area but is now geographically removed by 450 km of right-lateral displacement along the Tintina Fault.

Mortensen (1992) divided the YTT into 3 structural assemblages: 1) Nisling assemblage, a lower structural package of quartzite and marble of possible Proterozoic and/or Cambrian age; 2) Nasina assemblage, a middle structural package of Late Devonian to middle Mississippian carbonaceous metasedimentary, mafic and felsic metavolcanic rocks; 3) an upper structural package of mid-Permian felsic metavolcanic (Klondike Schist) and metaplutonic rocks.

6. PROPERTY GEOLOGY

The claims and surrounding area are underlain by metamorphosed intermediate to felsic volcanic and sedimentary of Mortensen's upper structural assemblage (Klondike Schist). Lithologies strike east-west, dip moderately to the south and include quartz-sericite schist, calcareous mica schist, chloritic schist, marble and black graphitic schist (Carne, 1992).

7. GEOCHEMISTRY

Grid soil sampling was limited to five north-south soil lines, having a combined length of 3.8 km and a total of 79 samples.

Previous lines in this area had a line spacing of 100 metres and a sample interval of 50 metres. The 1995 lines were also run at this line spacing and sample interval and extended the western end of the grid by 500 metres.

Sample lines are marked with orange flagging tape and were established by slope-corrected compass and "hip-chain" surveys. Grid stations are identified by blue and orange flagging tape with grid coordinates marked on "Tivek" tags. The grid coordinates were also used to identify the soil sample. Samples of B horizon soils were collected using sampling shovels or mattocks. Soils typically consist of clay rich-colluvium covered by a variable thickness of organic material. Sample depths ranged from 20 to 40 cm. Permafrost development is variable and did not hinder sampling.

Samples were analyzed by Acme Analytical Laboratories Ltd. of Vancouver, employing a standard 30 element Inductively Coupled Argon Plasma (ICP) package with gold analyzed by acid leach/AA from a 10 g sample. Certificates of analyses are appended to this report (Appendix A).

The interpreted soil sample analyses for Cu, Pb and Zn are plotted at 1: 5000 scale on Figures 3 to 5. These plots include only data from 1995.

STATISTICAL METHOD

Analytical data analyzed statistically using Probplot, a computer program designed to optimally fit multiple normal distributions to exploration geochemical data on probability plots (Stanley 1987).

A statistical analysis of Cu, Pb and Zn analytical data was carried out with the aid of histograms and cumulative probability plots generated by Probplot. Because of the low number of samples taken on the Pub claims, the analytical data were combined with analyses from the nearby Bor claims. During data analyses the data set was reduced by eliminating analyses which are at the analytical detection limit. Sub-population boundaries were visually estimated and modified until theoretical mixed population curves closely matched the real data points. Anomaly thresholds for each sub-population were then calculated by the Probplot program. Threshold values assigned to six symbol classes were determined by selecting the mean value and the mean plus two standard deviations of each sub-population. Summary statistics, histograms, and probability plots produced by Probplot, are appended to this report (Appendix B).

Trial plots were generated within Autocad and final thresholds were selected by a visual assessment of anomaly definition and contrast with background values. The final plots classify the analytical data for each element into ranges of increasing value which are assigned symbols of increasing size. In most cases, log probability plots were used to determine thresholds. The lowest population thresholds are often ignored on symbol plots because they represent background concentrations.

DISCUSSION OF RESULTS

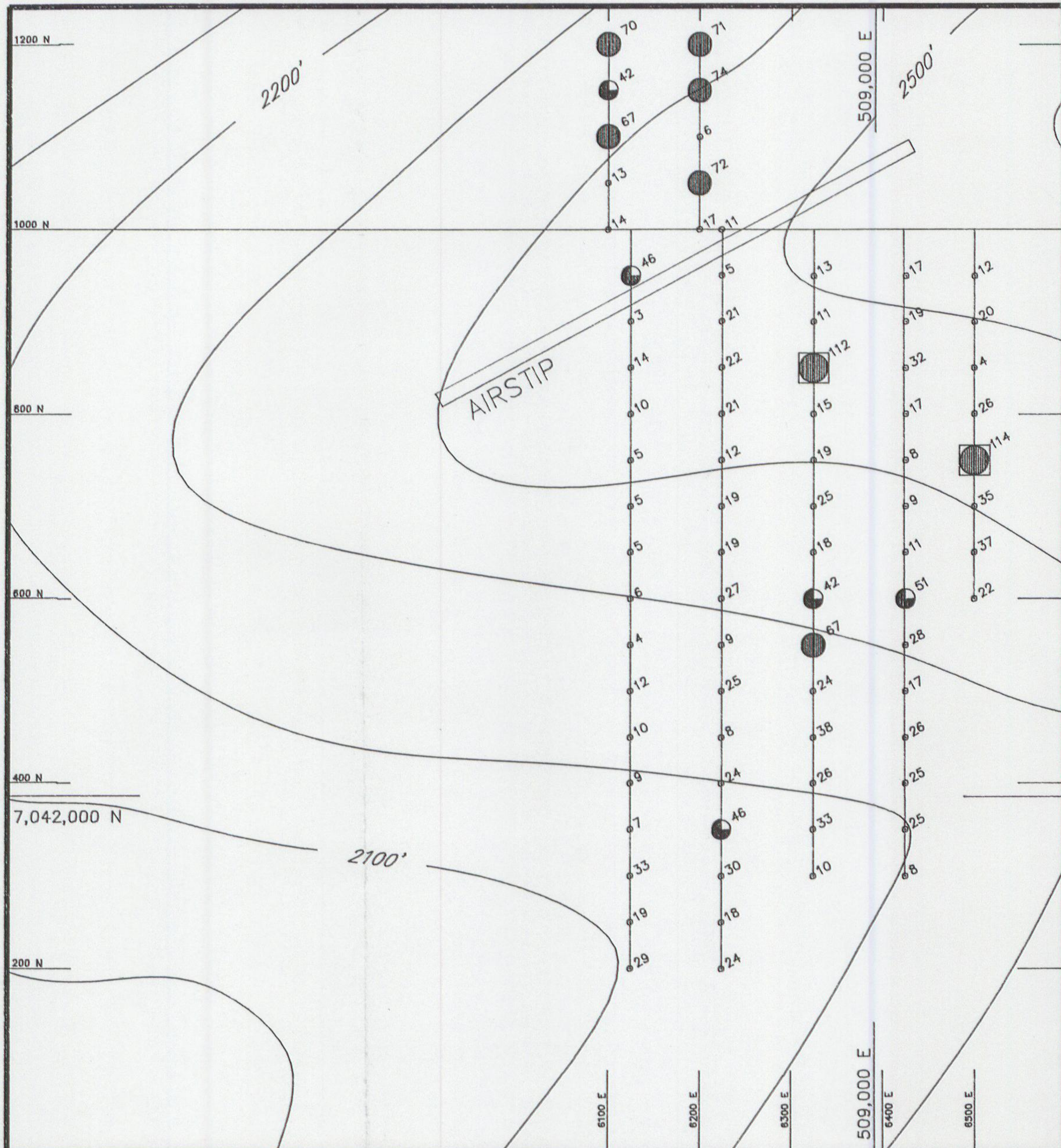
Copper (Fig.3)

Copper concentrations in 79 soil analyses range from 3 to 114 ppm. The data were sub-divided into 3 lognormal populations, with population boundaries selected at 75% and 90% of the data. An anomalous threshold of 38 ppm was selected, representing the mean of population 2. Symbol boundaries were chosen at 39, 55 and 76 ppm Cu. The higher thresholds correspond to the mean plus two standard deviations of population 2 and the mean of population 3, respectively.

Scaled symbol plots of the data at 1:5,000 scale (Fig.3) outline a group of anomalous concentrations at the north end of the grid. Isolated anomalous concentrations occur south of base-line 10+00 N.

Lead (Fig. 4)

Lead analyses range from 5 to 85 ppm. The data were sub-divided into 2 lognormal populations with population boundaries selected at 80% of the data. A concentration of 16 ppm Pb was chosen as the anomalous threshold and corresponds to the mean minus two



N

Analytical Thresholds

SOIL B HORIZON

CU Values in ppm

◦	<1 – 38
◔	39 – 54
●	55 – 75
▣	76 >>>>>>>

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BRITISH COLUMBIA
GEOSCIENTIST

ATNA RESOURCES LTD.

Work By	U. Schmidt
Date Drafted	04-26-96
Drafted By	
Date Revised	04-26-96
Revised By	
N.T.S. Number	115N/10
File Name	MATCUFIN

Matson Creek Property

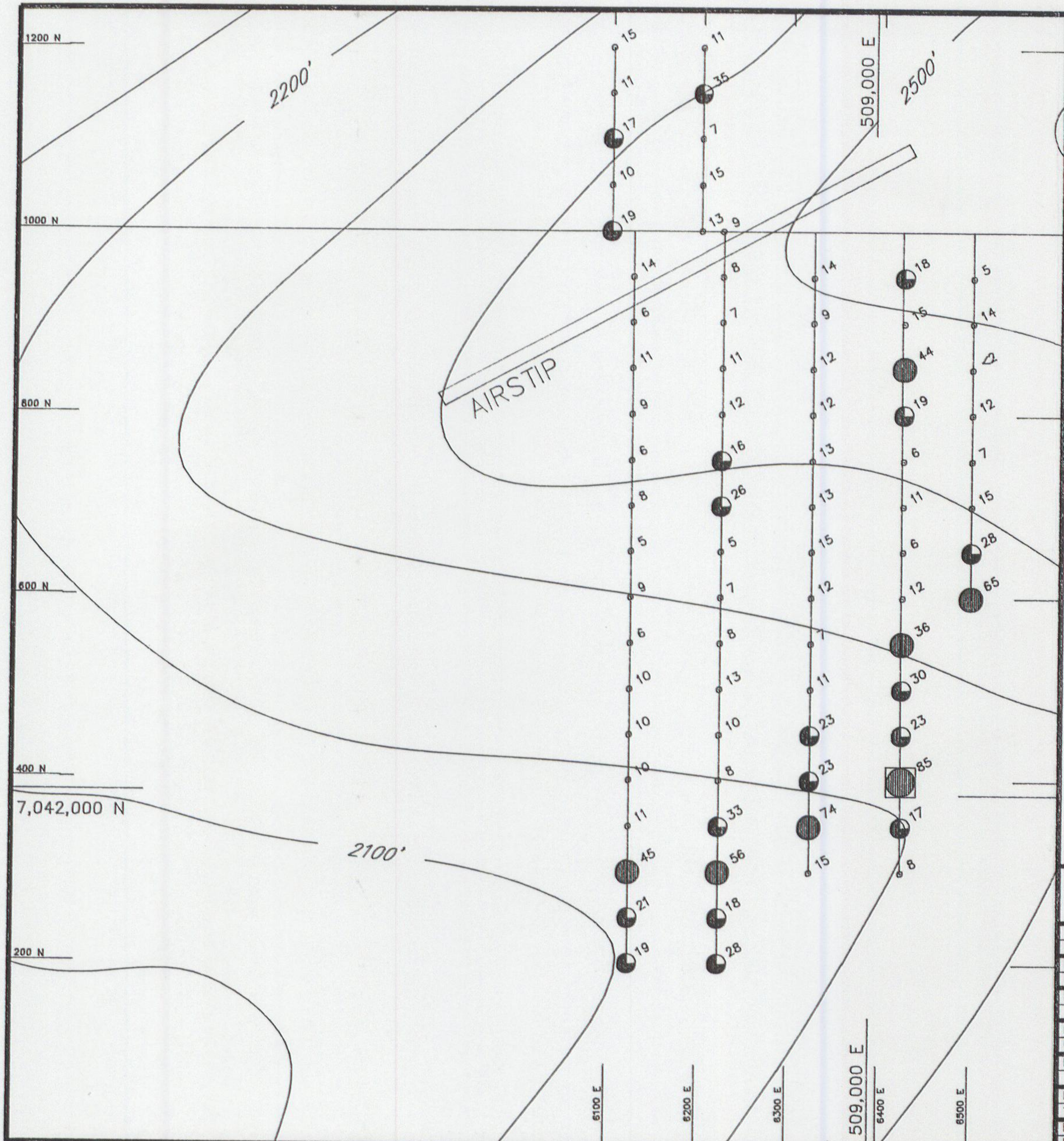
Cu Geochemistry

Northwest Geological Consulting Ltd.

100 0 100 200 300

SCALE 1 : 5000

Figure 3



Analytical Thresholds

SOIL B HORIZON

PB Values in ppm

⊡	<1 – 15
◔	16 – 35
●	36 – 81
▣	82 >>>>>>>

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Date Revised: 04-26-96
Revised By:
N.T.S. Number: 115N/10
File Name: MATPBFIN

Matson Creek Property
Pb Geochemistry

Northwest Geological Consulting Ltd.

100 0 100 200 300
SCALE 1 : 5000

Figure 4

standard deviations of population 2. Scaled symbols were assigned thresholds of 16, 36 and 82 ppm Pb. The higher thresholds represent the mean of population 2 and the mean plus two standard deviations of population 2, respectively.

Anomalous lead concentrations cluster at the south end of the grid lines.

Zinc (Fig. 5)

The zinc analytical data were divided into three populations with analyses ranging from 7 to 199 ppm. Population boundaries were selected at 5% and 80% of the data. An anomaly threshold of 38 was selected, which represents the mean of population 2. Scaled anomaly symbols were assigned thresholds of 39, 72 and 100 ppm. The higher values correspond to the mean plus 2 standard deviations of population 2, and the mean of population 3, respectively.

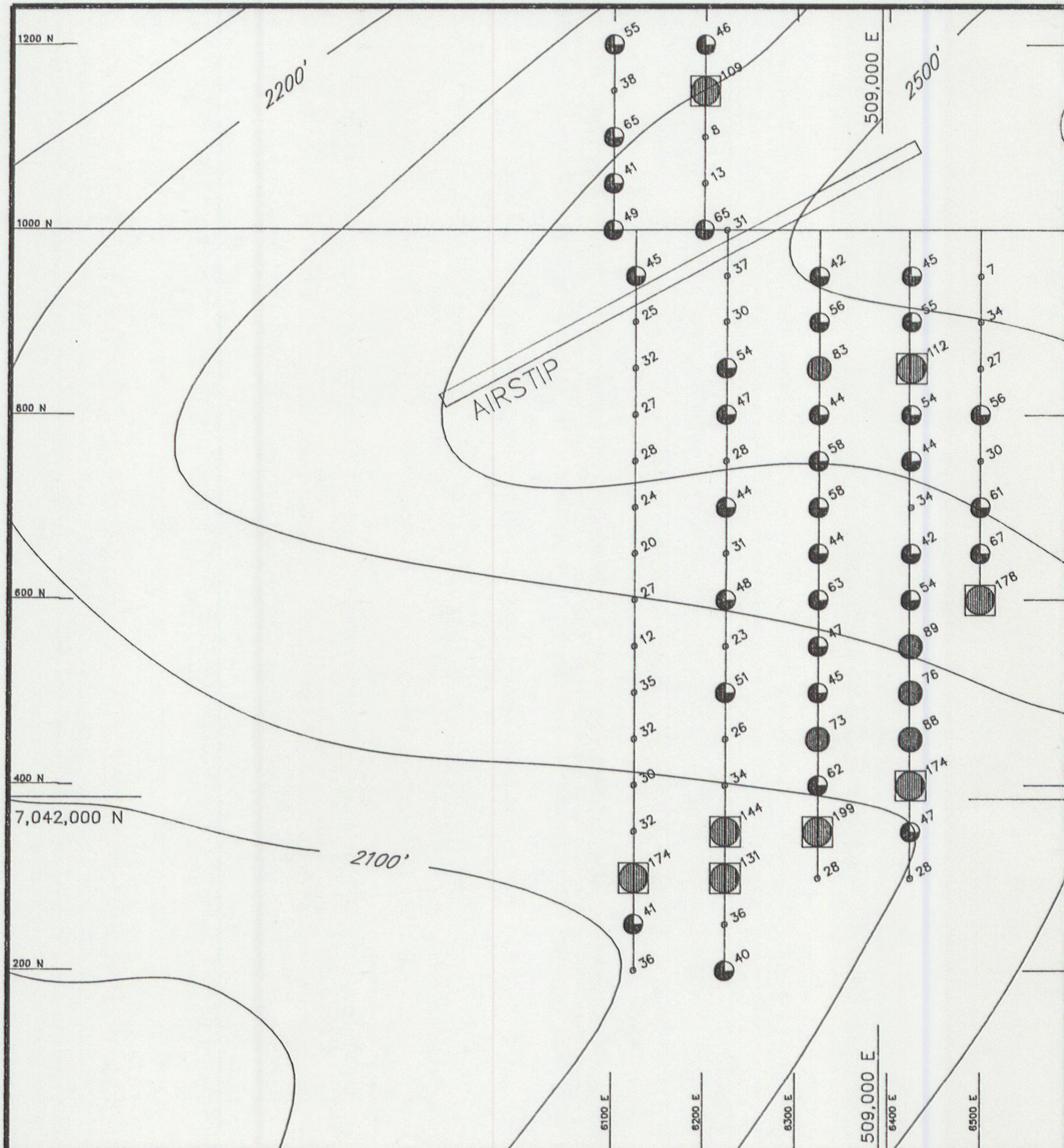
Scaled symbol plots of higher zinc concentrations are roughly coincident with the lead.

8. CONCLUSIONS

The 1995 grid soil sampling has identified coincident geochemical copper, lead and zinc soil anomalies west of previously identified soil anomalies. Although anomaly thresholds are identified by a statistical analysis of the data, these anomalies are significantly lower than those outlined by previous surveys to the east. The anomaly thresholds determined from the 1995 sampling are based on a small data set which is not representative of the entire property.

9. RECOMMENDATIONS

Coincident geochemical soil anomalies outlined by previous soil geochemical surveys on the Matson Creek property are open to the east and west. This suggests further exploration potential for the property and the area. To further assess this potential, a reevaluation of the geochemical data is recommended. This reevaluation should include a multi-element statistical analysis of all previous surveys, if available. This would provide a cost effective way to target further follow-up work on the property.



Analytical Thresholds

SOIL B HORIZON

ZN Values in ppm

⊡	<1 – 38
◕	39 – 71
●	72 – 99
▣	100 >>>>>>>

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Matson Creek Property
Zn Geochemistry

Work By	U. Schmidt
Date Drafted	04-26-96
Drafted By	
Date Revised	04-26-96
Revised By	
N.T.S. Number	115N/10
File Name	MATZNFIN

Northwest Geological Consulting Ltd.

100 0 100 200 300

SCALE 1 : 5000

Figure 5

10. BIBLIOGRAPHY AND REFERENCES

Carne, R.C. (1993): Summary Report on 1992 Exploration, Matson Creek Property, for YGC Resources Ltd.

Green, L.H., (1972): Geology o Nash Creek, Larsen Creek and Dawson Map-Areas, Yukon Territory; G.S.C. Memoir 364

Johnston, S.T. and Mortensen, J.K.,(1994): Regional Setting of Porphyry Cu-Mo deposits, Volcanogenic Massive-Sulphide Deposits, and Mesothermal Gold Deposits in the Yukon-Tanana Terrane, Yukon. Extended Extracted from: Abstracts and Proceedings of the District 6 CIM 1994 Annual General Meeting

Mortensen, J.K. and Jilson, G.A. (1985): Evolution of the Yukon-Tanana terrane: Evidence from southeastern Yukon Territory, GEOLOGY, v.13 p.806-810

Mortensen, J.K.,(1988): Geology of southwestern Dawson map area, Yukon Territory; in Current Research, Part E, G.S.C. Paper 88-1E, p.73-78

Mortensen, J.K., (1992): Pre-Mid-Mesozoic Tectonic Evolution of the Yukon-Tanana Terrane, Yukon and Alaska, TECTONICS, VOL. 11 NO. 4 , p.836-853

Sinclair, A.J., (1976): Applications of Probability Graphs in Mineral Exploration; The Association of Exploration Geochemists, Special Volume No. 4

Stanley, C.R., (1987): Probplot; The Association of Exploration Geochemists, Special Volume No. 14

11. STATEMENT OF EXPENDITURE

I. Field Expenses

1) Labour

U.Schmidt (Project Geologist) Aug. 6, 1995

1 day @$350/day $350.00

R.Beauchamp (Field Assistant) Aug. 6, 1995

1 day @ $200/day $200.00

R. Moran (Field Assistant) Aug. 6, 1995

1 day @ $175/day $175.00

$725.00

2) Consumables and Supplies $60.00

3) Camp and Equipment Rental $78.50

4) Transportation

Truck Rental Aug. 6, 1995 (1 day @ $55/day) $55.00

5) Geochemical Analysis

79 soils, 33 element ICP analysis $711.00

II. OFFICE

Data compilation, Interpretation, Data Plotting, Report Writing

U. Schmidt April 25,28, 1996

2 days @$350/day. $700.00

	$2,329.50
GST	$163.07
TOTAL	**$2,492.57**

Appendix A

CERTIFICATES OF ANALYSIS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm
MT 61+00E 12+00N	<1	70	15	55	<.3	46	14	536	2.93	<2	<5	<2	3	22	.2	<2	<2	63	.61	.033	23	126	1.85	137	.06	<3	2.04	.01	.05	<2	<5	<1
MT 61+00E 11+50N	<1	42	11	38	<.3	44	10	249	2.05	4	<5	<2	<2	29	.4	<2	<2	53	.40	.055	7	117	1.56	83	.08	<3	1.60	<.01	.04	<2	<5	<1
MT 61+00E 11+00N	<1	67	17	65	<.3	62	15	510	3.53	<2	<5	<2	5	11	.4	<2	3	72	.24	.041	38	175	2.47	112	.07	<3	2.34	<.01	.09	<2	<5	<1
MT 61+00E 10+50N	<1	13	10	41	<.3	3	3	318	1.63	<2	<5	<2	3	9	<.2	<2	<2	21	.17	.043	23	12	.59	75	.01	<3	.92	<.01	.06	<2	<5	<1
MT 61+00E 10+00N	1	14	19	49	<.3	12	9	522	4.17	2	<5	<2	3	18	<.2	<2	<2	79	.19	.030	15	23	2.14	99	.06	<3	2.99	.01	.03	<2	<5	<1
MT 61+00E 9+50N	<1	46	14	45	<.3	49	16	655	4.76	<2	<5	<2	<2	17	<.2	<2	4	119	.44	.030	9	112	2.09	168	.03	<3	2.58	<.01	.03	<2	<5	<1
MT 61+00E 9+00N	<1	3	6	25	<.3	4	2	184	1.55	<2	<5	<2	7	7	.3	<2	<2	9	.16	.020	6	6	.59	72	.01	<3	1.05	<.01	.05	<2	<5	<1
MT 61+00E 8+50N	<1	14	11	32	<.3	12	6	566	2.44	<2	<5	<2	3	17	.6	<2	<2	48	.28	.032	6	21	.83	235	.05	<3	1.54	.01	.06	<2	<5	<1
MT 61+00E 8+00N	<1	10	9	27	<.3	12	6	259	1.96	7	<5	<2	3	19	.4	<2	<2	32	.28	.021	7	26	.85	136	.05	<3	1.36	<.01	.08	<2	<5	<1
MT 61+00E 7+50N	<1	5	6	28	<.3	4	3	239	2.03	<2	<5	<2	3	16	.3	<2	<2	30	.31	.057	8	9	.84	79	.07	<3	1.41	.01	.06	<2	<5	<1
MT 61+00E 7+00N	<1	5	8	24	<.3	3	3	289	1.98	4	<5	<2	2	12	.7	<2	2	26	.29	.054	10	8	.83	88	.06	<3	1.32	<.01	.05	<2	<5	<1
MT 61+00E 6+50N	<1	5	5	20	<.3	3	2	172	1.45	<2	<5	<2	3	15	.4	<2	<2	22	.21	.008	7	12	.38	103	.04	<3	.93	.01	.09	<2	<5	<1
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MT 61+00E 3+50N	<1	7	11	32	<.3	13	4	272	1.98	3	<5	<2	2	16	.4	<2	<2	37	.29	.012	8	26	.64	145	.05	<3	1.32	.01	.08	<2	<5	<1
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MT 62+00E 7+50N	<1	12	16	28	<.3	9	5	339	2.11	<2	<5	<2	4	14	.5	<2	2	49	.16	.009	14	20	.41	157	.07	<3	1.36	.01	.08	<2	<5	<1
MT 62+00E 7+00N	<1	19	26	44	<.3	18	7	295	2.98	9	<5	<2	3	17	.2	<2	<2	71	.18	.016	12	42	.67	143	.13	<3	2.11	.01	.08	<2	<5	<1
MT 62+00E 6+50N	<1	19	5	31	<.3	23	5	253	1.94	6	<5	<2	2	16	<.2	<2	2	26	.24	.019	5	54	1.17	55	.05	<3	1.28	<.01	.05	<2	<5	<1
STANDARD C	18	59	37	125	7.0	64	30	1124	3.86	42	22	7	36	49	18.1	18	18	66	.49	.092	43	60	.92	177	.08	26	1.81	.06	.15	12	<5	1

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

34

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm
MT 62+00E 6+00N	<1	27	7	48	<.3	138	18	409	3.46	7	<5	<2	2	10	<.2	<2	4	85	.21	.005	3	311	2.99	51	.13	<3	2.81	<.01	.03	<2	<5	1
MT 62+00E 5+50N	<1	9	8	23	<.3	13	5	310	1.73	6	<5	<2	4	16	<.2	<2	2	33	.25	.008	9	30	.60	100	.05	<3	1.19	<.01	.05	<2	<5	<1
MT 62+00E 5+00N	<1	25	13	51	<.3	23	8	564	2.83	9	<5	<2	4	18	<.2	<2	<2	56	.30	.013	21	41	1.12	180	.08	<3	1.96	.01	.05	<2	<5	<1
MT 62+00E 4+50N	<1	8	10	26	<.3	9	6	223	2.38	8	5	<2	2	10	.3	<2	<2	35	.20	.023	5	15	1.16	53	.04	<3	1.48	.01	.03	<2	<5	<1
MT 62+00E 4+00N	<1	24	8	34	<.3	9	9	275	2.53	4	<5	<2	4	19	<.2	<2	<2	40	.79	.038	13	15	1.31	108	.03	<3	1.77	.01	.06	<2	<5	<1
MT 62+00E 3+50N	<1	46	33	144	<.3	33	11	567	2.54	10	6	<2	3	33	.7	<2	<2	50	.75	.043	13	69	1.38	148	.05	<3	1.60	.01	.04	<2	<5	<1
MT 62+00E 3+00N	1	30	56	131	.4	14	12	624	2.79	9	<5	<2	4	28	.7	<2	2	41	.44	.036	20	30	.63	227	.05	<3	1.19	.01	.06	<2	<5	<1
MT 62+00E 2+50N	<1	18	18	36	<.3	10	6	205	1.69	11	5	<2	8	25	.2	<2	<2	33	.36	.027	34	17	.29	351	.06	<3	1.14	.02	.08	<2	<5	<1
MT 62+00E 2+00N	1	24	28	40	<.3	13	7	304	2.17	12	9	<2	9	26	.4	<2	2	40	.35	.034	45	22	.33	380	.05	<3	1.43	.02	.09	<2	<5	<1
MT 63+00E 9+50N	1	13	14	42	<.3	13	5	250	2.28	9	<5	<2	2	18	.3	<2	<2	54	.22	.016	8	19	.75	126	.06	<3	1.49	.01	.05	<2	<5	1
MT 63+00E 9+00N	1	11	9	56	<.3	13	7	803	4.86	<2	6	<2	2	25	.3	<2	4	83	.24	.029	6	19	2.54	106	.13	<3	2.96	.01	.04	<2	<5	1
MT 63+00E 8+50N	1	112	12	83	<.3	14	9	432	3.57	6	<5	<2	2	21	<.2	<2	<2	86	.30	.034	7	20	1.50	85	.14	<3	2.00	.01	.09	<2	<5	<1
MT 63+00E 8+00N	1	15	12	44	<.3	17	8	353	2.97	5	<5	<2	<2	18	.2	<2	<2	67	.27	.019	6	23	1.29	95	.08	<3	1.68	.01	.07	<2	<5	1
MT 63+00E 7+50N	<1	19	13	58	<.3	25	12	454	4.30	5	<5	<2	<2	17	.2	<2	2	84	.27	.013	5	32	2.19	98	.09	<3	2.53	.01	.05	<2	<5	<1
MT 63+00E 7+00N	1	25	13	58	<.3	84	15	651	3.45	6	<5	<2	<2	13	.3	<2	3	75	.21	.015	4	163	2.07	89	.10	<3	2.43	<.01	.04	<2	<5	<1
MT 63+00E 6+50N	1	18	15	44	<.3	23	8	460	2.85	8	<5	<2	3	21	.6	<2	<2	66	.28	.018	9	37	.67	162	.11	<3	1.91	.01	.06	<2	<5	1
MT 63+00E 6+00N	<1	42	12	63	<.3	68	13	625	3.27	5	6	<2	2	25	<.2	<2	4	78	.38	.020	9	127	1.96	173	.07	<3	2.44	.01	.04	<2	<5	<1
MT 63+00E 5+50N	<1	67	7	47	<.3	32	11	339	3.13	5	<5	<2	2	19	<.2	<2	<2	97	.38	.013	9	65	1.51	102	.10	<3	1.82	<.01	.08	<2	<5	1
MT 63+00E 5+00N	<1	24	11	45	<.3	21	11	606	3.45	<2	<5	<2	<2	34	<.2	<2	<2	63	.95	.065	12	26	1.61	112	.05	<3	2.08	.01	.04	<2	<5	<1
MT 63+00E 4+50N	<1	38	23	73	<.3	26	14	516	3.65	4	<5	<2	4	23	.4	<2	<2	69	.60	.044	16	50	1.62	136	.06	<3	2.20	.01	.09	<2	<5	<1
MT 63+00E 4+00N	<1	26	23	62	<.3	13	13	746	3.45	5	<5	<2	3	28	.6	<2	<2	67	.80	.044	22	15	1.76	119	.02	<3	2.03	.01	.04	<2	<5	<1
MT 63+00E 3+50N	1	33	74	199	.4	23	9	321	2.77	20	7	<2	3	42	1.2	<2	2	63	.63	.049	19	46	.91	266	.05	<3	1.62	.02	.06	<2	<5	<1
MT 63+00E 3+00N	1	10	15	28	<.3	8	4	149	1.60	<2	<5	<2	5	19	<.2	<2	<2	24	.27	.032	20	12	.21	172	.04	<3	.73	.01	.08	<2	<5	<1
RE MT 63+00E 3+00N	<1	9	19	26	<.3	7	4	142	1.61	<2	<5	<2	5	19	<.2	<2	<2	24	.27	.030	22	10	.20	172	.04	<3	.71	.01	.07	<2	6	<1
MT 64+00E 9+50N	1	17	18	45	<.3	20	7	327	2.75	5	<5	<2	5	14	<.2	<2	<2	60	.13	.006	14	37	.53	190	.09	<3	2.22	.01	.08	<2	<5	<1
MT 64+00E 9+00N	1	19	15	55	<.3	19	8	311	3.11	10	<5	<2	3	21	.5	<2	<2	81	.29	.008	11	28	.97	156	.09	<3	2.11	.01	.06	<2	<5	<1
MT 64+00E 8+50N	3	32	44	112	<.3	9	9	611	5.56	<2	<5	<2	3	20	.6	<2	<2	96	.20	.031	10	12	1.86	138	.02	<3	2.46	.01	.12	<2	<5	<1
MT 64+00E 8+00N	1	17	19	54	<.3	21	10	474	3.50	<2	<5	<2	3	20	<.2	<2	<2	73	.28	.016	8	25	1.05	166	.09	3	2.18	.01	.06	<2	5	<1
MT 64+00E 7+50N	1	8	6	44	<.3	13	7	573	4.62	2	<5	<2	<2	18	.2	<2	<2	93	.28	.019	3	17	2.37	63	.11	<3	2.63	<.01	.04	<2	<5	1
MT 64+00E 7+00N	1	9	11	34	<.3	11	5	254	2.74	<2	<5	<2	2	15	<.2	<2	<2	65	.22	.011	6	17	.96	80	.11	<3	1.58	.01	.04	<2	<5	<1
MT 64+00E 6+50N	<1	11	6	42	<.3	11	7	421	4.17	<2	<5	<2	<2	20	.2	<2	<2	73	.43	.041	4	9	1.77	18	.13	<3	2.08	.01	.02	<2	<5	<1
MT 64+00E 6+00N	<1	51	12	54	<.3	56	14	652	2.99	7	8	<2	<2	39	.5	<2	<2	63	1.30	.048	12	120	1.93	189	.04	<3	2.04	.02	.04	<2	<5	<1
MT 64+00E 5+50N	1	28	36	89	<.3	20	9	391	2.74	3	<5	<2	3	27	.2	<2	2	52	.57	.028	13	37	.99	150	.06	4	1.59	.02	.04	<2	<5	<1
MT 64+00E 5+00N	1	17	30	76	<.3	19	8	341	3.17	7	7	<2	3	20	.2	<2	<2	69	.27	.013	9	34	1.02	157	.06	<3	2.17	.01	.06	<2	<5	<1
MT 64+00E 4+50N	1	26	23	88	<.3	17	7	361	2.38	3	<5	<2	2	30	<.2	<2	2	44	.53	.028	14	27	1.09	146	.04	<3	1.56	.01	.05	<2	<5	<1
STANDARD C	17	55	37	129	6.6	70	29	1043	3.62	41	21	6	35	47	17.0	18	20	62	.47	.087	40	57	.86	166	.07	25	1.69	.06	.14	8	<5	1

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

34

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm
MT 64+00E 4+00N	1	25	85	174	.3	11	6	286	1.92	5	<5	<2	6	25	.7	<2	<2	26	.34	.042	21	22	.41	135	.05	<3	.88	.01	.06	4	<5	1
MT 64+00E 3+50N	1	25	17	47	<.3	13	6	266	2.32	6	<5	<2	9	29	.7	<2	<2	35	.39	.038	37	23	.30	331	.07	<3	1.71	.02	.11	9	<5	3
MT 64+00E 3+00N	1	8	8	28	<.3	7	3	112	1.34	2	<5	<2	3	20	<.2	<2	<2	25	.27	.036	18	11	.18	157	.06	<3	.88	.01	.07	3	<5	1
MT 65+00E 9+50N	<1	12	5	7	<.3	16	3	114	.80	3	<5	<2	4	11	.3	<2	<2	12	.28	.075	6	37	.32	55	.01	<3	.54	<.01	.04	2	<5	<1
MT 65+00E 9+00N	<1	20	14	34	<.3	31	7	408	1.99	3	<5	<2	4	14	.4	<2	<2	36	.29	.012	7	83	.88	209	.03	<3	1.65	.01	.06	3	<5	1
MT 65+00E 8+50N	1	4	<3	27	<.3	5	1	119	.85	6	<5	<2	8	7	.3	<2	<2	4	.12	.013	36	4	.19	77	.01	<3	.62	<.01	.07	8	<5	<1
MT 65+00E 8+00N	1	26	12	56	<.3	21	8	597	2.92	2	<5	<2	5	19	<.2	<2	<2	59	.31	.008	16	38	.95	207	.09	<3	2.33	.01	.07	4	<5	2
RE MT 65+00E 8+00N	<1	27	15	57	<.3	18	8	596	2.89	4	<5	<2	4	18	.8	<2	<2	59	.30	.008	15	35	.94	203	.08	<3	2.31	.02	.07	4	<5	1
MT 65+00E 7+50N	<1	114	7	30	<.3	89	22	535	3.25	5	<5	<2	<2	15	.4	<2	<2	87	.67	.046	6	241	2.79	121	.06	<3	2.58	<.01	.13	2	<5	1
MT 65+00E 7+00N	<1	35	15	61	<.3	19	8	311	2.26	<2	<5	<2	5	13	.3	<2	<2	38	.26	.015	17	39	.99	123	.04	<3	1.57	.01	.05	3	<5	1
MT 65+00E 6+50N	1	37	28	67	<.3	15	8	410	2.19	<2	<5	<2	3	18	.5	<2	<2	43	.39	.023	12	28	.78	103	.06	<3	1.39	.02	.04	2	<5	<1
MT 65+00E 6+00N	1	22	65	178	.3	12	8	453	1.86	10	<5	<2	5	35	1.1	<2	<2	30	.64	.036	22	19	.32	192	.06	<3	1.09	.02	.06	5	<5	<1
STANDARD C	18	59	35	137	7.0	69	32	1112	3.94	42	19	7	37	51	19.2	16	15	58	.55	.095	43	61	.82	188	.08	29	1.87	.06	.15	14	<5	3

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Appendix B

STATISTICS

COPPER STATISTICS

MATSON CRK. SOIL GEOCHEMISTRY

##

PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = A:MATSON.DAT

Variable = Cu   Unit = ppm   N = 77
N CI = 19

Transform = Logarithmic   Number of Populations = 3

# of Missing Observations = 0.

==

Users Visual Parameter Estimates

Population	Mean		Std Dev	Percentage
1	13.302	-	7.313	75.00
		+	24.195	
2	38.245	-	32.319	15.00
		+	45.258	
3	75.254	-	58.321	10.00
		+	97.103	

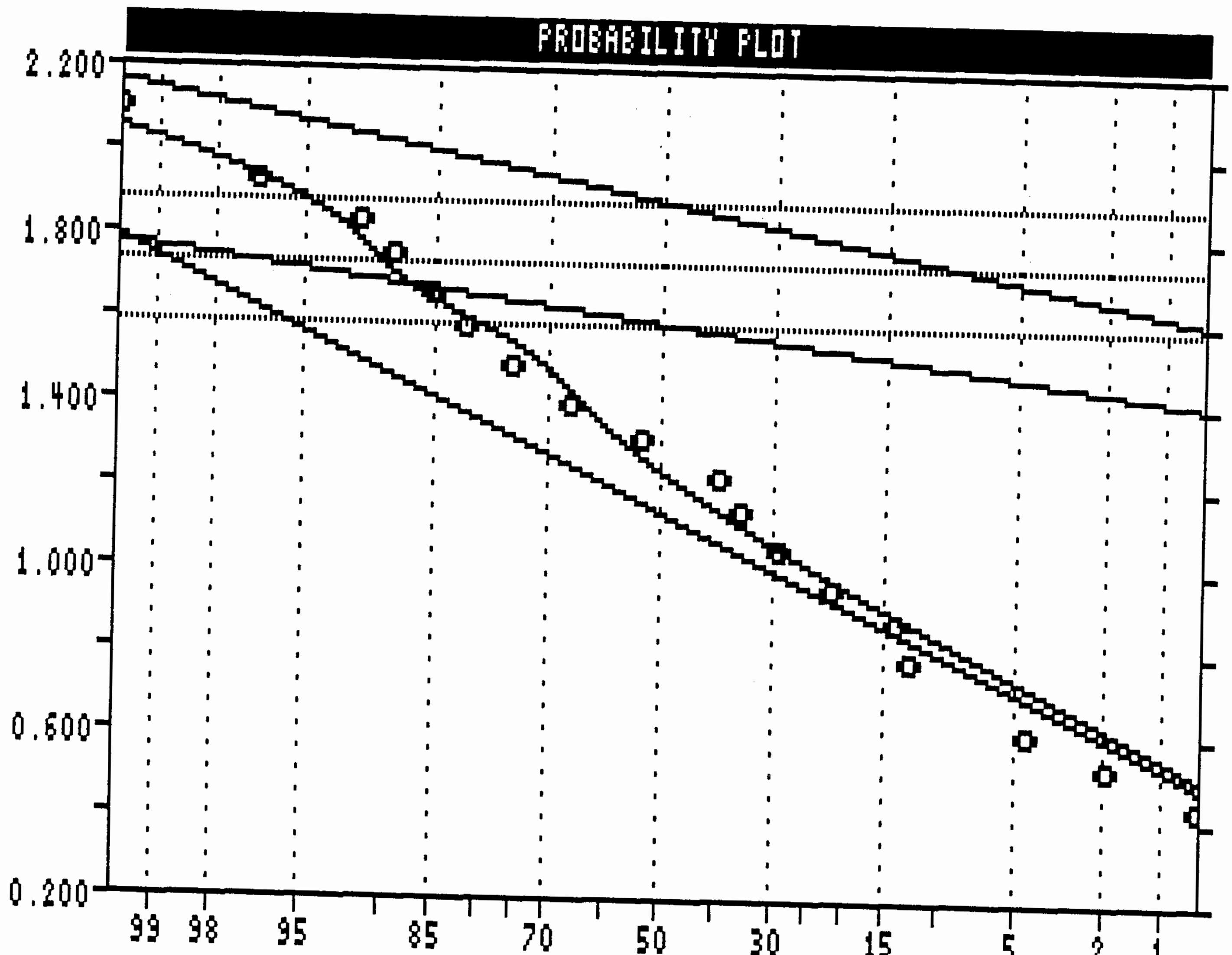
==

User Defined Thresholds.

Thresholds
75.249
53.555
38.247

##

MATSON CRK. SOIL GEOCHEMISTRY



LOGARITHMIC VALUES

VARIABLE = Cu
UNIT = ppm
N = 77
N CI = 19

POPULATIONS

Pop.	Mean	Std.Dev.	%
1	1.1239	0.2598	75.
2	1.5826	0.0731	15.
3	1.8765	0.1107	10.

THRESHOLDS

1.8765 1.7288
1.5826

USERS VISUAL
PARAMETER ESTIMATES

MATSON CRK. SOIL GEOCHEMISTRY

```
################################################################################
SUMMARY STATISTICS and HISTOGRAM                                 ARITHMETIC VALUES

 Variable = Cu                   Unit =    ppm                      N =     77

     Mean =     25.727          Min =     3.000   1st Quartile =    10.750
Std. Dev. =     22.681          Max =   114.000         Median =    19.000
     CV % =     88.160     Skewness =     1.968   3rd Quartile =    29.250

================================================================================
  %    cum %   cls int            (# of bins = 19  -  bin size =      6.167)
-----  -----   --------           ---------------------------------------------
 0.00   0.64    -0.083
11.69  12.18     6.083            *********
20.78  32.69    12.250            ****************
12.99  45.51    18.417            **********
15.58  60.90    24.583            ************
14.29  75.00    30.750            ***********
 5.19  80.13    36.917            ****
 5.19  85.26    43.083            ****
 2.60  87.82    49.250            **
 1.30  89.10    55.417            *
 0.00  89.10    61.583
 2.60  91.67    67.750            **
 3.90  95.51    73.917            ***
 1.30  96.79    80.083            *
 0.00  96.79    86.250
 0.00  96.79    92.417
 0.00  96.79    98.583
 0.00  96.79   104.750
 0.00  96.79   110.917
 2.60  99.36   117.083            **
--------------------------------------------------------------------------------
                                 0          1          2          3          4

################################################################################
```

MATSON CRK. SOIL GEOCHEMISTRY

##

SUMMARY STATISTICS and HISTOGRAM — LOGARITHMIC VALUES

Variable = Cu   Unit = ppm   N = 77

Mean =	1.2712	Min =	0.4771	1st Quartile =	1.0310
Std. Dev. =	0.3534	Max =	2.0569	Median =	1.2788
CV % =	27.7990	Skewness =	0.0034	3rd Quartile =	1.4661

Anti-Log Mean = 18.672   Anti-Log Std. Dev. : (-) 8.276
(+) 42.129

%	cum %	antilog	cls int	(# of bins = 19 - bin size = 0.0878)
0.00	0.64	2.712	0.4332	
1.30	1.92	3.319	0.5210	*
2.60	4.49	4.062	0.6088	**
0.00	4.49	4.972	0.6965	
7.79	12.18	6.086	0.7843	******
1.30	13.46	7.448	0.8721	*
7.79	21.15	9.117	0.9598	******
7.79	28.85	11.158	1.0476	******
6.49	35.26	13.657	1.1354	*****
3.90	39.10	16.716	1.2231	***
14.29	53.21	20.460	1.3109	***********
12.99	66.03	25.042	1.3987	**********
9.09	75.00	30.650	1.4864	*******
6.49	81.41	37.514	1.5742	*****
3.90	85.26	45.915	1.6620	***
3.90	89.10	56.198	1.7497	***
2.60	91.67	68.784	1.8375	**
5.19	96.79	84.189	1.9253	****
0.00	96.79	103.044	2.0130	
2.60	99.36	126.121	2.1008	**

0   1   2   3   4

##

LEAD STATISTICS

MATSON CRK. SOIL GEOCHEMISTRY

##

PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = A:MATSON.DAT

Variable = Pb   Unit = ppm   N = 76
N CI = 19

Transform = Logarithmic   Number of Populations = 2

# of Missing Observations = 0.

1 Observations Were Below the Minimum Value of 0.0001
0 Observations Were Above the Maximum Value of 99999.9999

==

Users Visual Parameter Estimates

Population	Mean		Std Dev	Percentage
1	10.575	-	7.251	80.00
		+	15.422	
2	34.755	-	22.757	20.00
		+	53.076	

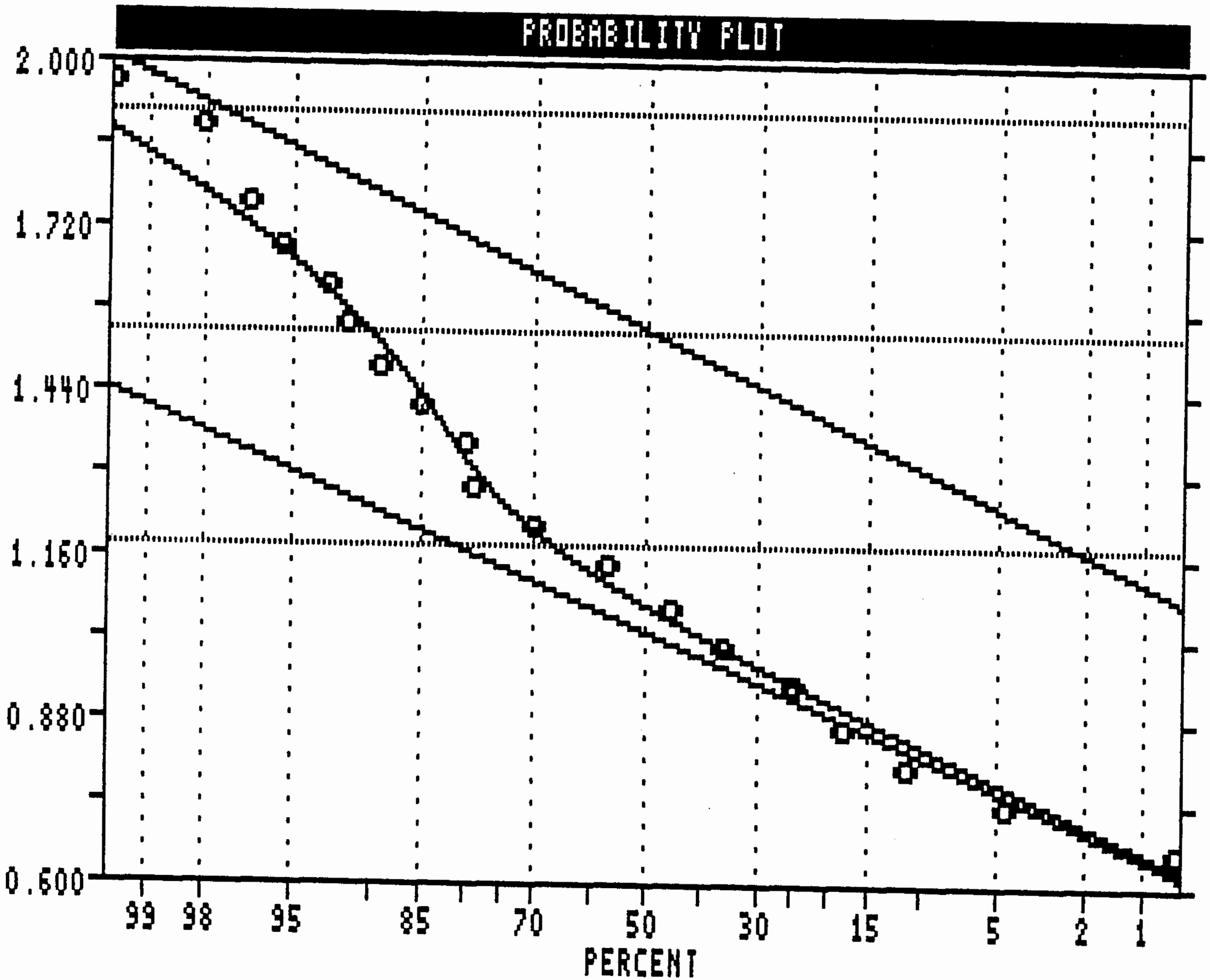
==

User Defined Thresholds.

Thresholds
81.059
34.754
14.900

##

MATSON CRK. SOIL GEOCHEMISTRY



LOGARITHMIC VALUES

VARIABLE = Pb
UNIT = ppm
N = 76
N CI = 19

POPULATIONS

Pop.	Mean	Std.Dev.	%
1	1.0243	0.1639	80.0
2	1.5410	0.1839	20.0

THRESHOLDS

1.9088 1.5410
1.1732

USERS VISUAL
PARAMETER ESTIMATES

MATSON CRK. SOIL GEOCHEMISTRY

##

SUMMARY STATISTICS and HISTOGRAM LOGARITHMIC VALUES

Variable = Pb Unit = ppm N = 76

Mean =	1.1291	Min =	0.6990	1st Quartile =	0.9542
Std. Dev. =	0.2700	Max =	1.9294	Median =	1.0792
CV % =	23.9085	Skewness =	0.7932	3rd Quartile =	1.2788

Anti-Log Mean = 13.463 Anti-Log Std. Dev. : (-) 7.231
(+) 25.067

%	cum %	antilog	cls int	(# of bins = 19 - bin size = 0.0684)
0.00	0.65	4.622	0.6648	
3.95	4.55	5.409	0.7331	***
6.58	11.04	6.332	0.8015	*****
6.58	17.53	7.411	0.8699	*****
6.58	24.03	8.674	0.9382	*****
11.84	35.71	10.153	1.0066	*********
9.21	44.81	11.883	1.0749	*******
11.84	56.49	13.909	1.1433	*********
13.16	69.48	16.280	1.2117	**********
9.21	78.57	19.055	1.2800	*******
1.32	79.87	22.304	1.3484	*
5.26	85.06	26.105	1.4167	****
3.95	88.96	30.556	1.4851	***
2.63	91.56	35.764	1.5534	**
1.32	92.86	41.861	1.6218	*
2.63	95.45	48.996	1.6902	**
1.32	96.75	57.349	1.7585	*
0.00	96.75	67.125	1.8269	
1.32	98.05	78.567	1.8952	*
1.32	99.35	91.960	1.9636	*

0 1 2 3 4

##

MATSON CRK. SOIL GEOCHEMISTRY

```
################################################################################
SUMMARY STATISTICS and HISTOGRAM                                 ARITHMETIC VALUES

 Variable = Pb                 Unit =    ppm                   N =     76

     Mean =     16.829          Min =     5.000   1st Quartile =     9.000
Std. Dev. =     14.339          Max =    85.000         Median =    12.000
     CV % =     85.205     Skewness =     2.735   3rd Quartile =    19.000

==========================================================================
  %    cum %   cls int             (# of bins = 19  -  bin size =    4.444)
----- -----  --------             ---------------------------------------
 0.00  0.65     2.778
17.11 17.53     7.222             *************
27.63 44.81    11.667             *********************
25.00 69.48    16.111             *******************
 9.21 78.57    20.556             *******
 5.26 83.77    25.000             ****
 3.95 87.66    29.444             ***
 2.63 90.26    33.889             **
 2.63 92.86    38.333             **
 0.00 92.86    42.778
 2.63 95.45    47.222             **
 0.00 95.45    51.667
 1.32 96.75    56.111             *
 0.00 96.75    60.556
 0.00 96.75    65.000
 0.00 96.75    69.444
 0.00 96.75    73.889
 1.32 98.05    78.333             *
 0.00 98.05    82.778
 1.32 99.35    87.222             *
--------------------------------------------------------------------------
                                  0         1         2         3         4

################################################################################
```

ZINC STATISTICS

MATSON CRK. SOIL GEOCHEMISTRY

##

PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = A:MATSON.DAT

Variable = Zn   Unit = ppm   N = 77
N CI = 19

Transform = Logarithmic   Number of Populations = 3

# of Missing Observations = 0.

==

Users Visual Parameter Estimates

Population	Mean		Std Dev	Percentage
1	9.668	-	7.144	5.00
		+	13.083	
2	37.732	-	27.499	75.00
		+	51.772	
3	98.998	-	66.703	20.00
		+	146.929	

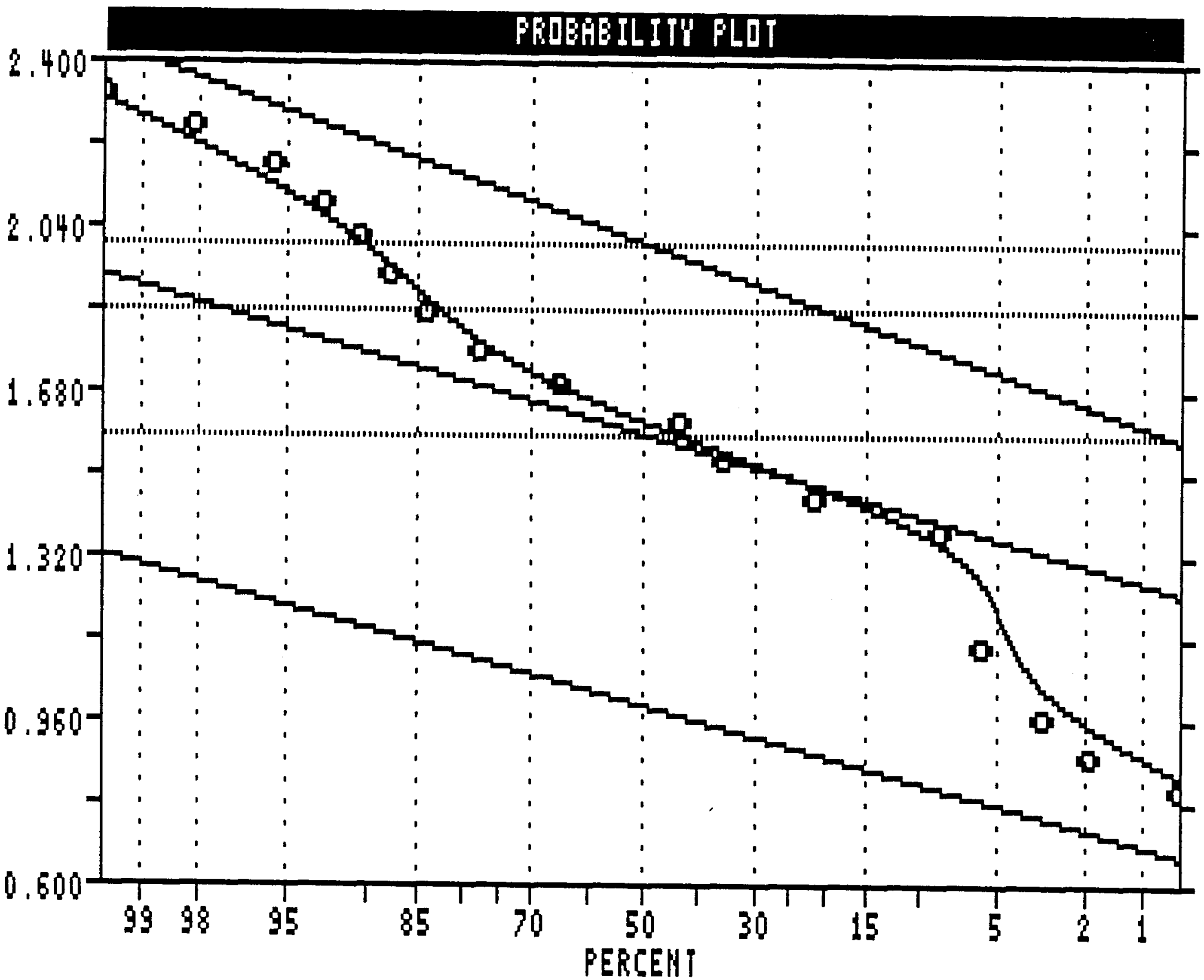
==

User Defined Thresholds.

Thresholds
98.992
71.040
37.731

##

MATSON CRK. SOIL GEOCHEMISTRY



LOGARITHMIC VALUES

VARIABLE = Zn
UNIT = ppm
N = 77
N CI = 19

POPULATIONS

Pop.	Mean	Std.Dev.	%
1	0.9853	0.1314	5.0
2	1.5767	0.1374	75.0
3	1.9956	0.1715	20.0

THRESHOLDS

1.9956 1.8515
1.5767

USERS VISUAL
PARAMETER ESTIMATES

MATSON CRK. SOIL GEOCHEMISTRY

##

SUMMARY STATISTICS and HISTOGRAM — LOGARITHMIC VALUES

Variable =	Zn	Unit =	ppm	N =	77
Mean =	1.6362	Min =	0.8451	1st Quartile =	1.4878
Std. Dev. =	0.2631	Max =	2.2989	Median =	1.6435
CV % =	16.0797	Skewness =	-0.0877	3rd Quartile =	1.7482

Anti-Log Mean = 43.276 Anti-Log Std. Dev. : (-) 23.612

(+) 79.313

%	cum %	antilog	cls int	(# of bins = 19 - bin size = 0.0808)
0.00	0.64	6.378	0.8047	
1.30	1.92	7.682	0.8855	*
1.30	3.21	9.252	0.9662	*
0.00	3.21	11.143	1.0470	
2.60	5.77	13.421	1.1278	**
0.00	5.77	16.164	1.2085	
0.00	5.77	19.467	1.2893	
2.60	8.33	23.446	1.3701	**
12.99	21.15	28.238	1.4508	**********
14.29	35.26	34.009	1.5316	***********
7.79	42.95	40.960	1.6124	******
22.08	64.74	49.331	1.6931	*****************
12.99	77.56	59.414	1.7739	**********
6.49	83.97	71.557	1.8547	*****
3.90	87.82	86.182	1.9354	***
2.60	90.38	103.795	2.0162	**
2.60	92.95	125.009	2.0969	**
2.60	95.51	150.559	2.1777	**
2.60	98.08	181.331	2.2585	**
1.30	99.36	218.391	2.3392	*
				0 1 2 3 4

##

MATSON CRK. SOIL GEOCHEMISTRY

```
##############################################################################
SUMMARY STATISTICS and HISTOGRAM                             ARITHMETIC VALUES

 Variable = Zn                 Unit =    ppm                   N =     77

     Mean =     52.013          Min =     7.000  1st Quartile =     30.750
Std. Dev. =     36.378          Max =   199.000        Median =     44.000
     CV % =     69.939     Skewness =     2.186  3rd Quartile =     56.000

==============================================================================
  %    cum %   cls int            (# of bins = 19  -  bin size =    10.667)
-----  -----  --------            ----------------------------------------
 0.00   0.64     1.667
 3.90   4.49    12.333            ***
 2.60   7.05    23.000            **
24.68  31.41    33.667            *******************
22.08  53.21    44.333            *****************
16.88  69.87    55.000            *************
12.99  82.69    65.667            **********
 3.90  86.54    76.333            ***
 1.30  87.82    87.000            *
 2.60  90.38    97.667            **
 0.00  90.38   108.333
 2.60  92.95   119.000            **
 0.00  92.95   129.667
 1.30  94.23   140.333            *
 1.30  95.51   151.000            *
 0.00  95.51   161.667
 0.00  95.51   172.333
 2.60  98.08   183.000            **
 0.00  98.08   193.667
 1.30  99.36   204.333            *
------------------------------------------------------------------------------
                                  0         1         2         3         4

##############################################################################
```

Appendix C

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Uwe Schmidt, of 656 Foresthill Place, Port Moody, B.C. do hereby declare:

(1) I am a consulting geologist and controlling shareholder of Northwest Geological Consulting Ltd.

(2) I am a 1971 graduate of the University of British Columbia with a B.Sc. degree in Geology.

(3) I am a member of The Association of Professional Engineers and Geoscientists of British Columbia and a Fellow of the Geological Association of Canada.

(4) I have practised my profession continuously since graduation.

(5) This report is based on work carried out by me or by workers under my supervision.

PROFESSIONAL
PROVINCE OF
U. SCHMIDT
BRITISH COLUMBIA
GEOSCIENTIST

Uwe Schmidt, P. Geo.

April 28, 1996
Vancouver, B.C.