Northern Gold NL

ACN: 009 620 937
Lot 128 Finlay Rd, ADELAIDE RIVER, N.T. 0846
Phone: 08 89767023 Fax: 08 89767025

EL 8056

1995/96 ANNUAL REPORT

15.9.95 to 14.9.96

Pine Creek 1:100,000 Map Sheet

Title Holder:- Territory Goldfields N.L.

Managed by:- Northern Gold N.L.

CENTRAL FILE

October 1996

Author:- N.Socic

NTDME

Northern Gold N.L., Adelaide River

Northern Gold N.L., Perth Office

SUMMARY

EL 8056 is located approximately 100 kilometres south - east of Darwin on the Pine Creek 1:100,000 scale map sheet and the Union Reef (14/6-I) 1:50,000 scale map sheet.

The tenement area is dominated by Burrell Creek and Mount Bonnie Formation sediments with Gerowie Tuff and Koolpin Formation present in the east and the McKinlay Granite in the west.

The licence was granted to Northern Territory Gold Mines N.L. on the 15th of September 1993 for a period of 6 years. EL 8056 is now held by Territory Goldfields N.L. and managed by Northern Gold N.L.

During the 1995/96 exploration season, Northern Gold N.L. completed a work program based on digital data acquisition and manipulation, a regional soil sampling program and stream sediment sampling.

Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping to determine the best method of gold exploration to be used on the licence.

The regional soil sampling program was conducted over five 400 metre spaced lines, each line being between 1,200 metres and 1,800 metres in length. A total of 65 samples, including duplicates, were collected.

The results were disappointing, with the highest value returned being 3 ppb Au.

A total of 3 stream sediment samples were also collected. The highest value return was 0.5 ppb Au.

Further soil sampling and geological mapping is required to fully assess the mineralisation potential within the licence.

The covenant for the 1995/96 year of tenure was $6,000 and the expenditure totaled $12,990.

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1.0 LOCATION AND TENURE

EL 8056 is located approximately 100 kilometres south - east of Darwin and 28 kilometres north of Pine Creek on the Union Reef (14/6-I) 1:50,000 scale and Pine Creek 1:100,000 scale map sheets. The licence consists of seven graticular blocks, 22 square kilometres in area, lying between latitudes 13°33' south and 13°37' south and longitudes 131°47' east and 131°49' east (Figure 1). EL 8056 is situated within Perpetual Pastoral Lease No. 1111, Ban Ban Springs, held by Ban Ban Springs Station Pty. Ltd. and Pastoral Lease No. 815, Mary River West, held by Equest Pty. Ltd.

Access is via the Stuart Highway to Pine Creek then via the Frances Creek Road and pastoral tracks. Access to most parts of the tenement can be reached over the relatively flat ground along the drainage course of Watts Creek.

The licence, originally consisting of 14 blocks, 45 square kilometres in area, was granted to Northern Territory Gold Mines N.L. on the 15th of September 1993 for a period of six years. Due to compulsory relinquishment, the tenement now stands at 7 blocks. Territory Goldfields N.L. which is now managed by Northern Gold N.L., acquired the tenement in 1995.

During the 1995/96 exploration season, Northern Gold N.L. completed a work program based on digital data acquisition and manipulation, a regional soil sampling program and stream sediment sampling.

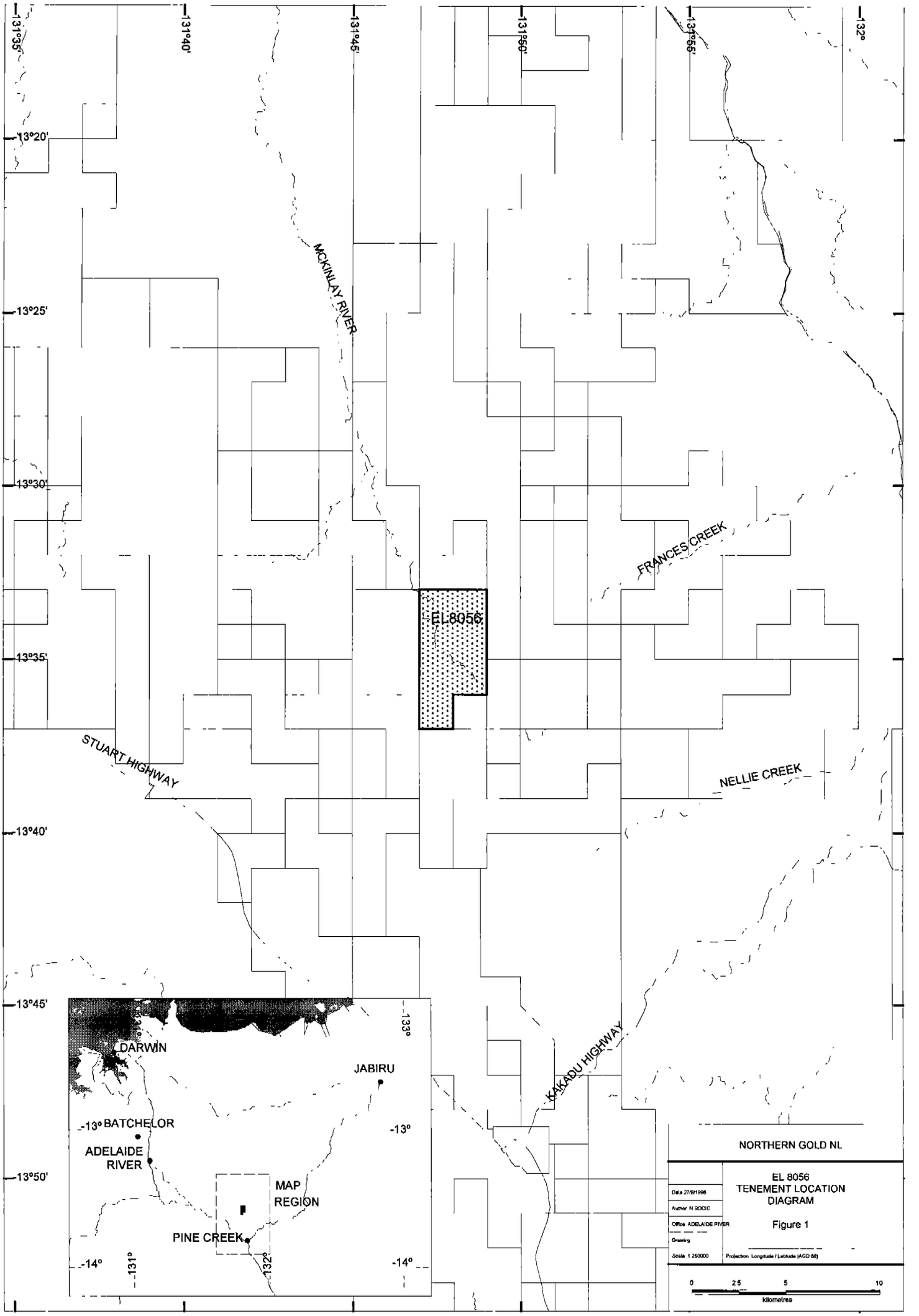
Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping to determine the best method of gold exploration to be used on the licence.

The regional soil sampling program was conducted over five 400 metre spaced lines, each line being between 1,200 metres and 1,800 metres in length. A total of 65 samples, including duplicates, were collected.

A total of 3 stream sediment samples were also collected.

Further soil sampling and geological mapping is required to fully assess the mineralisation potential within the licence.

The covenant for the 1995/96 year of tenure was $6,000 and the expenditure totaled $12,990.


131°35'
131°40'
131°45'
131°50'
131°55'
132°
13°20'
13°25'
13°30'
13°35'
13°40'
13°45'
13°50'
MCKINLAY RIVER
FRANCES CREEK
EL 8056
STUART HIGHWAY
NELLIE CREEK
KAKADU HIGHWAY
DARWIN
JABIRU
BATCHELOR
ADELAIDE RIVER
PINE CREEK
MAP REGION
-13°
-14°
131°
132°
133°
NORTHERN GOLD NL
EL 8056
TENEMENT LOCATION DIAGRAM
Figure 1
Date 27/8/1996
Author N SOCIC
Office ADELAIDE RIVER
Drawing
Scale 1:250000
Projection: Longitude / Latitude (AGD 66)
0 2.5 5 10
kilometres

2.0 GEOLOGY

2.1 Regional Geology

EL 8056 is situated within the Pine Creek Geosyncline, a tight to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic with interlayered tuff units. All rocks in the area have been metamorphosed to low, and in places medium grade, metamorphic assemblages. For the purposes of this report the prefix "meta" is implied, but omitted from the rock names and descriptions.

The sequence has been intruded by pre-orogenic sills of the Zamu Dolerite and a number of late syn-orogenic to post-orogenic Proterozoic granitoids. Largely undeformed Middle and Late Proterozoic, Palaeozoic and Mesozoic strata as well as Cainozoic sediments and laterite overlie the Pine Creek Geosyncline rocks.

2.2 Local Geology

The tenement predominantly consists of the Burrell Creek Formation of the Finniss River Group. Sedimentary units from the Mount Bonnie Formation, Gerowie Tuff, Koolpin Formation and Wildman Siltstone are also present within the licence (Figure 2).

The Burrell Creek Formation in the central part of the licence consists of metamorphosed shale, siltstone and greywacke.

The main lithologies present in the South Alligator Group units, consisting of the Mount Bonnie Formation, Gerowie Tuff and the Koolpin Formation, are pelitic and psammitic rocks, chert, banded iron formation, vitric and lithic tuffs. Carbonaceous and sulphidic pelites are common particularly in the Koolpin Formation.

All units have undergone tight to isoclinal folding about north - northwest to south - southeast axes and plunge mainly to the north.

The McKinlay Granite intrudes the area to the west of the tenement.

3.0 PREVIOUS EXPLORATION

The highlights of previous exploration activities are summarised below. In this work, the results of 1:100,000 scale geological mapping by the BMR have been used as the starting point by most previous explorers for large amounts of stream-sediment, soil and rock geochemistry, followed by limited drilling in some cases. While low-order geochemical anomalies have been quite commonplace in the past, none has led to intensive drill testing, except for prospects to the north of Mount Porter (Fawcett, 1995).

The multi-client, high resolution, airborne geophysical survey flown by Aerodata in 1988 (with additions in 1991 and 1992) covers only a small portion of the total area (Fawcett, 1995).

EL 4752 - R.G.C. Exploration Pty. Ltd.

- extensive program completed in Mount Porter locality involving detailed geological mapping, rock chip sampling, costeaning, and drilling (percussion and core).
- encouraging surface and costean sample results were not confirmed by core drilling.
- Mount Porter and Western anticlines were the principal foci of the exploration.

EL 4759 - Kable Resources Pty. Ltd. and Dominion Mining Ltd.

- extensive costeaning to north north - west and south south - east of old Watts Creek alluvial diggings by Kable plus follow-up mapping, sampling and reverse circulation drilling by Dominion of low-grade, stockwork-type Au mineralisation (Hosking, 1994).
- Southern Stockwork Zone (SSZ), Watts Creek North and Watts Creek South prospects.

EL 5064 - Western Gulf Oil and Mining Ltd.

- rock chip and soil (eluvial) sampling along selected traverses
- initial anomalous values not enhanced by follow-up sampling
- best values from initial sampling of 0.94g/t Au and 4.35% As (Fawcett, 1995)

EL 6222 and EL 6335 - Billiton Australia

- discouraging results from stream sediment (including BCL type), soil and rock chip sampling, geological mapping, ground magnetic surveying and interpretation of aeromagnetic data (Hosking, 1994).
- most significant results obtained were:

EL 6222

- 1.29g/t Au (rock chip sampling)
- 0.4ppb Au (BCL stream sediment sampling)
- magnetic anomalies due to presence of pyrrhotite and magnetite in hornfels adjacent to granite.

EL 6335

- 0.1g/t Au (rock chip sampling)
- 0.13ppb Au (BCL stream sediment sampling)

EL 6653 - Robert Johnston

- discouraging results from geochemical sampling and geological mapping.

EL 6702 - Rosequartz Mining N.L.

- geological reconnaissance and rock chip sampling completed, with emphasis on gossanous quartz stockworks and breccias.
- only one small area located with slightly anomalous gold values which were deemed to be insignificant.

EL 7316 - Northern Gold N.L

- discouraging results from stream sediment and soil sampling plus geological mapping, with no anomalies defined for follow-up work.

EL 8056 - Territory Goldfields N.L.

- research of available geological and exploration-related data, acquisition and digitising of colour aerial photography and establishment of a Geographic Information System (Fawcett, 1995).

The principal findings of past mineral exploration programs within and/or close to the present licence areas are, (Fawcett, 1995):-

1. a close association of tin and gold has been demonstrated in quartz and quartz-haematite (ex-sulphide) veins which are invariably related to faulting or shearing.
2. the Koolpin Formation and to a lesser extent, the Zamu Dolerite, have received much exploration for syngenetic, stratiform-stratabound and epigenetic, discordant (structurally controlled) types of Au mineralisation respectively, mostly for bulk-tonnage, low grade deposits.
3. past exploration detected subeconomic Au mineralisation using BLEG, silt and pan-concentrate types of stream sediment and/or soil samples.
4. tourmaline is a common accessory in known tin-gold mineralisation.
5. higher gold values in the ferruginous cappings of quartz-sulphide veins and sulphidic metasediments point to a considerable degree of surficial enrichment during oxidation and weathering.
6. sulphidic-carbonaceous units are common throughout the South Alligator Group, with the greatest concentrations being in the Mundogie Sandstone and Koolpin Formation.

4.0 1995/96 EXPLORATION COMPLETED

During the 1995/96 field season Northern Gold N.L. carried out a work program based on digital data studies, a regional soil sampling program and stream sediment sampling.

4.1 GIS and Remote Sensing Studies

Northern Gold N.L. completed a work program involving digital data acquisition and manipulation. Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping and site visits to determine the best method of exploration to be used on the licence.

GIS and satellite imagery were used to log soil types, indicating that the region comprises mainly lateritised lower saprolite, however, a thin band of black soil trends north - west to south - east through the tenement due to the McKinlay River drainage system.

Satellite imagery was also used to interpret the structural geology of the region. Figure 3 shows the satellite image as well as the regional soil sampling locations.

Interpretation of the GIS and remote sensing imagery shows the McKinlay Granite intruding into the surrounding strata. The metamorphic aureole extends approximately 250 metres into the licence. In the north - east of the tenement, the folded sequence of Gerowie Tuff, Mount Bonnie Formation, Koolpin Formation and the Wildman Siltstone outcrop. The Burrell Creek Formation dominates the region, and is indicated on the satellite image as a lighter shade of grey.

4.2 Regional Soil Sampling Program

During the 1995/96 year of tenure, Northern Gold N.L. completed a regional soil sampling program over EL 8056. The soil sampling program consisted of five 400 metre spaced lines, varying in length from 1,200 to 1,800 metres. Samples were collected at 25 metre intervals and composited to 100 metres. A total of 65 samples (Sample Nos. 144262 - 144330), including duplicates were collected and sieved to -6 millimetre fraction. All samples were submitted to Assaycorp, in Pine Creek, for BLEG assay technique and analysed for Au, As, Pb, Cu and Zn.

The regional soil sampling program sample locations are shown in plan on Figure 4 and given in Appendix 1.

8500500AMGN

8500000AMGN

8499500AMGN

8499000AMGN

8498500AMGN

802500AMGE

803000AMGE

803500AMGE

804000AMGE

804500AMGE

805000AMGE

× 144330 × 144329 × 144328 × 144327 × 144326 × 144325 × 144324 × 144323 × 144322

× 144317 × 144316 × 144315 × 144314 × 144313 × 144312 × 144311 × 144310 × 144309 × 144308 × 144307 × 144306

× 144305 × 144304 × 144303 × 144302 × 144300 × 144299 × 144298 × 144297 × 144296 × 144295 × 144294 × 144293

× 144292 × 144291 × 144290 × 144289 × 144288 × 144287 × 144286 × 144285 × 144284 × 144283 × 144282 × 144280

× 144279 × 144278 × 144277 × 144276 × 144275 × 144274 × 144273 × 144272 × 144271 × 144270 × 144269 × 144268 × 144267 × 144266 × 144265 × 144264 × 144263 × 144262

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EL 8056
WATTS CREEK
SOIL SAMPLE
LOCATION PLAN
FIGURE 4

Scale	DATE	SHEET
1: 10000	03/10/96	1 of 1
	REF No. J8	
	Plotted with MICROMINE	

4.2.1 Regional Soil Sampling Results

The results from the regional soil sampling program were generally disappointing with the highest value returned being 3 ppb Au (Sample No. 144287, 8499083N : 803435E). The results for all other elements analysed were poor.

The assay results for Au, As, Cu, Pb, and Zn are given in Appendix 1, and shown on plan in Figures 5 to 9.

Anomalous values are shown on the satellite image in Figures 10 to 14, to determine the relationships between the anomalies and underlying structures and geology.

4.2.2 Statistical Analysis of the Regional Soil Sampling Results

Summary statistics for each element analysed in the soil sampling program are as follows:-

Table 1 Summary Statistics for the Regional Soil Sampling Results

	Au	Cu	Zn	As	Pb
Samples	65	65	65	65	65
Minimum	0.005	11.000	18.000	0.005	9.000
Maximum	3.000	64.000	234.000	21.000	136.000
Class Int.	0.200	4.000	20.000	2.000	10.000
Median	0.400	17.000	44.000	5.000	31.000
Mean	0.512	18.554	55.554	6.046	38.769
Variance	0.304	69.064	1811.220	19.354	647.930
Std. Dev.	0.551	8.310	42.558	4.399	25.455
95th Percentile	1.250	23.000	132.000	7.500	75.000
99th Percentile	2.000	58.000	185.000	11.800	93.000

Both histograms and log probability plots were calculated for Au, Cu, As, Pb and Zn.

The histograms for each of the elements, indicate that the populations are log normal. However, at least two populations can be defined for all the elements analysed.

8500500AMGN

8500000AMGN

8499500AMGN

8499000AMGN

8498500AMGN

802500AMGE

803000AMGE

803500AMGE

804000AMGE

804500AMGE

805000AMGE

805500AMGE

×0.40 ×0.20 ×0.50 ×0.50 ×1.10 ×1.10 ×0.60 ×1.10 ×0.60

×0.50 ×0.40 ×0.20 ×0.40 ×0.40 ×0.80 ×0.40 ×0.40 ×0.20 ×0.40 ×0.005 ×0.80

×0.005 ×0.005 ×0.005 ×0.005 ×0.005 ×0.20 ×0.20 ×0.005 ×0.50 ×1.00 ×1.00 ×0.40

×0.50 ×0.005 ×0.005 ×0.005 ×0.005 ×3.00 ×0.005 ×0.005 ×0.005 ×1.40 ×0.50 ×0.005

×0.60 ×0.20 ×0.50 ×0.005 ×1.20 ×0.60 ×0.40 ×0.40 ×0.60 ×0.50 ×0.40 ×0.30 ×0.30 ×0.80 ×0.90 ×1.70 ×1.60 ×2.00

Northern Gold N.L.

EL 8056
WATTS CREEK
SOIL SAMPLE RESULTS
Au ppb
Figure 5

Scale	DATE	SHEET
1: 10000	03/10/96	1 of 1
	REF No. J5	
	Plotted with MICROMINE	

8500500AMGN

802500AMGE

803000AMGE

803500AMGE

804000AMGE

804500AMGE

805000AMGE

805050AMGN

×3.00 ×5.00 ×1.00 ×4.00 ×6.00 ×7.00 ×6.00 ×12.00 ×10.00

8500000AMGN

×1.00 ×2.00 ×0.005 ×0.005 ×2.00 ×5.00 ×4.00 ×5.00 ×5.00 ×11.00 ×12.00 ×6.00

8499500AMGN

×0.005 ×2.00 ×2.00 ×2.00 ×4.00 ×3.00 ×6.00 ×7.00 ×16.00 ×15.00 ×12.00 ×9.00

8499000AMGN

×6.00 ×2.00 ×5.00 ×4.00 ×5.00 ×2.00 ×7.00 ×7.00 ×6.00 ×9.00 ×5.00 ×7.00

8498500AMGN

×5.00 ×5.00 ×6.00 ×8.00 ×6.00 ×10.00 ×2.00 ×2.00 ×3.00 ×5.00 ×7.00 ×7.00 ×3.00 ×7.00 ×4.00 ×7.00 ×21.00 ×21.00

Northern Gold N.L.

EL 8056
WATTS CREEK
SOIL SAMPLE RESULTS
As ppm
Figure 6

Scale	DATE	SHEET
1: 10000	03/10/96	1 of 1
	REF No. J5	
	Plotted with MICROMINE	

8500500AMGN

8500000AMGN

8499500AMGN

8499000AMGN

8498500AMGN

802500AMGE

803000AMGE

803500AMGE

804000AMGE

804500AMGE

805000AMGE

805500AMGE

× 16.00 × 16.00 × 15.00 × 19.00 × 24.00 × 17.00 × 21.00 × 22.00 × 22.00

× 15.00 × 13.00 × 12.00 × 15.00 × 20.00 × 23.00 × 17.00 × 19.00 × 16.00 × 16.00 × 16.00 × 26.00

× 16.00 × 21.00 × 15.00 × 19.00 × 21.00 × 22.00 × 21.00 × 22.00 × 23.00 × 18.00 × 18.00 × 17.00

× 16.00 × 14.00 × 17.00 × 14.00 × 18.00 × 14.00 × 13.00 × 17.00 × 20.00 × 14.00 × 11.00 × 13.00

× 18.00 × 15.00 × 16.00 × 19.00 × 18.00 × 17.00 × 13.00 × 13.00 × 19.00 × 21.00 × 20.00 × 13.00 × 11.00 × 13.00 × 12.00 × 19.00 × 57.00 × 64.00

Northern Gold N.L.

EL 8056
WATTS CREEK
SOIL SAMPLE RESULTS
Cu ppm
Figure 7

Scale	DATE	SHEET
1: 10000	03/10/96	1 of 1
	REF No. J5	
	Plotted with MICROMINE	

8500500AMGN

8500000AMGN

8499500AMGN

8499000AMGN

8498500AMGN

802500AMGE

803000AMGE

803500AMGE

804000AMGE

804500AMGE

805000AMGE

8500500AMGN

8500000AMGN

8499500AMGN

8499000AMGN

8498500AMGN

802500AMGE

803000AMGE

803500AMGE

804000AMGE

804500AMGE

805000AMGE

× 33.00 × 15.00 × 19.00 × 29.00 × 41.00 × 60.00 × 93.00 × 91.00 × 136.00

× 12.00 × 12.00 × 17.00 × 22.00 × 34.00 × 37.00 × 39.00 × 59.00 × 45.00 × 75.00 × 79.00 × 108.00

× 44.00 × 18.00 × 9.00 × 15.00 × 32.00 × 54.00 × 29.00 × 35.00 × 67.00 × 46.00 × 37.00 × 27.00

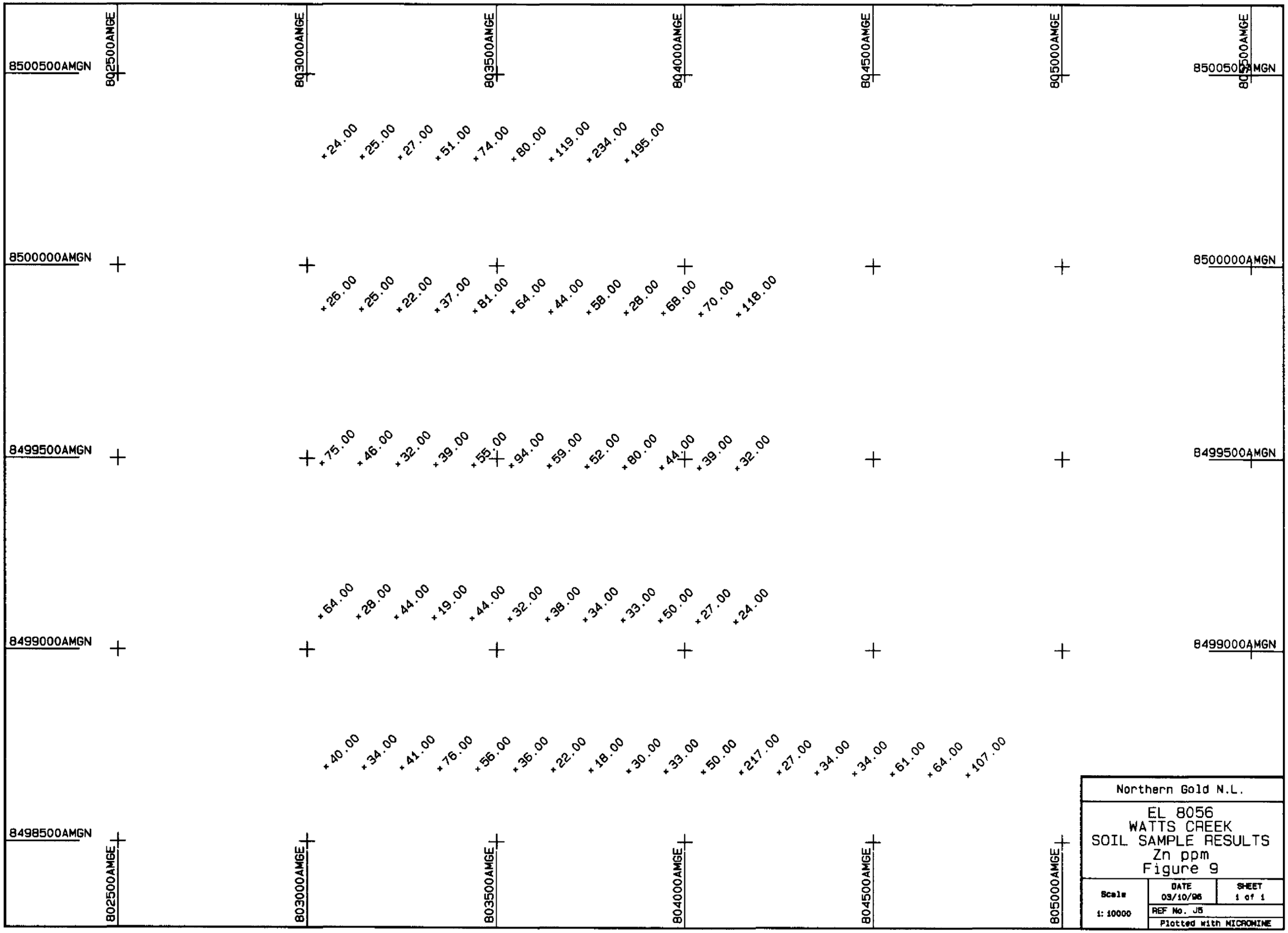
× 56.00 × 46.00 × 31.00 × 26.00 × 29.00 × 22.00 × 18.00 × 29.00 × 20.00 × 34.00 × 24.00 × 25.00

× 30.00 × 28.00 × 31.00 × 34.00 × 33.00 × 25.00 × 17.00 × 15.00 × 17.00 × 19.00 × 23.00 × 64.00 × 25.00 × 41.00 × 23.00 × 33.00 × 76.00 × 98.00

Northern Gold N.L.

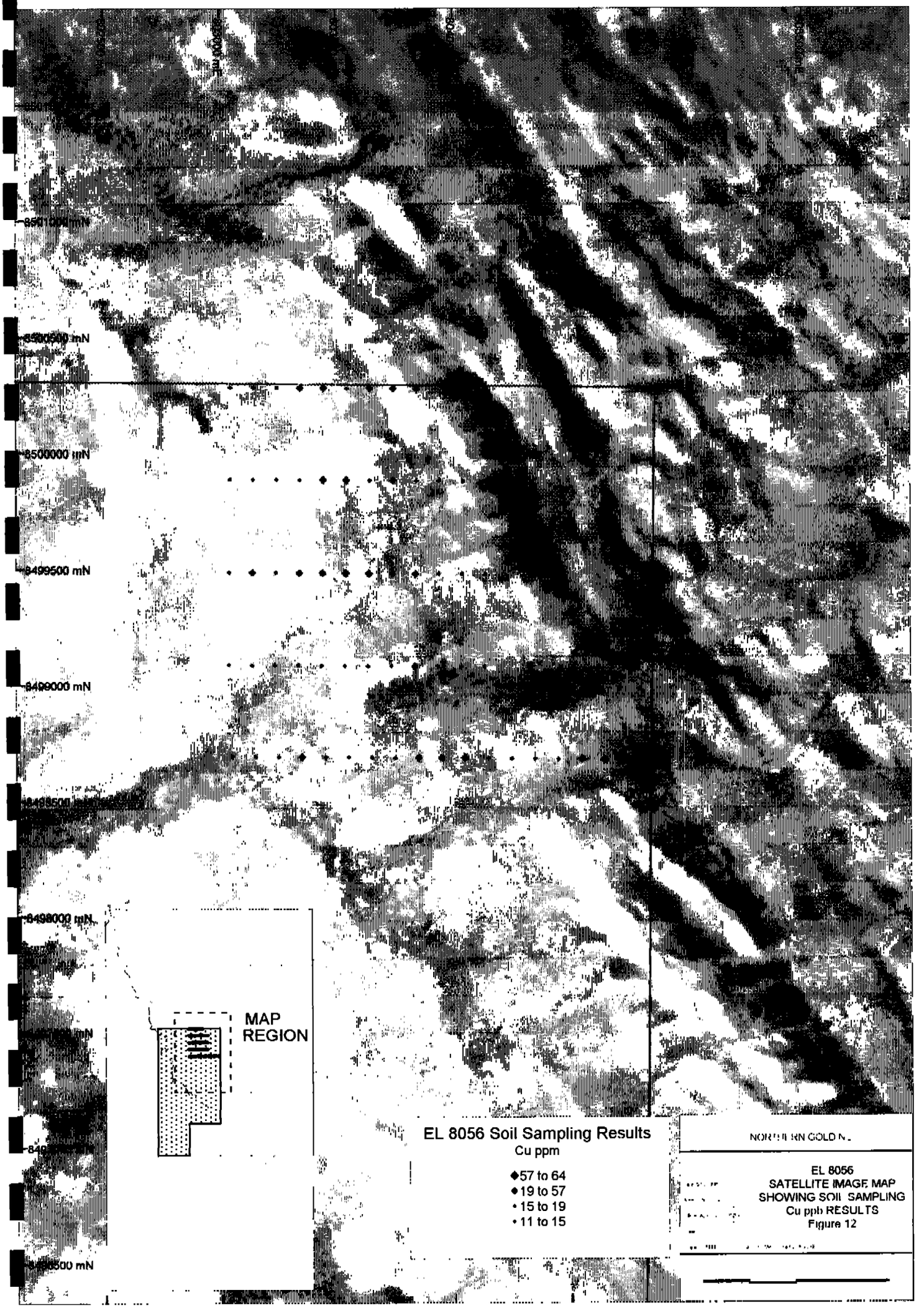
EL 8056
WATTS CREEK
SOIL SAMPLE RESULTS
Pb ppm
Figure 8

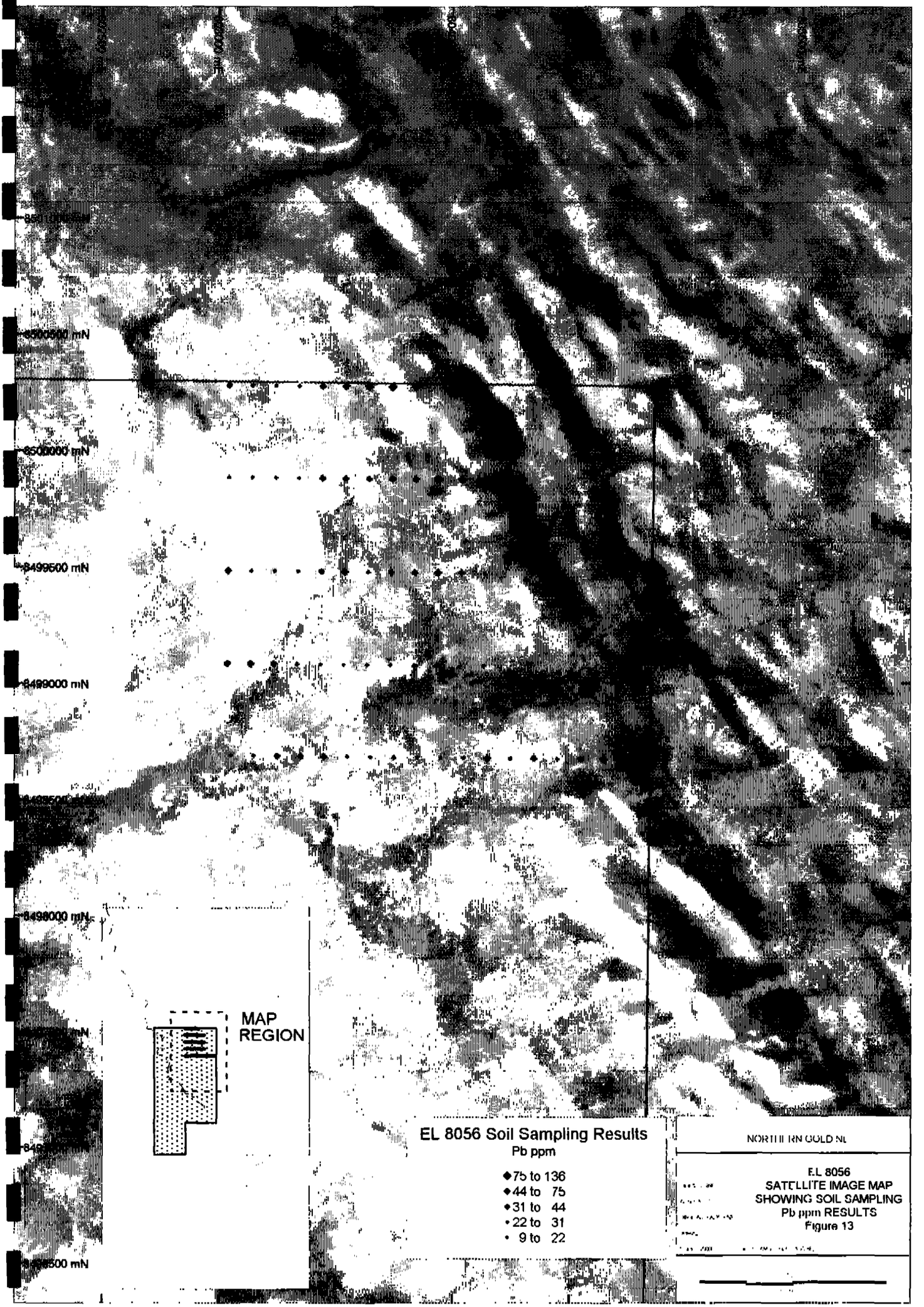
Scale	DATE	SHEET
1: 10000	03/10/96	1 of 1
	REF No. J5	
	Plotted with MICROMINE	

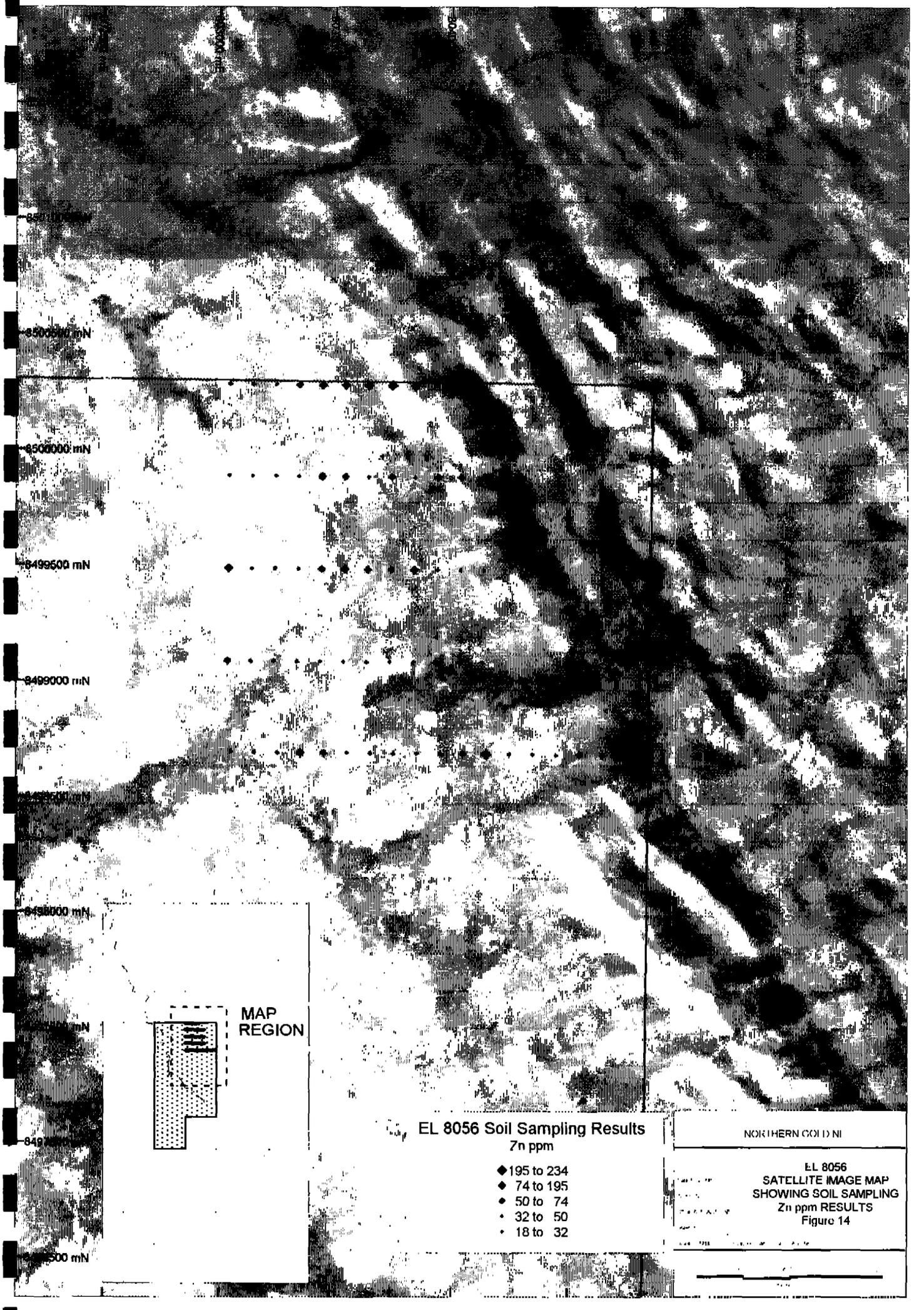

8500500AMGN
8500000AMGN
8499500AMGN
8499000AMGN
8498500AMGN
802500AMGE
803000AMGE
803500AMGE
804000AMGE
804500AMGE
805000AMGE
24.00 25.00 27.00 51.00 74.00 80.00 119.00 234.00 195.00
26.00 25.00 22.00 37.00 81.00 64.00 44.00 58.00 28.00 68.00 70.00 118.00
75.00 46.00 32.00 39.00 55.00 94.00 59.00 52.00 80.00 44.00 39.00 32.00
64.00 28.00 44.00 19.00 44.00 32.00 38.00 34.00 33.00 50.00 27.00 24.00
40.00 34.00 41.00 76.00 56.00 36.00 22.00 18.00 30.00 33.00 50.00 217.00 27.00 34.00 34.00 61.00 64.00 107.00
Northern Gold N.L.
EL 8056
WATTS CREEK
SOIL SAMPLE RESULTS
Zn ppm
Figure 9
Scale
1: 10000
DATE
03/10/96
SHEET
1 of 1
REF No. J5
Plotted with MICROMINE


8500500 mN
8500000 mN
8499500 mN
8499000 mN
8498000 mN
MAP
REGION
EL 8056 Soil Sampling Results
Au ppb
◆1.6 to 3
•0.8 to 1.6
•0.2 to 0.8
•0 to 0.2
NORTHERN GOLD NL
EL 8056
SATELLITE IMAGE MAP
SHOWING SOIL SAMPLING
Au ppb RESULTS
Figure 10


8501000 mN
8500000 mN
8500000 mN
8499500 mN
8499000 mN
8498500 mN
8498000 mN
MAP
REGION
EL 8056 Soil Sampling Results
As ppm
◆9 to 21
◆6 to 9
•4 to 6
•0 to 4
NORTHERN GOLD NL
EL 8056
SATELLITE IMAGE MAP
SHOWING SOIL SAMPLING
As ppm RESULTS
Figure 11


8500000 mN
8499500 mN
8499000 mN
MAP
REGION
EL 8056 Soil Sampling Results
Cu ppm
◆57 to 64
◆19 to 57
• 15 to 19
• 11 to 15
NORTHERN GOLD N.
EL 8056
SATELLITE IMAGE MAP
SHOWING SOIL SAMPLING
Cu ppb RESULTS
Figure 12


8500500 mN
8500000 mN
8499500 mN
8499000 mN
8498000 mN
MAP
REGION
EL 8056 Soil Sampling Results
Pb ppm
◆75 to 136
◆44 to 75
◆31 to 44
•22 to 31
• 9 to 22
NORTHERN GOLD NL
E.L 8056
SATELLITE IMAGE MAP
SHOWING SOIL SAMPLING
Pb ppm RESULTS
Figure 13


8500000 mN
8499500 mN
8499000 mN
MAP
REGION
EL 8056 Soil Sampling Results
Zn ppm
◆195 to 234
◆ 74 to 195
● 50 to 74
• 32 to 50
• 18 to 32
NORTHERN GOLD NL
EL 8056
SATELLITE IMAGE MAP
SHOWING SOIL SAMPLING
Zn ppm RESULTS
Figure 14

This is supported by the log probability plots. The data plot as two separate populations, indicating anomalous zones, deviating at a point of inflection, shown on the plots as a closed circle. It is inferred that the lower population represents the natural background for each element for the Pine Creek Geosyncline.

Deviations from the line in the upper 1% of the Cu and As, and in the lower 2% of the Zn probability plots, may be the result of problems with accurately plotting data or may represent a deviation from the interpreted population.

Histograms and log probability plots for Au, Cu, As, Pb, and Zn are given in Appendix 2.

4.3 Stream Sediment Sampling Program

Three stream sediment samples were collected from within the tenement (Figure 15). These samples were sent to Assaycorp, in Pine Creek, for BLEG assay technique and analysed for Au, As, Cu, Pb and Zn.

Table 2 EL 8056 Stream Sediment Sampling Locations

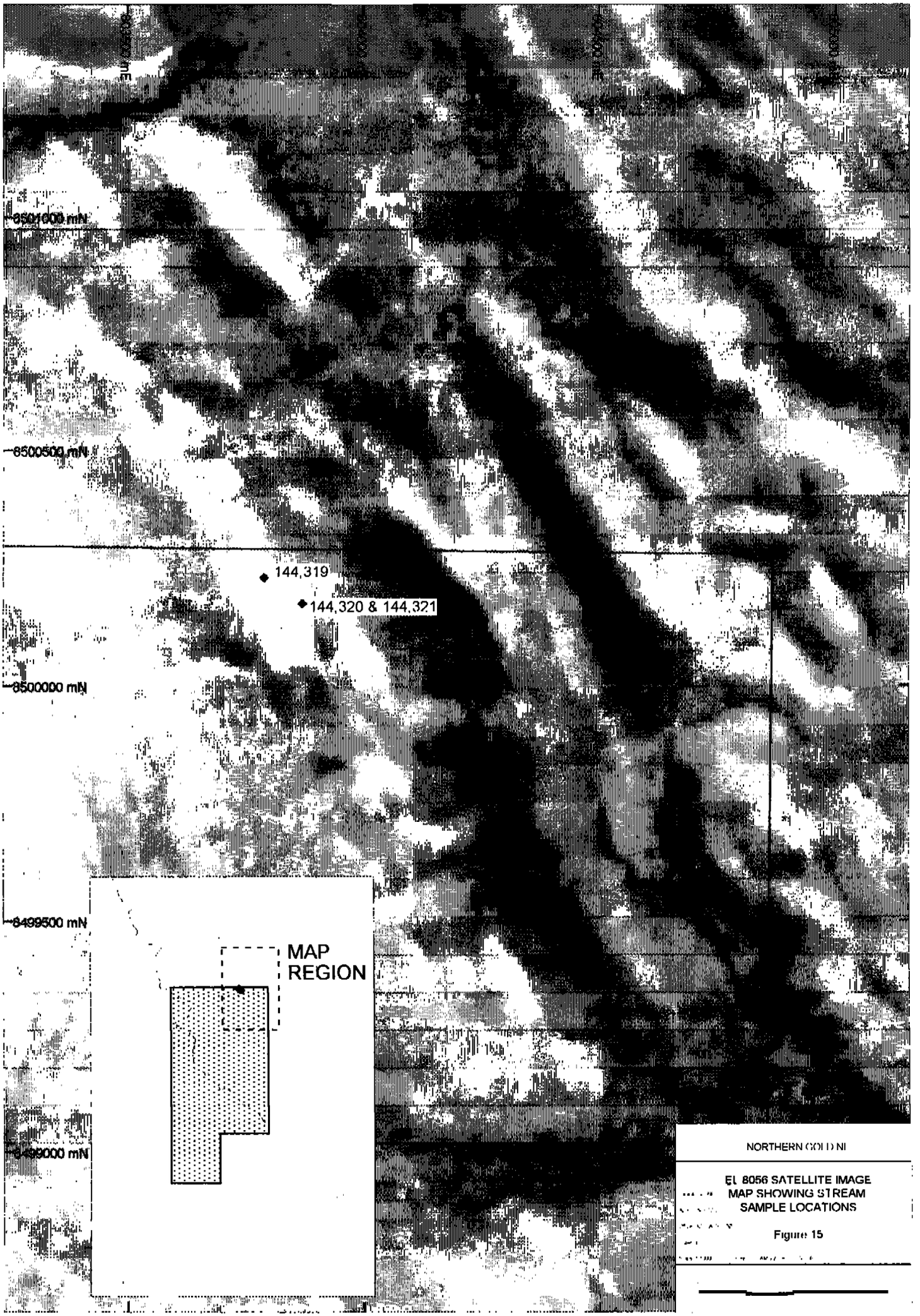
SAMPLE NO.	EASTING (AMG)	NORTHING (AMG)	ASSAY TYPE
144319	803790.00	8500230.00	BLEG
144320	803870.00	8500175.00	BLEG
144321 (Duplicate)	803870.00	8500175.00	BLEG

4.3.1 Stream Sediment Sampling Program Results

The results obtained from the stream sediment sampling were disappointing, with a peak result of 0.5 Au ppb returned. The base metal results indicate anomalous zinc and lead values within the north eastern block of the tenement.

Table 3 EL 8056 Stream Sediment Sampling Results

SAMPLE NO.	Au ppb	As ppm	Cu ppm	Zn ppm	Pb ppm
144319	0.50	22.00	37.00	395.00	203.00
144320	0.20	17.00	21.00	247.00	228.00
144321 (Duplicate)	0.40	16.00	22.00	247.00	236.00



NORTHERN GOLD NI

EL 8056 SATELLITE IMAGE
MAP SHOWING STREAM
SAMPLE LOCATIONS

Figure 15

4.4 Conclusion

The results from the soil sampling program were generally disappointing with the highest value returned being 3 ppb Au (Sample No. 144287, 8499082N : 803535E). The results for all other elements analysed were poor.

The stream sediment sampling returned weak results, ranging from 0.2 ppb to 0.5 ppb Au.

Interpretation of the GIS and remote sensing imagery shows the McKinlay Granite intruding into the surrounding strata. The metamorphic aureole extends approximately 250 metres into the licence. In the north - east of the tenement, the folded sequence of Gerowie Tuff, Mount Bonnie Formation, Koolpin Formation and the Wildman Siltstone outcrop. The Burrell Creek Formation dominates the region.

Further soil sampling and geological mapping is required to fully assess the mineralisation potential within the licence.

5.0 1995/96 EXPENDITURE

Expenditure on EL 8056 during the 1995/96 year of tenure totaled $12,990. Details of this expenditure are listed below as Table 4.

Table 4 **EL 8056 1995/96 Expenditure**

COSTS	AMOUNT
Assays	1,160
Sundry Expenses	440
Accomm.,Field, Travel Expenses	1,100
Consumables - Sampling etc.	2,030
Hire Charges	100
Motor Vehicle Charges and Fuel	1,295
AGSO Mapping	45
Satellite Imagery & Manipulation	165
GIS Manipulation	80
Tenement Management	370
Data Review	190
Report Compilation	385
Casual Wages	1,935
Salaries and Wages	2,000
Subtotal	**11,295**
Administration @ 15%	1,695
TOTAL	**$12,990**

6.0 1996/97 PROPOSED WORK PROGRAM

Exploration work proposed for the 1996/97 year of tenure will include geological mapping, infill soil sampling and assaying.

An estimation of the cost of these programs is given below in Table 5.

Table 5 EL 8056 1996/97 Proposed Work Program

COSTS	AMOUNT
Geological Mapping	1,200
Infill Soil Sampling	2,000
Assaying	800
TOTAL	**$4,000**

7.0 REFERENCES

FAWCETT, C., (1995). EL 8056 - Watts Creek, Annual Report, Year Two of Tenure, 15.09.94 - 14.09.95. Unpublished report by Territory Goldfields N.L. for the NTDME.

HOSKING, A. J., (1994). Northern Territory Gold Mines N.L., Exploration Licences 8056/8161, Watts Creek. First Annual Report for Year Ending 14/09/93. Unpublished company report to the NTDME.

APPENDIX 1

Regional Soil Sampling Locations and Assay Results

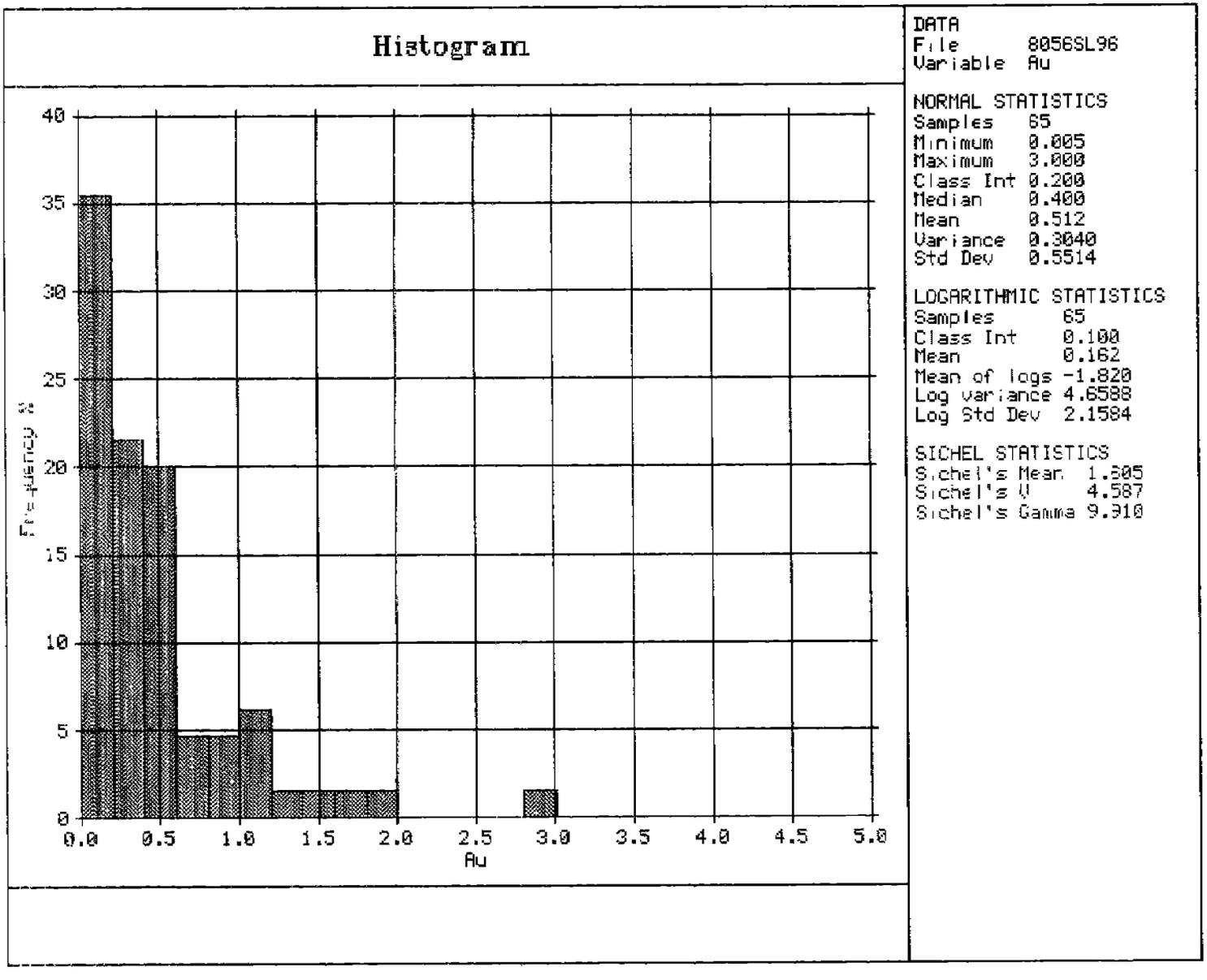
EL 8056 SOIL SAMPLING

SAMPLE	EASTING	NORTHING	AU	AS	TYPE	CU	PB	ZN	SOIL TYPE
144262	804750	8498676	2	21	BLEG	64	98	107	FeSol
144263	804650	8498677	1.6	21	BLEG	57	76	64	FeSol
144264	804550	8498678	1.7	7	BLEG	19	33	61	FeSol
144265	804450	8498679	0.9	4	BLEG	12	23	34	FeSol
144266	804350	8498680	0.8	7	BLEG	13	41	34	FeSol
144267	804250	8498681	0.3	3	BLEG	11	25	27	FeSol
144268	804150	8498682	0.3	7	BLEG	13	64	217	FeSol
144269	804050	8498683	0.4	7	BLEG	20	23	50	FeSol
144270	803950	8498684	0.5	5	BLEG	21	19	33	FeSol
144271	803850	8498685	0.6	3	BLEG	19	17	30	FeSol
144272	803750	8498686	0.4	2	BLEG	13	15	18	FeSol
144273	803650	8498687	0.4	2	BLEG	13	17	22	FeSol
144274	803550	8498688	0.6	10	BLEG	17	25	36	FeSol
144275	803450	8498689	1.2	6	BLEG	18	33	56	FeSol
144276	803350	8498690	0.005	8	BLEG	19	34	76	FeSol
144277	803250	8498691	0.5	6	BLEG	16	31	41	FeSol
144278	803150	8498692	0.2	5	BLEG	15	28	34	FeSol
144279	803050	8498693	0.6	5	BLEG	18	30	40	FeSol
144280	804135	8499076	0.005	7	BLEG	13	25	24	FeSol
144281	804135	8499076	0.3	10	BLEG	13	25	20	FeSol
144282	804035	8499077	0.5	5	BLEG	11	24	27	FeSol
144283	803935	8499078	1.4	9	BLEG	14	34	50	FeSol
144284	803835	8499079	0.005	6	BLEG	20	20	33	FeSol
144285	803735	8499080	0.005	7	BLEG	17	29	34	FeSol
144286	803635	8499081	0.005	7	BLEG	13	18	38	FeSol
144287	803535	8499082	3	2	BLEG	14	22	32	FeSol
144288	803435	8499083	0.005	5	BLEG	18	29	44	FeSol
144289	803335	8499084	0.005	4	BLEG	14	26	19	FeSol
144290	803235	8499085	0.005	5	BLEG	17	31	44	FeSol
144291	803135	8499086	0.005	2	BLEG	14	46	28	FeSol
144292	803035	8499087	0.5	6	BLEG	16	56	64	FeSol
144293	804139	8499476	0.4	9	BLEG	17	27	32	FeSol
144294	804039	8499477	1	12	BLEG	18	37	39	FeSol
144295	803939	8499478	1	16	BLEG	18	46	44	FeSol
144296	803839	8499479	0.5	16	BLEG	23	67	80	FeSol
144297	803739	8499480	0.005	7	BLEG	22	35	52	FeSol
144298	803639	8499481	0.2	6	BLEG	21	29	59	FeSol
144299	803539	8499482	0.2	3	BLEG	22	54	94	FeSol
144300	803439	8499483	0.005	4	BLEG	21	32	55	FeSol
144301	803439	8499483	0.005	3	BLEG	21	34	57	FeSol
144302	803339	8499484	0.005	2	BLEG	19	15	39	FeSol
144303	803239	8499485	0.005	2	BLEG	15	9	32	FeSol
144304	803139	8499486	0.005	2	BLEG	21	18	46	FeSol
144305	803039	8499487	0.005	0.005	BLEG	16	44	75	FeSol
144306	804143	8499876	0.8	6	BLEG	26	108	118	FeSol
144307	804043	8499877	0.005	12	BLEG	16	79	70	FeSol
144308	803943	8499878	0.4	11	BLEG	16	75	68	FeSol
144309	803843	8499879	0.2	5	BLEG	16	45	28	FeSol
144310	803743	8499880	0.4	5	BLEG	19	59	58	FeSol
144311	803643	8499881	0.4	4	BLEG	17	39	44	FeSol
144312	803543	8499882	0.8	5	BLEG	23	37	64	FeSol
144313	803443	8499883	0.4	2	BLEG	20	34	81	FeSol

144314	803343	8499884	0.4	0.005	BLEG	15	22	37	FeSol
144315	803243	8499885	0.2	0.005	BLEG	12	17	22	FeSol
144316	803143	8499886	0.4	2	BLEG	13	12	25	FeSol
144317	803043	8499887	0.6	1	BLEG	15	12	26	FeSol
144322	803845	8500276	0.6	10	BLEG	22	136	195	FeSol
144323	803745	8500277	1.1	12	BLEG	22	91	234	FeSol
144324	803645	8500278	0.6	6	BLEG	21	93	119	FeSol
144325	803545	8500279	1.1	7	BLEG	17	60	80	FeSol
144326	803445	8500280	1.1	6	BLEG	24	41	74	FeSol
144327	803345	8500281	0.6	4	BLEG	19	29	51	FeSol
144328	803245	8500282	0.5	1	BLEG	15	19	27	FeSol
144329	803145	8500283	0.2	5	BLEG	16	15	25	FeSol
144330	803045	8500284	0.4	3	BLEG	16	33	24	FeSol

APPENDIX 2

Summary Statistics Histograms and Log Probability Plots for the Regional Soil Sampling Results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30
25
20
15
10
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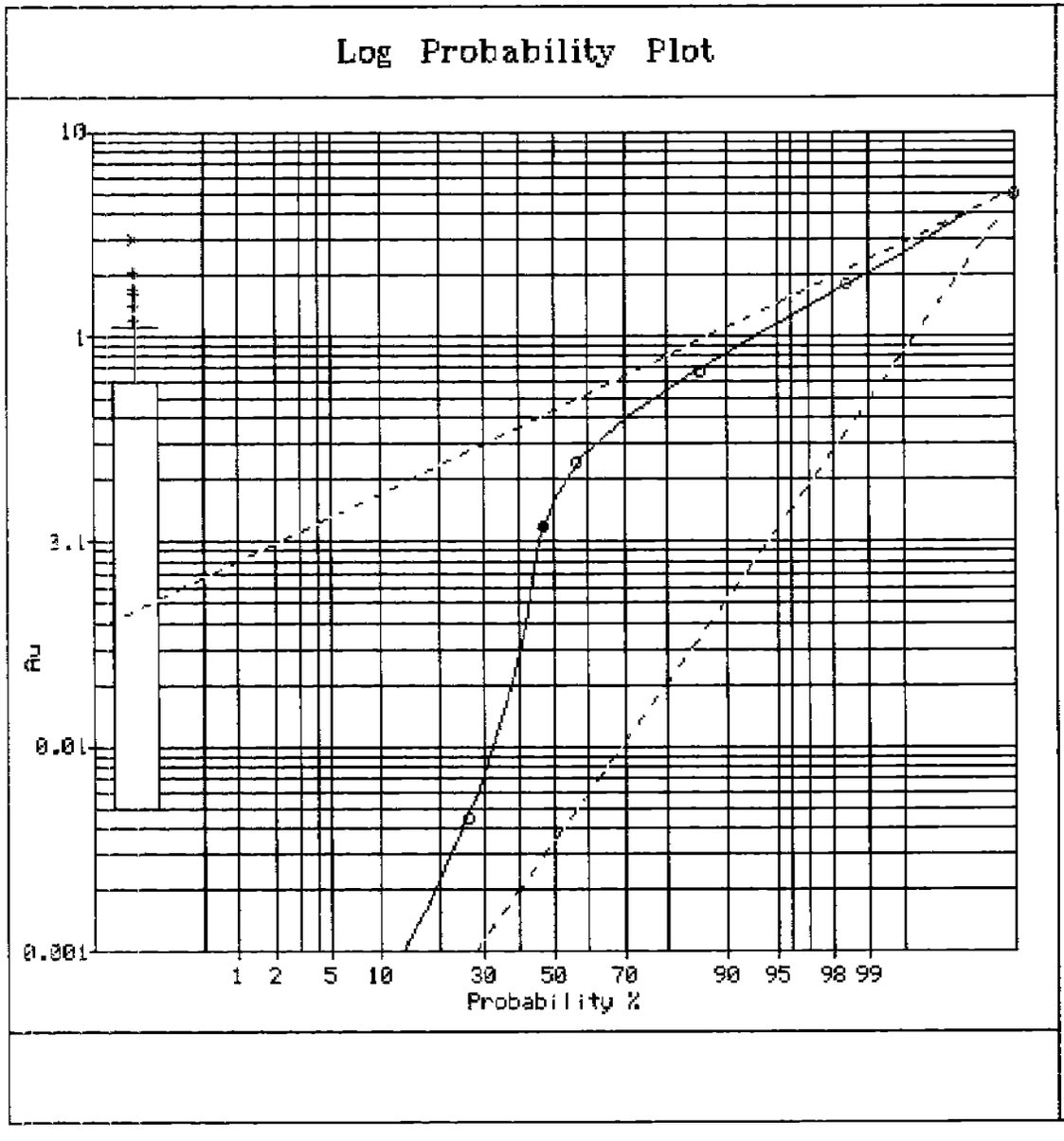
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
Au
DATA
File 8056SL96
Variable Au
NORMAL STATISTICS
Samples 65
Minimum 0.005
Maximum 3.000
Class Int 0.200
Median 0.400
Mean 0.512
Variance 0.3040
Std Dev 0.5514
LOGARITHMIC STATISTICS
Samples 65
Class Int 0.100
Mean 0.162
Mean of logs -1.820
Log variance 4.6588
Log Std Dev 2.1584
SICHEL STATISTICS
Sichel's Mean 1.505
Sichel's V 4.587
Sichel's Gamma 9.910



DATA
File 8056SL96
Variable Au

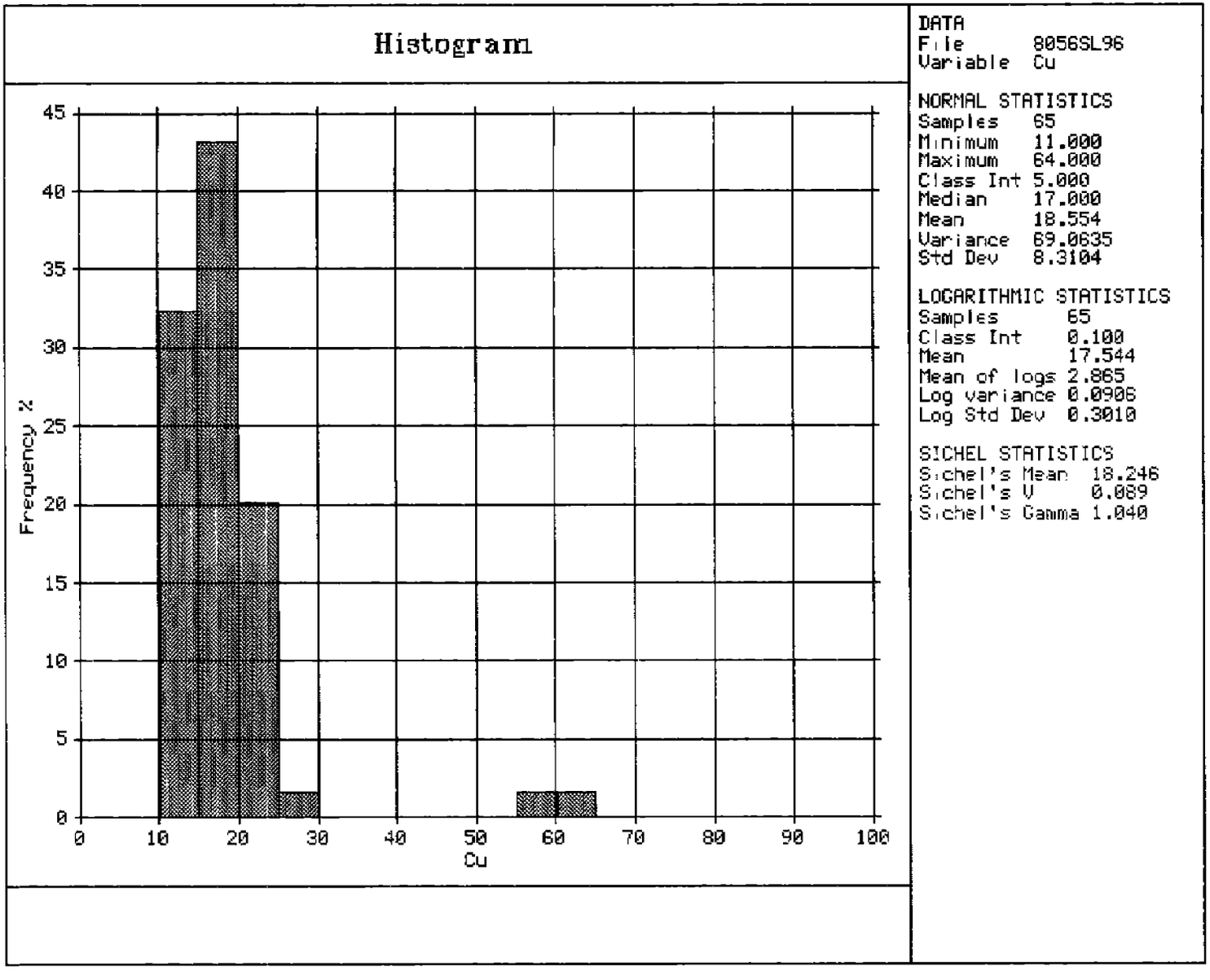
NORMAL STATISTICS
Samples 65
Minimum 0.005
Maximum 3.000
Class Int 0.200
Median 0.400
Mean 0.512
Variance 0.3040
Std Dev 0.5514

LOGARITHMIC STATISTICS
Samples 65
Class Int 1.000
Mean 0.162
Mean of logs -1.820
Log variance 4.6588
Log Std Dev 2.1584

SICHEL STATISTICS
Sichel's Mean 1.605
Sichel's V 4.587
Sichel's Gamma 9.910

Upper Population 52.82%
Mean 0.433 (Ln -0.836)
S Dev 2.072 (Ln 0.728)

Lower Population 47.18%
Mean 0.003 (Ln -5.667)
S Dev 8.389 (Ln 2.127)



DATA
File 8056SL96
Variable Cu

NORMAL STATISTICS

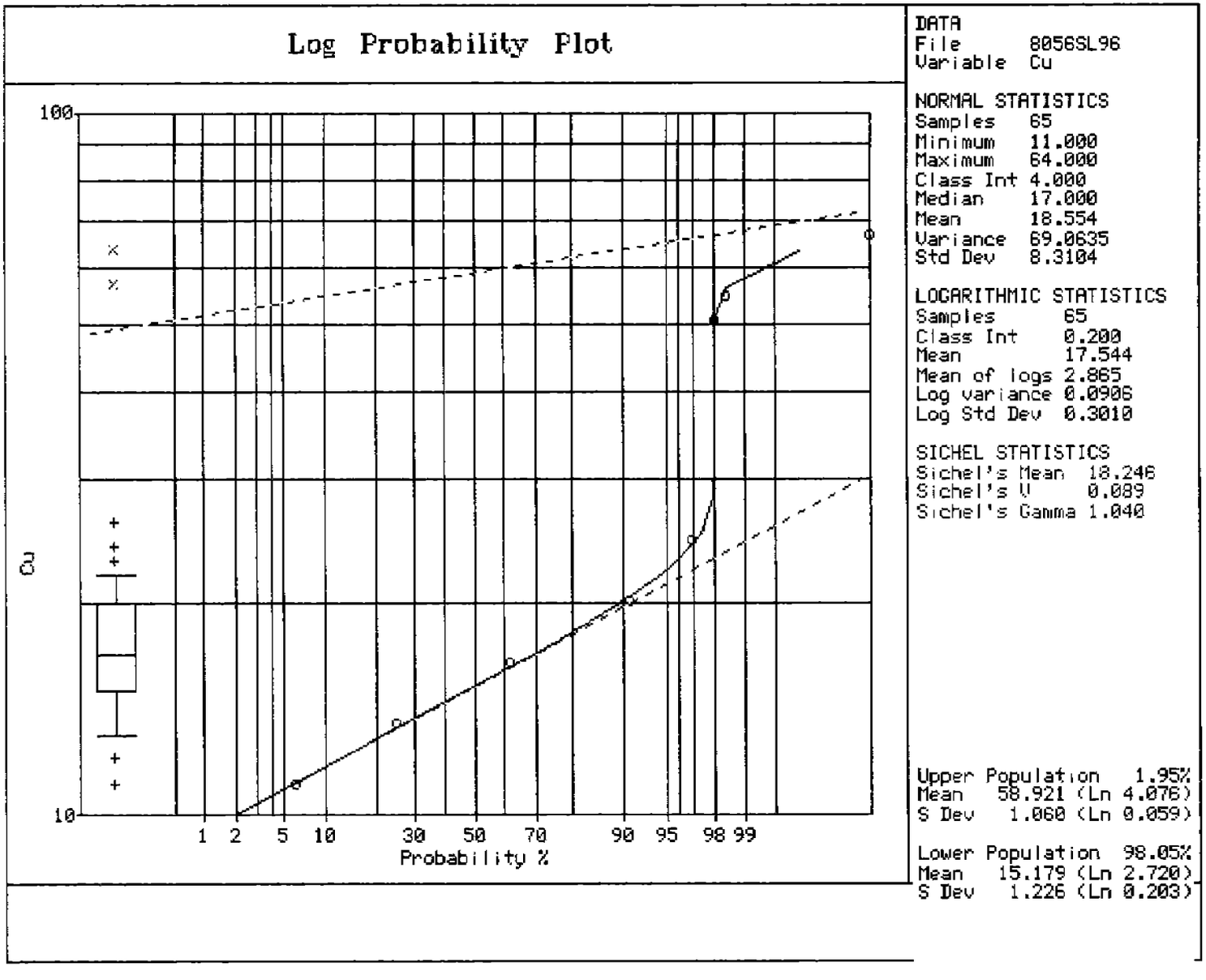
Samples	65
Minimum	11.000
Maximum	64.000
Class Int	5.000
Median	17.000
Mean	18.554
Variance	69.0635
Std Dev	8.3104

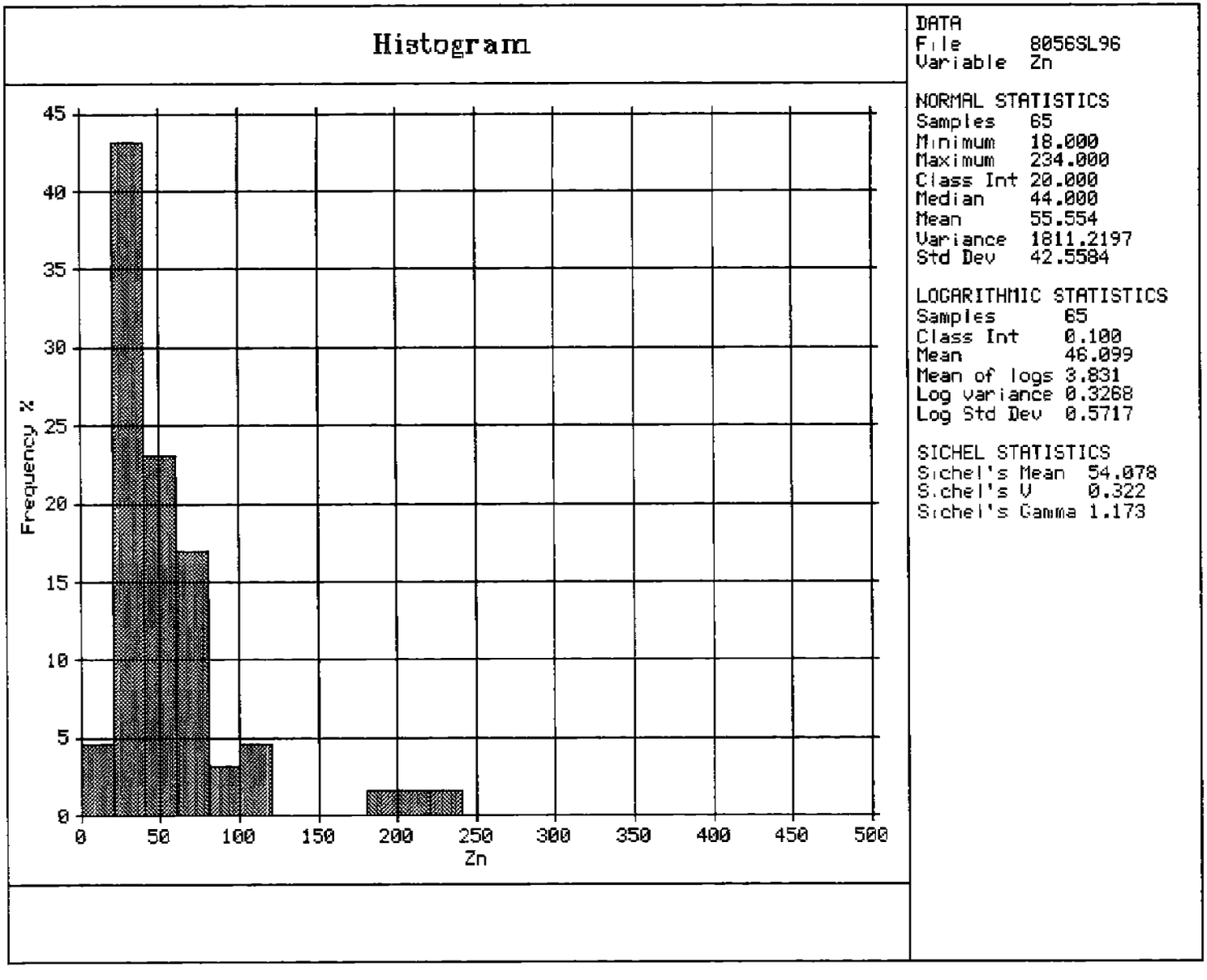
LOGARITHMIC STATISTICS

Samples	65
Class Int	0.100
Mean	17.544
Mean of logs	2.865
Log variance	0.0906
Log Std Dev	0.3010

SICHEL STATISTICS

Sichel's Mean	18.246
Sichel's V	0.089
Sichel's Gamma	1.040


Log Probability Plot
100
10
Cu
1 2 5 10 30 50 70 90 95 98 99
Probability %
DATA
File 8056SL96
Variable Cu
NORMAL STATISTICS
Samples 65
Minimum 11.000
Maximum 64.000
Class Int 4.000
Median 17.000
Mean 18.554
Variance 69.0635
Std Dev 8.3104
LOGARITHMIC STATISTICS
Samples 65
Class Int 0.200
Mean 17.544
Mean of logs 2.865
Log variance 0.0906
Log Std Dev 0.3010
SICHEL STATISTICS
Sichel's Mean 18.246
Sichel's V 0.089
Sichel's Gamma 1.040
Upper Population 1.95%
Mean 58.921 (Ln 4.076)
S Dev 1.060 (Ln 0.059)
Lower Population 98.05%
Mean 15.179 (Ln 2.720)
S Dev 1.226 (Ln 0.203)



DATA
File 8056SL96
Variable Zn

NORMAL STATISTICS

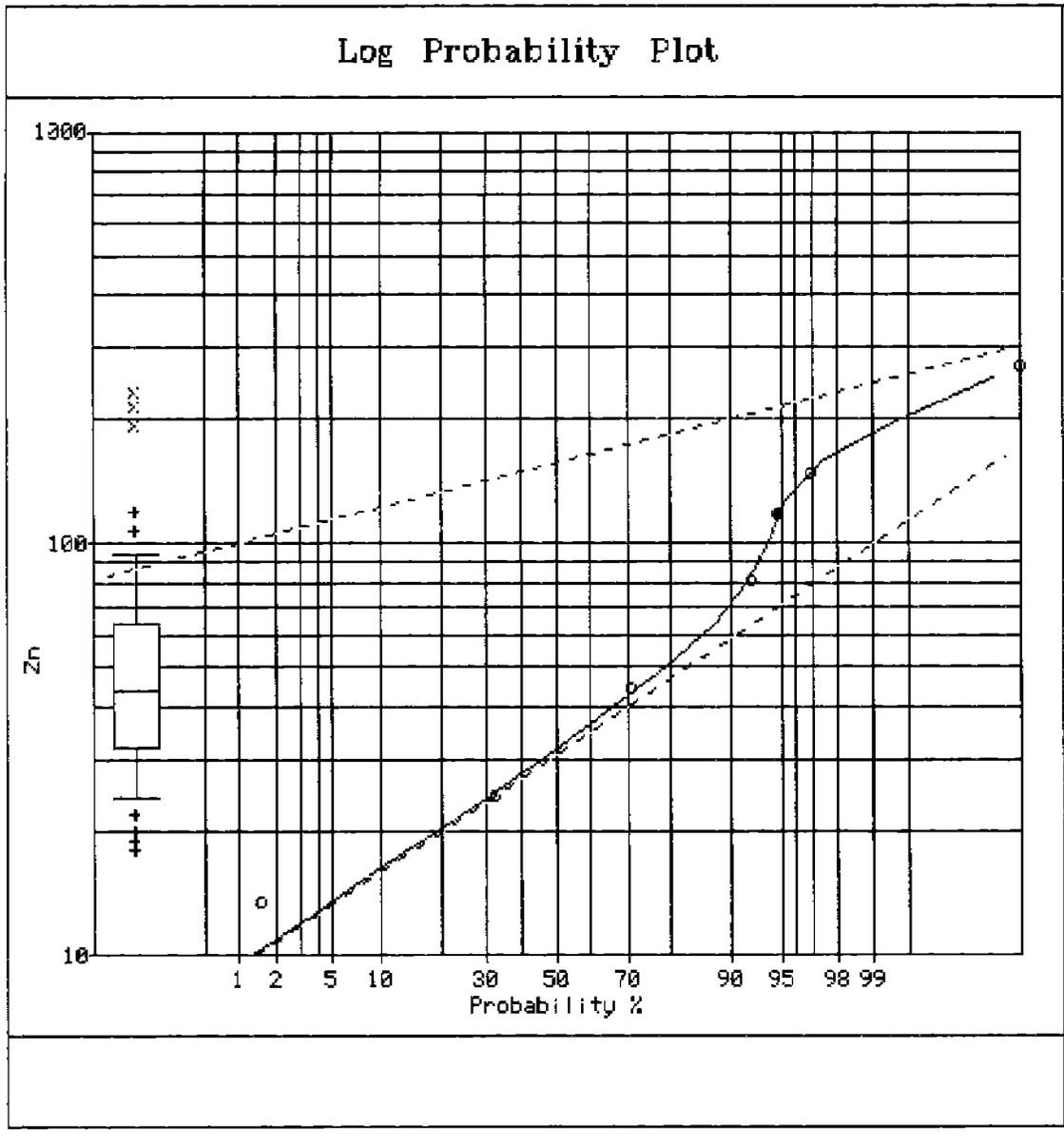
Samples	65
Minimum	18.000
Maximum	234.000
Class Int	20.000
Median	44.000
Mean	55.554
Variance	1811.2197
Std Dev	42.5584

LOGARITHMIC STATISTICS

Samples	65
Class Int	0.100
Mean	46.099
Mean of logs	3.831
Log variance	0.3268
Log Std Dev	0.5717

SICHEL STATISTICS

Sichel's Mean	54.078
Sichel's V	0.322
Sichel's Gamma	1.173



DATA
File 8056SL96
Variable Zn

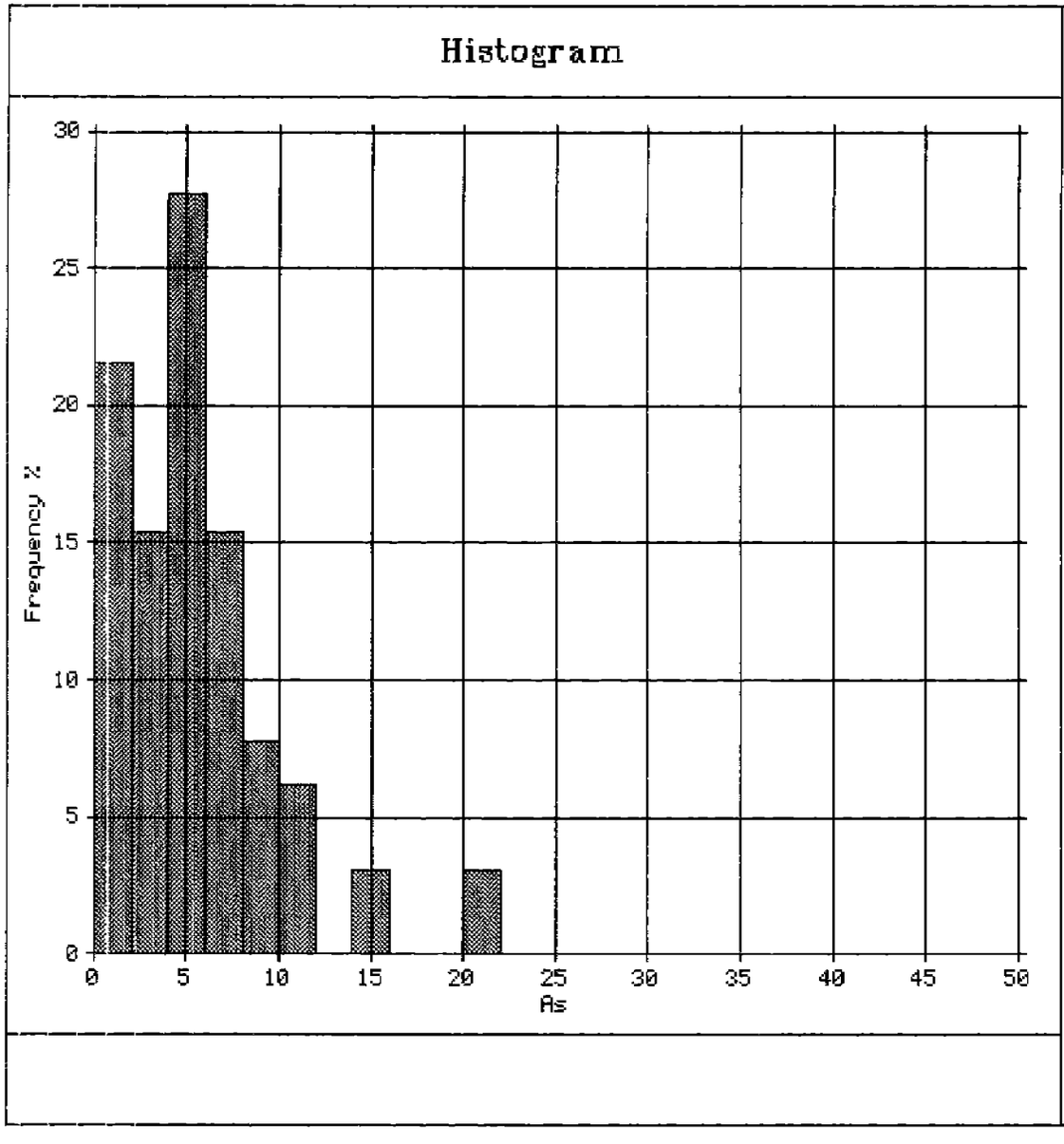
NORMAL STATISTICS
Samples 65
Minimum 18.000
Maximum 234.000
Class Int 20.000
Median 44.000
Mean 55.554
Variance 1811.2197
Std Dev 42.5584

LOGARITHMIC STATISTICS
Samples 65
Class Int 0.600
Mean 46.099
Mean of logs 3.831
Log variance 0.3268
Log Std Dev 0.5717

SICHEL STATISTICS
Sichel's Mean 54.078
Sichel's V 0.322
Sichel's Gamma 1.173

Upper Population 5.19%
Mean 156.524 (Ln 5.053)
S Dev 1.211 (Ln 0.192)

Lower Population 94.81%
Mean 30.679 (Ln 3.424)
S Dev 1.662 (Ln 0.508)



DATA
File 8056SL96
Variable As

NORMAL STATISTICS

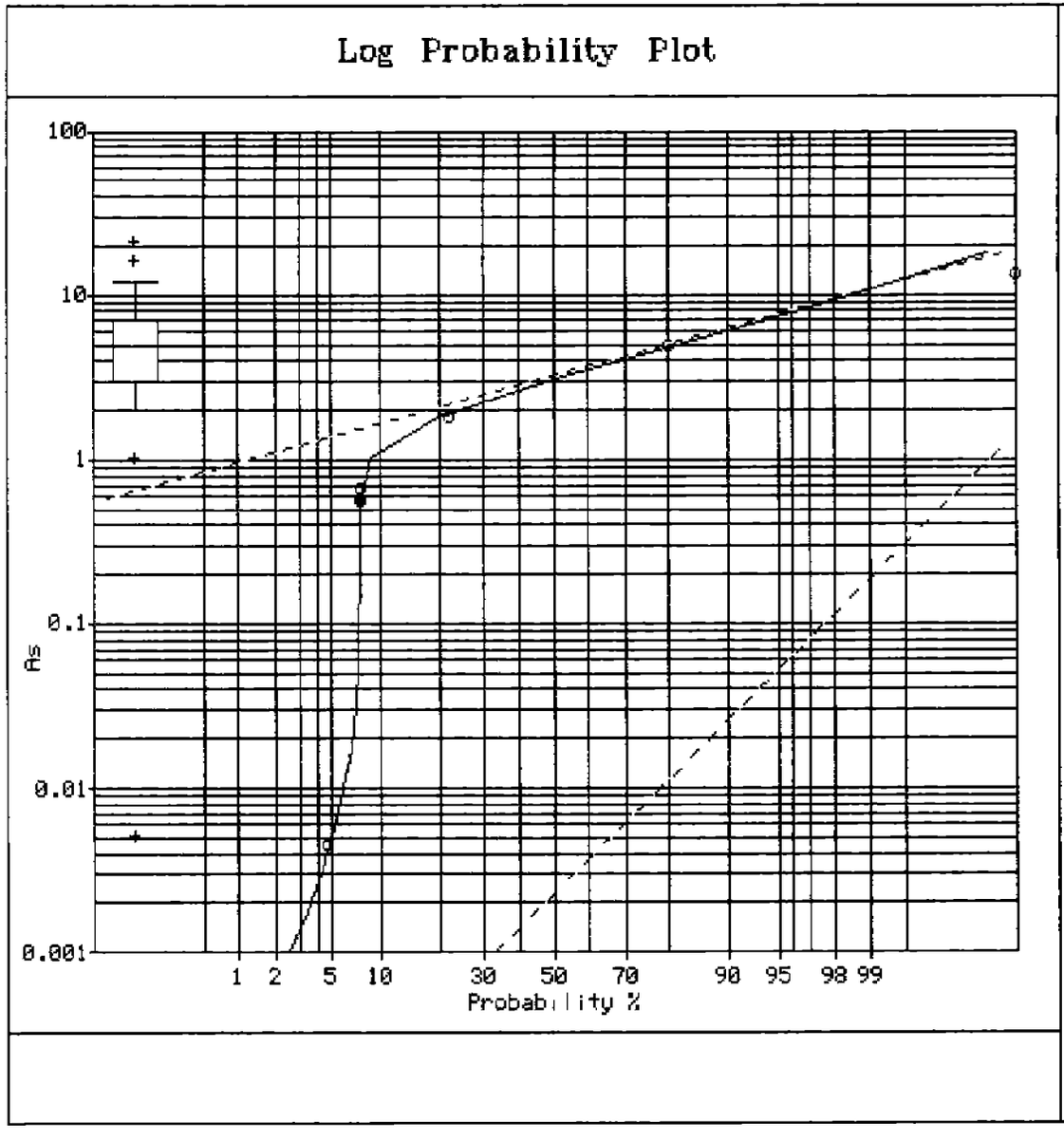
Samples	65
Minimum	0.005
Maximum	21.000
Class Int	2.000
Median	5.000
Mean	6.046
Variance	19.3544
Std Dev	4.3994

LOGARITHMIC STATISTICS

Samples	65
Class Int	0.100
Mean	3.731
Mean of logs	1.317
Log variance	2.5820
Log Std Dev	1.6069

SICHEL STATISTICS

Sichel's Mean	12.702
Sichel's V	2.542
Sichel's Gamma	3.405



DATA
File 8056SL96
Variable As

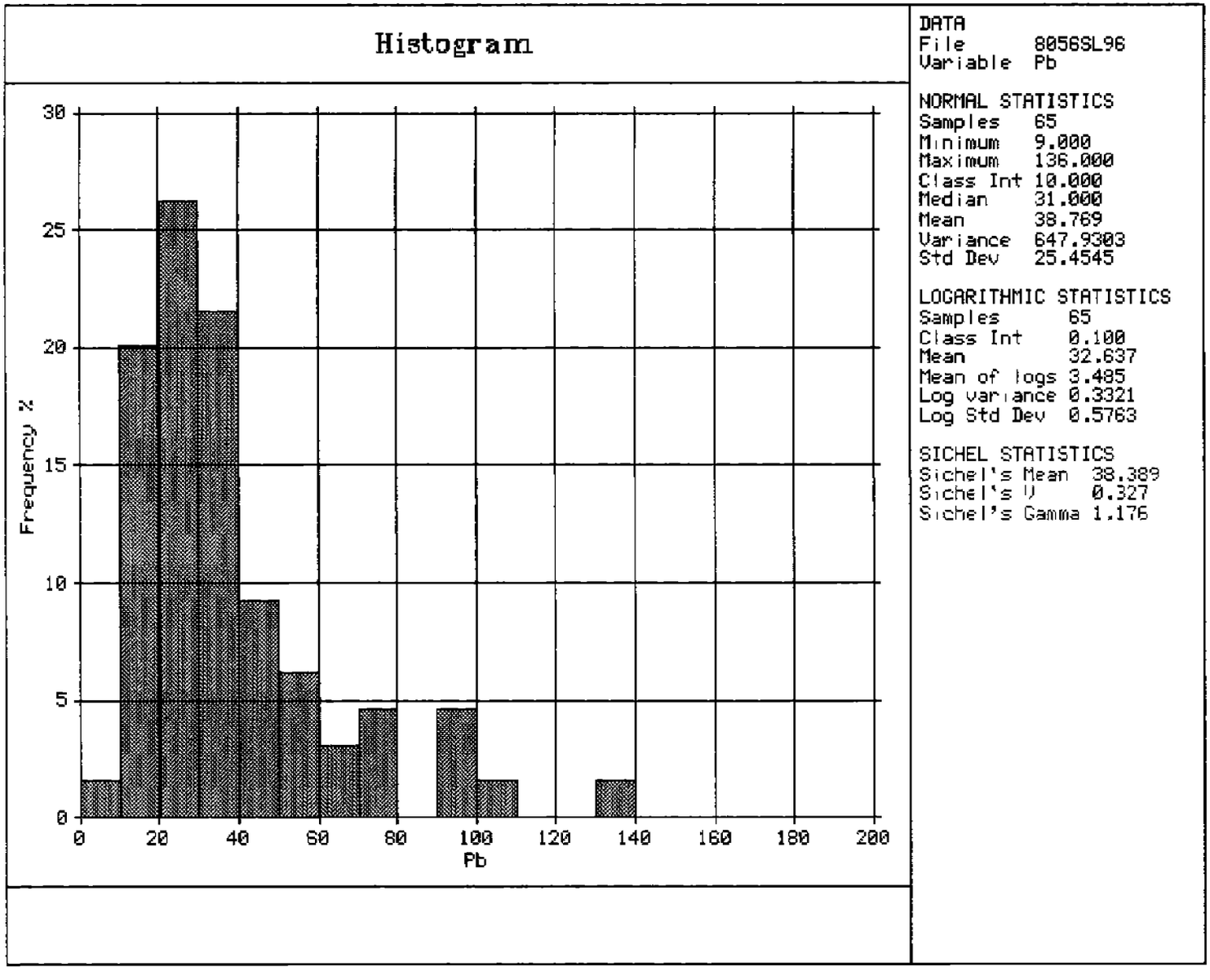
NORMAL STATISTICS
Samples 65
Minimum 0.005
Maximum 21.000
Class Int 2.000
Median 5.000
Mean 6.046
Variance 19.3544
Std Dev 4.3994

LOGARITHMIC STATISTICS
Samples 65
Class Int 1.000
Mean 3.731
Mean of logs 1.317
Log variance 2.5820
Log Std Dev 1.6069

SICHEL STATISTICS
Sichel's Mean 12.703
Sichel's V 2.542
Sichel's Gamma 3.405

Upper Population 92.40%
Mean 3.201 (Ln 1.163)
S Dev 1.675 (Ln 0.516)

Lower Population 7.60%
Mean 0.002 (Ln -6.083)
S Dev 6.682 (Ln 1.896)



DATA
File 8056SL96
Variable Pb

NORMAL STATISTICS

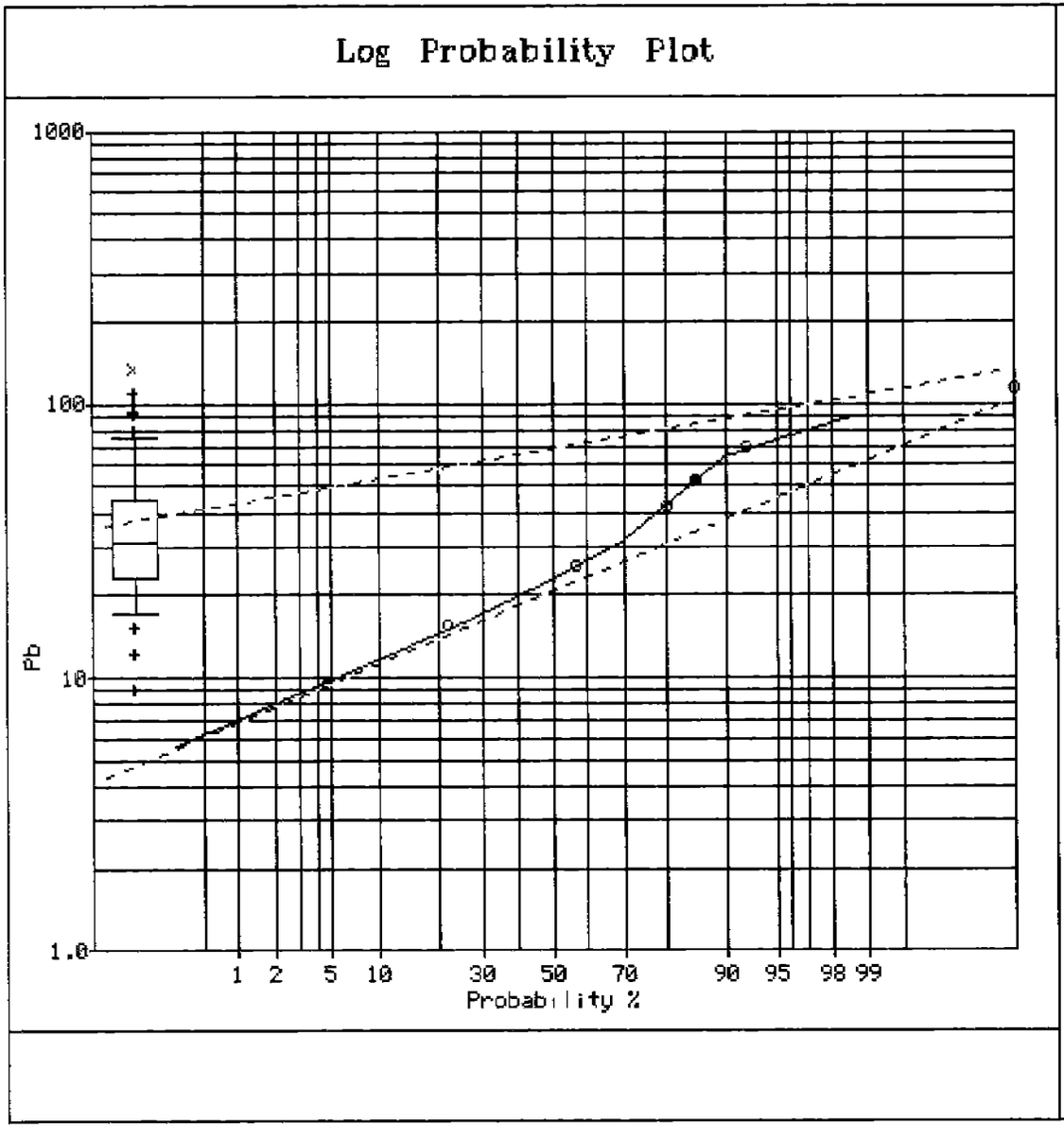
Samples	65
Minimum	9.000
Maximum	136.000
Class Int	10.000
Median	31.000
Mean	38.769
Variance	647.9303
Std Dev	25.4545

LOGARITHMIC STATISTICS

Samples	65
Class Int	0.100
Mean	32.637
Mean of logs	3.485
Log variance	0.3321
Log Std Dev	0.5763

SICHEL STATISTICS

Sichel's Mean	38.389
Sichel's V	0.327
Sichel's Gamma	1.176



DATA
File 8056SL96
Variable Pb

NORMAL STATISTICS
Samples 65
Minimum 9.000
Maximum 136.000
Class Int 10.000
Median 31.000
Mean 38.769
Variance 647.9303
Std Dev 25.4545

LOGARITHMIC STATISTICS
Samples 65
Class Int 0.500
Mean 32.637
Mean of logs 3.485
Log variance 0.3321
Log Std Dev 0.5763

SICHEL STATISTICS
Sichel's Mean 38.389
Sichel's V 0.327
Sichel's Gamma 1.176

Upper Population 14.72%
Mean 68.086 (Ln 4.221)
S Dev 1.218 (Ln 0.196)

Lower Population 85.28%
Mean 20.455 (Ln 3.018)
S Dev 1.608 (Ln 0.475)