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**EL 9051**

**1995/96 ANNUAL REPORT**

**12.05.95 to 11.05.96**

**Ranford Hill 1:100,000 map sheet**

**Title Holders:- Northern Gold N.L. and Camelot  
Northern Territory Ltd.**

**Managed by:- Northern Gold N.L.**

OFFICE  
FILE

June 1996

Author:- N. Socic

NTDME

Northern Gold N.L., Adelaide River

Northern Gold N.L., Perth Office

Camelot Northern Territory Ltd.

## SUMMARY

The exploration completed on EL 9051 was focussed in the south and south - east of the tenement. A regional soil sampling program was completed by Northern Gold N.L. for 10 lines over two of the southern blocks of EL 9051. The line spacing from the program was 200 metres with samples collected at 25 metre intervals and composited to 100 metres.

Statistical analysis identified two populations of Au soil samples. One being the natural background of the Pine Creek Geosyncline, and the other being very weak bedrock mineralisation. The anomalous areas identified by the statistical analysis were analysed using GIS and remote sensing techniques, which identified low level bedrock Au mineralization along north-west to south-east trending fold axes. These areas are worthy of follow-up mapping and infill soil sampling.

The covenant for the 1995/96 year of tenure on EL 9051 was **\$25,500** and the expenditure totalled **\$34,050**.

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## **1.0 INTRODUCTION**

### **1.1 Title**

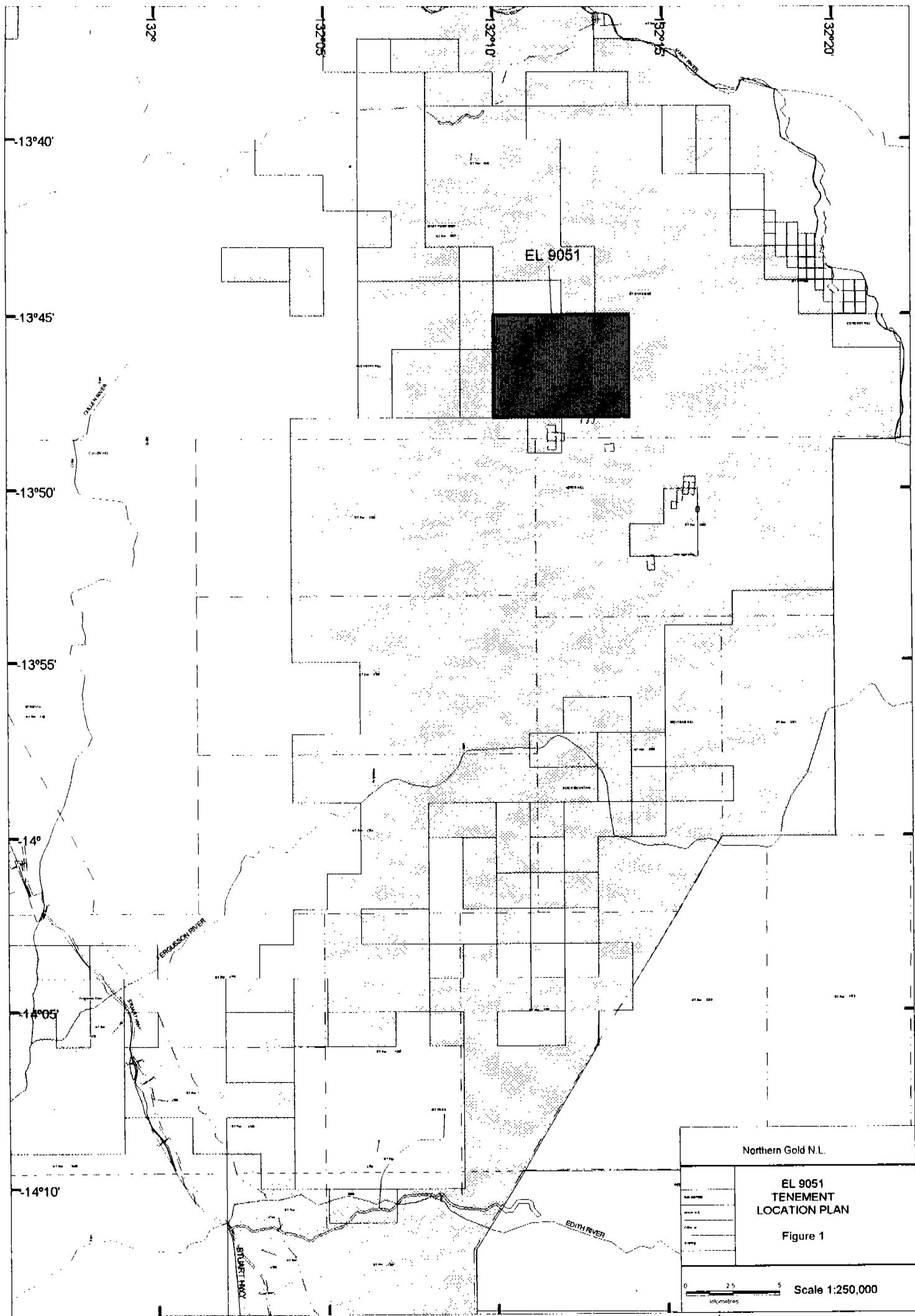
Exploration Licence 9051 was granted to Northern Gold N.L. and Camelot Northern Territory Ltd. on the 12th of May 1995, for a period of six years.

The covenant for the 1995/96 year of tenure was \$25,500.

### **1.2 Location and Access**

The licence falls within Pastoral Lease No. 1134, Mary River Cattle Station, and is located 130 kilometres north-east of Adelaide River, within the Cullen Mineral Field. EL 9051 is located on the Ranford Hill 1:100,000 map sheet, and the Moline and Wandie 1:50,000 map sheets. Access is via the Stuart Highway to Pine Creek and then via the Kakadu Highway and along station tracks (Figure 1).

EL 9051 consists of 12 graticular blocks, 39 square kilometres in area, lying between latitudes 13°45' south and 13°48' south and longitudes 132°10' east and 132°14' east.



## **2.0 GEOLOGY**

### **2.1 Regional Geology**

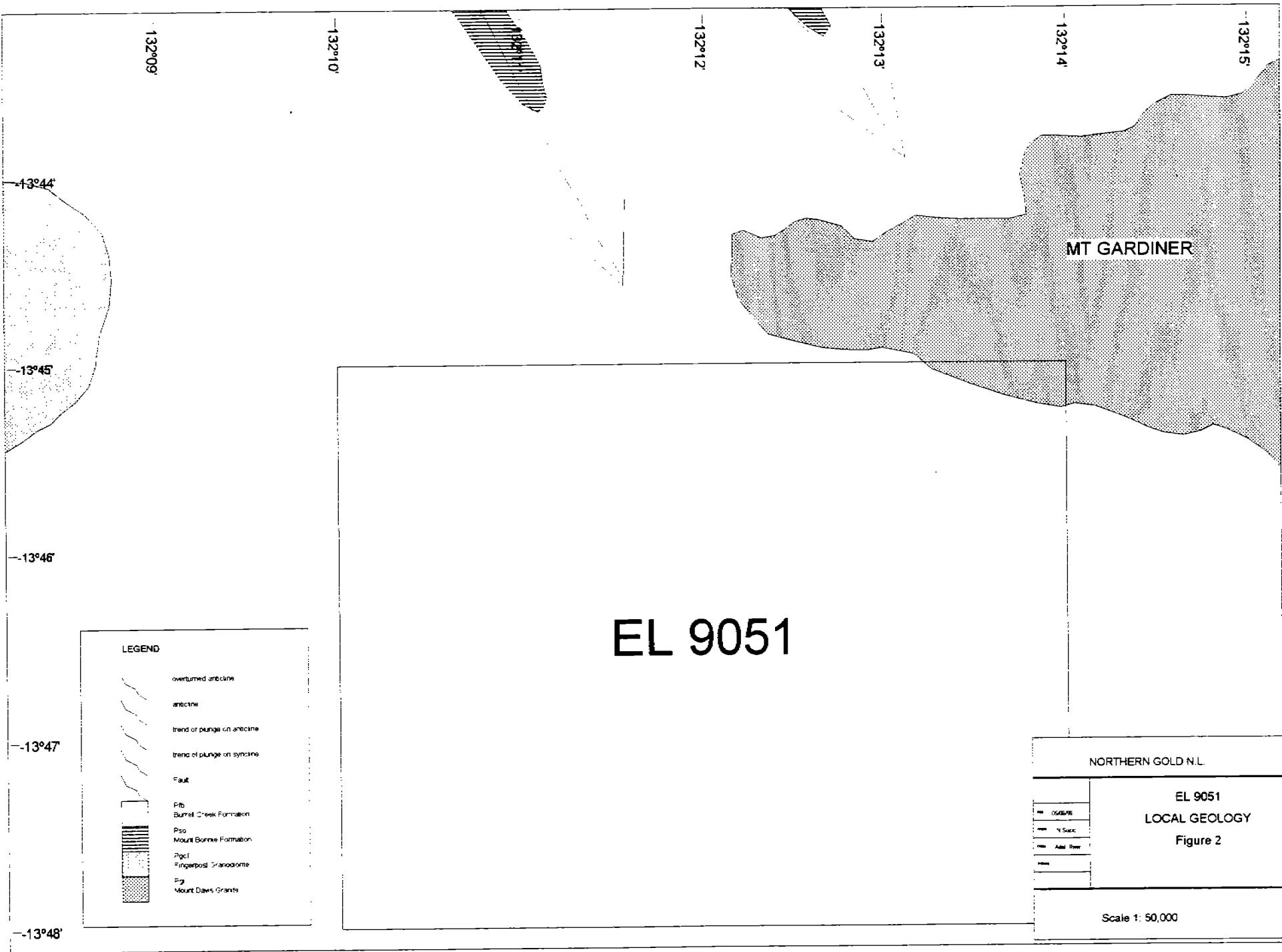
EL 9051 is situated within the Pine Creek Geosyncline, a tightly to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic sediments with interlayered tuff units. All the lithologies in the area have been metamorphosed to low, and in places, medium grade, metamorphic assemblages. For the purpose of this report, the prefix meta- is implied, but omitted from the rock names and descriptions.

The sequence has been intruded by pre-orogenic dolerite sills of the Zamu Dolerite and a large 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 laterites, overlie the Pine Creek Geosyncline.

### **2.2 Local Geology**

The rock types contained within EL 9051 consist predominantly of the Burrell Creek Formation with the Mount Davis Granite outcropping in the north-east corner of the tenement (Figure 2).

The rocks have been folded about north-westerly trending axes which plunge to the south-east. Fold axes with outcropping Mount Bonnie Formation are present to the north of the tenement. The Burrell Creek Formation sediments have been intruded by the Mount Davis granite in the north-east and the Fingerpost Granodiorite in the north-west. These intrusives have hornfelsed the metasediments along their contacts.



### **3.0 PREVIOUS EXPLORATION**

The exploration completed on EL 9051 has mainly been focussed in the south and south - east. This area was previously included in EL 5368 and EL 4732, held by RGC Exploration and Aardeau Mining N.L. in a joint venture agreement, and in EL 3618 and EL 3619, held by Aardeau Mining N.L.

EL 3618 and EL 3619 were granted to Aardeau Mining N.L. in January 1983 and December 1982 respectively. Work centred on exploration for alluvial and eluvial gold occurrences in Wandie Creek and its tributaries using stream sediment, soil and rock geochemistry. Strip mining of the Lake Wandie workings was also completed (Denwer, 1989).

In 1984/85 a pan concentrate survey was completed over the exploration licences, as well as airphoto interpretations to investigate anomalous ridges. The aerial data interpretations were used to plan sampling programs involving drainage sediments, costeans and eluvials.

Exploration completed on EL 5368 and EL 4732 was carried out by RGC Exploration for Aardeau Mining N.L. through a joint venture agreement. This work is detailed below.

#### **1987 - 1988**

All known workings within the confines of the Wandie project area were investigated by first pass geological mapping and sampling. A pilot stream sediment study, using both conventional stream sediment and bulk cyanide leach techniques was carried out. Samples collected were obtained from active stream channels and integrated drainage types over large catchment areas (Norton, 1990).

#### **1988 - 1989**

Work completed on EL 4732 included detailed mapping and sampling of old workings, additional trenching, further channel sampling and a major drilling program.

#### **1989 - 1990**

A regional evaluation of the project area was undertaken using photogeological studies and stream sediment geochemistry. Several new prospect areas were identified and investigated further by geological mapping, rock and soil geochemistry and BLEG stream sediment sampling (Norton, 1990).

Comprehensive investigations involving detailed geological mapping, rock geochemistry, trenching and/or bulldozed rip-line bedrock sampling and RC drilling were also carried out, centered on old alluvial/eluvial and minor hard rock workings, some of which had been recently strip mined.

## **4.0 WORK COMPLETED IN 1995/96**

### **4.1 GIS and Remote Sensing Studies**

Northern Gold N.L. completed a work program based on digital data acquisition and manipulation. Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping 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.

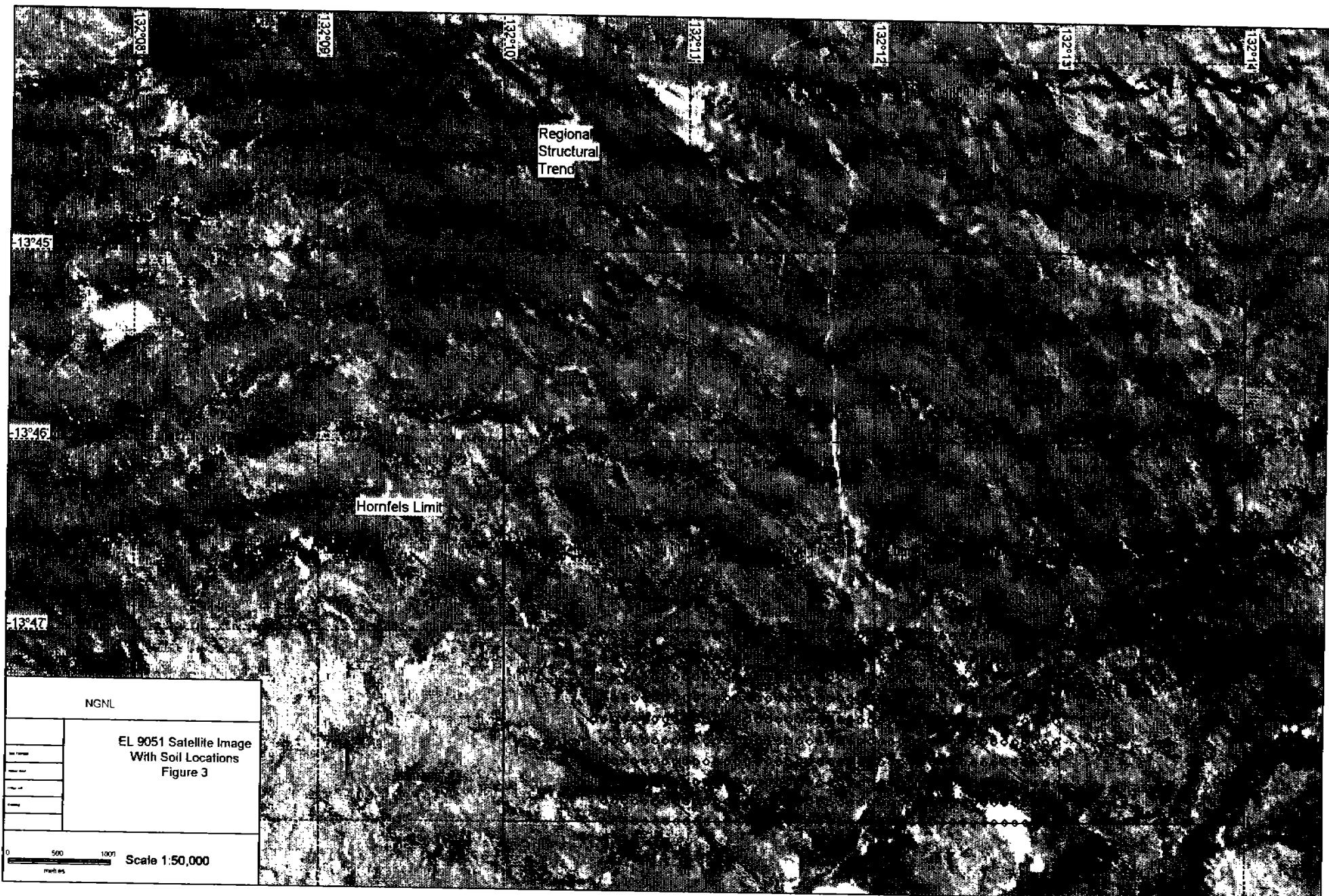
Satellite imagery was also used to interpret the structural geology of the region (Figure 3). Anomalous soil samples (see Section 4.3) are also shown on the satellite image to assess the relationship of the anomalous samples to the regional structure.

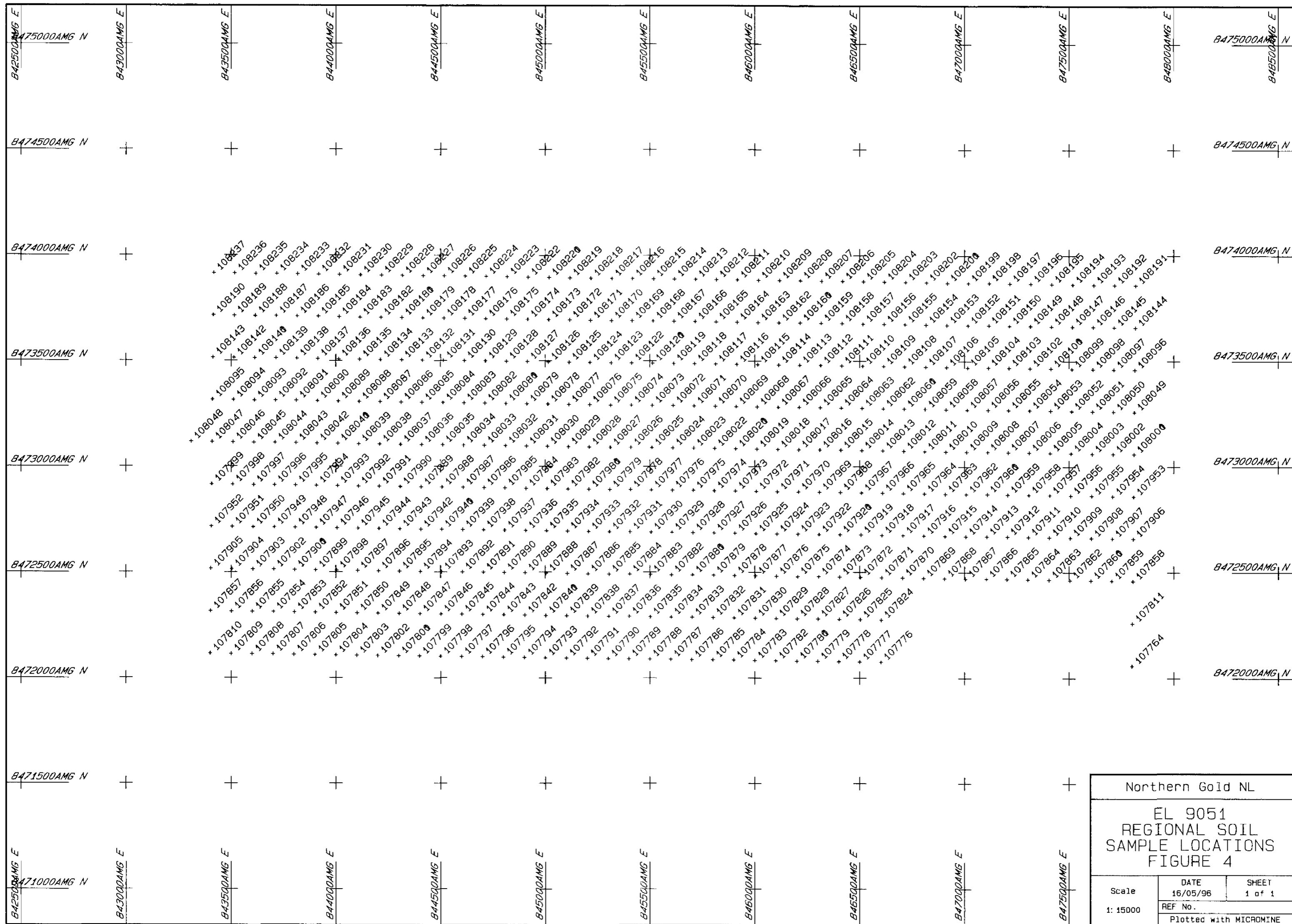
Interpretation of the GIS and remote sensing imagery shows the Mount Davis Granite intruding the Burrell Creek Formation in the north-east of the tenement. The contact aureole extends 1.5 kilometres into EL 9051 in the north east corner.

In the north-west corner, the contact metamorphic aureole from the Fingerpost Granodiorite extends approximately 1 kilometre into the tenement.

### **4.2 Regional Soil Sampling**

A regional soil sampling program was completed by Northern Gold N.L. for 10 lines over two of the southern blocks of EL 9051. The line spacing from the program was 200 metres by 4,500 metres long, with samples collected at 25 metre intervals and composited to 100 metres. A total of 451 samples (Sample Nos. 107764, 107776 - 107811, 107824 - 108237), including duplicates, were submitted to Assaycorp Pty. Ltd. for BLEG Au, As (ICP/MA-3), Sn (ICP/FS-2), and base metal analysis (ICP/MA-3). Sample locations are shown in Figure 4 and given in Appendix 1.





The analysis detection limits are as follows:-

Au 0.1 ppb

Cu 1 ppm

Pb 5 ppm

Zn 2 ppm

Ag 1 ppm

As 10 ppm

Sn 10 ppm

#### **4.3 Regional Soil Sampling Results**

The regional soil sampling program returned results indicating low level bedrock gold mineralization in the south of EL 9051. The gold values were generally unsupported by arsenic and base metal geochemistry. The spot high anomalous gold values are given below with their locations and corresponding arsenic values:-

<b>SAMPLE NO.</b>	<b>AMG EAST</b>	<b>AMG NORTH</b>	<b>Au PPB</b>	<b>As PPM</b>
107780	846200	8472080	20.6	63
107787	845600	8472088	13.4	L
107912	847206	8472668	9.6	L
107924	846106	8472681	8.2	14
107934	845106	8472694	15.2	16
107942	844406	8472703	22.8	L
107994	843908	8472909	12.2	L
107998	843508	8472914	6.9	L
108019	846010	8473083	14.6	24
108115	846014	8473483	12.8	52
108164	845916	8473684	13.6	29

**Table 1**

Note:- The character 'L' indicates that the value obtained through analysis was below the detection limit.

The assay results for Au, As, Cu, Pb, Sn, Ag and Zn are given in Appendix 1, and shown on plan in Figures 5 to 9. Sn and Ag are not shown on plan as the results obtained from analysis were below detection limits.

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.

#### 4.4 Statistical Analysis

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

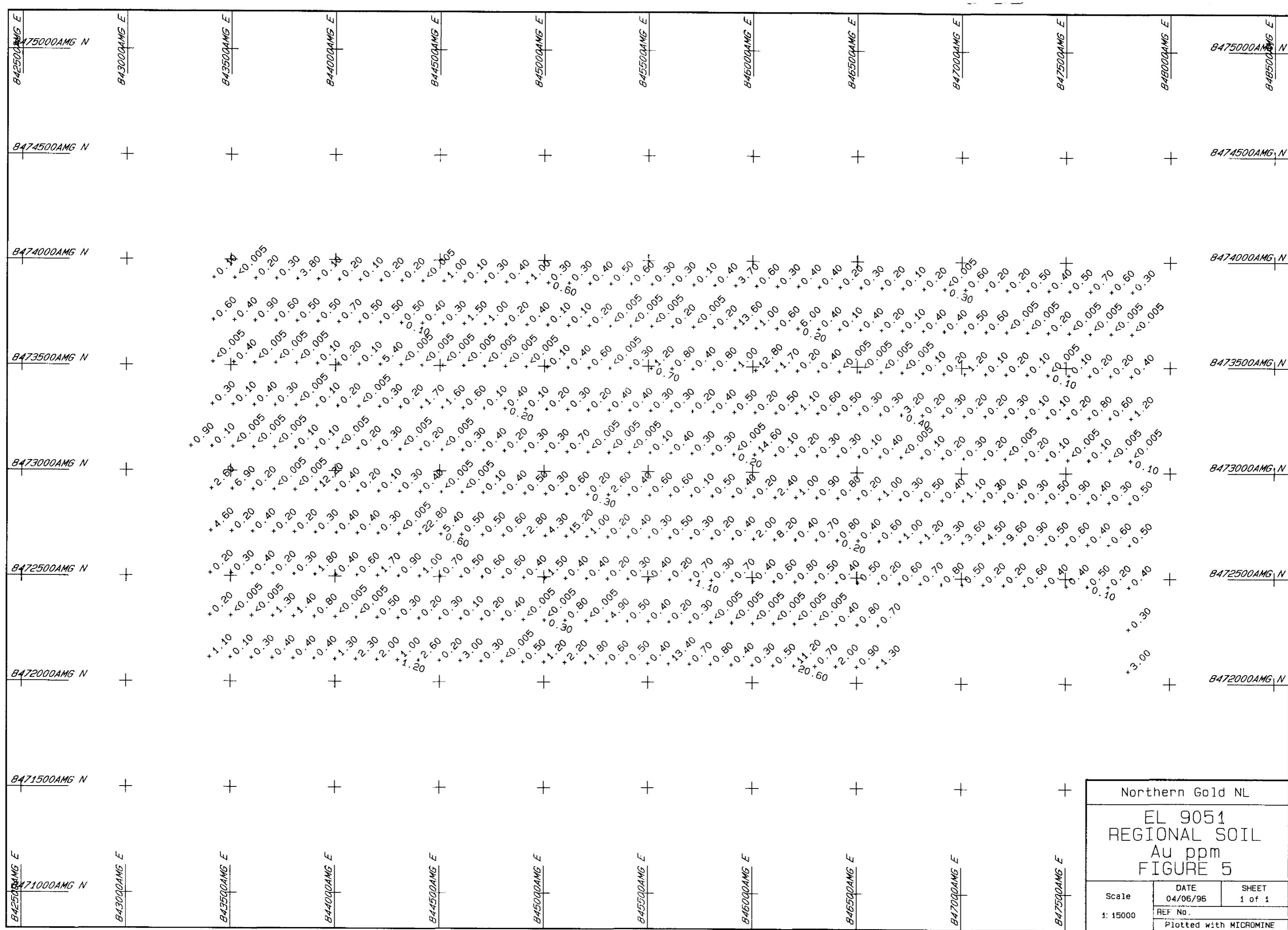
	<u>Au</u>	<u>Cu</u>	<u>Zn</u>	<u>As</u>	<u>Pb</u>
<b>Samples</b>	383	451	451	42	451
<b>Minimum</b>	0.100	3.000	8.000	10.000	7.000
<b>Maximum</b>	22.800	80.000	225.000	67.000	265.000
<b>Class Int.</b>	0.300	2.000	5.000	8.000	8.000
<b>Median</b>	0.400	7.000	18.000	17.000	20.000
<b>Mean</b>	1.044	9.000	22.195	26.952	22.687
<b>Variance</b>	6.293	106.931	254.140	410.290	342.269
<b>Std. Dev.</b>	2.509	10.341	15.942	20.256	18.501
<b>95th Percentile</b>	3.000	15.000	38.000	58.000	30.000
<b>99th Percentile</b>	12.000	53.000	69.000	65.500	80.000

**Table 2**

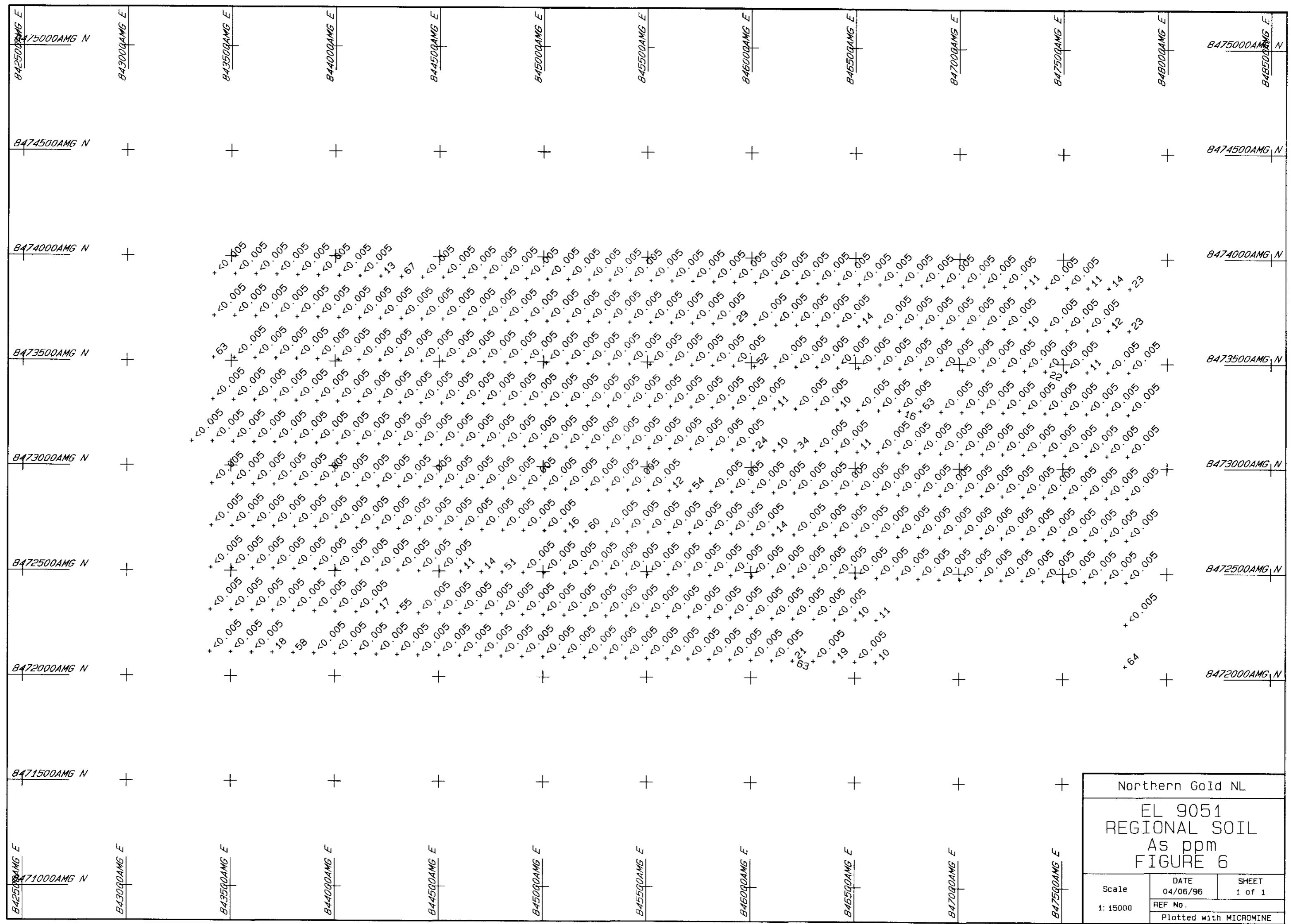
Both histograms and log probability plots were calculated for Au, Cu, As, Pb and Zn.

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.

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



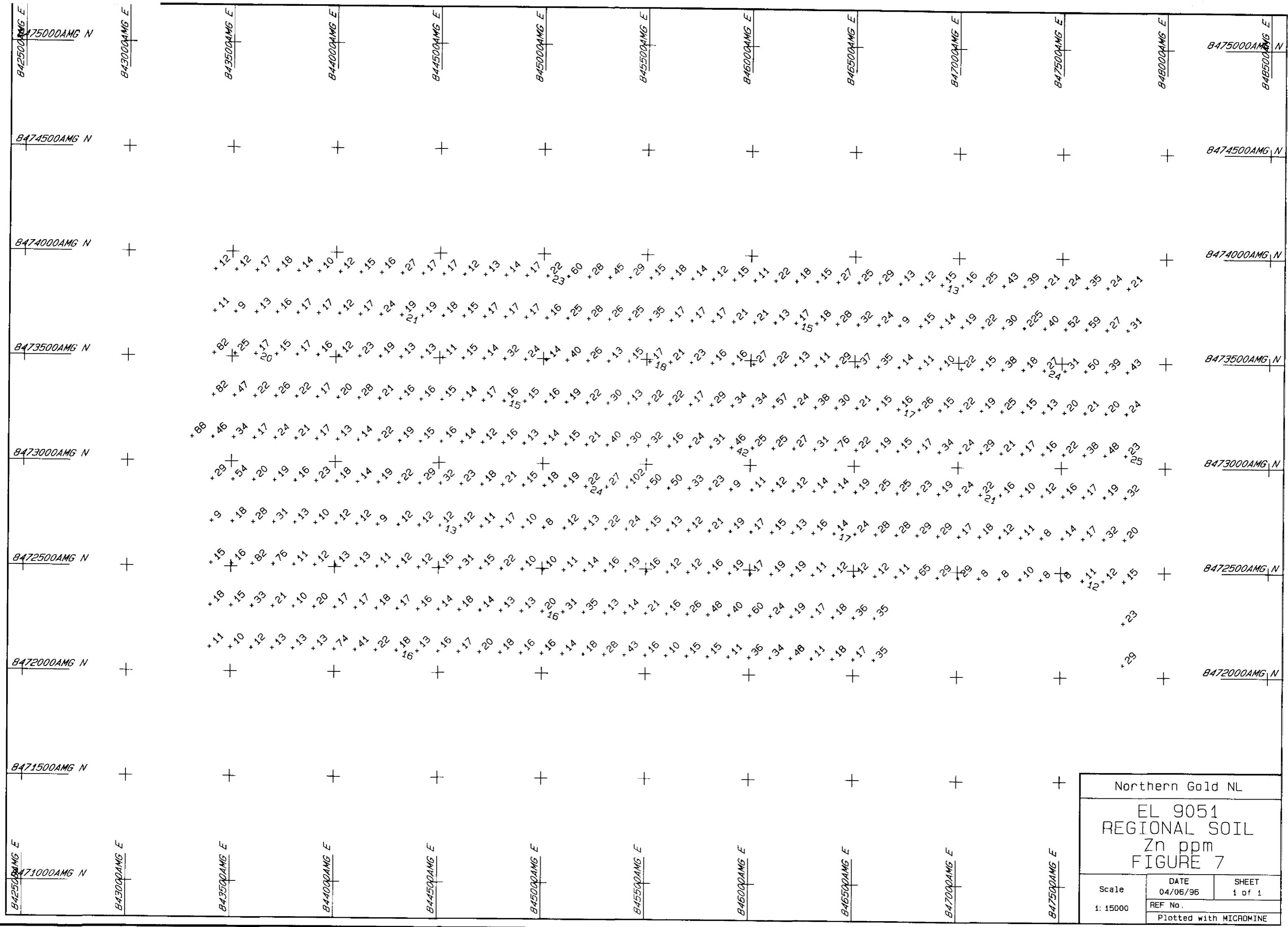
Northern Gold NL		
EL 9051 REGIONAL SOIL Au ppm FIGURE 5		
Scale 1: 15000	DATE 04/06/96	SHEET 1 of 1
REF No.	Plotted with MICROMINE	

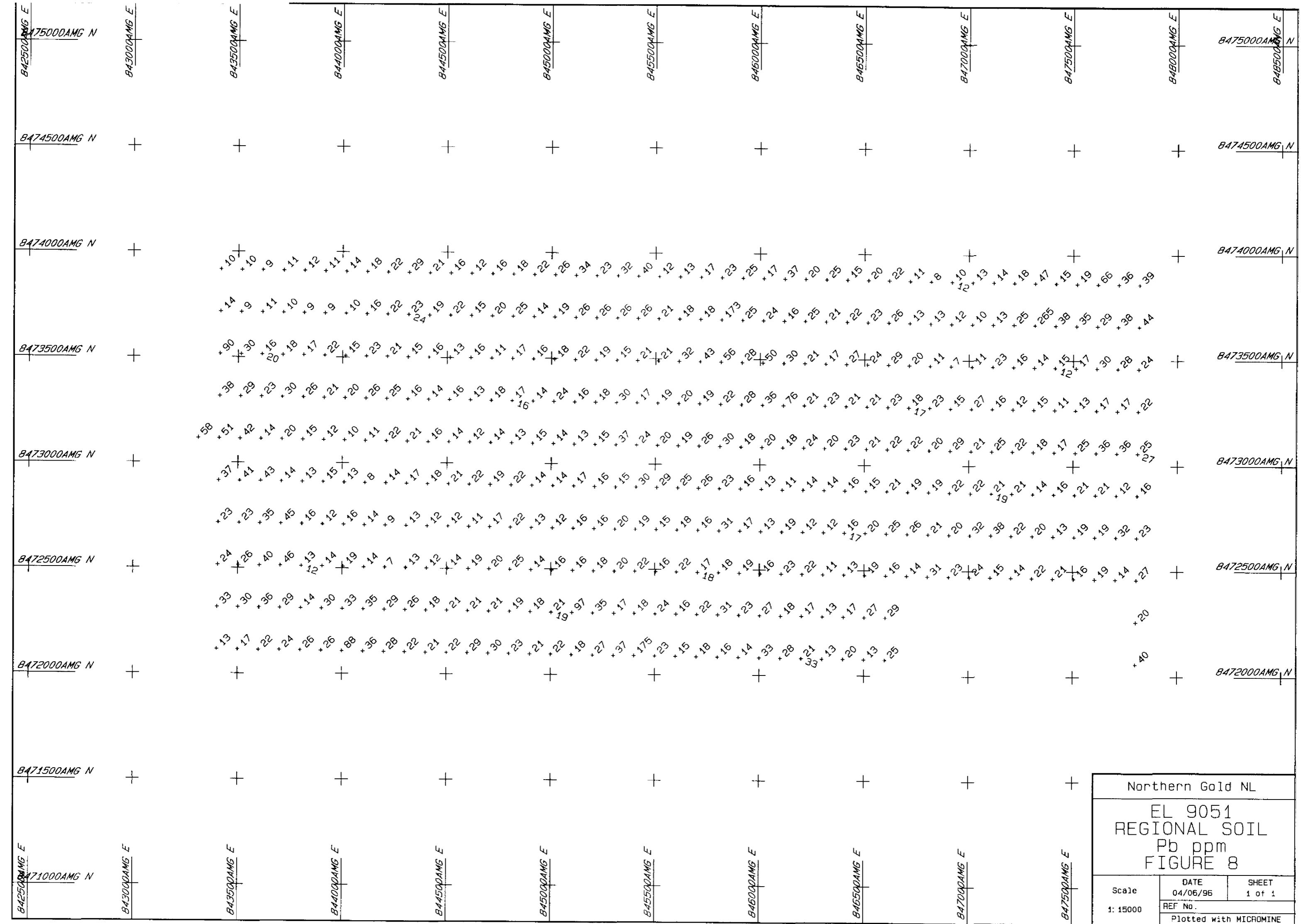


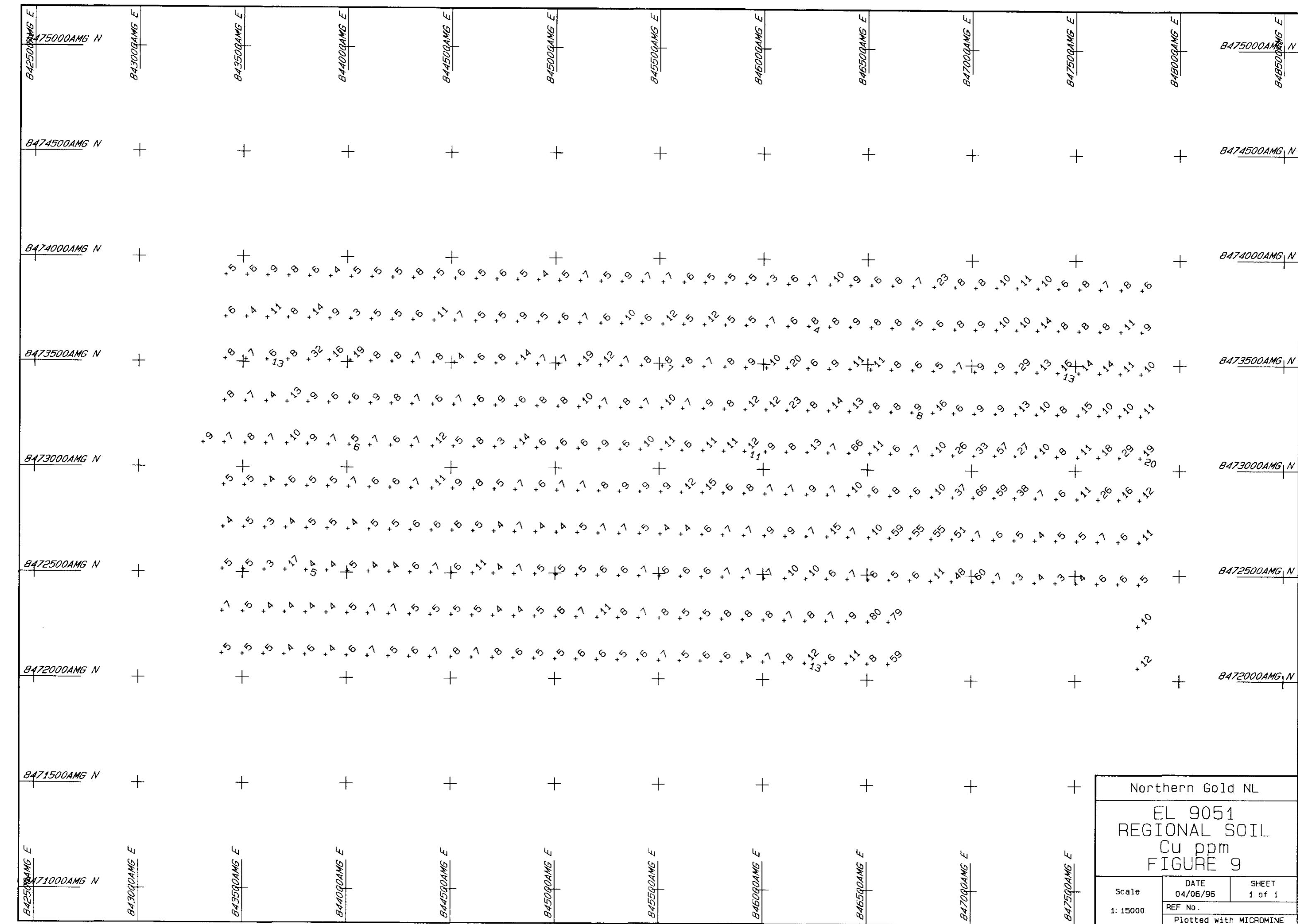
Northern Gold NL

EL 9051  
REGIONAL SOIL  
As ppm  
FIGURE 6

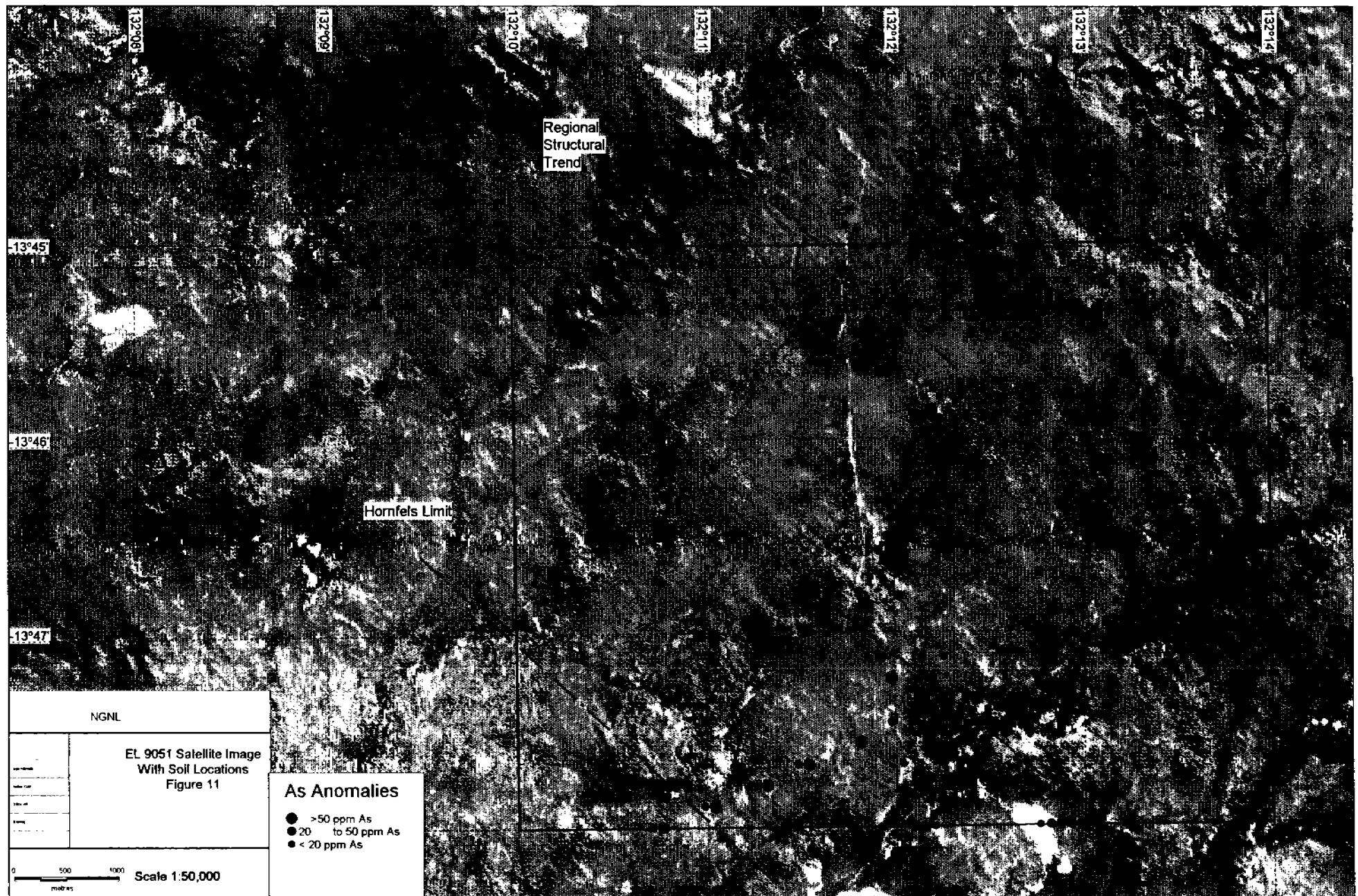
Scale	Date	Sheet
1: 15000	04/06/96	1 of 1
REF No.		
Plotted with MICROMINE		

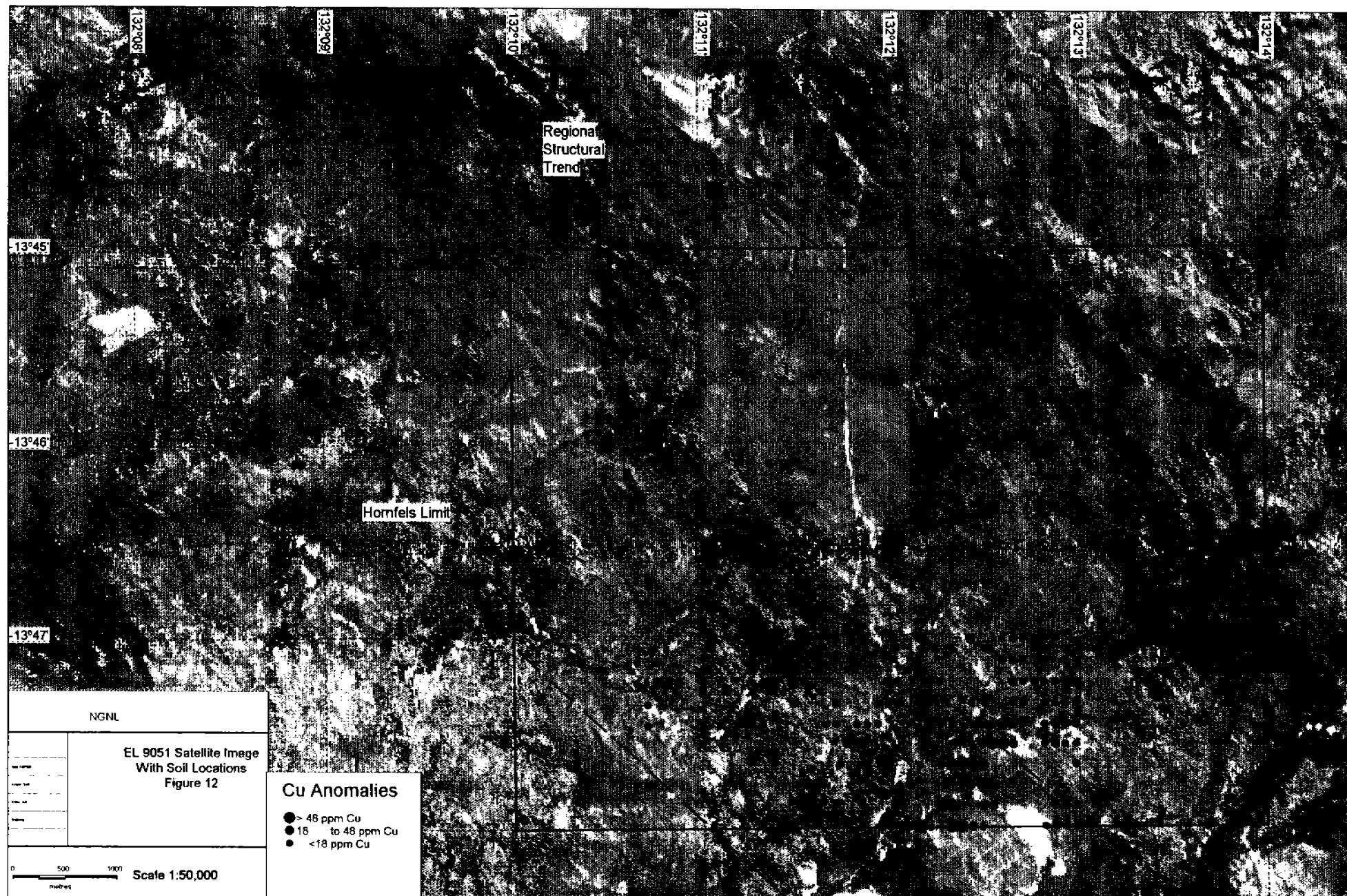


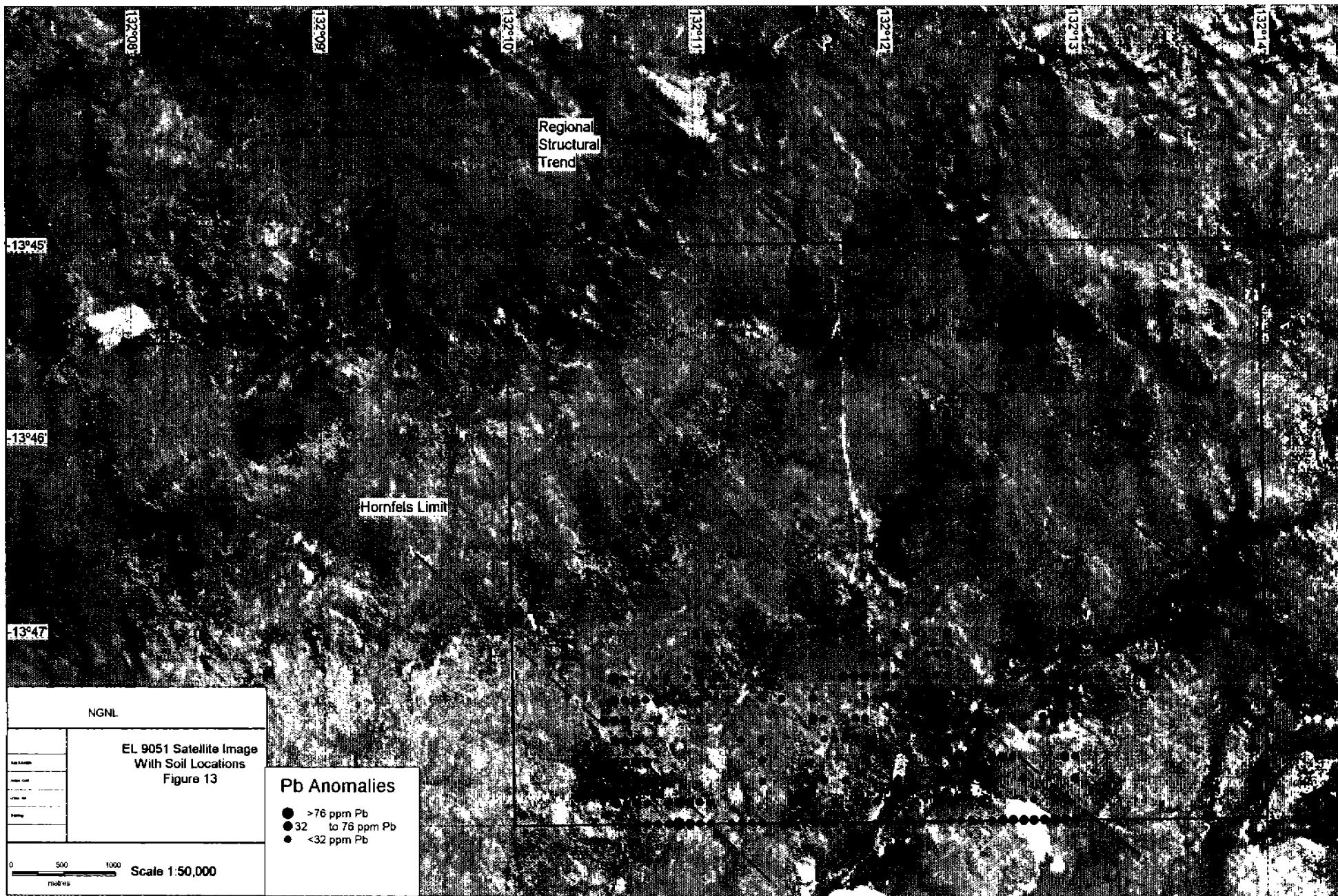


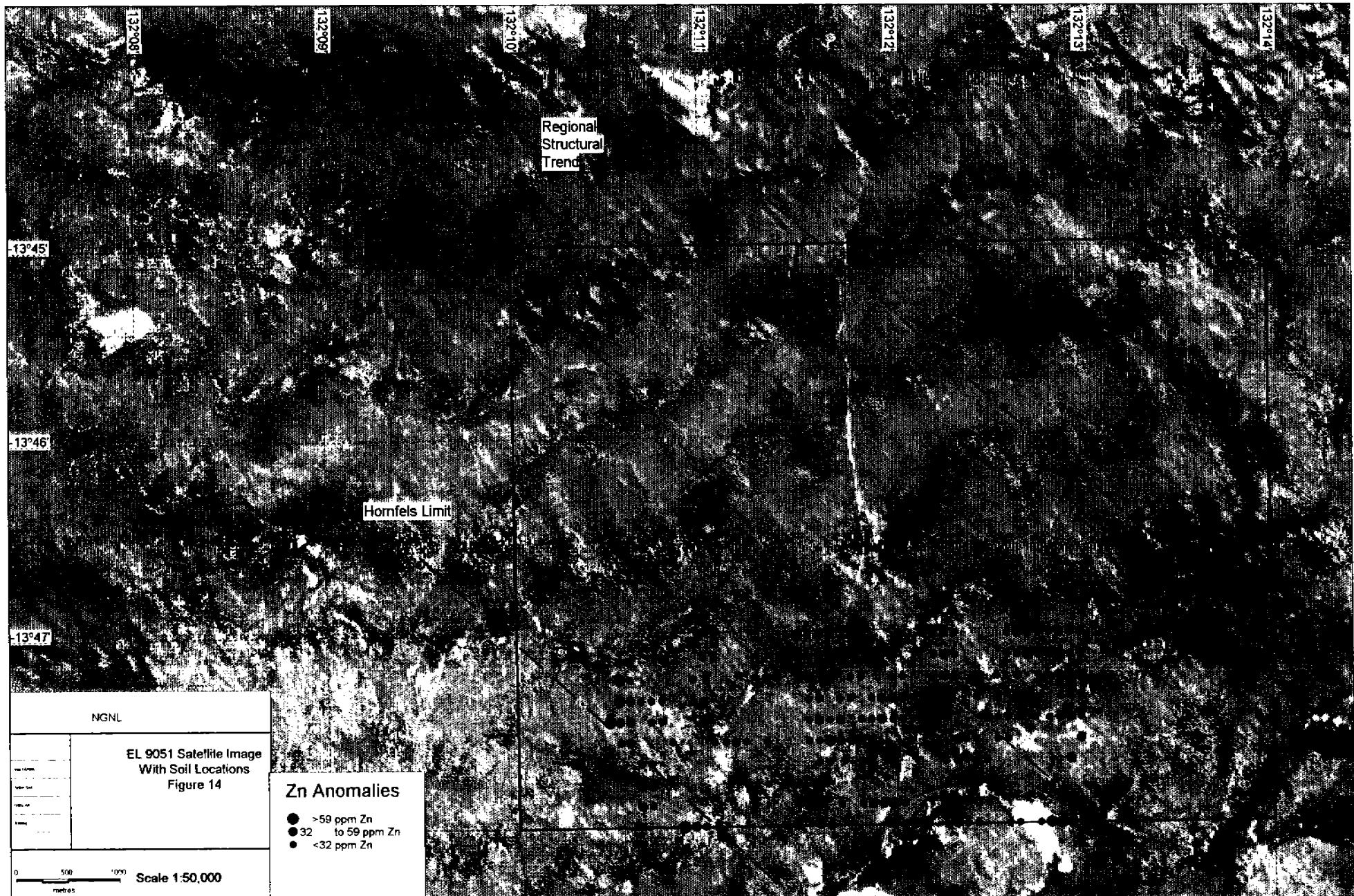












Deviations from the line at the upper ends of the probability plots may be the result of problems with accurately plotting data or may represent a deviation from the interpreted population.

The results for Sn and Ag were not calculated as they were below detection limits.

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

#### **4.5 Conclusion**

Based on the geochemical analysis of the soil samples, arsenic has a linear anomalous trend northeast-southwest across the area sampled. However, this was not replicated in the gold or base metal geochemistry. A weak gold and arsenic anomaly trends north-south through the south eastern region of EL 9051, with small isolated arsenic and gold highs scattered throughout the sampled area.

Interpretation of the GIS and remote sensing imagery shows the Mount Davis Granite intruding the Burrell Creek Formation in the north-east of the tenement. The contact aureole extends 1.5 kilometres into EL 9051 in the north east corner.

In the north-west corner, the contact metamorphic aureole from the Fingerpost Granodiorite extends approximately 1 kilometre into the tenement.

Anticlinal structures trend north-west to south-east across the licence. Anomalous gold geochemistry obtained from the soil sampling indicates weak mineralization along the fold axes in the south-east of EL 9051.

Further geological mapping and infill soil sampling along these fold axes is required to determine the degree of the mineralization close to areas of contact metamorphism.

## **5.0 EL 9051 PROPOSED WORK PROGRAM**

Exploration programs for the 1996/97 year of tenure will include geological mapping, regional soil sampling, close spaced soil sampling, rock chip sampling and assaying.

An estimation of the cost of these programs is given below:-

<b><u>COSTS</u></b>	<b><u>AMOUNT</u></b>
Geological Mapping	1,450
Regional Soil Sampling	4,000
Close Spaced Soil Sampling	3,000
Rock Chip Sampling	3,000
Assays	5,000
D.T.M. Modelling	2,000
Drafting and Computing	1,600
Site Access	950
Report Preparation	500
Salaries and Wages	8,500
<hr/>	
<b>TOTAL</b>	<b><u>\$30,000</u></b>

**Table 3**

## **6.0 1995/96 EXPENDITURE**

The following is a breakdown of the costs incurred in the 1995/96 year of tenure for EL 9051:-

<b><u>COSTS</u></b>	<b><u>AMOUNT</u></b>
Mines Department Fees	150
Hire Charges	300
Accommodation, Field, Travel Exp.	1,310
Assays	9,420
Consumables - Sampling etc.	550
Report and Plan Preparation	640
Motor Vehicle Charges and Fuel	830
AGSO Mapping	400
Satellite Imagery & Manipulation	1,500
GIS Manipulation	750
Salaries	6,220
Casual Wages	7,540
<hr/>	
<b>Subtotal</b>	<b>\$29,610</b>
Administration @ 15%	4,440
<hr/>	
<b>TOTAL</b>	<b><u>\$34,050</u></b>

**Table 4**

## **7.0 REFERENCES**

DENWER, K. (1989). Wandie Project Area EL's 3618 and 3619, Final Report (15.01.88 - 14.01.89). Unpublished report by RGC Exploration Pty. Ltd. for the NTDME.

NORTON, A. (1990). Wandie Project Area Relinquishment Report, November 1990. Open File report by Aardeau Mining N.L. for the NTDME.

## **APPENDIX 1**

### **Sample Locations and Assay Results**

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
107764	847800	8472060	3	12	29	64	40	L	L
107777	846500	8472076	0.9	8	17	L	13	L	L
107778	846400	8472078	2	11	18	19	20	L	L
107779	846300	8472079	0.7	6	11	L	13	L	L
107780	846200	8472080	20.6	13	46	63	33	L	L
107781	846200	8472080	11.2	12	40	21	21	L	L
107782	846100	8472081	0.5	8	34	L	28	L	L
107783	846000	8472083	0.3	7	36	L	33	L	L
107784	845900	8472084	0.4	4	11	L	14	L	L
107785	845800	8472085	0.8	6	15	L	16	L	L
107786	845700	8472086	0.7	6	15	L	18	L	L
107787	845600	8472088	13.4	5	10	L	15	L	L
107788	845500	8472089	0.4	7	16	L	23	L	L
107789	845400	8472090	0.5	6	43	L	175	L	L
107790	845300	8472091	0.6	5	28	L	37	L	L
107791	845200	8472093	1.8	6	18	L	27	L	L
107792	845100	8472094	2.2	6	14	L	18	L	L
107793	845000	8472095	1.2	5	16	L	22	L	L
107794	844900	8472096	0.5	5	16	L	21	L	L
107795	844800	8472098	L	6	18	L	23	L	L
107796	844700	8472099	0.3	8	20	L	30	L	L
107797	844600	8472100	3	7	17	L	29	L	L
107798	844500	8472101	0.2	8	16	L	22	L	L
107799	844400	8472103	2.6	7	13	L	21	L	L
107800	844300	8472104	1.2	6	16	L	22	L	L
107801	844300	8472104	1	6	18	L	22	L	L
107802	844200	8472105	2	5	22	L	28	L	L
107803	844100	8472106	2.3	7	41	L	36	L	L
107804	844000	8472108	1.3	6	74	L	88	L	L
107805	843900	8472109	0.4	4	13	L	26	L	L
107806	843800	8472110	0.4	6	13	58	26	L	L
107807	843700	8472111	0.4	4	13	18	24	L	L
107808	843600	8472113	0.3	5	12	L	22	L	L
107809	843500	8472114	0.1	5	10	L	17	L	L
107810	843400	8472115	1.1	5	11	L	13	L	L
107811	847802	8472260	0.3	10	23	L	20	L	L
107824	846602	8472275	0.7	79	35	11	29	L	L
107825	846502	8472276	0.8	80	36	10	27	L	L
107826	846402	8472278	0.4	9	18	L	17	L	L
107827	846302	8472279	L	7	17	L	13	L	L
107828	846202	8472280	L	8	19	L	17	L	L
107829	846102	8472281	L	7	24	L	18	L	L
107830	846002	8472283	L	8	60	L	27	L	L
107831	845902	8472284	L	8	40	L	23	L	L
107832	845802	8472285	L	8	48	L	31	L	L
107833	845702	8472286	0.3	5	26	L	22	L	L
107834	845602	8472288	0.2	5	16	L	16	L	L
107835	845502	8472289	0.4	8	21	L	24	L	L
107836	845402	8472290	0.5	7	14	L	18	L	L
107837	845302	8472291	4.9	8	13	L	17	L	L
107838	845202	8472293	L	11	35	L	35	L	L
107839	845102	8472294	0.8	7	31	L	97	L	L
107840	845002	8472295	0.3	5	16	L	19	L	L
107841	845002	8472295	L	6	20	L	21	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
107842	844902	8472296	L	5	13	L	18	L	L
107843	844802	8472298	0.4	4	13	L	19	L	L
107844	844702	8472299	0.2	4	14	L	21	L	L
107845	844602	8472300	0.1	5	18	L	21	L	L
107846	844502	8472301	0.3	5	14	L	21	L	L
107847	844402	8472303	0.2	5	16	L	18	L	L
107848	844302	8472304	0.3	5	17	55	26	L	L
107849	844202	8472305	0.5	7	18	17	29	L	L
107850	844102	8472306	L	7	17	L	35	L	L
107851	844002	8472308	L	5	17	L	33	L	L
107852	843902	8472309	0.8	4	20	L	30	L	L
107853	843802	8472310	1.4	4	10	L	14	L	L
107854	843702	8472311	1.3	4	21	L	29	L	L
107855	843602	8472313	L	4	33	L	36	L	L
107856	843502	8472314	L	5	15	L	30	L	L
107857	843402	8472315	0.2	7	18	L	33	L	L
107858	847804	8472460	0.4	5	15	L	27	L	L
107859	847704	8472461	0.2	6	12	L	14	L	L
107860	847604	8472463	0.1	6	12	L	19	L	L
107861	847604	8472463	0.5	6	11	L	19	L	L
107862	847504	8472464	0.4	4	8	L	16	L	L
107863	847404	8472465	0.4	3	8	L	21	L	L
107864	847304	8472466	0.6	4	10	L	22	L	L
107865	847204	8472468	0.2	3	8	L	14	L	L
107866	847104	8472469	0.2	7	8	L	15	L	L
107867	847004	8472470	0.5	60	29	L	24	L	L
107868	846904	8472471	0.8	48	29	L	23	L	L
107869	846804	8472473	0.7	11	65	L	31	L	L
107870	846704	8472474	0.6	6	11	L	14	L	L
107871	846604	8472475	0.2	5	12	L	16	L	L
107872	846504	8472476	0.5	6	12	L	19	L	L
107873	846404	8472478	0.4	7	12	L	13	L	L
107874	846304	8472479	0.5	6	11	L	11	L	L
107875	846204	8472480	0.8	10	19	L	22	L	L
107876	846104	8472481	0.6	10	19	L	23	L	L
107877	846004	8472483	0.4	7	17	L	16	L	L
107878	845904	8472484	0.7	7	19	L	19	L	L
107879	845804	8472485	0.3	7	16	L	18	L	L
107880	845704	8472486	1.1	6	12	L	18	L	L
107881	845704	8472486	0.7	6	12	L	17	L	L
107882	845604	8472488	0.2	6	12	L	22	L	L
107883	845504	8472489	0.4	6	16	L	16	L	L
107884	845404	8472490	0.3	7	19	L	22	L	L
107885	845304	8472491	0.2	6	16	L	20	L	L
107886	845204	8472493	0.4	6	14	L	18	L	L
107887	845104	8472494	0.4	5	11	L	16	L	L
107888	845004	8472495	1.5	5	10	L	16	L	L
107889	844904	8472496	0.4	5	10	L	14	L	L
107890	844804	8472498	0.6	7	22	51	25	L	L
107891	844704	8472499	0.6	4	15	14	20	L	L
107892	844604	8472500	0.5	11	31	11	19	L	L
107893	844504	8472501	0.7	6	15	L	14	L	L
107894	844404	8472503	1	7	12	L	12	L	L
107895	844304	8472504	0.9	6	12	L	13	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
107896	844204	8472505	1.7	4	11	L	7	L	L
107897	844104	8472506	0.6	4	13	L	14	L	L
107898	844004	8472508	0.4	5	13	L	19	L	L
107899	843904	8472509	1.8	4	12	L	14	L	L
107900	843804	8472510	0.3	5	11	L	12	L	L
107901	843804	8472510	0.3	4	11	L	13	L	L
107902	843704	8472511	0.2	17	76	L	46	L	L
107903	843604	8472513	0.4	3	82	L	40	L	L
107904	843504	8472514	0.3	5	16	L	26	L	L
107905	843404	8472515	0.2	5	15	L	24	L	L
107906	847806	8472660	0.5	11	20	L	23	L	L
107907	847706	8472661	0.6	6	32	L	32	L	L
107908	847606	8472663	0.4	7	17	L	19	L	L
107909	847506	8472664	0.6	5	14	L	19	L	L
107910	847406	8472665	0.5	5	8	L	13	L	L
107911	847306	8472666	0.9	4	11	L	20	L	L
107912	847206	8472668	9.6	5	12	L	22	L	L
107913	847106	8472669	4.5	6	18	L	38	L	L
107914	847006	8472670	3.6	7	17	L	32	L	L
107915	846906	8472671	3.3	51	29	L	20	L	L
107916	846806	8472673	1.2	55	29	L	21	L	L
107917	846706	8472674	1	55	28	L	26	L	L
107918	846606	8472675	0.6	59	28	L	25	L	L
107919	846506	8472676	0.4	10	24	L	20	L	L
107920	846406	8472678	0.2	7	17	L	17	L	L
107921	846406	8472678	0.8	7	14	L	16	L	L
107922	846306	8472679	0.7	15	16	L	12	L	L
107923	846206	8472680	0.4	7	13	L	12	L	L
107924	846106	8472681	8.2	9	15	14	19	L	L
107925	846006	8472683	2	9	17	L	13	L	L
107926	845906	8472684	0.4	7	19	L	17	L	L
107927	845806	8472685	0.2	7	21	L	31	L	L
107928	845706	8472686	0.3	6	12	L	16	L	L
107929	845606	8472688	0.5	4	13	L	18	L	L
107930	845506	8472689	0.3	4	15	L	15	L	L
107931	845406	8472690	0.4	5	24	L	19	L	L
107932	845306	8472691	0.2	7	22	L	20	L	L
107933	845206	8472693	1	7	13	60	16	L	L
107934	845106	8472694	15.2	5	12	16	16	L	L
107935	845006	8472695	4.3	4	8	L	12	L	L
107936	844906	8472696	2.8	4	10	L	13	L	L
107937	844806	8472698	0.6	7	17	L	22	L	L
107938	844706	8472699	0.5	4	11	L	17	L	L
107939	844606	8472700	0.5	5	12	L	11	L	L
107940	844506	8472701	0.6	6	13	L	12	L	L
107941	844506	8472701	5.4	5	12	L	12	L	L
107942	844406	8472703	22.8	6	12	L	12	L	L
107943	844306	8472704	L	6	12	L	13	L	L
107944	844206	8472705	0.3	5	9	L	9	L	L
107945	844106	8472706	0.4	5	12	L	14	L	L
107946	844006	8472708	0.4	4	12	L	16	L	L
107947	843906	8472709	0.3	5	10	L	12	L	L
107948	843806	8472710	0.2	5	13	L	16	L	L
107949	843706	8472711	0.2	4	31	L	45	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
107950	843606	8472713	0.4	3	28	L	35	L	L
107951	843506	8472714	0.2	5	18	L	23	L	L
107952	843406	8472715	4.6	4	9	L	23	L	L
107953	847808	8472860	0.5	12	32	L	16	L	L
107954	847708	8472861	0.3	16	19	L	12	L	L
107955	847608	8472863	0.4	26	17	L	21	L	L
107956	847508	8472864	0.9	11	16	L	21	L	L
107957	847408	8472865	0.5	6	12	L	16	L	L
107958	847308	8472866	0.3	7	10	L	14	L	L
107959	847208	8472868	0.4	38	16	L	21	L	L
107960	847108	8472869	0.3	59	21	L	19	L	L
107961	847108	8472869	0.7	59	22	L	21	L	L
107962	847008	8472870	1.1	66	24	L	22	L	L
107963	846908	8472871	0.4	37	19	L	22	L	L
107964	846808	8472873	0.5	10	23	L	19	L	L
107965	846708	8472874	0.3	6	25	L	19	L	L
107966	846608	8472875	1	8	25	L	21	L	L
107967	846508	8472876	0.2	6	19	L	15	L	L
107968	846408	8472878	0.8	10	14	L	16	L	L
107969	846308	8472879	0.9	7	14	L	14	L	L
107970	846208	8472880	1	9	12	L	14	L	L
107971	846108	8472881	2.4	7	12	L	11	L	L
107972	846008	8472883	0.2	7	11	L	13	L	L
107973	845908	8472884	0.4	8	9	L	16	L	L
107974	845808	8472885	0.5	6	23	L	23	L	L
107975	845708	8472886	0.1	15	33	54	26	L	L
107976	845608	8472888	0.6	12	50	12	25	L	L
107977	845508	8472889	0.6	9	50	L	29	L	L
107978	845408	8472890	0.4	9	102	L	30	L	L
107979	845308	8472891	2.6	9	27	L	15	L	L
107980	845208	8472893	0.3	8	24	L	16	L	L
107981	845208	8472893	0.2	8	22	L	16	L	L
107982	845108	8472894	0.6	7	19	L	17	L	L
107983	845008	8472895	0.3	7	18	L	14	L	L
107984	844908	8472896	0.5	6	15	L	14	L	L
107985	844808	8472898	0.4	7	21	L	22	L	L
107986	844708	8472899	0.1	5	18	L	19	L	L
107987	844608	8472900	L	8	23	L	22	L	L
107988	844508	8472901	L	9	32	L	21	L	L
107989	844408	8472903	0.4	11	29	L	18	L	L
107990	844308	8472904	0.3	7	22	L	17	L	L
107991	844208	8472905	0.1	6	19	L	14	L	L
107992	844108	8472906	0.2	6	14	L	8	L	L
107993	844008	8472908	0.4	7	18	L	13	L	L
107994	843908	8472909	12.2	5	23	L	15	L	L
107995	843808	8472910	L	5	16	L	13	L	L
107996	843708	8472911	L	6	19	L	14	L	L
107997	843608	8472913	0.2	4	20	L	43	L	L
107998	843508	8472914	6.9	5	54	L	41	L	L
107999	843408	8472915	2.6	5	29	L	37	L	L
108000	847810	8473060	0.1	20	25	L	27	L	L
108001	847810	8473060	L	19	23	L	25	L	L
108002	847710	8473061	L	29	48	L	36	L	L
108003	847610	8473063	0.1	18	38	L	36	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
108004	847510	8473064	L	11	22	L	25	L	L
108005	847410	8473065	0.1	8	16	L	17	L	L
108006	847310	8473066	0.2	10	17	L	18	L	L
108007	847210	8473068	L	27	21	L	22	L	L
108008	847110	8473069	0.2	57	29	L	25	L	L
108009	847010	8473070	0.3	33	24	L	21	L	L
108010	846910	8473071	0.2	26	34	L	29	L	L
108011	846810	8473073	0.1	10	17	L	20	L	L
108012	846710	8473074	IS	7	15	L	22	L	L
108013	846610	8473075	0.4	6	19	L	22	L	L
108014	846510	8473076	0.1	11	22	11	21	L	L
108015	846410	8473078	0.3	66	76	L	23	L	L
108016	846310	8473079	0.3	7	31	L	20	L	L
108017	846210	8473080	0.2	13	27	34	24	L	L
108018	846110	8473081	0.1	8	25	10	18	L	L
108019	846010	8473083	14.6	9	25	24	20	L	L
108020	845910	8473084	0.2	11	42	L	18	L	L
108021	845910	8473084	L	12	46	L	18	L	L
108022	845810	8473085	0.3	11	31	L	30	L	L
108023	845710	8473086	0.3	11	24	L	26	L	L
108024	845610	8473088	0.4	6	16	L	19	L	L
108025	845510	8473089	0.1	11	32	L	20	L	L
108026	845410	8473090	L	10	30	L	24	L	L
108027	845310	8473091	L	6	40	L	37	L	L
108028	845210	8473093	L	9	21	L	15	L	L
108029	845110	8473094	0.7	6	15	L	13	L	L
108030	845010	8473095	0.3	6	14	L	14	L	L
108031	844910	8473096	0.3	6	13	L	15	L	L
108032	844810	8473098	0.2	14	16	L	13	L	L
108033	844710	8473099	0.4	3	12	L	14	L	L
108034	844610	8473100	0.3	8	14	L	12	L	L
108035	844510	8473101	L	5	16	L	14	L	L
108036	844410	8473103	0.2	12	15	L	16	L	L
108037	844310	8473104	L	7	19	L	21	L	L
108038	844210	8473105	0.3	6	22	L	22	L	L
108039	844110	8473106	0.2	7	14	L	11	L	L
108040	844010	8473108	L	6	13	L	10	L	L
108041	844010	8473108	L	5	13	L	10	L	L
108042	843910	8473109	0.1	7	17	L	12	L	L
108043	843810	8473110	0.1	9	21	L	15	L	L
108044	843710	8473111	L	10	24	L	20	L	L
108045	843610	8473113	L	7	17	L	14	L	L
108046	843510	8473114	L	8	34	L	42	L	L
108047	843410	8473115	0.1	7	46	L	51	L	L
108048	843310	8473116	0.9	9	88	L	58	L	L
108049	847812	8473260	1.2	11	24	L	22	L	L
108050	847712	8473261	0.6	10	20	L	17	L	L
108051	847612	8473263	0.8	10	21	L	17	L	L
108052	847512	8473264	0.2	15	20	L	13	L	L
108053	847412	8473265	0.1	8	13	L	11	L	L
108054	847312	8473266	0.1	10	15	L	15	L	L
108055	847212	8473268	0.3	13	25	L	12	L	L
108056	847112	8473269	0.2	9	19	L	16	L	L
108057	847012	8473270	0.2	9	22	L	27	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
108058	846912	8473271	0.3	6	15	L	15	L	L
108059	846812	8473273	0.2	16	26	63	23	L	L
108060	846712	8473274	0.4	8	17	16	17	L	L
108061	846712	8473274	3.2	9	16	L	18	L	L
108062	846612	8473275	0.3	8	15	L	23	L	L
108063	846512	8473276	0.3	8	21	L	21	L	L
108064	846412	8473278	0.5	13	30	10	21	L	L
108065	846312	8473279	0.6	14	38	L	23	L	L
108066	846212	8473280	1.1	8	24	L	21	L	L
108067	846112	8473281	0.5	23	57	11	76	L	L
108068	846012	8473283	0.2	12	34	L	36	L	L
108069	845912	8473284	0.5	12	34	L	28	L	L
108070	845812	8473285	0.4	8	29	L	22	L	L
108071	845712	8473286	0.2	9	17	L	19	L	L
108072	845612	8473288	0.3	7	22	L	20	L	L
108073	845512	8473289	0.3	10	22	L	19	L	L
108074	845412	8473290	0.4	7	13	L	17	L	L
108075	845312	8473291	0.4	8	30	L	30	L	L
108076	845212	8473293	0.2	7	22	L	18	L	L
108077	845112	8473294	0.3	10	19	L	16	L	L
108078	845012	8473295	0.2	8	16	L	24	L	L
108079	844912	8473296	0.1	8	15	L	14	L	L
108080	844812	8473298	0.2	6	15	L	16	L	L
108081	844812	8473298	0.4	6	16	L	17	L	L
108082	844712	8473299	0.1	9	17	L	18	L	L
108083	844612	8473300	0.6	6	14	L	13	L	L
108084	844512	8473301	1.6	7	15	L	16	L	L
108085	844412	8473303	1.7	6	16	L	14	L	L
108086	844312	8473304	0.2	7	16	L	16	L	L
108087	844212	8473305	0.3	8	21	L	25	L	L
108088	844112	8473306	L	9	28	L	26	L	L
108089	844012	8473308	0.2	6	20	L	20	L	L
108090	843912	8473309	0.1	6	17	L	21	L	L
108091	843812	8473310	L	9	22	L	26	L	L
108092	843712	8473311	0.3	13	26	L	30	L	L
108093	843612	8473313	0.4	4	22	L	23	L	L
108094	843512	8473314	0.1	7	47	L	29	L	L
108095	843412	8473315	0.3	8	82	L	38	L	L
108096	847814	8473460	0.4	10	43	L	24	L	1
108097	847714	8473461	0.2	11	39	L	28	L	L
108098	847614	8473463	0.2	14	50	11	30	L	L
108099	847514	8473464	0.1	14	31	L	17	L	L
108100	847414	8473465	L	13	24	L	12	L	L
108101	847414	8473465	0.1	16	27	22	15	L	L
108102	847314	8473466	0.1	13	18	L	14	L	L
108103	847214	8473468	0.2	29	38	L	16	L	L
108104	847114	8473469	0.1	9	15	L	23	L	L
108105	847014	8473470	1.2	9	22	L	11	L	L
108106	846914	8473471	0.2	7	10	L	7	L	L
108107	846814	8473473	0.1	5	11	L	11	L	L
108108	846714	8473474	L	6	14	L	20	L	L
108109	846614	8473475	L	8	35	L	29	L	L
108110	846514	8473476	L	11	37	L	24	L	L
108111	846414	8473478	L	11	29	L	27	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
108112	846314	8473479	0.4	9	11	L	17	L	L
108113	846214	8473480	0.2	6	13	L	21	L	L
108114	846114	8473481	1.7	20	22	L	30	L	L
108115	846014	8473483	12.8	10	27	52	50	L	L
108116	845914	8473484	1	9	16	L	28	L	L
108117	845814	8473485	0.8	8	16	L	56	L	3
108118	845714	8473486	0.4	7	23	L	43	L	L
108119	845614	8473488	0.8	8	21	L	32	L	L
108120	845514	8473489	0.7	7	18	L	21	L	L
108121	845514	8473489	1.2	8	17	L	21	L	L
108122	845414	8473490	0.3	8	15	L	21	L	L
108123	845314	8473491	L	7	13	L	15	L	L
108124	845214	8473493	0.6	12	26	L	19	L	L
108125	845114	8473494	0.4	19	40	L	22	L	L
108126	845014	8473495	0.1	7	14	L	18	L	L
108127	844914	8473496	L	7	24	L	16	L	L
108128	844814	8473498	L	14	32	L	17	L	L
108129	844714	8473499	L	8	14	L	11	L	L
108130	844614	8473500	L	6	15	L	16	L	L
108131	844514	8473501	L	4	11	L	13	L	L
108132	844414	8473503	L	8	13	L	16	L	L
108133	844314	8473504	L	7	13	L	15	L	L
108134	844214	8473505	5.4	8	19	L	21	L	L
108135	844114	8473506	0.1	8	23	L	23	L	L
108136	844014	8473508	0.2	19	12	L	15	L	L
108137	843914	8473509	0.1	16	16	L	22	L	L
108138	843814	8473510	L	32	17	L	17	L	L
108139	843714	8473511	L	8	15	L	18	L	L
108140	843614	8473513	L	13	20	L	20	L	L
108141	843614	8473513	L	6	17	L	16	L	L
108142	843514	8473514	0.4	7	25	L	30	L	L
108143	843414	8473515	L	8	82	63	90	L	L
108144	847816	8473660	L	9	31	23	44	L	L
108145	847716	8473661	L	11	27	12	38	L	L
108146	847616	8473663	L	8	59	L	29	L	L
108147	847516	8473664	L	8	52	L	35	L	L
108148	847416	8473665	0.2	8	40	L	38	L	L
108149	847316	8473666	L	14	225	10	265	L	1
108150	847216	8473668	L	10	30	L	25	L	L
108151	847116	8473669	0.6	10	22	L	13	L	1
108152	847016	8473670	0.5	9	19	L	10	L	L
108153	846916	8473671	0.4	8	14	L	12	L	L
108154	846816	8473673	0.4	6	15	L	13	L	L
108155	846716	8473674	0.1	5	9	L	13	L	L
108156	846616	8473675	0.2	8	24	L	26	L	L
108157	846516	8473676	0.4	8	32	14	23	L	L
108158	846416	8473678	0.1	9	28	L	22	L	L
108159	846316	8473679	0.4	8	18	L	21	L	L
108160	846216	8473680	0.2	4	15	L	25	L	L
108161	846216	8473680	6	8	17	L	25	L	L
108162	846116	8473681	0.6	6	13	L	16	L	L
108163	846016	8473683	1	7	21	L	24	L	L
108164	845916	8473684	13.6	5	21	29	25	L	L
108165	845816	8473685	0.2	5	17	L	173	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
108166	845716	8473686	L	12	17	L	18	L	L
108167	845616	8473688	0.2	5	17	L	18	L	L
108168	845516	8473689	L	12	35	L	21	L	L
108169	845416	8473690	L	6	25	L	26	L	L
108170	845316	8473691	L	10	26	L	26	L	L
108171	845216	8473693	0.2	6	28	L	26	L	L
108172	845116	8473694	0.1	7	25	L	26	L	L
108173	845016	8473695	0.1	6	16	L	19	L	L
108174	844916	8473696	0.4	5	17	L	14	L	L
108175	844816	8473698	0.2	9	17	L	25	L	L
108176	844716	8473699	1	5	17	L	20	L	L
108177	844616	8473700	1.5	5	15	L	15	L	L
108178	844516	8473701	0.3	7	18	L	22	L	L
108179	844416	8473703	0.4	11	19	L	19	L	L
108180	844316	8473704	0.1	6	21	L	24	L	L
108181	844316	8473704	0.5	6	19	L	23	L	L
108182	844216	8473705	0.5	5	24	L	22	L	L
108183	844116	8473706	0.5	5	17	L	16	L	L
108184	844016	8473708	0.7	3	12	L	10	L	L
108185	843916	8473709	0.5	9	17	L	9	L	L
108186	843816	8473710	0.5	14	17	L	9	L	L
108187	843716	8473711	0.6	8	16	L	10	L	L
108188	843616	8473713	0.9	11	13	L	11	L	L
108189	843516	8473714	0.4	4	9	L	9	L	L
108190	843416	8473715	0.6	6	11	L	14	L	L
108191	847818	8473860	0.3	6	21	23	39	L	L
108192	847718	8473861	0.6	8	24	14	36	L	L
108193	847618	8473863	0.7	7	35	11	66	L	L
108194	847518	8473864	0.5	8	24	L	19	L	L
108195	847418	8473865	0.4	6	21	L	15	L	L
108196	847318	8473866	0.5	10	39	11	47	L	L
108197	847218	8473868	0.2	11	43	L	18	L	L
108198	847118	8473869	0.2	10	25	L	14	L	L
108199	847018	8473870	0.6	8	16	L	13	L	L
108200	846918	8473871	0.3	8	13	L	12	L	L
108201	846918	8473871	IS	8	15	L	10	L	L
108202	846818	8473873	0.2	23	12	L	8	L	L
108203	846718	8473874	0.1	7	13	L	11	L	L
108204	846618	8473875	0.2	8	29	L	22	L	L
108205	846518	8473876	0.3	6	25	L	20	L	L
108206	846418	8473878	0.2	9	27	L	15	L	L
108207	846318	8473879	0.4	10	15	L	25	L	L
108208	846218	8473880	0.4	7	18	L	20	L	L
108209	846118	8473881	0.3	6	22	L	37	L	L
108210	846018	8473883	0.6	3	11	L	17	L	L
108211	845918	8473884	3.7	5	15	L	25	L	L
108212	845818	8473885	0.4	5	12	L	23	L	L
108213	845718	8473886	0.1	5	14	L	17	L	L
108214	845618	8473888	0.3	6	18	L	13	L	L
108215	845518	8473889	0.3	7	15	L	12	L	L
108216	845418	8473890	0.6	7	29	L	40	L	L
108217	845318	8473891	0.5	9	45	L	32	L	L
108218	845218	8473893	0.4	5	28	L	23	L	L
108219	845118	8473894	0.3	7	60	L	34	L	L

## EL 9051 Soil Sample Results

SAMPLE NO.	AMG EAST	MG NORTH	Au PPB	Cu PPM	n PPM	As PPM	Pb PPM	Sn PPM	Ag PPM
108220	845018	8473895	0.6	5	23	L	26	L	L
108221	845018	8473895	0.3	5	22	L	26	L	L
108222	844918	8473896	1	4	17	L	22	L	L
108223	844818	8473898	0.4	5	14	L	18	L	L
108224	844718	8473899	0.3	6	13	L	16	L	L
108225	844618	8473900	0.1	5	12	L	12	L	L
108226	844518	8473901	1	6	17	L	16	L	L
108227	844418	8473903	L	5	17	L	21	L	L
108228	844318	8473904	0.2	8	27	67	29	L	L
108229	844218	8473905	0.2	5	16	13	22	L	L
108230	844118	8473906	0.1	5	15	L	18	L	L
108231	844018	8473908	0.2	5	12	L	14	L	L
108232	843918	8473909	0.1	4	10	L	11	L	L
108233	843818	8473910	3.8	6	14	L	12	L	L
108234	843718	8473911	0.3	8	18	L	11	L	L
108235	843618	8473913	0.2	9	17	L	9	L	L
108236	843518	8473914	L	6	12	L	10	L	L
108237	843418	8473915	0.1	5	12	L	10	L	L

## **APPENDIX 2**

### **Statistical Plots for Au, Cu, As, Pb and Zn**

