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## **No. 9599**

**EL 2589**

**CROSSVILLE**

**ANNUAL AND FINAL REPORT FOR THE PERIOD 26/3/99  
TO 25/3/2000**

Submitted by

Goldstream Mining NL  
2000

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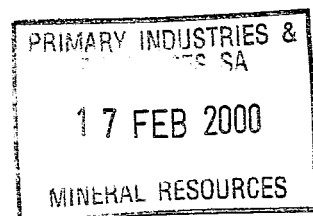
**PRIMARY INDUSTRIES  
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**GOLDSTREAM MINING N.L.**  
**A.C.N. 009 129 560**

**Annual & Final Report**  
**EL 2589 "CROSSVILLE"**

**For period 26 March 1999 to 25 March 2000**

**Author:** P. Greenhill  
**Date:** February 2000  
**Copies to:** PIRSA (2)  
GDM – Perth  
GDM – Adelaide



**GDM Report No: 071**

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## **1. Summary**

Exploration during the past 12 months on EL 2589 has comprised regional calcrete, BCL drainage, lag and rock-chip sampling. No significant results were returned and the tenement will be relinquished at the end of the current year of tenure.

## **2. Introduction**

Exploration Licence 2589 "Crossville" is situated approximately 5km east of the township of Cleve on Eyre Peninsula (Fig.1). The region is easily accessible via a network of public roads and farm tracks.

Principal land uses in the area are grain growing and sheep/cattle grazing on what is dominantly freehold and perpetual leasehold land. The Yeldulknie Conservation Park is excluded from the exploration licence.

## **3. Tenure**

Exploration Licence 2589 "Crossville" was granted to Goldstream Mining on 26<sup>th</sup> March 1999 to explore for gold and base metals for a period of one year. The tenement will be relinquished at the end of the current year of tenure.

## **4. Geology**

Exploration Licence 2589 is located within the folded and metamorphosed Cleve Subdomain in the southern Gawler Craton. The lower unit of the Cleve Subdomain, the Palaeoproterozoic Hutchison Group, has been intruded by Lincoln Complex granitoids during the Kimban Orogeny. These rocks, in turn, are overlain by Neoproterozoic sediments and minor volcanic units with a covering of Quaternary sediments and regolith material throughout the area.

The Hutchison Group comprises terrigenous to shallow marine clastic sediments, iron formations, carbonates and mafic ( $\pm$  acid) volcanics. The basal unit of the Hutchison Group, the Warrow Quartzite is conformably overlain by the metamorphosed sediments of the Middleback Subgroup. Historical Pb-Zn prospects are hosted within or adjacent to the Middleback Subgroup, and this group of rocks provides a possible target for Au, Ag, Cu and Fe mineralisation.

## **5. Current Exploration**

### **5.1 Calcrete Geochemistry**

One hundred and seven calcrete samples were collected along roadsides of the tenement at a nominal spacing of 400m. Samples were analysed for Au, Cu, As and Ca with peak results including 14ppb Au and 11ppb Au.

All sample data is included as Appendix 1 and Plate 1-2.

### **5.2 Lag Geochemistry**

A total of 6 lag samples were collected and analysed for Au, Ag and Cu. No significant results were returned. Appendix 2.

### **5.3 Rockchips**

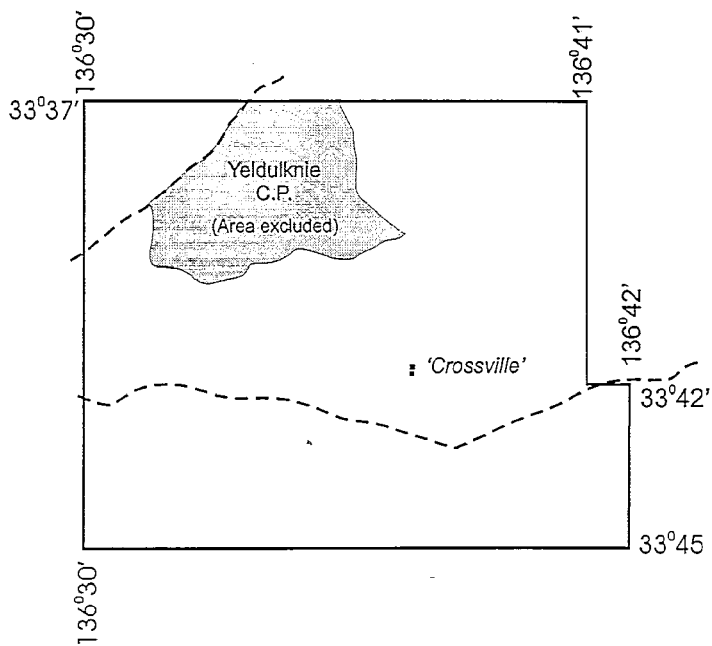
Two samples of vein quartz were taken from areas that had returned elevated gold results in calcrete. Results of 3ppb Au and 2ppb Au are believed to explain the calcrete anomalies. Appendix 3.

### **5.4 BCL Drainage Geochemistry**

Twenty-seven drainage BCL samples were collected and analysed for Au, Cu and Ag. No significant results were returned. Data is included in this report as Appendix 4 and Plate 3.

## **6. Conclusions**

An assessment of all sample data has led to the conclusion that little scope remains for the tenement to contain substantial economic deposits. Consequently the exploration licence will not be renewed for a second year .



0 20 km

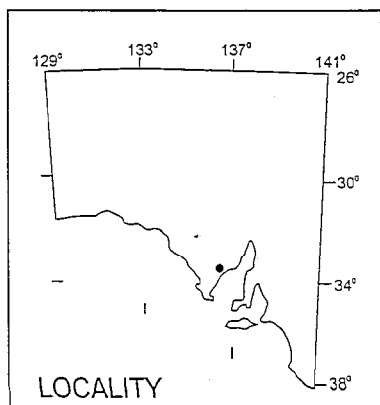
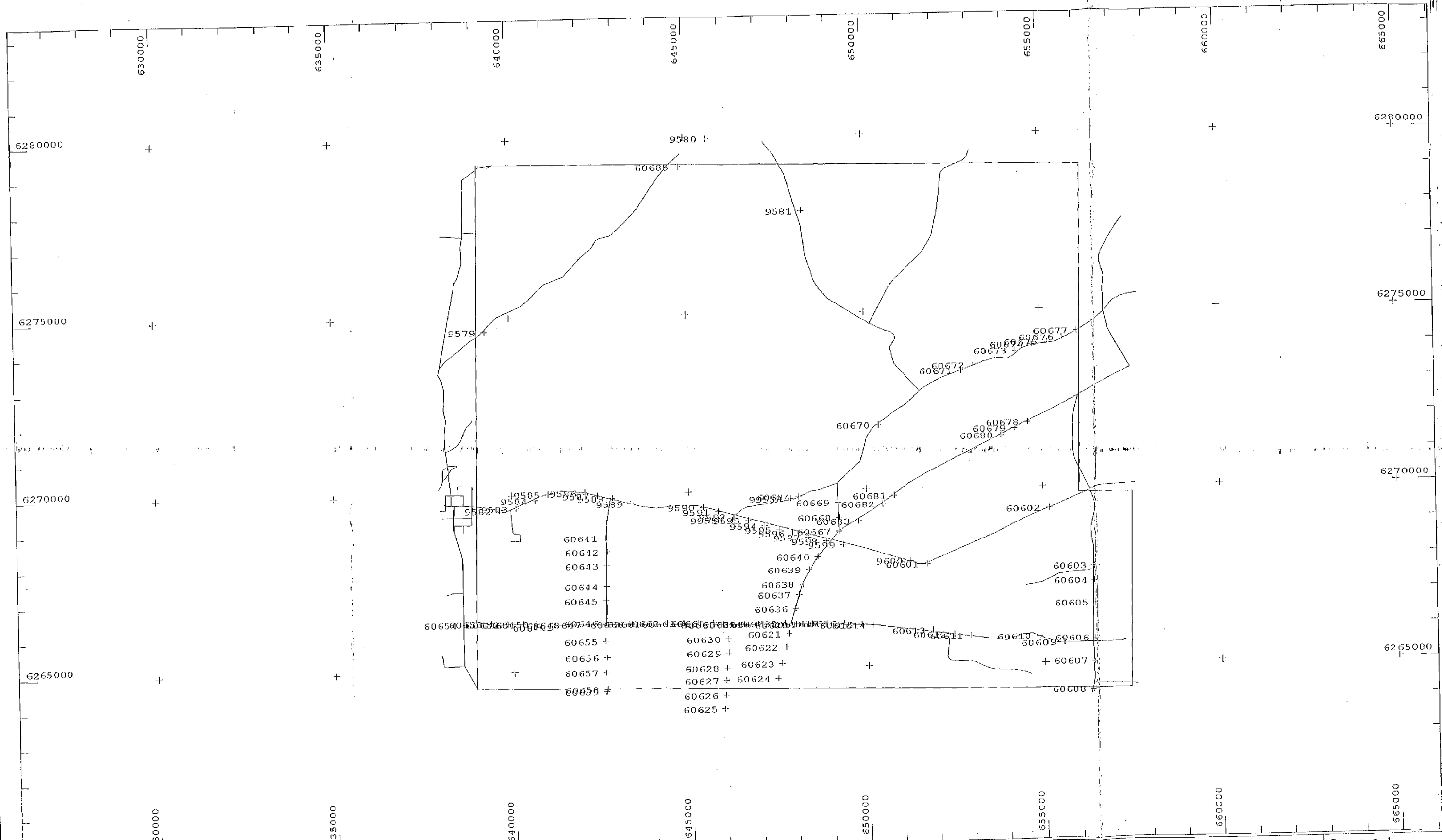


FIG. 1

|                        |              |        |
|------------------------|--------------|--------|
| GOLDSTREAM MINING N.L. |              |        |
| EL 2589 - CROSSVILLE   |              |        |
| Location plan          |              |        |
| SCALE: 1: 250 000      | DATE: DEC 98 |        |
| DRAWN: FR              | REPT. NO 071 | SA 252 |



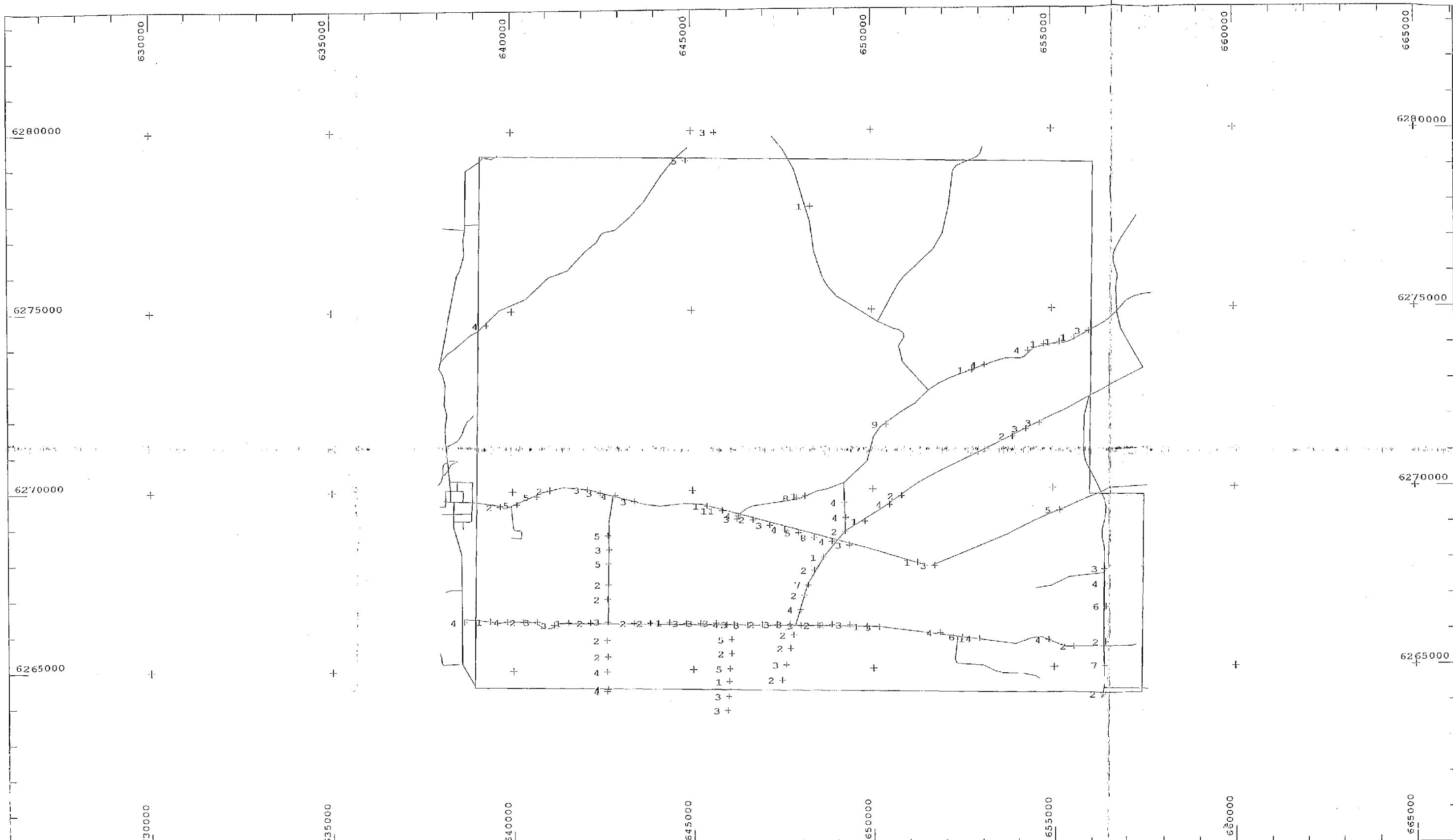
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Crossville E.L. 2589  
Calcrete Geochemistry  
Sample Numbers

PLATE 1  
SA 299  
ADM Rept 071





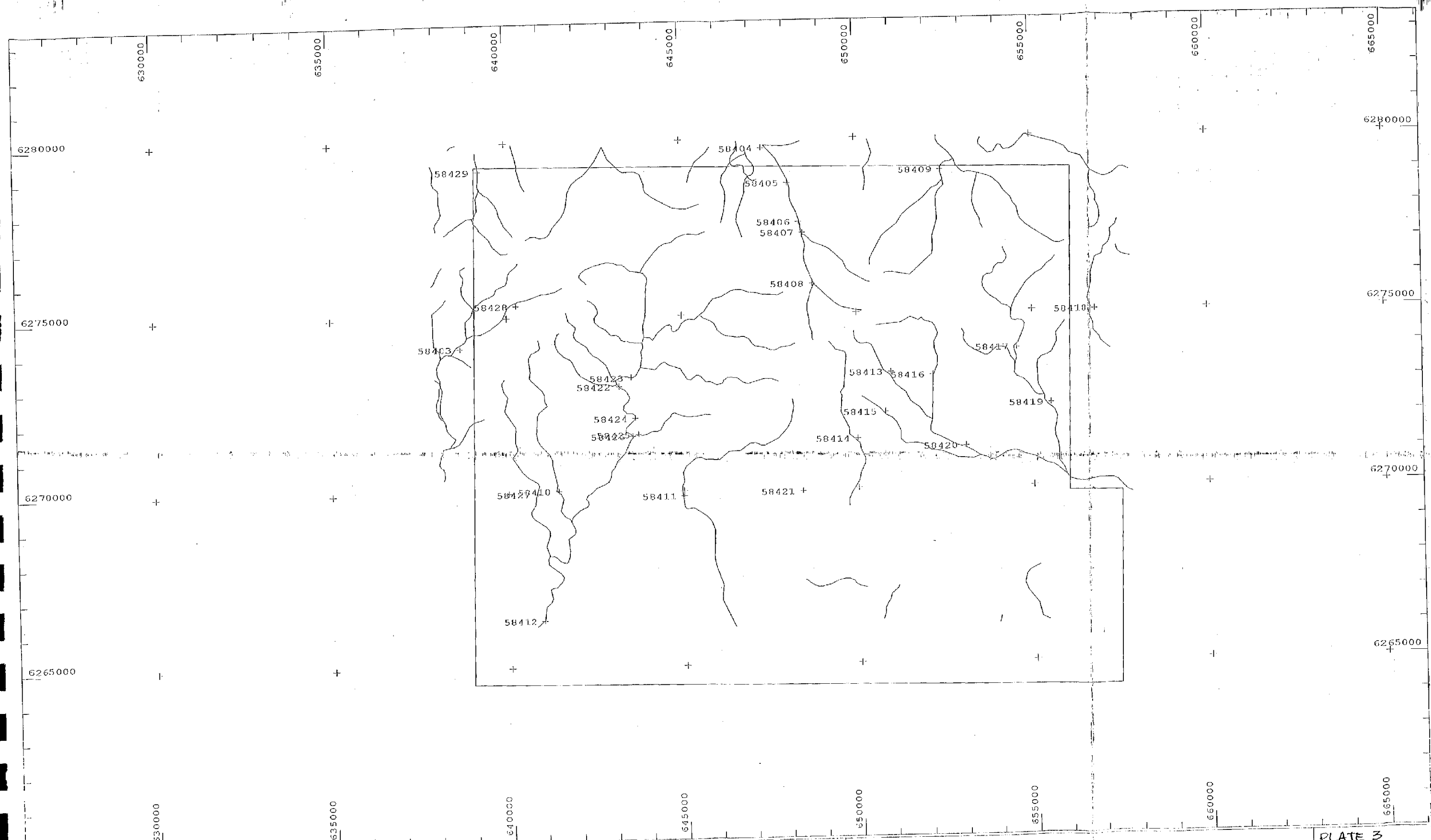
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Crossville E.L. 2589  
Calcrete Geochemistry  
Au values (ppb)

PLATE 2

SA 300  
ADM Rept 071



GOLDSTREAM MINING N. L.

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Crossville E.L. 2589  
-40# BCL Drainage Geochemistry  
Sample Numbers

PLATE 3  
SA 301  
ADM Rept 071

# Appendix 1

## Calcrete Geochemical Data

| SAMPLE | EAST   | NORTH   | EL   | Au (ppb) | Ca (%) | As (ppm) | Cu (ppm) |
|--------|--------|---------|------|----------|--------|----------|----------|
| 60601  | 651700 | 6267850 | 2589 | 3        | 7.4    | <5       | 4        |
| 60602  | 655170 | 6269370 | 2589 | 5        | 21.5   | <5       | 15       |
| 60603  | 656420 | 6267720 | 2589 | 3        | 3.9    | 5        | 4        |
| 60604  | 656430 | 6267300 | 2589 | 4        | 19.5   | <5       | 10       |
| 60605  | 656450 | 6266670 | 2589 | 6        | 13.5   | <5       | 13       |
| 60606  | 656440 | 6265680 | 2589 | 2        | 24     | <5       | 10       |
| 60607  | 656400 | 6265020 | 2589 | 7        | 26.5   | <5       | 6        |
| 60608  | 656350 | 6264220 | 2589 | 2        | 26     | <5       | 8        |
| 60609  | 655530 | 6265560 | 2589 | 2        | 24.5   | <5       | 9        |
| 60610  | 654860 | 6265750 | 2589 | 4        | 19     | <5       | 12       |
| 60611  | 652920 | 6265800 | 2589 | 14       | 19     | <5       | 20       |
| 60612  | 652450 | 6265850 | 2589 | 6        | 22.5   | <5       | 11       |
| 60613  | 651850 | 6265970 | 2589 | 4        | 22     | <5       | 20       |
| 60614  | 650150 | 6266140 | 2589 | 3        | 23     | <5       | 7        |
| 60615  | 649810 | 6266160 | 2589 | 1        | 25     | <5       | 8        |
| 60616  | 649330 | 6266210 | 2589 | 3        | 23     | <5       | 9        |
| 60617  | 648840 | 6266220 | 2589 | 2        | 24     | <5       | 11       |
| 60618  | 648430 | 6266210 | 2589 | 2        | 14     | <5       | 13       |
| 60619  | 647970 | 6266200 | 2589 | 3        | 24     | <5       | 19       |
| 60620  | 647970 | 6266200 | 2589 | 1        | 25.5   | <5       | 15       |
| 60621  | 647770 | 6265950 | 2589 | 2        | 23.5   | <5       | 10       |
| 60622  | 647680 | 6265570 | 2589 | 2        | 26.5   | <5       | 9        |
| 60623  | 647560 | 6265110 | 2589 | 3        | 19.5   | <5       | 9        |
| 60624  | 647440 | 6264690 | 2589 | 2        | 21     | <5       | 7        |
| 60625  | 645930 | 6263850 | 2589 | 3        | 24.5   | <5       | 8        |
| 60626  | 645960 | 6264240 | 2589 | 3        | 22.5   | <5       | 10       |
| 60627  | 645980 | 6264650 | 2589 | 1        | 24     | <5       | 7        |
| 60628  | 646000 | 6265010 | 2589 | 5        | 24     | <5       | 13       |
| 60629  | 646050 | 6265430 | 2589 | 2        | 17.5   | <5       | 8        |
| 60630  | 646050 | 6265820 | 2589 | 5        | 16.5   | <5       | 9        |
| 60631  | 646120 | 6266240 | 2589 | 3        | 19.5   | <5       | 10       |
| 60632  | 646490 | 6266230 | 2589 | 3        | 19.5   | <5       | 12       |
| 60633  | 646890 | 6266240 | 2589 | 2        | 27     | <5       | 8        |
| 60634  | 647310 | 6266240 | 2589 | 3        | 21.5   | <5       | 13       |
| 60635  | 647660 | 6266240 | 2589 | 3        | 25     | <5       | 19       |
| 60636  | 647970 | 6266650 | 2589 | 4        | 20.5   | <5       | 14       |
| 60637  | 648070 | 6267050 | 2589 | 2        | 9.4    | <5       | 10       |
| 60638  | 648180 | 6267340 | 2589 | 7        | 23     | <5       | 28       |
| 60639  | 648360 | 6267750 | 2589 | 2        | 27     | <5       | 13       |
| 60640  | 648620 | 6268110 | 2589 | 1        | 14.5   | <5       | 21       |
| 60641  | 642650 | 6268750 | 2589 | 5        | 19     | <5       | 9        |
| 60642  | 642680 | 6268360 | 2589 | 3        | 17.5   | <5       | 13       |
| 60643  | 642670 | 6267970 | 2589 | 5        | 18.5   | <5       | 8        |
| 60644  | 642650 | 6267390 | 2589 | 2        | 23     | <5       | 5        |
| 60645  | 642630 | 6266980 | 2589 | 2        | 16     | <5       | 9        |
| 60646  | 642630 | 6266350 | 2589 | 3        | 22.5   | <5       | 6        |
| 60647  | 642150 | 6266320 | 2589 | 2        | 18     | <5       | 9        |
| 60648  | 641550 | 6266330 | 2589 | 1        | 6.6    | <5       | 8        |

| SAMPLE | EAST   | NORTH   | EL   | Au (ppb) | Ca (%) | As (ppm) | Cu (ppm) |
|--------|--------|---------|------|----------|--------|----------|----------|
| 60649  | 641150 | 6266270 | 2589 | 3        | 21.5   | <5       | 12       |
| 60650  | 640660 | 6266360 | 2589 | 3        | 22     | <5       | 10       |
| 60651  | 640280 | 6266360 | 2589 | 2        | 22     | <5       | 9        |
| 60652  | 639830 | 6266370 | 2589 | 4        | 21     | <5       | 17       |
| 60653  | 639360 | 6266390 | 2589 | 1        | 20     | <5       | 6        |
| 60654  | 638650 | 6266370 | 2589 | 4        | 18.5   | <5       | 10       |
| 60655  | 642610 | 6265830 | 2589 | 2        | 26     | <5       | 9        |
| 60656  | 642630 | 6265370 | 2589 | 2        | 23.5   | <5       | 6        |
| 60657  | 642610 | 6264950 | 2589 | 4        | 24     | <5       | 18       |
| 60658  | 642630 | 6264470 | 2589 | 4        | 21.5   | <5       | 9        |
| 60659  | 642610 | 6264410 | 2589 | 4        | 22     | <5       | 9        |
| 60660  | 643350 | 6266300 | 2589 | 2        | 24     | <5       | 8        |
| 60661  | 643820 | 6266300 | 2589 | 2        | 16     | <5       | 8        |
| 60662  | 644340 | 6266310 | 2589 | 1        | 3.2    | <5       | 6        |
| 60663  | 644800 | 6266290 | 2589 | 3        | 21     | <5       | 8        |
| 60664  | 645200 | 6266290 | 2589 | 3        | 21.5   | <5       | 12       |
| 60665  | 645620 | 6266290 | 2589 | 3        | 20     | <5       | 11       |
| 60666  | 645900 | 6266240 | 2589 | 4        | 24     | <5       | 10       |
| 60667  | 649220 | 6268820 | 2589 | 2        | 28     | <5       | 9        |
| 60668  | 649240 | 6269210 | 2589 | 4        | 26.5   | <5       | 30       |
| 60669  | 649200 | 6269630 | 2589 | 4        | 26     | <5       | 17       |
| 60670  | 650370 | 6271790 | 2589 | 9        | 5.4    | <5       | 23       |
| 60671  | 652750 | 6273290 | 2589 | 1        | 23.5   | <5       | 9        |
| 60672  | 653100 | 6273430 | 2589 | 4        | 27     | <5       | 9        |
| 60673  | 654320 | 6273820 | 2589 | 4        | 24.5   | <5       | 15       |
| 60674  | 654780 | 6273990 | 2589 | 1        | 31     | <5       | 8        |
| 60675  | 655190 | 6274050 | 2589 | 1        | 26.5   | <5       | 4        |
| 60676  | 655600 | 6274180 | 2589 | 1        | 20     | <5       | 12       |
| 60677  | 656010 | 6274360 | 2589 | 3        | 24     | <5       | 10       |
| 60678  | 654630 | 6271800 | 2589 | 3        | 23     | <5       | 18       |
| 60679  | 654250 | 6271640 | 2589 | 3        | 24     | <5       | 19       |
| 60680  | 653880 | 6271440 | 2589 | 2        | 26     | <5       | 16       |
| 60681  | 650800 | 6269800 | 2589 | 2        | 28     | <5       | 5        |
| 60682  | 650470 | 6269560 | 2589 | 4        | 19     | <5       | 11       |
| 60683  | 649770 | 6269100 | 2589 | 1        | 25.5   | <5       | 8        |
| 60684  | 648100 | 6269820 | 2589 | 1        | 12.5   | <5       | 8        |
| 60685  | 644860 | 6279170 | 2589 | 5        | 13     | <5       | 30       |
| 9579   | 639300 | 6274620 | 2589 | 4        | 24     | <5       | 7        |
| 9580   | 645640 | 6279950 | 2589 | 3        | 14     | <5       | 9        |
| 9581   | 648290 | 6277870 | 2589 | 1        | 2.6    | <5       | 10       |
| 9582   | 639650 | 6269580 | 2589 | 2        | 27     | <5       | 17       |
| 9583   | 640120 | 6269630 | 2589 | 5        | 20     | <5       | 11       |
| 9584   | 640680 | 6269850 | 2589 | 5        | 25.5   | <5       | 15       |
| 9585   | 641050 | 6270020 | 2589 | 2        | 21.5   | <5       | 8        |
| 9586   | 642090 | 6270040 | 2589 | 3        | 22     | <5       | 7        |
| 9587   | 642440 | 6269940 | 2589 | 3        | 21     | <5       | 9        |
| 9588   | 642850 | 6269870 | 2589 | 4        | 24     | <5       | 16       |
| 9589   | 643380 | 6269700 | 2589 | 3        | 22     | <5       | 11       |

| SAMPLE | EAST   | NORTH   | EL   | Au (ppb) | Ca (%) | As (ppm) | Cu (ppm) |
|--------|--------|---------|------|----------|--------|----------|----------|
| 9590   | 645390 | 6269560 | 2589 | 1        | 6.8    | <5       | 5        |
| 9591   | 645810 | 6269430 | 2589 | 11       | 25.5   | <5       | 17       |
| 9592   | 646260 | 6269280 | 2589 | 4        | 26     | <5       | 8        |
| 9593   | 646660 | 6269170 | 2589 | 2        | 30     | <5       | 9        |
| 9594   | 647120 | 6269010 | 2589 | 3        | 22.5   | <5       | 12       |
| 9595   | 647540 | 6268890 | 2589 | 4        | 28.5   | <5       | 35       |
| 9596   | 647920 | 6268790 | 2589 | 5        | 20     | <5       | 9        |
| 9597   | 648350 | 6268660 | 2589 | 8        | 23.5   | <5       | 22       |
| 9598   | 648860 | 6268550 | 2589 | 4        | 26     | <5       | 10       |
| 9599   | 649330 | 6268440 | 2589 | 3        | 20.5   | <5       | 11       |
| 9600   | 651240 | 6267950 | 2589 | 1        | 7.2    | <5       | 12       |
| 99557  | 646220 | 6269190 | 2589 | 3        | 15     | <5       | 12       |
| 99558  | 647870 | 6269770 | 2589 | 8        | 16     | <5       | 55       |

## Appendix 2

### Lag Geochemical Data

| SAMPLE | EAST   | NORTH   | EL   | Au (ppb) | Fe (%) | Ni (ppm) | Cu (ppm) | As (ppm) | Pb (ppm) |
|--------|--------|---------|------|----------|--------|----------|----------|----------|----------|
| 57474  | 645140 | 6279700 | 2589 | 1        | 54     | 13       | 74       | 10       | 150      |
| 57475  | 648200 | 6278080 | 2589 | <0.1     | 9.6    | 5        | 12       | 15       | 66       |
| 57476  | 648580 | 6276290 | 2589 | 1        | 9      | 11       | 9        | 10       | 43       |
| 57477  | 650350 | 6274860 | 2589 | <0.1     | 34     | 180      | 48       | <5       | 46       |
| 57478  | 651250 | 6276150 | 2589 | <0.1     | 7.2    | 35       | 37       | 5        | 42       |
| 57479  | 651650 | 6276550 | 2589 | 2        | 9.4    | 20       | 38       | <5       | 56       |



## Appendix 3

### Rockchip Geochemical Data

| SAMPLE | EAST   | NORTH   | EL   | NOTES   | Au (ppb) |
|--------|--------|---------|------|---|----------|
| 99349  | 652960 | 6265840 | 2589 | Quartz veins in mylonitic quartz/feldspar schist. | 3        |
|        |        |         |      | Calcrete 14 ppb site.                             |          |
| 99350  | 645730 | 6269450 | 2589 | Quartz boudins in chlorite schist.                | 2        |
|        |        |         |      | Calcrete 11 ppb site.                             |          |

## Appendix 4

### BCL Drainage Geochemical Data

| SAMPLE | EAST   | NORTH   | EL   | Au (ppb) | Cu (ppm) | Ag (ppb) |
|--------|--------|---------|------|----------|----------|----------|
| 58403  | 638680 | 6274150 | 2589 | <0.1     | 0.39     | 0.1      |
| 58404  | 647360 | 6279730 | 2589 | <0.1     | 0.56     | <0.1     |
| 58405  | 648090 | 6278730 | 2589 | <0.1     | 0.8      | <0.1     |
| 58406  | 648400 | 6277610 | 2589 | <0.1     | 0.64     | <0.1     |
| 58407  | 648500 | 6277300 | 2589 | <0.1     | 0.84     | <0.1     |
| 58408  | 648760 | 6275840 | 2589 | 0.1      | 0.82     | 0.03     |
| 58409  | 652450 | 6279030 | 2589 | <0.1     | 0.21     | <0.1     |
| 58410  | 641440 | 6270050 | 2589 | 0.1      | 0.72     | 0.02     |
| 58411  | 645000 | 6269850 | 2589 | <0.1     | 0.76     | 0.02     |
| 58412  | 640970 | 6266350 | 2589 | <0.1     | 0.14     | <0.1     |
| 58413  | 650960 | 6273280 | 2589 | 0.5      | 0.84     | 0.02     |
| 58414  | 649990 | 6271400 | 2589 | 0.1      | 0.47     | <0.1     |
| 58415  | 650780 | 6272150 | 2589 | 0.2      | 0.37     | <0.1     |
| 58416  | 652140 | 6273190 | 2589 | 0.1      | 0.72     | <0.1     |
| 58417  | 654550 | 6273930 | 2589 | 0.2      | 0.16     | <0.1     |
| 58418  | 656820 | 6274980 | 2589 | 0.6      | 1.35     | 0.02     |
| 58419  | 655500 | 6272330 | 2589 | <0.1     | 0.74     | <0.1     |
| 58420  | 653050 | 6271150 | 2589 | 0.1      | 0.39     | <0.1     |
| 58421  | 648400 | 6269930 | 2589 | 0.2      | 1.45     | 0.01     |
| 58422  | 643180 | 6273000 | 2589 | <0.1     | 0.5      | 0.03     |
| 58423  | 643550 | 6273250 | 2589 | 0.1      | 0.26     | <0.1     |
| 58424  | 643650 | 6272090 | 2589 | <0.1     | 0.19     | 0.01     |
| 58425  | 643730 | 6271620 | 2589 | <0.1     | 0.29     | 0.02     |
| 58426  | 643560 | 6271580 | 2589 | <0.1     | 0.23     | <0.1     |
| 58427  | 640830 | 6269980 | 2589 | <0.1     | 0.16     | 0.02     |
| 58428  | 640280 | 6275350 | 2589 | 0.6      | 0.98     | 0.03     |
| 58429  | 639250 | 6279200 | 2589 | <0.1     | 0.35     | <0.1     |