

|          |             |     |
|----------|-------------|-----|
| LOG NO:  | MAR 09 1993 | RD. |
| ACTION:  |             |     |
| FILE NO: |             |     |

GEOLOGICAL AND GEOCHEMICAL

ASSESSMENT REPORT

for the

GOLDEN LOON CLAIM GROUP

THE GOLDEN LOON I, II, III, IV, V, VI, VII, IX CLAIMS

LUC 1 TO 14 CLAIMS (INC.)

GOLDEN LOON 10 TO 29 CLAIMS (INC.)

NTS 92P/8

for

PLACER DOME INC.  
 1440 HUGH ALLAN DRIVE  
 KAMLOOPS, B.C.  
 V1S 1L8

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**22,818**

Property Owner:

Star of Mines Ltd.

Operator:

Placer Dome Inc.

Report Authors:

R.C. Wells, B.Sc., FGAC.  
 Consulting Geologist

Jean-François Métail, B.Sc.,  
 Geologist, Placer Dome Inc.

February 10, 1993

## TABLE OF CONTENTS

|  | <b>page</b> |
|--|-------------|
| Summary and Conclusions                          | 1           |
| 1.0 INTRODUCTION                                 | 4           |
| 1.1 Location and Access                          | 4           |
| 1.2 Property                                     | 4           |
| 1.3 Physiography and Vegetation                  | 7           |
| 1.4 History and Previous Work                    | 7           |
| 1.5 Regional Geology and Mineralization          | 8           |
| 1.6 Property Geology                             | 8           |
| 2.0 THE 1992 EXPLORATION PROGRAM ON THE PROPERTY | 11          |
| 2.1 Introduction                                 | 11          |
| 2.2 Grid Preparation                             | 11          |
| 2.3 Terrain Analyses                             | 11          |
| 2.4 Soil Geochemical Survey                      | 12          |
| 2.5 Geological Mapping                           | 14          |
| 2.6 Prospecting and Sampling                     | 15          |
| 3.0 REFERENCES                                   | 16          |
| 4.0 STATEMENT OF EXPENDITURES                    | 17          |
| 5.0 STATEMENT OF QUALIFICATIONS                  | 19          |

**LIST OF APPENDICES**  
**(At Rear of Report)**

- APPENDIX 1:       PROPERTY AND GRIDS  
                  Figures 4 and 5
- APPENDIX 2:       TERRAIN ANALYSES/SURFICIAL GEOLOGY  
                  Report by T.H.F. Reimchen  
                  Pegasus Earth Sensing Corporation  
                  Figure 6: Terrain Analyses
- APPENDIX 3:       GEOCHEMICAL DATA (SOILS)  
                  3a - Soil Sample Geochemical Certificates  
                  3b - Geochemical Plots  
                      Histograms with Statistics. Figures 8.0 to 8.3 Inc.  
                      Scatterplots with Statistics. Figures 9.0 to 9.2 Inc.  
                  3c - Large Figures and Plans  
                      Figures 7.0 to 7.4 Inc. Soil Geochemistry AU, Cu, Pb, Zn.
- APPENDIX 4:       GEOCHEMICAL DATA (ROCKS)  
                  4a - Rock Sample Geochemical Certificates  
                  4b - Rock Sample Descriptions - 1992 Surveys, PDI  
                  4c - Large Figures and Plans  
                      Figures 10.0 to 10.2 Inc. Rock Sample Geochemistry Au,Cu.
- APPENDIX 5:       GOLDEN LOON PROSPECT - GEOLOGY  
                  Report by D.G. Bailey  
                  Bailey Geological Consultants (Canada) Ltd.  
                  Figure 11: Geology Map
- APPENDIX 6:       Statement of Work 1992

## LIST OF FIGURES

following page no.

|             |  |             |
|-------------|--|-------------|
| Figure 1    | Property Location Map  | 2           |
| Figure 2    | Claim Map  | 5           |
| Figure 3    | Regional Geology Map   | 9           |
| Figure 4    | Claim Map with Topography  | Appendix 1  |
| Figure 5    | Claim Map with 1992 Grids  | Appendix 1  |
| Figure 6    | Terrain Analyses<br>Pegasus Earth Sensing Corporation                                    | Appendix 2  |
| Figure 7.0  | Geochemical (Soil) Sample Location Map   | Appendix 3c |
| Figure 7.1  | Gold (ppb) in Soil Samples   | Appendix 3c |
| Figure 7.2  | Copper (ppm) in Soil Samples   | Appendix 3c |
| Figure 7.3  | Lead (ppm) in Soil Samples   | Appendix 3c |
| Figure 8.0  | Golden Loon Soils-Au. Histogram with Statistics  | Appendix 3b |
| Figure 8.1  | Golden Loon Soils-Cu. Histogram with Statistics  | Appendix 3b |
| Figure 8.2  | Golden Loon Soils-Pb. Histogram with Statistics  | Appendix 3b |
| Figure 8.3  | Golden Loon Soils-Zn. Histogram with Statistics  | Appendix 3b |
| Figure 9.0  | Golden Loon Soils: Copper-Gold Scatterplots/Statistics                                   | "           |
| Figure 9.1  | Golden Loon Soils: Lead-Gold Scatterplots/Statistics                                     | "           |
| Figure 9.2  | Golden Loon Soils: Zinc-Gold Scatterplots/Statistics                                     | "           |
| Figure 10.0 | Golden Loon Property: Rock Sample Location   | Appendix 4c |
| Figure 10.1 | Golden Loon Property: Gold (ppb) in Rock Samples   | Appendix 4c |
| Figure 10.2 | Golden Loon Property: Copper (ppm) in Rock Samples                                       | "           |
| Figure 11   | Western Golden Loon Property: Geology Map<br>Bailey Geological Consultants (Canada) Ltd. | Appendix 5  |



## SUMMARY AND CONCLUSIONS

The Golden Loon Property of Star of Mineta Ltd. is located at the edge of the Thompson Plateau, six kilometres west of Little Fort, British Columbia. The property is comprised of 114 contiguous mineral claims totalling 228 units and 5700 hectares.

Placer Dome Inc. has an option on the property from Mineta dated December 9, 1991. The exploration target for the 1992 program was intrusive hosted, "porphyry style" copper-gold mineralization in the northern part of the Thuya Batholith.

The 1992 exploration program on the property by Placer Dome Inc. consisted of the following:

1. Grid preparation to cover the western half of the property with 200 m spaced, east trending lines.
2. Terrain analyses and superficial geology. An air photograph study, Pegasus Earth Sensing Corporation.
3. Soil geochemical surveys on the new grid, Placer Dome Inc.
4. Geological Mapping. 1:10,000 scale over the west half of the property by Bailey Geological Consultants Ltd.
5. Prospecting and sampling, Placer Dome Inc.

Much of the western half of the property appears to be underlain by the Thuya Batholith, a hornblende to biotite granodiorite. The northeast trending ultramafic-gabbro complex to the east is displaced by a northeast trending structural zone that passes north of Montigny Lake to Dum Creek.

The soil surveys did not indicate any moderate to strong copper-gold anomalies over the intrusive area. There appears to be a poor copper-gold correlation based on statistics derived from the 1992 data.

Limited prospecting on the property identified pyritic and siliceous alteration zones in intrusive rocks near the main northwest structural zone. Samples from the alteration yielded anomalous gold values (only), quartz veins within the alteration zones yielded significant Au, Ag, Cu, and Pb values. Skarn mineralization in the northern part of the property yielded zinc values associated with arsenic and elevated Au, Cu and Pb.

Based on the 1992 data a porphyry copper-gold environment does not appear to be present in the western half of the property. Precious and base metal mineralization is either structural-alteration or skarn related.

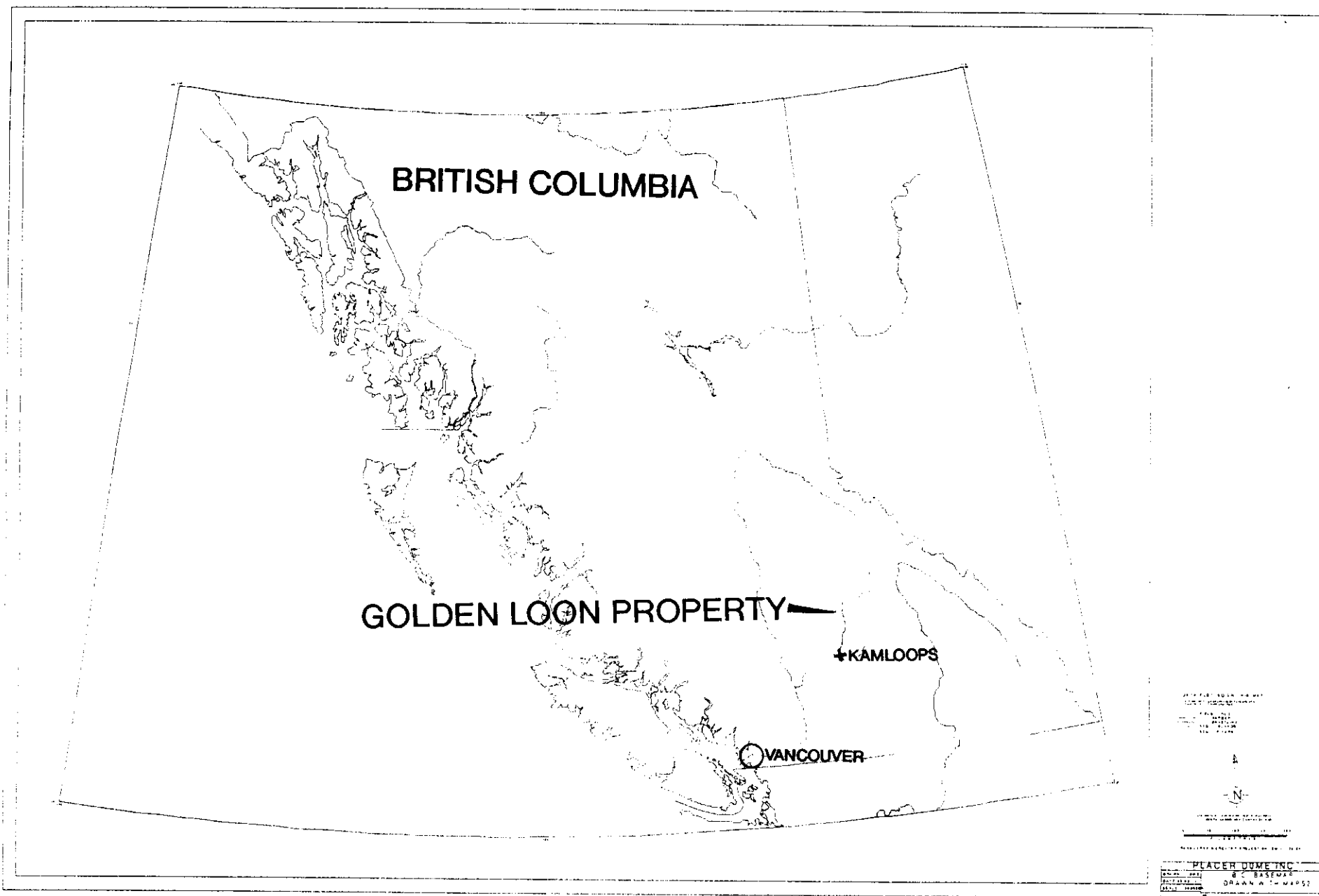


FIGURE 1: LOCATION MAP

## 1.0 INTRODUCTION

This report presents the results of a 1992 exploration program, conducted by Placer Dome Inc. on the Golden Loon Property in Kamloops Mining Division. The exploration target for this program was intrusive hosted, "porphyry style" mineralization in the western half of the property. During the program, the property was expanded by the staking of 20 new claims (58 units) along the western border.

This report describes geological and geochemical programs undertaken on the Golden Loon Mineral claims during 1992. All this work was supervised and financed by Placer Dome Inc. The total cost of the program, excluding staking costs, is \$116,460.75 of which \$111,800 is being filed for assessment credit.

### 1.1 Location and Access

The Golden Loon claim group is covered by NTS sheet 92P/8 and is centred seven kilometres west of Little Fort, B.C. Little Fort is a small settlement on Highway 5, 100 km north of Kamloops. (Figure 1) A network of well travelled forestry and logging roads afford good access to most parts of the property from both Little Fort to the east and Thuya Resort and Eakin Creek Valley to the west.

### 1.2 Property

The property described in this report consists of eight contiguous mineral claims (modified grid), plus fourteen 2 post claims totalling 170 units (4250 hectares) located in the Kamloops Mining Division (NTS 92-P-8) and shown in Figure 2. The claims are:

| <u>Claim Name</u> | <u>Units</u> | <u>Record Number</u> | <u>Expiry Date</u> | <u>Hectares</u> |
|-------------------|--------------|----------------------|--------------------|-----------------|
| Golden Loon I     | 20           | 217292(5541 old No.) | 1996/03/09         | 500             |
| Golden Loon II    | 20           | 217293(5542 old No.) | 1996/03/09         | 500             |
| Golden Loon III   | 20           | 217294(5543 old No.) | 1996/03/09         | 500             |
| Golden Loon IV    | 20           | 217295(5544 old No.) | 1996/03/09         | 500             |
| Golden Loon V     | 20           | 217548(6539 old No.) | 1996/03/07         | 500             |
| Golden Loon VI    | 20           | 217549(6540 old No.) | 1996/03/07         | 500             |
| Golden Loon VII   | 16           | 217550(6549 old No.) | 1996/03/14         | 400             |
| Golden Loon IX    | 20           | 217552(6556 old No.) | 1996/03/27         | 500             |
| Luc 1             | 1            | 218169               | 1996/09/09         | 25              |
| Luc 2             | 1            | 218170               | 1996/09/09         | 25              |
| Luc 3             | 1            | 218171               | 1996/09/09         | 25              |
| Luc 4             | 1            | 218172               | 1996/09/10         | 25              |
| Luc 5             | 1            | 218173               | 1996/09/10         | 25              |
| Luc 6             | 1            | 218174               | 1996/09/10         | 25              |
| Luc 7             | 1            | 218175               | 1996/09/10         | 25              |
| Luc 8             | 1            | 218176               | 1996/09/10         | 25              |
| Luc 9             | 1            | 218177               | 1996/09/10         | 25              |
| Luc 10            | 1            | 218178               | 1996/09/10         | 25              |
| Luc 11            | 1            | 218179               | 1996/09/10         | 25              |
| Luc 12            | 1            | 218180               | 1996/09/10         | 25              |
| Luc 13            | 1            | 218181               | 1996/09/10         | 25              |
| Luc 14            | 1            | 218182               | 1996/09/10         | 25              |

This property is owned by Mineta Resources Ltd. now Star of Mineta., 415-470 Granville St. Vancouver, B.C. December 9, 1991 (Amended April 1992) Mineta granted Placer Dome Inc. an option on the property. Placer Dome, by paying Mineta an aggregate of \$470,000 and incurring a minimum of \$2,500,000 in exploration expenditures could earn a 70% undivided interest in the claims.

Following the release of new regional geochemical data in the summer of 1992, (MEMPR BC RGS 36) Placer Dome Inc. staked twenty claims totalling 58 units (1450 hectares) at the northwestern edge of the optioned group (Figure 2). These claims are presently owned by Placer Dome Inc. but fall within the Mineta Agreement and will be transferred to that company of termination of the option. The new claims are as follows:

| <u>Claim Name</u><br><u>Hectares</u> | <u>Units</u> | <u>Record No.</u> | <u>Expiry Date</u> |     |
|--------------------------------------|--------------|-------------------|--------------------|-----|
| Golden Loon 10                       | 20           | 311057            | 1993/07/10         | 500 |
| Golden Loon 11                       | 20           | 311058            | 1993/07/07         | 500 |
| Golden Loon 12                       | 1            | 311026            | 1993/07/07         | 25  |
| Golden Loon 13                       | 1            | 311027            | 1993/07/07         | 25  |
| Golden Loon 14                       | 1            | 311028            | 1993/07/07         | 25  |
| Golden Loon 15                       | 1            | 311029            | 1993/07/07         | 25  |
| Golden Loon 16                       | 1            | 311030            | 1993/07/09         | 25  |
| Golden Loon 17                       | 1            | 311031            | 1993/07/09         | 25  |
| Golden Loon 18                       | 1            | 311032            | 1993/07/09         | 25  |
| Golden Loon 19                       | 1            | 311033            | 1993/07/09         | 25  |
| Golden Loon 20                       | 1            | 311034            | 1993/07/09         | 25  |
| Golden Loon 21                       | 1            | 311035            | 1993/07/09         | 25  |
| Golden Loon 22                       | 1            | 311036            | 1993/07/08         | 25  |
| Golden Loon 23                       | 1            | 311037            | 1993/07/08         | 25  |
| Golden Loon 24                       | 1            | 311038            | 1993/07/08         | 25  |
| Golden Loon 25                       | 1            | 311039            | 1993/07/08         | 25  |
| Golden Loon 26                       | 1            | 311040            | 1993/07/08         | 25  |
| Golden Loon 27                       | 1            | 311041            | 1993/07/08         | 25  |
| Golden Loon 28                       | 1            | 311042            | 1993/07/08         | 25  |
| Golden Loon 29                       | 1            | 311043            | 1993/07/08         | 25  |

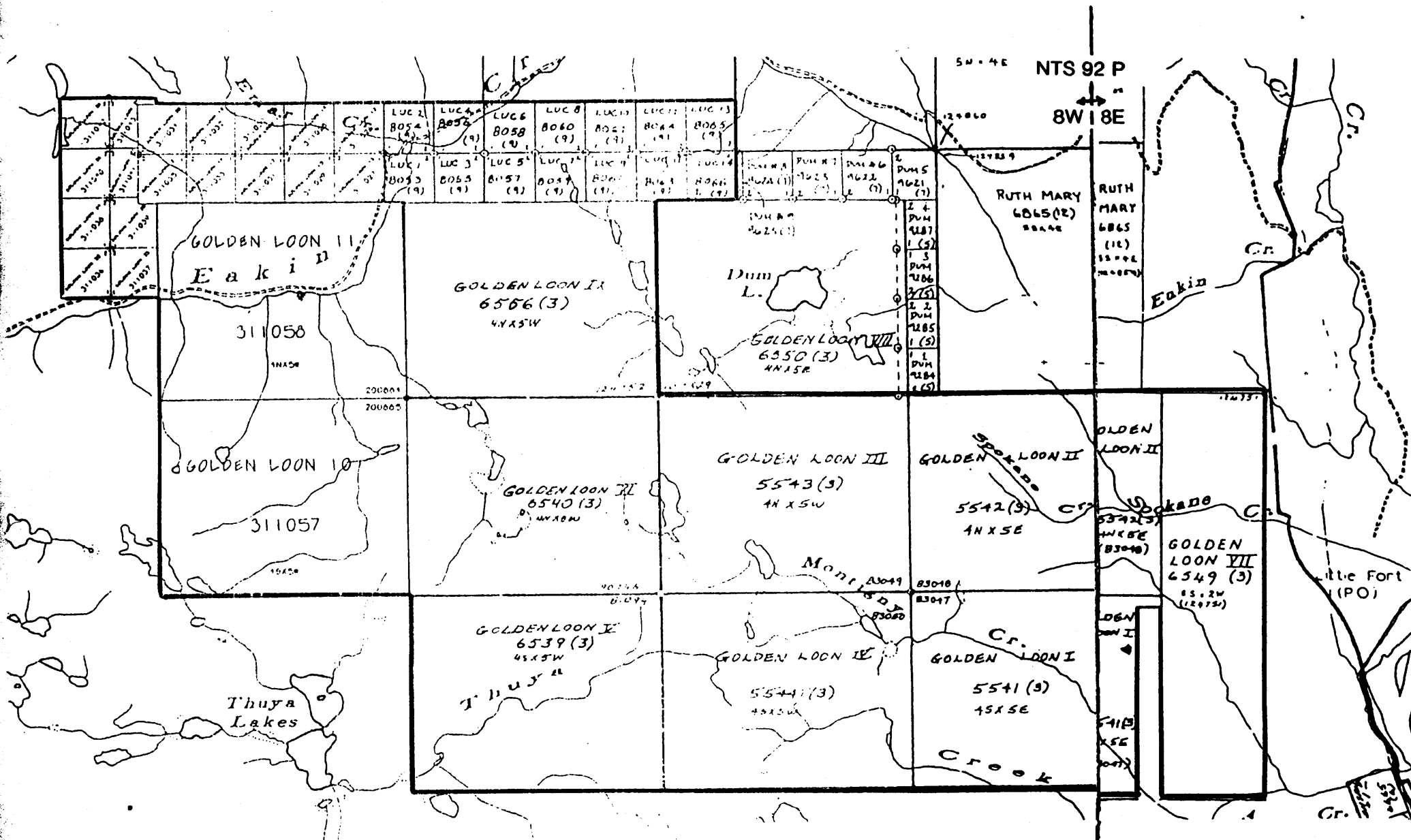


FIGURE 2. GOLDEN LOON PROPERTY CLAIM MAP

### 1.3 Physiography and Vegetation

The original Golden Loon Property lies to the south of Eakin Creek gorge and occupies an undulating plateau region between 1100 and 1400 m in elevation. In the east, the Golden Loon I, II, and VII claims cover the edge of the plateau and the western valley slopes of the North Thompson River, down to 550 m elevation. In the northwest the new claims straddle Eakin Creek and cover steep topography with up to 500 m relief. (Figure 4)

Vegetation on the property is generally thick with stands of mature pine and, or poplar. Large sections of the western area were logged between ten and fifteen years ago and have very thick alder and scrub vegetation. Recent logging activity has taken place on the central and eastern claims involving small clear-cut blocks.

### 1.4 History and Previous Work

During the early 1920's interest was generated in the placer gold deposits of Eakin Creek. In 1923 placer claims were held on a 2.4 km stretch of Eakin Creek directly north of the Golden Loon II claim, upstream from the confluence with Lemieux Creek. Coarse gold was found in the higher bench gravels. The source of the placer gold has never been located but could come from the northern part of the Golden Loon Property.

The area presently covered by the western part of the claim group has been subject to a number of more "grass roots" geochemical and geological programs. Noranda Exploration, in the 1960's, looked at Cu, Ni anomalies largely associated with the main ultramafic unit on the Kira Group. Rio Tinto, in their 1973 soil program, outlined Cu, Zn and Pb anomalies west of Dum Lake with no recorded follow-up. Teck Corporation's work on the Minerva claims in 1980 and 1981 outlined Ag, Cu soil anomalies in the western area. None of these soil surveys included gold analyses and none of the copper anomalies over the Thuya intrusives in the western area were tested.

Mineta Resources Ltd., between 1987 and 1989, financed a number of geochemical and geophysical surveys on the eastern half of the property. Detailed exploration south and west of Dum Lakes located a number of new targets on the Golden Loon VIII claim.

Corona Corporation optioned the Golden Loon Property in 1990 and conducted an integrated geological, geochemical, geophysical, trenching and diamond drilling program largely in the Dum Lake area (Golden Loon VIII). This program developed and tested Mineta's gold targets. Six holes tested a strong northerly trending zone of silicification cutting monzonitic to monzodioritic intrusive rocks southwest of Dum Lake, the best gold intersection was 2.67 g/t over 10.4 m in hole GL-04. Corona did very little work in the western half of the property other than some preliminary prospecting.

## 1.5 Regional Geology and Mineralization

The regional geology of the Little Fort area, which is largely based on GSC Map 1287A accompanying the Bonaparte Lake Memoir 363 by Campbell and Tipper (1971), is illustrated in simplified form in Figure 3.

The North Thompson Valley lies along a major (regional) northerly trending fault system marking the boundary between the Omineca Belt (to the east) and Intermontane Belt (to the west). To the south of Little Fort, the fault zone separates deformed Fennel (Mississippian) and Eagle Bay Formation (Palaeozoic) volcanics and sediments to the east from less deformed Nicola group Volcanics (Triassic) and Mesozoic intrusive rocks (Thuya Batholith) to the west. At Little Fort, the fault zone splays to the northwest into a wide zone of complex faulting (fault duplex!) north of the Thuya Batholith.

The Golden Loon Property covers the northeastern margin of the Thuya Batholith and its contact with strongly faulted Nicola Group volcanics. A northwesterly trending zone of ultramafic rocks occurs along a fault zone (deep seated?) near this contact.

A number of gold and base metal occurrences are known in the area. The majority of these are located in the zones of complex faulting northwest of Little Fort. Many of the occurrences can be related to relatively small alkalic and calc-alkalic intrusives. Five kilometres north of the Golden Loon Property (on the Cedar Claim Group), copper mineralization with gold and silver values is associated with a narrow skarn zone developed at the margins of a dioritic dyke.

The northern part of the Golden Loon Property could be a source area for the gold placers in Eakin Creek which is located 1.5 km northeast of Dum Lake.

## 1.6 Property Geology

The area covered by the Golden Loon II, III and VIII mineral claims has received detailed geological mapping by Wells (1989, 1990). Outside of this area around Dum Lake there has been very limited geological mapping apart from reconnaissance.

The property covers a zone of complex faulting at the northern edge of the Thuya Batholith (Jurassic). Much of the southern and western parts of the property is underlain by poorly exposed granitic rocks of the batholith. A northwesterly trending ultramafic unit up to 1.5 km wide forms a prominent ridge cutting diagonally across the claims, north of the main batholith. It is a continuous body, not a series of lenses as suggested by the 1971 GSC map and stands out on regional airborne magnetic maps as a positive feature some 2000 to 3000 nT above background.

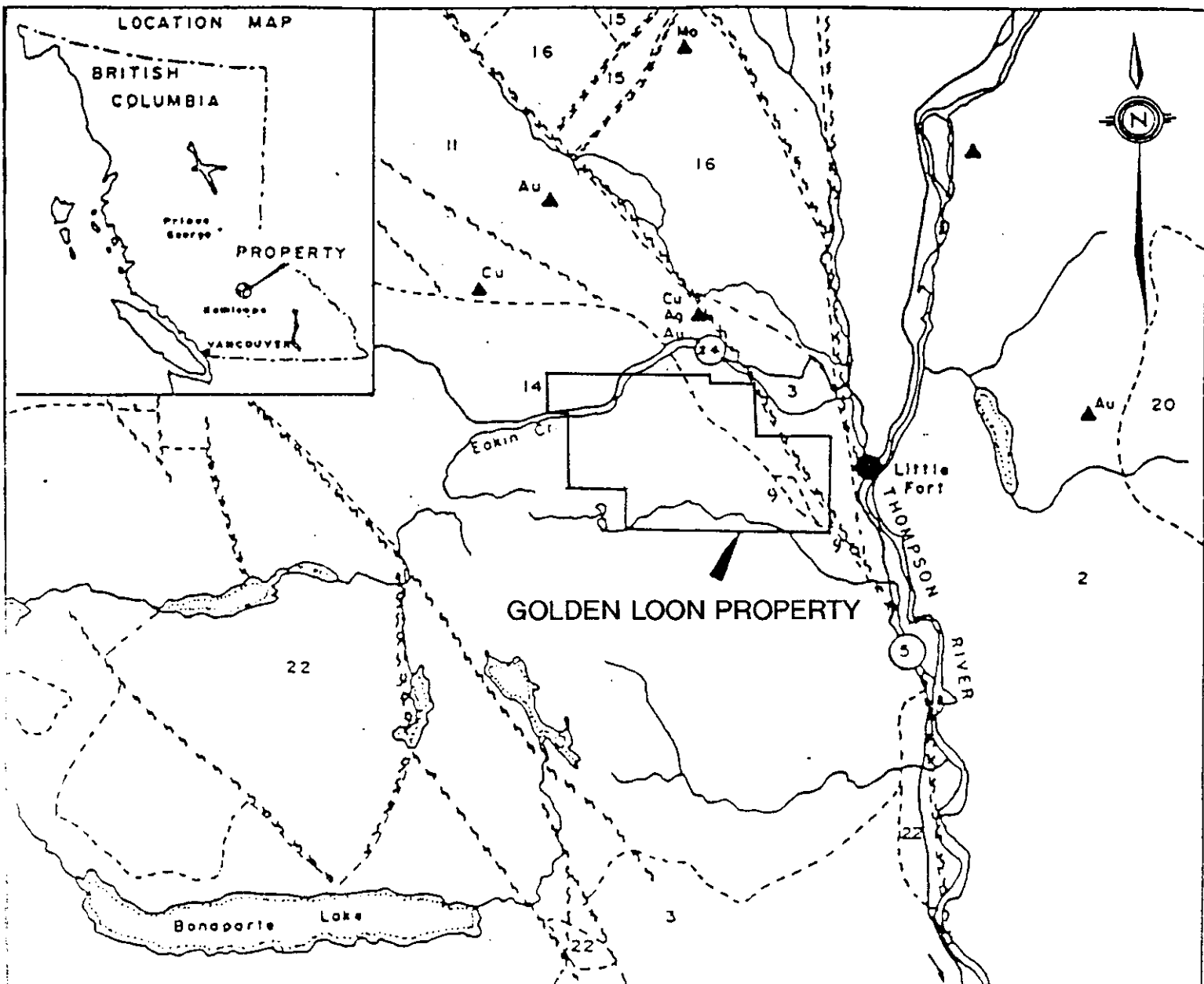


Geological traverses in the area indicated compositional layering with thick bands of dunite, peridotite, pyroxenite and gabbro. In the Dum Lake area, north of the ultramafic unit, Nicola Group volcanics and sediments are intruded by a mixed group of rocks ranging in composition from syenogabbro to quartz monzonites. These may represent contaminated, satellitic intrusive bodies to the Thuya Batholith or later more alkalic intrusive activity (like Rayfield River to the west?).

Mineralization in the Dum Lake area is hosted by the more alkalic monzonitic to monzodiorite intrusives and features either;

- 1) Quartz veins with pyrite  $\pm$  galena and chalcopyrite. Variable wallrock silicification, K. feldspar and propylitic alteration. Au, Ag  $\pm$  Cu, Pb.
- 2) Structurally controlled, northerly trending alteration zones with silicified core zones and wide propylitic, chlorite-pyrite haloes. Au minor Ag.

In the eastern part of the property, along the main north trending structures, a number of quartz veins have been documented with Ag and Pb values, gold values are low.



**LEGEND**

- 22 SKULL HILL FORMATION (TERTIARY)  
Felsic to intermediate volcanics.
- 20 RAFT AND BALDY BATHOLITHS (Cretaceous)  
Granitic intrusives.
- 16 INTERMEDIATE VOLCANICS WITH SEDIMENTS (JURASSIC)
- 14 THUYA BATHOLITH (TRIASSIC/JURASSIC)  
Granodioritic intrusive.
- 11 NICOLA GROUP (TRIASSIC)  
Intermediate volcanics with sediments.
- 9 ULTRAMAFIC INTRUSIVES (EARLY MESOZOIC)
- 3 EAGLE BAY (LATE PALEOZOIC)  
Mixed volcanics and sediments.
- 2 FENNEL FORMATION (MISSISSIPPIAN)  
Mixed basic volcanics and sediments.



- ▲ Mineral occurrences
- ~ Major faults

**PLACER DOME INC.**

REGIONAL GEOLOGY MAP  
GOLDEN LOON PROPERTY  
LITTLE FORT AREA  
KAMLOOPS M.D., B.C.

DRAWN BY K.G.

N.T.S. 92-P-8

1-2-1993

FIG.3

## **2.0 THE 1992 EXPLORATION PROGRAM ON THE PROPERTY**

### **2.1 Introduction**

The 1992 exploration program on the Golden Loon Property was conducted and financed by Placer Dome Inc., 1440 Hugh Allan Drive, Kamloops, B.C. This work was completed between May 25 and September 8, 1992.

Previous exploration in the western half of the property by Noranda (1960's), Rio Tinto (1973) and Teck (1980) had indicated significant copper anomalies over Thuya intrusive rocks. None of these soil surveys had involved gold analyses. Strongly silicified and quartz veined monzonite float in this area had returned anomalous gold values to 300 ppb during Corona's 1990 program. A good case could be made for potential intrusive related (porphyry) copper-gold mineralization in this area.

Placer Dome's 1992 program was designed to develop porphyry style targets in the western half of the property. It included grid preparation, terrane (air photograph) analysis, soil geochemical, prospecting and geological surveys.

Project supervision was by Jean-Francois Metall, geologist with Placer Dome Inc. Data compilation and report writing was by R.C. Wells, Consulting Geologist.

### **2.2 Grid Preparation**

Grid preparation on the property consisted of 20 km of control lines cut, chained and picketed to IP standard on the western claims. This work was by Peripheral Exploration Ltd. of Barriere, B.C. and was completed in July 1992.

The grid is shown in Figure 5 and consists of a north trending Base Line 4 km long, three parallel tie-lines and two control survey lines at 10,000N and 12,000N. This cut grid provided the control for 200 m spaced, east trending, compass and topofil survey lines used during the geochemical and geological surveys. These survey lines are also shown in Figure 5.

### **2.3 Terrain Analyses**

Pegasus Earth Sensing Corporation, Vancouver, B.C. was contracted to conduct a terrain analyses of the property area. This air photograph study focused on the glacial geology and was at 1:30,000 scale. Studies of this nature are useful in designing soil geochemical programs and in the interpretations of results.

The Pegasus report by T.H.F. Reimchen is included in Appendix 2. Much of the western area has a variable through generally thin cover of glacial moraine with local washed fluvial materials. The predominant ice direction appears to be towards the southeast, however, some more easterly trends have been interpreted locally.

## 2.4 Soil Geochemical Surveys

### Method

A total of 1083 soil samples was collected at 25 m intervals along east trending lines, 200 m apart. (Figure 7) The samples were collected from the "C" horizon where possible using either narrow bladed treeplanting shovels or 1.5 m long hand augers. Parts of the eastern grid are swampy with lacustrine silts making sampling difficult.

Samples were placed in standard brown kraft envelopes and labelled with a station number/identification number. Notes were taken at each sample site regarding site conditions, sample depth, soil composition, grain size and rock fragment composition.

### Preparation and Analysis

The soil sampling program was in two phases. Samples from the first phase, covering the eastern half of the grid, (784 samples) were sent to the Placer Dome Research Centre in Vancouver for analysis. Samples from the second phase, covering the western half of the grid, (299 samples) were sent to EcoTech Laboratories Ltd. in Kamloops, B.C.

In both cases the samples were dried and sieved to extract the -80 mesh sized fraction.

The first sample batches were analyzed for 27 elements by ICP (Inductively Coupled Plasma). Gold was determined by Atomic Absorption Spectrophotometry (AAS) using a graphite furnace following aqua regia digestion.

The samples sent to Eco Tech were analyzed for 30 elements by ICP. Gold was determined by atomic absorption following fire assay preconcentration and aqua regia digestion.

All soil geochemical data including certificates of analyses can be found in Appendix 3.

## Data Handling and Maps

All geochemical data was entered into a computer ASCII file. Programs, such as EXPL-stats, Probplot and OP70 were used to determine basic statistics. Histograms for gold, copper, lead and zinc and scatterplots with gold against copper, lead and zinc are included in Appendix 3b. A number of computer generated maps with geochemical data occur in this report and include; a sample location map (Figure 7.0), Gold (Figure 7.1), Copper (Figure 7.2), Lead (Figure 7.4), and Zinc (Figure ) soil geochemical plans.

## Results and Interpretation

### 1. *Gold* (Figure 7.1)

Gold in soil values in the western part of the property are low, rarely exceeding 50 ppb, the highest value obtained was 82 ppb. A number of single station anomalies with gold values greater than 50 ppb are scattered throughout the grid. Contouring the grid data using low thresholds suggests that the western half of the grid has slightly higher background gold values compared to the east. This difference is however, more a reflection of the detection limit of the two different laboratories.

### 2. *Copper* (Figure 7.2)

Copper values are predominantly less than 100 ppm with a population mean of 30.7 ppm and maximum value of 1297 ppm. A number of copper anomalies exceeding 100 ppm occur in the central and northeastern parts of the grid generally on the higher areas. These anomalies roughly coincide with those outlined by Rio Tinto (1973) and Teck Corporation (1980's). There are no distinct linear trends to the anomalies, they are spot highs or small clusters less than 100 m in diameter.

### 3. *Lead* (Figure 7.3)

Lead values are predominantly less than 30 ppm with a population mean of 10.7 ppm and maximum value of 195 ppm. Anomalous values greater than 50 ppm cluster in the low swampy areas in the eastern part of the grid. The anomaly trends north, northwest following the main drainage and probably represents hydromorphic concentration.

#### 4. Zinc (Figure 7.4)

Zinc values are generally low, less than 100 ppm with a population mean of 59 ppm and maximum value of 181 ppm. Weakly anomalous zinc values cluster in the northeastern part of the grid roughly coincident with the area of copper anomalies.

#### 5. Comments

Copper and semi coincident zinc anomalies occur on the higher ground in the eastern half of the grid. In this area, the soil samples were largely from the "C" horizon which strongly suggests a nearby bedrock source for the anomalous values.

Gold does not correlate with anomalous copper, lead or zinc (see scatterplots in Appendix 3b). The origin for spot gold anomalies in the northern half of the grid is unknown.

### 2.5 Geological Mapping

Bailey Geological Consultants (Canada) Ltd. was contracted to map the western half of the property. This geological mapping was at 1:10,000 scale and used the control grid and 1:18,000 air photographs for location. A report by D.G. Bailey including a geological map (Figure 11) is included in Appendix 5.

#### Comments

Much of the western half of the property appears to be underlain by Thuya Batholith, hornblende-granodiorite. The northwest trending ultramafic-gabbro complex to the east is displaced by a northeast trending, steeply dipping fault zone that passes north of Montigny Lake to Dum Creek.

During the mapping, zones of strongly silicified granodiorite with pyrite were identified at the southern end of the grid at 9000E. These are not far from the Dum Creek fault zone.

Bailey, in his concluding remarks, suggests that porphyry gold mineralization on the mapped part of the property is unlikely. The silicification and quartz veining with associated gold is probably a post magmatic event.

## 2.6 Prospecting and Sampling

Prospecting was conducted over two short periods, largely by P. Watt (prospector) and used air photograph or grid control. Sample locations and values are illustrated in Figures 10.0 to 10.2. A total of 69 samples taken during the prospecting were selected for analysis; descriptions of these can be found in Appendix 4b. The samples were shipped to Eco Tech Laboratories Ltd. in Kamloops and run for 30 element ICP and geochemical AA for gold. Analytical results are available in Appendix 4a.

### Results

Two areas of mineralized outcrop or subcrop were located during the prospecting.

#### *1) Northern Area (Luc 7 to 11 claims)*

In this area, brecciated dioritic intrusive rocks are in contact with hornfelsed volcanics and sediments with pyrite and local sphalerite. Limey units are converted to garnet-epidote skarn (Sample 3821). Selected samples from the hornfels (Samples 11940, 3821) yielded significant zinc values up to 0.89% with associated arsenic and elevated gold, copper and lead. Silicified dioritic breccia with quartz vein stockwork yielded a gold value of 735 ppb (sample 11941). This area was not covered by the 1992 soil geochemical survey. It lies very close to the properties northern boundary.

#### *2) Central Golden Loon VI Area*

This area on the higher ground in the central part of the claim has heavy scrub vegetation. Silicified and quartz vein granodiorite to monzonite outcrop, subcrop and float in an area 500 m north-south by 400 metres wide yielded numerous gold values in the 100 to 600 ppb range. A sample from a quartz vein zone with significant pyrite, galena and chalcopyrite (sample 3808), yielded 2 g/t Au, 27.4 g/t Ag, 0.56% Pb and 1106 ppm Cu. This alteration and mineralization with gold only, in the pervasively silicified intrusives, and Au, Ag, Cu and Pb in quartz veins is very similar to that near Dum Lake on the Golden Loon VIII claim. The common link is that both areas lie close to a major northeast trending fracture zone which crosses the property.

Silicified intrusive float was found through prospecting in other areas on the grid. Most of these samples yielded elevated gold values, however, values greater than 100ppb were rare.

### 3.0 REFERENCES

- CAMPBELL, R.B. and H.W. TIPPER (1971) Geology of Bonaparte Lake Map Area, British Columbia, GSC Me. 363
- DEPARTMENT OF ENERGY MINES AND RESOURCES (1968) Airborne Magnetic Survey, Chu Chua Sheet, Series 52249
- EVANS, C.T. and BELLAMY, J. (1990) Diamond Drill Report: Assessment Report for Corona Corporation
- LUTJEN, L.J. and LODMELL, R.D. (1985) Prospecting Assessment Report on Golden Loons I to IV. Assorted maps, diagrams and assays for the Golden Loon Property.
- NORANDA EXPLORATION CO. LTD. (1967) Assessment Report No. 1055. Geochemical Soil Survey of the Kira Mineral Claims
- TECK CORPORATION (1981) Assessment Report NO. 9061. Minerva Claims Geochemical and Geological Report.
- WELLS, R.C. (1987) Assessment Report. Geochemical Report on the Golden Loon Claim Group.
- WELLS, R.C. (1988) Assessment Report. Phase 1 and 2 Exploration on the Golden Loon Claim Group.
- WELLS, R.C. (1990) Assessment Report. Geological, Geochemical and Geophysical Report on the Golden Loon Claim Group.
- YORSTON, R. and IKONA, C.K. (1985) Geological Report on the Cedar I to IV Mineral Claims, Kamloops Mining Division for Craven Resources



#### 4.0 STATEMENT OF EXPENDITURES

##### 1. Field and Office Personnel - Placer Dome Inc.

|  |             |
|--|-------------|
| J.F. Metall, geologist, 66 days @\$380     | \$25,080.00 |
| G. Lustig, Senior Geologist, 3 days @\$540 | 1,620.00    |
| T. Campbell, Technical, 4 days @\$325      | 1,300.00    |
| P. Watt, Geotech, 54 days @\$215           | 11,600.00   |
| G. Demers, Geotech, 10 days @\$215         | 2,150.00    |
| R. Krauss, Geotech, 11 days @\$215         | 2,365.00    |
| T. Stone, Student, 31 days @\$215          | 6,665.00    |
| C. Woolverton, Geotech, 18 days @\$215     | 3,870.00    |
| T. Muraro, Student, 6 days @\$215          | 1,290.00    |
| B. Kahlert, Student, 12 dyas @\$215        | 2,580.00    |
| R. McLeod, Student, 17 days @\$215         | 3,655.00    |
| E. McKenzie, Geotech, 2 days @\$215        | 430.00      |

Salaries Sub Total \$62,605.00

##### 2. Contractors

|   |            |
|---|------------|
| Linecutting - C. Marlow, Peripheral Exploration                       | \$8,100.00 |
| D. Bailey Geological Consultants (Canada Ltd) -<br>Geological Mapping | 7,712.96   |
| Pegasus Earth Sensing Corporation - Terrain Analyses                  | 1,575.00   |
| Kamloops Geological Services Ltd.- Report Preparation                 | 3,420.00   |

Sub Total \$20,807.96

##### 3. Analytical Costs

|  |             |
|--|-------------|
| Placer Dome Research Centre, Vancouver | \$11,417.85 |
| Eco Tech Laboratories, Kamloops        | 5,179.04    |
| Freight                                | 449.36      |

Sub Total \$17,046.25

**Statement of Expenditures, Cont...****4. Other Costs**

|                           |            |
|---------------------------|------------|
| Lodging, Thuya Lake Lodge | \$3,723.53 |
| Food, groceries           | 5,750.43   |
| Trucks, expenses, gas     | 3,943.00   |
| Supplies                  | 2,257.90   |
| Misc. eg. telephone       | 326.90     |

Sub Total \$16,001.54

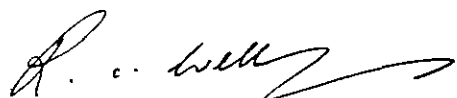
**Total Program Cost \$116,460.75**

## 5.0 STATEMENT OF QUALIFICATIONS

I, Ronald C. Wells, of the City of Kamloops, British Columbia, hereby certify that:

1. I am a Member of the Geological Association of Canada
2. I am a graduate of the University of Wales, U.K. with a B. Sc. Hons. in Geology (1974), did post graduate (M. Sc.) studies at Laurentian University, Sudbury, Ontario (1976-77) in Economic Geology.
3. I am presently employed as Consulting Geologist and President of Kamloops Geological Services Ltd., Kamloops, B.C.
4. I have practiced continuously as a geologist for the last 14 years throughout Canada and USA and have past experience and employment as a geologist in Europe.
5. Ten of these years were in the capacity of Regional Geologist for Lacana Mining Corp. then Corona Corporation in both N. Ontario/Quebec and S. British Columbia.

R.C. Wells, B. Sc., F.G.A.C.



Dated

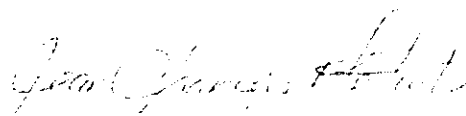
*Feb 24, 1993*

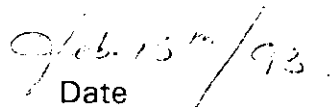
## STATEMENT OF QUALIFICATIONS

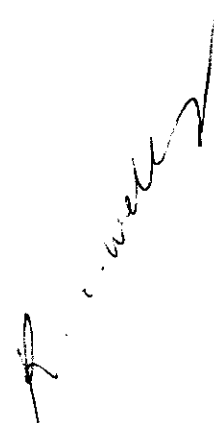
I, Jean-François Métail, of #207-1103 Hugh Allan Drive, Kamloops, B.C., do hereby certify that:

1. I graduated from the Université de Montréal, Montréal, Québec, with a B. Sc. Major in Geology in 1991.
2. From 1987 to the present, I have been studying and/or working in the field of geology both in Canada and internationally. I have held various contract positions with Placer Dome Inc. since 1988.
3. I have assisted with the field work and data compilation for the Golden Loon 1-7, Golden Loon 9-29 and Luc 1-14 mineral claims located in the Kamloops Mining District.

Respectfully Submitted,

  
Jean-François Métail, B.Sc.

  
Date



APPENDIX 1  
PROPERTY AND GRIDS

APPENDIX 3  
GEOCHEMICAL DATA (SOILS)

3a. SOIL SAMPLE GEOCHEMICAL CERTIFICATES

## Golden Loon Project Soil Geochemistry, January 5, 1993

Page 1

| SAMP  | AU  | CU  | AG   | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN   | MO | NA    | NI  | P    | PB | SB | SR | TI   | V   | W  | ZN  |
|-------|-----|-----|------|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|------|----|-------|-----|------|----|----|----|------|-----|----|-----|
| B18   | 12  | 69  | 0.2  | <5 | 182 | 0.4 | <2 | 0.43 | <0.1 | 15 | 44  | 1.55 | 3.44 | 0.24 | 9  | 0.85 | 600  | 4  | <0.01 | 18  | 0.10 | 3  | <5 | 28 | 0.06 | 50  | <5 | 78  |
| B19   | 9   | 62  | 0.1  | <5 | 104 | 0.3 | <2 | 0.37 | <0.1 | 13 | 42  | 1.32 | 3.14 | 0.24 | 9  | 0.84 | 611  | <1 | <0.01 | 14  | 0.08 | 3  | <5 | 21 | 0.06 | 48  | <5 | 76  |
| B20   | 12  | 35  | <0.1 | <5 | 77  | 0.3 | 3  | 0.23 | 0.4  | 10 | 40  | 1.26 | 2.70 | 0.21 | 8  | 0.65 | 293  | 1  | <0.01 | 14  | 0.05 | 4  | <5 | 17 | 0.06 | 40  | <5 | 47  |
| B21   | 3   | 7   | 0.2  | <5 | 150 | 0.4 | <2 | 0.24 | <0.1 | 8  | 29  | 1.74 | 1.79 | 0.05 | 3  | 0.24 | 267  | 1  | <0.01 | 22  | 0.22 | 5  | <5 | 20 | 0.06 | 22  | <5 | 45  |
| B22   | 2   | 8   | 0.2  | <5 | 116 | 0.3 | 2  | 0.20 | <0.1 | 8  | 48  | 1.59 | 1.85 | 0.06 | 3  | 0.20 | 220  | 1  | <0.01 | 37  | 0.16 | 3  | <5 | 17 | 0.05 | 21  | <5 | 52  |
| *B23  | 5   |     |      |    |     |     |    |      |      |    |     |      |      |      |    |      |      |    |       |     |      |    |    |    |      |     |    |     |
| B23   | 225 | 18  | 0.3  | <5 | 162 | 0.4 | <2 | 0.19 | <0.1 | 10 | 39  | 2.08 | 2.77 | 0.04 | 4  | 0.29 | 206  | 4  | <0.01 | 23  | 0.14 | 4  | <5 | 20 | 0.07 | 39  | <5 | 50  |
| *B23* | 7   |     |      |    |     |     |    |      |      |    |     |      |      |      |    |      |      |    |       |     |      |    |    |    |      |     |    |     |
| B24   | 30  | 14  | 0.3  | <5 | 103 | 0.3 | <2 | 0.14 | <0.1 | 7  | 37  | 1.16 | 2.16 | 0.07 | 4  | 0.37 | 184  | 4  | <0.01 | 15  | 0.06 | 3  | <5 | 15 | 0.05 | 32  | <5 | 36  |
| B25   | 11  | 19  | 0.2  | <5 | 213 | 0.3 | <2 | 0.24 | <0.1 | 8  | 40  | 1.40 | 2.19 | 0.07 | 4  | 0.42 | 423  | 9  | <0.01 | 26  | 0.13 | 2  | <5 | 19 | 0.05 | 27  | <5 | 72  |
| B26   | 4   | 17  | 0.1  | <5 | 111 | 0.3 | <2 | 0.18 | <0.1 | 9  | 50  | 1.45 | 2.26 | 0.09 | 3  | 0.57 | 307  | 2  | <0.01 | 38  | 0.07 | 1  | <5 | 18 | 0.06 | 30  | <5 | 47  |
| B26*  | 2   | 16  | 0.1  | <5 | 103 | 0.3 | 2  | 0.17 | <0.1 | 9  | 49  | 1.34 | 2.18 | 0.09 | 3  | 0.55 | 286  | 3  | <0.01 | 42  | 0.07 | 2  | <5 | 16 | 0.05 | 29  | <5 | 45  |
| B27   | 9   | 32  | 0.1  | 11 | 47  | 0.7 | 3  | 0.15 | 0.4  | 13 | 45  | 0.76 | 1.92 | 0.10 | 15 | 0.43 | 192  | 6  | <0.01 | 24  | 0.03 | 6  | 7  | 19 | 0.05 | 41  | 20 | 39  |
| B28   | 4   | 16  | 0.4  | <5 | 167 | 0.4 | <2 | 0.22 | <0.1 | 7  | 28  | 1.80 | 1.99 | 0.06 | 4  | 0.27 | 244  | 5  | <0.01 | 25  | 0.14 | 2  | <5 | 18 | 0.07 | 27  | <5 | 46  |
| B29   | 8   | 18  | 0.1  | <5 | 226 | 0.2 | <2 | 0.16 | <0.1 | 8  | 33  | 1.29 | 2.07 | 0.09 | 4  | 0.42 | 187  | 7  | <0.01 | 14  | 0.08 | <1 | <5 | 16 | 0.05 | 30  | <5 | 56  |
| B30   | 19  | 27  | 0.1  | <5 | 163 | 0.2 | <2 | 0.15 | <0.1 | 7  | 29  | 1.03 | 2.24 | 0.17 | 4  | 0.48 | 219  | 3  | <0.01 | 6   | 0.08 | <1 | <5 | 14 | 0.04 | 29  | <5 | 50  |
| B31   | 6   | 17  | <0.1 | <5 | 162 | 0.3 | <2 | 0.22 | <0.1 | 6  | 31  | 1.40 | 1.95 | 0.07 | 4  | 0.37 | 203  | 5  | <0.01 | 15  | 0.12 | <1 | <5 | 19 | 0.05 | 26  | <5 | 69  |
| B32   | 4   | 15  | 0.4  | <5 | 173 | 0.3 | <2 | 0.23 | <0.1 | 7  | 31  | 1.42 | 1.94 | 0.08 | 4  | 0.37 | 200  | 6  | <0.01 | 15  | 0.13 | 2  | <5 | 20 | 0.05 | 26  | <5 | 73  |
| B33   | 1   | 13  | 0.4  | <5 | 116 | 0.2 | <2 | 0.30 | <0.1 | 6  | 34  | 1.06 | 1.95 | 0.04 | 4  | 0.32 | 151  | 6  | <0.01 | 12  | 0.02 | 3  | <5 | 24 | 0.04 | 29  | <5 | 31  |
| B34   | 2   | 16  | 0.3  | <5 | 109 | 0.3 | <2 | 0.16 | <0.1 | 7  | 30  | 1.29 | 2.11 | 0.07 | 3  | 0.37 | 191  | 4  | <0.01 | 21  | 0.10 | <1 | <5 | 13 | 0.05 | 33  | <5 | 48  |
| B35   | 7   | 12  | 0.2  | <5 | 129 | 0.3 | <2 | 0.18 | <0.1 | 7  | 34  | 1.11 | 2.15 | 0.04 | 4  | 0.35 | 168  | 4  | <0.01 | 15  | 0.14 | 1  | <5 | 14 | 0.04 | 31  | <5 | 44  |
| B35*  | 3   | 11  | 0.2  | <5 | 125 | 0.2 | <2 | 0.16 | <0.1 | 6  | 34  | 1.02 | 2.07 | 0.04 | 4  | 0.31 | 154  | 1  | <0.01 | 17  | 0.12 | <1 | <5 | 14 | 0.03 | 29  | <5 | 40  |
| B36   | 3   | 28  | 0.3  | 8  | 120 | 0.6 | 6  | 0.18 | 0.3  | 12 | 50  | 1.44 | 2.27 | 0.04 | 12 | 0.43 | 202  | 7  | <0.01 | 33  | 0.12 | 12 | <5 | 24 | 0.05 | 46  | 17 | 47  |
| B37   | 3   | 17  | 0.3  | <5 | 126 | 0.3 | 3  | 0.15 | <0.1 | 7  | 37  | 1.18 | 1.97 | 0.04 | 5  | 0.36 | 178  | 8  | <0.01 | 22  | 0.09 | 7  | <5 | 14 | 0.04 | 31  | 5  | 58  |
| B38   | 4   | 19  | 0.3  | <5 | 135 | 0.4 | 2  | 0.19 | <0.1 | 8  | 42  | 1.19 | 2.10 | 0.04 | 5  | 0.37 | 178  | 9  | <0.01 | 33  | 0.09 | 6  | <5 | 16 | 0.07 | 37  | <5 | 38  |
| B39   | 1   | 19  | 0.5  | <5 | 123 | 0.3 | 3  | 0.17 | <0.1 | 8  | 34  | 1.13 | 2.06 | 0.04 | 4  | 0.35 | 170  | 7  | <0.01 | 10  | 0.06 | 7  | <5 | 17 | 0.07 | 31  | <5 | 61  |
| B40   | 4   | 52  | 0.3  | <5 | 98  | 0.3 | 3  | 0.40 | <0.1 | 11 | 51  | 1.43 | 2.31 | 0.13 | 6  | 0.42 | 440  | 10 | <0.01 | 47  | 0.22 | 6  | <5 | 28 | 0.07 | 46  | <5 | 58  |
| B41   | 1   | 22  | 0.4  | <5 | 148 | 0.4 | <2 | 0.14 | <0.1 | 9  | 39  | 1.14 | 2.44 | 0.04 | 4  | 0.36 | 261  | 5  | <0.01 | 37  | 0.18 | 8  | <5 | 14 | 0.08 | 34  | <5 | 61  |
| B42   | 1   | 29  | 0.3  | <5 | 166 | 0.4 | <2 | 0.13 | <0.1 | 9  | 35  | 1.19 | 2.22 | 0.04 | 4  | 0.41 | 474  | 11 | <0.01 | 11  | 0.19 | 7  | <5 | 12 | 0.06 | 31  | <5 | 56  |
| B43   | 19  | 29  | 0.4  | <5 | 99  | 0.3 | <2 | 0.15 | <0.1 | 10 | 40  | 1.06 | 2.34 | 0.04 | 3  | 0.41 | 295  | 4  | <0.01 | 13  | 0.12 | 8  | <5 | 17 | 0.06 | 43  | <5 | 80  |
| B44   | <1  | 15  | 0.8  | <5 | 114 | 0.5 | <2 | 0.24 | <0.1 | 4  | 23  | 2.93 | 1.63 | 0.04 | 4  | 0.59 | 364  | <1 | 0.01  | 4   | 0.34 | 9  | <5 | 23 | 0.10 | 17  | <5 | 50  |
| B44*  | <1  | 14  | 0.8  | <5 | 112 | 0.5 | <2 | 0.24 | <0.1 | 5  | 23  | 2.85 | 1.54 | 0.04 | 5  | 0.58 | 298  | <1 | 0.01  | 5   | 0.33 | 12 | <5 | 22 | 0.09 | 16  | <5 | 49  |
| B45   | 2   | 38  | 0.6  | 14 | 134 | 1.1 | 3  | 0.11 | 0.4  | 14 | 39  | 1.81 | 2.09 | 0.04 | 17 | 0.32 | 501  | 9  | <0.01 | 42  | 0.20 | 10 | <5 | 19 | 0.08 | 44  | 17 | 60  |
| B46   | 2   | 26  | 0.7  | <5 | 162 | 0.5 | 3  | 0.11 | 0.2  | 9  | 32  | 1.51 | 2.35 | 0.04 | 4  | 0.40 | 258  | 4  | <0.01 | 40  | 0.25 | 5  | <5 | 11 | 0.11 | 32  | <5 | 78  |
| B47   | 5   | 17  | 0.4  | <5 | 86  | 0.2 | <2 | 0.11 | <0.1 | 8  | 38  | 1.04 | 1.80 | 0.04 | 3  | 0.32 | 115  | 6  | <0.01 | 38  | 0.07 | 3  | <5 | 11 | 0.07 | 31  | <5 | 65  |
| B48   | 4   | 40  | 0.4  | <5 | 106 | 0.4 | <2 | 0.11 | <0.1 | 16 | 41  | 1.73 | 3.42 | 0.11 | 3  | 0.77 | 377  | 7  | <0.01 | 55  | 0.07 | 2  | <5 | 12 | 0.10 | 53  | <5 | 75  |
| B49   | 1   | 13  | 0.5  | <5 | 116 | 0.4 | <2 | 0.18 | <0.1 | 9  | 38  | 1.54 | 1.74 | 0.06 | 3  | 0.25 | 701  | 9  | <0.01 | 39  | 0.12 | 5  | <5 | 14 | 0.07 | 24  | <5 | 61  |
| B50   | 5   | 22  | 0.2  | <5 | 115 | 0.3 | <2 | 0.32 | <0.1 | 14 | 53  | 1.39 | 2.83 | 0.17 | 4  | 0.70 | 184  | 7  | <0.01 | 10  | 0.03 | 9  | <5 | 28 | 0.09 | 57  | <5 | 67  |
| B51   | 4   | 20  | 0.2  | <5 | 103 | 0.3 | <3 | 0.32 | <0.1 | 13 | 50  | 1.39 | 2.82 | 0.13 | 4  | 0.66 | 205  | 6  | <0.01 | 35  | 0.03 | 7  | <5 | 28 | 0.09 | 55  | <5 | 70  |
| B52   | <1  | 22  | 0.3  | <5 | 92  | 0.5 | <3 | 0.15 | <0.1 | 6  | 28  | 2.46 | 2.02 | 0.05 | 3  | 0.20 | 190  | 3  | <0.01 | 15  | 0.21 | 7  | <5 | 14 | 0.10 | 28  | <5 | 40  |
| B53   | 19  | 19  | 0.3  | <5 | 157 | 0.4 | <3 | 0.23 | <0.1 | 10 | 45  | 2.20 | 2.22 | 0.09 | 4  | 0.44 | 308  | 2  | <0.01 | 30  | 0.23 | 7  | <5 | 30 | 0.08 | 30  | <5 | 80  |
| B54   | 4   | 48  | <0.1 | 7  | 91  | 0.8 | 3  | 0.14 | 0.4  | 30 | 209 | 1.68 | 3.36 | 0.10 | 15 | 1.62 | 359  | <1 | <0.01 | 206 | 0.04 | 8  | 9  | 18 | 0.07 | 73  | 15 | 71  |
| B55   | 19  | 101 | 0.2  | <5 | 219 | 0.5 | <3 | 0.30 | <0.1 | 27 | 131 | 2.22 | 4.47 | 0.33 | 9  | 1.82 | 663  | <1 | <0.01 | 39  | 0.12 | 7  | <5 | 22 | 0.10 | 80  | <5 | 83  |
| B56   | 3   | 16  | 0.5  | <5 | 138 | 0.4 | <3 | 0.12 | <0.1 | 28 | 141 | 2.10 | 2.77 | 0.03 | 6  | 0.88 | 228  | <1 | <0.01 | 162 | 0.22 | 8  | <5 | 11 | 0.10 | 42  | <5 | 63  |
| B57   | 5   | 23  | 0.5  | <5 | 118 | 0.3 | <3 | 0.20 | <0.1 | 12 | 113 | 1.79 | 2.47 | 0.09 | 5  | 0.86 | 240  | <1 | <0.01 | 62  | 0.08 | 3  | <5 | 16 | 0.08 | 45  | <5 | 45  |
| B58   | 19  | 30  | 0.3  | <5 | 97  | 0.1 | <3 | 0.23 | <0.1 | 13 | 97  | 1.64 | 3.00 | 0.07 | 4  | 1.07 | 252  | 3  | <0.01 | 52  | 0.02 | 2  | <5 | 21 | 0.10 | 55  | <5 | 44  |
| B59   | 1   | 28  | 0.3  | <5 | 150 | 0.3 | <3 | 0.13 | <0.1 | 20 | 174 | 2.34 | 3.15 | 0.07 | 3  | 1.07 | 410  | <1 | <0.01 | 89  | 0.26 | 4  | 10 | 8  | 0.14 | 56  | <5 | 61  |
| B60   | 5   | 147 | 0.3  | <5 | 212 | 0.9 | <3 | 0.71 | <0.1 | 37 | 39  | 3.52 | 7.27 | 0.55 | 10 | 2.49 | 1103 | 4  | <0.01 | 78  | 0.05 | <1 | <5 | 38 | 0.21 | 101 | <5 | 168 |
| B61   | 7   | 32  | 0.8  | <5 | 109 | 0.5 | <3 | 0.14 | <0.1 | 14 | 36  | 2.22 | 2.83 | 0.06 | 5  | 0.55 | 262  | 3  | <0.01 | 21  | 0.10 | 2  | 6  | 12 | 0.09 | 37  | <5 | 68  |
| B62   | 15  | 37  | 0.4  | <5 | 113 | 0.4 | <3 | 0.18 | <0.1 | 15 | 46  | 2.07 | 3.07 | 0.13 | 6  | 0.76 | 283  | 3  | <0.01 | 30  | 0.13 | 4  | 7  | 17 | 0.09 | 46  | <5 | 98  |
| B62*  | 9   | 35  | 0.4  | <5 | 111 | 0.4 | <3 | 0.18 | <0.1 | 14 | 42  | 2.05 | 3.02 | 0.13 | 5  | 0.74 | 278  | 4  | <0.01 | 28  | 0.12 | 4  | <5 | 16 | 0.09 | 44  | <5 | 99  |
| B63   | 24  | 40  | 0.2  | 8  | 100 | 0.7 | 3  | 0.22 | 0.2  | 15 | 63  | 1.52 | 2.72 | 0.09 | 13 | 0.83 | 375  | <1 | <0.01 | 28  | 0.09 | 5  | 6  | 24 | 0.07 | 53  | 15 | 67  |
| B64   | <1  | 18  | 0.4  | <5 | 87  | 0.4 | <3 | 0.13 | <0.1 | 8  | 21  | 1.37 | 1.39 | 0.04 | 5  | 0.12 | 711  | <1 | <0.01 | <1  | 0.17 |    |    |    |      |     |    |     |



## Golden Loon Project Soil Geochemistry, January 5, 1993

Page 2

| SAHP | AU | CU  | AG  | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN  | MO | NA    | NI  | P    | PB | SB | SR   | TI   | V  | W  | ZN  |
|------|----|-----|-----|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|-----|----|-------|-----|------|----|----|------|------|----|----|-----|
| B71  | 32 | 29  | 0.1 | <5 | 81  | 0.3 | <2 | 0.26 | <0.1 | 12 | 39  | 1.67 | 3.05 | 0.10 | 5  | 0.84 | 399 | <1 | <0.01 | 11  | 0.07 | 2  | <5 | 20   | 0.09 | 50 | <5 | 66  |
| B71* | 36 | 29  | 0.1 | <5 | 81  | 0.3 | <2 | 0.26 | <0.1 | 12 | 38  | 1.68 | 3.06 | 0.10 | 5  | 0.85 | 403 | 4  | <0.01 | 12  | 0.07 | <1 | <5 | 21   | 0.09 | 50 | <5 | 68  |
| B72  | 16 | 113 | 0.1 | 14 | 75  | 0.7 | 2  | 1.91 | 0.4  | 20 | 50  | 1.09 | 3.28 | 0.21 | 17 | 0.83 | 624 | <1 | 0.01  | 26  | 0.11 | 7  | 8  | 55   | 0.06 | 60 | 13 | 67  |
| C17  | 15 | 92  | 0.3 | <5 | 78  | 0.3 | <2 | 1.69 | <0.1 | 14 | 42  | 1.20 | 3.21 | 0.20 | 10 | 0.80 | 628 | 5  | 0.01  | 37  | 0.10 | 3  | <5 | 55   | 0.08 | 57 | <5 | 66  |
| C18  | 11 | 56  | 0.2 | <5 | 90  | 0.4 | <2 | 0.38 | <0.1 | 12 | 56  | 1.49 | 3.09 | 0.27 | 12 | 0.87 | 431 | 4  | 0.01  | 48  | 0.08 | 3  | <5 | 26   | 0.09 | 47 | <5 | 69  |
| C19  | 5  | 55  | 0.2 | <5 | 81  | 0.3 | <2 | 0.37 | <0.1 | 11 | 56  | 1.47 | 3.03 | 0.27 | 12 | 0.85 | 411 | 4  | 0.01  | 53  | 0.09 | 4  | <5 | 25   | 0.09 | 46 | <5 | 66  |
| C20  | 8  | 38  | 0.2 | <5 | 124 | 0.3 | <2 | 0.31 | <0.1 | 11 | 59  | 1.43 | 2.95 | 0.19 | 8  | 0.82 | 441 | <1 | <0.01 | 42  | 0.11 | 5  | <5 | 28   | 0.08 | 48 | <5 | 76  |
| C21  | 17 | 57  | 0.2 | <5 | 60  | 0.3 | <2 | 0.26 | <0.1 | 14 | 47  | 1.35 | 3.28 | 0.32 | 9  | 0.87 | 383 | <1 | <0.01 | 43  | 0.08 | 2  | <5 | 21   | 0.10 | 54 | <5 | 63  |
| C22  | 18 | 70  | 0.3 | <5 | 91  | 0.3 | <2 | 0.32 | <0.1 | 15 | 106 | 1.66 | 3.73 | 0.23 | 7  | 1.18 | 468 | <1 | <0.01 | 64  | 0.07 | 1  | <5 | 28   | 0.09 | 67 | <5 | 84  |
| C23  | 6  | 18  | 0.2 | <5 | 169 | 0.2 | <2 | 0.26 | <0.1 | 9  | 46  | 1.37 | 2.88 | 0.08 | 5  | 0.55 | 306 | <1 | 0.01  | 27  | 0.13 | 1  | <5 | 30   | 0.07 | 47 | <5 | 60  |
| C24  | 13 | 3   | 0.2 | <5 | 185 | 0.3 | <2 | 0.26 | <0.1 | 6  | 31  | 1.43 | 1.81 | 0.07 | 4  | 0.24 | 354 | 1  | <0.01 | 23  | 0.22 | 3  | <5 | 25   | 0.06 | 26 | <5 | 64  |
| C25  | 7  | 36  | 0.3 | <5 | 135 | 0.3 | <2 | 0.40 | <0.1 | 12 | 74  | 1.44 | 3.12 | 0.18 | 7  | 0.83 | 355 | <1 | <0.01 | 46  | 0.06 | 2  | <5 | 34   | 0.08 | 55 | <5 | 64  |
| C25* | 8  | 35  | 0.3 | <5 | 135 | 0.3 | <2 | 0.40 | <0.1 | 12 | 74  | 1.42 | 3.07 | 0.18 | 6  | 0.82 | 354 | 2  | <0.01 | 46  | 0.06 | 3  | <5 | 33   | 0.08 | 54 | <5 | 68  |
| C26  | 1  | 19  | 0.3 | 6  | 182 | 0.4 | <2 | 0.38 | <0.1 | 13 | 73  | 1.67 | 2.56 | 0.18 | 6  | 0.66 | 455 | 4  | 0.01  | 47  | 0.08 | 2  | <5 | 37   | 0.07 | 40 | <5 | 92  |
| C27  | 1  | 24  | 0.4 | <5 | 171 | 0.4 | <2 | 0.25 | <0.1 | 11 | 60  | 1.86 | 2.19 | 0.08 | 5  | 0.42 | 244 | <1 | 0.01  | 68  | 0.07 | 3  | <5 | 25   | 0.09 | 35 | <5 | 71  |
| C28  | 7  | 168 | 0.5 | 6  | 114 | 0.4 | <2 | 0.46 | <0.1 | 15 | 63  | 1.66 | 3.09 | 0.12 | 12 | 0.84 | 740 | 1  | 0.01  | 103 | 0.05 | 3  | <5 | 35   | 0.09 | 54 | <5 | 89  |
| C29  | 3  | 24  | 0.4 | 5  | 170 | 0.5 | <2 | 0.22 | <0.1 | 12 | 40  | 1.96 | 2.35 | 0.09 | 5  | 0.42 | 339 | <1 | 0.01  | 52  | 0.22 | 8  | <5 | 22   | 0.09 | 33 | <5 | 153 |
| C30  | 9  | 32  | 0.4 | 7  | 98  | 0.3 | <2 | 0.31 | <0.1 | 14 | 74  | 1.37 | 2.94 | 0.19 | 5  | 0.80 | 365 | 1  | <0.01 | 48  | 0.06 | <1 | <5 | 29   | 0.09 | 50 | <5 | 60  |
| C31  | 4  | 30  | 0.4 | 6  | 100 | 0.3 | <2 | 0.30 | <0.1 | 14 | 67  | 1.40 | 2.89 | 0.17 | 5  | 0.76 | 350 | <1 | <0.01 | 46  | 0.07 | 1  | <5 | 27   | 0.08 | 47 | <5 | 55  |
| C32  | 3  | 9   | 0.3 | 5  | 65  | 0.2 | <2 | 0.18 | <0.1 | 10 | 55  | 1.13 | 2.25 | 0.09 | 4  | 0.55 | 202 | <1 | <0.01 | 32  | 0.04 | 2  | <5 | 19   | 0.07 | 39 | <5 | 46  |
| C33  | 5  | 24  | 0.4 | 7  | 95  | 0.4 | <2 | 0.30 | <0.1 | 13 | 59  | 1.74 | 2.99 | 0.08 | 7  | 0.74 | 303 | 2  | <0.01 | 37  | 0.14 | 3  | <5 | 36   | 0.07 | 53 | <5 | 63  |
| C34  | 20 | 54  | 0.2 | <5 | 81  | 0.3 | <2 | 0.38 | <0.1 | 12 | 50  | 1.14 | 2.90 | 0.14 | 10 | 0.74 | 313 | <1 | <0.01 | 27  | 0.09 | <1 | 6  | 29   | 0.06 | 47 | <5 | 51  |
| C34* | 6  | 54  | 0.2 | 6  | 79  | 0.3 | <2 | 0.37 | <0.1 | 12 | 49  | 1.11 | 2.84 | 0.14 | 9  | 0.72 | 306 | <1 | <0.01 | 27  | 0.09 | 2  | <5 | 28   | 0.06 | 46 | <5 | 50  |
| C35  | 8  | 15  | 0.3 | <5 | 114 | 0.4 | <2 | 0.20 | <0.1 | 10 | 43  | 1.66 | 2.65 | 0.06 | 7  | 0.51 | 224 | 2  | <0.01 | 27  | 0.13 | 2  | <5 | 23   | 0.07 | 41 | 6  | 49  |
| C36  | 4  | 11  | 0.3 | <5 | 180 | 0.3 | <2 | 0.21 | <0.1 | 10 | 37  | 1.42 | 2.29 | 0.05 | 5  | 0.47 | 699 | 5  | <0.01 | 20  | 0.14 | <1 | <5 | 26   | 0.07 | 36 | <5 | 56  |
| C37  | 2  | 9   | 0.4 | <5 | 74  | 0.3 | <2 | 0.14 | <0.1 | 7  | 35  | 1.57 | 2.36 | 0.03 | 5  | 0.38 | 222 | <1 | <0.01 | 18  | 0.12 | 2  | <5 | 17   | 0.06 | 40 | <5 | 53  |
| C38  | 5  | 17  | 0.1 | <5 | 122 | 0.4 | <2 | 0.18 | <0.1 | 9  | 31  | 1.83 | 2.61 | 0.05 | 4  | 0.40 | 330 | <1 | <0.01 | 22  | 0.09 | 1  | <5 | 18   | 0.10 | 44 | <5 | 97  |
| C39  | 19 | 11  | 0.3 | <5 | 172 | 0.4 | 2  | 0.25 | <0.1 | 9  | 30  | 1.92 | 2.33 | 0.09 | 5  | 0.47 | 363 | <1 | <0.01 | 25  | 0.18 | <1 | <5 | 22   | 0.09 | 35 | <5 | 67  |
| C40  | 6  | 31  | 0.7 | <5 | 108 | 0.4 | <2 | 0.19 | <0.1 | 10 | 32  | 1.86 | 3.18 | 0.08 | 4  | 0.60 | 278 | <1 | <0.01 | 22  | 0.16 | 3  | 8  | 21   | 0.09 | 50 | <5 | 55  |
| C41  | 6  | 13  | 0.7 | <5 | 82  | 0.3 | <2 | 0.25 | <0.1 | 8  | 22  | 1.35 | 1.86 | 0.07 | 3  | 0.25 | 491 | <1 | <0.01 | 17  | 0.10 | 3  | <5 | 20   | 0.08 | 30 | <5 | 67  |
| C42  | 20 | 13  | 0.7 | <5 | 123 | 0.7 | 2  | 0.25 | <0.1 | 9  | 26  | 3.03 | 2.54 | 0.07 | 5  | 0.34 | 321 | 4  | <0.01 | 21  | 0.25 | 3  | <5 | 23   | 0.11 | 34 | <5 | 67  |
| C43  | 11 | 10  | 0.3 | <5 | 74  | 0.2 | <2 | 0.20 | <0.1 | 7  | 25  | 1.28 | 2.18 | 0.05 | 3  | 0.36 | 168 | 2  | <0.01 | 14  | 0.05 | 3  | 5  | 20   | 0.09 | 39 | <5 | 51  |
| C43* | 2  | 11  | 0.3 | <5 | 75  | 0.2 | <2 | 0.20 | <0.1 | 7  | 24  | 1.26 | 2.17 | 0.05 | 3  | 0.37 | 168 | <1 | <0.01 | 14  | 0.05 | 2  | <5 | 20   | 0.08 | 38 | <5 | 50  |
| C44  | 7  | 31  | 0.4 | <5 | 127 | 0.3 | <2 | 0.16 | <0.1 | 10 | 47  | 1.32 | 1.99 | 0.06 | 3  | 0.28 | 248 | <1 | 0.01  | 34  | 0.09 | 4  | <5 | 14   | 0.10 | 34 | 5  | 38  |
| C45  | 2  | 23  | 0.8 | <5 | 151 | 0.6 | 2  | 0.19 | <0.1 | 11 | 34  | 2.46 | 2.89 | 0.08 | 5  | 0.46 | 284 | <1 | 0.01  | 34  | 0.19 | 9  | <5 | 20   | 0.10 | 42 | <5 | 108 |
| C46  | 17 | 20  | 0.1 | <5 | 99  | 0.3 | <2 | 0.17 | <0.1 | 11 | 30  | 1.43 | 2.42 | 0.08 | 5  | 0.42 | 423 | 4  | <0.01 | 18  | 0.04 | 4  | <5 | 19   | 0.09 | 46 | <5 | 52  |
| C47  | 3  | 24  | 0.6 | <5 | 155 | 0.6 | 3  | 0.29 | <0.1 | 13 | 32  | 2.95 | 3.20 | 0.09 | 5  | 0.51 | 322 | 2  | 0.01  | 20  | 0.26 | 14 | <5 | 23   | 0.14 | 49 | <5 | 181 |
| C48  | 4  | 48  | 0.3 | <5 | 106 | 0.6 | 3  | 0.13 | <0.1 | 11 | 25  | 3.40 | 3.59 | 0.05 | 5  | 0.43 | 322 | 5  | 0.01  | 20  | 0.12 | 70 | <5 | 11   | 0.18 | 70 | <5 | 94  |
| C49  | 4  | 30  | 0.2 | <5 | 146 | 0.6 | <2 | 0.27 | <0.1 | 11 | 26  | 2.74 | 3.20 | 0.07 | 4  | 0.53 | 318 | <1 | 0.01  | 20  | 0.28 | 12 | <5 | 24   | 0.15 | 48 | <5 | 110 |
| C50  | 5  | 10  | 0.2 | <5 | 245 | 0.6 | 4  | 0.32 | <0.1 | 10 | 30  | 3.36 | 2.60 | 0.05 | 5  | 0.22 | 213 | <1 | 0.01  | 15  | 0.71 | 15 | <5 | 40   | 0.15 | 32 | <5 | 93  |
| C51  | 4  | 12  | 0.3 | <5 | 248 | 1.5 | 7  | 0.40 | <0.1 | 11 | 33  | 4.25 | 3.41 | 0.05 | 6  | 0.21 | 258 | <1 | 0.01  | 16  | 1.01 | 18 | <5 | 53   | 0.19 | 34 | <5 | 98  |
| C52  | 3  | 94  | 0.4 | <5 | 75  | 0.6 | 7  | 0.08 | <0.1 | 17 | 35  | 2.55 | 3.03 | 0.04 | 5  | 0.17 | 537 | <1 | <0.01 | 47  | 0.28 | 47 | <5 | 6    | 0.17 | 52 | <5 | 69  |
| C53  | 10 | 43  | 0.3 | <5 | 150 | 0.4 | 5  | 0.29 | <0.1 | 14 | 46  | 2.02 | 2.97 | 0.08 | 5  | 0.21 | 321 | <1 | <0.01 | 35  | 0.21 | 14 | <5 | 23   | 0.10 | 47 | <5 | 59  |
| C54  | 2  | 38  | 0.3 | <5 | 153 | 0.4 | 5  | 0.15 | <0.1 | 22 | 120 | 2.03 | 2.74 | 0.09 | 6  | 0.82 | 186 | <1 | <0.01 | 92  | 0.10 | 9  | <5 | 10   | 0.14 | 77 | <5 | 99  |
| C55  | 5  | 30  | 0.5 | <5 | 150 | 0.6 | 4  | 0.16 | <0.1 | 18 | 102 | 2.61 | 3.93 | 0.08 | 5  | 0.67 | 239 | <1 | 0.01  | 69  | 0.32 | 12 | <5 | 12   | 0.11 | 59 | <5 | 66  |
| C56  | 1  | 14  | 0.2 | <5 | 66  | 0.5 | <2 | 0.08 | <0.1 | 8  | 97  | 2.45 | 2.04 | 0.03 | 4  | 0.38 | 261 | <1 | <0.01 | 37  | 0.15 | 7  | <5 | 6    | 0.10 | 33 | <5 | 38  |
| C57  | 2  | 28  | 0.2 | <5 | 133 | 0.3 | 4  | 0.10 | <0.1 | 16 | 46  | 1.70 | 2.68 | 0.10 | 4  | 0.48 | 304 | <1 | <0.01 | 87  | 0.15 | 14 | <5 | 9    | 0.13 | 42 | <5 | 116 |
| C58  | 1  | 17  | 0.3 | <5 | 95  | 0.7 | <2 | 0.10 | <0.1 | 8  | 39  | 3.49 | 2.51 | 0.04 | 4  | 0.15 | 121 | <2 | <0.01 | 22  | 0.26 | 10 | <5 | 10   | 0.13 | 27 | <5 | 60  |
| C59  | 3  | 23  | 0.2 | <5 | 91  | 0.4 | <2 | 0.09 | <0.1 | 8  | 27  | 2.02 | 2.46 | 0.15 | 3  | 0.32 | 215 | <1 | <0.01 | 13  | 0.10 | 8  | <5 | 8    | 0.12 | 41 | <5 | 46  |
| C60  | 12 | 85  | 0.3 | <5 | 99  | 0.4 | 2  | 0.12 | <0.1 | 14 | 56  | 1.37 | 2.94 | 0.07 | 8  | 0.53 | 217 | <1 | <0.01 | 37  | 0.11 | 8  | 10 | 17   | 0.08 | 52 | 13 | 80  |
| C61  | 24 | 41  | 0.2 | <5 | 122 | 0.6 | 4  | 0.20 | 0.2  | 19 | 74  | 1.72 | 2.64 | 0.09 | 10 | 0.40 | 324 | 5  | <0.01 | 56  | 0.11 | 7  | 7  | 19   | 0.07 | 50 | 6  | 80  |
| C62  | 5  | 28  | 0.3 | <5 | 87  | 0.7 | <2 | 0.27 | 0.2  | 12 | 47  | 2.22 | 2.44 | 0.07 | 9  | 0.42 | 292 | 5  | <0.01 | 39  | 0.13 | 7  | 9  | 19</ |      |    |    |     |

| SMAP   | AD  | CD  | AG   | AS | BA  | RE  | BI | CA   | CD   | CR | AL  | FE   | K    | LA   | MG | MS   | MO   | NA  | NI    | P   | PB   | SB  | SR | TI | V     | M   | ZN |     |
|--------|-----|-----|------|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|------|-----|-------|-----|------|-----|----|----|-------|-----|----|-----|
| C70    | 19  | 51  | 0.3  | <5 | 103 | 0.4 | 6  | 0.20 | <0.1 | 37 | 44  | 2.22 | 4.73 | 0.19 | 5  | 1.21 | 458  | <1  | <0.01 | 32  | 0.05 | 10  | <5 | 19 | 0.12  | 75  | <5 | 100 |
| C71    | 15  | 90  | 0.3  | 18 | 61  | 0.5 | 7  | 1.64 | 0.4  | 37 | 46  | 0.91 | 3.09 | 0.18 | 15 | 0.77 | 572  | 3   | 0.01  | 36  | 0.09 | 11  | 11 | 46 | 0.06  | 51  | <5 | 57  |
| D18    | 14  | 105 | 0.1  | 11 | 79  | 0.4 | 2  | 2.08 | 0.2  | 39 | 47  | 1.26 | 3.63 | 0.24 | 11 | 0.97 | 702  | <1  | 0.01  | 38  | 0.12 | 12  | <5 | 60 | 0.08  | 59  | <5 | 69  |
| D19    | 11  | 33  | 0.1  | <5 | 102 | 0.4 | <2 | 0.44 | <0.1 | 30 | 50  | 1.06 | 2.93 | 0.10 | 10 | 0.54 | 229  | <1  | <0.01 | 28  | 0.08 | 4   | <5 | 39 | 0.06  | 49  | <5 | 37  |
| D20    | 11  | 33  | 0.1  | <5 | 90  | 0.4 | <2 | 0.42 | <0.1 | 30 | 47  | 1.01 | 2.76 | 0.10 | 14 | 0.52 | 217  | 2   | <0.01 | 27  | 0.07 | 5   | <5 | 35 | 0.06  | 47  | <5 | 36  |
| D21    | 5   | 36  | 0.2  | 5  | 129 | 0.2 | <2 | 0.62 | <0.1 | 7  | 35  | 1.13 | 1.87 | 0.06 | 4  | 0.28 | 205  | <1  | 0.01  | 32  | 0.03 | 2   | <5 | 39 | 0.05  | 24  | <5 | 31  |
| D22    | 3   | 4   | 0.2  | <5 | 164 | 0.4 | <2 | 0.32 | <0.1 | 8  | 31  | 1.57 | 1.87 | 0.06 | 4  | 0.12 | 264  | <1  | <0.01 | 21  | 0.29 | 4   | <5 | 28 | 0.07  | 26  | <5 | 60  |
| D23    | 15  | 41  | 0.2  | <5 | 169 | 0.3 | <2 | 0.60 | <0.1 | 11 | 54  | 1.36 | 2.77 | 0.11 | 9  | 0.59 | 303  | <1  | 0.01  | 43  | 0.06 | 3   | <5 | 41 | 0.06  | 35  | <5 | 59  |
| D24    | 8   | 24  | 0.1  | <5 | 156 | 0.4 | <2 | 0.30 | <0.1 | 11 | 39  | 1.64 | 2.62 | 0.09 | 6  | 0.52 | 333  | <1  | 0.01  | 33  | 0.03 | 3   | <5 | 26 | 0.07  | 48  | <5 | 41  |
| D25    | 4   | 8   | 0.1  | <5 | 101 | 0.2 | <2 | 0.20 | <0.1 | 10 | 39  | 1.06 | 1.88 | 0.07 | 3  | 0.31 | 338  | 2   | <0.01 | 23  | 0.02 | 4   | <5 | 19 | 0.08  | 37  | <5 | 34  |
| D26    | 8   | 12  | 0.1  | <5 | 128 | 0.2 | <2 | 0.24 | <0.1 | 8  | 44  | 1.21 | 2.21 | 0.09 | 4  | 0.45 | 180  | <1  | <0.01 | 33  | 0.02 | 3   | <5 | 24 | 0.07  | 37  | <5 | 45  |
| D27    | 3   | 11  | 0.2  | <5 | 177 | 0.3 | <2 | 0.19 | <0.1 | 7  | 26  | 1.39 | 1.96 | 0.07 | 3  | 0.24 | 338  | <1  | 0.01  | 41  | 0.16 | 5   | <5 | 20 | 0.06  | 22  | <5 | 77  |
| D27*   | 3   | 12  | 0.2  | <5 | 181 | 0.3 | <2 | 0.19 | <0.1 | 8  | 27  | 1.43 | 1.99 | 0.07 | 3  | 0.25 | 347  | <1  | 0.01  | 43  | 0.17 | 2   | <5 | 20 | 0.06  | 23  | <5 | 80  |
| D28    | 5   | 12  | 0.1  | <5 | 131 | 0.3 | <2 | 0.19 | <0.1 | 9  | 38  | 1.55 | 2.03 | 0.09 | 5  | 0.39 | 198  | <1  | <0.01 | 38  | 0.08 | 1   | <5 | 18 | 0.07  | 34  | <5 | 55  |
| D29    | 4   | 20  | 0.1  | <5 | 92  | 0.3 | <2 | 0.23 | <0.1 | 12 | 46  | 1.68 | 2.50 | 0.11 | 4  | 0.57 | 203  | <1  | <0.01 | 46  | 0.05 | <1  | <5 | 20 | 0.09  | 45  | <5 | 57  |
| D30    | 2   | 19  | <0.1 | <5 | 36  | 0.2 | <2 | 0.20 | <0.1 | 11 | 58  | 1.07 | 2.51 | 0.11 | 4  | 0.70 | 232  | <1  | <0.01 | 42  | 0.04 | 1   | <5 | 17 | 0.06  | 45  | <5 | 41  |
| D31    | 13  | 18  | <0.1 | <5 | 44  | 0.2 | <2 | 0.20 | <0.1 | 11 | 59  | 1.12 | 2.51 | 0.12 | 3  | 0.71 | 237  | <1  | <0.01 | 43  | 0.04 | 2   | <5 | 18 | 0.06  | 44  | <5 | 44  |
| D32    | 21  | 21  | 0.1  | <5 | 135 | 0.2 | <2 | 0.29 | <0.1 | 12 | 46  | 1.94 | 2.28 | 0.09 | 4  | 0.48 | 324  | 1   | <0.01 | 64  | 0.14 | 2   | <5 | 22 | 0.08  | 36  | <5 | 87  |
| D33    | 14  | 14  | 0.2  | <5 | 121 | 0.3 | <2 | 0.21 | <0.1 | 11 | 39  | 1.58 | 2.15 | 0.08 | 4  | 0.45 | 246  | <1  | <0.01 | 46  | 0.12 | 3   | <5 | 19 | 0.07  | 34  | <5 | 51  |
| D34    | 15  | 14  | 0.2  | <5 | 121 | 0.3 | <2 | 0.21 | <0.1 | 10 | 45  | 1.15 | 1.49 | 0.09 | 5  | 0.49 | 278  | <1  | <0.01 | 31  | 0.08 | <1  | <5 | 21 | 0.06  | 43  | <5 | 56  |
| D35    | 15  | 18  | 0.1  | <5 | 161 | 0.3 | <2 | 0.20 | <0.1 | 9  | 34  | 1.91 | 0.53 | 0.06 | 5  | 0.47 | 284  | <1  | <0.01 | 23  | 0.19 | 4   | <5 | 18 | 0.09  | 43  | <5 | 82  |
| D36    | 15  | 18  | 0.1  | <5 | 161 | 0.3 | <2 | 0.20 | <0.1 | 8  | 29  | 2.51 | 1.11 | 0.04 | 4  | 0.24 | 162  | <1  | <0.01 | 17  | 0.19 | 5   | <5 | 11 | 0.09  | 38  | <5 | 47  |
| D36*   | 15  | 18  | 0.1  | <5 | 161 | 0.3 | <2 | 0.20 | <0.1 | 8  | 29  | 2.50 | 1.37 | 0.04 | 4  | 0.24 | 162  | <1  | <0.01 | 18  | 0.19 | 5   | <5 | 11 | 0.09  | 39  | <5 | 47  |
| D37    | 15  | 18  | 0.1  | <5 | 161 | 0.3 | <2 | 0.20 | <0.1 | 11 | 29  | 3.73 | 3.47 | 0.04 | 6  | 0.47 | 248  | 9   | <0.01 | 20  | 0.26 | 5   | <5 | 21 | 0.14  | 56  | 6  | 76  |
| D38    | 15  | 21  | 0.1  | <5 | 161 | 0.3 | <2 | 0.20 | <0.1 | 9  | 14  | 2.12 | 1.19 | 0.07 | 5  | 0.38 | 586  | 2   | <0.01 | 17  | 0.21 | 6   | <5 | 20 | 0.08  | 32  | <5 | 70  |
| D39    | 15  | 20  | 0.1  | <5 | 160 | 0.3 | <2 | 0.24 | <0.1 | 12 | 35  | 1.78 | 0.74 | 0.10 | 4  | 0.69 | 346  | <1  | <0.01 | 23  | 0.17 | 4   | <5 | 25 | 0.09  | 47  | <5 | 73  |
| D40    | 15  | 20  | 0.1  | <5 | 160 | 0.3 | <2 | 0.24 | <0.1 | 9  | 29  | 2.02 | 1.40 | 0.05 | 4  | 0.39 | 237  | 2   | <0.01 | 22  | 0.11 | 4   | <5 | 19 | 0.09  | 39  | <5 | 74  |
| D41    | 6   | 18  | 0.1  | <5 | 161 | 0.2 | <2 | 0.25 | <0.1 | 13 | 29  | 2.66 | 1.62 | 0.09 | 5  | 0.70 | 402  | 5   | <0.01 | 22  | 0.14 | 21  | <5 | 16 | 0.14  | 74  | <5 | 98  |
| D42    | 17  | 18  | 0.1  | <5 | 97  | 0.3 | <2 | 0.14 | <0.1 | 8  | 26  | 3.19 | 2.51 | 0.04 | 4  | 0.26 | 301  | 4   | <0.01 | 18  | 0.12 | 5   | <5 | 10 | 0.11  | 41  | <5 | 51  |
| D43    | 13  | 23  | 0.1  | <5 | 100 | 0.4 | <2 | 0.17 | <0.1 | 8  | 26  | 2.50 | 3.40 | 0.05 | 4  | 0.43 | 335  | 6   | <0.01 | 17  | 0.13 | 11  | <5 | 13 | 0.13  | 56  | <5 | 82  |
| D44    | 4   | 18  | 0.1  | <5 | 181 | 0.8 | <2 | 0.17 | 0.2  | 9  | 27  | 3.87 | 1.86 | 0.05 | 5  | 0.23 | 368  | 3   | <0.01 | 16  | 0.61 | 5   | <5 | 19 | 0.12  | 37  | <5 | 133 |
| D45    | 21  | 38  | 0.1  | <5 | 189 | 0.3 | <2 | 0.16 | 0.3  | 12 | 43  | 4.33 | 4.72 | 0.06 | 38 | 0.44 | 1904 | 12  | 0.01  | 40  | 0.18 | 119 | <5 | 42 | 0.10  | 62  | <5 | 90  |
| D46    | 4   | 15  | 0.1  | <5 | 83  | 0.3 | <2 | 0.17 | <0.1 | 9  | 19  | 1.84 | 3.87 | 0.04 | 6  | 0.81 | 366  | <1  | <0.01 | 14  | 0.14 | 11  | <5 | 10 | 0.19  | 116 | <5 | 100 |
| D47    | 15  | 17  | 0.1  | <5 | 131 | 0.3 | <2 | 0.24 | <0.1 | 6  | 19  | 1.71 | 1.43 | 0.04 | 5  | 0.29 | 155  | <1  | <0.01 | 9   | 0.10 | 10  | <5 | 10 | 0.15  | 65  | <5 | 48  |
| D48    | 15  | 17  | 0.1  | <5 | 131 | 0.3 | <2 | 0.24 | <0.1 | 9  | 36  | 2.41 | 3.64 | 0.17 | 4  | 1.37 | 419  | <1  | <0.01 | 22  | 0.15 | 4   | <5 | 19 | 0.15  | 74  | <5 | 130 |
| D49    | 21  | 17  | 0.1  | <5 | 184 | 0.3 | <2 | 0.17 | <0.1 | 15 | 34  | 2.26 | 1.45 | 0.08 | 5  | 0.79 | 370  | <1  | <0.01 | 25  | 0.22 | 7   | <5 | 15 | 0.12  | 62  | <5 | 96  |
| D50    | 5   | 18  | 0.1  | <5 | 73  | 0.2 | <2 | 0.17 | <0.1 | 8  | 25  | 1.02 | 1.10 | 0.17 | 4  | 0.60 | 268  | <1  | <0.01 | 16  | 0.08 | 7   | <5 | 12 | 0.13  | 55  | <5 | 64  |
| D5076  | 7   | 20  | 0.1  | <5 | 209 | 0.4 | <2 | 1.92 | <0.1 | 7  | 39  | 0.30 | 1.42 | 0.01 | 8  | 0.54 | 722  | 3   | 0.04  | 14  | 0.08 | 12  | <5 | 85 | 0.02  | 32  | <5 | 72  |
| D5077  | 6   | 17  | 0.1  | <5 | 155 | 0.4 | <2 | 1.49 | <0.1 | 7  | 117 | 0.23 | 1.67 | 0.15 | 5  | 0.76 | 590  | 2   | 0.01  | 13  | 0.06 | 7   | <5 | 35 | <0.01 | 5   | <5 | 21  |
| D5078  | 3   | 25  | <0.1 | <5 | 68  | 0.3 | <2 | 0.33 | <0.1 | 6  | 130 | 0.58 | 2.40 | 0.20 | 7  | 0.47 | 562  | 2   | 0.03  | 12  | 0.06 | 5   | <5 | 25 | 0.05  | 44  | <5 | 37  |
| D5079  | 3   | 16  | 0.1  | <5 | 204 | 0.4 | <2 | 1.56 | <0.1 | 8  | 90  | 0.15 | 1.87 | 0.10 | 10 | 0.45 | 702  | 2   | 0.04  | 14  | 0.09 | 12  | <5 | 62 | 0.03  | 60  | <5 | 47  |
| D5080  | <1  | 15  | <0.1 | <5 | 39  | 0.2 | <2 | 0.39 | <0.1 | 5  | 158 | 0.52 | 1.80 | 0.10 | 6  | 0.34 | 269  | 1   | 0.04  | 19  | 0.07 | 3   | <5 | 34 | 0.05  | 38  | <5 | 43  |
| D5081  | 510 | 75  | 1.0  | <5 | 158 | 0.4 | <2 | 1.64 | 0.1  | 12 | 45  | 0.14 | 4.52 | 0.11 | 23 | 0.43 | 677  | 381 | 0.03  | 16  | 0.06 | 33  | <5 | 57 | 0.05  | 94  | <5 | 54  |
| D5082  | 5   | 42  | <0.1 | <5 | 201 | 0.3 | <2 | 1.67 | <0.1 | 9  | 63  | 0.55 | 2.50 | 0.30 | 11 | 0.62 | 795  | 2   | 0.03  | 12  | 0.09 | 8   | <5 | 84 | 0.03  | 28  | <5 | 41  |
| D5082* | 10  | 40  | 0.2  | <5 | 197 | 0.3 | <2 | 1.64 | 0.1  | 9  | 59  | 0.54 | 2.44 | 0.29 | 11 | 0.61 | 772  | <1  | 0.02  | 6   | 0.09 | 9   | <5 | 83 | 0.03  | 27  | <5 | 35  |
| D51    | 8   | 30  | 0.3  | <5 | 101 | 0.3 | <2 | 0.21 | <0.1 | 10 | 26  | 1.71 | 3.23 | 0.20 | 5  | 0.66 | 280  | <1  | <0.01 | 19  | 0.13 | 6   | <5 | 15 | 0.14  | 71  | <5 | 74  |
| D52    | 37  | 36  | 0.4  | <5 | 121 | 0.4 | <2 | 0.17 | <0.1 | 12 | 46  | 2.08 | 2.58 | 0.09 | 4  | 0.59 | 262  | <1  | <0.01 | 43  | 0.06 | 5   | <5 | 16 | 0.10  | 44  | <5 | 79  |
| D53    | 18  | 37  | 0.7  | <5 | 270 | 0.5 | <2 | 0.23 | <0.1 | 15 | 49  | 2.63 | 4.19 | 0.31 | 9  | 1.11 | 403  | <1  | <0.01 | 47  | 0.16 | 5   | <5 | 46 | 0.16  | 74  | <5 | 96  |
| D54    | 5   | 23  | 0.2  | <5 | 153 | 0.5 | <2 | 0.36 | <0.1 | 14 | 58  | 2.61 | 2.69 | 0.10 | 4  | 0.68 | 397  | <1  | <0.01 | 46  | 0.29 | 6   | <5 | 30 | 0.10  | 45  | <5 | 100 |
| D54*   | 1   | 24  | 0.3  | <5 | 167 | 0.5 | <2 | 0.39 | <0.1 | 14 | 61  | 2.82 | 2.74 | 0.11 | 4  | 0.75 | 435  | <1  | 0.01  | 50  | 0.31 | 3   | <5 | 33 | 0.11  | 49  | <5 | 108 |
| D55    | <1  | 10  | 0.3  | <5 | 213 | 0.5 | <2 | 0.22 | <0.1 | 20 | 147 | 3.27 | 2.66 | 0.05 | 4  | 0.41 | 235  | <1  | <0.01 | 103 | 0.42 | 6   | <5 | 16 | 0.14  | 42  | <5 | 52  |
| D56    | <1  | 14  | 0.2  | <5 | 160 | 0.4 | <2 | 0.28 | <0.1 | 22 | 64  | 1.95 |      |      |    |      |      |     |       |     |      |     |    |    |       |     |    |     |

| SAMP | AD | CD  | AG  | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN   | MO | KA    | NI  | P    | PB | SB | SR | TI   | V  | W  | ZN  |
|------|----|-----|-----|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|------|----|-------|-----|------|----|----|----|------|----|----|-----|
| D64  | 6  | 69  | 0.1 | 7  | 68  | 0.3 | <2 | 0.17 | <0.1 | 24 | 93  | 1.13 | 2.44 | 0.05 | 3  | 0.58 | 150  | 3  | <0.01 | 95  | 0.04 | 5  | <5 | 12 | 0.06 | 39 | 5  | 47  |
| D65  | 2  | 98  | 0.3 | 6  | 94  | 0.3 | 2  | 0.14 | <0.1 | 31 | 155 | 1.66 | 2.33 | 0.05 | 3  | 0.96 | 176  | 4  | <0.01 | 176 | 0.06 | 9  | <5 | 11 | 0.06 | 36 | <5 | 71  |
| D66  | 33 | 45  | 0.4 | <5 | 101 | 0.4 | 2  | 0.22 | <0.1 | 13 | 46  | 1.40 | 2.96 | 0.09 | 5  | 0.72 | 473  | <1 | <0.01 | 31  | 0.08 | 9  | <5 | 18 | 0.06 | 48 | <5 | 55  |
| D67  | 3  | 22  | 0.6 | <5 | 110 | 0.6 | <2 | 0.15 | <0.1 | 11 | 33  | 2.41 | 2.44 | 0.06 | 4  | 0.41 | 356  | <1 | <0.01 | 25  | 0.15 | 7  | <5 | 14 | 0.09 | 35 | <5 | 91  |
| D68  | 3  | 16  | 0.6 | <5 | 120 | 0.5 | <2 | 0.25 | <0.1 | 10 | 25  | 2.30 | 2.38 | 0.08 | 4  | 0.44 | 1051 | <1 | <0.01 | 18  | 0.23 | 8  | <5 | 18 | 0.09 | 35 | <5 | 122 |
| D69  | 7  | 17  | 0.4 | <5 | 148 | 0.4 | <2 | 0.28 | <0.1 | 10 | 37  | 1.97 | 2.36 | 0.11 | 4  | 0.58 | 466  | <1 | <0.01 | 31  | 0.11 | 14 | <5 | 19 | 0.08 | 37 | <5 | 96  |
| D70  | 7  | 25  | 0.5 | <5 | 99  | 0.3 | 3  | 0.22 | <0.1 | 10 | 28  | 1.63 | 2.52 | 0.12 | 4  | 0.65 | 333  | <1 | <0.01 | 20  | 0.04 | 10 | <5 | 20 | 0.08 | 44 | <5 | 73  |
| D71  | 20 | 17  | 0.5 | <5 | 109 | 0.4 | 3  | 0.19 | <0.1 | 10 | 29  | 1.80 | 2.48 | 0.08 | 4  | 0.61 | 432  | <1 | <0.01 | 22  | 0.08 | 8  | <5 | 17 | 0.07 | 38 | <5 | 72  |
| D72  | 12 | 18  | 0.5 | <5 | 118 | 0.4 | <2 | 0.21 | <0.1 | 10 | 30  | 1.94 | 2.65 | 0.09 | 4  | 0.64 | 479  | <1 | <0.01 | 23  | 0.09 | 8  | <5 | 19 | 0.08 | 41 | <5 | 80  |
| E17  | 16 | 88  | 0.2 | 9  | 66  | 0.4 | <2 | 1.66 | 0.2  | 16 | 43  | 1.06 | 2.69 | 0.19 | 10 | 0.76 | 565  | <1 | 0.01  | 33  | 0.10 | 9  | <5 | 46 | 0.06 | 53 | 5  | 67  |
| E18  | 15 | 54  | 0.5 | <1 | 126 | 0.3 | 3  | 0.99 | 0.1  | 13 | 53  | 1.07 | 2.45 | 0.13 | 11 | 0.70 | 707  | 7  | <0.01 | 43  | 0.07 | 7  | <5 | 50 | 0.05 | 37 | <5 | 56  |
| E19  | 6  | 58  | 0.4 | <5 | 149 | 0.4 | 3  | 1.46 | 0.1  | 13 | 45  | 1.09 | 2.49 | 0.12 | 12 | 0.63 | 869  | <1 | 0.01  | 42  | 0.07 | 5  | <5 | 61 | 0.05 | 36 | <5 | 47  |
| E20  | 20 | 24  | 0.3 | <1 | 209 | 0.3 | <2 | 0.29 | <0.1 | 8  | 35  | 1.20 | 2.32 | 0.07 | 6  | 0.39 | 218  | <1 | <0.01 | 21  | 0.03 | 5  | <5 | 28 | 0.06 | 36 | <5 | 46  |
| E21  | 10 | 25  | 0.2 | <5 | 215 | 0.3 | <2 | 0.25 | <0.1 | 8  | 35  | 1.28 | 2.27 | 0.06 | 5  | 0.41 | 241  | <1 | <0.01 | 24  | 0.08 | 4  | <5 | 22 | 0.05 | 34 | <5 | 62  |
| E22  | 21 | 24  | 0.4 | <5 | 193 | 0.4 | <2 | 0.27 | <0.1 | 7  | 30  | 1.49 | 2.11 | 0.08 | 5  | 0.30 | 170  | <1 | <0.01 | 23  | 0.06 | 6  | <5 | 21 | 0.06 | 29 | <5 | 61  |
| E23  | 8  | 122 | 0.3 | <5 | 222 | 0.4 | <2 | 0.38 | <0.1 | 10 | 37  | 1.57 | 2.72 | 0.10 | 9  | 0.36 | 502  | 4  | <0.01 | 40  | 0.03 | 7  | <5 | 30 | 0.06 | 33 | <5 | 60  |
| E24  | 12 | 5   | 0.2 | <5 | 153 | 0.3 | <2 | 0.16 | <0.1 | 6  | 29  | 1.37 | 1.85 | 0.05 | 4  | 0.25 | 339  | <1 | <0.01 | 16  | 0.10 | 6  | <5 | 17 | 0.05 | 27 | <5 | 45  |
| E25  | 7  | 56  | 0.3 | <5 | 229 | 0.7 | 4  | 0.60 | <0.1 | 11 | 34  | 2.54 | 3.33 | 0.09 | 12 | 0.47 | 266  | <1 | 0.01  | 30  | 0.05 | 4  | <5 | 44 | 0.08 | 44 | <5 | 45  |
| E25* | 1  | 56  | 0.3 | <5 | 229 | 0.7 | <1 | 0.61 | <0.1 | 11 | 34  | 2.51 | 3.29 | 0.09 | 12 | 0.46 | 263  | 1  | 0.01  | 30  | 0.05 | 4  | <5 | 44 | 0.08 | 44 | <5 | 45  |
| E26  | 1  | 56  | 0.3 | <5 | 229 | 0.7 | <1 | 0.61 | <0.1 | 10 | 47  | 1.70 | 2.36 | 0.07 | 5  | 0.44 | 198  | 3  | <0.01 | 36  | 0.06 | 6  | <5 | 13 | 0.09 | 37 | <5 | 75  |
| E26* | 1  | 56  | 0.3 | <5 | 229 | 0.7 | <1 | 0.61 | <0.1 | 10 | 47  | 1.70 | 2.36 | 0.07 | 5  | 0.44 | 198  | 3  | <0.01 | 36  | 0.06 | 6  | <5 | 13 | 0.09 | 37 | <5 | 75  |
| E27  | 61 | 14  | 0.1 | <5 | 103 | 0.4 | <3 | 0.15 | <0.1 | 9  | 32  | 1.74 | 2.45 | 0.06 | 4  | 0.32 | 195  | 7  | <0.01 | 23  | 0.04 | 6  | <5 | 18 | 0.06 | 43 | <5 | 50  |
| E28  | 61 | 14  | 0.1 | <5 | 103 | 0.4 | <3 | 0.15 | <0.1 | 9  | 32  | 1.74 | 2.45 | 0.06 | 4  | 0.32 | 195  | 7  | <0.01 | 23  | 0.04 | 6  | <5 | 18 | 0.06 | 43 | <5 | 50  |
| E28* | 61 | 14  | 0.1 | <5 | 103 | 0.4 | <3 | 0.15 | <0.1 | 9  | 32  | 1.74 | 2.45 | 0.06 | 4  | 0.32 | 195  | 7  | <0.01 | 23  | 0.04 | 6  | <5 | 18 | 0.06 | 43 | <5 | 50  |
| E29  | 5  | 24  | 0.4 | <5 | 167 | 0.6 | <2 | 0.22 | <0.1 | 9  | 35  | 1.71 | 2.25 | 0.08 | 4  | 0.37 | 140  | 3  | <0.01 | 39  | 0.08 | 14 | <5 | 20 | 0.09 | 38 | <5 | 38  |
| E30  | 1  | 22  | 0.4 | <5 | 167 | 0.6 | <2 | 0.22 | <0.1 | 11 | 45  | 1.66 | 2.98 | 0.07 | 9  | 0.43 | 1076 | 2  | 0.01  | 114 | 0.03 | 10 | <5 | 34 | 0.07 | 34 | <5 | 45  |
| E31  | 1  | 22  | 0.4 | <5 | 167 | 0.6 | <2 | 0.22 | <0.1 | 8  | 40  | 1.08 | 2.18 | 0.06 | 5  | 0.42 | 202  | 4  | <0.01 | 28  | 0.05 | 5  | <5 | 15 | 0.05 | 35 | <5 | 37  |
| E31* | 1  | 22  | 0.4 | <5 | 167 | 0.6 | <2 | 0.22 | <0.1 | 7  | 41  | 1.13 | 2.18 | 0.06 | 5  | 0.41 | 178  | 5  | <0.01 | 28  | 0.06 | 7  | <5 | 16 | 0.05 | 35 | <5 | 43  |
| E32  | 19 | 16  | 0.1 | <5 | 172 | 0.5 | <2 | 0.17 | <0.1 | 9  | 26  | 2.27 | 2.23 | 0.06 | 4  | 0.38 | 287  | 3  | <0.01 | 30  | 0.30 | 6  | <5 | 17 | 0.09 | 29 | <5 | 66  |
| E33  | 14 | 12  | 0.1 | <5 | 158 | 0.5 | 5  | 0.21 | <0.1 | 18 | 69  | 2.70 | 2.68 | 0.05 | 5  | 0.59 | 364  | 5  | <0.01 | 159 | 0.26 | 7  | <5 | 18 | 0.10 | 33 | <5 | 90  |
| E34  | 54 | 42  | 0.1 | <5 | 141 | 0.6 | 3  | 0.18 | <0.1 | 10 | 30  | 2.24 | 3.41 | 0.10 | 4  | 0.66 | 323  | 4  | <0.01 | 24  | 0.09 | 6  | <5 | 16 | 0.11 | 60 | <5 | 75  |
| E34* | 9  | 34  | 0.1 | <5 | 138 | 0.5 | 2  | 0.17 | <0.1 | 7  | 28  | 2.19 | 3.32 | 0.08 | 2  | 0.54 | 318  | 5  | <0.01 | 23  | 0.07 | 5  | <5 | 15 | 0.09 | 58 | <5 | 59  |
| E35  | 19 | 22  | 0.1 | <5 | 97  | 0.3 | 3  | 0.22 | 0.2  | 15 | 80  | 1.40 | 2.92 | 0.07 | 5  | 0.79 | 277  | 6  | <0.01 | 68  | 0.09 | 11 | 7  | 18 | 0.07 | 44 | <5 | 54  |
| E36  | 6  | 16  | 0.1 | <5 | 115 | 0.5 | 2  | 0.16 | <0.1 | 10 | 33  | 2.44 | 3.34 | 0.05 | 5  | 0.40 | 189  | 2  | <0.01 | 25  | 0.28 | 17 | 7  | 14 | 0.10 | 49 | <5 | 60  |
| E37  | 4  | 28  | 0.1 | <5 | 62  | 0.6 | 3  | 0.21 | 0.1  | 9  | 27  | 2.69 | 3.33 | 0.07 | 5  | 0.41 | 233  | 4  | 0.01  | 23  | 0.23 | 16 | <5 | 16 | 0.13 | 49 | <5 | 80  |
| E38  | 3  | 24  | 0.1 | <5 | 106 | 0.5 | 6  | 0.30 | 0.2  | 7  | 21  | 1.96 | 2.18 | 0.08 | 5  | 0.22 | 270  | 3  | 1.01  | 17  | 0.19 | 15 | 6  | 19 | 0.12 | 30 | <5 | 63  |
| E39  | 5  | 24  | 0.1 | <5 | 109 | 0.5 | 5  | 0.29 | 0.2  | 11 | 25  | 2.62 | 3.12 | 0.08 | 5  | 0.49 | 265  | 7  | <0.01 | 25  | 0.22 | 18 | <5 | 21 | 0.09 | 43 | <5 | 101 |
| E40  | 1  | 27  | 0.1 | <5 | 144 | 0.4 | 4  | 0.28 | 0.3  | 10 | 12  | 1.73 | 2.32 | 0.12 | 5  | 0.36 | 566  | 4  | 1.01  | 19  | 0.28 | 18 | 7  | 30 | 0.09 | 30 | <5 | 122 |
| E41  | 13 | 34  | 0.1 | <5 | 155 | 1.0 | 5  | 1.16 | 0.3  | 11 | 29  | 2.95 | 3.70 | 0.09 | 24 | 0.35 | 1487 | 11 | 1.02  | 34  | 0.09 | 22 | 7  | 60 | 0.10 | 35 | <5 | 56  |
| E42  | 14 | 22  | 0.1 | <5 | 173 | 0.5 | 5  | 0.28 | 0.3  | 11 | 16  | 1.80 | 3.05 | 0.07 | 5  | 0.35 | 1232 | 3  | 1.01  | 18  | 0.30 | 15 | <5 | 24 | 0.10 | 44 | <5 | 106 |
| E44  | 8  | 37  | 0.1 | <5 | 153 | 0.6 | 4  | 0.26 | 0.3  | 13 | 34  | 2.46 | 3.50 | 0.08 | 6  | 0.63 | 403  | 2  | <0.01 | 26  | 0.28 | 17 | <5 | 18 | 0.10 | 49 | <5 | 137 |
| E45  | 8  | 37  | 0.1 | <5 | 153 | 0.6 | 4  | 0.26 | 0.3  | 13 | 34  | 2.46 | 3.50 | 0.08 | 6  | 0.63 | 403  | 2  | <0.01 | 26  | 0.28 | 17 | <5 | 18 | 0.10 | 49 | <5 | 137 |
| E45* | 8  | 37  | 0.1 | <5 | 153 | 0.6 | 4  | 0.26 | 0.3  | 13 | 34  | 2.46 | 3.50 | 0.08 | 6  | 0.63 | 403  | 2  | <0.01 | 26  | 0.28 | 17 | <5 | 18 | 0.10 | 49 | <5 | 137 |
| E46  | 1  | 41  | 0.1 | <5 | 175 | 0.5 | <2 | 0.26 | <0.1 | 12 | 41  | 2.58 | 2.64 | 0.06 | 4  | 0.54 | 392  | 2  | <0.01 | 30  | 0.36 | 9  | <5 | 21 | 0.11 | 40 | <5 | 121 |
| E47  | 4  | 42  | 0.1 | <5 | 142 | 0.7 | <2 | 0.42 | <0.1 | 15 | 39  | 2.84 | 4.05 | 0.19 | 7  | 0.72 | 381  | 5  | 1.01  | 30  | 0.36 | 21 | <5 | 29 | 0.18 | 73 | <5 | 142 |
| E48  | 2  | 23  | 0.1 | <5 | 78  | 0.4 | <2 | 0.31 | <0.1 | 12 | 26  | 2.22 | 2.97 | 0.08 | 4  | 0.56 | 722  | 2  | <0.01 | 17  | 0.21 | 3  | <5 | 23 | 0.09 | 53 | <5 | 77  |
| E49  | 11 | 19  | 0.1 | <5 | 83  | 0.4 | <2 | 0.17 | <0.1 | 9  | 23  | 1.76 | 2.19 | 0.04 | 4  | 0.29 | 324  | 1  | <0.01 | 15  | 0.14 | 9  | <5 | 14 | 0.09 | 40 | <5 | 62  |
| E50  | 2  | 92  | 0.1 | <5 | 195 | 0.6 | <2 | 0.47 | <0.1 | 14 | 24  | 2.59 | 3.34 | 0.14 | 9  | 0.67 | 447  | 5  | 0.01  | 20  | 0.15 | 16 | <5 | 36 | 0.20 | 65 | <5 | 98  |
| E51  | 2  | 65  | 0.1 | <5 | 156 | 0.4 | <2 | 0.41 | <0.1 | 10 | 31  | 1.93 | 2.79 | 0.22 | 8  | 0.71 | 269  | 7  | <0.01 | 16  | 0.08 | 9  | <5 | 30 | 0.17 | 53 | <5 | 66  |
| E52  | 13 | 41  | 0.1 | <5 | 110 | 0.3 | <2 | 0.23 | <0.1 | 13 | 32  | 2.15 | 3.13 | 0.11 | 4  | 0.86 | 289  | 3  | <0.01 | 25  | 0.12 | 4  | <5 | 20 | 0.13 | 64 | <5 | 88  |
| E53  | 6  | 58  | 0.1 | <5 | 122 | 0.4 | <2 | 0.23 | <0.1 | 14 | 36  | 2.04 | 3.30 | 0.11 | 4  | 0.79 | 422  | 2  | <0.01 | 27  | 0.25 | 5  | <5 | 20 | 0.10 | 62 | <5 | 82  |
| E53* | 5  | 54  | 0.1 | <5 | 109 | 0.3 | <2 | 0.21 | <0.1 | 13 | 34  | 1.99 | 3.11 | 0.11 | 3  | 0.73 | 418  | <1 | <0.01 | 25  | 0.23 | 5  | <5 | 18 | 0.09 |    |    |     |

| SAMP | AU | CU  | AG  | AS | BA  | BE  | BI | CA   | CD   | CO | CR | AL   | FE   | K    | LA | MG   | MN   | MO | NA    | NI | P    | PB | SB | SR | TI   | V   | W  | ZN  |
|------|----|-----|-----|----|-----|-----|----|------|------|----|----|------|------|------|----|------|------|----|-------|----|------|----|----|----|------|-----|----|-----|
| E68  | 8  | 58  | 0.4 | 6  | 145 | 0.5 | 5  | 0.40 | <0.1 | 15 | 66 | 2.23 | 3.76 | 0.09 | 7  | 0.89 | 425  | <1 | 0.01  | 46 | 0.04 | 21 | 6  | 26 | 0.09 | 53  | <5 | 85  |
| E69  | 7  | 74  | 0.6 | <5 | 148 | 0.6 | 5  | 0.35 | <0.1 | 18 | 41 | 2.14 | 4.32 | 0.20 | 8  | 0.74 | 278  | <1 | 0.01  | 31 | 0.12 | 13 | <5 | 34 | 0.10 | 51  | <5 | 79  |
| E70  | 3  | 25  | 0.8 | <5 | 78  | 0.4 | 4  | 0.15 | <0.1 | 10 | 31 | 1.51 | 2.60 | 0.07 | 6  | 0.41 | 217  | <1 | <0.01 | 17 | 0.03 | 18 | 7  | 12 | 0.08 | 37  | <5 | 60  |
| E71  | 2  | 20  | 1.0 | <5 | 73  | 0.3 | 5  | 0.14 | <0.1 | 9  | 28 | 1.20 | 2.17 | 0.07 | 5  | 0.31 | 172  | 3  | <0.01 | 19 | 0.02 | 16 | 6  | 11 | 0.08 | 31  | <5 | 51  |
| E72  | 8  | 80  | 0.3 | 9  | 50  | 0.3 | 5  | 1.55 | 0.1  | 13 | 39 | 0.84 | 2.86 | 0.17 | 9  | 0.72 | 520  | <1 | <0.01 | 27 | 0.08 | 10 | 10 | 40 | 0.05 | 45  | <5 | 47  |
| E73  | 11 | 85  | 0.3 | 9  | 56  | 0.3 | 6  | 1.62 | 0.1  | 14 | 41 | 0.93 | 3.03 | 0.18 | 9  | 0.76 | 552  | <1 | 0.01  | 28 | 0.09 | 9  | 9  | 42 | 0.05 | 45  | <5 | 53  |
| E73* | 19 | 87  | 0.3 | 11 | 53  | 0.3 | 4  | 1.69 | <0.1 | 14 | 40 | 0.90 | 3.06 | 0.19 | 9  | 0.77 | 565  | <1 | 0.01  | 25 | 0.09 | 9  | <5 | 43 | 0.05 | 45  | <5 | 53  |
| F18  | 19 | 90  | 0.4 | 11 | 66  | 0.3 | <2 | 1.79 | <0.1 | 16 | 44 | 1.17 | 3.03 | 0.20 | 10 | 0.82 | 594  | 4  | 0.01  | 33 | 0.10 | 9  | <5 | 50 | 0.07 | 37  | <5 | 62  |
| F19  | 1  | 11  | 0.4 | <5 | 90  | 0.3 | <2 | 0.14 | <0.1 | 11 | 40 | 1.30 | 2.07 | 0.06 | 4  | 0.36 | 454  | 4  | <0.01 | 42 | 0.08 | 7  | <5 | 16 | 0.06 | 37  | <5 | 43  |
| F20  | 18 | 12  | 0.3 | <5 | 87  | 0.3 | <2 | 0.15 | <0.1 | 11 | 41 | 1.29 | 2.10 | 0.06 | 4  | 0.41 | 268  | 1  | <0.01 | 46 | 0.08 | 6  | <5 | 17 | 0.07 | 44  | <5 | 45  |
| F21  | 8  | 27  | 0.2 | <5 | 87  | 0.2 | <2 | 0.28 | <0.1 | 15 | 74 | 1.08 | 2.45 | 0.18 | 6  | 0.87 | 272  | 2  | <0.01 | 52 | 0.07 | 8  | <5 | 19 | 0.07 | 44  | <5 | 45  |
| F22  | 28 | 7   | 0.5 | <5 | 151 | 0.4 | <2 | 0.32 | <0.1 | 9  | 31 | 1.71 | 2.08 | 0.07 | 5  | 0.29 | 344  | 5  | <0.01 | 42 | 0.10 | 7  | <5 | 25 | 0.07 | 34  | <5 | 48  |
| F23  | 19 | 13  | 0.2 | <5 | 118 | 0.2 | <2 | 0.26 | <0.1 | 8  | 39 | 1.13 | 2.34 | 0.05 | 6  | 0.47 | 223  | 3  | <0.01 | 21 | 0.13 | 5  | <5 | 25 | 0.05 | 42  | <5 | 41  |
| F24  | 7  | 9   | 0.3 | <5 | 190 | 0.4 | <2 | 0.18 | <0.1 | 10 | 41 | 1.86 | 2.70 | 0.05 | 5  | 0.43 | 322  | 3  | <0.01 | 30 | 0.13 | 5  | <5 | 19 | 0.06 | 47  | <5 | 63  |
| F24* | 8  | 8   | 0.3 | <5 | 187 | 0.4 | <2 | 0.18 | <0.1 | 9  | 41 | 1.85 | 2.65 | 0.05 | 5  | 0.42 | 319  | <1 | <0.01 | 30 | 0.13 | 7  | <5 | 19 | 0.06 | 47  | <5 | 62  |
| F25  | <1 | 5   | 0.4 | 5  | 186 | 0.5 | 4  | 0.20 | <0.1 | 8  | 29 | 1.97 | 1.93 | 0.04 | 4  | 0.18 | 238  | 2  | <0.01 | 18 | 0.23 | 7  | <5 | 18 | 0.07 | 31  | <5 | 54  |
| F26  | 34 | 27  | 0.3 | 5  | 145 | 0.3 | 3  | 0.21 | <0.1 | 10 | 43 | 1.40 | 2.67 | 0.05 | 5  | 0.45 | 270  | <1 | <0.01 | 31 | 0.08 | 11 | <5 | 23 | 0.06 | 42  | <5 | 56  |
| F27  | 9  | 21  | 0.1 | <5 | 132 | 0.3 | <2 | 0.33 | <0.1 | 10 | 41 | 1.27 | 2.54 | 0.07 | 5  | 0.50 | 288  | 1  | <0.01 | 22 | 0.08 | 5  | <5 | 31 | 0.07 | 46  | <5 | 59  |
| F28  | 3  | 7   | 0.1 | <5 | 167 | 0.5 | <2 | 0.25 | <0.1 | 12 | 35 | 1.81 | 2.29 | 0.06 | 4  | 0.31 | 385  | 3  | <0.01 | 21 | 0.27 | 5  | <5 | 24 | 0.07 | 34  | <5 | 74  |
| F29  | 2  | 10  | 0.3 | 5  | 148 | 0.5 | 2  | 0.18 | <0.1 | 10 | 37 | 1.85 | 2.29 | 0.05 | 5  | 0.29 | 824  | 3  | <0.01 | 21 | 0.24 | 6  | <5 | 17 | 0.06 | 36  | <5 | 75  |
| F30  | 1  | 194 | 0.5 | <5 | 136 | 0.5 | <2 | 0.41 | <0.1 | 9  | 31 | 1.56 | 2.21 | 0.05 | 4  | 0.31 | 289  | 2  | <0.01 | 24 | 0.20 | 5  | <5 | 15 | 0.08 | 33  | <5 | 68  |
| F31  | 1  | 11  | 0.4 | <5 | 103 | 0.4 | <2 | 0.15 | <0.1 | 8  | 32 | 1.97 | 2.18 | 0.05 | 4  | 0.20 | 1220 | 3  | <0.01 | 62 | 0.03 | 7  | <5 | 30 | 0.09 | 38  | <5 | 45  |
| F32  | 6  | 6   | 0.3 | <5 | 74  | 0.3 | <2 | 0.12 | <0.1 | 7  | 29 | 1.64 | 1.95 | 0.05 | 4  | 0.20 | 234  | 1  | <0.01 | 16 | 0.21 | 5  | <5 | 12 | 0.07 | 28  | <5 | 53  |
| F33  | 16 | 8   | 0.2 | 7  | 114 | 0.5 | <2 | 0.13 | <0.1 | 8  | 28 | 2.23 | 1.40 | 0.05 | 4  | 0.28 | 224  | 3  | <0.01 | 22 | 0.25 | 5  | <5 | 12 | 0.09 | 36  | <5 | 75  |
| F33* | 10 | 8   | 0.2 | 7  | 111 | 0.5 | <2 | 0.13 | <0.1 | 8  | 28 | 2.17 | 1.34 | 0.05 | 4  | 0.27 | 222  | 1  | <0.01 | 22 | 0.25 | 7  | <5 | 12 | 0.09 | 34  | <5 | 73  |
| F34  | 32 | 3   | 0.1 | <5 | 42  | 0.1 | <2 | 0.26 | <0.1 | 3  | 22 | 0.39 | 0.98 | 0.05 | 4  | 0.14 | 62   | <1 | <0.01 | 7  | 0.01 | 6  | <5 | 19 | 0.08 | 29  | 6  | 18  |
| F35  | 5  | 21  | 0.2 | <5 | 121 | 0.4 | <2 | 0.24 | <0.1 | 10 | 45 | 1.53 | 2.23 | 0.05 | 4  | 0.42 | 643  | <1 | <0.01 | 51 | 0.15 | 3  | <5 | 19 | 0.07 | 33  | <5 | 91  |
| F36  | 3  | 42  | 0.4 | <5 | 103 | 0.4 | <2 | 0.25 | <0.1 | 9  | 30 | 1.79 | 2.23 | 0.07 | 4  | 0.31 | 247  | <1 | <0.01 | 26 | 0.14 | 6  | <5 | 19 | 0.09 | 36  | <5 | 59  |
| F37  | 6  | 8   | 0.1 | 6  | 91  | 0.5 | <2 | 0.20 | <0.1 | 9  | 34 | 2.08 | 2.43 | 0.05 | 4  | 0.41 | 260  | <1 | <0.01 | 20 | 0.26 | 4  | <5 | 16 | 0.07 | 35  | <5 | 45  |
| F38  | 3  | 13  | 0.4 | <5 | 91  | 0.3 | <2 | 0.13 | <0.1 | 8  | 25 | 1.68 | 2.10 | 0.06 | 3  | 0.32 | 228  | <1 | <0.01 | 16 | 0.16 | 5  | <5 | 13 | 0.08 | 32  | <5 | 74  |
| F39  | 7  | 11  | 0.4 | <5 | 91  | 0.4 | <2 | 0.20 | <0.1 | 8  | 28 | 1.93 | 2.89 | 0.06 | 4  | 0.39 | 221  | <1 | <0.01 | 18 | 0.16 | 6  | <5 | 17 | 0.10 | 45  | <5 | 52  |
| F40  | 5  | 27  | 0.5 | 6  | 122 | 0.3 | <2 | 0.18 | <0.1 | 10 | 25 | 1.61 | 2.67 | 0.06 | 4  | 0.55 | 293  | 2  | <0.01 | 17 | 0.07 | 6  | <5 | 17 | 0.08 | 42  | <5 | 78  |
| F41  | 4  | 37  | 0.4 | 5  | 131 | 0.4 | <2 | 0.22 | <0.1 | 9  | 22 | 1.89 | 2.36 | 0.07 | 4  | 0.46 | 432  | <1 | <0.01 | 18 | 0.14 | 10 | <5 | 21 | 0.09 | 34  | <5 | 68  |
| F42  | 5  | 9   | 0.2 | <5 | 68  | 0.3 | <2 | 0.12 | <0.1 | 7  | 26 | 1.18 | 2.02 | 0.05 | 3  | 0.37 | 212  | 1  | <0.01 | 16 | 0.04 | 3  | <5 | 13 | 0.06 | 34  | <5 | 42  |
| F43  | 12 | 30  | 0.1 | <5 | 94  | 0.4 | <2 | 0.21 | <0.1 | 11 | 25 | 1.80 | 2.80 | 0.09 | 5  | 0.53 | 302  | <1 | <0.01 | 20 | 0.11 | 16 | <5 | 19 | 0.09 | 50  | <5 | 76  |
| F44  | 3  | 162 | 0.2 | <5 | 306 | 1.1 | <2 | 0.27 | <0.1 | 12 | 29 | 4.22 | 4.27 | 0.09 | 10 | 1.02 | 442  | 6  | <0.01 | 22 | 0.59 | 53 | <5 | 35 | 0.14 | 134 | <5 | 106 |
| F45  | <1 | 35  | 0.1 | <5 | 63  | 0.7 | <2 | 0.08 | <0.1 | 6  | 20 | 2.39 | 3.03 | 0.05 | 4  | 0.43 | 236  | <1 | <0.01 | 12 | 0.13 | 7  | <5 | 7  | 0.15 | 59  | <5 | 79  |
| F46  | 2  | 22  | 0.2 | <5 | 144 | 0.4 | <2 | 0.25 | <0.1 | 9  | 26 | 1.83 | 2.26 | 0.07 | 4  | 0.46 | 220  | <1 | <0.01 | 20 | 0.24 | 9  | <5 | 21 | 0.09 | 35  | <5 | 97  |
| F47  | 17 | 11  | 0.1 | <5 | 137 | 0.3 | <2 | 0.38 | <0.1 | 10 | 25 | 1.31 | 2.43 | 0.16 | 5  | 0.66 | 670  | 1  | <0.01 | 17 | 0.14 | 9  | <5 | 27 | 0.06 | 42  | <5 | 90  |
| F48  | <1 | 15  | 0.3 | <5 | 322 | 0.5 | <2 | 0.15 | <0.1 | 10 | 53 | 2.29 | 2.34 | 0.04 | 3  | 0.45 | 719  | <1 | <0.01 | 40 | 0.70 | 10 | <5 | 21 | 0.11 | 26  | <5 | 91  |
| F49  | <1 | 32  | 0.2 | <5 | 100 | 0.3 | <2 | 0.27 | <0.1 | 10 | 26 | 1.51 | 2.84 | 0.12 | 4  | 0.65 | 334  | <1 | <0.01 | 19 | 0.07 | 8  | <5 | 20 | 0.11 | 55  | <5 | 76  |
| F50  | 9  | 254 | 0.6 | <5 | 142 | 0.8 | <2 | 0.47 | <0.1 | 11 | 29 | 2.87 | 4.27 | 0.11 | 6  | 0.61 | 385  | 3  | 0.01  | 32 | 0.08 | 17 | <5 | 30 | 0.16 | 78  | <5 | 115 |
| F51  | 13 | 376 | 1.2 | <5 | 133 | 1.0 | <2 | 0.43 | <0.1 | 13 | 31 | 3.61 | 4.53 | 0.12 | 7  | 0.72 | 301  | <1 | 0.01  | 36 | 0.07 | 19 | <5 | 29 | 0.15 | 77  | <5 | 123 |
| F51* | 11 | 374 | 1.1 | <5 | 127 | 0.9 | <2 | 0.41 | <0.1 | 12 | 30 | 3.50 | 4.36 | 0.11 | 6  | 0.70 | 288  | 2  | 0.01  | 35 | 0.07 | 18 | <5 | 28 | 0.14 | 75  | <5 | 118 |
| F52  | 3  | 144 | 0.9 | 16 | 203 | 1.3 | 7  | 0.45 | 0.8  | 19 | 38 | 1.80 | 2.88 | 0.31 | 25 | 0.76 | 421  | 10 | <0.01 | 35 | 0.08 | 20 | 11 | 37 | 0.10 | 69  | 23 | 68  |
| F52* | 5  | 205 | 0.9 | 6  | 261 | 0.6 | <2 | 0.57 | <0.1 | 16 | 26 | 2.84 | 3.95 | 0.43 | 10 | 1.15 | 535  | 5  | <0.01 | 28 | 0.03 | 14 | <5 | 36 | 0.14 | 75  | 6  | 91  |
| F53  | <1 | 36  | 0.2 | 6  | 82  | 0.4 | <2 | 0.18 | <0.1 | 12 | 30 | 2.07 | 3.07 | 0.11 | 4  | 0.74 | 292  | <1 | <0.01 | 27 | 0.08 | 10 | <5 | 17 | 0.10 | 58  | <5 | 66  |
| F53* | 8  | 49  | 0.4 | <5 | 89  | 0.4 | 6  | 0.19 | <0.1 | 13 | 36 | 1.99 | 2.99 | 0.14 | 5  | 0.86 | 298  | 7  | <0.01 | 30 | 0.07 | 12 | <5 | 17 | 0.10 | 56  | 7  | 66  |
| F54  | 3  | 45  | 0.3 | 11 | 101 | 0.5 | <2 | 0.30 | <0.1 | 14 | 37 | 2.35 | 4.07 | 0.16 | 6  | 1.15 | 357  | <1 | <0.01 | 28 | 0.17 | 11 | <5 | 19 | 0.15 | 89  | <5 | 123 |
| F54* | 5  | 60  | 0.4 | <5 | 91  | 0.4 | 5  | 0.26 | <0.1 | 14 | 44 | 2.05 | 3.91 | 0.18 | 6  | 1.16 | 384  | 6  | <0.01 | 30 | 0.15 | 10 | <5 | 17 | 0.14 | 81  | <5 | 111 |
| F55  | 1  | 594 | 0.3 | <5 | 211 | 0.8 | <2 | 0.37 | <0.1 | 28 | 41 | 4.03 | 5.61 | 0.15 | 8  | 1.15 | 437  | 3  | 0.01  | 73 | 0.12 | 14 | <5 | 31 | 0.21 | 118 | <5 | 103 |
| F55* | 4  | 661 | 0.4 | <5 | 152 | 0.9 | 5  | 0.34 | <0.1 | 26 | 44 | 3.62 | 4.86 | 0.13 | 10 | 1.01 | 385  | 13 | <0.01 | 70 | 0.09 | 16 | <5 | 26 |      |     |    |     |

| SAMP | AU  | CU  | AG  | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN  | MO | NA    | NI  | P    | PB | SB | SR | TI   | V  | W  | ZN  |
|------|-----|-----|-----|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|-----|----|-------|-----|------|----|----|----|------|----|----|-----|
| F62  | <1  | 41  | 0.3 | <5 | 208 | 0.3 | 5  | 0.22 | <0.1 | 14 | 56  | 1.92 | 2.11 | 0.13 | 5  | 0.54 | 269 | 5  | <0.01 | 96  | 0.27 | 14 | <5 | 18 | 0.10 | 39 | <5 | 64  |
| F63  | <1  | 22  | 0.4 | <5 | 97  | 0.7 | 5  | 0.18 | <0.1 | 13 | 57  | 3.49 | 3.35 | 0.13 | 4  | 0.74 | 212 | 11 | 0.01  | 80  | 0.19 | 11 | <5 | 12 | 0.14 | 90 | <5 | 77  |
| F64  | 2   | 56  | 0.4 | <5 | 108 | 0.3 | 4  | 0.30 | <0.1 | 20 | 84  | 1.77 | 2.80 | 0.19 | 4  | 1.01 | 355 | 8  | <0.01 | 164 | 0.10 | 13 | <5 | 19 | 0.10 | 63 | <5 | 86  |
| F65  | <1  | 31  | 0.2 | <5 | 94  | 0.1 | 3  | 0.17 | <0.1 | 13 | 104 | 0.88 | 2.07 | 0.08 | 3  | 0.66 | 147 | 12 | <0.01 | 96  | 0.05 | 5  | <5 | 11 | 0.08 | 42 | <5 | 38  |
| F66  | <1  | 26  | 0.1 | <5 | 78  | 0.2 | 6  | 0.16 | <0.1 | 17 | 121 | 1.19 | 2.95 | 0.13 | 4  | 1.00 | 215 | 6  | <0.01 | 118 | 0.02 | 6  | <5 | 13 | 0.10 | 64 | <5 | 48  |
| F67  | 5   | 26  | 0.6 | <5 | 156 | 0.4 | 5  | 0.25 | <0.1 | 15 | 90  | 2.32 | 2.92 | 0.06 | 5  | 0.73 | 343 | 6  | <0.01 | 68  | 0.13 | 11 | <5 | 20 | 0.10 | 54 | <5 | 81  |
| F68  | 7   | 23  | 0.4 | <5 | 102 | 0.4 | 3  | 0.12 | <0.1 | 11 | 50  | 1.86 | 2.39 | 0.08 | 4  | 0.56 | 243 | 4  | <0.01 | 49  | 0.08 | 9  | <5 | 14 | 0.08 | 39 | <5 | 61  |
| F69  | 4   | 18  | 0.3 | <5 | 103 | 0.4 | 4  | 0.16 | <0.1 | 10 | 61  | 2.18 | 2.45 | 0.06 | 4  | 0.59 | 269 | 4  | <0.01 | 44  | 0.13 | 11 | <5 | 16 | 0.07 | 39 | <5 | 52  |
| F69* | 5   | 17  | 0.4 | <5 | 99  | 0.3 | <2 | 0.15 | <0.1 | 10 | 61  | 2.14 | 2.39 | 0.06 | 4  | 0.55 | 252 | 5  | <0.01 | 49  | 0.12 | 10 | <5 | 15 | 0.07 | 37 | <5 | 49  |
| F70  | <1  | 31  | 0.4 | <5 | 115 | 0.8 | 4  | 0.19 | 0.2  | 14 | 66  | 2.00 | 2.42 | 0.06 | 13 | 0.59 | 326 | 6  | <0.01 | 63  | 0.12 | 15 | 6  | 22 | 0.07 | 45 | 17 | 55  |
| F71  | 7   | 87  | 0.4 | <5 | 58  | 0.3 | <2 | 1.60 | <0.1 | 14 | 47  | 0.97 | 2.72 | 0.18 | 10 | 0.73 | 515 | 6  | <0.01 | 50  | 0.10 | 4  | <5 | 45 | 0.05 | 47 | <5 | 55  |
| G18  | 13  | 80  | 0.2 | 12 | 59  | 0.3 | <2 | 1.61 | <0.1 | 15 | 39  | 1.00 | 2.80 | 0.18 | 9  | 0.73 | 532 | <1 | 0.01  | 30  | 0.10 | 6  | <5 | 44 | 0.06 | 49 | <5 | 54  |
| G19  | <1  | 6   | 0.1 | <5 | 96  | 0.3 | <2 | 0.20 | <0.1 | 8  | 32  | 1.09 | 1.87 | 0.07 | 3  | 0.32 | 196 | <1 | <0.01 | 30  | 0.12 | 6  | <5 | 17 | 0.06 | 30 | <5 | 41  |
| *G20 | 5   |     |     |    |     |     |    |      |      |    |     |      |      |      |    |      |     |    |       |     |      |    |    |    |      |    |    |     |
| G20  | 8   | 62  | 0.4 | <5 | 90  | 0.3 | <2 | 0.28 | <0.1 | 12 | 38  | 1.17 | 2.25 | 0.11 | 4  | 0.64 | 296 | 3  | <0.01 | 72  | 0.08 | 4  | <5 | 29 | 0.07 | 38 | <5 | 48  |
| G20* | 160 | 63  | 0.4 | <5 | 93  | 0.3 | <2 | 0.31 | <0.1 | 13 | 42  | 1.25 | 2.49 | 0.12 | 4  | 0.71 | 300 | <1 | <0.01 | 73  | 0.09 | 4  | <5 | 32 | 0.07 | 43 | <5 | 49  |
| G21  | 43  | 15  | 0.2 | <5 | 107 | 0.3 | <2 | 0.22 | <0.1 | 10 | 45  | 1.09 | 2.87 | 0.06 | 6  | 0.62 | 284 | <1 | <0.01 | 27  | 0.07 | 2  | <5 | 22 | 0.06 | 43 | <5 | 44  |
| G22  | 7   | 23  | 0.6 | <5 | 121 | 0.4 | <2 | 0.24 | 0.2  | 11 | 65  | 1.52 | 2.00 | 0.07 | 5  | 0.52 | 198 | <1 | 0.01  | 64  | 0.07 | 21 | <5 | 21 | 0.07 | 23 | <5 | 71  |
| G23  | 5   | 8   | 0.4 | <5 | 107 | 0.5 | <2 | 0.23 | 0.2  | 7  | 30  | 2.14 | 2.41 | 0.05 | 5  | 0.29 | 199 | <1 | <0.01 | 26  | 0.18 | 5  | <5 | 21 | 0.08 | 30 | <5 | 52  |
| G24  | 6   | 18  | 0.3 | <1 | 181 | 0.3 | <2 | 0.26 | 0.1  | 9  | 37  | 1.29 | 2.55 | 0.07 | 6  | 0.48 | 255 | <1 | <0.01 | 25  | 0.17 | 4  | <5 | 24 | 0.06 | 31 | <5 | 58  |
| G25  | 2   | 49  | 0.3 | <1 | 589 | 0.6 | <2 | 0.75 | 0.3  | 16 | 26  | 2.57 | 4.45 | 0.18 | 9  | 1.20 | 425 | 1  | 0.01  | 19  | 0.11 | 7  | <5 | 69 | 0.16 | 76 | <5 | 95  |
| G26  | 6   | 62  | 0.8 | <5 | 247 | 0.6 | <2 | 0.53 | 0.4  | 9  | 29  | 1.82 | 2.74 | 0.07 | 16 | 0.39 | 378 | <1 | <0.01 | 25  | 0.05 | 8  | <5 | 40 | 0.08 | 35 | <5 | 40  |
| G27  | 5   | 37  | 0.3 | <5 | 365 | 0.5 | <2 | 0.40 | 0.2  | 16 | 37  | 1.64 | 3.88 | 0.13 | 6  | 0.96 | 494 | <1 | <0.01 | 38  | 0.18 | 11 | <5 | 83 | 0.10 | 58 | <5 | 94  |
| G28  | 6   | 9   | 0.4 | <1 | 216 | 0.4 | <2 | 0.17 | 0.3  | 10 | 29  | 1.61 | 2.47 | 0.09 | 5  | 0.47 | 424 | <1 | <0.01 | 19  | 0.29 | 6  | <5 | 18 | 0.08 | 30 | <5 | 82  |
| G29  | 3   | 164 | 0.4 | <1 | 129 | 0.4 | <2 | 0.37 | 0.4  | 8  | 26  | 1.78 | 2.73 | 0.06 | 7  | 0.40 | 188 | 1  | <0.01 | 35  | 0.03 | 7  | <5 | 32 | 0.09 | 33 | <5 | 41  |
| G29* | 3   | 185 | 0.2 | <1 | 141 | 0.4 | <2 | 0.38 | 0.4  | 9  | 27  | 1.83 | 2.85 | 0.06 | 7  | 0.42 | 204 | <1 | <0.01 | 38  | 0.03 | 7  | <5 | 34 | 0.09 | 35 | <5 | 44  |
| G30  | 13  | 31  | 0.3 | <1 | 94  | 0.4 | <2 | 0.27 | 0.2  | 12 | 44  | 1.40 | 2.91 | 0.11 | 6  | 0.70 | 319 | 4  | <0.01 | 29  | 0.10 | 11 | 6  | 21 | 0.07 | 44 | 7  | 56  |
| G31  | 31  | 77  | 0.3 | <5 | 89  | 0.3 | <2 | 0.26 | 0.1  | 11 | 45  | 1.35 | 2.85 | 0.11 | 7  | 0.70 | 306 | 5  | <0.01 | 28  | 0.09 | 9  | <5 | 20 | 0.07 | 41 | <5 | 56  |
| G32  | 5   | 30  | 0.6 | 8  | 140 | 0.8 | 4  | 0.26 | 0.5  | 15 | 41  | 2.13 | 3.57 | 0.10 | 12 | 0.60 | 239 | 7  | <0.01 | 34  | 0.11 | 15 | <5 | 26 | 0.12 | 60 | <5 | 96  |
| G33  | 2   | 37  | 0.7 | 6  | 162 | 0.8 | 4  | 0.23 | 0.4  | 13 | 35  | 2.11 | 2.61 | 0.08 | 12 | 0.44 | 337 | 6  | 0.01  | 36  | 0.14 | 14 | <5 | 22 | 0.10 | 39 | <5 | 107 |
| G34  | 5   | 37  | 0.5 | <5 | 125 | 0.3 | <2 | 0.31 | 0.2  | 12 | 34  | 1.61 | 3.28 | 0.12 | 5  | 0.60 | 228 | 3  | <0.01 | 30  | 0.05 | 10 | <5 | 26 | 0.13 | 50 | <5 | 75  |
| G35  | 3   | 298 | 0.5 | <5 | 270 | 0.5 | <2 | 0.42 | 0.3  | 15 | 37  | 1.82 | 3.46 | 0.11 | 8  | 0.66 | 316 | 6  | <0.01 | 46  | 0.04 | 26 | <5 | 44 | 0.13 | 54 | <5 | 87  |
| G36  | 2   | 41  | 0.6 | <5 | 175 | 0.2 | <2 | 0.45 | 0.3  | 10 | 28  | 1.25 | 2.45 | 0.14 | 4  | 0.49 | 254 | 4  | 0.01  | 20  | 0.02 | 26 | <5 | 38 | 0.14 | 47 | <5 | 74  |
| G37  | 21  | 64  | 0.4 | <5 | 215 | 0.4 | <2 | 0.33 | 0.4  | 13 | 32  | 1.55 | 3.23 | 0.11 | 6  | 0.42 | 365 | 9  | 0.01  | 35  | 0.07 | 14 | <5 | 42 | 0.08 | 33 | <5 | 98  |
| G38  | 21  | 25  | 0.3 | <5 | 124 | 0.3 | <2 | 0.39 | 0.3  | 12 | 26  | 1.65 | 2.93 | 0.09 | 4  | 0.49 | 327 | 5  | 0.01  | 22  | 0.03 | 12 | <5 | 32 | 0.09 | 36 | <5 | 63  |
| G38* | 38  | 10  | 0.3 | <5 | 103 | 0.3 | <2 | 0.24 | 0.1  | 11 | 34  | 1.48 | 2.61 | 0.09 | 4  | 0.47 | 306 | 5  | 0.01  | 17  | 0.03 | 11 | <5 | 28 | 0.08 | 34 | <5 | 55  |
| G39  | 13  | 36  | 0.5 | 24 | 159 | 1.5 | 6  | 0.24 | 1.0  | 18 | 42  | 2.08 | 3.07 | 0.09 | 24 | 0.44 | 264 | 9  | <0.01 | 32  | 0.20 | 23 | 10 | 32 | 0.07 | 56 | 15 | 83  |
| G40  | 17  | 54  | 0.4 | 26 | 118 | 1.5 | 7  | 0.27 | 1.2  | 13 | 40  | 1.79 | 3.34 | 0.11 | 28 | 0.89 | 457 | 10 | <0.01 | 35  | 0.11 | 21 | 13 | 36 | 0.09 | 71 | 12 | 89  |
| G41  | 7   | 42  | 0.5 | 8  | 128 | 0.6 | 3  | 0.19 | 0.4  | 14 | 28  | 1.15 | 2.26 | 0.08 | 9  | 0.64 | 376 | 8  | <0.01 | 24  | 0.17 | 14 | <5 | 23 | 0.11 | 49 | <5 | 100 |
| G42  | 8   | 79  | 0.9 | 7  | 140 | 0.7 | 3  | 0.28 | 0.2  | 13 | 40  | 2.51 | 3.48 | 0.10 | 6  | 0.74 | 317 | 4  | <0.01 | 30  | 0.16 | 21 | <5 | 25 | 0.11 | 51 | <5 | 108 |
| G43  | 4   | 43  | 0.5 | <5 | 119 | 0.6 | 3  | 0.24 | 0.1  | 14 | 30  | 2.22 | 3.52 | 0.11 | 8  | 0.78 | 367 | 6  | <0.01 | 29  | 0.17 | 16 | <5 | 25 | 0.11 | 55 | <5 | 104 |
| G44  | 4   | 36  | 1.5 | 7  | 127 | 0.8 | <2 | 0.31 | 0.2  | 13 | 32  | 3.20 | 4.14 | 0.10 | 7  | 0.70 | 308 | 7  | <0.01 | 29  | 0.28 | 20 | <5 | 29 | 0.14 | 58 | <5 | 110 |
| G45  | 8   | 53  | 0.6 | <5 | 223 | 0.6 | 3  | 0.32 | 0.1  | 16 | 32  | 2.53 | 4.07 | 0.14 | 7  | 0.61 | 380 | 7  | <0.01 | 38  | 0.20 | 26 | <5 | 29 | 0.12 | 65 | <5 | 112 |
| G46  | 2   | 31  | 1.0 | <5 | 153 | 0.5 | <2 | 0.20 | 0.2  | 12 | 33  | 2.15 | 2.87 | 0.09 | 4  | 0.40 | 511 | 3  | 0.01  | 31  | 0.35 | 12 | <5 | 19 | 0.09 | 33 | <5 | 99  |
| G47  | 1   | 21  | 0.9 | <5 | 130 | 0.6 | 2  | 0.19 | 0.3  | 7  | 22  | 2.22 | 2.38 | 0.08 | 4  | 0.29 | 807 | 6  | 0.01  | 19  | 0.20 | 15 | <5 | 15 | 0.13 | 32 | <5 | 111 |
| G48  | 2   | 27  | 0.6 | <5 | 115 | 0.5 | <2 | 0.20 | 0.2  | 11 | 25  | 1.70 | 2.49 | 0.08 | 6  | 0.52 | 323 | 3  | <0.01 | 26  | 0.12 | 13 | <5 | 20 | 0.09 | 36 | 6  | 92  |
| G49  | 2   | 23  | 0.5 | <5 | 122 | 0.6 | <2 | 0.20 | 0.2  | 12 | 30  | 2.58 | 3.06 | 0.07 | 6  | 0.49 | 289 | 3  | <0.01 | 31  | 0.16 | 11 | <5 | 17 | 0.10 | 41 | <5 | 109 |
| G50  | 2   | 29  | 0.6 | 9  | 171 | 1.1 | 3  | 0.22 | 0.7  | 13 | 28  | 1.87 | 2.62 | 0.09 | 15 | 0.32 | 353 | 8  | <0.01 | 23  | 0.37 | 20 | 8  | 23 | 0.12 | 44 | <5 | 92  |
| G51  | 1   | 21  | 0.7 | 7  | 183 | 0.7 | 5  | 0.25 | 0.3  | 9  | 23  | 1.80 | 2.65 | 0.09 | 8  | 0.33 | 335 | 4  | <0.01 | 17  | 0.40 | 21 | <5 | 21 | 0.13 | 38 | <5 | 94  |
| G52  | 1   | 9   | 0.3 | <5 | 75  | 0.6 | 2  | 0.18 | <0.1 | 9  | 22  | 2.82 | 3.16 | 0.06 | 4  | 0.34 | 258 | 3  | <0.01 | 17  | 0.19 | 15 | <5 | 16 | 0.14 | 47 | <5 | 82  |
| G53  | 4   | 27  | 0.3 | <5 | 123 | 0.6 | 3  | 0.21 | 0.2  | 15 | 35  | 3.41 | 3.64 | 0.08 | 7  | 0.80 | 489 | 10 | <0.01 | 32  | 0.17 | 19 | <5 | 21 | 0.14 | 56 | <5 | 131 |
| G54  | 2   | 190 | 0.7 | <5 | 170 | 1.1 | 3  | 0.38 | 0.2  | 16 | 42  | 4.13 | 4.62 | 0.16 | 7  | 0.76 | 366 | 12 | 0.01  | 55  | 0.11 | 25 | <5 | 31 | 0.15 | 65 | <5 | 121 |
| G55  | 3   | 39  | 0.3 | <5 | 127 | 0.6 | 3  | 0.52 | 0.2  | 13 | 33  | 2.23 | 3.29 | 0.13 | 7  |      |     |    |       |     |      |    |    |    |      |    |    |     |



| SAMP | AU | CU  | AG  | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN   | MO | NA    | NI | P    | PB | SB | SR | TI   | V  | W  | ZN  |
|------|----|-----|-----|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|------|----|-------|----|------|----|----|----|------|----|----|-----|
| G62  | <1 | 46  | 0.4 | <5 | 103 | 0.4 | <2 | 0.26 | 0.3  | 17 | 282 | 1.71 | 2.53 | 0.08 | 4  | 1.13 | 422  | 2  | <0.01 | 88 | 0.21 | 31 | <5 | 18 | 0.09 | 41 | <5 | 111 |
| G63  | 1  | 31  | 0.4 | <5 | 167 | 0.4 | <2 | 0.43 | <0.1 | 14 | 81  | 1.88 | 2.64 | 0.15 | 4  | 0.62 | 261  | 5  | 0.01  | 58 | 0.28 | 16 | <5 | 31 | 0.12 | 41 | <5 | 80  |
| G64  | 3  | 91  | 0.3 | <5 | 187 | 0.6 | <2 | 0.36 | 0.3  | 22 | 66  | 2.81 | 4.64 | 0.29 | 5  | 1.47 | 467  | 5  | 0.01  | 57 | 0.38 | 15 | <5 | 24 | 0.15 | 85 | <5 | 143 |
| G65  | <1 | 16  | 0.3 | <5 | 186 | 0.7 | <2 | 0.20 | 0.2  | 8  | 39  | 3.36 | 3.12 | 0.08 | 3  | 0.29 | 179  | 2  | 0.01  | 24 | 0.76 | 9  | <5 | 19 | 0.15 | 40 | <5 | 55  |
| G65* | <1 | 13  | 0.3 | 5  | 181 | 0.7 | <2 | 0.17 | 0.3  | 7  | 38  | 3.37 | 2.89 | 0.06 | 3  | 0.25 | 168  | 2  | <0.01 | 22 | 0.79 | 11 | <5 | 18 | 0.15 | 39 | <5 | 51  |
| G66  | <1 | 46  | 0.6 | 22 | 132 | 2.4 | 9  | 0.18 | 1.5  | 22 | 45  | 4.88 | 2.42 | 0.04 | 33 | 0.13 | 235  | 2  | 0.02  | 49 | 0.24 | 28 | 8  | 30 | 0.14 | 69 | 19 | 52  |
| G69  | 3  | 22  | 0.7 | 9  | 110 | 1.0 | 6  | 0.14 | 0.7  | 14 | 40  | 1.94 | 2.26 | 0.09 | 16 | 0.30 | 310  | <1 | 0.01  | 25 | 0.18 | 20 | <5 | 18 | 0.11 | 56 | 11 | 59  |
| G70  | 11 | 43  | 0.4 | <5 | 122 | 0.9 | 9  | 0.36 | 0.4  | 20 | 74  | 2.52 | 3.34 | 0.14 | 15 | 0.99 | 420  | 3  | 0.01  | 59 | 0.08 | 27 | <5 | 36 | 0.14 | 81 | 6  | 90  |
| G71  | 5  | 59  | 0.9 | <5 | 131 | 0.7 | 7  | 0.27 | 0.3  | 17 | 79  | 2.66 | 3.79 | 0.13 | 8  | 1.11 | 548  | <1 | 0.01  | 55 | 0.26 | 21 | <5 | 25 | 0.14 | 74 | <5 | 159 |
| G72  | 4  | 56  | 1.0 | <5 | 126 | 0.8 | 5  | 0.26 | 0.2  | 16 | 78  | 2.55 | 3.71 | 0.12 | 9  | 1.06 | 524  | 3  | 0.01  | 55 | 0.25 | 18 | <5 | 24 | 0.14 | 72 | <5 | 146 |
| G73  | 13 | 120 | 0.3 | 12 | 102 | 0.6 | 7  | 2.08 | 0.3  | 22 | 65  | 1.87 | 4.09 | 0.26 | 15 | 1.11 | 768  | 3  | 0.02  | 53 | 0.17 | 15 | <5 | 63 | 0.11 | 85 | 8  | 97  |
| H18  | 9  | 118 | 0.4 | 14 | 93  | 0.6 | 5  | 2.13 | 0.4  | 21 | 61  | 1.69 | 3.90 | 0.26 | 15 | 1.05 | 744  | 4  | 0.02  | 50 | 0.15 | 14 | 9  | 62 | 0.10 | 81 | <5 | 88  |
| H19  | 11 | 46  | 0.3 | <5 | 139 | 0.5 | 5  | 0.45 | 0.2  | 15 | 54  | 1.95 | 3.07 | 0.17 | 9  | 0.63 | 312  | <1 | 0.01  | 56 | 0.13 | 9  | <5 | 30 | 0.10 | 56 | <5 | 66  |
| H20  | 9  | 18  | 0.6 | <5 | 136 | 0.6 | 5  | 0.41 | 0.2  | 13 | 47  | 2.53 | 2.67 | 0.09 | 6  | 0.46 | 287  | 3  | 0.01  | 68 | 0.25 | 11 | <5 | 27 | 0.09 | 47 | <5 | 76  |
| H20* | 4  | 13  | 0.6 | <5 | 135 | 0.6 | 5  | 0.34 | 0.2  | 13 | 45  | 2.34 | 2.56 | 0.08 | 6  | 0.41 | 267  | 2  | 0.01  | 66 | 0.26 | 10 | <5 | 26 | 0.09 | 45 | <5 | 73  |
| H21  | 9  | 25  | 0.2 | <5 | 95  | 0.4 | 5  | 0.26 | 0.2  | 11 | 36  | 1.23 | 2.42 | 0.08 | 8  | 0.56 | 206  | 6  | <0.01 | 38 | 0.08 | 14 | <5 | 23 | 0.08 | 51 | 6  | 46  |
| H22  | 13 | 38  | 0.3 | 6  | 84  | 0.3 | 3  | 0.25 | 0.1  | 12 | 66  | 1.27 | 2.68 | 0.06 | 8  | 0.69 | 243  | 2  | <0.01 | 55 | 0.10 | 7  | <5 | 19 | 0.07 | 51 | <5 | 51  |
| H23  | 2  | 46  | 0.2 | 16 | 138 | 1.2 | 9  | 0.30 | 0.7  | 18 | 51  | 2.79 | 3.06 | 0.07 | 19 | 0.57 | 341  | 5  | 0.01  | 49 | 0.22 | 19 | <5 | 28 | 0.12 | 69 | 7  | 86  |
| H24  | 7  | 45  | 0.1 | 8  | 301 | 0.7 | 4  | 0.24 | 0.3  | 16 | 41  | 2.31 | 3.03 | 0.08 | 11 | 0.66 | 398  | 8  | <0.01 | 33 | 0.13 | 17 | <5 | 33 | 0.11 | 64 | <5 | 73  |
| H25  | 11 | 41  | 0.1 | 7  | 224 | 0.5 | 5  | 0.30 | 0.1  | 13 | 42  | 2.40 | 3.29 | 0.09 | 8  | 0.63 | 311  | 4  | <0.01 | 30 | 0.18 | 11 | <5 | 30 | 0.12 | 61 | 6  | 94  |
| H26  | 12 | 25  | 0.6 | 5  | 205 | 0.5 | <2 | 0.40 | <0.1 | 8  | 37  | 2.29 | 2.34 | 0.11 | 7  | 0.49 | 363  | 7  | 0.01  | 28 | 0.24 | 12 | <5 | 31 | 0.11 | 48 | <5 | 88  |
| H27  | 6  | 28  | 0.6 | 7  | 217 | 0.8 | 2  | 0.20 | <0.1 | 8  | 30  | 3.61 | 3.29 | 0.08 | 8  | 0.52 | 236  | 6  | <0.01 | 23 | 0.33 | 16 | <5 | 23 | 0.17 | 53 | <5 | 88  |
| H28  | 5  | 58  | 0.3 | <5 | 163 | 0.8 | 3  | 0.10 | <0.1 | 11 | 27  | 1.60 | 3.08 | 0.13 | 7  | 0.51 | 328  | 3  | 0.01  | 23 | 0.39 | 39 | <5 | 17 | 0.16 | 60 | <5 | 126 |
| H29  | 8  | 60  | 0.3 | <5 | 167 | 0.8 | 2  | 0.21 | <0.1 | 13 | 27  | 3.76 | 3.24 | 0.16 | 6  | 0.54 | 601  | 4  | 0.01  | 23 | 0.41 | 46 | <5 | 18 | 0.17 | 63 | <5 | 134 |
| H29* | 4  | 63  | 0.2 | <5 | 171 | 0.8 | 4  | 0.22 | <0.1 | 13 | 27  | 3.82 | 3.29 | 0.15 | 6  | 0.54 | 615  | 3  | 0.01  | 22 | 0.42 | 45 | <5 | 18 | 0.17 | 65 | <5 | 137 |
| H30  | 7  | 30  | 0.2 | <5 | 147 | 0.4 | 2  | 0.11 | <0.1 | 10 | 20  | 1.94 | 2.64 | 0.09 | 4  | 0.56 | 247  | 5  | 0.01  | 41 | 0.21 | 4  | <5 | 21 | 0.09 | 38 | <5 | 88  |
| H31  | 1  | 14  | 0.5 | <5 | 134 | 0.6 | 2  | 0.16 | 0.1  | 5  | 14  | 0.61 | 1.63 | 0.03 | 2  | 0.11 | 1247 | 5  | 0.01  | 43 | 0.43 | 4  | <5 | 14 | 0.08 | 17 | <5 | 43  |
| H32  | 10 | 17  | 0.3 | <5 | 106 | 0.3 | 4  | 0.17 | 0.1  | 8  | 19  | 1.07 | 2.49 | 0.01 | 2  | 0.37 | 243  | 8  | 0.01  | 54 | 0.17 | 8  | <5 | 20 | 0.12 | 41 | <5 | 61  |
| H33  | 9  | 26  | 0.4 | <5 | 86  | 0.3 | 4  | 0.27 | 0.3  | 9  | 24  | 1.33 | 2.21 | 0.09 | 4  | 0.49 | 301  | 6  | 0.01  | 59 | 0.07 | 6  | <5 | 20 | 0.08 | 37 | <5 | 64  |
| H34  | 6  | 19  | 0.4 | <5 | 92  | 0.5 | 3  | 0.17 | 0.2  | 9  | 15  | 1.72 | 2.12 | 0.05 | 5  | 0.33 | 230  | 2  | 0.01  | 59 | 0.16 | 8  | <5 | 18 | 0.06 | 33 | <5 | 67  |
| H35  | 10 | 41  | 0.2 | <5 | 83  | 0.2 | 2  | 0.37 | 0.3  | 11 | 61  | 1.28 | 2.22 | 0.06 | 3  | 0.62 | 180  | 2  | 0.01  | 86 | 0.03 | 6  | 5  | 25 | 0.07 | 39 | <5 | 44  |
| H36  | 13 | 22  | 0.4 | <5 | 81  | 0.4 | 2  | 0.16 | 0.3  | 9  | 38  | 1.95 | 2.47 | 0.06 | 5  | 0.44 | 225  | 4  | 0.01  | 61 | 0.14 | 5  | <5 | 15 | 0.07 | 39 | <5 | 58  |
| H37  | 16 | 17  | 0.5 | <5 | 47  | 0.2 | <2 | 0.09 | 0.1  | 6  | 13  | 1.12 | 2.01 | 0.05 | 3  | 0.56 | 200  | <1 | 0.01  | 22 | 0.06 | 5  | <5 | 11 | 0.06 | 39 | <5 | 37  |
| H38  | 13 | 16  | 0.7 | <5 | 110 | 0.5 | 3  | 0.32 | 0.1  | 8  | 19  | 2.42 | 2.76 | 0.07 | 4  | 0.37 | 225  | <1 | 0.01  | 22 | 0.19 | 9  | <5 | 23 | 0.12 | 40 | <5 | 60  |
| H39  | 3  | 27  | 0.6 | <5 | 93  | 0.5 | <2 | 0.11 | <0.1 | 6  | 27  | 1.76 | 2.12 | 0.03 | 14 | 0.21 | 117  | <1 | 0.01  | 12 | 0.03 | 4  | 7  | 43 | 0.07 | 36 | <5 | 33  |
| H40  | 6  | 49  | 0.5 | 12 | 116 | 0.9 | <2 | 0.11 | 0.3  | 13 | 35  | 1.64 | 3.77 | 0.05 | 19 | 0.55 | 213  | 3  | 0.01  | 10 | 0.04 | 11 | <5 | 50 | 0.08 | 55 | <5 | 71  |
| H41  | 10 | 351 | 0.3 | <5 | 174 | 0.7 | 4  | 0.45 | <0.1 | 15 | 40  | 2.09 | 3.36 | 0.09 | 16 | 0.90 | 345  | 5  | 0.01  | 54 | 0.03 | 14 | <5 | 44 | 0.10 | 65 | <5 | 91  |
| H42  | 9  | 572 | 2.3 | <5 | 118 | 1.2 | 3  | 0.82 | <0.1 | 9  | 26  | 1.87 | 3.00 | 0.04 | 33 | 0.19 | 1352 | 5  | 0.02  | 26 | 0.07 | 12 | 5  | 50 | 0.07 | 42 | <5 | 41  |
| H43  | 12 | 344 | 2.7 | <5 | 312 | 1.1 | 2  | 0.52 | <0.1 | 12 | 34  | 3.92 | 4.21 | 0.12 | 17 | 0.31 | 354  | 9  | 0.02  | 60 | 0.09 | 19 | <5 | 39 | 0.15 | 54 | <5 | 58  |
| H44  | 3  | 36  | 0.6 | <5 | 76  | 0.5 | <2 | 0.15 | <0.1 | 9  | 26  | 1.74 | 2.51 | 0.07 | 7  | 0.44 | 215  | 4  | <0.01 | 19 | 0.10 | 7  | <5 | 15 | 0.10 | 43 | <5 | 56  |
| H45  | 14 | 460 | 1.1 | <5 | 248 | 1.4 | <1 | 0.13 | <0.1 | 13 | 34  | 3.08 | 3.33 | 0.11 | 18 | 0.38 | 350  | 7  | 0.02  | 49 | 0.12 | 49 | <5 | 40 | 0.15 | 47 | <5 | 129 |
| H46  | 17 | 32  | 0.7 | <5 | 122 | 0.5 | 4  | 0.32 | <0.1 | 10 | 29  | 1.97 | 3.13 | 0.10 | 6  | 0.53 | 270  | 3  | <0.01 | 24 | 0.16 | 12 | <5 | 27 | 0.11 | 57 | <5 | 86  |
| H47  | <1 | 22  | 0.8 | <5 | 78  | 0.7 | 4  | 0.15 | <0.1 | 9  | 19  | 3.17 | 2.25 | 0.04 | 6  | 0.12 | 477  | 5  | 0.01  | 13 | 0.22 | 21 | <5 | 12 | 0.12 | 33 | <5 | 63  |
| H47* | 1  | 24  | 0.8 | <5 | 73  | 0.7 | 4  | 0.14 | <0.1 | 9  | 18  | 2.90 | 2.13 | 0.03 | 7  | 0.12 | 446  | 1  | 0.01  | 14 | 0.21 | 22 | 7  | 11 | 0.11 | 31 | <5 | 58  |
| H48  | 3  | 74  | 0.6 | 26 | 84  | 1.7 | 10 | 0.21 | 1.1  | 20 | 39  | 1.83 | 2.73 | 0.06 | 28 | 0.44 | 315  | 6  | 0.01  | 39 | 0.14 | 22 | 8  | 30 | 0.09 | 68 | 19 | 83  |
| H49  | 62 | 87  | 0.7 | <5 | 93  | 0.7 | 6  | 0.29 | <0.1 | 12 | 21  | 1.76 | 2.70 | 0.08 | 9  | 0.36 | 384  | 6  | 0.01  | 24 | 0.11 | 13 | <5 | 24 | 0.09 | 40 | <5 | 75  |
| H50  | 1  | 36  | 0.5 | 10 | 92  | 1.1 | 5  | 0.29 | 0.3  | 11 | 23  | 2.61 | 2.23 | 0.06 | 13 | 0.19 | 473  | 6  | 0.01  | 18 | 0.30 | 17 | <5 | 22 | 0.12 | 42 | <5 | 71  |
| H51  | 1  | 36  | 0.5 | 8  | 90  | 1.1 | 4  | 0.28 | 0.3  | 11 | 24  | 2.53 | 2.14 | 0.06 | 14 | 0.19 | 471  | 3  | 0.01  | 19 | 0.30 | 13 | <5 | 22 | 0.12 | 42 | <5 | 67  |
| H52  | 15 | 39  | 0.1 | <5 | 46  | 0.5 | 3  | 0.16 | <0.1 | 10 | 21  | 1.59 | 3.53 | 0.06 | 8  | 0.85 | 444  | 4  | <0.01 | 17 | 0.11 | 9  | <5 | 14 | 0.17 | 85 | <5 | 89  |
| H53  | 9  | 32  | 0.3 | <5 | 93  | 0.5 | 4  | 0.19 | <0.1 | 10 | 25  | 1.90 | 3.04 | 0.07 | 7  | 0.66 | 501  | <1 | 0.01  | 19 | 0.09 | 13 | 5  | 19 | 0.12 | 62 | <5 | 76  |
| H54  | 12 | 33  | 0.4 | <5 | 115 | 0.7 | 4  | 0.20 | <0.1 | 12 | 26  | 2.44 | 3.25 | 0.07 | 7  | 0.70 | 288  | 3  | <0.01 | 23 | 0.12 | 16 | <5 | 19 | 0.12 | 62 | <5 | 98  |
| H55  | 3  | 39  | 0.4 | <5 | 117 | 0.6 | 4  | 0.20 | <0.1 | 9  | 27  | 2.39 | 3.18 | 0.06 | 6  | 0.69 | 368  | 5  | <0.01 | 24 | 0.14 | 11 | <5 | 19 | 0.12 | 59 | <5 | 89  |
| H56  | 15 | 42  | 0.3 | <5 | 219 | 0.9 | 8  | 0.28 | <0.1 | 10 | 22  | 2.03 | 3.18 | 0.07 | 5  | 0    |      |    |       |    |      |    |    |    |      |    |    |     |

| SAMP  | AD | CU  | AG   | AS | BA  | FE  | SI | CA   | CD   | OD | CR  | AL   | FE   | K    | LA | MG   | MO  | MO | NA    | NI  | P    | PB  | SB | SR | TI   | V   | W  | ZN  |
|-------|----|-----|------|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|-----|----|-------|-----|------|-----|----|----|------|-----|----|-----|
| R63   | 2  | 22  | 0.3  | <5 | 106 | 0.2 | <2 | 0.27 | <0.1 | 9  | 57  | 1.25 | 3.11 | 0.40 | 3  | 1.14 | 331 | 3  | <0.01 | 38  | 0.06 | 16  | <5 | 25 | 0.13 | 68  | <5 | 61  |
| R64   | 2  | 30  | 0.7  | <5 | 85  | 0.4 | 3  | 0.25 | <0.1 | 16 | 76  | 2.18 | 3.51 | 0.12 | 4  | 0.86 | 288 | 2  | 0.01  | 61  | 0.15 | 31  | <5 | 20 | 0.12 | 63  | <5 | 88  |
| R65   | 2  | 6   | 0.9  | <5 | 57  | 0.6 | 3  | 0.09 | <0.1 | 13 | 65  | 2.91 | 2.64 | 0.05 | 3  | 0.36 | 211 | 2  | 0.01  | 43  | 0.15 | 39  | <5 | 8  | 0.10 | 37  | <5 | 50  |
| R66   | 2  | 17  | 0.2  | 10 | 108 | 0.6 | 4  | 0.14 | 0.3  | 11 | 97  | 0.73 | 2.52 | 0.08 | 12 | 0.39 | 169 | 5  | 0.01  | 40  | 0.01 | 28  | 7  | 17 | 0.11 | 61  | 13 | 35  |
| R67   | 2  | 135 | 0.6  | 25 | 137 | 1.7 | 10 | 0.28 | 1.1  | 30 | 276 | 1.27 | 2.38 | 0.06 | 31 | 0.79 | 223 | 9  | 0.02  | 191 | 0.03 | 33  | 10 | 38 | 0.10 | 67  | 9  | 43  |
| R68   | 4  | 42  | 0.3  | 20 | 97  | 1.3 | 7  | 0.19 | 0.8  | 23 | 158 | 1.41 | 2.49 | 0.07 | 25 | 0.88 | 280 | 11 | 0.01  | 91  | 0.03 | 29  | 7  | 28 | 0.11 | 82  | 7  | 59  |
| R69   | 10 | 30  | 0.3  | 15 | 128 | 1.1 | 6  | 0.26 | 0.5  | 22 | 79  | 1.70 | 3.15 | 0.06 | 20 | 0.67 | 268 | 5  | <0.01 | 79  | 0.08 | 18  | 11 | 30 | 0.09 | 65  | 5  | 72  |
| R70   | 7  | 22  | 0.4  | <5 | 183 | 0.6 | 3  | 0.28 | <0.1 | 19 | 52  | 1.89 | 3.08 | 0.12 | 8  | 0.67 | 524 | 4  | <0.01 | 60  | 0.22 | 17  | <5 | 24 | 0.09 | 60  | <5 | 73  |
| R71   | 4  | 69  | 0.4  | <5 | 98  | 0.4 | <2 | 0.21 | <0.1 | 9  | 50  | 1.08 | 1.26 | 0.03 | 7  | 0.19 | 62  | 3  | <0.01 | 73  | 0.02 | 27  | <5 | 25 | 0.10 | 34  | <5 | 17  |
| R72   | 13 | 50  | 0.8  | <5 | 119 | 0.6 | <2 | 0.23 | <0.1 | 14 | 63  | 2.10 | 3.38 | 0.10 | 7  | 0.93 | 471 | 6  | <0.01 | 48  | 0.21 | 14  | <5 | 22 | 0.11 | 57  | <5 | 122 |
| R72*  | 5  | 47  | 0.8  | <5 | 113 | 0.6 | 4  | 0.22 | <0.1 | 14 | 60  | 2.00 | 3.28 | 0.10 | 7  | 0.90 | 461 | 5  | <0.01 | 47  | 0.21 | 16  | <5 | 21 | 0.11 | 55  | <5 | 117 |
| R73   | 1  | 24  | 0.6  | <5 | 153 | 0.5 | <2 | 0.27 | <0.1 | 15 | 39  | 2.55 | 2.89 | 0.07 | 3  | 0.52 | 386 | <1 | <0.01 | 28  | 0.35 | 38  | <5 | 23 | 0.13 | 63  | <5 | 159 |
| R74   | 2  | 32  | 0.5  | <5 | 144 | 0.6 | <2 | 0.27 | <0.1 | 23 | 65  | 1.45 | 3.15 | 0.15 | 6  | 0.76 | 315 | 2  | 0.01  | 48  | 0.10 | 75  | <5 | 23 | 0.11 | 70  | <5 | 89  |
| R75   | 12 | 67  | 1.4  | <5 | 258 | 1.6 | <2 | 0.51 | <0.1 | 35 | 346 | 2.34 | 4.71 | 1.16 | 4  | 3.02 | 598 | 1  | <0.01 | 153 | 0.09 | 195 | <5 | 30 | 0.18 | 146 | <5 | 100 |
| R76   | 7  | 126 | 2.1  | <5 | 325 | 1.2 | <2 | 0.44 | <0.1 | 25 | 207 | 2.47 | 4.00 | 0.18 | 4  | 1.68 | 687 | 4  | 0.01  | 141 | 0.12 | 252 | <5 | 30 | 0.14 | 95  | <5 | 141 |
| R77   | 6  | 57  | <0.1 | <1 | 156 | 1.0 | <2 | 0.49 | <0.1 | 23 | 266 | 1.95 | 3.65 | 0.45 | 9  | 2.09 | 427 | 1  | 0.01  | 144 | 0.08 | 55  | <5 | 29 | 0.13 | 82  | <5 | 68  |
| R78   | 2  | 19  | <0.1 | <1 | 198 | 0.5 | <2 | 0.53 | <0.1 | 29 | 298 | 2.35 | 3.63 | 0.45 | 5  | 2.16 | 530 | <1 | 0.01  | 186 | 0.06 | 12  | <5 | 27 | 0.14 | 78  | <5 | 81  |
| R79   | <1 | 75  | <0.1 | <1 | 181 | 1.8 | <2 | 0.36 | <0.1 | 45 | 667 | 2.47 | 4.84 | 0.27 | 2  | 4.19 | 351 | <1 | <0.01 | 381 | 0.03 | 69  | <5 | 29 | 0.16 | 125 | <5 | 54  |
| R80   | 2  | 15  | <0.1 | <1 | 142 | 1.2 | <2 | 0.28 | <0.1 | 17 | 175 | 0.89 | 2.32 | 0.07 | 3  | 0.57 | 352 | 2  | <0.01 | 133 | 0.06 | 17  | <5 | 21 | 0.07 | 33  | <5 | 56  |
| R81   | 2  | 12  | <0.1 | <1 | 92  | 1.2 | <2 | 0.24 | <0.1 | 6  | 46  | 1.05 | 1.23 | 0.04 | 5  | 0.39 | 156 | <1 | <0.01 | 23  | 0.14 | 5   | <5 | 19 | 0.05 | 40  | <5 | 50  |
| R81*  | 1  | 12  | <0.1 | <1 | 92  | 0.2 | <2 | 0.24 | <0.1 | 6  | 45  | 1.04 | 1.24 | 0.04 | 4  | 0.37 | 152 | <1 | <0.01 | 20  | 0.14 | 4   | <5 | 18 | 0.04 | 39  | <5 | 51  |
| R82   | 2  | 19  | 0.3  | <1 | 99  | 0.5 | <2 | 0.29 | <0.1 | 11 | 73  | 1.84 | 3.55 | 0.04 | 6  | 0.55 | 164 | 1  | <0.01 | 80  | 0.08 | 6   | <5 | 21 | 0.11 | 65  | 6  | 82  |
| R83   | 3  | 17  | <0.1 | <1 | 102 | 0.5 | <2 | 0.23 | <0.1 | 18 | 69  | 1.97 | 3.01 | 0.04 | 7  | 0.72 | 238 | 2  | <0.01 | 72  | 0.09 | 6   | <5 | 18 | 0.09 | 46  | <5 | 74  |
| R84   | 3  | 15  | <0.1 | <1 | 69  | 0.3 | <2 | 0.21 | <0.1 | 21 | 142 | 1.24 | 2.84 | 0.07 | 4  | 0.85 | 241 | 2  | 0.01  | 152 | 0.05 | 4   | <5 | 14 | 0.08 | 47  | <5 | 49  |
| R85   | <1 | 19  | 0.4  | <1 | 206 | 1.4 | <2 | 0.19 | <0.1 | 23 | 202 | 1.79 | 3.25 | 0.03 | 4  | 0.88 | 240 | <1 | <0.01 | 143 | 0.32 | 4   | <5 | 15 | 0.09 | 36  | <5 | 67  |
| R86   | 16 | 53  | 0.3  | <1 | 94  | 1.1 | 3  | 0.46 | <0.1 | 26 | 139 | 2.09 | 3.53 | 0.06 | 8  | 1.44 | 368 | <1 | 0.01  | 252 | 0.05 | 6   | <5 | 28 | 0.10 | 65  | <5 | 54  |
| R87   | 9  | 101 | 1.4  | <1 | 161 | 0.4 | <2 | 0.75 | <0.1 | 12 | 53  | 1.93 | 3.26 | 0.10 | 6  | 0.60 | 638 | 3  | 0.01  | 203 | 0.05 | 11  | <5 | 43 | 0.07 | 40  | <5 | 54  |
| R88   | 4  | 127 | 1.6  | <1 | 291 | 0.7 | 4  | 1.00 | <0.1 | 11 | 59  | 2.39 | 3.32 | 0.12 | 16 | 0.45 | 512 | 2  | 0.01  | 78  | 0.04 | 10  | <5 | 50 | 0.07 | 47  | <5 | 42  |
| R89   | 5  | 26  | 0.1  | <5 | 99  | 0.5 | 2  | 0.27 | <0.1 | 15 | 75  | 2.13 | 3.62 | 0.05 | 6  | 0.86 | 310 | 2  | <0.01 | 59  | 0.17 | 7   | <5 | 18 | 0.08 | 56  | <5 | 83  |
| R90   | 12 | 33  | <0.1 | <5 | 50  | 0.3 | 2  | 0.27 | <0.1 | 12 | 80  | 1.75 | 3.67 | 0.12 | 6  | 1.20 | 350 | <1 | <0.01 | 53  | 0.08 | 11  | <5 | 21 | 0.11 | 65  | <5 | 69  |
| R90*  | 16 | 34  | <0.1 | <5 | 50  | 0.3 | 3  | 0.27 | <0.1 | 12 | 83  | 1.82 | 3.82 | 0.13 | 6  | 1.25 | 351 | 1  | <0.01 | 54  | 0.08 | 10  | <5 | 22 | 0.11 | 68  | <5 | 72  |
| R91   | 15 | 42  | 0.3  | <1 | 130 | 0.8 | 3  | 0.20 | <0.1 | 20 | 84  | 2.84 | 3.82 | 0.24 | 9  | 1.21 | 384 | 5  | 0.01  | 78  | 0.04 | 13  | <5 | 20 | 0.14 | 74  | <5 | 52  |
| R92   | 5  | 42  | 0.2  | <1 | 116 | 1.1 | 2  | 0.23 | <0.1 | 15 | 49  | 2.29 | 3.66 | 0.16 | 4  | 1.09 | 865 | 3  | <0.01 | 38  | 0.08 | 7   | <5 | 14 | 0.14 | 73  | <5 | 122 |
| R93   | 6  | 40  | 0.2  | <1 | 118 | 0.5 | 2  | 0.20 | <0.1 | 15 | 46  | 2.45 | 3.85 | 0.16 | 4  | 1.01 | 602 | 3  | <0.01 | 38  | 0.11 | 7   | <5 | 15 | 0.14 | 71  | <5 | 52  |
| R94   | 9  | 100 | 0.2  | 5  | 71  | 0.2 | 4  | 1.70 | 0.2  | 17 | 51  | 1.07 | 2.61 | 0.19 | 16 | 0.79 | 568 | 11 | 0.01  | 52  | 0.10 | 9   | <5 | 50 | 0.06 | 56  | <5 | 63  |
| R95   | 5  | 12  | 0.2  | <5 | 168 | 0.3 | 3  | 0.21 | <0.1 | 9  | 42  | 1.29 | 2.12 | 0.03 | 7  | 0.52 | 173 | 4  | <0.01 | 39  | 0.02 | 5   | <5 | 27 | 0.06 | 42  | <5 | 45  |
| R96   | 3  | 15  | 0.2  | <5 | 175 | 0.3 | <2 | 0.25 | <0.1 | 7  | 31  | 1.52 | 2.04 | 0.02 | 4  | 0.36 | 118 | 4  | <0.01 | 13  | 0.02 | 4   | <5 | 29 | 0.06 | 35  | <5 | 73  |
| R97   | <1 | 15  | 0.4  | <5 | 227 | 0.5 | <2 | 0.21 | <0.1 | 8  | 30  | 2.60 | 2.31 | 0.04 | 5  | 0.21 | 318 | <1 | <0.01 | 15  | 0.37 | 6   | <5 | 23 | 0.08 | 30  | <5 | 43  |
| R98   | 3  | 14  | 0.4  | <5 | 104 | 0.6 | 3  | 0.13 | <0.1 | 8  | 39  | 2.25 | 2.42 | 0.03 | 6  | 0.28 | 124 | 3  | <0.01 | 23  | 0.16 | 8   | <5 | 14 | 0.06 | 40  | <5 | 43  |
| R99   | 6  | 22  | 0.4  | <5 | 172 | 0.4 | 4  | 0.16 | <0.1 | 9  | 47  | 1.96 | 2.92 | 0.03 | 5  | 0.55 | 196 | <1 | <0.01 | 35  | 0.09 | 5   | <5 | 19 | 0.04 | 48  | <5 | 47  |
| R100  | 40 | 48  | 0.4  | <5 | 226 | 0.3 | 2  | 0.16 | <0.1 | 9  | 32  | 1.63 | 2.46 | 0.03 | 4  | 0.45 | 174 | <1 | <0.01 | 26  | 0.15 | 7   | <5 | 20 | 0.05 | 33  | <5 | 41  |
| R101* | 1  | 49  | 0.4  | <5 | 232 | 0.3 | 3  | 0.16 | <0.1 | 9  | 32  | 1.63 | 2.45 | 0.03 | 4  | 0.46 | 174 | 2  | <0.01 | 27  | 0.15 | 7   | <5 | 21 | 0.05 | 33  | <5 | 41  |
| R102  | 1  | 19  | 0.4  | 8  | 59  | 0.8 | 4  | 0.10 | 0.4  | 9  | 24  | 1.69 | 1.68 | 0.03 | 13 | 0.08 | 244 | 2  | <0.01 | 14  | 0.13 | 11  | <5 | 13 | 0.08 | 31  | 15 | 38  |
| R103  | 3  | 9   | 0.3  | <5 | 135 | 0.2 | <2 | 0.15 | <0.1 | 6  | 29  | 1.10 | 1.74 | 0.04 | 4  | 0.27 | 478 | 8  | <0.01 | 18  | 0.09 | 8   | 9  | 13 | 0.05 | 26  | <5 | 42  |
| R104  | <1 | 14  | 0.4  | <5 | 223 | 0.7 | 4  | 0.55 | <0.1 | 10 | 25  | 2.80 | 2.29 | 0.03 | 6  | 0.19 | 728 | 3  | <0.01 | 12  | 0.42 | 15  | <5 | 35 | 0.12 | 25  | <5 | 75  |
| R105  | 8  | 34  | 0.1  | <5 | 219 | 0.4 | 6  | 0.50 | <0.1 | 11 | 41  | 1.63 | 3.12 | 0.08 | 8  | 0.70 | 321 | 10 | <0.01 | 33  | 0.06 | 11  | <5 | 36 | 0.06 | 53  | <5 | 58  |
| R106  | 7  | 15  | 0.3  | <5 | 93  | 0.4 | 6  | 0.21 | <0.1 | 7  | 36  | 1.50 | 2.54 | 0.04 | 7  | 0.33 | 164 | 7  | <0.01 | 24  | 0.21 | 5   | <5 | 13 | 0.03 | 34  | <5 | 52  |
| R107  | 2  | 15  | 0.5  | <5 | 207 | 0.5 | 6  | 0.19 | <0.1 | 7  | 31  | 1.96 | 2.21 | 0.06 | 5  | 0.31 | 395 | 7  | <0.01 | 27  | 0.25 | 10  | <5 | 15 | 0.06 | 30  | <5 | 38  |
| R108  | 4  | 17  | 0.3  | <5 | 100 | 0.3 | 3  | 0.16 | <0.1 | 7  | 28  | 1.34 | 2.00 | 0.05 | 4  | 0.33 | 173 | 2  | <0.01 | 19  | 0.10 | 7   | <5 | 15 | 0.04 | 29  | <5 | 42  |
| R109  | 10 | 32  | 0.5  | <5 | 144 | 0.5 | 4  | 0.16 | <0.1 | 8  | 33  | 2.01 | 2.60 | 0.06 | 6  | 0.47 | 186 | 2  | <0.01 | 25  | 0.13 | 8   | <5 | 16 | 0.05 | 36  | <5 | 42  |
| R110  | 6  | 9   | 0.7  | <5 | 106 | 0.3 | <2 | 0.12 | <0.1 | 4  | 22  | 1.54 | 1.70 | 0.04 | 3  | 0.13 | 133 | 3  | <0.01 | 11  | 0.12 | 10  | <5 | 14 | 0.04 | 29  | <5 | 24  |
| R111  | 5  | 30  | 0.5  | <5 | 155 | 0.6 | <2 | 0.21 | <0.1 | 10 | 28  | 1.87 | 2.74 | 0.05 | 8  | 0.42 | 205 | 2  | <0.01 | 1   | 0.34 | 8</ |    |    |      |     |    |     |

| SMMP | AD | CU | AG   | AS | BA  | BE   | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN   | MO | NA    | NI  | P    | PB  | SB | SR | TI   | V   | W  | ZN  |
|------|----|----|------|----|-----|------|----|------|------|----|-----|------|------|------|----|------|------|----|-------|-----|------|-----|----|----|------|-----|----|-----|
| L41* | 7  | 25 | 0.6  | <5 | 82  | 0.4  | <2 | 0.17 | <0.1 | 8  | 31  | 1.85 | 2.58 | 0.06 | 5  | 0.46 | 211  | 4  | <0.01 | 14  | 0.19 | 8   | <5 | 15 | 0.06 | 38  | <5 | 52  |
| L42  | 3  | 33 | 0.9  | <5 | 84  | 0.9  | <2 | 0.10 | 0.2  | 9  | 26  | 2.22 | 1.99 | 0.03 | 11 | 0.21 | 157  | 6  | <0.01 | 8   | 0.17 | 21  | <5 | 14 | 0.06 | 36  | 13 | 46  |
| L43  | 5  | 39 | 0.3  | <5 | 121 | 1.1  | 7  | 0.18 | 0.4  | 13 | 37  | 1.86 | 2.57 | 0.09 | 17 | 0.43 | 248  | 8  | <0.01 | 47  | 0.14 | 19  | <5 | 22 | 0.10 | 61  | 6  | 55  |
| L44  | 3  | 24 | 1.2  | <5 | 90  | 0.5  | 4  | 0.14 | <0.1 | 6  | 21  | 2.44 | 2.16 | 0.04 | 5  | 0.21 | 216  | <1 | <0.01 | 6   | 0.11 | 14  | <5 | 13 | 0.09 | 34  | <5 | 31  |
| L45  | 3  | 32 | 0.6  | <5 | 92  | 0.5  | 4  | 0.20 | <0.1 | 8  | 29  | 1.82 | 2.78 | 0.07 | 5  | 0.52 | 229  | <1 | <0.01 | 10  | 0.10 | 10  | <5 | 19 | 0.09 | 53  | <5 | 60  |
| L46  | 5  | 28 | 0.2  | <5 | 79  | 0.5  | 4  | 0.24 | <0.1 | 10 | 31  | 2.25 | 3.13 | 0.08 | 6  | 0.68 | 253  | 1  | <0.01 | 17  | 0.14 | 14  | <5 | 20 | 0.08 | 59  | <5 | 73  |
| L47  | 5  | 46 | 0.8  | <5 | 78  | 0.5  | 4  | 0.12 | <0.1 | 6  | 22  | 2.03 | 2.37 | 0.04 | 5  | 0.24 | 160  | 7  | <0.01 | 5   | 0.24 | 14  | <5 | 12 | 0.09 | 36  | <5 | 44  |
| L48  | <1 | 25 | 0.7  | <5 | 65  | 0.7  | 4  | 0.15 | <0.1 | 3  | 20  | 3.05 | 2.81 | 0.03 | 4  | 0.07 | 76   | <1 | <0.01 | 2   | 0.40 | 16  | <5 | 17 | 0.15 | 47  | <5 | 19  |
| L49  | 7  | 23 | 0.4  | <5 | 89  | 0.5  | 4  | 0.17 | <0.1 | 6  | 24  | 2.21 | 2.97 | 0.03 | 5  | 0.35 | 133  | 5  | <0.01 | 9   | 0.27 | 14  | <5 | 17 | 0.10 | 57  | <5 | 26  |
| L50  | 9  | 45 | 0.2  | <5 | 51  | 0.2  | 4  | 0.13 | <0.1 | 5  | 25  | 1.20 | 3.24 | 0.04 | 3  | 0.36 | 134  | 4  | <0.01 | 14  | 0.02 | 10  | <5 | 19 | 0.11 | 63  | <5 | 27  |
| L50* | 8  | 46 | 0.2  | <5 | 54  | 0.1  | 5  | 0.14 | <0.1 | 5  | 26  | 1.27 | 3.32 | 0.04 | 4  | 0.40 | 146  | <1 | <0.01 | 13  | 0.01 | 12  | <5 | 23 | 0.11 | 68  | 13 | 30  |
| L51  | 9  | 48 | 0.2  | <5 | 63  | 0.6  | 2  | 0.15 | 0.3  | 9  | 32  | 1.16 | 3.09 | 0.04 | 12 | 0.36 | 157  | 3  | <0.01 | 18  | 0.02 | 10  | <5 | 23 | 0.11 | 68  | 13 | 30  |
| L52  | 3  | 17 | 0.3  | <5 | 58  | 0.4  | 4  | 0.12 | <0.1 | 7  | 26  | 1.63 | 2.19 | 0.03 | 5  | 0.25 | 329  | <1 | <0.01 | 13  | 0.20 | 9   | <5 | 12 | 0.07 | 38  | <5 | 52  |
| L53  | 3  | 26 | 0.4  | <5 | 50  | 0.5  | <2 | 0.09 | <0.1 | 5  | 26  | 2.51 | 2.65 | 0.03 | 6  | 0.25 | 122  | 5  | <0.01 | 11  | 0.20 | 11  | <5 | 11 | 0.09 | 49  | <5 | 42  |
| L54  | 9  | 45 | 0.4  | <5 | 91  | 0.5  | 3  | 0.15 | <0.1 | 10 | 27  | 2.23 | 2.27 | 0.06 | 6  | 0.41 | 246  | 2  | <0.01 | 22  | 0.14 | 10  | <5 | 18 | 0.09 | 41  | <5 | 58  |
| L54  | 3  | 27 | 0.4  | <5 | 40  | 0.5  | <2 | 0.10 | <0.1 | 6  | 28  | 1.90 | 2.57 | 0.05 | 6  | 0.32 | 144  | <1 | <0.01 | 18  | 0.17 | 9   | <5 | 14 | 0.09 | 51  | <5 | 46  |
| L55  | <1 | 27 | 0.3  | <5 | 67  | 0.5  | <2 | 0.10 | <0.1 | 6  | 25  | 2.26 | 2.63 | 0.05 | 4  | 0.18 | 102  | <1 | <0.01 | 13  | 0.09 | 12  | <5 | 13 | 0.14 | 54  | <5 | 30  |
| L56  | 4  | 61 | 0.2  | <5 | 136 | 0.5  | <2 | 0.15 | <0.1 | 11 | 27  | 3.74 | 3.85 | 0.03 | 9  | 0.37 | 179  | 4  | <0.01 | 17  | 0.04 | 12  | <5 | 18 | 0.13 | 65  | <5 | 40  |
| L57  | 4  | 44 | 0.4  | <5 | 73  | 0.4  | <2 | 0.11 | <0.1 | 11 | 30  | 2.11 | 2.32 | 0.05 | 5  | 0.45 | 299  | <1 | <0.01 | 22  | 0.16 | 13  | <5 | 13 | 0.08 | 39  | <5 | 48  |
| L58  | 4  | 23 | 0.4  | <5 | 81  | 0.5  | 2  | 0.14 | <0.1 | 6  | 27  | 2.67 | 1.93 | 0.05 | 5  | 0.21 | 147  | <1 | <0.01 | 17  | 0.17 | 9   | <5 | 14 | 0.09 | 29  | <5 | 47  |
| L59* | <1 | 21 | 0.4  | <5 | 82  | 0.5  | <2 | 0.15 | <0.1 | 6  | 26  | 2.75 | 1.92 | 0.05 | 4  | 0.20 | 144  | <1 | <0.01 | 14  | 0.17 | 13  | <5 | 42 | 0.10 | 62  | <5 | 73  |
| L60  | 5  | 22 | 0.5  | <5 | 114 | <0.1 | <2 | 0.22 | <0.1 | 8  | 44  | 1.91 | 3.40 | 0.11 | <1 | 0.70 | 229  | <1 | <0.01 | 25  | 0.10 | 2   | <5 | 13 | 0.15 | 55  | <5 | 101 |
| L61  | 2  | 39 | 0.6  | <5 | 87  | 0.3  | <2 | 0.11 | <0.1 | 9  | 28  | 2.72 | 3.75 | 0.07 | <1 | 0.44 | 245  | 3  | <0.01 | 31  | 0.17 | 11  | <5 | 21 | 0.13 | 76  | <5 | 147 |
| L62  | 6  | 94 | 0.4  | <5 | 81  | 0.4  | <2 | 0.19 | <0.1 | 14 | 34  | 2.88 | 4.29 | 0.09 | <1 | 0.87 | 491  | 6  | <0.01 | 28  | 0.16 | 11  | <5 | 23 | 0.11 | 57  | <5 | 47  |
| L63  | 3  | 38 | 0.4  | <5 | 104 | <0.1 | <2 | 0.13 | <0.1 | 7  | 47  | 1.53 | 2.91 | 0.07 | <1 | 0.55 | 183  | 6  | <0.01 | 15  | 0.02 | 12  | <5 | 17 | 0.15 | 55  | <5 | 30  |
| L64  | 2  | 18 | 0.3  | <5 | 81  | <0.1 | <2 | 0.14 | <0.1 | 5  | 33  | 1.09 | 1.46 | 0.06 | <1 | 0.24 | 85   | 3  | <0.01 | 37  | 0.12 | 9   | <5 | 26 | 0.11 | 54  | <5 | 76  |
| L65  | 4  | 35 | 0.1  | <5 | 111 | 0.3  | 2  | 0.22 | <0.1 | 13 | 55  | 2.71 | 3.44 | 0.09 | <1 | 0.77 | 293  | 3  | <0.01 | 27  | 0.05 | 14  | <5 | 17 | 0.09 | 35  | <5 | 41  |
| L66  | 2  | 18 | 0.3  | <5 | 85  | <0.1 | <2 | 0.15 | <0.1 | 5  | 40  | 0.96 | 1.95 | 0.06 | <1 | 0.28 | 245  | <1 | <0.01 | 30  | 0.09 | 37  | <5 | 21 | 0.06 | 46  | <5 | 43  |
| L67  | 4  | 46 | 0.3  | <5 | 65  | <0.1 | <2 | 0.27 | <0.1 | 8  | 55  | 1.13 | 1.69 | 0.10 | <1 | 0.56 | 204  | <1 | <0.01 | 30  | 0.09 | 37  | <5 | 21 | 0.06 | 46  | <5 | 43  |
| L68  | 1  | 19 | 1.2  | <5 | 133 | 0.5  | <2 | 0.13 | <0.1 | 10 | 27  | 3.52 | 1.66 | 0.04 | <1 | 0.07 | 223  | <1 | <0.01 | 11  | 0.58 | 99  | <5 | 11 | 0.13 | 28  | <5 | 35  |
| L68* | 1  | 19 | 1.2  | <5 | 143 | 0.6  | <2 | 0.14 | <0.1 | 11 | 29  | 3.59 | 2.69 | 0.04 | <1 | 0.07 | 239  | <1 | <0.01 | 11  | 0.58 | 99  | <5 | 11 | 0.13 | 28  | <5 | 35  |
| L69  | 1  | 74 | 1.1  | <5 | 135 | 0.7  | 4  | 0.17 | 0.1  | 11 | 35  | 1.33 | 1.51 | 0.11 | 10 | 0.30 | 443  | 5  | 0.01  | 33  | 0.06 | 285 | <5 | 27 | 0.12 | 55  | 12 | 62  |
| L70  | 3  | 33 | 0.6  | <5 | 77  | 0.4  | 3  | 0.17 | <0.1 | 18 | 78  | 1.74 | 3.42 | 0.06 | 6  | 0.70 | 277  | 4  | <0.01 | 59  | 0.10 | 41  | <5 | 20 | 0.10 | 67  | <5 | 69  |
| L71  | 3  | 83 | 0.4  | <5 | 105 | 0.5  | 2  | 0.14 | <0.1 | 21 | 70  | 2.23 | 4.19 | 0.14 | 6  | 1.09 | 352  | 3  | <0.01 | 55  | 0.09 | 53  | <5 | 21 | 0.13 | 88  | <5 | 90  |
| L72  | 8  | 81 | 0.6  | <5 | 126 | 0.1  | <2 | 0.22 | <0.1 | 19 | 67  | 2.12 | 4.00 | 0.12 | 5  | 1.01 | 348  | 5  | <0.01 | 52  | 0.09 | 49  | <5 | 19 | 0.12 | 83  | <5 | 86  |
| L73  | 13 | 94 | 0.3  | <5 | 70  | 0.3  | <2 | 0.17 | <0.1 | 16 | 65  | 1.09 | 3.21 | 0.11 | 10 | 0.80 | 614  | 5  | 0.01  | 31  | 0.10 | 1   | <5 | 51 | 0.06 | 53  | <5 | 60  |
| L73  | 4  | 37 | 1.1  | <5 | 103 | 0.6  | 3  | 0.24 | <0.1 | 25 | 75  | 2.93 | 3.33 | 0.07 | 1  | 0.85 | 268  | 3  | <0.01 | 71  | 0.12 | 39  | <5 | 19 | 0.11 | 59  | <5 | 67  |
| L74  | 1  | 37 | 0.5  | <5 | 107 | 0.1  | <2 | 0.20 | <0.1 | 19 | 45  | 1.51 | 3.35 | 0.05 | 5  | 0.65 | 287  | 2  | <0.01 | 46  | 0.09 | 78  | <5 | 19 | 0.09 | 60  | <5 | 117 |
| L75  | 1  | 29 | 0.7  | <5 | 109 | 0.1  | 2  | 0.13 | <0.1 | 20 | 235 | 1.41 | 3.29 | 0.03 | 4  | 1.26 | 972  | 2  | <0.01 | 140 | 0.07 | 23  | <5 | 15 | 0.08 | 55  | <5 | 73  |
| L76  | 1  | 29 | 0.2  | <5 | 194 | 0.6  | <2 | 0.29 | <0.1 | 47 | 241 | 3.95 | 3.70 | 0.13 | 3  | 1.40 | 828  | 3  | <0.01 | 234 | 0.04 | 86  | <5 | 23 | 0.13 | 61  | <5 | 89  |
| L77  | 1  | 19 | 0.2  | <5 | 95  | 1.1  | <2 | 0.25 | <0.1 | 10 | 135 | 1.55 | 4.35 | 0.14 | 3  | 0.83 | 354  | 3  | <0.01 | 348 | 0.04 | 161 | <5 | 22 | 0.09 | 85  | <5 | 62  |
| L78  | 13 | 27 | 0.1  | <5 | 104 | 1.1  | <2 | 0.45 | <0.1 | 30 | 437 | 2.13 | 4.59 | 0.12 | 4  | 3.19 | 586  | 2  | 0.01  | 238 | 0.06 | 45  | <5 | 23 | 0.15 | 126 | <5 | 99  |
| L78* | 1  | 25 | 0.1  | <5 | 112 | 1.0  | <2 | 0.42 | <0.1 | 29 | 432 | 2.02 | 4.40 | 0.14 | 4  | 3.01 | 563  | 2  | 0.01  | 233 | 0.06 | 45  | <5 | 22 | 0.14 | 121 | <5 | 93  |
| L79  | 5  | 36 | <0.1 | <5 | 103 | 1.7  | <2 | 0.47 | <0.1 | 31 | 498 | 2.01 | 4.54 | 0.38 | 10 | 3.77 | 505  | 2  | 0.01  | 255 | 0.09 | 101 | <5 | 31 | 0.11 | 107 | <5 | 65  |
| L80  | 2  | 65 | 0.4  | <5 | 149 | 0.8  | <2 | 0.32 | <0.1 | 31 | 237 | 2.01 | 3.80 | 0.14 | 5  | 2.16 | 573  | 3  | <0.01 | 700 | 0.05 | 42  | <5 | 26 | 0.09 | 62  | <5 | 74  |
| L81  | 3  | 31 | <0.1 | <5 | 139 | 0.6  | <2 | 0.40 | <0.1 | 29 | 466 | 2.25 | 4.21 | 0.34 | 4  | 3.47 | 351  | <1 | <0.01 | 324 | 0.05 | 23  | <5 | 20 | 0.14 | 95  | <5 | 63  |
| L82  | 1  | 24 | <0.1 | <5 | 99  | 0.6  | 3  | 0.23 | <0.1 | 28 | 260 | 1.95 | 3.61 | 0.17 | 5  | 1.92 | 291  | 1  | 0.01  | 201 | 0.08 | 36  | <5 | 16 | 0.11 | 70  | <5 | 58  |
| L83  | 3  | 22 | <0.1 | <5 | 78  | 0.4  | 3  | 0.21 | <0.1 | 25 | 210 | 1.40 | 3.36 | 0.07 | 4  | 1.68 | 421  | 2  | 0.01  | 194 | 0.05 | 17  | <5 | 15 | 0.11 | 69  | <5 | 55  |
| L84  | <1 | 24 | 0.2  | <5 | 122 | 0.5  | <2 | 0.25 | <0.1 | 28 | 265 | 1.55 | 3.48 | 0.09 | 4  | 1.48 | 1093 | <1 | <0.01 | 166 | 0.07 | 25  | <5 | 17 | 0.09 | 60  | <5 | 78  |
| L85  | 1  | 30 | 0.4  | <5 | 75  | 0.4  | <2 | 0.40 | <0.1 | 23 | 263 | 1.73 | 3.82 | 0.14 | 4  | 1.92 | 361  | <1 | <0.01 | 148 | 0.11 | 32  | <5 | 21 | 0.11 | 74  | <5 | 74  |
| L86  | 4  | 19 | 0.1  | <5 | 76  | 0.2  | 2  | 0.28 | <0.1 | 16 | 86  | 1.50 | 2.98 | 0.10 | 4  | 1.07 | 361  | <1 | <0.01 | 84  | 0.09 | 7   | <5 | 17 | 0.09 | 47  | <5 | 78  |
| L87  | 1  | 24 | 0.4  | <5 | 75  | 0.5  | 2  | 0.30 | <0.1 | 17 | 84  | 2.18 | 2.73 | 0.08 | 6  |      |      |    |       |     |      |     |    |    |      |     |    |     |



| SAMP | AD | CD   | AG  | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN  | MO | NA    | NI   | P    | PB | SB | SR | TI   | V   | W  | ZN  |
|------|----|------|-----|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|-----|----|-------|------|------|----|----|----|------|-----|----|-----|
| M21  | 11 | 20   | 0.2 | <5 | 231 | 0.2 | 2  | 0.37 | <0.1 | 7  | 40  | 1.20 | 1.85 | 0.03 | 6  | 0.48 | 155 | 5  | <0.01 | 20   | 0.02 | 4  | <5 | 40 | 0.06 | 37  | <5 | 37  |
| M22  | 16 | 25   | 0.3 | <5 | 267 | 0.2 | <2 | 0.38 | <0.1 | 9  | 46  | 1.40 | 2.25 | 0.03 | 7  | 0.63 | 196 | <1 | <0.01 | 23   | 0.02 | 4  | <5 | 45 | 0.06 | 44  | <5 | 41  |
| M23  | 6  | 22   | 0.3 | <5 | 359 | 0.3 | <2 | 0.35 | <0.1 | 8  | 42  | 1.80 | 2.39 | 0.04 | 5  | 0.47 | 197 | 6  | 0.01  | 26   | 0.02 | 5  | <5 | 37 | 0.05 | 40  | <5 | 41  |
| M23* | 6  | 22   | 0.3 | <5 | 360 | 0.4 | <2 | 0.37 | <0.1 | 9  | 44  | 1.93 | 2.40 | 0.04 | 5  | 0.50 | 209 | 7  | 0.01  | 26   | 0.02 | 7  | <5 | 40 | 0.05 | 43  | <5 | 39  |
| M24  | 15 | 26   | 0.3 | <5 | 416 | 0.5 | 2  | 0.38 | <0.1 | 11 | 47  | 2.10 | 2.73 | 0.04 | 9  | 0.52 | 352 | 8  | <0.01 | 35   | 0.05 | 6  | <5 | 36 | 0.06 | 44  | 14 | 72  |
| M25  | 10 | 17   | 0.3 | <5 | 177 | 0.3 | <2 | 0.20 | <0.1 | 6  | 35  | 1.40 | 2.23 | 0.05 | 5  | 0.37 | 187 | 6  | <0.01 | 27   | 0.05 | 6  | <5 | 20 | 0.07 | 38  | <5 | 43  |
| M26  | 8  | 19   | 0.3 | <5 | 167 | 0.3 | <2 | 0.13 | <0.1 | 7  | 34  | 1.20 | 2.15 | 0.04 | 5  | 0.37 | 254 | 7  | <0.01 | 27   | 0.07 | 9  | <5 | 15 | 0.05 | 34  | <5 | 42  |
| M27  | 5  | 14   | 0.3 | <5 | 230 | 0.5 | 3  | 0.22 | <0.1 | 7  | 32  | 2.08 | 2.21 | 0.04 | 6  | 0.28 | 374 | 5  | <0.01 | 31   | 0.18 | 7  | <5 | 19 | 0.06 | 30  | <5 | 41  |
| M28  | 3  | 15   | 0.2 | <5 | 149 | 0.3 | 2  | 0.21 | <0.1 | 7  | 34  | 1.26 | 2.14 | 0.05 | 7  | 0.33 | 222 | 7  | <0.01 | 27   | 0.11 | 6  | <5 | 19 | 0.05 | 32  | <5 | 41  |
| M29  | 1  | 9    | 0.6 | <5 | 215 | 0.8 | 2  | 0.25 | <0.1 | 5  | 23  | 3.91 | 2.72 | 0.04 | 5  | 0.09 | 219 | 2  | <0.01 | 7    | 0.61 | 16 | <5 | 23 | 0.16 | 33  | <5 | 42  |
| M30  | 2  | 12   | 0.5 | <5 | 138 | 0.8 | 4  | 0.42 | <0.1 | 6  | 25  | 4.31 | 2.95 | 0.05 | 5  | 0.14 | 139 | 2  | 0.01  | 11   | 0.57 | 12 | <5 | 36 | 0.16 | 37  | <5 | 41  |
| M31  | 3  | 12   | 0.4 | <5 | 205 | 0.9 | 3  | 0.43 | <0.1 | 5  | 25  | 4.49 | 3.40 | 0.05 | 5  | 0.15 | 143 | <1 | <0.01 | 10   | 0.70 | 13 | <5 | 38 | 0.16 | 44  | <5 | 46  |
| M32  | 3  | 14   | 0.3 | <5 | 175 | 0.5 | 3  | 0.14 | <0.1 | 6  | 25  | 2.19 | 2.35 | 0.05 | 5  | 0.23 | 299 | 1  | <0.01 | 14   | 0.27 | 6  | <5 | 16 | 0.08 | 28  | <5 | 49  |
| M32* | 2  | 15   | 0.2 | <5 | 175 | 0.5 | <2 | 0.14 | <0.1 | 6  | 25  | 2.18 | 2.36 | 0.06 | 5  | 0.23 | 301 | <1 | <0.01 | 14   | 0.27 | 7  | <5 | 16 | 0.08 | 28  | <5 | 50  |
| M33  | 3  | 25   | 0.2 | <5 | 234 | 0.6 | <2 | 0.20 | <0.1 | 11 | 42  | 2.10 | 3.15 | 0.05 | 9  | 0.49 | 480 | 5  | <0.01 | 34   | 0.34 | 7  | <5 | 22 | 0.08 | 48  | 11 | 89  |
| M34  | 3  | 14   | 0.4 | <5 | 88  | 0.7 | <2 | 0.15 | <0.1 | 6  | 36  | 3.18 | 3.22 | 0.04 | 5  | 0.23 | 124 | 10 | <0.01 | 27   | 0.11 | 7  | <5 | 14 | 0.12 | 53  | <5 | 36  |
| M35  | 3  | 48   | 0.4 | <5 | 341 | 0.9 | <2 | 0.44 | <0.1 | 24 | 47  | 4.26 | 5.43 | 0.19 | 9  | 1.00 | 775 | 11 | <0.01 | 49   | 0.15 | 10 | <5 | 39 | 0.19 | 98  | <5 | 101 |
| M36  | 7  | 227  | 1.3 | <5 | 191 | 0.4 | <2 | 0.45 | <0.1 | 6  | 34  | 1.40 | 2.48 | 0.07 | 16 | 0.25 | 151 | 4  | 0.01  | 24   | 0.02 | 3  | <5 | 32 | 0.06 | 44  | <5 | 35  |
| M37  | 4  | 17   | 0.5 | <5 | 149 | 0.5 | <2 | 0.15 | <0.1 | 9  | 35  | 2.19 | 2.44 | 0.06 | 6  | 0.41 | 298 | 4  | <0.01 | 26   | 0.10 | 5  | <5 | 18 | 0.07 | 34  | <5 | 70  |
| M38  | 5  | 25   | 0.4 | <5 | 129 | 0.5 | <2 | 0.18 | <0.1 | 9  | 28  | 2.33 | 2.61 | 0.07 | 4  | 0.38 | 523 | <1 | <0.01 | 21   | 0.24 | 4  | <5 | 21 | 0.09 | 36  | <5 | 73  |
| M39  | 4  | 45   | 0.4 | <5 | 125 | 0.5 | <2 | 0.25 | <0.1 | 11 | 29  | 1.79 | 3.15 | 0.12 | 5  | 0.68 | 391 | 1  | <0.01 | 18   | 0.12 | 7  | <5 | 23 | 0.09 | 36  | <5 | 59  |
| M40  | 2  | 21   | 0.8 | <5 | 109 | 0.7 | <2 | 0.16 | <0.1 | 8  | 29  | 3.25 | 2.55 | 0.06 | 5  | 0.23 | 274 | 2  | <0.01 | 21   | 0.21 | 8  | <5 | 15 | 0.13 | 34  | <5 | 69  |
| M41  | 18 | 32   | 0.6 | <5 | 131 | 0.4 | <2 | 0.14 | <0.1 | 10 | 29  | 1.92 | 2.82 | 0.05 | 4  | 0.43 | 205 | 2  | <0.01 | 21   | 0.11 | 7  | <5 | 17 | 0.08 | 45  | <5 | 69  |
| M42  | 3  | 27   | 0.8 | <5 | 87  | 0.6 | 3  | 0.15 | <0.1 | 9  | 25  | 1.59 | 1.95 | 0.05 | 6  | 0.19 | 283 | <1 | <0.01 | 15   | 0.24 | 9  | <5 | 15 | 0.08 | 32  | 10 | 44  |
| M43  | 4  | 25   | 0.5 | <5 | 115 | 0.8 | 3  | 0.19 | <0.1 | 9  | 27  | 2.29 | 2.69 | 0.05 | 6  | 0.32 | 501 | <1 | <0.01 | 13   | 0.31 | 10 | <5 | 16 | 0.07 | 38  | 5  | 79  |
| M44  | 1  | 11   | 1.8 | <5 | 54  | 0.4 | <2 | 0.10 | <0.1 | 4  | 20  | 1.96 | 1.89 | 0.04 | 4  | 0.07 | 234 | <1 | <0.01 | 4    | 0.36 | 12 | <5 | 9  | 0.11 | 25  | <5 | 32  |
| M45  | 12 | 73   | 0.5 | <5 | 62  | 0.4 | <2 | 0.18 | <0.1 | 9  | 29  | 1.13 | 3.11 | 0.11 | 5  | 0.63 | 280 | 2  | <0.01 | 14   | 0.05 | 15 | <5 | 17 | 0.08 | 66  | <5 | 62  |
| M46  | 2  | 21   | 0.7 | <5 | 87  | 0.7 | <2 | 0.14 | <0.1 | 6  | 25  | 1.88 | 2.56 | 0.04 | 5  | 0.23 | 119 | <1 | <0.01 | 10   | 0.18 | 8  | <5 | 12 | 0.10 | 42  | <5 | 45  |
| M47  | 4  | 18   | 0.4 | <5 | 72  | 0.4 | <2 | 0.09 | <0.1 | 6  | 21  | 1.63 | 1.99 | 0.04 | 4  | 0.16 | 186 | 3  | <0.01 | 4    | 0.22 | 6  | <5 | 10 | 0.08 | 32  | <5 | 43  |
| M48  | 23 | 1297 | 3.3 | <5 | 109 | 1.9 | <2 | 0.79 | <0.1 | 5  | 28  | 2.69 | 2.05 | 0.03 | 42 | 0.15 | 279 | 4  | 0.01  | 20   | 0.06 | 12 | <5 | 45 | 0.06 | 36  | <5 | 25  |
| M49  | 21 | 59   | 0.2 | <5 | 52  | 0.4 | <2 | 0.24 | <0.1 | 9  | 27  | 1.07 | 3.17 | 0.09 | 6  | 0.60 | 226 | 2  | <0.01 | 12   | 0.09 | <1 | <5 | 20 | 0.06 | 63  | <5 | 41  |
| M50  | 6  | 36   | 0.2 | <5 | 95  | 0.4 | <2 | 0.20 | <0.1 | 8  | 26  | 1.87 | 3.36 | 0.18 | 5  | 0.66 | 305 | 1  | <0.01 | 14   | 0.25 | 22 | 6  | 18 | 0.13 | 59  | <5 | 80  |
| M50* | 3  | 38   | 0.1 | <5 | 89  | 0.4 | <2 | 0.19 | <0.1 | 8  | 26  | 1.73 | 3.25 | 0.17 | 5  | 0.62 | 289 | 3  | <0.01 | 14   | 0.24 | 21 | <5 | 17 | 0.12 | 53  | <5 | 75  |
| M51  | 3  | 34   | 0.2 | <5 | 88  | 0.5 | <2 | 0.20 | <0.1 | 9  | 27  | 1.72 | 3.06 | 0.20 | 7  | 0.64 | 309 | <1 | <0.01 | 13   | 0.22 | 22 | <5 | 18 | 0.12 | 56  | 11 | 78  |
| M52  | 3  | 15   | 0.3 | <5 | 43  | 0.8 | <2 | 0.07 | <0.1 | 5  | 26  | 3.76 | 2.53 | 0.03 | 5  | 0.15 | 103 | 2  | <0.01 | 9    | 0.26 | 7  | <5 | 9  | 0.10 | 34  | <5 | 54  |
| M53  | 8  | 36   | 0.3 | <5 | 64  | 1.5 | <2 | 0.16 | <0.1 | 10 | 29  | 1.75 | 3.10 | 0.12 | 4  | 0.45 | 198 | 2  | <0.01 | 19   | 0.06 | 66 | <5 | 19 | 0.09 | 51  | <5 | 66  |
| M54  | 4  | 22   | 0.1 | <5 | 44  | 0.2 | <2 | 0.16 | <0.1 | 10 | 29  | 1.10 | 3.55 | 0.09 | 3  | 0.58 | 225 | <1 | <0.01 | 9    | 0.02 | 1  | <5 | 19 | 0.19 | 105 | <5 | 54  |
| M55  | 13 | 23   | 0.1 | <5 | 169 | 0.5 | <2 | 0.16 | <0.1 | 9  | 26  | 1.89 | 3.25 | 0.06 | 5  | 0.41 | 195 | <1 | <0.01 | 13   | 0.13 | 2  | <5 | 36 | 0.06 | 49  | <5 | 48  |
| M56  | 1  | 16   | 0.4 | <5 | 97  | 0.7 | <2 | 0.10 | <0.1 | 10 | 28  | 3.73 | 3.28 | 0.04 | 4  | 0.21 | 290 | 4  | <0.01 | 12   | 0.43 | 7  | <5 | 11 | 0.13 | 51  | <5 | 88  |
| M57  | 4  | 22   | 0.2 | <5 | 51  | 0.3 | <2 | 0.21 | <0.1 | 9  | 25  | 1.25 | 2.90 | 0.17 | 4  | 0.67 | 274 | <1 | <0.01 | 9    | 0.04 | 2  | <5 | 22 | 0.11 | 60  | <5 | 55  |
| M58  | 5  | 3    | 0.1 | <5 | 58  | 0.3 | <2 | 0.13 | <0.1 | 8  | 30  | 1.73 | 2.41 | 0.25 | 4  | 0.28 | 142 | <1 | <0.01 | 10   | 0.16 | 6  | <5 | 14 | 0.10 | 40  | <5 | 59  |
| M59  | 5  | 27   | 0.1 | <5 | 76  | 0.3 | <2 | 0.24 | <0.1 | 8  | 31  | 1.78 | 2.81 | 0.09 | 5  | 0.49 | 176 | <1 | <0.01 | 13   | 0.02 | 4  | <5 | 26 | 0.12 | 52  | <5 | 48  |
| M59* | 18 | 25   | 0.1 | <5 | 72  | 0.3 | <2 | 0.21 | <0.1 | 8  | 29  | 1.65 | 2.64 | 0.08 | 5  | 0.46 | 163 | <1 | <0.01 | 10   | 0.02 | 3  | <5 | 24 | 0.11 | 48  | <5 | 44  |
| M60  | 3  | 39   | 0.5 | <5 | 78  | 0.6 | <2 | 0.20 | <0.1 | 8  | 29  | 2.37 | 3.64 | 0.10 | 7  | 0.62 | 162 | 1  | <0.01 | 13   | 0.14 | 9  | <5 | 19 | 0.20 | 75  | 11 | 83  |
| M61  | 4  | 46   | 0.4 | <5 | 68  | 0.4 | <2 | 0.20 | <0.1 | 9  | 33  | 1.62 | 2.93 | 0.13 | 6  | 0.76 | 344 | 2  | <0.01 | 15   | 0.17 | 8  | <5 | 21 | 0.09 | 56  | <5 | 88  |
| M62  | 1  | 69   | 0.8 | <5 | 83  | 0.8 | <2 | 0.42 | <0.1 | 5  | 27  | 1.91 | 2.23 | 0.05 | 7  | 0.23 | 281 | 3  | 0.01  | 27   | 0.04 | 12 | 7  | 36 | 0.12 | 28  | <5 | 47  |
| M63  | 2  | 30   | 0.2 | <5 | 75  | 0.4 | <2 | 0.21 | <0.1 | 8  | 43  | 1.50 | 2.96 | 0.07 | 6  | 0.50 | 244 | <1 | <0.01 | 17   | 0.13 | 13 | 8  | 21 | 0.07 | 54  | <5 | 61  |
| M64  | 3  | 28   | 0.1 | <5 | 59  | 0.3 | <2 | 0.25 | <0.1 | 8  | 40  | 1.43 | 3.04 | 0.13 | 6  | 0.76 | 216 | <1 | <0.01 | 18   | 0.14 | 11 | <5 | 26 | 0.11 | 63  | <5 | 72  |
| M65  | 4  | 26   | 0.3 | <5 | 57  | 0.3 | <2 | 0.17 | <0.1 | 10 | 30  | 1.21 | 2.37 | 0.11 | 5  | 0.42 | 245 | <1 | <0.01 | 19   | 0.06 | 23 | <5 | 15 | 0.10 | 50  | <5 | 60  |
| M66  | 5  | 18   | 0.1 | <5 | 38  | 0.2 | <2 | 0.15 | <0.1 | 7  | 38  | 0.85 | 2.44 | 0.11 | 4  | 0.47 | 204 | <1 | <0.01 | 19   | 0.04 | 19 | <5 | 16 | 0.11 | 63  | <5 | 43  |
| M67  | <1 | 23   | 0.2 | <5 | 23  | 0.9 | <2 | 0.11 | <0.1 | 74 | 395 | 2.14 | 4.06 | 0.92 | 4  | 9.59 | 328 | 6  | <0.01 | 891  | 0.05 | <1 | <5 | 8  | 0.01 | 53  | <5 | 26  |
| M68  | <1 | 18   | 0.3 | <5 | 27  | 0.6 | <2 | 0.08 | <0.1 | 75 | 912 | 1.47 | 5.30 | 0.09 | 3  | 8.63 | 316 | <1 | <0.01 | 1033 | 0.02 | <1 | <5 | 9  |      |     |    |     |

| SAMP | AU | CU  | AG   | AS | BA  | BE   | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | HN  | MO | NA    | NI   | P    | PB | SB | SR   | TI   | V   | W  | ZN |
|------|----|-----|------|----|-----|------|----|------|------|----|-----|------|------|------|----|------|-----|----|-------|------|------|----|----|------|------|-----|----|----|
| M74  | <1 | 12  | 0.1  | <5 | 70  | 0.5  | 2  | 0.10 | <0.1 | 50 | 307 | 1.35 | 3.88 | 0.03 | 6  | 3.30 | 380 | 3  | <0.01 | 415  | 0.03 | 22 | 8  | 11   | 0.07 | 52  | <5 | 56 |
| M75  | 6  | 18  | 0.1  | <5 | 56  | 0.7  | 5  | 0.11 | <0.1 | 36 | 498 | 1.75 | 4.94 | 0.03 | 5  | 2.60 | 282 | 2  | <0.01 | 329  | 0.05 | 50 | 7  | 12   | 0.10 | 89  | <5 | 70 |
| M76  | 2  | 13  | 0.1  | <5 | 105 | 0.7  | 2  | 0.15 | <0.1 | 77 | 583 | 2.03 | 5.14 | 0.07 | 4  | 4.46 | 339 | 3  | <0.01 | 1306 | 0.04 | 75 | 8  | 13   | 0.09 | 76  | <5 | 75 |
| M77  | <1 | 15  | 0.1  | <5 | 56  | 0.5  | 3  | 0.10 | <0.1 | 33 | 228 | 1.90 | 3.62 | 0.04 | 4  | 1.58 | 258 | 1  | <0.01 | 284  | 0.05 | 43 | 10 | 9    | 0.11 | 66  | <5 | 77 |
| M78  | <1 | 16  | <0.1 | <5 | 74  | 0.6  | 5  | 0.09 | <0.1 | 37 | 209 | 1.88 | 3.21 | 0.04 | 5  | 1.77 | 380 | 2  | 0.01  | 473  | 0.03 | 44 | <5 | 10   | 0.10 | 55  | <5 | 63 |
| M79  | 4  | 24  | 0.1  | <5 | 48  | 0.5  | 2  | 0.09 | <0.1 | 48 | 472 | 2.12 | 4.13 | 0.05 | 4  | 3.46 | 493 | 2  | 0.01  | 637  | 0.03 | 44 | 8  | 8    | 0.11 | 78  | <5 | 67 |
| M80  | <1 | 18  | <0.1 | <5 | 36  | 0.5  | 2  | 0.11 | <0.1 | 32 | 360 | 2.05 | 3.70 | 0.03 | 4  | 2.91 | 272 | 2  | 0.01  | 293  | 0.04 | 64 | 5  | 9    | 0.15 | 86  | <5 | 78 |
| M80* | 1  | 16  | <0.1 | <5 | 34  | 0.5  | 5  | 0.11 | <0.1 | 30 | 339 | 1.90 | 3.67 | 0.03 | 4  | 2.86 | 255 | <1 | 0.01  | 277  | 0.04 | 64 | 8  | 9    | 0.13 | 80  | <5 | 75 |
| M81  | <1 | 17  | <0.1 | <5 | 75  | 0.9  | <2 | 0.09 | <0.1 | 82 | 163 | 1.59 | 2.86 | 0.04 | 6  | 2.24 | 760 | 3  | 0.01  | 468  | 0.06 | 54 | <5 | 11   | 0.07 | 46  | 5  | 68 |
| M82  | 2  | 13  | <0.1 | <5 | 52  | 0.5  | <2 | 0.14 | <0.1 | 37 | 350 | 1.53 | 3.27 | 0.03 | 6  | 2.58 | 250 | 2  | <0.01 | 425  | 0.02 | 24 | <5 | 19   | 0.09 | 60  | <5 | 53 |
| M83  | 1  | 22  | <0.1 | <5 | 43  | 0.5  | <2 | 0.17 | <0.1 | 37 | 325 | 1.84 | 4.03 | 0.05 | 6  | 2.51 | 338 | 3  | 0.01  | 417  | 0.03 | 32 | <5 | 13   | 0.14 | 103 | <5 | 63 |
| M84  | 3  | 9   | 0.1  | <5 | 71  | 0.6  | <2 | 0.15 | <0.1 | 46 | 170 | 1.80 | 3.31 | 0.05 | 5  | 2.39 | 365 | 1  | 0.01  | 703  | 0.03 | 17 | <5 | 16   | 0.08 | 36  | <5 | 56 |
| M85  | <1 | 13  | 0.1  | <5 | 71  | 0.4  | <2 | 0.13 | <0.1 | 29 | 277 | 1.54 | 2.94 | 0.06 | 5  | 1.29 | 234 | 2  | 0.01  | 209  | 0.11 | 16 | <5 | 13   | 0.11 | 52  | <5 | 53 |
| M86  | 14 | 29  | 0.1  | <5 | 122 | 0.3  | <2 | 0.28 | <0.1 | 27 | 342 | 1.47 | 3.61 | 0.08 | 6  | 1.99 | 370 | 4  | 0.01  | 252  | 0.08 | 7  | <5 | 17   | 0.10 | 69  | <5 | 69 |
| M87  | 3  | 43  | 0.2  | <5 | 93  | 0.7  | <2 | 0.32 | <0.1 | 31 | 172 | 1.92 | 3.89 | 0.16 | 9  | 1.91 | 810 | 4  | 0.01  | 559  | 0.06 | 16 | <5 | 23   | 0.12 | 75  | <5 | 92 |
| M88  | 2  | 36  | 0.1  | <5 | 87  | 0.3  | <2 | 0.29 | <0.1 | 25 | 201 | 1.55 | 3.62 | 0.16 | 8  | 1.64 | 562 | 3  | 0.01  | 218  | 0.06 | 10 | <5 | 17   | 0.11 | 71  | <5 | 94 |
| M89  | 8  | 52  | 0.4  | <5 | 104 | 0.3  | <2 | 0.33 | <0.1 | 29 | 193 | 1.90 | 3.84 | 0.13 | 6  | 1.80 | 354 | 3  | 0.02  | 223  | 0.10 | 8  | <5 | 21   | 0.12 | 87  | <5 | 97 |
| M90  | 5  | 59  | 0.2  | 7  | 119 | 0.6  | 2  | 0.35 | <0.1 | 26 | 180 | 1.66 | 3.60 | 0.19 | 13 | 1.56 | 436 | 5  | 0.01  | 153  | 0.06 | 12 | <5 | 22   | 0.10 | 79  | 10 | 69 |
| M91  | 9  | 48  | 0.4  | 7  | 105 | 0.3  | <2 | 0.36 | <0.1 | 25 | 181 | 1.61 | 3.32 | 0.17 | 8  | 1.56 | 406 | 1  | 0.01  | 149  | 0.06 | 9  | <5 | 20   | 0.10 | 69  | <5 | 70 |
| N23  | 7  | 19  | 0.2  | <5 | 197 | 0.2  | 2  | 0.60 | <0.1 | 6  | 35  | 1.06 | 1.66 | 0.03 | 5  | 0.40 | 137 | <1 | <0.01 | 11   | 0.01 | 6  | <5 | 56   | 0.03 | 32  | <5 | 32 |
| N24  | 3  | 50  | 0.7  | <5 | 494 | 0.7  | <2 | 0.37 | <0.1 | 6  | 41  | 3.67 | 2.85 | 0.05 | 8  | 0.28 | 267 | <1 | <0.01 | 32   | 0.17 | 13 | <5 | 33   | 0.09 | 35  | <5 | 66 |
| N25  | 7  | 22  | 0.2  | <5 | 205 | 0.3  | <2 | 0.19 | <0.1 | 8  | 41  | 1.61 | 2.52 | 0.03 | 6  | 0.58 | 214 | <1 | <0.01 | 20   | 0.05 | 8  | <5 | 25   | 0.04 | 43  | <5 | 41 |
| N26  | 6  | 74  | 0.4  | <5 | 192 | 0.4  | <2 | 0.14 | <0.1 | 8  | 34  | 1.97 | 2.47 | 0.04 | 5  | 0.46 | 181 | <1 | <0.01 | 19   | 0.08 | 7  | <5 | 18   | 0.06 | 37  | <5 | 44 |
| N27  | 5  | 21  | 0.1  | <5 | 168 | 0.2  | 3  | 0.15 | <0.1 | 7  | 27  | 1.17 | 1.98 | 0.06 | 4  | 0.33 | 266 | <1 | <0.01 | 9    | 0.06 | 6  | 14 | 0.04 | 29   | <5  | 32 |    |
| N28  | 5  | 14  | 0.1  | <5 | 246 | 0.2  | 4  | 0.19 | <0.1 | 7  | 31  | 1.33 | 2.21 | 0.06 | 6  | 0.51 | 222 | <1 | <0.01 | 17   | 0.08 | 6  | 6  | 19   | 0.03 | 32  | <5 | 46 |
| N28* | 5  | 14  | 0.1  | <5 | 241 | 0.2  | 4  | 0.18 | <0.1 | 7  | 31  | 1.31 | 2.21 | 0.06 | 6  | 0.50 | 222 | <1 | <0.01 | 18   | 0.08 | 7  | <5 | 19   | 0.03 | 31  | <5 | 46 |
| N29  | 7  | 15  | 0.2  | <5 | 157 | 0.4  | <2 | 0.14 | <0.1 | 7  | 31  | 1.97 | 2.42 | 0.03 | 5  | 0.34 | 194 | 3  | <0.01 | 17   | 0.18 | 7  | <5 | 14   | 0.07 | 33  | <5 | 51 |
| N30  | 2  | 8   | 0.1  | <5 | 198 | 0.3  | <2 | 0.19 | <0.1 | 4  | 25  | 2.34 | 2.21 | 0.03 | 3  | 0.18 | 190 | 4  | <0.01 | 9    | 0.24 | 8  | <5 | 17   | 0.09 | 24  | <5 | 28 |
| N31  | 5  | 10  | 0.2  | <5 | 227 | 0.3  | 2  | 0.20 | <0.1 | 5  | 26  | 2.48 | 2.22 | 0.04 | 4  | 0.24 | 184 | 2  | <0.01 | 10   | 0.19 | 7  | <5 | 19   | 0.08 | 25  | <5 | 32 |
| N32  | 3  | 15  | 0.3  | <5 | 186 | 0.4  | 3  | 0.28 | <0.1 | 7  | 33  | 1.94 | 2.43 | 0.05 | 5  | 0.35 | 274 | <1 | <0.01 | 15   | 0.15 | 5  | <5 | 24   | 0.06 | 34  | <5 | 43 |
| N33  | 4  | 16  | 0.3  | <5 | 177 | 0.3  | 4  | 0.22 | <0.1 | 7  | 29  | 1.73 | 2.12 | 0.07 | 5  | 0.41 | 368 | 3  | <0.01 | 12   | 0.20 | 7  | <5 | 22   | 0.05 | 28  | <5 | 42 |
| N34  | 8  | 19  | 0.2  | <5 | 168 | 0.3  | 5  | 0.21 | <0.1 | 7  | 29  | 1.24 | 2.08 | 0.07 | 4  | 0.50 | 217 | 7  | <0.01 | 14   | 0.08 | 8  | <5 | 23   | 0.05 | 32  | <5 | 42 |
| N35  | 6  | 21  | 0.2  | <5 | 118 | 0.3  | 6  | 0.21 | <0.1 | 9  | 33  | 1.39 | 2.18 | 0.07 | 5  | 0.51 | 207 | 3  | <0.01 | 22   | 0.07 | 7  | <5 | 21   | 0.07 | 35  | <5 | 64 |
| N36  | 9  | 23  | 0.2  | <5 | 96  | 0.3  | 4  | 0.18 | <0.1 | 8  | 33  | 1.35 | 2.30 | 0.07 | 4  | 0.58 | 262 | 6  | <0.01 | 18   | 0.11 | 7  | <5 | 20   | 0.06 | 34  | <5 | 49 |
| N37  | 13 | 28  | 0.1  | <5 | 71  | 0.3  | 4  | 0.23 | <0.1 | 9  | 37  | 1.26 | 2.76 | 0.11 | 5  | 0.71 | 283 | 9  | <0.01 | 25   | 0.10 | 4  | <5 | 18   | 0.06 | 45  | <5 | 45 |
| N37* | 13 | 28  | 0.1  | <5 | 74  | 0.3  | 5  | 0.24 | <0.1 | 10 | 36  | 1.33 | 2.91 | 0.12 | 5  | 0.75 | 299 | 4  | <0.01 | 17   | 0.11 | 4  | <5 | 18   | 0.07 | 51  | <5 | 48 |
| N38  | 5  | 46  | 1.2  | <5 | 112 | 0.7  | <2 | 0.49 | <0.1 | 4  | 23  | 2.21 | 1.73 | 0.03 | 10 | 0.13 | 131 | 3  | 0.01  | 9    | 0.05 | 10 | <5 | 31   | 0.10 | 22  | 12 | 24 |
| N39  | 6  | 144 | 1.2  | <5 | 172 | 0.5  | <2 | 0.28 | <0.1 | 7  | 29  | 1.81 | 2.28 | 0.05 | 9  | 0.23 | 700 | 9  | 0.01  | 24   | 0.03 | 11 | <5 | 22   | 0.09 | 35  | 6  | 36 |
| N40  | 8  | 15  | 0.5  | <5 | 43  | 0.2  | 2  | 0.07 | <0.1 | 3  | 25  | 1.62 | 1.96 | 0.03 | 4  | 0.19 | 103 | 3  | <0.01 | 8    | 0.10 | 15 | 6  | 9    | 0.06 | 30  | <5 | 35 |
| N41  | 4  | 30  | 0.5  | <5 | 106 | 0.5  | <2 | 0.18 | <0.1 | 6  | 25  | 1.85 | 2.33 | 0.05 | 5  | 0.23 | 110 | 4  | <0.01 | 12   | 0.11 | 14 | <5 | 16   | 0.10 | 38  | <5 | 43 |
| N42  | 6  | 14  | 0.4  | <5 | 110 | 0.2  | <2 | 0.24 | <0.1 | 8  | 34  | 1.44 | 2.52 | 0.06 | 4  | 0.54 | 207 | 6  | <0.01 | 16   | 0.03 | 7  | <5 | 22   | 0.08 | 43  | <5 | 42 |
| N43  | 12 | 37  | 0.5  | <5 | 84  | 0.4  | <2 | 0.24 | <0.1 | 8  | 31  | 1.16 | 2.62 | 0.06 | 5  | 0.46 | 203 | 3  | <0.01 | 18   | 0.13 | 7  | <5 | 19   | 0.05 | 45  | <5 | 59 |
| N44  | 3  | 12  | 0.6  | <5 | 78  | 0.4  | <2 | 0.16 | <0.1 | 4  | 25  | 1.79 | 2.58 | 0.07 | 3  | 0.21 | 167 | 3  | <0.01 | 7    | 0.36 | 11 | <5 | 17   | 0.15 | 37  | <5 | 58 |
| N45  | 3  | 22  | 0.6  | <5 | 83  | 0.6  | <2 | 0.14 | <0.1 | 8  | 26  | 1.84 | 2.39 | 0.04 | 4  | 0.30 | 241 | 3  | <0.01 | 11   | 0.18 | 8  | <5 | 14   | 0.08 | 37  | <5 | 64 |
| N46  | 4  | 22  | 0.6  | <5 | 59  | 0.4  | <2 | 0.13 | <0.1 | 3  | 25  | 1.66 | 2.56 | 0.03 | 4  | 0.22 | 123 | <1 | <0.01 | 5    | 0.16 | 19 | <5 | 15   | 0.15 | 43  | <5 | 37 |
| N47  | 32 | 41  | 0.3  | <5 | 87  | 0.4  | <2 | 0.14 | <0.1 | 9  | 33  | 1.38 | 2.78 | 0.06 | 8  | 0.43 | 323 | 4  | <0.01 | 26   | 0.13 | 26 | <5 | 14   | 0.09 | 59  | 12 | 57 |
| N48  | 45 | 56  | 0.7  | <5 | 53  | 0.4  | <2 | 0.16 | <0.1 | 6  | 25  | 0.70 | 2.24 | 0.05 | 6  | 0.26 | 156 | 3  | <0.01 | 15   | 0.02 | 22 | <5 | 16   | 0.06 | 46  | <5 | 29 |
| N49  | 2  | 34  | 0.5  | <5 | 67  | 0.4  | <2 | 0.19 | <0.1 | 2  | 19  | 0.88 | 1.25 | 0.03 | 9  | 0.04 | 25  | 2  | <0.01 | 8    | 0.02 | 8  | <5 | 18   | 0.07 | 15  | <5 | 11 |
| N50  | 4  | 17  | 0.6  | <5 | 70  | 0.4  | <2 | 0.14 | <0.1 | 6  | 27  | 1.81 | 2.61 | 0.04 | 5  | 0.33 | 140 | 2  | <0.01 | 6    | 0.24 | 5  | <5 | 15   | 0.08 | 44  | <5 | 65 |
| N51  | 4  | 16  | 0.4  | <5 | 70  | 0.4  | <2 | 0.13 | <0.1 | 5  | 27  | 1.58 | 2.86 | 0.04 | 4  | 0.29 | 130 | 2  | <0.01 | 3    | 0.25 | 3  | <5 | 14   | 0.07 | 49  | <5 | 56 |
| N52  | 1  | 3   | 0.3  | <5 | 29  | <0.1 | <2 | 0.06 | <0.1 | <1 | 17  | 0.16 | 0.49 | 0.02 | 2  | 0.03 | 35  | 1  | <0.01 | <1   | 0.01 | 3  | <5 | 7    | 0.04 | 32  | <5 | 13 |
| N53  | 1  | 17  | 0.3  | <5 | 56  | 0.5  | <2 | 0.13 | <0.1 | 6  | 25  | 2.34 | 2.62 | 0.03 | 4  | 0.21 | 220 | 1  | <0.01 | 5    | 0.28 | 9  | <5 | 13   | 0.10 | 42  | <5 | 57 |
|      |    |     |      |    |     |      |    |      |      |    |     |      |      |      |    |      |     |    |       |      |      |    |    |      |      |     |    |    |

| SAMP | AD  | CU  | AG   | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MC   | MR   | MO | NA    | NI  | P    | PB | SB | SR | TI   | V  | W  | ZN  |  |
|------|-----|-----|------|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|------|----|-------|-----|------|----|----|----|------|----|----|-----|--|
| N61  | 4   | 40  | 0.4  | <5 | 69  | 0.6 | <2 | 0.21 | <0.1 | 11 | 40  | 1.83 | 3.40 | 0.09 | 5  | 0.65 | 245  | <1 | <0.01 | 21  | 0.13 | 18 | <5 | 20 | 0.11 | 76 | <5 | 78  |  |
| N62  | <1  | 15  | 0.6  | <5 | 93  | 0.7 | 4  | 0.15 | <0.1 | 11 | 29  | 3.27 | 3.30 | 0.06 | 5  | 0.25 | 246  | 3  | <0.01 | 14  | 0.42 | 22 | <5 | 20 | 0.15 | 48 | <5 | 75  |  |
| N63  | 1   | 36  | 0.6  | <5 | 78  | 0.9 | 3  | 0.25 | <0.1 | 11 | 29  | 3.41 | 4.29 | 0.11 | 6  | 0.66 | 419  | 3  | <0.01 | 12  | 0.48 | 99 | <5 | 20 | 0.19 | 92 | <5 | 105 |  |
| N64  | 4   | 22  | 0.3  | <5 | 61  | 0.3 | 2  | 0.19 | <0.1 | 11 | 48  | 1.15 | 2.62 | 0.09 | 5  | 0.57 | 313  | 2  | <0.01 | 30  | 0.07 | 17 | <5 | 19 | 0.09 | 34 | <5 | 32  |  |
| N64* | 2   | 22  | 0.3  | <5 | 62  | 0.3 | <2 | 0.19 | <0.1 | 10 | 47  | 1.12 | 2.64 | 0.09 | 5  | 0.57 | 320  | 3  | <0.01 | 29  | 0.06 | 16 | <5 | 19 | 0.09 | 35 | <5 | 32  |  |
| N65  | 3   | 27  | 0.3  | <5 | 41  | 0.5 | 6  | 0.18 | <0.1 | 39 | 576 | 1.17 | 4.17 | 0.08 | 6  | 1.88 | 241  | 1  | <0.01 | 264 | 0.03 | 22 | <5 | 13 | 0.06 | 63 | 8  | 36  |  |
| N66  | <1  | 18  | 0.4  | <5 | 20  | 0.3 | 3  | 0.07 | <0.1 | 42 | 722 | 1.22 | 5.57 | 0.06 | 3  | 3.08 | 309  | 2  | <0.01 | 427 | 0.02 | 9  | <5 | 5  | 0.04 | 85 | <5 | 34  |  |
| N67  | <1  | 19  | 0.3  | <5 | 22  | 0.4 | <2 | 0.06 | <0.1 | 49 | 741 | 1.32 | 5.82 | 0.06 | 3  | 3.21 | 341  | 2  | <0.01 | 465 | 0.03 | 11 | <5 | 5  | 0.05 | 87 | <5 | 62  |  |
| N68  | 14  | 101 | 0.2  | 6  | 72  | 0.3 | 2  | 1.84 | <0.1 | 16 | 50  | 1.16 | 3.24 | 0.20 | 10 | 0.86 | 624  | <1 | <0.01 | 32  | 0.11 | 7  | <5 | 53 | 0.07 | 55 | <5 | 62  |  |
| N68  | 1   | 17  | 0.4  | <5 | 92  | 0.3 | <2 | 0.07 | <0.1 | 7  | 51  | 0.90 | 2.13 | 0.06 | 4  | 0.26 | 264  | 1  | <0.01 | 21  | 0.05 | 12 | <5 | 12 | 0.14 | 43 | <5 | 40  |  |
| N69  | 1   | 17  | 0.4  | <5 | 51  | 0.4 | <2 | 0.06 | <0.1 | 89 | 912 | 1.81 | 8.45 | 0.06 | 3  | 7.28 | 321  | <1 | <0.01 | 764 | 0.03 | <1 | <5 | 5  | 0.03 | 94 | <5 | 39  |  |
| N70  | 1   | 18  | 0.6  | <5 | 68  | 0.3 | 2  | 0.17 | <0.1 | 30 | 341 | 1.02 | 2.93 | 0.14 | 4  | 1.48 | 387  | 1  | <0.01 | 201 | 0.03 | 25 | <5 | 15 | 0.07 | 49 | <5 | 57  |  |
| N71  | 1   | 17  | 0.9  | <5 | 75  | 0.4 | 4  | 0.23 | <0.1 | 30 | 263 | 1.60 | 3.39 | 0.10 | 5  | 1.27 | 385  | <1 | <0.01 | 139 | 0.09 | 30 | <5 | 22 | 0.10 | 68 | <5 | 45  |  |
| N72  | 1   | 12  | 0.1  | <5 | 65  | 0.3 | 3  | 0.18 | <0.1 | 25 | 332 | 1.44 | 3.36 | 0.12 | 4  | 1.61 | 188  | 1  | <0.01 | 194 | 0.02 | 22 | <5 | 17 | 0.10 | 62 | <5 | 48  |  |
| N73  | 1   | 12  | <0.1 | <5 | 65  | 0.4 | <2 | 0.13 | <0.1 | 39 | 487 | 1.45 | 4.13 | 0.07 | 4  | 2.48 | 199  | 2  | <0.01 | 342 | 0.02 | 25 | <5 | 15 | 0.09 | 70 | <5 | 58  |  |
| N74  | 6   | 12  | <0.1 | <5 | 146 | 0.5 | <2 | 0.09 | <0.1 | 49 | 259 | 1.92 | 3.85 | 0.03 | 5  | 2.10 | 175  | 2  | <0.01 | 553 | 0.06 | 25 | <5 | 15 | 0.09 | 52 | <5 | 57  |  |
| N74* | 3   | 12  | <0.1 | <5 | 141 | 0.5 | <2 | 0.09 | <0.1 | 49 | 250 | 1.86 | 3.78 | 0.03 | 4  | 2.03 | 170  | 2  | <0.01 | 554 | 0.06 | 24 | <5 | 14 | 0.09 | 50 | <5 | 57  |  |
| N75  | <1  | 14  | 0.2  | <5 | 89  | 0.6 | 7  | 0.11 | <0.1 | 46 | 479 | 1.52 | 4.41 | 0.03 | 6  | 2.77 | 217  | <1 | <0.01 | 524 | 0.02 | 30 | <5 | 11 | 0.07 | 66 | <5 | 69  |  |
| N76  | <1  | 14  | 0.1  | <5 | 80  | 0.5 | 6  | 0.09 | <0.1 | 46 | 193 | 1.67 | 3.38 | 0.03 | 5  | 1.98 | 307  | 2  | 0.01  | 449 | 0.03 | 34 | 5  | 10 | 0.08 | 46 | <5 | 69  |  |
| N77  | 7   | 30  | 0.1  | <5 | 103 | 1.1 | 9  | 0.15 | <0.1 | 33 | 136 | 1.98 | 3.27 | 0.07 | 9  | 1.88 | 1413 | <1 | <0.02 | 605 | 0.06 | 42 | 16 | 14 | 0.11 | 79 | <5 | 126 |  |
| N78  | 6   | 19  | 0.1  | <5 | 99  | 0.5 | 7  | 0.08 | <0.1 | 47 | 258 | 1.72 | 3.29 | 0.03 | 8  | 3.13 | 275  | 2  | 0.01  | 617 | 0.05 | 27 | 10 | 10 | 0.09 | 55 | <5 | 74  |  |
| N79  | 1   | 12  | 0.1  | <5 | 132 | 0.6 | 7  | 0.06 | <0.1 | 57 | 107 | 1.81 | 3.22 | 0.03 | 7  | 3.41 | 422  | 2  | 0.01  | 668 | 0.06 | 21 | 7  | 10 | 0.07 | 32 | <5 | 76  |  |
| N80  | <1  | 8   | <0.1 | <5 | 66  | 0.3 | 7  | 0.07 | <0.1 | 13 | 105 | 0.86 | 3.01 | 0.02 | 6  | 0.65 | 102  | <1 | <0.01 | 125 | 0.07 | 18 | 7  | 7  | 0.15 | 44 | <5 | 77  |  |
| N81  | <1  | 9   | 0.1  | <5 | 50  | 0.3 | 4  | 0.06 | <0.1 | 42 | 145 | 1.35 | 2.77 | 0.02 | 6  | 3.78 | 274  | <1 | <0.01 | 594 | 0.03 | 14 | 6  | 7  | 0.07 | 34 | <5 | 54  |  |
| N82  | <1  | 10  | 0.1  | 5  | 53  | 0.3 | 4  | 0.07 | <0.1 | 72 | 105 | 1.33 | 3.90 | 0.03 | 5  | 0.39 | 543  | <1 | <0.01 | 899 | 0.04 | 11 | 7  | 9  | 0.06 | 32 | <5 | 54  |  |
| N83  | 1   | 10  | <0.1 | <5 | 48  | 0.3 | 6  | 0.09 | <0.1 | 23 | 242 | 0.90 | 2.77 | 0.03 | 5  | 1.41 | 194  | 2  | <0.01 | 238 | 0.02 | 32 | 11 | 8  | 0.07 | 43 | <5 | 48  |  |
| N83* | 1   | 10  | <0.1 | <5 | 49  | 0.3 | 7  | 0.09 | <0.1 | 23 | 249 | 0.91 | 2.81 | 0.03 | 5  | 1.42 | 192  | 1  | <0.01 | 241 | 0.02 | 33 | 11 | 8  | 0.07 | 42 | <5 | 50  |  |
| N84  | 1   | 16  | <0.1 | <5 | 67  | 0.4 | <2 | 0.07 | <0.1 | 51 | 177 | 1.28 | 3.28 | 0.04 | 5  | 3.42 | 593  | 4  | <0.01 | 721 | 0.03 | 24 | <5 | 10 | 0.05 | 35 | <5 | 83  |  |
| N85  | 2   | 29  | <0.1 | <5 | 25  | 0.4 | 4  | 0.14 | <0.1 | 29 | 323 | 1.30 | 3.47 | 0.04 | 6  | 2.24 | 269  | 3  | <0.01 | 336 | 0.03 | 28 | 6  | 12 | 0.09 | 64 | <5 | 55  |  |
| N86  | <1  | 31  | 0.1  | <5 | 121 | 1.2 | 4  | 0.14 | <0.1 | 30 | 160 | 2.35 | 3.70 | 0.07 | 8  | 1.86 | 1103 | 3  | 0.01  | 736 | 0.05 | 53 | <5 | 18 | 0.08 | 55 | <5 | 81  |  |
| N87  | 8   | 16  | 0.1  | <5 | 60  | 0.3 | 2  | 0.11 | <0.1 | 38 | 127 | 1.45 | 3.71 | 0.03 | 6  | 2.57 | 276  | 3  | <0.01 | 389 | 0.04 | 8  | <5 | 10 | 0.08 | 44 | <5 | 65  |  |
| N88  | <1  | 8   | <0.1 | <5 | 50  | 0.4 | 5  | 0.05 | <0.1 | 43 | 68  | 1.06 | 3.08 | 0.03 | 6  | 1.14 | 320  | 4  | <0.01 | 224 | 0.03 | 14 | 7  | 9  | 0.09 | 42 | <5 | 41  |  |
| N89  | <1  | 6   | <0.1 | <5 | 48  | 0.3 | 5  | 0.05 | <0.1 | 40 | 72  | 1.05 | 3.01 | 0.03 | 5  | 1.16 | 282  | 4  | <0.01 | 206 | 0.03 | 14 | <5 | 8  | 0.09 | 41 | <5 | 40  |  |
| *022 | 9   |     |      |    |     |     |    |      |      |    |     |      |      |      |    |      |      |    |       |     |      |    |    |    |      |    |    |     |  |
| 022  | 215 | 87  | 0.3  | 7  | 66  | 0.3 | <2 | 1.76 | <0.1 | 15 | 41  | 1.05 | 3.10 | 0.20 | 8  | 0.80 | 197  | 4  | 0.01  | 34  | 0.11 | 5  | <5 | 47 | 0.06 | 50 | <5 | 60  |  |
| 023  | 8   | 17  | 0.3  | 5  | 107 | 0.5 | <2 | 0.19 | <0.1 | 10 | 38  | 1.64 | 2.32 | 0.03 | 7  | 0.40 | 243  | 11 | <0.01 | 52  | 0.11 | 8  | <5 | 18 | 0.04 | 36 | <5 | 51  |  |
| 024  | 6   | 23  | 0.4  | <5 | 198 | 0.4 | <2 | 0.33 | <0.1 | 6  | 36  | 1.29 | 2.03 | 0.03 | 6  | 0.35 | 277  | 10 | <0.01 | 41  | 0.03 | 6  | <5 | 30 | 0.03 | 31 | <5 | 31  |  |
| 025  | 4   | 50  | 0.3  | 5  | 511 | 0.7 | <2 | 0.58 | <0.1 | 7  | 39  | 1.89 | 2.41 | 0.03 | 12 | 0.25 | 2287 | 14 | 0.01  | 42  | 0.04 | 9  | <5 | 49 | 0.04 | 42 | <5 | 27  |  |
| 026  | 12  | 44  | 0.1  | <5 | 452 | 0.8 | <2 | 0.16 | <0.1 | 5  | 30  | 2.16 | 2.51 | 0.02 | 12 | 0.12 | 337  | 7  | <0.01 | 23  | 0.02 | 11 | <5 | 16 | 0.06 | 34 | <5 | 16  |  |
| 027  | 8   | 17  | 0.2  | <5 | 191 | 0.3 | 2  | 0.14 | <0.1 | 6  | 34  | 1.30 | 1.19 | 0.03 | 4  | 0.37 | 192  | 9  | <0.01 | 25  | 0.03 | 6  | <5 | 16 | 0.04 | 32 | <5 | 34  |  |
| 028  | 8   | 14  | 0.3  | <5 | 103 | 0.2 | <2 | 0.14 | <0.1 | 5  | 24  | 0.96 | 1.93 | 0.04 | 3  | 0.35 | 222  | 7  | <0.01 | 23  | 0.08 | 5  | <5 | 14 | 0.02 | 26 | <5 | 28  |  |
| 029  | 6   | 16  | 0.3  | <5 | 175 | 0.2 | <2 | 0.17 | <0.1 | 6  | 26  | 1.19 | 1.98 | 0.06 | 3  | 0.40 | 172  | 7  | <0.01 | 18  | 0.12 | 11 | <5 | 16 | 0.04 | 25 | <5 | 24  |  |
| 030  | 5   | 9   | 0.3  | <5 | 177 | 0.2 | <2 | 0.16 | <0.1 | 5  | 25  | 1.30 | 1.91 | 0.05 | 2  | 0.25 | 284  | 4  | <0.01 | 19  | 0.13 | 13 | <5 | 17 | 0.04 | 27 | <5 | 26  |  |
| 030* | 3   | 10  | 0.3  | <5 | 192 | 0.3 | 2  | 0.18 | <0.1 | 5  | 26  | 1.35 | 2.06 | 0.05 | 2  | 0.27 | 291  | 3  | <0.01 | 25  | 0.12 | 14 | <5 | 22 | 0.03 | 37 | 13 | 32  |  |
| 031  | 5   | 21  | 0.3  | 10 | 202 | 0.8 | <2 | 0.18 | 0.3  | 10 | 30  | 1.38 | 1.92 | 0.04 | 13 | 0.26 | 330  | 6  | <0.01 | 28  | 0.11 | 9  | <5 | 16 | 0.06 | 38 | <5 | 33  |  |
| 032  | 3   | 36  | 0.2  | <5 | 162 | 0.7 | <2 | 0.14 | <0.1 | 9  | 29  | 2.01 | 2.38 | 0.04 | 9  | 0.29 | 101  | 4  | <0.01 | 26  | 0.07 | 8  | <5 | 17 | 0.04 | 32 | <5 | 38  |  |
| 033  | 11  | 17  | 0.2  | <5 | 187 | 0.4 | <2 | 0.14 | <0.1 | 7  | 30  | 1.47 | 2.06 | 0.04 | 6  | 0.45 | 182  | 5  | <0.01 | 26  | 0.08 | 17 | <5 | 24 | 0.10 | 31 | <5 | 29  |  |
| 034  | 5   | 14  | 0.4  | <5 | 157 | 0.7 | <2 | 0.34 | <0.1 | 6  | 22  | 2.90 | 2.34 | 0.03 | 4  | 0.19 | 167  | 7  | <0.01 | 24  | 0.18 | 10 | <5 | 17 | 0.04 | 32 | <5 | 50  |  |
| 035  | 6   | 14  | 0.2  | <5 | 141 | 0.4 | <2 | 0.20 | <0.1 | 6  | 28  | 1.46 | 2.18 | 0.05 | 5  | 0.41 | 198  | 3  | <0.01 | 21  | 0.12 | 10 | <5 | 14 | 0.06 | 35 | <5 | 32  |  |
| 036  | 5   | 17  | 0.5  | <5 | 130 | 0.4 | <2 | 0.15 | <0.1 | 7  | 32  | 1.98 | 2.34 | 0.04 | 4  | 0.37 | 151  | 3  | <0.01 | 30  | 0.14 | 11 | <5 | 14 | 0.06 | 30 | <5 | 37  |  |
| 037  | 10  | 12  | 0.3  | <5 | 108 | 0.3 | <2 | 0.13 | <0.1 | 7  | 24  | 1.65 | 1.96 | 0.05 | 4  | 0.30 | 135  | 3  | <0.01 | 24  | 0.11 | 10 | <5 | 13 | 0.04 | 31 | <5 | 29  |  |
| 038  | 6   | 11  | 0.3  | <5 | 85  | 0.3 | <2 | 0.10 | <0.1 | 6  | 32  | 1.37 | 1.95 | 0.04 | 3  | 0.32 | 172  | 5  | <0.01 | 26  | 0.10 | 11 | <5 | 11 | 0.05 | 35 | <5 | 38  |  |
|      |     |     |      |    |     |     |    |      |      |    |     |      |      |      |    |      |      |    |       |     |      |    |    |    |      |    |    |     |  |

| SAMP | AD | CU | AG   | AS | BA  | BE  | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN  | MO  | NA    | NI   | P    | PB | SB | SR | TI   | V  | W  | ZN  |
|------|----|----|------|----|-----|-----|----|------|------|----|-----|------|------|------|----|------|-----|-----|-------|------|------|----|----|----|------|----|----|-----|
| O46  | 13 | 12 | 0.2  | <5 | 174 | 0.4 | <2 | 0.26 | <0.1 | 6  | 24  | 0.98 | 1.74 | 0.11 | 4  | 0.29 | 470 | 11  | <0.01 | 25   | 0.06 | 9  | <5 | 17 | 0.06 | 31 | <5 | 71  |
| O47  | 16 | 15 | 0.1  | <5 | 122 | 0.3 | <2 | 0.16 | <0.1 | 6  | 37  | 0.84 | 1.74 | 0.09 | 3  | 0.31 | 260 | 5   | <0.01 | 25   | 0.09 | 10 | <5 | 13 | 0.04 | 29 | <5 | 51  |
| O48  | 5  | 13 | 0.1  | <5 | 110 | 0.3 | <2 | 0.10 | <0.1 | 5  | 19  | 1.08 | 1.58 | 0.04 | 2  | 0.12 | 198 | 4   | <0.01 | 18   | 0.18 | 10 | <5 | 8  | 0.07 | 26 | <5 | 47  |
| O48* | 9  | 14 | 0.1  | <5 | 114 | 0.3 | <2 | 0.10 | <0.1 | 5  | 19  | 1.14 | 1.58 | 0.04 | 2  | 0.12 | 199 | 4   | <0.01 | 21   | 0.19 | 13 | <5 | 8  | 0.07 | 25 | <5 | 48  |
| O49  | 18 | 37 | 0.2  | 9  | 125 | 0.9 | 4  | 0.17 | 0.3  | 15 | 55  | 1.41 | 2.74 | 0.06 | 16 | 0.55 | 194 | 6   | <0.01 | 47   | 0.03 | 14 | 8  | 20 | 0.07 | 61 | 13 | 53  |
| O50  | 7  | 25 | 0.3  | 3  | 94  | 0.5 | <2 | 0.17 | <0.1 | 12 | 92  | 1.41 | 2.28 | 0.07 | 8  | 0.49 | 220 | 5   | <0.01 | 72   | 0.08 | 14 | <5 | 13 | 0.07 | 42 | <5 | 51  |
| O51  | 16 | 20 | 0.2  | <5 | 86  | 0.4 | <2 | 0.16 | <0.1 | 11 | 87  | 1.32 | 2.08 | 0.07 | 5  | 0.46 | 207 | 2   | <0.01 | 70   | 0.07 | 12 | <5 | 12 | 0.07 | 36 | <5 | 49  |
| O52  | 6  | 15 | 0.3  | <5 | 79  | 0.4 | <2 | 0.15 | <0.1 | 8  | 23  | 1.49 | 1.60 | 0.05 | 3  | 0.24 | 331 | 4   | <0.01 | 21   | 0.22 | 9  | <5 | 11 | 0.06 | 27 | <5 | 101 |
| O53  | 3  | 12 | 0.3  | <5 | 133 | 0.5 | 2  | 0.12 | <0.1 | 6  | 22  | 2.03 | 1.44 | 0.03 | 4  | 0.15 | 228 | 3   | <0.01 | 23   | 0.39 | 11 | <5 | 10 | 0.07 | 20 | <5 | 72  |
| O54  | 3  | 15 | 0.1  | <5 | 78  | 0.4 | <2 | 0.08 | <0.1 | 6  | 23  | 1.81 | 1.98 | 0.04 | 3  | 0.21 | 148 | 7   | <0.01 | 22   | 0.25 | 12 | <5 | 7  | 0.08 | 33 | <5 | 50  |
| O55  | 18 | 12 | 0.2  | <5 | 51  | 0.6 | <2 | 0.17 | <0.1 | 5  | 23  | 2.51 | 2.34 | 0.04 | 3  | 0.14 | 111 | 4   | <0.01 | 15   | 0.24 | 14 | <5 | 15 | 0.09 | 41 | <5 | 41  |
| O56  | 18 | 17 | 0.5  | <5 | 53  | 0.4 | <2 | 0.09 | <0.1 | 5  | 23  | 1.67 | 2.41 | 0.04 | 3  | 0.20 | 107 | 3   | <0.01 | 15   | 0.22 | 13 | <5 | 9  | 0.08 | 34 | <5 | 45  |
| O57  | 7  | 11 | 0.1  | <5 | 65  | 0.4 | <2 | 0.17 | <0.1 | 6  | 24  | 1.92 | 1.85 | 0.04 | 3  | 0.19 | 93  | 3   | <0.01 | 17   | 0.19 | 16 | <5 | 15 | 0.08 | 27 | <5 | 57  |
| O58  | 4  | 54 | 0.2  | <5 | 107 | 0.6 | 2  | 0.15 | <0.1 | 12 | 75  | 1.49 | 2.73 | 0.05 | 6  | 0.82 | 211 | 9   | <0.01 | 71   | 0.09 | 14 | <5 | 27 | 0.06 | 60 | <5 | 58  |
| O59  | <1 | 15 | 0.2  | <5 | 63  | 0.6 | <2 | 0.08 | <0.1 | 6  | 25  | 2.67 | 2.43 | 0.03 | 4  | 0.14 | 296 | 2   | <0.01 | 15   | 0.20 | 16 | <5 | 9  | 0.10 | 43 | <5 | 45  |
| O60  | <1 | 16 | 0.2  | <5 | 55  | 0.7 | 2  | 0.09 | <0.1 | 6  | 22  | 3.52 | 2.34 | 0.03 | 6  | 0.10 | 74  | <1  | <0.01 | 12   | 0.30 | 18 | <5 | 9  | 0.12 | 36 | <5 | 29  |
| O61  | <1 | 25 | 0.3  | <5 | 65  | 1.1 | 3  | 0.13 | <0.1 | 13 | 20  | 4.50 | 2.36 | 0.03 | 5  | 0.09 | 374 | <1  | <0.01 | 12   | 0.34 | 23 | <5 | 12 | 0.12 | 33 | <5 | 50  |
| O62  | <1 | 17 | 0.1  | <5 | 50  | 0.9 | 4  | 0.05 | <0.1 | 7  | 22  | 5.03 | 2.93 | 0.02 | 4  | 0.08 | 212 | 2   | <0.01 | 14   | 0.38 | 27 | <5 | 7  | 0.15 | 45 | <5 | 38  |
| O63  | <1 | 17 | 0.6  | <5 | 81  | 0.7 | 2  | 0.09 | <0.1 | 5  | 26  | 3.42 | 2.00 | 0.02 | 4  | 0.14 | 135 | 1   | <0.01 | 19   | 0.21 | 17 | <5 | 10 | 0.09 | 29 | <5 | 45  |
| O64  | <1 | 26 | 0.1  | <5 | 54  | 0.2 | <2 | 0.15 | <0.1 | 3  | 23  | 0.96 | 2.30 | 0.03 | 4  | 0.13 | 51  | <1  | <0.01 | 13   | 0.03 | 13 | <5 | 18 | 0.11 | 53 | <5 | 19  |
| O65  | 1  | 21 | 0.5  | <5 | 56  | 0.5 | 2  | 0.08 | <0.1 | 8  | 33  | 1.89 | 2.46 | 0.04 | 4  | 0.30 | 149 | <1  | <0.01 | 22   | 0.11 | 12 | <5 | 10 | 0.07 | 41 | <5 | 39  |
| O66  | 2  | 20 | 0.6  | <5 | 76  | 0.5 | 3  | 0.15 | <0.1 | 8  | 38  | 2.31 | 3.24 | 0.06 | 5  | 0.55 | 242 | 4   | <0.01 | 25   | 0.20 | 16 | <5 | 13 | 0.10 | 65 | <5 | 85  |
| O66* | 2  | 20 | 0.6  | <5 | 76  | 0.6 | 2  | 0.15 | <0.1 | 9  | 39  | 2.35 | 3.29 | 0.06 | 5  | 0.56 | 248 | <1  | <0.01 | 25   | 0.20 | 15 | <5 | 13 | 0.10 | 65 | <5 | 88  |
| O67  | <1 | 60 | 0.2  | 13 | 111 | 1.1 | 4  | 0.13 | 0.5  | 17 | 57  | 1.45 | 2.43 | 0.07 | 18 | 0.45 | 275 | 7   | <0.01 | 39   | 0.09 | 19 | 6  | 27 | 0.08 | 68 | 13 | 114 |
| O68  | 2  | 35 | 1.1  | 9  | 124 | 1.1 | 2  | 0.21 | 0.3  | 14 | 39  | 2.23 | 2.58 | 0.06 | 13 | 0.47 | 305 | 4   | <0.01 | 61   | 0.11 | 45 | 5  | 19 | 0.10 | 55 | 6  | 79  |
| O69  | 1  | 25 | 0.1  | 8  | 72  | 0.5 | <2 | 0.13 | <0.1 | 45 | 275 | 1.43 | 3.31 | 0.17 | 5  | 0.59 | 294 | 4   | <0.01 | 531  | 0.04 | 24 | <5 | 14 | 0.06 | 50 | <5 | 49  |
| O70  | <1 | 28 | 0.1  | <5 | 71  | 0.3 | 3  | 0.17 | <0.1 | 21 | 322 | 2.49 | 2.93 | 0.07 | 3  | 2.44 | 241 | 4   | <0.01 | 197  | 0.07 | 22 | <5 | 12 | 0.14 | 50 | <5 | 55  |
| O71  | <1 | 25 | 0.1  | <5 | 128 | 0.4 | <2 | 0.15 | <0.1 | 27 | 291 | 2.34 | 3.68 | 0.75 | 3  | 3.19 | 298 | 6   | <0.01 | 221  | 0.03 | 25 | <5 | 25 | 0.13 | 87 | <5 | 50  |
| O72  | 1  | 25 | 0.4  | <5 | 125 | 0.4 | <2 | 0.33 | <0.1 | 28 | 290 | 2.24 | 3.65 | 0.66 | 4  | 3.80 | 311 | 8   | <0.01 | 221  | 0.04 | 29 | <5 | 24 | 0.13 | 86 | <5 | 49  |
| O73  | 8  | 21 | 0.1  | 11 | 70  | 0.3 | 3  | 0.76 | <0.1 | 16 | 43  | 1.08 | 3.13 | 0.21 | 9  | 0.84 | 569 | 6   | 0.01  | 30   | 0.11 | 8  | <5 | 48 | 0.06 | 52 | <5 | 61  |
| O73  | <1 | 16 | <0.1 | <5 | 104 | 0.2 | 2  | 0.14 | <0.1 | 22 | 252 | 1.30 | 2.96 | 0.08 | 5  | 1.86 | 336 | 3   | <0.01 | 215  | 0.03 | 10 | 6  | 18 | 0.08 | 47 | <5 | 46  |
| O74  | <1 | 16 | <0.1 | <5 | 72  | 0.2 | <2 | 0.24 | <0.1 | 37 | 609 | 1.86 | 4.37 | 0.17 | 4  | 1.39 | 257 | 4   | <0.01 | 542  | 0.03 | 7  | <5 | 18 | 0.06 | 49 | <5 | 35  |
| O75  | <1 | 12 | 0.1  | <5 | 97  | 0.4 | 4  | 0.20 | <0.1 | 23 | 237 | 1.43 | 2.75 | 0.04 | 5  | 1.09 | 113 | 2   | <0.01 | 436  | 0.04 | 11 | <5 | 34 | 0.05 | 20 | <5 | 21  |
| O76  | <1 | 23 | 0.3  | <5 | 77  | 0.4 | 4  | 0.22 | <0.1 | 12 | 63  | 1.00 | 1.31 | 0.04 | 5  | 1.34 | 58  | <1  | 0.01  | 706  | 0.02 | 16 | <5 | 30 | 0.05 | 16 | 6  | 31  |
| O77  | <1 | 19 | 0.1  | <5 | 43  | 0.4 | 3  | 0.20 | <0.1 | 57 | 708 | 1.62 | 4.89 | 0.17 | 5  | 3.24 | 222 | 2   | <0.01 | 526  | 0.02 | 9  | <5 | 16 | 0.06 | 60 | <5 | 40  |
| O78  | <1 | 10 | 0.1  | <5 | 73  | 0.3 | 3  | 0.16 | <0.1 | 12 | 150 | 0.47 | 2.09 | 0.12 | 7  | 0.41 | 188 | 3   | <0.01 | 99   | 0.02 | 8  | <5 | 15 | 0.08 | 37 | <5 | 37  |
| O79  | 1  | 19 | 0.1  | <5 | 43  | 0.8 | <2 | 0.10 | <0.1 | 71 | 523 | 1.44 | 3.05 | 0.23 | 6  | 0.82 | 247 | <1  | <0.01 | 835  | 0.04 | 39 | <5 | 11 | 0.06 | 69 | <5 | 56  |
| O81  | 1  | 10 | 0.1  | <5 | 88  | 0.3 | <2 | 0.07 | <0.1 | 32 | 76  | 0.99 | 2.93 | 0.03 | 6  | 2.47 | 776 | 3   | <0.01 | 404  | 0.04 | 8  | <5 | 9  | 0.07 | 29 | <5 | 59  |
| O82  | <1 | 12 | 0.1  | <5 | 85  | 0.5 | <2 | 0.08 | <0.1 | 34 | 217 | 1.38 | 3.36 | 0.23 | 6  | 0.32 | 147 | 1   | <0.01 | 621  | 0.05 | 28 | <5 | 10 | 0.09 | 51 | <5 | 74  |
| O83  | 1  | 20 | 0.1  | <5 | 62  | 0.6 | <2 | 0.15 | <0.1 | 57 | 295 | 1.62 | 3.83 | 0.06 | 4  | 4.67 | 443 | 4   | <0.01 | 852  | 0.05 | 25 | <5 | 12 | 0.08 | 60 | <5 | 63  |
| O84  | <1 | 4  | 0.1  | <5 | 48  | 0.2 | 3  | 0.06 | <0.1 | 15 | 60  | 0.61 | 1.40 | 0.04 | 4  | 0.70 | 130 | 1   | 0.01  | 247  | 0.02 | 6  | <5 | 6  | 0.04 | 15 | <5 | 34  |
| O85  | <1 | 26 | 0.4  | <5 | 152 | 1.2 | 3  | 0.13 | <0.1 | 30 | 158 | 2.33 | 3.30 | 0.07 | 7  | 1.79 | 932 | <1  | 0.02  | 1465 | 0.04 | 54 | <5 | 18 | 0.08 | 30 | <5 | 37  |
| O85* | 1  | 25 | 0.4  | <5 | 148 | 1.2 | 4  | 0.13 | <0.1 | 31 | 194 | 2.28 | 3.25 | 0.07 | 7  | 1.75 | 924 | 1   | 0.02  | 1462 | 0.04 | 55 | <5 | 18 | 0.08 | 29 | <5 | 36  |
| O86  | <1 | 10 | <0.1 | <5 | 150 | 0.5 | 3  | 0.07 | <0.1 | 34 | 112 | 1.95 | 2.24 | 0.04 | 7  | 1.37 | 107 | 1   | 0.02  | 716  | 0.03 | 23 | <5 | 17 | 0.07 | 23 | 6  | 75  |
| O87  | 1  | 12 | <0.1 | <5 | 122 | 0.6 | 3  | 0.07 | <0.1 | 36 | 202 | 2.07 | 2.87 | 0.04 | 5  | 1.55 | 311 | <1  | <0.01 | 1352 | 0.03 | 55 | <5 | 12 | 0.07 | 37 | <5 | 98  |
| O88  | 1  | 7  | 0.2  | <5 | 56  | 0.4 | 2  | 0.08 | <0.1 | 25 | 148 | 1.11 | 2.26 | 0.03 | 6  | 1.60 | 109 | <1  | <0.01 | 432  | 0.02 | 20 | <5 | 12 | 0.06 | 30 | <5 | 44  |
| O89  | 3  | 15 | 0.3  | <5 | 20  | 0.3 | <2 | 0.09 | <0.1 | 24 | 387 | 0.94 | 3.24 | 0.04 | 7  | 1.62 | 148 | <1  | <0.01 | 260  | 0.03 | 10 | <5 | 8  | 0.07 | 57 | <5 | 26  |
| O90  | <1 | 5  | 0.2  | <5 | 25  | 0.2 | <2 | 0.03 | <0.1 | 14 | 176 | 0.44 | 1.55 | 0.03 | 5  | 0.85 | 91  | <1  | <0.01 | 125  | 0.02 | 2  | <5 | 6  | 0.04 | 23 | <5 | 76  |
| O91  | <1 | 16 | <0.1 | <5 | 89  | 0.3 | <2 | 0.21 | <0.1 | 26 | 153 | 1.58 | 3.33 | 0.13 | 8  | 1.52 | 286 | <1  | <0.01 | 231  | 0.10 | 13 | <5 | 15 | 0.10 | 54 | <5 | 76  |
| O92  | <1 | 14 | <0.1 | <5 | 109 | 0.4 | 2  | 0.23 | <0.1 | 25 | 124 | 1.91 | 3.55 | 0.19 | 8  | 1.47 | 300 | <1  | <0.01 | 182  | 0.13 | 15 | <5 | 17 | 0.13 | 59 | <5 | 93  |
| F21  | 14 | 93 | 0.2  | 10 | 70  | 0.3 | 3  | 1.77 | <0.1 | 16 | 41  | 1.07 | 3.08 | 0.21 | 9  | 0.82 | 594 | <1  | 0.01  | 29   | 0.10 | 8  | <5 | 49 | 0.06 | 51 | <5 | 65  |
| F22  | <1 | 10 | 0.4  | <5 | 67  | 0.4 | <2 | 0.13 | <0.1 | 6  | 33  | 2.70 | 2.24 | 0.04 | 3  | 0.16 | 258 | 4</ |       |      |      |    |    |    |      |    |    |     |



| SAMP | AD | CU | AG   | AS | BA  | BE   | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MC   | MS  | MO | NA    | NI  | P      | PB | SB | SR | TI   | V  | W  | ZN |
|------|----|----|------|----|-----|------|----|------|------|----|-----|------|------|------|----|------|-----|----|-------|-----|--------|----|----|----|------|----|----|----|
| P30  | 13 | 12 | 0.1  | <5 | 97  | 0.4  | <2 | 0.11 | <0.1 | 5  | 32  | 1.87 | 2.33 | 0.04 | 2  | 0.26 | 143 | 2  | <0.01 | 18  | 0.14   | 8  | <5 | 12 | 0.05 | 37 | <5 | 27 |
| P31  | 5  | 9  | 0.1  | <5 | 120 | 0.3  | 3  | 0.12 | <0.1 | 4  | 28  | 1.24 | 1.63 | 0.03 | 2  | 0.21 | 113 | 2  | <0.01 | 24  | 0.10   | 8  | <5 | 18 | 0.04 | 24 | <5 | 27 |
| P32  | 3  | 18 | <0.1 | 10 | 112 | 0.7  | 2  | 0.12 | 0.4  | 9  | 30  | 1.13 | 1.65 | 0.03 | 12 | 0.18 | 134 | 5  | <0.01 | 25  | 0.09   | 11 | <5 | 21 | 0.04 | 34 | 9  | 30 |
| P33  | 2  | 12 | 0.3  | <5 | 109 | 0.6  | 3  | 0.11 | <0.1 | 6  | 32  | 1.83 | 2.21 | 0.03 | 7  | 0.22 | 134 | 7  | <0.01 | 29  | 0.20   | 16 | 5  | 25 | 0.06 | 38 | <5 | 35 |
| P34  | 1  | 10 | 0.2  | <5 | 150 | 0.4  | 5  | 0.13 | <0.1 | 6  | 34  | 1.66 | 2.18 | 0.03 | 5  | 0.28 | 111 | 4  | <0.01 | 29  | 0.11   | 13 | <5 | 13 | 0.03 | 32 | <5 | 30 |
| P35  | 14 | 15 | 0.6  | <5 | 151 | 0.3  | <2 | 0.14 | <0.1 | 6  | 33  | 1.21 | 1.97 | 0.04 | 4  | 0.36 | 199 | 4  | <0.01 | 27  | 0.08   | 9  | <5 | 14 | 0.03 | 32 | <5 | 30 |
| P36  | 3  | 13 | 0.4  | <5 | 110 | 0.3  | 4  | 0.11 | <0.1 | 5  | 27  | 1.53 | 1.81 | 0.04 | 3  | 0.26 | 149 | 3  | <0.01 | 23  | 0.09   | 27 | <5 | 12 | 0.04 | 30 | <5 | 25 |
| P37  | 8  | 18 | 0.3  | <5 | 215 | 0.3  | 2  | 0.16 | <0.1 | 8  | 31  | 1.43 | 2.17 | 0.06 | 4  | 0.38 | 245 | 2  | <0.01 | 33  | 0.07   | 20 | <5 | 16 | 0.06 | 31 | <5 | 46 |
| P38  | 12 | 22 | 0.3  | <5 | 216 | 0.2  | 4  | 0.21 | <0.1 | 7  | 32  | 1.20 | 1.89 | 0.05 | 4  | 0.48 | 265 | 2  | <0.01 | 24  | 0.05   | 12 | <5 | 23 | 0.03 | 33 | <5 | 36 |
| P39  | 2  | 12 | 0.3  | <5 | 106 | 0.5  | 4  | 0.18 | <0.1 | 6  | 35  | 1.97 | 2.17 | 0.04 | 4  | 0.33 | 114 | 8  | <0.01 | 24  | 0.12   | 14 | <5 | 20 | 0.06 | 34 | <5 | 30 |
| P40  | 12 | 15 | 0.3  | <5 | 116 | 0.2  | 2  | 0.18 | <0.1 | 7  | 39  | 0.96 | 2.10 | 0.05 | 5  | 0.56 | 169 | 5  | <0.01 | 22  | 0.04   | 9  | 6  | 22 | 0.04 | 35 | <5 | 32 |
| P40* | 9  | 15 | 0.3  | <5 | 123 | 0.2  | 3  | 0.18 | <0.1 | 7  | 38  | 0.97 | 2.18 | 0.05 | 5  | 0.59 | 177 | 4  | <0.01 | 17  | 0.04   | 8  | 7  | 23 | 0.05 | 37 | <5 | 34 |
| P41  | 17 | 30 | 0.1  | 9  | 120 | 0.5  | <2 | 0.23 | <0.1 | 11 | 46  | 1.06 | 1.47 | 0.05 | 11 | 0.57 | 224 | <1 | <0.01 | 24  | 0.13   | 9  | <5 | 24 | 0.04 | 47 | 11 | 42 |
| P42  | 9  | 49 | 0.5  | 10 | 239 | 0.6  | 2  | 0.33 | 0.2  | 11 | 46  | 1.86 | 2.75 | 0.06 | 9  | 0.34 | 156 | 10 | <0.01 | 69  | 0.04   | 16 | <5 | 32 | 0.08 | 50 | <5 | 62 |
| P43  | 9  | 15 | 0.3  | <5 | 94  | 0.3  | <2 | 0.15 | <0.1 | 8  | 40  | 1.22 | 1.10 | 0.04 | 4  | 0.42 | 140 | <1 | <0.01 | 25  | 0.09   | 8  | <5 | 15 | 0.04 | 34 | <5 | 38 |
| P44  | <1 | 22 | 0.7  | <5 | 125 | 0.7  | 3  | 0.42 | <0.1 | 6  | 21  | 2.94 | 2.20 | 0.05 | 4  | 0.12 | 141 | 3  | <0.01 | 16  | 0.35   | 19 | <5 | 28 | 0.12 | 27 | <5 | 33 |
| P45  | 1  | 25 | 1.0  | <5 | 80  | 0.6  | 2  | 0.15 | <0.1 | 9  | 22  | 2.22 | 1.04 | 0.06 | 3  | 0.22 | 255 | 4  | <0.01 | 15  | 0.21   | 17 | <5 | 12 | 0.10 | 29 | <5 | 48 |
| P46  | 2  | 19 | 0.5  | <5 | 72  | 0.5  | 2  | 0.10 | <0.1 | 7  | 22  | 1.65 | 1.97 | 0.05 | 3  | 0.25 | 164 | 2  | <0.01 | 16  | 0.14   | 14 | <5 | 10 | 0.07 | 31 | <5 | 46 |
| P47  | 2  | 12 | 0.8  | <5 | 48  | 0.4  | 4  | 0.08 | <0.1 | 6  | 18  | 1.94 | 1.37 | 0.04 | 2  | 0.05 | 258 | 2  | <0.01 | 15  | 0.29   | 15 | <5 | 7  | 0.07 | 18 | <5 | 29 |
| P48  | 3  | 14 | 0.4  | <5 | 93  | 0.3  | 3  | 0.20 | 0.1  | 6  | 23  | 0.70 | 1.59 | 0.07 | 2  | 0.27 | 759 | 7  | <0.01 | 13  | 0.09   | 11 | <5 | 15 | 0.05 | 34 | <5 | 55 |
| P49  | 4  | 19 | 0.5  | <5 | 133 | 0.5  | 3  | 0.19 | <0.1 | 7  | 31  | 1.75 | 2.21 | 0.07 | 4  | 0.50 | 199 | <1 | <0.01 | 19  | 0.16   | 15 | <5 | 16 | 0.08 | 39 | <5 | 82 |
| P49* | 2  | 18 | 0.5  | <5 | 128 | 0.5  | 2  | 0.18 | <0.1 | 7  | 32  | 1.65 | 2.02 | 0.07 | 4  | 0.48 | 188 | 5  | <0.01 | 21  | 0.15   | 15 | <5 | 15 | 0.08 | 37 | <5 | 78 |
| P50  | 3  | 29 | 0.2  | 8  | 113 | 0.9  | <2 | 0.18 | 0.4  | 12 | 35  | 1.57 | 2.09 | 0.06 | 13 | 0.48 | 288 | 3  | <0.01 | 24  | 0.09   | 13 | <5 | 24 | 0.08 | 51 | 10 | 58 |
| P51  | 1  | 17 | 0.1  | <5 | 95  | 0.5  | <2 | 0.17 | <0.1 | 7  | 21  | 1.57 | 1.84 | 0.05 | 6  | 0.36 | 204 | 2  | <0.01 | 20  | 0.10   | 11 | <5 | 18 | 0.07 | 38 | <5 | 48 |
| P52  | 2  | 21 | 0.4  | <5 | 114 | 0.5  | <2 | 0.15 | <0.1 | 7  | 24  | 1.34 | 1.83 | 0.05 | 4  | 0.32 | 350 | 3  | <0.01 | 17  | 0.15   | 12 | <5 | 16 | 0.07 | 35 | <5 | 63 |
| P53  | 2  | 23 | 0.6  | <5 | 74  | 0.3  | <2 | 0.11 | <0.1 | 4  | 19  | 1.36 | 1.84 | 0.05 | 3  | 0.21 | 273 | 3  | <0.01 | 10  | 0.18   | 12 | <5 | 13 | 0.09 | 32 | <5 | 79 |
| P54  | 1  | 6  | 0.3  | <5 | 24  | <0.1 | <2 | 0.09 | <0.1 | 2  | 11  | 0.28 | 0.52 | 0.05 | 3  | 0.09 | 60  | 5  | <0.01 | 3   | 0.01   | 5  | <5 | 8  | 0.05 | 20 | <5 | 30 |
| P55  | <1 | 10 | 0.3  | <5 | 50  | 0.2  | <2 | 0.09 | <0.1 | 3  | 21  | 1.85 | 1.43 | 0.04 | 2  | 0.14 | 140 | 4  | <0.01 | 16  | 0.09   | 11 | <5 | 9  | 0.05 | 27 | <5 | 18 |
| P56  | <1 | 24 | 0.5  | <5 | 83  | 0.6  | 2  | 0.08 | <0.1 | 5  | 19  | 2.64 | 1.11 | 0.03 | 3  | 0.12 | 330 | 1  | <0.01 | 11  | 0.41   | 16 | <5 | 10 | 0.09 | 29 | <5 | 52 |
| P57  | 3  | 32 | 0.8  | <5 | 75  | 0.6  | 2  | 0.08 | <0.1 | 8  | 33  | 2.13 | 2.19 | 0.05 | 3  | 0.32 | 204 | 6  | <0.01 | 34  | 0.15   | 16 | <5 | 9  | 0.08 | 42 | <5 | 63 |
| P58  | <1 | 11 | 0.2  | <5 | 39  | 0.2  | 2  | 0.07 | <0.1 | 3  | 14  | 0.95 | 1.44 | 0.04 | 2  | 0.16 | 231 | 3  | <0.01 | 14  | 0.08   | 7  | <5 | 6  | 0.06 | 29 | <5 | 34 |
| P59  | 3  | 36 | 0.6  | 13 | 70  | 0.3  | <2 | 0.17 | 0.3  | 12 | 31  | 3.30 | 1.49 | 0.03 | 15 | 0.16 | 223 | 4  | <0.01 | 23  | 0.31   | 27 | <5 | 16 | 0.12 | 56 | 11 | 54 |
| P60  | 4  | 35 | 0.4  | 4  | 83  | 0.1  | <2 | 0.12 | <0.1 | 9  | 42  | 1.43 | 1.42 | 0.04 | 6  | 0.46 | 212 | 4  | <0.01 | 29  | 0.10   | 11 | <5 | 14 | 0.07 | 46 | <5 | 51 |
| P61  | 4  | 37 | 0.3  | 4  | 66  | 0.5  | <2 | 0.12 | <0.1 | 8  | 37  | 1.47 | 1.49 | 0.04 | 5  | 0.42 | 199 | 5  | <0.01 | 36  | 0.12   | 14 | <5 | 15 | 0.07 | 54 | <5 | 50 |
| P62  | 15 | 50 | 0.2  | 13 | 65  | 0.3  | <2 | 0.16 | <0.1 | 14 | 39  | 1.57 | 2.04 | 0.19 | 9  | 0.81 | 572 | 2  | 0.01  | 26  | 0.10   | 7  | 6  | 48 | 0.06 | 52 | <5 | 56 |
| P63  | 4  | 33 | 0.4  | 4  | 79  | 0.9  | 2  | 0.17 | <0.1 | 7  | 32  | 1.78 | 1.43 | 0.05 | 16 | 0.22 | 63  | 1  | 0.01  | 52  | 0.02   | 27 | <5 | 20 | 0.12 | 33 | <5 | 35 |
| P64  | 4  | 33 | 0.5  | 4  | 94  | 0.6  | <2 | 0.17 | <0.1 | 11 | 45  | 1.41 | 2.22 | 0.12 | 8  | 0.74 | 220 | 1  | <0.01 | 33  | 0.11   | 16 | <5 | 21 | 0.09 | 77 | <5 | 65 |
| P64* | 4  | 32 | 0.5  | 4  | 100 | 0.6  | <2 | 0.18 | <0.1 | 11 | 45  | 1.47 | 2.33 | 0.13 | 7  | 0.76 | 228 | <1 | <0.01 | 31  | 0.11   | 13 | <5 | 21 | 0.09 | 79 | <5 | 67 |
| P65  | 5  | 24 | <0.1 | <5 | 62  | 0.2  | 2  | 0.08 | <0.1 | 35 | 172 | 1.12 | 3.25 | 0.20 | <1 | 1.54 | 264 | 1  | <0.01 | 269 | 0.01   | 16 | <5 | 14 | 0.10 | 69 | <5 | 38 |
| P66  | <1 | 12 | <0.1 | <5 | 93  | 0.1  | <2 | 0.15 | <0.1 | 44 | 274 | 1.60 | 3.56 | 0.09 | 1  | 1.77 | 212 | <1 | <0.01 | 435 | 0.01   | 10 | <5 | 22 | 0.10 | 56 | <5 | 41 |
| P67  | <1 | 9  | 0.1  | <5 | 103 | 0.3  | 4  | 0.12 | <0.1 | 37 | 571 | 1.51 | 4.65 | 0.07 | <1 | 1.82 | 324 | <1 | <0.01 | 321 | 0.02   | 8  | <5 | 11 | 0.08 | 70 | <5 | 42 |
| P68  | <1 | 4  | <0.1 | <5 | 126 | <0.1 | <2 | 0.09 | <0.1 | 21 | 122 | 1.65 | 1.61 | 0.06 | <1 | 0.51 | 141 | <1 | <0.01 | 441 | 0.02   | 1  | <5 | 15 | 0.05 | 13 | <5 | 26 |
| P69  | <1 | 10 | <0.1 | <5 | 85  | 0.3  | 3  | 0.14 | <0.1 | 39 | 604 | 1.82 | 4.30 | 0.08 | 2  | 1.64 | 351 | <1 | <0.01 | 277 | 0.02   | 11 | <5 | 14 | 0.08 | 68 | <5 | 35 |
| P70  | <1 | 12 | <0.1 | <5 | 33  | 0.3  | <2 | 0.13 | <0.1 | 53 | 967 | 1.42 | 5.69 | 0.07 | 1  | 6.36 | 353 | <1 | <0.01 | 640 | 0.04   | <1 | <5 | 10 | 0.04 | 72 | <5 | 41 |
| P71  | <1 | 11 | <0.1 | <5 | 59  | 0.3  | 4  | 0.10 | <0.1 | 48 | 550 | 1.04 | 4.26 | 0.03 | 3  | 2.57 | 354 | <1 | <0.01 | 539 | 0.02   | 2  | <5 | 10 | 0.04 | 45 | <5 | 33 |
| P72  | 1  | 10 | <0.1 | <5 | 76  | 0.2  | <2 | 0.08 | <0.1 | 37 | 426 | 1.43 | 3.11 | 0.05 | 2  | 1.87 | 170 | <1 | <0.01 | 626 | 0.02   | 4  | <5 | 10 | 0.07 | 35 | <5 | 49 |
| P73  | 1  | 6  | <0.1 | <5 | 50  | 0.2  | <2 | 0.11 | <0.1 | 29 | 277 | 1.44 | 3.17 | 0.07 | <1 | 1.69 | 141 | <1 | <0.01 | 354 | 0.02   | 10 | <5 | 11 | 0.06 | 29 | 9  | 34 |
| P74  | 1  | 14 | <0.1 | <5 | 69  | 0.5  | <2 | 0.09 | <0.1 | 35 | 126 | 1.82 | 2.84 | 0.03 | 7  | 1.76 | 130 | 3  | 0.01  | 563 | 0.03   | 28 | <5 | 18 | 0.06 | 33 | <5 | 47 |
| P75  | 1  | 10 | <0.1 | <5 | 61  | 0.4  | <2 | 0.12 | <0.1 | 47 | 202 | 1.42 | 3.10 | 0.04 | 4  | 2.35 | 169 | 2  | <0.01 | 648 | 0.04   | 14 | <5 | 14 | 0.06 | 33 | <5 | 44 |
| P76  | 1  | 12 | <0.1 | <5 | 62  | 0.5  | <2 | 0.08 | <0.1 | 37 | 201 | 1.43 | 2.70 | 0.04 | 4  | 2.48 | 179 | 3  | <0.01 | 580 | 0.02   | 30 | <5 | 10 | 0.05 | 35 | <5 | 45 |
| P77  | <1 | 10 | <0.1 | <5 | 146 | 0.3  | <2 | 0.07 | <0.1 | 23 | 115 | 1.91 | 2.07 | 0.04 | 3  | 1.30 | 136 | 2  | 0.02  | 663 | 0.02   | 12 | <5 | 12 | 0.08 | 27 | <5 | 46 |
| P78  | <1 | 8  | <0.1 | <5 | 51  | 0.6  | <2 | 0.04 | <0.1 | 53 | 207 | 1.44 | 2.40 | 0.03 | 4  | 1.34 | 106 | 2  | <0.01 | 619 | 0.03</ |    |    |    |      |    |    |    |

| SAMP  | AD | CU  | AG   | AS | BA  | BE   | BI | CA   | CD   | CO | CR  | AL   | FE   | K    | LA | MG   | MN   | MO | NA    | NI  | P    | PB | SB | SR | TI   | V   | W  | ZN  |
|-------|----|-----|------|----|-----|------|----|------|------|----|-----|------|------|------|----|------|------|----|-------|-----|------|----|----|----|------|-----|----|-----|
| VA15  | 1  | 17  | 0.3  | <5 | 124 | 0.3  | <2 | 0.15 | <0.1 | 9  | 27  | 1.04 | 1.84 | 0.07 | 4  | 0.36 | 413  | <1 | <0.01 | 22  | 0.07 | 9  | <5 | 16 | 0.06 | 30  | <5 | 45  |
| VA16  | 10 | 42  | 0.2  | <5 | 74  | 0.2  | 5  | 0.27 | <0.1 | 9  | 41  | 0.89 | 2.07 | 0.11 | 5  | 0.56 | 268  | <1 | <0.01 | 37  | 0.07 | 11 | <5 | 20 | 0.04 | 33  | <5 | 254 |
| VA17  | 6  | 23  | 0.3  | <5 | 74  | 0.3  | 3  | 0.15 | <0.1 | 11 | 44  | 1.11 | 2.29 | 0.07 | 5  | 0.53 | 192  | <1 | <0.01 | 47  | 0.06 | 7  | <5 | 14 | 0.05 | 36  | <5 | 43  |
| VA18  | 5  | 19  | 0.3  | <5 | 145 | 0.4  | <2 | 0.16 | <0.1 | 8  | 34  | 1.12 | 1.98 | 0.08 | 7  | 0.47 | 222  | 4  | <0.01 | 36  | 0.05 | 8  | <5 | 19 | 0.05 | 35  | <5 | 49  |
| VA19  | 3  | 16  | 0.5  | <5 | 162 | 0.3  | <2 | 0.23 | <0.1 | 8  | 29  | 1.10 | 1.95 | 0.06 | 4  | 0.37 | 313  | 5  | <0.01 | 27  | 0.08 | 8  | <5 | 20 | 0.04 | 29  | <5 | 50  |
| VA2   | 10 | 7   | 0.3  | <5 | 51  | <0.1 | <2 | 0.13 | <0.1 | 4  | 25  | 0.49 | 1.41 | 0.04 | 2  | 0.17 | 130  | 2  | <0.01 | 7   | 0.03 | 4  | <5 | 14 | 0.04 | 25  | <5 | 20  |
| VA20  | 15 | 15  | 0.3  | <5 | 131 | 0.3  | 2  | 0.19 | <0.1 | 6  | 30  | 1.10 | 1.89 | 0.06 | 4  | 0.40 | 207  | 3  | <0.01 | 25  | 0.07 | 8  | <5 | 19 | 0.07 | 34  | <5 | 63  |
| VA21  | 4  | 21  | 0.4  | <5 | 217 | 0.4  | <2 | 0.17 | <0.1 | 8  | 31  | 1.60 | 2.28 | 0.08 | 4  | 0.42 | 198  | 1  | <0.01 | 41  | 0.09 | 9  | <5 | 25 | 0.05 | 23  | <5 | 42  |
| VA22  | 1  | 15  | 0.5  | <5 | 188 | 0.3  | <2 | 0.30 | <0.1 | 7  | 28  | 1.26 | 1.56 | 0.06 | 4  | 0.22 | 771  | 4  | <0.01 | 31  | 0.19 | 9  | <5 | 24 | 0.06 | 26  | <5 | 33  |
| VA23  | 1  | 18  | 0.5  | <5 | 139 | 0.3  | <2 | 0.27 | <0.1 | 5  | 27  | 1.36 | 1.89 | 0.05 | 3  | 0.25 | 163  | 3  | <0.01 | 24  | 0.13 | 8  | <5 | 24 | 0.05 | 30  | 11 | 38  |
| VA24  | 9  | 18  | 0.2  | 10 | 177 | 0.8  | 3  | 0.21 | 0.4  | 10 | 27  | 1.15 | 1.66 | 0.04 | 13 | 0.16 | 253  | <1 | <0.01 | 20  | 0.18 | 16 | 6  | 22 | 0.07 | 26  | <5 | 57  |
| VA25  | 5  | 27  | 0.2  | <5 | 173 | 0.4  | <2 | 0.22 | <0.1 | 8  | 20  | 1.29 | 1.82 | 0.09 | 5  | 0.32 | 483  | <1 | <0.01 | 12  | 0.16 | 7  | <5 | 18 | 0.07 | 26  | <5 | 42  |
| VA26  | 8  | 14  | 0.1  | <5 | 180 | 0.2  | <2 | 0.23 | <0.1 | 6  | 22  | 0.80 | 1.59 | 0.04 | 4  | 0.23 | 230  | <1 | <0.01 | 13  | 0.08 | 5  | 6  | 21 | 0.04 | 24  | <5 | 42  |
| VA27  | 9  | 11  | 0.1  | <5 | 247 | 0.3  | 2  | 0.34 | <0.1 | 6  | 23  | 1.53 | 1.89 | 0.04 | 5  | 0.27 | 214  | <1 | <0.01 | 17  | 0.22 | 9  | 6  | 26 | 0.05 | 25  | <5 | 71  |
| VA28  | 6  | 50  | 0.2  | <5 | 230 | 0.3  | 2  | 0.24 | <0.1 | 8  | 31  | 1.19 | 2.41 | 0.04 | 7  | 0.42 | 397  | 3  | <0.01 | 11  | 0.07 | 6  | 6  | 24 | 0.04 | 31  | <5 | 44  |
| VA29  | 3  | 16  | 0.3  | <5 | 721 | 0.3  | <2 | 0.16 | <0.1 | 7  | 18  | 1.15 | 3.00 | 0.07 | 6  | 0.39 | 659  | <1 | <0.01 | 15  | 0.06 | 10 | 6  | 15 | 0.08 | 49  | <5 | 54  |
| VA3   | 12 | 9   | 0.1  | <5 | 85  | 0.2  | <2 | 0.25 | <0.1 | 5  | 31  | 0.96 | 1.80 | 0.05 | 4  | 0.38 | 132  | <1 | <0.01 | 11  | 0.04 | 7  | 6  | 16 | 0.06 | 48  | <5 | 47  |
| VA30  | 4  | 17  | 0.1  | <5 | 130 | 0.2  | <2 | 0.12 | <0.1 | 9  | 61  | 1.23 | 2.62 | 0.07 | 4  | 0.66 | 188  | <1 | <0.01 | 24  | 0.07 | 7  | <5 | 18 | 0.06 | 23  | <5 | 59  |
| VA31  | 7  | 11  | 0.4  | <5 | 133 | 0.3  | 2  | 0.22 | <0.1 | 6  | 31  | 1.34 | 1.67 | 0.07 | 4  | 0.26 | 262  | <1 | <0.01 | 34  | 0.10 | 8  | 5  | 49 | 0.06 | 53  | <5 | 61  |
| VA32  | 14 | 81  | 0.1  | 6  | 70  | 0.3  | <2 | 1.77 | <0.1 | 16 | 39  | 1.09 | 3.18 | 0.20 | 10 | 0.83 | 603  | <1 | 0.01  | 27  | 0.11 | 9  | 11 | 51 | 0.06 | 54  | <5 | 63  |
| VA32* | 8  | 94  | 0.1  | 7  | 71  | 0.3  | 2  | 1.82 | <0.1 | 16 | 41  | 1.11 | 3.26 | 0.20 | 10 | 0.85 | 623  | <1 | 0.01  | 29  | 0.11 | 9  | 11 | 51 | 0.06 | 54  | <5 | 63  |
| VA4   | 1  | 19  | 0.2  | 9  | 127 | 0.2  | <2 | 3.47 | 0.1  | 5  | 26  | 0.52 | 1.18 | 0.05 | 4  | 0.26 | 298  | 4  | <0.01 | 16  | 0.04 | 2  | <5 | 55 | 0.03 | 22  | <5 | 28  |
| VA5   | 8  | 143 | 0.3  | 5  | 104 | 0.3  | <2 | 0.82 | <0.1 | 8  | 44  | 0.79 | 1.99 | 0.10 | 9  | 0.51 | 422  | 5  | <0.01 | 42  | 0.07 | 4  | <5 | 35 | 0.03 | 29  | <5 | 39  |
| VA5*  | 5  | 139 | 0.4  | 6  | 113 | 0.3  | <1 | 0.75 | <0.1 | 9  | 46  | 0.87 | 2.01 | 0.11 | 10 | 0.57 | 474  | 2  | <0.01 | 43  | 0.08 | 6  | <5 | 37 | 0.03 | 31  | <5 | 43  |
| VA6   | 10 | 30  | <0.1 | 5  | 152 | 0.5  | 3  | 0.27 | <0.1 | 13 | 44  | 1.24 | 2.58 | 0.09 | 10 | 0.58 | 274  | <1 | <0.01 | 24  | 0.07 | 5  | <5 | 33 | 0.05 | 35  | <5 | 34  |
| VA7   | 9  | 20  | <0.1 | <5 | 145 | 0.2  | 3  | 0.28 | <0.1 | 7  | 39  | 1.07 | 2.35 | 0.08 | 5  | 0.49 | 172  | <1 | <0.01 | 14  | 0.04 | 10 | <5 | 22 | 0.06 | 31  | <5 | 48  |
| VA8   | 7  | 19  | 0.3  | 7  | 230 | 0.4  | 1  | 0.17 | 0.1  | 7  | 34  | 1.48 | 1.89 | 0.06 | 7  | 0.35 | 189  | 1  | <0.01 | 28  | 0.07 | 6  | <5 | 21 | 0.05 | 34  | <5 | 43  |
| VA9   | 3  | 14  | 0.2  | <5 | 110 | 0.3  | 1  | 0.18 | <0.1 | 6  | 35  | 1.24 | 1.90 | 0.05 | 4  | 0.41 | 157  | <1 | <0.01 | 29  | 0.05 | 6  | <5 | 21 | 0.05 | 34  | <5 | 43  |
| VB10  | <1 | 34  | 0.2  | 7  | 146 | 0.5  | 3  | 0.23 | <0.1 | 30 | 364 | 2.26 | 2.99 | 0.17 | 8  | 2.43 | 257  | 4  | <0.01 | 247 | 0.05 | 10 | <5 | 17 | 0.11 | 71  | 8  | 46  |
| VB11  | 1  | 26  | <0.1 | <5 | 107 | 0.3  | <2 | 0.14 | <0.1 | 22 | 161 | 1.65 | 2.28 | 0.08 | 4  | 1.05 | 157  | 3  | <0.01 | 145 | 0.01 | 10 | <5 | 11 | 0.10 | 55  | <5 | 32  |
| VB12  | <1 | 18  | 0.2  | <5 | 122 | 0.2  | <2 | 0.13 | <0.1 | 11 | 41  | 3.49 | 2.58 | 0.04 | 6  | 0.28 | 423  | 2  | <0.01 | 39  | 0.28 | 16 | <5 | 13 | 0.12 | 40  | <5 | 92  |
| VB13  | <1 | 16  | 0.2  | <5 | 127 | 0.1  | <2 | 0.07 | <0.1 | 6  | 27  | 2.40 | 2.27 | 0.23 | 4  | 0.21 | 303  | 2  | <0.01 | 23  | 0.13 | 14 | <5 | 9  | 0.09 | 35  | <5 | 56  |
| VB14  | <1 | 38  | 0.2  | <5 | 127 | 0.3  | <2 | 0.17 | <0.1 | 15 | 114 | 2.07 | 3.20 | 0.26 | 4  | 1.36 | 363  | <1 | <0.01 | 58  | 0.03 | 7  | <5 | 20 | 0.12 | 73  | <5 | 97  |
| VB15  | 5  | 14  | 0.1  | <5 | 134 | 0.1  | <2 | 0.19 | <0.1 | 13 | 33  | 2.60 | 3.70 | 0.12 | 5  | 1.09 | 394  | 1  | <0.01 | 35  | 0.09 | 11 | <5 | 15 | 0.13 | 65  | <5 | 97  |
| VB16  | 2  | 151 | 1.3  | <5 | 124 | 0.1  | <2 | 0.40 | <0.1 | 12 | 49  | 2.00 | 3.05 | 0.26 | 13 | 0.53 | 205  | <1 | <0.01 | 40  | 0.03 | 23 | <5 | 25 | 0.07 | 51  | <5 | 42  |
| VB17  | <1 | 13  | 0.2  | <5 | 11  | 0.1  | <1 | 0.18 | <0.1 | 3  | 16  | 0.97 | 1.30 | 0.12 | 3  | 0.07 | 355  | <1 | <0.01 | 6   | 0.04 | 10 | <5 | 9  | 0.06 | 21  | <5 | 29  |
| VB18  | 1  | 41  | 0.1  | <5 | 103 | 0.2  | <2 | 0.31 | <0.1 | 15 | 26  | 1.28 | 2.70 | 0.21 | 4  | 0.69 | 676  | 2  | <0.01 | 20  | 0.03 | 9  | <5 | 20 | 0.11 | 53  | <5 | 67  |
| VB18* | 1  | 40  | 0.1  | <5 | 102 | 0.1  | <1 | 0.31 | <0.1 | 15 | 26  | 1.23 | 1.65 | 0.21 | 4  | 0.68 | 645  | <1 | <0.01 | 21  | 0.03 | 7  | <5 | 20 | 0.10 | 52  | <5 | 66  |
| VB19  | <1 | 117 | 0.1  | 20 | 104 | 0.4  | 8  | 0.33 | 0.7  | 21 | 50  | 1.86 | 2.75 | 0.07 | 13 | 0.50 | 235  | 8  | <0.01 | 53  | 0.07 | 24 | <5 | 26 | 0.11 | 71  | 12 | 61  |
| VB20  | 3  | 49  | 0.1  | <5 | 77  | 0.4  | <2 | 0.16 | <0.1 | 11 | 34  | 1.11 | 2.15 | 0.09 | 8  | 0.66 | 282  | 7  | <0.01 | 34  | 0.04 | 11 | <5 | 17 | 0.07 | 46  | <5 | 51  |
| VB21  | 9  | 62  | 0.3  | <5 | 78  | 0.3  | <1 | 0.26 | <0.1 | 10 | 32  | 1.10 | 2.16 | 0.07 | 5  | 0.64 | 231  | 9  | <0.01 | 35  | 0.05 | 9  | <5 | 18 | 0.06 | 51  | <5 | 44  |
| VB22  | 2  | 82  | 0.9  | <5 | 84  | 0.1  | <1 | 0.25 | <0.1 | 7  | 28  | 1.45 | 2.16 | 0.08 | 5  | 0.34 | 313  | 9  | <0.01 | 28  | 0.03 | 15 | <5 | 15 | 0.08 | 40  | <5 | 41  |
| VB23  | 8  | 625 | 0.9  | <5 | 218 | 0.8  | <2 | 0.59 | <0.1 | 22 | 26  | 3.40 | 5.27 | 0.34 | 10 | 1.79 | 1097 | 7  | <0.01 | 34  | 0.08 | 14 | <5 | 31 | 0.17 | 102 | <5 | 144 |
| VB24  | 1  | 63  | 0.4  | <5 | 93  | 0.4  | <2 | 0.23 | <0.1 | 8  | 29  | 1.76 | 1.41 | 0.11 | 4  | 0.48 | 252  | 6  | <0.01 | 32  | 0.23 | 11 | <5 | 15 | 0.08 | 36  | <5 | 72  |
| VB25  | 7  | 36  | 0.2  | <5 | 156 | 0.4  | <1 | 0.24 | <0.1 | 10 | 27  | 1.62 | 2.75 | 0.18 | 5  | 0.72 | 386  | 6  | <0.01 | 22  | 0.16 | 10 | 5  | 16 | 0.09 | 63  | <5 | 92  |
| VB26  | 4  | 51  | <0.1 | <5 | 68  | 0.5  | <2 | 0.23 | <0.1 | 11 | 32  | 2.20 | 3.43 | 0.09 | 6  | 0.89 | 360  | 3  | <0.01 | 27  | 0.16 | 11 | <5 | 15 | 0.09 | 46  | <5 | 107 |
| VB27  | 4  | 50  | 0.2  | <5 | 95  | 0.5  | <2 | 0.19 | <0.1 | 10 | 25  | 1.91 | 2.80 | 0.10 | 5  | 0.64 | 357  | <1 | <0.01 | 28  | 0.10 | 13 | <5 | 14 | 0.08 | 41  | <5 | 100 |
| VB27* | 21 | 45  | 0.3  | <5 | 88  | 0.4  | 3  | 0.17 | <0.1 | 9  | 22  | 1.74 | 2.56 | 0.09 | 4  | 0.58 | 327  | 4  | 0.01  | 19  | 0.09 | 10 | <5 | 19 | 0.14 | 47  | 11 | 51  |
| VB28  | <1 | 48  | 0.4  | 10 | 95  | 1.4  | 9  | 0.16 | 0.3  | 13 | 26  | 3.65 | 2.48 | 0.04 | 18 | 0.16 | 274  | 4  | <0.01 | 23  | 0.38 | 25 | 10 | 19 | 0.14 | 47  | 11 | 51  |
| VB29  | 1  | 38  | 0.7  | <5 | 99  | 1.4  | 1  | 0.13 | <0.1 | 8  | 22  | 2.02 | 2.21 | 0.06 | 7  | 0.33 | 298  | 4  | <0.01 | 22  | 0.13 | 13 | 7  | 14 | 0.10 | 36  | <5 | 53  |
| VB30  | 1  | 76  | 0.3  | <5 | 80  | 1.5  | 3  | 0.19 | <0.1 | 12 | 27  | 1.91 | 2.87 | 0.10 | 6  | 0.67 | 382  | 5  | <0.01 | 31  | 0.15 | 13 | 7  | 17 | 0.11 | 50  | <5 | 76  |
| VB31  | 75 | 37  | 0.4  | <5 | 19  | 0.3  | 1  | 0.18 | <0.1 | 8  | 21  | 1.45 | 2.41 | 0.09 | 5  | 0.45 | 317  | 9  | <     |     |      |    |    |    |      |     |    |     |

| SAMP  | AU | CU  | AG  | AS | BA  | BE  | BI | CA   | CO   | CR | AL  | FE   | K      | LA   | MG | MN   | MO   | NA | NI    | P   | PB   | SB  | SR | TI | V    | W   | ZN |     |
|-------|----|-----|-----|----|-----|-----|----|------|------|----|-----|------|--------|------|----|------|------|----|-------|-----|------|-----|----|----|------|-----|----|-----|
| VB39  | 1  | 311 | 0.5 | <5 | 130 | 0.8 | <2 | 0.86 | <0.1 | 16 | 20  | 1.70 | 3.15   | 0.12 | 14 | 0.57 | 1382 | 5  | 0.01  | 14  | 0.06 | 12  | <5 | 46 | 0.08 | 55  | <5 | 60  |
| VB40  | 2  | 40  | 0.1 | <5 | 54  | 0.4 | <2 | 0.17 | <0.1 | 10 | 21  | 1.41 | 2.58   | 0.05 | 5  | 0.39 | 209  | 3  | <0.01 | 17  | 0.06 | 7   | <5 | 14 | 0.07 | 41  | <5 | 60  |
| VB41  | 3  | 35  | 0.4 | <5 | 72  | 0.9 | 3  | 0.14 | <0.1 | 9  | 20  | 3.68 | 3.16   | 0.03 | 4  | 0.23 | 136  | <1 | <0.01 | 13  | 0.37 | 15  | <5 | 13 | 0.11 | 48  | <5 | 58  |
| VB42  | 1  | 21  | 0.2 | <5 | 63  | 0.5 | 2  | 0.09 | <0.1 | 7  | 20  | 2.26 | 2.08   | 0.04 | 4  | 0.23 | 108  | 3  | <0.01 | 13  | 0.11 | 10  | <5 | 9  | 0.07 | 30  | <5 | 42  |
| VB43  | 3  | 39  | 0.2 | <5 | 104 | 0.6 | 2  | 0.13 | <0.1 | 9  | 23  | 2.41 | 2.68   | 0.04 | 5  | 0.42 | 214  | <1 | <0.01 | 14  | 0.16 | 10  | <5 | 16 | 0.07 | 42  | <5 | 52  |
| VB44  | 3  | 16  | 0.3 | <5 | 68  | 0.6 | 3  | 0.19 | <0.1 | 7  | 20  | 2.67 | 2.55   | 0.07 | 4  | 0.25 | 420  | <1 | <0.01 | 5   | 0.33 | 18  | <5 | 15 | 0.11 | 51  | <5 | 53  |
| VB45  | 2  | 81  | 1.5 | <5 | 99  | 0.8 | 2  | 0.39 | <0.1 | 4  | 20  | 2.32 | 1.35   | 0.03 | 7  | 0.15 | 193  | 3  | 0.01  | 21  | 0.05 | 26  | <5 | 32 | 0.09 | 21  | <5 | 22  |
| VB46  | 1  | 37  | 0.6 | 11 | 105 | 1.5 | 3  | 0.09 | 0.5  | 12 | 29  | 2.98 | 2.27   | 0.03 | 19 | 0.15 | 188  | <1 | <0.01 | 22  | 0.41 | 19  | <5 | 16 | 0.10 | 48  | 13 | 58  |
| VB47  | 2  | 28  | 0.3 | <5 | 60  | 0.4 | <2 | 0.12 | <0.1 | 7  | 21  | 1.20 | 2.38   | 0.03 | 5  | 0.28 | 227  | <1 | <0.01 | 10  | 0.21 | 6   | <5 | 12 | 0.06 | 41  | <5 | 43  |
| VB48  | <1 | 18  | 0.2 | <5 | 262 | 0.7 | <2 | 0.25 | <0.1 | 9  | 19  | 1.89 | 1.91   | 0.05 | 5  | 0.10 | 329  | <1 | <0.01 | 15  | 0.55 | 9   | <5 | 28 | 0.07 | 20  | <5 | 68  |
| VB49  | 1  | 27  | 0.4 | <5 | 103 | 0.4 | <2 | 0.13 | <0.1 | 9  | 63  | 1.32 | 2.37   | 0.05 | 4  | 0.46 | 186  | <1 | <0.01 | 45  | 0.10 | 7   | <5 | 12 | 0.07 | 41  | <5 | 44  |
| VB50  | <1 | 16  | 0.6 | <5 | 49  | 0.9 | <2 | 0.10 | <0.1 | 7  | 21  | 3.49 | 2.32   | 0.04 | 4  | 0.11 | 316  | <1 | <0.01 | 13  | 0.24 | 10  | <5 | 8  | 0.10 | 29  | <5 | 67  |
| VB51  | 8  | 23  | 0.3 | <5 | 49  | 1.1 | <2 | 0.12 | <0.1 | 4  | 22  | 3.00 | 2.11   | 0.03 | 3  | 0.14 | 118  | <1 | <0.01 | 24  | 0.26 | 12  | <5 | 10 | 0.10 | 33  | <5 | 38  |
| VB52  | 9  | 95  | 0.1 | 6  | 69  | 0.3 | <2 | 1.78 | <0.1 | 16 | 39  | 1.17 | 3.33   | 0.20 | 10 | 0.86 | 645  | <1 | <0.01 | 26  | 0.11 | 4   | <5 | 50 | 0.06 | 55  | <5 | 65  |
| VC15  | 1  | 16  | 0.5 | <5 | 83  | 0.4 | 2  | 0.21 | <0.1 | 7  | 21  | 1.65 | 1.97   | 0.05 | 4  | 0.24 | 372  | <1 | <0.01 | 19  | 0.10 | 6   | <5 | 13 | 0.07 | 31  | <5 | 54  |
| VC16  | 6  | 25  | 0.1 | <5 | 99  | 0.3 | 2  | 0.18 | <0.1 | 9  | 27  | 1.57 | 2.66   | 0.06 | 4  | 0.62 | 396  | <1 | <0.01 | 19  | 0.08 | 4   | <5 | 15 | 0.06 | 45  | <5 | 56  |
| VC16* | 3  | 26  | 0.1 | <5 | 104 | 0.3 | <2 | 0.18 | <0.1 | 9  | 27  | 1.62 | 2.79   | 0.06 | 4  | 0.67 | 315  | <1 | <0.01 | 16  | 0.08 | 5   | <5 | 15 | 0.07 | 47  | <5 | 59  |
| VC17  | 18 | 43  | 0.3 | 7  | 115 | 0.6 | 3  | 0.16 | <0.1 | 15 | 29  | 2.14 | 3.53   | 0.11 | 9  | 0.95 | 462  | <1 | <0.01 | 15  | 0.06 | 10  | <5 | 22 | 0.10 | 64  | 11 | 79  |
| VC18  | 1  | 20  | 0.3 | <5 | 91  | 0.6 | <2 | 0.14 | 0.2  | 9  | 22  | 0.92 | 1.32   | 0.03 | 11 | 0.17 | 291  | <1 | <0.01 | 20  | 0.12 | 5   | <5 | 15 | 0.07 | 32  | <5 | 83  |
| VC19  | 1  | 16  | 0.2 | <5 | 113 | 0.5 | <2 | 0.12 | <0.1 | 9  | 29  | 1.88 | 2.19   | 0.06 | 6  | 0.45 | 446  | 5  | <0.01 | 16  | 0.10 | 10  | <5 | 15 | 0.05 | 28  | 6  | 33  |
| VC20  | 7  | 33  | 0.2 | <5 | 70  | 0.3 | <2 | 0.30 | <0.1 | 13 | 42  | 1.52 | 3.43   | 0.15 | 6  | 0.96 | 353  | 3  | <0.01 | 19  | 0.04 | 2   | <5 | 30 | 0.09 | 64  | <5 | 80  |
| VC21  | 26 | 10  | 0.4 | <5 | 57  | 0.2 | <2 | 0.11 | <0.1 | 7  | 18  | 1.02 | 1.97   | 0.04 | 6  | 0.96 | 353  | 3  | <0.01 | 19  | 0.04 | 2   | <5 | 30 | 0.09 | 64  | <5 | 80  |
| VC22  | 13 | 10  | 0.5 | <5 | 60  | 0.2 | <2 | 0.18 | <0.1 | 6  | 18  | 0.99 | 1.87   | 0.04 | 3  | 0.25 | 312  | <1 | <0.01 | 7   | 0.07 | <1  | <5 | 13 | 0.06 | 37  | <5 | 39  |
| VC23  | 3  | 10  | 0.8 | <5 | 93  | 0.3 | <2 | 0.18 | <0.1 | 5  | 17  | 1.84 | 1.58   | 0.05 | 3  | 0.31 | 504  | <1 | <0.01 | 5   | 0.10 | <1  | <5 | 15 | 0.05 | 32  | <5 | 47  |
| VC24  | 9  | 11  | 0.4 | <5 | 169 | 0.5 | <2 | 0.16 | <0.1 | 6  | 22  | 2.31 | 1.99   | 0.04 | 4  | 0.20 | 913  | <1 | <0.01 | 11  | 0.39 | 10  | <5 | 13 | 0.09 | 23  | <5 | 54  |
| VC25  | 2  | 22  | 0.9 | <5 | 129 | 0.3 | <2 | 0.22 | <0.1 | 8  | 19  | 1.43 | 2.01   | 0.08 | 3  | 0.30 | 545  | 2  | <0.01 | 11  | 0.09 | 5   | <5 | 19 | 0.06 | 29  | <5 | 70  |
| VC25* | 1  | 22  | 1.0 | <5 | 123 | 0.3 | <2 | 0.22 | <0.1 | 8  | 17  | 1.33 | 1.91   | 0.07 | 3  | 0.29 | 539  | <1 | <0.01 | 7   | 0.08 | 4   | <5 | 18 | 0.06 | 28  | <5 | 67  |
| VC26  | 18 | 42  | 0.6 | <5 | 110 | 0.4 | <2 | 0.23 | <0.1 | 12 | 35  | 2.02 | 3.14   | 0.18 | 5  | 0.89 | 352  | 2  | <0.01 | 30  | 0.06 | 8   | <5 | 24 | 0.11 | 58  | <5 | 93  |
| VC27  | 6  | 43  | 0.4 | <5 | 134 | 0.4 | <2 | 0.23 | <0.1 | 13 | 38  | 2.06 | 2.86   | 0.17 | 6  | 0.77 | 376  | 3  | 0.01  | 35  | 0.04 | 12  | <5 | 24 | 0.11 | 50  | <5 | 85  |
| VC28  | 3  | 29  | 0.5 | <5 | 122 | 0.4 | <2 | 0.20 | <0.1 | 10 | 37  | 1.75 | 2.15   | 0.11 | 6  | 0.53 | 381  | 2  | 0.01  | 34  | 0.06 | 9   | <5 | 19 | 0.09 | 35  | <5 | 92  |
| VC29  | 14 | 24  | 0.3 | <5 | 109 | 0.3 | <2 | 0.20 | <0.1 | 10 | 47  | 1.51 | 2.30   | 0.09 | 5  | 0.51 | 380  | <1 | <0.01 | 34  | 0.15 | 9   | <5 | 20 | 0.08 | 36  | <5 | 74  |
| VC30  | 1  | 14  | 0.2 | <5 | 53  | 0.4 | <2 | 0.22 | <0.1 | 9  | 41  | 1.95 | 2.43   | 0.07 | 4  | 0.41 | 237  | <1 | <0.01 | 25  | 0.16 | 13  | <5 | 19 | 0.09 | 43  | <5 | 65  |
| VC31  | 3  | 19  | 0.2 | <5 | 84  | 0.4 | <2 | 0.20 | <0.1 | 10 | 44  | 1.72 | 2.62   | 0.09 | 4  | 0.60 | 276  | 1  | <0.01 | 33  | 0.05 | 12  | <5 | 23 | 0.10 | 46  | <5 | 59  |
| VC32  | 6  | 17  | 0.4 | <5 | 73  | 0.3 | <2 | 0.15 | <0.1 | 8  | 35  | 1.23 | 1.98   | 0.06 | 4  | 0.35 | 381  | <1 | <0.01 | 25  | 0.08 | 8   | <5 | 15 | 0.08 | 36  | <5 | 49  |
| VC33  | 5  | 17  | 0.2 | <5 | 75  | 0.3 | <2 | 0.19 | <0.1 | 12 | 60  | 1.60 | 2.85   | 0.07 | 5  | 0.69 | 429  | <1 | <0.01 | 36  | 0.10 | 8   | <5 | 21 | 0.08 | 51  | <5 | 81  |
| VC34  | 5  | 36  | 0.1 | <5 | 81  | 0.2 | <2 | 0.25 | <0.1 | 12 | 45  | 1.13 | 3.04   | 0.21 | 5  | 0.74 | 293  | <1 | <0.01 | 25  | 0.06 | 5   | <5 | 24 | 0.12 | 65  | <5 | 64  |
| VC34* | 14 | 36  | 0.1 | <5 | 81  | 0.2 | <2 | 0.25 | <0.1 | 12 | 47  | 1.14 | 2.86   | 0.22 | 6  | 0.76 | 290  | <1 | <0.01 | 26  | 0.06 | 5   | <5 | 25 | 0.12 | 64  | <5 | 59  |
| VC35  | <1 | 24  | 0.2 | <5 | 78  | 0.4 | <2 | 0.22 | <0.1 | 19 | 194 | 1.98 | 2.89   | 0.06 | 4  | 1.16 | 243  | 2  | 0.01  | 118 | 0.07 | 13  | <5 | 13 | 0.11 | 65  | 8  | 51  |
| VC36  | <1 | 16  | 0.1 | <5 | 111 | 0.4 | <2 | 0.17 | <0.1 | 9  | 51  | 2.06 | 2.02   | 0.05 | 3  | 0.24 | 328  | <1 | <0.01 | 29  | 0.15 | 15  | <5 | 12 | 0.09 | 30  | <5 | 41  |
| VC37  | 1  | 18  | 0.3 | <5 | 118 | 0.4 | <2 | 0.21 | <0.1 | 16 | 68  | 1.86 | 3.09   | 0.07 | 4  | 0.53 | 312  | <1 | <0.01 | 49  | 0.10 | 24  | <5 | 16 | 0.08 | 46  | <5 | 65  |
| VC38  | <1 | 25  | 0.1 | <5 | 148 | 0.3 | <2 | 0.35 | 0.1  | 12 | 39  | 1.45 | 3.46   | 0.57 | 5  | 1.26 | 588  | <1 | <0.01 | 15  | 0.12 | 9   | <5 | 20 | 0.15 | 87  | <5 | 123 |
| VC39  | 1  | 21  | 0.3 | <5 | 110 | 0.2 | <2 | 0.30 | <0.1 | 12 | 86  | 1.29 | 3.13   | 0.13 | 5  | 0.94 | 268  | 3  | 0.01  | 62  | 0.03 | 20  | <5 | 30 | 0.12 | 69  | <5 | 49  |
| VC40  | <1 | 160 | 2.7 | <5 | 131 | 0.8 | <2 | 0.40 | 0.1  | 19 | 87  | 2.51 | 3.18   | 0.08 | 12 | 0.41 | 1289 | 5  | 0.02  | 847 | 0.05 | 58  | <5 | 38 | 0.13 | 37  | <5 | 61  |
| VC41  | <1 | 27  | 0.2 | <5 | 101 | 0.3 | <2 | 0.21 | <0.1 | 19 | 170 | 1.46 | 2.84   | 0.12 | 3  | 1.15 | 253  | 1  | 0.01  | 84  | 0.18 | 25  | <5 | 15 | 0.11 | 53  | <5 | 90  |
| VC42  | 1  | 23  | 0.6 | <5 | 84  | 0.4 | <2 | 0.19 | <0.1 | 24 | 165 | 1.73 | 3.47   | 0.07 | 4  | 0.92 | 332  | 3  | 0.01  | 124 | 0.07 | 25  | <5 | 19 | 0.10 | 53  | <5 | 97  |
| VC43  | <1 | 40  | 0.1 | <5 | 179 | 0.6 | <2 | 0.43 | <0.1 | 25 | 41  | 1.99 | 5.28   | 0.37 | 4  | 1.24 | 332  | 1  | 0.02  | 31  | 0.21 | 77  | <5 | 21 | 0.19 | 149 | <5 | 110 |
| VC43* | <1 | 38  | 0.2 | <5 | 169 | 0.6 | <2 | 0.40 | <0.1 | 24 | 39  | 1.90 | 5.06   | 0.35 | 4  | 1.19 | 313  | 3  | 0.02  | 31  | 0.20 | 74  | <5 | 20 | 0.18 | 143 | <5 | 106 |
| VC44  | 7  | 92  | 0.1 | 11 | 73  | 0.4 | <2 | 1.89 | 0.1  | 16 | 45  | 1.16 | 3.24   | 0.21 | 11 | 0.84 | 624  | 1  | 0.01  | 32  | 0.10 | 5   | 12 | 57 | 0.08 | 56  | 9  | 64  |
| VC44  | 1  | 32  | 0.1 | <5 | 95  | 0.5 | <2 | 0.22 | <0.1 | 24 | 65  | 1.81 | 3.58   | 0.11 | 6  | 0.86 | 284  | 3  | <0.01 | 57  | 0.06 | 43  | <5 | 25 | 0.12 | 75  | <5 | 74  |
| VC45  | 11 | 193 | 1.2 | <5 | 103 | 0.8 | 11 | 0.16 | <0.1 | 31 | 44  | 2.45 | 3.69   | 0.09 | 7  | 0.69 | 501  | 6  | <0.01 | 50  | 0.10 | 888 | <5 | 16 | 0.12 | 73  | <5 | 111 |
| VC46  | 3  | 47  | 0.4 | <5 | 97  | 0.5 | 2  | 0.22 | <0.1 | 19 | 49  | 1.70 | 3.07   | 0.10 | 7  | 0.76 | 241  | 3  | <0.01 | 56  | 0.09 | 46  | <5 | 25 | 0.11 | 63  | <5 | 64  |
| VC46* | 1  | 46  | 0.3 | <5 | 95  | 0.5 | <2 | 0.22 | <0.1 | 18 | 47  | 1.69 | 3.04</ |      |    |      |      |    |       |     |      |     |    |    |      |     |    |     |

| SAMP  | AU | CO | AG  | AS | BA | BE  | BI | CA   | CD   | CO | CR | AL   | FE   | K    | LA | MG   | MN  | MO | NA    | NI | P    | PB  | SB | SR | TI   | V  | W  | ZN |
|-------|----|----|-----|----|----|-----|----|------|------|----|----|------|------|------|----|------|-----|----|-------|----|------|-----|----|----|------|----|----|----|
| VC55  | 4  | 31 | 4.8 | <5 | 91 | 0.6 | 11 | 0.21 | <0.1 | 10 | 55 | 1.50 | 3.11 | 0.13 | 5  | 0.78 | 419 | 3  | 0.01  | 43 | 0.14 | 377 | <5 | 16 | 0.12 | 87 | <5 | 83 |
| VC55* | 1  | 30 | 4.8 | <5 | 90 | 0.6 | 15 | 0.20 | <0.1 | 10 | 55 | 1.49 | 3.02 | 0.12 | 6  | 0.76 | 410 | 2  | 0.01  | 43 | 0.14 | 379 | <5 | 16 | 0.12 | 84 | <5 | 81 |
| VC56  | 1  | 41 | 0.6 | <5 | 93 | 0.7 | <2 | 0.15 | <0.1 | 11 | 30 | 2.03 | 3.01 | 0.07 | 9  | 0.49 | 276 | 5  | <0.01 | 25 | 0.13 | 6   | <5 | 19 | 0.11 | 66 | 11 | 79 |
| VC57  | 7  | 53 | 0.2 | <5 | 67 | 0.4 | <2 | 0.21 | <0.1 | 11 | 52 | 1.26 | 3.52 | 0.25 | 6  | 0.86 | 254 | 2  | <0.01 | 32 | 0.06 | 4   | <5 | 22 | 0.09 | 76 | <5 | 51 |
| VC57* | 5  | 51 | 0.2 | <5 | 64 | 0.5 | <2 | 0.21 | <0.1 | 12 | 53 | 1.20 | 3.43 | 0.23 | 8  | 0.82 | 248 | 4  | <0.01 | 33 | 0.06 | 5   | <5 | 23 | 0.09 | 75 | <5 | 49 |



## Golden Loon Project Soil Geochemistry- 1993 Samples, January 15, 1993

Page 1

| SNMP | AD    | CD     | AG   | AF    | BA     | BI   | CA   | CD     | CO    | CR    | AL   | FE   | K    | LA    | MG   | MN      | MO   | NA   | NI    | P       | PB   | SB   | SN    | SR    | TI   | U    | V     | W     | Y     | ZB    |
|------|-------|--------|------|-------|--------|------|------|--------|-------|-------|------|------|------|-------|------|---------|------|------|-------|---------|------|------|-------|-------|------|------|-------|-------|-------|-------|
| BA1  | 10.00 | 24.00  | 0.10 | 10.00 | 220.00 | 2.50 | 0.33 | 0.50   | 14.00 | 20.00 | 2.76 | 3.50 | 0.09 | 5.00  | 0.46 | 258.00  | 1.00 | 0.01 | 14.00 | 2320.00 | 6.00 | 0.00 | 10.00 | 32.00 | 0.10 | 0.00 | 59.00 | 10.00 | 8.00  | 57.00 |
| BA2  | 5.00  | 23.00  | 0.20 | 10.00 | 115.00 | 2.50 | 0.17 | 0.50   | 13.00 | 17.00 | 4.51 | 3.44 | 0.04 | 5.00  | 0.22 | 190.00  | 1.00 | 0.01 | 8.00  | 5540.00 | 4.00 | 0.00 | 10.00 | 21.00 | 0.13 | 0.00 | 45.00 | 0.00  | 10.00 | 37.00 |
| BA3  | 10.00 | 24.00  | 0.10 | 10.00 | 160.00 | 2.50 | 0.40 | 0.50   | 13.00 | 24.00 | 2.03 | 3.30 | 0.07 | 5.00  | 0.64 | 317.00  | 1.00 | 0.01 | 10.00 | 1350.00 | 2.00 | 0.00 | 10.00 | 42.00 | 0.08 | 0.00 | 58.00 | 0.00  | 8.00  | 43.00 |
| BA4  | 5.00  | 17.00  | 0.10 | 10.00 | 145.00 | 2.50 | 0.38 | 0.50   | 13.00 | 30.00 | 2.95 | 2.92 | 0.06 | 5.00  | 0.44 | 356.00  | 2.00 | 0.01 | 16.00 | 1300.00 | 4.00 | 0.00 | 10.00 | 32.00 | 0.12 | 0.00 | 57.00 | 0.00  | 10.00 | 51.00 |
| BA5  | 10.00 | 18.00  | 0.10 | 10.00 | 165.00 | 2.50 | 0.38 | 0.50   | 14.00 | 33.00 | 2.88 | 3.18 | 0.05 | 5.00  | 0.55 | 226.00  | 1.00 | 0.01 | 16.00 | 1050.00 | 2.00 | 0.00 | 10.00 | 36.00 | 0.13 | 0.00 | 60.00 | 0.00  | 11.00 | 46.00 |
| BA6  | 5.00  | 15.00  | 0.10 | 10.00 | 115.00 | 2.50 | 0.44 | 0.50   | 12.00 | 31.00 | 1.67 | 2.60 | 0.04 | 5.00  | 0.40 | 534.00  | 0.00 | 0.01 | 14.00 | 1770.00 | 2.00 | 0.00 | 10.00 | 38.00 | 0.07 | 0.00 | 45.00 | 0.00  | 7.00  | 29.00 |
| BA7  | 5.00  | 27.00  | 0.10 | 10.00 | 180.00 | 2.50 | 0.44 | 0.50   | 16.00 | 46.00 | 2.29 | 3.28 | 0.05 | 5.00  | 0.73 | 273.00  | 1.00 | 0.01 | 22.00 | 1220.00 | 2.00 | 0.00 | 10.00 | 42.00 | 0.12 | 0.00 | 68.00 | 0.00  | 11.00 | 48.00 |
| BA8  | 10.00 | 22.00  | 0.10 | 10.00 | 165.00 | 2.50 | 0.40 | 0.50   | 15.00 | 40.00 | 2.30 | 2.94 | 0.05 | 5.00  | 0.55 | 440.00  | 0.00 | 0.01 | 18.00 | 1270.00 | 4.00 | 0.00 | 10.00 | 36.00 | 0.12 | 0.00 | 61.00 | 0.00  | 10.00 | 38.00 |
| BA9  | 10.00 | 14.00  | 0.10 | 15.00 | 100.00 | 2.50 | 0.39 | 0.50   | 12.00 | 35.00 | 2.21 | 2.69 | 0.05 | 5.00  | 0.41 | 350.00  | 0.00 | 0.01 | 14.00 | 1410.00 | 2.00 | 0.00 | 10.00 | 33.00 | 0.11 | 0.00 | 57.00 | 0.00  | 10.00 | 37.00 |
| BA10 | 5.00  | 13.00  | 0.10 | 20.00 | 95.00  | 2.50 | 0.35 | 0.50   | 13.00 | 34.00 | 2.25 | 2.91 | 0.04 | 5.00  | 0.36 | 255.00  | 0.00 | 0.01 | 12.00 | 2470.00 | 4.00 | 0.00 | 10.00 | 33.00 | 0.12 | 0.00 | 61.00 | 0.00  | 10.00 | 30.00 |
| BA11 | 5.00  | 11.00  | 0.10 | 15.00 | 75.00  | 2.50 | 0.34 | 0.50   | 12.00 | 30.00 | 1.96 | 2.87 | 0.05 | 5.00  | 0.36 | 260.00  | 0.00 | 0.01 | 11.00 | 1510.00 | 2.00 | 0.00 | 10.00 | 34.00 | 0.10 | 0.00 | 59.00 | 0.00  | 8.00  | 44.00 |
| BA12 | 30.00 | 14.00  | 0.10 | 15.00 | 95.00  | 2.50 | 0.44 | 0.50   | 13.00 | 31.00 | 1.44 | 2.78 | 0.04 | 5.00  | 0.50 | 223.00  | 0.00 | 0.01 | 16.00 | 1000.00 | 0.00 | 0.00 | 10.00 | 41.00 | 0.09 | 0.00 | 56.00 | 0.00  | 8.00  | 25.00 |
| BA13 | 10.00 | 15.00  | 0.10 | 10.00 | 55.00  | 2.50 | 0.48 | 0.50   | 11.00 | 28.00 | 1.00 | 2.79 | 0.03 | 5.00  | 0.46 | 205.00  | 0.00 | 0.01 | 10.00 | 910.00  | 0.00 | 0.00 | 10.00 | 40.00 | 0.08 | 0.00 | 57.00 | 0.00  | 9.00  | 42.00 |
| BA14 | 15.00 | 21.00  | 0.10 | 15.00 | 100.00 | 2.50 | 0.51 | 0.50   | 13.00 | 35.00 | 1.54 | 3.07 | 0.07 | 5.00  | 0.57 | 364.00  | 0.00 | 0.01 | 14.00 | 1430.00 | 2.00 | 0.00 | 10.00 | 44.00 | 0.10 | 0.00 | 64.00 | 0.00  | 9.00  | 42.00 |
| BA15 | 5.00  | 12.00  | 0.10 | 15.00 | 65.00  | 2.50 | 0.38 | 0.50   | 13.00 | 34.00 | 1.78 | 3.00 | 0.04 | 5.00  | 0.44 | 197.00  | 0.00 | 0.01 | 16.00 | 1610.00 | 0.00 | 0.00 | 10.00 | 35.00 | 0.09 | 0.00 | 61.00 | 0.00  | 8.00  | 37.00 |
| BA16 | 5.00  | 7.00   | 0.10 | 10.00 | 65.00  | 2.50 | 0.35 | 0.50   | 10.00 | 26.00 | 1.63 | 2.49 | 0.03 | 5.00  | 0.37 | 381.00  | 0.00 | 0.01 | 10.00 | 2180.00 | 0.00 | 0.00 | 10.00 | 34.00 | 0.08 | 0.00 | 50.00 | 0.00  | 6.00  | 59.00 |
| BA17 | 10.00 | 26.00  | 0.10 | 15.00 | 150.00 | 2.50 | 0.48 | 0.50   | 17.00 | 48.00 | 2.16 | 3.41 | 0.03 | 5.00  | 0.65 | 250.00  | 1.00 | 0.01 | 24.00 | 790.00  | 2.00 | 0.00 | 10.00 | 43.00 | 0.12 | 0.00 | 81.00 | 0.00  | 10.00 | 56.00 |
| BA18 | 2.50  | 11.00  | 0.10 | 10.00 | 105.00 | 0.00 | 0.41 | 0.50   | 10.00 | 28.00 | 1.73 | 2.46 | 0.04 | 5.00  | 0.45 | 253.00  | 0.00 | 0.01 | 15.00 | 1420.00 | 0.00 | 0.00 | 10.00 | 38.00 | 0.08 | 0.00 | 49.00 | 0.00  | 8.00  | 57.00 |
| BA19 | 10.00 | 81.00  | 0.10 | 10.00 | 385.00 | 2.50 | 0.84 | 0.50   | 13.00 | 38.00 | 1.82 | 2.71 | 0.03 | 5.00  | 0.53 | 408.00  | 0.00 | 0.01 | 14.00 | 240.00  | 2.00 | 0.00 | 10.00 | 69.00 | 0.10 | 0.00 | 56.00 | 0.00  | 14.00 | 33.00 |
| BA20 | 10.00 | 130.00 | 0.40 | 15.00 | 355.00 | 2.50 | 1.15 | 0.50   | 12.00 | 28.00 | 1.81 | 2.57 | 0.03 | 10.00 | 0.28 | 614.00  | 1.00 | 0.02 | 19.00 | 550.00  | 2.00 | 0.00 | 10.00 | 73.00 | 0.09 | 0.00 | 54.00 | 0.00  | 20.00 | 41.00 |
| BA21 | 15.00 | 44.00  | 0.10 | 15.00 | 500.00 | 2.50 | 0.85 | 0.50   | 13.00 | 36.00 | 2.25 | 3.09 | 0.05 | 10.00 | 0.49 | 192.00  | 1.00 | 0.01 | 19.00 | 410.00  | 2.00 | 0.00 | 10.00 | 71.00 | 0.10 | 0.00 | 54.00 | 0.00  | 15.00 | 43.00 |
| BA22 | 15.00 | 96.00  | 0.10 | 10.00 | 450.00 | 2.50 | 0.69 | 0.50   | 11.00 | 32.00 | 1.52 | 2.39 | 0.04 | 10.00 | 0.46 | 562.00  | 0.00 | 0.01 | 12.00 | 410.00  | 2.00 | 0.00 | 10.00 | 64.00 | 0.06 | 0.00 | 40.00 | 10.00 | 6.00  | 36.00 |
| BA23 | 10.00 | 13.00  | 0.10 | 10.00 | 325.00 | 2.50 | 0.36 | 0.50   | 10.00 | 25.00 | 1.45 | 2.27 | 0.04 | 5.00  | 0.47 | 221.00  | 0.00 | 0.01 | 10.00 | 1100.00 | 0.00 | 0.00 | 10.00 | 44.00 | 0.16 | 0.00 | 57.00 | 0.00  | 11.00 | 18.00 |
| BA24 | 2.50  | 6.00   | 0.10 | 5.00  | 220.00 | 0.00 | 0.20 | 0.50   | 10.00 | 25.00 | 4.70 | 3.47 | 0.02 | 5.00  | 0.15 | 81.00   | 1.00 | 0.01 | 7.00  | 4000.00 | 2.00 | 0.00 | 10.00 | 24.00 | 0.13 | 0.00 | 42.00 | 0.00  | 13.00 | 30.00 |
| BA25 | 2.50  | 16.00  | 0.10 | 5.00  | 295.00 | 0.00 | 0.54 | 0.50   | 11.00 | 28.00 | 3.67 | 2.66 | 0.04 | 5.00  | 0.17 | 122.00  | 0.00 | 0.02 | 9.00  | 1390.00 | 2.00 | 0.00 | 10.00 | 41.00 | 0.07 | 0.00 | 47.00 | 0.00  | 6.00  | 33.00 |
| BA26 | 10.00 | 8.00   | 0.10 | 10.00 | 260.00 | 2.50 | 0.37 | 0.50   | 11.00 | 24.00 | 2.31 | 2.77 | 0.05 | 5.00  | 0.44 | 203.00  | 0.00 | 0.01 | 9.00  | 2640.00 | 0.00 | 0.00 | 10.00 | 50.00 | 0.06 | 0.00 | 48.00 | 0.00  | 6.00  | 30.00 |
| BA27 | 5.00  | 13.00  | 0.10 | 10.00 | 480.00 | 2.50 | 0.38 | 0.50   | 10.00 | 27.00 | 1.17 | 2.65 | 0.04 | 5.00  | 0.44 | 172.00  | 0.00 | 0.01 | 8.00  | 930.00  | 0.00 | 0.00 | 10.00 | 22.00 | 0.16 | 0.00 | 38.00 | 0.00  | 12.00 | 27.00 |
| BA28 | 5.00  | 12.00  | 0.60 | 5.00  | 260.00 | 2.50 | 0.28 | 0.50   | 11.00 | 14.00 | 4.14 | 2.73 | 0.03 | 5.00  | 0.14 | 198.00  | 1.00 | 0.01 | 5.00  | 6310.00 | 4.00 | 0.00 | 10.00 | 24.00 | 0.13 | 0.00 | 49.00 | 0.00  | 9.00  | 50.00 |
| BA29 | 2.50  | 13.00  | 0.20 | 5.00  | 255.00 | 0.00 | 0.24 | 0.50   | 15.00 | 24.00 | 2.62 | 2.85 | 0.06 | 5.00  | 0.27 | 303.00  | 1.00 | 0.01 | 11.00 | 3400.00 | 4.00 | 0.00 | 10.00 | 24.00 | 0.11 | 0.00 | 48.00 | 0.00  | 9.00  | 45.00 |
| BA30 | 5.00  | 12.00  | 0.40 | 20.00 | 330.00 | 2.50 | 0.40 | 0.50   | 13.00 | 26.00 | 2.59 | 3.28 | 0.05 | 5.00  | 0.33 | 257.00  | 0.00 | 0.01 | 7.00  | 4920.00 | 6.00 | 0.00 | 10.00 | 20.00 | 0.11 | 0.00 | 34.00 | 0.00  | 10.00 | 58.00 |
| BS1  | 2.50  | 15.00  | 0.40 | 5.00  | 145.00 | 0.00 | 0.23 | 0.50   | 10.00 | 15.00 | 2.20 | 2.10 | 0.04 | 5.00  | 0.21 | 501.00  | 0.00 | 0.01 | 6.00  | 2330.00 | 4.00 | 0.00 | 10.00 | 29.00 | 0.12 | 0.00 | 54.00 | 0.00  | 10.00 | 54.00 |
| BS2  | 2.50  | 25.00  | 0.10 | 15.00 | 175.00 | 0.00 | 0.34 | 0.50   | 14.00 | 28.00 | 1.86 | 3.06 | 0.08 | 5.00  | 0.48 | 600.00  | 0.00 | 0.01 | 12.00 | 1010.00 | 6.00 | 0.00 | 10.00 | 51.00 | 0.05 | 0.00 | 40.00 | 0.00  | 7.00  | 45.00 |
| BS3  | 5.00  | 69.00  | 0.10 | 15.00 | 275.00 | 0.00 | 0.42 | 0.50   | 13.00 | 22.00 | 1.47 | 3.79 | 0.09 | 5.00  | 0.57 | 427.00  | 4.00 | 0.01 | 11.00 | 1030.00 | 4.00 | 0.00 | 10.00 | 41.00 | 0.07 | 0.00 | 44.00 | 0.00  | 7.00  | 32.00 |
| BS4  | 15.00 | 19.00  | 0.10 | 15.00 | 275.00 | 2.50 | 0.35 | 0.50   | 11.00 | 15.00 | 2.14 | 2.99 | 0.07 | 5.00  | 0.41 | 217.00  | 1.00 | 0.01 | 11.00 | 1430.00 | 2.00 | 0.00 | 10.00 | 51.00 | 0.05 | 0.00 | 47.00 | 0.00  | 8.00  | 37.00 |
| BS5  | 10.00 | 13.00  | 0.10 | 10.00 | 170.00 | 2.50 | 0.40 | 0.50   | 11.00 | 18.00 | 1.43 | 2.41 | 0.05 | 5.00  | 0.45 | 582.00  | 0.00 | 0.01 | 8.00  | 1050.00 | 2.00 | 0.00 | 10.00 | 38.00 | 0.07 | 0.00 | 46.00 | 0.00  | 8.00  | 52.00 |
| BS6  | 15.00 | 19.00  | 0.20 | 10.00 | 230.00 | 2.50 | 0.70 | 0.50   | 11.00 | 21.00 | 1.52 | 2.49 | 0.13 | 5.00  | 0.48 | 1275.00 | 0.00 | 0.01 | 11.00 | 1420.00 | 2.00 | 0.00 | 10.00 | 18.00 | 0.10 | 0.00 | 35.00 | 0.00  | 7.00  | 27.00 |
| BS7  | 2.50  | 5.00   | 0.10 | 5.00  | 70.00  | 0.00 | 0.22 | 0.50   | 5.00  | 11.00 | 0.69 | 1.36 | 0.04 | 5.00  | 0.13 | 282.00  | 0.00 | 0.01 | 3.00  | 500.00  | 2.00 | 0.00 | 10.00 | 29.00 | 0.13 | 0.00 | 51.00 | 0.00  | 9.00  | 40.00 |
| BS8  | 5.00  | 13.00  | 0.20 | 10.00 | 155.00 | 2.50 | 0.35 | 0.50   | 10.00 | 17.00 | 1.91 | 2.56 | 0.06 | 5.00  | 0.23 | 323.00  | 1.00 | 0.01 | 9.00  | 1540.00 | 4.00 | 0.00 | 10.00 | 27.00 | 0.12 | 0.00 | 53.00 | 0.00  | 9.00  | 50.00 |
| BS9  | 2.50  | 21.00  | 0.40 | 5.00  | 105.00 | 0.00 | 0.27 | 0.50   | 16.00 | 33.00 | 2.39 | 3.12 | 0.05 | 5.00  | 0.34 | 196.00  | 2.00 | 0.01 | 19.00 | 2670.00 | 4.00 | 0.00 | 10.00 | 27.00 | 0.12 | 0.00 | 53.00 | 0.00  | 7.00  | 38.00 |
| BS10 | 10.00 | 18.00  | 0.10 | 5.00  | 165.00 | 1.00 | 0.50 | 1.00   | 11.00 | 26.00 | 1.44 | 2.63 | 0.07 | 5.00  | 0.34 | 626.00  | 0.00 | 0.01 | 10.00 | 1800.00 | 2.00 | 0.00 | 10.00 | 41.00 | 0.09 | 0.00 | 51.00 | 0.00  | 7.00  | 38.00 |
| BS11 | 20.00 | 7.00   | 0.10 | 10.00 | 95.00  | 2.50 | 0.38 | 0.50</ |       |       |      |      |      |       |      |         |      |      |       |         |      |      |       |       |      |      |       |       |       |       |

Golden Loon Project Soil Geochemistry- 1993 Samples, January 15, 1993

Page 2

| SAMP | AD    | CU    | AG   | AS    | BA     | BI   | CA   | CD   | CO    | CR    | AL   | FE   | K    | LA    | HG   | MN      | MO   | NA   | NI    | P       | PB   | SB   | SH    | SR    | TI   | U    | V     | W     | Y     | ZN    |
|------|-------|-------|------|-------|--------|------|------|------|-------|-------|------|------|------|-------|------|---------|------|------|-------|---------|------|------|-------|-------|------|------|-------|-------|-------|-------|
| BB30 | 10.00 | 24.00 | 0.10 | 10.00 | 395.00 | 2.50 | 0.42 | 0.50 | 15.00 | 27.00 | 2.10 | 3.33 | 0.08 | 5.00  | 0.53 | 247.00  | 1.00 | 0.03 | 9.00  | 3160.00 | 0.00 | 0.00 | 10.00 | 46.00 | 0.07 | 0.00 | 46.00 | 10.00 | 5.00  | 42.00 |
| BC1  | 20.00 | 25.00 | 0.10 | 10.00 | 80.00  | 2.50 | 0.61 | 0.50 | 13.00 | 27.00 | 1.30 | 3.26 | 0.12 | 5.00  | 0.76 | 290.00  | 0.00 | 0.01 | 12.00 | 1240.00 | 2.00 | 0.00 | 10.00 | 52.00 | 0.11 | 0.00 | 64.00 | 0.00  | 11.00 | 33.00 |
| BC2  | 20.00 | 33.00 | 0.10 | 15.00 | 180.00 | 2.50 | 0.34 | 0.50 | 13.00 | 21.00 | 1.47 | 4.46 | 0.09 | 5.00  | 0.41 | 316.00  | 3.00 | 0.01 | 8.00  | 350.00  | 4.00 | 0.00 | 10.00 | 33.00 | 0.05 | 0.00 | 58.00 | 0.00  | 4.00  | 63.00 |
| BC3  | 5.00  | 21.00 | 0.10 | 10.00 | 140.00 | 2.50 | 0.32 | 0.50 | 14.00 | 39.00 | 1.56 | 2.85 | 0.12 | 5.00  | 0.59 | 374.00  | 1.00 | 0.01 | 21.00 | 850.00  | 4.00 | 0.00 | 10.00 | 25.00 | 0.11 | 0.00 | 51.00 | 0.00  | 9.00  | 50.00 |
| BC4  | 2.50  | 13.00 | 0.10 | 10.00 | 185.00 | 0.00 | 0.47 | 0.50 | 11.00 | 28.00 | 1.57 | 2.52 | 0.08 | 5.00  | 0.44 | 572.00  | 0.00 | 0.01 | 9.00  | 1690.00 | 2.00 | 0.00 | 10.00 | 43.00 | 0.10 | 0.00 | 48.00 | 0.00  | 8.00  | 46.00 |
| BC5  | 2.50  | 11.00 | 0.10 | 10.00 | 100.00 | 0.00 | 0.36 | 0.50 | 12.00 | 29.00 | 1.98 | 2.58 | 0.05 | 5.00  | 0.39 | 277.00  | 0.00 | 0.01 | 13.00 | 2030.00 | 0.00 | 0.00 | 10.00 | 35.00 | 0.10 | 0.00 | 47.00 | 0.00  | 8.00  | 46.00 |
| BC6  | 15.00 | 10.00 | 0.20 | 10.00 | 120.00 | 2.50 | 0.39 | 0.50 | 10.00 | 22.00 | 2.07 | 2.62 | 0.06 | 5.00  | 0.32 | 187.00  | 0.00 | 0.01 | 13.00 | 1910.00 | 0.00 | 0.00 | 10.00 | 41.00 | 0.11 | 0.00 | 53.00 | 0.00  | 9.00  | 27.00 |
| BC7  | 5.00  | 11.00 | 0.10 | 10.00 | 105.00 | 2.50 | 0.42 | 0.50 | 11.00 | 31.00 | 1.73 | 2.66 | 0.08 | 5.00  | 0.41 | 173.00  | 0.00 | 0.01 | 13.00 | 1160.00 | 0.00 | 0.00 | 10.00 | 45.00 | 0.11 | 0.00 | 46.00 | 0.00  | 9.00  | 50.00 |
| BC8  | 2.50  | 14.00 | 0.10 | 10.00 | 235.00 | 0.00 | 0.49 | 0.50 | 11.00 | 28.00 | 1.88 | 2.49 | 0.10 | 5.00  | 0.46 | 236.00  | 0.00 | 0.01 | 15.00 | 460.00  | 1.00 | 0.00 | 10.00 | 50.00 | 0.13 | 0.00 | 40.00 | 0.00  | 15.00 | 33.00 |
| BC9  | 15.00 | 19.00 | 0.10 | 5.00  | 210.00 | 2.50 | 0.60 | 0.50 | 11.00 | 21.00 | 2.52 | 2.34 | 0.14 | 5.00  | 0.42 | 271.00  | 0.00 | 0.02 | 15.00 | 660.00  | 1.00 | 0.00 | 10.00 | 56.00 | 0.13 | 0.00 | 22.00 | 0.00  | 10.00 | 47.00 |
| BC10 | 5.00  | 8.00  | 0.20 | 5.00  | 255.00 | 2.50 | 0.83 | 0.50 | 6.00  | 8.00  | 2.73 | 1.67 | 0.06 | 5.00  | 0.14 | 373.00  | 0.00 | 0.02 | 13.00 | 2920.00 | 0.00 | 0.00 | 10.00 | 33.00 | 0.12 | 0.00 | 44.00 | 0.00  | 11.00 | 45.00 |
| BC11 | 35.00 | 14.00 | 0.20 | 10.00 | 115.00 | 2.50 | 0.34 | 0.50 | 11.00 | 22.00 | 3.45 | 2.70 | 0.05 | 5.00  | 0.32 | 192.00  | 0.00 | 0.02 | 9.00  | 1310.00 | 0.00 | 0.00 | 10.00 | 38.00 | 0.10 | 0.00 | 47.00 | 0.00  | 8.00  | 45.00 |
| BC12 | 20.00 | 10.00 | 0.10 | 10.00 | 120.00 | 2.50 | 0.42 | 0.50 | 9.00  | 22.00 | 1.46 | 2.27 | 0.07 | 5.00  | 0.32 | 328.00  | 0.00 | 0.02 | 15.00 | 2120.00 | 0.00 | 0.00 | 10.00 | 37.00 | 0.11 | 0.00 | 47.00 | 0.00  | 8.00  | 63.00 |
| BC13 | 10.00 | 18.00 | 0.20 | 10.00 | 200.00 | 2.50 | 0.40 | 0.50 | 11.00 | 25.00 | 2.04 | 2.52 | 0.07 | 5.00  | 0.42 | 272.00  | 0.00 | 0.02 | 15.00 | 1860.00 | 0.00 | 0.00 | 10.00 | 38.00 | 0.11 | 0.00 | 69.00 | 0.00  | 8.00  | 43.00 |
| BC14 | 15.00 | 13.00 | 0.10 | 15.00 | 145.00 | 2.50 | 0.35 | 0.50 | 15.00 | 33.00 | 2.22 | 3.41 | 0.05 | 5.00  | 0.47 | 316.00  | 0.00 | 0.01 | 13.00 | 1140.00 | 0.00 | 0.00 | 10.00 | 45.00 | 0.12 | 0.00 | 76.00 | 0.00  | 9.00  | 34.00 |
| BC15 | 10.00 | 16.00 | 0.10 | 10.00 | 120.00 | 2.50 | 0.39 | 0.50 | 13.00 | 37.00 | 1.97 | 3.74 | 0.05 | 5.00  | 0.59 | 214.00  | 1.00 | 0.01 | 14.00 | 1040.00 | 0.00 | 0.00 | 10.00 | 85.00 | 0.02 | 5.00 | 57.00 | 0.00  | 24.00 | 65.00 |
| BC16 | 15.00 | 99.00 | 0.10 | 15.00 | 305.00 | 2.50 | 0.92 | 0.50 | 17.00 | 31.00 | 2.10 | 3.95 | 0.13 | 10.00 | 1.09 | 1099.00 | 2.00 | 0.01 | 16.00 | 920.00  | 0.00 | 0.00 | 10.00 | 38.00 | 0.11 | 0.00 | 55.00 | 0.00  | 9.00  | 36.00 |
| BC17 | 2.50  | 11.00 | 0.10 | 15.00 | 145.00 | 0.00 | 0.37 | 0.50 | 12.00 | 32.00 | 2.43 | 3.01 | 0.05 | 5.00  | 0.45 | 181.00  | 0.00 | 0.01 | 11.00 | 1540.00 | 0.00 | 0.00 | 10.00 | 56.00 | 0.06 | 0.00 | 51.00 | 0.00  | 6.00  | 34.00 |
| BC18 | 5.00  | 13.00 | 0.10 | 15.00 | 185.00 | 2.50 | 0.34 | 0.50 | 11.00 | 28.00 | 1.70 | 3.14 | 0.04 | 5.00  | 0.59 | 242.00  | 0.00 | 0.01 | 14.00 | 1650.00 | 0.00 | 0.00 | 10.00 | 36.00 | 0.09 | 0.00 | 54.00 | 0.00  | 7.00  | 36.00 |
| BC19 | 5.00  | 10.00 | 0.10 | 15.00 | 115.00 | 2.50 | 0.32 | 0.50 | 11.00 | 27.00 | 1.78 | 2.85 | 0.04 | 5.00  | 0.48 | 210.00  | 0.00 | 0.01 | 13.00 | 1780.00 | 0.00 | 0.00 | 10.00 | 43.00 | 0.10 | 0.00 | 62.00 | 0.00  | 8.00  | 27.00 |
| BC20 | 30.00 | 18.00 | 0.10 | 15.00 | 120.00 | 2.50 | 0.41 | 0.50 | 11.00 | 33.00 | 1.81 | 3.21 | 0.05 | 5.00  | 0.33 | 188.00  | 0.00 | 0.02 | 14.00 | 570.00  | 0.00 | 0.00 | 10.00 | 37.00 | 0.12 | 0.00 | 50.00 | 0.00  | 9.00  | 29.00 |
| BC21 | 2.50  | 11.00 | 0.10 | 10.00 | 130.00 | 0.00 | 0.39 | 0.50 | 10.00 | 32.00 | 2.43 | 3.01 | 0.05 | 5.00  | 0.49 | 317.00  | 0.00 | 0.01 | 18.00 | 2030.00 | 0.00 | 0.00 | 10.00 | 46.00 | 0.11 | 0.00 | 51.00 | 0.00  | 8.00  | 34.00 |
| BC22 | 10.00 | 10.00 | 0.10 | 15.00 | 235.00 | 2.50 | 0.45 | 0.50 | 13.00 | 33.00 | 2.19 | 2.62 | 0.05 | 5.00  | 0.43 | 234.00  | 0.00 | 0.01 | 16.00 | 1690.00 | 0.00 | 0.00 | 10.00 | 39.00 | 0.10 | 0.00 | 48.00 | 0.00  | 8.00  | 48.00 |
| BC23 | 2.50  | 15.00 | 0.10 | 10.00 | 360.00 | 0.00 | 0.36 | 0.50 | 11.00 | 34.00 | 2.20 | 2.81 | 0.06 | 5.00  | 0.38 | 309.00  | 0.00 | 0.01 | 16.00 | 2720.00 | 0.00 | 0.00 | 10.00 | 38.00 | 0.09 | 0.00 | 57.00 | 0.00  | 7.00  | 44.00 |
| BC24 | 25.00 | 10.00 | 0.10 | 10.00 | 145.00 | 2.50 | 0.43 | 0.50 | 12.00 | 34.00 | 2.40 | 2.55 | 0.06 | 5.00  | 0.51 | 204.00  | 0.00 | 0.01 | 19.00 | 1700.00 | 0.00 | 0.00 | 10.00 | 45.00 | 0.11 | 0.00 | 47.00 | 0.00  | 9.00  | 42.00 |
| BC25 | 2.50  | 11.00 | 0.10 | 10.00 | 120.00 | 0.00 | 0.45 | 0.50 | 14.00 | 32.00 | 2.40 | 2.55 | 0.06 | 5.00  | 0.53 | 217.00  | 1.00 | 0.02 | 34.00 | 420.00  | 1.00 | 0.00 | 10.00 | 64.00 | 0.15 | 5.00 | 81.00 | 0.00  | 25.00 | 40.00 |
| BC26 | 2.50  | 32.00 | 0.10 | 15.00 | 305.00 | 0.00 | 0.38 | 0.50 | 11.00 | 27.00 | 2.10 | 3.12 | 0.05 | 5.00  | 0.51 | 184.00  | 0.00 | 0.01 | 13.00 | 2370.00 | 0.00 | 0.00 | 10.00 | 45.00 | 0.08 | 0.00 | 58.00 | 0.00  | 6.00  | 26.00 |
| BC27 | 2.50  | 11.00 | 0.10 | 15.00 | 115.00 | 0.00 | 0.46 | 0.50 | 11.00 | 36.00 | 2.04 | 2.94 | 0.06 | 5.00  | 0.60 | 228.00  | 0.00 | 0.01 | 15.00 | 860.00  | 0.00 | 0.00 | 10.00 | 49.00 | 0.11 | 0.00 | 63.00 | 0.00  | 9.00  | 33.00 |
| BC28 | 2.50  | 15.00 | 0.10 | 15.00 | 110.00 | 0.00 | 0.46 | 0.50 | 11.00 | 36.00 | 2.04 | 2.94 | 0.06 | 5.00  | 0.53 | 317.00  | 0.00 | 0.01 | 11.00 | 1000.00 | 0.00 | 0.00 | 10.00 | 51.00 | 0.06 | 0.00 | 55.00 | 0.00  | 11.00 | 24.00 |
| BC29 | 10.00 | 36.00 | 0.10 | 15.00 | 285.00 | 2.50 | 0.59 | 0.50 | 11.00 | 30.00 | 1.03 | 3.01 | 0.05 | 5.00  | 0.53 | 380.00  | 1.00 | 0.01 | 12.00 | 770.00  | 0.00 | 0.00 | 10.00 | 61.00 | 0.09 | 0.00 | 53.00 | 0.00  | 9.00  | 26.00 |
| BC30 | 30.00 | 22.00 | 0.10 | 10.00 | 235.00 | 2.50 | 0.68 | 0.50 | 11.00 | 34.00 | 1.50 | 2.69 | 0.07 | 5.00  | 0.36 | 256.00  | 0.00 | 0.01 | 24.00 | 2550.00 | 2.00 | 0.00 | 10.00 | 31.00 | 0.12 | 0.00 | 44.00 | 0.00  | 9.00  | 50.00 |
| BD1  | 5.00  | 10.00 | 0.20 | 15.00 | 180.00 | 2.50 | 0.36 | 0.50 | 12.00 | 30.00 | 2.83 | 2.47 | 0.08 | 5.00  | 0.52 | 295.00  | 0.00 | 0.02 | 19.00 | 1320.00 | 8.00 | 0.00 | 10.00 | 40.00 | 0.12 | 0.00 | 49.00 | 0.00  | 9.00  | 57.00 |
| BD2  | 10.00 | 16.00 | 0.10 | 10.00 | 180.00 | 2.50 | 0.41 | 0.50 | 12.00 | 29.00 | 1.92 | 1.70 | 0.07 | 5.00  | 0.52 | 376.00  | 0.00 | 0.01 | 12.00 | 450.00  | 2.00 | 0.00 | 10.00 | 45.00 | 0.13 | 0.00 | 50.00 | 0.00  | 10.00 | 38.00 |
| BD3  | 5.00  | 10.00 | 0.10 | 10.00 | 120.00 | 2.50 | 0.44 | 0.50 | 9.00  | 26.00 | 1.59 | 2.45 | 0.12 | 5.00  | 0.52 | 376.00  | 0.00 | 0.01 | 11.00 | 1000.00 | 0.00 | 0.00 | 10.00 | 36.00 | 0.11 | 0.00 | 47.00 | 0.00  | 8.00  | 33.00 |
| BD4  | 2.50  | 5.00  | 0.10 | 10.00 | 130.00 | 0.00 | 0.40 | 0.50 | 9.00  | 20.00 | 1.23 | 2.03 | 0.09 | 5.00  | 0.30 | 436.00  | 0.00 | 0.01 | 16.00 | 680.00  | 0.00 | 0.00 | 10.00 | 55.00 | 0.14 | 0.00 | 66.00 | 0.00  | 12.00 | 40.00 |
| BD5  | 10.00 | 21.00 | 0.10 | 15.00 | 65.00  | 2.50 | 0.59 | 0.50 | 13.00 | 39.00 | 1.53 | 2.98 | 0.02 | 5.00  | 0.50 | 352.00  | 0.00 | 0.01 | 13.00 | 540.00  | 2.00 | 0.00 | 10.00 | 48.00 | 0.11 | 0.00 | 50.00 | 0.00  | 9.00  | 29.00 |
| BD6  | 5.00  | 15.00 | 0.10 | 10.00 | 75.00  | 2.50 | 0.52 | 0.50 | 11.00 | 31.00 | 1.23 | 2.37 | 0.10 | 5.00  | 0.50 | 352.00  | 0.00 | 0.01 | 14.00 | 690.00  | 0.00 | 0.00 | 10.00 | 44.00 | 0.10 | 0.00 | 53.00 | 0.00  | 9.00  | 30.00 |
| BD7  | 10.00 | 19.00 | 0.10 | 15.00 | 70.00  | 2.50 | 0.46 | 0.50 | 11.00 | 31.00 | 1.26 | 2.61 | 0.06 | 5.00  | 0.56 | 208.00  | 0.00 | 0.01 | 14.00 | 690.00  | 0.00 | 0.00 | 10.00 | 44.00 | 0.10 | 0.00 | 53.00 | 0.00  | 9.00  | 46.00 |
| BD8  | 5.00  | 11.00 | 0.20 | 15.00 | 125.00 | 2.50 | 0.38 | 0.50 | 14.00 | 26.00 | 2.06 | 2.45 | 0.07 | 5.00  | 0.43 | 581.00  | 0.00 | 0.01 | 16.00 | 1460.00 | 0.00 | 0.00 | 10.00 | 32.00 | 0.11 | 0.00 | 49.00 | 0.00  | 9.00  | 52.00 |
| BD9  | 25.00 | 84.00 | 0.10 | 15.00 | 145.00 | 2.50 | 0.72 | 0.50 | 18.00 | 40.00 | 1.78 | 3.75 | 0.32 | 5.00  | 1.05 | 664.00  | 0.00 | 0.01 | 16.00 | 890.00  | 4.00 | 0.00 | 10.00 | 61.00 | 0.14 | 0.00 | 75.00 | 0.00  | 15.00 | 32.00 |
| BD10 | 10.00 | 10.00 | 0.10 | 10.00 | 145.00 | 2.50 |      |      |       |       |      |      |      |       |      |         |      |      |       |         |      |      |       |       |      |      |       |       |       |       |

Golden Loon Project Soil Geochemistry- 1993 Samples, January 15, 1993

Page 3

| SAMP | AD    | CU    | AG   | AS    | BA     | BI   | CA   | CD   | CO    | CR    | AL   | FE   | K    | LA    | MG          | MN     | MO   | NA    | NI      | P       | FB   | SB    | SN    | SR     | TI   | U     | V     | W     | Y     | ZN    |
|------|-------|-------|------|-------|--------|------|------|------|-------|-------|------|------|------|-------|-------------|--------|------|-------|---------|---------|------|-------|-------|--------|------|-------|-------|-------|-------|-------|
| BB30 | 10.00 | 21.00 | 0.10 | 5.00  | 335.00 | 2.50 | 0.36 | 0.50 | 12.00 | 31.00 | 1.67 | 3.02 | 0.05 | 5.00  | 0.50        | 253.00 | 1.00 | 0.01  | 10.00   | 1020.00 | 0.00 | 0.00  | 10.00 | 47.00  | 0.08 | 0.00  | 57.00 | 0.00  | 8.00  | 31.00 |
| BB1  | 15.00 | 23.00 | 0.10 | 5.00  | 115.00 | 2.50 | 0.50 | 0.50 | 14.00 | 31.00 | 1.48 | 2.98 | 0.11 | 5.00  | 0.63        | 231.00 | 0.00 | 0.01  | 17.00   | 500.00  | 0.00 | 5.00  | 10.00 | 47.00  | 0.12 | 0.00  | 58.00 | 0.00  | 11.00 | 48.00 |
| BB2  | 2.50  | 18.00 | 0.20 | 0.00  | 335.00 | 0.00 | 0.43 | 0.50 | 15.00 | 33.00 | 2.48 | 2.88 | 0.14 | 5.00  | 0.51        | 363.00 | 0.00 | 0.02  | 39.00   | 1560.00 | 4.00 | 0.00  | 10.00 | 39.00  | 0.13 | 0.00  | 49.00 | 0.00  | 10.00 | 54.00 |
| BB3  | 30.00 | 19.00 | 0.10 | 2.50  | 210.00 | 0.00 | 0.54 | 0.50 | 14.00 | 28.00 | 2.19 | 2.93 | 0.10 | 5.00  | 0.51        | 212.00 | 0.00 | 0.02  | 21.00   | 800.00  | 2.00 | 0.00  | 10.00 | 47.00  | 0.13 | 0.00  | 57.00 | 0.00  | 11.00 | 49.00 |
| BB4  | 20.00 | 11.00 | 0.10 | 2.50  | 155.00 | 0.00 | 0.36 | 0.50 | 11.00 | 22.00 | 2.55 | 2.43 | 0.07 | 5.00  | 0.34        | 165.00 | 0.00 | 0.02  | 18.00   | 2100.00 | 4.00 | 0.00  | 10.00 | 33.00  | 0.12 | 0.00  | 48.00 | 0.00  | 10.00 | 43.00 |
| BB5  | 20.00 | 12.00 | 0.10 | 2.50  | 180.00 | 0.00 | 0.54 | 0.50 | 12.00 | 32.00 | 2.07 | 2.54 | 0.10 | 5.00  | 0.56        | 271.00 | 0.00 | 0.02  | 21.00   | 1290.00 | 2.00 | 0.00  | 10.00 | 52.00  | 0.13 | 0.00  | 40.00 | 0.00  | 10.00 | 40.00 |
| BB6  | 30.00 | 14.00 | 0.10 | 2.50  | 135.00 | 0.00 | 0.43 | 0.50 | 12.00 | 26.00 | 1.95 | 2.64 | 0.08 | 5.00  | 0.47        | 249.00 | 0.00 | 0.01  | 17.00   | 1390.00 | 2.00 | 0.00  | 10.00 | 40.00  | 0.12 | 0.00  | 56.00 | 0.00  | 10.00 | 37.00 |
| BB7  | 10.00 | 14.00 | 0.10 | 2.50  | 120.00 | 0.00 | 0.52 | 0.50 | 13.00 | 28.00 | 1.91 | 2.85 | 0.16 | 5.00  | 0.51        | 295.00 | 0.00 | 0.01  | 16.00   | 910.00  | 6.00 | 0.00  | 10.00 | 43.00  | 0.11 | 0.00  | 56.00 | 0.00  | 9.00  | 34.00 |
| BB8  | 20.00 | 17.00 | 0.10 | 2.50  | 100.00 | 0.00 | 0.45 | 0.50 | 14.00 | 30.00 | 1.57 | 2.83 | 0.08 | 5.00  | 0.48        | 379.00 | 0.00 | 0.01  | 12.00   | 1600.00 | 2.00 | 0.00  | 10.00 | 61.00  | 0.13 | 0.00  | 62.00 | 0.00  | 12.00 | 40.00 |
| BB9  | 15.00 | 14.00 | 0.10 | 5.00  | 105.00 | 2.50 | 0.57 | 0.50 | 13.00 | 39.00 | 1.67 | 2.90 | 0.08 | 5.00  | 0.68        | 267.00 | 0.00 | 0.01  | 16.00   | 910.00  | 2.00 | 0.00  | 10.00 | 61.00  | 0.09 | 0.00  | 45.00 | 0.00  | 9.00  | 48.00 |
| BB10 | 5.00  | 10.00 | 0.10 | 2.50  | 235.00 | 0.00 | 0.55 | 0.50 | 12.00 | 35.00 | 1.85 | 2.49 | 0.07 | 5.00  | 0.44        | 518.00 | 0.00 | 0.01  | 16.00   | 2870.00 | 2.00 | 0.00  | 10.00 | 45.00  | 0.09 | 0.00  | 49.00 | 0.00  | 9.00  | 37.00 |
| BB11 | 10.00 | 10.00 | 0.10 | 2.50  | 125.00 | 0.00 | 0.43 | 0.50 | 11.00 | 39.00 | 1.65 | 2.56 | 0.05 | 5.00  | 0.46        | 202.00 | 0.00 | 0.01  | 17.00   | 1220.00 | 0.00 | 0.00  | 10.00 | 53.00  | 0.16 | 5.00  | 85.00 | 0.00  | 23.00 | 48.00 |
| BB12 | 25.00 | 94.00 | 0.10 | 5.00  | 80.00  | 2.50 | 0.74 | 0.50 | 22.00 | 52.00 | 1.99 | 4.35 | 0.40 | 10.00 | 1.11        | 481.00 | 0.00 | 0.02  | 24.00   | 780.00  | 6.00 | 0.00  | 10.00 | 60.00  | 0.12 | 5.00  | 67.00 | 0.00  | 15.00 | 42.00 |
| BB13 | 20.00 | 40.00 | 0.10 | 5.00  | 95.00  | 2.50 | 0.70 | 0.50 | 15.00 | 61.00 | 1.58 | 3.33 | 0.20 | 10.00 | 0.77        | 469.00 | 0.00 | 0.02  | 17.00   | 860.00  | 2.00 | 0.00  | 10.00 | 60.00  | 0.13 | 0.00  | 67.00 | 0.00  | 13.00 | 39.00 |
| BB14 | 2.50  | 55.00 | 0.10 | 5.00  | 95.00  | 0.00 | 0.70 | 0.50 | 16.00 | 43.00 | 1.36 | 3.40 | 0.23 | 5.00  | 0.89        | 389.00 | 0.00 | 0.01  | 22.00   | 1070.00 | 2.00 | 0.00  | 10.00 | 54.00  | 0.12 | 0.00  | 48.00 | 0.00  | 10.00 | 22.00 |
| BB15 | 10.00 | 22.00 | 0.10 | 5.00  | 55.00  | 2.50 | 0.56 | 0.50 | 10.00 | 29.00 | 0.93 | 2.40 | 0.09 | 5.00  | 0.52        | 187.00 | 0.00 | 0.01  | 12.00   | 890.00  | 0.00 | 0.00  | 10.00 | 50.00  | 0.12 | 0.00  | 67.00 | 0.00  | 12.00 | 38.00 |
| BB16 | 10.00 | 69.00 | 0.10 | 5.00  | 115.00 | 2.50 | 0.61 | 0.50 | 15.00 | 61.00 | 1.42 | 3.42 | 0.23 | 5.00  | 0.78        | 342.00 | 0.00 | 0.01  | 24.00   | 1050.00 | 2.00 | 0.00  | 10.00 | 42.00  | 0.12 | 0.00  | 60.00 | 0.00  | 11.00 | 30.00 |
| BB17 | 20.00 | 43.00 | 0.10 | 5.00  | 80.00  | 2.50 | 0.50 | 0.50 | 14.00 | 49.00 | 1.21 | 3.09 | 0.14 | 5.00  | 0.63        | 291.00 | 0.00 | 0.01  | 24.00   | 750.00  | 2.00 | 0.00  | 10.00 | 51.00  | 0.11 | 0.00  | 65.00 | 0.00  | 11.00 | 33.00 |
| BB18 | 10.00 | 29.00 | 0.10 | 5.00  | 95.00  | 2.50 | 0.63 | 0.50 | 16.00 | 45.00 | 1.27 | 3.21 | 0.14 | 5.00  | 0.76        | 392.00 | 0.00 | 0.01  | 19.00   | 1200.00 | 2.00 | 0.00  | 10.00 | 69.00  | 0.09 | 5.00  | 68.00 | 0.00  | 18.00 | 80.00 |
| BB19 | 15.00 | 73.00 | 0.10 | 5.00  | 430.00 | 2.50 | 0.75 | 0.50 | 19.00 | 48.00 | 1.94 | 4.10 | 0.10 | 10.00 | 0.801782.00 | 1.00   | 0.02 | 29.00 | 2070.00 | 0.00    | 0.00 | 10.00 | 56.00 | 0.11   | 5.00 | 63.00 | 0.00  | 13.00 | 37.00 |       |
| BB20 | 20.00 | 37.00 | 0.10 | 10.00 | 80.00  | 2.50 | 0.73 | 0.50 | 16.00 | 37.00 | 1.23 | 3.08 | 0.12 | 10.00 | 0.76        | 536.00 | 0.00 | 0.02  | 16.00   | 1220.00 | 0.00 | 0.00  | 10.00 | 56.00  | 0.13 | 0.00  | 69.00 | 0.00  | 11.00 | 35.00 |
| BB21 | 2.50  | 26.00 | 0.10 | 5.00  | 140.00 | 0.00 | 0.55 | 0.50 | 14.00 | 34.00 | 1.81 | 3.21 | 0.07 | 5.00  | 0.69        | 269.00 | 0.00 | 0.01  | 10.00   | 1650.00 | 0.00 | 0.00  | 10.00 | 56.00  | 0.09 | 0.00  | 50.00 | 0.00  | 9.00  | 26.00 |
| BB22 | 2.50  | 8.00  | 0.10 | 5.00  | 105.00 | 0.00 | 0.53 | 0.50 | 10.00 | 35.00 | 1.32 | 2.50 | 0.04 | 5.00  | 0.39        | 227.00 | 0.00 | 0.01  | 8.00    | 1540.00 | 0.00 | 0.00  | 10.00 | 47.00  | 0.09 | 0.00  | 43.00 | 0.00  | 8.00  | 30.00 |
| BB23 | 2.50  | 6.00  | 0.10 | 5.00  | 185.00 | 0.00 | 0.45 | 0.50 | 8.00  | 24.00 | 1.11 | 1.98 | 0.05 | 5.00  | 0.30        | 504.00 | 0.00 | 0.01  | 25.00   | 2340.00 | 2.00 | 0.00  | 10.00 | 43.00  | 0.10 | 0.00  | 50.00 | 0.00  | 9.00  | 71.00 |
| BB24 | 10.00 | 18.00 | 0.10 | 2.50  | 255.00 | 0.00 | 0.36 | 0.50 | 13.00 | 33.00 | 2.08 | 2.70 | 0.07 | 5.00  | 0.42        | 440.00 | 0.00 | 0.02  | 18.00   | 1000.00 | 6.00 | 0.00  | 10.00 | 86.00  | 0.13 | 0.00  | 24.00 | 0.00  | 10.00 | 80.00 |
| BB25 | 2.50  | 10.00 | 0.20 | 0.00  | 865.00 | 0.00 | 0.56 | 0.50 | 17.00 | 86.00 | 2.69 | 2.47 | 0.04 | 5.00  | 0.20        | 974.00 | 0.00 | 0.02  | 15.00   | 400.00  | 1.00 | 0.00  | 10.00 | 46.00  | 0.14 | 0.00  | 51.00 | 0.00  | 11.00 | 41.00 |
| BB26 | 2.50  | 12.00 | 0.10 | 0.00  | 250.00 | 0.00 | 0.45 | 0.50 | 12.00 | 23.00 | 2.38 | 2.41 | 0.07 | 5.00  | 0.31        | 254.00 | 1.00 | 0.02  | 16.00   | 530.00  | 2.00 | 0.00  | 10.00 | 60.00  | 0.13 | 0.50  | 55.00 | 0.00  | 11.00 | 32.00 |
| BB27 | 10.00 | 20.00 | 0.10 | 2.50  | 305.00 | 0.00 | 0.58 | 2.00 | 14.00 | 28.00 | 2.36 | 2.78 | 0.08 | 5.00  | 0.34        | 159.00 | 0.00 | 0.02  | 18.00   | 860.00  | 2.00 | 0.00  | 10.00 | 51.00  | 0.13 | 0.00  | 67.00 | 0.00  | 12.00 | 46.00 |
| BB28 | 40.00 | 22.00 | 0.10 | 5.00  | 145.00 | 2.50 | 0.55 | 1.00 | 17.00 | 43.00 | 2.17 | 3.30 | 0.11 | 5.00  | 0.76        | 361.00 | 0.00 | 0.02  | 19.00   | 2550.00 | 0.00 | 0.00  | 10.00 | 36.00  | 0.10 | 0.00  | 52.00 | 0.00  | 8.00  | 68.00 |
| BB29 | 10.00 | 14.00 | 0.10 | 2.50  | 230.00 | 0.00 | 0.33 | 0.50 | 14.00 | 34.00 | 2.45 | 2.85 | 0.09 | 5.00  | 0.47        | 257.00 | 0.00 | 0.01  | 13.00   | 2920.00 | 0.00 | 0.00  | 10.00 | 44.00  | 0.09 | 0.00  | 44.00 | 0.00  | 8.00  | 41.00 |
| BB1  | 5.00  | 10.00 | 0.10 | 2.50  | 195.00 | 0.00 | 0.44 | 0.50 | 11.00 | 34.00 | 1.62 | 2.53 | 0.07 | 5.00  | 0.35        | 300.00 | 0.00 | 0.02  | 19.00   | 3360.00 | 2.00 | 0.00  | 10.00 | 45.00  | 0.09 | 0.00  | 44.00 | 0.00  | 8.00  | 41.00 |
| BB2  | 35.00 | 11.00 | 0.20 | 2.50  | 225.00 | 0.00 | 0.48 | 0.50 | 11.00 | 33.00 | 1.84 | 2.54 | 0.08 | 5.00  | 0.34        | 489.00 | 0.00 | 0.02  | 16.00   | 1940.00 | 0.00 | 0.00  | 10.00 | 38.00  | 0.10 | 0.00  | 45.00 | 0.00  | 10.00 | 51.00 |
| BB3  | 2.50  | 16.00 | 0.10 | 0.00  | 155.00 | 0.00 | 0.41 | 0.50 | 15.00 | 37.00 | 1.50 | 2.63 | 0.10 | 5.00  | 0.60        | 822.00 | 0.00 | 0.01  | 23.00   | 1580.00 | 2.00 | 0.00  | 10.00 | 104.00 | 0.08 | 5.00  | 36.00 | 0.00  | 14.00 | 38.00 |
| BB4  | 10.00 | 45.00 | 0.20 | 2.50  | 180.00 | 0.00 | 0.41 | 0.50 | 13.00 | 39.00 | 1.51 | 2.46 | 0.15 | 10.00 | 0.69        | 549.00 | 0.00 | 0.02  | 35.00   | 630.00  | 2.00 | 5.00  | 10.00 | 128.00 | 0.17 | 5.00  | 78.00 | 0.00  | 20.00 | 44.00 |
| BB5  | 10.00 | 74.00 | 0.10 | 5.00  | 140.00 | 2.50 | 2.87 | 0.50 | 24.00 | 61.00 | 1.80 | 3.99 | 0.31 | 10.00 | 1.34        | 775.00 | 1.00 | 0.02  | 24.00   | 240.00  | 2.00 | 0.00  | 10.00 | 30.00  | 0.16 | 5.00  | 68.00 | 0.00  | 15.00 | 39.00 |
| BB6  | 20.00 | 33.00 | 0.10 | 5.00  | 55.00  | 2.50 | 0.61 | 0.50 | 18.00 | 53.00 | 1.57 | 3.29 | 0.22 | 10.00 | 0.91        | 344.00 | 1.00 | 0.02  | 21.00   | 840.00  | 2.00 | 0.00  | 10.00 | 41.00  | 0.13 | 5.00  | 50.00 | 0.00  | 12.00 | 60.00 |
| BB7  | 5.00  | 23.00 | 0.10 | 5.00  | 130.00 | 2.50 | 0.46 | 1.00 | 16.00 | 43.00 | 1.61 | 2.87 | 0.26 | 10.00 | 0.75        | 653.00 | 0.50 | 0.02  | 28.00   | 840.00  | 2.00 | 0.00  | 10.00 | 41.00  | 0.13 | 5.00  | 60.00 | 0.00  | 13.00 | 46.00 |
| BB8  | 15.00 | 34.00 | 0.10 | 5.00  | 95.00  | 2.50 | 0.53 | 0.50 | 20.00 | 72.00 | 1.61 | 3.30 | 0.16 | 10.00 | 1.01        | 436.00 | 0.00 | 0.02  | 32.00   | 1130.00 | 2.00 | 0.00  | 10.00 | 41.00  | 0.13 | 5.00  | 63.00 | 0.00  | 12.00 | 66.00 |
| BB9  | 2.50  | 28.00 | 0.10 | 5.00  | 140.00 | 0.00 | 0.67 | 0.50 | 19.00 | 76.00 | 1.84 | 3.41 | 0.20 | 10.00 | 0.99        | 800.00 | 0.00 | 0.02  | 30.00   | 1370.00 | 2.00 | 0.00  | 10.00 | 50.00  | 0.13 | 5.00  | 63.00 | 0.00  | 12.00 | 66.00 |
| BB10 | 15.00 | 39.00 | 0.10 | 5.00  | 70.00  | 2.50 | 0.70 | 0.50 | 17.00 | 66.00 | 1.89 | 3.61 | 0.24 | 10.00 | 1.01        | 420.00 | 0.00 | 0.02  | 27.00   | 700.00  | 2.00 | 0.00  | 10.00 | 49.00  | 0.15 | 5.00  | 71.00 | 0.00  | 17.00 | 49.00 |
| BB11 | 30.00 | 14.00 | 0.10 | 2.50  | 170.00 | 0.00 | 0.58 |      |       |       |      |      |      |       |             |        |      |       |         |         |      |       |       |        |      |       |       |       |       |       |



| SAMP | AU    | CU     | AG   | AS    | BA     | BI   | CA   | CD   | CO    | CR    | AL   | FE   | K    | LA    | MZ   | MS     | MO   | NA   | NI    | P       | PB    | SB   | SN    | SR    | TI   | U    | V     | W    | Y     | ZN     |
|------|-------|--------|------|-------|--------|------|------|------|-------|-------|------|------|------|-------|------|--------|------|------|-------|---------|-------|------|-------|-------|------|------|-------|------|-------|--------|
| B11  | 2.50  | 11.00  | 0.10 | 0.00  | 95.00  | 0.00 | 0.42 | 0.50 | 9.00  | 29.00 | 1.21 | 2.02 | 0.06 | 5.00  | 0.30 | 174.00 | 0.00 | 0.01 | 12.00 | 350.00  | 2.00  | 0.00 | 10.00 | 44.00 | 0.12 | 0.00 | 45.00 | 0.00 | 10.00 | 24.00  |
| B12  | 15.00 | 10.00  | 0.10 | 5.00  | 90.00  | 2.50 | 0.48 | 0.50 | 10.00 | 33.00 | 1.26 | 2.22 | 0.06 | 5.00  | 0.38 | 196.00 | 0.00 | 0.01 | 12.00 | 370.00  | 2.00  | 0.00 | 10.00 | 48.00 | 0.13 | 0.00 | 48.00 | 0.00 | 11.00 | 27.00  |
| B13  | 15.00 | 189.00 | 0.40 | 5.00  | 130.00 | 2.50 | 1.35 | 0.50 | 11.00 | 40.00 | 1.33 | 2.38 | 0.10 | 10.00 | 0.40 | 619.00 | 0.00 | 0.02 | 52.00 | 870.00  | 2.00  | 0.00 | 10.00 | 74.00 | 0.08 | 5.00 | 40.00 | 0.00 | 15.00 | 30.00  |
| B14  | 10.00 | 23.00  | 0.10 | 10.00 | 125.00 | 2.50 | 1.10 | 0.50 | 17.00 | 50.00 | 1.29 | 3.24 | 0.09 | 10.00 | 0.73 | 388.00 | 0.00 | 0.02 | 26.00 | 570.00  | 2.00  | 0.00 | 10.00 | 65.00 | 0.13 | 5.00 | 62.00 | 0.00 | 16.00 | 32.00  |
| B15  | 20.00 | 24.00  | 0.10 | 5.00  | 85.00  | 2.50 | 2.78 | 0.50 | 13.00 | 44.00 | 1.42 | 2.68 | 0.23 | 5.00  | 0.53 | 313.00 | 0.00 | 0.02 | 19.00 | 210.00  | 1.00  | 0.00 | 10.00 | 61.00 | 0.12 | 0.00 | 50.00 | 0.00 | 14.00 | 21.00  |
| B16  | 2.50  | 34.00  | 0.10 | 5.00  | 80.00  | 0.00 | 3.58 | 0.50 | 13.00 | 54.00 | 1.26 | 2.63 | 0.20 | 5.00  | 0.66 | 302.00 | 0.00 | 0.02 | 22.00 | 300.00  | 1.00  | 0.00 | 10.00 | 53.00 | 0.13 | 5.00 | 55.00 | 0.00 | 18.00 | 52.00  |
| B17  | 5.00  | 45.00  | 0.10 | 5.00  | 85.00  | 2.50 | 1.41 | 0.50 | 17.00 | 48.00 | 1.71 | 3.22 | 0.27 | 10.00 | 0.95 | 420.00 | 0.00 | 0.02 | 31.00 | 870.00  | 4.00  | 0.00 | 10.00 | 65.00 | 0.16 | 5.00 | 93.00 | 0.00 | 16.00 | 71.00  |
| B18  | 10.00 | 65.00  | 0.10 | 10.00 | 135.00 | 2.50 | 0.90 | 0.50 | 26.00 | 64.00 | 2.28 | 4.51 | 0.27 | 10.00 | 1.36 | 821.00 | 1.00 | 0.02 | 27.00 | 1000.00 | 32.00 | 0.00 | 10.00 | 51.00 | 0.13 | 5.00 | 63.00 | 0.00 | 13.00 | 92.00  |
| B19  | 2.50  | 24.00  | 0.20 | 5.00  | 155.00 | 0.00 | 0.69 | 0.50 | 21.00 | 61.00 | 2.10 | 3.47 | 0.25 | 10.00 | 1.05 | 636.00 | 0.00 | 0.02 | 28.00 | 2070.00 | 4.00  | 0.00 | 10.00 | 72.00 | 0.09 | 5.00 | 59.00 | 0.00 | 13.00 | 41.00  |
| B110 | 40.00 | 35.00  | 0.10 | 10.00 | 140.00 | 2.50 | 0.93 | 0.50 | 13.00 | 39.00 | 1.38 | 2.86 | 0.09 | 10.00 | 0.70 | 457.00 | 1.00 | 0.01 | 19.00 | 900.00  | 2.00  | 0.00 | 10.00 | 50.00 | 0.14 | 0.00 | 65.00 | 0.00 | 13.00 | 71.00  |
| B111 | 10.00 | 25.00  | 0.10 | 5.00  | 80.00  | 2.50 | 0.65 | 0.50 | 17.00 | 39.00 | 1.85 | 3.39 | 0.16 | 5.00  | 0.80 | 407.00 | 0.00 | 0.01 | 17.00 | 1390.00 | 2.00  | 0.00 | 10.00 | 50.00 | 0.14 | 0.00 | 67.00 | 0.00 | 13.00 | 76.00  |
| B112 | 2.50  | 33.00  | 0.10 | 5.00  | 110.00 | 0.00 | 0.67 | 0.50 | 17.00 | 39.00 | 1.72 | 3.26 | 0.16 | 5.00  | 0.78 | 785.00 | 0.00 | 0.02 | 18.00 | 960.00  | 4.00  | 0.00 | 10.00 | 50.00 | 0.15 | 5.00 | 77.00 | 0.00 | 18.00 | 49.00  |
| B113 | 20.00 | 55.00  | 0.10 | 10.00 | 60.00  | 2.50 | 0.80 | 0.50 | 20.00 | 42.00 | 1.60 | 3.79 | 0.23 | 10.00 | 0.92 | 594.00 | 0.00 | 0.02 | 21.00 | 1210.00 | 4.00  | 0.00 | 10.00 | 45.00 | 0.12 | 0.00 | 56.00 | 0.00 | 11.00 | 93.00  |
| B114 | 5.00  | 27.00  | 0.20 | 5.00  | 240.00 | 2.50 | 0.57 | 0.50 | 16.00 | 36.00 | 2.11 | 3.02 | 0.15 | 5.00  | 0.65 | 714.00 | 0.00 | 0.02 | 20.00 | 2780.00 | 4.00  | 0.00 | 10.00 | 51.00 | 0.15 | 5.00 | 72.00 | 0.00 | 17.00 | 48.00  |
| B115 | 15.00 | 49.00  | 0.10 | 10.00 | 65.00  | 2.50 | 0.77 | 0.50 | 18.00 | 39.00 | 1.61 | 3.46 | 0.20 | 10.00 | 0.89 | 551.00 | 0.00 | 0.02 | 19.00 | 950.00  | 4.00  | 0.00 | 10.00 | 51.00 | 0.15 | 5.00 | 79.00 | 0.00 | 21.00 | 53.00  |
| B116 | 10.00 | 74.00  | 0.10 | 10.00 | 80.00  | 2.50 | 1.02 | 0.50 | 22.00 | 45.00 | 1.96 | 3.94 | 0.28 | 10.00 | 0.93 | 567.00 | 0.00 | 0.02 | 26.00 | 880.00  | 6.00  | 0.00 | 10.00 | 55.00 | 0.16 | 5.00 | 79.00 | 0.00 | 21.00 | 53.00  |
| B117 | 2.50  | 27.00  | 0.10 | 0.00  | 120.00 | 0.00 | 0.57 | 0.50 | 13.00 | 37.00 | 2.09 | 2.92 | 0.09 | 5.00  | 0.54 | 239.00 | 0.00 | 0.02 | 20.00 | 940.00  | 2.00  | 0.00 | 10.00 | 50.00 | 0.15 | 0.00 | 54.00 | 0.00 | 10.00 | 63.00  |
| B118 | 2.50  | 19.00  | 0.20 | 0.00  | 160.00 | 0.00 | 0.44 | 0.50 | 13.00 | 27.00 | 2.36 | 2.81 | 0.09 | 5.00  | 0.50 | 382.00 | 0.00 | 0.01 | 15.00 | 1910.00 | 2.00  | 0.00 | 10.00 | 46.00 | 0.12 | 0.00 | 54.00 | 0.00 | 10.00 | 63.00  |
| B119 | 2.50  | 11.00  | 0.40 | 0.00  | 130.00 | 0.00 | 0.33 | 0.50 | 12.00 | 20.00 | 3.70 | 2.47 | 0.06 | 5.00  | 0.26 | 243.00 | 1.00 | 0.02 | 19.00 | 2100.00 | 2.00  | 0.00 | 10.00 | 50.00 | 0.12 | 0.00 | 50.00 | 0.00 | 11.00 | 35.00  |
| B120 | 5.00  | 10.00  | 0.10 | 2.50  | 110.00 | 0.00 | 0.48 | 0.50 | 11.00 | 35.00 | 1.67 | 2.51 | 0.07 | 5.00  | 0.48 | 213.00 | 0.00 | 0.01 | 13.00 | 960.00  | 2.00  | 0.00 | 10.00 | 50.00 | 0.15 | 0.00 | 47.00 | 0.00 | 11.00 | 49.00  |
| B121 | 2.50  | 18.00  | 0.20 | 0.00  | 165.00 | 0.00 | 0.36 | 0.50 | 13.00 | 21.00 | 2.79 | 2.83 | 0.08 | 5.00  | 0.32 | 178.00 | 0.00 | 0.02 | 11.00 | 2360.00 | 4.00  | 0.00 | 10.00 | 31.00 | 0.09 | 0.00 | 36.00 | 0.00 | 7.00  | 60.00  |
| B122 | 2.50  | 7.00   | 0.20 | 0.00  | 225.00 | 0.00 | 0.35 | 0.50 | 8.00  | 16.00 | 1.60 | 1.76 | 0.07 | 5.00  | 0.23 | 346.00 | 0.00 | 0.02 | 11.00 | 680.00  | 2.00  | 0.00 | 10.00 | 24.00 | 0.11 | 0.00 | 47.00 | 0.00 | 8.00  | 42.00  |
| B123 | 2.50  | 5.00   | 0.10 | 5.00  | 130.00 | 0.00 | 0.25 | 0.50 | 8.00  | 11.00 | 0.83 | 1.67 | 0.05 | 5.00  | 0.16 | 462.00 | 0.00 | 0.02 | 9.00  | 3160.00 | 4.00  | 0.00 | 10.00 | 30.00 | 0.12 | 0.00 | 33.00 | 0.00 | 9.00  | 59.00  |
| B124 | 2.50  | 7.00   | 0.40 | 0.00  | 185.00 | 0.00 | 0.32 | 0.50 | 9.00  | 13.00 | 2.38 | 1.89 | 0.06 | 5.00  | 0.18 | 572.00 | 0.00 | 0.02 | 15.00 | 1640.00 | 2.00  | 0.00 | 10.00 | 44.00 | 0.11 | 0.00 | 47.00 | 0.00 | 9.00  | 83.00  |
| B125 | 2.50  | 20.00  | 0.10 | 5.00  | 210.00 | 0.00 | 0.41 | 0.50 | 12.00 | 23.00 | 1.95 | 2.38 | 0.07 | 5.00  | 0.25 | 346.00 | 0.00 | 0.02 | 17.00 | 1080.00 | 2.00  | 0.00 | 10.00 | 39.00 | 0.12 | 0.00 | 41.00 | 0.00 | 10.00 | 67.00  |
| B126 | 2.50  | 15.00  | 0.20 | 0.00  | 130.00 | 0.00 | 0.41 | 0.50 | 11.00 | 18.00 | 2.11 | 2.05 | 0.08 | 5.00  | 0.37 | 369.00 | 0.00 | 0.01 | 15.00 | 870.00  | 2.00  | 0.00 | 10.00 | 52.00 | 0.14 | 0.00 | 57.00 | 0.00 | 13.00 | 48.00  |
| B127 | 10.00 | 28.00  | 0.10 | 5.00  | 165.00 | 2.50 | 0.55 | 0.50 | 13.00 | 29.00 | 2.01 | 2.84 | 0.09 | 5.00  | 0.46 | 306.00 | 0.00 | 0.02 | 18.00 | 1720.00 | 4.00  | 0.00 | 10.00 | 46.00 | 0.13 | 0.00 | 46.00 | 0.00 | 13.00 | 43.00  |
| B128 | 2.50  | 35.00  | 0.10 | 0.00  | 135.00 | 0.00 | 0.53 | 0.50 | 12.00 | 21.00 | 2.88 | 2.77 | 0.09 | 5.00  | 0.45 | 306.00 | 0.00 | 0.02 | 25.00 | 1220.00 | 8.00  | 0.00 | 10.00 | 48.00 | 0.14 | 5.00 | 42.00 | 0.00 | 18.00 | 81.00  |
| B129 | 2.50  | 74.00  | 0.60 | 0.00  | 175.00 | 0.00 | 0.56 | 0.50 | 11.00 | 21.00 | 3.23 | 2.71 | 0.15 | 10.00 | 0.49 | 405.00 | 0.00 | 0.02 | 15.00 | 1700.00 | 4.00  | 0.00 | 10.00 | 46.00 | 0.13 | 0.00 | 46.00 | 0.00 | 13.00 | 43.00  |
| E130 | 2.50  | 22.00  | 0.20 | 0.00  | 165.00 | 0.00 | 0.38 | 0.50 | 12.00 | 20.00 | 2.46 | 2.69 | 0.07 | 5.00  | 0.43 | 572.00 | 0.00 | 0.02 | 16.00 | 2490.00 | 4.00  | 0.00 | 10.00 | 43.00 | 0.12 | 0.00 | 50.00 | 0.00 | 10.00 | 43.00  |
| E131 | 5.00  | 53.00  | 0.10 | 10.00 | 80.00  | 2.50 | 0.63 | 0.50 | 23.00 | 92.00 | 2.00 | 4.13 | 0.29 | 5.00  | 1.28 | 475.00 | 0.00 | 0.02 | 44.00 | 500.00  | 2.00  | 0.00 | 10.00 | 51.00 | 0.17 | 0.00 | 82.00 | 0.00 | 16.00 | 55.00  |
| E132 | 25.00 | 64.00  | 0.10 | 10.00 | 80.00  | 2.50 | 0.62 | 0.50 | 25.00 | 99.00 | 2.03 | 4.35 | 0.31 | 5.00  | 1.40 | 514.00 | 0.00 | 0.02 | 51.00 | 530.00  | 4.00  | 0.00 | 10.00 | 48.00 | 0.17 | 0.00 | 86.00 | 0.00 | 15.00 | 59.00  |
| E133 | 5.00  | 120.00 | 0.10 | 1.00  | 155.00 | 2.50 | 0.95 | 0.50 | 21.00 | 77.00 | 1.82 | 3.65 | 0.18 | 10.00 | 0.94 | 910.00 | 0.00 | 0.02 | 56.00 | 540.00  | 4.00  | 0.00 | 10.00 | 65.00 | 0.14 | 5.00 | 64.00 | 0.00 | 19.00 | 51.00  |
| E134 | 10.00 | 51.00  | 0.10 | 10.00 | 70.00  | 2.50 | 0.48 | 0.50 | 20.00 | 57.00 | 1.58 | 3.56 | 0.32 | 10.00 | 0.92 | 361.00 | 0.00 | 0.01 | 38.00 | 630.00  | 4.00  | 0.00 | 10.00 | 40.00 | 0.15 | 5.00 | 67.00 | 0.00 | 14.00 | 46.00  |
| E135 | 2.50  | 12.00  | 0.20 | 0.00  | 225.00 | 0.00 | 0.62 | 0.50 | 14.00 | 41.00 | 2.08 | 2.40 | 0.12 | 5.00  | 0.42 | 681.00 | 0.00 | 0.02 | 37.00 | 3890.00 | 2.00  | 0.00 | 10.00 | 49.00 | 0.11 | 0.00 | 36.00 | 0.00 | 9.00  | 107.00 |
| E136 | 2.50  | 27.00  | 0.10 | 5.00  | 155.00 | 0.00 | 0.56 | 0.50 | 18.00 | 47.00 | 2.04 | 3.37 | 0.14 | 10.00 | 0.90 | 417.00 | 0.00 | 0.02 | 32.00 | 2370.00 | 4.00  | 0.00 | 10.00 | 50.00 | 0.13 | 5.00 | 54.00 | 0.00 | 12.00 | 66.00  |
| E137 | 2.50  | 27.00  | 0.10 | 5.00  | 155.00 | 0.00 | 0.56 | 0.50 | 18.00 | 47.00 | 2.04 | 3.37 | 0.14 | 10.00 | 0.90 | 417.00 | 0.00 | 0.02 | 32.00 | 2370.00 | 4.00  | 0.00 | 10.00 | 50.00 | 0.13 | 5.00 | 54.00 | 0.00 | 12.00 | 66.00  |
| E138 | 2.50  | 25.00  | 0.10 | 5.00  | 165.00 | 0.00 | 0.42 | 0.50 | 27.00 | 51.00 | 1.75 | 3.09 | 0.15 | 5.00  | 0.69 | 601.00 | 0.00 | 0.02 | 24.00 | 2210.00 | 4.00  | 0.00 | 10.00 | 36.00 | 0.12 | 0.00 | 59.00 | 0.00 | 11.00 | 77.00  |
| E139 | 10.00 | 51.00  | 0.10 | 5.00  | 125.00 | 2.50 | 0.73 | 0.50 | 18.00 | 59.00 | 1.72 | 3.30 | 0.17 | 10.00 | 0.95 | 629.00 | 0.00 | 0.02 | 29.00 | 900.00  | 10.00 | 0.00 | 10.00 | 55.00 | 0.11 | 5.00 | 62.00 | 0.00 | 16.00 | 46.00  |
| E140 | 10.00 | 32.00  | 0.10 | 5.00  | 125.00 | 2.50 | 0.74 | 0.50 | 19.00 | 46.00 | 1.74 | 3.50 | 0.20 | 4.00  | 0.78 | 613.00 | 0.00 | 0.02 | 18.00 | 1320.00 | 4.00  | 0.00 | 10.00 | 61.00 | 0.15 | 0.00 | 72.00 | 0.00 | 14.00 | 58.00  |
| E141 | 5.00  | 27.00  | 0.10 | 5.00  | 155.00 | 0.   |      |      |       |       |      |      |      |       |      |        |      |      |       |         |       |      |       |       |      |      |       |      |       |        |

| SHMP | AU    | CU    | AG   | AS    | BA     | BI   | CA   | CD   | CO    | CR    | AL   | FE   | K    | LA    | MG   | MS      | MO   | NA   | NI    | P       | PB   | SB   | SN    | SR    | TI   | U    | V     | W    | Y     | ZN     |
|------|-------|-------|------|-------|--------|------|------|------|-------|-------|------|------|------|-------|------|---------|------|------|-------|---------|------|------|-------|-------|------|------|-------|------|-------|--------|
| BG1  | 2.50  | 27.00 | 0.10 | 5.00  | 80.00  | 0.00 | 0.63 | 0.50 | 18.00 | 53.00 | 1.46 | 2.91 | 0.10 | 10.00 | 0.98 | 524.00  | 0.00 | 0.01 | 28.00 | 970.00  | 2.00 | 0.00 | 10.00 | 37.00 | 0.14 | 5.00 | 54.00 | 0.00 | 16.00 | 47.00  |
| BG2  | 2.50  | 27.00 | 0.10 | 5.00  | 100.00 | 0.00 | 0.69 | 0.50 | 18.00 | 53.00 | 1.48 | 2.92 | 0.21 | 10.00 | 0.91 | 956.00  | 0.00 | 0.01 | 29.00 | 1050.00 | 2.00 | 0.00 | 10.00 | 42.00 | 0.13 | 5.00 | 53.00 | 0.00 | 15.00 | 49.00  |
| BG3  | 2.50  | 10.00 | 0.10 | 0.00  | 225.00 | 0.00 | 0.84 | 0.50 | 13.00 | 33.00 | 1.62 | 2.35 | 0.08 | 5.00  | 0.36 | 369.00  | 0.00 | 0.01 | 24.00 | 3390.00 | 2.00 | 0.00 | 10.00 | 61.00 | 0.09 | 0.00 | 36.00 | 0.00 | 8.00  | 47.00  |
| BG4  | 4.00  | 27.00 | 0.10 | 5.00  | 160.00 | 2.50 | 0.47 | 0.50 | 20.00 | 76.00 | 1.72 | 3.14 | 0.07 | 10.00 | 0.72 | 278.00  | 0.00 | 0.01 | 61.00 | 2010.00 | 2.00 | 0.00 | 10.00 | 38.00 | 0.12 | 5.00 | 55.00 | 0.00 | 11.00 | 41.00  |
| BG5  | 2.50  | 19.00 | 0.10 | 5.00  | 115.00 | 0.00 | 0.54 | 0.50 | 25.00 | 76.00 | 1.89 | 3.17 | 0.12 | 5.00  | 0.56 | 281.00  | 0.00 | 0.01 | 54.00 | 2020.00 | 2.00 | 0.00 | 10.00 | 37.00 | 0.12 | 0.00 | 62.00 | 0.00 | 10.00 | 37.00  |
| BG6  | 2.50  | 19.00 | 0.10 | 5.00  | 100.00 | 0.00 | 0.44 | 0.50 | 16.00 | 76.00 | 1.72 | 3.08 | 0.08 | 10.00 | 0.68 | 278.00  | 0.00 | 0.01 | 38.00 | 820.00  | 2.00 | 0.00 | 10.00 | 40.00 | 0.13 | 5.00 | 60.00 | 0.00 | 10.00 | 39.00  |
| BG7  | 5.00  | 20.00 | 0.10 | 10.00 | 95.00  | 2.50 | 0.47 | 0.50 | 18.00 | 76.00 | 1.64 | 3.23 | 0.08 | 10.00 | 0.63 | 244.00  | 0.00 | 0.01 | 40.00 | 1120.00 | 2.00 | 0.00 | 10.00 | 39.00 | 0.11 | 5.00 | 59.00 | 0.00 | 10.00 | 53.00  |
| BG8  | 2.50  | 21.00 | 0.10 | 5.00  | 150.00 | 0.00 | 0.36 | 0.50 | 18.00 | 76.00 | 1.86 | 2.83 | 0.12 | 5.00  | 0.65 | 558.00  | 0.00 | 0.01 | 50.00 | 1200.00 | 4.00 | 0.00 | 10.00 | 31.00 | 0.12 | 0.00 | 52.00 | 0.00 | 11.00 | 46.00  |
| BG9  | 5.00  | 29.00 | 0.10 | 5.00  | 80.00  | 2.50 | 0.43 | 0.50 | 17.00 | 76.00 | 1.51 | 2.72 | 0.23 | 10.00 | 0.72 | 365.00  | 0.00 | 0.01 | 41.00 | 950.00  | 2.00 | 0.00 | 10.00 | 28.00 | 0.12 | 5.00 | 46.00 | 0.00 | 14.00 | 54.00  |
| BG10 | 2.50  | 39.00 | 0.10 | 5.00  | 125.00 | 0.00 | 0.48 | 0.50 | 19.00 | 76.00 | 1.95 | 3.60 | 0.35 | 10.00 | 0.91 | 499.00  | 0.00 | 0.01 | 29.00 | 800.00  | 4.00 | 0.00 | 10.00 | 38.00 | 0.15 | 5.00 | 62.00 | 0.00 | 16.00 | 60.00  |
| BG11 | 2.50  | 32.00 | 0.10 | 5.00  | 110.00 | 0.00 | 0.57 | 0.50 | 20.00 | 76.00 | 1.78 | 3.48 | 0.22 | 10.00 | 1.14 | 524.00  | 0.00 | 0.01 | 35.00 | 1040.00 | 4.00 | 0.00 | 10.00 | 44.00 | 0.15 | 5.00 | 65.00 | 0.00 | 15.00 | 54.00  |
| BG12 | 2.50  | 37.00 | 0.10 | 5.00  | 105.00 | 0.00 | 0.61 | 0.50 | 20.00 | 76.00 | 1.94 | 3.54 | 0.25 | 10.00 | 1.11 | 449.00  | 0.00 | 0.01 | 37.00 | 990.00  | 4.00 | 0.00 | 10.00 | 43.00 | 0.16 | 5.00 | 67.00 | 0.00 | 16.00 | 61.00  |
| BG13 | 2.50  | 30.00 | 0.10 | 5.00  | 135.00 | 0.00 | 0.59 | 0.50 | 18.00 | 76.00 | 1.93 | 3.54 | 0.15 | 10.00 | 0.92 | 418.00  | 1.00 | 0.01 | 27.00 | 2300.00 | 6.00 | 0.00 | 10.00 | 49.00 | 0.14 | 5.00 | 66.00 | 0.00 | 13.00 | 67.00  |
| BG14 | 5.00  | 32.00 | 0.10 | 5.00  | 155.00 | 2.50 | 0.66 | 0.50 | 18.00 | 76.00 | 1.66 | 3.54 | 0.14 | 10.00 | 0.91 | 582.00  | 1.00 | 0.01 | 21.00 | 1190.00 | 4.00 | 5.00 | 10.00 | 48.00 | 0.14 | 5.00 | 77.00 | 0.00 | 13.00 | 73.00  |
| BG15 | 15.00 | 48.00 | 0.10 | 5.00  | 110.00 | 2.50 | 1.00 | 0.50 | 19.00 | 76.00 | 1.36 | 3.54 | 0.21 | 10.00 | 0.89 | 516.00  | 0.00 | 0.01 | 25.00 | 1330.00 | 4.00 | 0.00 | 10.00 | 59.00 | 0.11 | 5.00 | 63.00 | 0.00 | 14.00 | 51.00  |
| BG16 | 10.00 | 65.00 | 0.10 | 15.00 | 185.00 | 2.50 | 1.25 | 0.50 | 17.00 | 76.00 | 1.76 | 3.54 | 0.15 | 10.00 | 0.90 | 1010.00 | 1.00 | 0.01 | 27.00 | 1040.00 | 4.00 | 0.00 | 10.00 | 87.00 | 0.08 | 5.00 | 60.00 | 0.00 | 17.00 | 57.00  |
| BG17 | 5.00  | 31.00 | 0.10 | 10.00 | 195.00 | 2.50 | 0.53 | 0.50 | 18.00 | 76.00 | 1.77 | 3.54 | 0.16 | 10.00 | 0.89 | 544.00  | 0.00 | 0.01 | 30.00 | 2070.00 | 4.00 | 5.00 | 10.00 | 42.00 | 0.11 | 5.00 | 57.00 | 0.00 | 10.00 | 98.00  |
| BG18 | 2.50  | 23.00 | 0.10 | 5.00  | 215.00 | 0.00 | 0.44 | 0.50 | 18.00 | 76.00 | 2.52 | 3.54 | 0.19 | 10.00 | 0.69 | 558.00  | 0.00 | 0.01 | 30.00 | 2960.00 | 4.00 | 0.00 | 10.00 | 32.00 | 0.12 | 5.00 | 52.00 | 0.00 | 11.00 | 114.00 |
| BG19 | 2.50  | 38.00 | 0.10 | 5.00  | 210.00 | 0.00 | 1.36 | 0.50 | 17.00 | 76.00 | 1.49 | 3.54 | 0.23 | 10.00 | 0.85 | 1045.00 | 0.00 | 0.01 | 25.00 | 1250.00 | 4.00 | 0.00 | 10.00 | 62.00 | 0.11 | 5.00 | 58.00 | 0.00 | 12.00 | 73.00  |
| BG20 | 15.00 | 46.00 | 0.10 | 10.00 | 105.00 | 2.50 | 0.34 | 0.50 | 18.00 | 76.00 | 1.53 | 3.54 | 0.21 | 10.00 | 0.83 | 447.00  | 1.00 | 0.01 | 17.00 | 670.00  | 6.00 | 0.00 | 10.00 | 43.00 | 0.12 | 5.00 | 64.00 | 0.00 | 13.00 | 48.00  |
| BG21 | 50.00 | 70.00 | 0.10 | 10.00 | 100.00 | 2.50 | 0.68 | 0.50 | 18.00 | 53.00 | 1.76 | 3.83 | 0.37 | 10.00 | 0.98 | 501.00  | 0.00 | 0.01 | 23.00 | 980.00  | 6.00 | 0.00 | 10.00 | 48.00 | 0.13 | 5.00 | 67.00 | 0.00 | 13.00 | 50.00  |
| BG22 | 5.00  | 29.00 | 0.10 | 5.00  | 210.00 | 2.50 | 1.00 | 0.50 | 16.00 | 49.00 | 1.43 | 2.98 | 0.25 | 10.00 | 0.75 | 1497.00 | 0.00 | 0.01 | 22.00 | 690.00  | 4.00 | 0.00 | 10.00 | 56.00 | 0.12 | 5.00 | 54.00 | 0.00 | 18.00 | 66.00  |
| BG23 | 2.50  | 17.00 | 0.10 | 5.00  | 75.00  | 0.00 | 0.50 | 0.50 | 14.00 | 47.00 | 1.34 | 2.86 | 0.21 | 10.00 | 0.68 | 341.00  | 0.00 | 0.01 | 18.00 | 520.00  | 4.00 | 0.00 | 10.00 | 41.00 | 0.13 | 5.00 | 61.00 | 0.00 | 16.00 | 54.00  |
| BG24 | 2.50  | 53.00 | 0.10 | 10.00 | 115.00 | 0.00 | 1.05 | 0.50 | 18.00 | 43.00 | 1.56 | 3.14 | 0.22 | 10.00 | 0.86 | 666.00  | 0.00 | 0.01 | 24.00 | 1140.00 | 4.00 | 0.00 | 10.00 | 52.00 | 0.12 | 5.00 | 58.00 | 0.00 | 11.00 | 77.00  |
| BG25 | 25.00 | 18.00 | 0.10 | 10.00 | 130.00 | 2.50 | 0.49 | 0.50 | 16.00 | 36.00 | 2.23 | 3.15 | 0.11 | 10.00 | 0.65 | 529.00  | 0.00 | 0.01 | 21.00 | 2560.00 | 2.00 | 0.00 | 10.00 | 37.00 | 0.12 | 5.00 | 59.00 | 0.00 | 11.00 | 71.00  |
| BG26 | 2.50  | 25.00 | 0.10 | 5.00  | 85.00  | 0.00 | 0.46 | 0.50 | 16.00 | 37.00 | 2.01 | 2.98 | 0.11 | 10.00 | 0.59 | 393.00  | 0.00 | 0.01 | 20.00 | 1370.00 | 2.00 | 0.00 | 10.00 | 35.00 | 0.12 | 5.00 | 57.00 | 0.00 | 11.00 | 70.00  |
| BG27 | 2.50  | 37.00 | 0.20 | 10.00 | 115.00 | 0.00 | 0.55 | 0.50 | 16.00 | 39.00 | 1.50 | 3.29 | 0.12 | 10.00 | 0.63 | 810.00  | 0.00 | 0.01 | 15.00 | 1220.00 | 4.00 | 0.00 | 10.00 | 44.00 | 0.11 | 5.00 | 60.00 | 0.00 | 16.00 | 61.00  |
| BG28 | 35.00 | 30.00 | 0.10 | 10.00 | 140.00 | 2.50 | 0.61 | 0.50 | 16.00 | 47.00 | 1.81 | 3.29 | 0.30 | 10.00 | 0.80 | 678.00  | 0.00 | 0.01 | 23.00 | 670.00  | 4.00 | 0.00 | 10.00 | 54.00 | 0.11 | 5.00 | 62.00 | 0.00 | 16.00 | 57.00  |
| BG29 | 2.50  | 46.00 | 0.20 | 10.00 | 130.00 | 0.00 | 1.56 | 0.50 | 17.00 | 49.00 | 1.74 | 3.20 | 0.33 | 10.00 | 0.87 | 798.00  | 0.00 | 0.01 | 24.00 | 810.00  | 4.00 | 0.00 | 10.00 | 50.00 | 0.13 | 5.00 | 63.00 | 0.00 | 14.00 | 63.00  |
| BG30 | 2.50  | 18.00 | 0.10 | 10.00 | 85.00  | 0.00 | 0.58 | 0.50 | 15.00 | 46.00 | 1.50 | 3.37 | 0.14 | 10.00 | 0.92 | 517.00  | 1.00 | 0.01 | 17.00 | 910.00  | 4.00 | 0.00 | 10.00 | 47.00 | 0.13 | 5.00 | 64.00 | 0.00 | 14.00 | 52.00  |
| BG31 | 2.50  | 16.00 | 0.10 | 10.00 | 70.00  | 0.00 | 0.59 | 0.50 | 15.00 | 39.00 | 1.47 | 3.18 | 0.12 | 10.00 | 0.83 | 380.00  | 0.00 | 0.01 | 15.00 | 720.00  | 2.00 | 0.00 | 10.00 | 52.00 | 0.13 | 5.00 | 63.00 | 0.00 | 14.00 | 69.00  |
| BG32 | 2.50  | 42.00 | 0.10 | 10.00 | 145.00 | 0.00 | 0.66 | 0.50 | 17.00 | 48.00 | 1.60 | 3.03 | 0.23 | 10.00 | 0.84 | 897.00  | 0.00 | 0.01 | 22.00 | 930.00  | 4.00 | 0.00 | 10.00 | 43.00 | 0.14 | 5.00 | 64.00 | 0.00 | 12.00 | 52.00  |
| BF1  | 2.50  | 38.00 | 0.10 | 5.00  | 100.00 | 0.00 | 0.50 | 0.50 | 21.00 | 93.00 | 1.89 | 3.22 | 0.09 | 10.00 | 1.09 | 295.00  | 0.00 | 0.01 | 78.00 | 840.00  | 0.00 | 0.00 | 10.00 | 32.00 | 0.12 | 0.00 | 37.00 | 0.00 | 11.00 | 77.00  |
| BF2  | 2.50  | 19.00 | 0.20 | 5.00  | 145.00 | 0.00 | 0.45 | 0.50 | 14.00 | 25.00 | 2.63 | 2.22 | 0.08 | 5.00  | 0.36 | 467.00  | 0.00 | 0.01 | 46.00 | 2980.00 | 4.00 | 0.00 | 10.00 | 32.00 | 0.12 | 0.00 | 52.00 | 0.00 | 10.00 | 50.00  |
| BF3  | 2.50  | 20.00 | 0.10 | 5.00  | 170.00 | 0.00 | 0.58 | 0.50 | 15.00 | 41.00 | 1.91 | 2.82 | 0.13 | 10.00 | 0.71 | 406.00  | 0.00 | 0.01 | 38.00 | 1690.00 | 2.00 | 0.00 | 10.00 | 32.00 | 0.12 | 0.00 | 37.00 | 0.00 | 11.00 | 77.00  |
| BF4  | 5.00  | 19.00 | 0.10 | 5.00  | 100.00 | 2.50 | 0.57 | 0.50 | 15.00 | 27.00 | 3.05 | 2.62 | 0.06 | 5.00  | 0.39 | 203.00  | 0.00 | 0.01 | 45.00 | 2680.00 | 4.00 | 0.00 | 10.00 | 43.00 | 0.13 | 0.00 | 43.00 | 0.00 | 12.00 | 43.00  |
| BF5  | 2.50  | 22.00 | 0.10 | 5.00  | 145.00 | 0.00 | 0.39 | 0.50 | 16.00 | 43.00 | 2.24 | 3.06 | 0.09 | 10.00 | 0.56 | 221.00  | 0.00 | 0.01 | 51.00 | 1370.00 | 2.00 | 0.00 | 10.00 | 36.00 | 0.11 | 5.00 | 48.00 | 0.00 | 11.00 | 48.00  |
| BF6  | 2.50  | 22.00 | 0.10 | 5.00  | 135.00 | 0.00 | 0.38 | 0.50 | 14.00 | 36.00 | 1.95 | 2.76 | 0.08 | 10.00 | 0.51 | 250.00  | 0.00 | 0.01 | 48.00 | 1560.00 | 2.00 | 0.00 | 10.00 | 36.00 | 0.11 | 5.00 | 48.00 | 0.00 | 11.00 | 48.00  |
| BF7  | 5.00  | 14.00 | 0.10 | 5.00  | 165.00 | 2.50 | 0.37 | 0.50 | 14.00 | 38.00 | 1.95 | 2.74 | 0.05 | 10.00 | 0.44 | 260.00  | 0.00 | 0.01 | 35.00 | 2770.00 | 2.00 | 0.00 | 10.00 | 33.00 | 0.10 | 5.00 | 45.00 | 0.00 | 9.00  | 46.00  |
| BF8  | 2.50  | 14.00 | 0.20 | 5.00  | 215.00 | 0.00 | 0.49 | 0.50 | 15.00 | 36.00 | 2.20 | 2.66 | 0.11 | 10.00 | 0.52 | 997.00  | 0.00 | 0.01 | 31.00 | 3230.00 | 2.00 | 0.00 | 10.00 | 34.00 | 0.09 | 5.00 | 49.00 | 0.00 | 9.00  | 40.00  |
| BF9  | 2.50  | 14.00 | 0.10 | 10.00 |        |      |      |      |       |       |      |      |      |       |      |         |      |      |       |         |      |      |       |       |      |      |       |      |       |        |

| SAMP | AD    | CU     | AG   | AS    | BA     | HI   | CA   | CD   | CO    | CR    | AL   | FE   | K    | LA    | MG   | MN     | MO   | NA   | NI    | P       | PB    | SB   | SN    | SR    | TI   | U     | V     | W    | Y     | ZN    |
|------|-------|--------|------|-------|--------|------|------|------|-------|-------|------|------|------|-------|------|--------|------|------|-------|---------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| BJ32 | 2.50  | 14.00  | 0.10 | 5.00  | 55.00  | 0.00 | 0.52 | 0.50 | 12.00 | 16.00 | 1.56 | 2.70 | 0.05 | 5.00  | 0.58 | 265.00 | 0.00 | 0.01 | 8.00  | 360.00  | 2.00  | 0.00 | 10.00 | 48.00 | 0.15 | 0.00  | 60.00 | 0.00 | 14.00 | 35.00 |
| BK1  | 35.00 | 47.00  | 0.10 | 10.00 | 200.00 | 2.50 | 0.67 | 0.50 | 19.00 | 36.00 | 2.14 | 3.96 | 0.16 | 10.00 | 0.77 | 491.00 | 1.00 | 0.02 | 19.00 | 590.00  | 12.00 | 0.00 | 10.00 | 49.00 | 0.13 | 5.00  | 69.00 | 0.00 | 13.00 | 59.00 |
| BK2  | 20.00 | 46.00  | 0.10 | 5.00  | 205.00 | 2.50 | 0.67 | 0.50 | 19.00 | 35.00 | 2.19 | 3.98 | 0.16 | 10.00 | 0.76 | 487.00 | 1.00 | 0.02 | 19.00 | 630.00  | 14.00 | 0.00 | 10.00 | 48.00 | 0.13 | 5.00  | 69.00 | 0.00 | 13.00 | 56.00 |
| BK3  | 10.00 | 75.00  | 0.10 | 10.00 | 90.00  | 2.50 | 0.91 | 0.50 | 20.00 | 48.00 | 1.90 | 4.00 | 0.36 | 10.00 | 1.07 | 541.00 | 0.00 | 0.02 | 25.00 | 810.00  | 6.00  | 0.00 | 10.00 | 59.00 | 0.16 | 3.00  | 78.00 | 0.00 | 19.00 | 54.00 |
| BK4  | 2.50  | 16.00  | 0.20 | 5.00  | 100.00 | 0.00 | 0.42 | 0.50 | 14.00 | 27.00 | 2.18 | 2.59 | 0.16 | 5.00  | 0.56 | 482.00 | 0.00 | 0.02 | 20.00 | 1340.00 | 4.00  | 0.00 | 10.00 | 35.00 | 0.12 | 0.00  | 47.00 | 0.00 | 12.00 | 92.00 |
| BK5  | 2.50  | 32.00  | 0.10 | 5.00  | 120.00 | 0.00 | 0.68 | 0.50 | 20.00 | 49.00 | 1.91 | 3.51 | 0.21 | 10.00 | 1.02 | 942.00 | 1.00 | 0.01 | 22.00 | 1150.00 | 4.00  | 0.00 | 10.00 | 57.00 | 0.14 | 5.00  | 68.00 | 0.00 | 14.00 | 79.00 |
| BK6  | 2.50  | 53.00  | 0.10 | 5.00  | 160.00 | 0.00 | 1.12 | 0.50 | 14.00 | 37.00 | 1.49 | 2.99 | 0.08 | 10.00 | 0.85 | 343.00 | 1.00 | 0.02 | 20.00 | 790.00  | 2.00  | 0.00 | 10.00 | 78.00 | 0.09 | 5.00  | 56.00 | 0.00 | 16.00 | 88.00 |
| BK7  | 5.00  | 57.00  | 0.10 | 15.00 | 135.00 | 2.50 | 0.93 | 0.50 | 24.00 | 44.00 | 2.08 | 4.17 | 0.23 | 10.00 | 0.94 | 784.00 | 0.00 | 0.02 | 18.00 | 1820.00 | 6.00  | 0.00 | 10.00 | 70.00 | 0.15 | 5.00  | 82.00 | 0.00 | 18.00 | 51.00 |
| BK8  | 10.00 | 65.00  | 0.10 | 10.00 | 85.00  | 2.50 | 1.01 | 0.50 | 21.00 | 38.00 | 1.64 | 3.72 | 0.21 | 10.00 | 0.92 | 769.00 | 0.00 | 0.02 | 18.00 | 1350.00 | 4.00  | 5.00 | 10.00 | 68.00 | 0.15 | 5.00  | 78.00 | 0.00 | 18.00 | 50.00 |
| BK9  | 2.50  | 31.00  | 0.10 | 10.00 | 90.00  | 0.00 | 0.81 | 0.50 | 18.00 | 38.00 | 1.64 | 3.29 | 0.16 | 5.00  | 0.67 | 543.00 | 0.00 | 0.01 | 18.00 | 1140.00 | 4.00  | 0.00 | 10.00 | 62.00 | 0.13 | 0.00  | 66.00 | 0.00 | 12.00 | 50.00 |
| BK10 | 2.50  | 69.00  | 0.10 | 15.00 | 45.00  | 0.00 | 0.76 | 0.50 | 19.00 | 37.00 | 1.53 | 3.48 | 0.13 | 10.00 | 0.81 | 376.00 | 0.00 | 0.01 | 17.00 | 610.00  | 4.00  | 0.00 | 10.00 | 51.00 | 0.15 | 5.00  | 75.00 | 0.00 | 14.00 | 37.00 |
| BK11 | 5.00  | 54.00  | 0.10 | 10.00 | 80.00  | 2.50 | 0.82 | 0.50 | 20.00 | 54.00 | 1.78 | 3.79 | 0.23 | 10.00 | 1.02 | 517.00 | 0.00 | 0.02 | 22.00 | 970.00  | 4.00  | 0.00 | 10.00 | 58.00 | 0.16 | 5.00  | 76.00 | 0.00 | 17.00 | 38.00 |
| BK12 | 5.00  | 57.00  | 0.10 | 10.00 | 75.00  | 2.50 | 0.77 | 0.50 | 16.00 | 48.00 | 1.88 | 3.67 | 0.16 | 20.00 | 0.81 | 322.00 | 0.00 | 0.02 | 19.00 | 550.00  | 2.00  | 0.00 | 10.00 | 60.00 | 0.16 | 5.00  | 76.00 | 0.00 | 17.00 | 38.00 |
| BK13 | 2.50  | 25.00  | 0.10 | 5.00  | 150.00 | 0.00 | 0.30 | 0.50 | 14.00 | 25.00 | 2.91 | 2.84 | 0.08 | 5.00  | 0.48 | 327.00 | 0.00 | 0.02 | 18.00 | 2260.00 | 6.00  | 0.00 | 10.00 | 46.00 | 0.14 | 0.00  | 49.00 | 0.00 | 12.00 | 44.00 |
| BK14 | 2.50  | 33.00  | 0.10 | 0.00  | 120.00 | 0.00 | 0.46 | 0.50 | 14.00 | 23.00 | 2.02 | 2.56 | 0.08 | 10.00 | 0.51 | 478.00 | 1.00 | 0.02 | 16.00 | 510.00  | 4.00  | 0.00 | 10.00 | 44.00 | 0.15 | 3.00  | 55.00 | 0.00 | 13.00 | 52.00 |
| BK15 | 2.50  | 25.00  | 0.10 | 5.00  | 100.00 | 0.00 | 0.66 | 0.50 | 15.00 | 20.00 | 2.70 | 2.78 | 0.08 | 5.00  | 0.48 | 270.00 | 1.00 | 0.02 | 17.00 | 890.00  | 6.00  | 0.00 | 10.00 | 46.00 | 0.15 | 0.00  | 52.00 | 0.00 | 12.00 | 65.00 |
| BK16 | 2.50  | 17.00  | 0.20 | 0.00  | 150.00 | 0.00 | 0.66 | 0.50 | 10.00 | 12.00 | 2.26 | 2.00 | 0.11 | 5.00  | 0.33 | 292.00 | 0.00 | 0.02 | 10.00 | 2170.00 | 4.00  | 0.00 | 10.00 | 46.00 | 0.12 | 0.00  | 35.00 | 0.00 | 12.00 | 56.00 |
| BK17 | 15.00 | 38.00  | 0.20 | 5.00  | 170.00 | 2.50 | 0.48 | 0.50 | 13.00 | 16.00 | 2.49 | 2.44 | 0.07 | 5.00  | 0.32 | 472.00 | 1.00 | 0.02 | 12.00 | 3510.00 | 6.00  | 0.00 | 10.00 | 43.00 | 0.13 | 0.00  | 42.00 | 0.00 | 11.00 | 89.00 |
| BK18 | 2.50  | 41.00  | 0.20 | 0.00  | 80.00  | 0.00 | 0.41 | 0.50 | 10.00 | 13.00 | 2.11 | 2.17 | 0.05 | 5.00  | 0.22 | 311.00 | 0.00 | 0.02 | 16.00 | 1130.00 | 6.00  | 0.00 | 10.00 | 29.00 | 0.12 | 0.00  | 47.00 | 0.00 | 11.00 | 54.00 |
| BK19 | 2.50  | 17.00  | 0.10 | 0.00  | 165.00 | 0.00 | 0.48 | 0.50 | 12.00 | 14.00 | 2.69 | 2.16 | 0.08 | 5.00  | 0.29 | 345.00 | 0.00 | 0.02 | 12.00 | 780.00  | 6.00  | 0.00 | 10.00 | 29.00 | 0.13 | 0.00  | 40.00 | 0.00 | 11.00 | 40.00 |
| BK20 | 60.00 | 19.00  | 0.10 | 5.00  | 90.00  | 2.50 | 0.43 | 0.50 | 13.00 | 18.00 | 1.73 | 3.08 | 0.08 | 10.00 | 0.21 | 320.00 | 0.00 | 0.01 | 7.00  | 320.00  | 2.00  | 0.00 | 10.00 | 60.00 | 0.12 | 5.00  | 59.00 | 0.00 | 11.00 | 33.00 |
| BK21 | 2.50  | 13.00  | 0.20 | 0.00  | 425.00 | 0.00 | 0.78 | 0.50 | 11.00 | 13.00 | 3.89 | 2.45 | 0.06 | 5.00  | 0.20 | 619.00 | 1.00 | 0.02 | 9.00  | 910.00  | 8.00  | 0.00 | 10.00 | 60.00 | 0.14 | 0.00  | 28.00 | 0.00 | 9.00  | 94.00 |
| BK22 | 2.50  | 13.00  | 0.20 | 5.00  | 215.00 | 0.00 | 0.69 | 0.50 | 9.00  | 13.00 | 1.96 | 1.59 | 0.11 | 5.00  | 0.26 | 782.00 | 0.00 | 0.02 | 12.00 | 2560.00 | 8.00  | 0.00 | 10.00 | 47.00 | 0.10 | 0.00  | 52.00 | 0.00 | 12.00 | 64.00 |
| BK23 | 2.50  | 30.00  | 0.20 | 0.00  | 160.00 | 0.00 | 0.13 | 0.50 | 13.00 | 16.00 | 2.19 | 2.79 | 0.08 | 5.00  | 0.52 | 253.00 | 0.02 | 0.02 | 10.00 | 640.00  | 0.00  | 0.00 | 10.00 | 70.00 | 0.14 | 0.00  | 58.00 | 0.00 | 11.00 | 95.00 |
| BK24 | 2.50  | 65.00  | 0.10 | 0.00  | 140.00 | 0.00 | 0.44 | 0.50 | 15.00 | 17.00 | 1.99 | 3.05 | 0.07 | 5.00  | 0.61 | 318.00 | 0.00 | 0.01 | 10.00 | 900.00  | 4.00  | 0.00 | 10.00 | 62.00 | 0.12 | 0.00  | 48.00 | 0.00 | 11.00 | 92.00 |
| BK25 | 2.50  | 30.00  | 0.20 | 0.00  | 200.00 | 0.00 | 0.36 | 0.50 | 14.00 | 19.00 | 2.79 | 2.77 | 0.08 | 5.00  | 0.44 | 336.00 | 0.00 | 0.02 | 17.00 | 1900.00 | 2.00  | 0.00 | 10.00 | 38.00 | 0.13 | 0.00  | 53.00 | 0.00 | 10.00 | 56.00 |
| BK26 | 2.50  | 13.00  | 0.10 | 0.00  | 100.00 | 0.00 | 0.29 | 0.50 | 10.00 | 13.00 | 1.11 | 2.13 | 0.05 | 5.00  | 0.33 | 760.00 | 0.00 | 0.01 | 6.00  | 860.00  | 0.00  | 0.00 | 10.00 | 33.00 | 0.12 | 0.00  | 43.00 | 0.00 | 9.00  | 90.00 |
| BK27 | 2.50  | 12.00  | 0.20 | 0.00  | 100.00 | 0.00 | 0.26 | 0.50 | 9.00  | 10.00 | 1.00 | 1.84 | 0.07 | 5.00  | 0.22 | 452.00 | 0.00 | 0.02 | 6.00  | 850.00  | 4.00  | 0.00 | 10.00 | 20.00 | 0.11 | 0.00  | 43.00 | 0.00 | 9.00  | 93.00 |
| BK28 | 2.50  | 58.00  | 0.20 | 0.00  | 155.00 | 0.00 | 0.37 | 0.50 | 11.00 | 14.00 | 2.31 | 2.31 | 0.09 | 5.00  | 0.46 | 324.00 | 0.00 | 0.02 | 12.00 | 1100.00 | 2.00  | 0.00 | 10.00 | 38.00 | 0.12 | 0.00  | 42.00 | 0.00 | 10.00 | 93.00 |
| BK29 | 2.50  | 24.00  | 0.10 | 0.00  | 105.00 | 0.00 | 0.56 | 0.50 | 13.00 | 15.00 | 1.90 | 3.14 | 0.06 | 5.00  | 0.72 | 408.00 | 0.00 | 0.01 | 7.00  | 570.00  | 1.00  | 0.00 | 10.00 | 71.00 | 0.13 | 0.00  | 69.00 | 0.00 | 13.00 | 50.00 |
| BK30 | 2.50  | 17.00  | 0.10 | 0.00  | 150.00 | 0.00 | 0.49 | 0.50 | 14.00 | 17.00 | 2.12 | 2.95 | 0.05 | 5.00  | 0.74 | 349.00 | 0.00 | 0.01 | 10.00 | 710.00  | 1.00  | 0.00 | 10.00 | 64.00 | 0.15 | 0.00  | 62.00 | 0.00 | 14.00 | 55.00 |
| BL1  | 15.00 | 100.00 | 0.10 | 2.50  | 85.00  | 0.00 | 0.73 | 0.50 | 21.00 | 56.00 | 2.12 | 4.39 | 0.30 | 10.00 | 1.22 | 529.00 | 0.00 | 0.02 | 34.00 | 790.00  | 2.00  | 0.00 | 10.00 | 57.00 | 0.15 | 5.00  | 86.00 | 0.00 | 22.00 | 60.00 |
| BL2  | 10.00 | 40.00  | 0.10 | 2.50  | 55.00  | 0.00 | 0.60 | 0.50 | 18.00 | 52.00 | 1.78 | 3.43 | 0.28 | 10.00 | 1.03 | 397.00 | 0.00 | 0.02 | 26.00 | 580.00  | 0.00  | 0.00 | 10.00 | 48.00 | 0.17 | 5.00  | 70.00 | 0.00 | 18.00 | 58.00 |
| BL3  | 2.50  | 30.00  | 0.10 | 0.00  | 90.00  | 0.00 | 0.49 | 0.50 | 17.00 | 44.00 | 2.05 | 3.22 | 0.20 | 10.00 | 0.85 | 549.00 | 0.00 | 0.02 | 25.00 | 1130.00 | 0.00  | 0.00 | 10.00 | 41.00 | 0.14 | 5.00  | 59.00 | 0.00 | 14.00 | 79.00 |
| BL4  | 2.50  | 28.50  | 0.10 | 0.00  | 80.00  | 0.00 | 0.48 | 0.50 | 17.00 | 43.00 | 1.89 | 3.09 | 0.20 | 10.00 | 0.84 | 550.00 | 0.00 | 0.02 | 23.00 | 950.00  | 0.00  | 0.00 | 10.00 | 41.00 | 0.14 | 5.00  | 59.00 | 0.00 | 14.00 | 79.00 |
| BL5  | 2.50  | 46.00  | 0.10 | 5.00  | 135.00 | 0.00 | 1.16 | 0.50 | 14.00 | 46.00 | 1.51 | 2.87 | 0.10 | 10.00 | 0.80 | 675.00 | 1.00 | 0.02 | 21.00 | 1010.00 | 1.00  | 0.00 | 10.00 | 79.00 | 0.10 | 10.00 | 65.00 | 0.00 | 15.00 | 47.00 |
| BL6  | 20.00 | 50.00  | 0.10 | 5.00  | 185.00 | 2.50 | 0.97 | 0.50 | 18.00 | 44.00 | 1.72 | 3.46 | 0.10 | 10.00 | 0.93 | 793.00 | 1.00 | 0.02 | 21.00 | 890.00  | 0.00  | 0.00 | 10.00 | 47.00 | 0.13 | 0.00  | 68.00 | 0.00 | 13.00 | 75.00 |
| BL7  | 5.00  | 26.00  | 0.10 | 2.50  | 70.00  | 0.00 | 0.60 | 0.50 | 16.00 | 41.00 | 1.90 | 3.20 | 0.13 | 5.00  | 0.69 | 418.00 | 0.00 | 0.02 | 17.00 | 1410.00 | 1.00  | 0.00 | 10.00 | 56.00 | 0.21 | 0.00  | 87.00 | 0.00 | 17.00 | 62.00 |
| BL8  | 2.50  | 52.00  | 0.10 | 0.00  | 85.00  | 0.00 | 0.72 | 0.50 | 20.00 | 35.00 | 2.36 | 4.18 | 0.36 | 5.00  | 0.93 | 311.00 | 0.00 | 0.01 | 16.00 | 690.00  | 1.00  | 0.00 | 10.00 | 51.00 | 0.16 | 0.00  | 61.00 | 0.00 | 14.00 | 46.00 |
| BL9  | 2.50  | 19.00  | 0.10 | 0.00  | 65.00  | 0.00 | 0.63 | 0.50 | 13.00 | 28.00 | 1.86 | 2.82 | 0.16 | 5.00  | 0.62 | 249.00 | 0.00 | 0.01 | 13.00 | 420.00  | 1.00  | 0.00 | 10.00 | 65.00 | 0.14 | 0.00  | 60.00 | 0.00 | 12.00 | 66.00 |
| BL10 | 2.50  | 26.00  | 0.10 | 0.00  | 155.00 | 0.00 | 0.53 | 0.50 | 14.00 |       |      |      |      |       |      |        |      |      |       |         |       |      |       |       |      |       |       |      |       |       |

### 3b. GEOCHEMICAL PLOTS

### Golden Loon Soils- Au

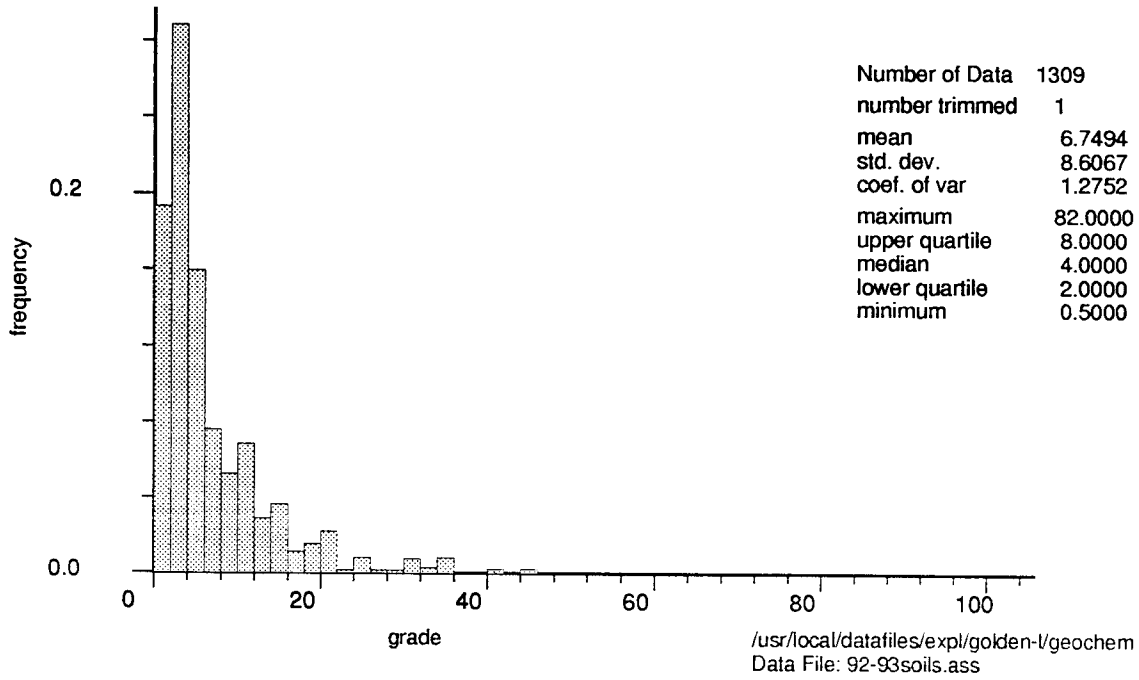


FIGURE 8.0



### Golden Loon Soils- Cu

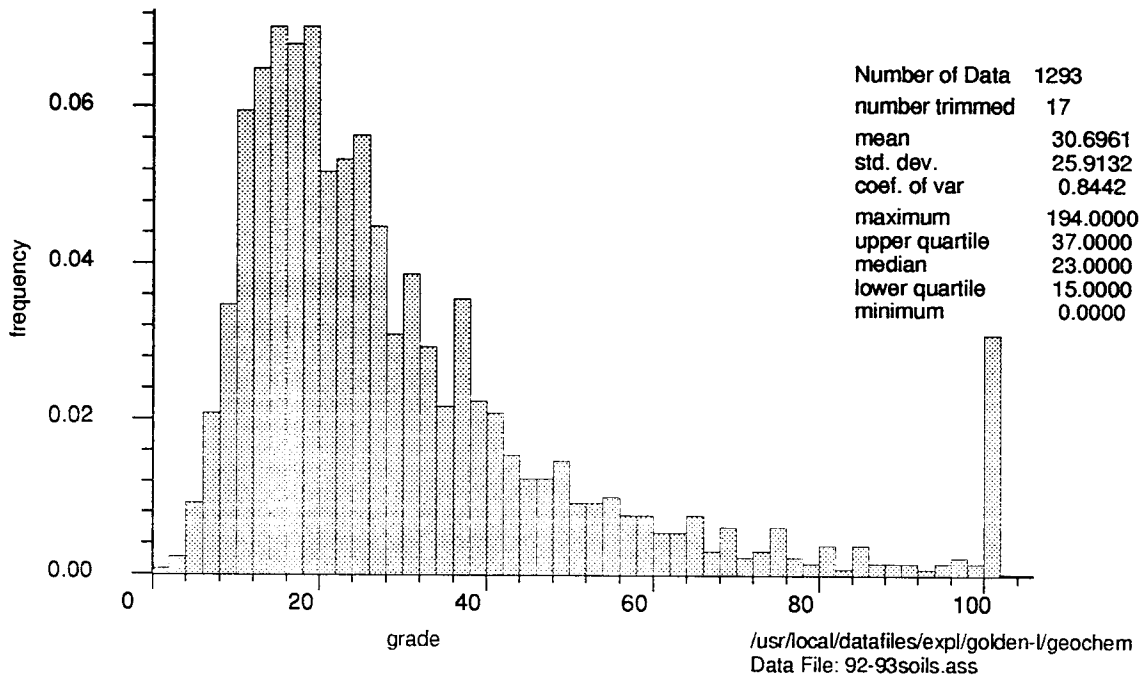


FIGURE 8.1

### Golden Loon Soils- Pb

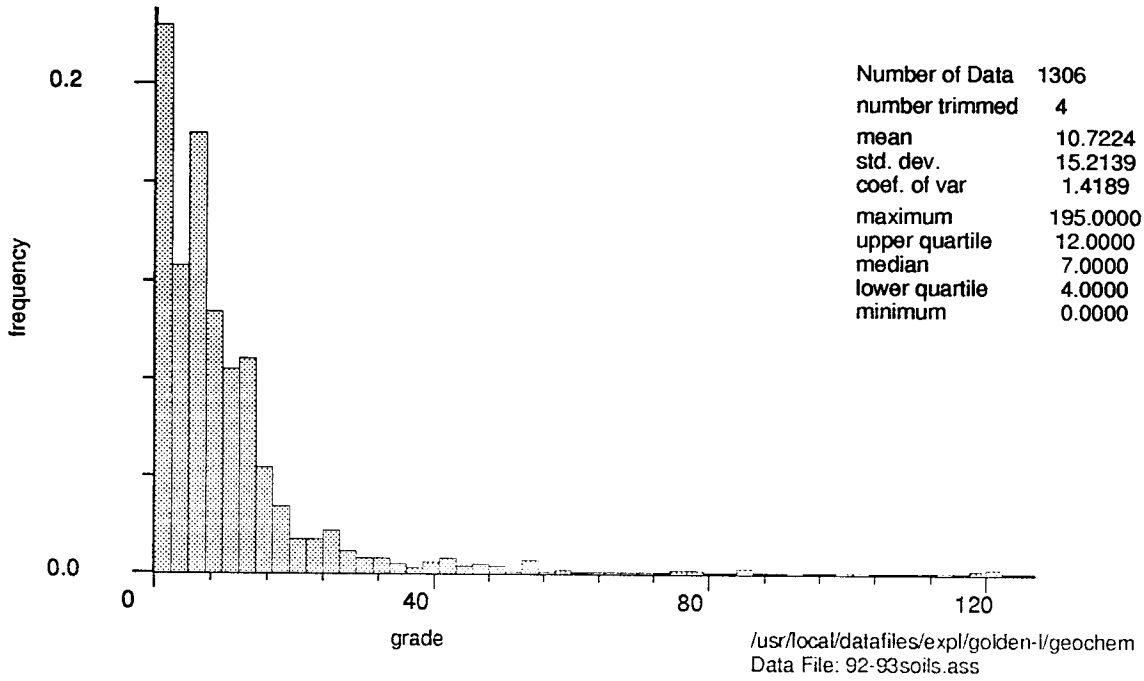


FIGURE 8.2

### Golden Loon soils- Zn

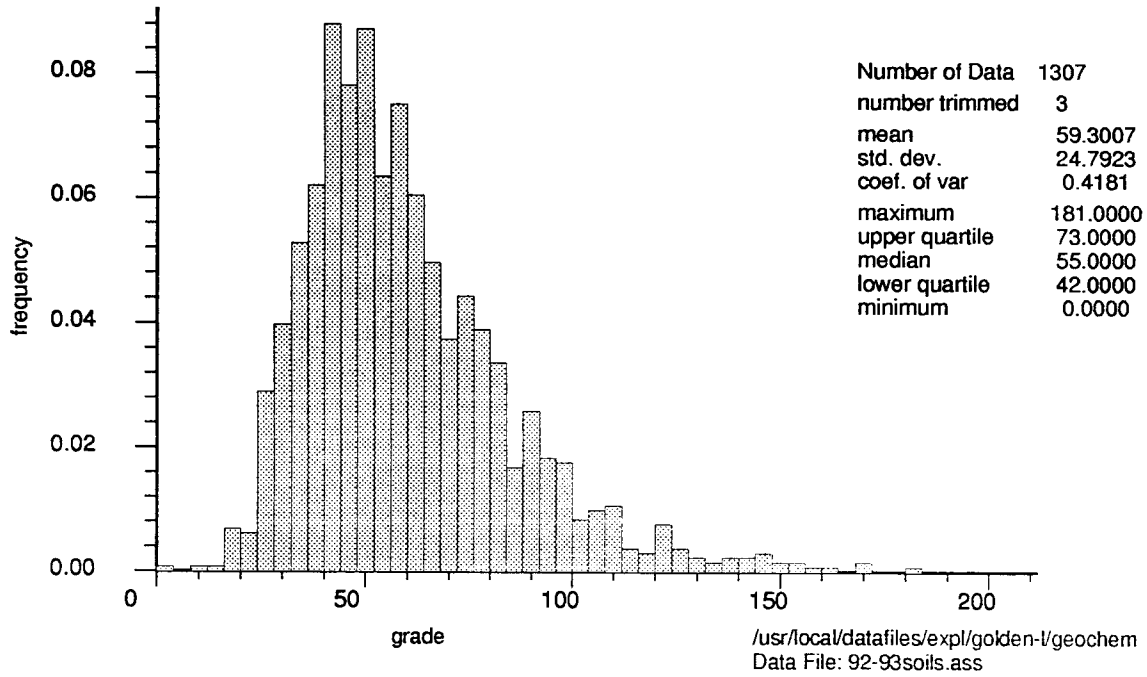
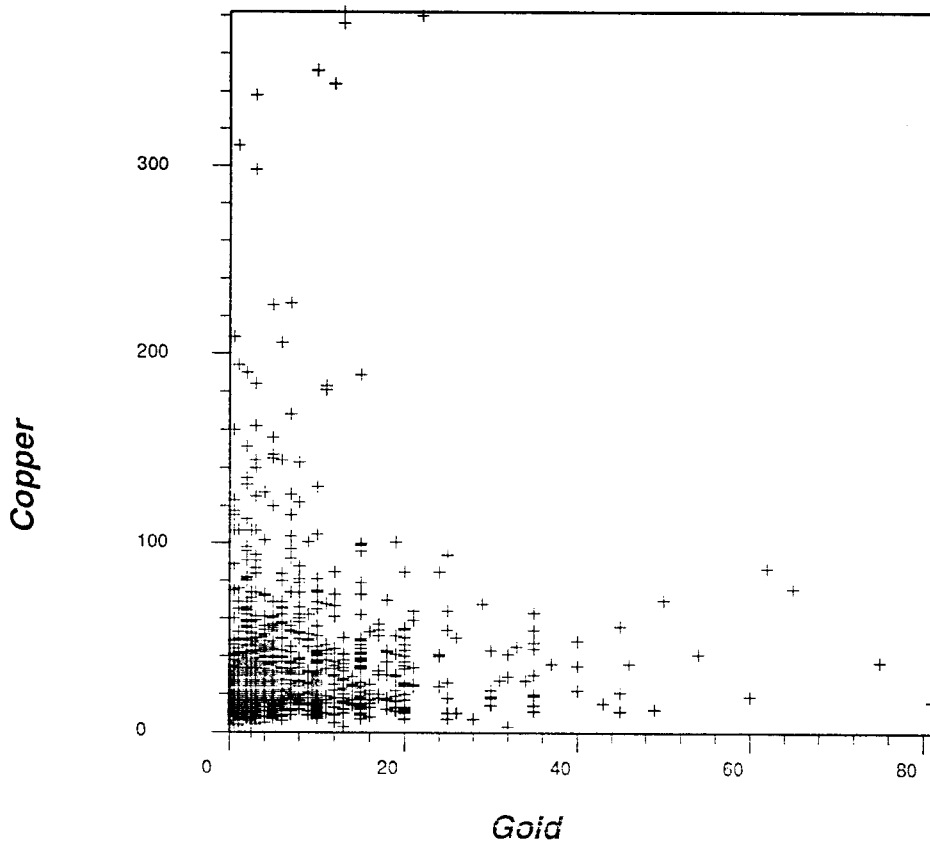


FIGURE 8.3

### Golden Loon Soils



Number of data: 1304

6 Data trimmed

Correlation coefficient = 0.0654

T Statistic (for different means) = -25.3911

#### Regression Lines

LS y on x:  $Y = 31.3162 + 0.2830 X$

Mean and Variance of X: 6.7308 74.1051

LS x on y:  $X = 6.2286 + 0.0151 Y$

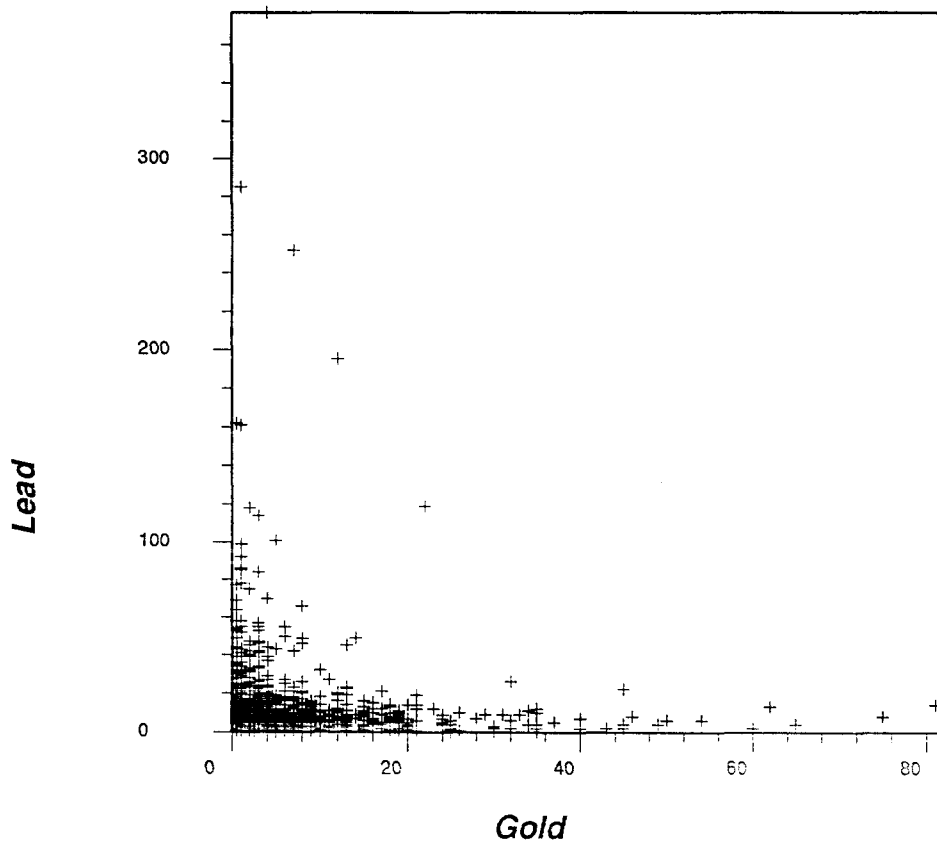
Mean and Variance of Y: 33.2209 1387.1492

UNBIASED:  $Y = -388.3529 + 62.6333 X$

FILE: 92-93soils.ass

FIGURE 9.0

### Golden Loon Soils



Number of data: 1308

2 Data trimmed

Correlation coefficient =  $-0.1104$

T Statistic (for different means) =  $-7.1862$

#### Regression Lines

LS y on x:  $Y = 13.2063 + -0.2675 X$

Mean and Variance of X: 6.7462 74.1179

LS x on y:  $X = 7.2656 + -0.0456 Y$

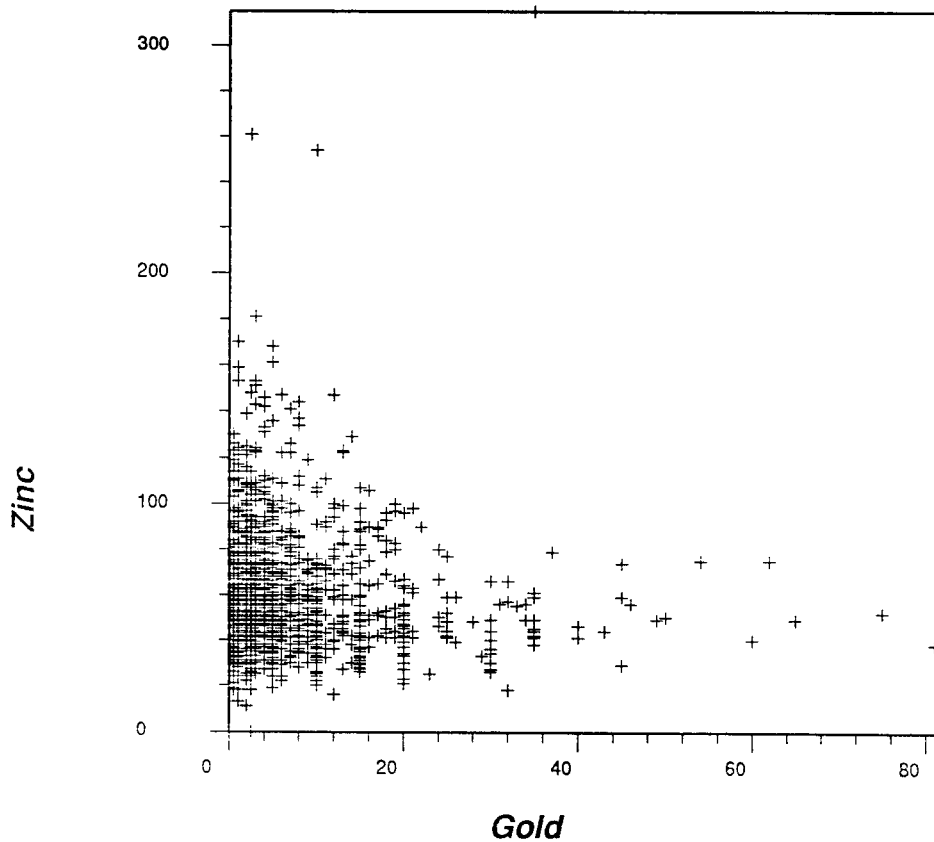
Mean and Variance of Y: 11.4018 435.2027

UNBIASED:  $Y = 134.6348 + -18.2671 X$

FILE: 92-93soils.ass

FIGURE 9.1

### Golden Loon Soils



Number of data: 1309

1 Data trimmed

Correlation coefficient = -.0554

T Statistic (for different means) = -66.9087

#### Regression Lines

LS y on x:  $Y = 60.9747 + -0.1732 X$

Mean and Variance of X: 6.7494 74.0751

LS x on y:  $X = 7.8099 + -0.0177 Y$

Mean and Variance of Y: 59.8060 723.3831

UNBIASED:  $Y = 401.5955 + -50.6398 X$

FILE: 92-93soils.ass

FIGURE 9.2

### 3c. LARGE FIGURES AND PLANS

APPENDIX 4  
GEOCHEMICAL DATA (ROCKS)



4a. ROCK SAMPLE GEOCHEMICAL CERTIFICATES

## Golden Loon Project Rock Geochemistry, January 15, 1993

Page 1

| SAMP  | AU   | CG   | AG   | AS     | BA  | BI   | CA    | CD | CO  | CR  | AL   | FE   | K     | LA   | MG   | MN   | MO   | NA    | NI   | P    | PB   | SD  | SN  | SR   | TI    | U   | V   | W   | X  | ZN   |
|-------|------|------|------|--------|-----|------|-------|----|-----|-----|------|------|-------|------|------|------|------|-------|------|------|------|-----|-----|------|-------|-----|-----|-----|----|------|
| 3910A | 160  | 77   | 0.4  | 15     | 95  | <5   | 2.43  | <1 | 15  | 103 | 0.79 | 3.67 | 0.57  | 10   | 0.71 | 814  | 10   | 0.02  | 5    | 1070 | 22   | <5  | <20 | 105  | 0.08  | <10 | 80  | <10 | 10 | 44   |
| 3810B | 175  | 27   | 0.6  | 10     | 80  | <5   | 1.34  | <1 | 11  | 141 | 0.19 | 2.49 | 0.09  | <10  | 0.19 | 527  | 5    | 0.04  | 5    | 660  | 9    | <5  | <20 | 48   | <0.01 | <10 | 23  | <10 | 4  | 22   |
| 3676  | 85   | 41   | <2   | 50     | 280 | 5    | 0.35  | <1 | 22  | 83  | 0.51 | 9.89 | 0.39  | <10  | 0.25 | 395  | 546  | 0.01  | 10   | 620  | 26   | <5  | <20 | 20   | 0.06  | 10  | 131 | <10 | 3  | 222  |
| 3677* | 0.6  | 3.88 | 0.26 | <2     | <5  | 2.38 | <1    | 14 | 124 | 67  | 20   | 0.10 | <10   | 0.28 | 873  | 21   | 0.03 | 10    | 1040 | 48   | <5   | <20 | 59  | 0.01 | <10   | 60  | <10 | 5   | 86 |      |
| 3677  | 150  | 57   | 0.4  | 15     | 80  | <5   | 2.01  | <1 | 11  | 108 | 0.22 | 3.22 | 0.08  | <10  | 0.23 | 729  | 19   | 0.03  | 6    | 880  | 38   | <5  | <20 | 49   | 0.01  | <10 | 50  | <10 | 4  | 70   |
| 3678  | 50   | 41   | <2   | 15     | 215 | <5   | 2.59  | <1 | 12  | 78  | 0.15 | 3.60 | 0.06  | <10  | 0.53 | 714  | 14   | 0.03  | 4    | 980  | 9    | <5  | <20 | 85   | 0.05  | <10 | 95  | <10 | 9  | 56   |
| 3679  | 120  | 92   | 0.6  | 10     | 140 | <5   | 2.13  | <1 | 14  | 97  | 0.75 | 3.33 | 0.43  | 10   | 0.59 | 854  | 7    | 0.02  | 6    | 920  | 78   | <5  | <20 | 31   | 0.05  | <10 | 54  | <10 | 9  | 48   |
| 3680  | 25   | 76   | <2   | 15     | 135 | <5   | 0.85  | <1 | 13  | 82  | 0.76 | 3.67 | 0.32  | 10   | 0.32 | 756  | 7    | 0.02  | 3    | 930  | 4    | <5  | <20 | 47   | 0.03  | <10 | 35  | <10 | 6  | 43   |
| 3691  | 20   | 10   | 0.2  | 10     | 205 | <5   | 2.25  | <1 | 9   | 109 | 0.60 | 2.09 | 0.37  | 10   | 0.40 | 793  | 6    | 0.02  | 3    | 870  | 2    | <5  | <20 | 123  | <0.01 | <10 | 19  | <10 | 3  | 27   |
| 3751  | 105  | 260  | 2.2  | 5      | 705 | <5   | 2.32  | <1 | 7   | 241 | 0.14 | 1.61 | 0.06  | <10  | 0.62 | 527  | 7    | 0.01  | 20   | 470  | 1018 | <5  | <20 | 116  | <0.01 | <10 | 6   | <10 | 3  | 22   |
| 3752  | 35   | 38   | <2   | 10     | 370 | <5   | 2.27  | <1 | 17  | 61  | 0.42 | 3.00 | 0.20  | <10  | 0.50 | 750  | 3    | 0.02  | 3    | 1050 | 8    | <5  | <20 | 78   | 0.02  | <10 | 40  | <10 | 8  | 29   |
| 3753  | 100  | 24   | <2   | 10     | 220 | <5   | 1.73  | <1 | 9   | 107 | 0.19 | 1.86 | 0.08  | <10  | 0.11 | 484  | 3    | 0.02  | 2    | 430  | 4    | <5  | <20 | 33   | 0.01  | <10 | 49  | <10 | 3  | 49   |
| 3754  | 355  | 4    | 1.4  | 10     | 55  | <5   | 4.32  | <1 | 6   | 124 | 0.10 | 1.97 | 0.06  | <10  | 0.44 | 540  | 17   | 0.02  | 5    | 510  | 76   | <5  | <20 | 249  | <0.01 | <10 | 2   | <10 | 5  | 54   |
| 3755  | 50   | 55   | <2   | 10     | 365 | <5   | 2.89  | <1 | 7   | 94  | 0.21 | 2.77 | 0.12  | 10   | 0.53 | 718  | 3    | 0.03  | 3    | 920  | 10   | <5  | <20 | 109  | 0.03  | <10 | 90  | <10 | 9  | 40   |
| 3756  | 40   | 53   | <2   | 10     | 145 | <5   | 3.05  | <1 | 13  | 73  | 0.42 | 2.95 | 0.21  | 10   | 0.18 | 815  | 5    | 0.02  | 4    | 960  | 2    | <5  | <20 | 49   | 0.01  | <10 | 20  | <10 | 5  | 27   |
| 3757  | 50   | 50   | 0.4  | 10     | 350 | <5   | 3.70  | <1 | 10  | 73  | 0.46 | 2.52 | 0.26  | 10   | 0.34 | 763  | 2    | 0.02  | 2    | 1030 | 10   | <5  | <20 | 68   | <0.01 | <10 | 9   | <10 | 5  | 30   |
| 3758  | 25   | 51   | 0.2  | 10     | 205 | <5   | 3.27  | <1 | 11  | 64  | 0.53 | 2.79 | 0.33  | 10   | 0.67 | 981  | 7    | 0.01  | 3    | 1150 | 4    | <5  | <20 | 149  | 0.01  | <10 | 19  | <10 | 9  | 42   |
| 3759  | 20   | 47   | 0.2  | 10     | 100 | <5   | 2.66  | <1 | 12  | 89  | 0.56 | 2.97 | 0.34  | 10   | 0.83 | 846  | 4    | 0.02  | 4    | 1140 | 2    | <5  | <20 | 171  | 0.01  | <10 | 13  | <10 | 6  | 35   |
| 3760  | 75   | 42   | 0.2  | 10     | 325 | <5   | 2.72  | <1 | 13  | 75  | 0.63 | 2.89 | 0.35  | 10   | 0.53 | 934  | 5    | 0.02  | 5    | 1200 | 2    | <5  | <20 | 155  | <0.01 | <10 | 11  | <10 | 6  | 36   |
| 3801  | 60   | 61   | 0.2  | 15     | 170 | <5   | 3.07  | <1 | 16  | 56  | 0.40 | 3.41 | 0.19  | <10  | 0.64 | 900  | 3    | 0.02  | 5    | 1120 | 2    | <5  | <20 | 87   | 0.01  | <10 | 23  | <10 | 6  | 32   |
| 3802  | 5    | 7    | <2   | 15     | 245 | <5   | 1.65  | <1 | 10  | 90  | 1.00 | 3.55 | 0.41  | 10   | 1.29 | 453  | 4    | 0.02  | 8    | 930  | 4    | <5  | <20 | 91   | 0.29  | <10 | 33  | <10 | 7  | 38   |
| 3803  | 30   | 15   | 0.2  | 10     | 570 | <5   | 3.39  | <1 | 12  | 87  | 0.48 | 2.25 | 0.27  | <10  | 0.65 | 757  | 3    | 0.02  | 7    | 940  | 4    | <5  | <20 | 131  | <0.01 | <10 | 6   | <10 | 4  | 25   |
| 3804  | 25   | 8    | <2   | 10     | 65  | <5   | 4.63  | <1 | 9   | 58  | 0.49 | 2.25 | 0.31  | 10   | 1.05 | 822  | 4    | 0.01  | 1    | 1210 | 2    | <5  | <20 | 230  | <0.01 | <10 | 11  | <10 | 7  | 27   |
| 3805  | 30   | 39   | <2   | 10     | 140 | <5   | 3.72  | <1 | 11  | 70  | 0.61 | 2.94 | 0.37  | 10   | 0.77 | 949  | 4    | 0.02  | 2    | 1130 | 4    | <5  | <20 | 231  | <0.01 | <10 | 17  | <10 | 8  | 34   |
| 3806  | 40   | 29   | <2   | 20     | 35  | <5   | 3.50  | <1 | 40  | 100 | 1.15 | 5.38 | 0.21  | <10  | 0.88 | 445  | 30   | 0.01  | 5    | 870  | 2    | <5  | <20 | 21   | 0.12  | 10  | 34  | <10 | 13 | 50   |
| 3807  | 85   | 32   | <2   | 15     | 145 | <5   | 3.82  | <1 | 12  | 70  | 0.69 | 3.32 | 0.35  | 10   | 0.69 | 1056 | 2    | 0.01  | 4    | 1220 | 2    | <5  | <20 | 228  | <0.01 | <10 | 28  | <10 | 7  | 39   |
| 3808  | 2082 | 1106 | 27.4 | 5      | 220 | <5   | 1.49  | <1 | 3   | 257 | 0.06 | 1.09 | 0.02  | <10  | 0.06 | 267  | 61   | <0.01 | 3    | 140  | 5628 | <5  | <20 | 367  | <0.01 | <10 | 3   | <10 | 6  | 6    |
| 3809  | 75   | 15   | 0.4  | 15     | 260 | <5   | 2.43  | <1 | 8   | 116 | 0.18 | 2.31 | 0.09  | 10   | 0.54 | 642  | 4    | 0.03  | 4    | 900  | 42   | <5  | <20 | 85   | 0.02  | <10 | 49  | <10 | 6  | 23   |
| 3811  | 170  | 16   | 0.6  | 10     | 215 | <5   | 1.55  | <1 | 8   | 134 | 0.20 | 2.25 | 0.08  | <10  | 0.12 | 445  | 15   | 0.03  | 4    | 530  | 8    | <5  | <20 | 56   | <0.01 | <10 | 30  | <10 | 4  | 36   |
| 3812  | 240  | 11   | 1.0  | 10     | 70  | <5   | 1.75  | <1 | 6   | 105 | 0.17 | 2.24 | 0.04  | <10  | 0.11 | 464  | 5    | 0.05  | 4    | 430  | 4    | <5  | <20 | 77   | <0.01 | <10 | 13  | <10 | 4  | 24   |
| 3813  | 25   | 11   | <2   | 10     | 40  | <5   | 2.29  | <1 | 8   | 124 | 0.19 | 2.58 | 0.09  | <10  | 0.57 | 607  | 8    | 0.03  | 7    | 850  | 4    | <5  | <20 | 85   | 0.01  | <10 | 60  | <10 | 5  | 30   |
| 3814  | 250  | 11   | 1.6  | 5      | 375 | <5   | 1.43  | <1 | 8   | 111 | 0.21 | 1.90 | 0.11  | <10  | 0.18 | 537  | 6    | 0.02  | 4    | 870  | 64   | <5  | <20 | 47   | 0.01  | <10 | 31  | <10 | 5  | 21   |
| 3815  | 45   | 20   | <2   | 15     | 400 | <5   | 2.00  | <1 | 15  | 85  | 0.18 | 3.65 | 0.09  | <10  | 0.51 | 991  | 6    | 0.02  | 5    | 960  | 8    | <5  | <20 | 74   | 0.03  | <10 | 86  | <10 | 7  | 33   |
| 3816  | 30   | 14   | <2   | 10     | 95  | <5   | 2.17  | <1 | 10  | 80  | 0.26 | 2.81 | 0.12  | 10   | 0.65 | 646  | 3    | 0.03  | 3    | 970  | 6    | <5  | <20 | 74   | 0.04  | <10 | 82  | <10 | 9  | 31   |
| 3817  | 50   | 68   | <2   | 20     | 450 | <5   | 2.39  | <1 | 13  | 88  | 0.26 | 4.04 | 0.16  | <10  | 0.51 | 832  | 9    | 0.02  | 5    | 1020 | 52   | <5  | <20 | 76   | 0.35  | <10 | 107 | <10 | 8  | 51   |
| 3818  | 35   | 74   | 0.2  | 10     | 75  | <5   | 2.58  | <1 | 20  | 61  | 1.74 | 4.41 | 0.55  | 10   | 1.18 | 997  | 7    | 0.01  | 6    | 1210 | <2   | 5   | <20 | 109  | 0.14  | <10 | 49  | <10 | 20 | 64   |
| 3819  | 140  | 174  | 2.6  | >10000 | 30  | <5   | 1.80  | <1 | 21  | 93  | 1.79 | 6.52 | <0.01 | <10  | 1.07 | 756  | 5    | 0.01  | 61   | 1630 | 168  | 75  | <20 | 99   | 0.11  | <10 | 58  | <10 | 8  | 7543 |
| 3820  | 20   | 692  | 0.6  | 170    | 20  | <5   | 2.36  | <1 | 41  | 92  | 1.11 | 1.34 | <0.01 | 10   | 0.56 | 127  | 3    | 0.02  | 15   | 2740 | 8    | <5  | <20 | 154  | 0.11  | <10 | 45  | <10 | 13 | 60   |
| 3821  | 20   | 167  | 0.8  | 135    | 50  | <5   | 10.14 | <1 | 13  | 67  | 1.28 | 6.66 | 0.05  | <10  | 0.39 | 1391 | 4    | <0.01 | 5    | 230  | 34   | <5  | <20 | 66   | 0.11  | <10 | 71  | <10 | 37 | 145  |
| 3822  | 570  | 6    | 3.8  | 10     | 55  | <5   | 3.43  | <1 | 23  | 50  | 0.89 | 4.27 | 0.19  | <10  | 0.79 | 1101 | 1    | 0.03  | 5    | 1190 | 8    | 5   | <20 | 203  | 0.11  | <10 | 52  | <10 | 17 | 40   |
| 3823* | 0.6  | 4.76 | 0.44 | 2      | <5  | 2.13 | <1    | 19 | 86  | 13  | 30   | 0.13 | <10   | 0.14 | 768  | 6    | 0.03 | 5     | 1190 | 4    | <5   | <20 | 36  | 0.01 | 10    | 28  | <10 | 8   | 38 |      |
| 3823  | 180  | 11   | 0.4  | 20     | 40  | <5   | 1.80  | <1 | 15  | 71  | 0.39 | 4.00 | 0.12  | <10  | 0.13 | 650  | 4    | 0.03  | 4    | 990  | 2    | <5  | <20 | 32   | 0.01  | 10  | 24  | <10 | 7  | 32   |
| 3824  | 295  | 22   | 1.0  | 10     | 50  | <5   | 1.48  | <1 | 11  | 100 | 0.34 | 2.56 | 0.15  | <10  | 0.20 | 648  | 32   | 0.01  | 5    | 740  | 10   | <5  | <20 | 55   | 0.01  | <10 | 20  | <10 | 4  | 32   |
| 3825  | 25   | 14   | <2   | 5      | 195 | <5   | 0.67  | <1 | 5   | 97  | 0.25 | 1.92 | 0.14  | <10  | 0.10 | 456  | 4    | 0.03  | 3    | 400  | 4    | <5  | <20 | 31   | 0.01  | <10 | 51  | <10 | 3  | 27   |
| 11926 | 5    | 110  | 2.0  | <5     | 10  | <5   | 0.29  | <1 | <1  | 231 | 0.03 | 0.44 | <0.01 | <10  | 0.05 | 75   | 15   | <0.01 | 9    | <10  | 60   | <5  | <20 | 24   | <0.01 | <10 | 2   | <10 | <1 | 6    |
| 11927 | 10   | 139  | 0.4  | 20     | 50  | <5   | 0.89  | <1 | 63  | 389 | 2.10 | 5.59 | 0.27  | 10   | 2.74 | 482  | 14   | 0.03  | 143  | 1120 | 4    | <5  | <20 | 35   | 0.14  | 10  | 122 | <10 | 12 | 47   |
| 11928 | 15   | 1179 | 1.2  | 15     | 45  | <5   | 3.44  | <1 | 16  | 34  | 0.34 | 2.65 | 0.24  | <10  | 1.00 | 794  | 7    | 0.01  | 3    | 640  | <2   | 5   | <20 | 203  | <0.01 | <10 | 3   | <10 | 4  | 29   |
| 11930 | 10   | 16   | <2   | 5      | 690 | <5   | 2.24  | <1 | 4   | 59  | 0.29 | 1.54 | 0.17  | <10  | 0.26 | 466  | 4    | 0.01  | 2    | 710  | <2   | 5   | <20 | 201  | <0.01 | <10 | 4   | <10 | 3  | 14   |
| 1     |      |      |      |        |     |      |       |    |     |     |      |      |       |      |      |      |      |       |      |      |      |     |     |      |       |     |     |     |    |      |

## Golden Loon Project Rock Geochemistry, January 15, 1993

Page 2

| SAMP  | AU | CD  | AG  | AS  | BA  | BI  | CA   | CD  | CO | CR  | AL   | FE   | K    | LA   | MG   | MN   | MO | NA   | NI | P    | PB | SB  | SN   | SR  | TI   | U    | V   | W    | Y  | ZN |
|-------|----|-----|-----|-----|-----|-----|------|-----|----|-----|------|------|------|------|------|------|----|------|----|------|----|-----|------|-----|------|------|-----|------|----|----|
| 11943 | 25 | 52  | <.2 | <.5 | 80  | <.5 | 1.83 | <.1 | 28 | 64  | 1.63 | 3.80 | 0.23 | <.10 | 1.15 | 567  | 3  | 0.02 | 7  | 1660 | 2  | <.5 | <.20 | 126 | 0.21 | <.10 | 84  | <.10 | 20 | 79 |
| 11944 | 20 | 49  | <.2 | <.5 | 225 | <.5 | 1.68 | <.1 | 22 | 77  | 2.15 | 4.13 | 0.96 | <.10 | 1.20 | 706  | 4  | 0.02 | 4  | 1470 | 2  | 5   | <.20 | 111 | 0.25 | <.10 | 107 | <.10 | 23 | 64 |
| 11945 | 80 | 40  | 0.4 | 10  | 160 | <.5 | 3.68 | <.1 | 14 | 70  | 0.53 | 3.27 | 0.25 | <.10 | 0.84 | 1098 | 4  | 0.01 | 4  | 1350 | 2  | <.5 | <.20 | 209 | <.01 | <.10 | 17  | <.10 | 8  | 42 |
| 11946 | 15 | 23  | 0.2 | 10  | 470 | <.5 | 3.31 | <.1 | 11 | 102 | 0.50 | 2.94 | 0.29 | 10   | 0.59 | 941  | 5  | 0.01 | 3  | 1090 | 2  | <.5 | <.20 | 144 | <.01 | <.10 | 14  | <.10 | 6  | 44 |
| 11947 | 35 | 973 | 0.8 | 5   | 110 | <.5 | 4.61 | <.1 | 20 | 41  | 0.63 | 3.43 | 0.21 | <.10 | 1.14 | 1155 | 5  | 0.01 | 3  | 1020 | 4  | 5   | <.20 | 180 | <.01 | <.10 | 12  | <.10 | 6  | 53 |
| 11948 | 25 | 57  | <.2 | 10  | 470 | <.5 | 2.22 | <.1 | 11 | 130 | 0.43 | 3.00 | 0.24 | <.10 | 0.33 | 653  | 8  | 0.02 | 4  | 980  | 2  | <.5 | <.20 | 54  | 0.01 | <.10 | 18  | <.10 | 5  | 28 |
| 11949 | 20 | 41  | 0.2 | <.5 | 215 | <.5 | 3.09 | <.1 | 11 | 78  | 0.75 | 2.81 | 0.26 | 10   | 0.51 | 754  | 7  | 0.02 | 5  | 1030 | 22 | <.5 | <.20 | 95  | 0.03 | <.10 | 45  | <.10 | 9  | 32 |
| 11950 | 25 | 18  | <.2 | 5   | 235 | <.5 | 2.81 | <.1 | 9  | 116 | 0.42 | 2.65 | 0.21 | 10   | 0.53 | 721  | 4  | 0.01 | 3  | 1000 | 4  | <.5 | <.20 | 70  | 0.01 | <.10 | 22  | <.10 | 5  | 28 |
| 12028 | 15 | 43  | 0.2 | 5   | 65  | <.5 | 1.24 | <.1 | 9  | 113 | 0.51 | 2.13 | 0.11 | <.10 | 0.54 | 420  | 9  | 0.01 | 5  | 620  | 60 | <.5 | <.20 | 65  | 0.04 | <.10 | 47  | <.10 | 7  | 30 |

4b. ROCK SAMPLE DESCRIPTIONS - 1992 SURVEYS

## GOLDEN LOON PROPERTY

### ROCK SAMPLE DESCRIPTIONS - 1992 SURVEYS, PDI (see Figures 10.0, 10.1 and 10.2 for locations and results)

| <u>Sample No.</u> | <u>UTM Coordinates</u> | <u>Description</u>  |
|-------------------|------------------------|---|
| 3810 A, B.        | 685438.13/5701067.89   | Altered monzonite, silicified with hematite. Quartz vein stockworks. Disseminated pyrite, minor chalcopyrite in veins and wallrocks. Subcrop samples. |
| 3676              | 685641.30/5700903.47   | Altered monzonite, silicified with hematite. Float.   |
| 3677              | 685641.30/5700903.47   | Silicified monzonite, 1% pyrite. Heavily oxidized with quartz veins. subcrop?   |
| 3678              | 685718.47/5700972.10   | As above, oxidized with hematite. 1% pyrite. Outcrop.   |
| 3679              | 685643.19/5701293.85   | Weakly silicified monzonite. 1% pyrite, hematitic. Float  |
| 3680              | 685686.01/5701295.09   | As above. Float.  |
| 3681              | 684687.04/5700148.25   | Altered monzonite with pyrite. Float.   |
| 3751              | 685577.48/5700883.30   | Altered monzonite with quartz carbonate veining minor galena, 2% pyrite, 0.5% chalcopyrite. Disseminated hematite. Subcrop.                           |
| 3752              | 685606.35/5700883.94   | Silicified monzonite, weak quartz vein stockwork. 1% pyrite minor chalcopyrite, subcrop.  |
| 3753              | 685574.61/5700967.19   | As above, quartz veined, 0.5% pyrite. Float.  |
| 3754              | 685564.70/5700962.66   | Strong silicified monzonite, vein stockwork. 5% pyrite, 5% hematite. float  |
| 3755              | 685554.79/5700958.12   | Less silicified, more hematitic. Galena in fine fracture. Float.  |

|      |                      |   |
|------|----------------------|---|
| 3756 | 683982.54/5702089.64 | Moderately silicified monzonite, 1% pyrite, some hematite. Float  |
| 3757 | 684026.28/5702072.36 | Same as above, Float.   |
| 3758 | 684703.26/5702253.62 | Sericite, weak silicified granodiorite. No veining, float.  |
| 3759 | 684671.46/5702352.69 | Moderately silicified granodiorite. Minor quartz veinlets, weak hematite. Float   |
| 3760 | 684565.60/5702650.40 | Strongly silicified granodiorite, sericite, minor pyrite. Float.  |
| 3801 | 682790.80/5702569.59 | Sheared, hematitic granodiorite. Outcrop.   |
| 3802 | 682821.42/5702592.48 | As above. Outcrop/subcrop   |
| 3803 | 682019.99/5701691.47 | Moderately silicified monzonite, chloritic fractures weak vein stockwork. Subcrop/float?  |
| 3804 | 685783.65/5701966.97 | Silicified monzonite, quartz stringers, pyrite cubes, weak hematite. float.   |
| 3805 | 685785.19/5702812.14 | Moderately silicified granodiorite, minor pyrite. Float.  |
| 3806 | 685427.23/5703123.05 | As above, trace chalcopyrite. float.  |
| 3807 | 685568.47/5703125.19 | Monzonite with bleby pyrite, quartz stringers. Float.   |
| 3808 | 685464.19/5701034.28 | Granodiorite with quartz veins. 30cm alteration envelopes. Quartz has significant pyrite, chalcopyrite and 1-2% galena. Subcrop |
| 3809 | 685499.33/5701060.77 | Silicified monzonite, quartz vein stockwork, strong hematite. Carbonate. Little py, cpy. Float.                                 |
| 3811 | 685537.15/5701061.47 | Silicified monzonite, vein stockwork 2% pyrite subcrop. Subcrop.  |
| 3812 | 685590.99/5701055.30 | Monzonite, monzodiorite as above. Subcrop.  |
| 3813 | 685646.88/5701044.94 | As above. Subcrop.  |

|       |                      |   |
|-------|----------------------|---|
| 3814  | 685624.91/5701043.92 | Silicified monzonite, strong quartz vein stockwork, vuggy, hematitic quartz veining. Subcrop.                                   |
| 3815  | 685619.99/5701134.12 | Silicified, hematitic monzonite some quartz veining. Float.   |
| 3816  | 685622.48/5701101.38 | As above. Float.  |
| 3817  | 685657.08/5701133.26 | As above. Float.  |
| 3818  | 686536.94/5704446.81 | Chloritic diorite, 3% cubic pyrite. Float.  |
| 3819  | 686807.71/5704697.06 | Hornfelsic siltstone. Sheared, contorted, chloritic outcrop.  |
| 3820  | 686808.86/5704697.48 | Brecciated diorite near hornfels contact. Malachite along fractures outcrop.  |
| 3821  | 686828.10/5705619.28 | Strongly epidotized, carbonate rich diorite breccia with garnet. Grades into hornfels, spotty pyrite. Some sphalerite? Outcrop. |
| 3822  | 687241.66/5703919.25 | Chloritic, sheared diorite with carbonate. Quartz veining 2% pyrite. Strong foliation. Outcrop.                                 |
| 3823  | 684767.07/5704007.09 | Leached and oxidized monzonite, 3 to 5% pyrite sparse veining. Float.   |
| 3824  | 685540.54/5700849.61 | Silicified monzonite, fine quartz stringers minor hematite. 1% pyrite. Float.   |
| 3825  | 685569.38/5700880.56 | As above. Float.  |
| 11926 | 686639.58/5702584.24 | Quartz vein, strikes 30° W. Outcrop?  |
| 11927 | 684965.20/5702544.05 | Silicified monzonite disseminated pyrite, chalcopyrite. Float.  |
| 11928 | 684189.88/5702907.53 | As above. Outcrop.  |
| 11930 | 681461.23/5701627.90 | As above. Outcrop.  |
| 11931 | 681265.08/5701655.45 | As above. Outcrop.  |
| 11933 | 684516.24/5702594.54 | Pyritic Monzonite float.  |

|       |                      |  |
|-------|----------------------|--|
| 11934 | 684331.17/5702773.76 | As above.  |
| 11935 | 686839.65/5701964.55 | Minor pyrite, chalcoprite in altered monzonite outcrop.  |
| 11936 | 686837.79/5701962.18 | Milky quartz veins, little pyrite, galena minor carbonate. Grab sample over 4 metres. Float?                               |
| 11937 | 68689.77/5702047.88  | Chloritic altered granodiorite. Outcrop.   |
| 11938 | 686620/5702164.02    | Weak epidote, chlorite altered granodiorite minor pyrite float.  |
| 11939 | 686560.63/5704482.24 | Diorite, chlorite altered. 3% Py, trace chalcoprite.   |
| 11940 | 686794.45/5704741.85 | Strong sheared, hornfelsic sediments. North trending fractures with galena, sphalerite, pyrite minor chalcoprite. Outcrop. |
| 11941 | 685969.36/5703965.64 | Silicified diorite with quartz vein stockwork. 5% pyrite subcrop.  |
| 11942 | 685676.19/5703634.82 | As above 4% pyrite. Float.   |
| 11943 | 686097.62/5703801.77 | Moderate to strong epidote altered diorite, medium grained. 1% pyrite. Float   |
| 11944 | 686406.99/5703837.91 | Weak epidote altered monzonite, minor pyrite. Float.   |
| 11945 | 684564.88/5703198.23 | As above with hematite. 2% cubic pyrite. Float   |
| 11946 | 684223.52/5702905.79 | Weakly altered granodiorite with hematite, quartz stringers. Float.  |
| 11947 | 684188.64/5701910.19 | Altered granodiorite with disseminated chalcoprite.  |
| 11948 | 682671.71/5702508.64 | Sheared granodiorite, hematite altered some quartz veining. Outcrop near strong fracture zone.                             |
| 11949 | 682729.28/5702534.23 | Weakly altered granodiorite, specular hematite. Outcrop.   |



11950

682759.69/5702550.55

As above. Outcrop

4c. LARGE FIGURES AND PLANS

APPENDIX 5  
GOLDEN LOON PROSPECT - GEOLOGY

# **BGC** BAILEY GEOLOGICAL CONSULTANTS (CANADA) LIMITED

4759 MAPLERIDGE DRIVE  
NORTH VANCOUVER  
B.C. CANADA  
V7R 3T5  
Tel. (604) 985 2143

BOX 189, POSTAL STATION "A"  
757 WEST HASTINGS STREET  
VANCOUVER, B.C., CANADA  
V6C 2M3

## **MEMORANDUM**

**To:** Placer Dome Inc.

**From:** D.G. Bailey

**Subject:** Golden Loon Prospect - Geology

**Date:** October 6, 1992

---

### **1. INTRODUCTION**

The Golden Loon prospect is located a few kilometres to the west of Little Fort, north of Kamloops, on the central Cariboo plateau at an average altitude of about 1,230 metres. Most parts of the property have little relief, are covered with a veneer of moraine and have little exposed bedrock. However, adjacent to Eakin Creek where relief exceeds 500 metres and on hill tops there are sufficient outcrops to allow the geology of the bedrock to be interpreted. Vegetation over most of the property is mainly jackpine although in old logged areas thick stands of alder and poplar have become established.

The geology of the Golden Loon property was mapped at a scale of 1:10,000 during the period September 11 - 21, using as control an established grid and topographic features located on 1:18,000 scale colour aerial photographs. Apart from the area of the grid, traverses were by pace and compass.

## 2. REGIONAL GEOLOGY

The area covered by the Golden Loon prospect occurs within Quesnellia Terrane, a belt of Upper Triassic - Lower Jurassic alkaline volcanic and sedimentary rocks, intruded by small coeval and comagmatic differentiated plutons and calcalkaline batholiths of largely granodioritic to quartz monzonitic composition. The dominant structural style within the volcanic part of Quesnellia is that of brittle fracturing and faulting. Northwesterly-striking faults commonly bound the belt and occur within the belt, towards its margins, while northeasterly striking faults have segmented this part of the belt. Northeasterly striking faults probably formed before the development of northwesterly faults although in many areas, because of poor exposure, the relationship between the two fault sets is unclear.

Regional metamorphism of the belt is generally of subgreenschist facies although widespread and pervasive weak propylitization in the area of the Golden Loon claims may have masked any low grade greenschist or subgreenschist metamorphic mineral assemblages.

The Golden Loon claims straddle the contact between the Upper Triassic - Lower Jurassic Thuya Batholith to the west and a Lower Jurassic mafic - ultramafic complex to the east. These latter rocks are probably, at least in part, differentiates of a basaltic liquid which gave rise to the voluminous alkalic basalts of the Nicola and Takla groups.

### 3. GEOLOGY OF THE GOLDEN LOON PROSPECT

#### 3.1. Lithologies

The geology of the Golden Loon prospect, shown on the accompanying map, appears to be relatively simple. The most common rock type represented in the area is medium to coarse grained, equigranular hornblende granodiorite (plagioclase 40-60%, potash feldspar 20-30%) (Unit 2A) in which minor biotite (generally less than 1%) is commonly present. This forms the most common phase of the Thuya Batholith and shows little variation throughout the batholith. In the north central part of the area mapped a variation of the hornblende granodiorite unit is recognised by its greater biotite content (generally greater than 5%) (Unit 2B) which, in places, exceeds that of hornblende.

Intruding Unit 2 is an intrusive complex which ranges in composition from pyroxenite to diorite and minor quartz diorite. In the southeastern part of the area mapped coarse grained clinopyroxenite crops out on a prominent hill and in road outcrops, along with (?) interlayered peridotite (Unit 3A). These rocks have been variably serpentinised and in many cases primary textures are difficult to recognise. No attempt was made to separate the pyroxenite from the peridotite at the scale of mapping. To the east ultramafic rocks grade into gabbro and medium to fine grained clinopyroxene - bearing hornblende diorite while to the north ultramafic rocks are in fault contact with gabbro. Small ultramafic stocks also occur intruding Unit 2 granodiorite outside the area shown on the accompanying map.

Fine to coarse grained pyroxene gabbro (Unit 3B) crops out in the northeastern part of the map area. Adjacent to granodiorite of Unit 2 the gabbro is fine grained and contains minor amounts of biotite, but away from the contact biotite

is absent and the gabbro is coarse grained to very coarse grained. This unit grades eastwards into pyroxene diorite and pyroxene hornblende diorite (Unit 3C) of typical texture and composition for this type of rock. However, diorite of Unit 3C grades eastwards into rocks which although of dioritic composition, have a hypidiomorphic granular texture and generally a lower mafic content than those of Unit 3C. Within this unit (Unit 3D) in some areas an increased potash feldspar content allows these rocks to be called monzodiorite; such rocks, however, do not appear to be common.

To the north of the area mapped rocks which texturally are similar to those of Unit 3D contain minor amounts of quartz although it is not clear at this stage whether the quartz is primary or secondary. Quartz monzonite has been reported in drill core obtained during a 1990 drilling programme by Corona Corporation in the area of Dum Lake, to the east of the area described herein.

Sedimentary and volcanic rocks of the Upper Triassic - Lower Jurassic Takla Group were not observed in outcrop during mapping of the Golden Loon prospect. In the extreme northeastern part of the map area abundant locally derived boulders of volcanoclastic sandstone and siltstone occur (Unit 1); these rocks crop out on the north facing slope to the north of the map area.

### **3.2 Structure and Metamorphism**

The dominant structural style of the geology of the Golden Loon property is that of brittle fracturing with no accompanying penetrative deformation. Two dominant fracture sets occur throughout the intrusive rocks of the area, one at about  $330^{\circ}$  and the other at about  $030^{\circ}$ . Both sets of fractures dip moderately to steeply although some shallowly dipping fractures occur within diorite of Unit 2C in the

northeast. These shallow dips may be attributed to rotation by later fault movement.

From distribution of lithologies and from magnetic data two sets of faults may be interpreted to occur in the area of the Golden Loon prospect although no faults were observed directly. A northeasterly striking fault is interpreted to cut across the southeastern part of the area mapped from the spatial relationship of ultramafic rocks of Unit 2 and granodiorite of Unit 3. A fault with similar orientation is interpreted from the apparent offset of diorite of Unit 3C in the northern part of the map area. Both faults appear to have undergone dextral displacement and the northern side of each fault downdropped relative to the southern side. To the east of the area mapped a northwesterly striking fault, possibly related to the North Thompson River fault system, is interpreted from the relationship between Takla Group strata and a felsic intrusion which crops out along the east-facing slopes west of the North Thompson River.

Metamorphism of the rocks of the Golden Loon prospect is of low grade. Regionally extensive propylitization of granodiorite of the Thuya Batholith and of rocks along its eastern margin may be related to a regional lower greenschist metamorphic event but is more likely caused by a late stage metasomatizing event related to the cooling of the Thuya Batholith. To the northwest of the Golden Loon property, in the area of Wavey Lake, regional metamorphism is of zeolite grade.

### **3.3 Wallrock Alteration and Mineralization**

As mentioned above, a weak propylitizing event has occurred throughout the Thuya granodiorite and has also affected rocks of Unit 3 along the eastern margin of the batholith. No sulphide deposition appears to have accompanied this event. Within the main granodiorite body of the Thuya Batholith propylitization is manifested



as weak epidote alteration of plagioclase and slight chloritization of hornblende. Biotite, where present, is usually more chloritised than accompanying hornblende. Calcite has developed locally.

In parts of the Thuya Batholith fractures host quartz veins with minor pyrite and the development of limonite or goethite. These quartz veins appear to occur in a zone striking at about  $020^{\circ}$  through the central part of the grid area. The veins are commonly a few centimetres thick although they range from less than one to over 20 centimetres in thickness. Selvedges to the veins are usually limonitic while chloritization of mafic minerals within the granodioritic wallrock has commonly occurred. Quartz veins striking at about  $320^{\circ}$  were also mapped to the north of Thuya Lakes in the southwestern part of the map area. These veins are similar to those in the central part of the grid in that they contain pyrite and have a chloritic alteration envelope. However, unlike those in the central part of the grid, these quartz veins occur within granodiorite which has been subjected to mild shearing.

Immediately to the west of line 9000E on line 9200N is a zone exposed over a width of about 5 metres of strongly silicified granodiorite with limonite and minor pyrite but because of lack of outcrop, the extent of this zone could not be determined. Boulders of this altered granodiorite are abundant in the area; all appear to be locally derived.

Sericitic alteration with some associated ankerite or siderite occurs within moderately propylitically altered biotite-rich granodiorite near line 11600N at about 8600E. Minor pyrite is associated with this alteration zone which, however, could only be traced over a few metres. Similar alteration occurs within hornblende granodiorite in a road cut about 200 metres south of Eakin Creek bridge on the main Thuya Lakes access road.

Diorite of Unit 3C has been moderately to highly chloritised in the northeastern part of the map area and locally contains disseminated pyrite in amounts up to 1-2%. A few shallowly-dipping quartz veins also occur in this area; these veins are clearly younger than the chlorite alteration of the diorite. Minor amounts of pyrite also occur in gabbro to the west of this altered diorite.

## 4. DISCUSSION

### 4.1 Relationship Between Geology and Soil Geochemistry

For many elements there is a close relationship between element distribution in soils and lithology. This is especially true for those elements which are usually concentrated in mafic and ultramafic rocks, e.g. nickel, chromium, vanadium, iron and magnesium. The concentration of nickel in soils, for example, is highest over areas underlain by ultramafic rocks, less so over gabbro and diorite and lowest over granodiorite. Thus, the distribution of such elements can be used to interpret the nature of underlying bedrock in areas of poor bedrock exposure.

In the case of gold, there is a strong relationship between elevated gold concentrations in soils and biotite-rich granodiorite of Unit 2B suggesting that this unit, a rock type which shows little evidence of hydrothermal alteration in outcrop, has been primarily enriched in gold. On the other hand, anomalous gold in soils about line 9300N west of 9000E, is thought to reflect secondary enrichment related to zones of silicification with associated pyrite, such is exposed on line 9200N, immediately west of line 9000E. This area of anomalous gold in soils is also littered with boulders of gold-enriched silicified granodiorite which may have contributed to

the large soil anomaly. Zones of gold enrichment in bedrock may, in fact, cover a much smaller area.

For many other elements a geological basis for element concentration in soils is not obvious from the present mapping programme. However, this mapping has established that glacial dispersion is probably not a significant factor to be considered in interpreting metal distribution in soils and, thus, metal anomalies probably have local sources.

#### 4.2 Gold Potential of the Golden Loon Prospect

The results of exploration to date suggest that, at least in some areas, gold mineralization occur within zones of silicification controlled by fracturing and shearing and which may occur in any of the rock types represented in the prospect area. Anomalous gold is associated with structurally controlled silicification in the Dum Lake area, a zone drilled by Corona in 1990. This zone is reported to be linear and to strike to the northwest, parallel to one of the two main fracture directions noted in the area. A silicified zone noted on line 9200N, west of line 9000E, appears to be within granodiorite which has undergone fracturing in a northeasterly direction, similar to the direction of quartz-filled fractures elsewhere in the area.

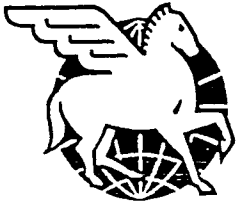
It is considered that silicification and quartz veining with a possible gold association probably occurred much later than magmatic activity in the region and, therefore, it is unlikely that there is a genetic relationship between the two events. Thus, a model of porphyry gold mineralization related to late stage hydrothermal fluids generated during the cooling of a pluton (such as the Thuya Batholith or the alkalic intrusion to the east) is unlikely to apply in the case of the Golden Loon

prospect. Instead, fracture controlled gold mineralization may be related to processes which occurred during emplacement of Quesnellia on to Mesozoic North America and later uplift of the amalgamated terranes (c.f. the Cariboo - Barkerville base and precious metal mesothermal veins).

The development of a conjugate fracture set, one striking to the northwest and the other to the northeast, may be the direct result of movement along northeasterly- striking faults which are interpreted to cut the area of the prospect. The formation of such faults to the north in the Quesnel Lake area is considered to have occurred no earlier than late Lower Jurassic and no later than Cretaceous. If fracture zones which now are silicified and contain pyrite are the result of northeasterly fault movement, then any associated gold mineralization can also be no older than late Lower Jurassic.

APPENDIX 2

TERRAIN ANALYSES/SURFICIAL GEOLOGY



**PEGASUS**

earth sensing  
corporation

4761 COVE CLIFF ROAD  
NORTH VANCOUVER, BRITISH COLUMBIA  
CANADA V7G 1M8  
TELEPHONE: (604) 929-0244  
FACSIMILE: (604) 929-7231

June 29, 1992  
Ron Wells

Placer Dome Inc.  
1440 Hugh Allan Drive  
Kamloops, B.C.  
V1S 1L8

Dear Sir:

GOLDEN LOON, Little Fort  
PEG 248--0192

Thankyou for giving me the opportunity of interpreting aerial photographs for terrain analyses/surficial geology of the Golden Loon Property, west of Little Fort in 92P8. These interpretations are portrayed on a map at a scale of about 1:30,000. I expanded the map scale in order to plot all of the polygons.

Prior to interpretation of soil anomalies in any terrain, it is mandatory to understand the geomorphological processes that generated the landscape. Are some of these processes still active and how have they transformed the surface? A terrain analyses solves some of these problems by assigning a genetic origin to landform units and the probable source direction? Only detailed field work can give a more localized source area and distance of movement.

Regional movement by the latest glacial advance in this area is from southwest to northwest on the upland. This east flowing ice is an early phase as a main valley glacier flowing north to south truncates these linears as demonstrated on the Terrain Analysis Map. Local directions of flow have been plotted on the photographs as ice will flow around obstacles before going over.

If one thinks of alpine glaciation as opposed to continental glaciation several differences are immediately evident. Continental glaciers moved as broad masses in relative straight lines over long distances. In Western Canada, continental ice moved south and southwest, up the regional slope to Western Alberta. The general low relief of the prairies did not cause large flow deflections.

**In opposition to this are alpine glaciers which flowed around and between the mountains as well as over the tops of most of the peaks. Measuring ice directions then is very important in the field as aerial photograph interpretation generally only gives the regional movement.**

I know you have probably read this before but I put it in in case not. Initiation of Cordilleran Glaciation began with Alpine glaciers originating in plateau ice centers. Ice flowed as ice river/streams down small valleys coalescing to form major valley glaciers which flowed downslope (south in this area).

In this area glaciers moving from the west scoured residual soils from the area scraping the weathered part of the hills bare. Upon deglaciation, very little material was deposited as till, bedrock is close to the surface. A map unit ~~sb~~Mbv, signifys that much of the polygon has less than 1.5 meters separated by thicker zones of glacial till up to 3 meters thick.

Upon deglaciation, glacial ice on tops of hills in the west half of this area would melt first. Streams would run on the ice and generally along the ice boundary. Abandoned stream channels, cut into the underlying bedrock/glacial till are not observed except on the side hill of Eakin Creek on the northwest corner of the map. As one approaches the North Thompson and Lemieux Valleys one can see that Eakin Creek built a high level delta on the west side of the valley. This shows that the base level of erosion was about 1700 feet Elevation OR that Eakin Creek 'Delta' flowed onto a valley glacier still plugging the main valley. (I personally favor this latter explanation other than we know that tectonic uplift/isostatic rebound is about 200 meters in this area.)

Although much of the Cordilleran of Western North America has been glaciated several times beginning as early as the Miocene it is reasonable to assume that the existing soils developed on materials which were eroded/mobilized/redeposited by the last glacial advance. For much of the area this is the case and the soils will all be Recent.

**In the southwest part of this Property, surface soils will have a thin cover of washed fluvial materials and soil samples should probably get below this material into the C horizon of the soil. Actually this could be recognized by a grey material rather than rusty zones higher up. The problem of sampling in the washed material is a placerizing?? effect to some of the minerals--mainly gold.**

Again, I have plotted thickness in black on the photographs. I had a problem due to the color photography. One is always looking at colors rather than shades, morphology, texture so I would have to guess that my non-glacial linears may well be glacial.

## LINEAMENTS

All of the glacial lineaments have been plotted on the terrain analysis interpretation. In addition, I have tried to separate non-glacial lineament and depicted them as normal? faults. Because of the confusion, I have not plotted them on the maps. I have left my interpretation on the aerial photographs so you can determine exactly where the linears are. Yellow are faults?, blue is ice direction.



### OVERBURDEN THICKNESS (meters)

I am not quite certain if this is truly scientific although it is somewhat above the realm of water witching. I could plot an isopach map given sufficient time and points. I only started this technique 2 years ago but have some relevant experience such as looking at about 25,000 aerial photographs in all parts of the earth over 26 years. This must help somehow. Other companies have planned backhoe/drill hole programs on this interpretation. I would appreciate your comments on the accuracy of this exercise.

### TERRAIN ANALYSIS

A modified terrain analyses legend has been developed for this area. The terrain analyses units have been separated firstly on the basis of genetic origin, then morphology, texture and thickness in a universal formula such as:

sbMv -E

so this would be interpreted as a sandy bouldery Morainal veneer (less than 1.5 meters in thickness over Rock) that has been eroded by surface streams creating channels. The channels will have a thin cover of washed materials overlying moraine.

### Genetic Materials

**C COLLUVIAL:** Colluvium consists of materials which have moved downslope under the force of gravity. In this area colluvial sediments will consist of mainly of moraine, and unweathered to weathered rock particles that have rolled or slid down steep slopes or were transported there by avalanching to materials that have been slightly washed forming colluvial fans, to unaltered rock debris on the tops of the mountains.

**F FLUVIAL:** Fluvial materials are usually derived from the subglacial washing of bedrock and basal moraine as In this area more that 80% of the erratics and 100% of the fines will come from local areas.

Fluvial sediments range from silt derived from colluvial/alluvial fans to dirty gravel washed out from the local tills. In this area fluvial sediments are confined to stream valley except in the southwest corner. In the Lemieux/Thompson valley very thick fluvial sediments occur as deltas, terraces and just fluvial on the floodplain.





**M MORAINAL:** Moraine, commonly called glacial till or diamicton, is usually composed of the 90 - 95% of comminuted fragments of local bedrock. In this area the moraine always consists of a silty sand intermixed with subangular boulders and angular rubble.

**O ORGANIC:** consist of inorganic and organic silts and clays with trace of sand mixed with organic debris.

A variety of modifying descriptors have been used in the map legend for morphology, texture, and thickness including active modifying processes for: **-S** for seepage, and **-E** or **-V** for eroded or channelled.

#### Thickness and Morphology

|   |                            |
|---|----------------------------|
| v | veneer < 1.5 meters thick  |
| b | blanket > 1.5 meters thick |
| d | delta                      |
| f | fan shaped                 |
| i | inclined                   |
| l | level                      |
| p | plain                      |
| r | ridged                     |
| t | terraced                   |

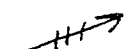
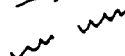
#### Texture(modified Wentworth)

|   |          |
|---|----------|
| s | silt     |
| s | sand     |
| b | bouldery |
| g | gravelly |
| r | rubbly   |

#### Erosional Modifiers

|    |         |
|----|---------|
| -S | seepage |
| -E | eroded  |
| -V | gullies |

#### Linear Features

|   |                  |
|---|------------------|
|  | glacial ice flow |
|  | rock structure   |



**Stratigraphy**

sgFv

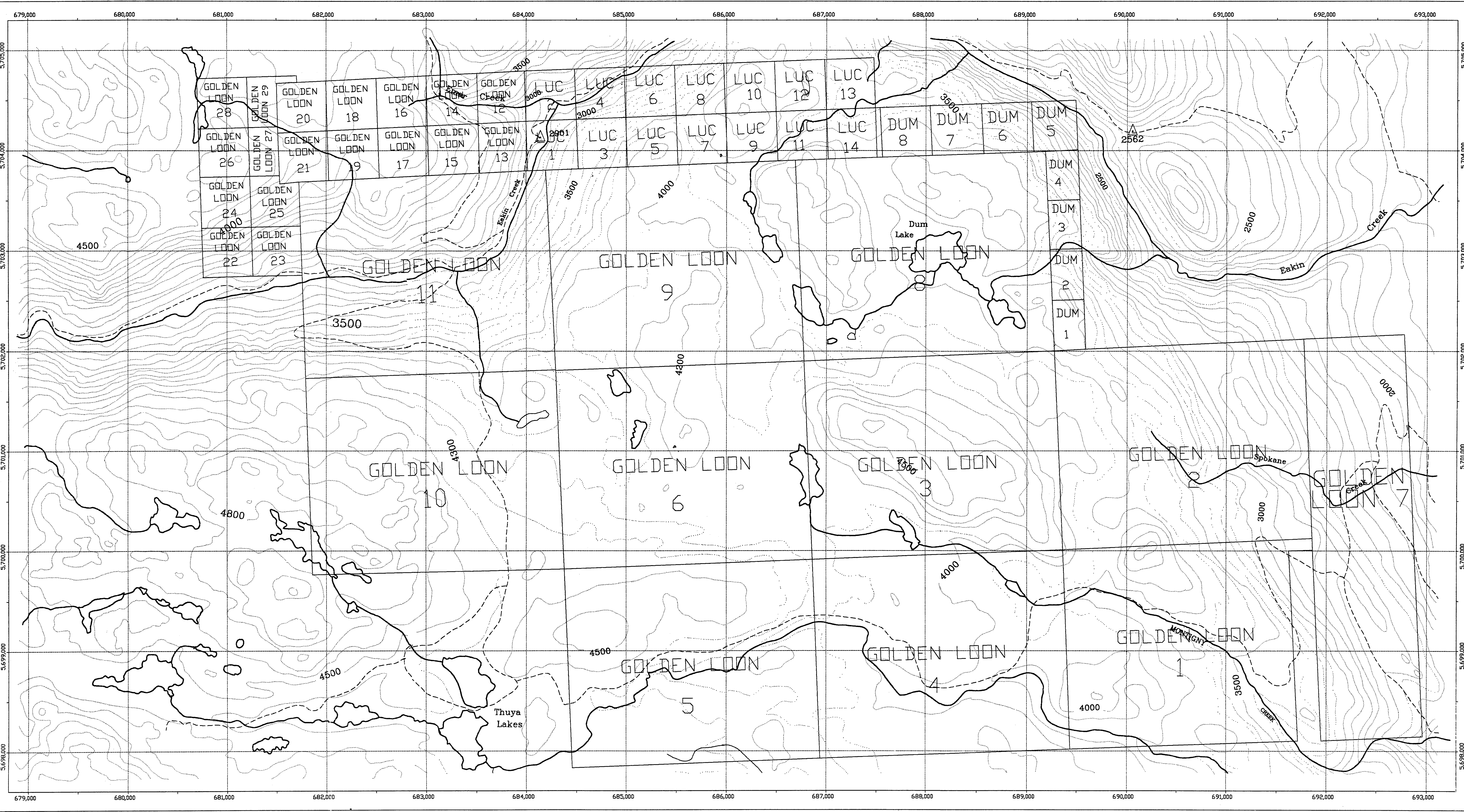
~~sMb~~ a veneer of sand and gravel overlying a blanket of silty moraine or glacial till.

I hope that you are able to use this interpretation for your program. I would be pleased to answer any questions that you might have.


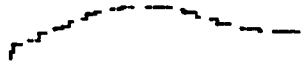

Sincerely,

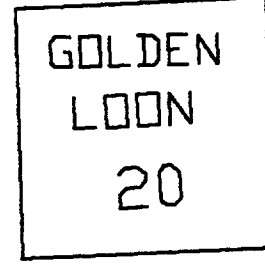
  
THE REIMCHEN P. Geol. Geol.





# LEGEND

-  HYDRO
-  ROADS
-  4800 CONTOUR LINES

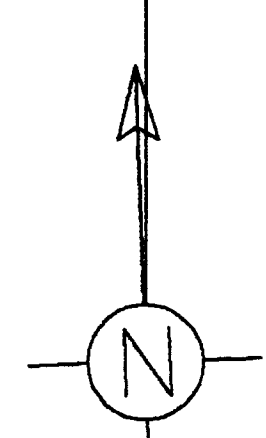
 CLAIM BOUNDARY

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

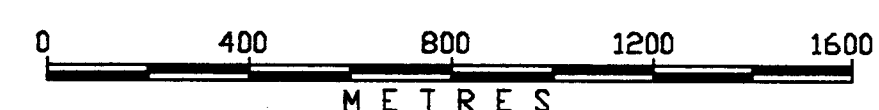
## 22,818

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: #EXPL/GOLDEN-L/GEOLGY  
 RUN FILE: CADRE.RUN

FILE LINE    FILE GRID/UTM






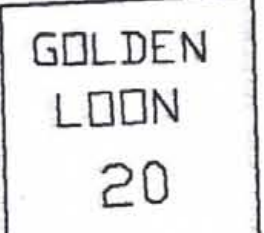
UTM NORTH IS 2 SECS 53 MIN EAST OF TRUE NORTH



PLACER DOME INC.  
 DRAWN JFM    GOLDEN LOON PROPERTY/TOPOGRAPHY  
 DATE 93/01/11    FIG.4 CLAIM MAP WITH TOPOGRAPHY  
 SCALE 1:50000

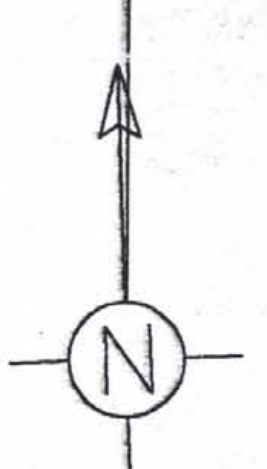


# LEGEND


-  HYDRO
-  ROADS
-  4800 CONTOUR LINES
-  CLAIM BOUNDARY

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: #EXPL/GOLDEN-L/GEOLOGY  
 RUN FILE: CADREX.DAT

FILE LINE    FILE GRID.UTM



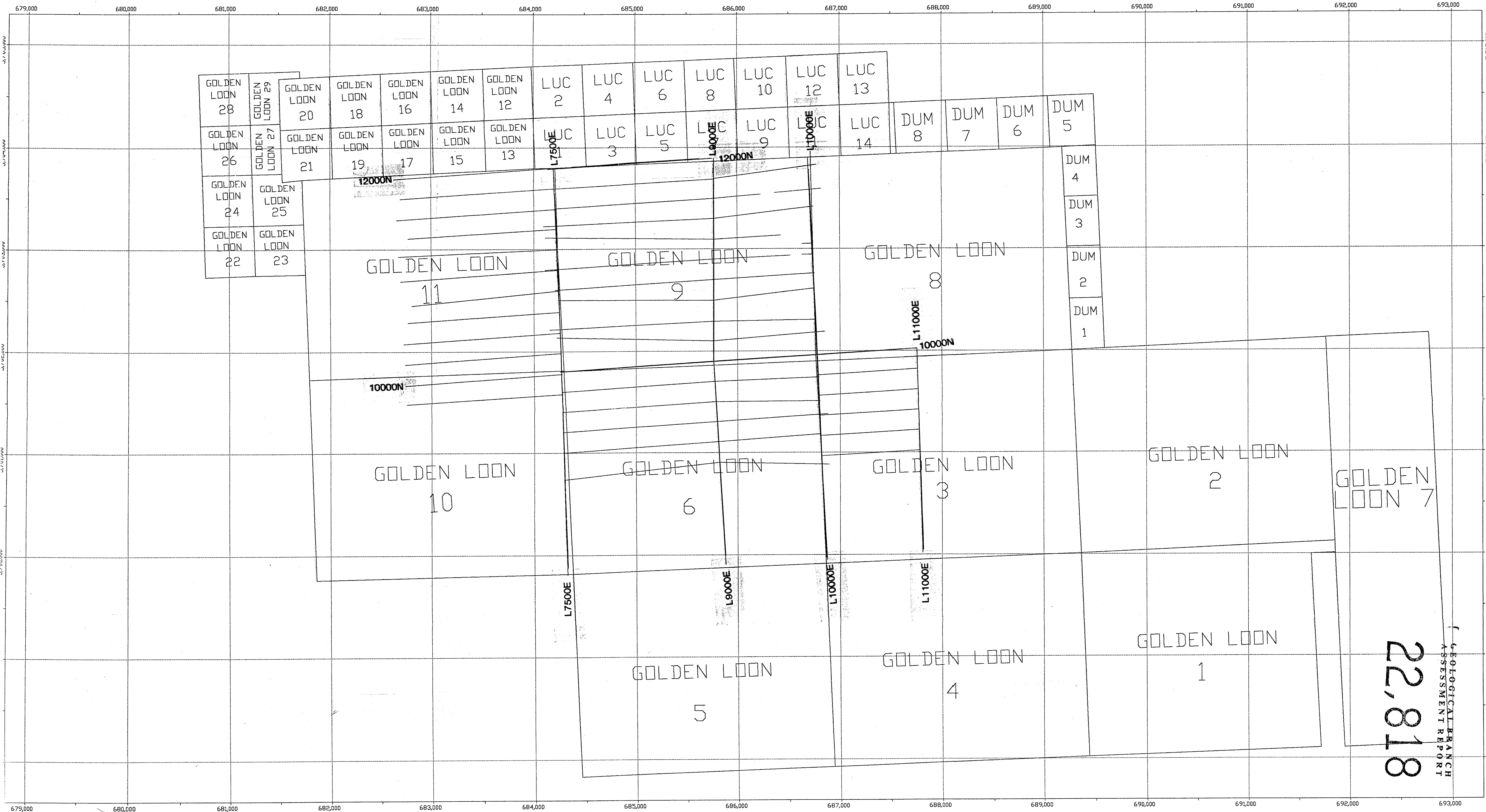
UTM NORTH IS 2 DEG 53 MIN EAST OF TRUE NORTH




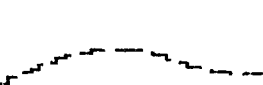
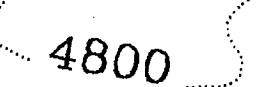
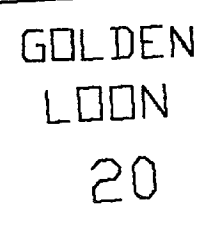
PLACER DOME INC.  
 DRAWN JFM    GOLDEN LOON PROPERTY/TOPOGRAPHY  
 DATE 93/01/11    FIG.4 CLAIM MAP WITH TOPOGRAPHY  
 SCALE 1:15000





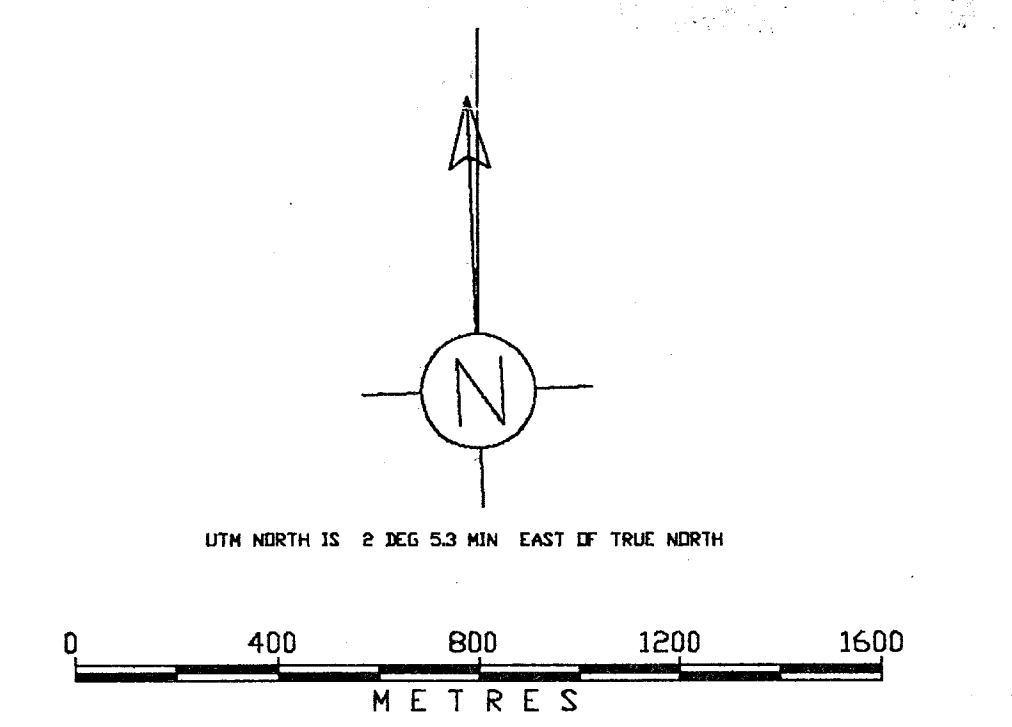


# LEGEND

-  HYDRO
-  ROADS
-  4800 CONTOUR LINES
-  CLAIM BOUNDARY

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: #EXPL/GOLDEN-L/GEOLGY  
 RUN FILE: CARLEMAN

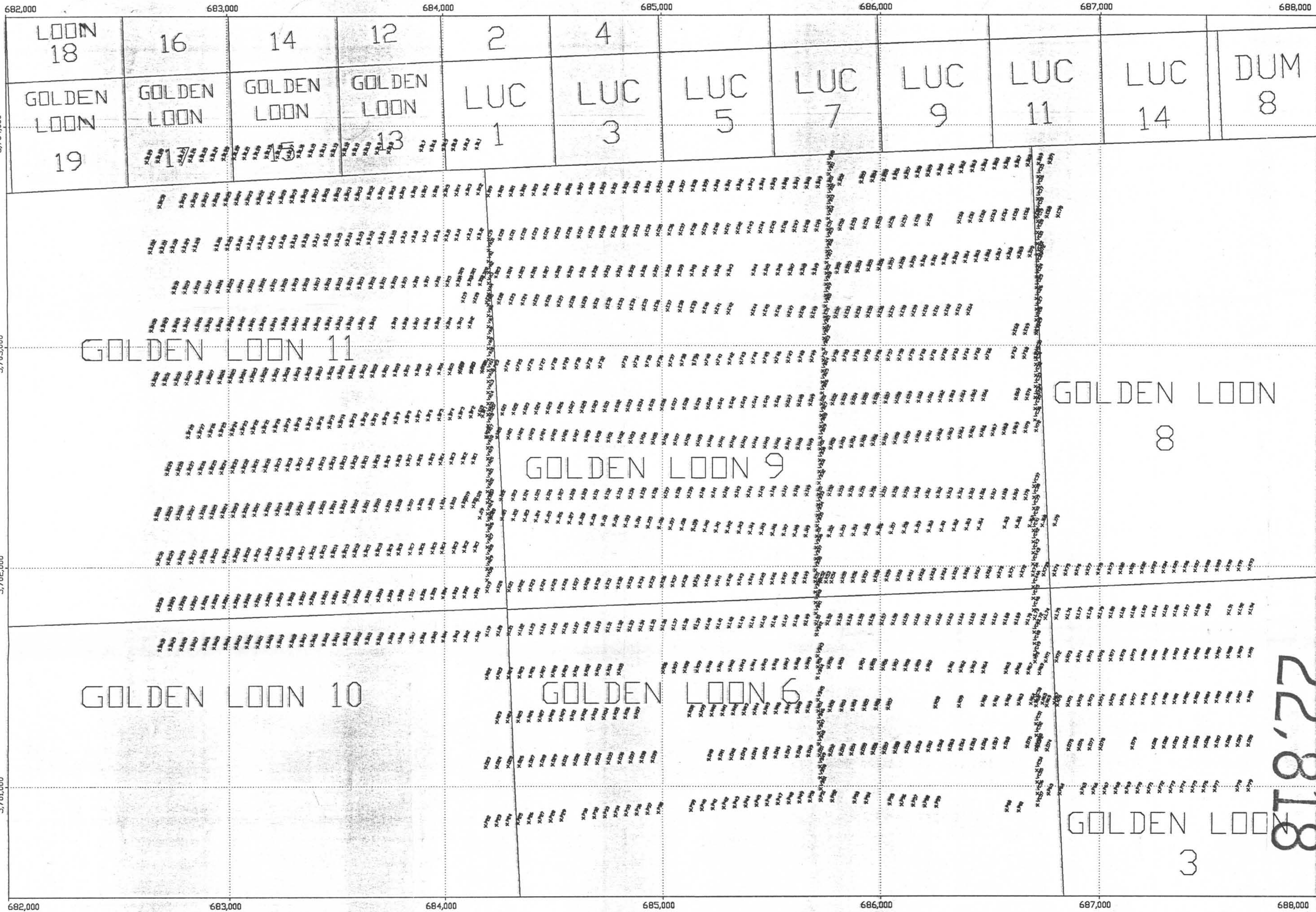
FIELD LINE    FILE GRID/UTH    CUT LINES



**PLACER DOME INC.**

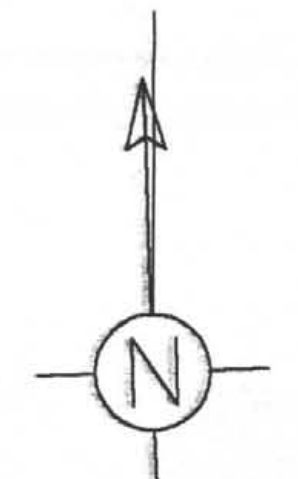
|               |                                 |
|---------------|---------------------------------|
| DRAWN JFM     | GOLDEN LOON PROPERTY/TOPOGRAPHY |
| DATE 93/01/11 | <b>FIG.5</b>                    |
| SCALE 1:15000 | CLAIM MAP WITH 1992 GRIDS       |





DATA PLOTTED ON THIS MAP:  
 DIRECTORY: #EXPL/GOLDEN-L/GEOCHEM  
 RUN FILE: 99SOILLCRUN  
 x POINTS: FIELD FILE  
 SAMP 92-93SOILS.ASS

GEOLOGICAL BRANCH  
ASSESSMENT REPORT



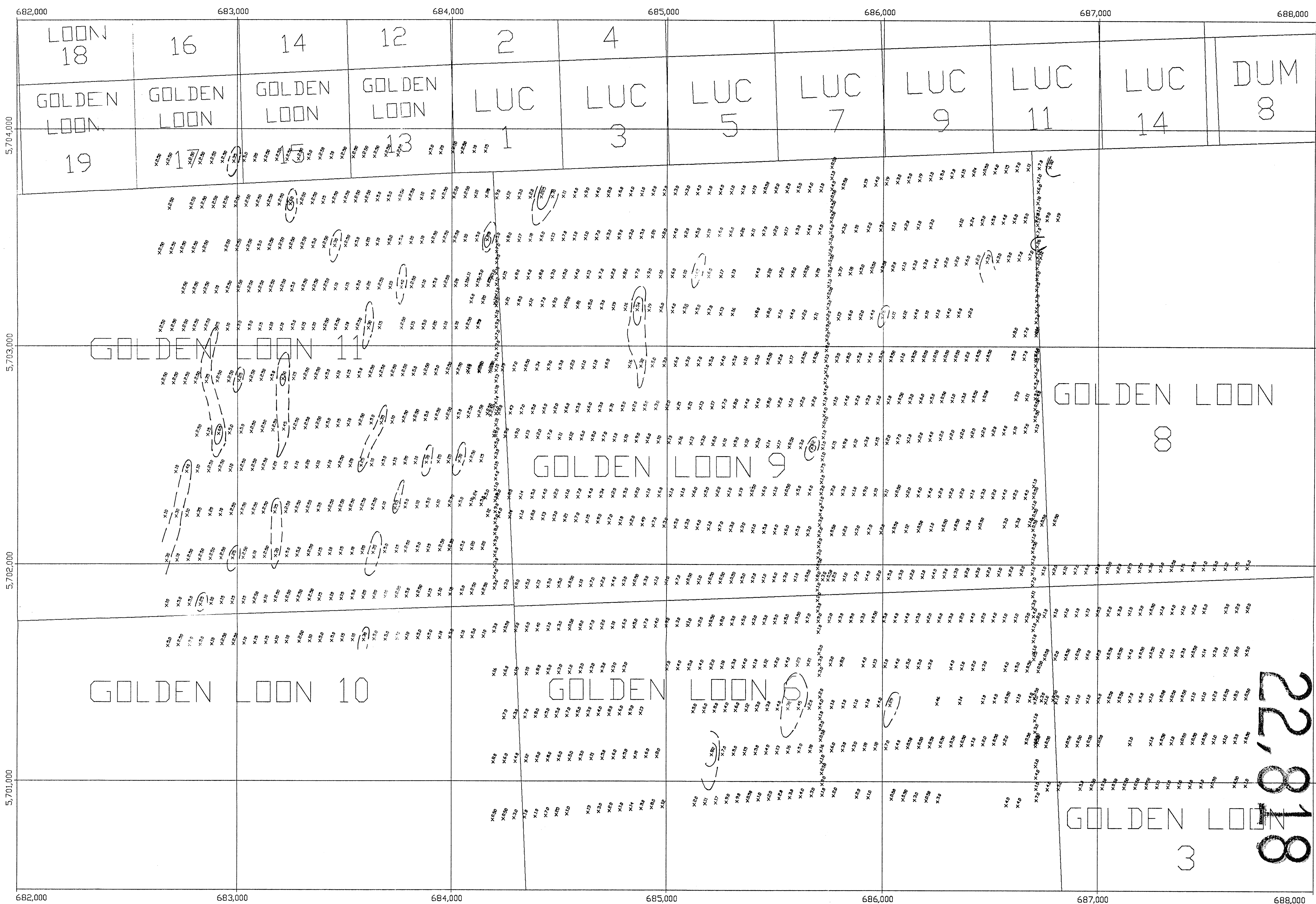
UTM NORTH IS 2 DEG 46 MIN EAST OF TRUE NORTH



22,818

|                  |                             |
|------------------|-----------------------------|
| PLACER DOME INC. |                             |
| DRAWN JFM        | GOLDEN LOON PROPERTY        |
| DATE 93/02/08    | GEOCHEM SAMPLE LOCATION MAP |
| SCALE 1:10000    | <b>FIGURE 7.0</b>           |
| NO.              |                             |

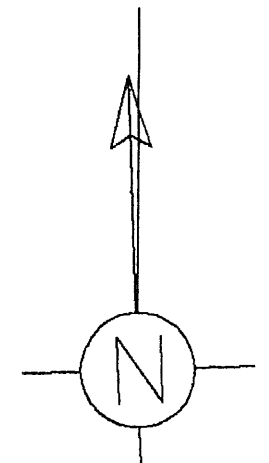




CONTOURED DATA

- 25 to 49 ppb
- >50 ppb

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: \$EXPL/GOLDEN-L/GEOCHEM  
 RUN FILE: 99SOILAURUN  
 X POINTS: FIELD FILE  
 AU 92-93SOILS.ASS



UTM NORTH IS 2 DEG 46 MIN EAST OF TRUE NORTH

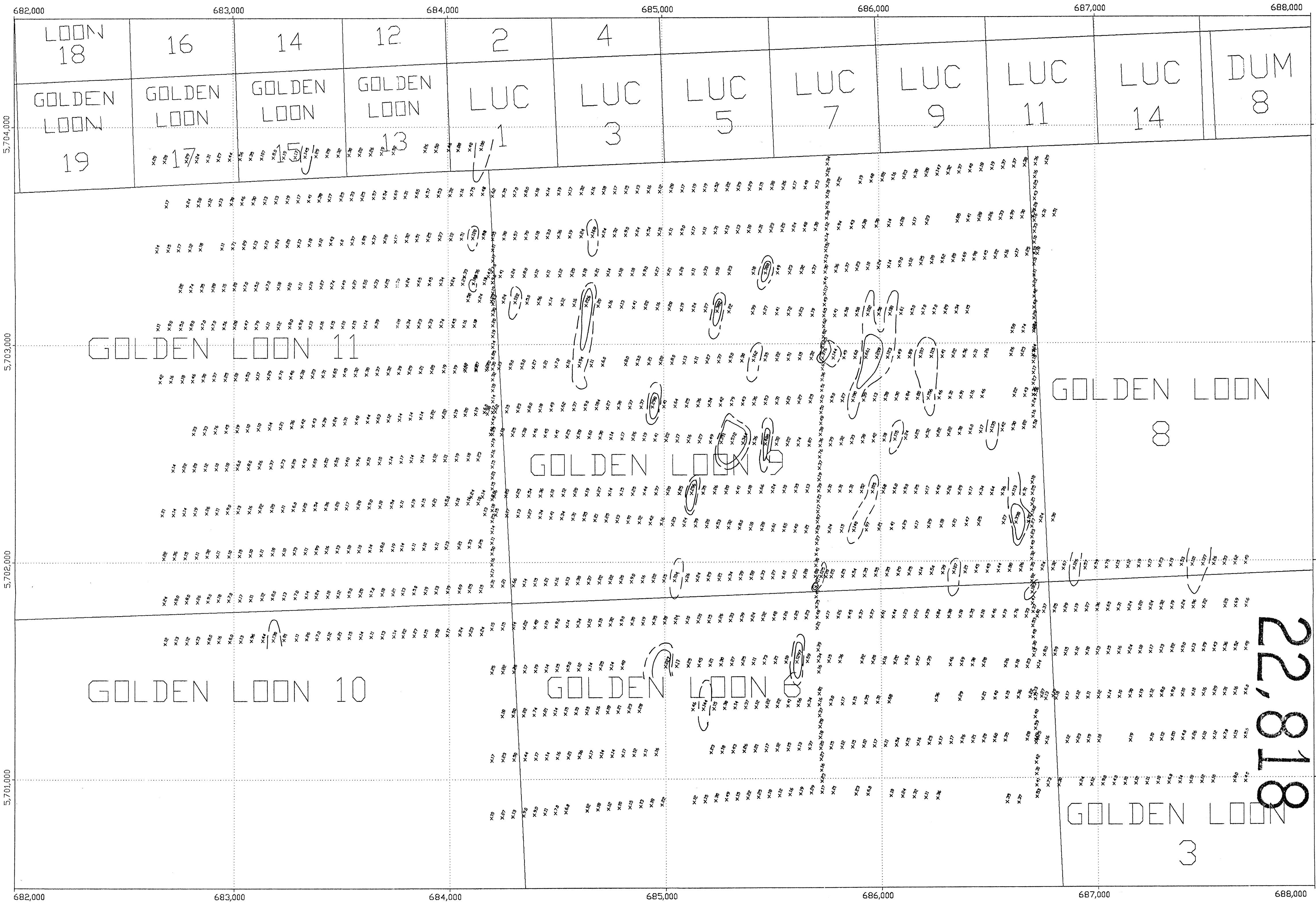


GEOLOGICAL BRANCH ASSESSMENT REPORT



22,818

|       |          |  |
|-------|----------|--|
| DRAWN | JFM      | PLACER DOME INC.<br>GOLD (PPB) IN SOIL SAMPLES |
| DATE  | 93:02:08 |  |
| SCALE | 1:10000  |  |
| NO.   |          |  |

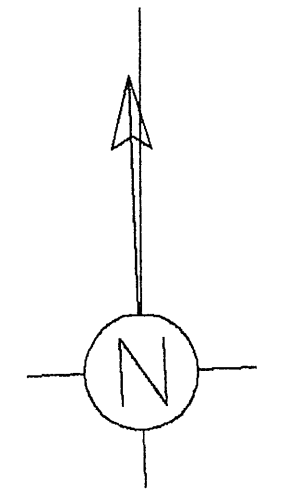
FIGURE 7.1



CONTOURED DATA

 100 to 199 ppm  
 >199 ppm

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: #EXPL/GOLDEN-L/GEOCHEM  
 RUN FILE: 99SOILCURUN  
 FIELD FILE: 92-93SOILS.ASS  
 POINTS: CU



UTM NORTH IS 2 DEG 4.6 MIN EAST OF TRUE NORTH

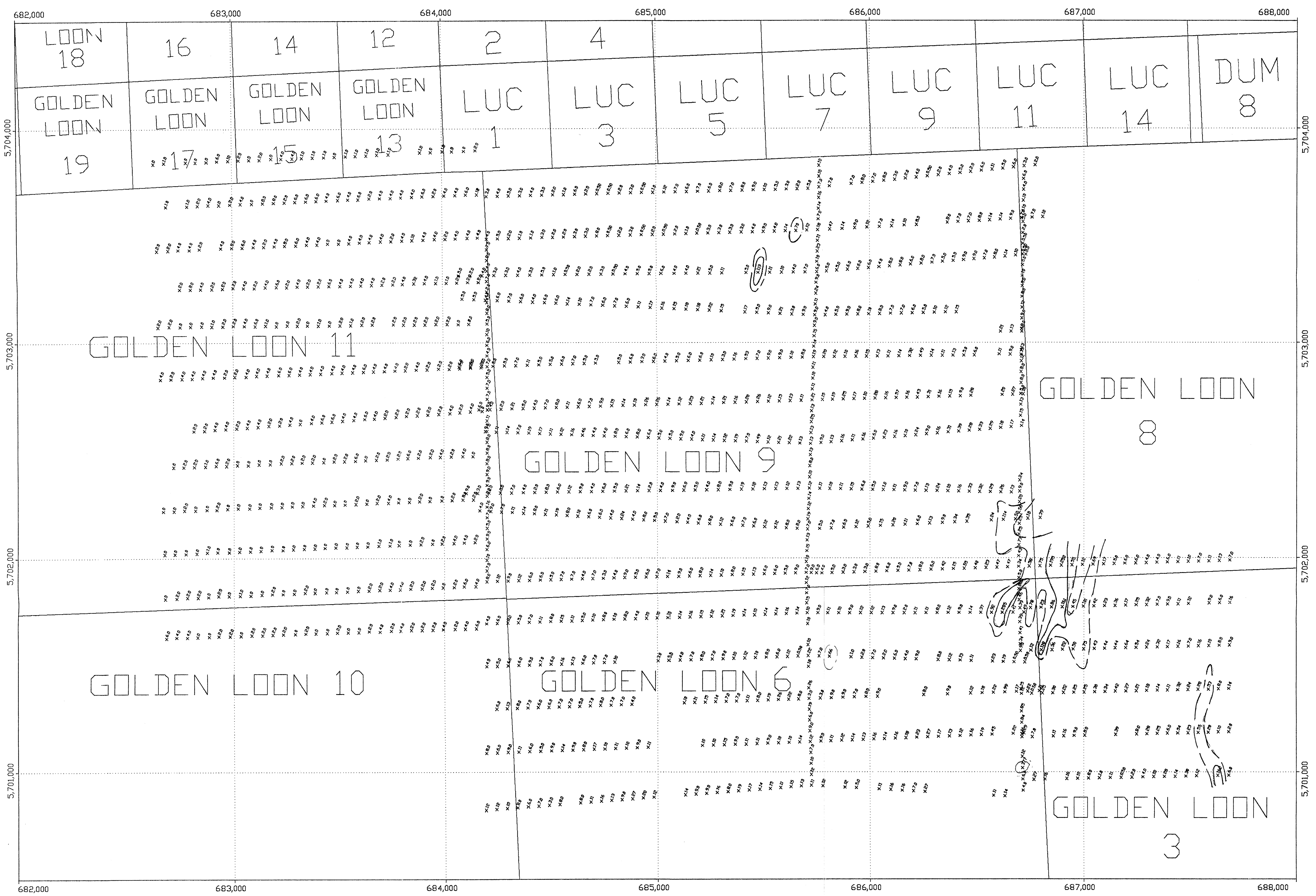


GEOLOGICAL BRANCH  
 ASSESSMENT REPORT


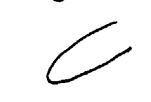
22,818

|               |  |                              |  |
|---------------|--|------------------------------|--|
| DRAWN JFM     |  | PLACER DOME INC.             |  |
| DATE 93/02/08 |  | GOLDEN LOON PROPERTY         |  |
| SCALE 1:10000 |  | COPPER (PPM) IN SOIL SAMPLES |  |
|               |  | FIGURE 7.2                   |  |
|               |  | NO.                          |  |

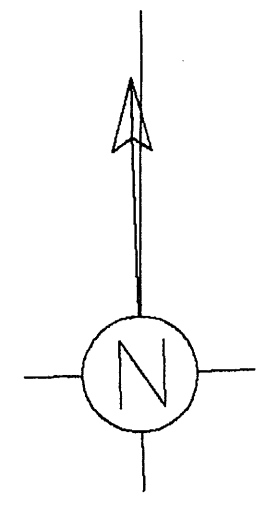




CONTOURED DATA

 50 to 99 ppm  
 >99ppm

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: \EXPL\GOLDEN-L\GEOCHEM  
 RUN FILE: 99SOILPBRUN  
 X POINTS: FIELD PB FILE 92-93SOILS.ASS

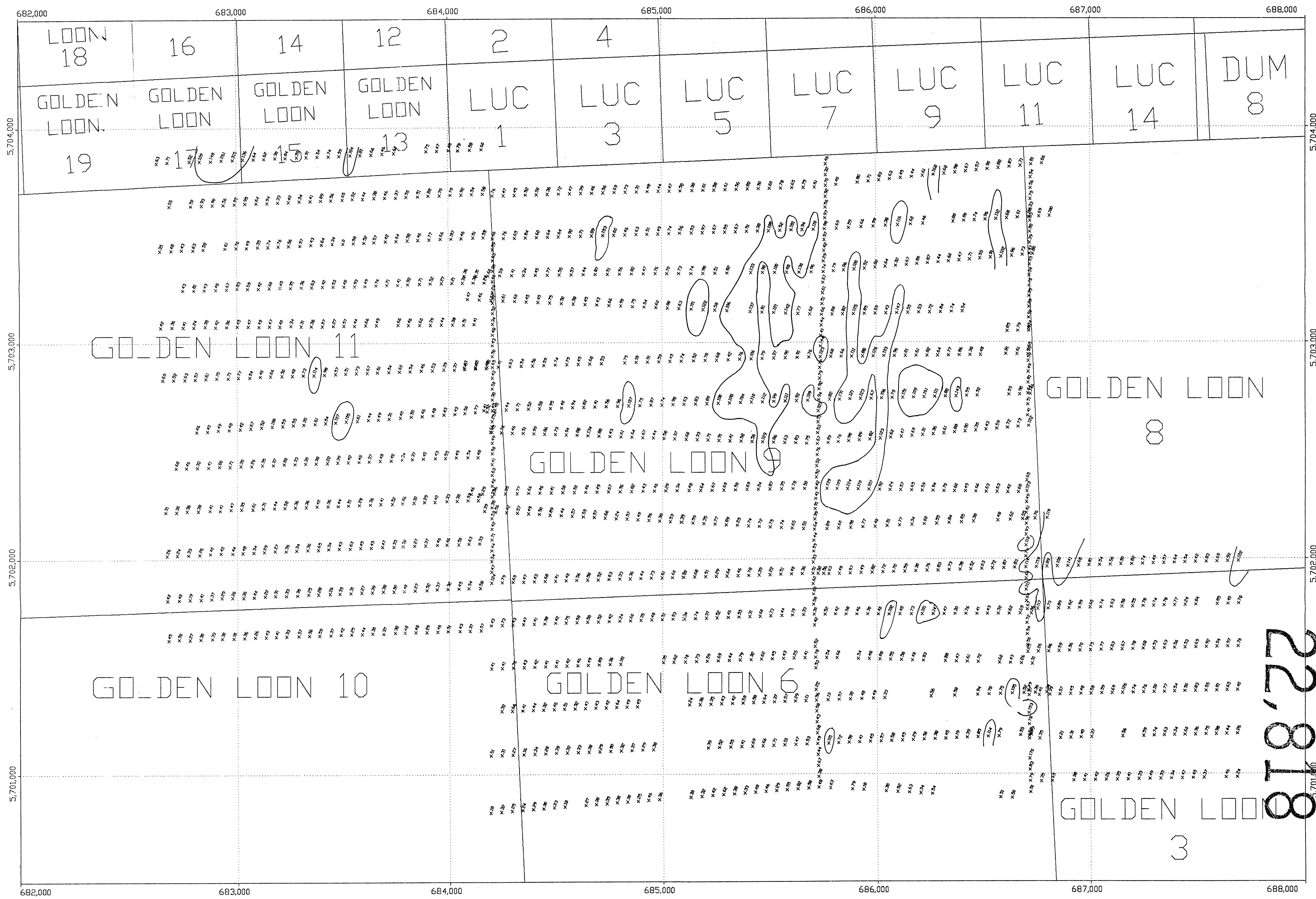


UTM NORTH IS 2 DEG 4.6 MIN EAST OF TRUE NORTH



**22,818**  
 GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

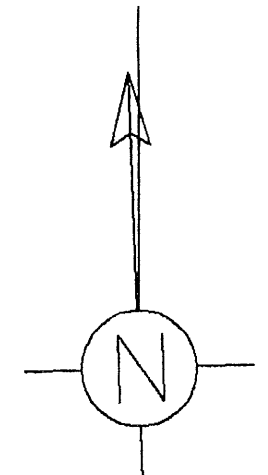
|               |  |                            |  |
|---------------|--|----------------------------|--|
| DRAWN JFM     |  | PLACER DOME INC.           |  |
| DATE 93-02-08 |  | GOLDEN LOON PROPERTY       |  |
| SCALE 1:10000 |  | LEAD (PPM) IN SOIL SAMPLES |  |
| ND.           |  | FIGURE 7.3                 |  |



CONTOURED DATA

>99ppm

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: #EXPL/GOLDEN-L/GEOCHEM  
 RUN FILE: 99SOILZNRUN  
 X POINTS: FIELD FILE  
 ZN 92-93SOILS.ASS



UTM NORTH IS 2 DEG 4.6 MIN EAST OF TRUE NORTH

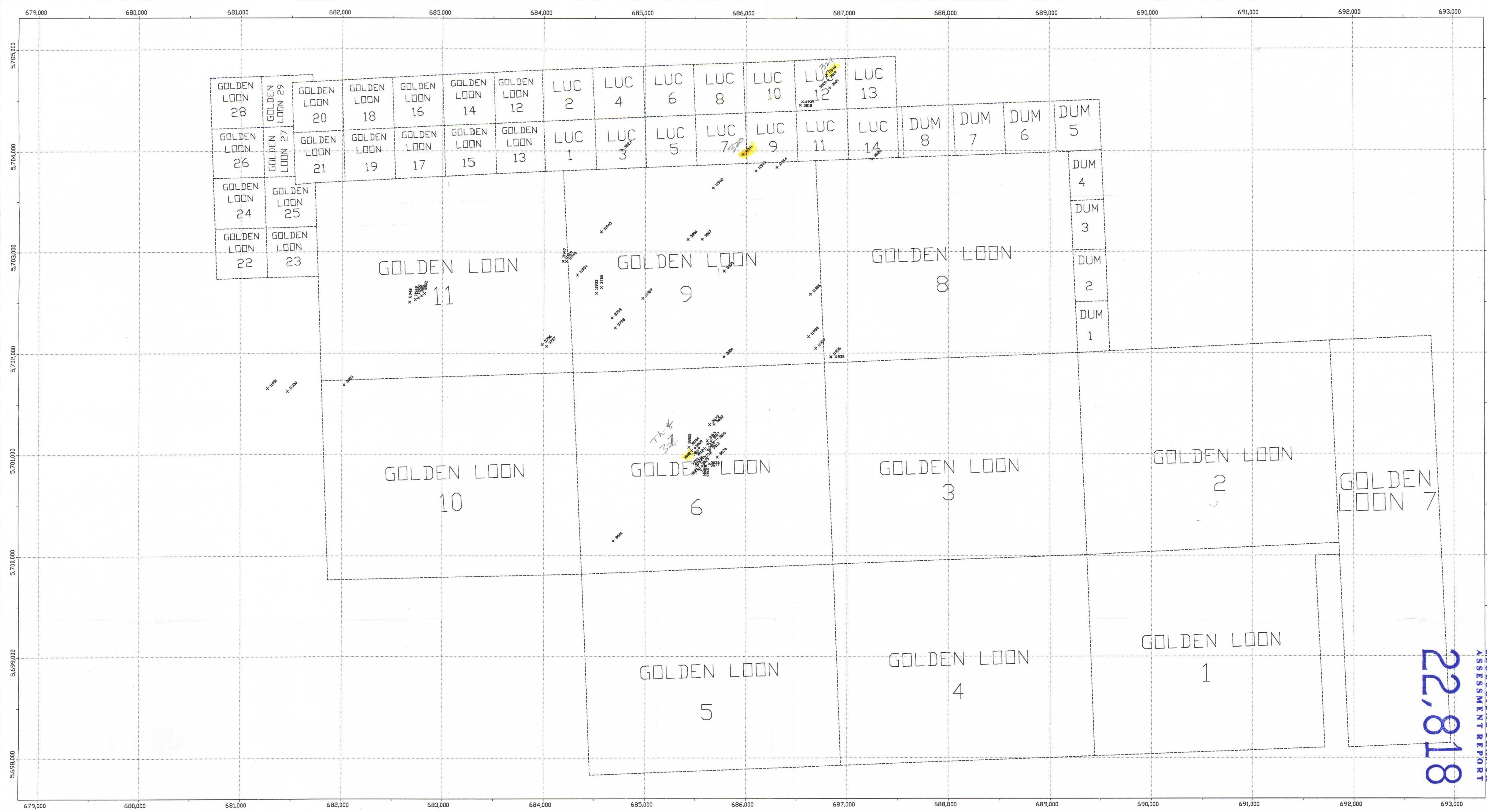


GEOLOGICAL BRANCH ASSESSMENT REPORT

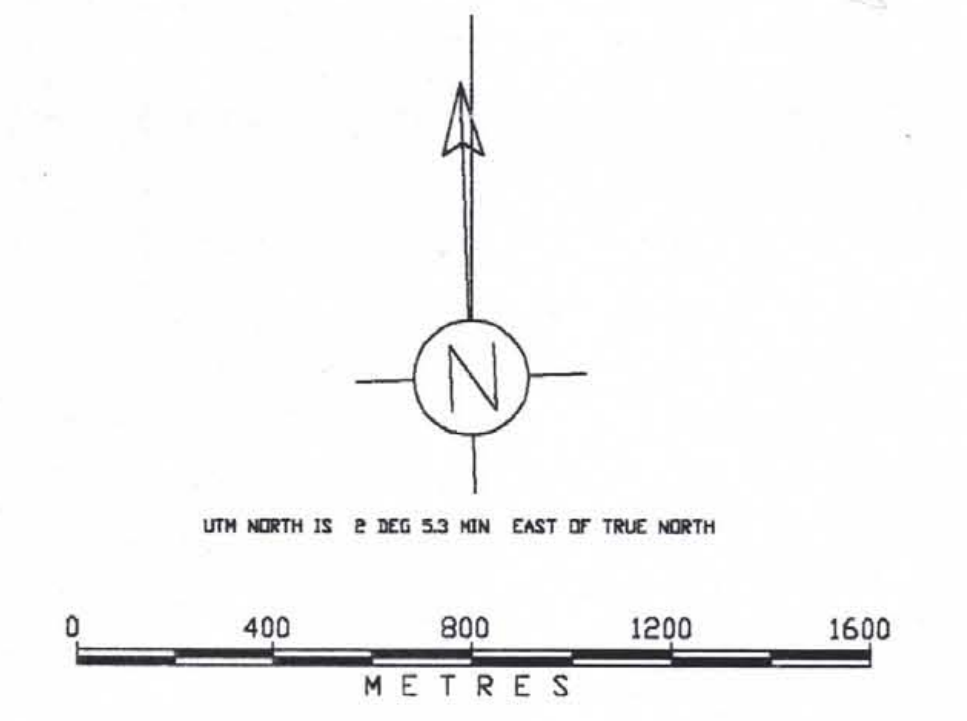
22,818

|               |  |                            |  |
|---------------|--|----------------------------|--|
| DRAWN JFM     |  | PLACER DOME INC.           |  |
| DATE 93:02:08 |  | GOLDEN LOON PROPERTY       |  |
| SCALE 1:10000 |  | ZINC (PPM) IN SOIL SAMPLES |  |
|               |  | FIGURE 7.4                 |  |
|               |  | NO.                        |  |





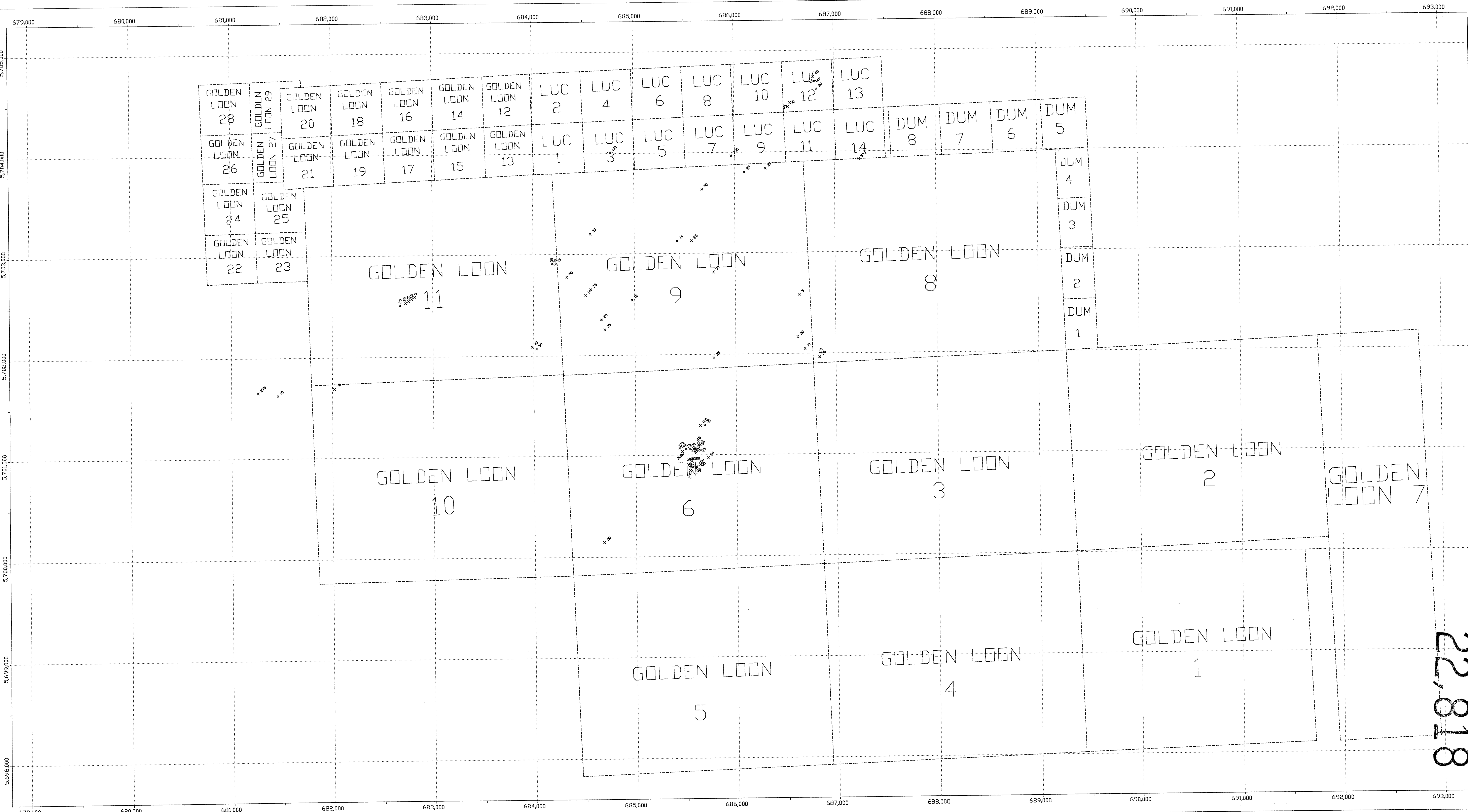
DATA PLOTTED ON THIS MAP:  
 DIRECTORY: #EXPL/GOLDEN-L/GEOCHEM  
 RUN FILE: 99ROCKL.RUN  
 FIELD FILE: 92-93ROCKS.ASS  
 + POINTS: SAMP



22,818

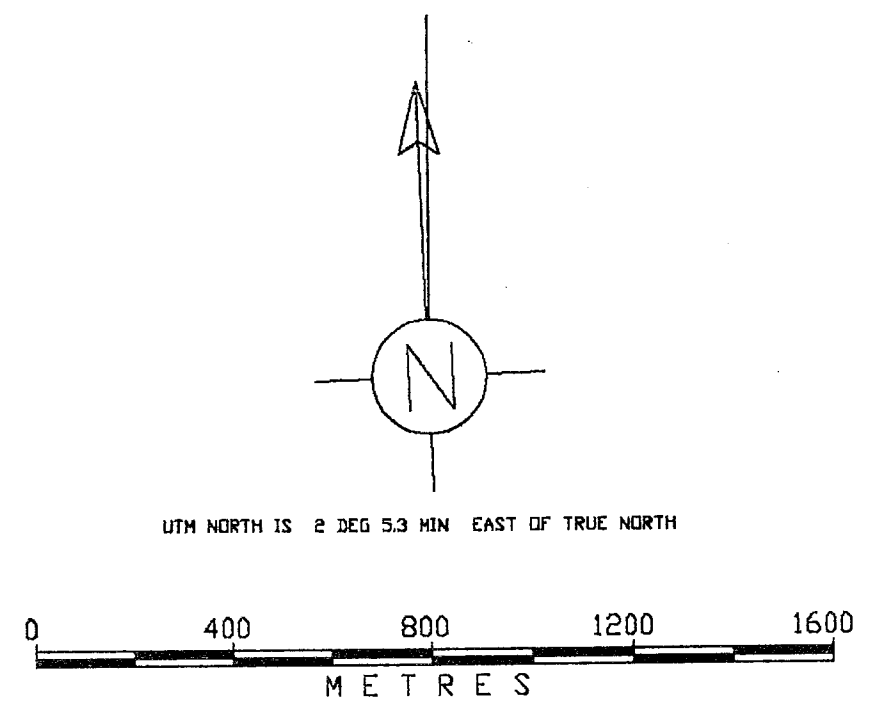
GEOLOGICAL REPORT  
ASSESSMENT REPORT





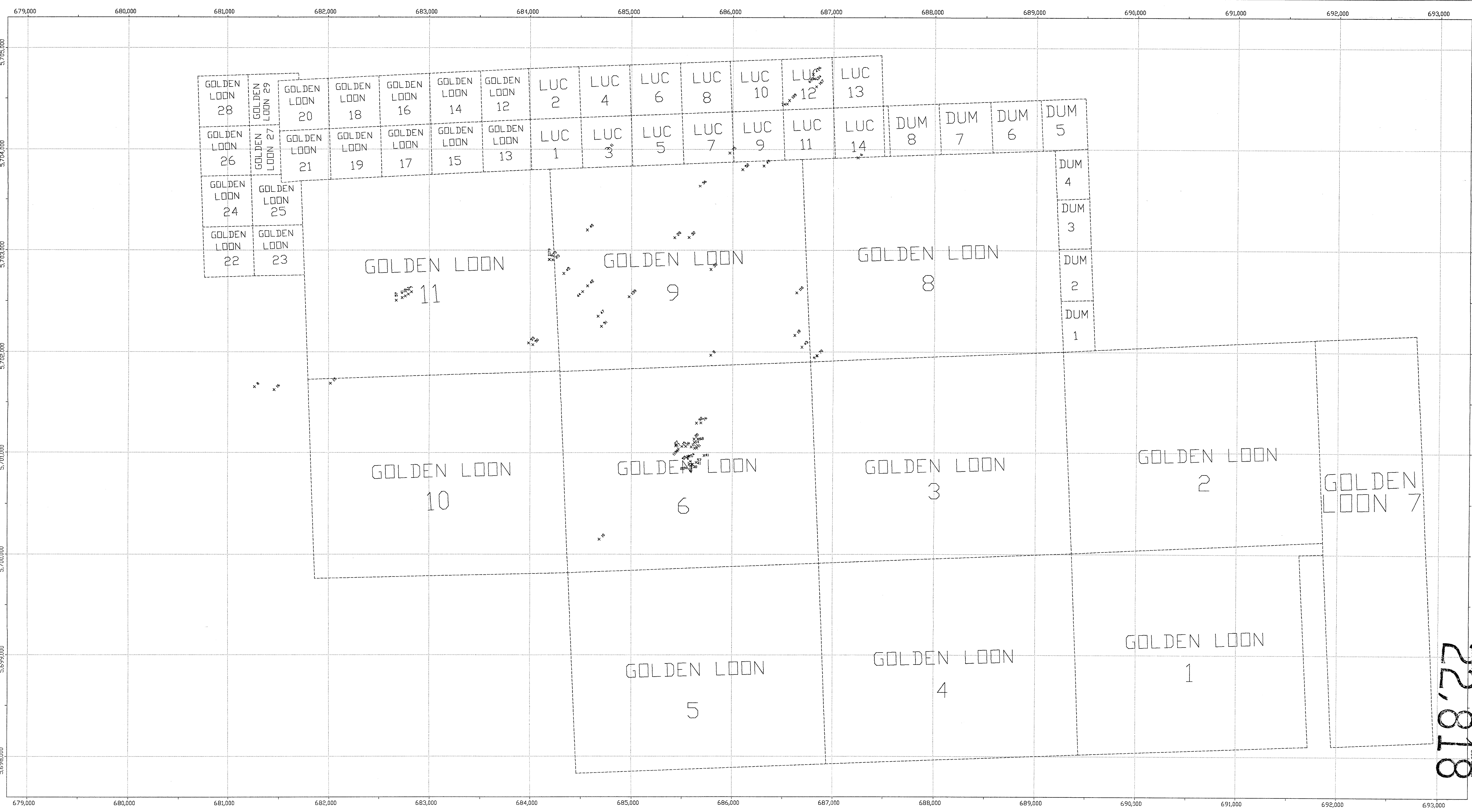
22,818

DATA PLOTTED ON THIS MAP:  
 DIRECTORY: \*EXPL/GOLDEN-L/GEDCHEM  
 RUN FILE: \*99ROCKLERUN  
 FIELD FILE 92-93ROCKS.ASS  
 + POINTS: SAMP

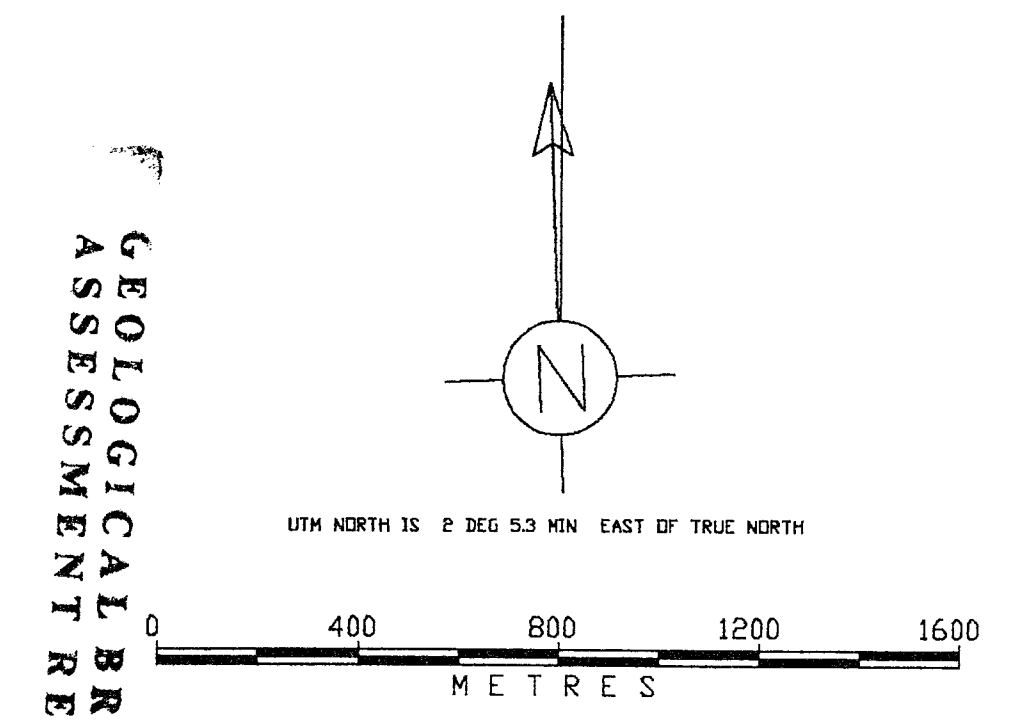


GEOLOGICAL BRANCH  
 ASSESSMENT REPORT  
 00066995  
 00086995

PLACER DOME INC.  
 GOLDEN LOON PROPERTY  
 GOLD (PPB) IN ROCK SAMPLES  
 DRAWN JFM  
 DATE 93-01-13  
 SCALE 1:15000  
 FIGURE 10.1



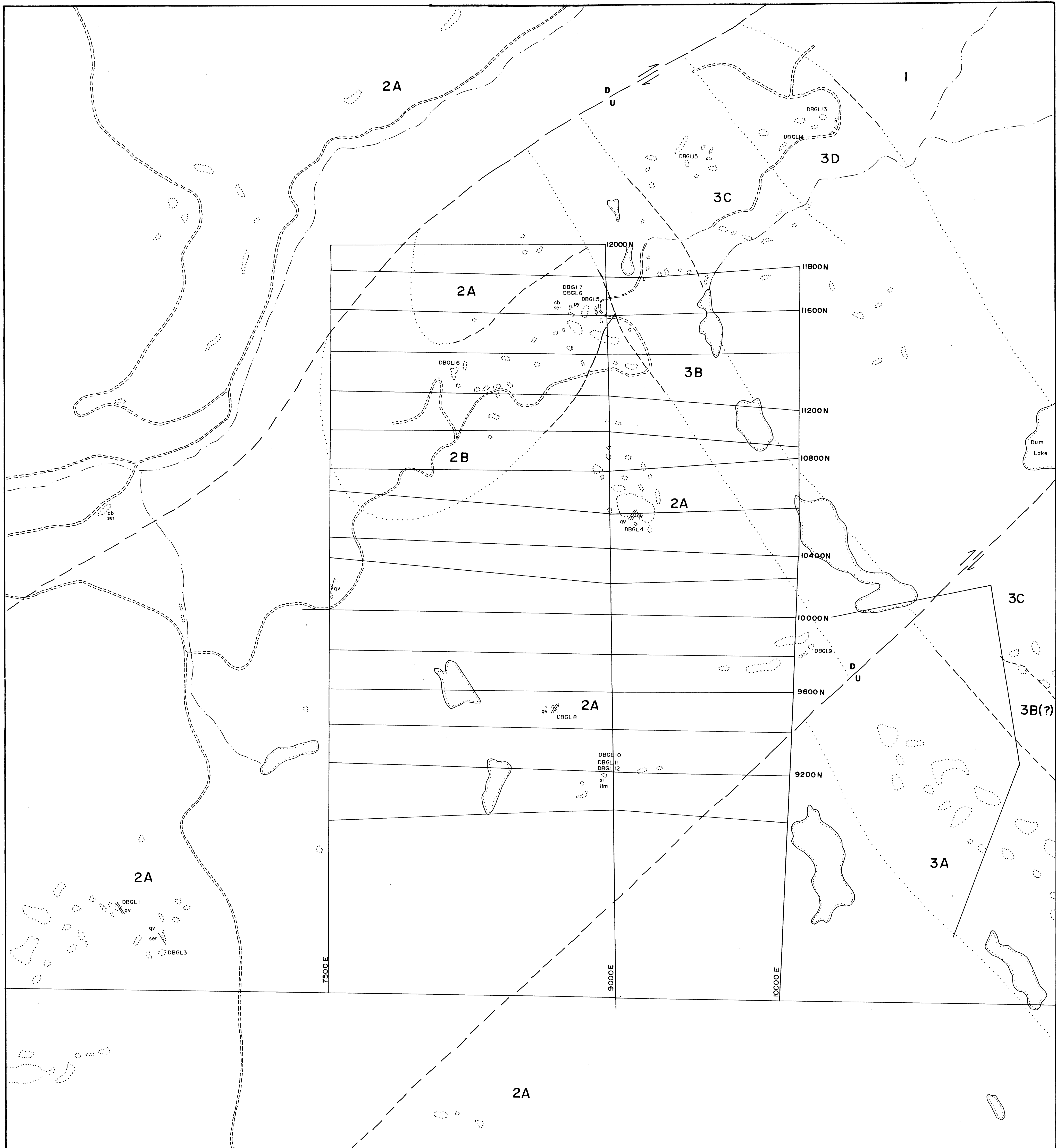
DATA PLOTTED ON THIS MAP:  
 DIRECTORY: KEXPL\GOLDEN-L\GEOCHEM  
 RUN FILE: 99RDKLC.RUN  
 FIELD FILE: 92-93ROCKS.ASS  
 + POINTS: SAMP



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

22818

PLACER DOME INC.  
 GOLDEN LOON PROPERTY  
 COPPER (PPM) IN ROCK SAMPLES  
 DRAWN: JFM  
 DATE: 93-01-13  
 SCALE: 1:15000  
 FIGURE 10.2

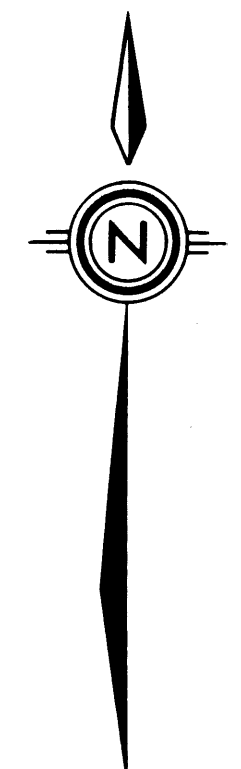


**LEGEND**

- LOWER JURASSIC**
- 3D** DIORITE: Medium grained, grey, green, equigranular: probably mainly of diorite composition but with some monzonite.
  - 3C** DIORITE: Medium to fine grained hornblende diorite: some monzodiorite: minor gabbro and peridotite.
  - 3B** GABBRO: Generally coarse grained clinopyroxene gabbro: becomes finer grained towards western margin; minor biotite.
  - 3A** PERIDOTITE: Medium to coarse grained clinopyroxene-bearing peridotite, variably serpentinized: clinopyroxene common in places.
- UPPER TRIASSIC LOWER JURASSIC  
THUYA BATHOLITH**
- 2B** GRANODIORITE: Medium grained hornblende granodiorite, biotite generally greater than 5%.
  - 2A** GRANODIORITE: Medium grained hornblende granodiorite: biotite generally less than 1%.
- UPPER TRIASSIC**
- I** TAKLA GROUP: Undifferentiated tuffaceous sandstone, siltstone and volcanic breccia.

**SYMBOLS**

- Geological contact: known, approximate, inferred
- Fault: approximate, inferred
- Outcrop or group of outcrops
- Vein - quartz vein
- q quartz
- ser sericite
- cb carbonate
- py pyrite
- bx breccia
- sl silicification
- lim limonite (goethite)
- X DBGL9 Sample location and number



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,818**

**GOLDEN LOON PROJECT  
PLACER DOME INC.  
GEOLOGY**

**FIGURE 11**