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Geological Report
for the
BAR CLAIM GROUP
CARIBOO MINING DIVISION

NTS: 93A/14W
Latitude 52° 55'N, Longitude 121° 20'W

by
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FILMED

GEOLOGICAL BRANCH
Date: December 15, 1994 **ASSESSMENT REPORT**

23,806

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SUMMARY

The **Bar** claims were acquired by staking in March, 1993, and July, 1994 to cover an area in the Cariboo Mining Division. The property is located 25 km southeast of Wells, BC and consists of 26, 2-Post claim units staked to cover ground thought to be prospective with respect to stratabound, base-metal mineralization. Three operators have investigated the general area in the past, and have provided comprehensive data-bases in publicly-accessed information files.

A \$65,000 geological and geophysical program was carried out in the summer of 1994 to further evaluate the claims with respect to their potential for hosting large "sedex" (sedimentary-exhalative) deposits. Two separate control grids were established, with 21 line-km placed, and 834 soil samples collected. As well, some 8.0 line-km of UTEM geophysical surveys were completed. 29 rock samples were also taken of representative material from the property. The work program followed work initiated by past operators since 1971, and most recently Toklat Resources in 1993.

The geological/geochemical program was designed to cover stratigraphy of the Hardscrabble Mountain succession, a Palaeozoic sequence of shallow- to deep-water marine sediments which show indications of hosting massive sulphide mineralization. Evidence of this consists of:

- (1) a 1000m-long, concordant, silver, lead, zinc and barium soil geochemical anomaly,
- (2) coincident geophysical anomalies,
- (3) both of the above directly associated with a stratabound barite horizon over 2.0m in width, mappable for over 300m, and apparently occurring some 2.5km along strike,
- (4) extremely gossanous material located in at least two places along the trend of the anomaly,
- (5) conformable lead-zinc occurrences have been recognised within the same stratigraphic succession less than 500m north of the claim boundary, with grades reported of 7.22% Pb, 5.23% Zn, and .93oz/t Ag over 0.5m., and
- (6) the sedimentary sequence underlying the claims is very similar in age, lithology and tectonic setting to those that host world-class "sedex-style" deposits in the Canadian Cordillera, Europe and Australia.

INTRODUCTION

The **Bar** claims were staked on March 12, 1993, and July 22, 1994 to cover ground open to staking in the Cariboo Mining Division. The property is located 25 km southeast of Wells, BC and consists of 26 claim units staked to cover ground thought to be prospective with respect to stratabound, base-metal mineralization. Three operators have investigated the area in the past, and have provided comprehensive data-bases in publicly-accessed information files.

The staking program was designed to cover stratigraphy of the Hardscrabble Mountain succession, a Palaeozoic sequence of shallow-to deep-water marine sediments which have shown strong indications of hosting massive sulphide mineralization. Very high soil geochemical values have been recovered from within the property area in the past, yet insufficient work was carried out in order to fully recognise its geologic potential. Diamond drilling was completed in an area comprising only 400m of strike length, though the geochemical anomaly stretches for approximately 1200m, and the barite horizon, some 2.5 km. Extensive trenching was also carried out in some areas by past operators, but often deep overburden made exposure of bedrock material infrequent, and results inconclusive. Geochemical and geophysical work completed during the 1994 season indicated that prominent faults offset the anomalous horizon, an important feature which may not have been recognised by past operators.

PROPERTY, DESCRIPTION, AND LOCATION

The Bar claims are located 25km southeast of Wells, BC. on NTS mapsheet 93A/14W (Fig. 1). They occur within the Cunningham Creek valley, on a gentle grade along the western slope of Roundtop Mountain between elevation 4000 and 6300 ft. Mature spruce and fir cover the entire property area, and outcrop is generally limited to escarpments and creek draws. The claim block consists of 26 contiguous 2-post claim units, which trend north and northeasterly (Fig. 2). Property tenure details are summarized below:

<u>Name</u>	<u>Units</u>	<u>Tag No.</u>	<u>Title No.</u>	<u>Date Acquired</u>	<u>Expiry Date</u>
Bar 1	1	653411M	316623	Mar. 12, 1993	Mar. 12, 2001
Bar 2	1	653412M	316624	Mar. 12, 1993	Mar. 12, 2001
Bar 3	1	653413M	316643	Mar. 12, 1993	Mar. 12, 2001
Bar 4	1	653414M	316644	Mar. 12, 1993	Mar. 12, 2001
Bar 5	1	653415M	316645	Mar. 12, 1993	Mar. 12, 2001
Bar 6	1	653416M	316646	Mar. 12, 1993	Mar. 12, 2001
Bar 7	1	653417M	316647	Mar. 12, 1993	Mar. 12, 2001
Bar 8	1	653418M	316648	Mar. 12, 1993	Mar. 12, 2001
Bar 9	1	653419M	316649	Mar. 12, 1993	Mar. 12, 2001
Bar 10	1	653420M	316650	Mar. 12, 1993	Mar. 12, 2001
Bar 11	1	653421M	316651	Mar. 12, 1993	Mar. 12, 2001
Bar 12	1	653422M	316652	Mar. 12, 1993	Mar. 12, 2001
Bar 13	1	653401M	316653	Mar. 12, 1993	Mar. 12, 2001
Bar 14	1	653402M	316654	Mar. 12, 1993	Mar. 12, 2001
Bar 15	1	653403M	316655	Mar. 12, 1993	Mar. 12, 2001
Bar 16	1	653404M	316659	Mar. 12, 1993	Mar. 12, 2001
Bar 17	1	653405M	316660	Mar. 12, 1993	Mar. 12, 2001
Bar 18	1	653406M	316656	Mar. 12, 1993	Mar. 12, 2001
Bar 19	1	653407M	316657	Mar. 12, 1993	Mar. 12, 2001
Bar 20	1	653408M	316658	Mar. 12, 1993	Mar. 12, 2001
Bar 21	1	653741M	329283	Jul. 22, 1994	Jul. 22, 2001
Bar 22	1	653742M	329285	Jul. 22, 1994	Jul. 22, 2001
Bar 23	1	653744M	329286	Jul. 22, 1994	Jul. 22, 2001
Bar 24	1	653745M	329287	Jul. 22, 1994	Jul. 22, 2001
Bar 25	1	653746M	329288	Jul. 22, 1994	Jul. 22, 2001
Bar 26	1	653747M	329289	Jul. 22, 1994	Jul. 22, 2001

Total: 26 units

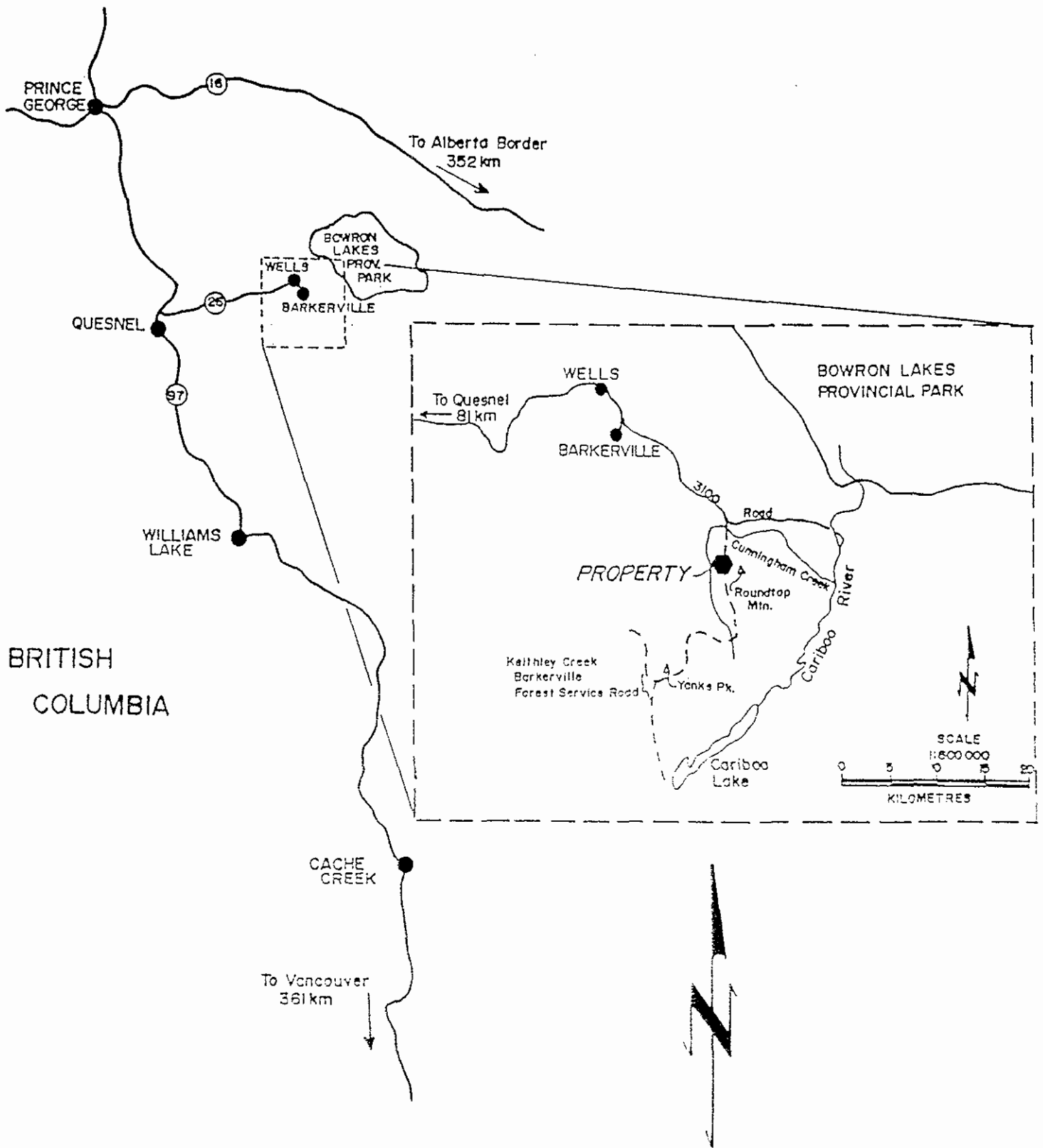


Figure 1- Property Location Map

ACCESSIBILITY, CLIMATE AND LOCAL RESOURCES

Access to and within the property area is excellent, provided by forest service roads which are maintained year-round. Logging is presently underway within the Cunningham Creek area. Roads within the property have been constructed by previous operators, and would require very little work to rehabilitate them. The area is subject to moderate precipitation, and is workable from late May to late October.

A local forest company currently has plans to log selected areas of the property in the winter of 1994/95, and as such, a new access road will be built along the east side of Cunningham Creek, at an elevation which will see it transverse much of the property. This road will undoubtedly provide new exposures, and hopefully will benefit the overall geologic interpretation of the property.

Mining has played an important role in the history of the area, and as a result, a well developed infrastructure is located nearby. Three major lode gold producers operated in Wells during the last century, namely the Mosquito Creek, Island Mountain, and Cariboo Gold Quartz Mines. Numerous placer operations have also been in existence nearby, some still working the same creeks which saw activity 130 years ago. A hydroelectric powerline and paved highway are located 15km to the northeast at Barkerville, and the nearest railhead is situated 60km north, along the Yellowhead Highway.

A well developed Forest Service Road network exists to the above services.

HISTORY

The entire Cariboo region has seen a wealth of prospecting activity since 1860, owing primarily to the rich placer gold deposits of the Barkerville area, located some 18km to the northwest of the claims.

Most work in the area was primarily focused on gold, and systematic exploration for base metals was first undertaken in 1971 by Coast Interior Ventures. Their program consisted of detailed drilling of a high-grade silver occurrence off of the present claims, as well as a 4000-sample soil geochemical program which resulted in the discovery of the "X"- Anomaly, along the western boundary of the present Bar Claims, and a further 9 discrete soil anomalies in the Cunningham Creek area. A number of anomalies were drilled, but the X-Anomaly remained untested.

Rio Tinto Canadian (Riocanex) optioned the Coast Interior Ventures ground in 1977-1978, and carried out work on all known sedex-style showings in the area, and also located a number more (see Figure 3). Geological work carried out within this program resulted in the recognition of a conformable bedded barite horizon directly overlying the anomaly area, underlining the significant potential for stratabound massive sulphides. Trenching and geophysical work was carried out in the area of the X-Anomaly, followed by approximately 650m of diamond drilling from 4 holes over 400m of strike-length. Trenching failed to locate the source of mineralization, though bedrock was not everywhere exposed along trench floors. Drilling indicated that the anomaly area was complexly folded, and that careful structural interpretation would be necessary to adequately test for mineralization. The best showing worked by Riocanex was at the "A"-Anomaly, and consisted of a conformable galena-sphalerite zone in a siliceous limestone and black shale sequence that assayed 5.98% combined lead-zinc and 2.09 oz/ton silver over 14.5m. It is interesting to note that the geochemical response in soils within the X-Anomaly area on the Bar claims, is stronger than that overlying the impressive A-Anomaly mineralization. Riocanex also discovered conformable lead/zinc/silver mineralization in outcrop immediately north of the Bar claim boundary. This occurrence, named the Vic showing, returned values of 7.22% Pb, 5.23% Zn, and .93 oz t Ag over 0.5m.

Loki Gold acquired the ground now overlain by the Bar claims in 1989, as part of a larger property package including 160 units. Their \$350,000 work program concentrated on exploration for gold, which occurs in high-grade concentrations within quartz veins at a number of locations along the Cunningham Creek valley. As a result of Lokis' program, a portion of their soil geochemical grid covered the area of the present claims. Though no significant gold geochemical values were returned from this area, a strong coincident silver, lead and zinc soil anomaly was delineated in the area of the X-Anomaly. Interestingly, the strongest zinc values (1235ppm), and highly anomalous silver and lead values were recovered to the south of, and along strike with the area tested by

(1235ppm), and highly anomalous silver and lead values were recovered to the south of, and along strike with the area tested by drilling in 1978 by Riocanex. Also during this program, an extremely rusty ground seep was located within the anomaly area, and appears to have been overlooked by past workers. The value of work completed by Loki in the area of the present Bar claims is approximately \$40,000.

In 1993, \$6,500 was spent on the property, and consisted of a brief geological program which saw the collection of 94 soil samples, and 2 rock samples. The existing Loki Gold Corp Grid was expanded, and drillholes made by Riocanex in 1977 and 1978 were located and tied-in. The barite in outcrop was also located, and material was examined and sampled by S. Butrenchuk, of Mountain Minerals Ltd.

GEOLOGY

The property covers a section of complexly deformed Upper Proterozoic to Upper Palaeozoic metasediments of the Omineca Tectonic Belt of the Canadian Cordillera. The northwest-southeast trending Pleasant Valley Thrust crosses the claims and separates two tectonically and stratigraphically unique terranes defined by Struik (1988). To the west, the Barkerville Terrane is defined by varieties of grit, quartzite, and pelites with lesser amounts of limestone and volcanoclastic rocks. East of the fault, the Cariboo Terrane comprises Hadrynian to Lower Paleozoic limestone and clastic rocks, and farther to the east, Middle to Upper Paleozoic shales, limestones, and minor basalt.

The rocks of both the Cariboo and Barkerville terranes are structurally complex. According to Struik (1988), they have been affected by at least four episodes of deformation. Generally, the rocks strike to the northwest and dip vertically or steeply to the northeast. Most fold axes plunge gently to the northwest.

The metamorphic grade reaches lower greenschist facies in most of the Cariboo and Barkerville Terrane rocks.

Property Geology

Property geology has been divided by Struik (1982) into five distinct lithologic units, all which strike northwesterly, parallel to claim boundaries, having a consistent 50-60° dip to the northeast.

The youngest unit present within the property is a Tertiary lamprophyre dyke which trends northeasterly, having a vertical dip. Host lithologies are summarized below:

BARKERVILLE TERRANE

Upper Paleozoic

Hardscrabble Mountain succession:

Black siltite and phyllite, grey micaceous quartzite, limestone, minor metatuff?, greywacke, muddy conglomerate

Paleozoic

Bralco succession:

Marble

Downey succession:

Olive and grey micaceous quartzite and phyllite, and

CARIBOO TERRANE

*Hadrynian and/or Cambrian*Midas Formation:

Dark siltstone and quartzite, minor shale and argillite

Property Mineralization

Despite the pronounced soil geochemical anomaly present within Bar Claim boundaries, very little outcrop mineralization has been discovered. Only two small showings were reported by Riocanex, and were concluded to be related, but not responsible for the extensive geochemical feature. These showings are described below, and their approximate locations shown on Figure 3; following page:

Evening Showing

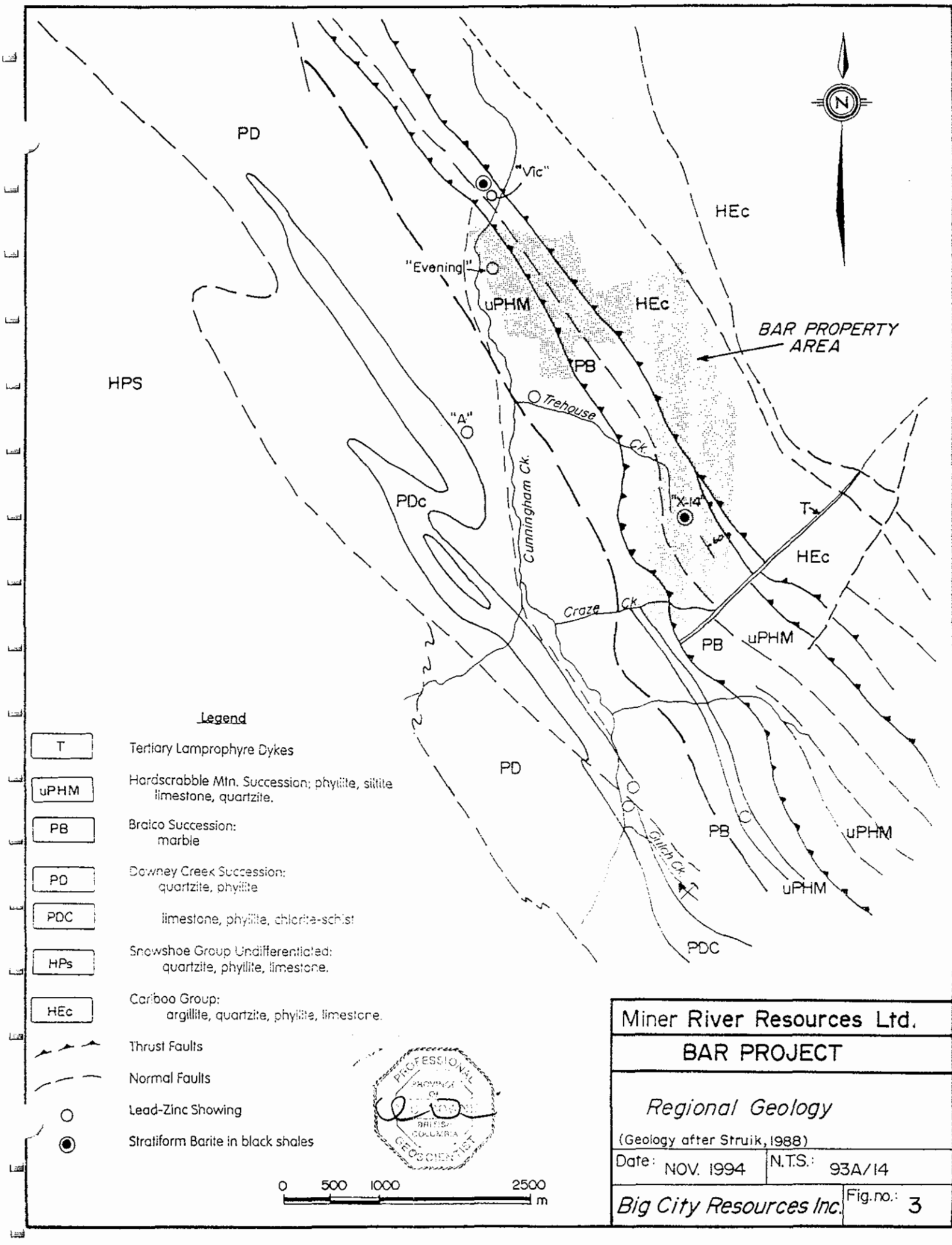
Black cherty shales are host to a conformable sulphide horizon of dark massive sphalerite and galena. A 40cm chip sample taken in 1977 across the mineralization assayed .99% Pb, 3.25% Zn, and .23 oz/t Ag. The showing was originally exposed in a small hand trench from which a sample taken in 1976 assayed 17% Zn. The nature of this sample is unknown. The showing lies along strike with the main Bar geochemical anomaly.

X-14 Showing

Low grade disseminated sphalerite and galena was exposed in 1977 by Riocanex in their 1400 Trench at 3+55W. A grab sample was assayed and found to contain .31% Pb and .70% Zn. Workers at the time suggest that "this mineralization does not explain the occurrence of the extensive X Anomaly, the greater part of which lies uphill from the showing".

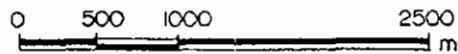
Bedded Barite

Parallel to the lead/zinc/silver geochemical anomaly is a bedded barite unit over 2.0m in width. This unit is exposed intermittently on surface for over 300m, and is traced by soil geochemistry for 1300m, with the anomaly open to the north. Whole-rock analysis of this material indicates that it is relatively pure, with a BaSO₄ content of 89.59%, and a Specific Gravity of 4.16, making it of acceptable quality for use as a drilling mud product.



Legend

- T Tertiary Lamprophyre Dykes
- uPHM Hardscrabble Mtn. Succession: phyllite, siltite limestone, quartzite.
- PB Braico Succession: marble
- PD Downey Creek Succession: quartzite, phyllite
- PDC limestone, phyllite, chlorite-schist
- HPS Snowshoe Group Undifferentiated: quartzite, phyllite, limestone.
- HEc Cariboo Group: argillite, quartzite, phyllite, limestone.
- Thrust Faults
- Normal Faults
- Lead-Zinc Showing
- Stratiform Barite in black shales



Miner River Resources Ltd.	
BAR PROJECT	
<i>Regional Geology</i>	
(Geology after Struik, 1988)	
Date: NOV. 1994	N.T.S.: 93A/14
<i>Big City Resources Inc.</i>	Fig.no.: 3

1994 PROGRAM

The focus of the \$65,000 Summer, 1994 program was to:

- (1) extend geochemical coverage initiated by Loki Gold in 1989
- (2) locate and tie-in drillholes and trenches constructed by Riocanex in 1977 and 1978
- (3) locate and sample the barite occurrences
- (4) complete UTEM geophysical coverage of the primary geochemical anomaly.
- (5) extend geochemical coverage northward, along strike of the primary anomaly.

A total of 834 soil geochemical samples and 29 rock sample were taken from the property. Sample coverage was designed to extend the existing grid coverage initiated by Loki Gold Corp. in 1989, (the "South Grid"), and to evaluate a new grid area (covered by the "North Grid").

An 8.0 line-km UTEM survey was completed on the South Grid, over the primary soil geochemical anomaly ("X-anomaly"). Work was contracted to SJ Geophysical of Vancouver, the report for which is provided in Appendix V, following this report.

Samples were shipped to Eco-Tech Labs in Kamloops, where they were analyzed by 30 element ICP methods. Eco-Tech's standard procedure for soil sample preparation is provided in Appendix IV, following this report.

Soil samples were taken with a mattock from the B horizon at a depth of about 30 cm.

RESULTSGeochemistry

South Grid (see Figures 4-7; following)

Results of the 1994 program were extremely encouraging, and clearly warrant extensive follow-up work. Coincident lead-, zinc- and silver-anomalous areas were delineated, and for the most part, indicate mineralization in areas untested by 1977, 1978 RioCanex drilling. The anomalous horizon is some 1000m in length, and its high silver and lead content is confirmed laterally over several separate soil traverses. Coincident with this anomaly is a strong, well-defined barium geochemical anomaly, within which is exposed the bedded barite on surface. The strongest portions of the metals anomaly occur in areas which were not investigated by past RioCanex programs, and must be considered significant exploration targets.

Other encouraging metals anomalies occur at BL 0+00/11+50E and at L2+00S/12+50E, and should see follow-up work done.

Interestingly, poor correlation is made between analytical results returned from both the 1993 program and Loki Golds' 1989 program, and that carried out by RioCanex in 1977. Drillholes completed in 1977 and 1978 by RioCanex generally appear to be located in areas of poor geochemical response, according to 1989 and 1993 data. It is possible that results from the 1977-78 programs were misleading, and caused the location of drillsites to be made in areas of less than optimum potential.

NORTH GRID (see Figures 8-11; following)

A total of 17.6 line-km of survey grid was established in an area of the property located north of Trehouse Creek. The grid was designed to cover any possible extension of geochemically anomalous horizons indicated within the South Grid area.

No linecutting was initiated on this grid, and only hip-chain and compass used for control.

Two strong mineralized trends were indicated in the North Grid area, and occur as parallel, distinct linear features. A strong barite anomaly is indicated over 1200m strike length from L12+00N to L25+00N. Within this anomaly area is found localized silver, lead and zinc enrichment. The strongest response from soils occurs along or near the baseline, from 19+50 to 22+00N.

A strong, continuous silver (with weak zinc and barium) anomaly occurs along the western region of the North Grid, occurring over 1000m, open to the north and south. This anomaly trends off of the present claim area, and forms an obvious staking target.

Barite (see Figures 7, 11; following)

The bedded barite occurrence was located at approximately L2N/14+50 E, and was traced intermittently along surface for some 300m. It is exposed over 2.6m in width, representing a true thickness of approximately 2.0m. Tests carried out by Mountain Minerals concluded that the material is suitable as a drilling medium (S. Butrenchuk-personal communication).

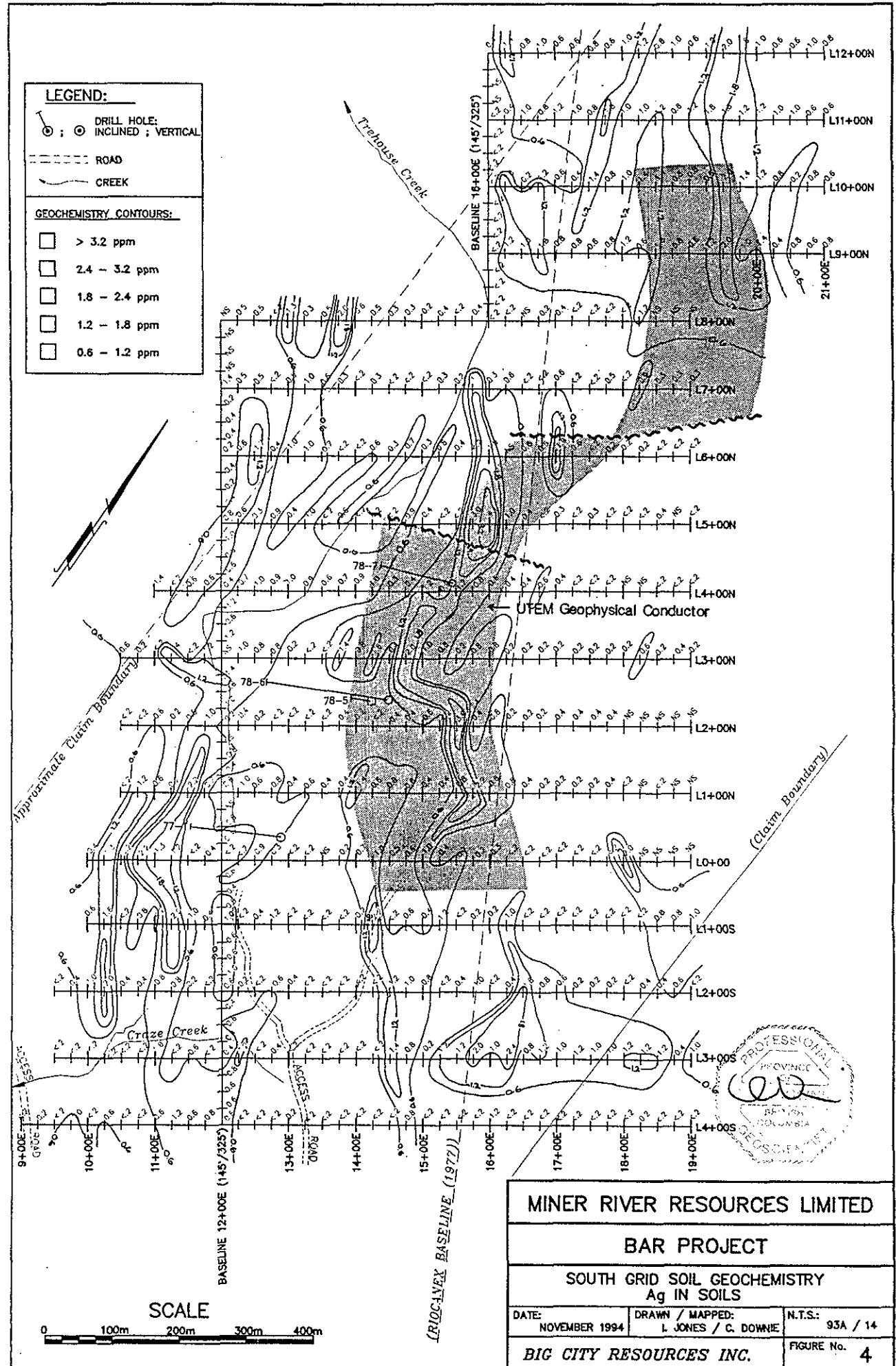
Soil sample coverage for barium proved extremely successful in following the underlying barite material, based on its limited exposure on surface. A strong barium anomaly is revealed parallel to stratigraphy within the grid area, and is coincident with known exposures at L2N/14+50E. The anomaly is over 1300m in length, and is open to the south. The anastomosing nature of the anomaly may likely represent either folded or faulted underlying structure, the specifics of which will have to be determined. In either case, it appears as though this unit may prove to be an effective marker for future work programs.

LEGEND:

- ⊙ ; ⊙ DRILL HOLE:
INCLINED ; VERTICAL
- ROAD
- ~ CREEK

GEOCHEMISTRY CONTOURS:

- ☐ > 3.2 ppm
- ☐ 2.4 - 3.2 ppm
- ☐ 1.8 - 2.4 ppm
- ☐ 1.2 - 1.8 ppm
- ☐ 0.6 - 1.2 ppm



MINER RIVER RESOURCES LIMITED		
BAR PROJECT		
SOUTH GRID SOIL GEOCHEMISTRY Ag IN SOILS		
DATE: NOVEMBER 1994	DRAWN / MAPPED: L. JONES / C. DOWNE	N.T.S.: 93A / 14
BIG CITY RESOURCES INC.		FIGURE No. 4

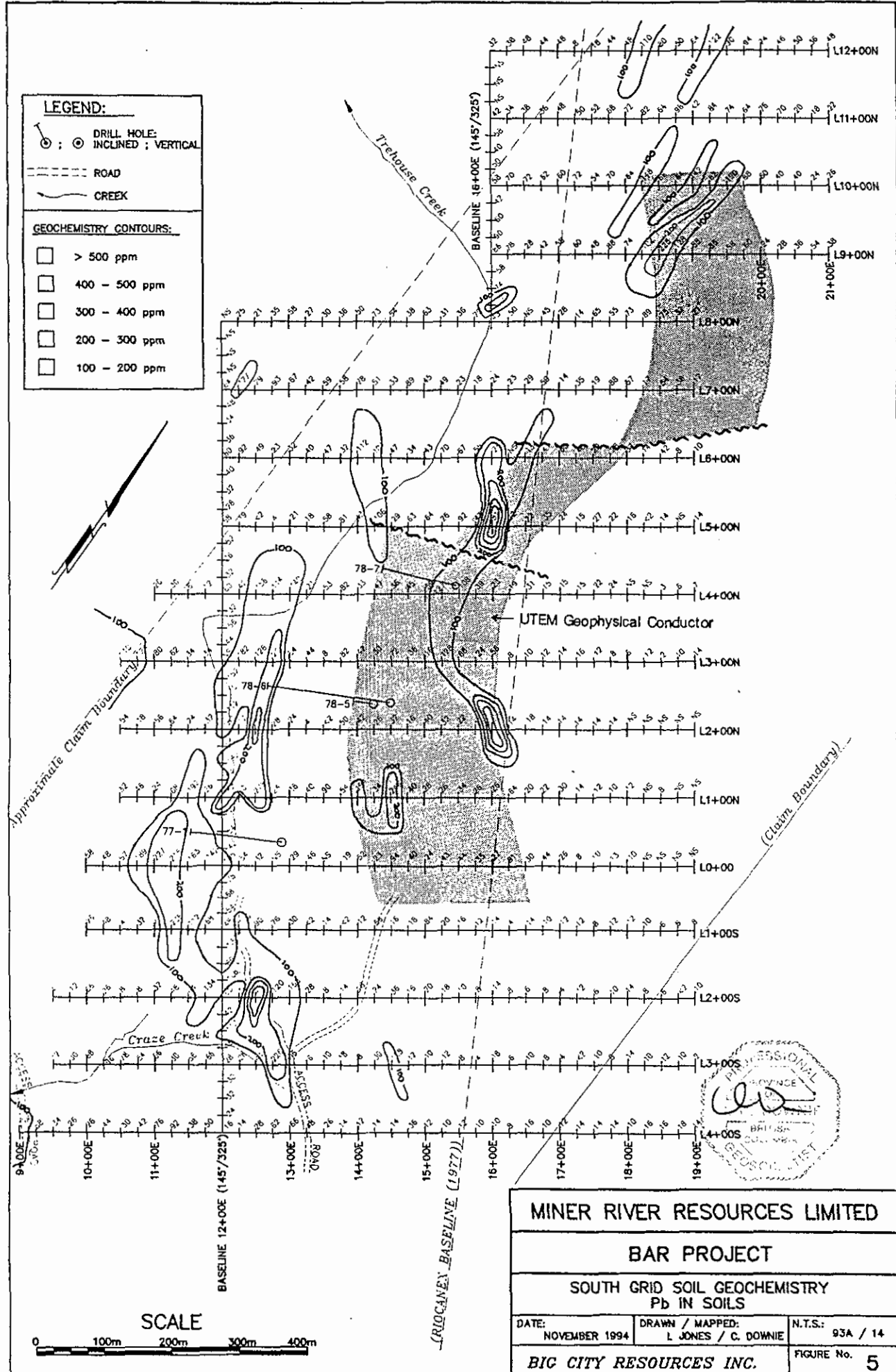
LEGEND:

○ : ○ DRILL HOLE:
 INCLUDED ; VERTICAL

--- ROAD
 ~~~~~ CREEK



**GEOCHEMISTRY CONTOURS:**



- > 500 ppm
- 400 - 500 ppm
- 300 - 400 ppm
- 200 - 300 ppm
- 100 - 200 ppm








|                                                     |                                        |                     |
|-----------------------------------------------------|----------------------------------------|---------------------|
| <b>MINER RIVER RESOURCES LIMITED</b>                |                                        |                     |
| <b>BAR PROJECT</b>                                  |                                        |                     |
| <b>SOUTH GRID SOIL GEOCHEMISTRY<br/>Pb IN SOILS</b> |                                        |                     |
| DATE:<br>NOVEMBER 1994                              | DRAWN / MAPPED:<br>L JONES / C. DOWNIE | N.T.S.:<br>93A / 14 |
| <b>BIG CITY RESOURCES INC.</b>                      |                                        | FIGURE No. <b>5</b> |

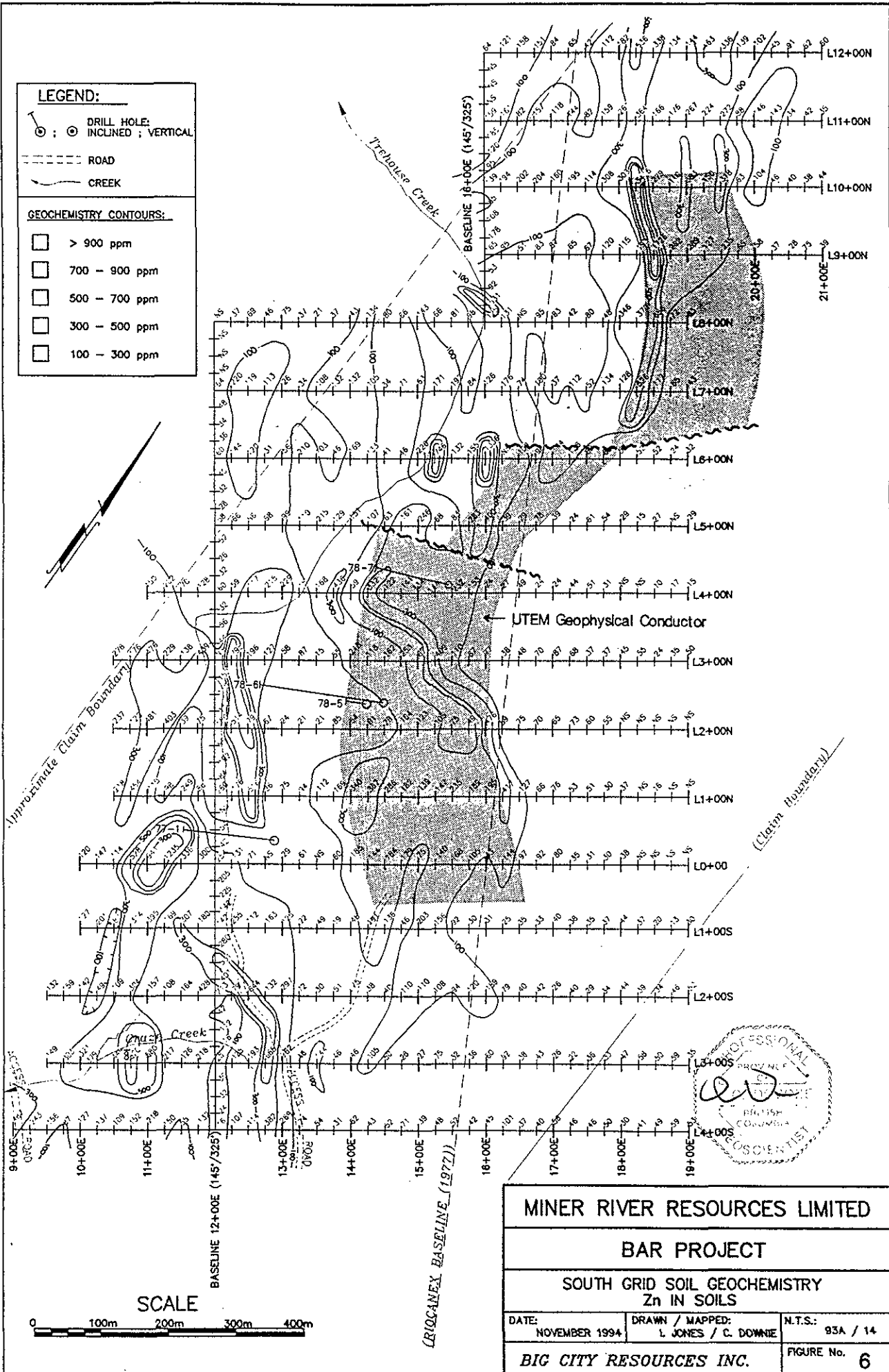
**LEGEND:**

 DRILL HOLE:  
 INCLINED ; VERTICAL

 ROAD  
 CREEK

**GEOCHEMISTRY CONTOURS:**

-  > 900 ppm
-  700 - 900 ppm
-  500 - 700 ppm
-  300 - 500 ppm
-  100 - 300 ppm



|                                                     |                                         |                     |
|-----------------------------------------------------|-----------------------------------------|---------------------|
| <b>MINER RIVER RESOURCES LIMITED</b>                |                                         |                     |
| <b>BAR PROJECT</b>                                  |                                         |                     |
| <b>SOUTH GRID SOIL GEOCHEMISTRY<br/>Zn IN SOILS</b> |                                         |                     |
| DATE:<br>NOVEMBER 1994                              | DRAWN / MAPPED:<br>L. JONES / C. DOWDIE | N.T.S.:<br>93A / 14 |
| <b>BIG CITY RESOURCES INC.</b>                      |                                         | FIGURE No. <b>6</b> |

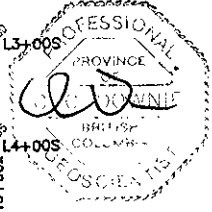
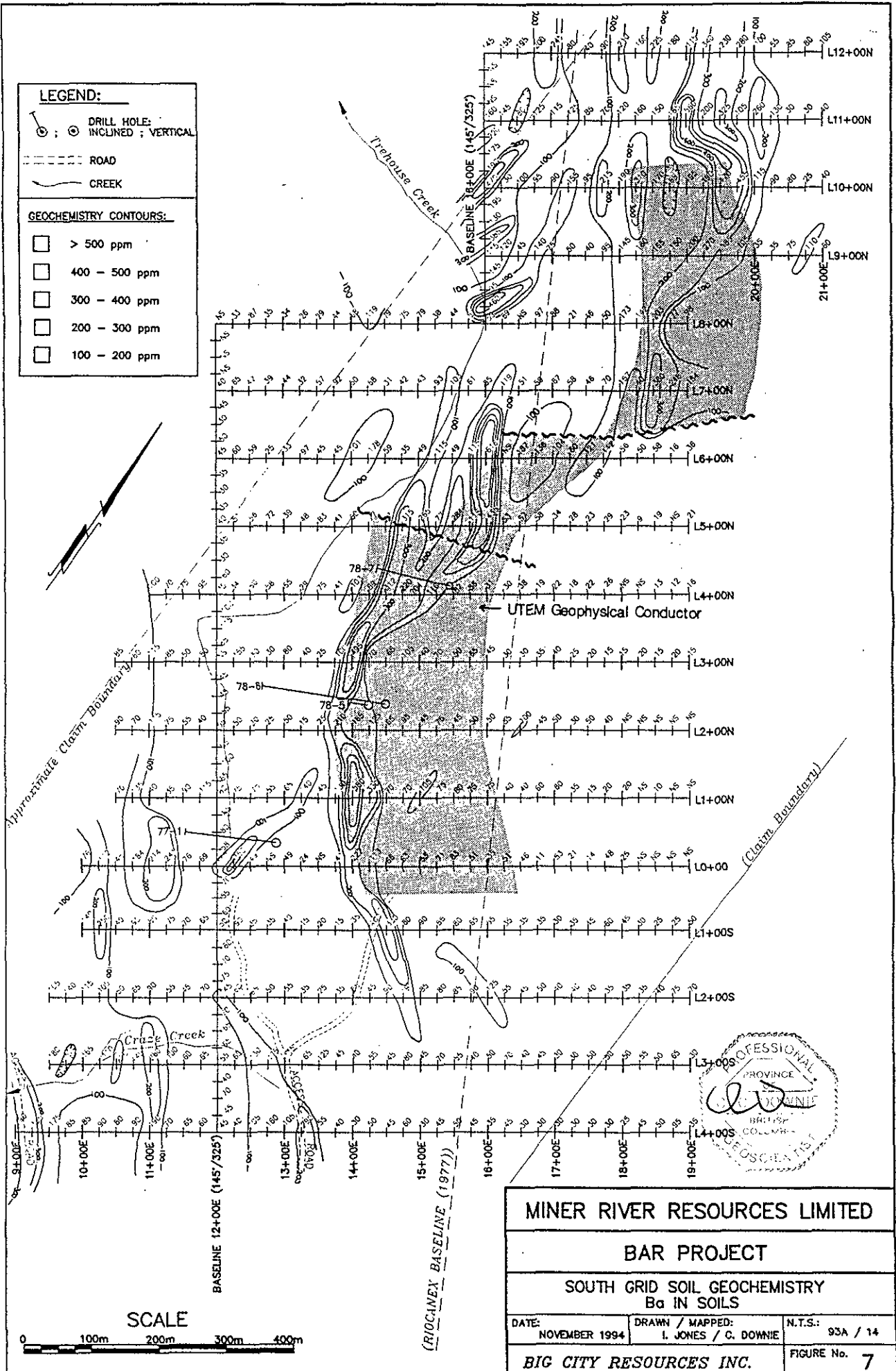
**LEGEND:**

DRILL HOLE:  
 INCLINED ; VERTICAL

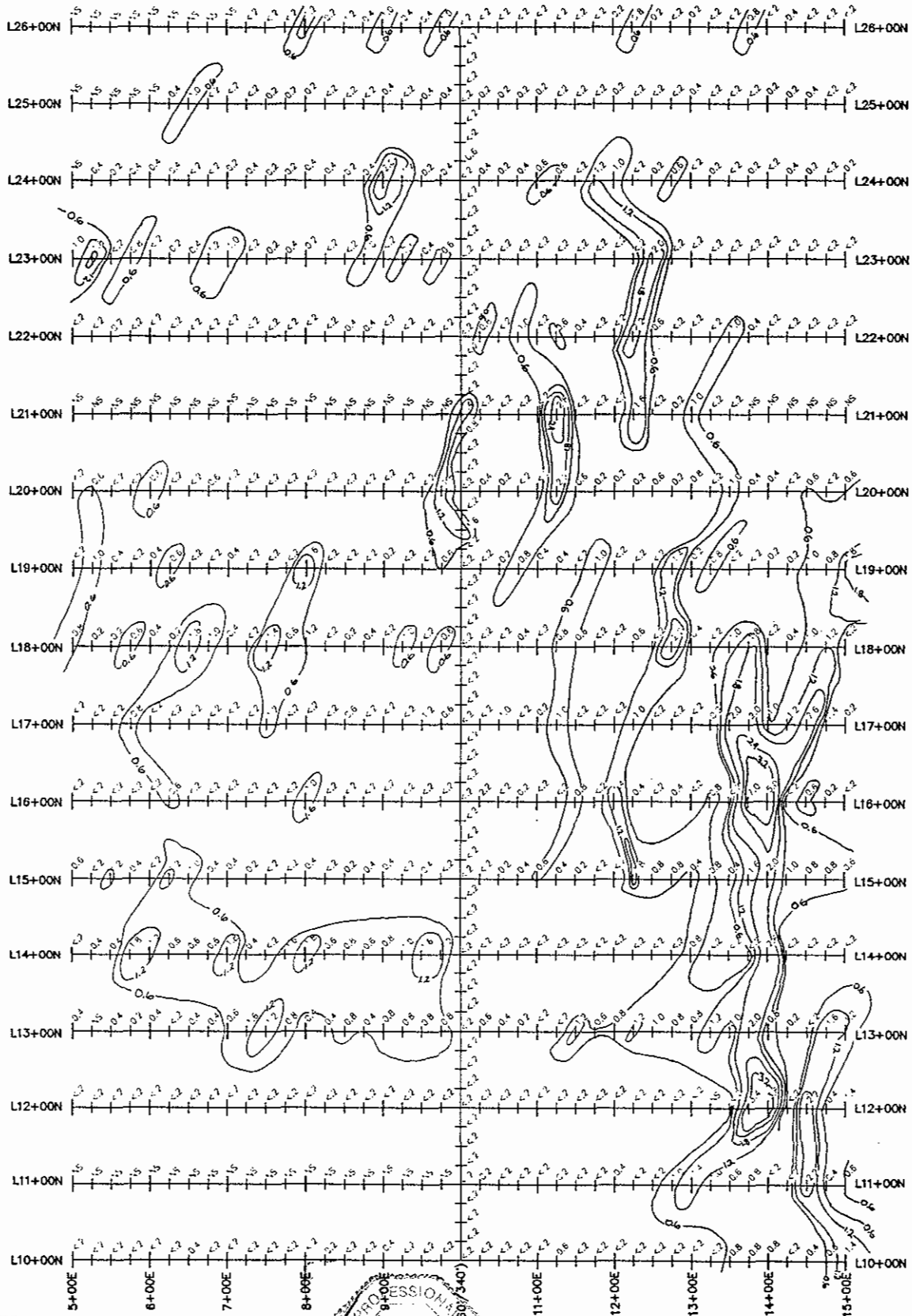
ROAD  
 CREEK

**GEOCHEMISTRY CONTOURS:**

- > 500 ppm
- 400 - 500 ppm
- 300 - 400 ppm
- 200 - 300 ppm
- 100 - 200 ppm

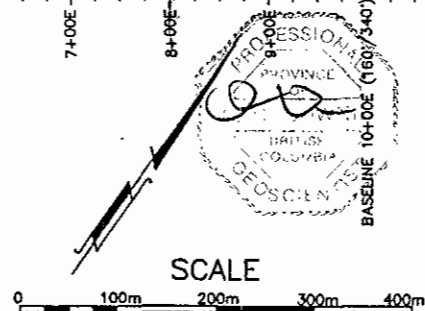


|                                                    |                                         |                     |
|----------------------------------------------------|-----------------------------------------|---------------------|
| <b>MINER RIVER RESOURCES LIMITED</b>               |                                         |                     |
| <b>BAR PROJECT</b>                                 |                                         |                     |
| <b>SOUTH GRID SOIL GEOCHEMISTRY</b><br>Ba IN SOILS |                                         |                     |
| DATE:<br>NOVEMBER 1994                             | DRAWN / MAPPED:<br>I. JONES / C. DOWNIE | N.T.S.:<br>93A / 14 |
| <b>BIG CITY RESOURCES INC.</b>                     |                                         | FIGURE No. <b>7</b> |

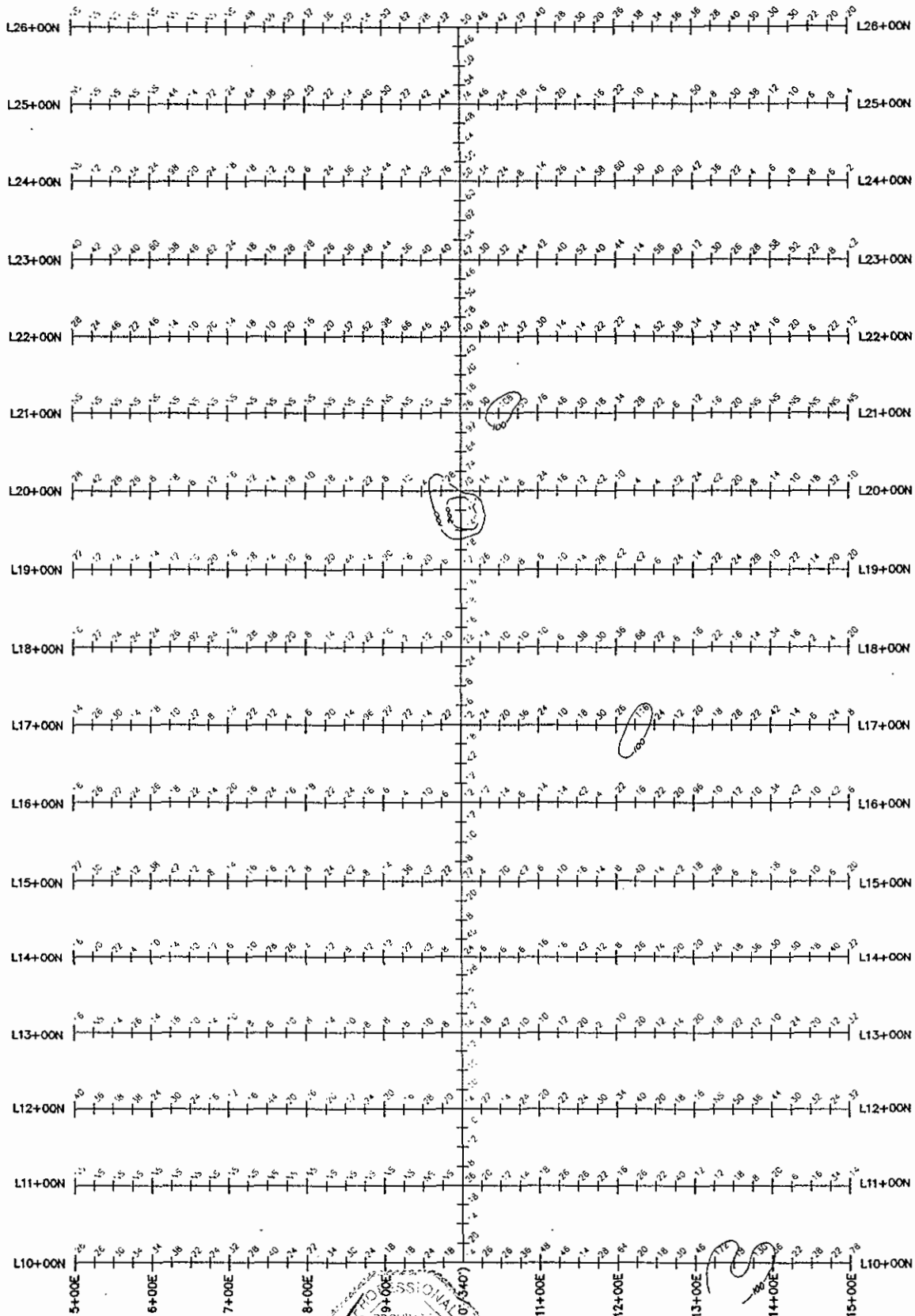


**GEOCHEMISTRY CONTOURS:**

|   |               |
|---|---------------|
| □ | > 3.2 ppm     |
| □ | 2.4 - 3.2 ppm |
| □ | 1.8 - 2.4 ppm |
| □ | 1.2 - 1.8 ppm |
| □ | 0.8 - 1.2 ppm |



|                                                    |                                         |                     |
|----------------------------------------------------|-----------------------------------------|---------------------|
| <b>MINER RIVER RESOURCES LIMITED</b>               |                                         |                     |
| <b>BAR PROJECT</b>                                 |                                         |                     |
| <b>NORTH GRID SOIL GEOCHEMISTRY</b><br>Ag IN SOILS |                                         |                     |
| DATE:<br>NOVEMBER 1994                             | DRAWN / MAPPED:<br>I. JONES / C. DOWNIE | N.T.S.:<br>93A / 14 |
| <b>BIG CITY RESOURCES INC.</b>                     |                                         | <b>FIGURE No. 8</b> |

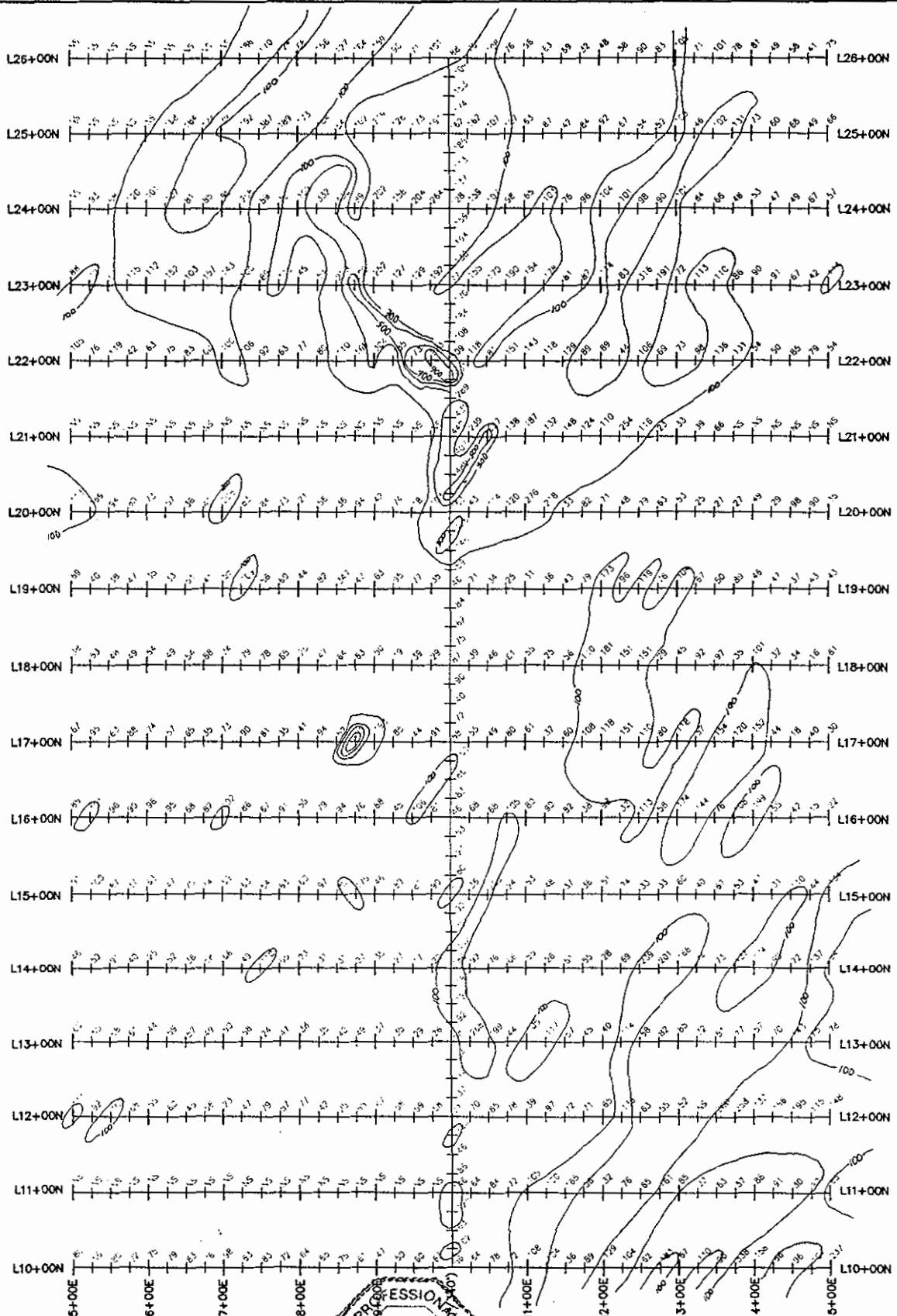


**GEOCHEMISTRY CONTOURS:**

|                          |               |
|--------------------------|---------------|
| <input type="checkbox"/> | > 500 ppm     |
| <input type="checkbox"/> | 400 - 500 ppm |
| <input type="checkbox"/> | 300 - 400 ppm |
| <input type="checkbox"/> | 200 - 300 ppm |
| <input type="checkbox"/> | 100 - 200 ppm |

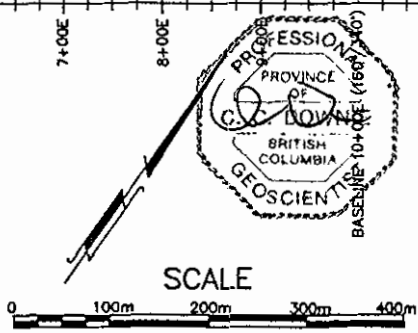


|                                                     |                                         |                     |
|-----------------------------------------------------|-----------------------------------------|---------------------|
| <b>MINER RIVER RESOURCES LIMITED</b>                |                                         |                     |
| <b>BAR PROJECT</b>                                  |                                         |                     |
| <b>NORTH GRID SOIL GEOCHEMISTRY<br/>Pb IN SOILS</b> |                                         |                     |
| DATE:<br>NOVEMBER 1994                              | DRAWN / MAPPED:<br>L. JONES / C. DOWNIE | N.T.S.: 93A / 14    |
| <b>BIG CITY RESOURCES INC.</b>                      |                                         | FIGURE No. <b>9</b> |



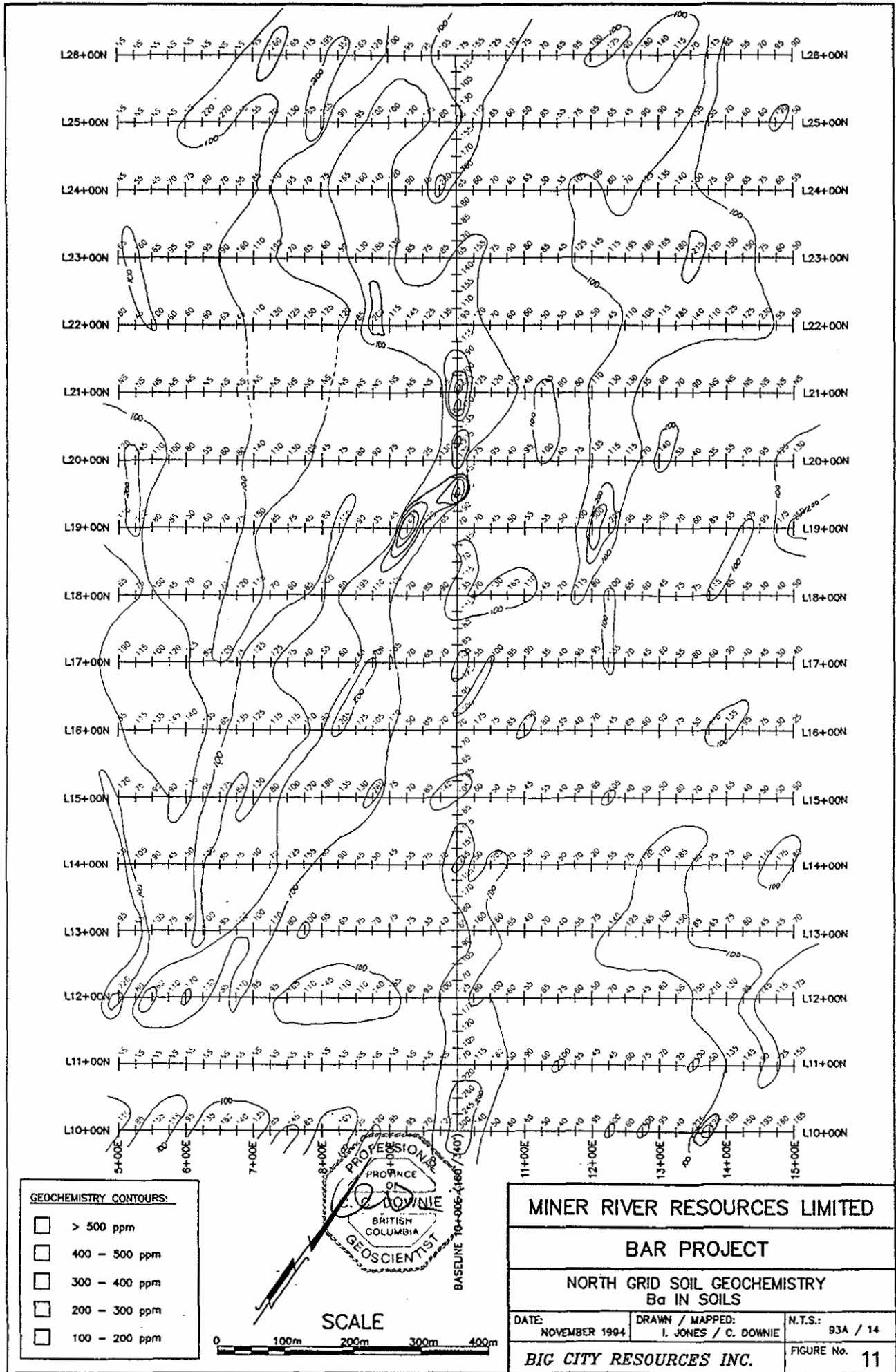
**GEOCHEMISTRY CONTOURS:**

|                          |               |
|--------------------------|---------------|
| <input type="checkbox"/> | > 900 ppm     |
| <input type="checkbox"/> | 700 - 900 ppm |
| <input type="checkbox"/> | 500 - 700 ppm |
| <input type="checkbox"/> | 300 - 500 ppm |
| <input type="checkbox"/> | 100 - 300 ppm |



|                                                     |                                        |                      |
|-----------------------------------------------------|----------------------------------------|----------------------|
| <b>MINER RIVER RESOURCES LIMITED</b>                |                                        |                      |
| <b>BAR PROJECT</b>                                  |                                        |                      |
| <b>NORTH GRID SOIL GEOCHEMISTRY<br/>Zn IN SOILS</b> |                                        |                      |
| DATE:<br>NOVEMBER 1994                              | DRAWN / MAPPED:<br>L. JONES / C. DOWNE | N.T.S.:<br>93A / 14  |
| <b>BIG CITY RESOURCES INC.</b>                      |                                        | <b>FIGURE No. 10</b> |



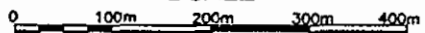


**GEOCHEMISTRY CONTOURS:**

|   |               |
|---|---------------|
| □ | > 500 ppm     |
| □ | 400 - 500 ppm |
| □ | 300 - 400 ppm |
| □ | 200 - 300 ppm |
| □ | 100 - 200 ppm |

PROFESSIONAL  
 I. JONES  
 PROVINCE OF  
 BRITISH COLUMBIA  
 GEOSCIENTIST

SCALE



|                                                     |                                         |                      |
|-----------------------------------------------------|-----------------------------------------|----------------------|
| <b>MINER RIVER RESOURCES LIMITED</b>                |                                         |                      |
| <b>BAR PROJECT</b>                                  |                                         |                      |
| <b>NORTH GRID SOIL GEOCHEMISTRY<br/>Ba IN SOILS</b> |                                         |                      |
| DATE:<br>NOVEMBER 1994                              | DRAWN / MAPPED:<br>I. JONES / C. DOWNIE | N.T.S.:<br>93A / 14  |
| <b>BIG CITY RESOURCES INC.</b>                      |                                         | FIGURE No. <b>11</b> |

Geophysics (see appended report by S.J. Geophysics)

Approximately 8 line km of UTEM geophysics was completed on the Bar claims during the 1994 field program. The survey outlined a broad linear zone of high conductivity, open to the north and south, with sharp lateral contacts. The conductive zone is truncated in two areas : Line 500N between 1450 - 1550 E; 625N between 1640 - 1790 E. The linear nature of the anomaly trend and the sharp truncations suggest a conductive bedrock source that is offset by faulting. The shape of the geophysical anomaly mimics the shape of the contoured geochemical data.

EXPLORATION MODEL

Mineralization on the Bar property is similar to that found in the Gataga District of Northeastern British Columbia. The Gataga District hosts at least 22 sedimentary - exhalative type deposits, the largest of which is the Cirque deposit which has a geological reserve in excess of 35 million tons averaging 10% combined Pb/Zn and 47 g/t Ag. Mineralization in the Gataga District is barite-zinc-lead-silver in 19 of the 22 documented deposits. There are also stratiform barite deposits within the district. According to MacIntyre(1992), the Gataga deposits were formed by precipitation of sulfide and sulfate minerals from metalliferous brines that were exhaled along active rift zones. These submarine faults were later reactivated as thrust faults. Mineralization hosting lithologies include cherty to carbonaceous argillite, brecciated dolomite and quartzite, and cherty mudstone. The Gunsteel Formation, which hosts eight important sedimentary-exhalative barite-sulfide deposits, including the Cirque, has a distinctive lithogeochemical signature. Regionally deficient in lead, zinc, copper and silver, the Gunsteel rocks are only enriched in lead and zinc in the immediate footwall of the barite-sulfide deposits. These footwall rocks are also enriched in organic carbon and phosphate. MacIntyre has proposed the underlying Hadrynian Grit unit as a source for the metallic brines.

Mineralization on the Bar Claims indicates the potential for Gataga style barite-zinc-lead-silver deposits. A bedded barite unit 2.0m thick indicates the presence of a paleomarine exhalative system. Exposed intermittently on surface over 300m, the barite horizon has a strong geochemical trace over 1300m. Coincident with the bedded barite horizon is a strong zinc-lead-silver geochemical anomaly. The geochemistry trend shows an anastomosing surface trace which may be related to faulting, possibly related to reactivation along the Pleasant Valley Thrust which cuts the Bar claims to the east. Geochemistry also indicates the presence of elevated phosphate in the soils. The host rocks on the Bar claims are carbonaceous siltites, phyllites, grey micaceous quartzites, siliceous limestones and cherty shales. The Hadrynian Cariboo and Kaza Group rocks include argillites, shales, and greywacke which are potential source rocks for metalliferous brines.

**CONCLUSION AND RECOMMENDATIONS**

The following conclusions may be drawn from work relating to the Bar property:

The Bar property has indications that it may host a sedimentary-exhalative base metal deposit. A bedded barite horizon 2.0m thick, exposed intermittently on surface over a distance of 300m with a strong soil geochemical trace extending over 1300m, is suggestive of a marine exhalative system. Coincident with the bedded barite horizon is a strong lead-zinc-silver soil geochemical anomaly, also indicative of sedimentary-exhalative style mineralization. 1994 work has located another (possibly continuous) silver-lead-zinc soil anomaly on the North Grid area. The strong linear nature of the geochemical anomalies may be suggestive of underlying stratabound mineralization, or may be related to metal remobilization along re-activated faults. These anomalies could then represent the surface expression of deeper sed-ex mineralization.

Trenching and limited diamond drilling by past operators failed to locate a source for the base metal values in the soils. Trench exposures may have been constrained by overburden thickness. Also the enriched soils may be indications of a sed-ex deposit located beyond the reach of a surface trench. Poor correlation is made between analytical results obtained from the 1994, 1993, and 1989 programs, and that carried out by Riocanex in 1977. Drillholes completed in 1977 and 1978 by Riocanex generally do not appear to be located in areas of optimum geochemical response outlined by 1994, 1993, and 1989 work. The results from the 1977-1978 programs may have been misleading, and the drillsites may not have been in the most favourable locations.

The following field program is recommended to further evaluate sed-ex potential on the Bar claims. A estimated budget for the work is included, following:

- 1) Land position should be increased by staking north of the BAR 25 and 26 claims and east of the main claim group. This will cover a possible northern extension of a multi-element anomaly located within both the North and South Grid areas.
- 2) The geochemistry survey should be extended to include any new claims. The new claims should be thoroughly prospected.
- 3) The North grid area should be prospected, with particular detail in the areas of geochemical soil anomalies.
- 4) A diamond drilling program of 1000m should be completed to locate the source of the base metal geochemistry anomalies.
- 5) Contingent on favourable results from Phase 1 drilling, a follow-up drilling program of 6000 feet should be completed.

**PROPOSED BUDGET**

Phase 1

|                                             |              |
|---------------------------------------------|--------------|
| Personnel.....                              | \$ 35,000.00 |
| Diamond-Drilling (3000 ft x \$35/foot)..... | 105,000.00   |
| Heavy Equipment.....                        | 20,000.00    |
| Mob/Demob.....                              | 5,000.00     |
| Analytical.....                             | 8,000.00     |
| Meals/Grocery.....                          | 10,000.00    |
| Truck and Equipment Rentals.....            | 5,000.00     |
| Fuel (Diesel, Gasoline, Propane).....       | 4,000.00     |
| Supplies.....                               | 3,000.00     |
| Miscellaneous.....                          | 6,000.00     |
| Report/Reproduction.....                    | 4,000.00     |

---

Sub-Total: \$205,000.00

10% Contingency: 20,000.00

---

**TOTAL, Phase 1: \$225,000.00**

Phase 2

|                                             |              |
|---------------------------------------------|--------------|
| Personnel.....                              | \$ 40,000.00 |
| Diamond-Drilling (6,000ft x \$35/foot)..... | 210,000.00   |
| Heavy Equipment.....                        | 25,000.00    |
| Mob/Demob.....                              | 5,000.00     |
| Analytical.....                             | 10,000.00    |
| Meals/Grocery.....                          | 12,000.00    |

|                                       |          |
|---------------------------------------|----------|
| Truck and Equipment Rentals.....      | 5,000.00 |
| Fuel (Diesel, Gasoline, Propane)..... | 6,000.00 |
| Supplies.....                         | 4,000.00 |
| Miscellaneous.....                    | 5,000.00 |
| Report/Reproduction.....              | 3,000.00 |

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Sub-Total: \$325,000.00

10% Contingency: 35,000.00

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**TOTAL, Phase 2: \$360,000.00**

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APPENDIX I

Certificate of Qualification

CERTIFICATE OF QUALIFICATION

I, Charles C. Downie, of 720- 23rd Ave. N. in the City of Cranbrook in the Province of British Columbia do hereby certify that:

- 1) I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia.
- 2) I am a 1988 graduate of The University of Alberta with a B.Sc. degree, and have practised my profession as a geologist continuously since graduation in 1988.
- 3) I have had previous working experience in "Sedex"-type deposit models, including work as underground geologist at Cominco's Sullivan Mine, a world-class sedimentary-exhalative base metal deposit.
- 3) This report is based on my personal examination of the Bar property.
- 4) This report is supported by data and observations collected during fieldwork conducted from July 20 - July 24, 1994, in addition to data from past programs dating to 1977.
- 5) I have no interest, direct or otherwise, in the Bar Claim Group, nor do I anticipate receiving any interest in the Bar Claim group in the future. I do not beneficially own, directly or indirectly, any shares, certificates, or warrants in Miner River Resources Ltd.

Dated this 15th day of December, 1994.

C.C. Downie, P. Geo.



APPENDIX II  
Statement of Expenditures

## Statement of Expenditures

The following expenses were incurred for the purpose of mineral exploration on the Bar property, Cariboo Mining Division, British Columbia, between the dates of June 28th and July 25th, 1994:

### PERSONNEL

|                       |                            |            |
|-----------------------|----------------------------|------------|
| T. Termuende, P.Geo:  | 20.0 days x \$350/day..... | \$7,000.00 |
| M. Betker, Assistant: | 17.0 days x \$225/day..... | 3,825.00   |
| B. Betker, Assistant: | 17.0 days x \$200/day..... | 3,400.00   |

### EQUIPMENT RENTAL

|                   |                              |          |
|-------------------|------------------------------|----------|
| 4WD Vehicles (2): | 28.0 days x \$50.00/day..... | 1,400.00 |
| Mileage:          | 8820km x \$.20/km.....       | 1,764.00 |
| Motorcycle:       | 1.0 mo. x \$1,000/mo.....    | 1,000.00 |
| Radios (3):       | 22.0 days x \$10.00/day..... | 660.00   |
| Chainsaw:         | 5.0 days x \$15.00/day.....  | 75.00    |
| Camper:           | 3.0 weeks x \$350/week.....  | 1,050.00 |
| 4-Trax ATV:       | 1.0 mo.....                  | 1,710.50 |

ANALYTICAL ..... 7,176.71

GEOPHYSICAL SURVEY ..... 14,890.98

### MATERIALS

|                              |       |          |
|------------------------------|-------|----------|
| Field Supply:                | ..... | 975.00   |
| Fuel:                        | ..... | 1,502.86 |
| Air Photos:                  | ..... | 22.06    |
| Reproduction, Maps, Etc..... | ..... | 451.14   |
| Miscellaneous                | ..... | 373.27   |

SHIPPING ..... 72.34

HANDLING CHARGES ..... 3,614.11

CONSULTANTS ..... 2,109.50

MEALS/ACCOMMODATIONS ..... 4,701.38

RECORDING FEES ..... 60.00

OFFICE/TELEPHONE ..... 200.00

RECLAMATION BOND ..... 2,500.00

MISCELLANEOUS ..... 373.27

TOTAL : \$60,907.12

Appendix III  
Analytical Results

4-Aug-94

ECO-TECH LABORATORIES LTD.  
10041 East Trans Canada Highway  
KAMLOOPS, B.C.  
V2C 2J3

Phone: 804-573-5700  
Fax : 804-573-4557

TOKLAT RESOURCES INC. ETK 94-480  
2720-17TH STREET SOUTH  
CRANBROOK, B.C.  
VIC 4H4

ATTENTION: TIM TERMUENDE

29 ROCK samples received July 25, 1994  
PROJECT #: NA

Values in ppm unless otherwise reported

| Et # | Tag #    | Ag  | Al % | As  | Ba     | Bi | Ca % | Cd | Co  | Cr  | Cu  | Fe %  | La  | Mg % | Mn     | Mo  | Na % | Ni  | P      | Pb  | Sb | Sn  | Sr   | Tl % | U   | V   | W   | Y  | Zn   |
|------|----------|-----|------|-----|--------|----|------|----|-----|-----|-----|-------|-----|------|--------|-----|------|-----|--------|-----|----|-----|------|------|-----|-----|-----|----|------|
| 1    | BAR94-1  | <.2 | 1.09 | <5  | 750    | 70 | 0.82 | 4  | 99  | 17  | 75  | > 15  | <10 | <.01 | 1826   | <1  | 0.04 | 29  | 4410   | 8   | <5 | <20 | 42   | 0.02 | <10 | 55  | <10 | <1 | 163  |
| 2    | BAR94-2  | <.2 | 0.12 | <5  | 120    | <5 | 0.03 | <1 | 3   | 255 | 7   | 0.89  | <10 | 0.02 | 41     | 18  | <.01 | 7   | 40     | 148 | <5 | <20 | 2    | <.01 | <10 | 2   | <10 | <1 | 123  |
| 3    | BAR94-3  | <.2 | 0.10 | 5   | 3310   | <5 | 0.23 | <1 | 5   | 55  | <1  | 0.23  | <10 | <.01 | 13     | 3   | <.01 | 4   | 1130   | 54  | <5 | <20 | 127  | <.01 | <10 | 4   | <10 | 2  | 80   |
| 4    | BAR94-4  | <.2 | 0.07 | 10  | 1915   | <5 | <.01 | <1 | 4   | 190 | 4   | 0.73  | <10 | <.01 | 22     | 16  | <.01 | 12  | 110    | 50  | <5 | <20 | 7    | <.01 | <10 | 32  | <10 | <1 | 107  |
| 5    | BAR94-5  | <.2 | 1.97 | <5  | 925    | 20 | 0.59 | 15 | 272 | 36  | 301 | > 15  | <10 | <.01 | 4723   | 3   | <.01 | 445 | 1800   | 52  | <5 | <20 | 33   | <.01 | <10 | 35  | <10 | 25 | 6804 |
| 6    | BAR94-6  | <.2 | 0.62 | 25  | 515    | <5 | 0.24 | 4  | 43  | 92  | 237 | 4.73  | <10 | <.01 | 1300   | 7   | 0.01 | 18  | 2070   | 18  | <5 | <20 | 12   | <.01 | <10 | 15  | <10 | 3  | 185  |
| 7    | BAR94-7  | <.2 | 0.94 | 100 | 585    | <5 | 0.46 | 5  | 76  | 227 | 150 | 11.10 | <10 | <.01 | 361    | 15  | <.01 | 345 | 4400   | 44  | <5 | <20 | 34   | <.01 | <10 | 44  | <10 | 13 | 484  |
| 8    | BAR94-8  | <.2 | 0.39 | 30  | 260    | <5 | 2.66 | 2  | 5   | 220 | 58  | 2.52  | <10 | <.01 | 85     | 24  | <.01 | 21  | >10000 | 226 | <5 | <20 | 130  | <.01 | <10 | 135 | <10 | 15 | 800  |
| 9    | BAR94-9  | 5.6 | 0.08 | 105 | 5620   | <5 | 0.22 | 12 | 154 | 132 | 266 | > 15  | <10 | <.01 | >10000 | 38  | <.01 | 150 | 8420   | 36  | <5 | <20 | 33   | <.01 | <10 | 26  | <10 | <1 | 1220 |
| 10   | BAR94-10 | <.2 | <.01 | <5  | 3275   | <5 | <.01 | <1 | 6   | 6   | <1  | 0.25  | <10 | <.01 | 180    | <1  | <.01 | 1   | 110    | <2  | <5 | <20 | 38   | <.01 | <10 | 1   | <10 | <1 | 15   |
| 11   | BAR94-11 | <.2 | 0.83 | 5   | >10000 | <5 | 0.26 | <1 | 23  | 39  | 12  | 0.58  | <10 | <.01 | 78     | 3   | <.01 | 8   | 1440   | 14  | <5 | <20 | 150  | <.01 | <10 | 16  | <10 | 2  | 39   |
| 12   | CDW-1    | <.2 | > 15 | <5  | 2885   | <5 | 1.12 | 1  | 65  | 238 | 115 | 10.80 | 30  | 3.98 | 2495   | <1  | 0.01 | 127 | 3420   | <2  | 10 | <20 | 50   | 0.13 | <10 | 195 | <10 | 13 | 196  |
| 13   | CDW-2    | <.2 | 0.13 | <5  | 2950   | 10 | > 15 | <1 | 13  | 56  | <1  | 5.96  | <10 | 6.61 | 1814   | 1   | <.01 | 14  | 880    | 16  | 25 | <20 | 277  | <.01 | <10 | 9   | <10 | 6  | 58   |
| 14   | CDW-3    | <.2 | 2.60 | <5  | 2230   | 10 | > 15 | <1 | 40  | 93  | 43  | 7.45  | 20  | 4.47 | 1776   | <1  | <.01 | 46  | 2490   | 38  | 25 | <20 | 587  | <.01 | <10 | 105 | <10 | 8  | 85   |
| 15   | CDW-4    | <.2 | 0.05 | 10  | 1130   | <5 | > 15 | <1 | 3   | 7   | <1  | 0.64  | <10 | 1.82 | 309    | <1  | <.01 | 2   | 220    | <2  | 30 | <20 | 651  | <.01 | <10 | 5   | <10 | 7  | 25   |
| 16   | CDW-5    | <.2 | 0.16 | 5   | 1315   | <5 | 0.79 | <1 | 6   | 237 | <1  | 1.14  | <10 | 0.07 | 334    | 17  | <.01 | 10  | 360    | 10  | <5 | <20 | 18   | <.01 | <10 | 3   | <10 | <1 | 26   |
| 17   | CDW-6    | <.2 | 0.12 | 10  | 1165   | <5 | 0.22 | <1 | 4   | 265 | <1  | 0.57  | <10 | 0.01 | 59     | 19  | <.01 | 6   | 80     | 18  | <5 | <20 | 5    | <.01 | <10 | 2   | <10 | <1 | 20   |
| 18   | CDW-7    | <.2 | 3.38 | <5  | 495    | 10 | 0.64 | <1 | 45  | 583 | 120 | 6.08  | <10 | 3.45 | 697    | <1  | 0.01 | 233 | 550    | 48  | <5 | <20 | 16   | 0.15 | <10 | 106 | <10 | 7  | 95   |
| 19   | CDW-8    | <.2 | 1.29 | 10  | 1805   | <5 | 0.30 | <1 | 4   | 162 | 9   | 1.33  | 10  | 0.07 | 35     | 11  | 0.04 | 15  | 5280   | 24  | <5 | <20 | 1533 | <.01 | <10 | 27  | <10 | 7  | 110  |
| 20   | CDW-9    | <.2 | 1.87 | <5  | 260    | <5 | 0.20 | <1 | 11  | 95  | 34  | 3.51  | <10 | 1.25 | 48     | 4   | <.01 | 17  | 1060   | 32  | 10 | <20 | 33   | <.01 | <10 | 45  | <10 | <1 | 103  |
| 21   | CDW-10   | <.2 | 0.07 | 20  | 235    | <5 | > 15 | <1 | 2   | 11  | <1  | 0.65  | <10 | 0.37 | 267    | <1  | <.01 | 3   | 230    | <2  | 10 | <20 | 702  | <.01 | <10 | 4   | <10 | 9  | 9    |
| 22   | CDW-11   | <.2 | <.01 | <5  | 3195   | <5 | 0.84 | <1 | 4   | 13  | <1  | 0.04  | <10 | <.01 | 7      | <1  | <.01 | <1  | 700    | <2  | <5 | <20 | 90   | <.01 | <10 | 2   | <10 | <1 | 2    |
| 23   | CDW-12   | <.2 | 0.86 | 10  | 210    | <5 | 0.14 | <1 | 7   | 16  | 6   | 3.17  | 10  | 0.08 | 436    | <1  | <.01 | 11  | 1350   | 22  | <5 | <20 | 2    | <.01 | <10 | 33  | <10 | <1 | 41   |
| 24   | CDW-13   | <.2 | 0.22 | 135 | 1950   | 55 | 0.48 | 7  | 96  | 25  | 38  | > 15  | <10 | <.01 | 1036   | <1  | <.01 | 348 | 9740   | 54  | <5 | <20 | 32   | 0.01 | <10 | 8   | <10 | <1 | 2627 |
| 25   | CDW-13B  | 3.2 | 0.42 | 55  | >10000 | <5 | 0.55 | 20 | 864 | 119 | 14  | > 15  | <10 | <.01 | >10000 | 223 | <.01 | 656 | 9630   | <2  | <5 | <20 | 345  | <.01 | <10 | 22  | <10 | 16 | 2151 |
| 26   | CDW-14   | <.2 | 0.37 | 80  | 1330   | 20 | 0.40 | 3  | 101 | 12  | 47  | > 15  | <10 | <.01 | 4148   | 4   | <.01 | 343 | 6460   | 106 | <5 | <20 | 56   | <.01 | <10 | 12  | <10 | <1 | 1496 |
| 27   | CDW-15   | <.2 | > 15 | <5  | >10000 | <5 | 0.48 | <1 | 111 | 121 | 40  | 3.58  | <10 | <.01 | 1659   | 7   | 0.02 | 46  | 3370   | <2  | <5 | <20 | 86   | <.01 | <10 | 48  | <10 | 3  | 146  |
| 28   | CDW-16   | <.2 | 0.04 | <5  | 3370   | <5 | 0.07 | <1 | 5   | 5   | <1  | 0.14  | <10 | <.01 | 169    | <1  | <.01 | 1   | 350    | <2  | <5 | <20 | 58   | <.01 | <10 | 3   | <10 | <1 | 7    |



ASSAYING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700  
Fax (604) 573-4557

**CERTIFICATE OF ASSAY ETK 94-480**

TOKLAT RESOURCES INC. ETK 94-480  
2720-17TH STREET SOUTH  
CRANBROOK, B.C.  
V1C 4H4

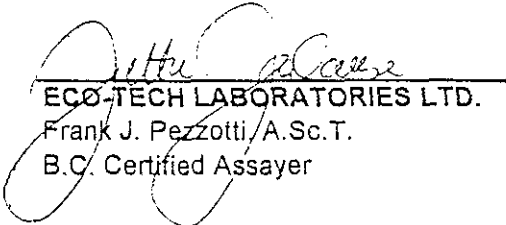
5-Aug-94

ATTENTION: TIM TERMUENDE

29 ROCK samples received July 25, 1994  
PROJECT #: NA

| ET #. | Tag #    | Ba (%) |
|-------|----------|--------|
| 11    | BAR94-11 | 51.90  |
| 25    | CDW-13B  | 7.68   |
| 27    | CDW-15   | 15.58  |

XLS/toklat

  
Eco-Tech LABORATORIES LTD.  
Frank J. Pezzotti/A.Sc.T.  
B.C. Certified Assayer



8-Aug-94

ECO-TECH LABORATORIES LTD.  
10041 East Trans Canada Highway  
KAMLOOPS, B.C.  
V2C 2J3

Phone: 604-573-5700  
Fax : 604-573-4557

TOKLAT RESOURCES INC. ETK 94-481  
2720-17TH STREET SOUTH  
CRANBROOK, B.C.  
V1C 4H4

ATTENTION: TIM TERMUENDE

98 SOIL samples received July 25, 1994  
PROJECT #: NA

Values in ppm unless otherwise reported

| ET#: | Tag #          | Ag  | Al % | As | Ba  | Bl | Ca % | Cd | Co | Cr | Cu | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb  | Sb | Sn  | Sr | Tl % | U   | V   | W   | Y  | Zn   |
|------|----------------|-----|------|----|-----|----|------|----|----|----|----|------|-----|------|------|----|------|----|------|-----|----|-----|----|------|-----|-----|-----|----|------|
| 1    | L7N: 19+ 25 E  | 2.2 | 1.55 | <5 | 65  | <5 | 0.08 | 2  | 5  | 21 | 19 | 4.20 | 20  | 0.17 | 110  | 3  | <.01 | 13 | 1440 | 42  | <5 | <20 | <1 | <.01 | <10 | 48  | <10 | 1  | 93   |
| 2    | L7N: 19+ 50 E  | 1.2 | 1.80 | <5 | 90  | <5 | 0.11 | 1  | 11 | 40 | 30 | 6.66 | 10  | 0.36 | 311  | <1 | <.01 | 27 | 2630 | 66  | <5 | <20 | 1  | 0.01 | <10 | 44  | <10 | <1 | 134  |
| 3    | L7N: 19+ 75 E  | 0.2 | 1.72 | 5  | 130 | 10 | 0.10 | 1  | 11 | 37 | 43 | 5.69 | <10 | 0.30 | 246  | <1 | <.01 | 32 | 2570 | 72  | <5 | <20 | 8  | <.01 | <10 | 52  | <10 | <1 | 130  |
| 4    | L7N: 20+ 00 E  | 1.6 | 1.21 | <5 | 55  | <5 | 0.05 | 1  | 6  | 17 | 20 | 4.40 | 30  | 0.16 | 142  | 2  | <.01 | 16 | 1450 | 64  | <5 | <20 | <1 | <.01 | <10 | 36  | <10 | 2  | 82   |
| 5    | L7N: 20+ 25 E  | 0.6 | 1.56 | <5 | 75  | 10 | 0.11 | 1  | 7  | 24 | 17 | 3.91 | 20  | 0.26 | 166  | <1 | <.01 | 17 | 1690 | 42  | <5 | <20 | 4  | <.01 | <10 | 35  | <10 | <1 | 76   |
| 6    | L7N: 20+ 50 E  | 1.8 | 2.97 | <5 | 70  | 5  | 0.72 | 1  | 17 | 26 | 25 | 4.18 | 20  | 0.41 | 1624 | <1 | <.01 | 32 | 3900 | 44  | 10 | <20 | 63 | 0.01 | <10 | 32  | <10 | 12 | 96   |
| 7    | L7N: 20+ 75 E  | 0.8 | 0.69 | <5 | 30  | <5 | 0.29 | <1 | 7  | 9  | 9  | 1.86 | <10 | 0.13 | 737  | <1 | <.01 | 12 | 1230 | 16  | <5 | <20 | 23 | <.01 | <10 | 10  | <10 | 4  | 48   |
| 8    | L7N: 21+ 00 E  | 0.6 | 1.14 | <5 | 60  | <5 | 0.30 | 1  | 19 | 16 | 17 | 4.08 | 20  | 0.17 | 1067 | <1 | <.01 | 26 | 1620 | 34  | <5 | <20 | 36 | <.01 | <10 | 18  | <10 | 8  | 76   |
| 9    | L9N: 16+ 25 ER | 1.2 | 1.55 | <5 | 120 | <5 | 0.12 | 1  | 14 | 25 | 18 | 4.03 | 20  | 0.20 | 890  | <1 | <.01 | 18 | 1660 | 78  | <5 | <20 | <1 | <.01 | <10 | 29  | <10 | 2  | 95   |
| 10   | L9N: 16+ 50 ER | 1.0 | 1.31 | <5 | 45  | <5 | 0.05 | <1 | 6  | 16 | 13 | 2.75 | 30  | 0.12 | 177  | 1  | <.01 | 14 | 1210 | 28  | <5 | <20 | <1 | <.01 | <10 | 35  | <10 | 2  | 51   |
| 11   | L9N: 16+ 75 ER | 1.8 | 1.01 | <5 | 140 | <5 | 0.07 | 2  | 7  | 17 | 15 | 2.80 | 20  | 0.14 | 164  | 3  | <.01 | 22 | 1860 | 42  | <5 | <20 | <1 | <.01 | <10 | 24  | <10 | 3  | 83   |
| 12   | L9N: 17+ 00 ER | 0.8 | 1.31 | <5 | 75  | <5 | 0.04 | 1  | 10 | 29 | 21 | 4.84 | 20  | 0.24 | 140  | 1  | <.01 | 26 | 1790 | 58  | <5 | <20 | 7  | <.01 | <10 | 34  | <10 | <1 | 87   |
| 13   | L9N: 17+ 25 ER | 0.8 | 1.31 | <5 | 50  | <5 | 0.06 | 1  | 8  | 34 | 15 | 4.43 | 20  | 0.20 | 94   | 2  | <.01 | 26 | 2390 | 60  | <5 | <20 | <1 | <.01 | <10 | 44  | <10 | <1 | 65   |
| 14   | L9N: 17+ 50 ER | 0.6 | 0.79 | <5 | 40  | <5 | 0.04 | <1 | 9  | 20 | 20 | 2.40 | 30  | 0.05 | 64   | 1  | <.01 | 26 | 750  | 48  | <5 | <20 | <1 | <.01 | <10 | 37  | <10 | 2  | 67   |
| 15   | L9N: 17+ 75 ER | 0.8 | 1.64 | 5  | 95  | 15 | 0.10 | 1  | 15 | 46 | 31 | 6.69 | 10  | 0.42 | 387  | <1 | <.01 | 41 | 3260 | 88  | <5 | <20 | 13 | <.01 | <10 | 57  | <10 | <1 | 120  |
| 16   | L9N: 18+ 00 ER | 1.2 | 1.42 | 5  | 145 | <5 | 0.14 | 2  | 11 | 40 | 26 | 5.53 | 20  | 0.39 | 458  | 1  | <.01 | 37 | 3650 | 74  | <5 | <20 | <1 | <.01 | <10 | 51  | <10 | 2  | 115  |
| 17   | L9N: 18+ 25 ER | 0.6 | 1.22 | 15 | 180 | <5 | 0.14 | 1  | 13 | 21 | 30 | 5.04 | 10  | 0.13 | 234  | 2  | <.01 | 53 | 2560 | 102 | <5 | <20 | 5  | <.01 | <10 | 30  | <10 | 1  | 193  |
| 18   | L9N: 18+ 50 ER | 1.6 | 1.26 | 10 | 165 | <5 | 0.93 | 9  | 27 | 26 | 69 | 5.18 | 20  | 0.18 | 1178 | <1 | <.01 | 74 | 2220 | 228 | <5 | <20 | 40 | <.01 | <10 | 23  | <10 | 13 | 1726 |
| 19   | L9N: 18+ 75 ER | 0.8 | 1.02 | 15 | 150 | <5 | 0.07 | 1  | 13 | 18 | 35 | 5.26 | 20  | 0.06 | 362  | 2  | <.01 | 50 | 1380 | 128 | <5 | <20 | 3  | <.01 | <10 | 30  | <10 | 1  | 262  |
| 20   | L9N: 19+ 00 ER | 0.6 | 2.14 | 15 | 200 | 10 | 0.08 | 1  | 19 | 58 | 31 | 5.49 | 10  | 0.52 | 405  | <1 | <.01 | 47 | 1280 | 88  | <5 | <20 | 7  | <.01 | <10 | 63  | <10 | 1  | 289  |
| 21   | L9N: 19+ 25 ER | 1.2 | 1.90 | <5 | 270 | <5 | 0.04 | 1  | 8  | 26 | 20 | 4.43 | 20  | 0.41 | 309  | 1  | <.01 | 24 | 1210 | 86  | <5 | <20 | <1 | <.01 | <10 | 41  | <10 | 1  | 127  |
| 22   | L9N: 19+ 50 ER | 2.0 | 1.86 | <5 | 185 | 5  | 0.17 | 2  | 10 | 30 | 48 | 6.47 | 40  | 0.41 | 188  | 6  | <.01 | 44 | 3190 | 58  | <5 | <20 | 28 | <.01 | <10 | 56  | <10 | 3  | 235  |
| 23   | L9N: 19+ 75 ER | 1.0 | 1.41 | 10 | 105 | <5 | 0.06 | 1  | 6  | 28 | 26 | 5.91 | 20  | 0.19 | 105  | 4  | <.01 | 18 | 4270 | 60  | <5 | <20 | 14 | <.01 | <10 | 68  | <10 | <1 | 65   |
| 24   | L9N: 20+ 00 ER | 1.4 | 1.14 | <5 | 35  | <5 | 0.03 | 1  | 4  | 23 | 17 | 2.71 | 30  | 0.19 | 132  | 2  | <.01 | 18 | 800  | 24  | <5 | <20 | <1 | <.01 | <10 | 42  | <10 | 3  | 58   |
| 25   | L9N: 20+ 25 ER | 0.4 | 0.93 | <5 | 35  | <5 | 0.03 | <1 | 3  | 10 | 9  | 1.29 | 30  | 0.07 | 64   | 1  | <.01 | 8  | 550  | 28  | <5 | <20 | <1 | <.01 | <10 | 22  | <10 | 2  | 37   |
| 26   | L9N: 20+ 50 ER | 0.8 | 1.69 | <5 | 75  | <5 | 0.06 | <1 | 2  | 16 | 7  | 1.30 | 30  | 0.10 | 60   | 1  | <.01 | 6  | 540  | 36  | 5  | <20 | 7  | <.01 | <10 | 29  | <10 | 2  | 28   |
| 27   | L9N: 20+ 75 ER | 0.6 | 2.66 | <5 | 110 | 10 | 0.05 | 1  | 15 | 61 | 42 | 7.51 | <10 | 1.05 | 478  | <1 | <.01 | 34 | 1250 | 54  | <5 | <20 | <1 | 0.02 | <10 | 144 | <10 | <1 | 75   |
| 28   | L9N: 21+ 00 ER | 0.8 | 1.51 | <5 | 60  | <5 | 0.03 | <1 | 5  | 21 | 11 | 2.16 | 30  | 0.17 | 105  | 1  | <.01 | 11 | 580  | 38  | <5 | <20 | 9  | <.01 | <10 | 50  | <10 | 1  | 39   |


| ET#: | Tag #           | Ag  | Al % | As | Ba  | Bi | Ca % | Cd  | Co | Cr  | Cu | Fe % | La   | Mg % | Mn   | Mo   | Na % | Ni  | P    | Pb  | Sb | Sn  | Sr  | Ti % | U   | V   | W   | Y   | Zn   |
|------|-----------------|-----|------|----|-----|----|------|-----|----|-----|----|------|------|------|------|------|------|-----|------|-----|----|-----|-----|------|-----|-----|-----|-----|------|
| 29   | L10N: 16+ 25 ER | 1.8 | 1.91 | <5 | 130 | <5 | 0.55 | 2   | 26 | 28  | 39 | 5.54 | 20   | 0.34 | 1606 | 1    | <.01 | 45  | 2320 | 70  | <5 | <20 | 27  | <.01 | <10 | 31  | <10 | 13  | 194  |
| 30   | L10N: 16+ 50 ER | 0.2 | 1.41 | <5 | 100 | <5 | 0.35 | 1   | 24 | 26  | 35 | 5.23 | 20   | 0.34 | 785  | <.01 | <.01 | 42  | 1440 | 72  | <5 | <20 | 21  | <.01 | <10 | 26  | <10 | 7   | 202  |
| 31   | L10N: 16+ 75 ER | 1.2 | 1.24 | <5 | 95  | <5 | 0.96 | 1   | 19 | 22  | 31 | 4.56 | 10   | 0.32 | 760  | <.01 | <.01 | 45  | 1770 | 62  | <5 | <20 | 51  | <.01 | <10 | 20  | <10 | 14  | 204  |
| 32   | L10N: 17+ 00 ER | 0.6 | 1.24 | <5 | 90  | <5 | 0.16 | <.1 | 14 | 24  | 24 | 4.54 | 20   | 0.25 | 341  | <.01 | <.01 | 32  | 1470 | 60  | <5 | <20 | 5   | <.01 | <10 | 27  | <10 | 3   | 160  |
| 33   | L10N: 17+ 25 ER | 0.4 | 1.50 | <5 | 155 | <5 | 0.09 | 1   | 18 | 41  | 28 | 5.10 | 20   | 0.36 | 564  | 1    | <.01 | 41  | 1280 | 72  | <5 | <20 | <.1 | <.01 | <10 | 38  | <10 | 1   | 195  |
| 34   | L10N: 17+ 50 ER | 1.4 | 1.17 | <5 | 95  | <5 | 1.12 | 1   | 12 | 26  | 20 | 3.52 | 10   | 0.28 | 208  | 2    | <.01 | 30  | 1570 | 54  | 10 | <20 | 29  | <.01 | <10 | 24  | <10 | 7   | 114  |
| 35   | L10N: 17+ 75 LR | 0.8 | 1.38 | 15 | 215 | <5 | 0.59 | 2   | 30 | 34  | 52 | 6.25 | <.10 | 0.29 | 1548 | 2    | <.01 | 70  | 2450 | 70  | <5 | <20 | 42  | <.01 | <10 | 27  | <10 | 14  | 308  |
| 36   | L10N: 18+ 00 ER | 1.0 | 1.53 | <5 | 190 | <5 | 0.10 | 1   | 11 | 40  | 20 | 4.03 | 20   | 0.31 | 292  | 2    | <.01 | 32  | 1890 | 64  | <5 | <20 | <.1 | <.01 | <10 | 45  | <10 | 2   | 303  |
| 37   | L10N: 18+ 25 ER | 1.4 | 1.30 | <5 | 310 | <5 | 1.08 | 15  | 14 | 19  | 66 | 3.85 | 10   | 0.25 | 932  | <.01 | <.01 | 54  | 1260 | 148 | 5  | <20 | 41  | <.01 | <10 | 24  | <10 | 8   | 3416 |
| 38   | L10N: 18+ 50 ER | 1.4 | 2.27 | <5 | 170 | 10 | 0.07 | 2   | 21 | 32  | 67 | 8.29 | <.10 | 0.57 | 1154 | 3    | <.01 | 45  | 1970 | 66  | <5 | <20 | 15  | <.01 | <10 | 73  | <10 | <.1 | 279  |
| 39   | L10N: 18+ 75 ER | 0.8 | 2.92 | <5 | 65  | 10 | 0.04 | 1   | 10 | 84  | 13 | 6.19 | <.10 | 1.37 | 285  | 1    | <.01 | 23  | 750  | 64  | 10 | <20 | <.1 | 0.01 | <10 | 114 | <10 | <.1 | 110  |
| 40   | L10N: 19+ 00 ER | 0.8 | 2.94 | 45 | 195 | 15 | 0.06 | 2   | 30 | 246 | 55 | 8.10 | <.10 | 1.66 | 1217 | <.01 | <.01 | 175 | 1450 | 142 | 5  | <20 | <.1 | 0.01 | <10 | 100 | <10 | <.1 | 383  |
| 41   | L10N: 19+ 25 ER | 0.6 | 1.67 | <5 | 190 | <5 | 0.10 | 1   | 12 | 36  | 33 | 5.13 | 20   | 0.46 | 437  | 4    | <.01 | 31  | 2260 | 62  | <5 | <20 | 9   | <.01 | <10 | 39  | <10 | <.1 | 150  |
| 42   | L10N: 19+ 50 ER | 2.0 | 1.46 | 15 | 470 | <5 | 0.67 | 4   | 20 | 21  | 84 | 5.04 | 20   | 0.24 | 968  | 4    | <.01 | 40  | 4020 | 190 | <5 | <20 | 26  | <.01 | <10 | 36  | <10 | 9   | 318  |
| 43   | L10N: 19+ 75 ER | 1.4 | 0.69 | 15 | 455 | <5 | 0.16 | <.1 | 3  | 16  | 26 | 2.51 | 30   | 0.06 | 58   | 8    | <.01 | 9   | 3420 | 86  | <5 | <20 | 157 | <.01 | <10 | 46  | <10 | 5   | 63   |
| 44   | L10N: 20+ 00 ER | 1.2 | 3.45 | 10 | 115 | 15 | 0.23 | 1   | 17 | 327 | 37 | 7.34 | <.10 | 2.35 | 292  | <.01 | <.01 | 124 | 1750 | 60  | <5 | <20 | <.1 | 0.01 | <10 | 118 | <10 | <.1 | 104  |
| 45   | L10N: 20+ 25 ER | 0.8 | 1.19 | <5 | 90  | <5 | 0.05 | <.1 | 4  | 25  | 14 | 2.24 | 20   | 0.17 | 124  | 1    | <.01 | 14  | 1360 | 40  | <5 | <20 | 1   | <.01 | <10 | 29  | <10 | 1   | 46   |
| 46   | L10N: 20+ 50 ER | 0.2 | 1.65 | <5 | 80  | <5 | 0.03 | <.1 | 5  | 23  | 17 | 3.15 | 20   | 0.16 | 101  | <.01 | <.01 | 11  | 900  | 40  | <5 | <20 | 7   | <.01 | <10 | 40  | <10 | <.1 | 40   |
| 47   | L10N: 20+ 75 ER | 0.8 | 0.73 | <5 | 25  | <5 | 0.03 | <.1 | 2  | 13  | 17 | 1.14 | 20   | 0.07 | 46   | 2    | <.01 | 8   | 480  | 24  | <5 | <20 | <.1 | <.01 | <10 | 24  | <10 | 2   | 38   |
| 48   | L10N: 21+ 00 ER | 0.6 | 1.13 | <5 | 40  | <5 | 0.02 | <.1 | 6  | 8   | 29 | 1.81 | 40   | 0.05 | 89   | 2    | <.01 | 13  | 570  | 26  | <5 | <20 | <.1 | <.01 | <10 | 30  | <10 | 2   | 44   |
| 49   | L11N: 7+ 75 EN  | 1.4 | 1.08 | <5 | 90  | <5 | 2.88 | 1   | 8  | 15  | 25 | 2.54 | 20   | 0.21 | 277  | 3    | <.01 | 30  | 1710 | 18  | 5  | <20 | 111 | <.01 | <10 | 18  | <10 | 11  | 72   |
| 50   | L11N: 8+ 00 EN  | 1.0 | 1.48 | <5 | 95  | <5 | 0.67 | 1   | 12 | 22  | 23 | 4.23 | 20   | 0.30 | 480  | 3    | <.01 | 25  | 1340 | 34  | <5 | <20 | 30  | <.01 | <10 | 30  | <10 | 2   | 83   |
| 51   | L11N: 8+ 25 EN  | <.2 | 1.77 | 10 | 115 | 10 | 0.30 | <.1 | 13 | 26  | 25 | 4.05 | 20   | 0.24 | 431  | 2    | <.01 | 28  | 1280 | 44  | <5 | <20 | 25  | <.01 | <10 | 31  | <10 | 2   | 108  |
| 52   | L11N: 8+ 50 EN  | 1.0 | 0.99 | <5 | 90  | <5 | 0.14 | 1   | 9  | 20  | 23 | 3.82 | 20   | 0.16 | 223  | 5    | <.01 | 27  | 1780 | 32  | <5 | <20 | <.1 | <.01 | <10 | 29  | <10 | 2   | 93   |
| 53   | L11N: 8+ 75 EN  | 0.8 | 1.61 | 15 | 125 | 5  | 1.01 | 2   | 20 | 31  | 29 | 4.57 | 20   | 0.39 | 695  | 2    | <.01 | 44  | 1190 | 48  | 5  | <20 | 40  | 0.01 | <10 | 28  | <10 | 7   | 167  |
| 54   | L11N: 9+ 00 EN  | 1.0 | 0.54 | <5 | 150 | <5 | 3.61 | 2   | 6  | 9   | 54 | 1.16 | <.10 | 0.17 | 433  | 3    | 0.02 | 17  | 1180 | 14  | 10 | <20 | 156 | <.01 | <10 | 8   | <10 | 5   | 126  |
| 55   | L11N: 9+ 25 EN  | 0.6 | 1.58 | 5  | 80  | 10 | 0.36 | 1   | 16 | 28  | 21 | 4.52 | 20   | 0.28 | 303  | 3    | <.01 | 33  | 830  | 44  | <5 | <20 | 11  | <.01 | <10 | 31  | <10 | 3   | 132  |
| 56   | L11N: 9+ 50 EN  | 0.8 | 1.62 | 5  | 180 | 10 | 1.09 | 1   | 15 | 24  | 25 | 4.12 | 20   | 0.23 | 411  | 3    | <.01 | 30  | 1730 | 48  | <5 | <20 | 55  | <.01 | <10 | 29  | <10 | 4   | 115  |
| 57   | L11N: 9+ 75 EN  | 1.4 | 1.80 | <5 | 85  | <5 | 0.47 | 1   | 17 | 24  | 23 | 4.70 | 30   | 0.51 | 509  | <.01 | <.01 | 39  | 1270 | 34  | <5 | <20 | 6   | <.01 | <10 | 25  | <10 | 5   | 136  |
| 58   | L11N: 16+ 25 ER | 0.4 | 1.16 | <5 | 145 | <5 | 1.14 | <.1 | 19 | 21  | 35 | 4.47 | 10   | 0.38 | 795  | <.01 | <.01 | 40  | 1240 | 34  | <5 | <20 | 42  | <.01 | <10 | 19  | <10 | 4   | 161  |
| 59   | L11N: 16+ 50 ER | 1.0 | 1.17 | <5 | 80  | <5 | 0.07 | <.1 | 9  | 20  | 20 | 3.98 | 20   | 0.14 | 183  | 1    | <.01 | 23  | 790  | 38  | <5 | <20 | <.1 | <.01 | <10 | 36  | <10 | 1   | 82   |
| 60   | L11N: 16+ 75 ER | 0.8 | 1.07 | <5 | 125 | <5 | 1.41 | <.1 | 17 | 20  | 32 | 3.62 | <.10 | 0.33 | 843  | <.01 | <.01 | 33  | 1250 | 36  | <5 | <20 | 59  | <.01 | <10 | 17  | <10 | 5   | 157  |
| 61   | L11N: 17+ 00 ER | 1.2 | 1.73 | <5 | 115 | 5  | 0.50 | 1   | 28 | 23  | 21 | 4.91 | 10   | 0.20 | 669  | <.01 | <.01 | 25  | 1140 | 48  | <5 | <20 | 16  | <.01 | <10 | 32  | <10 | 6   | 118  |
| 62   | L11N: 17+ 25 ER | 1.0 | 1.60 | <5 | 125 | 5  | 0.41 | 1   | 20 | 30  | 35 | 4.80 | 20   | 0.30 | 1071 | <.01 | <.01 | 45  | 1190 | 50  | <5 | <20 | 19  | <.01 | <10 | 28  | <10 | 13  | 144  |
| 63   | L11N: 17+ 50 ER | 0.8 | 1.22 | 5  | 85  | <5 | 0.65 | <.1 | 9  | 26  | 19 | 4.39 | 20   | 0.20 | 185  | 1    | <.01 | 23  | 1650 | 52  | <5 | <20 | 6   | <.01 | <10 | 33  | <10 | <.1 | 82   |
| 64   | L11N: 17+ 75 ER | 1.8 | 1.54 | <5 | 70  | <5 | 0.12 | 1   | 16 | 39  | 34 | 6.11 | 10   | 0.38 | 429  | 2    | <.01 | 49  | 2950 | 68  | <5 | <20 | <.1 | <.01 | <10 | 36  | <10 | 1   | 159  |
| 65   | L11N: 18+ 00 ER | 1.0 | 1.35 | <5 | 130 | 5  | 0.18 | 2   | 17 | 29  | 32 | 4.99 | 10   | 0.30 | 608  | 2    | <.01 | 44  | 2110 | 72  | <5 | <20 | 9   | <.01 | <10 | 29  | <10 | 2   | 261  |
| 66   | L11N: 18+ 25 ER | 1.0 | 1.81 | 5  | 160 | <5 | 1.40 | 3   | 25 | 49  | 72 | 5.65 | <.10 | 0.48 | 654  | 3    | <.01 | 64  | 2380 | 82  | 5  | <20 | 68  | <.01 | <10 | 34  | <10 | 10  | 364  |
| 67   | L11N: 18+ 50 ER | 1.2 | 2.12 | 10 | 150 | <5 | 0.06 | 2   | 17 | 54  | 36 | 5.97 | 10   | 0.54 | 528  | 2    | <.01 | 48  | 1300 | 64  | <5 | <20 | <.1 | <.01 | <10 | 49  | <10 | 1   | 166  |

| ET#: | Tag #           | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na %  | Ni  | P    | Pb  | Sb | Sn  | Sr  | Ti %  | U   | V   | W   | Y  | Zn  |
|------|-----------------|-----|------|----|-----|----|------|----|----|-----|-----|------|-----|------|------|----|-------|-----|------|-----|----|-----|-----|-------|-----|-----|-----|----|-----|
| 68   | L11N: 18+ 75 ER | 0.8 | 2.21 | 25 | 165 | 5  | 0.06 | 1  | 28 | 128 | 48  | 6.46 | <10 | 0.87 | 1245 | 2  | <0.01 | 82  | 2220 | 96  | <5 | <20 | 3   | <0.01 | <10 | 77  | <10 | <1 | 176 |
| 69   | L11N: 19+ 00 ER | 1.2 | > 15 | <5 | 560 | 5  | 0.20 | 4  | 68 | 152 | 63  | 9.63 | <10 | 2.21 | 3183 | 4  | <0.01 | 139 | 2020 | <2  | 10 | <20 | <1  | <0.01 | <10 | 120 | <10 | <1 | 267 |
| 70   | L11N: 19+ 25 ER | 1.8 | 1.07 | 20 | 200 | <5 | 0.31 | 2  | 8  | 19  | 48  | 3.84 | 20  | 0.15 | 239  | 5  | <0.01 | 29  | 3500 | 84  | <5 | <20 | 10  | <0.01 | <10 | 44  | <10 | 3  | 224 |
| 71   | L11N: 19+ 50 ER | 1.8 | 1.75 | 40 | 325 | 5  | 0.21 | 4  | 23 | 55  | 74  | 6.76 | 20  | 0.38 | 710  | 12 | <0.01 | 67  | 2630 | 74  | <5 | <20 | 28  | <0.01 | <10 | 63  | <10 | 2  | 272 |
| 72   | L11N: 19+ 75 ER | 1.2 | 0.86 | 10 | 105 | <5 | 0.07 | 1  | 6  | 14  | 45  | 3.60 | 20  | 0.07 | 135  | 6  | <0.01 | 19  | 2240 | 64  | <5 | <20 | 10  | <0.01 | <10 | 30  | <10 | 2  | 88  |
| 73   | L11N: 20+ 00 ER | 1.2 | 2.73 | 20 | 260 | <5 | 1.00 | 1  | 25 | 198 | 50  | 5.65 | 60  | 1.46 | 1137 | <1 | <0.01 | 97  | 1710 | 78  | 10 | <20 | 81  | <0.01 | <10 | 71  | <10 | 24 | 146 |
| 74   | L11N: 20+ 25 ER | 1.0 | 1.97 | <5 | 130 | <5 | 0.07 | 2  | 18 | 28  | 60  | 9.01 | 20  | 0.38 | 335  | <1 | <0.01 | 38  | 1960 | 70  | <5 | <20 | <1  | <0.01 | <10 | 35  | <10 | 2  | 143 |
| 75   | L11N: 20+ 50 ER | 1.0 | 0.89 | <5 | 30  | <5 | 0.06 | <1 | 2  | 9   | 15  | 0.98 | 20  | 0.07 | 32   | <1 | <0.01 | 6   | 310  | 20  | <5 | <20 | <1  | <0.01 | <10 | 18  | <10 | 2  | 34  |
| 76   | L11N: 20+ 75 ER | 0.6 | 0.77 | <5 | 30  | <5 | 0.02 | <1 | 6  | 4   | 14  | 2.40 | 20  | 0.03 | 144  | <1 | <0.01 | 10  | 550  | 18  | <5 | <20 | <1  | <0.01 | <10 | 19  | <10 | 1  | 42  |
| 77   | L11N: 21+ 00 ER | 0.6 | 1.12 | <5 | 40  | <5 | 0.07 | <1 | 3  | 9   | 19  | 1.39 | 20  | 0.08 | 76   | <1 | <0.01 | 6   | 700  | 22  | <5 | <20 | <1  | <0.01 | <10 | 21  | <10 | 1  | 35  |
| 78   | L12N: 61+ 00 E  | 0.4 | 1.26 | <5 | 145 | 5  | 0.12 | <1 | 7  | 29  | 17  | 3.84 | 20  | 0.19 | 302  | <1 | <0.01 | 15  | 1340 | 32  | <5 | <20 | 2   | <0.01 | <10 | 33  | <10 | <1 | 64  |
| 79   | L12N: 16+ 25 E  | 1.4 | 1.68 | <5 | 155 | <5 | 0.84 | 2  | 19 | 29  | 32  | 4.70 | 20  | 0.38 | 1027 | 2  | <0.01 | 39  | 1230 | 38  | 10 | <20 | 23  | <0.01 | <10 | 30  | <10 | 6  | 121 |
| 80   | L12N: 16+ 50 E  | 0.8 | 1.77 | <5 | 195 | <5 | 0.70 | 1  | 19 | 32  | 30  | 4.88 | 10  | 0.39 | 784  | 1  | <0.01 | 38  | 1090 | 48  | <5 | <20 | 31  | <0.01 | <10 | 32  | <10 | 4  | 158 |
| 81   | L12N: 16+ 75 E  | 1.0 | 1.86 | <5 | 200 | <5 | 0.77 | 1  | 16 | 34  | 26  | 4.87 | 10  | 0.38 | 753  | 2  | <0.01 | 33  | 1330 | 44  | <5 | <20 | 25  | <0.01 | <10 | 37  | <10 | 1  | 151 |
| 82   | L12N: 17+ 00 E  | 0.6 | 2.00 | <5 | 245 | 5  | 0.68 | 1  | 8  | 33  | 15  | 4.04 | 20  | 0.25 | 152  | 2  | <0.01 | 21  | 730  | 48  | <5 | <20 | 25  | <0.01 | <10 | 50  | <10 | <1 | 84  |
| 83   | L12N: 17+ 25 E  | 0.6 | 0.19 | <5 | 80  | <5 | 3.62 | 1  | 2  | 6   | 46  | 0.29 | <10 | 0.18 | 653  | 1  | <0.01 | 19  | 1060 | 8   | 10 | <20 | 117 | <0.01 | <10 | 2   | <10 | 4  | 65  |
| 84   | L12N: 17+ 50 E  | 0.8 | 1.02 | <5 | 40  | <5 | 0.08 | <1 | 4  | 15  | 8   | 2.11 | 30  | 0.13 | 99   | 1  | <0.01 | 12  | 430  | 18  | <5 | <20 | <1  | <0.01 | <10 | 27  | <10 | 2  | 42  |
| 85   | L12N: 17+ 75 E  | 0.6 | 1.49 | <5 | 90  | 5  | 0.04 | <1 | 12 | 30  | 21  | 5.68 | 10  | 0.24 | 365  | 2  | <0.01 | 26  | 1100 | 44  | <5 | <20 | <1  | <0.01 | <10 | 31  | <10 | <1 | 112 |
| 86   | L12N: 18+ 00 E  | 1.0 | 1.79 | <5 | 210 | 5  | 1.03 | 2  | 23 | 34  | 40  | 5.38 | 10  | 0.45 | 776  | 3  | <0.01 | 52  | 1360 | 48  | 5  | <20 | 33  | <0.01 | <10 | 29  | <10 | 6  | 182 |
| 87   | L12N: 18+ 25 E  | 1.2 | 1.37 | 5  | 160 | <5 | 1.50 | 4  | 19 | 29  | 66  | 3.97 | 10  | 0.36 | 623  | 2  | <0.01 | 49  | 1780 | 110 | 10 | <20 | 54  | <0.01 | <10 | 28  | <10 | 9  | 536 |
| 88   | L12N: 18+ 50 E  | 0.8 | 2.28 | 20 | 225 | <5 | 0.76 | 3  | 23 | 55  | 70  | 5.55 | 20  | 0.68 | 674  | 3  | <0.01 | 60  | 1790 | 80  | 10 | <20 | 36  | <0.01 | <10 | 49  | <10 | 6  | 338 |
| 89   | L12N: 18+ 75 E  | 1.0 | 1.78 | <5 | 180 | 5  | 0.34 | 1  | 12 | 47  | 26  | 4.48 | 20  | 0.54 | 342  | 2  | <0.01 | 34  | 1310 | 50  | <5 | <20 | 5   | <0.01 | <10 | 49  | <10 | <1 | 134 |
| 90   | L12N: 19+ 00 E  | 0.6 | 2.26 | 30 | 115 | <5 | 0.66 | 1  | 17 | 195 | 30  | 5.71 | 10  | 0.88 | 390  | 1  | <0.01 | 78  | 1680 | 64  | <5 | <20 | <1  | <0.01 | <10 | 85  | <10 | <1 | 144 |
| 91   | L12N: 19+ 25 E  | 1.0 | 2.52 | 20 | 340 | 5  | 0.64 | 6  | 48 | 63  | 67  | 7.81 | 20  | 0.67 | 5445 | 2  | <0.01 | 82  | 3490 | 122 | <5 | <20 | 46  | 0.01  | <10 | 61  | <10 | 10 | 463 |
| 92   | L12N: 19+ 50 E  | 2.0 | 1.35 | 15 | 230 | <5 | 1.73 | 10 | 17 | 37  | 133 | 3.38 | 60  | 0.32 | 1703 | 3  | <0.01 | 91  | 3840 | 90  | 5  | <20 | 86  | <0.01 | <10 | 32  | <10 | 37 | 336 |
| 93   | L12N: 19+ 75 E  | 1.8 | 0.93 | 5  | 280 | <5 | 0.22 | 2  | 4  | 25  | 25  | 1.95 | 20  | 0.16 | 68   | 2  | <0.01 | 20  | 1480 | 94  | <5 | <20 | 12  | <0.01 | <10 | 16  | <10 | 6  | 139 |
| 94   | L12N: 20+ 00 E  | 1.0 | 1.21 | <5 | 100 | <5 | 0.05 | 1  | 9  | 17  | 24  | 4.28 | 30  | 0.11 | 176  | 3  | <0.01 | 31  | 1440 | 74  | <5 | <20 | <1  | 0.01  | <10 | 36  | <10 | 2  | 102 |
| 95   | L12N: 20+ 25 E  | 0.6 | 1.57 | <5 | 55  | <5 | 0.03 | <1 | 4  | 13  | 11  | 2.31 | 20  | 0.11 | 72   | <1 | <0.01 | 11  | 480  | 46  | <5 | <20 | <1  | 0.01  | <10 | 33  | <10 | 2  | 45  |
| 96   | L12N: 20+ 50 E  | 0.6 | 1.80 | 5  | 85  | 5  | 0.08 | 1  | 8  | 23  | 24  | 4.22 | 10  | 0.18 | 212  | <1 | <0.01 | 21  | 1200 | 50  | <5 | <20 | 2   | 0.01  | <10 | 48  | <10 | <1 | 91  |
| 97   | L12N: 20+ 75 E  | 1.0 | 1.15 | <5 | 80  | <5 | 0.13 | 1  | 6  | 15  | 29  | 3.22 | 30  | 0.08 | 294  | 1  | <0.01 | 11  | 650  | 36  | <5 | <20 | <1  | 0.01  | <10 | 35  | <10 | 3  | 62  |
| 98   | L12N: 21+ 00 E  | 0.8 | 1.14 | <5 | 105 | <5 | 0.03 | <1 | 10 | 12  | 21  | 3.53 | 20  | 0.11 | 793  | <1 | <0.01 | 15  | 1050 | 48  | <5 | <20 | <1  | <0.01 | <10 | 23  | <10 | <1 | 60  |

TOKLAT RESOURCES INC. ETK 94-481

Eco-Tech Laboratories Ltd.

| QC/DATA:             | Ag        | Al % | As | Ba  | Bi   | Ca % | Cd | Co | Cr   | Cu | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni  | P   | Pb   | Sb | Sn   | Sr | Ti % | U   | V  | W    | Y   | Zn |     |    |     |
|----------------------|-----------|------|----|-----|------|------|----|----|------|----|------|-----|------|------|----|------|-----|-----|------|----|------|----|------|-----|----|------|-----|----|-----|----|-----|
| <b>Repeat #:</b>     |           |      |    |     |      |      |    |    |      |    |      |     |      |      |    |      |     |     |      |    |      |    |      |     |    |      |     |    |     |    |     |
| 1                    | L7N: 19+  | 25   | E  | 2.0 | 1.46 | <5   | 75 | <5 | 0.05 | 1  | 6    | 22  | 17   | 4.05 | 20 | 0.14 | 120 | 2   | <0.1 | 13 | 1480 | 48 | <5   | <20 | <1 | <0.1 | <10 | 45 | <10 | <1 | 88  |
| 30                   | L10N: 16+ | 50   | ER | 1.0 | 1.42 | <5   | 85 | <5 | 0.62 | 1  | 23   | 25  | 33   | 5.21 | 20 | 0.34 | 782 | 1   | <0.1 | 43 | 1460 | 68 | <5   | <20 | 18 | <0.1 | <10 | 26 | <10 | 8  | 204 |
| 77                   | L11N: 21+ | 00   | ER | 0.6 | 1.08 | <5   | 35 | <5 | 0.06 | <1 | 2    | 9   | 15   | 1.26 | 20 | 0.07 | 73  | <1  | <0.1 | 6  | 690  | 20 | <5   | <20 | <1 | <0.1 | <10 | 19 | <10 | 1  | 32  |
| <b>Standard 1993</b> |           |      |    |     |      |      |    |    |      |    |      |     |      |      |    |      |     |     |      |    |      |    |      |     |    |      |     |    |     |    |     |
|                      | 1.4       | 2.00 | 65 | 175 | <5   | 2.00 | 2  | 21 | 70   | 88 | 4.10 | <10 | 0.99 | 728  | <1 | 0.03 | 26  | 700 | 22   | 5  | <20  | 65 | 1.40 | <10 | 86 | <10  | 10  | 76 |     |    |     |
|                      | 1.4       | 1.95 | 65 | 100 | <5   | 1.99 | 2  | 21 | 74   | 85 | 4.20 | <10 | 0.97 | 718  | <1 | 0.03 | 26  | 710 | 24   | 20 | <20  | 55 | 0.12 | <10 | 84 | <10  | 9   | 82 |     |    |     |
|                      | 1.4       | 2.13 | 55 | 150 | 5    | 1.96 | 2  | 21 | 72   | 81 | 4.49 | <10 | 0.93 | 699  | <1 | 0.03 | 31  | 720 | 50   | 20 | <20  | 55 | 0.16 | <10 | 89 | <10  | 13  | 82 |     |    |     |

  
 ECO-TECH LABORATORIES LTD  
 Frank J. Pezzotti, A.Sc.T.  
 B.C. Certified Assayer

XI.Stoklat

July 28, 1994

ECO-TECH LABORATORIES LTD.  
10041 East Trans Canada Highway  
KAMLOOPS, B.C.  
V2C 2J3

Phone: 604-573-5700  
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TOKLAT RESOURCES INC. ETK 94-455  
2720-17TH STREET SOUTH  
CRANBROOK, B.C.  
V1C 4H4

ATTENTION: TIM TERMUENDE

834 samples received July 14, 1994  
PROJECT #: NA

Values in ppm unless otherwise reported

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni  | P    | Pb  | Sb | Sn  | Sr | Ti % | U   | V  | W   | Y  | Zn   |
|------|---------------|-----|------|----|-----|----|------|----|----|----|-----|------|-----|------|------|----|------|-----|------|-----|----|-----|----|------|-----|----|-----|----|------|
| 1    | L9N: 14+ 00 E | <2  | 1.66 | 35 | 210 | <5 | 0.23 | <1 | 20 | 44 | 43  | 5.14 | <10 | 0.28 | 1091 | 2  | 0.02 | 29  | 2610 | 28  | <5 | <20 | 12 | 0.01 | <10 | 41 | <10 | <1 | 114  |
| 2    | L9N: 14+ 25 E | <2  | 1.80 | 50 | 490 | <5 | 0.24 | 2  | 29 | 60 | 81  | 6.18 | <10 | 0.35 | 1503 | 2  | 0.03 | 41  | 2100 | 42  | <5 | <20 | 17 | <0.1 | <10 | 48 | <10 | 21 | 156  |
| 3    | L9N: 14+ 50 E | <2  | 1.44 | 45 | 295 | <5 | 1.05 | 1  | 25 | 44 | 49  | 5.31 | <10 | 0.31 | 917  | 4  | 0.02 | 42  | 2270 | 58  | <5 | <20 | 56 | 0.01 | <10 | 41 | <10 | 20 | 204  |
| 4    | L9N: 14+ 75 E | <2  | 1.16 | 25 | 180 | <5 | 0.46 | <1 | 12 | 34 | 40  | 4.91 | <10 | 0.17 | 349  | 3  | 0.01 | 25  | 1630 | 44  | <5 | <20 | 39 | <0.1 | <10 | 45 | <10 | <1 | 148  |
| 5    | L9N: 15+ 00 E | <2  | 0.89 | 20 | 115 | <5 | 0.13 | <1 | 7  | 33 | 16  | 2.98 | <10 | 0.22 | 120  | 3  | 0.03 | 16  | 2240 | 36  | <5 | <20 | 23 | <0.1 | <10 | 42 | <10 | 2  | 71   |
| 6    | L9N: 15+ 25 E | <2  | 0.94 | 85 | 510 | <5 | 0.66 | 5  | 49 | 24 | 171 | 7.99 | <10 | 0.16 | 3211 | 9  | <0.1 | 140 | 4120 | 98  | <5 | <20 | 80 | <0.1 | <10 | 39 | <10 | 40 | 449  |
| 7    | L9N: 15+ 50 E | 1.2 | 1.39 | 35 | 70  | <5 | 0.17 | <1 | 11 | 43 | 33  | 5.77 | <10 | 0.23 | 365  | <1 | 0.02 | 38  | 2710 | 48  | <5 | <20 | 12 | <0.1 | <10 | 38 | <10 | <1 | 117  |
| 8    | L9N: 15+ 75 E | <2  | 1.66 | 85 | 85  | <5 | 0.34 | 1  | 18 | 60 | 50  | 7.29 | <10 | 0.37 | 513  | <1 | 0.03 | 65  | 3820 | 16  | <5 | <20 | 15 | <0.1 | <10 | 37 | <10 | <1 | 152  |
| 9    | L9N: 16+ 25 E | 0.6 | 1.52 | 35 | 150 | <5 | 0.58 | <1 | 17 | 50 | 13  | 5.80 | <10 | 0.39 | 672  | 2  | 0.03 | 19  | 1850 | 32  | <5 | <20 | 33 | <0.1 | <10 | 40 | <10 | <1 | 109  |
| 10   | L9N: 16+ 50 E | <2  | 1.69 | 35 | 80  | <5 | 0.43 | <1 | 14 | 42 | 12  | 4.66 | <10 | 0.33 | 579  | 2  | 0.03 | 13  | 1560 | 26  | <5 | <20 | 31 | <0.1 | <10 | 51 | <10 | <1 | 72   |
| 11   | L9N: 16+ 75 E | <2  | 1.25 | 20 | 65  | <5 | 0.04 | <1 | 8  | 32 | 13  | 4.40 | <10 | 0.23 | 358  | <1 | 0.03 | 11  | 1740 | 16  | <5 | <20 | 7  | <0.1 | <10 | 51 | <10 | <1 | 50   |
| 12   | L9N: 17+ 00 E | <2  | 0.95 | 25 | 50  | <5 | 0.14 | <1 | 11 | 30 | 15  | 5.03 | <10 | 0.18 | 711  | 2  | 0.04 | 16  | 2230 | 30  | <5 | <20 | 9  | <0.1 | <10 | 36 | <10 | <1 | 58   |
| 13   | L9N: 17+ 25 E | <2  | 1.52 | 30 | 45  | <5 | 0.11 | <1 | 11 | 47 | 20  | 5.41 | <10 | 0.34 | 270  | <1 | 0.02 | 21  | 2810 | 22  | <5 | <20 | 10 | 0.01 | <10 | 51 | <10 | <1 | 71   |
| 14   | L9N: 17+ 50 E | <2  | 1.51 | 60 | 120 | <5 | 0.17 | 1  | 31 | 45 | 37  | 8.37 | <10 | 0.21 | 1453 | 3  | 0.01 | 49  | 3140 | 68  | <5 | <20 | 13 | <0.1 | <10 | 44 | <10 | <1 | 276  |
| 15   | L9N: 17+ 75 E | <2  | 1.00 | 25 | 240 | <5 | 0.18 | <1 | 15 | 20 | 23  | 3.64 | <10 | 0.11 | 652  | 2  | 0.02 | 20  | 1490 | 54  | <5 | <20 | 15 | <0.1 | <10 | 32 | <10 | <1 | 108  |
| 16   | L9N: 18+ 00 E | 2.0 | 1.02 | 30 | 175 | <5 | 0.20 | 1  | 33 | 18 | 41  | 5.64 | <10 | 0.08 | 1843 | <1 | <0.1 | 30  | 1790 | 96  | <5 | <20 | 12 | <0.1 | <10 | 22 | <10 | <1 | 181  |
| 17   | L9N: 18+ 25 E | <2  | 1.16 | 60 | 165 | <5 | 0.07 | 2  | 27 | 36 | 31  | 6.99 | <10 | 0.12 | 1043 | 3  | <0.1 | 40  | 3100 | 48  | <5 | <20 | 10 | <0.1 | <10 | 41 | <10 | <1 | 255  |
| 18   | L9N: 18+ 50 E | 2.2 | 1.74 | 35 | 290 | <5 | 0.73 | 17 | 59 | 36 | 76  | 4.89 | <10 | 0.22 | 2528 | 2  | <0.1 | 41  | 4100 | 58  | <5 | <20 | 42 | <0.1 | <10 | 30 | <10 | 51 | 1086 |
| 19   | L9N: 18+ 75 E | <2  | 1.20 | 25 | 115 | <5 | 0.16 | <1 | 8  | 19 | 39  | 3.03 | <10 | 0.07 | 126  | 5  | <0.1 | 19  | 1630 | 30  | <5 | <20 | 13 | <0.1 | <10 | 49 | <10 | <1 | 193  |
| 20   | L9N: 19+ 00 E | <2  | 2.50 | 35 | 115 | <5 | 0.08 | 1  | 9  | 44 | 21  | 4.49 | <10 | 0.77 | 307  | 1  | 0.03 | 12  | 1310 | 10  | <5 | <20 | 7  | <0.1 | <10 | 48 | <10 | <1 | 71   |
| 21   | L10N 14+ 00 E | <2  | 1.43 | 35 | 200 | <5 | 0.12 | 1  | 10 | 46 | 21  | 5.32 | <10 | 0.28 | 271  | 1  | 0.02 | 20  | 1490 | 32  | <5 | <20 | 18 | 0.01 | <10 | 45 | <10 | <1 | 84   |
| 22   | L10N 14+ 25 E | <2  | 1.51 | 30 | 155 | <5 | 0.15 | <1 | 24 | 41 | 38  | 4.81 | <10 | 0.49 | 872  | 2  | 0.04 | 31  | 1130 | 16  | <5 | <20 | 16 | 0.02 | <10 | 35 | <10 | 2  | 92   |
| 23   | L10N 14+ 50 E | <2  | 0.94 | 45 | 130 | <5 | 0.12 | 1  | 17 | 26 | 15  | 7.18 | <10 | 0.13 | 618  | 2  | 0.02 | 51  | 2710 | 36  | <5 | <20 | 39 | <0.1 | <10 | 22 | <10 | <1 | 151  |
| 24   | L10N 14+ 75 E | <2  | 0.76 | 70 | 180 | <5 | 0.23 | 1  | 19 | 24 | 85  | 7.32 | <10 | 0.07 | 660  | 3  | 0.01 | 53  | 4310 | 134 | <5 | <20 | 66 | <0.1 | <10 | 36 | <10 | 4  | 250  |
| 25   | L10N 15+ 00 E | <2  | 0.98 | 75 | 235 | <5 | 0.45 | 3  | 39 | 46 | 120 | 8.00 | <10 | 0.18 | 1712 | 3  | <0.1 | 100 | 3360 | 126 | <5 | <20 | 51 | <0.1 | <10 | 34 | <10 | 18 | 535  |
| 26   | L10N 15+ 25 E | <2  | 1.50 | 65 | 85  | <5 | 0.15 | <1 | 19 | 54 | 34  | 8.12 | <10 | 0.30 | 515  | 2  | 0.03 | 46  | 2980 | 34  | <5 | <20 | 14 | <0.1 | <10 | 58 | <10 | <1 | 154  |
| 27   | L10N 15+ 50 E | 1.6 | 1.03 | 65 | 135 | <5 | 1.36 | 2  | 37 | 38 | 78  | 6.06 | <10 | 0.37 | 2455 | 2  | 0.01 | 71  | 2650 | 78  | <5 | <20 | 74 | <0.1 | <10 | 27 | <10 | 10 | 243  |
| 28   | L10N 15+ 75 E | <2  | 1.23 | 20 | 70  | <5 | 0.09 | <1 | 7  | 40 | 11  | 3.46 | <10 | 0.26 | 171  | <1 | 0.03 | 12  | 1800 | 36  | <5 | <20 | 12 | <0.1 | <10 | 46 | <10 | <1 | 49   |

| Et # | Tag #         | Ag  | Al % | As  | Ba  | Bi | Cu % | Cd | Co | Cr  | Cu  | Fe %  | La  | Mg % | Mn   | Mo | Na % | Ni  | P    | Pb  | Sb | Sn  | Sr | Ti % | U   | V   | W   | Y  | Zn  |
|------|---------------|-----|------|-----|-----|----|------|----|----|-----|-----|-------|-----|------|------|----|------|-----|------|-----|----|-----|----|------|-----|-----|-----|----|-----|
| 29   | L10N 16+ 25 E | 1.0 | 1.95 | 40  | 150 | 10 | 0.88 | 1  | 31 | 43  | 53  | 5.65  | <10 | 0.37 | 2681 | 3  | 0.04 | 33  | 3390 | 36  | <5 | <20 | 51 | 0.01 | <10 | 38  | <10 | 33 | 165 |
| 30   | L10N 16+ 50 E | 0.2 | 1.35 | 15  | 100 | <5 | 0.22 | <1 | 15 | 33  | 26  | 4.71  | <10 | 0.27 | 762  | <1 | 0.02 | 20  | 1530 | 18  | <5 | <20 | 20 | <0.1 | <10 | 33  | <10 | <1 | 86  |
| 31   | L10N 16+ 75 E | <2  | 1.07 | 35  | 110 | <5 | 0.12 | <1 | 16 | 41  | 22  | 5.24  | <10 | 0.21 | 1051 | 2  | 0.03 | 17  | 1820 | 34  | <5 | <20 | 15 | <0.1 | <10 | 50  | <10 | <1 | 70  |
| 32   | L10N 17+ 00 E | <2  | 1.24 | 30  | 95  | <5 | 0.35 | <1 | 17 | 30  | 36  | 4.88  | <10 | 0.29 | 444  | 1  | 0.01 | 24  | 1240 | 46  | <5 | <20 | 29 | <0.1 | <10 | 29  | <10 | <1 | 164 |
| 33   | L10N 17+ 25 E | <2  | 1.48 | 25  | 115 | <5 | 0.15 | <1 | 16 | 40  | 19  | 5.01  | <10 | 0.28 | 477  | <1 | 0.03 | 21  | 1490 | 22  | <5 | <20 | 15 | <0.1 | <10 | 40  | <10 | 3  | 79  |
| 34   | L10N 17+ 50 E | 1.2 | 1.54 | 30  | 90  | <5 | 1.18 | <1 | 21 | 33  | 45  | 4.29  | <10 | 0.42 | 1185 | 2  | 0.02 | 29  | 1880 | 22  | <5 | <20 | 65 | <0.1 | <10 | 26  | <10 | 45 | 101 |
| 35   | L10N 17+ 75 E | <2  | 1.72 | 45  | 125 | <5 | 0.61 | 1  | 31 | 56  | 34  | 6.06  | <10 | 0.42 | 1262 | 2  | 0.02 | 37  | 2090 | 36  | <5 | <20 | 24 | <0.1 | <10 | 44  | <10 | 2  | 179 |
| 36   | L10N 18+ 00 E | <2  | 1.34 | 40  | 175 | <5 | 1.38 | 2  | 27 | 43  | 41  | 4.93  | <10 | 0.43 | 1760 | 2  | <0.1 | 41  | 2330 | 68  | <5 | <20 | 43 | <0.1 | <10 | 32  | <10 | 8  | 400 |
| 37   | L10N 18+ 25 E | 1.0 | 1.90 | 40  | 150 | <5 | 0.45 | 4  | 37 | 50  | 62  | 7.65  | <10 | 0.42 | 1830 | <1 | <0.1 | 50  | 3130 | 52  | <5 | <20 | 31 | <0.1 | <10 | 34  | <10 | 26 | 515 |
| 38   | L10N 18+ 50 E | <2  | 0.93 | 50  | 85  | <5 | 0.09 | <1 | 13 | 35  | 23  | 4.49  | <10 | 0.09 | 227  | 4  | 0.01 | 35  | 1870 | 110 | <5 | <20 | 17 | <0.1 | <10 | 42  | <10 | <1 | 182 |
| 39   | L10N 18+ 75 E | <2  | 1.93 | 85  | 140 | <5 | 0.25 | 1  | 24 | 78  | 36  | 7.03  | <10 | 0.40 | 752  | 4  | <0.1 | 36  | 1550 | 66  | <5 | <20 | 16 | <0.1 | <10 | 50  | <10 | <1 | 278 |
| 40   | L10N 19+ 00 E | <2  | 3.37 | 50  | 170 | <5 | 0.05 | 1  | 19 | 114 | 23  | 8.00  | <10 | 1.14 | 1144 | 1  | 0.02 | 29  | 1380 | 10  | <5 | <20 | 7  | 0.01 | <10 | 158 | <10 | <1 | 132 |
| 41   | L11N 14+ 00 E | <2  | 1.68 | 50  | 175 | <5 | 0.54 | 1  | 34 | 63  | 77  | 6.77  | <10 | 0.47 | 1271 | 1  | 0.02 | 71  | 2880 | 32  | <5 | <20 | 41 | 0.01 | <10 | 39  | <10 | 12 | 231 |
| 42   | L11N 14+ 25 E | 0.2 | 1.40 | 55  | 175 | <5 | 0.27 | 1  | 25 | 38  | 89  | 6.48  | <10 | 0.31 | 865  | 3  | 0.01 | 54  | 2780 | 46  | <5 | <20 | 47 | <0.1 | <10 | 36  | <10 | <1 | 213 |
| 43   | L11N 14+ 50 E | <2  | 1.41 | 70  | 75  | <5 | 0.16 | 1  | 22 | 52  | 46  | 8.71  | <10 | 0.25 | 721  | 3  | 0.02 | 51  | 3890 | 62  | <5 | <20 | 16 | <0.1 | <10 | 49  | <10 | <1 | 219 |
| 44   | L11N 14+ 75 E | <2  | 1.08 | 70  | 145 | <5 | 0.49 | 1  | 37 | 35  | 105 | 6.98  | <10 | 0.25 | 2260 | 2  | 0.02 | 75  | 2130 | 112 | <5 | <20 | 39 | <0.1 | <10 | 32  | <10 | 13 | 274 |
| 45   | L11N 15+ 00 E | 1.6 | 1.90 | 20  | 180 | <5 | 0.19 | 1  | 25 | 40  | 34  | 5.51  | <10 | 0.36 | 1132 | <1 | 0.02 | 25  | 1640 | 16  | <5 | <20 | 19 | <0.1 | <10 | 36  | <10 | 4  | 113 |
| 46   | L11N 15+ 25 E | <2  | 1.75 | 35  | 130 | <5 | 0.23 | <1 | 25 | 51  | 34  | 6.06  | <10 | 0.46 | 1005 | 2  | 0.03 | 31  | 1710 | 24  | <5 | <20 | 20 | <0.1 | <10 | 45  | <10 | 7  | 145 |
| 47   | L11N 15+ 50 E | <2  | 1.15 | 25  | 135 | <5 | 0.14 | <1 | 10 | 32  | 16  | 4.52  | <10 | 0.24 | 409  | <1 | 0.02 | 13  | 1960 | 20  | <5 | <20 | 19 | <0.1 | <10 | 39  | <10 | <1 | 69  |
| 48   | L11N 15+ 75 E | <2  | 1.58 | 35  | 115 | <5 | 1.04 | <1 | 30 | 45  | 33  | 5.87  | <10 | 0.48 | 1060 | 2  | 0.02 | 31  | 1440 | 30  | <5 | <20 | 42 | <0.1 | <10 | 37  | <10 | 2  | 154 |
| 49   | L11N 16+ 25 E | <2  | 1.69 | 35  | 130 | <5 | 0.52 | <1 | 15 | 32  | 31  | 5.41  | <10 | 0.34 | 287  | 1  | 0.02 | 20  | 1130 | 16  | <5 | <20 | 29 | <0.1 | <10 | 31  | <10 | <1 | 93  |
| 50   | L11N 16+ 50 E | <2  | 1.32 | 20  | 90  | <5 | 0.06 | <1 | 7  | 37  | 14  | 3.91  | <10 | 0.22 | 137  | 1  | 0.03 | 10  | 770  | 12  | <5 | <20 | 9  | <0.1 | <10 | 48  | <10 | <1 | 48  |
| 51   | L11N 16+ 75 E | <2  | 1.55 | 30  | 100 | 5  | 0.16 | <1 | 13 | 43  | 24  | 4.07  | <10 | 0.44 | 154  | 2  | 0.03 | 22  | 950  | 14  | <5 | <20 | 13 | <0.1 | <10 | 37  | <10 | <1 | 77  |
| 52   | L11N 17+ 00 E | 0.2 | 1.69 | 15  | 145 | <5 | 0.99 | <1 | 18 | 35  | 24  | 4.22  | <10 | 0.32 | 861  | <1 | <0.1 | 17  | 1370 | 12  | <5 | <20 | 39 | <0.1 | <10 | 29  | <10 | <1 | 92  |
| 53   | L11N 17+ 25 E | <2  | 1.53 | 40  | 70  | <5 | 0.08 | <1 | 12 | 44  | 18  | 4.31  | <10 | 0.29 | 286  | 4  | 0.03 | 16  | 930  | 20  | <5 | <20 | 11 | <0.1 | <10 | 53  | <10 | <1 | 62  |
| 54   | L11N 17+ 50 E | <2  | 1.28 | 30  | 60  | <5 | 0.11 | <1 | 11 | 38  | 22  | 4.53  | <10 | 0.24 | 517  | 1  | 0.02 | 20  | 1850 | 22  | <5 | <20 | 12 | <0.1 | <10 | 53  | <10 | <1 | 73  |
| 55   | L11N 17+ 75 E | <2  | 1.65 | 55  | 70  | <5 | 0.24 | <1 | 23 | 65  | 30  | 7.44  | <10 | 0.43 | 825  | 4  | 0.03 | 28  | 3300 | 40  | <5 | <20 | 21 | 0.01 | <10 | 53  | <10 | <1 | 101 |
| 56   | L11N 18+ 00 E | <2  | 1.38 | 30  | 125 | <5 | 0.07 | <1 | 10 | 45  | 22  | 3.70  | <10 | 0.19 | 149  | 2  | 0.02 | 21  | 1840 | 40  | <5 | <20 | 12 | <0.1 | <10 | 64  | <10 | <1 | 66  |
| 57   | L11N 18+ 25 E | <2  | 1.34 | 50  | 75  | <5 | 0.22 | <1 | 25 | 75  | 38  | 8.10  | <10 | 0.42 | 756  | 3  | 0.03 | 42  | 4120 | 60  | <5 | <20 | 21 | <0.1 | <10 | 59  | <10 | <1 | 164 |
| 58   | L11N 18+ 50 E | <2  | 3.68 | 90  | 120 | <5 | 0.08 | 1  | 31 | 117 | 86  | 9.01  | <10 | 0.68 | 1391 | 11 | 0.02 | 42  | 3560 | 42  | <5 | <20 | 12 | 0.02 | <10 | 85  | <10 | <1 | 249 |
| 59   | L11N 18+ 75 E | 1.2 | 1.84 | 40  | 220 | <5 | 0.10 | 1  | 16 | 44  | 33  | 6.54  | <10 | 0.16 | 649  | 4  | 0.01 | 17  | 6690 | 72  | <5 | <20 | 64 | <0.1 | <10 | 48  | <10 | <1 | 126 |
| 60   | L11N 19+ 00 E | <2  | 5.01 | 110 | 85  | <5 | 0.11 | <1 | 50 | 653 | 30  | 12.10 | <10 | 2.48 | 3560 | 4  | 0.01 | 113 | 2710 | 36  | <5 | <20 | 9  | 0.03 | <10 | 247 | <10 | <1 | 283 |
| 61   | L16N 5+ 00 E  | <2  | 1.32 | 30  | 85  | <5 | 0.57 | <1 | 12 | 40  | 18  | 4.86  | <10 | 0.36 | 457  | 3  | 0.02 | 17  | 1080 | 16  | <5 | <20 | 27 | 0.01 | <10 | 37  | <10 | <1 | 85  |
| 62   | L16N 5+ 25 E  | <2  | 1.76 | 45  | 115 | <5 | 0.29 | <1 | 27 | 46  | 35  | 6.19  | <10 | 0.38 | 1195 | 3  | 0.02 | 25  | 1280 | 26  | <5 | <20 | 20 | 0.01 | <10 | 41  | <10 | 4  | 101 |
| 63   | L16N 5+ 50 E  | <2  | 1.46 | 40  | 135 | <5 | 1.70 | <1 | 22 | 33  | 32  | 4.96  | <10 | 0.34 | 1458 | 4  | 0.02 | 25  | 1450 | 22  | <5 | <20 | 58 | 0.01 | <10 | 34  | <10 | <1 | 96  |
| 64   | L16N 5+ 75 E  | <2  | 1.57 | 40  | 145 | <5 | 1.45 | <1 | 25 | 40  | 27  | 5.52  | <10 | 0.42 | 1584 | 4  | 0.02 | 25  | 1320 | 24  | <5 | <20 | 50 | 0.01 | <10 | 33  | <10 | 2  | 99  |
| 65   | L16N 6+ 00 E  | <2  | 1.90 | 60  | 140 | <5 | 0.78 | <1 | 28 | 43  | 34  | 6.53  | <10 | 0.35 | 1877 | 5  | 0.03 | 32  | 1120 | 26  | <5 | <20 | 31 | <0.1 | <10 | 40  | <10 | 3  | 96  |
| 66   | L16N 6+ 25 E  | 0.6 | 2.07 | 50  | 135 | <5 | 0.71 | <1 | 25 | 40  | 35  | 6.50  | <10 | 0.35 | 1158 | 2  | 0.02 | 29  | 1090 | 18  | <5 | <20 | 30 | <0.1 | <10 | 30  | <10 | <1 | 95  |
| 67   | L16N 6+ 50 E  | <2  | 1.35 | 40  | 85  | <5 | 0.19 | <1 | 13 | 40  | 21  | 5.35  | <10 | 0.23 | 437  | 5  | 0.03 | 18  | 1270 | 22  | <5 | <20 | 11 | 0.01 | <10 | 51  | <10 | <1 | 68  |

| Et # | Tag #         | Ag  | Al % | As  | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu | Fe %  | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr  | Ti % | U   | V   | W   | Y  | Zn  |
|------|---------------|-----|------|-----|-----|----|------|----|----|-----|----|-------|-----|------|------|----|------|----|------|----|----|-----|-----|------|-----|-----|-----|----|-----|
| 68   | L16N 6+ 75 E  | <2  | 1.67 | 30  | 135 | 5  | 0.89 | <1 | 21 | 41  | 27 | 4.72  | <10 | 0.47 | 1039 | 2  | 0.02 | 25 | 1050 | 14 | <5 | <20 | 35  | <0.1 | <10 | 33  | <10 | 1  | 82  |
| 69   | L16N 7+ 00 E  | <2  | 1.66 | 35  | 125 | <5 | 0.87 | <1 | 29 | 57  | 22 | 5.69  | <10 | 0.48 | 1035 | 2  | 0.03 | 26 | 1270 | 20 | <5 | <20 | 37  | 0.01 | <10 | 40  | <10 | 6  | 102 |
| 70   | L16N 7+ 25 E  | <2  | 1.42 | 25  | 115 | <5 | 1.54 | <1 | 19 | 44  | 24 | 4.00  | <10 | 0.50 | 782  | 2  | 0.02 | 25 | 1230 | 16 | <5 | <20 | 50  | 0.01 | <10 | 31  | <10 | 5  | 86  |
| 71   | L16N 7+ 50 E  | <2  | 1.41 | 40  | 115 | <5 | 0.11 | <1 | 13 | 54  | 19 | 5.01  | <10 | 0.27 | 385  | 4  | 0.03 | 16 | 900  | 24 | <5 | <20 | 11  | 0.01 | <10 | 70  | <10 | <1 | 67  |
| 72   | L16N 7+ 75 E  | <2  | 1.42 | 35  | 110 | <5 | 0.19 | <1 | 18 | 47  | 30 | 4.42  | <10 | 0.42 | 884  | 2  | 0.02 | 27 | 1120 | 16 | <5 | <20 | 12  | 0.02 | <10 | 44  | <10 | <1 | 91  |
| 73   | L16N 8+ 00 E  | 1.0 | 1.19 | 30  | 80  | <5 | 0.28 | <1 | 8  | 44  | 11 | 4.23  | <10 | 0.26 | 235  | 3  | 0.02 | 11 | 1530 | 18 | <5 | <20 | 12  | 0.01 | <10 | 57  | <10 | <1 | 55  |
| 74   | L16N 8+ 25 E  | <2  | 1.45 | 35  | 205 | <5 | 0.20 | <1 | 12 | 70  | 16 | 5.75  | <10 | 0.33 | 485  | 4  | 0.03 | 17 | 2110 | 22 | <5 | <20 | 15  | 0.01 | <10 | 75  | <10 | <1 | 79  |
| 75   | L16N 8+ 50 E  | <2  | 2.08 | 45  | 175 | <5 | 0.21 | <1 | 18 | 71  | 25 | 6.10  | <10 | 0.45 | 512  | 5  | 0.03 | 25 | 1040 | 24 | <5 | <20 | 18  | 0.01 | <10 | 61  | <10 | <1 | 94  |
| 76   | L16N 8+ 75 E  | <2  | 2.13 | 30  | 105 | <5 | 0.12 | <1 | 24 | 89  | 21 | 4.68  | <10 | 0.73 | 199  | 2  | 0.03 | 30 | 620  | 16 | <5 | <20 | 9   | 0.01 | <10 | 51  | <10 | 2  | 76  |
| 77   | L16N 9+ 00 E  | <2  | 3.11 | 50  | 110 | <5 | 0.09 | <1 | 18 | 99  | 20 | 7.18  | <10 | 1.01 | 328  | 2  | 0.03 | 24 | 2130 | 6  | <5 | <20 | 7   | 0.01 | <10 | 113 | <10 | <1 | 88  |
| 78   | L16N 9+ 25 E  | <2  | 1.73 | 20  | 50  | <5 | 0.04 | <1 | 7  | 30  | 10 | 3.64  | <10 | 0.34 | 157  | <1 | 0.02 | 11 | 870  | 4  | <5 | <20 | 6   | 0.01 | <10 | 45  | <10 | <1 | 45  |
| 79   | L16N 9+ 50 E  | <2  | 2.16 | 35  | 85  | <5 | 0.08 | <1 | 15 | 52  | 19 | 5.15  | <10 | 0.43 | 499  | 1  | 0.02 | 20 | 1630 | 10 | <5 | <20 | 7   | 0.01 | <10 | 48  | <10 | <1 | 106 |
| 80   | L16N 9+ 75 E  | <2  | 2.35 | 30  | 70  | <5 | 0.09 | <1 | 9  | 58  | 12 | 4.81  | <10 | 0.50 | 271  | 1  | 0.02 | 13 | 1230 | 6  | <5 | <20 | 8   | 0.02 | <10 | 54  | <10 | <1 | 81  |
| 81   | L16N 10+ 25 E | 2.2 | 1.38 | 20  | 175 | <5 | 0.76 | <1 | 14 | 41  | 14 | 3.79  | <10 | 0.33 | 1898 | 1  | 0.02 | 14 | 940  | 12 | 5  | <20 | 29  | <0.1 | <10 | 48  | <10 | <1 | 68  |
| 82   | L16N 10+ 50 E | <2  | 1.51 | 35  | 75  | <5 | 0.26 | <1 | 16 | 37  | 22 | 4.83  | <10 | 0.41 | 558  | 2  | 0.03 | 20 | 1240 | 14 | <5 | <20 | 16  | 0.02 | <10 | 39  | <10 | <1 | 66  |
| 83   | L16N 10+ 75 E | 0.2 | 2.68 | 40  | 85  | <5 | 0.10 | <1 | 18 | 48  | 28 | 5.59  | <10 | 0.57 | 460  | 1  | 0.02 | 27 | 1290 | 6  | <5 | <20 | 10  | <0.1 | <10 | 40  | <10 | <1 | 105 |
| 84   | L16N 11+ 00 E | <2  | 1.70 | 35  | 140 | <5 | 0.05 | <1 | 13 | 50  | 16 | 4.51  | <10 | 0.34 | 465  | 2  | 0.03 | 20 | 1140 | 14 | <5 | <20 | 8   | 0.01 | <10 | 66  | <10 | <1 | 80  |
| 85   | L16N 11+ 25 E | <2  | 1.72 | 35  | 80  | <5 | 1.12 | <1 | 20 | 32  | 25 | 4.37  | <10 | 0.47 | 775  | 2  | 0.02 | 26 | 1310 | 14 | <5 | <20 | 46  | 0.01 | <10 | 30  | <10 | <1 | 90  |
| 86   | L16N 11+ 50 E | 0.8 | 0.13 | <5  | 35  | <5 | 6.72 | <1 | 7  | 6   | 12 | 0.25  | <10 | 0.27 | 931  | <1 | <0.1 | 6  | 840  | <2 | <5 | <20 | 166 | <0.1 | <10 | 5   | <10 | 2  | 82  |
| 87   | L16N 11+ 75 E | <2  | 1.49 | 20  | 40  | <5 | 0.09 | <1 | 6  | 24  | 10 | 3.30  | <10 | 0.29 | 115  | <1 | 0.01 | 10 | 1000 | 4  | <5 | <20 | 8   | 0.01 | <10 | 32  | <10 | <1 | 38  |
| 88   | L16N 12+ 00 E | 1.4 | 2.12 | 50  | 70  | <5 | 0.26 | <1 | 16 | 60  | 20 | 8.24  | <10 | 0.43 | 387  | 2  | 0.03 | 26 | 2780 | 22 | <5 | <20 | 15  | <0.1 | <10 | 52  | <10 | <1 | 98  |
| 89   | L16N 12+ 25 E | 0.4 | 1.42 | 30  | 45  | <5 | 0.08 | <1 | 5  | 38  | 4  | 4.77  | <10 | 0.23 | 164  | 2  | 0.03 | 7  | 2010 | 16 | <5 | <20 | 8   | 0.02 | <10 | 85  | <10 | <1 | 32  |
| 90   | L16N 12+ 50 E | <2  | 2.00 | 55  | 85  | <5 | 0.06 | <1 | 15 | 80  | 32 | 8.14  | <10 | 0.51 | 659  | 3  | 0.03 | 30 | 3840 | 22 | <5 | <20 | 12  | 0.02 | <10 | 86  | <10 | <1 | 113 |
| 91   | L16N 12+ 75 E | 0.4 | 1.19 | 45  | 80  | <5 | 0.10 | <1 | 12 | 43  | 16 | 5.19  | <10 | 0.19 | 401  | 3  | 0.03 | 24 | 2470 | 20 | <5 | <20 | 12  | 0.01 | <10 | 72  | <10 | <1 | 58  |
| 92   | L16N 13+ 00 E | <2  | 0.51 | 30  | 50  | <5 | 0.16 | <1 | 7  | 15  | 69 | 3.52  | <10 | 0.04 | 116  | 15 | <0.1 | 27 | 1420 | 96 | <5 | <20 | 39  | <0.1 | <10 | 150 | <10 | 1  | 174 |
| 93   | L16N 13+ 25 E | 0.8 | 3.35 | 120 | 75  | <5 | 0.09 | <1 | 27 | 333 | 40 | 12.20 | <10 | 1.43 | 740  | 5  | 0.03 | 69 | 3360 | 10 | <5 | <20 | 7   | 0.02 | <10 | 161 | <10 | <1 | 144 |
| 94   | L16N 13+ 50 E | <2  | 1.76 | 70  | 55  | <5 | 0.07 | <1 | 16 | 63  | 36 | 8.17  | <10 | 0.37 | 697  | 4  | 0.03 | 29 | 1530 | 12 | <5 | <20 | 12  | 0.01 | <10 | 76  | <10 | <1 | 76  |
| 95   | L16N 13+ 75 E | 7.0 | 1.97 | 35  | 110 | <5 | 2.38 | 5  | 23 | 58  | 48 | 5.11  | <10 | 0.65 | 3082 | 3  | 0.04 | 39 | 2510 | 10 | <5 | <20 | 73  | 0.01 | <10 | 42  | <10 | 49 | 108 |
| 96   | L16N 14+ 00 E | 5.0 | 1.97 | 45  | 135 | <5 | 1.70 | 3  | 27 | 63  | 22 | 4.69  | <10 | 0.45 | 2567 | 4  | 0.01 | 25 | 1730 | 34 | <5 | <20 | 66  | 0.01 | <10 | 87  | <10 | 29 | 199 |
| 97   | L16N 14+ 25 E | <2  | 1.07 | 5   | 95  | <5 | 0.11 | <1 | 5  | 23  | 16 | 3.20  | <10 | 0.17 | 120  | <1 | 0.02 | 12 | 1220 | <2 | <5 | <20 | 8   | <0.1 | <10 | 53  | <10 | <1 | 55  |
| 98   | L16N 14+ 50 E | 0.6 | 1.02 | 25  | 75  | <5 | 0.04 | <1 | 5  | 24  | 8  | 4.87  | <10 | 0.08 | 160  | 1  | 0.03 | 7  | 1420 | 10 | <5 | <20 | 5   | 0.02 | <10 | 39  | <10 | <1 | 42  |
| 99   | L16N 14+ 75 E | 0.2 | 0.96 | <5  | 30  | <5 | 0.13 | <1 | 2  | 13  | 2  | 0.73  | <10 | 0.06 | 131  | <1 | 0.01 | 2  | 480  | <2 | <5 | <20 | 4   | <0.1 | <10 | 22  | <10 | <1 | 15  |
| 100  | L16N 15+ 00 E | <2  | 0.71 | 15  | 25  | <5 | 0.06 | <1 | 4  | 13  | 6  | 2.39  | <10 | 0.05 | 149  | <1 | 0.02 | 5  | 900  | 6  | <5 | <20 | 4   | <0.1 | <10 | 41  | <10 | <1 | 22  |
| 101  | L17N 5+ 00 E  | <2  | 0.91 | 25  | 180 | <5 | 0.38 | <1 | 10 | 26  | 18 | 4.43  | <10 | 0.19 | 731  | 3  | 0.02 | 11 | 850  | 14 | <5 | <20 | 16  | <0.1 | <10 | 36  | <10 | <1 | 67  |
| 102  | L17N 5+ 25 E  | <2  | 1.74 | 45  | 115 | <5 | 1.30 | <1 | 29 | 48  | 28 | 6.72  | <10 | 0.33 | 1577 | 4  | 0.02 | 28 | 1370 | 26 | <5 | <20 | 39  | 0.01 | <10 | 46  | <10 | 4  | 95  |
| 103  | L17N 5+ 50 E  | <2  | 1.25 | 55  | 100 | 5  | 0.10 | <1 | 16 | 49  | 18 | 6.47  | <10 | 0.25 | 375  | 6  | 0.03 | 18 | 1100 | 30 | <5 | <20 | 9   | 0.01 | <10 | 54  | <10 | <1 | 63  |
| 104  | L17N 5+ 75 E  | 0.8 | 1.90 | 30  | 120 | <5 | 0.99 | <1 | 26 | 40  | 44 | 5.97  | <10 | 0.29 | 1674 | 2  | 0.03 | 27 | 1540 | 14 | <5 | <20 | 32  | <0.1 | <10 | 36  | <10 | 32 | 88  |
| 105  | L17N 6+ 00 E  | <2  | 1.31 | 40  | 105 | <5 | 0.54 | <1 | 12 | 39  | 12 | 5.20  | <10 | 0.36 | 389  | 3  | 0.03 | 14 | 1240 | 18 | <5 | <20 | 24  | 0.01 | <10 | 51  | <10 | <1 | 74  |
| 106  | L17N 6+ 25 E  | <2  | 1.26 | 20  | 85  | <5 | 1.11 | <1 | 11 | 29  | 11 | 3.66  | <10 | 0.32 | 333  | 2  | 0.02 | 11 | 810  | 10 | <5 | <20 | 42  | <0.1 | <10 | 35  | <10 | <1 | 57  |

| Et# | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu | Fe %  | La  | Mg % | Mn   | Mo | Na %  | Ni | P    | Pb  | Sb | Sn  | Sr  | Ti %  | U   | V  | W   | Y  | Zn  |
|-----|---------------|-----|------|----|-----|----|------|----|----|-----|----|-------|-----|------|------|----|-------|----|------|-----|----|-----|-----|-------|-----|----|-----|----|-----|
| 107 | L17N 6+ 50 E  | <2  | 1.44 | 35 | 100 | <5 | 0.26 | <1 | 18 | 44  | 16 | 5.86  | <10 | 0.33 | 1085 | 3  | 0.03  | 18 | 920  | 22  | <5 | <20 | 13  | 0.01  | <10 | 48 | <10 | <1 | 65  |
| 108 | L17N 6+ 75 E  | <2  | 1.00 | 20 | 75  | <5 | 0.32 | <1 | 6  | 23  | 8  | 3.47  | <10 | 0.17 | 157  | 2  | 0.02  | 8  | 700  | 8   | <5 | <20 | 17  | <0.01 | <10 | 38 | <10 | <1 | 35  |
| 109 | L17N 7+ 00 E  | <2  | 1.49 | 25 | 125 | <5 | 1.73 | <1 | 18 | 40  | 12 | 4.74  | <10 | 0.29 | 1157 | 3  | 0.02  | 14 | 1390 | 14  | <5 | <20 | 46  | 0.01  | <10 | 50 | <10 | <1 | 73  |
| 110 | L17N 7+ 25 E  | <2  | 1.75 | 40 | 125 | <5 | 2.90 | <1 | 20 | 62  | 16 | 4.67  | <10 | 0.32 | 575  | 5  | 0.02  | 20 | 1360 | 22  | <5 | <20 | 71  | 0.02  | <10 | 53 | <10 | 5  | 90  |
| 111 | L17N 7+ 50 E  | 1.2 | 1.25 | 25 | 75  | <5 | 0.37 | <1 | 14 | 49  | 15 | 5.16  | <10 | 0.28 | 394  | <1 | 0.01  | 17 | 730  | 12  | <5 | <20 | 14  | 0.02  | <10 | 62 | <10 | <1 | 81  |
| 112 | L17N 7+ 75 E  | <2  | 1.02 | 5  | 40  | <5 | 0.05 | <1 | 4  | 29  | 6  | 1.89  | <10 | 0.15 | 105  | <1 | 0.01  | 6  | 490  | 4   | <5 | <20 | 5   | 0.02  | <10 | 60 | <10 | <1 | 35  |
| 113 | L17N 8+ 00 E  | <2  | 0.87 | 15 | 55  | <5 | 0.09 | <1 | 5  | 20  | 9  | 1.74  | <10 | 0.11 | 142  | 1  | 0.02  | 8  | 360  | 6   | <5 | <20 | 7   | 0.01  | <10 | 50 | <10 | <1 | 41  |
| 114 | L17N 8+ 25 E  | <2  | 1.20 | 35 | 60  | <5 | 0.27 | <1 | 15 | 46  | 24 | 5.23  | <10 | 0.40 | 415  | 2  | 0.02  | 25 | 1560 | 20  | <5 | <20 | 14  | 0.04  | <10 | 64 | <10 | <1 | 94  |
| 115 | L17N 8+ 50 E  | 0.6 | 1.15 | 10 | 45  | <5 | 0.05 | <1 | 10 | 22  | <1 | 4.07  | <10 | 0.27 | 393  | <1 | 0.01  | 12 | 1300 | 14  | <5 | <20 | 5   | <0.01 | <10 | 30 | <10 | <1 | 52  |
| 116 | L17N 8+ 75 E  | <2  | 1.95 | 15 | 200 | <5 | 0.33 | 5  | 17 | 42  | 8  | 6.67  | <10 | 0.25 | 3697 | 2  | <0.01 | 29 | 1250 | 96  | <5 | <20 | 11  | 0.01  | <10 | 37 | <10 | 33 | 821 |
| 117 | L17N 9+ 00 E  | <2  | 2.82 | 30 | 155 | <5 | 0.36 | <1 | 31 | 89  | 11 | 8.45  | <10 | 0.86 | 989  | <1 | <0.01 | 44 | 1990 | 22  | <5 | <20 | 11  | 0.01  | <10 | 70 | <10 | 2  | 193 |
| 118 | L17N 9+ 25 E  | <2  | 2.17 | 15 | 70  | <5 | 1.05 | <1 | 21 | 45  | <1 | 5.53  | <10 | 0.49 | 520  | <1 | <0.01 | 20 | 1230 | 22  | <5 | <20 | 40  | 0.01  | <10 | 44 | <10 | 5  | 85  |
| 119 | L17N 9+ 50 E  | 1.2 | 0.74 | 10 | 65  | <5 | 3.38 | 1  | 6  | 22  | <1 | 1.71  | <10 | 0.20 | 138  | 1  | 0.01  | 9  | 720  | 14  | <5 | <20 | 102 | <0.01 | <10 | 24 | <10 | 3  | 44  |
| 120 | L17N 9+ 75 E  | 0.6 | 2.72 | 20 | 70  | <5 | 0.95 | <1 | 15 | 62  | <1 | 6.98  | <10 | 0.87 | 377  | <1 | <0.01 | 21 | 750  | 22  | <5 | <20 | 34  | <0.01 | <10 | 49 | <10 | <1 | 91  |
| 121 | L17N 10+ 25 E | <2  | 1.59 | 10 | 55  | <5 | 0.12 | <1 | 10 | 37  | <1 | 5.65  | <10 | 0.52 | 413  | <1 | 0.02  | 12 | 2920 | 24  | <5 | <20 | 8   | 0.01  | <10 | 40 | <10 | <1 | 55  |
| 122 | L17N 10+ 50 E | 1.0 | 1.41 | 10 | 100 | <5 | 0.54 | <1 | 11 | 31  | <1 | 4.35  | <10 | 0.40 | 445  | <1 | 0.02  | 14 | 1470 | 20  | <5 | <20 | 22  | <0.01 | <10 | 35 | <10 | <1 | 49  |
| 123 | L17N 10+ 75 E | <2  | 1.28 | 20 | 85  | <5 | 1.14 | 1  | 22 | 47  | 20 | 6.73  | <10 | 0.30 | 1512 | <1 | <0.01 | 24 | 1980 | 36  | <5 | <20 | 43  | 0.01  | <10 | 46 | <10 | 2  | 80  |
| 124 | L17N 11+ 00 E | 0.2 | 1.68 | 15 | 90  | <5 | 2.17 | <1 | 26 | 34  | 9  | 4.82  | <10 | 0.35 | 1073 | <1 | <0.01 | 18 | 1830 | 24  | <5 | <20 | 76  | 0.01  | <10 | 33 | <10 | 6  | 61  |
| 125 | L17N 11+ 25 E | 1.0 | 0.32 | <5 | 35  | <5 | 0.12 | <1 | 11 | 6   | 7  | 2.86  | <10 | 0.02 | 107  | <1 | 0.04  | 13 | 410  | 10  | <5 | <20 | 7   | <0.01 | <10 | 17 | <10 | 1  | 37  |
| 126 | L17N 11+ 50 E | <2  | 1.33 | 10 | 40  | <5 | 0.05 | <1 | 14 | 30  | <1 | 7.59  | <10 | 0.33 | 586  | <1 | <0.01 | 15 | 2420 | 18  | <5 | <20 | 5   | <0.01 | <10 | 27 | <10 | <1 | 60  |
| 127 | L17N 11+ 75 E | <2  | 0.88 | 35 | 95  | 5  | 0.54 | <1 | 37 | 25  | 6  | 12.70 | <10 | 0.12 | 3249 | <1 | <0.01 | 46 | 4100 | 30  | <5 | <20 | 15  | 0.01  | <10 | 31 | <10 | <1 | 108 |
| 128 | L17N 12+ 00 E | <2  | 0.77 | 35 | 95  | 10 | 0.07 | <1 | 25 | 25  | 25 | 9.40  | <10 | 0.07 | 648  | 6  | <0.01 | 70 | 3780 | 26  | <5 | <20 | 9   | <0.01 | <10 | 33 | <10 | <1 | 118 |
| 129 | L17N 12+ 25 E | 1.0 | 0.93 | 40 | 135 | <5 | 0.21 | 1  | 12 | 22  | 53 | 8.06  | <10 | 0.09 | 481  | 15 | <0.01 | 21 | 4920 | 116 | <5 | <20 | 35  | <0.01 | <10 | 54 | <10 | 4  | 151 |
| 130 | L17N 12+ 50 E | <2  | 1.84 | 30 | 70  | <5 | 0.16 | <1 | 30 | 58  | 11 | 8.17  | <10 | 0.47 | 1604 | 2  | <0.01 | 26 | 2330 | 24  | <5 | <20 | 12  | 0.01  | <10 | 56 | <10 | <1 | 110 |
| 131 | L17N 12+ 75 E | <2  | 1.67 | 30 | 45  | <5 | 0.06 | <1 | 15 | 37  | 7  | 6.55  | <10 | 0.64 | 594  | 2  | 0.01  | 26 | 2070 | 12  | <5 | <20 | 7   | 0.01  | <10 | 75 | <10 | <1 | 80  |
| 132 | L17N 13+ 00 E | <2  | 2.79 | 50 | 60  | 10 | 0.12 | <1 | 23 | 118 | 16 | 7.60  | <10 | 1.11 | 731  | 2  | <0.01 | 41 | 1260 | 20  | <5 | <20 | 10  | 0.01  | <10 | 73 | <10 | 1  | 118 |
| 133 | L17N 13+ 25 E | 0.2 | 1.18 | 15 | 55  | <5 | 0.04 | <1 | 9  | 24  | 3  | 4.40  | <10 | 0.33 | 413  | <1 | 0.02  | 15 | 1540 | 18  | <5 | <20 | 6   | <0.01 | <10 | 34 | <10 | <1 | 57  |
| 134 | L17N 13+ 50 E | 2.0 | 2.16 | 15 | 80  | <5 | 1.56 | 2  | 28 | 42  | 20 | 5.32  | <10 | 0.98 | 3061 | <1 | 0.03  | 28 | 2340 | 28  | <5 | <20 | 66  | 0.01  | <10 | 31 | <10 | 28 | 154 |
| 135 | L17N 13+ 75 E | 2.0 | 2.16 | 20 | 60  | <5 | 1.24 | 3  | 26 | 36  | 46 | 5.02  | <10 | 0.77 | 2532 | 1  | 0.06  | 37 | 2370 | 22  | <5 | <20 | 61  | <0.01 | <10 | 25 | <10 | 95 | 120 |
| 136 | L17N 14+ 00 E | 1.0 | 1.77 | 20 | 90  | <5 | 1.28 | 2  | 35 | 34  | 25 | 6.12  | <10 | 0.38 | 2010 | <1 | 0.02  | 39 | 2140 | 42  | <5 | <20 | 74  | <0.01 | <10 | 29 | <10 | 48 | 152 |
| 137 | L17N 14+ 25 E | 1.2 | 0.60 | 10 | 40  | <5 | 0.27 | <1 | 8  | 11  | <1 | 2.56  | <10 | 0.08 | 245  | <1 | 0.03  | 11 | 680  | 14  | <5 | <20 | 9   | <0.01 | <10 | 29 | <10 | 2  | 44  |
| 138 | L17N 14+ 50 E | 2.6 | 1.27 | <5 | 45  | <5 | 0.06 | <1 | 3  | 8   | <1 | 1.48  | <10 | 0.07 | 132  | <1 | 0.02  | 3  | 720  | 6   | <5 | <20 | 6   | <0.01 | <10 | 14 | <10 | 1  | 18  |
| 139 | L17N 14+ 75 E | 0.4 | 1.52 | 10 | 30  | <5 | 0.14 | <1 | 12 | 21  | <1 | 4.57  | <10 | 0.25 | 525  | <1 | 0.05  | 11 | 2270 | 24  | <5 | <20 | 14  | 0.01  | <10 | 35 | <10 | 3  | 40  |
| 140 | L17N 15+ 00 E | 0.2 | 1.66 | 5  | 40  | <5 | 0.04 | <1 | 8  | 22  | <1 | 4.62  | <10 | 0.21 | 346  | <1 | 0.02  | 7  | 1210 | 8   | <5 | <20 | 6   | <0.01 | <10 | 28 | <10 | <1 | 30  |
| 141 | L18N 5+ 00 E  | 0.8 | 0.84 | 10 | 65  | <5 | 0.07 | <1 | 8  | 23  | <1 | 3.27  | <10 | 0.23 | 207  | <1 | 0.02  | 12 | 1000 | 16  | <5 | <20 | 7   | <0.01 | <10 | 30 | <10 | <1 | 38  |
| 142 | L18N 5+ 25 E  | 0.2 | 1.16 | 20 | 70  | <5 | 0.06 | <1 | 12 | 27  | 3  | 4.94  | <10 | 0.27 | 437  | 1  | 0.01  | 15 | 890  | 22  | <5 | <20 | 6   | <0.01 | <10 | 29 | <10 | <1 | 53  |
| 143 | L18N 5+ 50 E  | 0.2 | 1.51 | 15 | 100 | <5 | 0.08 | <1 | 10 | 33  | <1 | 5.54  | <10 | 0.47 | 249  | <1 | 0.01  | 13 | 1780 | 24  | <5 | <20 | 8   | <0.01 | <10 | 29 | <10 | <1 | 46  |
| 144 | L18N 5+ 75 E  | 0.6 | 0.86 | 15 | 45  | <5 | 0.16 | <1 | 10 | 22  | 2  | 3.87  | <10 | 0.28 | 409  | <1 | 0.02  | 14 | 1190 | 24  | <5 | <20 | 8   | <0.01 | <10 | 27 | <10 | <1 | 49  |
| 145 | L18N 6+ 00 E  | 0.4 | 1.25 | 10 | 70  | <5 | 0.16 | <1 | 10 | 44  | <1 | 4.59  | <10 | 0.52 | 351  | <1 | 0.01  | 15 | 1190 | 24  | <5 | <20 | 8   | 0.01  | <10 | 40 | <10 | <1 | 54  |



| Et# | Tag #         | Ag  | Al % | As | Ba  | Bi | Cu % | Gd | Co | Cr  | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr | Ti % | U   | V   | W   | Y  | Zn  |
|-----|---------------|-----|------|----|-----|----|------|----|----|-----|-----|------|-----|------|------|----|------|----|------|----|----|-----|----|------|-----|-----|-----|----|-----|
| 146 | L18N 6+ 25 E  | 0.2 | 1.40 | 20 | 60  | 5  | 0.07 | <1 | 10 | 38  | <1  | 4.44 | <10 | 0.49 | 249  | 2  | 0.02 | 14 | 1500 | 26 | <5 | <20 | 7  | <0.1 | <10 | 37  | <10 | <1 | 49  |
| 147 | L18N 6+ 50 E  | 1.8 | 1.25 | 10 | 70  | <5 | 0.10 | <1 | 8  | 36  | <1  | 4.15 | <10 | 0.35 | 311  | 2  | 0.01 | 11 | 1560 | 92 | <5 | <20 | 9  | <0.1 | <10 | 34  | <10 | <1 | 54  |
| 148 | L18N 6+ 75 E  | 1.0 | 1.92 | 10 | 120 | <5 | 1.27 | <1 | 23 | 57  | 8   | 4.71 | <10 | 0.63 | 1830 | 1  | 0.01 | 22 | 1230 | 24 | <5 | <20 | 43 | 0.01 | <10 | 33  | <10 | 10 | 88  |
| 149 | L18N 7+ 00 E  | 0.4 | 1.94 | 10 | 115 | <5 | 1.63 | <1 | 20 | 53  | 3   | 4.81 | <10 | 0.52 | 1193 | <1 | 0.01 | 18 | 1250 | 16 | <5 | <20 | 42 | 0.01 | <10 | 36  | <10 | 5  | 74  |
| 150 | L18N 7+ 25 E  | <2  | 2.04 | 15 | 70  | 5  | 0.21 | <1 | 14 | 113 | <1  | 6.51 | <10 | 1.36 | 397  | <1 | <0.1 | 24 | 3030 | 28 | <5 | <20 | 10 | 0.02 | <10 | 100 | <10 | <1 | 79  |
| 151 | L18N 7+ 50 E  | 1.4 | 0.89 | <5 | 60  | <5 | 0.07 | <1 | 3  | 18  | <1  | 1.35 | <10 | 0.15 | 75   | <1 | 0.02 | 5  | 470  | 38 | <5 | <20 | 6  | <0.1 | <10 | 23  | <10 | 1  | 78  |
| 152 | L18N 7+ 75 E  | 0.6 | 1.17 | 10 | 65  | <5 | 0.25 | <1 | 10 | 27  | <1  | 4.31 | <10 | 0.33 | 446  | <1 | 0.02 | 14 | 1200 | 20 | <5 | <20 | 10 | 0.01 | <10 | 40  | <10 | <1 | 65  |
| 153 | L18N 8+ 00 E  | 1.2 | 0.74 | <5 | 100 | <5 | 0.06 | <1 | 3  | 13  | 6   | 1.42 | <10 | 0.15 | 95   | <1 | 0.02 | 5  | 660  | 8  | <5 | <20 | 7  | <0.1 | <10 | 20  | <10 | 1  | 25  |
| 154 | L18N 8+ 25 E  | <2  | 1.27 | <5 | 60  | <5 | 0.05 | <1 | 7  | 23  | 8   | 3.36 | <10 | 0.31 | 352  | <1 | 0.01 | 9  | 780  | 14 | <5 | <20 | 7  | 0.01 | <10 | 30  | <10 | <1 | 47  |
| 155 | L18N 8+ 50 E  | 0.2 | 1.01 | <5 | 195 | <5 | 0.18 | <1 | 11 | 22  | 12  | 3.03 | <10 | 0.25 | 1290 | <1 | 0.01 | 11 | 900  | 12 | <5 | <20 | 17 | <0.1 | <10 | 33  | <10 | <1 | 64  |
| 156 | L18N 8+ 75 E  | 0.4 | 1.55 | 10 | 110 | <5 | 1.61 | <1 | 17 | 34  | 30  | 3.33 | <10 | 0.42 | 1504 | <1 | 0.01 | 21 | 1320 | 22 | <5 | <20 | 75 | 0.01 | <10 | 28  | <10 | 10 | 63  |
| 157 | L18N 9+ 00 E  | <2  | 2.19 | 10 | 105 | <5 | 1.60 | <1 | 15 | 39  | 18  | 3.53 | <10 | 0.61 | 418  | <1 | 0.01 | 17 | 820  | 10 | <5 | <20 | 54 | <0.1 | <10 | 38  | <10 | 7  | 50  |
| 158 | L18N 9+ 25 E  | 1.0 | 0.99 | <5 | 70  | <5 | 0.05 | <1 | 3  | 13  | 5   | 1.27 | <10 | 0.12 | 86   | <1 | 0.02 | 5  | 310  | 2  | <5 | <20 | 6  | <0.1 | <10 | 29  | <10 | 1  | 19  |
| 159 | L18N 9+ 50 E  | <2  | 1.41 | 5  | 85  | <5 | 0.04 | <1 | 9  | 22  | 10  | 3.64 | <10 | 0.39 | 593  | <1 | 0.02 | 10 | 1940 | 12 | <5 | <20 | 8  | 0.01 | <10 | 29  | <10 | <1 | 39  |
| 160 | L18N 9+ 75 E  | 0.6 | 0.98 | <5 | 90  | <5 | 0.02 | <1 | 6  | 14  | 9   | 2.19 | <10 | 0.22 | 287  | <1 | 0.03 | 6  | 490  | 10 | <5 | <20 | 6  | 0.01 | <10 | 25  | <10 | 1  | 29  |
| 161 | L18N 10+ 25 E | <2  | 1.41 | 10 | 70  | <5 | 0.03 | <1 | 8  | 23  | 11  | 3.52 | <10 | 0.38 | 191  | <1 | 0.02 | 11 | 680  | 14 | <5 | <20 | 7  | <0.1 | <10 | 27  | <10 | <1 | 39  |
| 162 | L18N 10+ 50 E | <2  | 1.39 | 5  | 130 | <5 | 0.05 | <1 | 9  | 22  | 12  | 3.10 | <10 | 0.30 | 388  | <1 | 0.02 | 10 | 720  | 10 | <5 | <20 | 9  | <0.1 | <10 | 29  | <10 | <1 | 46  |
| 163 | L18N 10+ 75 E | 0.4 | 1.67 | <5 | 165 | <5 | 1.07 | <1 | 16 | 22  | 17  | 3.21 | <10 | 0.48 | 2609 | <1 | 0.02 | 18 | 1120 | 10 | <5 | <20 | 56 | 0.01 | <10 | 21  | <10 | 8  | 61  |
| 164 | L18N 11+ 00 E | <2  | 1.74 | 5  | 110 | <5 | 0.08 | <1 | 9  | 24  | 12  | 3.62 | <10 | 0.39 | 322  | <1 | 0.01 | 10 | 950  | 10 | <5 | <20 | 12 | <0.1 | <10 | 29  | <10 | <1 | 55  |
| 165 | L18N 11+ 25 E | 0.8 | 1.04 | <5 | 45  | <5 | 0.05 | <1 | 3  | 13  | 3   | 1.45 | <10 | 0.17 | 64   | <1 | 0.03 | 4  | 420  | 6  | <5 | <20 | 7  | <0.1 | <10 | 25  | <10 | 1  | 25  |
| 166 | L18N 11+ 50 E | 0.6 | 1.44 | 10 | 70  | <5 | 0.25 | <1 | 8  | 28  | 11  | 3.19 | <10 | 0.34 | 104  | <1 | <0.1 | 13 | 840  | 38 | <5 | <20 | 17 | <0.1 | <10 | 32  | <10 | <1 | 56  |
| 167 | L18N 11+ 75 E | <2  | 0.58 | <5 | 115 | <5 | 0.11 | <1 | 10 | 7   | 20  | 4.10 | <10 | 0.04 | 193  | 4  | 0.01 | 29 | 1310 | 30 | <5 | <20 | 13 | <0.1 | <10 | 17  | <10 | 1  | 110 |
| 168 | L18N 12+ 00 E | <2  | 0.54 | 15 | 80  | <5 | 0.04 | <1 | 13 | 9   | 41  | 4.81 | <10 | 0.03 | 164  | 8  | 0.01 | 43 | 1640 | 36 | <5 | <20 | 10 | <0.1 | <10 | 37  | <10 | <1 | 181 |
| 169 | L18N 12+ 25 E | 0.6 | 0.41 | 15 | 100 | <5 | 0.08 | <1 | 14 | 1   | 219 | 4.23 | <10 | 0.03 | 178  | 4  | <0.1 | 29 | 1640 | 68 | <5 | <20 | 22 | <0.1 | <10 | 23  | <10 | 8  | 151 |
| 170 | L18N 12+ 50 E | <2  | 0.40 | 10 | 65  | 5  | 0.16 | <1 | 17 | 4   | 128 | 6.95 | <10 | 0.08 | 736  | 6  | <0.1 | 28 | 1720 | 22 | <5 | <20 | 14 | <0.1 | <10 | 63  | <10 | 3  | 151 |
| 171 | L18N 12+ 75 E | 2.2 | 0.96 | 5  | 60  | <5 | 0.07 | <1 | 4  | 15  | 15  | 1.89 | <10 | 0.17 | 62   | <1 | 0.01 | 7  | 830  | 6  | <5 | <20 | 5  | <0.1 | <10 | 27  | <10 | <1 | 29  |
| 172 | L18N 13+ 00 E | 0.4 | 0.96 | 10 | 45  | <5 | 0.03 | <1 | 7  | 15  | 20  | 3.88 | <10 | 0.17 | 164  | 1  | 0.01 | 14 | 1250 | 16 | <5 | <20 | 5  | <0.1 | <10 | 34  | <10 | <1 | 45  |
| 173 | L18N 13+ 25 E | <2  | 0.99 | 5  | 75  | <5 | 0.07 | <1 | 9  | 18  | 105 | 4.55 | <10 | 0.19 | 205  | 2  | 0.02 | 18 | 1670 | 22 | <5 | <20 | 10 | 0.01 | <10 | 49  | <10 | 1  | 92  |
| 174 | L18N 13+ 50 E | 1.0 | 0.48 | 5  | 75  | <5 | 0.18 | <1 | 8  | 10  | 144 | 2.64 | <10 | 0.07 | 134  | <1 | 0.03 | 18 | 680  | 16 | <5 | <20 | 18 | <0.1 | <10 | 26  | <10 | 4  | 97  |
| 175 | L18N 13+ 75 E | 1.8 | 0.58 | <5 | 115 | <5 | 0.10 | <1 | 2  | 6   | 73  | 0.98 | <10 | 0.04 | 25   | <1 | 0.02 | 5  | 480  | 14 | <5 | <20 | 22 | <0.1 | <10 | 13  | <10 | 2  | 35  |
| 176 | L18N 14+ 00 E | <2  | 1.58 | 65 | 65  | <5 | 0.09 | <1 | 25 | 64  | 65  | 7.39 | <10 | 0.57 | 1225 | <1 | <0.1 | 57 | 1940 | 34 | <5 | <20 | 12 | <0.1 | <10 | 39  | <10 | <1 | 101 |
| 177 | L18N 14+ 25 E | 0.4 | 1.02 | 10 | 55  | <5 | 0.05 | <1 | 6  | 10  | 20  | 2.13 | <10 | 0.09 | 251  | <1 | 0.03 | 8  | 890  | 16 | <5 | <20 | 6  | <0.1 | <10 | 30  | <10 | 2  | 32  |
| 178 | L18N 14+ 50 E | 1.0 | 0.78 | <5 | 30  | <5 | 0.14 | <1 | 4  | 3   | 66  | 1.41 | <10 | 0.04 | 117  | <1 | 0.02 | 5  | 490  | 2  | <5 | <20 | 7  | <0.1 | <10 | 21  | <10 | 1  | 34  |
| 179 | L18N 14+ 75 E | 1.2 | 1.05 | <5 | 40  | <5 | 0.02 | <1 | 2  | 6   | 10  | 0.74 | <10 | 0.05 | 25   | <1 | 0.02 | 3  | 400  | 4  | <5 | <20 | 5  | <0.1 | <10 | 20  | <10 | 2  | 16  |
| 180 | L18N 15+ 00 E | <2  | 1.16 | <5 | 50  | <5 | 0.03 | <1 | 12 | 16  | 73  | 4.24 | <10 | 0.25 | 538  | <1 | 0.01 | 11 | 1220 | 20 | <5 | <20 | 5  | 0.03 | <10 | 27  | <10 | 1  | 61  |
| 181 | L19N 5+ 00 E  | <2  | 2.13 | 15 | 110 | <5 | 0.54 | <1 | 22 | 31  | 27  | 4.50 | <10 | 0.45 | 1230 | <1 | 0.01 | 23 | 900  | 22 | <5 | <20 | 27 | 0.01 | <10 | 27  | <10 | 9  | 69  |
| 182 | L19N 5+ 25 E  | 1.0 | 0.67 | <5 | 220 | <5 | 0.25 | <1 | 8  | 14  | 18  | 1.99 | <10 | 0.15 | 998  | <1 | 0.02 | 6  | 810  | 12 | <5 | <20 | 12 | <0.1 | <10 | 26  | <10 | 1  | 40  |
| 183 | L19N 5+ 50 E  | 0.4 | 1.03 | <5 | 80  | <5 | 0.07 | <1 | 7  | 20  | 20  | 3.09 | <10 | 0.25 | 310  | <1 | 0.01 | 8  | 830  | 14 | <5 | <20 | 7  | <0.1 | <10 | 27  | <10 | <1 | 38  |
| 184 | L19N 5+ 75 E  | <2  | 1.17 | 5  | 85  | <5 | 0.04 | <1 | 9  | 24  | 31  | 4.10 | <10 | 0.26 | 367  | <1 | 0.01 | 10 | 630  | 14 | <5 | <20 | 5  | 0.01 | <10 | 33  | <10 | <1 | 47  |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu  | Fe %  | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr | Ti % | U   | V  | W   | Y  | Zn  |
|------|---------------|-----|------|----|-----|----|------|----|----|----|-----|-------|-----|------|------|----|------|----|------|----|----|-----|----|------|-----|----|-----|----|-----|
| 185  | L19N 6+ 00 E  | 0.4 | 0.81 | 5  | 50  | <5 | 0.08 | <1 | 7  | 18 | 17  | 2.89  | <10 | 0.25 | 269  | <1 | 0.01 | 9  | 1280 | 14 | <5 | <20 | 6  | <0.1 | <10 | 26 | <10 | <1 | 35  |
| 186  | L19N 6+ 25 E  | 0.6 | 0.65 | 15 | 60  | <5 | 0.03 | <1 | 8  | 19 | 18  | 2.86  | <10 | 0.22 | 195  | 1  | 0.01 | 13 | 1190 | 12 | <5 | <20 | 4  | <0.1 | <10 | 23 | <10 | <1 | 33  |
| 187  | L19N 6+ 50 E  | <2  | 1.09 | 5  | 70  | <5 | 0.06 | <1 | 10 | 25 | 23  | 4.54  | <10 | 0.36 | 295  | <1 | <0.1 | 15 | 1810 | 16 | <5 | <20 | 7  | <0.1 | <10 | 23 | <10 | <1 | 51  |
| 188  | L19N 6+ 75 E  | <2  | 0.94 | 10 | 75  | <5 | 0.11 | <1 | 8  | 21 | 19  | 3.51  | <10 | 0.26 | 329  | <1 | 0.01 | 11 | 1150 | 20 | <5 | <20 | 9  | <0.1 | <10 | 32 | <10 | <1 | 41  |
| 189  | L19N 7+ 00 E  | 0.4 | 1.16 | 5  | 150 | <5 | 0.11 | <1 | 9  | 20 | 40  | 3.54  | <10 | 0.33 | 679  | <1 | 0.02 | 11 | 1720 | 16 | <5 | <20 | 10 | <0.1 | <10 | 25 | <10 | 1  | 55  |
| 190  | L19N 7+ 25 E  | <2  | 1.51 | 10 | 85  | <5 | 0.32 | <1 | 15 | 27 | 20  | 4.34  | <10 | 0.48 | 757  | <1 | 0.01 | 14 | 1370 | 18 | <5 | <20 | 16 | 0.01 | <10 | 29 | <10 | <1 | 109 |
| 191  | L19N 7+ 50 E  | <2  | 1.46 | <5 | 75  | <5 | 0.20 | <1 | 16 | 22 | 50  | 3.47  | <10 | 0.41 | 463  | <1 | 0.02 | 15 | 890  | 14 | <5 | <20 | 19 | 0.01 | <10 | 23 | <10 | 6  | 56  |
| 192  | L19N 7+ 75 E  | <2  | 1.11 | <5 | 45  | <5 | 0.54 | <1 | 6  | 19 | 136 | 2.39  | <10 | 0.21 | 127  | 1  | <0.1 | 7  | 650  | 10 | <5 | <20 | 29 | <0.1 | <10 | 19 | <10 | 2  | 60  |
| 193  | L19N 8+ 00 E  | 1.6 | 0.47 | <5 | 80  | <5 | 2.01 | <1 | 6  | 10 | 36  | 0.98  | <10 | 0.17 | 545  | <1 | <0.1 | 7  | 510  | 6  | <5 | <20 | 91 | <0.1 | <10 | 8  | <10 | 4  | 44  |
| 194  | L19N 8+ 25 E  | <2  | 1.90 | 15 | 100 | <5 | 0.22 | <1 | 18 | 52 | 37  | 4.21  | <10 | 0.85 | 375  | <1 | 0.01 | 31 | 970  | 20 | <5 | <20 | 16 | 0.01 | <10 | 43 | <10 | 4  | 82  |
| 195  | L19N 8+ 50 E  | <2  | 2.53 | 20 | 90  | <5 | 0.12 | <1 | 16 | 55 | 36  | 5.15  | <10 | 0.89 | 326  | <1 | <0.1 | 29 | 840  | 44 | <5 | <20 | 10 | <0.1 | <10 | 46 | <10 | <1 | 347 |
| 196  | L19N 8+ 75 E  | <2  | 0.84 | 5  | 35  | <5 | 0.09 | <1 | 9  | 17 | 45  | 3.71  | <10 | 0.19 | 237  | <1 | 0.01 | 11 | 1140 | 14 | <5 | <20 | 6  | 0.03 | <10 | 41 | <10 | <1 | 47  |
| 197  | L19N 9+ 00 E  | 0.2 | 0.77 | 15 | 45  | <5 | 0.07 | <1 | 9  | 9  | 114 | 3.70  | <10 | 0.09 | 353  | 3  | <0.1 | 19 | 1110 | 20 | <5 | <20 | 9  | 0.01 | <10 | 36 | <10 | <1 | 63  |
| 198  | L19N 9+ 25 E  | <2  | 1.78 | 10 | 680 | 10 | 1.07 | 2  | 38 | 21 | 48  | 12.50 | <10 | 0.20 | 4498 | <1 | <0.1 | 30 | 3360 | 16 | <5 | <20 | 24 | 0.02 | <10 | 66 | <10 | 23 | 95  |
| 199  | L19N 9+ 50 E  | <2  | 2.07 | 35 | 120 | <5 | 0.32 | <1 | 43 | 31 | 33  | 6.03  | <10 | 0.33 | 1067 | 2  | 0.01 | 56 | 1590 | 20 | <5 | <20 | 9  | <0.1 | <10 | 35 | <10 | 15 | 77  |
| 200  | L19N 9+ 75 E  | 0.6 | 1.07 | <5 | 65  | <5 | 0.10 | <1 | 10 | 18 | 15  | 2.95  | <10 | 0.19 | 266  | <1 | 0.02 | 18 | 740  | 6  | <5 | <20 | 5  | <0.1 | <10 | 41 | <10 | <1 | 35  |
| 201  | L19N 10+ 25 E | <2  | 1.05 | 40 | 70  | <5 | 0.28 | <1 | 24 | 23 | 38  | 6.05  | <10 | 0.26 | 448  | 4  | <0.1 | 68 | 2070 | 26 | <5 | <20 | 13 | <0.1 | <10 | 22 | <10 | 2  | 71  |
| 202  | L19N 10+ 50 E | 0.2 | 1.40 | 10 | 45  | <5 | 0.03 | <1 | 8  | 21 | 12  | 3.60  | <10 | 0.32 | 163  | <1 | 0.02 | 10 | 1110 | 10 | <5 | <20 | 5  | 0.01 | <10 | 32 | <10 | <1 | 34  |
| 203  | L19N 10+ 75 E | 0.8 | 0.89 | <5 | 50  | <5 | 0.08 | <1 | 6  | 13 | 10  | 2.10  | <10 | 0.19 | 264  | <1 | 0.02 | 7  | 770  | 8  | <5 | <20 | 7  | <0.1 | <10 | 23 | <10 | <1 | 25  |
| 204  | L19N 11+ 00 E | 0.4 | 1.30 | 5  | 55  | <5 | 0.03 | <1 | 7  | 17 | 9   | 2.78  | <10 | 0.32 | 147  | <1 | 0.02 | 7  | 610  | 6  | <5 | <20 | 5  | <0.1 | <10 | 25 | <10 | <1 | 31  |
| 205  | L19N 11+ 25 E | 0.4 | 1.33 | 5  | 55  | <5 | 0.03 | <1 | 7  | 20 | 16  | 3.11  | <10 | 0.36 | 208  | <1 | 0.02 | 8  | 920  | 10 | <5 | <20 | 6  | 0.01 | <10 | 30 | <10 | <1 | 36  |
| 206  | L19N 11+ 50 E | <2  | 1.60 | 15 | 50  | <5 | 0.05 | 1  | 8  | 24 | 10  | 4.57  | <10 | 0.38 | 228  | <1 | 0.01 | 10 | 1240 | 14 | <5 | <20 | 7  | 0.01 | <10 | 34 | <10 | <1 | 43  |
| 207  | L19N 11+ 75 E | 1.0 | 0.49 | 10 | 100 | <5 | 0.06 | <1 | 5  | 3  | 97  | 2.93  | <10 | 0.03 | 546  | 3  | <0.1 | 12 | 1010 | 28 | <5 | <20 | 11 | <0.1 | <10 | 17 | <10 | <1 | 79  |
| 208  | L19N 12+ 00 E | <2  | 2.59 | 25 | 300 | <5 | 0.50 | <1 | 28 | <1 | 20  | 8.64  | <10 | 0.95 | 2216 | <1 | <0.1 | 4  | 3470 | <2 | <5 | <20 | 29 | <0.1 | <10 | 32 | <10 | 3  | 173 |
| 209  | L19N 12+ 25 E | <2  | 2.87 | 30 | 205 | 5  | 0.75 | 1  | 40 | <1 | 37  | 9.53  | <10 | 1.05 | 2173 | 1  | <0.1 | 6  | 2430 | <2 | <5 | <20 | 33 | <0.1 | <10 | 27 | <10 | 9  | 96  |
| 210  | L19N 12+ 50 E | <2  | 1.90 | 5  | 95  | 5  | 0.10 | <1 | 47 | 4  | 52  | 10.00 | <10 | 0.65 | 547  | 2  | <0.1 | 35 | 3220 | 6  | <5 | <20 | 9  | 0.01 | <10 | 44 | <10 | <1 | 119 |
| 211  | L19N 12+ 75 E | 1.4 | 1.22 | 20 | 55  | <5 | 0.05 | <1 | 12 | 18 | 127 | 4.82  | <10 | 0.19 | 210  | 5  | <0.1 | 27 | 2360 | 24 | <5 | <20 | 10 | <0.1 | <10 | 40 | <10 | 4  | 76  |
| 212  | L19N 13+ 00 E | 0.2 | 1.47 | 15 | 55  | <5 | 0.01 | <1 | 8  | 21 | 23  | 4.43  | <10 | 0.44 | 184  | 1  | 0.03 | 21 | 2800 | 14 | <5 | <20 | 6  | <0.1 | <10 | 43 | <10 | 2  | 104 |
| 213  | L19N 13+ 25 E | 0.8 | 0.97 | 10 | 70  | <5 | 0.06 | <1 | 8  | 14 | 31  | 3.61  | <10 | 0.14 | 116  | 3  | 0.02 | 17 | 1540 | 22 | <5 | <20 | 11 | 0.02 | <10 | 53 | <10 | 2  | 67  |
| 214  | L19N 13+ 50 E | <2  | 1.21 | 15 | 60  | <5 | 0.02 | <1 | 7  | 27 | 19  | 5.67  | <10 | 0.12 | 98   | 2  | <0.1 | 14 | 2310 | 24 | <5 | <20 | 6  | 0.02 | <10 | 87 | <10 | <1 | 50  |
| 215  | L19N 13+ 75 E | <2  | 0.67 | 5  | 85  | <5 | 0.05 | <1 | 11 | 11 | 46  | 4.97  | <10 | 0.10 | 814  | 3  | <0.1 | 21 | 2110 | 28 | <5 | <20 | 26 | <0.1 | <10 | 42 | <10 | 1  | 89  |
| 216  | L19N 14+ 00 E | 0.2 | 1.09 | <5 | 65  | <5 | 0.05 | <1 | 8  | 15 | 15  | 3.96  | <10 | 0.15 | 262  | <1 | 0.01 | 11 | 1310 | 10 | <5 | <20 | 8  | 0.01 | <10 | 34 | <10 | <1 | 46  |
| 217  | L19N 14+ 25 E | 0.2 | 0.91 | 5  | 105 | <5 | 0.22 | 1  | 9  | 10 | 20  | 3.57  | <10 | 0.14 | 311  | <1 | 0.03 | 13 | 1150 | 22 | <5 | <20 | 16 | <0.1 | <10 | 23 | <10 | 4  | 47  |
| 218  | L19N 14+ 50 E | 1.0 | 0.78 | 5  | 95  | <5 | 0.10 | <1 | 9  | 9  | 12  | 2.31  | <10 | 0.10 | 294  | <1 | 0.03 | 8  | 900  | 14 | <5 | <20 | 11 | <0.1 | <10 | 25 | <10 | 3  | 37  |
| 219  | L19N 14+ 75 E | 0.8 | 0.93 | <5 | 175 | <5 | 0.18 | <1 | 10 | 11 | 14  | 2.18  | <10 | 0.13 | 1213 | <1 | 0.02 | 7  | 630  | 20 | <5 | <20 | 11 | 0.02 | <10 | 31 | <10 | 2  | 43  |
| 220  | L19N 15+ 00 E | 1.8 | 1.00 | <5 | 250 | <5 | 0.19 | <1 | 14 | 10 | 18  | 2.03  | <10 | 0.13 | 3120 | <1 | <0.1 | 7  | 820  | 20 | <5 | <20 | 13 | 0.01 | <10 | 24 | <10 | 5  | 43  |
| 221  | L11N 10+ 25 E | 0.2 | 1.08 | 10 | 115 | <5 | 0.47 | <1 | 12 | 18 | 16  | 3.75  | <10 | 0.24 | 521  | 1  | <0.1 | 14 | 1150 | 20 | <5 | <20 | 22 | <0.1 | <10 | 26 | <10 | 1  | 64  |
| 222  | L11N 10+ 50 E | <2  | 1.27 | 5  | 160 | <5 | 0.45 | <1 | 13 | 19 | 21  | 3.44  | <10 | 0.35 | 759  | <1 | 0.02 | 16 | 1070 | 12 | <5 | <20 | 22 | <0.1 | <10 | 21 | <10 | 7  | 84  |
| 223  | L11N 10+ 75 E | <2  | 1.39 | 10 | 50  | <5 | 0.21 | <1 | 13 | 22 | 22  | 4.05  | <10 | 0.46 | 313  | <1 | 0.02 | 20 | 1490 | 14 | <5 | <20 | 15 | <0.1 | <10 | 21 | <10 | 3  | 72  |

| Et# | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca %  | Cd | Co | Cr | Cu | Fe % | La  | Mg % | Mn   | Mo | Na %  | Ni | P    | Pb | Sb | Sn  | Sr | Ti %  | U   | V  | W   | Y  | Zn  |   |
|-----|---------------|-----|------|----|-----|----|-------|----|----|----|----|------|-----|------|------|----|-------|----|------|----|----|-----|----|-------|-----|----|-----|----|-----|---|
| 224 | L11N 11+ 00 E | <2  | 1.87 | 20 | 90  | <5 | 0.15  | <1 | 15 | 30 | 21 | 4.04 | <10 | 0.44 | 382  | <1 | 0.02  | 23 | 1590 | 18 | <5 | <20 | 13 | <0.01 | <10 | 28 | <10 | 5  | 105 |   |
| 225 | L11N 11+ 25 E | 0.2 | 0.69 | 15 | 60  | <5 | 0.06  | <1 | 9  | 28 | 19 | 3.58 | <10 | 0.17 | 305  | <1 | 0.01  | 29 | 2030 | 26 | <5 | <20 | 10 | <0.01 | <10 | 39 | <10 | <1 | 100 |   |
| 226 | L11N 11+ 50 E | <2  | 1.96 | 20 | 100 | <5 | 0.25  | <1 | 20 | 74 | 27 | 5.94 | <10 | 0.46 | 940  | 1  | <0.01 | 45 | 2530 | 26 | <5 | <20 | 15 | <0.01 | <10 | 55 | <10 | 7  | 165 |   |
| 227 | L11N 11+ 75 E | <2  | 1.20 | 30 | 55  | <5 | 0.03  | <1 | 10 | 65 | 16 | 5.26 | <10 | 0.46 | 249  | <1 | 0.01  | 22 | 2440 | 22 | <5 | <20 | 5  | 0.02  | <10 | 86 | <10 | <1 | 56  |   |
| 228 | L11N 12+ 00 E | 0.4 | 1.00 | 10 | 45  | <5 | 0.03  | <1 | 7  | 18 | 9  | 3.27 | <10 | 0.15 | 141  | <1 | 0.02  | 10 | 760  | 16 | <5 | <20 | 5  | 0.01  | <10 | 30 | <10 | <1 | 32  |   |
| 229 | L11N 12+ 25 E | <2  | 0.95 | 20 | 45  | <5 | 0.12  | <1 | 14 | 22 | 19 | 5.41 | <10 | 0.10 | 357  | <1 | <0.01 | 27 | 1500 | 26 | <5 | <20 | 7  | 0.01  | <10 | 38 | <10 | <1 | 76  |   |
| 230 | L11N 12+ 50 E | <2  | 0.63 | 25 | 60  | 5  | 0.03  | <1 | 13 | 11 | 19 | 4.72 | <10 | 0.05 | 211  | 1  | 0.01  | 40 | 1050 | 22 | <5 | <20 | 5  | 0.01  | <10 | 35 | <10 | <1 | 65  |   |
| 231 | L11N 12+ 75 E | 1.0 | 0.94 | 20 | 75  | <5 | 0.42  | 1  | 11 | 15 | 13 | 4.38 | <10 | 0.06 | 2014 | 1  | <0.01 | 25 | 1060 | 40 | <5 | <20 | 10 | <0.01 | <10 | 35 | <10 | <1 | 161 |   |
| 232 | L11N 13+ 00 E | 1.4 | 0.36 | 10 | 70  | <5 | 0.10  | <1 | 8  | 4  | 43 | 2.25 | <10 | 0.03 | 1610 | <1 | 0.02  | 17 | 580  | 12 | <5 | <20 | 7  | <0.01 | <10 | 20 | <10 | 2  | 85  |   |
| 233 | L11N 13+ 25 E | 1.0 | 0.58 | <5 | 25  | <5 | <0.01 | <1 | 6  | 2  | 13 | 1.72 | <10 | 0.01 | 73   | <1 | 0.04  | 6  | 430  | 12 | <5 | <20 | 3  | <0.01 | <10 | 18 | <10 | 2  | 22  |   |
| 234 | L11N 13+ 50 E | 0.6 | 1.30 | 10 | 100 | <5 | 0.13  | <1 | 12 | 13 | 23 | 3.62 | <10 | 0.12 | 906  | 1  | 0.02  | 12 | 1120 | 18 | <5 | <20 | 15 | <0.01 | <10 | 26 | <10 | 3  | 63  |   |
| 235 | L11N 13+ 75 E | 0.8 | 0.70 | 5  | 50  | <5 | 0.25  | <1 | 7  | 3  | 18 | 2.22 | <10 | 0.08 | 159  | <1 | 0.03  | 11 | 390  | 8  | <5 | <20 | 20 | <0.01 | <10 | 20 | <10 | 1  | 37  |   |
| 236 | L11N 14+ 00 E | <2  | 1.39 | 20 | 135 | <5 | 0.33  | <1 | 13 | 22 | 30 | 4.38 | <10 | 0.24 | 271  | 2  | 0.01  | 22 | 860  | 20 | <5 | <20 | 30 | <0.01 | <10 | 33 | <10 | 1  | 88  |   |
| 237 | L11N 14+ 25 E | <2  | 1.72 | 25 | 145 | <5 | 0.04  | <1 | 16 | 65 | 28 | 5.40 | <10 | 0.39 | 274  | 1  | 0.01  | 38 | 1730 | 6  | <5 | <20 | 6  | 0.01  | <10 | 38 | <10 | <1 | 91  |   |
| 238 | L11N 14+ 50 E | 2.2 | 0.69 | 5  | 80  | <5 | 0.05  | <1 | 4  | 14 | 7  | 1.30 | <10 | 0.11 | 93   | 1  | 0.02  | 7  | 650  | 16 | <5 | <20 | 12 | <0.01 | <10 | 23 | <10 | 1  | 30  |   |
| 239 | L11N 14+ 75 E | 0.4 | 1.23 | 15 | 125 | <5 | 0.19  | <1 | 11 | 33 | 20 | 3.67 | <10 | 0.30 | 480  | 1  | <0.01 | 22 | 1640 | 34 | <5 | <20 | 21 | <0.01 | <10 | 39 | <10 | 3  | 207 |   |
| 240 | L11N 15+ 00 E | 0.6 | 0.86 | 10 | 155 | <5 | 0.11  | <1 | 12 | 22 | 27 | 3.01 | <10 | 0.24 | 554  | <1 | 0.01  | 19 | 1160 | 14 | <5 | <20 | 14 | <0.01 | <10 | 32 | <10 | 2  | 65  |   |
| 241 | L13N 5+ 00 E  | 0.4 | 1.31 | 10 | 95  | <5 | 0.19  | <1 | 14 | 23 | 23 | 3.77 | <10 | 0.32 | 719  | 1  | 0.01  | 20 | 810  | 16 | <5 | <20 | 18 | <0.01 | <10 | 24 | <10 | 7  | 60  |   |
| 242 | L13N 5+ 25 E  | .   | .    | .  | .   | .  | .     | .  | .  | .  | .  | .    | .   | .    | .    | .  | .     | .  | .    | .  | .  | .   | .  | .     | .   | .  | .   | .  | .   | . |
| 243 | L13N 5+ 50 E  | 0.4 | 1.48 | 15 | 105 | <5 | 0.08  | <1 | 14 | 22 | 18 | 3.51 | <10 | 0.31 | 704  | <1 | 0.02  | 16 | 750  | 14 | <5 | <20 | 9  | <0.01 | <10 | 26 | <10 | 5  | 58  |   |
| 244 | L13N 5+ 75 E  | 0.2 | 1.82 | 10 | 75  | <5 | 0.04  | <1 | 12 | 23 | 25 | 3.79 | <10 | 0.22 | 521  | 2  | <0.01 | 13 | 740  | 26 | <5 | <20 | 7  | 0.01  | <10 | 26 | <10 | 1  | 61  |   |
| 245 | L13N 6+ 00 E  | 0.4 | 0.78 | 10 | 85  | <5 | 0.24  | <1 | 8  | 15 | 15 | 3.23 | <10 | 0.12 | 318  | 2  | 0.01  | 10 | 670  | 14 | <5 | <20 | 13 | 0.01  | <10 | 25 | <10 | 2  | 44  |   |
| 246 | L13N 6+ 25 E  | <2  | 1.92 | 20 | 100 | <5 | 0.24  | <1 | 16 | 27 | 17 | 4.30 | <10 | 0.28 | 450  | 1  | 0.01  | 15 | 830  | 18 | <5 | <20 | 15 | 0.01  | <10 | 30 | <10 | 2  | 59  |   |
| 247 | L13N 6+ 50 E  | 0.4 | 1.80 | 5  | 85  | <5 | 0.19  | <1 | 12 | 24 | 17 | 4.33 | <10 | 0.26 | 433  | <1 | <0.01 | 12 | 790  | 10 | <5 | <20 | 13 | <0.01 | <10 | 24 | <10 | <1 | 57  |   |
| 248 | L13N 6+ 75 E  | 0.4 | 1.07 | 10 | 100 | <5 | 0.10  | <1 | 9  | 19 | 15 | 3.13 | <10 | 0.26 | 370  | 1  | 0.01  | 12 | 1080 | 14 | <5 | <20 | 18 | <0.01 | <10 | 23 | <10 | 1  | 49  |   |
| 249 | L13N 7+ 00 E  | 0.6 | 1.18 | 10 | 160 | <5 | 0.55  | <1 | 9  | 18 | 15 | 2.80 | <10 | 0.20 | 588  | 2  | <0.01 | 10 | 710  | 10 | <5 | <20 | 38 | <0.01 | <10 | 22 | <10 | 1  | 50  |   |
| 250 | L13N 7+ 25 E  | 1.6 | 1.13 | 5  | 110 | <5 | 1.70  | <1 | 11 | 22 | 15 | 2.39 | <10 | 0.19 | 1155 | 2  | <0.01 | 10 | 1220 | 8  | <5 | <20 | 80 | <0.01 | <10 | 19 | <10 | 7  | 58  |   |
| 251 | L13N 7+ 50 E  | 1.2 | 0.81 | <5 | 80  | <5 | 0.10  | <1 | 4  | 12 | 14 | 2.15 | <10 | 0.13 | 132  | <1 | 0.01  | 5  | 850  | 8  | <5 | <20 | 14 | <0.01 | <10 | 20 | <10 | <1 | 24  |   |
| 252 | L13N 7+ 75 E  | 0.8 | 0.84 | 5  | 100 | <5 | 0.01  | <1 | 7  | 15 | 13 | 2.40 | <10 | 0.17 | 582  | 1  | 0.01  | 9  | 990  | 10 | <5 | <20 | 53 | <0.01 | <10 | 23 | <10 | 2  | 47  |   |
| 253 | L13N 8+ 00 E  | 0.4 | 0.79 | <5 | 95  | <5 | 0.51  | <1 | 7  | 11 | 16 | 2.10 | <10 | 0.15 | 361  | <1 | 0.01  | 8  | 790  | 8  | <5 | <20 | 31 | <0.01 | <10 | 22 | <10 | 1  | 38  |   |
| 254 | L13N 8+ 25 E  | 0.4 | 0.80 | 5  | 65  | <5 | 0.06  | <1 | 6  | 14 | 17 | 3.03 | <10 | 0.15 | 168  | <1 | 0.02  | 10 | 860  | 14 | <5 | <20 | 11 | <0.01 | <10 | 27 | <10 | <1 | 35  |   |
| 255 | L13N 8+ 50 E  | 0.8 | 1.13 | 10 | 75  | <5 | 0.10  | <1 | 10 | 16 | 14 | 2.49 | <10 | 0.31 | 214  | 1  | 0.02  | 12 | 560  | 10 | <5 | <20 | 13 | 0.01  | <10 | 23 | <10 | 3  | 40  |   |
| 256 | L13N 8+ 75 E  | 0.4 | 1.30 | <5 | 70  | <5 | 0.08  | <1 | 7  | 23 | 13 | 2.97 | <10 | 0.27 | 150  | 2  | 0.01  | 11 | 430  | 8  | <5 | <20 | 8  | <0.01 | <10 | 26 | <10 | <1 | 49  |   |
| 257 | L13N 9+ 00 E  | 0.8 | 0.81 | <5 | 75  | <5 | 0.05  | <1 | 6  | 13 | 10 | 2.35 | <10 | 0.21 | 162  | <1 | 0.02  | 9  | 700  | 8  | <5 | <20 | 9  | 0.01  | <10 | 23 | <10 | 1  | 37  |   |
| 258 | L13N 9+ 25 E  | 0.8 | 0.79 | <5 | 75  | <5 | 0.04  | <1 | 6  | 16 | 9  | 2.43 | <10 | 0.17 | 258  | <1 | 0.02  | 8  | 590  | 8  | <5 | <20 | 7  | 0.01  | <10 | 28 | <10 | <1 | 35  |   |
| 259 | L13N 9+ 50 E  | 0.8 | 0.66 | 5  | 35  | <5 | 0.04  | <1 | 5  | 13 | 7  | 2.20 | <10 | 0.12 | 110  | <1 | 0.02  | 7  | 680  | 10 | <5 | <20 | 6  | 0.01  | <10 | 26 | <10 | <1 | 29  |   |
| 260 | L13N 9+ 75 E  | 0.8 | 0.86 | <5 | 40  | <5 | 0.05  | <1 | 4  | 14 | 6  | 2.53 | <10 | 0.15 | 141  | <1 | 0.02  | 5  | 980  | 8  | <5 | <20 | 6  | 0.01  | <10 | 27 | <10 | <1 | 26  |   |
| 261 | L13N 10+ 25 E | 0.6 | 2.15 | 15 | 160 | <5 | 0.41  | 2  | 17 | 46 | 16 | 3.82 | <10 | 0.51 | 387  | 2  | <0.01 | 31 | 810  | 18 | <5 | <20 | 14 | <0.01 | <10 | 35 | <10 | 8  | 268 |   |
| 262 | L13N 10+ 50 E | 0.4 | 1.47 | 20 | 160 | <5 | 1.78  | 1  | 11 | 19 | 12 | 2.53 | <10 | 0.25 | 1730 | 6  | <0.01 | 19 | 1150 | 42 | <5 | <20 | 26 | <0.01 | <10 | 27 | <10 | 9  | 199 |   |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu | Fe % | La  | Mg % | Mn   | Mo | Na %  | Ni | P    | Pb | Sb | Sn  | Sr  | Ti %  | U   | V   | W   | Y  | Zn  |
|------|---------------|-----|------|----|-----|----|------|----|----|-----|----|------|-----|------|------|----|-------|----|------|----|----|-----|-----|-------|-----|-----|-----|----|-----|
| 263  | L13N 10+ 75 E | 0.2 | 1.61 | 10 | 65  | <5 | 0.05 | <1 | 7  | 29  | 9  | 3.90 | <10 | 0.30 | 138  | <1 | 0.02  | 10 | 770  | 10 | <5 | <20 | 7   | <0.01 | <10 | 41  | <10 | <1 | 44  |
| 264  | L13N 11+ 00 E | <2  | 2.04 | 15 | 40  | <5 | 0.07 | <1 | 20 | 92  | 21 | 6.37 | <10 | 1.00 | 420  | 2  | 0.01  | 41 | 1470 | 10 | <5 | <20 | 5   | 0.01  | <10 | 92  | <10 | <1 | 105 |
| 265  | L13N 11+ 25 E | <2  | 3.44 | 15 | 70  | <5 | 0.07 | <1 | 17 | 124 | 30 | 6.28 | <10 | 1.69 | 326  | <1 | <0.01 | 35 | 1450 | 12 | <5 | <20 | 6   | <0.01 | <10 | 112 | <10 | <1 | 117 |
| 266  | L13N 11+ 50 E | 1.2 | 0.98 | 10 | 40  | <5 | 0.02 | <1 | 6  | 18  | 19 | 2.57 | <10 | 0.15 | 149  | 4  | 0.02  | 12 | 890  | 20 | <5 | <20 | 8   | <0.01 | <10 | 50  | <10 | <1 | 57  |
| 267  | L13N 11+ 75 E | 0.6 | 1.91 | 10 | 55  | <5 | 0.02 | <1 | 7  | 30  | 9  | 2.74 | <10 | 0.65 | 309  | <1 | 0.01  | 9  | 760  | 2  | <5 | <20 | 4   | <0.01 | <10 | 36  | <10 | <1 | 45  |
| 268  | L13N 12+ 00 E | 0.8 | 0.74 | 10 | 75  | <5 | 0.10 | <1 | 7  | 12  | 12 | 2.52 | <10 | 0.10 | 150  | <1 | 0.02  | 11 | 840  | 10 | <5 | <20 | 9   | <0.01 | <10 | 24  | <10 | <1 | 40  |
| 269  | L13N 12+ 25 E | 1.2 | 1.40 | 15 | 140 | <5 | 1.04 | 1  | 20 | 19  | 25 | 3.58 | <10 | 0.29 | 2281 | 2  | <0.01 | 20 | 2140 | 20 | <5 | <20 | 51  | 0.01  | <10 | 23  | <10 | 9  | 114 |
| 270  | L13N 12+ 50 E | 1.0 | 1.32 | 10 | 125 | <5 | 0.82 | 1  | 14 | 15  | 22 | 2.77 | <10 | 0.25 | 1107 | 1  | 0.01  | 15 | 1430 | 12 | <5 | <20 | 45  | <0.01 | <10 | 22  | <10 | 8  | 58  |
| 271  | L13N 12+ 75 E | 0.8 | 1.30 | 10 | 165 | <5 | 0.74 | <1 | 16 | 18  | 17 | 3.14 | <10 | 0.24 | 2128 | 1  | 0.01  | 14 | 1380 | 14 | <5 | <20 | 40  | <0.01 | <10 | 24  | <10 | 5  | 82  |
| 272  | L13N 13+ 00 E | 0.8 | 1.75 | 15 | 150 | 5  | 0.73 | 1  | 20 | 21  | 32 | 3.68 | <10 | 0.28 | 2202 | 1  | 0.01  | 21 | 1970 | 20 | <5 | <20 | 42  | <0.01 | <10 | 24  | <10 | 17 | 85  |
| 273  | L13N 13+ 25 E | 1.2 | 1.90 | 15 | 150 | <5 | 0.63 | <1 | 18 | 21  | 32 | 3.70 | <10 | 0.32 | 457  | 1  | 0.01  | 23 | 1710 | 18 | <5 | <20 | 40  | <0.01 | <10 | 24  | <10 | 13 | 72  |
| 274  | L13N 13+ 50 E | 1.0 | 0.67 | 10 | 85  | <5 | 0.15 | 1  | 6  | 12  | 12 | 2.40 | <10 | 0.09 | 99   | 1  | 0.02  | 14 | 1360 | 22 | <5 | <20 | 12  | <0.01 | <10 | 27  | <10 | 1  | 51  |
| 275  | L13N 13+ 75 E | 2.0 | 0.58 | <5 | 65  | <5 | 0.07 | 1  | 7  | 7   | 33 | 3.23 | <10 | 0.06 | 134  | <1 | <0.01 | 16 | 1270 | 12 | <5 | <20 | 7   | <0.01 | <10 | 18  | <10 | <1 | 77  |
| 276  | L13N 14+ 00 E | 0.8 | 0.56 | <5 | 75  | <5 | 0.10 | <1 | 8  | 6   | 26 | 3.31 | <10 | 0.07 | 166  | 1  | <0.01 | 14 | 1120 | 10 | <5 | <20 | 9   | <0.01 | <10 | 20  | <10 | <1 | 57  |
| 277  | L13N 14+ 25 E | 0.2 | 1.20 | 15 | 60  | <5 | 0.10 | 1  | 9  | 34  | 24 | 4.37 | <10 | 0.28 | 165  | 1  | <0.01 | 22 | 1840 | 24 | <5 | <20 | 17  | <0.01 | <10 | 35  | <10 | 1  | 70  |
| 278  | L13N 14+ 50 E | <2  | 0.78 | 15 | 45  | <5 | 0.06 | 1  | 15 | 16  | 41 | 4.58 | <10 | 0.09 | 590  | 9  | 0.03  | 25 | 1170 | 20 | <5 | <20 | 9   | <0.01 | <10 | 26  | <10 | 6  | 143 |
| 279  | L13N 14+ 75 E | 1.6 | 2.85 | 30 | 45  | <5 | 0.03 | <1 | 8  | 51  | 37 | 8.66 | <10 | 0.98 | 213  | 3  | 0.04  | 9  | 1600 | 12 | <5 | <20 | 24  | <0.01 | <10 | 66  | <10 | <1 | 75  |
| 280  | L13N 15+ 00 E | 1.2 | 1.28 | 30 | 70  | <5 | 0.05 | 1  | 9  | 36  | 22 | 6.16 | <10 | 0.21 | 251  | 3  | 0.02  | 13 | 3020 | 32 | <5 | <20 | 12  | 0.01  | <10 | 76  | <10 | <1 | 78  |
| 281  | L14N 5+ 00 E  | <2  | 0.82 | 30 | 50  | <5 | 0.06 | 1  | 9  | 22  | 18 | 6.21 | <10 | 0.13 | 491  | 3  | 0.01  | 9  | 670  | 16 | <5 | <20 | 6   | <0.01 | <10 | 29  | <10 | <1 | 46  |
| 282  | L14N 5+ 25 E  | 0.4 | 1.24 | 20 | 105 | <5 | 2.07 | 1  | 17 | 32  | 20 | 4.63 | <10 | 0.27 | 1120 | 2  | 0.01  | 13 | 1170 | 20 | <5 | <20 | 48  | <0.01 | <10 | 27  | <10 | 9  | 59  |
| 283  | L14N 5+ 50 E  | 0.4 | 1.23 | 15 | 90  | <5 | 0.26 | <1 | 17 | 24  | 24 | 3.61 | <10 | 0.37 | 850  | 2  | 0.01  | 21 | 780  | 22 | <5 | <20 | 37  | <0.01 | <10 | 23  | <10 | 9  | 91  |
| 284  | L14N 5+ 75 E  | 1.8 | 0.35 | <5 | 45  | <5 | 2.87 | <1 | 5  | 5   | 11 | 0.94 | <10 | 0.20 | 838  | <1 | <0.01 | 6  | 920  | 4  | <5 | <20 | 112 | <0.01 | <10 | 4   | <10 | 3  | 40  |
| 285  | L14N 6+ 00 E  | 1.2 | 0.55 | 10 | 50  | <5 | 0.10 | 1  | 5  | 12  | 13 | 2.12 | <10 | 0.11 | 174  | 2  | 0.01  | 6  | 390  | 10 | <5 | <20 | 7   | <0.01 | <10 | 27  | <10 | <1 | 25  |
| 286  | L14N 6+ 25 E  | 0.6 | 1.02 | 15 | 100 | <5 | 0.06 | <1 | 13 | 17  | 25 | 3.20 | <10 | 0.22 | 1047 | <1 | 0.01  | 15 | 620  | 14 | <5 | <20 | 7   | <0.01 | <10 | 17  | <10 | 3  | 52  |
| 287  | L14N 6+ 50 E  | 0.6 | 0.78 | 10 | 85  | <5 | 0.11 | <1 | 6  | 14  | 14 | 2.32 | <10 | 0.15 | 215  | <1 | 0.01  | 8  | 550  | 10 | <5 | <20 | 8   | <0.01 | <10 | 29  | <10 | <1 | 36  |
| 288  | L14N 6+ 75 E  | 0.6 | 1.56 | 15 | 75  | <5 | 0.14 | <1 | 17 | 20  | 29 | 3.57 | <10 | 0.45 | 402  | <1 | 0.01  | 21 | 600  | 12 | <5 | <20 | 12  | <0.01 | <10 | 15  | <10 | 3  | 58  |
| 289  | L14N 7+ 00 E  | 1.8 | 0.56 | <5 | 90  | <5 | 3.34 | <1 | 7  | 10  | 25 | 1.28 | <10 | 0.19 | 1180 | 2  | <0.01 | 9  | 980  | 6  | <5 | <20 | 124 | <0.01 | <10 | 11  | <10 | 5  | 66  |
| 290  | L14N 7+ 25 E  | 0.4 | 1.24 | 5  | 70  | <5 | 0.41 | <1 | 11 | 21  | 20 | 2.86 | <10 | 0.27 | 363  | 1  | 0.01  | 13 | 670  | 10 | <5 | <20 | 24  | <0.01 | <10 | 23  | <10 | 4  | 49  |
| 291  | L14N 7+ 50 E  | <2  | 1.59 | 15 | 125 | 5  | 0.49 | <1 | 18 | 43  | 37 | 4.09 | <10 | 0.39 | 664  | 2  | 0.02  | 23 | 910  | 28 | <5 | <20 | 32  | <0.01 | <10 | 32  | <10 | 53 | 110 |
| 292  | L14N 7+ 75 E  | 1.6 | 2.43 | 25 | 155 | <5 | 0.59 | <1 | 22 | 34  | 41 | 4.37 | <10 | 0.24 | 580  | 2  | 0.03  | 26 | 930  | 26 | <5 | <20 | 35  | 0.01  | <10 | 33  | <10 | 39 | 65  |
| 293  | L14N 8+ 00 E  | 1.8 | 0.85 | <5 | 65  | <5 | 0.06 | <1 | 4  | 10  | 6  | 1.43 | <10 | 0.11 | 185  | <1 | 0.02  | 5  | 350  | 4  | <5 | <20 | 8   | <0.01 | <10 | 21  | <10 | 2  | 23  |
| 294  | L14N 8+ 25 E  | 0.6 | 0.99 | 5  | 90  | <5 | 0.05 | <1 | 6  | 16  | 7  | 2.85 | <10 | 0.21 | 143  | <1 | 0.02  | 7  | 870  | 12 | <5 | <20 | 8   | 0.01  | <10 | 26  | <10 | <1 | 31  |
| 295  | L14N 8+ 50 E  | 0.8 | 0.92 | <5 | 45  | <5 | 0.04 | <1 | 5  | 15  | 7  | 2.92 | <10 | 0.15 | 209  | <1 | 0.02  | 7  | 860  | 8  | <5 | <20 | 7   | 0.01  | <10 | 24  | <10 | <1 | 31  |
| 296  | L14N 8+ 75 E  | 0.6 | 0.81 | 5  | 50  | <5 | 0.08 | 1  | 5  | 16  | 9  | 2.80 | <10 | 0.16 | 134  | <1 | 0.02  | 7  | 780  | 12 | <5 | <20 | 8   | 0.02  | <10 | 28  | <10 | <1 | 27  |
| 297  | L14N 9+ 00 E  | 0.8 | 0.76 | 5  | 45  | <5 | 0.05 | <1 | 6  | 15  | 9  | 2.48 | <10 | 0.19 | 255  | <1 | 0.01  | 9  | 1040 | 12 | <5 | <20 | 6   | 0.01  | <10 | 36  | <10 | <1 | 35  |
| 298  | L14N 9+ 25 E  | 1.0 | 0.78 | 5  | 55  | <5 | 0.05 | <1 | 4  | 18  | 5  | 2.66 | <10 | 0.15 | 108  | <1 | 0.01  | 6  | 1370 | 22 | <5 | <20 | 6   | 0.02  | <10 | 38  | <10 | <1 | 27  |
| 299  | L14N 9+ 50 E  | 1.6 | 0.55 | <5 | 75  | <5 | 0.07 | <1 | 7  | 6   | 3  | 0.86 | <10 | 0.08 | 358  | <1 | 0.02  | 3  | 400  | <2 | <5 | <20 | 6   | <0.01 | <10 | 13  | <10 | <1 | 17  |
| 300  | L14N 9+ 75 E  | 1.2 | 0.62 | <5 | 70  | <5 | 0.07 | <1 | 3  | 11  | 5  | 1.16 | <10 | 0.13 | 112  | <1 | 0.02  | 5  | 490  | 8  | <5 | <20 | 7   | <0.01 | <10 | 21  | <10 | 1  | 20  |
| 301  | L14N 10+ 25 E | <2  | 4.23 | 20 | 50  | <5 | 0.14 | <1 | 20 | 214 | 16 | 6.42 | <10 | 2.80 | 503  | <1 | 0.02  | 40 | 1600 | 6  | <5 | <20 | 10  | 0.05  | <10 | 149 | <10 | <1 | 99  |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na %  | Ni | P    | Pb | Sb | Sn  | Sr | Ti %  | U   | V   | W   | Y  | Zn  |
|------|---------------|-----|------|----|-----|----|------|----|----|-----|-----|------|-----|------|------|----|-------|----|------|----|----|-----|----|-------|-----|-----|-----|----|-----|
| 302  | L14N 10+ 50 E | < 2 | 3.37 | 10 | 205 | <5 | 0.30 | <1 | 34 | 184 | 30  | 6.06 | <10 | 3.41 | 889  | <1 | 0.02  | 49 | 1240 | 6  | <5 | <20 | 16 | 0.12  | <10 | 199 | <10 | <1 | 76  |
| 303  | L14N 10+ 75 E | < 2 | 3.01 | 25 | 70  | 10 | 0.07 | <1 | 25 | 116 | 28  | 5.63 | <10 | 2.05 | 587  | 1  | 0.02  | 31 | 1090 | 6  | <5 | <20 | 6  | 0.02  | <10 | 155 | <10 | <1 | 66  |
| 304  | L14N 11+ 00 E | < 2 | 1.30 | 20 | 55  | <5 | 0.03 | <1 | 13 | 39  | 19  | 4.22 | <10 | 0.37 | 339  | <1 | 0.01  | 18 | 910  | 16 | <5 | <20 | 5  | 0.01  | <10 | 52  | <10 | <1 | 55  |
| 305  | L14N 11+ 25 E | < 2 | 0.81 | 15 | 50  | <5 | 0.04 | <1 | 4  | 22  | 4   | 2.16 | <10 | 0.20 | 168  | <1 | 0.02  | 7  | 520  | 16 | <5 | <20 | 6  | <0.01 | <10 | 27  | <10 | <1 | 26  |
| 306  | L14N 11+ 50 E | < 2 | 2.19 | 15 | 50  | <5 | 0.03 | <1 | 6  | 39  | 6   | 2.86 | <10 | 0.91 | 174  | <1 | 0.02  | 10 | 780  | <2 | <5 | <20 | 4  | <0.01 | <10 | 29  | <10 | <1 | 51  |
| 307  | L14N 11+ 75 E | < 2 | 1.63 | 15 | 70  | <5 | 0.02 | <1 | 8  | 26  | 13  | 3.79 | <10 | 0.62 | 350  | <1 | 0.02  | 12 | 950  | 12 | <5 | <20 | 5  | <0.01 | <10 | 29  | <10 | <1 | 55  |
| 308  | L14N 12+ 00 E | < 2 | 0.31 | 15 | 20  | <5 | 0.07 | <1 | 6  | 6   | 5   | 1.33 | <10 | 0.04 | 161  | 1  | 0.04  | 7  | 420  | 8  | <5 | <20 | 5  | <0.01 | <10 | 20  | <10 | 2  | 28  |
| 309  | L14N 12+ 25 E | < 2 | 1.12 | 25 | 55  | <5 | 0.14 | <1 | 8  | 16  | 19  | 3.05 | <10 | 0.21 | 180  | 2  | 0.02  | 16 | 2040 | 26 | <5 | <20 | 15 | <0.01 | <10 | 22  | <10 | 1  | 69  |
| 310  | L14N 12+ 50 E | < 2 | 0.80 | 60 | 75  | <5 | 0.20 | 1  | 11 | 40  | 19  | 4.44 | <10 | 0.19 | 632  | <1 | 0.02  | 55 | 2290 | 74 | <5 | <20 | 16 | 0.01  | <10 | 30  | <10 | 1  | 239 |
| 311  | L14N 12+ 75 E | < 2 | 1.34 | 25 | 120 | <5 | 0.67 | 2  | 30 | 19  | 50  | 5.19 | <10 | 0.41 | 610  | 2  | 0.01  | 55 | 1630 | 20 | <5 | <20 | 37 | <0.01 | <10 | 19  | <10 | 6  | 201 |
| 312  | L14N 13+ 00 E | 0.8 | 1.56 | 20 | 170 | <5 | 1.11 | 4  | 20 | 21  | 56  | 2.66 | <10 | 0.42 | 180  | <1 | 0.02  | 49 | 1800 | 20 | <5 | <20 | 54 | 0.01  | <10 | 21  | <10 | 14 | 166 |
| 313  | L14N 13+ 25 E | < 2 | 1.63 | 20 | 185 | <5 | 0.46 | <1 | 8  | 18  | 38  | 4.00 | <10 | 0.29 | 206  | 2  | 0.01  | 12 | 1410 | 24 | <5 | <20 | 28 | <0.01 | <10 | 35  | <10 | <1 | 74  |
| 314  | L14N 13+ 50 E | < 2 | 0.84 | 15 | 85  | <5 | 0.44 | <1 | 4  | 6   | 26  | 3.16 | <10 | 0.14 | 78   | 2  | <0.01 | 8  | 1160 | 18 | <5 | <20 | 34 | <0.01 | <10 | 34  | <10 | <1 | 73  |
| 315  | L14N 13+ 75 E | < 2 | 1.56 | 50 | 75  | <5 | 0.15 | <1 | 17 | 25  | 26  | 7.33 | <10 | 0.30 | 406  | 2  | 0.01  | 36 | 3240 | 36 | <5 | <20 | 15 | 0.01  | <10 | 39  | <10 | <1 | 137 |
| 316  | L14N 14+ 00 E | 2.6 | 0.92 | 30 | 75  | <5 | 0.09 | 1  | 11 | 11  | 170 | 5.48 | <10 | 0.14 | 266  | 4  | <0.01 | 30 | 2400 | 30 | <5 | <20 | 79 | <0.01 | <10 | 51  | <10 | 4  | 174 |
| 317  | L14N 14+ 25 E | < 2 | 1.14 | 25 | 60  | <5 | 0.11 | <1 | 15 | 25  | 32  | 5.39 | <10 | 0.16 | 580  | 8  | 0.03  | 26 | 1400 | 30 | <5 | <20 | 15 | 0.01  | <10 | 84  | <10 | 1  | 99  |
| 318  | L14N 14+ 50 E | < 2 | 1.40 | 20 | 115 | <5 | 0.37 | <1 | 9  | 28  | 17  | 3.54 | <10 | 0.36 | 343  | 2  | 0.02  | 15 | 960  | 18 | <5 | <20 | 20 | <0.01 | <10 | 41  | <10 | <1 | 72  |
| 319  | L14N 14+ 75 E | < 2 | 1.66 | 45 | 175 | <5 | 0.33 | 2  | 17 | 44  | 43  | 6.71 | <10 | 0.59 | 468  | 3  | 0.02  | 42 | 1780 | 40 | <5 | <20 | 18 | 0.01  | <10 | 50  | <10 | 4  | 137 |
| 320  | L14N 15+ 00 E | < 2 | 1.69 | 25 | 80  | <5 | 0.02 | <1 | 9  | 28  | 23  | 6.57 | <10 | 0.31 | 172  | <1 | <0.01 | 23 | 1670 | 22 | <5 | <20 | 5  | 0.01  | <10 | 35  | <10 | <1 | 94  |
| 321  | L12N 5+ 00 E  | < 2 | 2.35 | 40 | 230 | <5 | 0.18 | 1  | 22 | 42  | 30  | 5.89 | <10 | 0.36 | 1927 | 1  | 0.03  | 30 | 1380 | 40 | <5 | <20 | 16 | 0.01  | <10 | 40  | <10 | 19 | 111 |
| 322  | L12N 5+ 25 E  | < 2 | 1.21 | 35 | 80  | <5 | 0.12 | <1 | 18 | 30  | 23  | 5.62 | <10 | 0.31 | 643  | 1  | 0.02  | 29 | 1270 | 36 | <5 | <20 | 10 | 0.01  | <10 | 26  | <10 | 3  | 92  |
| 323  | L12N 5+ 50 E  | < 2 | 1.82 | 40 | 200 | 5  | 0.70 | <1 | 25 | 36  | 30  | 5.12 | <10 | 0.31 | 1926 | 1  | 0.03  | 31 | 1550 | 38 | <5 | <20 | 30 | 0.01  | <10 | 34  | <10 | 30 | 109 |
| 324  | L12N 5+ 75 E  | < 2 | 0.87 | 40 | 110 | <5 | 0.16 | <1 | 14 | 29  | 21  | 5.73 | <10 | 0.19 | 494  | <1 | 0.01  | 21 | 1060 | 38 | <5 | <20 | 11 | 0.02  | <10 | 38  | <10 | <1 | 68  |
| 325  | L12N 6+ 00 E  | < 2 | 0.67 | 30 | 170 | <5 | 0.08 | <1 | 9  | 18  | 14  | 3.97 | <10 | 0.15 | 400  | <1 | 0.02  | 12 | 950  | 24 | <5 | <20 | 8  | 0.01  | <10 | 30  | <10 | <1 | 55  |
| 326  | L12N 6+ 25 E  | < 2 | 1.01 | 35 | 130 | <5 | 0.09 | <1 | 11 | 26  | 16  | 5.54 | <10 | 0.23 | 663  | <1 | 0.01  | 17 | 2210 | 30 | <5 | <20 | 8  | 0.01  | <10 | 28  | <10 | <1 | 60  |
| 327  | L12N 6+ 50 E  | < 2 | 0.65 | 30 | 85  | <5 | 0.12 | <1 | 7  | 17  | 9   | 3.02 | <10 | 0.15 | 151  | 2  | 0.02  | 12 | 1240 | 24 | <5 | <20 | 8  | 0.01  | <10 | 33  | <10 | <1 | 45  |
| 328  | L12N 6+ 75 E  | < 2 | 0.96 | 20 | 110 | <5 | 0.15 | <1 | 9  | 20  | 13  | 4.12 | <10 | 0.18 | 483  | <1 | 0.02  | 13 | 1170 | 16 | <5 | <20 | 9  | 0.02  | <10 | 27  | <10 | <1 | 56  |
| 329  | L12N 7+ 00 E  | < 2 | 0.69 | 15 | 85  | <5 | 0.02 | <1 | 4  | 12  | 5   | 1.91 | <10 | 0.08 | 81   | <1 | 0.03  | 5  | 650  | 12 | <5 | <20 | 5  | 0.01  | <10 | 25  | <10 | 1  | 23  |
| 330  | L12N 7+ 25 E  | < 2 | 1.07 | 20 | 95  | <5 | 0.65 | <1 | 7  | 21  | 9   | 3.47 | <10 | 0.24 | 176  | <1 | 0.02  | 12 | 1520 | 16 | <5 | <20 | 7  | <0.01 | <10 | 30  | <10 | <1 | 47  |
| 331  | L12N 7+ 50 E  | < 2 | 1.49 | 30 | 165 | <5 | 0.22 | <1 | 12 | 28  | 12  | 4.94 | <10 | 0.43 | 392  | <1 | 0.02  | 19 | 1630 | 44 | <5 | <20 | 21 | 0.01  | <10 | 24  | <10 | <1 | 79  |
| 332  | L12N 7+ 75 E  | < 2 | 1.31 | 25 | 110 | <5 | 0.11 | <1 | 9  | 21  | 16  | 3.93 | <10 | 0.27 | 215  | <1 | 0.02  | 14 | 1080 | 20 | <5 | <20 | 11 | 0.01  | <10 | 31  | <10 | 2  | 57  |
| 333  | L12N 8+ 00 E  | < 2 | 1.00 | 25 | 145 | <5 | 0.17 | <1 | 11 | 21  | 71  | 4.46 | <10 | 0.25 | 426  | <1 | 0.02  | 18 | 1160 | 26 | <5 | <20 | 13 | 0.01  | <10 | 40  | <10 | <1 | 77  |
| 334  | L12N 8+ 25 E  | < 2 | 1.22 | 20 | 110 | <5 | 0.09 | <1 | 6  | 21  | 10  | 2.83 | <10 | 0.22 | 156  | <1 | 0.02  | 8  | 1030 | 20 | <5 | <20 | 8  | 0.01  | <10 | 30  | <10 | <1 | 42  |
| 335  | L12N 8+ 50 E  | < 2 | 0.93 | 10 | 110 | <5 | 0.05 | <1 | 3  | 11  | 7   | 1.65 | <10 | 0.11 | 128  | <1 | 0.02  | 3  | 530  | 12 | <5 | <20 | 8  | <0.01 | <10 | 24  | <10 | <1 | 25  |
| 336  | L12N 8+ 75 E  | < 2 | 1.30 | 25 | 140 | <5 | 0.15 | <1 | 6  | 26  | 10  | 4.17 | <10 | 0.29 | 162  | <1 | 0.02  | 11 | 2250 | 24 | <5 | <20 | 15 | 0.01  | <10 | 32  | <10 | <1 | 55  |
| 337  | L12N 9+ 00 E  | < 2 | 1.26 | 20 | 165 | <5 | 0.03 | <1 | 8  | 28  | 12  | 4.55 | <10 | 0.26 | 376  | <1 | 0.01  | 10 | 1920 | 20 | <5 | <20 | 12 | 0.01  | <10 | 31  | <10 | <1 | 67  |
| 338  | L12N 9+ 25 E  | < 2 | 1.16 | 15 | 85  | <5 | 0.13 | 1  | 8  | 21  | 9   | 3.75 | <10 | 0.29 | 521  | <1 | 0.02  | 11 | 1450 | 16 | <5 | <20 | 12 | 0.01  | <10 | 27  | <10 | <1 | 58  |
| 339  | L12N 9+ 50 E  | < 2 | 0.97 | 30 | 95  | <5 | 0.08 | <1 | 8  | 24  | 12  | 4.84 | <10 | 0.20 | 218  | 1  | 0.02  | 14 | 1680 | 28 | <5 | <20 | 10 | 0.02  | <10 | 31  | <10 | <1 | 59  |
| 340  | L12N 9+ 75 E  | < 2 | 0.87 | 15 | 100 | <5 | 0.10 | <1 | 8  | 15  | 17  | 4.08 | <10 | 0.12 | 212  | <1 | 0.03  | 17 | 730  | 20 | <5 | <20 | 16 | <0.01 | <10 | 24  | <10 | 10 | 58  |

| Et# | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr | Ti % | U   | V  | W   | Y   | Zn  |   |
|-----|---------------|-----|------|----|-----|----|------|----|----|----|----|------|-----|------|------|----|------|----|------|----|----|-----|----|------|-----|----|-----|-----|-----|---|
| 341 | L12N 10+ 25 E | <2  | 1.39 | 25 | 80  | <5 | 0.19 | <1 | 11 | 27 | 14 | 4.80 | <10 | 0.34 | 314  | <1 | 0.02 | 20 | 970  | 22 | <5 | <20 | 13 | 0.01 | <10 | 26 | <10 | 1   | 70  |   |
| 342 | L12N 10+ 50 E | <2  | 1.73 | 25 | 100 | <5 | 0.08 | <1 | 11 | 25 | 15 | 5.08 | <10 | 0.37 | 275  | <1 | 0.01 | 19 | 990  | 14 | <5 | <20 | 10 | <0.1 | <10 | 21 | <10 | <1  | 85  |   |
| 343 | L12N 10+ 75 E | <2  | 1.93 | 35 | 60  | <5 | 0.05 | <1 | 11 | 27 | 15 | 4.90 | <10 | 0.33 | 171  | 2  | 0.01 | 21 | 680  | 24 | <5 | <20 | 6  | <0.1 | <10 | 21 | <10 | <1  | 78  |   |
| 344 | L12N 11+ 00 E | <2  | 0.87 | 20 | 55  | <5 | 0.03 | <1 | 5  | 15 | 7  | 3.15 | <10 | 0.13 | 130  | <1 | 0.02 | 10 | 880  | 20 | <5 | <20 | 6  | 0.02 | <10 | 29 | <10 | <1  | 39  |   |
| 345 | L12N 11+ 25 E | <2  | 1.74 | 30 | 65  | <5 | 0.03 | <1 | 12 | 24 | 16 | 5.11 | <10 | 0.38 | 282  | <1 | 0.02 | 23 | 920  | 22 | <5 | <20 | 6  | <0.1 | <10 | 20 | <10 | <1  | 97  |   |
| 346 | L12N 11+ 50 E | <2  | 1.58 | 40 | 75  | <5 | 0.06 | <1 | 12 | 30 | 12 | 5.88 | <10 | 0.25 | 356  | 1  | 0.02 | 21 | 1860 | 24 | <5 | <20 | 7  | 0.01 | <10 | 30 | <10 | <1  | 72  |   |
| 347 | L12N 11+ 75 E | <2  | 1.17 | 60 | 60  | <5 | 0.11 | <1 | 11 | 30 | 20 | 5.79 | <10 | 0.24 | 358  | 1  | 0.01 | 27 | 2290 | 30 | <5 | <20 | 11 | 0.02 | <10 | 29 | <10 | <1  | 71  |   |
| 348 | L12N 12+ 00 E | <2  | 1.07 | 40 | 50  | <5 | 0.05 | <1 | 9  | 22 | 10 | 5.17 | <10 | 0.16 | 412  | <1 | 0.01 | 19 | 1690 | 34 | <5 | <20 | 7  | 0.01 | <10 | 33 | <10 | <1  | 65  |   |
| 349 | L12N 12+ 25 E | <2  | 1.36 | 50 | 70  | <5 | 0.10 | 1  | 15 | 27 | 17 | 5.92 | <10 | 0.24 | 804  | 2  | 0.02 | 40 | 1530 | 40 | <5 | <20 | 8  | 0.01 | <10 | 31 | <10 | <1  | 136 |   |
| 350 | L12N 12+ 50 E | <2  | 0.94 | 75 | 45  | <5 | 0.06 | <1 | 12 | 15 | 24 | 6.58 | <10 | 0.19 | 485  | <1 | 0.02 | 45 | 1600 | 20 | <5 | <20 | 8  | 0.01 | <10 | 22 | <10 | <1  | 63  |   |
| 351 | L12N 12+ 75 E | <2  | 0.82 | 20 | 45  | <5 | 0.15 | 1  | 8  | 18 | 10 | 3.98 | <10 | 0.19 | 249  | <1 | 0.02 | 15 | 920  | 18 | <5 | <20 | 14 | 0.01 | <10 | 36 | <10 | <1  | 55  |   |
| 352 | L12N 13+ 00 E | <2  | 1.27 | 25 | 80  | <5 | 0.18 | 1  | 6  | 17 | 8  | 3.83 | <10 | 0.23 | 178  | 1  | 0.01 | 10 | 830  | 16 | <5 | <20 | 16 | <0.1 | <10 | 23 | <10 | <1  | 52  |   |
| 353 | L12N 13+ 25 E | .   | .    | .  | .   | .  | .    | .  | .  | .  | .  | .    | .   | .    | .    | .  | .    | .  | .    | .  | .  | .   | .  | .    | .   | .  | .   | .   | .   | . |
| 354 | L12N 13+ 50 E | <2  | 1.43 | 50 | 155 | <5 | 0.58 | 1  | 26 | 30 | 27 | 5.70 | <10 | 0.29 | 1939 | 3  | 0.01 | 46 | 1640 | 50 | <5 | <20 | 32 | 0.02 | <10 | 30 | <10 | 20  | 208 |   |
| 355 | L12N 13+ 75 E | 3.4 | 1.14 | 40 | 210 | <5 | 1.71 | 6  | 17 | 12 | 81 | 3.31 | <10 | 0.13 | 3058 | 3  | <0.1 | 28 | 2750 | 36 | <5 | <20 | 58 | <0.1 | <10 | 13 | <10 | 38  | 258 |   |
| 356 | L12N 14+ 00 E | 3.8 | 2.29 | 20 | 130 | <5 | 2.11 | 4  | 27 | 27 | 90 | 4.02 | <10 | 0.22 | 2282 | <1 | 0.05 | 43 | 1900 | 44 | <5 | <20 | 64 | <0.1 | <10 | 16 | <10 | 126 | 132 |   |
| 357 | L12N 14+ 25 E | <2  | 1.00 | 25 | 85  | <5 | 0.21 | 1  | 13 | 22 | 56 | 6.10 | <10 | 0.15 | 352  | 2  | <0.1 | 26 | 1310 | 30 | <5 | <20 | 22 | 0.01 | <10 | 52 | <10 | 2   | 156 |   |
| 358 | L12N 14+ 50 E | 2.2 | 2.06 | 30 | 145 | <5 | 1.00 | 5  | 33 | 39 | 63 | 5.21 | <10 | 0.38 | 5329 | 2  | 0.01 | 42 | 2010 | 32 | <5 | <20 | 49 | 0.01 | <10 | 37 | <10 | 37  | 195 |   |
| 359 | L12N 14+ 75 E | 0.4 | 1.50 | 35 | 115 | <5 | 0.47 | 2  | 22 | 24 | 44 | 4.85 | <10 | 0.38 | 1212 | 1  | 0.02 | 36 | 970  | 24 | <5 | <20 | 29 | 0.01 | <10 | 22 | <10 | 17  | 115 |   |
| 360 | L12N 15+ 00 E | 1.4 | 2.23 | 30 | 175 | <5 | 0.64 | 4  | 26 | 35 | 59 | 5.16 | <10 | 0.46 | 1923 | 2  | 0.04 | 42 | 1840 | 32 | <5 | <20 | 39 | <0.1 | <10 | 35 | <10 | 48  | 148 |   |
| 361 | L10N 5+ 00 E  | <2  | 1.46 | 35 | 110 | <5 | 0.13 | <1 | 19 | 30 | 22 | 5.26 | <10 | 0.29 | 586  | <1 | 0.01 | 23 | 930  | 26 | <5 | <20 | 10 | 0.01 | <10 | 25 | <10 | 6   | 80  |   |
| 362 | L10N 5+ 25 E  | <2  | 1.13 | 30 | 85  | <5 | 0.11 | <1 | 12 | 23 | 16 | 4.40 | <10 | 0.23 | 403  | 1  | 0.01 | 16 | 800  | 26 | <5 | <20 | 9  | <0.1 | <10 | 25 | <10 | 3   | 56  |   |
| 363 | L10N 5+ 50 E  | <2  | 1.28 | 35 | 155 | <5 | 0.21 | <1 | 13 | 27 | 20 | 5.12 | <10 | 0.29 | 466  | <1 | 0.01 | 20 | 830  | 30 | <5 | <20 | 12 | 0.01 | <10 | 26 | <10 | <1  | 80  |   |
| 364 | L10N 5+ 75 E  | <2  | 1.23 | 45 | 115 | <5 | 0.26 | <1 | 16 | 24 | 28 | 5.50 | <10 | 0.18 | 568  | <1 | 0.01 | 21 | 920  | 34 | <5 | <20 | 17 | 0.01 | <10 | 29 | <10 | 16  | 72  |   |
| 365 | L10N 6+ 00 E  | <2  | 0.93 | 70 | 95  | <5 | 0.05 | <1 | 14 | 29 | 18 | 5.60 | <10 | 0.20 | 771  | 1  | 0.02 | 19 | 1080 | 34 | <5 | <20 | 7  | 0.01 | <10 | 31 | <10 | 2   | 75  |   |
| 366 | L10N 6+ 25 E  | <2  | 0.99 | 45 | 135 | 5  | 0.46 | <1 | 17 | 29 | 17 | 4.61 | <10 | 0.26 | 660  | 2  | 0.01 | 20 | 1090 | 38 | <5 | <20 | 23 | 0.02 | <10 | 31 | <10 | 3   | 79  |   |
| 367 | L10N 6+ 50 E  | 0.4 | 1.42 | 15 | 180 | <5 | 0.73 | <1 | 15 | 29 | 29 | 3.81 | <10 | 0.33 | 657  | <1 | 0.01 | 28 | 1230 | 22 | <5 | <20 | 34 | <0.1 | <10 | 18 | <10 | 15  | 83  |   |
| 368 | L10N 6+ 75 E  | <2  | 1.19 | 25 | 140 | <5 | 0.51 | <1 | 17 | 25 | 26 | 3.99 | <10 | 0.33 | 1253 | <1 | 0.01 | 26 | 1060 | 24 | <5 | <20 | 26 | 0.01 | <10 | 20 | <10 | 13  | 76  |   |
| 369 | L10N 7+ 00 E  | <2  | 1.41 | 30 | 135 | <5 | 0.44 | <1 | 18 | 27 | 24 | 4.17 | <10 | 0.33 | 1184 | <1 | 0.01 | 25 | 1170 | 32 | <5 | <20 | 24 | 0.01 | <10 | 22 | <10 | 11  | 98  |   |
| 370 | L10N 7+ 25 E  | <2  | 0.66 | 35 | 85  | <5 | 0.41 | <1 | 12 | 23 | 17 | 4.62 | <10 | 0.24 | 431  | 1  | 0.01 | 19 | 1220 | 28 | <5 | <20 | 19 | <0.1 | <10 | 24 | <10 | <1  | 63  |   |
| 371 | L10N 7+ 50 E  | <2  | 1.24 | 25 | 145 | <5 | 0.55 | <1 | 14 | 24 | 26 | 3.72 | <10 | 0.29 | 895  | 2  | 0.01 | 24 | 1180 | 40 | <5 | <20 | 39 | 0.01 | <10 | 21 | <10 | 14  | 83  |   |
| 372 | L10N 7+ 75 E  | <2  | 1.36 | 20 | 85  | <5 | 0.45 | <1 | 17 | 27 | 12 | 4.57 | <10 | 0.48 | 510  | <1 | 0.02 | 22 | 860  | 24 | <5 | <20 | 23 | 0.01 | <10 | 23 | <10 | 3   | 72  |   |
| 373 | L10N 8+ 00 E  | <2  | 1.52 | 25 | 110 | <5 | 0.79 | <1 | 17 | 24 | 22 | 4.46 | <10 | 0.30 | 1126 | 1  | 0.01 | 23 | 1370 | 22 | <5 | <20 | 35 | 0.01 | <10 | 22 | <10 | 9   | 64  |   |
| 374 | L10N 8+ 25 E  | 0.2 | 0.96 | 30 | 105 | <5 | 0.50 | <1 | 13 | 27 | 19 | 5.27 | <10 | 0.21 | 543  | 2  | 0.02 | 21 | 1440 | 34 | <5 | <20 | 22 | <0.1 | <10 | 31 | <10 | 5   | 65  |   |
| 375 | L10N 8+ 50 E  | <2  | 1.38 | 30 | 95  | <5 | 0.20 | <1 | 14 | 29 | 18 | 5.48 | <10 | 0.31 | 533  | <1 | 0.02 | 22 | 1210 | 30 | <5 | <20 | 11 | 0.01 | <10 | 28 | <10 | 5   | 75  |   |
| 376 | L10N 8+ 75 E  | <2  | 0.81 | 30 | 120 | <5 | 0.36 | <1 | 10 | 20 | 18 | 4.18 | <10 | 0.18 | 344  | <1 | 0.02 | 19 | 1310 | 24 | <5 | <20 | 21 | <0.1 | <10 | 28 | <10 | 4   | 61  |   |
| 377 | L10N 9+ 00 E  | 0.4 | 0.61 | 15 | 85  | <5 | 0.52 | <1 | 6  | 14 | 11 | 2.81 | <10 | 0.12 | 295  | <1 | 0.02 | 11 | 1010 | 18 | <5 | <20 | 27 | <0.1 | <10 | 23 | <10 | 1   | 47  |   |
| 378 | L10N 9+ 25 E  | <2  | 0.69 | 20 | 95  | <5 | 0.13 | <1 | 7  | 15 | 11 | 3.15 | <10 | 0.12 | 251  | <1 | 0.02 | 13 | 1150 | 18 | <5 | <20 | 10 | <0.1 | <10 | 24 | <10 | 1   | 50  |   |
| 379 | L10N 9+ 50 E  | <2  | 0.82 | 25 | 70  | <5 | 0.31 | <1 | 10 | 20 | 14 | 4.51 | <10 | 0.20 | 383  | 1  | 0.02 | 15 | 1350 | 24 | <5 | <20 | 18 | 0.01 | <10 | 25 | <10 | 1   | 60  |   |

| Et # | Tag #         | Ag  | Al % | As  | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb  | Sb | Sn  | Sr | Ti % | U   | V   | W   | Y  | Zn  |
|------|---------------|-----|------|-----|-----|----|------|----|----|-----|----|------|-----|------|------|----|------|----|------|-----|----|-----|----|------|-----|-----|-----|----|-----|
| 380  | L10N 9+ 75 E  | <2  | 0.79 | 20  | 125 | <5 | 0.62 | <1 | 8  | 16  | 14 | 3.17 | <10 | 0.17 | 367  | 3  | 0.02 | 14 | 870  | 18  | <5 | <20 | 35 | 0.01 | <10 | 23  | <10 | 4  | 63  |
| 381  | L10N 10+ 25 E | <2  | 0.74 | 25  | 140 | <5 | 0.45 | <1 | 12 | 20  | 13 | 3.73 | <10 | 0.16 | 784  | 2  | 0.02 | 19 | 670  | 26  | <5 | <20 | 20 | 0.01 | <10 | 30  | <10 | 2  | 64  |
| 382  | L10N 10+ 50 E | <2  | 0.86 | 30  | 50  | <5 | 0.12 | <1 | 10 | 24  | 14 | 5.09 | <10 | 0.15 | 232  | 2  | 0.02 | 27 | 990  | 26  | <5 | <20 | 9  | <0.1 | <10 | 36  | <10 | <1 | 78  |
| 383  | L10N 10+ 75 E | <2  | 0.57 | 35  | 60  | <5 | 0.09 | <1 | 11 | 16  | 14 | 4.77 | <10 | 0.14 | 278  | 2  | 0.03 | 22 | 1260 | 36  | <5 | <20 | 13 | 0.02 | <10 | 35  | <10 | 1  | 72  |
| 384  | L10N 11+ 00 E | <2  | 1.11 | 45  | 60  | <5 | 0.15 | <1 | 15 | 26  | 26 | 7.09 | <10 | 0.25 | 455  | 2  | 0.01 | 30 | 3240 | 48  | <5 | <20 | 13 | <0.1 | <10 | 25  | <10 | 1  | 108 |
| 385  | L10N 11+ 25 E | 0.6 | 0.81 | 35  | 50  | <5 | 0.05 | <1 | 8  | 28  | 10 | 5.11 | <10 | 0.16 | 142  | 1  | 0.02 | 26 | 2580 | 46  | <5 | <20 | 9  | <0.1 | <10 | 39  | <10 | <1 | 104 |
| 386  | L10N 11+ 50 E | <2  | 0.78 | 15  | 40  | <5 | 0.01 | <1 | 5  | 16  | 5  | 2.36 | <10 | 0.11 | 75   | <1 | 0.03 | 10 | 580  | 14  | <5 | <20 | 4  | 0.01 | <10 | 31  | <10 | <1 | 36  |
| 387  | L10N 11+ 75 E | <2  | 1.05 | 30  | 40  | <5 | 0.08 | <1 | 9  | 31  | 12 | 4.58 | <10 | 0.25 | 160  | 1  | 0.02 | 23 | 1490 | 28  | <5 | <20 | 8  | 0.01 | <10 | 41  | <10 | <1 | 89  |
| 388  | L10N 12+ 00 E | <2  | 1.43 | 30  | 95  | <5 | 0.16 | <1 | 6  | 22  | 25 | 2.84 | <10 | 0.12 | 179  | 10 | 0.02 | 14 | 1650 | 64  | <5 | <20 | 9  | 0.01 | <10 | 49  | <10 | <1 | 129 |
| 389  | L10N 12+ 25 E | <2  | 2.00 | 35  | 100 | <5 | 0.05 | <1 | 13 | 60  | 19 | 7.50 | <10 | 0.63 | 460  | 2  | <0.1 | 26 | 1590 | 20  | <5 | <20 | 6  | <0.1 | <10 | 50  | <10 | <1 | 104 |
| 390  | L10N 12+ 50 E | <2  | 1.40 | 35  | 60  | <5 | 0.03 | <1 | 8  | 34  | 14 | 6.88 | <10 | 0.53 | 304  | 2  | <0.1 | 15 | 1040 | 18  | <5 | <20 | 5  | 0.01 | <10 | 44  | <10 | <1 | 62  |
| 391  | L10N 12+ 75 E | <2  | 3.01 | 60  | 100 | <5 | 0.29 | <1 | 32 | 39  | 33 | 8.90 | <10 | 0.23 | 1024 | <1 | <0.1 | 54 | 2680 | 30  | <5 | <20 | 10 | 0.01 | <10 | 43  | <10 | 5  | 183 |
| 392  | L10N 13+ 00 E | <2  | 0.36 | 45  | 95  | <5 | 0.09 | <1 | 8  | 12  | 25 | 3.01 | <10 | 0.03 | 340  | 7  | 0.02 | 30 | 1030 | 46  | <5 | <20 | 26 | <0.1 | <10 | 42  | <10 | <1 | 67  |
| 393  | L10N 13+ 25 E | <2  | 1.02 | 175 | 40  | <5 | 0.05 | <1 | 19 | 42  | 15 | >15  | <10 | 0.10 | 1220 | 2  | <0.1 | 85 | 1660 | 172 | <5 | <20 | 5  | 0.02 | <10 | 54  | <10 | <1 | 110 |
| 394  | L10N 13+ 50 E | 0.8 | 0.70 | 45  | 275 | <5 | 0.45 | <1 | 17 | 14  | 15 | 5.47 | <10 | 0.10 | 4183 | 2  | <0.1 | 53 | 1610 | 18  | <5 | <20 | 37 | <0.1 | <10 | 20  | <10 | 3  | 90  |
| 395  | L10N 13+ 75 E | 0.8 | 1.23 | 105 | 120 | <5 | 0.87 | <1 | 26 | 23  | 23 | 8.42 | <10 | 0.09 | 2601 | 3  | 0.02 | 95 | 2710 | 130 | <5 | <20 | 20 | <0.1 | <10 | 21  | <10 | 33 | 338 |
| 396  | L10N 14+ 00 E | 0.8 | 0.86 | 15  | 185 | <5 | 1.01 | <1 | 8  | 7   | 12 | 3.01 | <10 | 0.13 | 1652 | 1  | 0.01 | 13 | 1020 | 36  | <5 | <20 | 64 | <0.1 | <10 | 14  | <10 | 31 | 158 |
| 397  | L10N 14+ 25 E | <2  | 1.06 | 30  | 150 | <5 | 0.31 | <1 | 12 | 25  | 9  | 3.77 | <10 | 0.15 | 373  | 3  | 0.02 | 16 | 820  | 22  | <5 | <20 | 20 | <0.1 | <10 | 36  | <10 | 2  | 66  |
| 398  | L10N 14+ 50 E | 0.4 | 1.68 | 50  | 195 | <5 | 0.19 | <1 | 20 | 35  | 25 | 6.08 | <10 | 0.40 | 450  | 2  | 0.02 | 28 | 1460 | 28  | <5 | <20 | 16 | <0.1 | <10 | 32  | <10 | <1 | 96  |
| 399  | L10N 14+ 75 E | 0.6 | 1.89 | 45  | 160 | <5 | 0.27 | <1 | 23 | 146 | 30 | 6.91 | <10 | 0.94 | 851  | 2  | <0.1 | 35 | 1910 | 22  | <5 | <20 | 18 | 0.01 | <10 | 74  | <10 | <1 | 107 |
| 400  | L10N 15+ 00 E | 1.4 | 1.41 | 55  | 165 | <5 | 0.89 | <1 | 28 | 61  | 56 | 6.38 | <10 | 0.31 | 565  | 23 | <0.1 | 34 | 2480 | 78  | <5 | <20 | 49 | <0.1 | <10 | 125 | <10 | 6  | 237 |
| 401  | L15N 5+ 00 E  | 0.6 | 1.34 | 35  | 130 | <5 | 0.70 | <1 | 23 | 32  | 30 | 5.32 | <10 | 0.41 | 1161 | 2  | 0.01 | 21 | 1250 | 22  | <5 | <20 | 29 | <0.1 | <10 | 24  | <10 | 4  | 91  |
| 402  | L15N 5+ 25 E  | <2  | 1.12 | 35  | 75  | <5 | 1.13 | <1 | 20 | 39  | 18 | 6.06 | <10 | 0.23 | 997  | 6  | 0.01 | 15 | 1470 | 30  | <5 | <20 | 37 | 0.01 | <10 | 40  | <10 | <1 | 100 |
| 403  | L15N 5+ 50 E  | 1.2 | 1.44 | 25  | 90  | <5 | 0.33 | <1 | 28 | 47  | 24 | 5.43 | <10 | 0.51 | 1484 | 2  | 0.01 | 20 | 1470 | 24  | <5 | <20 | 18 | 0.01 | <10 | 35  | <10 | 6  | 87  |
| 404  | L15N 5+ 75 E  | 0.4 | 1.28 | 15  | 90  | <5 | 0.15 | <1 | 8  | 37  | 7  | 4.10 | <10 | 0.39 | 237  | 2  | 0.01 | 7  | 950  | 12  | <5 | <20 | 8  | <0.1 | <10 | 34  | <10 | <1 | 37  |
| 405  | L15N 6+ 00 E  | <2  | 1.14 | 55  | 135 | <5 | 0.09 | <1 | 13 | 44  | 9  | 7.49 | <10 | 0.23 | 855  | 6  | 0.01 | 9  | 1230 | 38  | <5 | <20 | 8  | 0.01 | <10 | 59  | <10 | <1 | 63  |
| 406  | L15N 6+ 25 E  | 1.2 | 1.37 | 5   | 55  | <5 | 0.03 | <1 | 9  | 41  | 13 | 4.38 | <10 | 0.51 | 368  | <1 | <0.1 | 11 | 780  | <2  | <5 | <20 | 6  | <0.1 | <10 | 32  | <10 | <1 | 47  |
| 407  | L15N 6+ 50 E  | 1.0 | 1.36 | 20  | 175 | <5 | 1.00 | <1 | 20 | 40  | 16 | 4.64 | <10 | 0.39 | 1695 | 2  | 0.02 | 15 | 1390 | 12  | <5 | <20 | 31 | 0.01 | <10 | 39  | <10 | 4  | 70  |
| 408  | L15N 6+ 75 E  | 0.4 | 0.75 | 20  | 80  | <5 | 0.04 | <1 | 7  | 18  | 8  | 3.18 | <10 | 0.19 | 329  | 1  | 0.02 | 7  | 1740 | 8   | <5 | <20 | 6  | <0.1 | <10 | 28  | <10 | <1 | 34  |
| 409  | L15N 7+ 00 E  | 0.4 | 1.08 | 20  | 130 | <5 | 0.14 | <1 | 8  | 51  | 7  | 4.69 | <10 | 0.31 | 231  | 1  | 0.01 | 10 | 2630 | 14  | <5 | <20 | 7  | 0.01 | <10 | 61  | <10 | <1 | 59  |
| 410  | L15N 7+ 25 E  | 0.2 | 1.33 | 20  | 80  | <5 | 0.11 | <1 | 10 | 38  | 8  | 3.82 | <10 | 0.37 | 227  | <1 | <0.1 | 11 | 930  | 16  | <5 | <20 | 7  | <0.1 | <10 | 34  | <10 | <1 | 63  |
| 411  | L15N 7+ 50 E  | <2  | 1.13 | 25  | 100 | <5 | 0.12 | <1 | 11 | 64  | 7  | 4.14 | <10 | 0.37 | 329  | 3  | 0.02 | 13 | 690  | 16  | <5 | <20 | 7  | 0.01 | <10 | 64  | <10 | <1 | 54  |
| 412  | L15N 7+ 75 E  | <2  | 1.10 | 25  | 120 | <5 | 0.07 | <1 | 12 | 65  | 10 | 3.80 | <10 | 0.43 | 350  | 3  | 0.02 | 16 | 1100 | 12  | <5 | <20 | 8  | 0.01 | <10 | 50  | <10 | <1 | 63  |
| 413  | L15N 8+ 00 E  | 0.4 | 0.59 | 10  | 180 | <5 | 0.55 | <1 | 6  | 23  | 5  | 2.41 | <10 | 0.12 | 127  | 1  | 0.03 | 6  | 920  | 8   | <5 | <20 | 23 | 0.01 | <10 | 36  | <10 | <1 | 60  |
| 414  | L15N 8+ 25 E  | <2  | 1.04 | 35  | 135 | <5 | 1.96 | <1 | 16 | 52  | 12 | 4.71 | <10 | 0.33 | 394  | 5  | 0.01 | 16 | 1150 | 24  | <5 | <20 | 53 | 0.01 | <10 | 49  | <10 | <1 | 97  |
| 415  | L15N 8+ 50 E  | 0.2 | 0.90 | 10  | 130 | <5 | 1.42 | <1 | 9  | 39  | 11 | 3.87 | <10 | 0.27 | 474  | <1 | <0.1 | 11 | 900  | <2  | <5 | <20 | 48 | <0.1 | <10 | 30  | <10 | <1 | 85  |
| 416  | L15N 8+ 75 E  | 0.4 | 1.69 | 20  | 265 | <5 | 1.94 | <1 | 18 | 68  | 23 | 4.22 | <10 | 0.47 | 973  | 1  | <0.1 | 17 | 1480 | 8   | <5 | <20 | 68 | 0.01 | <10 | 52  | <10 | <1 | 175 |
| 417  | L15N 9+ 00 E  | 0.4 | 1.01 | 20  | 75  | <5 | 0.13 | <1 | 7  | 32  | 11 | 2.65 | <10 | 0.26 | 118  | 2  | 0.02 | 10 | 770  | 14  | <5 | <20 | 11 | <0.1 | <10 | 48  | <10 | <1 | 46  |
| 418  | L15N 9+ 25 E  | <2  | 1.26 | 30  | 70  | <5 | 0.19 | <1 | 15 | 66  | 18 | 4.91 | <10 | 0.61 | 302  | 3  | 0.02 | 23 | 2110 | 36  | <5 | <20 | 12 | 0.02 | <10 | 61  | <10 | <1 | 89  |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu | Fe %  | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr | Ti % | U   | V   | W   | Y  | Zn  |
|------|---------------|-----|------|----|-----|----|------|----|----|-----|----|-------|-----|------|------|----|------|----|------|----|----|-----|----|------|-----|-----|-----|----|-----|
| 419  | L15N 9+ 50 E  | 0.4 | 2.04 | <5 | 85  | <5 | 0.09 | <1 | 14 | 86  | 18 | 5.32  | <10 | 1.19 | 331  | <1 | <.01 | 19 | 1200 | <2 | <5 | <20 | 6  | 0.02 | <10 | 62  | <10 | <1 | 81  |
| 420  | L15N 9+ 75 E  | <2  | 1.67 | 40 | 140 | <5 | 0.10 | <1 | 18 | 70  | 20 | 7.68  | <10 | 0.59 | 895  | 2  | <.01 | 21 | 2200 | 22 | <5 | <20 | 8  | 0.02 | <10 | 66  | <10 | <1 | 90  |
| 421  | L15N 10+ 25 E | <2  | 1.03 | 20 | 60  | <5 | 0.04 | <1 | 12 | 48  | 13 | 3.20  | <10 | 0.65 | 245  | <1 | 0.01 | 12 | 920  | 4  | <5 | <20 | 4  | 0.04 | <10 | 87  | <10 | <1 | 36  |
| 422  | L15N 10+ 50 E | 0.2 | 2.42 | 25 | 50  | <5 | 0.16 | <1 | 21 | 115 | 25 | 6.01  | <10 | 1.84 | 535  | <1 | <.01 | 24 | 2020 | 70 | <5 | <20 | 7  | 0.02 | <10 | 136 | <10 | <1 | 200 |
| 423  | L15N 10+ 75 E | 0.4 | 0.67 | 10 | 55  | <5 | 0.09 | <1 | 4  | 11  | 2  | 1.79  | <10 | 0.17 | 126  | <1 | 0.02 | 4  | 480  | <2 | <5 | <20 | 6  | <.01 | <10 | 20  | <10 | <1 | 24  |
| 424  | L15N 11+ 00 E | 0.6 | 1.31 | 25 | 45  | <5 | 0.14 | <1 | 13 | 26  | 12 | 4.50  | <10 | 0.42 | 513  | <1 | 0.01 | 11 | 1420 | 6  | <5 | <20 | 7  | <.01 | <10 | 22  | <10 | <1 | 53  |
| 425  | L15N 11+ 25 E | 0.4 | 1.67 | 25 | 55  | <5 | 0.09 | <1 | 10 | 32  | 8  | 4.63  | <10 | 0.30 | 424  | 1  | 0.02 | 9  | 2070 | 10 | <5 | <20 | 5  | <.01 | <10 | 32  | <10 | <1 | 48  |
| 426  | L15N 11+ 50 E | 0.2 | 0.90 | 25 | 40  | <5 | 0.02 | <1 | 7  | 19  | 8  | 3.27  | <10 | 0.18 | 140  | 1  | 0.02 | 11 | 1320 | 16 | <5 | <20 | 4  | <.01 | <10 | 32  | <10 | <1 | 37  |
| 427  | L15N 11+ 75 E | <2  | 1.04 | 20 | 50  | <5 | 0.07 | <1 | 7  | 18  | 5  | 3.25  | <10 | 0.18 | 188  | <1 | 0.02 | 10 | 1610 | 14 | <5 | <20 | 5  | 0.01 | <10 | 29  | <10 | <1 | 36  |
| 428  | L15N 12+ 00 E | <2  | 1.73 | 25 | 65  | <5 | 0.04 | <1 | 9  | 27  | 8  | 3.79  | <10 | 0.26 | 326  | 1  | 0.02 | 9  | 1140 | 8  | <5 | <20 | 5  | 0.01 | <10 | 35  | <10 | <1 | 51  |
| 429  | L15N 12+ 25 E | 1.8 | 1.80 | 30 | 105 | <5 | 1.02 | <1 | 24 | 36  | 18 | 4.71  | <10 | 0.35 | 1796 | 2  | 0.02 | 21 | 1830 | 40 | <5 | <20 | 34 | <.01 | <10 | 32  | <10 | 16 | 74  |
| 430  | L15N 12+ 50 E | 0.8 | 1.22 | 25 | 40  | <5 | 0.04 | <1 | 6  | 29  | 5  | 4.46  | <10 | 0.25 | 194  | 1  | 0.02 | 7  | 1880 | 14 | <5 | <20 | 5  | <.01 | <10 | 42  | <10 | <1 | 33  |
| 431  | L15N 12+ 75 E | 0.8 | 1.23 | 15 | 35  | <5 | 0.05 | <1 | 8  | 14  | 9  | 3.41  | <10 | 0.13 | 166  | <1 | 0.02 | 8  | 1210 | <2 | <5 | <20 | 4  | <.01 | <10 | 29  | <10 | <1 | 33  |
| 432  | L15N 13+ 00 E | 0.4 | 0.90 | 70 | 50  | <5 | 0.04 | <1 | 23 | 26  | 18 | 8.37  | <10 | 0.08 | 1414 | 2  | 0.01 | 34 | 2440 | 18 | <5 | <20 | 3  | 0.01 | <10 | 37  | <10 | <1 | 60  |
| 433  | L15N 13+ 25 E | 0.8 | 0.44 | 35 | 60  | <5 | 0.10 | <1 | 7  | 8   | 28 | 2.45  | <10 | 0.03 | 398  | 4  | <.01 | 12 | 1010 | 26 | <5 | <20 | 18 | <.01 | <10 | 39  | <10 | <1 | 40  |
| 434  | L15N 13+ 50 E | 0.4 | 1.94 | 35 | 70  | <5 | 0.12 | <1 | 18 | 23  | 22 | 7.56  | <10 | 0.43 | 292  | 2  | <.01 | 16 | 2970 | 6  | <5 | <20 | 8  | <.01 | <10 | 58  | <10 | <1 | 67  |
| 435  | L15N 13+ 75 E | 1.6 | 1.50 | 35 | 40  | <5 | 0.05 | <1 | 14 | 91  | 31 | 6.64  | <10 | 0.56 | 497  | 2  | <.01 | 26 | 2020 | 6  | <5 | <20 | 4  | 0.01 | <10 | 68  | <10 | <1 | 53  |
| 436  | L15N 14+ 00 E | 2.0 | 1.42 | 25 | 65  | <5 | 0.04 | <1 | 7  | 43  | 15 | 6.04  | <10 | 0.24 | 120  | 5  | 0.03 | 8  | 2350 | 18 | <5 | <20 | 7  | 0.02 | <10 | 71  | <10 | <1 | 47  |
| 437  | L15N 14+ 25 E | 1.0 | 1.35 | 30 | 40  | <5 | 0.01 | <1 | 6  | 23  | 15 | 4.48  | <10 | 0.33 | 113  | 2  | 0.02 | 7  | 1660 | 6  | <5 | <20 | 2  | <.01 | <10 | 37  | <10 | <1 | 31  |
| 438  | L15N 14+ 50 E | 0.8 | 0.35 | 30 | 50  | <5 | 0.09 | <1 | 8  | 6   | 67 | 2.93  | <10 | 0.03 | 294  | 5  | 0.03 | 19 | 800  | 10 | <5 | <20 | 8  | <.01 | <10 | 58  | <10 | 3  | 110 |
| 439  | L15N 14+ 75 E | 0.8 | 0.74 | 15 | 50  | <5 | 0.05 | <1 | 10 | 17  | 31 | 3.39  | <10 | 0.08 | 236  | 2  | 0.02 | 18 | 880  | 6  | <5 | <20 | 5  | <.01 | <10 | 50  | <10 | 1  | 44  |
| 440  | L15N 15+ 00 E | 0.6 | 1.49 | 40 | 50  | <5 | 0.07 | <1 | 16 | 24  | 39 | 6.81  | <10 | 0.48 | 417  | 3  | 0.02 | 29 | 2060 | 20 | <5 | <20 | 6  | <.01 | <10 | 41  | <10 | <1 | 134 |
| 441  | L20N 10+ 25 E | 0.4 | 1.31 | 30 | 75  | <5 | 0.12 | <1 | 11 | 36  | 10 | 3.64  | <10 | 0.34 | 270  | 1  | 0.02 | 13 | 1140 | 14 | <5 | <20 | 5  | <.01 | <10 | 46  | <10 | <1 | 43  |
| 442  | L20N 10+ 50 E | 0.2 | 1.35 | 20 | 95  | <5 | 0.13 | <1 | 15 | 50  | 13 | 4.59  | <10 | 0.39 | 600  | <1 | 0.02 | 19 | 1200 | 14 | <5 | <20 | 14 | 0.07 | <10 | 98  | <10 | <1 | 114 |
| 443  | L20N 10+ 75 E | <2  | 0.85 | 15 | 40  | <5 | 0.06 | <1 | 8  | 15  | 7  | 3.23  | <10 | 0.09 | 188  | <1 | 0.02 | 8  | 660  | 6  | <5 | <20 | 6  | <.01 | <10 | 38  | <10 | <1 | 120 |
| 444  | L20N 11+ 00 E | <2  | 1.33 | 40 | 35  | <5 | 0.05 | <1 | 13 | 36  | 20 | 6.88  | <10 | 0.28 | 660  | 1  | <.01 | 19 | 1580 | 24 | <5 | <20 | 6  | 0.01 | <10 | 37  | <10 | <1 | 276 |
| 445  | L20N 11+ 25 E | 2.2 | 0.56 | 20 | 100 | <5 | 2.05 | 2  | 18 | 12  | 56 | 4.83  | <10 | 0.16 | 1089 | 4  | <.01 | 27 | 1240 | 16 | <5 | <20 | 65 | <.01 | <10 | 32  | <10 | <1 | 218 |
| 446  | L20N 11+ 50 E | 0.6 | 1.20 | 15 | 65  | <5 | 0.03 | <1 | 7  | 16  | 20 | 2.75  | <10 | 0.08 | 86   | 3  | 0.02 | 8  | 1020 | 12 | <5 | <20 | 4  | <.01 | <10 | 37  | <10 | <1 | 33  |
| 447  | L20N 11+ 75 E | 0.2 | 1.44 | 25 | 75  | <5 | 0.08 | <1 | 15 | 8   | 43 | 9.06  | <10 | 0.30 | 625  | 2  | <.01 | 12 | 1920 | <2 | <5 | <20 | 4  | <.01 | <10 | 36  | <10 | <1 | 82  |
| 448  | L20N 12+ 00 E | 0.2 | 2.33 | 40 | 135 | <5 | 0.10 | <1 | 22 | 19  | 26 | 10.40 | <10 | 0.40 | 798  | 3  | 0.01 | 10 | 1960 | 10 | <5 | <20 | 5  | <.01 | <10 | 44  | <10 | <1 | 71  |
| 449  | L20N 12+ 25 E | 0.2 | 1.06 | 25 | 115 | <5 | 0.14 | <1 | 9  | 34  | 19 | 3.85  | <10 | 0.21 | 249  | 2  | 0.01 | 13 | 830  | 4  | <5 | <20 | 7  | <.01 | <10 | 59  | <10 | <1 | 48  |
| 450  | L20N 12+ 50 E | 0.6 | 2.52 | 55 | 115 | <5 | 0.29 | <1 | 16 | 280 | 14 | 7.00  | <10 | 1.50 | 579  | 2  | <.01 | 33 | 1200 | 4  | <5 | <20 | 7  | 0.01 | <10 | 129 | <10 | <1 | 79  |
| 451  | L20N 12+ 75 E | 0.2 | 1.16 | 25 | 70  | <5 | 0.03 | <1 | 6  | 21  | 11 | 3.74  | <10 | 0.15 | 108  | 2  | 0.02 | 9  | 1400 | 32 | <5 | <20 | 4  | <.01 | <10 | 57  | <10 | <1 | 63  |
| 452  | L20N 13+ 00 E | 0.8 | 0.98 | 20 | 140 | <5 | 0.10 | <1 | 9  | 23  | 23 | 4.51  | <10 | 0.10 | 1791 | 3  | 0.02 | 12 | 2280 | 24 | <5 | <20 | 6  | <.01 | <10 | 58  | <10 | <1 | 53  |
| 453  | L20N 13+ 25 E | <2  | 0.70 | 10 | 55  | <5 | 0.02 | <1 | 4  | 7   | 6  | 1.70  | <10 | 0.04 | 85   | 1  | 0.02 | 5  | 680  | <2 | <5 | <20 | 2  | <.01 | <10 | 24  | <10 | 1  | 25  |
| 454  | L20N 13+ 50 E | 1.0 | 0.93 | 25 | 40  | <5 | 0.02 | <1 | 5  | 12  | 4  | 3.91  | <10 | 0.06 | 114  | <1 | 0.02 | 5  | 1910 | 20 | <5 | <20 | 3  | <.01 | <10 | 26  | <10 | <1 | 27  |
| 455  | L20N 13+ 75 E | 0.4 | 0.81 | 15 | 35  | <5 | 0.10 | <1 | 5  | 11  | 3  | 1.87  | <10 | 0.10 | 193  | <1 | 0.02 | 5  | 550  | 8  | <5 | <20 | 5  | <.01 | <10 | 33  | <10 | <1 | 27  |
| 456  | L20N 14+ 00 E | 0.4 | 1.29 | 20 | 55  | <5 | 0.05 | <1 | 9  | 26  | 12 | 4.95  | <10 | 0.21 | 222  | <1 | 0.02 | 9  | 1710 | 14 | <5 | <20 | 6  | 0.01 | <10 | 41  | <10 | <1 | 49  |
| 457  | L20N 14+ 25 E | <2  | 1.27 | 15 | 75  | <5 | 0.05 | <1 | 4  | 11  | 6  | 2.08  | <10 | 0.15 | 140  | <1 | 0.02 | 5  | 790  | 10 | <5 | <20 | 10 | <.01 | <10 | 27  | <10 | <1 | 29  |



| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu  | Fe %  | La  | Mg % | Mn   | Mo | Na %  | Ni | P    | Pb  | Sb | Sn  | Sr  | Ti %  | U   | V  | W   | Y  | Zn  |
|------|---------------|-----|------|----|-----|----|------|----|----|-----|-----|-------|-----|------|------|----|-------|----|------|-----|----|-----|-----|-------|-----|----|-----|----|-----|
| 458  | L20N 14+ 50 E | 0.6 | 2.39 | 15 | 95  | <5 | 0.84 | <1 | 23 | 31  | 35  | 4.51  | <10 | 0.30 | 1480 | <1 | 0.04  | 29 | 2730 | 18  | <5 | <20 | 55  | <0.01 | <10 | 19 | <10 | 49 | 98  |
| 459  | L20N 14+ 75 E | <2  | 1.07 | 20 | 125 | <5 | 0.23 | <1 | 16 | 22  | 19  | 3.75  | <10 | 0.24 | 920  | <1 | 0.02  | 23 | 1240 | 32  | <5 | <20 | 16  | <0.01 | <10 | 28 | <10 | 8  | 90  |
| 460  | L20N 15+ 00 E | 0.6 | 0.77 | <5 | 130 | <5 | 0.27 | <1 | 4  | 10  | 6   | 1.08  | <10 | 0.13 | 165  | <1 | 0.02  | 6  | 510  | 10  | <5 | <20 | 18  | <0.01 | <10 | 18 | <10 | 3  | 35  |
| 461  | L21N 10+ 25 E | <2  | 1.52 | 20 | 125 | 5  | 0.10 | <1 | 19 | 33  | 17  | 4.35  | <10 | 0.36 | 384  | <1 | 0.02  | 31 | 870  | 30  | <5 | <20 | 10  | 0.01  | <10 | 36 | <10 | 9  | 239 |
| 462  | L21N 10+ 50 E | <2  | 1.40 | 15 | 120 | <5 | 0.21 | 4  | 20 | 25  | 20  | 3.54  | <10 | 0.26 | 1578 | <1 | <0.01 | 28 | 1090 | 108 | <5 | <20 | 24  | 0.01  | <10 | 27 | <10 | 7  | 627 |
| 463  | L21N 10+ 75 E | <2  | 0.65 | 10 | 155 | 5  | 0.35 | <1 | 8  | 11  | 30  | 4.08  | <10 | 0.15 | 319  | 2  | <0.01 | 13 | 2220 | 50  | <5 | <20 | 25  | <0.01 | <10 | 31 | <10 | <1 | 138 |
| 464  | L21N 11+ 00 E | <2  | 1.18 | 25 | 40  | 5  | 0.23 | <1 | 17 | 24  | 31  | 5.17  | <10 | 0.35 | 488  | 3  | <0.01 | 27 | 1250 | 76  | <5 | <20 | 18  | <0.01 | <10 | 27 | <10 | 2  | 187 |
| 465  | L21N 11+ 25 E | 2.8 | 1.14 | <5 | 145 | <5 | 2.86 | 4  | 15 | 14  | 114 | 3.22  | <10 | 0.25 | 1121 | <1 | <0.01 | 44 | 2290 | 46  | <5 | <20 | 145 | <0.01 | <10 | 14 | <10 | 10 | 132 |
| 466  | L21N 11+ 50 E | <2  | 0.66 | 30 | 80  | <5 | 0.06 | <1 | 13 | 20  | 55  | 4.32  | <10 | 0.09 | 318  | 6  | 0.02  | 29 | 1230 | 30  | <5 | <20 | 10  | <0.01 | <10 | 45 | <10 | 2  | 148 |
| 467  | L21N 11+ 75 E | <2  | 2.37 | 35 | 80  | <5 | 0.23 | <1 | 14 | 75  | 18  | 7.74  | <10 | 0.89 | 768  | <1 | <0.01 | 20 | 1910 | 18  | <5 | <20 | 16  | 0.01  | <10 | 96 | <10 | <1 | 124 |
| 468  | L21N 12+ 00 E | <2  | 1.84 | 45 | 110 | <5 | 0.09 | 1  | 24 | 54  | 31  | 10.20 | <10 | 0.48 | 1146 | 1  | <0.01 | 25 | 1740 | 34  | <5 | <20 | 8   | 0.01  | <10 | 57 | <10 | <1 | 110 |
| 469  | L21N 12+ 25 E | 1.6 | 1.13 | 15 | 130 | <5 | 0.34 | 1  | 36 | 29  | 40  | 4.23  | <10 | 0.23 | 582  | 2  | 0.04  | 30 | 1500 | 28  | <5 | <20 | 33  | <0.01 | <10 | 26 | <10 | 43 | 254 |
| 470  | L21N 12+ 50 E | <2  | 1.36 | 45 | 130 | <5 | 0.20 | <1 | 16 | 47  | 14  | 5.15  | <10 | 0.18 | 277  | 1  | <0.01 | 37 | 950  | 22  | <5 | <20 | 18  | <0.01 | <10 | 35 | <10 | <1 | 116 |
| 471  | L21N 12+ 75 E | 0.2 | 0.85 | 10 | 35  | <5 | 0.08 | <1 | 4  | 5   | 5   | 1.11  | <10 | 0.04 | 149  | <1 | 0.02  | 5  | 530  | 6   | <5 | <20 | 4   | <0.01 | <10 | 16 | <10 | 1  | 23  |
| 472  | L21N 13+ 00 E | 1.0 | 0.88 | 10 | 60  | <5 | 0.08 | <1 | 6  | 9   | 7   | 2.24  | <10 | 0.04 | 462  | <1 | 0.02  | 8  | 430  | 12  | <5 | <20 | 6   | <0.01 | <10 | 35 | <10 | <1 | 33  |
| 473  | L21N 13+ 25 E | <2  | 1.15 | 15 | 70  | <5 | 0.09 | <1 | 5  | 14  | 7   | 2.47  | <10 | 0.11 | 150  | <1 | 0.02  | 7  | 910  | 16  | <5 | <20 | 9   | 0.01  | <10 | 44 | <10 | <1 | 39  |
| 474  | L21N 13+ 50 E | <2  | 1.59 | 15 | 90  | <5 | 0.07 | <1 | 9  | 21  | 13  | 5.11  | <10 | 0.25 | 178  | <1 | 0.02  | 13 | 1680 | 20  | <5 | <20 | 8   | <0.01 | <10 | 39 | <10 | <1 | 66  |
| 475  | L1S: 14+ 75 E | 0.6 | 1.07 | 10 | 80  | <5 | 0.09 | <1 | 5  | 38  | 13  | 2.99  | <10 | 0.29 | 227  | <1 | 0.02  | 11 | 1020 | 18  | <5 | <20 | 11  | <0.01 | <10 | 49 | <10 | <1 | 46  |
| 476  | L1S: 15+ 00 E | 0.4 | 1.95 | 25 | 90  | <5 | 0.67 | 3  | 31 | 51  | 67  | 4.41  | <10 | 0.57 | 2805 | 2  | 0.05  | 27 | 3470 | 84  | <5 | <20 | 40  | 0.01  | <10 | 39 | <10 | 60 | 203 |
| 477  | L1S: 15+ 25 E | 1.2 | 1.88 | 50 | 85  | <5 | 1.80 | 3  | 33 | 59  | 131 | 4.86  | <10 | 0.63 | 2995 | 5  | 0.04  | 33 | 3220 | 20  | <5 | <20 | 68  | 0.01  | <10 | 48 | <10 | 42 | 156 |
| 478  | L1S: 15+ 50 E | <2  | 1.43 | 40 | 80  | <5 | 0.06 | <1 | 17 | 83  | 16  | 4.58  | <10 | 0.60 | 1502 | 3  | <0.01 | 21 | 1220 | 16  | <5 | <20 | 8   | 0.01  | <10 | 56 | <10 | <1 | 92  |
| 479  | L1S: 15+ 75 E | 0.2 | 0.95 | 10 | 65  | <5 | 0.07 | <1 | 4  | 27  | 6   | 1.65  | <10 | 0.22 | 138  | <1 | 0.02  | 6  | 710  | 12  | <5 | <20 | 11  | <0.01 | <10 | 43 | <10 | 2  | 30  |
| 480  | L1S: 16+ 00 E | 0.2 | 0.81 | 10 | 55  | <5 | 0.05 | <1 | 4  | 27  | 7   | 2.01  | <10 | 0.15 | 173  | 1  | 0.02  | 7  | 1200 | 14  | <5 | <20 | 10  | <0.01 | <10 | 41 | <10 | 1  | 31  |
| 481  | L1S: 16+ 25 E | 1.0 | 0.76 | <5 | 35  | <5 | 0.07 | <1 | 2  | 22  | 5   | 2.15  | <10 | 0.16 | 106  | <1 | 0.02  | 4  | 840  | 4   | <5 | <20 | 10  | <0.01 | <10 | 31 | <10 | <1 | 25  |
| 482  | L1S: 16+ 50 E | <2  | 0.97 | 15 | 35  | <5 | 0.05 | <1 | 6  | 40  | 7   | 3.63  | <10 | 0.28 | 297  | <1 | 0.02  | 10 | 1140 | 14  | <5 | <20 | 10  | 0.01  | <10 | 62 | <10 | <1 | 35  |
| 483  | L1S: 16+ 75 E | <2  | 0.65 | 10 | 35  | <5 | 0.04 | <1 | 5  | 28  | 5   | 2.74  | <10 | 0.22 | 266  | <1 | 0.02  | 7  | 710  | 10  | <5 | <20 | 8   | 0.01  | <10 | 45 | <10 | <1 | 33  |
| 484  | L1S: 17+ 00 E | <2  | 1.11 | 10 | 30  | <5 | 0.06 | <1 | 6  | 37  | 7   | 3.58  | <10 | 0.26 | 322  | <1 | 0.02  | 9  | 760  | 12  | <5 | <20 | 7   | 0.03  | <10 | 53 | <10 | <1 | 40  |
| 485  | L1S: 17+ 25 E | <2  | 1.05 | 10 | 35  | <5 | 0.04 | <1 | 5  | 32  | 5   | 4.25  | <10 | 0.18 | 296  | <1 | 0.01  | 6  | 930  | 12  | <5 | <20 | 8   | 0.01  | <10 | 55 | <10 | <1 | 38  |
| 486  | L1S: 17+ 50 E | <2  | 0.77 | 5  | 45  | <5 | 0.05 | <1 | 5  | 28  | 5   | 2.47  | <10 | 0.19 | 432  | <1 | 0.02  | 6  | 1040 | 8   | <5 | <20 | 7   | 0.01  | <10 | 43 | <10 | <1 | 35  |
| 487  | L1S: 17+ 75 E | <2  | 0.81 | 10 | 60  | <5 | 0.10 | <1 | 9  | 19  | 5   | 2.84  | <10 | 0.20 | 592  | <1 | 0.01  | 9  | 1130 | 12  | <5 | <20 | 11  | <0.01 | <10 | 30 | <10 | <1 | 37  |
| 488  | L1S: 18+ 00 E | <2  | 0.83 | 10 | 45  | <5 | 0.09 | <1 | 7  | 31  | 5   | 2.69  | <10 | 0.18 | 1033 | <1 | 0.01  | 7  | 960  | 12  | <5 | <20 | 9   | 0.03  | <10 | 56 | <10 | <1 | 44  |
| 489  | L1S: 18+ 25 E | <2  | 0.91 | 10 | 30  | <5 | 0.08 | <1 | 5  | 32  | 7   | 2.67  | <10 | 0.23 | 194  | <1 | 0.01  | 7  | 700  | 10  | <5 | <20 | 8   | 0.05  | <10 | 53 | <10 | <1 | 37  |
| 490  | L1S: 18+ 50 E | 0.8 | 0.42 | <5 | 25  | <5 | 0.04 | <1 | 2  | 16  | 3   | 1.06  | <10 | 0.05 | 81   | <1 | 0.02  | 2  | 510  | 6   | <5 | <20 | 7   | 0.01  | <10 | 30 | <10 | 1  | 20  |
| 491  | L1S: 18+ 75 E | 0.8 | 0.34 | <5 | 25  | <5 | 0.04 | <1 | 1  | 11  | 3   | 0.47  | <10 | 0.03 | 56   | <1 | 0.02  | 1  | 310  | 6   | <5 | <20 | 7   | 0.02  | <10 | 17 | <10 | 2  | 13  |
| 492  | L1S: 19+ 00 E | 1.0 | 0.44 | <5 | 50  | <5 | 0.03 | <1 | 5  | 19  | 6   | 1.44  | <10 | 0.04 | 551  | <1 | 0.02  | 5  | 430  | 8   | <5 | <20 | 7   | 0.02  | <10 | 33 | <10 | 1  | 30  |
| 493  | L2S: 14+ 25 E | <2  | 0.57 | 15 | 45  | 5  | 0.02 | <1 | 8  | 10  | 8   | 2.92  | <10 | 0.04 | 205  | 1  | 0.02  | 11 | 820  | 24  | <5 | <20 | 4   | <0.01 | <10 | 30 | <10 | <1 | 38  |
| 494  | L2S: 14+ 50 E | 1.2 | 0.76 | 10 | 90  | <5 | 0.02 | <1 | 6  | 24  | 17  | 2.02  | <10 | 0.09 | 146  | 3  | 0.01  | 9  | 1020 | 36  | <5 | <20 | 16  | <0.01 | <10 | 37 | <10 | 1  | 40  |
| 495  | L2S: 14+ 75 E | 1.0 | 1.49 | 20 | 190 | <5 | 0.47 | 1  | 23 | 41  | 45  | 4.11  | <10 | 0.47 | 2339 | <1 | <0.01 | 26 | 2650 | 16  | <5 | <20 | 29  | <0.01 | <10 | 33 | <10 | 22 | 110 |
| 496  | L2S: 15+ 00 E | 0.8 | 1.85 | 45 | 85  | <5 | 0.66 | 2  | 29 | 111 | 51  | 4.89  | <10 | 0.91 | 1951 | 2  | <0.01 | 47 | 2670 | 20  | <5 | <20 | 30  | 0.01  | <10 | 55 | <10 | 18 | 110 |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu | Fe % | La  | Mg % | Mn   | Mo | Na %  | Ni | P    | Pb  | Sb | Sn  | Sr | Ti %  | U   | V  | W   | Y  | Zn  |
|------|---------------|-----|------|----|-----|----|------|----|----|----|----|------|-----|------|------|----|-------|----|------|-----|----|-----|----|-------|-----|----|-----|----|-----|
| 497  | L2S: 15+ 25 E | <2  | 1.32 | 20 | 80  | <5 | 0.38 | 1  | 24 | 39 | 41 | 3.47 | <10 | 0.47 | 1356 | 2  | 0.01  | 20 | 2130 | 18  | <5 | <20 | 25 | <0.01 | <10 | 36 | <10 | 14 | 108 |
| 498  | L2S: 15+ 50 E | 0.4 | 1.49 | 20 | 85  | <5 | 0.68 | 2  | 21 | 47 | 25 | 3.20 | <10 | 0.51 | 1417 | 1  | 0.01  | 19 | 2030 | 10  | <5 | <20 | 32 | 0.01  | <10 | 40 | <10 | 9  | 94  |
| 499  | L2S: 15+ 75 E | 1.0 | 1.58 | 15 | 90  | <5 | 0.72 | 3  | 16 | 38 | 34 | 2.82 | <10 | 0.54 | 1261 | <1 | 0.02  | 17 | 2120 | 8   | <5 | <20 | 32 | 0.01  | <10 | 32 | <10 | 18 | 120 |
| 500  | L2S: 16+ 00 E | <2  | 1.74 | 15 | 125 | <5 | 0.33 | 3  | 30 | 44 | 18 | 3.87 | <10 | 0.60 | 2377 | 3  | 0.01  | 21 | 2280 | 14  | <5 | <20 | 23 | <0.01 | <10 | 42 | <10 | 7  | 189 |
| 501  | L2S: 16+ 25 E | 0.4 | 1.60 | 20 | 55  | 5  | 0.68 | 1  | 28 | 38 | 34 | 2.74 | <10 | 0.37 | 938  | 4  | 0.02  | 15 | 1120 | 8   | <5 | <20 | 12 | 0.02  | <10 | 43 | <10 | 8  | 79  |
| 502  | L2S: 16+ 50 E | 1.8 | 1.11 | 5  | 45  | <5 | 0.04 | <1 | 6  | 37 | 9  | 2.75 | <10 | 0.32 | 329  | <1 | 0.01  | 10 | 1080 | 6   | <5 | <20 | 12 | <0.01 | <10 | 42 | <10 | <1 | 40  |
| 503  | L2S: 16+ 75 E | 0.8 | 1.35 | 10 | 50  | <5 | 0.04 | <1 | 9  | 64 | 12 | 3.41 | <10 | 0.38 | 952  | <1 | 0.01  | 13 | 1070 | 8   | <5 | <20 | 7  | 0.02  | <10 | 64 | <10 | <1 | 42  |
| 504  | L2S: 17+ 00 E | 0.6 | 1.19 | 10 | 40  | <5 | 0.03 | <1 | 4  | 36 | 6  | 1.91 | <10 | 0.23 | 236  | <1 | <0.01 | 6  | 680  | 4   | <5 | <20 | 6  | <0.01 | <10 | 40 | <10 | <1 | 26  |
| 505  | L2S: 17+ 25 E | 0.2 | 0.76 | 10 | 40  | <5 | 0.05 | <1 | 5  | 27 | 6  | 2.54 | <10 | 0.17 | 717  | <1 | 0.02  | 6  | 1120 | 12  | <5 | <20 | 7  | 0.01  | <10 | 42 | <10 | <1 | 40  |
| 506  | L2S: 17+ 50 E | 0.2 | 0.76 | 5  | 40  | <5 | 0.05 | <1 | 5  | 28 | 6  | 1.90 | <10 | 0.24 | 483  | <1 | 0.02  | 7  | 870  | 6   | <5 | <20 | 6  | 0.01  | <10 | 37 | <10 | <1 | 29  |
| 507  | L2S: 17+ 75 E | 0.2 | 0.72 | 10 | 35  | <5 | 0.05 | <1 | 4  | 33 | 6  | 2.47 | <10 | 0.19 | 189  | <1 | 0.01  | 8  | 880  | 10  | <5 | <20 | 7  | 0.01  | <10 | 43 | <10 | <1 | 34  |
| 508  | L2S: 18+ 00 E | <2  | 1.09 | 10 | 35  | <5 | 0.05 | <1 | 14 | 22 | 8  | 2.63 | <10 | 0.24 | 944  | <1 | <0.01 | 9  | 1090 | 14  | <5 | <20 | 8  | 0.01  | <10 | 32 | <10 | <1 | 44  |
| 509  | L2S: 18+ 25 E | 0.4 | 1.07 | 10 | 35  | <5 | 0.05 | <1 | 8  | 24 | 8  | 2.55 | <10 | 0.22 | 778  | <1 | <0.01 | 8  | 1000 | 8   | <5 | <20 | 7  | 0.02  | <10 | 42 | <10 | <1 | 39  |
| 510  | L2S: 18+ 50 E | 0.4 | 0.80 | 5  | 40  | <5 | 0.06 | <1 | 6  | 19 | 4  | 2.59 | <10 | 0.19 | 678  | <1 | <0.01 | 6  | 1060 | 6   | <5 | <20 | 7  | 0.01  | <10 | 35 | <10 | <1 | 34  |
| 511  | L2S: 18+ 75 E | 0.6 | 0.77 | <5 | 75  | <5 | 0.08 | <1 | 7  | 16 | 5  | 2.80 | <10 | 0.15 | 1138 | <1 | <0.01 | 5  | 1110 | <2  | <5 | <20 | 10 | <0.01 | <10 | 30 | <10 | <1 | 46  |
| 512  | L2S: 19+ 00 E | <2  | 0.82 | 10 | 70  | <5 | 0.10 | <1 | 10 | 25 | 8  | 3.89 | <10 | 0.17 | 1035 | <1 | <0.01 | 9  | 1230 | 10  | <5 | <20 | 11 | 0.01  | <10 | 43 | <10 | <1 | 52  |
| 513  | L3S: 14+ 25 E | <2  | 1.09 | 30 | 55  | 5  | 0.02 | <1 | 15 | 50 | 28 | 6.61 | <10 | 0.39 | 259  | <1 | 0.01  | 27 | 1020 | 30  | <5 | <20 | 7  | 0.02  | <10 | 47 | <10 | <1 | 105 |
| 514  | L3S: 14+ 50 E | 1.4 | 0.99 | 25 | 45  | <5 | 0.02 | <1 | 6  | 25 | 10 | 4.08 | <10 | 0.14 | 376  | <1 | <0.01 | 10 | 960  | 108 | <5 | <20 | 8  | <0.01 | <10 | 41 | <10 | <1 | 50  |
| 515  | L3S: 14+ 75 E | 0.8 | 0.80 | 10 | 80  | <5 | 0.03 | <1 | 4  | 25 | 9  | 2.10 | <10 | 0.17 | 117  | <1 | 0.01  | 8  | 930  | 12  | <5 | <20 | 8  | <0.01 | <10 | 34 | <10 | <1 | 28  |
| 516  | L3S: 15+ 00 E | 0.2 | 0.36 | <5 | 45  | 5  | 0.03 | <1 | 6  | 13 | 6  | 2.25 | <10 | 0.08 | 270  | <1 | <0.01 | 9  | 560  | 10  | <5 | <20 | 5  | <0.01 | <10 | 19 | <10 | 2  | 27  |
| 517  | L3S: 15+ 25 E | 1.2 | 1.21 | 40 | 70  | <5 | 0.13 | <1 | 15 | 36 | 14 | 4.24 | <10 | 0.36 | 1379 | 2  | <0.01 | 17 | 1210 | 12  | <5 | <20 | 8  | <0.01 | <10 | 40 | <10 | <1 | 75  |
| 518  | L3S: 15+ 50 E | 1.2 | 0.89 | 15 | 55  | <5 | 0.05 | <1 | 5  | 28 | 12 | 2.63 | <10 | 0.21 | 187  | 1  | <0.01 | 9  | 650  | 8   | <5 | <20 | 7  | <0.01 | <10 | 44 | <10 | <1 | 32  |
| 519  | L3S: 15+ 75 E | 2.0 | 0.81 | 5  | 40  | <5 | 0.04 | <1 | 4  | 26 | 12 | 2.72 | <10 | 0.18 | 196  | <1 | <0.01 | 8  | 890  | 4   | <5 | <20 | 5  | <0.01 | <10 | 32 | <10 | <1 | 36  |
| 520  | L3S: 16+ 00 E | 1.0 | 0.89 | 30 | 50  | <5 | 0.04 | <1 | 14 | 27 | 17 | 4.00 | <10 | 0.30 | 1208 | 4  | 0.01  | 13 | 920  | 18  | <5 | <20 | 7  | 0.01  | <10 | 45 | <10 | <1 | 60  |
| 521  | L3S: 16+ 25 E | 2.4 | 1.39 | 15 | 70  | <5 | 1.25 | 1  | 19 | 37 | 21 | 2.67 | <10 | 0.35 | 1194 | 1  | <0.01 | 17 | 1950 | 6   | <5 | <20 | 43 | 0.01  | <10 | 28 | <10 | 10 | 92  |
| 522  | L3S: 16+ 50 E | 0.8 | 0.95 | 15 | 40  | <5 | 0.05 | <1 | 8  | 39 | 10 | 3.76 | <10 | 0.27 | 716  | <1 | 0.01  | 12 | 730  | 10  | <5 | <20 | 6  | 0.02  | <10 | 48 | <10 | <1 | 38  |
| 523  | L3S: 16+ 75 E | 1.2 | 0.84 | 20 | 45  | <5 | 0.05 | <1 | 9  | 34 | 8  | 3.49 | <10 | 0.22 | 1229 | <1 | <0.01 | 9  | 830  | 8   | <5 | <20 | 5  | 0.02  | <10 | 43 | <10 | <1 | 43  |
| 524  | L3S: 17+ 00 E | 1.0 | 0.61 | 5  | 30  | <5 | 0.04 | <1 | 5  | 27 | 5  | 1.91 | <10 | 0.18 | 432  | <1 | 0.01  | 6  | 700  | 4   | <5 | <20 | 5  | <0.01 | <10 | 36 | <10 | <1 | 26  |
| 525  | L3S: 17+ 25 E | 1.2 | 0.55 | <5 | 30  | <5 | 0.04 | <1 | 2  | 14 | 4  | 1.77 | <10 | 0.08 | 163  | <1 | 0.01  | 3  | 550  | <2  | <5 | <20 | 5  | <0.01 | <10 | 26 | <10 | <1 | 22  |
| 526  | L3S: 17+ 50 E | 1.0 | 0.71 | 15 | 50  | <5 | 0.07 | <1 | 8  | 22 | 7  | 2.68 | <10 | 0.19 | 781  | 1  | <0.01 | 7  | 850  | 10  | <5 | <20 | 8  | 0.02  | <10 | 38 | <10 | <1 | 36  |
| 527  | L3S: 17+ 75 E | 1.0 | 0.67 | 10 | 50  | <5 | 0.11 | <1 | 9  | 13 | 5  | 2.18 | <10 | 0.15 | 721  | <1 | <0.01 | 5  | 930  | 8   | <5 | <20 | 12 | <0.01 | <10 | 26 | <10 | <1 | 33  |
| 528  | L3S: 18+ 00 E | 1.2 | 0.92 | 10 | 50  | <5 | 0.32 | <1 | 21 | 17 | 7  | 2.72 | <10 | 0.21 | 1359 | <1 | 0.02  | 8  | 1480 | 14  | <5 | <20 | 24 | <0.01 | <10 | 30 | <10 | 11 | 47  |
| 529  | L3S: 18+ 25 E | 1.2 | 0.85 | 15 | 55  | <5 | 0.33 | <1 | 14 | 21 | 7  | 2.85 | <10 | 0.29 | 1214 | <1 | <0.01 | 11 | 1730 | 10  | <5 | <20 | 25 | <0.01 | <10 | 29 | <10 | 3  | 58  |
| 530  | L3S: 18+ 50 E | 1.2 | 1.09 | 15 | 50  | <5 | 0.27 | <1 | 15 | 21 | 8  | 2.80 | <10 | 0.26 | 1319 | <1 | <0.01 | 12 | 1700 | 12  | <5 | <20 | 20 | <0.01 | <10 | 28 | <10 | 17 | 50  |
| 531  | L3S: 18+ 75 E | 0.4 | 0.61 | 15 | 65  | <5 | 0.28 | <1 | 17 | 15 | 9  | 2.52 | <10 | 0.21 | 1314 | <1 | <0.01 | 12 | 1420 | 10  | <5 | <20 | 23 | <0.01 | <10 | 19 | <10 | 7  | 59  |
| 532  | L3S: 19+ 00 E | 1.0 | 0.65 | 5  | 30  | <5 | 0.05 | <1 | 5  | 17 | 6  | 3.02 | <10 | 0.17 | 422  | <1 | <0.01 | 6  | 750  | 2   | <5 | <20 | 5  | 0.01  | <10 | 24 | <10 | <1 | 35  |
| 533  | L4S: 13+ 75 E | <2  | 0.81 | 20 | 40  | <5 | 0.03 | <1 | 7  | 22 | 10 | 2.49 | <10 | 0.16 | 291  | <1 | 0.02  | 10 | 790  | 14  | <5 | <20 | 5  | 0.01  | <10 | 39 | <10 | <1 | 31  |
| 534  | L4S: 14+ 00 E | <2  | 1.57 | 30 | 30  | <5 | 0.07 | <1 | 12 | 62 | 23 | 4.82 | <10 | 0.51 | 328  | <1 | 0.01  | 23 | 910  | 12  | <5 | <20 | 7  | 0.03  | <10 | 47 | <10 | <1 | 62  |
| 535  | L4S: 14+ 25 E | <2  | 0.95 | 25 | 50  | <5 | 0.06 | <1 | 8  | 47 | 12 | 2.88 | <10 | 0.33 | 476  | <1 | 0.01  | 15 | 1010 | 14  | <5 | <20 | 7  | 0.02  | <10 | 55 | <10 | <1 | 43  |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi  | Ca % | Cd  | Co | Cr  | Cu | Fe % | La   | Mg % | Mn     | Mo  | Na % | Ni | P    | Pb  | Sb  | Sn   | Sr  | Ti % | U    | V   | W    | Y   | Zn  |
|------|---------------|-----|------|----|-----|-----|------|-----|----|-----|----|------|------|------|--------|-----|------|----|------|-----|-----|------|-----|------|------|-----|------|-----|-----|
| 536  | L4S: 14+ 50 E | <.2 | 1.82 | 35 | 45  | <.5 | 0.03 | <.1 | 10 | 79  | 12 | 4.16 | <.10 | 0.56 | 724    | 1   | <.01 | 17 | 1280 | 14  | <.5 | <.20 | 5   | 0.01 | <.10 | 80  | <.10 | <.1 | 52  |
| 537  | L4S: 14+ 75 E | 0.8 | 1.46 | 35 | 60  | <.5 | 0.03 | <.1 | 14 | 58  | 24 | 3.98 | <.10 | 0.41 | 1119   | <.1 | 0.01 | 23 | 900  | 36  | <.5 | <.20 | 7   | 0.01 | <.10 | 63  | <.10 | <.1 | 71  |
| 538  | L4S: 15+ 00 E | <.2 | 1.27 | 25 | 30  | <.5 | 0.04 | <.1 | 6  | 62  | 12 | 3.26 | <.10 | 0.43 | 275    | <.1 | 0.01 | 15 | 1030 | 12  | <.5 | <.20 | 6   | 0.01 | <.10 | 59  | <.10 | <.1 | 39  |
| 539  | L4S: 15+ 25 E | <.2 | 1.37 | 25 | 45  | <.5 | 0.04 | <.1 | 9  | 67  | 12 | 3.32 | <.10 | 0.46 | 944    | <.1 | 0.01 | 16 | 900  | 10  | <.5 | <.20 | 6   | 0.02 | <.10 | 61  | <.10 | <.1 | 48  |
| 540  | L4S: 15+ 50 E | <.2 | 1.46 | 30 | 50  | <.5 | 0.04 | <.1 | 11 | 70  | 16 | 3.77 | <.10 | 0.49 | 1084   | 1   | 0.01 | 18 | 960  | 12  | <.5 | <.20 | 7   | 0.02 | <.10 | 64  | <.10 | <.1 | 52  |
| 541  | L4S: 15+ 75 E | <.2 | 1.23 | 20 | 45  | <.5 | 0.04 | <.1 | 6  | 57  | 12 | 3.05 | <.10 | 0.36 | 582    | 1   | 0.01 | 12 | 990  | 10  | <.5 | <.20 | 7   | 0.01 | <.10 | 47  | <.10 | <.1 | 42  |
| 542  | L4S: 16+ 00 E | 1.2 | 1.27 | 25 | 35  | <.5 | 0.05 | <.1 | 7  | 63  | 14 | 3.29 | <.10 | 0.37 | 394    | 2   | 0.01 | 15 | 1630 | 10  | <.5 | <.20 | 7   | 0.02 | <.10 | 54  | <.10 | <.1 | 45  |
| 543  | L4S: 16+ 25 E | <.2 | 3.17 | 80 | 45  | <.5 | 0.03 | 1   | 30 | 108 | 28 | 7.38 | <.10 | 1.32 | 1867   | 2   | <.01 | 32 | 2080 | 8   | <.5 | <.20 | 4   | 0.02 | <.10 | 101 | <.10 | <.1 | 101 |
| 544  | L4S: 16+ 50 E | <.2 | 1.01 | 20 | 30  | <.5 | 0.04 | <.1 | 5  | 34  | 10 | 3.52 | <.10 | 0.19 | 178    | <.1 | 0.01 | 9  | 1340 | 16  | <.5 | <.20 | 6   | <.01 | <.10 | 45  | <.10 | <.1 | 47  |
| 545  | L4S: 16+ 75 E | <.2 | 1.03 | 20 | 30  | <.5 | 0.05 | <.1 | 7  | 34  | 9  | 3.49 | <.10 | 0.21 | 526    | <.1 | 0.01 | 9  | 900  | 10  | <.5 | <.20 | 6   | 0.02 | <.10 | 45  | <.10 | <.1 | 40  |
| 546  | L4S: 17+ 00 E | <.2 | 1.23 | 20 | 30  | <.5 | 0.04 | <.1 | 11 | 42  | 14 | 4.79 | <.10 | 0.28 | 1053   | <.1 | 0.01 | 11 | 1900 | 12  | <.5 | <.20 | 6   | 0.03 | <.10 | 49  | <.10 | <.1 | 56  |
| 547  | L4S: 17+ 25 E | <.2 | 1.21 | 25 | 30  | <.5 | 0.05 | <.1 | 11 | 47  | 13 | 4.18 | <.10 | 0.33 | 1090   | <.1 | 0.02 | 15 | 1200 | 14  | <.5 | <.20 | 6   | 0.03 | <.10 | 52  | <.10 | <.1 | 46  |
| 548  | L4S: 17+ 50 E | <.2 | 1.17 | 25 | 30  | <.5 | 0.04 | <.1 | 9  | 37  | 10 | 4.29 | <.10 | 0.24 | 678    | <.1 | 0.01 | 9  | 950  | 14  | <.5 | <.20 | 6   | 0.02 | <.10 | 47  | <.10 | <.1 | 46  |
| 549  | L4S: 17+ 75 E | <.2 | 1.15 | 25 | 30  | <.5 | 0.05 | <.1 | 12 | 36  | 9  | 4.28 | <.10 | 0.28 | 1390   | <.1 | 0.02 | 11 | 1390 | 14  | <.5 | <.20 | 5   | 0.02 | <.10 | 41  | <.10 | <.1 | 50  |
| 550  | L4S: 18+ 00 E | <.2 | 0.93 | 20 | 25  | <.5 | 0.04 | <.1 | 5  | 28  | 5  | 2.92 | <.10 | 0.19 | 248    | <.1 | 0.02 | 7  | 680  | 10  | <.5 | <.20 | 5   | 0.01 | <.10 | 40  | <.10 | <.1 | 30  |
| 551  | L4S: 18+ 25 E | 0.2 | 0.93 | 20 | 45  | <.5 | 0.04 | <.1 | 11 | 30  | 8  | 3.65 | <.10 | 0.16 | 2068   | <.1 | 0.01 | 7  | 1110 | 16  | <.5 | <.20 | 6   | 0.01 | <.10 | 48  | <.10 | <.1 | 41  |
| 552  | L4S: 18+ 50 E | <.2 | 0.98 | 20 | 50  | <.5 | 0.07 | <.1 | 14 | 34  | 10 | 4.15 | <.10 | 0.19 | 2174   | <.1 | 0.01 | 9  | 1290 | 16  | <.5 | <.20 | 7   | 0.02 | <.10 | 52  | <.10 | <.1 | 49  |
| 553  | L4S: 18+ 75 E | <.2 | 0.88 | 15 | 95  | <.5 | 0.06 | <.1 | 12 | 29  | 9  | 4.19 | <.10 | 0.11 | 3709   | <.1 | <.01 | 7  | 1320 | 18  | <.5 | <.20 | 6   | 0.01 | <.10 | 42  | <.10 | <.1 | 59  |
| 554  | L4S: 19+ 00 E | <.2 | 1.03 | 25 | 35  | <.5 | 0.07 | <.1 | 9  | 37  | 9  | 4.03 | <.10 | 0.24 | 611    | <.1 | 0.02 | 9  | 1090 | 14  | <.5 | <.20 | 7   | 0.02 | <.10 | 51  | <.10 | <.1 | 53  |
| 555  | L20N 5+ 00 E  | <.2 | 1.44 | 30 | 120 | 5   | 0.59 | 1   | 20 | 46  | 16 | 4.41 | <.10 | 0.39 | 1367   | 3   | 0.02 | 22 | 1420 | 28  | <.5 | <.20 | 25  | 0.01 | <.10 | 36  | <.10 | 7   | 113 |
| 556  | L20N 5+ 25 E  | 0.6 | 1.97 | 40 | 245 | <.5 | 1.85 | 2   | 23 | 56  | 39 | 5.47 | <.10 | 0.34 | 3330   | 3   | 0.02 | 37 | 1670 | 42  | <.5 | <.20 | 57  | 0.01 | <.10 | 40  | <.10 | 16  | 169 |
| 557  | L20N 5+ 50 E  | <.2 | 1.29 | 40 | 110 | <.5 | 0.18 | <.1 | 14 | 45  | 14 | 4.51 | <.10 | 0.36 | 431    | 3   | 0.02 | 19 | 860  | 28  | <.5 | <.20 | 10  | 0.01 | <.10 | 39  | <.10 | <.1 | 94  |
| 558  | L20N 5+ 75 E  | <.2 | 1.07 | 35 | 100 | <.5 | 0.91 | <.1 | 20 | 41  | 20 | 4.39 | <.10 | 0.28 | 872    | 3   | 0.02 | 24 | 700  | 26  | <.5 | <.20 | 32  | <.01 | <.10 | 33  | <.10 | 3   | 80  |
| 559  | L20N 6+ 00 E  | 0.6 | 0.45 | 10 | 80  | <.5 | 7.20 | 2   | 9  | 18  | 13 | 1.45 | <.10 | 0.14 | 341    | 2   | <.01 | 13 | 1180 | 8   | <.5 | <.20 | 173 | <.01 | <.10 | 12  | <.10 | 6   | 73  |
| 560  | L20N 6+ 25 E  | <.2 | 1.07 | 25 | 55  | <.5 | 0.63 | 2   | 11 | 28  | 9  | 3.57 | <.10 | 0.23 | 212    | 2   | <.01 | 10 | 990  | 18  | <.5 | <.20 | 30  | <.01 | <.10 | 34  | <.10 | <.1 | 57  |
| 561  | L20N 6+ 50 E  | <.2 | 0.96 | 20 | 80  | <.5 | 0.16 | <.1 | 5  | 22  | 5  | 2.35 | <.10 | 0.18 | 98     | <.1 | 0.03 | 7  | 810  | 8   | <.5 | <.20 | 12  | <.01 | <.10 | 35  | <.10 | <.1 | 36  |
| 562  | L20N 6+ 75 E  | 0.6 | 0.77 | 15 | 80  | <.5 | 0.11 | <.1 | 6  | 24  | 8  | 2.29 | <.10 | 0.24 | 189    | <.1 | 0.02 | 9  | 1080 | 12  | <.5 | <.20 | 7   | 0.01 | <.10 | 38  | <.10 | <.1 | 41  |
| 563  | L20N 7+ 00 E  | <.2 | 2.97 | 40 | 140 | <.5 | 0.13 | <.1 | 24 | 157 | 24 | 5.77 | <.10 | 1.98 | 430    | <.1 | <.01 | 40 | 1740 | 16  | <.5 | <.20 | 7   | 0.03 | <.10 | 139 | <.10 | <.1 | 208 |
| 564  | L20N 7+ 25 E  | <.2 | 1.12 | 20 | 110 | <.5 | 1.21 | <.1 | 12 | 24  | 11 | 2.71 | <.10 | 0.31 | 1284   | <.1 | 0.01 | 13 | 1040 | 12  | <.5 | <.20 | 44  | 0.01 | <.10 | 25  | <.10 | <.1 | 83  |
| 565  | L20N 7+ 50 E  | <.2 | 1.24 | 20 | 130 | <.5 | 2.04 | <.1 | 19 | 33  | 14 | 2.88 | <.10 | 0.42 | 1774   | 1   | 0.01 | 17 | 1370 | 14  | <.5 | <.20 | 73  | 0.02 | <.10 | 27  | <.10 | 3   | 84  |
| 566  | L20N 7+ 75 E  | <.2 | 2.59 | 30 | 105 | <.5 | 0.19 | <.1 | 25 | 45  | 26 | 3.30 | <.10 | 0.59 | 260    | <.1 | 0.02 | 33 | 1040 | 18  | <.5 | <.20 | 13  | 0.01 | <.10 | 31  | <.10 | 4   | 73  |
| 567  | L20N 8+ 00 E  | <.2 | 0.78 | 15 | 45  | <.5 | 0.04 | <.1 | 4  | 13  | 5  | 1.41 | <.10 | 0.11 | 79     | <.1 | 0.03 | 6  | 460  | 10  | <.5 | <.20 | 5   | 0.02 | <.10 | 36  | <.10 | <.1 | 21  |
| 568  | L20N 8+ 25 E  | <.2 | 1.30 | 35 | 75  | <.5 | 0.05 | <.1 | 10 | 32  | 14 | 4.22 | <.10 | 0.23 | 389    | <.1 | 0.01 | 13 | 1300 | 18  | <.5 | <.20 | 6   | 0.03 | <.10 | 50  | <.10 | <.1 | 56  |
| 569  | L20N 8+ 50 E  | <.2 | 0.78 | 20 | 80  | <.5 | 0.14 | <.1 | 6  | 20  | 7  | 2.69 | <.10 | 0.16 | 276    | <.1 | 0.02 | 8  | 800  | 14  | <.5 | <.20 | 8   | 0.03 | <.10 | 46  | <.10 | <.1 | 36  |
| 570  | L20N 8+ 75 E  | <.2 | 1.62 | 60 | 90  | <.5 | 1.01 | 1   | 40 | 36  | 24 | 6.07 | <.10 | 0.18 | 1254   | 4   | 0.03 | 64 | 2070 | 22  | <.5 | <.20 | 15  | 0.01 | <.10 | 32  | <.10 | 34  | 94  |
| 571  | L20N 9+ 00 E  | <.2 | 1.38 | 25 | 75  | <.5 | 0.16 | 1   | 15 | 24  | 10 | 3.31 | <.10 | 0.12 | 130    | 1   | 0.02 | 25 | 450  | 8   | <.5 | <.20 | 5   | 0.01 | <.10 | 50  | <.10 | <.1 | 42  |
| 572  | L20N 9+ 25 E  | <.2 | 1.19 | 30 | 75  | 5   | 0.10 | <.1 | 25 | 60  | 28 | 6.77 | <.10 | 0.15 | 331    | <.1 | 0.02 | 86 | 1490 | 10  | <.5 | <.20 | 7   | <.01 | <.10 | 44  | <.10 | <.1 | 74  |
| 573  | L20N 9+ 50 E  | <.2 | 0.36 | 10 | 25  | <.5 | 0.04 | <.1 | 6  | 5   | 6  | 2.07 | <.10 | 0.02 | 117    | <.1 | 0.05 | 10 | 390  | 4   | <.5 | <.20 | 4   | <.01 | <.10 | 18  | <.10 | 1   | 18  |
| 574  | L20N 9+ 75 E  | 1.8 | 0.57 | 30 | 130 | <.5 | 0.37 | <.1 | 27 | 14  | 11 | 5.69 | <.10 | 0.05 | >10000 | 3   | <.01 | 24 | 1450 | 128 | <.5 | <.20 | 23  | 0.01 | <.10 | 29  | <.10 | <.1 | 103 |

| Et# | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr  | Ti % | U   | V  | W   | Y  | Zn  |
|-----|---------------|-----|------|----|-----|----|------|----|----|----|-----|------|-----|------|------|----|------|----|------|----|----|-----|-----|------|-----|----|-----|----|-----|
| 575 | L22N 5+ 00 E  | <2  | 1.60 | 30 | 80  | <5 | 0.80 | <1 | 18 | 37 | 25  | 4.53 | <10 | 0.52 | 955  | <1 | 0.01 | 24 | 1050 | 28 | <5 | <20 | 29  | 0.01 | <10 | 27 | <10 | 4  | 105 |
| 576 | L22N 5+ 25 E  | <2  | 1.79 | 40 | 45  | <5 | 0.06 | <1 | 14 | 45 | 19  | 5.95 | <10 | 0.69 | 624  | 1  | 0.01 | 20 | 1020 | 24 | <5 | <20 | 4   | <0.1 | <10 | 31 | <10 | <1 | 76  |
| 577 | L22N 5+ 50 E  | 0.2 | 2.24 | 40 | 100 | <5 | 0.36 | <1 | 29 | 49 | 43  | 5.85 | <10 | 0.67 | 1504 | 1  | 0.02 | 44 | 930  | 46 | <5 | <20 | 19  | 0.01 | <10 | 30 | <10 | 17 | 119 |
| 578 | L22N 5+ 75 E  | <2  | 1.21 | 15 | 60  | <5 | 0.03 | 2  | 5  | 30 | 3   | 2.23 | <10 | 0.52 | 144  | <1 | 0.02 | 6  | 360  | 22 | <5 | <20 | 4   | 0.01 | <10 | 29 | <10 | <1 | 42  |
| 579 | L22N 6+ 00 E  | <2  | 1.69 | 25 | 60  | <5 | 0.04 | <1 | 9  | 37 | 7   | 3.95 | <10 | 0.71 | 313  | <1 | 0.01 | 11 | 550  | 46 | <5 | <20 | 4   | 0.01 | <10 | 46 | <10 | <1 | 63  |
| 580 | L22N 6+ 25 E  | <2  | 1.89 | 30 | 60  | <5 | 0.05 | <1 | 12 | 40 | 13  | 4.79 | <10 | 0.91 | 700  | <1 | 0.01 | 14 | 840  | 14 | <5 | <20 | 4   | <0.1 | <10 | 37 | <10 | <1 | 75  |
| 581 | L22N 6+ 50 E  | <2  | 2.49 | 35 | 65  | <5 | 0.07 | <1 | 15 | 48 | 18  | 4.86 | <10 | 1.21 | 470  | <1 | 0.01 | 22 | 1230 | 10 | <5 | <20 | 4   | <0.1 | <10 | 31 | <10 | <1 | 83  |
| 582 | L22N 6+ 75 E  | <2  | 1.22 | 50 | 45  | <5 | 0.06 | <1 | 26 | 28 | 53  | 7.70 | <10 | 0.19 | 599  | <1 | 0.03 | 54 | 1830 | 20 | <5 | <20 | 7   | <0.1 | <10 | 26 | <10 | 13 | 60  |
| 583 | L22N 7+ 00 E  | <2  | 2.47 | 40 | 110 | 5  | 0.59 | <1 | 24 | 41 | 44  | 7.25 | <10 | 0.38 | 1719 | <1 | 0.02 | 33 | 1610 | 14 | <5 | <20 | 13  | 0.01 | <10 | 33 | <10 | 12 | 100 |
| 584 | L22N 7+ 25 E  | <2  | 1.62 | 40 | 130 | <5 | 0.65 | <1 | 27 | 37 | 21  | 6.28 | <10 | 0.25 | 1546 | 1  | <0.1 | 22 | 1710 | 18 | <5 | <20 | 12  | 0.01 | <10 | 50 | <10 | <1 | 106 |
| 585 | L22N 7+ 50 E  | <2  | 2.10 | 35 | 125 | <5 | 0.16 | <1 | 20 | 44 | 27  | 5.73 | <10 | 0.44 | 525  | <1 | 0.02 | 31 | 970  | 10 | <5 | <20 | 7   | <0.1 | <10 | 41 | <10 | 5  | 92  |
| 586 | L22N 7+ 75 E  | <2  | 1.34 | 35 | 130 | <5 | 0.57 | <1 | 15 | 27 | 15  | 5.35 | <10 | 0.16 | 607  | 2  | 0.02 | 17 | 920  | 20 | <5 | <20 | 18  | 0.01 | <10 | 42 | <10 | <1 | 63  |
| 587 | L22N 8+ 00 E  | <2  | 1.81 | 30 | 125 | <5 | 0.13 | <1 | 13 | 37 | 20  | 4.85 | <10 | 0.44 | 258  | <1 | 0.01 | 26 | 1030 | 16 | <5 | <20 | 10  | <0.1 | <10 | 28 | <10 | <1 | 77  |
| 588 | L22N 8+ 25 E  | <2  | 1.75 | 40 | 120 | <5 | 0.13 | <1 | 14 | 39 | 22  | 4.98 | <10 | 0.43 | 277  | 1  | 0.01 | 27 | 1010 | 20 | <5 | <20 | 10  | <0.1 | <10 | 32 | <10 | <1 | 80  |
| 589 | L22N 8+ 50 E  | 0.4 | 1.09 | 45 | 85  | 5  | 0.60 | 1  | 30 | 21 | 20  | 6.67 | <10 | 0.12 | 3558 | 1  | <0.1 | 34 | 2230 | 32 | <5 | <20 | 14  | 0.01 | <10 | 31 | <10 | 1  | 110 |
| 590 | L22N 8+ 75 E  | 0.4 | 0.67 | 75 | 200 | <5 | 0.53 | 1  | 21 | 24 | 19  | 8.23 | <10 | 0.09 | 7563 | <1 | <0.1 | 34 | 4530 | 62 | <5 | <20 | 15  | 0.01 | <10 | 32 | <10 | <1 | 168 |
| 591 | L22N 9+ 00 E  | <2  | 1.37 | 60 | 115 | <5 | 0.12 | <1 | 16 | 34 | 28  | 5.83 | <10 | 0.22 | 584  | 1  | <0.1 | 39 | 1510 | 98 | <5 | <20 | 10  | 0.01 | <10 | 37 | <10 | <1 | 304 |
| 592 | L22N 9+ 25 E  | <2  | 1.12 | 35 | 145 | <5 | 0.26 | <1 | 16 | 25 | 20  | 5.19 | <10 | 0.17 | 744  | 1  | 0.01 | 20 | 990  | 66 | <5 | <20 | 22  | 0.01 | <10 | 31 | <10 | <1 | 185 |
| 593 | L22N 9+ 50 E  | <2  | 1.02 | 30 | 125 | <5 | 1.17 | 4  | 23 | 28 | 63  | 4.57 | <10 | 0.49 | 1110 | <1 | <0.1 | 48 | 1370 | 46 | <5 | <20 | 57  | <0.1 | <10 | 21 | <10 | 4  | 735 |
| 594 | L22N 9+ 75 E  | <2  | 0.90 | 10 | 135 | 5  | 1.23 | 4  | 23 | 24 | 56  | 4.28 | <10 | 0.43 | 987  | <1 | <0.1 | 72 | 1270 | 52 | <5 | <20 | 73  | <0.1 | <10 | 18 | <10 | 3  | 923 |
| 595 | L22N 10+ 25 E | 0.8 | 1.20 | 30 | 140 | <5 | 1.14 | 1  | 18 | 26 | 48  | 3.67 | <10 | 0.26 | 1146 | 2  | <0.1 | 22 | 1680 | 48 | <5 | <20 | 66  | 0.01 | <10 | 27 | <10 | 4  | 118 |
| 596 | L22N 10+ 50 E | <2  | 1.85 | 25 | 70  | <5 | 0.07 | <1 | 9  | 30 | 25  | 3.96 | <10 | 0.25 | 144  | <1 | 0.01 | 13 | 950  | 24 | <5 | <20 | 12  | 0.01 | <10 | 38 | <10 | <1 | 81  |
| 597 | L22N 10+ 75 E | 1.0 | 1.22 | 20 | 60  | <5 | 2.35 | 2  | 15 | 28 | 67  | 3.08 | <10 | 0.33 | 511  | <1 | <0.1 | 28 | 1550 | 32 | <5 | <20 | 108 | <0.1 | <10 | 16 | <10 | 19 | 151 |
| 598 | L22N 11+ 00 E | <2  | 1.20 | 30 | 60  | <5 | 1.08 | 2  | 20 | 22 | 41  | 3.85 | <10 | 0.36 | 575  | 2  | 0.01 | 28 | 1000 | 30 | <5 | <20 | 60  | 0.01 | <10 | 20 | <10 | 11 | 143 |
| 599 | L22N 11+ 25 E | 0.6 | 1.35 | 25 | 50  | <5 | 1.90 | 3  | 9  | 23 | 60  | 3.34 | <10 | 0.29 | 145  | <1 | 0.06 | 31 | 1730 | 14 | <5 | <20 | 109 | <0.1 | <10 | 17 | <10 | 62 | 118 |
| 600 | L22N 11+ 50 E | 0.4 | 1.30 | 25 | 55  | <5 | 1.35 | 2  | 12 | 23 | 48  | 4.41 | <10 | 0.24 | 340  | 1  | 0.06 | 31 | 1710 | 14 | <5 | <20 | 90  | <0.1 | <10 | 19 | <10 | 62 | 129 |
| 601 | L22N 11+ 75 E | <2  | 0.38 | 30 | 40  | <5 | 0.39 | <1 | 10 | 16 | 60  | 3.30 | <10 | 0.07 | 138  | 2  | 0.02 | 23 | 960  | 22 | <5 | <20 | 36  | <0.1 | <10 | 35 | <10 | <1 | 89  |
| 602 | L22N 12+ 00 E | <2  | 1.39 | 30 | 50  | <5 | 0.87 | <1 | 15 | 39 | 28  | 4.48 | <10 | 0.44 | 332  | 1  | 0.02 | 30 | 1050 | 22 | <5 | <20 | 59  | <0.1 | <10 | 29 | <10 | 11 | 89  |
| 603 | L22N 12+ 25 E | 2.2 | 0.68 | <5 | 45  | <5 | 2.94 | <1 | 20 | 3  | 59  | 0.63 | <10 | 0.17 | 531  | <1 | 0.09 | 31 | 1260 | 4  | <5 | <20 | 179 | <0.1 | <10 | 3  | <10 | 95 | 44  |
| 604 | L22N 12+ 50 E | 0.6 | 2.40 | 40 | 110 | <5 | 0.31 | <1 | 47 | 27 | 117 | 4.91 | <10 | 0.24 | 779  | <1 | 0.02 | 37 | 2020 | 52 | <5 | <20 | 26  | 0.02 | <10 | 31 | <10 | 2  | 106 |
| 605 | L22N 12+ 75 E | <2  | 1.60 | 25 | 105 | <5 | 0.13 | <1 | 11 | 19 | 51  | 4.06 | <10 | 0.24 | 263  | <1 | 0.01 | 14 | 1370 | 38 | <5 | <20 | 18  | <0.1 | <10 | 27 | <10 | <1 | 69  |
| 606 | L22N 13+ 00 E | <2  | 0.85 | 15 | 115 | <5 | 0.26 | <1 | 6  | 7  | 90  | 1.88 | <10 | 0.08 | 292  | <1 | <0.1 | 6  | 610  | 34 | <5 | <20 | 20  | <0.1 | <10 | 22 | <10 | <1 | 73  |
| 607 | L22N 13+ 25 E | <2  | 1.88 | 25 | 185 | <5 | 0.19 | <1 | 13 | 20 | 37  | 3.80 | <10 | 0.31 | 344  | <1 | 0.01 | 16 | 1250 | 34 | <5 | <20 | 22  | 0.02 | <10 | 30 | <10 | <1 | 98  |
| 608 | L22N 13+ 50 E | 1.0 | 2.45 | 20 | 140 | <5 | 0.64 | <1 | 30 | 19 | 57  | 3.47 | <10 | 0.28 | 1234 | <1 | 0.03 | 29 | 1750 | 34 | <5 | <20 | 49  | <0.1 | <10 | 18 | <10 | 42 | 136 |
| 609 | L22N 13+ 75 E | 0.4 | 1.65 | 15 | 110 | <5 | 0.87 | <1 | 16 | 18 | 56  | 2.99 | <10 | 0.31 | 261  | <1 | 0.03 | 34 | 1900 | 24 | <5 | <20 | 59  | <0.1 | <10 | 16 | <10 | 67 | 131 |
| 610 | L22N 14+ 00 E | <2  | 0.82 | 10 | 125 | <5 | 0.13 | <1 | 6  | 8  | 36  | 1.67 | <10 | 0.10 | 182  | <1 | 0.02 | 8  | 630  | 16 | <5 | <20 | 11  | 0.01 | <10 | 31 | <10 | <1 | 54  |
| 611 | L22N 14+ 25 E | <2  | 0.81 | 20 | 125 | <5 | 0.13 | <1 | 7  | 11 | 27  | 2.08 | <10 | 0.10 | 174  | 1  | 0.02 | 9  | 680  | 20 | <5 | <20 | 11  | 0.01 | <10 | 41 | <10 | <1 | 50  |
| 612 | L22N 14+ 50 E | <2  | 0.94 | 10 | 230 | <5 | 0.21 | <1 | 5  | 6  | 47  | 1.54 | <10 | 0.23 | 942  | <1 | 0.02 | 5  | 410  | 6  | <5 | <20 | 12  | 0.03 | <10 | 31 | <10 | <1 | 85  |
| 613 | L22N 14+ 75 E | <2  | 0.75 | 20 | 55  | <5 | 0.08 | <1 | 18 | 15 | 43  | 5.05 | <10 | 0.11 | 787  | <1 | <0.1 | 22 | 900  | 22 | <5 | <20 | 10  | <0.1 | <10 | 31 | <10 | <1 | 79  |

| Et # | Tag #          | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni  | P    | Pb | Sb | Sn  | Sr  | Ti % | U   | V  | W   | Y   | Zn  |
|------|----------------|-----|------|----|-----|----|------|----|----|----|----|------|-----|------|------|----|------|-----|------|----|----|-----|-----|------|-----|----|-----|-----|-----|
| 614  | L22N 15+ 00 E  | <2  | 1.02 | 5  | 50  | <5 | 0.02 | <1 | 7  | 14 | 47 | 2.52 | <10 | 0.08 | 203  | <1 | 0.02 | 14  | 490  | 12 | <5 | <20 | 5   | 0.02 | <10 | 53 | <10 | <1  | 54  |
| 615  | L23N 10+ 25 E  | <2  | 1.31 | 15 | 155 | <5 | 1.08 | 3  | 23 | 25 | 76 | 4.22 | <10 | 0.30 | 2157 | <1 | 0.02 | 36  | 2560 | 30 | <5 | <20 | 69  | <0.1 | <10 | 27 | <10 | 30  | 155 |
| 616  | L23N 10+ 50 E  | <2  | 1.31 | 20 | 75  | <5 | 1.18 | 2  | 21 | 38 | 35 | 4.33 | <10 | 0.46 | 844  | <1 | 0.02 | 43  | 1420 | 32 | <5 | <20 | 73  | <0.1 | <10 | 33 | <10 | 20  | 170 |
| 617  | L23N 10+ 75 E  | <2  | 1.68 | 30 | 90  | <5 | 0.60 | 1  | 29 | 58 | 42 | 5.78 | <10 | 0.50 | 1201 | <1 | 0.03 | 52  | 1610 | 44 | <5 | <20 | 50  | <0.1 | <10 | 46 | <10 | 26  | 190 |
| 618  | L23N 11+ 00 E  | <2  | 1.49 | 20 | 80  | <5 | 0.25 | <1 | 21 | 48 | 37 | 5.74 | <10 | 0.44 | 530  | <1 | 0.02 | 38  | 1300 | 42 | <5 | <20 | 30  | <0.1 | <10 | 38 | <10 | <1  | 154 |
| 619  | L23N 11+ 25 E  | <2  | 1.77 | 30 | 85  | <5 | 1.51 | 1  | 29 | 44 | 48 | 5.44 | <10 | 0.52 | 750  | <1 | 0.03 | 50  | 1430 | 40 | <5 | <20 | 97  | <0.1 | <10 | 35 | <10 | 25  | 178 |
| 620  | L23N 11+ 50 E  | <2  | 0.75 | 25 | 45  | <5 | 0.14 | <1 | 11 | 19 | 38 | 5.23 | <10 | 0.11 | 329  | <1 | 0.02 | 23  | 940  | 52 | <5 | <20 | 22  | 0.01 | <10 | 41 | <10 | <1  | 81  |
| 621  | L23N 11+ 75 E  | <2  | 0.95 | 10 | 125 | <5 | 0.11 | <1 | 10 | 15 | 23 | 3.65 | <10 | 0.19 | 661  | <1 | 0.02 | 13  | 740  | 40 | <5 | <20 | 19  | 0.01 | <10 | 36 | <10 | <1  | 87  |
| 622  | L23N 12+ 00 E  | <2  | 1.38 | 25 | 145 | <5 | 0.11 | <1 | 22 | 28 | 34 | 4.88 | <10 | 0.33 | 549  | <1 | 0.03 | 26  | 800  | 44 | <5 | <20 | 16  | 0.02 | <10 | 40 | <10 | 10  | 114 |
| 623  | L23N 12+ 25 E  | <2  | 0.52 | 10 | 115 | <5 | 4.12 | <1 | 9  | 14 | 29 | 2.26 | <10 | 0.21 | 314  | <1 | 0.02 | 22  | 1290 | 14 | <5 | <20 | 236 | <0.1 | <10 | 28 | <10 | 23  | 83  |
| 624  | L23N 12+ 50 E  | 2.0 | 4.94 | 45 | 195 | <5 | 1.51 | 1  | 36 | 39 | 72 | 4.97 | <10 | 0.32 | 1145 | <1 | 0.03 | 111 | 4190 | 56 | <5 | <20 | 118 | 0.02 | <10 | 30 | <10 | 139 | 316 |
| 625  | L23N 12+ 75 E  | <2  | 2.40 | 25 | 180 | <5 | 0.22 | <1 | 50 | 33 | 44 | 5.24 | <10 | 0.31 | 1734 | <1 | 0.04 | 31  | 2920 | 82 | <5 | <20 | 32  | 0.01 | <10 | 44 | <10 | 106 | 191 |
| 626  | L23N 13+ 00 E  | <2  | 0.93 | 15 | 165 | <5 | 0.24 | <1 | 8  | 11 | 30 | 2.41 | <10 | 0.19 | 142  | <1 | 0.02 | 8   | 680  | 12 | <5 | <20 | 18  | 0.03 | <10 | 46 | <10 | <1  | 72  |
| 627  | L23N 13+ 25 E  | <2  | 1.15 | 15 | 180 | <5 | 0.16 | <1 | 14 | 11 | 22 | 3.27 | <10 | 0.15 | 1487 | <1 | 0.01 | 9   | 1050 | 30 | <5 | <20 | 16  | 0.02 | <10 | 48 | <10 | <1  | 113 |
| 628  | L23N 13+ 50 E  | <2  | 1.72 | 15 | 215 | <5 | 0.16 | 1  | 14 | 22 | 29 | 4.75 | <10 | 0.16 | 409  | <1 | 0.03 | 17  | 1130 | 26 | <5 | <20 | 28  | <0.1 | <10 | 41 | <10 | 6   | 110 |
| 629  | L23N 13+ 75 E  | <2  | 1.18 | 20 | 120 | <5 | 0.23 | 1  | 9  | 18 | 29 | 4.26 | <10 | 0.16 | 201  | <1 | 0.01 | 17  | 890  | 28 | <5 | <20 | 24  | 0.01 | <10 | 45 | <10 | <1  | 86  |
| 630  | L23N 14+ 00 E  | <2  | 1.49 | 20 | 150 | <5 | 0.10 | <1 | 15 | 21 | 30 | 4.62 | <10 | 0.17 | 591  | <1 | 0.01 | 19  | 960  | 58 | <5 | <20 | 12  | 0.01 | <10 | 47 | <10 | <1  | 90  |
| 631  | L23N 14+ 25 E  | <2  | 1.38 | 20 | 150 | <5 | 0.10 | <1 | 14 | 20 | 25 | 4.20 | <10 | 0.16 | 515  | <1 | 0.01 | 18  | 900  | 52 | <5 | <20 | 12  | 0.01 | <10 | 48 | <10 | <1  | 91  |
| 632  | L23N 14+ 50 E  | <2  | 0.99 | 20 | 75  | <5 | 0.05 | <1 | 12 | 7  | 33 | 3.83 | <10 | 0.12 | 432  | <1 | 0.01 | 15  | 1540 | 22 | <5 | <20 | 9   | <0.1 | <10 | 38 | <10 | <1  | 67  |
| 633  | L23N 14+ 75 E  | <2  | 1.45 | 15 | 60  | <5 | 0.05 | <1 | 6  | 12 | 14 | 2.80 | <10 | 0.25 | 255  | <1 | 0.02 | 5   | 590  | 8  | <5 | <20 | 9   | <0.1 | <10 | 28 | <10 | <1  | 42  |
| 634  | L23N 15+ 00 E  | <2  | 3.12 | <5 | 50  | <5 | 0.10 | <1 | 18 | 38 | 49 | 7.77 | <10 | 0.46 | 302  | <1 | <0.1 | 24  | 1310 | <2 | <5 | <20 | 17  | <0.1 | <10 | 25 | <10 | <1  | 114 |
| 635  | BL10+00 10+00N | <2  | 0.90 | 5  | 300 | <5 | 0.62 | 1  | 8  | 9  | 59 | 2.42 | <10 | 0.12 | 347  | 1  | 0.02 | 23  | 740  | 14 | <5 | <20 | 29  | <0.1 | <10 | 27 | <10 | 8   | 56  |
| 636  | BL10+00 10+25N | <2  | 1.69 | 20 | 245 | <5 | 1.72 | 2  | 20 | 26 | 76 | 3.91 | <10 | 0.27 | 1687 | 2  | 0.02 | 37  | 1610 | 20 | <5 | <20 | 72  | <0.1 | <10 | 25 | <10 | 15  | 102 |
| 637  | BL10+00 10+50N | <2  | 0.47 | 10 | 260 | <5 | 0.23 | <1 | 8  | 8  | 24 | 2.24 | <10 | 0.07 | 235  | <1 | 0.02 | 16  | 600  | 14 | <5 | <20 | 17  | <0.1 | <10 | 25 | <10 | <1  | 63  |
| 638  | BL10+00 10+75N | <2  | 1.43 | 25 | 220 | <5 | 0.66 | 1  | 19 | 22 | 33 | 3.84 | <10 | 0.36 | 1300 | 3  | 0.02 | 25  | 1550 | 18 | <5 | <20 | 44  | <0.1 | <10 | 30 | <10 | 6   | 125 |
| 639  | BL10+00 11+00N | <2  | 1.09 | 15 | 170 | <5 | 0.16 | <1 | 22 | 17 | 36 | 4.31 | <10 | 0.20 | 2531 | 2  | 0.01 | 29  | 1460 | 26 | <5 | <20 | 43  | <0.1 | <10 | 26 | <10 | <1  | 146 |
| 640  | BL10+00 11+25N | <2  | 1.92 | 15 | 105 | <5 | 0.05 | 1  | 14 | 23 | 34 | 4.36 | <10 | 0.26 | 450  | <1 | 0.02 | 20  | 910  | 8  | <5 | <20 | 10  | <0.1 | <10 | 32 | <10 | <1  | 86  |
| 641  | BL10+00 11+50N | <2  | 0.90 | 10 | 120 | <5 | 0.07 | <1 | 6  | 10 | 17 | 2.53 | <10 | 0.17 | 194  | <1 | 0.02 | 10  | 930  | 12 | <5 | <20 | 10  | 0.01 | <10 | 31 | <10 | <1  | 46  |
| 642  | BL10+00 11+75N | <2  | 2.91 | 25 | 170 | <5 | 0.12 | 1  | 18 | 33 | 55 | 4.96 | <10 | 0.39 | 979  | <1 | 0.01 | 40  | 1280 | 10 | <5 | <20 | 13  | 0.01 | <10 | 37 | <10 | <1  | 149 |
| 643  | BL10+00 12+00N | <2  | 1.28 | 10 | 125 | <5 | 0.14 | <1 | 11 | 17 | 30 | 4.91 | <10 | 0.30 | 478  | <1 | 0.01 | 18  | 1310 | 14 | <5 | <20 | 17  | 0.01 | <10 | 30 | <10 | <1  | 77  |
| 644  | BL10+00 12+25N | <2  | 0.79 | 10 | 70  | <5 | 0.07 | <1 | 6  | 9  | 11 | 2.49 | <10 | 0.10 | 139  | <1 | 0.02 | 8   | 1050 | 10 | <5 | <20 | 10  | 0.02 | <10 | 31 | <10 | <1  | 37  |
| 645  | BL10+00 12+50N | <2  | 1.00 | 15 | 105 | <5 | 0.05 | 1  | 9  | 17 | 22 | 3.48 | <10 | 0.25 | 227  | <1 | 0.02 | 16  | 690  | 10 | <5 | <20 | 10  | 0.01 | <10 | 35 | <10 | <1  | 72  |
| 646  | BL10+00 12+75N | <2  | 1.24 | 15 | 160 | <5 | 0.07 | <1 | 7  | 25 | 13 | 3.85 | <10 | 0.31 | 152  | <1 | 0.02 | 13  | 1030 | 12 | <5 | <20 | 9   | 0.02 | <10 | 39 | <10 | <1  | 54  |
| 647  | BL10+00 13+00N | <2  | 1.29 | 25 | 125 | <5 | 0.05 | 1  | 7  | 42 | 13 | 3.12 | <10 | 0.43 | 99   | 2  | 0.01 | 20  | 1070 | 14 | <5 | <20 | 8   | 0.01 | <10 | 52 | <10 | <1  | 58  |
| 648  | BL10+00 13+25N | <2  | 1.30 | 20 | 80  | <5 | 0.16 | 2  | 12 | 35 | 23 | 4.03 | <10 | 0.41 | 272  | 1  | <0.1 | 25  | 1270 | 12 | <5 | <20 | 8   | 0.01 | <10 | 54 | <10 | <1  | 92  |
| 649  | BL10+00 13+50N | <2  | 0.84 | 20 | 170 | <5 | 0.92 | 1  | 30 | 23 | 37 | 5.32 | <10 | 0.20 | 1246 | <1 | <0.1 | 50  | 1640 | 8  | <5 | <20 | 29  | 0.02 | <10 | 45 | <10 | <1  | 124 |
| 650  | BL10+00 13+75N | <2  | 0.97 | 15 | 155 | <5 | 0.34 | <1 | 20 | 33 | 32 | 4.98 | <10 | 0.23 | 1530 | 1  | <0.1 | 49  | 1070 | 28 | <5 | <20 | 15  | 0.01 | <10 | 72 | <10 | <1  | 198 |
| 651  | BL10+00 14+00N | <2  | 2.14 | 35 | 205 | <5 | 0.08 | 2  | 17 | 66 | 36 | 5.70 | <10 | 0.53 | 359  | <1 | <0.1 | 44  | 1110 | 24 | <5 | <20 | 9   | <0.1 | <10 | 73 | <10 | <1  | 186 |
| 652  | BL10+00 14+25N | <2  | 3.05 | 20 | 155 | <5 | 0.87 | 2  | 17 | 40 | 15 | 4.80 | <10 | 0.22 | 1524 | <1 | <0.1 | 26  | 1930 | 40 | <5 | <20 | 42  | 0.01 | <10 | 46 | <10 | 4   | 352 |

| Et # | Tag #          | Ag  | Al % | As  | Ba   | Bi | Ca % | Cd | Co | Cr  | Cu | Fe % | La  | Mg % | Mn     | Mo | Na % | Ni | P    | Pb  | Sb | Sn  | Sr  | Ti % | U   | V   | W   | Y  | Zn   |
|------|----------------|-----|------|-----|------|----|------|----|----|-----|----|------|-----|------|--------|----|------|----|------|-----|----|-----|-----|------|-----|-----|-----|----|------|
| 653  | BL10+00 14+50N | <2  | 0.99 | 15  | 115  | <5 | 0.09 | <1 | 11 | 35  | 21 | 3.13 | <10 | 0.50 | 437    | <1 | 0.01 | 24 | 540  | 8   | <5 | <20 | 8   | 0.02 | <10 | 86  | <10 | <1 | 79   |
| 654  | BL10+00 14+75N | <2  | 0.59 | 30  | 65   | <5 | 0.07 | <1 | 15 | 21  | 40 | 3.74 | <10 | 0.19 | 418    | 2  | 0.02 | 25 | 950  | 20  | <5 | <20 | 7   | 0.05 | <10 | 93  | <10 | <1 | 90   |
| 655  | BL10+00 15+00N | <2  | 1.15 | 30  | 105  | <5 | 0.14 | <1 | 15 | 44  | 28 | 4.50 | <10 | 0.49 | 772    | <1 | 0.01 | 26 | 1920 | 22  | <5 | <20 | 11  | 0.04 | <10 | 82  | <10 | <1 | 107  |
| 656  | BL10+00 15+25N | <2  | 1.08 | 15  | 105  | <5 | 0.05 | <1 | 7  | 18  | 12 | 3.25 | <10 | 0.26 | 479    | <1 | 0.01 | 11 | 1160 | 8   | <5 | <20 | 8   | 0.01 | <10 | 31  | <10 | <1 | 80   |
| 657  | BL10+00 15+50N | <2  | 0.69 | 5   | 85   | <5 | 0.04 | <1 | 2  | 6   | 5  | 1.57 | <10 | 0.08 | 49     | <1 | 0.02 | 2  | 820  | 10  | <5 | <20 | 6   | 0.01 | <10 | 26  | <10 | <1 | 21   |
| 658  | BL10+00 15+75N | <2  | 1.29 | 15  | 70   | <5 | 0.66 | <1 | 8  | 22  | 15 | 3.71 | <10 | 0.35 | 255    | <1 | 0.01 | 13 | 1150 | 12  | <5 | <20 | 7   | 0.01 | <10 | 37  | <10 | <1 | 53   |
| 659  | BL10+00 16+00N | <2  | 0.70 | 10  | 70   | <5 | 0.12 | <1 | 6  | 12  | 11 | 2.17 | <10 | 0.21 | 191    | <1 | 0.02 | 9  | 860  | 12  | <5 | <20 | 9   | 0.01 | <10 | 33  | <10 | <1 | 46   |
| 660  | BL10+00 16+25N | <2  | 1.59 | 10  | 105  | <5 | 0.27 | <1 | 16 | 26  | 19 | 3.47 | <10 | 0.52 | 665    | <1 | 0.01 | 19 | 960  | 12  | <5 | <20 | 17  | <0.1 | <10 | 32  | <10 | <1 | 83   |
| 661  | BL10+00 16+50N | <2  | 2.54 | 20  | 95   | <5 | 0.36 | <1 | 11 | 38  | 25 | 3.55 | <10 | 0.81 | 263    | <1 | <0.1 | 18 | 1000 | <2  | <5 | <20 | 25  | 0.01 | <10 | 45  | <10 | <1 | 86   |
| 662  | BL10+00 16+75N | <2  | 3.09 | 10  | 120  | <5 | 0.09 | <1 | 24 | 45  | 66 | 3.70 | <10 | 0.96 | 662    | <1 | <0.1 | 53 | 1250 | 18  | <5 | <20 | 9   | <0.1 | <10 | 36  | <10 | <1 | 160  |
| 663  | BL10+00 17+00N | <2  | 1.64 | 25  | 105  | <5 | 0.03 | <1 | 11 | 37  | 16 | 4.67 | <10 | 0.49 | 566    | <1 | 0.01 | 17 | 1860 | 12  | <5 | <20 | 6   | <0.1 | <10 | 47  | <10 | <1 | 88   |
| 664  | BL10+00 17+25N | <2  | 1.55 | 15  | 85   | <5 | 0.03 | <1 | 9  | 22  | 17 | 3.52 | <10 | 0.40 | 646    | <1 | 0.01 | 13 | 1410 | 6   | <5 | <20 | 5   | <0.1 | <10 | 39  | <10 | <1 | 72   |
| 665  | BL10+00 17+50N | <2  | 1.05 | 10  | 85   | <5 | 0.07 | <1 | 5  | 10  | 14 | 2.59 | <10 | 0.22 | 109    | <1 | <0.1 | 9  | 1390 | 8   | <5 | <20 | 7   | <0.1 | <10 | 21  | <10 | <1 | 40   |
| 666  | BL10+00 17+75N | <2  | 1.11 | 30  | 115  | <5 | 0.12 | <1 | 15 | 42  | 16 | 5.33 | <10 | 0.54 | 509    | 2  | 0.02 | 24 | 2200 | 24  | <5 | <20 | 13  | 0.01 | <10 | 48  | <10 | <1 | 90   |
| 667  | BL10+00 18+00N | <2  | 1.03 | 20  | 135  | <5 | 0.07 | <1 | 13 | 32  | 46 | 5.21 | <10 | 0.36 | 876    | <1 | 0.02 | 14 | 1330 | 22  | <5 | <20 | 8   | <0.1 | <10 | 44  | <10 | <1 | 87   |
| 668  | BL10+00 18+25N | <2  | 1.42 | 20  | 115  | <5 | 0.11 | <1 | 10 | 39  | 13 | 5.72 | <10 | 0.45 | 442    | <1 | 0.02 | 13 | 1750 | 16  | <5 | <20 | 9   | <0.1 | <10 | 50  | <10 | <1 | 75   |
| 669  | BL10+00 18+50N | <2  | 0.99 | 25  | 70   | <5 | 0.12 | <1 | 8  | 28  | 15 | 4.88 | <10 | 0.29 | 178    | <1 | 0.02 | 9  | 1250 | 18  | <5 | <20 | 8   | 0.02 | <10 | 55  | <10 | <1 | 62   |
| 670  | BL10+00 18+75N | <2  | 1.15 | 25  | 135  | <5 | 0.66 | <1 | 12 | 35  | 44 | 4.89 | <10 | 0.45 | 532    | <1 | 0.02 | 17 | 1350 | 16  | <5 | <20 | 7   | 0.01 | <10 | 45  | <10 | <1 | 84   |
| 671  | BL10+00 19+00N | <2  | 0.63 | 10  | 70   | <5 | 0.02 | <1 | 4  | 6   | 57 | 1.32 | <10 | 0.12 | 89     | <1 | 0.02 | 6  | 500  | 12  | <5 | <20 | 5   | <0.1 | <10 | 28  | <10 | <1 | 46   |
| 672  | BL10+00 19+25N | <2  | 0.53 | 15  | 90   | <5 | 0.07 | <1 | 11 | 14  | 36 | 3.66 | <10 | 0.13 | 1582   | <1 | 0.02 | 20 | 1240 | 18  | <5 | <20 | 7   | 0.01 | <10 | 37  | <10 | <1 | 59   |
| 673  | BL10+00 19+50N | 1.6 | 1.75 | 50  | 620  | 15 | 2.68 | 3  | 22 | 26  | 23 | 6.40 | <10 | 0.07 | >10000 | 3  | 0.02 | 47 | 2810 | 140 | <5 | <20 | 137 | 0.02 | <10 | 34  | <10 | 8  | 146  |
| 674  | BL10+00 19+75N | <2  | 1.40 | 110 | 145  | <5 | 1.20 | 2  | 33 | 57  | 57 | 8.90 | <10 | 0.16 | 1215   | 7  | <0.1 | 87 | 6570 | 256 | <5 | <20 | 43  | 0.01 | <10 | 69  | <10 | <1 | 496  |
| 675  | BL10+00 20+00N | <2  | 1.05 | 60  | 170  | <5 | 0.15 | <1 | 34 | 134 | 50 | 8.22 | <10 | 0.39 | 970    | <1 | 0.01 | 94 | 2410 | 70  | <5 | <20 | 9   | 0.03 | <10 | 113 | <10 | <1 | 163  |
| 676  | BL10+00 20+25N | <2  | 1.54 | 75  | 215  | 10 | 0.35 | 1  | 30 | 80  | 33 | 9.03 | <10 | 0.36 | 1735   | <1 | <0.1 | 80 | 2570 | 74  | <5 | <20 | 13  | 0.01 | <10 | 82  | <10 | <1 | 518  |
| 677  | BL10+00 20+50N | <2  | 1.62 | 45  | 135  | <5 | 0.27 | 2  | 22 | 53  | 35 | 7.71 | <10 | 0.27 | 1200   | <1 | <0.1 | 38 | 3100 | 64  | <5 | <20 | 13  | 0.02 | <10 | 89  | <10 | <1 | 489  |
| 678  | BL10+00 20+75N | 0.8 | 1.30 | 40  | 440  | <5 | 3.16 | 3  | 26 | 29  | 24 | 6.09 | <10 | 0.20 | >10000 | <1 | 0.01 | 42 | 3070 | 92  | <5 | <20 | 158 | 0.02 | <10 | 38  | <10 | 15 | 407  |
| 679  | BL10+00 21+00N | 1.4 | 1.63 | 20  | 2465 | 5  | 1.74 | 2  | 35 | 58  | 30 | 6.04 | <10 | 0.23 | >10000 | <1 | 0.01 | 34 | 2910 | 26  | <5 | <20 | 104 | 0.02 | <10 | 63  | <10 | 23 | 440  |
| 680  | BL10+00 21+25N | <2  | 1.55 | 25  | 200  | <5 | 0.45 | 1  | 29 | 42  | 19 | 5.99 | <10 | 0.34 | 1938   | <1 | 0.02 | 38 | 1350 | 18  | <5 | <20 | 36  | 0.01 | <10 | 48  | <10 | <1 | 439  |
| 681  | BL10+00 21+50N | <2  | 0.79 | 60  | 190  | <5 | 0.26 | 1  | 18 | 28  | 20 | 5.85 | <10 | 0.10 | 468    | <1 | 0.01 | 55 | 1520 | 20  | <5 | <20 | 18  | <0.1 | <10 | 55  | <10 | <1 | 289  |
| 682  | BL10+00 21+75N | <2  | 0.61 | 20  | 115  | <5 | 1.87 | 6  | 29 | 16  | 41 | 4.19 | <10 | 0.28 | 1415   | <1 | <0.1 | 55 | 1550 | 40  | <5 | <20 | 89  | <0.1 | <10 | 19  | <10 | 7  | 1001 |
| 683  | BL10+00 22+00N | <2  | 1.29 | 25  | 190  | <5 | 1.88 | 4  | 23 | 37  | 47 | 4.74 | <10 | 0.44 | 1110   | <1 | <0.1 | 47 | 1490 | 40  | <5 | <20 | 91  | <0.1 | <10 | 39  | <10 | 8  | 509  |
| 684  | BL10+00 22+25N | <2  | 1.25 | 20  | 110  | <5 | 1.55 | 1  | 13 | 31  | 31 | 4.34 | <10 | 0.29 | 567    | <1 | 0.01 | 24 | 1600 | 28  | <5 | <20 | 82  | <0.1 | <10 | 39  | <10 | 3  | 108  |
| 685  | BL10+00 22+50N | <2  | 1.43 | 40  | 155  | <5 | 2.10 | 2  | 28 | 53  | 42 | 4.62 | <10 | 0.57 | 1178   | 2  | 0.02 | 42 | 1710 | 50  | <5 | <20 | 105 | 0.02 | <10 | 48  | <10 | 13 | 184  |
| 686  | BL10+00 22+75N | <2  | 1.32 | 25  | 140  | <5 | 2.15 | 2  | 24 | 40  | 51 | 4.10 | <10 | 0.51 | 1042   | <1 | 0.02 | 39 | 1540 | 46  | <5 | <20 | 109 | 0.01 | <10 | 37  | <10 | 11 | 170  |
| 687  | BL10+00 23+00N | <2  | 0.38 | 15  | 65   | <5 | 0.60 | <1 | 7  | 15  | 30 | 2.73 | <10 | 0.07 | 192    | 1  | 0.02 | 17 | 1000 | 42  | <5 | <20 | 48  | 0.01 | <10 | 43  | <10 | <1 | 77   |
| 688  | BL10+00 23+25N | <2  | 1.01 | 40  | 70   | <5 | 0.52 | 1  | 19 | 40  | 31 | 5.32 | <10 | 0.29 | 674    | 2  | 0.02 | 29 | 1780 | 54  | <5 | <20 | 45  | 0.01 | <10 | 54  | <10 | 2  | 130  |
| 689  | BL10+00 23+50N | <2  | 1.40 | 30  | 85   | <5 | 0.34 | 1  | 29 | 55  | 37 | 6.15 | <10 | 0.36 | 2769   | <1 | 0.02 | 39 | 2620 | 62  | <5 | <20 | 30  | <0.1 | <10 | 54  | <10 | 21 | 194  |
| 690  | BL10+00 23+75N | <2  | 1.10 | 95  | 80   | <5 | 0.44 | 1  | 43 | 78  | 70 | 7.37 | <10 | 0.29 | 2181   | 2  | 0.03 | 72 | 2850 | 60  | <5 | <20 | 49  | 0.01 | <10 | 57  | <10 | 28 | 159  |
| 691  | BL10+00 24+00N | <2  | 0.97 | 25  | 85   | <5 | 0.42 | 1  | 15 | 36  | 36 | 4.55 | <10 | 0.17 | 544    | 1  | 0.03 | 27 | 1650 | 50  | <5 | <20 | 46  | <0.1 | <10 | 52  | <10 | 18 | 128  |

| Et# | Tag #          | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni  | P    | Pb  | Sb | Sn  | Sr  | Ti % | U   | V  | W   | Y  | Zn  |
|-----|----------------|-----|------|----|-----|----|------|----|----|----|-----|------|-----|------|------|----|------|-----|------|-----|----|-----|-----|------|-----|----|-----|----|-----|
| 692 | BL10+00 24+25N | 0.6 | 0.97 | 30 | 160 | 5  | 1.15 | 2  | 18 | 27 | 28  | 4.70 | <10 | 0.21 | 1694 | <1 | 0.02 | 25  | 2250 | 50  | <5 | <20 | 42  | <0.1 | <10 | 43 | <10 | <1 | 137 |
| 693 | BL10+00 24+50N | <2  | 0.75 | 20 | 170 | <5 | 0.44 | <1 | 11 | 25 | 31  | 3.82 | <10 | 0.21 | 590  | <1 | 0.02 | 19  | 1970 | 44  | <5 | <20 | 30  | <0.1 | <10 | 37 | <10 | <1 | 113 |
| 694 | BL10+00 24+75N | <2  | 1.37 | 25 | 155 | <5 | 1.79 | 2  | 23 | 30 | 43  | 4.31 | <10 | 0.32 | 1227 | 2  | 0.02 | 37  | 1830 | 48  | <5 | <20 | 107 | 0.01 | <10 | 36 | <10 | 23 | 185 |
| 695 | BL10+00 25+00N | <2  | 1.27 | 40 | 95  | <5 | 0.13 | 2  | 25 | 45 | 47  | 5.35 | <10 | 0.40 | 1342 | 2  | 0.02 | 45  | 1270 | 74  | <5 | <20 | 16  | <0.1 | <10 | 44 | <10 | <1 | 162 |
| 696 | BL10+00 25+25N | <2  | 1.36 | 35 | 130 | <5 | 0.32 | 1  | 22 | 43 | 53  | 6.00 | <10 | 0.37 | 922  | <1 | 0.02 | 42  | 4020 | 54  | <5 | <20 | 27  | <0.1 | <10 | 45 | <10 | <1 | 174 |
| 697 | BL10+00 25+50N | <2  | 1.21 | 30 | 105 | <5 | 0.18 | <1 | 21 | 46 | 46  | 5.26 | <10 | 0.49 | 730  | <1 | 0.02 | 42  | 1290 | 50  | <5 | <20 | 20  | 0.01 | <10 | 42 | <10 | <1 | 153 |
| 698 | BL10+00 25+75N | <2  | 1.15 | 25 | 135 | <5 | 1.05 | <1 | 19 | 32 | 37  | 4.11 | <10 | 0.39 | 925  | <1 | 0.02 | 31  | 1490 | 46  | <5 | <20 | 103 | <0.1 | <10 | 36 | <10 | 15 | 109 |
| 699 | BL10+00 26+00N | <2  | 0.82 | 25 | 175 | <5 | 0.26 | 1  | 14 | 29 | 25  | 4.81 | <10 | 0.24 | 704  | <1 | 0.03 | 24  | 1730 | 50  | <5 | <20 | 26  | 0.01 | <10 | 47 | <10 | <1 | 88  |
| 700 | BL16+00 8+25N  | <2  | 0.47 | 60 | 460 | <5 | 0.27 | 4  | 53 | 5  | 184 | 8.07 | <10 | 0.07 | 4384 | 4  | 0.02 | 107 | 3470 | 205 | <5 | <20 | 97  | <0.1 | <10 | 23 | <10 | 54 | 531 |
| 701 | BL16+00 8+50N  | <2  | 1.28 | 30 | 95  | <5 | 0.08 | <1 | 11 | 45 | 33  | 4.44 | <10 | 0.24 | 459  | 1  | 0.02 | 25  | 2060 | 74  | <5 | <20 | 22  | <0.1 | <10 | 46 | <10 | <1 | 92  |
| 702 | BL16+00 8+75N  | <2  | 0.90 | 25 | 145 | <5 | 0.07 | <1 | 5  | 21 | 17  | 2.72 | <10 | 0.11 | 144  | <1 | 0.02 | 14  | 2170 | 58  | <5 | <20 | 21  | <0.1 | <10 | 41 | <10 | <1 | 53  |
| 703 | BL16+00 9+00N  | <2  | 0.97 | 50 | 115 | <5 | 0.17 | 1  | 15 | 27 | 54  | 6.44 | <10 | 0.15 | 564  | <1 | 0.01 | 54  | 2780 | 86  | <5 | <20 | 20  | <0.1 | <10 | 28 | <10 | <1 | 165 |
| 704 | BL16+00 9+25N  | <2  | 0.93 | 45 | 385 | <5 | 0.18 | 1  | 30 | 31 | 64  | 5.38 | <10 | 0.24 | 4558 | 1  | 0.02 | 50  | 2070 | 90  | <5 | <20 | 30  | <0.1 | <10 | 34 | <10 | 7  | 178 |
| 705 | BL16+00 9+50N  | <2  | 0.83 | 30 | 130 | <5 | 0.12 | <1 | 18 | 37 | 22  | 5.55 | <10 | 0.23 | 1152 | <1 | 0.02 | 28  | 2690 | 60  | <5 | <20 | 14  | <0.1 | <10 | 55 | <10 | <1 | 108 |
| 706 | BL16+00 9+75N  | <2  | 0.95 | 25 | 195 | <5 | 0.16 | <1 | 12 | 37 | 20  | 4.46 | <10 | 0.29 | 678  | <1 | 0.03 | 21  | 2170 | 42  | <5 | <20 | 19  | <0.1 | <10 | 34 | <10 | <1 | 85  |
| 707 | BL16+00 10+00N | <2  | 1.22 | 30 | 470 | 5  | 0.54 | <1 | 20 | 58 | 33  | 6.30 | <10 | 0.44 | 849  | <1 | 0.02 | 35  | 1960 | 58  | <5 | <20 | 31  | <0.1 | <10 | 59 | <10 | <1 | 139 |
| 708 | BL16+00 10+25N | <2  | 0.70 | 25 | 190 | <5 | 0.26 | 1  | 11 | 30 | 30  | 3.98 | <10 | 0.20 | 338  | <1 | 0.03 | 23  | 1550 | 50  | <5 | <20 | 21  | <0.1 | <10 | 40 | <10 | <1 | 95  |
| 709 | BL16+00 10+50N | <2  | 1.01 | 25 | 175 | <5 | 1.04 | <1 | 17 | 32 | 20  | 4.37 | <10 | 0.38 | 694  | <1 | 0.02 | 26  | 1490 | 40  | <5 | <20 | 68  | <0.1 | <10 | 30 | <10 | 6  | 120 |
| 710 | BL16+00 10+75N | <2  | 1.34 | 30 | 220 | <5 | 1.04 | <1 | 29 | 43 | 29  | 5.43 | <10 | 0.38 | 1363 | <1 | 0.02 | 35  | 1490 | 58  | <5 | <20 | 55  | <0.1 | <10 | 44 | <10 | 9  | 185 |
| 711 | BL16+00 11+00N | <2  | 0.97 | 25 | 160 | <5 | 1.05 | <1 | 26 | 31 | 23  | 4.56 | <10 | 0.38 | 1056 | <1 | 0.01 | 27  | 1550 | 42  | <5 | <20 | 71  | <0.1 | <10 | 26 | <10 | 4  | 159 |
| 712 | L26N 7+ 25 E   | <2  | 1.39 | 20 | 260 | <5 | 0.27 | 1  | 21 | 40 | 37  | 5.58 | <10 | 0.44 | 1227 | <1 | 0.01 | 42  | 2160 | 48  | <5 | <20 | 25  | 0.01 | <10 | 50 | <10 | <1 | 186 |
| 713 | L26N 7+ 50 E   | <2  | 1.49 | 35 | 165 | <5 | 0.33 | 1  | 20 | 42 | 37  | 5.55 | <10 | 0.38 | 1057 | 2  | 0.02 | 39  | 2030 | 66  | <5 | <20 | 28  | <0.1 | <10 | 42 | <10 | 25 | 170 |
| 714 | L26N 7+ 75 E   | <2  | 0.99 | 25 | 115 | <5 | 0.26 | 1  | 14 | 34 | 28  | 4.94 | <10 | 0.31 | 633  | 2  | 0.02 | 33  | 1730 | 50  | <5 | <20 | 24  | 0.01 | <10 | 47 | <10 | <1 | 124 |
| 715 | L26N 8+ 00 E   | 1.2 | 0.66 | 20 | 195 | <5 | 0.11 | <1 | 7  | 5  | 15  | 2.21 | <10 | 0.14 | 613  | 2  | 0.01 | 10  | 730  | 32  | <5 | <20 | 10  | <0.1 | <10 | 28 | <10 | <1 | 66  |
| 716 | L26N 8+ 25 E   | 0.2 | 2.15 | 60 | 355 | 5  | 0.91 | 1  | 18 | 20 | 34  | 4.68 | <10 | 0.40 | 863  | 4  | 0.01 | 28  | 1840 | 36  | <5 | <20 | 23  | <0.1 | <10 | 29 | <10 | <1 | 156 |
| 717 | L26N 8+ 50 E   | 1.2 | 1.74 | 35 | 165 | <5 | 0.15 | 1  | 17 | 16 | 49  | 4.12 | <10 | 0.40 | 685  | 2  | 0.01 | 30  | 1180 | 32  | <5 | <20 | 15  | 0.01 | <10 | 28 | <10 | <1 | 127 |
| 718 | L26N 8+ 75 E   | 0.4 | 1.63 | 50 | 120 | <5 | 0.15 | <1 | 21 | 32 | 35  | 5.06 | <10 | 0.36 | 1118 | 2  | 0.02 | 34  | 1810 | 54  | <5 | <20 | 13  | <0.1 | <10 | 36 | <10 | 2  | 164 |
| 719 | L26N 9+ 00 E   | 1.0 | 1.66 | 40 | 100 | <5 | 0.19 | 1  | 19 | 20 | 51  | 4.18 | <10 | 0.35 | 872  | 1  | 0.01 | 33  | 1230 | 50  | <5 | <20 | 16  | <0.1 | <10 | 25 | <10 | 4  | 159 |
| 720 | L26N 9+ 25 E   | 0.4 | 0.98 | 50 | 95  | <5 | 0.18 | <1 | 12 | 19 | 21  | 4.22 | <10 | 0.25 | 486  | 2  | 0.01 | 20  | 2590 | 62  | <5 | <20 | 17  | <0.1 | <10 | 29 | <10 | <1 | 90  |
| 721 | L26N 9+ 50 E   | 0.4 | 1.14 | 20 | 95  | <5 | 1.04 | <1 | 8  | 8  | 39  | 2.03 | <10 | 0.30 | 258  | <1 | 0.01 | 18  | 850  | 28  | <5 | <20 | 74  | <0.1 | <10 | 14 | <10 | 4  | 71  |
| 722 | L26N 9+ 75 E   | 1.0 | 1.21 | 20 | 105 | <5 | 0.74 | <1 | 11 | 8  | 62  | 2.81 | <10 | 0.31 | 297  | <1 | <0.1 | 20  | 810  | 32  | <5 | <20 | 56  | <0.1 | <10 | 14 | <10 | <1 | 101 |
| 723 | L26N 10+ 25 E  | <2  | 0.80 | 30 | 155 | <5 | 0.03 | <1 | 9  | 8  | 31  | 4.33 | <10 | 0.15 | 408  | <1 | 0.01 | 19  | 1030 | 46  | <5 | <20 | 8   | <0.1 | <10 | 25 | <10 | <1 | 76  |
| 724 | L26N 10+ 50 E  | <2  | 1.80 | 55 | 125 | <5 | 0.30 | <1 | 19 | 26 | 35  | 4.79 | <10 | 0.36 | 1206 | 4  | 0.03 | 25  | 1480 | 42  | <5 | <20 | 26  | 0.01 | <10 | 37 | <10 | 20 | 108 |
| 725 | L26N 10+ 75 E  | <2  | 1.39 | 35 | 110 | <5 | 0.51 | <1 | 15 | 19 | 23  | 4.46 | <10 | 0.37 | 620  | <1 | 0.02 | 18  | 1130 | 32  | <5 | <20 | 36  | <0.1 | <10 | 26 | <10 | 9  | 76  |
| 726 | L26N 11+ 00 E  | <2  | 1.51 | 40 | 75  | <5 | 0.25 | <1 | 17 | 28 | 20  | 5.83 | <10 | 0.44 | 448  | 1  | 0.02 | 21  | 1100 | 40  | <5 | <20 | 23  | <0.1 | <10 | 33 | <10 | 1  | 96  |
| 727 | L26N 11+ 25 E  | <2  | 1.50 | 35 | 70  | <5 | 0.10 | <1 | 15 | 18 | 21  | 4.48 | <10 | 0.36 | 495  | <1 | 0.02 | 14  | 780  | 28  | <5 | <20 | 12  | 0.01 | <10 | 29 | <10 | 2  | 63  |
| 728 | L26N 11+ 50 E  | <2  | 1.23 | 25 | 65  | <5 | 0.09 | <1 | 19 | 24 | 18  | 4.73 | <10 | 0.44 | 460  | <1 | 0.02 | 19  | 500  | 30  | <5 | <20 | 10  | 0.01 | <10 | 31 | <10 | <1 | 69  |
| 729 | L26N 11+ 75 E  | <2  | 0.87 | 15 | 95  | <5 | 0.16 | <1 | 4  | 5  | 6   | 1.73 | <10 | 0.15 | 105  | <1 | 0.02 | 3   | 630  | 20  | <5 | <20 | 11  | <0.1 | <10 | 29 | <10 | <1 | 32  |
| 730 | L26N 12+ 00 E  | 0.2 | 0.92 | 25 | 100 | <5 | 0.06 | <1 | 7  | 14 | 8   | 4.03 | <10 | 0.25 | 291  | <1 | 0.02 | 7   | 1170 | 26  | <5 | <20 | 7   | <0.1 | <10 | 39 | <10 | <1 | 48  |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr | Ti % | U   | V  | W   | Y  | Zn  |   |
|------|---------------|-----|------|----|-----|----|------|----|----|----|-----|------|-----|------|------|----|------|----|------|----|----|-----|----|------|-----|----|-----|----|-----|---|
| 731  | L26N 12+ 25 E | 0.8 | 0.69 | 25 | 175 | 5  | 0.17 | <1 | 17 | 10 | 17  | 3.31 | <10 | 0.14 | 3006 | 2  | 0.02 | 7  | 980  | 38 | <5 | <20 | 12 | <0.1 | <10 | 41 | <10 | <1 | 58  |   |
| 732  | L26N 12+ 50 E | 0.2 | 1.55 | 40 | 90  | <5 | 0.26 | <1 | 20 | 27 | 39  | 4.99 | <10 | 0.53 | 503  | <1 | 0.02 | 28 | 1100 | 34 | <5 | <20 | 22 | 0.03 | <10 | 36 | <10 | 6  | 90  |   |
| 733  | L26N 12+ 75 E | <2  | 1.06 | 35 | 180 | <5 | 0.12 | <1 | 12 | 22 | 72  | 5.21 | <10 | 0.30 | 678  | <1 | 0.02 | 14 | 1930 | 36 | <5 | <20 | 14 | <0.1 | <10 | 48 | <10 | <1 | 83  |   |
| 734  | L26N 13+ 00 E | 0.2 | 1.68 | 45 | 140 | <5 | 0.08 | <1 | 17 | 30 | 27  | 5.60 | <10 | 0.48 | 788  | <1 | 0.02 | 23 | 1140 | 36 | <5 | <20 | 10 | <0.1 | <10 | 34 | <10 | 4  | 105 |   |
| 735  | L26N 13+ 25 E | <2  | 1.01 | 30 | 115 | <5 | 0.28 | <1 | 13 | 18 | 24  | 4.57 | <10 | 0.32 | 609  | <1 | 0.03 | 13 | 900  | 28 | <5 | <20 | 22 | <0.1 | <10 | 33 | <10 | <1 | 71  |   |
| 736  | L26N 13+ 50 E | <2  | 1.67 | 40 | 70  | <5 | 0.08 | <1 | 15 | 28 | 29  | 6.16 | <10 | 0.38 | 644  | <1 | 0.02 | 20 | 1010 | 40 | <5 | <20 | 14 | <0.1 | <10 | 37 | <10 | <1 | 101 |   |
| 737  | L26N 13+ 75 E | 0.8 | 1.43 | 30 | 115 | <5 | 0.60 | <1 | 16 | 20 | 23  | 4.87 | <10 | 0.40 | 820  | <1 | 0.02 | 16 | 1310 | 30 | <5 | <20 | 53 | <0.1 | <10 | 30 | <10 | 2  | 78  |   |
| 738  | L26N 14+ 00 E | <2  | 1.55 | 35 | 85  | 5  | 0.64 | <1 | 18 | 23 | 22  | 4.68 | <10 | 0.49 | 722  | 2  | 0.03 | 21 | 970  | 30 | <5 | <20 | 53 | 0.01 | <10 | 32 | <10 | 10 | 81  |   |
| 739  | L26N 14+ 25 E | 0.4 | 1.19 | 25 | 55  | <5 | 0.04 | <1 | 6  | 11 | 19  | 4.94 | <10 | 0.24 | 216  | <1 | 0.02 | 7  | 900  | 30 | <5 | <20 | 7  | <0.1 | <10 | 29 | <10 | <1 | 49  |   |
| 740  | L26N 14+ 50 E | <2  | 1.70 | 30 | 70  | <5 | 0.06 | <1 | 11 | 17 | 17  | 4.14 | <10 | 0.40 | 446  | <1 | 0.02 | 10 | 1010 | 22 | <5 | <20 | 9  | <0.1 | <10 | 28 | <10 | <1 | 58  |   |
| 741  | L26N 14+ 75 E | <2  | 0.99 | 15 | 95  | <5 | 0.20 | <1 | 8  | 4  | 14  | 2.51 | <10 | 0.31 | 273  | <1 | 0.02 | 7  | 560  | 20 | <5 | <20 | 18 | <0.1 | <10 | 18 | <10 | <1 | 41  |   |
| 742  | L26N 15+ 00 E | <2  | 2.18 | 40 | 90  | <5 | 0.10 | <1 | 15 | 27 | 22  | 5.46 | <10 | 0.65 | 413  | <1 | 0.02 | 21 | 1550 | 20 | <5 | <20 | 11 | 0.01 | <10 | 28 | <10 | <1 | 75  |   |
| 743  | L23N 5+ 00 E  | 1.0 | 1.39 | 50 | 65  | <5 | 0.09 | <1 | 20 | 21 | 39  | 4.97 | <10 | 0.38 | 934  | 3  | <0.1 | 29 | 830  | 40 | <5 | <20 | 7  | <0.1 | <10 | 26 | <10 | <1 | 88  |   |
| 744  | L23N 5+ 25 E  | 1.8 | 1.44 | 35 | 160 | <5 | 0.72 | 1  | 15 | 19 | 26  | 4.44 | <10 | 0.37 | 3424 | 1  | <0.1 | 19 | 1330 | 42 | <5 | <20 | 37 | <0.1 | <10 | 19 | <10 | <1 | 121 |   |
| 745  | L23N 5+ 50 E  | <2  | 0.92 | 30 | 65  | <5 | 0.17 | <1 | 7  | 18 | 12  | 3.29 | <10 | 0.30 | 229  | 2  | 0.01 | 10 | 670  | 32 | <5 | <20 | 9  | <0.1 | <10 | 33 | <10 | <1 | 51  |   |
| 746  | L23N 5+ 75 E  | 0.8 | 1.55 | 45 | 95  | <5 | 0.90 | <1 | 23 | 23 | 68  | 5.22 | <10 | 0.60 | 985  | 2  | 0.01 | 34 | 960  | 40 | <5 | <20 | 29 | <0.1 | <10 | 25 | <10 | <1 | 115 |   |
| 747  | L23N 6+ 00 E  | <2  | 1.92 | 45 | 65  | <5 | 0.05 | <1 | 15 | 27 | 34  | 6.17 | <10 | 0.50 | 476  | <1 | 0.01 | 24 | 850  | 60 | <5 | <20 | 5  | <0.1 | <10 | 31 | <10 | <1 | 112 |   |
| 748  | L23N 6+ 25 E  | 0.2 | 2.60 | 40 | 95  | <5 | 0.09 | <1 | 15 | 23 | 45  | 4.72 | <10 | 0.57 | 413  | <1 | <0.1 | 25 | 910  | 58 | <5 | <20 | 8  | <0.1 | <10 | 26 | <10 | <1 | 152 |   |
| 749  | L23N 6+ 50 E  | 0.4 | 2.06 | 50 | 90  | <5 | 0.03 | <1 | 10 | 36 | 17  | 7.09 | <10 | 0.47 | 320  | 2  | <0.1 | 10 | 800  | 46 | <5 | <20 | 5  | 0.01 | <10 | 51 | <10 | <1 | 103 |   |
| 750  | L23N 6+ 75 E  | 1.2 | 2.06 | 35 | 160 | <5 | 0.95 | <1 | 13 | 16 | 49  | 4.54 | <10 | 0.45 | 685  | 1  | 0.01 | 24 | 1040 | 62 | <5 | <20 | 26 | <0.1 | <10 | 22 | <10 | <1 | 157 |   |
| 751  | L23N 7+ 00 E  | 1.0 | 3.20 | 75 | 110 | <5 | 0.25 | 1  | 36 | 32 | 53  | 9.05 | <10 | 0.63 | 716  | <1 | 0.03 | 42 | 1830 | 24 | <5 | <20 | 10 | <0.1 | <10 | 42 | <10 | <1 | 143 |   |
| 752  | L23N 7+ 25 E  | <2  | 2.68 | 55 | 190 | <5 | 0.41 | <1 | 19 | 30 | 23  | 6.26 | <10 | 0.43 | 694  | <1 | <0.1 | 22 | 1010 | 18 | <5 | <20 | 11 | <0.1 | <10 | 42 | <10 | <1 | 100 |   |
| 753  | L23N 7+ 50 E  | 0.2 | 2.29 | 40 | 70  | <5 | 0.26 | <1 | 17 | 19 | 23  | 5.87 | <10 | 0.33 | 520  | <1 | <0.1 | 21 | 1350 | 16 | <5 | <20 | 8  | <0.1 | <10 | 32 | <10 | <1 | 89  |   |
| 754  | L23N 7+ 75 E  | 0.4 | 2.15 | 55 | 85  | <5 | 0.13 | 1  | 18 | 32 | 30  | 7.50 | <10 | 0.41 | 521  | 2  | <0.1 | 25 | 1020 | 28 | <5 | <20 | 8  | <0.1 | <10 | 40 | <10 | <1 | 115 |   |
| 755  | L23N 8+ 00 E  | 0.2 | 0.90 | 30 | 60  | <5 | 0.09 | <1 | 9  | 6  | 23  | 4.38 | <10 | 0.16 | 329  | <1 | <0.1 | 14 | 1870 | 28 | <5 | <20 | 6  | <0.1 | <10 | 22 | <10 | <1 | 45  |   |
| 756  | L23N 8+ 25 E  | <2  | 1.25 | 30 | 50  | <5 | 0.03 | <1 | 11 | 10 | 21  | 4.81 | <10 | 0.16 | 561  | <1 | 0.01 | 14 | 830  | 26 | <5 | <20 | 5  | <0.1 | <10 | 27 | <10 | <1 | 54  |   |
| 757  | L23N 8+ 50 E  | <2  | 1.00 | 30 | 130 | <5 | 1.09 | <1 | 9  | 7  | 34  | 3.52 | <10 | 0.28 | 303  | <1 | <0.1 | 12 | 860  | 36 | <5 | <20 | 59 | <0.1 | <10 | 19 | <10 | <1 | 229 |   |
| 758  | L23N 8+ 75 E  | 1.0 | 0.95 | 35 | 185 | <5 | 1.81 | 3  | 16 | 15 | 63  | 4.36 | <10 | 0.31 | 1206 | 2  | <0.1 | 28 | 1230 | 48 | <5 | <20 | 83 | <0.1 | <10 | 25 | <10 | 3  | 609 |   |
| 759  | L23N 9+ 00 E  | <2  | 1.32 | 40 | 130 | <5 | 0.44 | 2  | 21 | 14 | 174 | 4.83 | <10 | 0.35 | 888  | 1  | <0.1 | 37 | 1150 | 44 | <5 | <20 | 33 | <0.1 | <10 | 24 | <10 | <1 | 252 |   |
| 760  | L23N 9+ 25 E  | 0.6 | 1.24 | 30 | 85  | <5 | 0.60 | <1 | 18 | 9  | 36  | 4.34 | <10 | 0.29 | 650  | <1 | <0.1 | 19 | 1430 | 36 | <5 | <20 | 41 | <0.1 | <10 | 21 | <10 | <1 | 127 |   |
| 761  | L23N 9+ 50 E  | 0.4 | 1.38 | <5 | 75  | <5 | 0.23 | 2  | 14 | 24 | 70  | 4.84 | 10  | 0.21 | 367  | 1  | <0.1 | 28 | 1190 | 40 | <5 | <20 | 13 | <0.1 | <10 | 29 | <10 | 9  | 129 |   |
| 762  | L23N 9+ 75 E  | 0.6 | 1.90 | <5 | 85  | 5  | 0.23 | 2  | 30 | 33 | 43  | 5.86 | <10 | 0.34 | 1393 | <1 | <0.1 | 41 | 1710 | 40 | <5 | <20 | 16 | 0.01 | <10 | 29 | <10 | 8  | 192 |   |
| 763  | L24N 5+ 00 E  | .   | .    | .  | .   | .  | .    | .  | .  | .  | .   | .    | .   | .    | .    | .  | .    | .  | .    | .  | .  | .   | .  | .    | .   | .  | .   | .  | .   | . |
| 764  | L24N 5+ 25 E  | 0.4 | 1.92 | 5  | 55  | 10 | 0.22 | <1 | 15 | 29 | <1  | 5.16 | <10 | 0.92 | 724  | <1 | <0.1 | 24 | 950  | 12 | <5 | <20 | 8  | <0.1 | <10 | 26 | <10 | <1 | 93  |   |
| 765  | L24N 5+ 50 E  | 0.2 | 1.02 | 10 | 45  | <5 | 0.07 | <1 | 9  | 18 | <1  | 4.31 | <10 | 0.35 | 261  | <1 | <0.1 | 16 | 750  | 10 | <5 | <20 | <1 | <0.1 | <10 | 23 | <10 | <1 | 58  |   |
| 766  | L24N 5+ 75 E  | 0.4 | 1.91 | 5  | 70  | <5 | 0.24 | 1  | 31 | 28 | 52  | 6.23 | 30  | 0.85 | 1351 | <1 | <0.1 | 58 | 960  | 34 | <5 | <20 | 8  | <0.1 | <10 | 22 | <10 | 11 | 120 |   |
| 767  | L24N 6+ 00 E  | 0.4 | 1.75 | 5  | 75  | <5 | 0.15 | <1 | 23 | 26 | 31  | 4.95 | 20  | 0.75 | 1191 | <1 | <0.1 | 41 | 910  | 24 | <5 | <20 | 7  | <0.1 | <10 | 21 | <10 | 7  | 101 |   |
| 768  | L24N 6+ 25 E  | 0.4 | 1.80 | <5 | 80  | <5 | 0.16 | <1 | 23 | 24 | 40  | 5.58 | 30  | 0.72 | 665  | <1 | <0.1 | 49 | 970  | 98 | <5 | <20 | 5  | <0.1 | <10 | 22 | <10 | 9  | 107 |   |
| 769  | L24N 6+ 50 E  | <2  | 1.11 | <5 | 70  | 5  | 0.06 | <1 | 11 | 18 | 1   | 5.16 | <10 | 0.28 | 304  | <1 | <0.1 | 22 | 1150 | 20 | <5 | <20 | <1 | <0.1 | <10 | 23 | <10 | <1 | 81  |   |



| El# | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu  | Fe % | La  | Mg % | Mn   | Mo | Na %  | Ni | P    | Pb | Sb | Sn  | Sr  | Ti %  | U   | V  | W   | Y  | Zn  |
|-----|---------------|-----|------|----|-----|----|------|----|----|----|-----|------|-----|------|------|----|-------|----|------|----|----|-----|-----|-------|-----|----|-----|----|-----|
| 770 | L24N 6+ 75 E  | < 2 | 1.26 | <5 | 55  | <5 | 0.11 | <1 | 10 | 18 | <1  | 4.69 | <10 | 0.31 | 223  | <1 | <0.01 | 24 | 840  | 24 | <5 | <20 | 2   | <0.01 | <10 | 21 | <10 | <1 | 85  |
| 771 | L24N 7+ 00 E  | 0.2 | 1.50 | <5 | 85  | <5 | 0.07 | <1 | 8  | 21 | <1  | 4.05 | <10 | 0.19 | 302  | <1 | <0.01 | 11 | 630  | 18 | <5 | <20 | <1  | <0.01 | <10 | 35 | <10 | <1 | 95  |
| 772 | L24N 7+ 25 E  | 0.4 | 1.88 | <5 | 110 | 10 | 0.70 | 2  | 23 | 29 | 8   | 7.77 | 20  | 0.54 | 1447 | <1 | <0.01 | 41 | 2360 | 18 | <5 | <20 | 11  | 0.01  | <10 | 38 | <10 | 8  | 258 |
| 773 | L24N 7+ 50 E  | 0.2 | 1.81 | 10 | 95  | 10 | 0.40 | 1  | 24 | 27 | 12  | 7.40 | 20  | 0.34 | 705  | <1 | <0.01 | 55 | 1170 | 12 | <5 | <20 | 3   | <0.01 | <10 | 33 | <10 | 9  | 89  |
| 774 | L24N 7+ 75 E  | 0.2 | 1.56 | <5 | 70  | 10 | 0.15 | <1 | 26 | 24 | 7   | 7.82 | 30  | 0.23 | 934  | <1 | <0.01 | 38 | 1160 | 10 | <5 | <20 | 1   | <0.01 | <10 | 30 | <10 | 9  | 75  |
| 775 | L24N 8+ 00 E  | 0.4 | 1.42 | <5 | 75  | 5  | 0.19 | <1 | 15 | 21 | <1  | 4.69 | <10 | 0.19 | 783  | <1 | <0.01 | 23 | 1480 | 6  | <5 | <20 | <1  | <0.01 | <10 | 26 | <10 | 2  | 109 |
| 776 | L24N 8+ 25 E  | 0.4 | 1.54 | <5 | 165 | 5  | 0.14 | 1  | 20 | 21 | 7   | 4.99 | 10  | 0.39 | 705  | <1 | <0.01 | 46 | 1090 | 24 | <5 | <20 | 24  | <0.01 | <10 | 21 | <10 | 6  | 332 |
| 777 | L24N 8+ 50 E  | 0.2 | 1.39 | 5  | 160 | <5 | 0.24 | 3  | 22 | 25 | 30  | 5.20 | <10 | 0.34 | 1122 | <1 | <0.01 | 56 | 1310 | 36 | <5 | <20 | 45  | <0.01 | <10 | 24 | <10 | 6  | 430 |
| 778 | L24N 8+ 75 E  | 0.4 | 1.25 | <5 | 140 | <5 | 0.14 | <1 | 10 | 19 | <1  | 5.26 | <10 | 0.17 | 290  | <1 | <0.01 | 18 | 1620 | 34 | <5 | <20 | 3   | <0.01 | <10 | 28 | <10 | <1 | 89  |
| 779 | L24N 9+ 00 E  | 2.0 | 1.08 | 20 | 120 | <5 | 2.61 | 5  | 12 | 3  | 228 | 2.30 | <10 | 0.32 | 967  | <1 | 0.01  | 35 | 1820 | 44 | <5 | <20 | 132 | <0.01 | <10 | 11 | <10 | 22 | 202 |
| 780 | L24N 9+ 25 E  | 1.2 | 0.20 | <5 | 90  | <5 | 4.44 | 1  | 5  | <1 | 44  | 0.70 | <10 | 0.25 | 1440 | 2  | <0.01 | 5  | 1370 | 24 | <5 | <20 | 189 | <0.01 | <10 | 2  | <10 | 3  | 158 |
| 781 | L24N 9+ 50 E  | 0.2 | 1.90 | <5 | 75  | 5  | 0.09 | 1  | 30 | 40 | 47  | 6.32 | 40  | 0.35 | 1224 | <1 | <0.01 | 50 | 2210 | 52 | <5 | <20 | 12  | 0.01  | <10 | 34 | <10 | 23 | 204 |
| 782 | L24N 9+ 75 E  | 0.4 | 1.73 | 10 | 280 | 5  | 0.56 | 2  | 35 | 67 | 60  | 7.32 | 10  | 0.76 | 1523 | 7  | <0.01 | 98 | 1930 | 76 | <5 | <20 | 30  | 0.03  | <10 | 47 | <10 | 10 | 264 |
| 783 | L24N 10+ 25 E | 0.4 | 1.53 | <5 | 60  | 5  | 0.27 | 2  | 21 | 31 | 30  | 5.62 | 10  | 0.31 | 854  | <1 | <0.01 | 46 | 1320 | 34 | <5 | <20 | 18  | 0.01  | <10 | 33 | <10 | 7  | 159 |
| 784 | L24N 10+ 50 E | 0.2 | 1.00 | <5 | 70  | <5 | 0.59 | 1  | 13 | 23 | 29  | 4.62 | 20  | 0.12 | 330  | <1 | <0.01 | 33 | 1120 | 24 | <5 | <20 | 40  | 0.01  | <10 | 33 | <10 | 8  | 107 |
| 785 | L24N 10+ 75 E | 0.4 | 0.90 | <5 | 65  | <5 | 2.70 | 1  | 8  | 10 | 11  | 1.93 | 30  | 0.23 | 515  | <1 | <0.01 | 37 | 1430 | 8  | <5 | <20 | 155 | <0.01 | <10 | 11 | <10 | 23 | 98  |
| 786 | L24N 11+ 00 E | 0.6 | 0.75 | <5 | 65  | <5 | 1.34 | 2  | 7  | 10 | 26  | 2.28 | 20  | 0.05 | 158  | <1 | <0.01 | 46 | 970  | 14 | <5 | <20 | 77  | <0.01 | <10 | 17 | <10 | 13 | 65  |
| 787 | L24N 11+ 25 E | 0.6 | 0.28 | <5 | 30  | <5 | 1.22 | <1 | 4  | <1 | 59  | 0.70 | <10 | 0.14 | 89   | <1 | <0.01 | 1  | 1200 | 26 | <5 | <20 | 80  | <0.01 | <10 | 6  | <10 | 6  | 103 |
| 788 | L24N 11+ 50 E | <2  | 0.72 | <5 | 35  | <5 | 0.45 | <1 | 10 | 26 | 15  | 4.14 | 10  | 0.16 | 225  | <1 | <0.01 | 25 | 1180 | 14 | <5 | <20 | 28  | 0.02  | <10 | 42 | <10 | 1  | 76  |
| 789 | L24N 11+ 75 E | 1.2 | 1.55 | <5 | 105 | <5 | 0.52 | <1 | 9  | 18 | 37  | 3.24 | 20  | 0.20 | 168  | <1 | <0.01 | 30 | 1530 | 58 | <5 | <20 | 43  | 0.02  | <10 | 18 | <10 | 22 | 96  |
| 790 | L24N 12+ 00 E | 1.0 | 1.68 | <5 | 165 | <5 | 0.44 | <1 | 10 | 22 | 24  | 3.65 | 20  | 0.25 | 207  | <1 | <0.01 | 32 | 1500 | 60 | <5 | <20 | 40  | 0.02  | <10 | 22 | <10 | 19 | 104 |
| 791 | L24N 12+ 25 E | <2  | 1.08 | <5 | 80  | <5 | 0.14 | <1 | 10 | 17 | 21  | 4.07 | <10 | 0.20 | 181  | <1 | <0.01 | 22 | 760  | 30 | <5 | <20 | 18  | <0.01 | <10 | 23 | <10 | 1  | 101 |
| 792 | L24N 12+ 50 E | 0.2 | 1.23 | <5 | 70  | 5  | 0.15 | <1 | 10 | 19 | 11  | 4.69 | 10  | 0.20 | 151  | <1 | <0.01 | 24 | 910  | 40 | <5 | <20 | 14  | <0.01 | <10 | 22 | <10 | 3  | 98  |
| 793 | L24N 12+ 75 E | 0.6 | 0.99 | <5 | 125 | <5 | 2.99 | <1 | 66 | 6  | 15  | 1.21 | 70  | 0.21 | 794  | <1 | <0.01 | 20 | 1690 | 20 | <5 | <20 | 175 | <0.01 | <10 | 5  | <10 | 38 | 90  |
| 794 | L24N 13+ 00 E | <2  | 1.00 | <5 | 135 | <5 | 0.83 | <1 | 21 | 15 | 21  | 4.14 | 10  | 0.11 | 1505 | <1 | <0.01 | 30 | 1310 | 42 | <5 | <20 | 48  | 0.01  | <10 | 29 | <10 | 8  | 101 |
| 795 | L24N 13+ 25 E | 0.2 | 1.54 | <5 | 140 | 5  | 0.91 | <1 | 28 | 13 | 4   | 3.54 | <10 | 0.24 | 874  | <1 | <0.01 | 16 | 990  | 36 | <5 | <20 | 55  | 0.02  | <10 | 26 | <10 | 7  | 84  |
| 796 | L24N 13+ 50 E | <2  | 1.67 | <5 | 100 | 5  | 0.08 | <1 | 9  | 19 | <1  | 4.24 | 10  | 0.26 | 232  | <1 | <0.01 | 15 | 1040 | 22 | <5 | <20 | 6   | <0.01 | <10 | 28 | <10 | <1 | 66  |
| 797 | L24N 13+ 75 E | 0.2 | 1.06 | <5 | 75  | 5  | 0.51 | <1 | 7  | 14 | <1  | 2.99 | 20  | 0.26 | 134  | <1 | <0.01 | 12 | 790  | 4  | <5 | <20 | 48  | <0.01 | <10 | 22 | <10 | 1  | 48  |
| 798 | L24N 14+ 00 E | <2  | 0.83 | 5  | 60  | <5 | 0.05 | <1 | 7  | 13 | <1  | 2.96 | 20  | 0.12 | 187  | <1 | <0.01 | 12 | 640  | 6  | <5 | <20 | 2   | 0.02  | <10 | 34 | <10 | 1  | 53  |
| 799 | L24N 14+ 25 E | 0.4 | 1.28 | <5 | 65  | <5 | 0.07 | <1 | 9  | 17 | 4   | 3.83 | 20  | 0.18 | 239  | <1 | <0.01 | 15 | 820  | 8  | <5 | <20 | 4   | <0.01 | <10 | 24 | <10 | 4  | 47  |
| 800 | L24N 14+ 50 E | 0.2 | 1.10 | <5 | 75  | 5  | 0.05 | <1 | 8  | 15 | <1  | 4.28 | 10  | 0.17 | 319  | <1 | <0.01 | 13 | 780  | 8  | <5 | <20 | 1   | <0.01 | <10 | 27 | <10 | <1 | 49  |
| 801 | L24N 14+ 75 E | <2  | 2.09 | <5 | 60  | <5 | 0.03 | <1 | 12 | 21 | <1  | 5.36 | 10  | 0.34 | 275  | <1 | <0.01 | 18 | 1100 | 6  | <5 | <20 | <1  | <0.01 | <10 | 23 | <10 | <1 | 67  |
| 802 | L24N 15+ 00 E | 0.2 | 1.42 | <5 | 55  | <5 | 0.01 | <1 | 11 | 18 | <1  | 4.22 | 10  | 0.25 | 553  | <1 | <0.01 | 14 | 770  | 2  | <5 | <20 | 2   | <0.01 | <10 | 29 | <10 | <1 | 57  |
| 803 | L25N 6+ 25 E  | 0.4 | 1.42 | <5 | 220 | 10 | 0.70 | 1  | 18 | 21 | 3   | 7.97 | <10 | 0.33 | 3080 | <1 | <0.01 | 23 | 2090 | 44 | <5 | <20 | 16  | 0.01  | <10 | 32 | <10 | 1  | 168 |
| 804 | L25N 6+ 50 E  | 1.0 | 1.09 | <5 | 270 | 10 | 2.94 | 2  | 17 | 16 | 5   | 8.84 | <10 | 0.33 | 5633 | <1 | <0.01 | 37 | 2050 | 14 | <5 | <20 | 32  | 0.01  | <10 | 24 | <10 | 9  | 184 |
| 805 | L25N 6+ 75 E  | <2  | 2.00 | <5 | 110 | 10 | 0.27 | <1 | 15 | 24 | <1  | 5.51 | <10 | 0.23 | 704  | <1 | <0.01 | 26 | 900  | 72 | <5 | <20 | 10  | <0.01 | <10 | 26 | <10 | 2  | 124 |
| 806 | L25N 7+ 00 E  | <2  | 0.79 | <5 | 55  | <5 | 0.11 | <1 | 4  | 12 | <1  | 2.86 | <10 | 0.08 | 115  | <1 | <0.01 | 6  | 470  | 24 | <5 | <20 | 4   | <0.01 | <10 | 37 | <10 | <1 | 39  |
| 807 | L25N 7+ 25 E  | <2  | 0.90 | <5 | 70  | 5  | 0.57 | <1 | 15 | 17 | <1  | 4.75 | <10 | 0.13 | 710  | <1 | <0.01 | 18 | 1350 | 64 | <5 | <20 | 17  | <0.01 | <10 | 29 | <10 | <1 | 192 |
| 808 | L25N 7+ 50 E  | 0.2 | 1.31 | <5 | 130 | <5 | 0.47 | 1  | 21 | 21 | 14  | 5.35 | 10  | 0.31 | 715  | <1 | <0.01 | 46 | 1220 | 38 | <5 | <20 | 26  | <0.01 | <10 | 21 | <10 | 7  | 387 |

| Et # | Tag #         | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr | Ti % | U   | V  | W   | Y  | Zn  |
|------|---------------|-----|------|----|-----|----|------|----|----|----|----|------|-----|------|------|----|------|----|------|----|----|-----|----|------|-----|----|-----|----|-----|
| 809  | L25N 7+ 75 E  | 0.2 | 1.39 | <5 | 165 | <5 | 0.58 | 2  | 22 | 23 | 26 | 5.78 | 10  | 0.34 | 984  | <1 | <.01 | 58 | 1230 | 50 | <5 | <20 | 22 | 0.01 | <10 | 24 | <10 | 9  | 189 |
| 810  | L25N 8+ 00 E  | 0.2 | 1.03 | <5 | 235 | <5 | 1.27 | 2  | 17 | 19 | 39 | 3.80 | <10 | 0.34 | 590  | <1 | <.01 | 52 | 1300 | 30 | <5 | <20 | 79 | <.01 | <10 | 17 | <10 | 9  | 173 |
| 811  | L25N 8+ 25 E  | <.2 | 1.03 | 5  | 90  | 5  | 0.12 | <1 | 10 | 17 | 2  | 4.10 | <10 | 0.14 | 210  | <1 | <.01 | 26 | 630  | 22 | <5 | <20 | 11 | <.01 | <10 | 29 | <10 | <1 | 104 |
| 812  | L25N 8+ 50 E  | <.2 | 0.75 | <5 | 95  | <5 | 0.04 | 3  | 7  | 11 | <1 | 2.37 | 20  | 0.09 | 141  | <1 | <.01 | 20 | 590  | 14 | <5 | <20 | 10 | <.01 | <10 | 21 | <10 | <1 | 54  |
| 813  | L25N 8+ 75 E  | <.2 | 1.04 | 5  | 100 | 10 | 0.06 | 1  | 13 | 23 | 5  | 5.49 | <10 | 0.23 | 361  | <1 | <.01 | 32 | 2200 | 40 | <5 | <20 | 12 | 0.01 | <10 | 30 | <10 | <1 | 102 |
| 814  | L25N 9+ 00 E  | 0.4 | 1.35 | 10 | 100 | <5 | 0.24 | 2  | 26 | 26 | 32 | 6.08 | 10  | 0.32 | 819  | 1  | <.01 | 59 | 1430 | 50 | <5 | <20 | 17 | <.01 | <10 | 25 | <10 | 8  | 219 |
| 815  | L25N 9+ 25 E  | <.2 | 1.17 | <5 | 120 | <5 | 0.46 | <1 | 13 | 21 | 2  | 3.97 | 10  | 0.37 | 305  | <1 | <.01 | 34 | 780  | 22 | <5 | <20 | 25 | 0.01 | <10 | 21 | <10 | 2  | 128 |
| 816  | L25N 9+ 50 E  | 0.4 | 1.74 | <5 | 145 | 5  | 0.44 | 2  | 23 | 32 | 29 | 5.26 | 20  | 0.35 | 1034 | <1 | <.01 | 49 | 1310 | 42 | <5 | <20 | 36 | 0.01 | <10 | 30 | <10 | 16 | 173 |
| 817  | L25N 9+ 75 E  | 0.4 | 1.84 | <5 | 80  | <5 | 0.24 | 2  | 23 | 30 | 42 | 5.92 | 20  | 0.26 | 834  | <1 | <.01 | 51 | 1450 | 44 | <5 | <20 | 19 | 0.01 | <10 | 30 | <10 | 20 | 191 |
| 818  | L25N 10+ 25 E | 0.2 | 1.61 | 10 | 110 | <5 | 0.30 | <1 | 23 | 33 | 24 | 5.59 | 20  | 0.41 | 1096 | <1 | <.01 | 49 | 1930 | 46 | <5 | <20 | 29 | 0.01 | <10 | 30 | <10 | 10 | 162 |
| 819  | L25N 10+ 50 E | 0.2 | 1.25 | <5 | 85  | <5 | 0.64 | 1  | 16 | 23 | 19 | 4.69 | 10  | 0.28 | 577  | <1 | <.01 | 38 | 900  | 24 | <5 | <20 | 42 | 0.01 | <10 | 26 | <10 | 10 | 107 |
| 820  | L25N 10+ 75 E | 0.2 | 0.95 | 5  | 60  | 10 | 0.84 | <1 | 12 | 20 | 11 | 4.24 | <10 | 0.23 | 252  | <1 | <.01 | 28 | 730  | 18 | <5 | <20 | 59 | <.01 | <10 | 25 | <10 | 4  | 107 |
| 821  | L25N 11+ 00 E | 0.2 | 1.32 | <5 | 50  | <5 | 0.81 | <1 | 10 | 20 | 7  | 3.01 | 20  | 0.24 | 175  | <1 | <.01 | 26 | 1160 | 16 | <5 | <20 | 65 | <.01 | <10 | 20 | <10 | 22 | 63  |
| 822  | L25N 11+ 25 E | <.2 | 1.57 | <5 | 85  | <5 | 0.49 | <1 | 16 | 24 | 4  | 4.54 | 20  | 0.33 | 595  | <1 | <.01 | 28 | 1190 | 20 | <5 | <20 | 35 | 0.01 | <10 | 28 | <10 | 8  | 87  |
| 823  | L25N 11+ 50 E | <.2 | 0.74 | <5 | 55  | <5 | 0.15 | <1 | 6  | 14 | <1 | 3.00 | 10  | 0.09 | 121  | <1 | <.01 | 14 | 1210 | 4  | <5 | <20 | 11 | <.01 | <10 | 29 | <10 | <1 | 42  |
| 824  | L25N 11+ 75 E | <.2 | 1.55 | <5 | 75  | 5  | 0.25 | <1 | 16 | 21 | 5  | 4.22 | 20  | 0.31 | 586  | <1 | <.01 | 32 | 890  | 16 | <5 | <20 | 17 | 0.01 | <10 | 26 | <10 | 8  | 84  |
| 825  | L25N 12+ 00 E | 0.2 | 1.48 | <5 | 65  | <5 | 0.22 | <1 | 14 | 20 | 38 | 4.00 | <10 | 0.29 | 369  | <1 | <.01 | 22 | 1030 | 22 | <5 | <20 | 12 | <.01 | <10 | 24 | <10 | 5  | 92  |
| 826  | L25N 12+ 25 E | <.2 | 1.73 | <5 | 65  | <5 | 0.07 | <1 | 11 | 21 | 6  | 5.03 | <10 | 0.31 | 208  | <1 | <.01 | 20 | 630  | 10 | <5 | <20 | 4  | 0.01 | <10 | 24 | <10 | <1 | 67  |
| 827  | L25N 12+ 50 E | <.2 | 0.82 | <5 | 45  | <5 | 0.04 | <1 | 6  | 13 | <1 | 2.44 | 20  | 0.12 | 168  | <1 | <.01 | 11 | 640  | 4  | <5 | <20 | 1  | <.01 | <10 | 23 | <10 | 1  | 54  |
| 828  | L25N 12+ 75 E | <.2 | 1.07 | <5 | 90  | <5 | <.01 | <1 | 6  | 13 | <1 | 2.89 | 20  | 0.20 | 318  | <1 | <.01 | 10 | 920  | 4  | <5 | <20 | <1 | <.01 | <10 | 21 | <10 | <1 | 52  |
| 829  | L25N 13+ 00 E | 0.4 | 1.88 | <5 | 90  | <5 | 0.02 | <1 | 12 | 25 | 12 | 5.55 | <10 | 0.21 | 357  | <1 | <.01 | 22 | 2260 | 50 | <5 | <20 | 2  | 0.01 | <10 | 32 | <10 | <1 | 105 |
| 830  | L25N 13+ 25 E | <.2 | 0.60 | <5 | 35  | <5 | 0.06 | <1 | 6  | 10 | <1 | 2.34 | 20  | 0.04 | 133  | <1 | <.01 | 13 | 890  | 8  | <5 | <20 | 6  | <.01 | <10 | 22 | <10 | 1  | 46  |
| 831  | L25N 13+ 50 E | <.2 | 1.36 | <5 | 155 | <5 | 0.08 | <1 | 17 | 21 | 9  | 4.95 | <10 | 0.20 | 478  | <1 | <.01 | 27 | 1190 | 30 | <5 | <20 | 11 | <.01 | <10 | 27 | <10 | 3  | 102 |
| 832  | L25N 13+ 75 E | <.2 | 1.62 | 5  | 55  | 5  | 0.06 | <1 | 20 | 32 | 12 | 6.29 | <10 | 0.34 | 726  | <1 | <.01 | 40 | 1260 | 38 | <5 | <20 | 2  | <.01 | <10 | 30 | <10 | 2  | 131 |
| 833  | L25N 14+ 00 E | 0.2 | 1.70 | <5 | 70  | 5  | 0.69 | <1 | 16 | 20 | 2  | 4.16 | 20  | 0.38 | 702  | <1 | <.01 | 25 | 1040 | 12 | <5 | <20 | 50 | <.01 | <10 | 24 | <10 | 10 | 73  |
| 834  | L25N 14+ 25 E | 0.2 | 1.59 | <5 | 60  | <5 | 0.35 | <1 | 13 | 18 | 6  | 3.71 | 30  | 0.27 | 354  | <1 | <.01 | 25 | 910  | 10 | <5 | <20 | 32 | <.01 | <10 | 20 | <10 | 16 | 60  |
| 835  | L25N 14+ 50 E | 0.4 | 1.74 | <5 | 60  | 10 | 0.25 | <1 | 18 | 21 | 7  | 4.41 | 30  | 0.40 | 508  | <1 | <.01 | 33 | 750  | 6  | <5 | <20 | 18 | <.01 | <10 | 24 | <10 | 13 | 68  |
| 836  | L25N 14+ 75 E | <.2 | 1.37 | <5 | 120 | 5  | 0.16 | <1 | 9  | 19 | <1 | 5.05 | <10 | 0.24 | 158  | <1 | <.01 | 16 | 540  | 8  | <5 | <20 | 8  | 0.01 | <10 | 33 | <10 | <1 | 49  |
| 837  | L25N 15+ 00 E | <.2 | 1.79 | <5 | 50  | 5  | 0.25 | <1 | 17 | 23 | 1  | 4.64 | 20  | 0.54 | 503  | <1 | <.01 | 25 | 710  | 4  | <5 | <20 | 15 | 0.01 | <10 | 25 | <10 | 4  | 66  |

| QC DATA:           | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr  | Cu | Fe % | La  | Mg % | Mn   | Mo | Na % | Ni | P    | Pb | Sb | Sn  | Sr  | Ti % | U   | V   | W   | Y  | Zn  |
|--------------------|-----|------|----|-----|----|------|----|----|-----|----|------|-----|------|------|----|------|----|------|----|----|-----|-----|------|-----|-----|-----|----|-----|
| <i>Repeat:</i>     |     |      |    |     |    |      |    |    |     |    |      |     |      |      |    |      |    |      |    |    |     |     |      |     |     |     |    |     |
| 1 L9N: 14+ 00 E    | <.2 | 1.88 | 40 | 225 | <5 | 0.20 | <1 | 21 | 46  | 43 | 5.23 | <10 | 0.30 | 1110 | 1  | 0.02 | 30 | 2630 | 28 | <5 | <20 | 14  | 0.01 | <10 | 44  | <10 | <1 | 125 |
| 39 L10N 18+ 75 E   | <.2 | 2.01 | 75 | 130 | <5 | 0.24 | <1 | 22 | 73  | 38 | 7.00 | <10 | 0.38 | 756  | <1 | <.01 | 32 | 1530 | 60 | <5 | <20 | 16  | <.01 | <10 | 39  | <10 | <1 | 265 |
| 77 L16N 9+ 00 E    | <.2 | 3.06 | 50 | 115 | <5 | 0.10 | <1 | 20 | 107 | 18 | 7.71 | <10 | 1.01 | 340  | 2  | 0.03 | 25 | 2160 | 8  | <5 | <20 | 8   | 0.02 | <10 | 117 | <10 | <1 | 91  |
| 115 L17N 8+ 50 E   | 0.6 | 1.18 | 10 | 45  | <5 | 0.06 | <1 | 10 | 23  | <1 | 4.13 | <10 | 0.30 | 394  | <1 | 0.02 | 12 | 1240 | 16 | <5 | <20 | 5   | 0.01 | <10 | 32  | <10 | <1 | 55  |
| 153 L18N 8+ 00 E   | 1.2 | 0.76 | <5 | 100 | <5 | 0.06 | <1 | 3  | 12  | 6  | 1.43 | <10 | 0.15 | 98   | <1 | 0.02 | 4  | 650  | 6  | <5 | <20 | 7   | <.01 | <10 | 20  | <10 | 1  | 26  |
| 191 L19N 7+ 50 E   | 0.2 | 1.47 | 5  | 75  | <5 | 0.17 | <1 | 15 | 20  | 48 | 3.16 | <10 | 0.38 | 440  | <1 | 0.01 | 15 | 840  | 12 | <5 | <20 | 18  | 0.01 | <10 | 22  | <10 | 5  | 54  |
| 229 L11N 12+ 25 E  | <.2 | 0.97 | 20 | 50  | <5 | 0.11 | <1 | 13 | 20  | 20 | 5.21 | <10 | 0.09 | 336  | <1 | <.01 | 25 | 1450 | 24 | <5 | <20 | 7   | 0.01 | <10 | 36  | <10 | <1 | 73  |
| 267 L13N 11+ 75 E  | 0.8 | 1.85 | 10 | 50  | <5 | 0.02 | <1 | 7  | 27  | 9  | 2.60 | <10 | 0.60 | 280  | <1 | 0.01 | 8  | 720  | 2  | <5 | <20 | 4   | <.01 | <10 | 33  | <10 | <1 | 42  |
| 306 L14N 11+ 25 E  | <.2 | 0.76 | 15 | 50  | <5 | 0.04 | <1 | 4  | 23  | 4  | 2.20 | <10 | 0.19 | 163  | <1 | 0.02 | 7  | 490  | 14 | <5 | <20 | 7   | <.01 | <10 | 28  | <10 | <1 | 26  |
| 343 L12N 10+ 75 E  | 0.2 | 1.94 | 30 | 60  | <5 | 0.06 | <1 | 12 | 31  | 15 | 5.00 | <10 | 0.36 | 187  | 1  | 0.02 | 24 | 720  | 26 | <5 | <20 | 7   | <.01 | <10 | 22  | <10 | <1 | 85  |
| 381 L10N 10+ 25 E  | 0.6 | 0.69 | 20 | 130 | <5 | 0.42 | <1 | 12 | 18  | 12 | 3.56 | <10 | 0.16 | 763  | 1  | 0.02 | 18 | 650  | 24 | <5 | <20 | 18  | <.01 | <10 | 29  | <10 | <1 | 60  |
| 419 L15N 9+ 50 E   | 0.4 | 2.10 | 10 | 95  | <5 | 0.10 | <1 | 16 | 92  | 20 | 5.40 | <10 | 1.36 | 342  | 1  | 0.01 | 22 | 1240 | 6  | <5 | <20 | 7   | 0.03 | <10 | 64  | <10 | <1 | 85  |
| 457 L20N 14+ 25 E  | <.2 | 1.27 | 10 | 80  | <5 | 0.06 | <1 | 5  | 13  | 7  | 2.46 | <10 | 0.16 | 155  | <1 | 0.02 | 5  | 790  | 12 | <5 | <20 | 11  | 0.01 | <10 | 32  | <10 | <1 | 30  |
| 495 L2S: 14+ 75 E  | 1.0 | 1.41 | 30 | 195 | <5 | 0.48 | <1 | 19 | 29  | 39 | 4.16 | <10 | 0.40 | 2295 | 2  | <.01 | 23 | 2435 | 16 | <5 | <20 | 22  | <.01 | <10 | 30  | <10 | 15 | 97  |
| 533 L4S: 13+ 75 E  | <.2 | 0.77 | 20 | 40  | <5 | 0.04 | <1 | 7  | 23  | 9  | 2.52 | <10 | 0.15 | 312  | <1 | 0.02 | 9  | 780  | 16 | <5 | <20 | 5   | 0.01 | <10 | 39  | <10 | <1 | 32  |
| 571 L20N 9+ 00 E   | <.2 | 1.40 | 25 | 65  | <5 | 0.16 | <1 | 14 | 22  | 11 | 3.16 | <10 | 0.13 | 95   | 1  | 0.01 | 22 | 430  | 6  | <5 | <20 | 4   | 0.01 | <10 | 48  | <10 | <1 | 39  |
| 609 L22N 13+ 75 E  | 0.4 | 1.72 | 15 | 115 | <5 | 0.85 | <1 | 12 | 16  | 59 | 3.05 | <10 | 0.29 | 248  | <1 | 0.03 | 33 | 1830 | 22 | <5 | <20 | 61  | <.01 | <10 | 14  | <10 | 66 | 128 |
| 647 BL10+00 13+00N | <.2 | 1.20 | 25 | 70  | <5 | 0.06 | <1 | 8  | 44  | 13 | 3.16 | <10 | 0.47 | 101  | 2  | 0.01 | 24 | 1120 | 20 | <5 | <20 | 9   | <.01 | <10 | 56  | <10 | <1 | 60  |
| 685 BL10+00 22+50N | 0.2 | 1.57 | 45 | 150 | <5 | 2.00 | 2  | 26 | 51  | 45 | 4.58 | <10 | 0.54 | 1096 | 3  | 0.02 | 39 | 1690 | 48 | <5 | <20 | 101 | 0.01 | <10 | 46  | <10 | 12 | 178 |
| 723 L26N 10+ 25 E  | <.2 | 0.76 | 35 | 150 | <5 | 0.03 | <1 | 10 | 8   | 30 | 4.11 | <10 | 0.14 | 380  | 2  | 0.01 | 17 | 990  | 48 | <5 | <20 | 8   | <.01 | <10 | 26  | <10 | <1 | 69  |
| 761 L23N 9+ 50 E   | 0.4 | 1.41 | <5 | 80  | <5 | 0.23 | 2  | 13 | 25  | 77 | 4.87 | 10  | 0.21 | 387  | 1  | <.01 | 28 | 1200 | 38 | <5 | <20 | 14  | <.01 | <10 | 30  | <10 | 10 | 126 |
| 799 L24N 14+ 25 E  | 0.4 | 1.26 | <5 | 60  | <5 | 0.07 | <1 | 9  | 16  | 3  | 3.85 | 20  | 0.17 | 240  | <1 | <.01 | 16 | 800  | 10 | <5 | <20 | 3   | <.01 | <10 | 23  | <10 | 4  | 46  |
| 837 L25N 15+ 00 E  | <.2 | 1.77 | <5 | 55  | 5  | 0.24 | <1 | 17 | 22  | <1 | 4.60 | 20  | 0.53 | 495  | <1 | <.01 | 25 | 690  | 4  | <5 | <20 | 18  | 0.01 | <10 | 25  | <10 | 5  | 65  |

| QC DATA:             | Ag  | Al % | As | Ba  | Bi | Ca % | Cd | Co | Cr | Cu | Fe % | La   | Mg % | Mn  | Mo | Na %  | Ni | P   | Pb | Sb | Sn  | Sr | Ti % | U   | V  | W   | Y | Zn |
|----------------------|-----|------|----|-----|----|------|----|----|----|----|------|------|------|-----|----|-------|----|-----|----|----|-----|----|------|-----|----|-----|---|----|
| <i>Standard 1991</i> |     |      |    |     |    |      |    |    |    |    |      |      |      |     |    |       |    |     |    |    |     |    |      |     |    |     |   |    |
|                      | 1.2 | 1.86 | 75 | 155 | <5 | 1.93 | <1 | 27 | 72 | 83 | 4.03 | <10  | 1.13 | 720 | <1 | 0.01  | 22 | 720 | 10 | <5 | <20 | 64 | 0.11 | <10 | 63 | <10 | 3 | 76 |
|                      | 1.2 | 1.93 | 70 | 155 | <5 | 1.94 | <1 | 22 | 72 | 80 | 4.08 | <10  | 1.14 | 730 | <1 | 0.01  | 21 | 720 | 16 | <5 | <20 | 60 | 0.10 | <10 | 82 | <10 | 6 | 79 |
|                      | 1.2 | 1.86 | 70 | 160 | <5 | 1.93 | <1 | 27 | 74 | 83 | 3.89 | <10  | 1.09 | 736 | <1 | 0.01  | 23 | 730 | 18 | <5 | <20 | 60 | 0.11 | <10 | 84 | <10 | 2 | 78 |
|                      | 1.2 | 1.90 | 60 | 140 | <5 | 2.01 | <1 | 23 | 74 | 77 | 4.54 | 0.46 | 1.00 | 730 | <1 | <0.01 | 18 | 730 | 16 | <5 | <20 | 53 | 0.12 | <10 | 86 | <10 | 9 | 70 |
|                      | 1.4 | 1.86 | 65 | 150 | <5 | 1.73 | <1 | 17 | 68 | 74 | 3.60 | <10  | 0.96 | 687 | <1 | <0.01 | 20 | 650 | 18 | <5 | <20 | 58 | 0.11 | <10 | 78 | <10 | 8 | 70 |
|                      | 1.2 | 1.78 | 60 | 155 | <5 | 1.75 | <1 | 17 | 66 | 74 | 3.40 | <10  | 0.96 | 705 | <1 | <0.01 | 19 | 670 | 20 | <5 | <20 | 55 | 0.09 | <10 | 78 | <10 | 7 | 68 |
|                      | 1.2 | 1.88 | 65 | 150 | <5 | 1.85 | <1 | 18 | 67 | 76 | 3.80 | <10  | 1.02 | 749 | <1 | <0.01 | 18 | 720 | 18 | <5 | <20 | 58 | 0.10 | <10 | 83 | <10 | 8 | 64 |
|                      | 1.2 | 1.71 | 60 | 145 | <5 | 1.80 | <1 | 18 | 66 | 75 | 3.80 | <10  | 0.93 | 680 | <1 | <0.01 | 20 | 680 | 16 | <5 | <20 | 63 | 0.09 | <10 | 78 | <10 | 6 | 70 |
|                      | 1.0 | 1.79 | 65 | 150 | <5 | 1.80 | <1 | 17 | 64 | 76 | 3.89 | <10  | 0.90 | 691 | <1 | <0.01 | 16 | 680 | 18 | <5 | <20 | 55 | 0.12 | <10 | 76 | <10 | 5 | 69 |
|                      | 1.0 | 1.80 | 70 | 155 | <5 | 1.99 | <1 | 18 | 70 | 77 | 4.36 | <10  | 0.94 | 736 | <1 | <0.01 | 18 | 690 | 20 | <5 | <20 | 55 | 0.13 | <10 | 82 | <10 | 6 | 72 |
|                      | 1.2 | 1.71 | 65 | 145 | <5 | 1.82 | <1 | 20 | 67 | 76 | 3.89 | <10  | 0.95 | 748 | <1 | <0.01 | 20 | 670 | 22 | <5 | <20 | 46 | 0.09 | <10 | 78 | <10 | 5 | 72 |
|                      | 1.6 | 1.88 | 60 | 155 | <5 | 1.99 | <1 | 19 | 74 | 74 | 3.41 | <10  | 1.00 | 780 | <1 | <0.01 | 18 | 730 | 12 | <5 | <20 | 60 | 0.12 | <10 | 88 | <10 | 6 | 62 |
|                      | 1.2 | 1.89 | 65 | 160 | <5 | 1.90 | <1 | 22 | 72 | 78 | 4.33 | <10  | 0.96 | 720 | <1 | <0.01 | 23 | 780 | 18 | <5 | <20 | 55 | 0.10 | <10 | 87 | <10 | 6 | 72 |
|                      | 1.4 | 2.00 | 75 | 150 | <5 | 2.09 | <1 | 20 | 42 | 82 | 3.95 | <10  | 0.96 | 730 | <1 | <0.01 | 20 | 760 | 18 | <5 | <20 | 58 | 0.11 | <10 | 83 | <10 | 4 | 76 |
|                      | 1.2 | 1.92 | 60 | 160 | <5 | 1.86 | <1 | 20 | 65 | 84 | 3.92 | <10  | 0.99 | 680 | <1 | <0.01 | 19 | 680 | 18 | <5 | <20 | 57 | 0.11 | <10 | 81 | <10 | 7 | 75 |
|                      | 1.2 | 1.89 | 75 | 174 | <5 | 2.06 | <1 | 21 | 68 | 84 | 3.79 | <10  | 0.95 | 734 | <1 | <0.01 | 21 | 750 | 18 | <5 | <20 | 64 | 0.12 | <10 | 84 | <10 | 6 | 71 |
|                      | 1.0 | 1.98 | 70 | 165 | <5 | 2.05 | 1  | 23 | 64 | 89 | 3.66 | <10  | 0.99 | 998 | <1 | <0.01 | 22 | 800 | 16 | <5 | <20 | 57 | 0.11 | <10 | 80 | <10 | 2 | 77 |
|                      | 1.0 | 2.02 | 75 | 170 | <5 | 2.08 | <1 | 20 | 69 | 82 | 3.76 | <10  | 0.95 | 720 | <1 | <0.01 | 21 | 730 | 22 | <5 | <20 | 66 | 0.11 | <10 | 83 | <10 | 6 | 73 |
|                      | 1.2 | 1.97 | 65 | 155 | <5 | 1.45 | <1 | 16 | 85 | 86 | 3.65 | <10  | 1.00 | 700 | <1 | <0.01 | 21 | 690 | 18 | <5 | <20 | 59 | 0.10 | <10 | 77 | <10 | 6 | 73 |
|                      | 1.2 | 2.02 | 65 | 165 | <5 | 1.76 | 1  | 20 | 62 | 75 | 4.11 | <10  | 0.97 | 700 | <1 | <0.01 | 24 | 708 | 18 | 5  | <20 | 56 | 0.11 | <10 | 79 | <10 | 8 | 74 |
|                      | 1.2 | 2.04 | 65 | 165 | <5 | 1.77 | 1  | 20 | 63 | 75 | 4.11 | <10  | 1.02 | 711 | <1 | <0.01 | 23 | 690 | 16 | <5 | <20 | 55 | 0.10 | <10 | 80 | <10 | 6 | 73 |
|                      | 1.2 | 1.91 | 65 | 165 | 5  | 1.82 | 2  | 20 | 63 | 76 | 4.03 | <10  | 0.94 | 724 | <1 | <0.01 | 24 | 650 | 18 | 5  | <20 | 55 | 0.12 | <10 | 80 | <10 | 8 | 74 |

\* No Sample

  
 ECO-TECH LABORATORIES LTD.  
 Frank J. Pezzotti, A.Sc.T.  
 B.C. Certified Assayer

**Appendix IV**  
Analytical Procedures



ASSAYING  
 GEOCHEMISTRY  
 ANALYTICAL CHEMISTRY  
 ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700  
 Fax (604) 573-4557

METHODOLOGY

a) Gold - Geochemical

Fire Assay - A.A.

A 10.000 gram sample is fire assayed by conventional fire assay procedures. The resulting bead is dissolved in 3ml aqua regia and is analyzed for gold by Atomic Absorption.

Minimum Reportable Concentration:

5 (ppb)

b) 30 Element ICP

Aqua Regia Digestion

A one gram sample\* is digested with a 6ml mixture of HCL, HNO<sub>3</sub>, H<sub>2</sub>O in a ratio of 3:2:1. The digestion is carried out at 95°C for two hours. The digested sample is made up to 20ml with distilled water and analyzed by ICP.

Minimum Reportable Concentration:

a) Aqua Regia Digestion

|     |         |     |        |     |        |
|-----|---------|-----|--------|-----|--------|
| Ag  | 0.2 ppm | Cu  | 1 ppm  | Pb  | 2 ppm  |
| Al* | 0.01%   | Fe* | 0.01%  | Sb  | 5 ppm  |
| As  | 5 ppm   | K*  | 0.01%  | Sn  | 20 ppm |
| B*  | 2 ppm   | La  | 10 ppm | Sr* | 1 ppm  |
| Ba* | 5 ppm   | Mg* | 0.01%  | Ti* | 0.01%  |
| Bi  | 5 ppm   | Mn* | 1 ppm  | U*  | 10 ppm |
| Ca* | 0.01%   | Mo  | 1 ppm  | V   | 1 ppm  |
| Cd  | 1 ppm   | Na* | 0.01%  | W*  | 10 ppm |
| Co  | 1 ppm   | Ni  | 1 ppm  | Y   | 1 ppm  |
| Cr* | 1 ppm   | P*  | 10 ppm | Zn  | 1 ppm  |

Dissolution of elements marked by an asterisk may not be complete.  
 \* 2 gram sample can be used at no extra charge

Copper Assay

A 2g sample is digested in a 200ml phosphoric flask with HNO<sub>3</sub>, HCl. The digestion is carried out on a hot plate for 2 hours. The sample is bulked up with distilled water and analysed for copper by Atomic Absorption. The minimum reportable concentration is <0.01%.



ASSAYING  
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ANALYTICAL CHEMISTRY  
ENVIRONMENTAL TESTING

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Fax (604) 573-4557

## Quality control

### a) Sample Preparation

Random Duplicate samples are split from each shipment and introduced in each suite of samples sent to the laboratory for analysis. No less than one sample in forty is re-split. Each sample is assigned a unique lab number and barcode to be read by the barcode reader at the weigh station. A second person checks the lab number assignment for accuracy.

### b) Weighing Stations

Each balance is calibrated twice during each shift using N.B.S. referenced weights. Samples are identified prior to weighing by use of a barcode reader. The sample identification, sample weight and analysis required is automatically captured by computer.

### c) Fire Lab

Separate fusion pots are used for Assay, Rock Geochem and Soil Geochem. The pots are catalogued and are not reused until the assay is completed. Pots which were used for samples containing high or anomalous gold values are discarded at the end of each day. All flux mixtures are tested for purity before use.

### d) Analysis

Samples are analyzed from test tube racks containing forty test tubes. Each rack will contain thirty-seven samples, (one of which may be a blind duplicate re-split from the bucking facility), one blank, one soil standard and one duplicate sample. Approximately 25 Can Met and several in-house standards are routinely used by our laboratory. As a minimum, a full 10% of all samples analyzed are quality control samples. In addition to the quality control analyses, check analyses are routinely performed to verify data for anomalous samples.



ASSAYING  
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 ANALYTICAL CHEMISTRY  
 ENVIRONMENTAL TESTING

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 Fax (604) 573-4557

The samples are analyzed in the following order:

| <u>Test Tube</u> | <u>Contents</u>                                                                           |
|------------------|-------------------------------------------------------------------------------------------|
| #40              | Soil Standard (CanMet or In-House) to verify instrument calibration and sample digestion. |
| #1               | Reagent Blank to check for reagent contamination and instrument zero.                     |
| #2 to #38        | Analysis of samples.                                                                      |
| #39              | Sample Duplicate.                                                                         |
| #40              | Soil Standard and Recalibration.                                                          |

Quality Control Data Assessment

Each element analyzed in the soil standards has an individual statistical plot of standard deviation for the analysis. Upper and lower warning limits are set at  $\pm 2$  standard deviations. The analysis is considered to be out of control and is stopped when the value exceeds  $\pm 3$  standard deviations. If the nature of the problem cannot be determined, the entire block of samples is re-analyzed. The results for duplicate and blind duplicate pairs must fall within our tolerance limits for precision of geochemical analysis as outlined below:

| <u>Average Value</u>         | <u>Precision</u> |
|------------------------------|------------------|
| 1 to 2 times detection limit | $\pm$ 100%       |
| 3 to 4 "                     | $\pm$ 60%        |
| 5 to 6 "                     | $\pm$ 40%        |
| 7 to 10 "                    | $\pm$ 25%        |
| 11 to 100 "                  | $\pm$ 15%        |
| > 100 "                      | $\pm$ 10%        |



**Appendix V**

UTEM Survey on the Bar River Claim Group  
by S.J Geophysics Ltd  
Author: S.J. Visser, P.Geo.

# **UTEM SURVEY**

*ON THE*

## **BAR RIVER CLAIM GROUP**

CARIBOO MINING DIVISION B.C.,      N.T.S. 93 A/14

*FOR*

**MINER RIVER RESOURCES LTD.**

*SURVEY BY*

**SJ GEOPHYSICS LTD.**

AND

**LAMONTAGNE GEOPHYSICS LTD.**

October 1994

*REPORT BY*  
Syd Visser  
SJ Geophysics Ltd.

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## INTRODUCTION

*Instrument*

A large loop time domain electromagnetic (UTEM-3) survey was completed by SJ Geophysics Ltd. and Lamontagne Geophysics Ltd., for Miner River Resources Ltd. on the Bar River Claim Group during the period of July 1-8 and July 17-23, 1994. The Bar River Claim Group is located near Wells B.C., in the Cariboo M.D., of B.C. (N.T.S. 93 A/14).

The purpose of the survey was to search for massive sulphides, and to aid in the mapping of local geology.

## DESCRIPTION OF UTEM SYSTEM

UTEM is an acronym for "University of Toronto ElectroMagnetometer". The system was developed by Dr. Y. Lamontagne (1975) while he was a graduate student of that University.

The following is a short description of the UTEM system used in the field. A paper (A time-domain EM system measuring the step response of the ground) by G.F. West, J.C. Macnae and Y. Lamontagne, giving a more complete description with an overview of interpretations is located in Appendix III.

The field procedure consists of first laying out a large loop, which can vary in size from less than 100M X 100M to more than 2Km X 2Km, of single strand insulated wire and energizing it with current from a transmitter which is powered by a 2.2 kW motor generator. During a surface survey the lines are generally oriented perpendicular to one side of the loop and surveying can be performed both inside and outside the loop. For Borehole survey the sensor coil is placed down the borehole measuring the axial component of the electromagnetic field from a minimum of 2 separate loops.

The transmitter loop is energized with a precise triangular current waveform at a carefully controlled frequency (30.97 Hz for this survey). The receiver system includes a sensor coil and backpack portable receiver module which has a digital recording facility. The time synchronization between transmitter and receiver is achieved through quartz crystal clocks in both units which are accurate to about one second in 50 years.

The receiver sensor coil measures the vertical horizontal, or axial magnetic component of the electromagnetic field and responds to its time derivative. Since the

transmitter current waveform is triangular, the receiver coil will sense a perfect square wave in the absence of geologic conductors. Deviations from a perfect square wave are caused by electrical conductors which may be geologic or cultural in origin. The receiver stacks any pre-set number of cycles in order to increase the signal to noise ratio.

The UTEM receiver gathers and records 10 channels of data at each station occupied. The higher number channels (7-8-9-10) correspond to short time or high frequency while the lower number channels (1-2-3) correspond to long time or low frequency. Therefore, poor or weak conductors will respond on channels 10, 9, 8, 7 and 6. Progressively better conductors will give responses on progressively lower number channels as well. For example, massive, highly conducting sulfides or graphite will produce a response on all ten channels.

The Borehole system consists of a normal surface UTEM-3 transmitter and receives along with special receiver coil (1 1/4" in diameter). The coil is connected to the receiver through a controller and fibre optic cable.

## **FIELD WORK**

Rolf Krowinkel, geophysicist with SJ Geophysics Ltd., and the equipment were mobilized from Vancouver by truck on July 1, 1994. The initial work on the Bar River Claim Group was completed between July 1 and 8, 1994 with helpers supplied by the client. Rolf was joined by Neil Visser and the survey was extended from July 17 and 23, 1994. The survey area was accessed daily by truck and all terrain vehicle from Wells. The field parameters and local geology were discussed with geologist Tim Tourmunde, Toklat, before commencing the survey and during the survey period.

Approximately 8 Km (including overlap) using a station spacing of 25m were surveyed from 2 loops in a period of 6 production days 4 loop laying days 3 mobilization days and 2 down days.

The grid is comprised of flagged lines in rough terrain therefore channel 1 data cannot be guaranteed to be accurate. Slopes were recorded during the survey to produce a topographic map and aid in reduction of the data. The loop lines were not flagged therefore the loop locations were estimated as close as possible. The long daily commute to the survey grid and poor access to parts of the grid and rough lines slowed the survey considerably.

## DATA PRESENTATION

The results of the 1994 UTEM survey are presented on 12 data sections (Appendix IV) and one compilation map, Plate G1.

Legends for the UTEM data sections are also attached (Appendix II).

In order to reduce the field data, the theoretical primary field of the loop must be computed at each station. The normalization of the data is as follows:

a) For Channel 1:

$$\% \text{ Ch.1 anomaly} = (\text{Ch.1} - \text{PC}) \times 100 / \text{PT}$$

Where:

PC is the calculated primary field in the direction of the component from the loop at the occupied station

Ch.1 is the observed amplitude of Channel 1

PT is the calculated total field

b) For remaining channels (n = 2 to 9)

$$\% \text{ Ch.n anomaly} = (\text{Ch.n} - \text{Ch.1}) \times 100 / \text{Ni}$$

where:

Ch.n is the observed amplitude of Channel n (2 to 9)

N is Ch1 for Ch1 normalized

N is PT for primary field normalized

I is the data station for continuous normalized (each reading normalized by different primary field)

I is the station below the arrow on the data sections for point normalized (each reading normalized by the same primary field)

Subtracting channel 1 (Ch.1) from the remaining channels eliminates the topographic errors from all the data except channel 1.

If there is a response in channel 1 from a conductor then this value must be added to do a proper conductivity determination from the decay curves. Therefore channel 1 should not be subtracted indiscriminately.

The data from each line is plotted on at least 2 separate sections consisting of a continuous normalized section and a point normalized section. Additional point normalized data sections were produced where more than one conductor is present on the same line. Point normalization data is the absolute secondary field at a "gain setting" related to the normalization point. The data is usually point normalized over the central part of the crossover anomaly to aid in interpretation.

## DISCUSSION

The compilation of the UTEM data is shown on the UTEM compilation map Plate 1. The survey indicated a good conductive package of rocks which are likely graphitic argillites or bedded sulphides striking across the survey grid from the southern end at line 0 to the northern end at line 100N. The conductive zone is approximately 200m wide and is continuous, except for the breaks near line 500N and 600N, along the length of the survey grid. Because of the strong late time (channel 1) response due to this extensive conductive package it is difficult to locate any zones of higher conductivity although the conductivity does not appear to be homogeneous along the complete strike length.

On the southern part of the survey area from line 0 to 400N, the conductive zone appears to be very conductive on both the western and eastern edge with possibly a somewhat resistive zone(s) in the central part. The conductive zone likely consists of a number of interbedded conductive and non-conductive layers. Both the western and eastern edges of the conductive zone are very distinct in this area.

In the central part of the survey grid between lines 500N and 600N the conductivity appears to be weak on the western edge and very strong on the eastern edge of the conductive zone. The conductive zone is narrower in this region.

The extension of the conductive zone north of line 600N is approximately the same width as the southern part. The conductivity on this part of the zone appears to be concentrated on the western edge of the zone.

Current channeling in all of these conductive zones make it very difficult to do any quantitative interpretation. The contacts of these zones appear to be very near surface (25m or less) therefore can likely be located with trenching or shallow drilling.

There are a number of very weak anomalies on the remainder of the grid. These are located mainly in the north western part of the survey grid and appear to be related to contact zones. There is also likely a conductive unit located under the loops.

The remaining interesting feature shown on the compilation map is the narrow high resistivity zone located at 1450E on line 600N.

## RECOMMENDATIONS

It is recommended to closely correlate the geophysics to any geological and geochemical information to determine the possible potential of the conductive zone. If more detailed geophysics is required it is recommended a carefully chained grid on cut lines to aid in the correction the late time response. A lower base frequency should also be considered to get more information at later time and therefore possibly discriminate between the conductive lithology and strong conductors due to sulphide mineralization. A loop located from the east side could aid in the interpretation of the eastern side of the conductive zone.

The edges of the conductive zones are near surface and can likely be located by trenching or shallow drilling. The conductive zone appear to consists of a number of interbedded conductive layers which extend to depth. Therefore a deeper hole to intersect the full width of the conductive zone may be of more interest. The location of the drill hole should be influenced by the geochemical results.

## CONCLUSION

A strongly conductive zone with a width of approximately 200m strikes across the length of the survey grid. The signature of the zone varies somewhat along strike with the southern part of the zone being very conductive on both the eastern and western edges with possibly interbedded conductive zones, the central part being conductive on the eastern edge and the northern zone conductive on the western edge. A number of weak anomalies located in the north western part of the grid are likely contacts. A small high resistivity zone is located in the central part of the survey area.

All of the conductive units are near surface and can likely be investigated by trenching or shallow drilling. The data should be closely correlated to the local geology and geochemical results to determine the best location to test this conductive zone by drilling or trenching.

Syd Visser, P. Geo

Geophysicist  
SJ Geophysics Ltd.

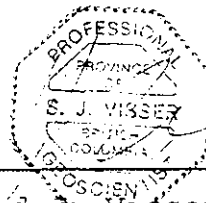


## APPENDIX I

### STATEMENT OF QUALIFICATIONS

I, Syd J. Visser, of 11762 - 94th Avenue, Delta, British Columbia, hereby certify that,

- 1) I am a graduate from the University of British Columbia, 1981, where I obtained a B.Sc. (Hon.) Degree in Geology and Geophysics.
- 2) I am a graduate from Haileybury School of Mines, 1971.
- 3) I have been engaged in mining exploration since 1968.
- 4) I am a professional Geoscientist registered in British Columbia.



Syd J. Visser, B.Sc., P. Geo  
Geophysicist

## APPENDIX II

### Legend

| UTEM SYSTEM MEAN DELAY TIME |                  |        |
|-----------------------------|------------------|--------|
| Channel Number              | Delay Time(msec) | Symbol |
| 1                           | 12.8             |        |
| 2                           | 6.4              | \      |
| 3                           | 3.2              | /      |
| 4                           | 1.6              | □      |
| 5                           | 0.8              | ∩      |
| 6                           | 0.4              | △      |
| 7                           | 0.2              | ∇      |
| 8                           | 0.1              | ×      |
| 9                           | 0.05             | △      |
| 10                          | 0.025            | ◇      |

Base Frequency = 31 Hz

**APPENDIX III**

**A time domain EM system measuring  
the step response of the ground**



## A time-domain EM system measuring the step response of the ground

G. F. West\*, J. C. Macnae\*†, and Y. Lamontagne‡

### ABSTRACT

A wide-band time-domain EM system, known as UTEM, which uses a large fixed transmitter and a moving receiver has been developed and used extensively in a variety of geologic environments. The essential characteristics that distinguish it from other systems are that its system function closely approximates a step-function response measurement and that it can measure both electric and magnetic fields. Measurement of step rather than impulse response simplifies interpretation of data amplitudes, and improves the detection of good conductors in the presence of poorer ones. Measurement of electric fields provides information about lateral conductivity contrasts somewhat similar to that obtained by the gradient array resistivity method.

### INTRODUCTION

This article describes the design of the UTEM system and its development at the Geophysics Laboratory of the University of Toronto by Y. Lamontagne and G. F. West from 1971 to 1979. UTEM is a wideband, time-domain, ground EM system with a step-function system response. It was designed to try to achieve the sensitivity and interpretability necessary to handle problems of deep exploration, conductive environments, and a variety of terrain conditions, in an economically viable manner. As with most EM systems, effective exploration for massive sulfide ores was the principal objective. The method was conceived in 1971, and the first UTEM I instrument was operational in 1972. It was an analog electronic system, and was used in a number of surveys which have been described by Lamontagne (1975). An improved UTEM II which incorporated a digital recording system was then designed and constructed at the University of Toronto with financial aid from a consortium of mining companies. It was first used in 1976. To fall 1980, about 1000 line-km had been surveyed with the system from 144 loops in 35 areas. UTEM III, which is a microprocessor-controlled system with expanded capabilities, is now produced commercially by Lamontagne Geophysics Ltd. Some of the field results obtained using the UTEM II system have been described in Lamontagne et al. (1977, 1980), Macnae (1977, 1980, 1981), Lodha (1977), and Podolsky and Slankis (1979). Data from all

three UTEM systems are identical insofar as geophysical characteristics are concerned. The differences affect only data noise levels and operational convenience. Some of the noise rejection features of UTEM III are discussed by Macnae et al. (1984).

### THE UTEM SYSTEM

#### Design philosophy

UTEM uses a large, fixed, horizontal transmitter loop as its source. The field of the loop is mapped in the quasi-static zone with the receiver system; the vertical component of the magnetic field is always measured, and in some circumstances the horizontal magnetic and electric field components may be measured as well (Figure 1). The size of the transmitter loop depends on the prospecting problem; loops may range from about 2 km  $\times$  1 km in resistive terrain to 300 m  $\times$  300 m in a conductive area. Lines are typically surveyed to a distance of 1.5 to 2 times the loop dimensions.

The large loop transmitter-field mapping receiver configuration was chosen in order to give the system the deepest possible exploration for orebody sized conductors, without sacrificing the ability to resolve shallower structures (depth < 50 m). This dictates a very large transmitter moment, and makes an extended source desirable. The virtue of an extended source is that the coupling between the source and a receiver or the source and a nearby conductive zone is not so many orders of magnitude larger than the coupling to a distant receiver or deep target as is the case with a confined source.

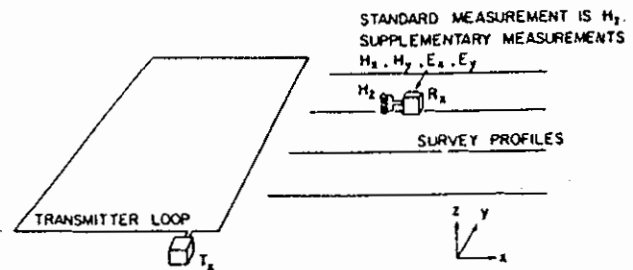


FIG. 1. Schematic layout of a UTEM survey.

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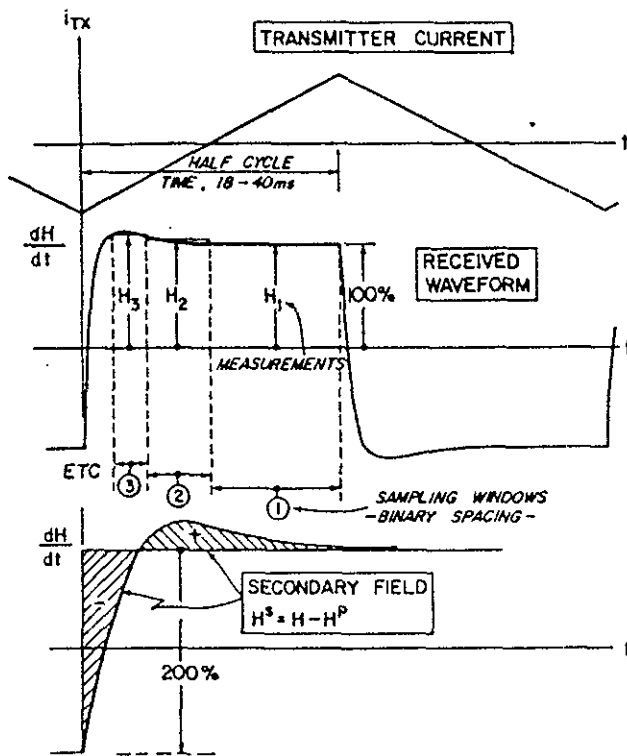


FIG. 2. Transmitted and received UTEM waveforms. Note that the measurement channels are numbered from the latest to the earliest. Sampling is repeated, with due regard to sign, in every half-cycle.

Given a large transmitter and a large Tx-Rx separation, it is inevitable that induction in extensive conductive overburden and in large formational conductors will contribute more to the response than with a small scale system. Also, as the separation becomes larger it becomes increasingly likely that the system will be responding to several nearby conductors at once. However, a fixed transmitter-moving receiver system offers a basis for separating the signal contributions from the various conductors and resolving the geometry of deep-seated conductors. At any time instant, the magnetic field of the current system induced in the ground is a potential field (within the quasi-static zone), and if it is mapped on a profile or over a surface, there is a firm theoretical basis for separating it into parts and estimating the current systems which caused it. When the transmitter and hence the eddy current system move for each observation, it is more difficult to find a theoretical basis for stripping of responses into component parts.

There are negative aspects to using a fixed transmitter method. In addition to the aforementioned enhancement of anomalies due to formational conductors, the transmitter can be positioned badly for induction in small plate-like conductors, and a large good conductor can screen a smaller, shorter time-constant conductor which lies behind it. For these reasons it may be desirable to have survey coverage from more than one transmitter location.

The UTEM II transmitter passes a low-frequency current of precise triangular waveform through the transmitter loop. The magnetic field is sensed with a coil, which responds to the time

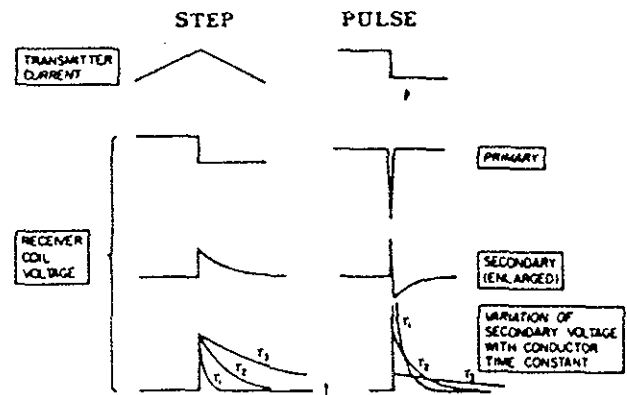


FIG. 3. Comparison of transient signals in step and pulse type systems.

derivative of the local magnetic field, so in "free space" a precise square-wave voltage would be induced in the receiver. In the presence of conductors the waveform is substantially distorted. The UTEM receiver measures this distortion by determining amplitudes at 10 delay times (actually, averages over time windows) which are spaced in a binary geometric progression between the waveform transitions. The sample scheme is shown in Figure 2. Note that the UTEM channel numbers are conventionally numbered in reverse order of time. This is because the latest time measurement often serves as a reference to which the other measurements are compared, whereas the number of earlier time measurements which can be made accurately may change if base period or instrument bandwidth is altered. The base frequency of the system is selectable, usually about 30 or 15 Hz (25 or 12.5 Hz in countries with 50 Hz power). A common practice is to set the base frequency (adjustable in 0.1 percent steps) about 0.5 Hz from a subharmonic of the power line in order that power line interference can be detected by slow beating in the data. The base frequency is usually set low enough that all ground response has nearly vanished by the end of the half-cycle. When this is the case, the UTEM system determines the step response of the ground in the time range  $25\mu\text{s}$  to 12.8 ms (30 Hz base frequency).

#### Time-domain systems

Time-domain systems have some advantage over frequency-domain systems in that simultaneous measurement is easier to achieve over the whole spectrum and, at the same time, it is possible to check the phase synchronization of the transmitter and receiver time bases. Most time-domain systems employ an on-off type of transmitter current and confine all measurements to the off period, as this automatically separates the secondary from the primary field. However, when a coil is used as a sensor, the time derivative of the signal is observed. Thus, if the transmitter loop is energized with a step current, it is the impulse response of the ground which is observed.

When prospecting for conductive mineral deposits, it is generally more desirable for interpretation purposes to observe the step response than any other time response. The reason for this lies in the characteristics of eddy current decay. For the step

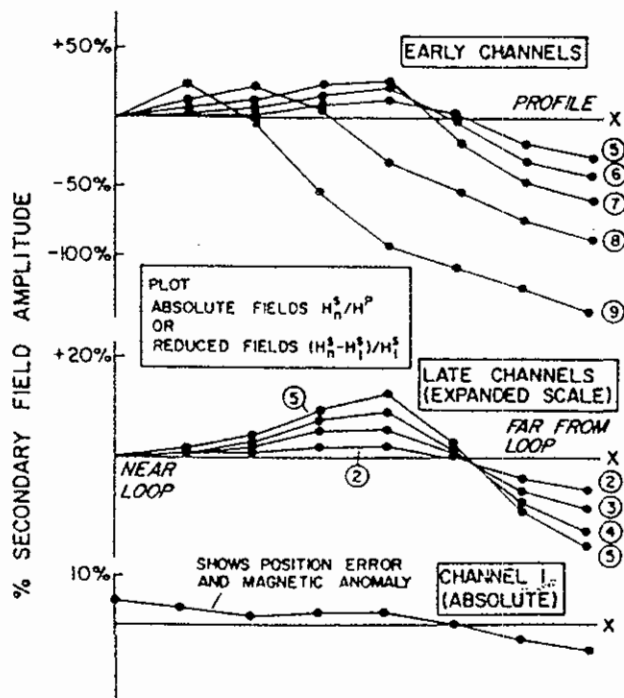


FIG. 4. Standard presentation of UTEM vertical component magnetic field data.

response, the early-time limit of response is identical to the frequency-domain inductive limit, and for a simple conductor in free space this is a function of geometry alone. For the impulse response, the early time limit is scaled from the step response limit by the inverse of the transient decay time constant (Figure 3). Thus, the decay rate must first be determined in order to interpret amplitude information in terms of geometry. This may present little difficulty in simple cases, but when complex or overlapping responses are observed it can be a serious problem. Also, even in the case of the step response, overburden anomalies which generally are of short time constant have early time amplitudes which are very much larger than the anomalies of target conductors with long time constant. Any further amplification caused by measuring the impulse rather than step response is clearly undesirable.

Although a system with a step response is usually desirable for interpretation purposes, the UTEM system is only one implementation of such a system. In fact a system using a magnetometer receiver with a square-wave transmitter instead of an induction coil (referred to as MSW system in the following sections) would have an identical system response. The foregoing rationale of the interpretational advantages of step response does not consider the other important factors which enter the design of actual systems such as signal-to-noise (S/N) efficiency and transmitter-sensor design constraints which in fact guide the choice of the actual transmitter waveform and sensor used. This is a complex topic discussed by Lamontagne et al. (1980). For example, the UTEM III system actually uses a modified triangular transmitter waveform and deconvolution in the receiver to improve its S/N performance but has a system response identical to the UTEM I and UTEM II systems (Macnae et al., 1984), i.e., a square-wave response. Thus the UTEM I/II systems, the conceptual MSW system, and the

UTEM III system all make identical measurements although they excite the ground differently. To avoid any confusion, discussions in this paper of actual induced current waveforms in the ground will be limited to the UTEM system with a purely triangular waveform and to the MSW system.

The sampling scheme of Figure 2 was chosen so that virtually all measuring time is utilized and time scaling of the measurements is permitted. In the frequency domain, inductive responses may be characterized by dimensionless parameters of the form

$$\theta_f = \sigma \mu \omega L^2,$$

which demonstrates that scale changes of conductivity, frequency or (length)<sup>2</sup> are equivalent to one another. The analogous parameter for the time domain is

$$\theta_t = \sigma \mu L^2 / t.$$

In interpreting frequency-domain data, it is common to compare observed frequency response data with dimensionless model response data. This is convenient because it avoids the necessity of rescaling the model data for all frequencies and physical scale lengths that might be encountered in the field cases. The same sort of scaling is possible with time-domain data, but only if the system function of the apparatus is a pure discontinuity response. If this is not the case, for instance when the apparatus has a characteristic ramp shut-off time, model response curves cannot be rescaled in time to match field data as this would imply rescaling the shut-off time to a value different from that used by the apparatus.

To ensure that time scaling can readily be applied to data that have been sampled and averaged over a time window, it is also necessary that the window widths be proportional to time after the discontinuity. UTEM has such sampling. It should be noted that time scaling may only be applied to UTEM anomalous responses which are short enough so as to have vanished in the interval between the two successive transitions of the step which form the square wave.

#### Data presentation

Because the field intensity falls off rapidly with increasing distance from the transmitter loop, it is often desirable to normalize the secondary field observations in some manner. One suitable normalizing factor is the primary vertical magnetic field signal ( $H_1^p$ ). If the positions of the transmitter loop and the receiver are known reasonably accurately, a calculated value of  $H_1^p$  may be employed. If the ground response vanishes by late time, the channel 1 measurement is a direct measure of  $H_1^p$ . Normal survey data plotting practice encompasses both procedures.

Figure 4 is an example of a standard plot of UTEM secondary vertical magnetic field data ( $H_1^s$ ). Channel 1 is plotted as secondary field ( $\text{Ch } 1 - H_1^s / H_1^p$ ) (where  $H_1^p$  is the calculated primary field) and all other channels are normalized to Ch 1 [(Ch  $n$  - Ch 1) / Ch 1] to correct for any position error in calculation of  $H_1^p$  and also to remove the effect of induced magnetic anomalies (for further details see Lamontagne, 1975). The late channels on the example plot show a crossover type of anomaly, indicative of a concentration of (changing) induced current, as will be discussed. The amplitude variation with channel number indicates that these induced currents are decaying with

time. A small component of response appears to have persisted to Ch 1 and, for quantitative analysis, it should be remembered that the data reduction process will have caused subtraction of this amount from profiles of Ch 2-Chn. On the early-time channels, the migration of crossover location from one channel to another indicates that the secondary current flow at these times is not fixed in geometry, a characteristic which is indicative of an extensive conductor (here extensive overburden) rather than a localized conductor such as that responsible for the late time crossovers.

Since at any delay time, the secondary field is a potential field, interpretation of geometrically fixed current systems is best performed using absolute secondary fields normalized by the primary field intensity at a single point rather than continuously along the profile. Although only one case presented in this paper has this absolute or "point normalization," recent routine field practice is to point normalize all survey profiles exhibiting discrete anomalies, in order to simplify interpretation.

Horizontal magnetic field measurements may be made by

reorienting the receiver coil. Normalization is done using the vertical primary magnetic field (calculated or vertical Ch 1 measurement). Unfortunately, horizontal field measurements frequently suffer a somewhat higher noise level than vertical fields, due to the predominantly horizontal orientation of sferic interference.

The electric field waveform is, like the voltage from the coil sensor, a square wave if the ground is very resistive. It is distorted in much the same way as the coil signal when the ground is conductive. Electric field observations are usually plotted as  $E_t/E_t^p$ —the observed channel voltage between the electrodes divided by the maximum expected late time voltage between electrodes at the observation point in any horizontal direction, i.e.,  $E_t^p = (E_x^2 + E_y^2)^{1/2}$ . "Expected" here refers to the electric field produced by a loop on a laterally uniform, resistive half-space. This normalization facilitates intercomparison of x and y component data. The geologic noise level in electric field data is usually high, so plotting on expanded scales is rarely justified. All channel data are usually plotted on the same axes, as shown in Figure 5.

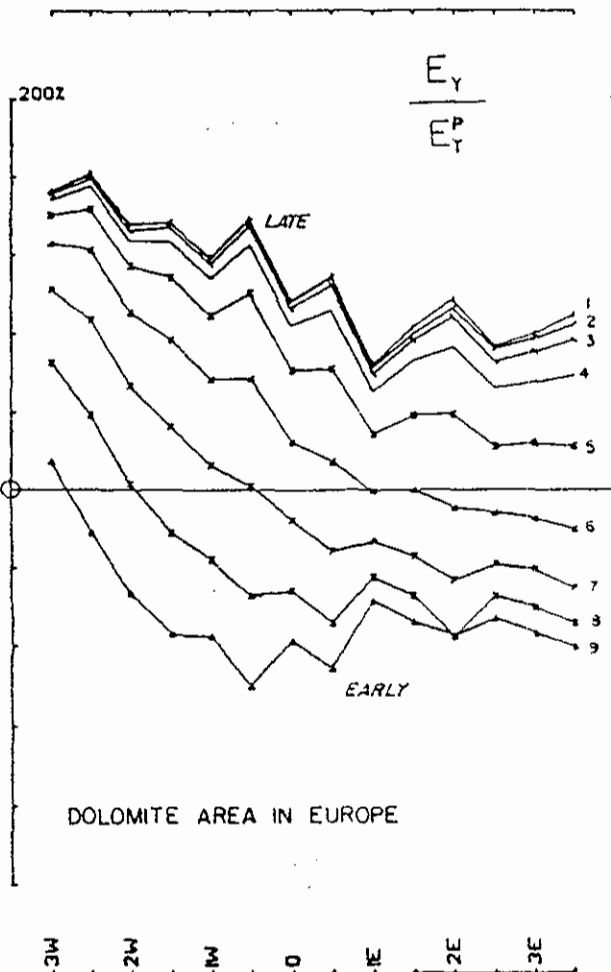


FIG. 5. Standard presentation of electric field data. The observed component is normalized to the total primary electric field of the transmitter loop.

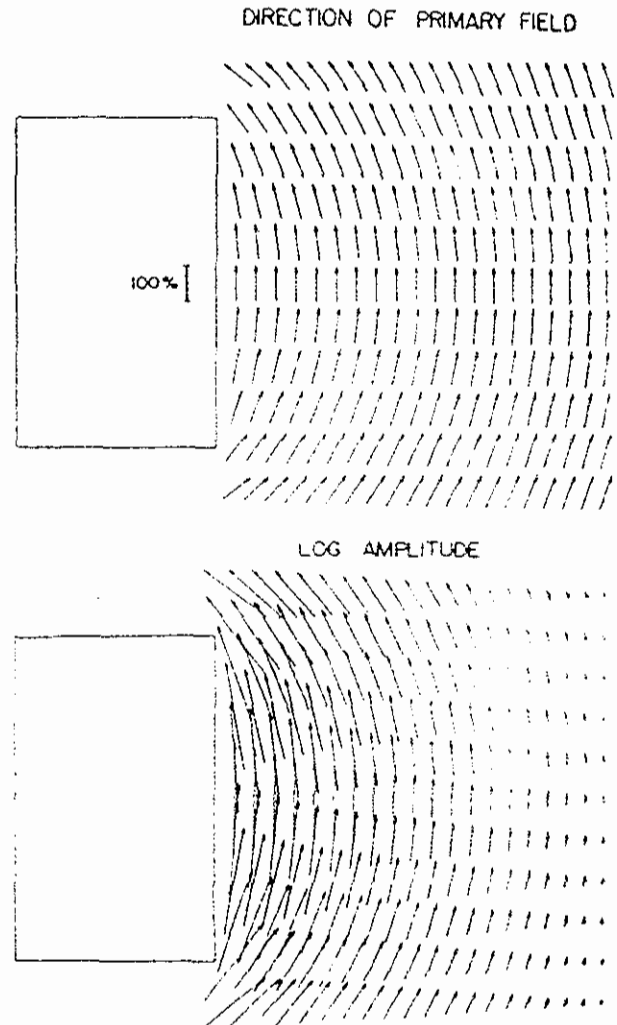


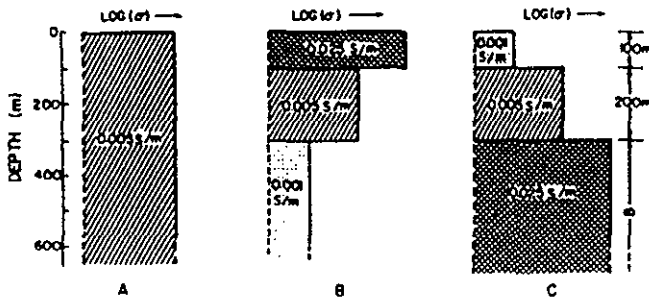
FIG. 6. Vector plots of late time electric field. (a) Direction information only. (b) Showing direction and intensity of the primary field.

The reference state for electric field data is usually described as a "laterally uniform, resistive half-space," rather than free space. By resistive is meant a case where all inductive transients have died out. The free-space electric field of a horizontal loop is horizontal, so introduction of a resistive half-space does not affect the field. However, for any other orientation of the transmitter loop or the earth-air interface, the free-space electric field will be directed across the interface and a strong distortion of the field will occur. Since the conductivity of air is virtually zero, the earth-air interface almost always has a high conductivity ratio, even if the earth is resistive in terms of induction. The charge which arises on the interface essentially doubles the vertical component of the  $E$  field in the air near the boundaries and annuls the vertical component in the ground. Thus the  $E$  field in the ground is (almost always) virtually horizontal. The nomenclature for the reference state serves to remind one that the earth-air interface has an important role in the physics of

the electric field and is always assumed to be present, but no lateral inhomogeneity or induction is permitted in the reference model.

The electric field of a heterogeneous, conductive earth does normally become constant at late time, as the EM transients vanish. At the same time, the rate of change of magnetic field becomes constant. However, the observed late-time  $E$  limit is usually found to be different from the free-space or uniform resistive half-space value, due to lateral inhomogeneity of the earth's conductivity structure. The late-time electric field around a loop greatly resembles what might be seen in a gradient resistivity survey. The field weaves about, deflected around the more resistive areas and through the more conductive ones. A vector display of the late-time  $E$  field is an interesting reflection of the relative conductivity of various parts of the ground. It is impractical to plot the unnormalized  $E$  vectors, since the true field intensity falls off rapidly with increasing distance from the loop. The lengths of the plotted vectors are therefore proportioned to the normalized field of the loop, as for profile plots. Vector plots of the free-space field of a loop are shown in Figure 6. Examples of field data are given in the following section.

Errors caused by the presence of EM noise or by poor geometrical control are discussed for the magnetic ( $H$ ) field case in Lamontagne (1975). For the electric ( $E$ ) case, details of the measurement and sources of error are discussed in appendix G of Macnae (1981). As in the dc resistivity method, topographic features can seriously distort local electric fields, and local conductivity contrasts such as overburden patches and minor lithological changes can have quite large effects on the amplitude of measured  $E$  fields.



INTERPRETATION

We shall describe briefly the responses from a number of simple geologic models and how these can be identified and interpreted.

Layered earth responses

The problem of EM induction in a layered earth is very well treated in the literature, particularly for frequency-domain systems (e.g., Wait, 1962). Time-domain cases have also been studied for some specific problems, for example the infinite thin sheet was solved by Maxwell (1891) and the half-space response is discussed by Nabighian (1979). A general, layered earth solution for UTEM geometry and waveforms was given in Lamontagne (1975). Figure 7 shows three examples of computed responses for different layer conductivities. Figure 8 shows three examples of a thin layer at different depths. There are several common characteristics of layered earth responses. The shapes of the anomalous profiles are generally similar, becoming broader at later times. The migration of crossovers with time, with positive lobes toward the loop and negative lobes away from the loop, seems to indicate that the induced current system is migrating away from the loop. This is the type of behavior described by Nabighian (1979) as an expanding smoke ring.

If the UTEM system employed a magnetometer as receiver and a square current waveform in the transmitter, the smoke ring analogy would be exact, as the crossovers would indicate

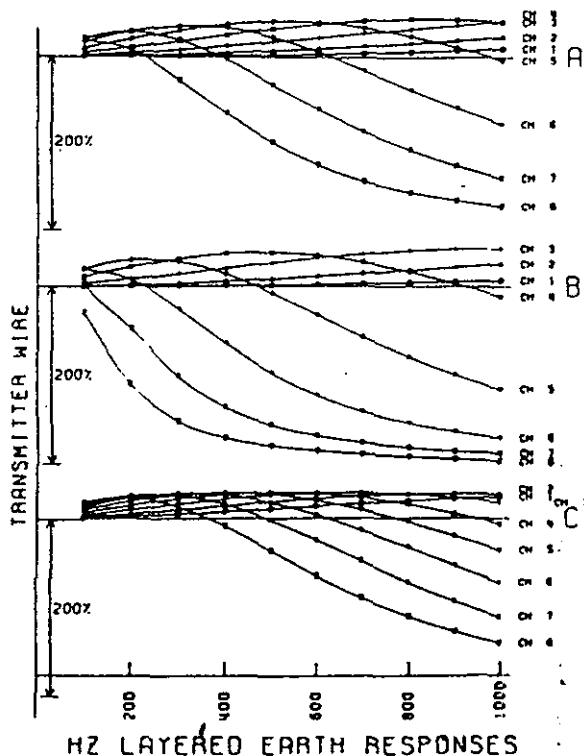


FIG. 7. UTEM layered earth response.



the position of the main current concentrations. However, the UTEM receiver is a coil which is sensitive only to  $dH/dt$ , and thus to the rate of change of induced and transmitter loop current. Thus the moving pattern of crossovers is actually indicating outward migration of changes in the induced current pattern. Toward the end of each half-cycle, the induced current system at any point in the survey area tends to a constant value, as indicated by the electric field measurements, but this steady current is invisible to the coil receiver.

When interpreting UTEM magnetic field data, it can often be simpler to think of the data in terms of the magnetometer receiver, square-wave transmitter current (MSW) analogy. Because the analogy is *exact* for a linear process like EM induction, there is no approximation in using it. It is very convenient to think of the field measurements of secondary signal at any delay time as describing the Biot-Savart magnetic field of a changing and decaying (analogous) induced current system. However, when electric field data are being analyzed and compared with magnetic field ( $dH/dt$ ) data, it is necessary to revert to the true picture of the induced currents (or take a time derivative of the  $E$  data) to maintain a consistent relationship. UTEM magnetic field data are usually symbolized as  $H_{st}^p$  (alphabetic subscript = component direction, superscript =  $p$  primary,  $s$  secondary,  $T$  total, numeric subscript = channel number) to accord with the magnetometer analogy; and in most discussions of simple induction, it is the time history of the analogous induced current which is described.

An important feature of layered earth  $H_z^p$  data is the early-time limit of continuously normalized  $H_{zi}^p/H_z^p$  data. If the ground is sufficiently conductive near the surface, the early-time secondary field data at points remote from the transmitter loop will approach  $-200$  percent; i.e., one finds that the voltage in the receiver coil has had insufficient time to change from the steady value attained at the end of the previous half-cycle (Figure 2). This situation may be pictured in the magnetometer-square wave current analogy as an induced current system forming near the surface of the ground under the transmitter loop such as prevents the total (analogous) magnetic field from entering into the ground anywhere except very close to the transmitter wire. The  $-200$  percent anomaly thus represents response at the inductive limit.

#### Finite thin plate in free space

A convenient modeling method for this finite plate conductors in free space is the integral equation solution of Annan (1974). Annan computed the best set of polynomial eigenpotentials of order 4, and used these to represent the induced current flow in the plate as a sum of 15 "eigencurrents." The solution for the eigencurrents themselves is quite complicated, but needs only to be done once for a plate of given width to length ratio. After that, any induced current system can be described in terms of 15 coefficients in the eigenpotential summation. The secondary field at a receiver can then be simply computed in terms of these induced eigencurrents. One great advantage of Annan's method is that each eigencurrent has a frequency or time-domain response identical to a simple loop circuit. Thus the solution for a broad frequency range or many time windows is very easy to calculate. Routines for simple, interactive application of Annan's algorithms to a number of EM systems have been programmed by Dyck (Dyck et al., 1980).

Examples of type curves generated with Annan's solution may be found in Lodha (1977) and Lamontagne et al. (1980). Figure 9 shows the results of a set of computed UTEM type curves for the geometry shown in Figure 10. Also shown in Figure 10 is the geometry of the primary magnetic field, which controls the nature of induction in the plate. For the zero dip case, the primary field is mostly perpendicular to the plate. The induction in the plate tends to cancel this field at early times, leading to a negative  $H_z$  anomaly directly over the plate. Positive shoulders on each side show the secondary magnetic field of the "forward (analogous) current" near the front edge of the plate nearest the loop and the "reverse current" near the rear edge. The normalization scheme used in plotting this data is to divide the total secondary field by the calculated primary field at the measuring point. It has the undesirable effect of making asymmetric a secondary anomaly that is symmetric in terms of absolute amplitude by increasing the relative amplitude away from the loop. In fact, the absolute secondary amplitude of the positive shoulder near the loop is usually larger than the one on the side away from the loop. As the dip of the plate is increased, the positive shoulder moves away, and by the time a 30-degree dip is reached the reverse crossover is off the end of the plotted line. From dips of 30 to 135 degrees, the anomaly maintains a basic shape in the form of a simple crossover. The amplitude

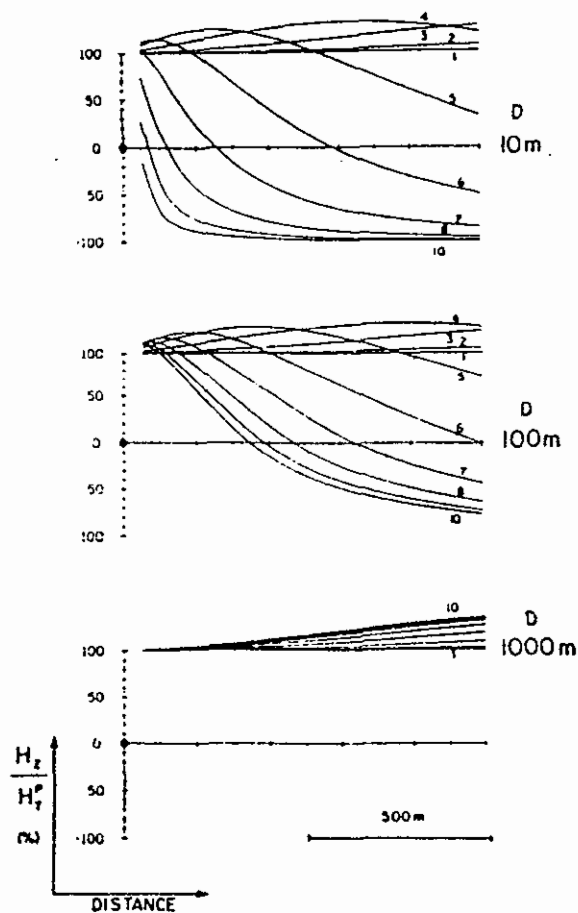


FIG. 8.  $H_z$  response of a thin horizontal sheet at various depths. The conductivity-thickness of the sheet is 2 S. The front of the transmitter loop is at the origin of coordinates.

does vary somewhat, however, being controlled by the primary field component normal to the plate which becomes a smaller and smaller fraction of the total field as the plate rotates from 30 to 150 degrees (Figure 10). The case at a dip of 150 degrees shows a very interesting behavior. The primary field can be seen to be *down* in the upper half of the plate and *up* in the lower half. The result of this is that the anomaly changes location and amplitude dramatically. For a very small plate, an anomaly could conceivably disappear completely. This phenomenon has been discussed by Bosschart (1964) for the Turam

method. For a large planar conductor, however, an anomaly is always present since a curving primary field must cut it somewhere, except in the special case when a vertical conductor is located directly under the center of a horizontal transmitting loop. The 165-degree dip case of Figure 9 shows a clear reverse crossover on the edge of the conductor far from the loop. The normal crossover is very small, due in part to the reduced induction at the near edge as shown in Figure 10, and also the large primary field used as a divisor for normalization.

The electric field anomaly generated by a plate conductor in

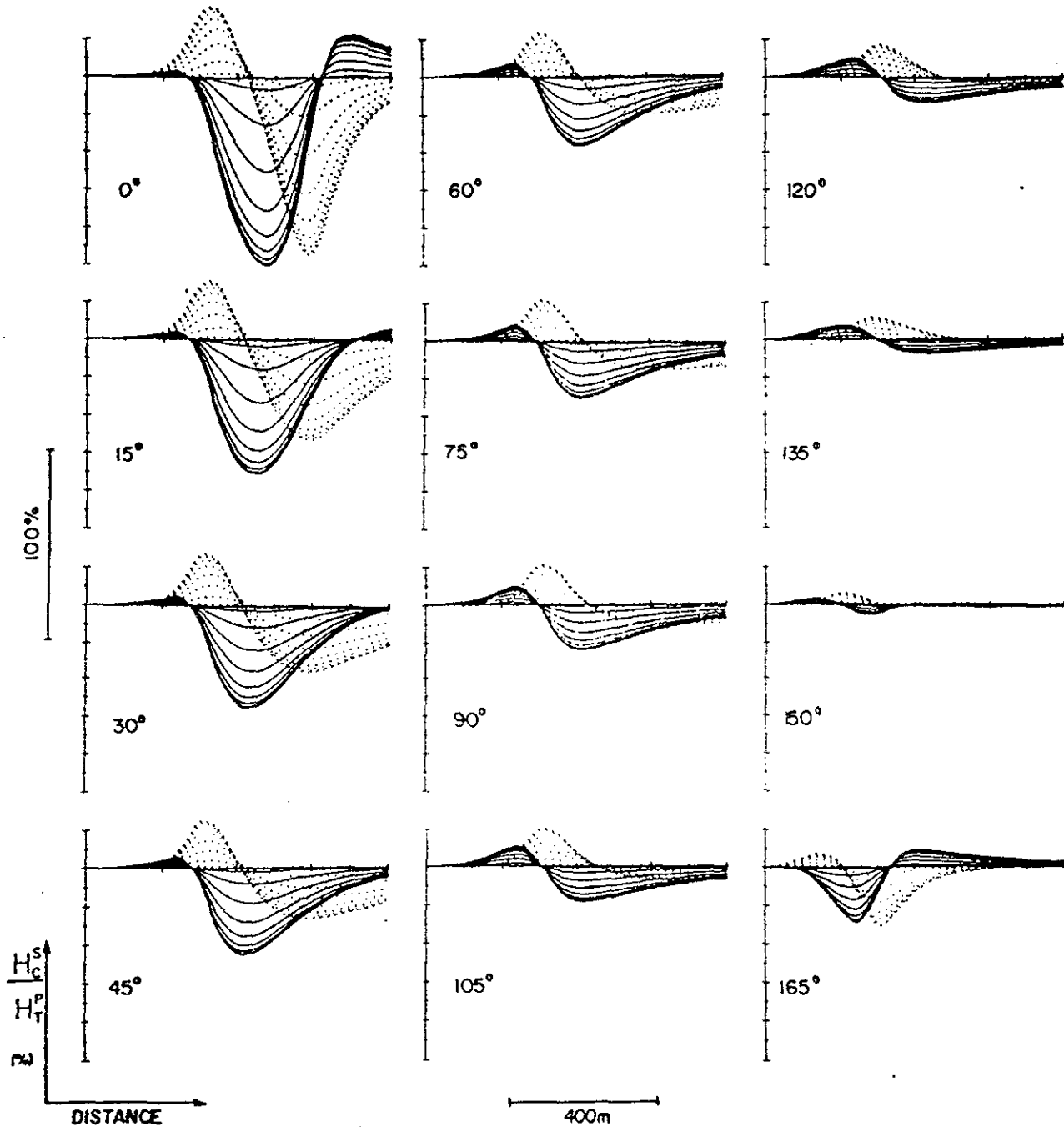
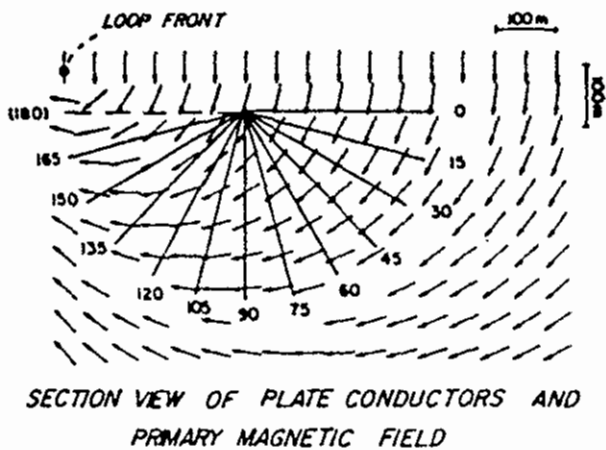


FIG. 9. UTEM  $H_x$  (solid) and  $H_x$  (dotted) profiles over a dipping plate (continuous normalization). (Geometry shown in Figure 10.)



GEOMETRY FOR 90° CASE

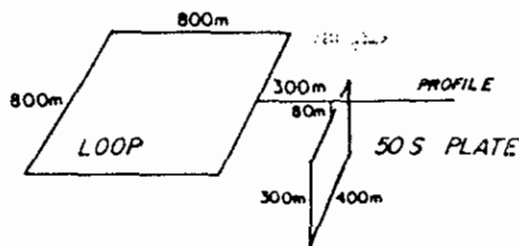


FIG. 10. Geometry and dimensions of the models shown in Figure 9. Also shown is the configuration of the primary field in the vicinity of the target conductor.

a resistive half-space is caused by charge on the plate as well as eddy currents flowing in it, and is affected by the earth-air interface. Annan's algorithm does not determine the charge distribution, so analog scale modeling methods were employed to produce type profiles. Figure 11 shows an example for a vertical plate. The longitudinal electric field is greatly reduced over the body at all times (i.e., there is a strong reduction in the late time limit). The dynamic (time-varying) part of the anomaly has the same time variation as the magnetic field but has a different geometrical pattern. The electric field is highly vulnerable to distortion by any conductivity contrast and the intensity of the static, late-limit anomaly over a conductor may therefore be reduced by any stratification between the conductor and the surface.

Other simple anomaly shapes

A set of simple schematic models is shown in Figure 12, for each of which the main features of the vertical magnetic field are sketched. The set of sketches was derived from quantitative scale model experiments by Lamontagne (1975). For the simple models illustrated where the host rock is completely non-conducting, the general anomaly shape for one body remains quite constant for the whole time range. The changes in anomaly from one channel to another are mostly in the amplitude and smoothness of the anomalies.

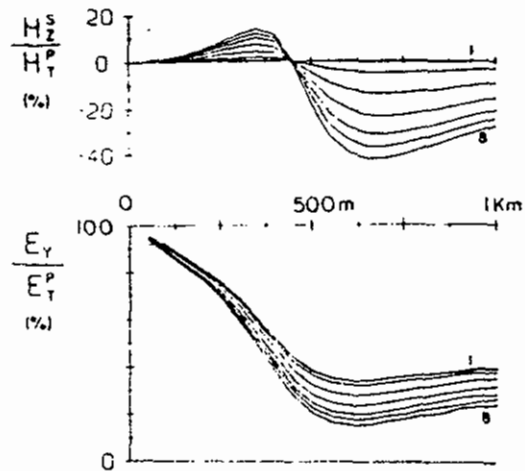


FIG. 11. Scale model UTEM secondary magnetic  $H_z^s$  and total electric  $E_y$  data over a vertical plate conductor.

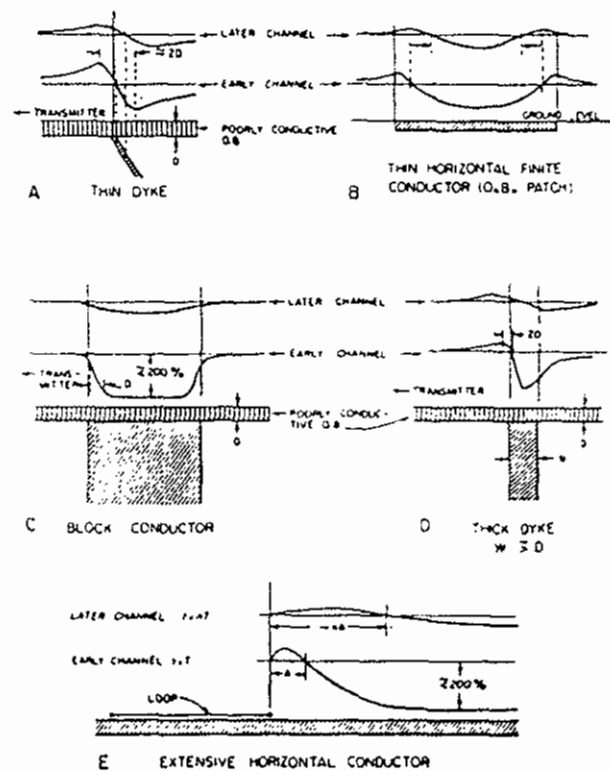
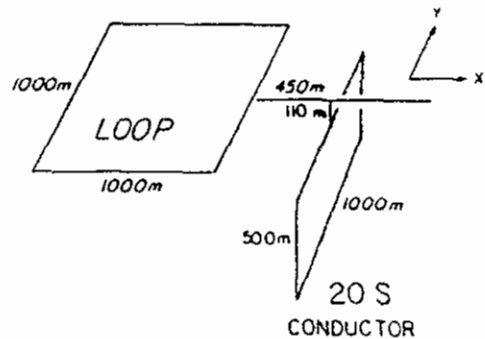


FIG. 12. The form of continuously normalized UTEM  $H_z^s$  anomalies over some simple shapes. All conductors are in free space.

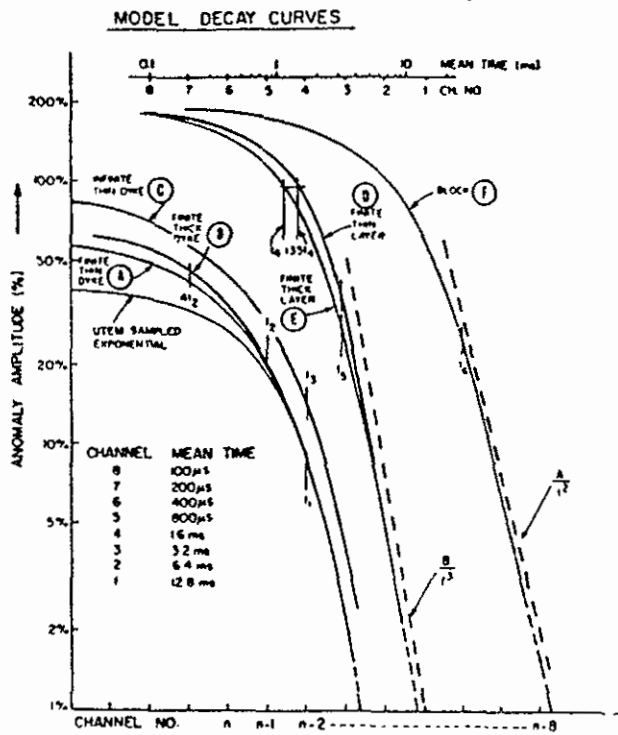


FIG. 13. The amplitude decay curves for the simple models of Figure 12. Mean sampling times are given for a base frequency of 30 Hz. The curve UTEM sampled exponential is a calculated function included for comparison. Lamontagne (1975) gives simple approximation formulas for interpreting target conductance from reference times  $t_1, \dots, t_6$  determined by translational curve matching.

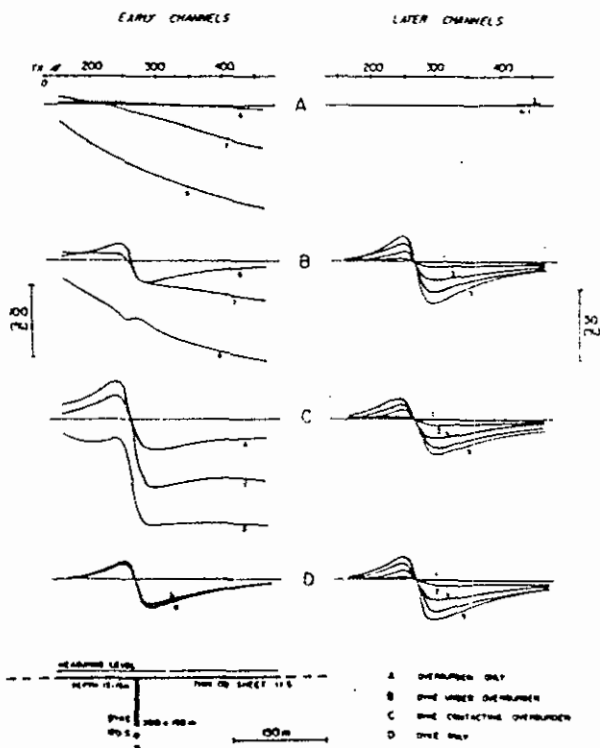


FIG. 14. Scale model UTEM  $H_z$  profiles over a conductive thin dike with overburden present.

**Thin dike.**—A conductive, steeply dipping body gives an  $H_z$  crossover shape similar to the plate model just discussed. The point where the anomaly changes sign indicates approximately the top edge of the conductor. The anomalies at later times tend to be broader and shifted slightly downdip from those at early times. The inductive decay rate of the anomalies will be discussed in a following section.

**Surface horizontal finite conductor.**—A thin horizontal conductor of limited dimensions (not extending under the loop) produces an anomaly consisting of a low over its central area, with large positive shoulders near its edge. The shoulders become rounded at later times and migrate towards the center of the conductor. Note that the thin horizontal plate shown in Figure 9 has a fairly deep location and thus the inward migration of the crossover points is less evident, although present.

**Shallow block conductor.**—This type of conductor produces a negative anomaly over its top having an amplitude of close to 200 percent at early times. An important characteristic of a block-like conductor is the absence of large positive flanking anomalies. The amplitude of the positive shoulders is less than 1/10 of the central negative, in contrast to the thin horizontal layer where the shoulders have amplitudes of order half the central negative. The sharpness of the crossovers at early time can be used as an indication of depth of burial. This type of anomaly is called a top anomaly and is due to a horizontal current pattern flowing around the top of the block.

**Thick dike.**—As might be expected, this is an intermediate case between a block and a thin dike where the width of a tabular body is of the same order as its depth of burial. In such cases the response is a combination of crossover and top anomaly due to vertical and horizontal current patterns, the top anomaly being more evident on the early-time channels and the crossover anomaly on later-time channels. The difference in decay rates results from the different scales of induced current flows, the top anomaly being controlled by the width of the dike, and the crossover by the depth extent.

**Extensive horizontal conductors.**—All the models with restricted lateral extent give rise to localized anomalies which simply change amplitude with time (approximately). The response of a very large conductor such as that shown in Figure 12e is included for comparison. In this case, the induced currents are not confined and they migrate horizontally with time.

**Time response of simple free-space models.**—Figure 13 shows example decay plots of log anomaly amplitude versus log time (channel number). The responses shown in Figure 13 are the UTEM sampled step responses that are only strictly valid for interpretation of actual field data when the observed anomalous response has effectively vanished at late times. Time scaling by lateral translation of the graphs is permitted for these cases, as previously discussed. The applicability of these time decays to interpretation is discussed by Lamontagne (1975), including the use of characteristic parameters to estimate conductance. A significant point to note is that simple induction in finite bodies eventually exhibits exponential decay at late time, whereas induction in infinite features takes the form of an inverse power law (Kaufman, 1978). Therefore, for models D, E, and F, the very late portion of the decay should ultimately show an exponential behavior if measured with sufficient sensitivity.

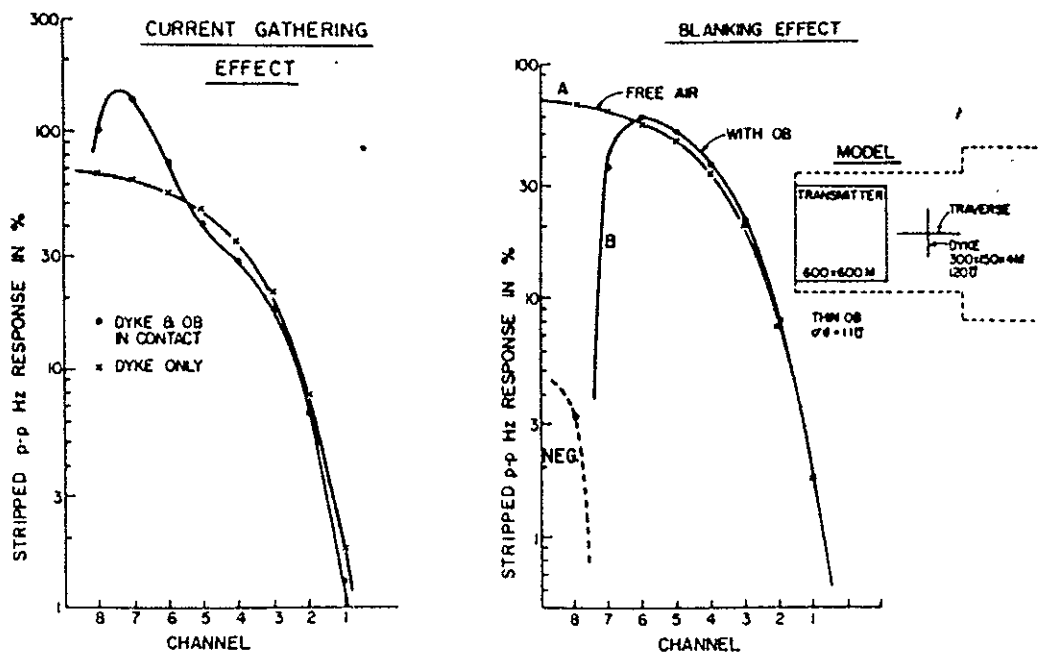


FIG. 15. Decay plots for the  $H_z^2$  anomalies of Figure 14.

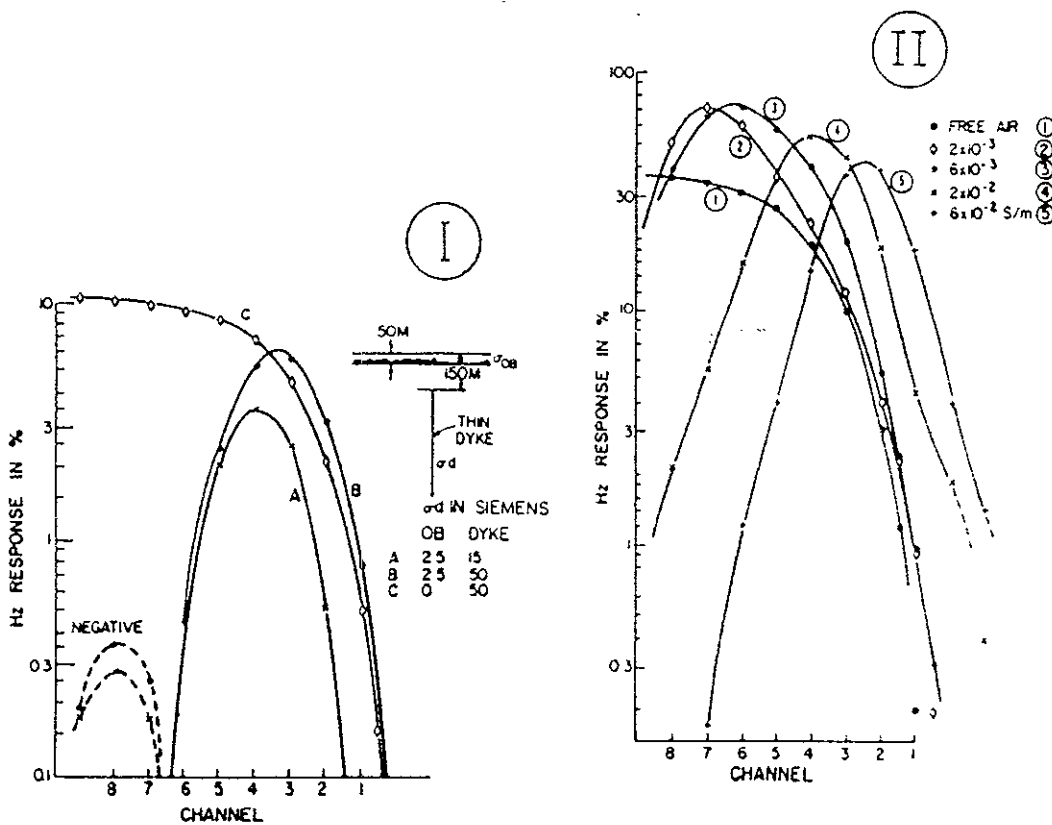


FIG. 16. Decay plots of  $H_z^2$  anomalies over a thin dike (I) under a conductive overburden and (II) in a conductive half-space.



Host rock effects

Figure 16 II shows the time variation in response of a 60 S vertical plate located in a half-space. The results were calculated by Lamontagne (1975) by Fourier transformation of the frequency-domain numerical modeling of Lajoie and West (1976). At early times the response is reduced from the free-air response: this corresponds to blanking by the conductive region above the target. At later times the response is enhanced indicating that the regional (analogous) current in the host rock is being gathered into the plate at these times. For poorly conducting host rock, the response at late times is close enough to the free-space response that simple interpretation of the target using a plate in free-space model is valid. For the higher host conductivities (case 4, 5) this is no longer the case.

FIELD RESULTS

Milton, Ontario

This area was surveyed to demonstrate what data from a conductive, well-stratified earth looks like. The area is one where 650 m of flat-lying Paleozoic sediments overlie the Precambrian basement. The predominant member of the stratigraphy is a uniform and thick sequence of shale. Other beds are mostly resistive calcareous and sandstone formations. The survey area is covered by a mixed forest and marshy streams, with occasional outcrops. The top of the bedrock is a dolomite formation which is everywhere more than 20 m thick. Topographic relief is minor (< 10 m), with occasional rough spots near outcrop. Overburden is probably less than 10 m every-

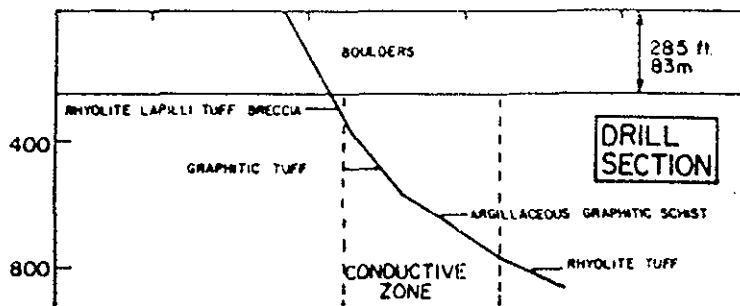
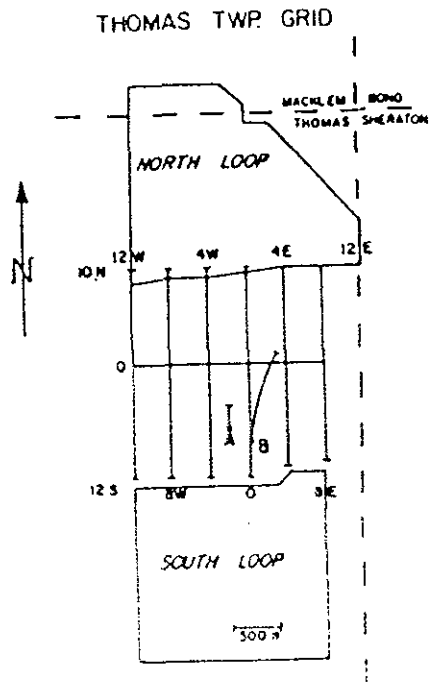
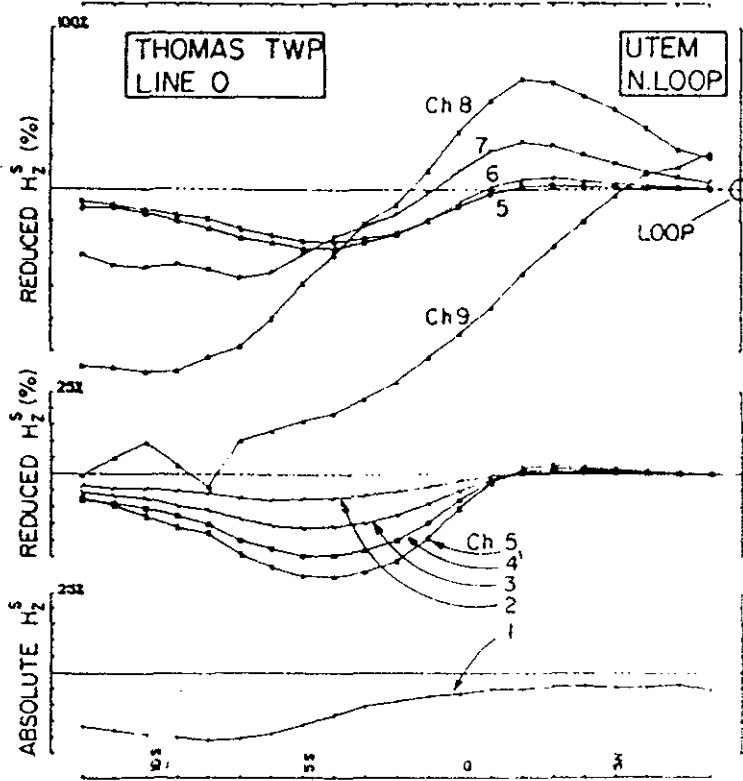


FIG. 18. A profile of  $H_z^s$  data from the north transmitter loop across the Thomas Twp test site. A map of the survey is included (different scale).

where and much less on average. It is mostly humus or thin glacial soil. Surface water is fresh, and likely quite resistive ( $> 100 \Omega\text{m}$ ). Figure 17 shows some of the data with a layer and half-space model fitted to it by iterative minimization of squared error. Also shown is a stratigraphic section from a well a few kilometers distant. The dolomite layer is too resistive for its conductivity to be determined by data whose earliest time sample is at  $100 \mu\text{s}$ . (The survey was done with UTEM I.) At first glance, the data look just like that for any conductive earth, as the early-time data at the end of profiles have the usual strong negative anomaly, and there is a regular outward progression of crossovers as time progresses (decreasing channel number). However, the resistive surface layer does reveal itself in the limited approach of the early time curves to  $-200$  percent anomaly. The convergence of  $E_z$  at late time to 100 percent of the primary field confirms the excellent lateral homogeneity of the site.

#### Thomas Township, Northern Ontario

This site has become an interesting test range for electrical methods, and a new grid has been cut and named the Night-hawk Lake geophysical test range. It is a graphitic zone that has many of the geometrical and electrical characteristics of a massive sulfide body. It is covered by 83 m of only moderately conductive overburden. It was found originally by airborne EM and has been intersected by two boreholes.

A UTEM II survey with 30 Hz base frequency was carried out on 6 lines of length 2200 ft and spacing 400 ft using transmitter loops to the north and south of the grid. Figure 18 shows a profile across the middle of the conductive zone.

At  $50 \mu\text{s}$  (Ch 9), the regionally induced (analogous) current is only 500 ft from the loop. The field has not penetrated the overburden at the target site. From  $100 \mu\text{s}$  to about  $500 \mu\text{s}$  (Ch 8-6), a crossover response is observed over the target. At about

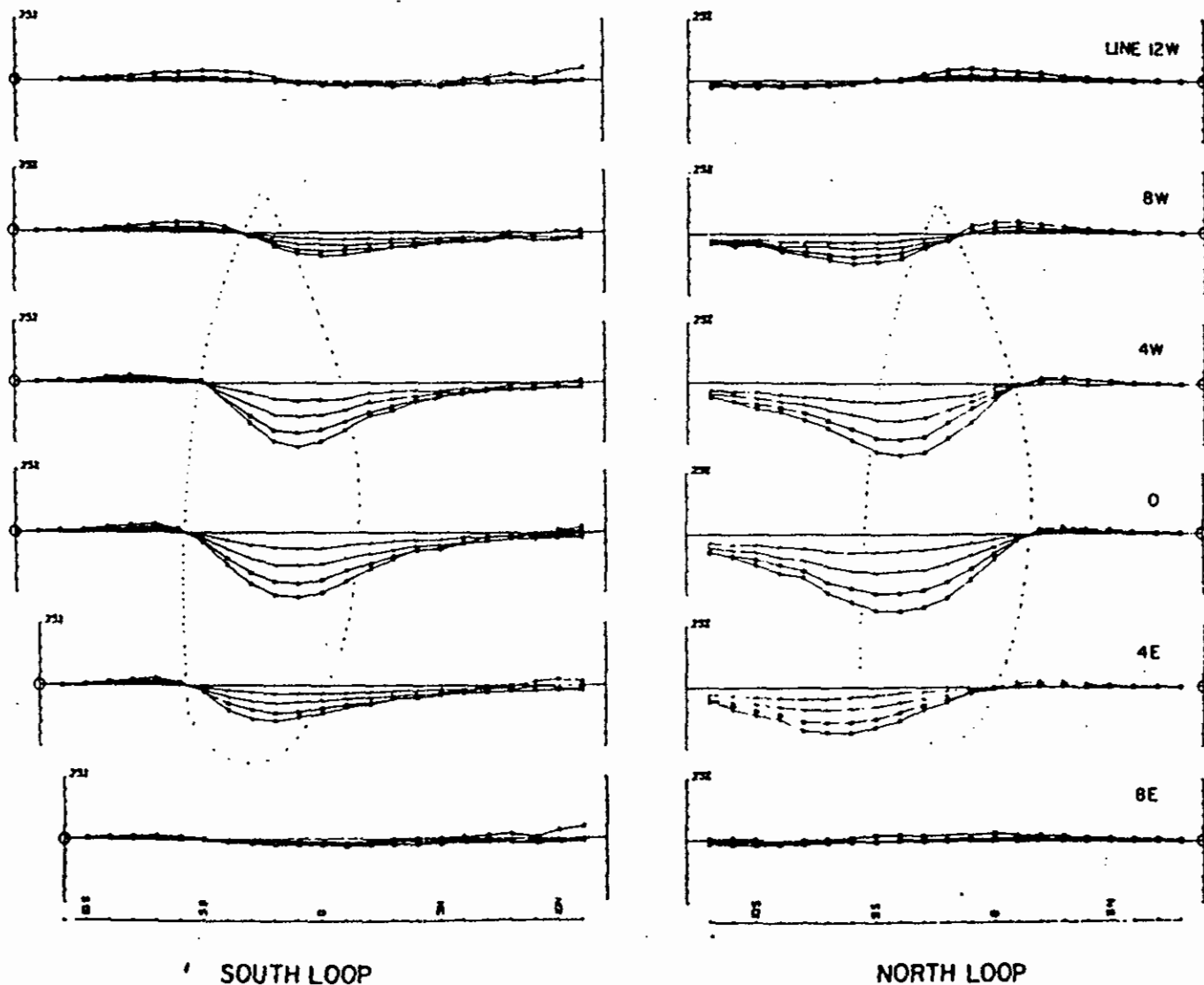


FIG. 19. Later time  $H_z$  profiles (Ch 5-2) outline the perimeter of the conductor.



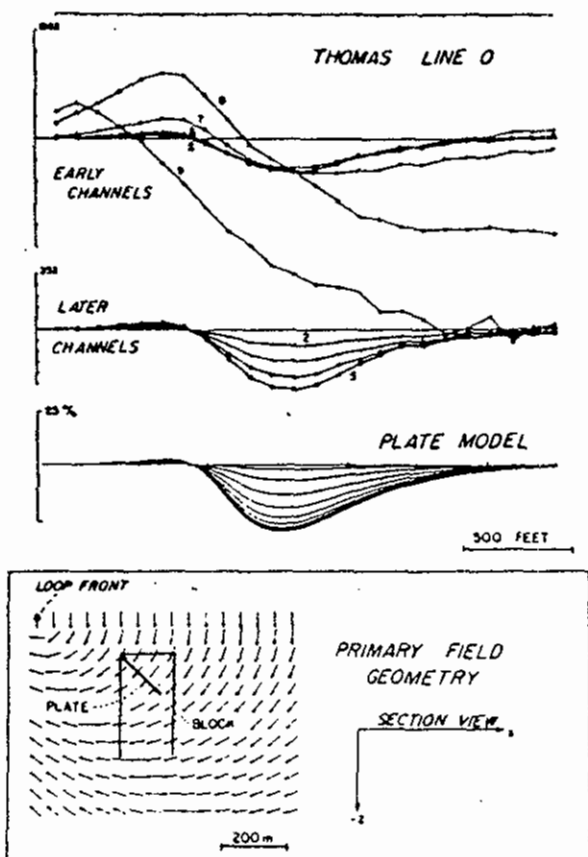


FIG. 20. Comparison of  $H_z$  data from the south transmitter loop with a free-space plate model. The configuration of the primary field is also shown.

500  $\mu$ s the response changes to an asymmetric negative anomaly which decays much more slowly than the crossover response. The early-time crossover response is a current gathering or channeling anomaly where the (analogous) anomalous current flows along the length of the zone, while the longer time constant response is a local induction anomaly, where induced currents flow in a vortex within the target conductor.

Figure 19 shows a map of all the late-time profiles. They clearly delineate the edge of the target body. Figure 20 shows how a rectangular plate model can be found which models the observed results from one transmitter loop quite accurately, but which has to be rotated in order to match the results from the other loop. The late-time induced (analogous) current system in the actual conductor appears to be a tightly defined normal current in the front upper (near-loop) edge of the conductor with a more diffuse, return current deep in the rear of the body. A survey with the transmitter loop located on the other side of the body was similarly fitted by a plate dipping away from that loop, indicating the conductor to be a thick zone in which currents can flow in a variety of directions.

Electric fields were measured at the Thomas site. The late time vector map is shown in Figure 21, along with a rough numerical model. The conductive zone shows very clearly, although its edge is ill defined. Figure 22 shows a profile of the longitudinal component of electric field over the body. The field

intensity is almost constant from channel 6 onward, and the main feature of the response is the aforementioned broad reduction in the field strength over the conductor. It is helpful, when looking at E field profiles, to imagine a plot on the same axes of the negative of the observed channel 1 response. This is the value the field starts from at the half-cycle transition. Even as early as 50  $\mu$ s (Ch 9), the electric field has made most of its polarity reversal. In fact, between the loop to the target body it has overshoot, while from the target body outwards it is changing relatively slowly. The time changes in E are actually very similar to those in H. There are two dominant decay times, a short one corresponding to the overburden and the channeling target response (Ch 8-6) and a long one corresponding to the local induction response (Ch 5-1). Also, these two E-field responses have a different geometrical form corresponding with the different forms of the magnetic anomalies. The scaled up version of the E data in Figure 22 shows the slowly decaying anomaly. Considerable noise is apparent in the data at this magnification.

#### Bedrock conductor beneath overburden

Figure 23 shows the measured secondary  $H_z$  fields at a site in Australia. The slow outward migration of the early-time channels and the -200 percent early-time limit away from the transmitter loop are characteristics of the response of a near-surface conductive weathered layer. This layer has a total conductance of about 4 S.

Around station 210W a more local superimposed crossover anomaly is evident which is fixed in location. This feature is evident over a great strike length. When the visually estimated overburden response is stripped from the anomaly and the peak-to-peak crossover response is plotted on a decay plot (Figure 26), the characteristics of early time blanking, time delay, and enhancement are clearly displayed. Corresponding to the model data of Figure 16, the early time blanking attenuates the local anomaly as the (analogous) magnetic field has not had time to penetrate the weathered layer. At intermediate times (Ch 5, 4) the response lies above a fitted free-space, half-plane conductor decay curve. This is partly an amplitude enhancement from current gathering and partly due to a small delay in time while the (analogous) magnetic field penetrates the near-surface conductor. It is not clear whether any of the L400S response can be identified as due to local induction. Nevertheless, the plotted induction curve for a half-plane in free space serves as a useful reference and establishes an upper limit on the conductance of the feature (7S in this case).

On two survey lines about 1 km away, the same local feature is observed, but the response has changed to one of longer time constant. As shown in Figure 24, a clear response persists through channels 2 and 1. These data are replotted with "point normalization" on Figure 25 to show the absolute secondary field. Absolute normalization preserves the true anomaly shape, but has the disadvantage of scaling up strongly those anomalies which lie near the transmitter. The stripped peak-to-peak response is plotted in decay form in Figure 26 and clearly shows the difference in time constant at the two locations.

The increase in time constant seen on line 600N is very significant, since little change is seen in the background response and only a lesser change in the blanking time. It indicates that the L600N late-time response is due to local induc-

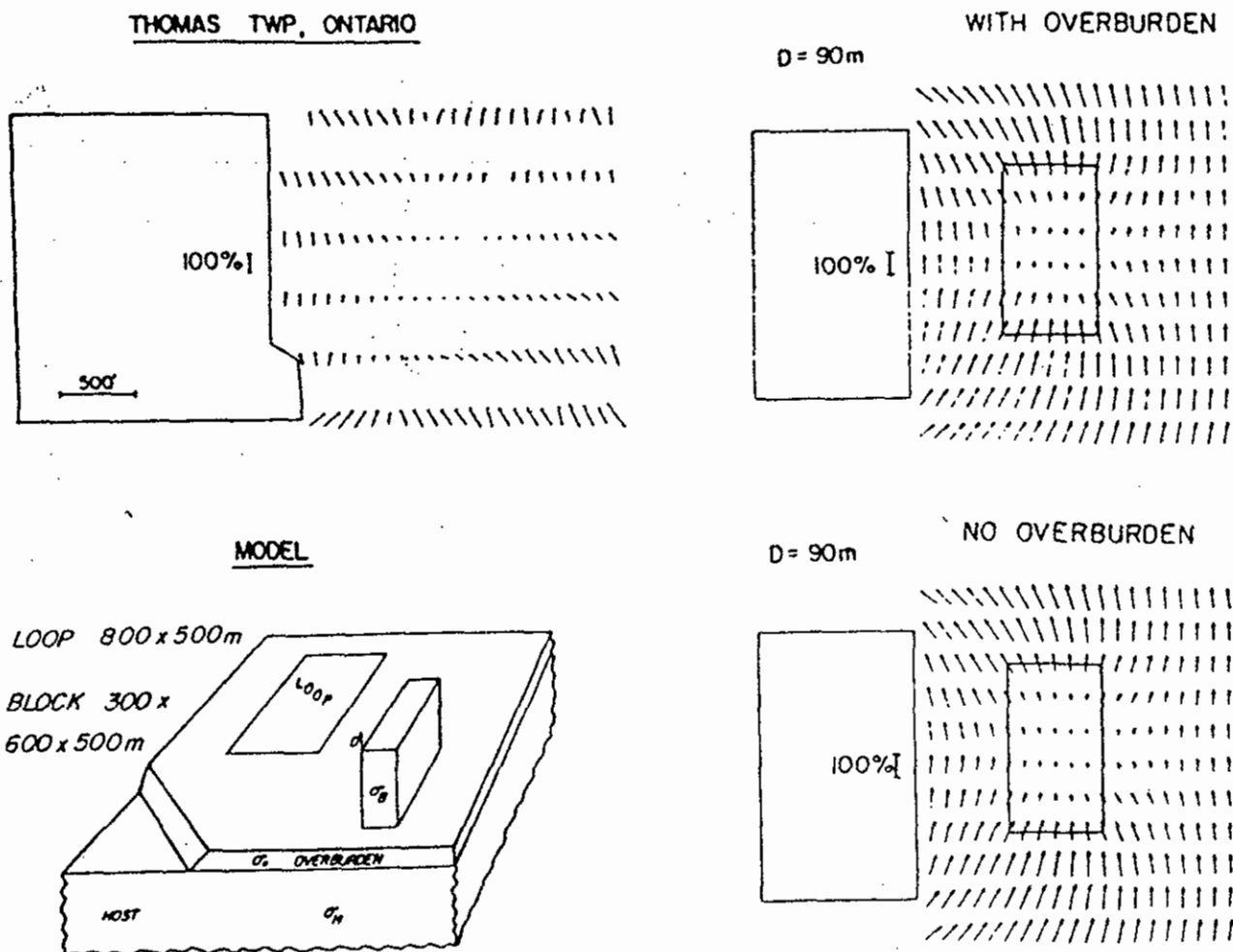


FIG. 21. Vector map of the late-time  $E$  field at Thomas Twp. A block model is included for comparison. The example is for a case where  $\sigma_B \gg \sigma_O \gg \sigma_H \gg \sigma_{AIR}$ .

tion. Model fitting of the decay, taking into account the limited strike extent of the long time constant response, leads to an interpretation of this feature as a local thickening of the half-plane conductor. The local conductance needed to produce the longer time constant is 120 S in contrast to the 7 S maximum of the rest of the bedrock conductor.

Drilling indicated that the extensive conductor was a 50 m thick calc-silicate zone containing both carbonates and sulfide lenses within a talc-sericite host. The locally more conductive part consisted chiefly of nearly massive noneconomic sulfides.

#### CONCLUSIONS

Experience with UTEM demonstrates that a wideband, time-domain EM system which measures the step response of the ground is electronically feasible and practical. Considerable field and modeling experience has shown that it is simple to use the amplitude information from such a system to aid significantly in interpretation. In our opinion the step response has a

significant advantage over the impulse response for detection and interpretation of good conductors in the presence of poorer ones. Electric field data measured with the system can provide independent information about lateral conductivity contrasts and may be a useful aid in interpretation.

#### ACKNOWLEDGMENTS

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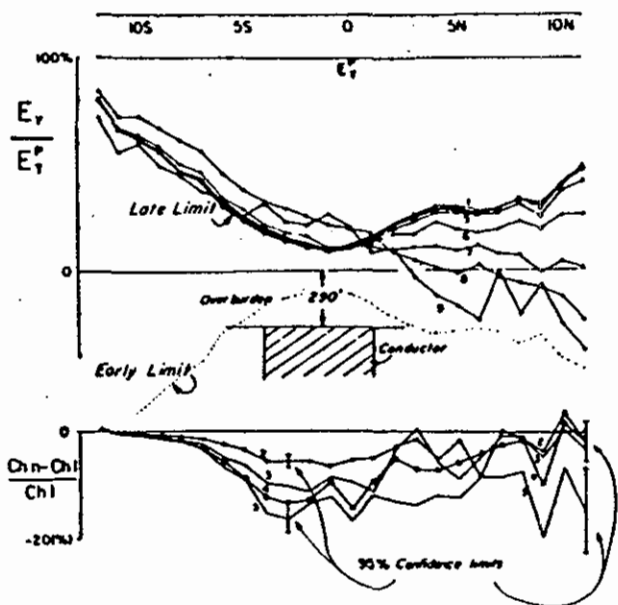


FIG. 22. Thomas Twp  $E_v$  data for line 0 from the south transmitter loop. The expanded scale data on the lower axes show that a very weak dynamic  $E$  field anomaly is associated with the main  $H_z^*$  late time response (Ch 5-1).

Natural Sciences and Engineering Research Council of Canada and the University of Toronto. All this assistance is gratefully acknowledged. We also thank an anonymous reviewer for a very careful, helpful review.

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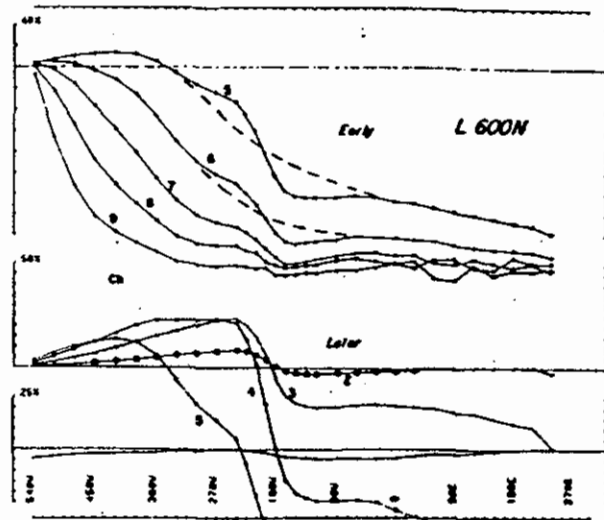


FIG. 24.  $H_z^*$  data on line 600N 1 km away from the previous figure showing a time decay of the local anomaly lasting to much later times. Remeasurement of the profile at 13 Hz gave virtually identical profiles (shifted one channel) with no visible Ch 1 anomaly.

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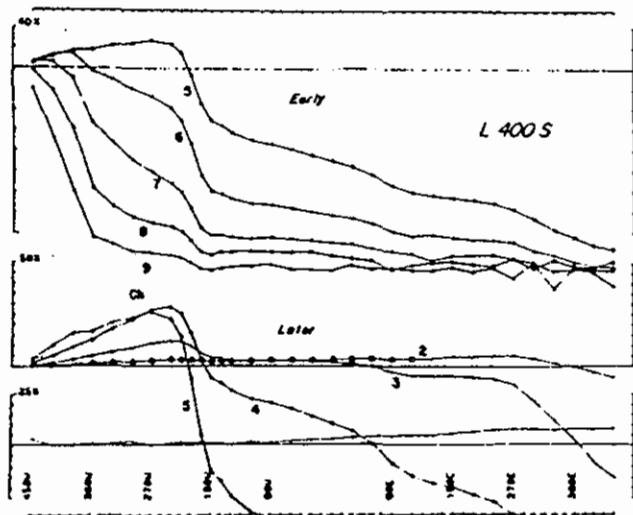


FIG. 23.  $H_z^*$  data from New South Wales showing the migrating crossovers of the overburden near the loop and a local anomaly around station 210 W. (Survey frequency 26 Hz.)

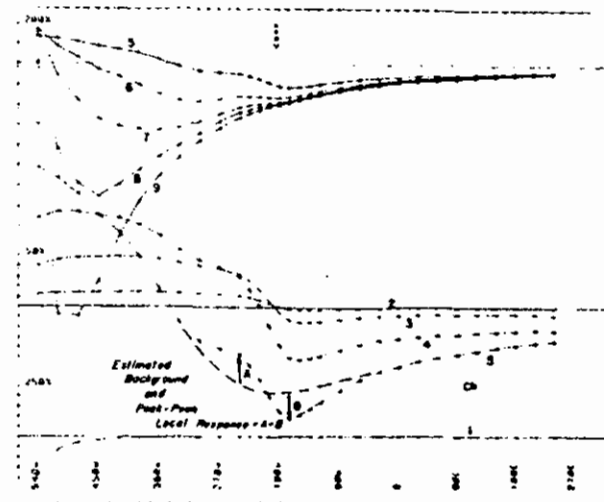


FIG. 25. Point normalized  $H_z^*$  from line 600N. The local secondary fields have been normalized to the constant primary field at station 210W and show how stripped peak-to-peak local anomaly amplitude is estimated.

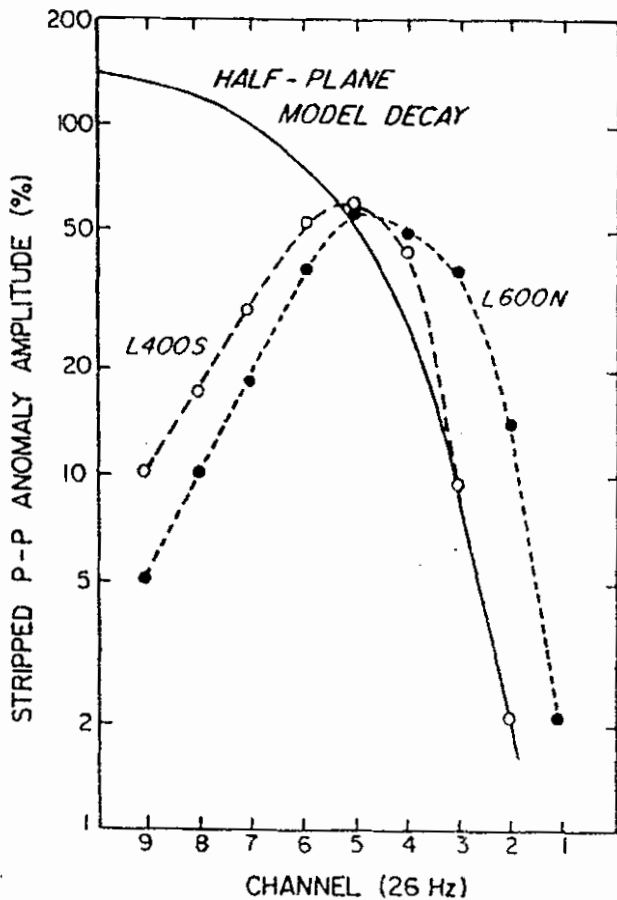


FIG. 26. Amplitude decay plot of stripped anomaly on lines 400S and 600N of the New South Wales survey.

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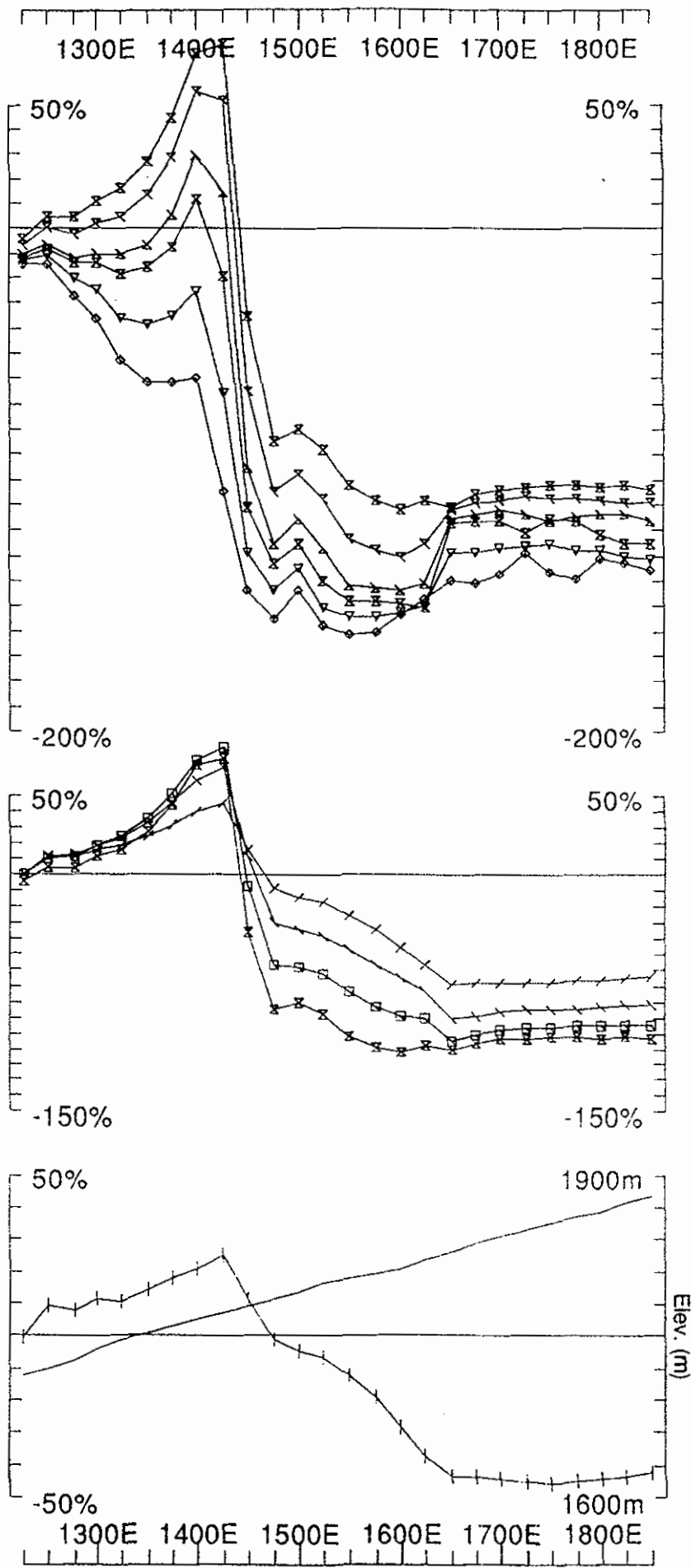
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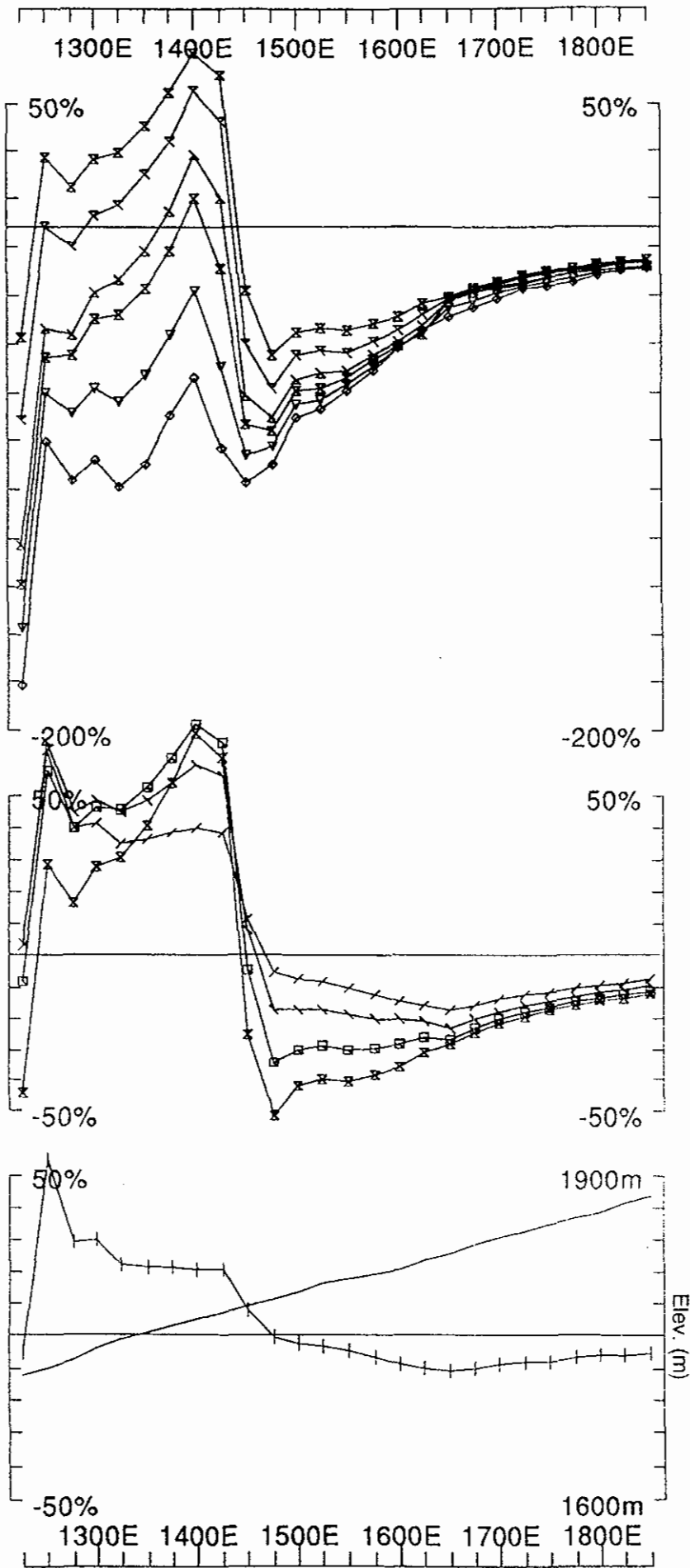
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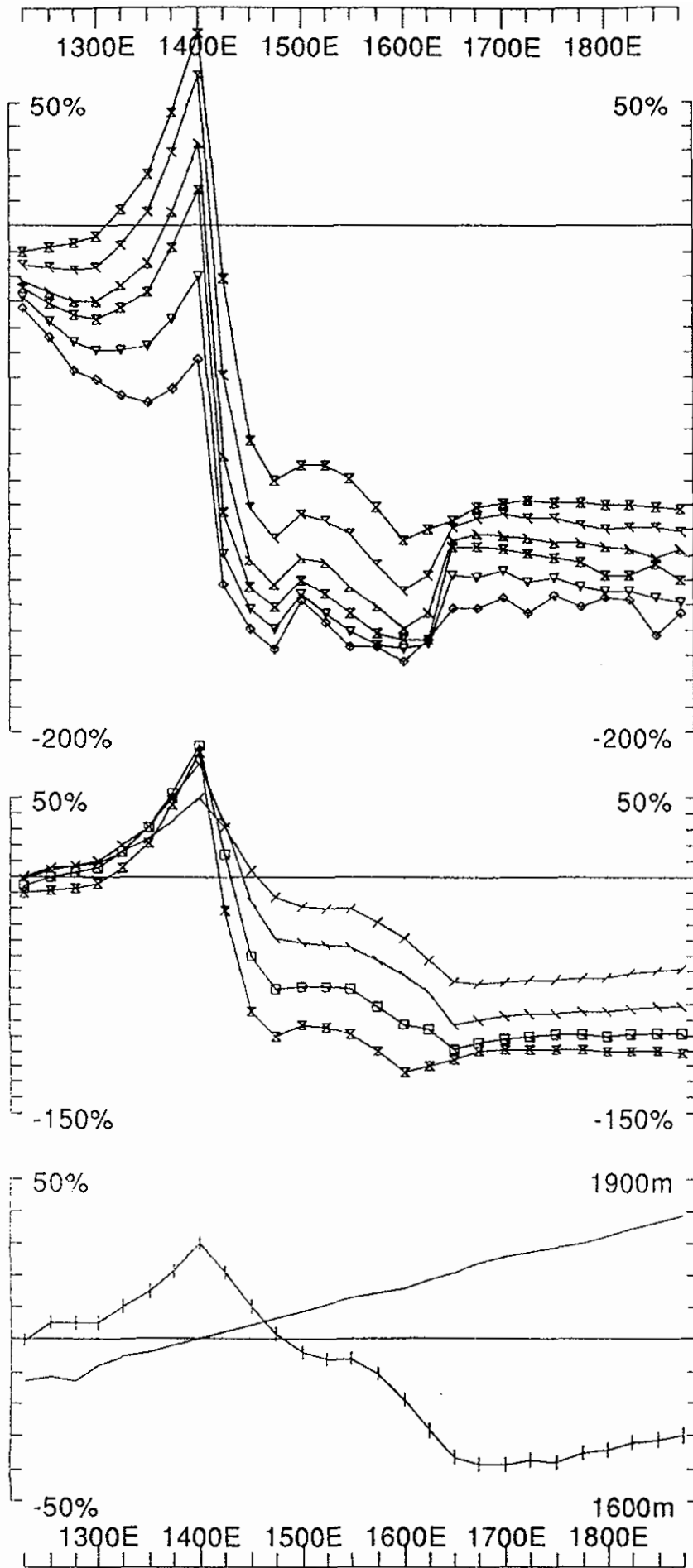
**APPENDIX IV**  
**data sections**



|           |                              |                                 |                   |
|-----------|------------------------------|---------------------------------|-------------------|
| Loop: 2   | Secondary, (Chn - Hpc)/Hpl   | UTEM Survey at: BAR CLAIM GROUP | Surveyed: 1977/84 |
| Line: 0 N | Contin. Norm at depth of 0 m | For: MINER RIVER RESOURCES LTD. | Reduced: 20/8/84  |
| Compt: Hz | Base Freq. 30.974 Hz         | <b>SJ GEOPHYSICS LTD.</b>       | Plotted: 23/6/84  |
|           |                              | Job 9417                        |                   |

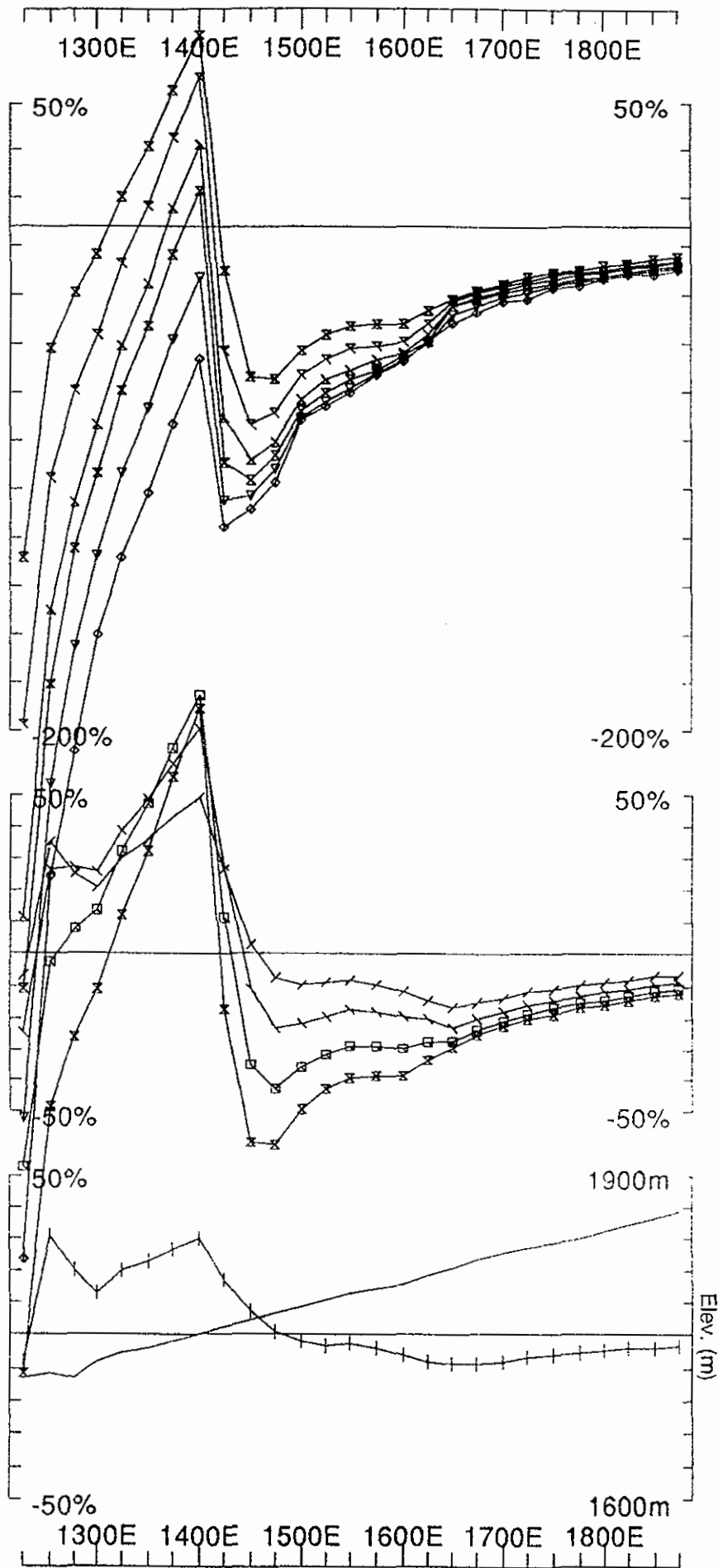


|           |                            |                                 |                  |                   |
|-----------|----------------------------|---------------------------------|------------------|-------------------|
| Loop: 2   | Secondary, (Chn - Hpc)/Hpc | UTEM Survey at: BAR CLAIM GROUP | Job              | Surveyed: 1979/94 |
| Line: 0 N | Point Norm. at stn 1400    | For: MINER RIVER RESOURCES LTD. | 9417             | Reduced: 20/8/94  |
| Compt: Hz | Base Freq. 30.974 Hz       | <b>SJ GEOPHYSICS LTD.</b>       | Plotted: 23/8/94 |                   |

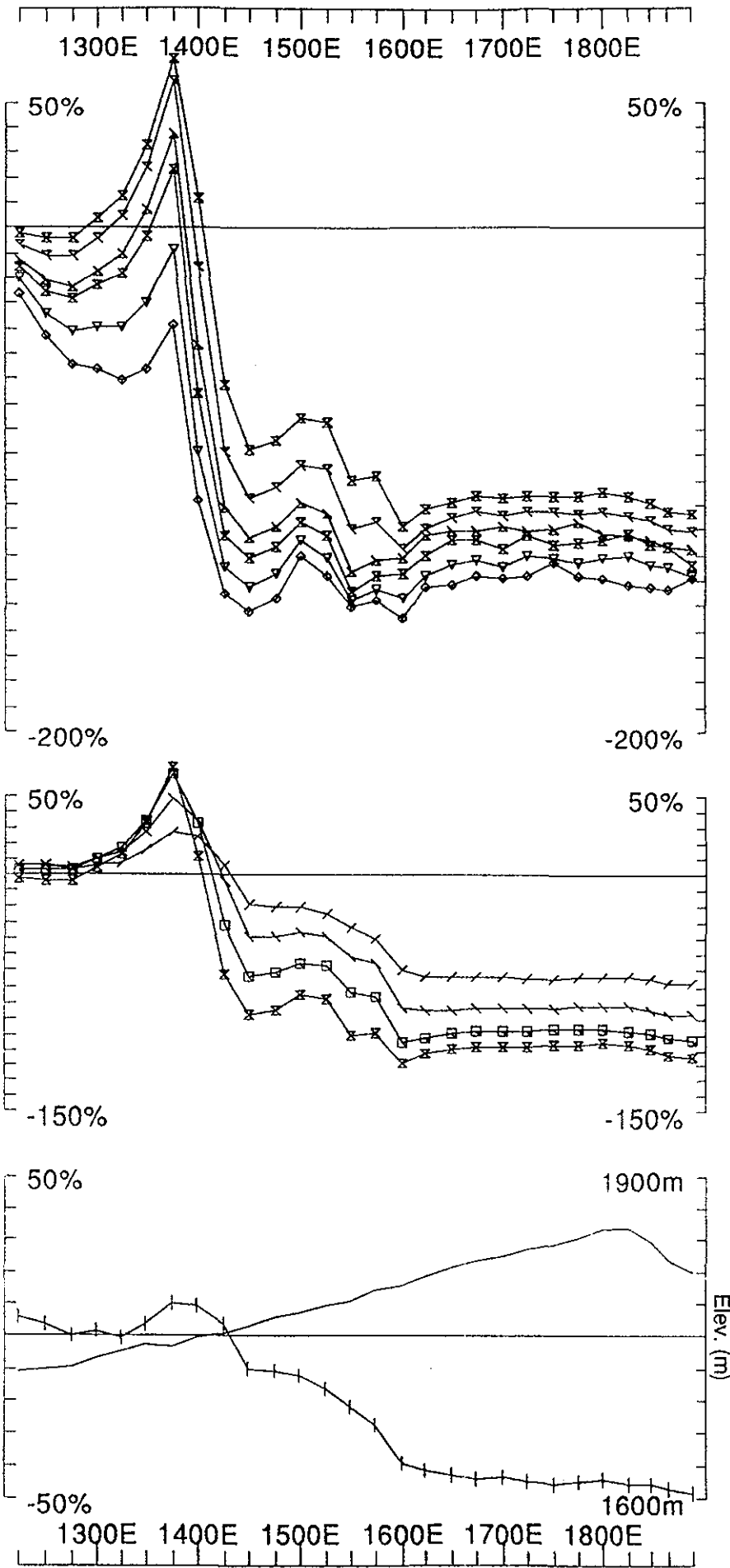


|                                 |                              |                  |
|---------------------------------|------------------------------|------------------|
| Loop: 1                         | Secondary, (Chn - Hpc)/ Hp   | Surveyed: 3/7/84 |
| Line: 1 N                       | Contin. Norm at depth of 0 m | Reduced: 20/8/84 |
| Compt: Hz                       | Base Freq. 30.974 Hz         | Plotted: 23/8/84 |
| UTEM Survey at: BAR CLAIM GROUP |                              | Job              |
| For: MINER RIVER RESOURCES LTD. |                              | 9417             |
| <b>SJ GEOPHYSICS LTD.</b>       |                              |                  |

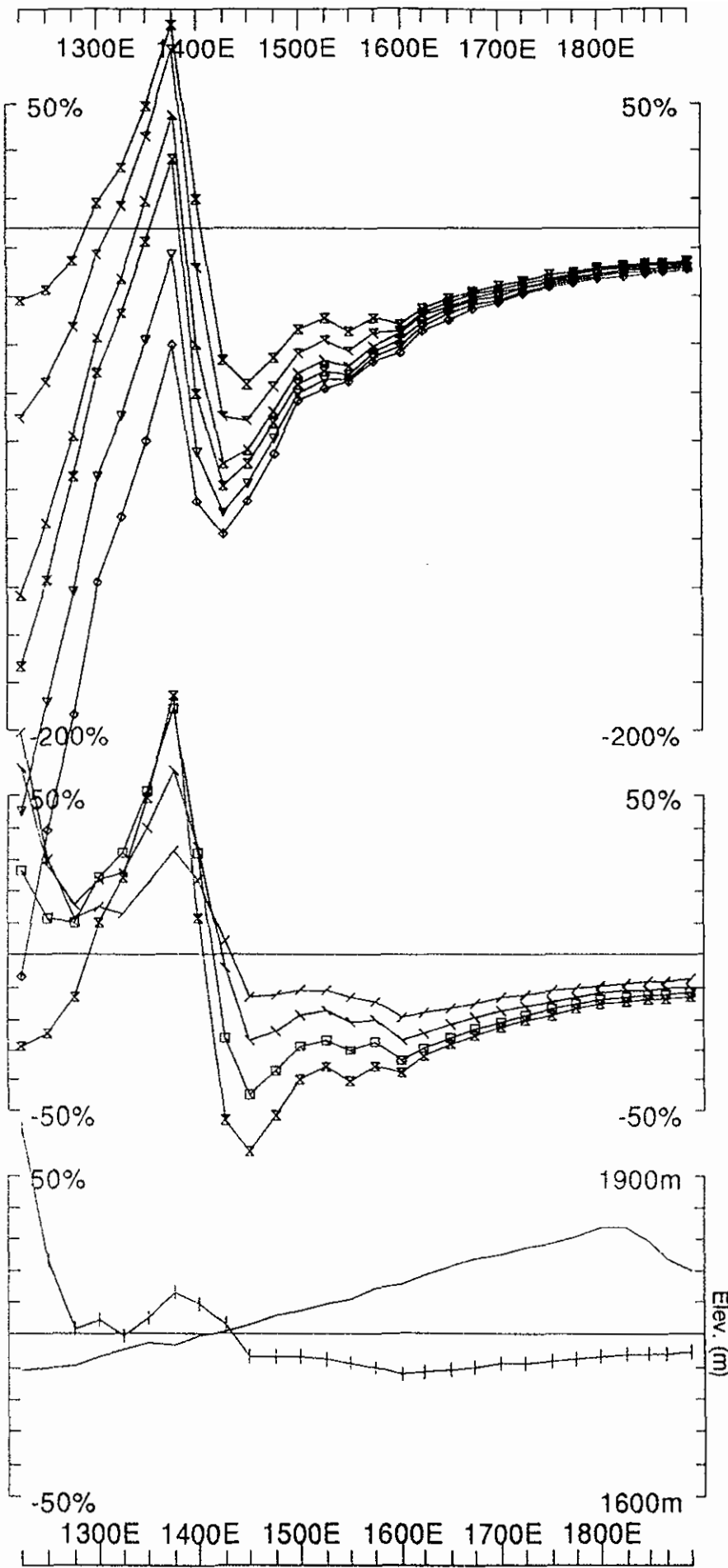




|           |                            |                                 |                |
|-----------|----------------------------|---------------------------------|----------------|
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| Line: 1 N | Point Norm. at stn 1400    | For: MINER RIVER RESOURCES LTD. | Reduced: 20894 |
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|           |                            | Job                             | 9417           |

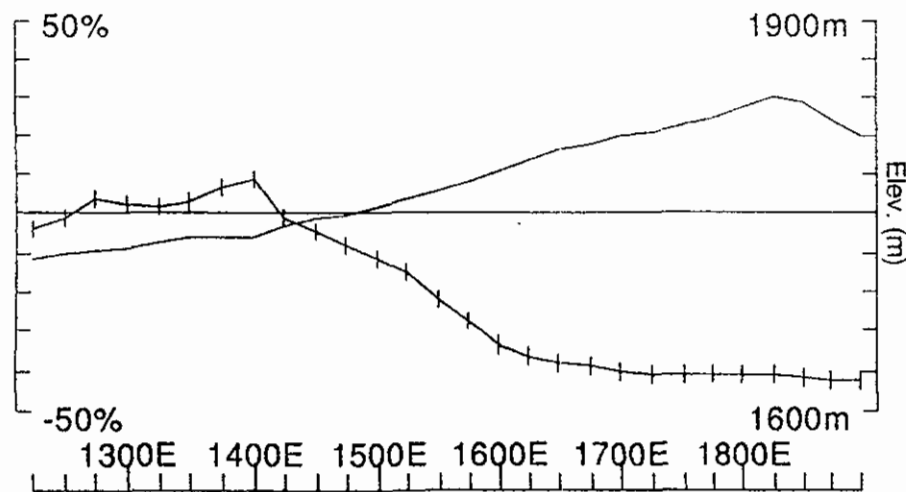
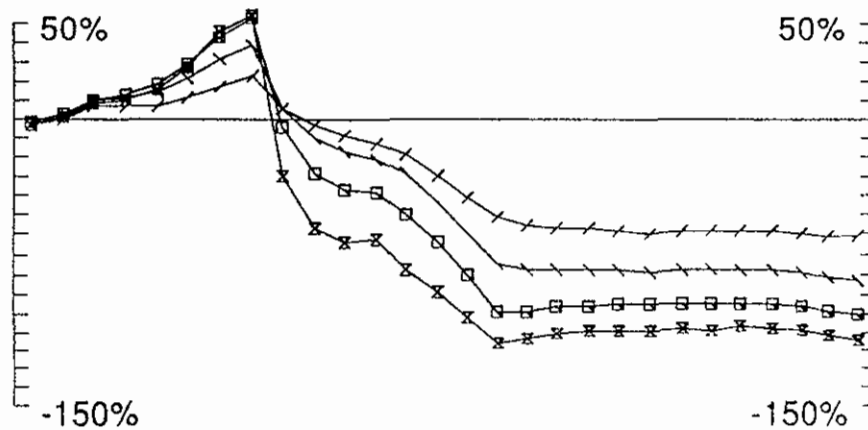
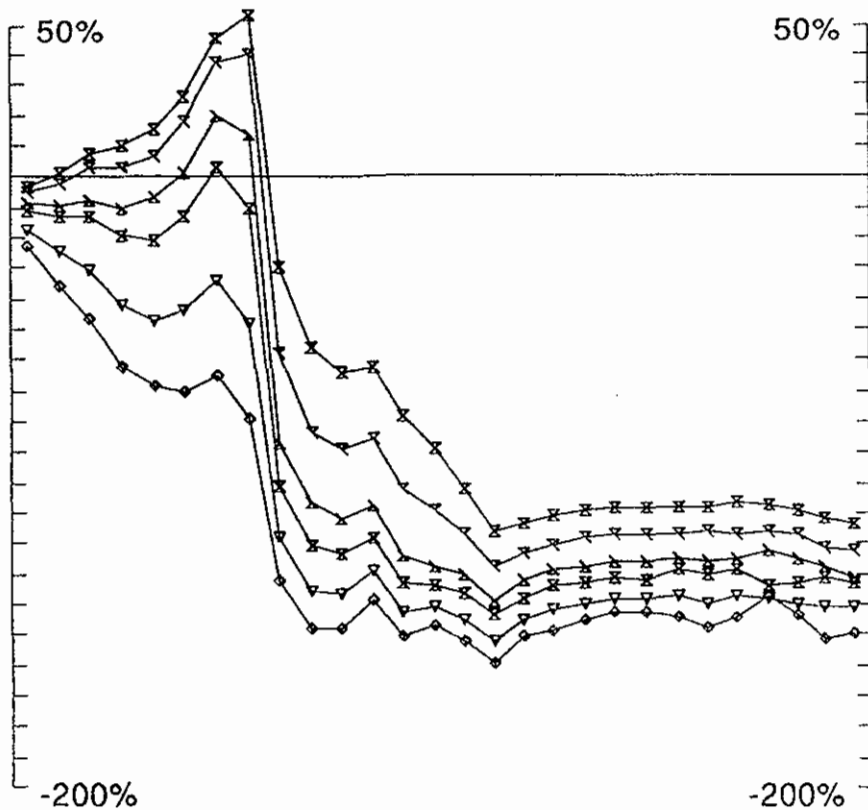


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| Loop: 2   | Secondary, (Chn - Hpc)/Hpl   | UTEM Survey at: BAR CLAIM GROUP | Job  | Surveyed: 19/7/94 |
| Line: 2 N | Contin. Norm at depth of 0 m | For: MINER RIVER RESOURCES LTD. | 9417 | Reduced: 20/9/94  |
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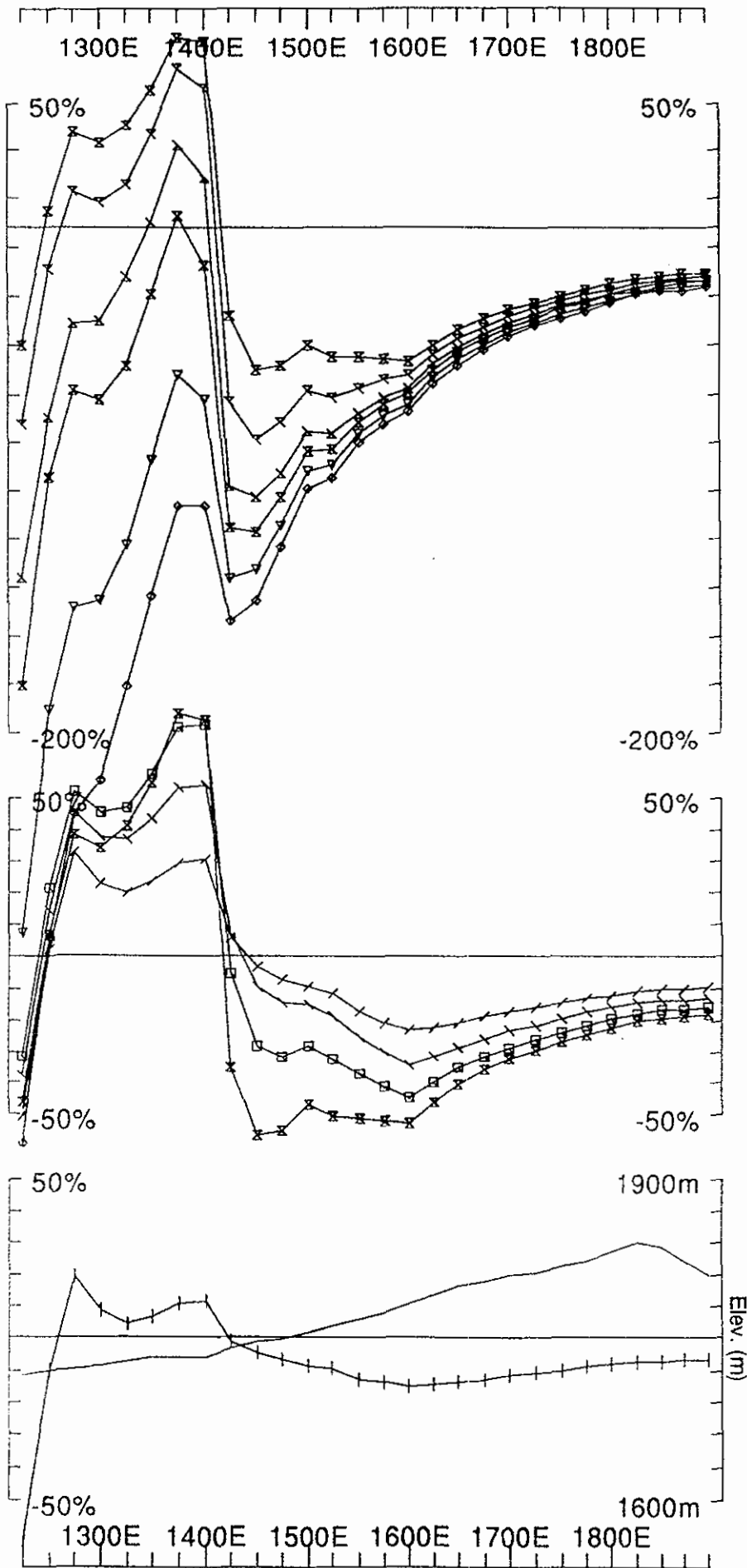


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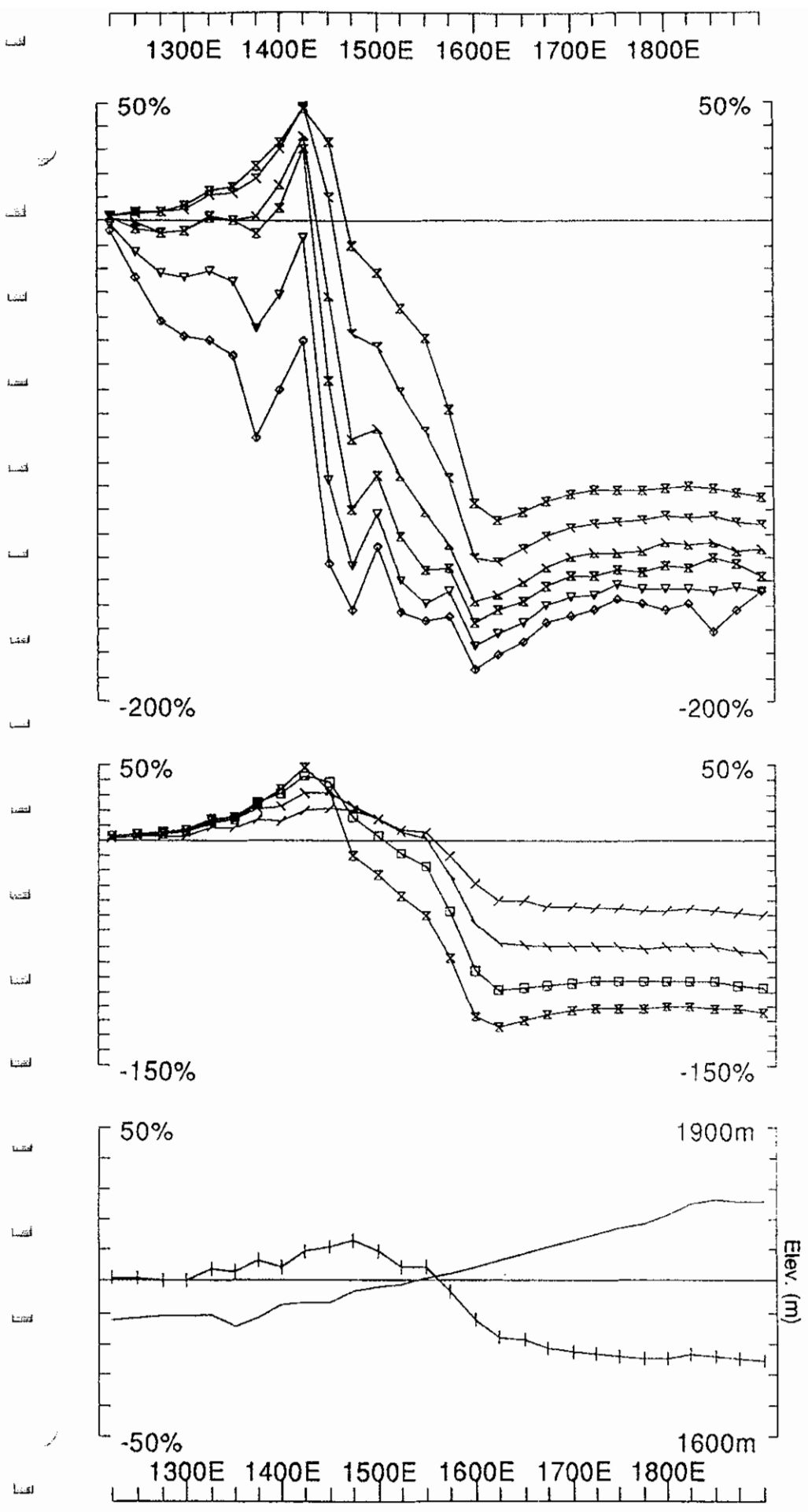
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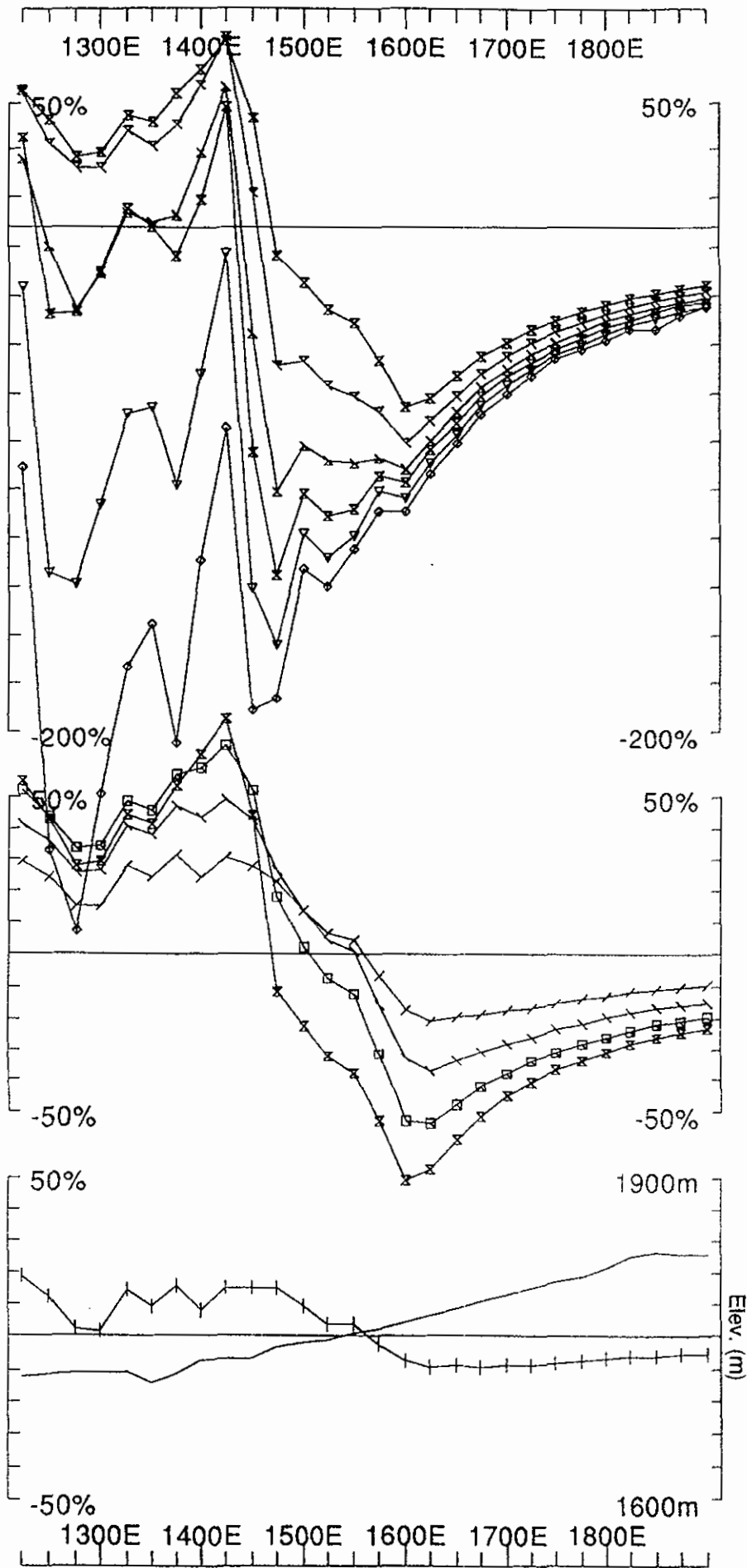
|                                                                                                 |                              |                   |
|-------------------------------------------------------------------------------------------------|------------------------------|-------------------|
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| Line: 3 N                                                                                       | Contin. Norm at depth of 0 m | Reduced: 20/8/94  |
| Compt: Hz                                                                                       | Base Freq. 30.974 Hz         | Plotted: 23/8/94  |
| UTEM Survey at: BAR CLAIM GROUP<br>For: MINER RIVER RESOURCES LTD.<br><b>SJ GEOPHYSICS LTD.</b> |                              | Job<br>9417       |



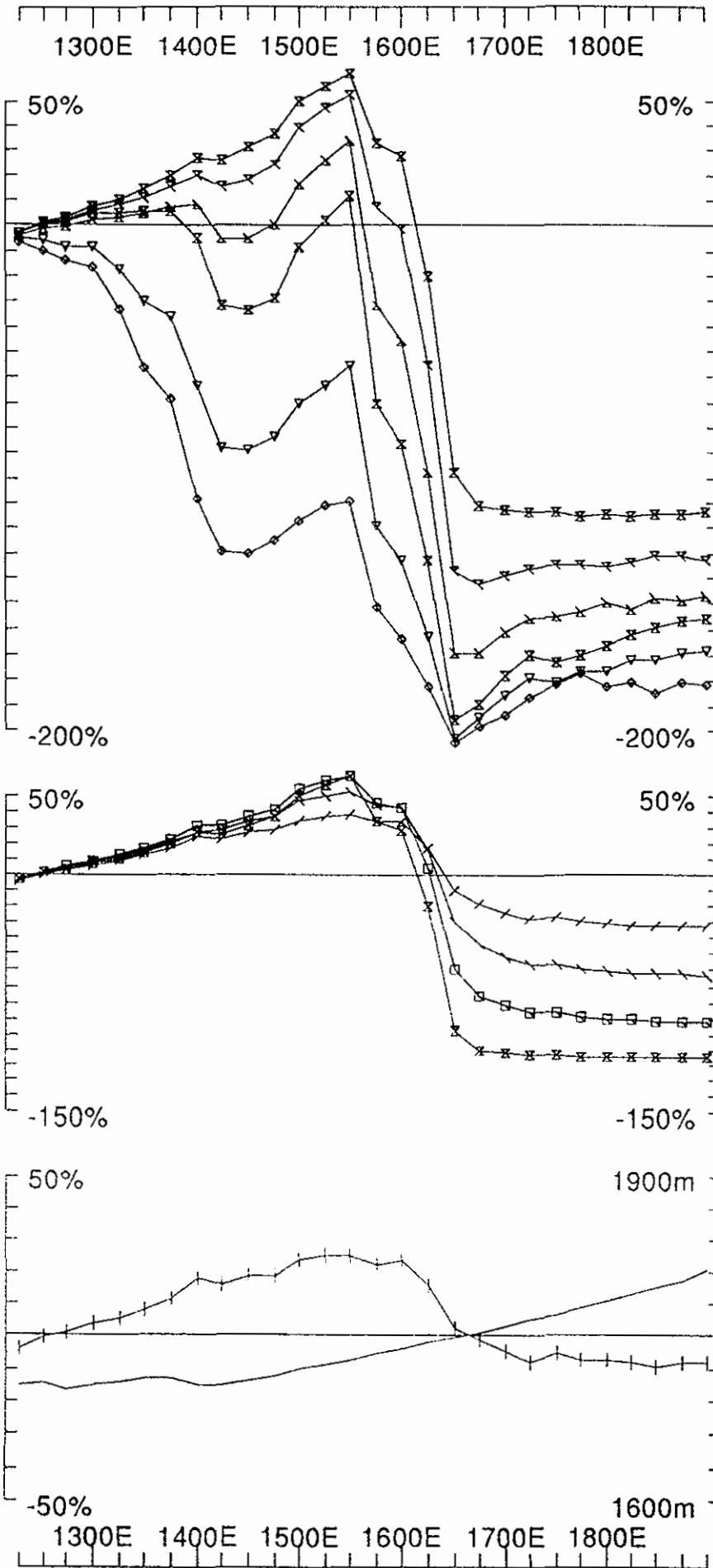
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|-----------|----------------------------|---------------------------------|------------------------------|
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| Line: 3 N | Point Norm. at stn 1450    | For: MINER RIVER RESOURCES LTD. | Reduced: 20/8/94             |
| Compt: Hz | Base Freq. 30.974 Hz       | <b>SJ GEOPHYSICS LTD.</b>       | Job 9417<br>Plotted: 23/8/94 |



|           |                              |                                 |                  |
|-----------|------------------------------|---------------------------------|------------------|
| Loop: 1   | Secondary, (Chn - Hpc)/ Hp   | UTEM Survey at: BAR CLAIM GROUP | Surveyed: 4/7/94 |
| Line: 4 N | Contin. Norm at depth of 0 m | For: MINER RIVER RESOURCES LTD. | Reduced: 20/8/94 |
| Compt: HZ | Base Freq. 30.974 Hz         | <b>SJ GEOPHYSICS LTD.</b>       | Plotted: 23/8/94 |
|           |                              |                                 | Job 9417         |

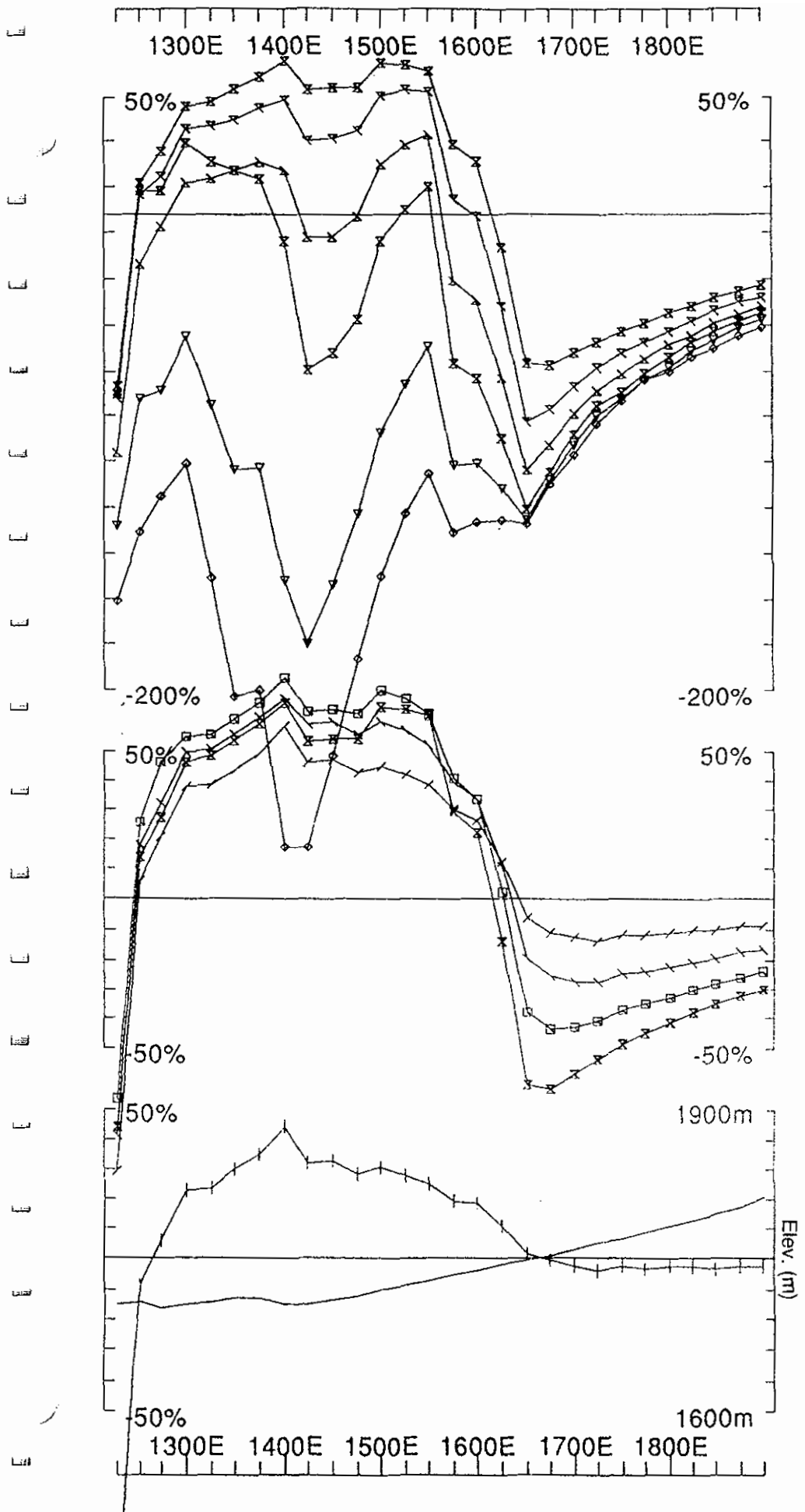


|           |                            |                                 |      |                  |
|-----------|----------------------------|---------------------------------|------|------------------|
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| Line: 4 N | Point Norm. at str 1500    | For: MINER RIVER RESOURCES LTD. | 9417 | Reduced: 20/8/94 |
| Compt: Hz | Base Freq. 30.974 Hz       | <b>SJ GEOPHYSICS LTD.</b>       |      | Plotted: 23/8/94 |

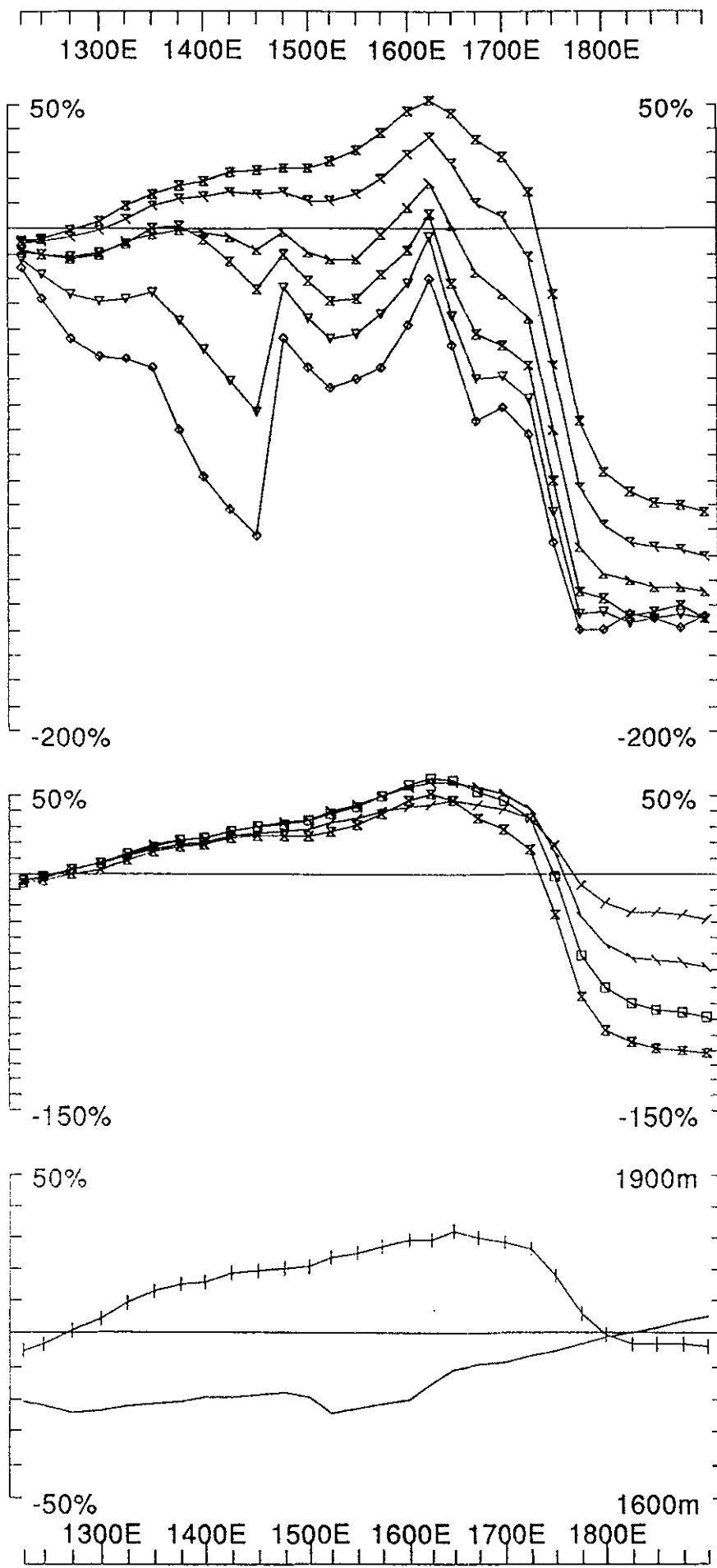


|           |                              |                                 |                  |
|-----------|------------------------------|---------------------------------|------------------|
| Loop: 1   | Secondary, (Chn - Hpc)/ Hp   | UTEM Survey at: BAR CLAIM GROUP | Job              |
| Line: 5 N | Contin. Norm at depth of 0 m | For: MINER RIVER RESOURCES LTD. | 9417             |
| Compt: Hz | Base Freq. 30.974 Hz         | <b>SJ GEOPHYSICS LTD.</b>       | Plotted: 23/8/94 |
|           |                              |                                 | Reduced: 20/8/94 |
|           |                              |                                 | Surveyed: 4/7/94 |

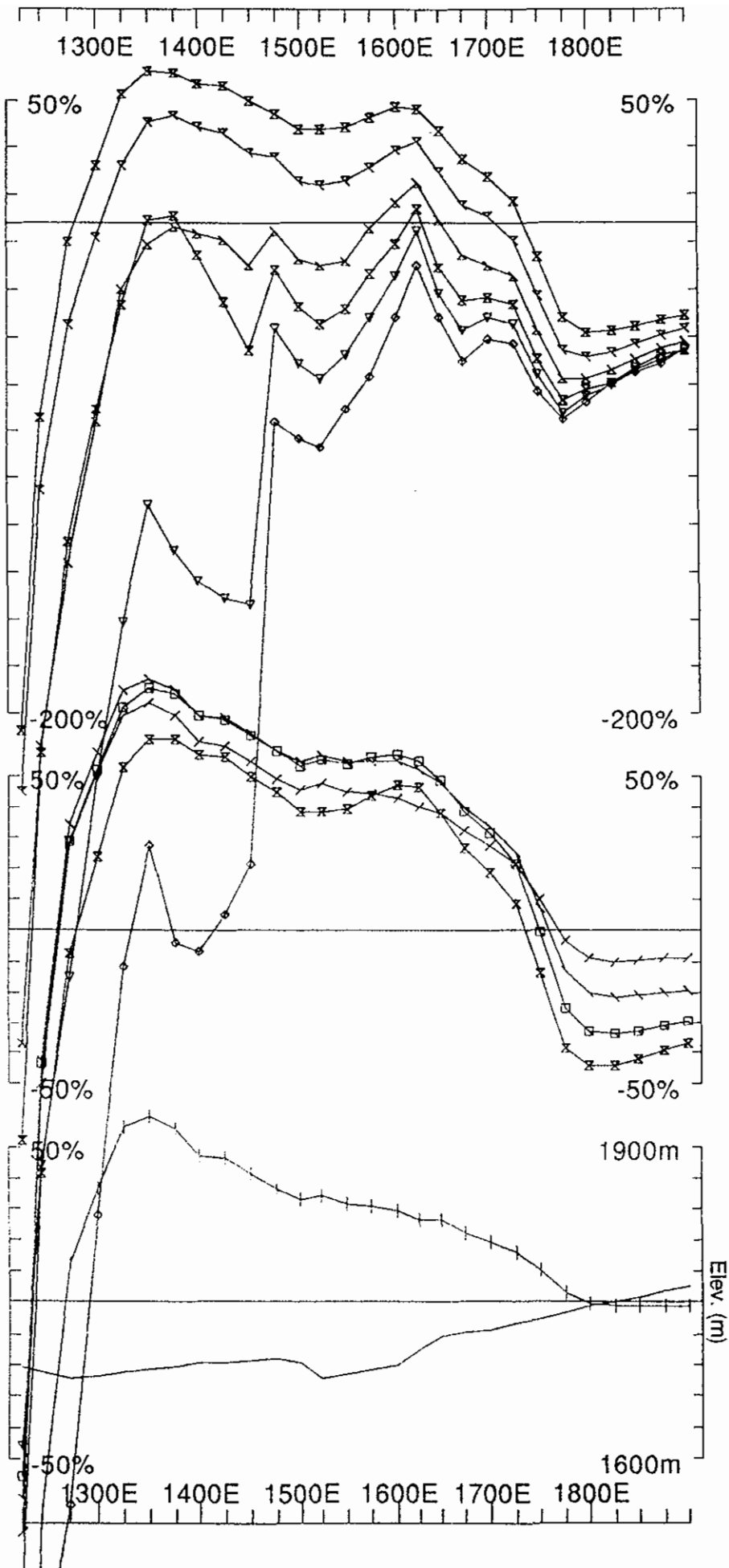




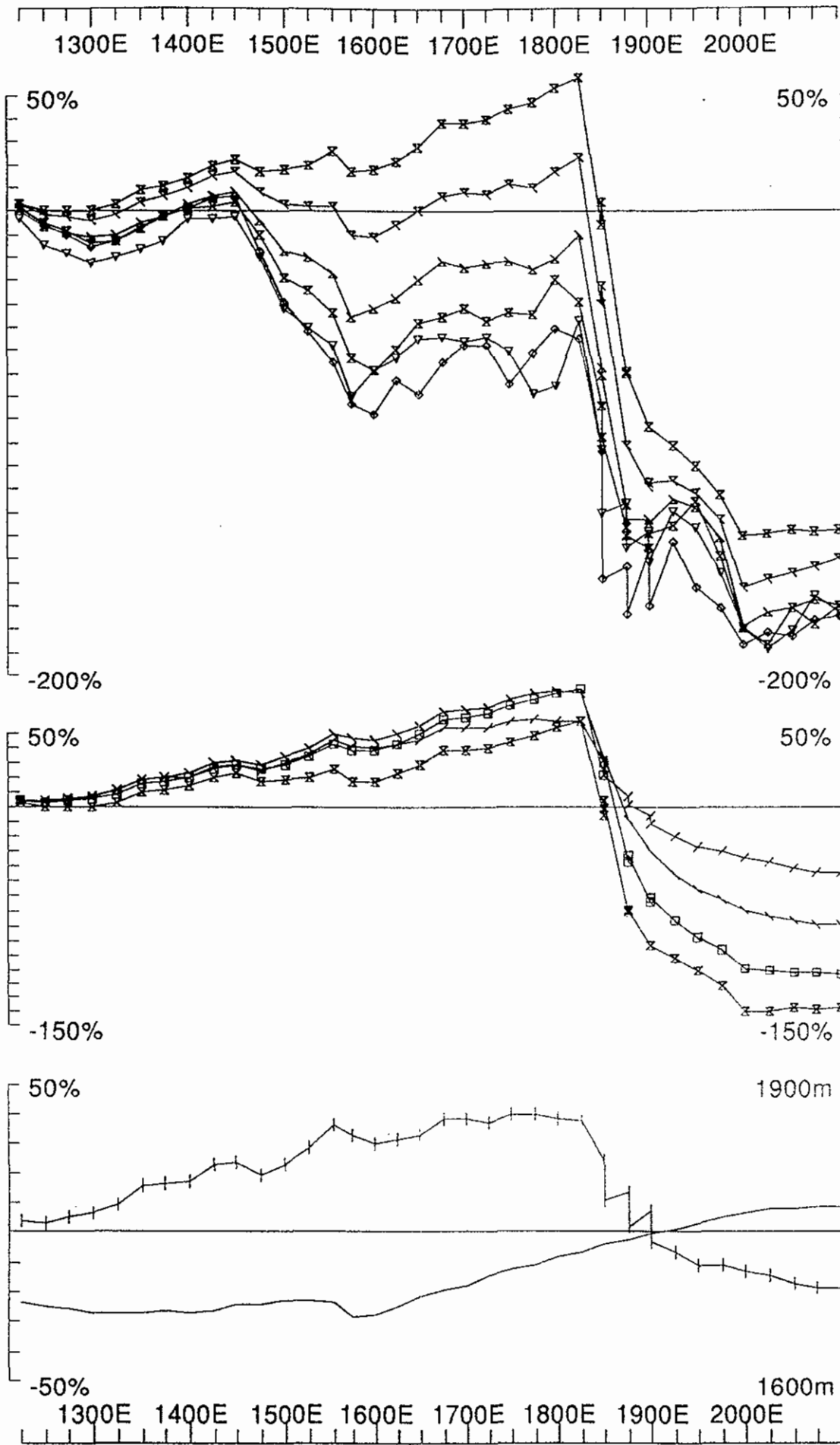
|           |                             |                                 |                  |
|-----------|-----------------------------|---------------------------------|------------------|
| Loop: 1   | Secondary, (Chin Hipe)/[Hp] | UTEM Survey at: BAR CLAIM GROUP | Surveyed: 4/7/94 |
| Line: 5 N | Point Norm.at str 1550      | For: MINER RIVER RESOURCES LTD. | Reduced: 20/6/94 |
| Compt: Hz | Base Freq. 30.974 Hz        | <b>SJ GEOPHYSICS LTD.</b>       | Plotted: 23/8/94 |
|           |                             |                                 | Job 9417         |



|                                                                    |                              |                           |                  |
|--------------------------------------------------------------------|------------------------------|---------------------------|------------------|
| Loop: 1                                                            | Secondary, (Chn - Hpc)/ Hpl  | Job                       | 9417             |
| Line: 6 N                                                          | Contin. Norm at depth of 0 m | Surveyed: 5/7/94          | Reduced: 20/8/94 |
| Compt: Hz                                                          | Base Freq. 30.974 Hz         | Plotted: 23/8/94          |                  |
| UTEM Survey at: BAR CLAIM GROUP<br>For: MINER RIVER RESOURCES LTD. |                              | <b>SJ GEOPHYSICS LTD.</b> |                  |



|           |                             |                                                                                                 |                                                         |
|-----------|-----------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Loop: 1   | Secondary, (Chn - Hpc)/(Hp) | UTEM Survey at: BAR CLAIM GROUP<br>For: MINER RIVER RESOURCES LTD.<br><b>SJ GEOPHYSICS LTD.</b> | Surveyed: 5/784<br>Reduced: 20/8/04<br>Plotted: 23/8/04 |
| Line: 6 N | Point Norm. at stn 1600     |                                                                                                 | Job<br>9417                                             |
| Compt: Hz | Base Freq. 30.974 Hz        |                                                                                                 |                                                         |



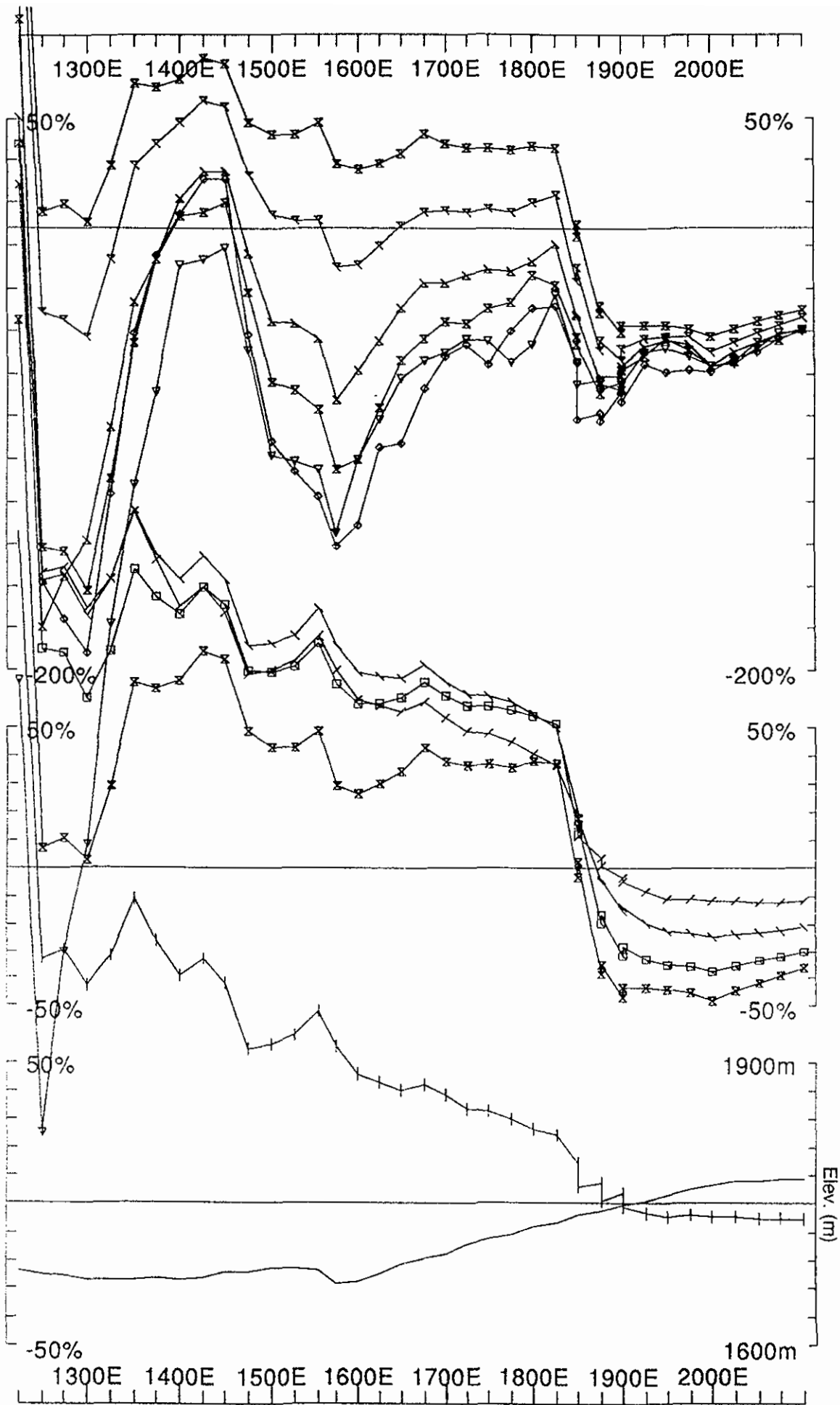
UTEM Survey at: BAR CLAIM GROUP  
 For: MINER RIVER RESOURCES LTD.

Job  
 9417

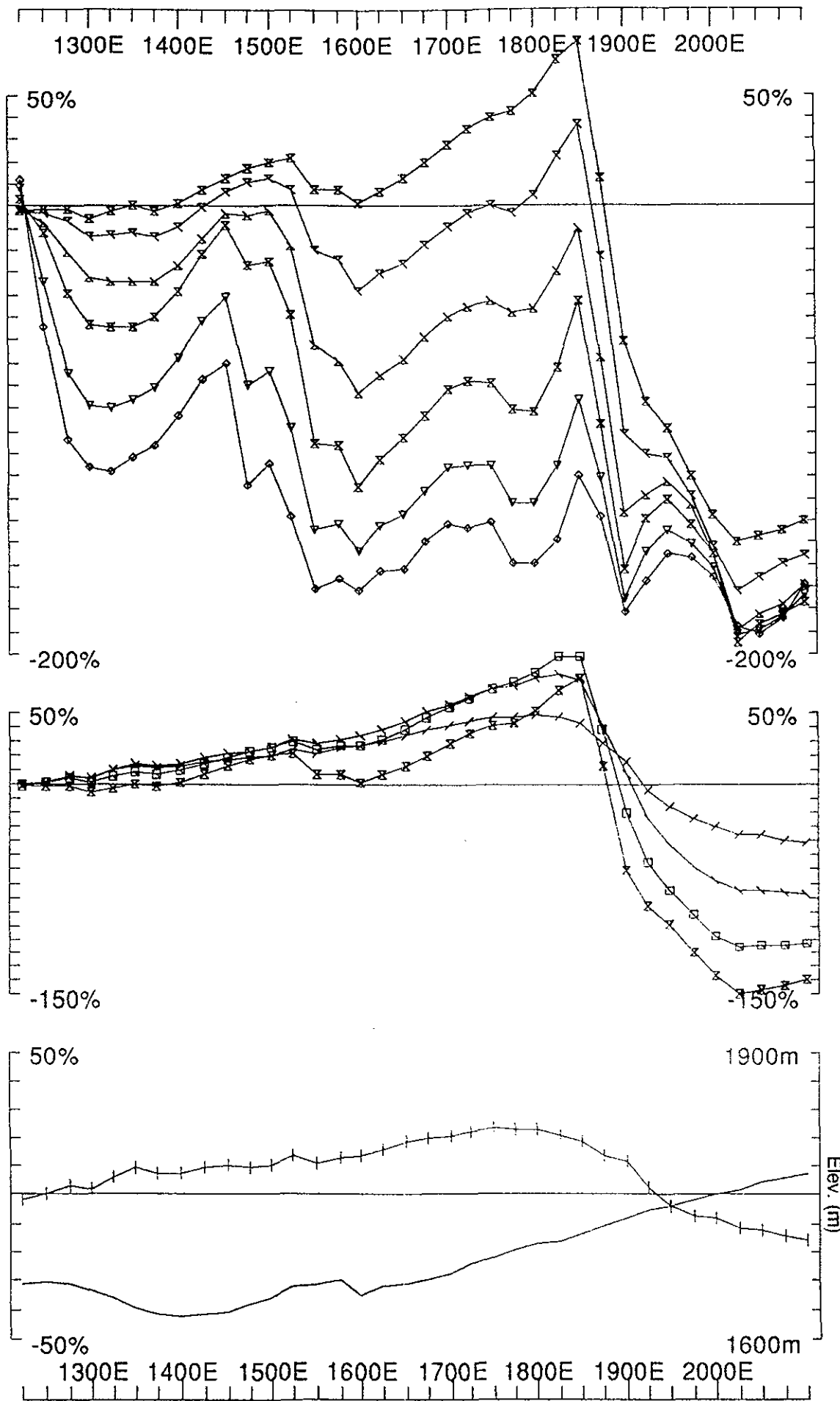
Plotted: 29/8/94

**SJ GEOPHYSICS LTD.**

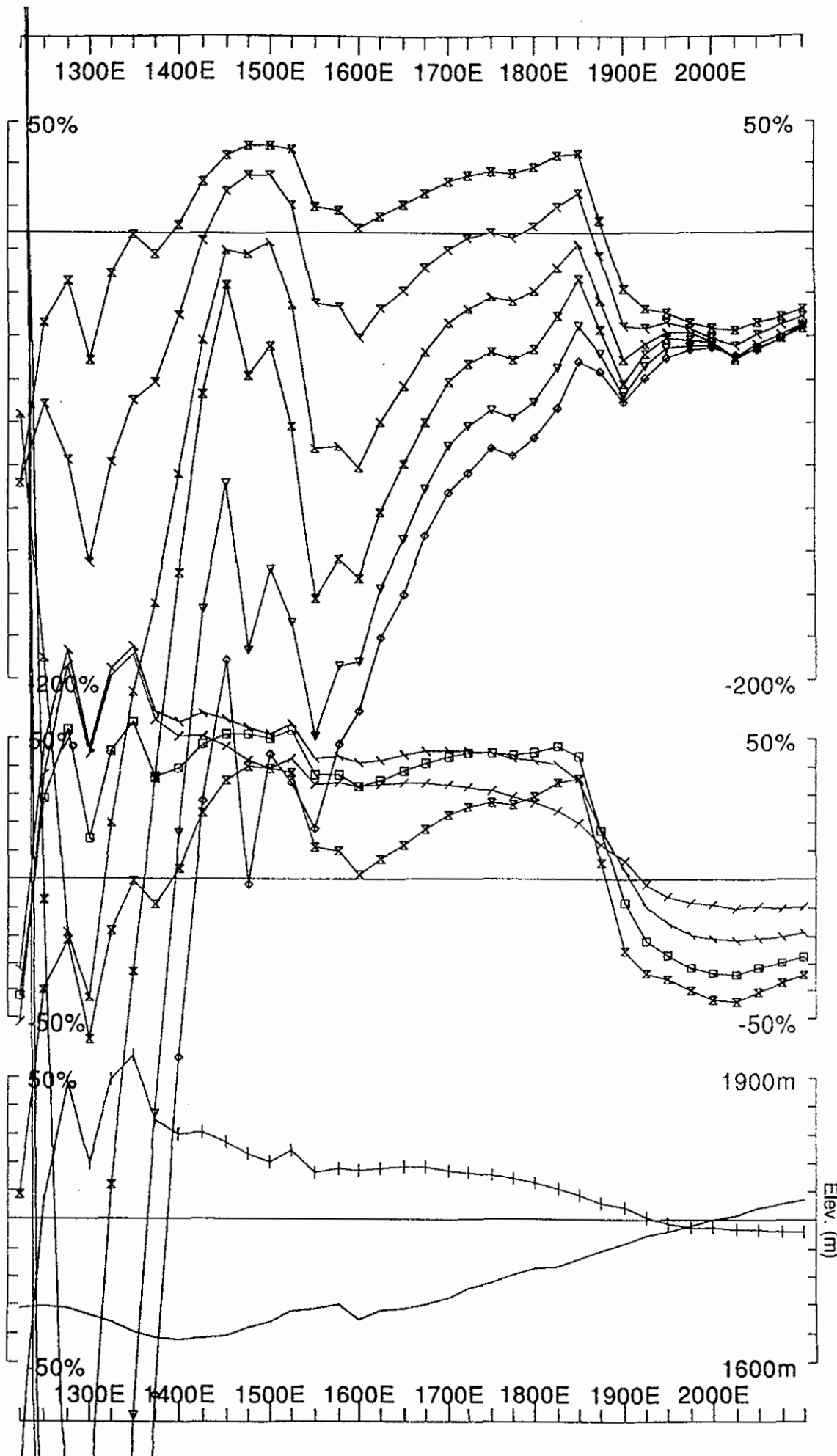
Loop: 1 Secondary, (Chin 1ipc)/Hpi  
 Line: 7 N Contin. Norm at depth of 0 m  
 Compt: Hz Base Freq. 30.974 Hz



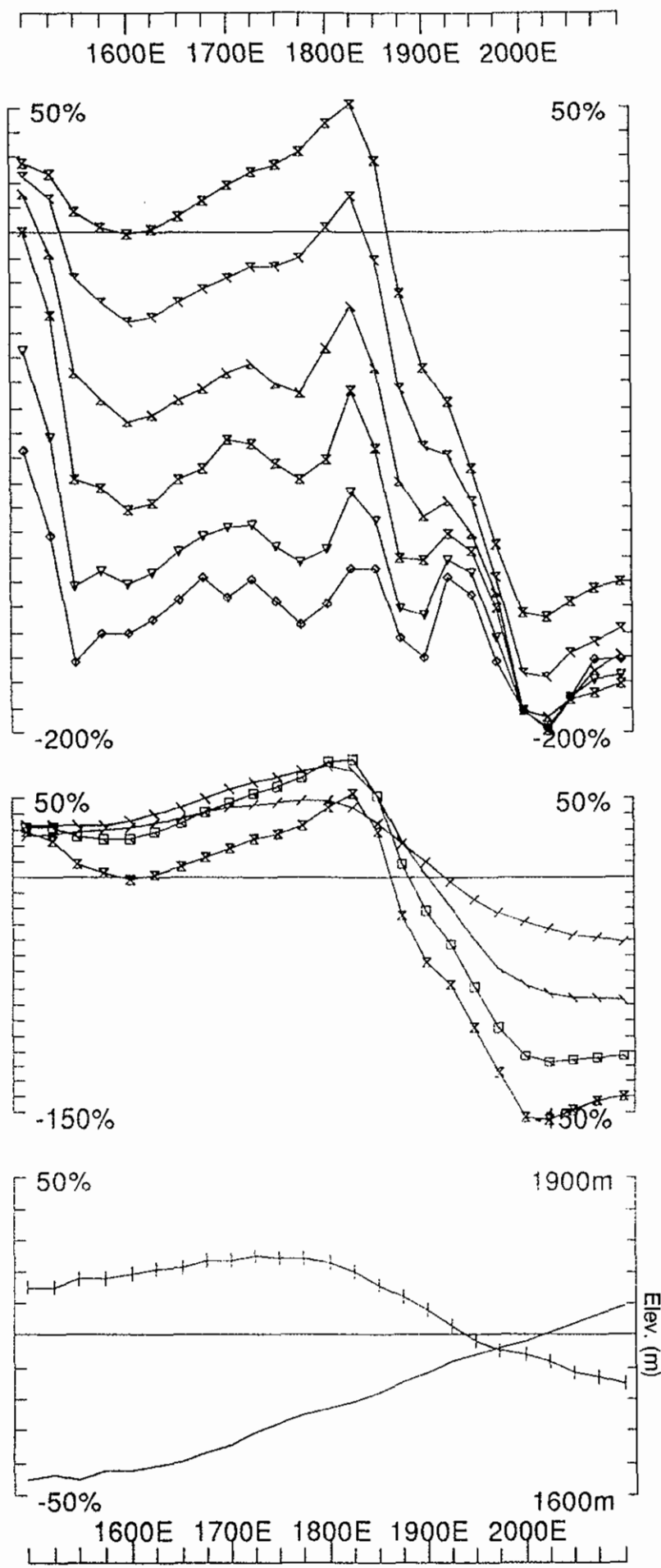
|                                   |                                                                                                       |                                                                                          |                                 |
|-----------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------|
| Loop: 1<br>Line: 7 N<br>Compt: Hz | Secondary, $(\text{Chr} - \text{Hpc})/ \text{Hp} $<br>Point Norm. at stn 1700<br>Base Freq. 30.974 Hz | UTEM Survey at: BAR CLAIM GROUP<br>For: MINER RIVER RESOURCES LTD.<br>SJ GEOPHYSICS LTD. | Job<br>9417<br>Plotted: 23/9/94 |
|-----------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------|



|           |                              |                                 |                              |
|-----------|------------------------------|---------------------------------|------------------------------|
| Loop: 2   | Secondary, (Chn - Hpc)/ Hp   | UTEM Survey at: BAR CLAIM GROUP | Surveyed: 20/7/94            |
| Line: 8 N | Contin. Norm at depth of 0 m | For: MINER RIVER RESOURCES LTD. | Reduced: 20/8/94             |
| Compt: HZ | Base Freq. 30.974 Hz         | <b>SJ GEOPHYSICS LTD.</b>       | Job 9417<br>Plotted: 23/8/94 |

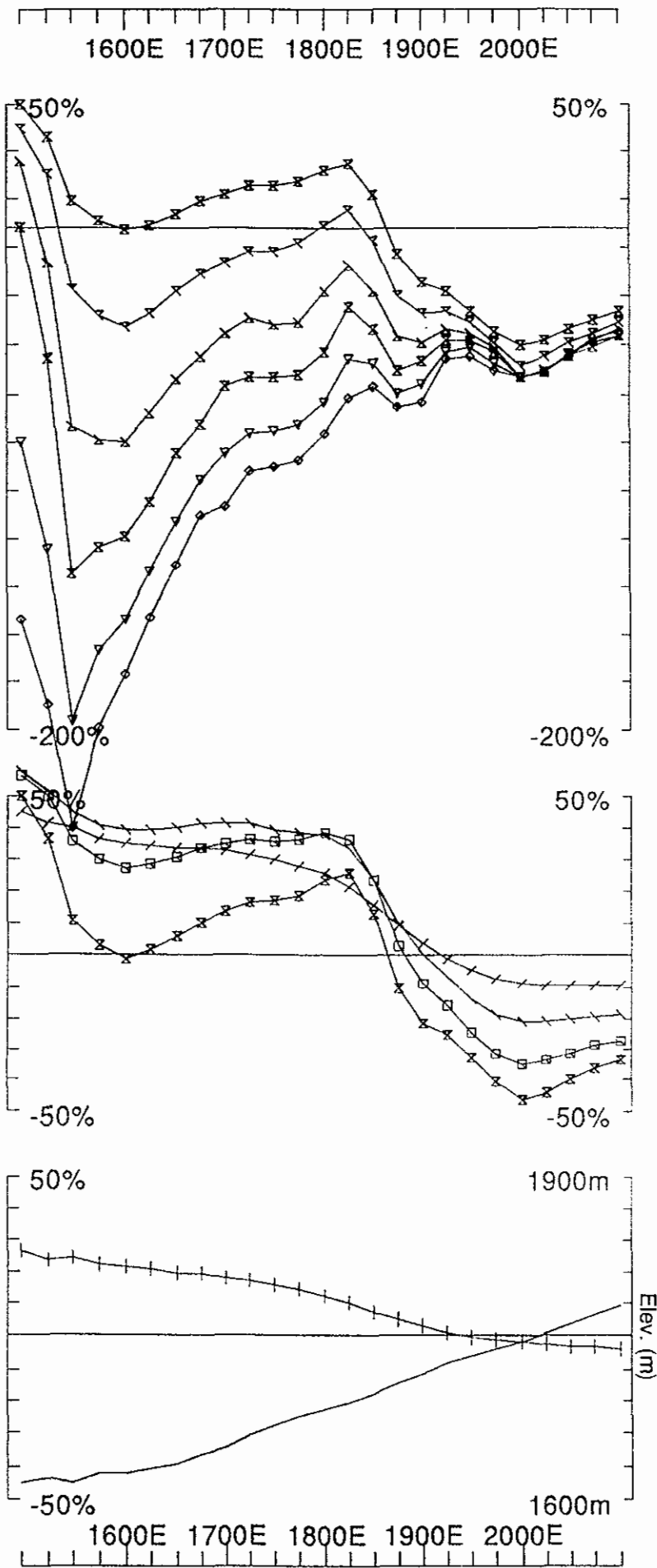


|           |                            |                                 |                              |
|-----------|----------------------------|---------------------------------|------------------------------|
| Loop: 2   | Secondary, (Chn - Hpc)/ Hp | UTEM Survey at: BAR CLAIM GROUP | Surveyed: 20/7/94            |
| Line: 8 N | Point Norm.at stn 1650     | For: MINER RIVER RESOURCES LTD. | Reduced: 20/8/94             |
| Compt: Hz | Base Freq. 30.974 Hz       | <b>SJ GEOPHYSICS LTD.</b>       | Job 9417<br>Plotted: 23/8/94 |

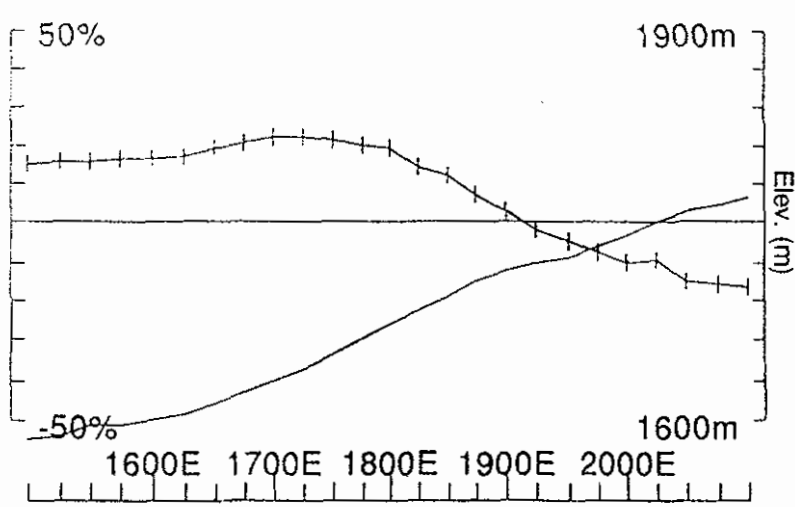
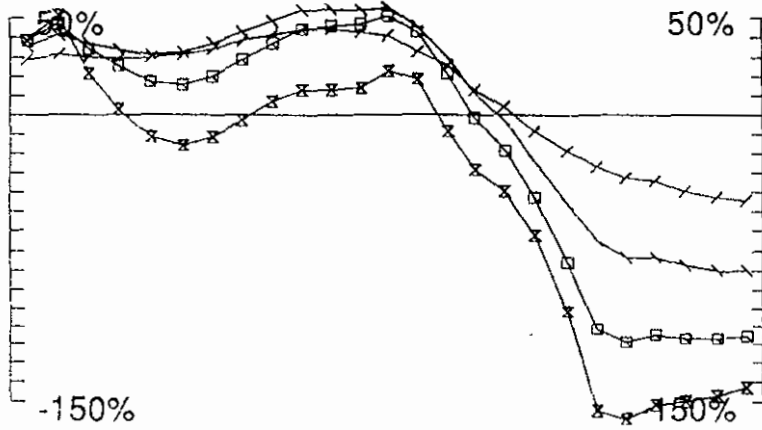
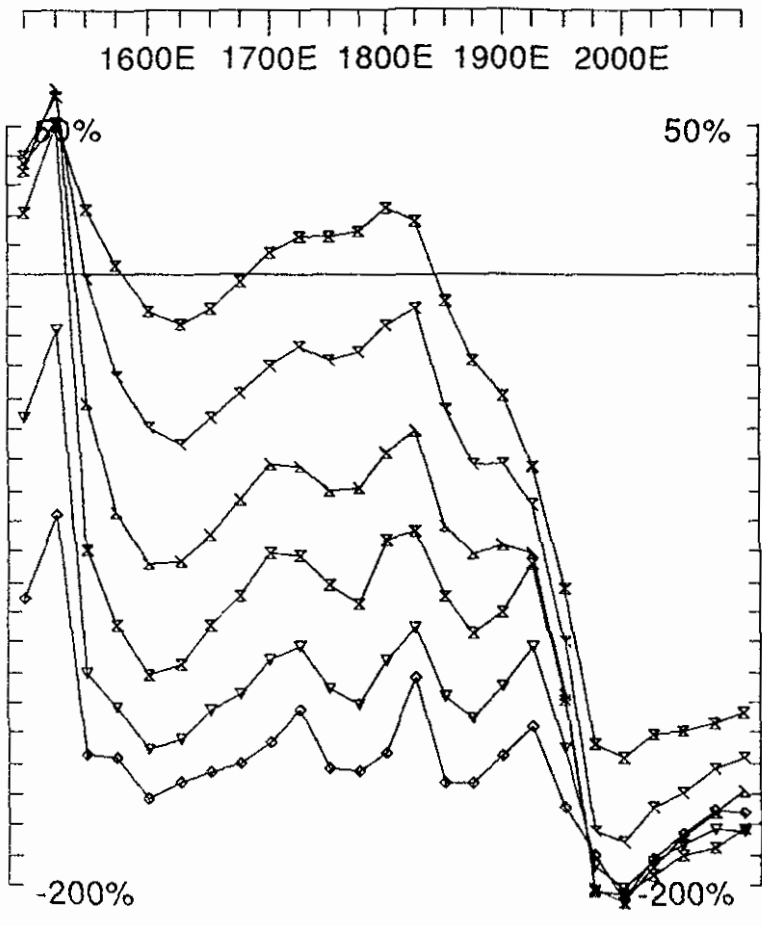


|                                                                                                 |                              |                   |
|-------------------------------------------------------------------------------------------------|------------------------------|-------------------|
| Loop: 2                                                                                         | Secondary, (Chn - Hpc)/ Hpl  | Surveyed: 22/7/94 |
| Line: 9 N                                                                                       | Contin. Norm at depth of 0 m | Reduced: 20/8/94  |
| Compt: Hz                                                                                       | Base Freq. 30.974 Hz         | Plotted: 23/8/94  |
| UTEM Survey at: BAR CLAIM GROUP<br>For: MINER RIVER RESOURCES LTD.<br><b>SJ GEOPHYSICS LTD.</b> |                              | Job<br>9417       |

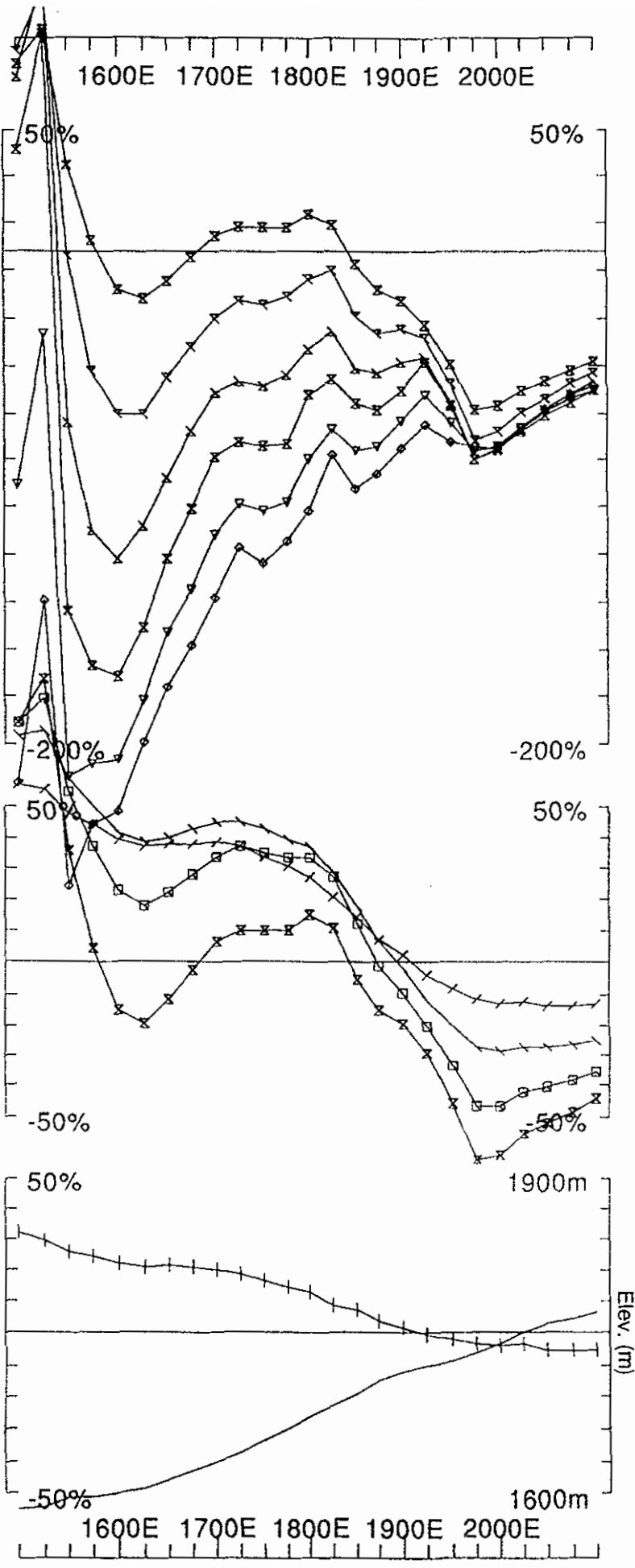




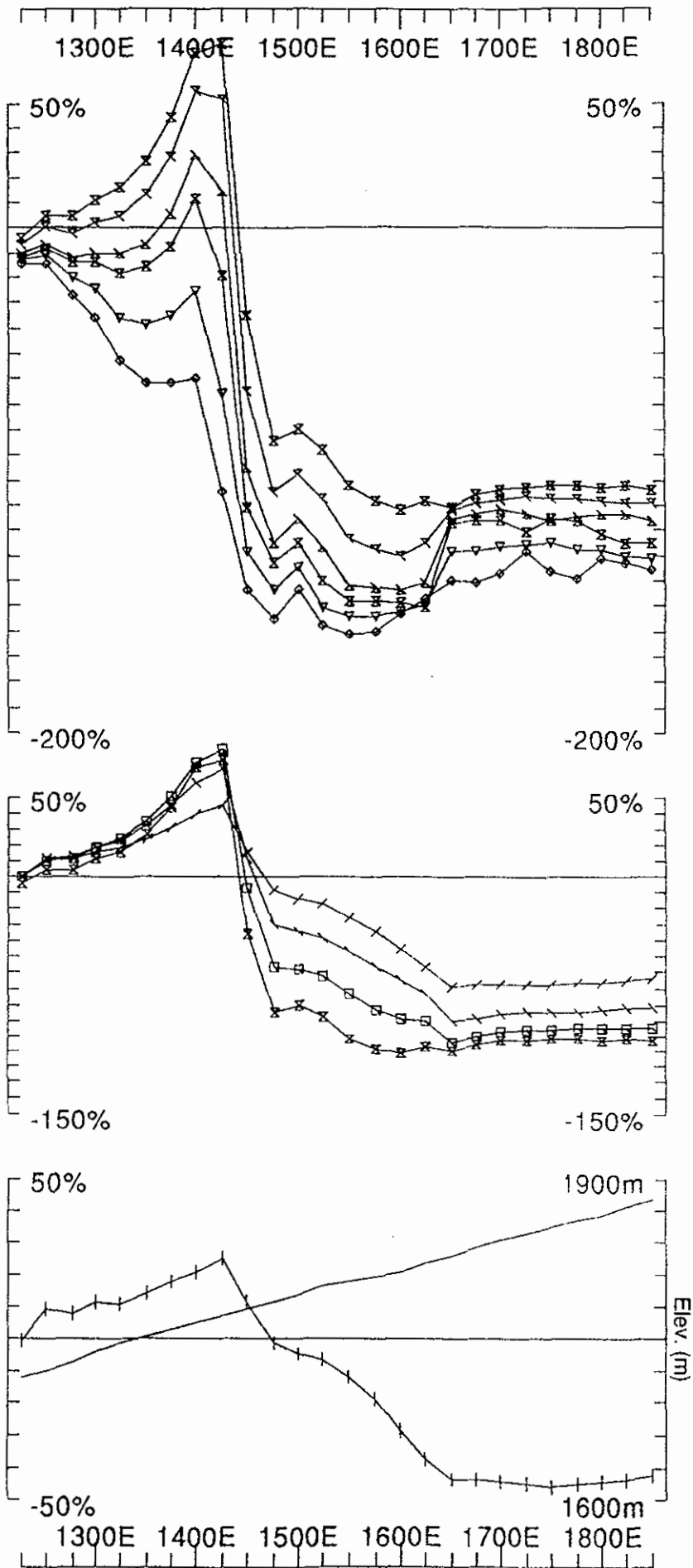
|           |                          |                                 |      |                   |
|-----------|--------------------------|---------------------------------|------|-------------------|
| Loop: 2   | Secondary, (Chn Hpc)/ Hp | UTEM Survey at: BAR CLAIM GROUP | Job  | Surveyed: 22/7/94 |
| Line: 9 N | Point Norm. at stn 1625  | For: MINER RIVER RESOURCES LTD. | 9417 | Reduced: 20/8/94  |
| Compt: Hz | Base Freq. 30.974 Hz     | <b>SJ GEOPHYSICS LTD.</b>       |      | Plotted: 23/8/94  |



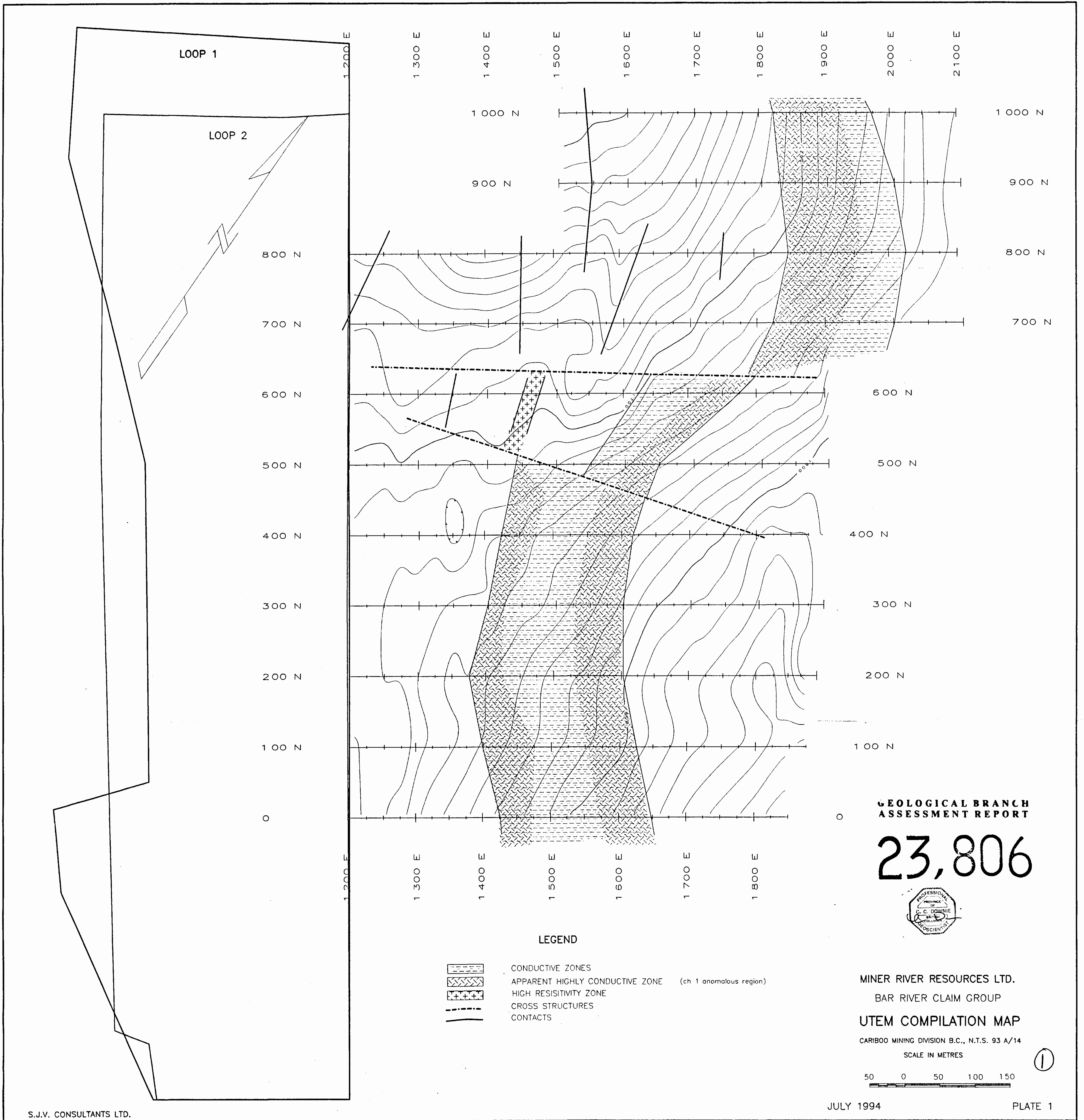
|            |                              |                                 |                              |
|------------|------------------------------|---------------------------------|------------------------------|
| Loop: 2    | Secondary, (Chn - Hpc)/(Hp)  | UTEM Survey at: BAR CLAIM GROUP | Surveyed: 22/7/94            |
| Line: 10 N | Contin. Norm at depth of 0 m | For: MINER RIVER RESOURCES LTD. | Reduced: 23/8/94             |
| Compt: Hz  | Base Freq. 30.974 Hz         | <b>SJ GEOPHYSICS LTD.</b>       | Job 9417<br>Plotted: 23/8/94 |



|            |                             |                                 |                   |
|------------|-----------------------------|---------------------------------|-------------------|
| Loop: 2    | Secondary, (Chn - Hpc)/ Hpl | UTEM Survey at: BAR CLAIM GROUP | Surveyed: 22/7/94 |
| Line: 10 N | Point Norm.at stn 1675      | For: MINER RIVER RESOURCES LTD. | Reduced: 22/8/94  |
| Compt: Hz  | Base Freq. 30.974 Hz        | <b>SJ GEOPHYSICS LTD.</b>       | Plotted: 23/8/94  |
|            |                             | Job 9417                        |                   |

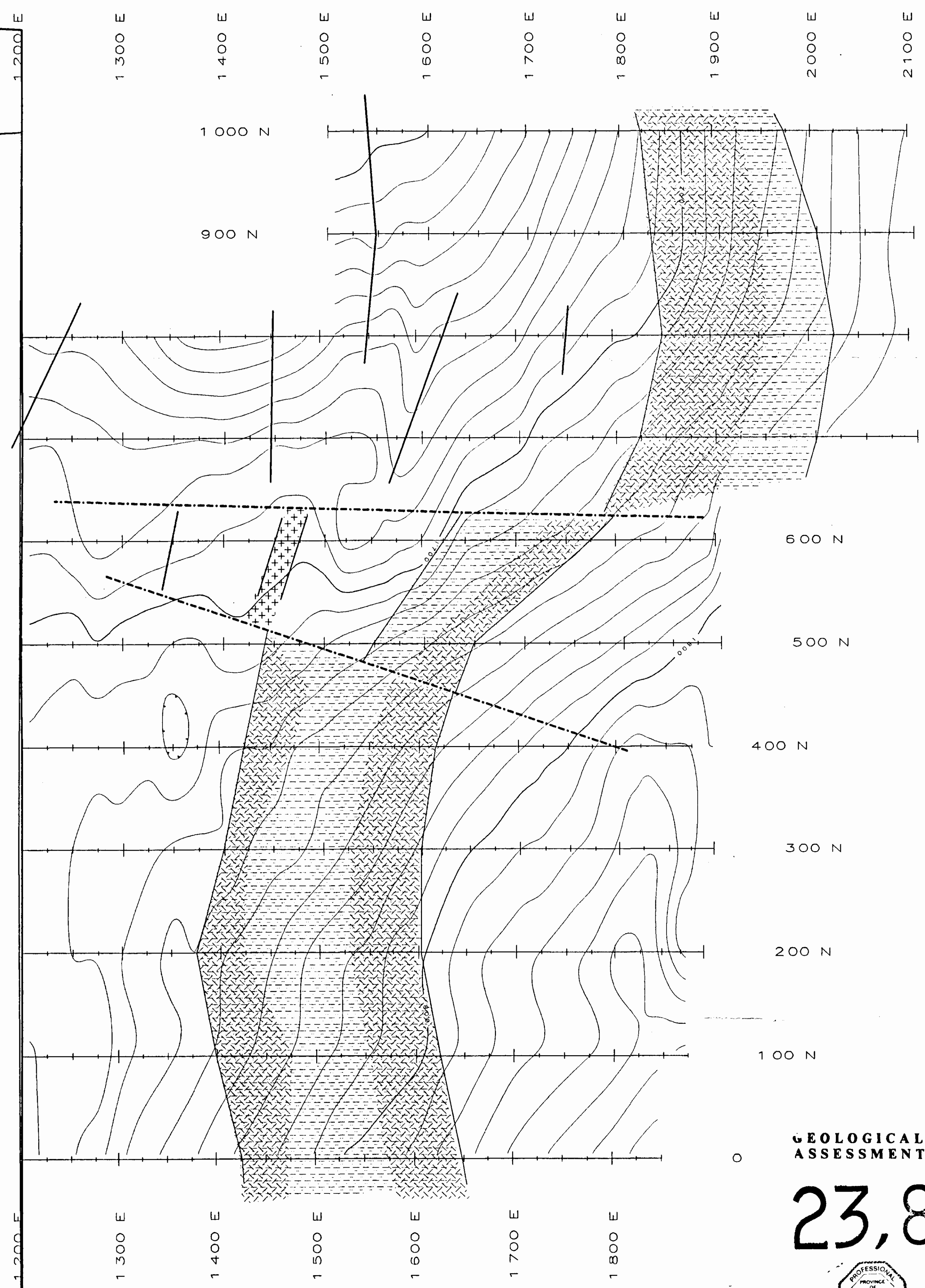


|           |                              |                                 |                                                           |
|-----------|------------------------------|---------------------------------|-----------------------------------------------------------|
| Loop: 2   | Secondary, (Chn - Hpc)/ Hp   | UTEM Survey at: BAR CLAIM GROUP | Job                                                       |
| Line: 0 N | Contin. Norm at depth of 0 m | For: MINER RIVER RESOURCES LTD. | 9417                                                      |
| Compt: Hz | Base Freq. 30.974 Hz         | <b>SJ GEOPHYSICS LTD.</b>       | Surveyed: 19/7/94<br>Reduced: 20/8/94<br>Plotted: 23/9/94 |



LOOP 1

LOOP 2

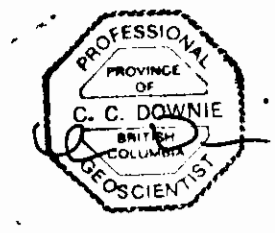


**LEGEND**

- CONDUCTIVE ZONES
- APPARENT HIGHLY CONDUCTIVE ZONE (ch 1 anomalous region)
- HIGH RESISTIVITY ZONE
- CROSS STRUCTURES
- CONTACTS

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

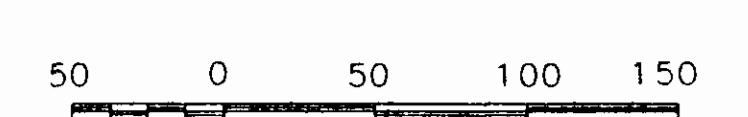
**23,806**



**MINER RIVER RESOURCES LTD.  
BAR RIVER CLAIM GROUP**

**UTEM COMPILATION MAP**

CARIBOO MINING DIVISION B.C., N.T.S. 93 A/14  
SCALE IN METRES



JULY 1994

PLATE 1



