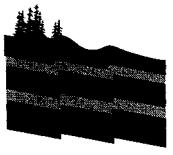
# REPORT ON THE DUNC MINERAL PROPERTY 8188 OF SECURITY ENVIRONMENTAL SYSTEMS INC. SLOCAN MINING DIVISION BRITISH COLUMBIA 82K/2W

50°14'N LATITUDE 116°56'W LONGITUDE

**Anthony Floyd**
**Ed McCrossan**
**October 30, 1987**







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## SUMMARY

The "Dunc" claim consisting of 16 units lies 100 kilometers north of Nelson, B.C. close to the Duncan Dam. The property is underlain by rocks of the Hamill-Badshot-Mohican formations of Lower Cambrian age and pre-Mississippian Lardeau group. Mineralization in the area is of two types, low silver-lead-zinc mineralization of "Mississippi Valley" style confined to the Badshot formation known locally as "Duncan" type whilst the other is "vein and replacement" silver-lead-zinc mineralization in the Lardeau group rocks. The old St. Patrick mine located on the Dunc claim is of the latter type.

Five kilometres of contour grid lines running north - south through the central portion of the property were sampled for soil geochemical analysis.

The results indicated two areas anomalous in lead, zinc, copper, and gold which were probably related to sporadic stratabound "Mississippi Valley" type mineralization within the predominantly carbonate Badshot - Mohican Formation.

Further work recommended for the Dunc claim includes a more detailed soil grid around the anomalies revealed by this study, as well as geological mapping, prospecting, and trenching of any strong anomalies revealed by the detailed soil geochemical study.

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## INTRODUCTION

This report has been prepared at the request of Security Environmental Systems Inc. as a corollary to the airborne magnetic and VLF-EM data collected during the fall of 1984. The survey at that time revealed an anomalous north - northwesterly trend on the eastern half of the claim block. This trend was a pair of strong VLF-EM conductive areas located on either side of magnetic highs of similar orientation (Fig. 4).

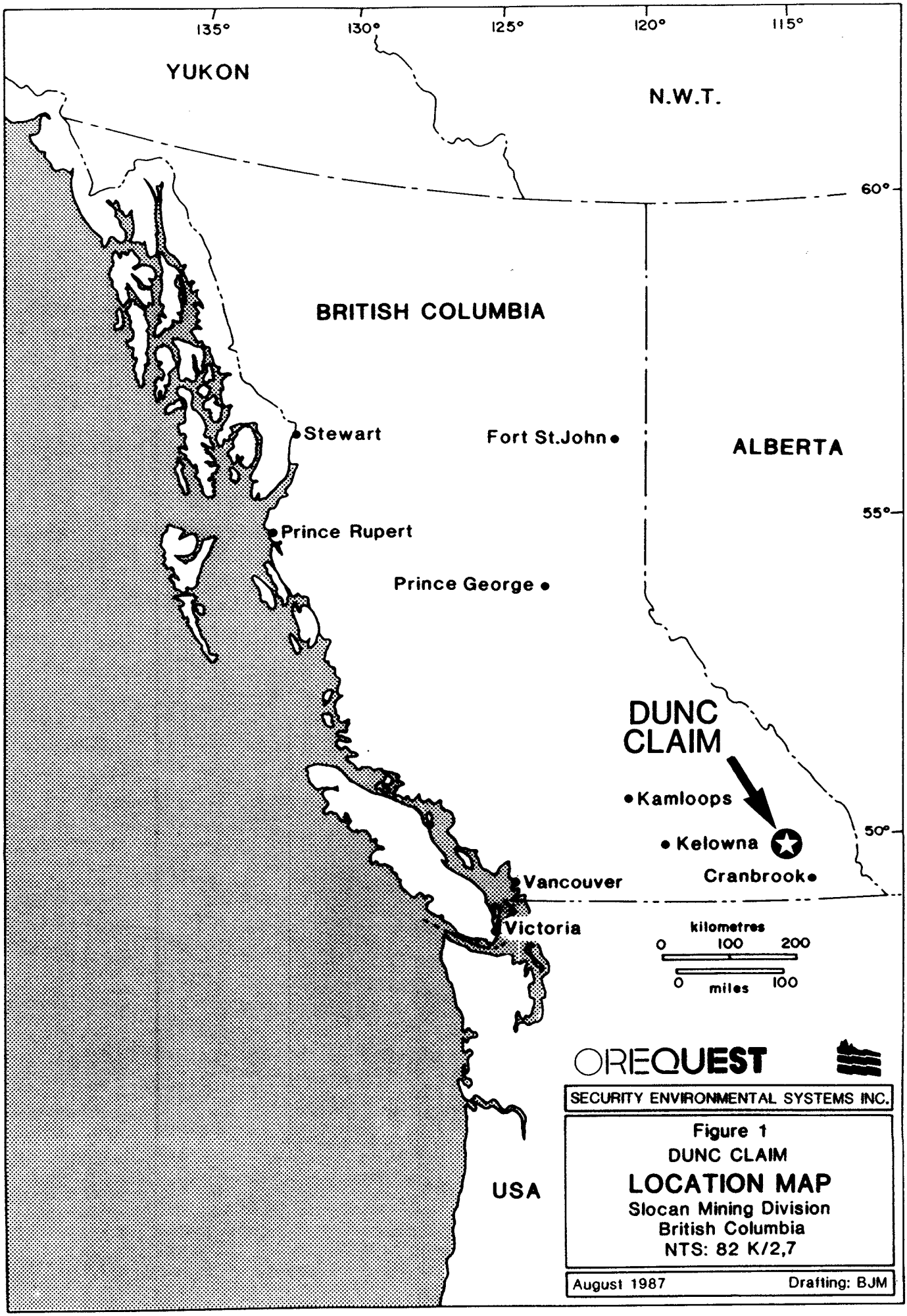
The present report describes the methods and results of a geochemical sampling program designed to investigate the origin of the geophysical conductors.

## CLAIMS

The property consists of 1 claim called the "Dunc" (Record Number 4066 (8)) comprising 16 units for a total of 400 hectares (Fig. 2). The claim was staked by Ken Antoniuk and recorded on August 31, 1983. On October 4th, 1983 the claim was transferred to Jetta Resources Ltd. The present work is being filed against an expiry date of August 31, 1987.

## LOCATION and ACCESS

The property is located 3 kilometers south of the Duncan Dam (NTS 82K/2) which is approximately 100 kilometers north of Nelson, B.C. (Figure 1). Access to the property is by way of Highway #31 from Nelson and then by taking a logging trail (see Figure 3) which bisects the claim.


135°
130°
125°
120°
115°
YUKON
N.W.T.
60°
BRITISH COLUMBIA
Stewart
Fort St.John
ALBERTA
55°
Prince Rupert
Prince George
DUNC
CLAIM
Kamloops
Kelowna
50°
Vancouver
Cranbrook
Victoria
kilometres
0 100 200
0 miles 100
USA
OREQUEST
SECURITY ENVIRONMENTAL SYSTEMS INC.
Figure 1
DUNC CLAIM
LOCATION MAP
Slocan Mining Division
British Columbia
NTS: 82 K/2,7
August 1987
Drafting: BJM

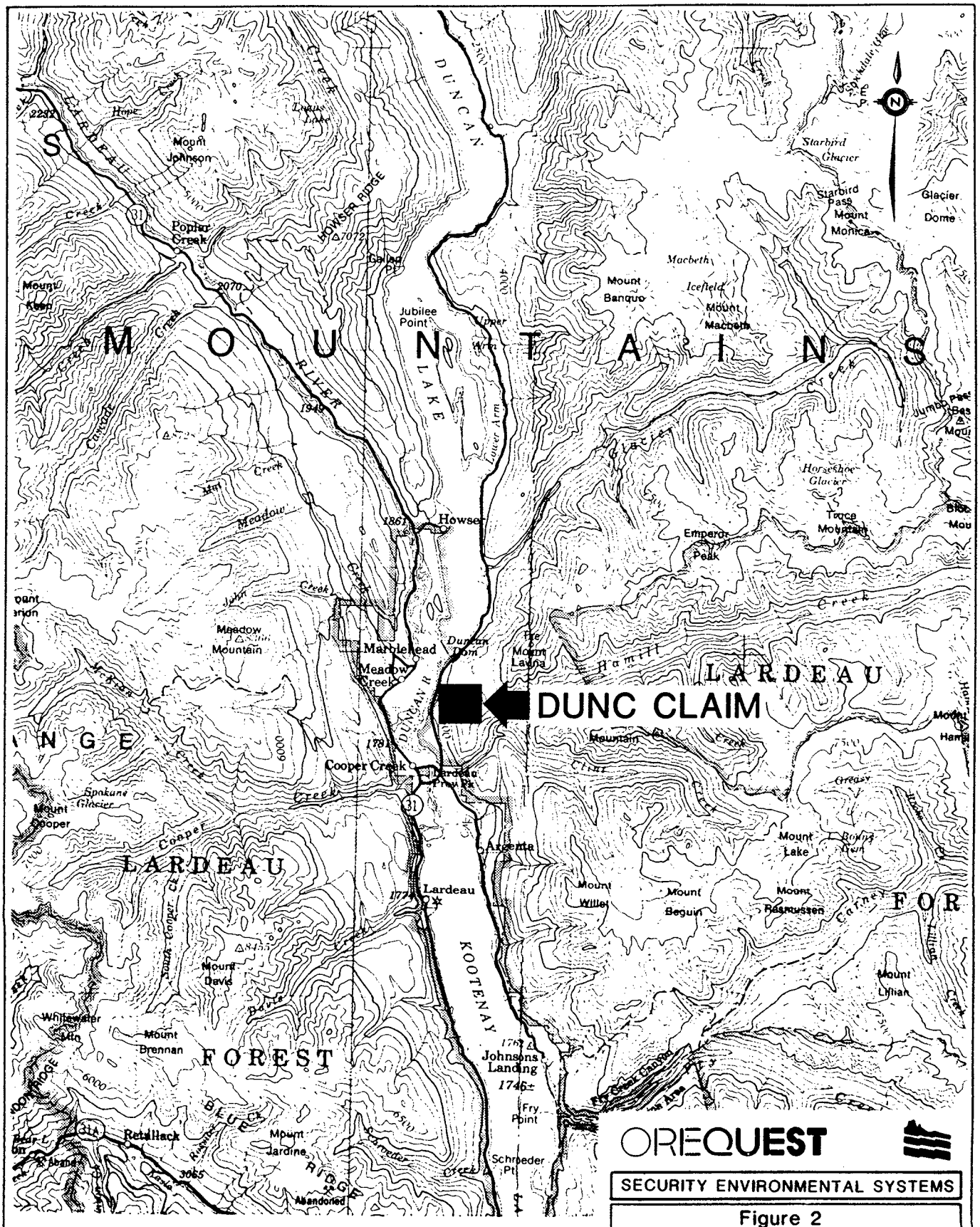



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Figure 2
DUNC CLAIM

# CLAIM MAP

Slocan Mining Division
British Columbia
NTS: 82 K/2, 7

August 1987

TOPOGRAPHY

The Dunc claim lies on the side of a very steep mountain, the slope of which is at the angle of repose. The elevation difference between Duncan Lake and the highest elevation on the Dunc claim is 1,000 metres. Peaks in the area commonly go above 2,000 metres and glaciers are common east of the Kootenay and Duncan Valleys.

HISTORY

The Dunc claim covers the old St. Patrick property which was first developed in 1912. The workings consists of an adit, an inclined shaft and several trenches which were developed to exploit silver-lead-zinc mineralization in limestones and schists of the Lardeau Group. Total production (Fyles 1964) which took place between 1917-1919 and 1937-1938, is reported as 42 tons grading 30 ozs Ag/ton, 36% Lead and 17.5% Zinc.

In 1984, Aerodat Ltd. flew a helicopter borne magnetic, EM, and VLF-EM survey of the Dunc claim for Jetta Resources Ltd.

Elsewhere in the area other properties have seen minor production. These include the Argenta, Surprise, Lavina and the Moonshine-Right Bower. Although there are no active mines in this locality at present, mineral exploration has been active in this district from the end of the last century to the present. The principal target has been mineralization of the "Duncan" type which consists of pyrite, sphalerite, galena and minor pyrrhotite disseminated in dolomite and siliceous dolomite of the Badshot Formation. Fyles 1964, reports the Duncan property contains "several million tons of low-grade lead-zinc mineralization".

## REGIONAL GEOLOGY

The Dunc claim is located on map 1326A Lardeau East half, British Columbia which is published with Memoir 369, Geological Survey of Canada - Geology of the Lardeau Map-Area, East half, British Columbia - by J.E. Reesor 1973.

The consolidated rocks in the area are predominantly Precambrian clastic sediments with minor carbonates, tightly folded in a north-northwesterly direction. These formations appear to be conformable with each other and are overlain unconformably by later Paleozoic and Mezozoic sediments. All of these rocks have been intruded by Mesozoic granodiorite and quartz monzonite. The southwestern corner of this map sheet is underlain by a series of Lower Cambrian and pre-Mississippian sedimentary formations. This area is considered to be a separate geological sequence, although it is time equivalent of some of the formations on the rest of the map sheet. The Dunc claim lies in the southwestern corner.

The lithologies dealt with in this report concern rocks of the Lardeau Group, Badshot-Mohican formations and the Hamill group as shown in the Table of Formations and which outcrop in the southwest corner of Map 1326A.

## LOCAL GEOLOGY

The area covered by the Dunc claim has been mapped first by Fyles (1964) and then by Reesor (1973). The most recent work by Reesor reveals that the principal units in the claim area are highly folded and faulted Hamill-Badshot-Mohican formations of Lower Cambrian age and the pre-Mississippian Lardeau group.

The Hamill Group is thought to be between 1,000 metres to 2,000 metres thick.

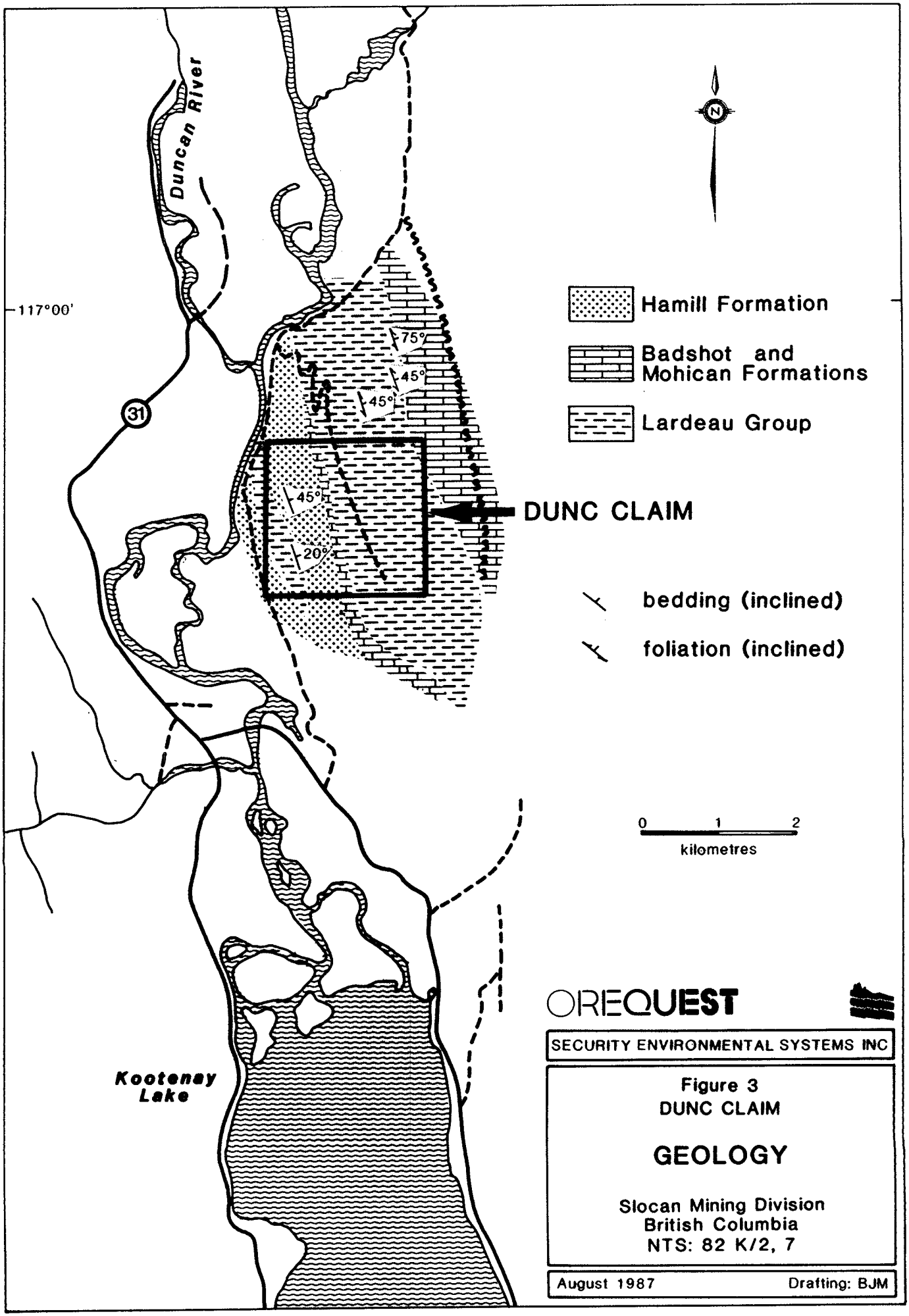
Duncan River
117°00'
31
75°
45°
45°
45°
20°
Hamill Formation
Badshot and Mohican Formations
Lardeau Group
DUNC CLAIM
bedding (inclined)
foliation (inclined)
0 1 2
kilometres
Kootenay Lake
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Figure 3
DUNC CLAIM
GEOLOGY
Slocan Mining Division
British Columbia
NTS: 82 K/2, 7
August 1987
Drafting: BJM

In the area of the Dunc claim the generally medium to fine grained quartzite unit with pelitic interbeds is metamorphosed to sericitic, fine grained white quartzite, brown micaceous quartzite, green garnet-mica schist and dense grey quartzite.

The Badshot-Mohican Formation lies stratigraphically above the Hamill and in the claim area consists of bands of marble or dolomitic marble. This unit is a marker horizon and also the host for the "Duncan" lead-zinc mineralization. In the area of higher grade metamorphism this unit becomes a coarse mica schist or a staurolite-garnet schist. Both the Hamill and the Badshot-Mohican Formations are thought to be Lower Cambrian in age.

The Lardeau group, metamorphosed in the claim area to upper greenschist facies, consists of chlorite-muscovite-quartz schist, biotite-muscovite schist, micaceous quartzite, garnet-biotite-muscovite-quartz schist and tremolite marble. Black carbonaceous calcite biotite-quartz schist and dense black carbonaceous phyllite is commonly found near the base of the group. The age of the Lardeau Group ranges from post-Lower Cambrian to pre-Upper Mississippian.

## MINERALIZATION

Mineral exploration has been sporadic in this district from the end of the last century to the present. The most common type of mineralization appears to be low grade lead-zinc deposits of the "Duncan" type which is generally confined to the Badshot-Mohican Formation close to the Duncan anticline. Typical examples would be the Duncan, Lavina, Sal Mag and Argenta. Mineralized zones of the Duncan type consist of pyrite, sphalerite, galena and minor pyrrhotite disseminated in dolomite and siliceous dolomite of the Badshot Formation. The largest zone delineated to date

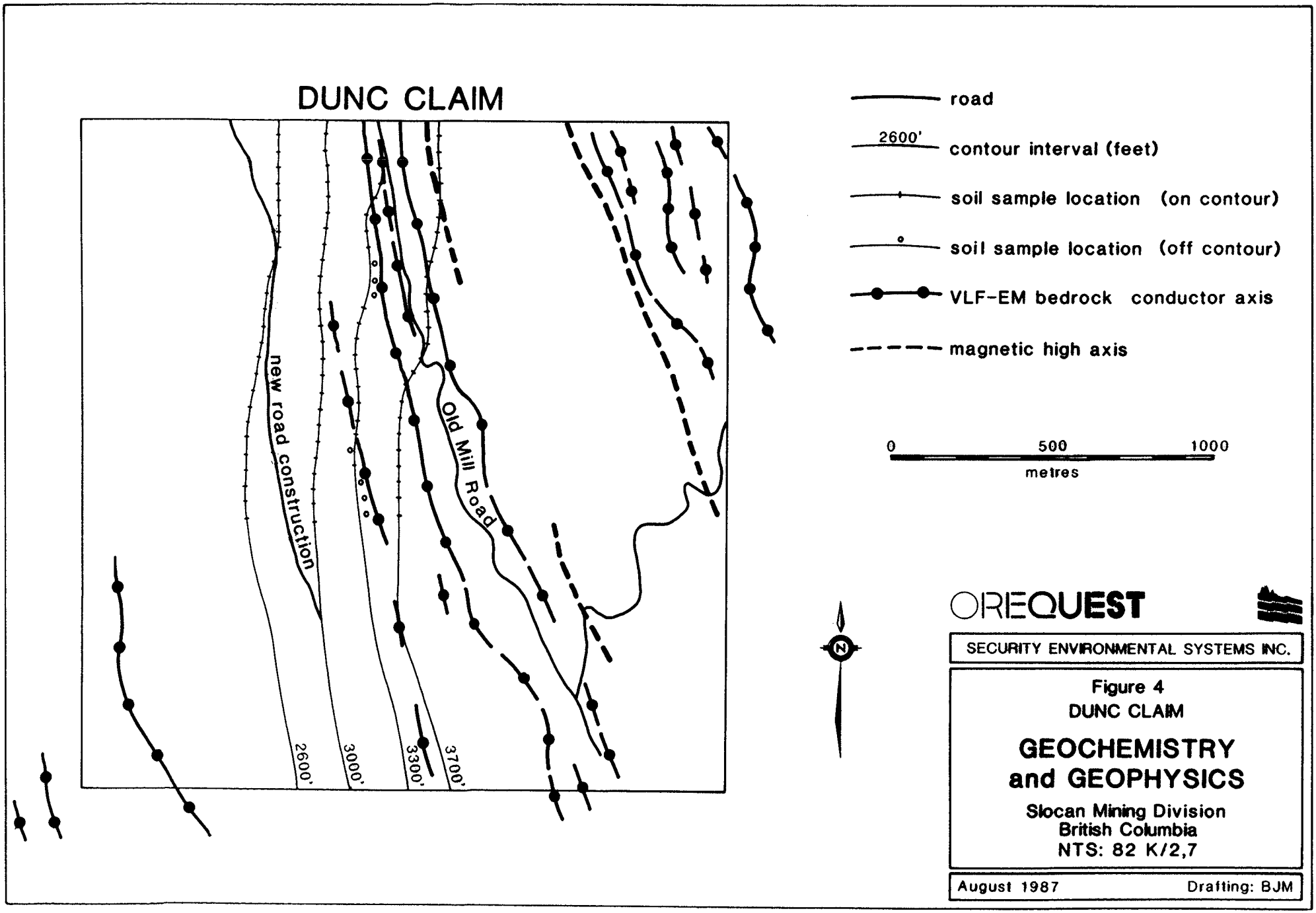
DUNC CLAIM
road
2600'
contour interval (feet)
soil sample location (on contour)
soil sample location (off contour)
VLF-EM bedrock conductor axis
magnetic high axis
0
500
1000
metres
new road construction
Old Mill Road
2600'
3000'
3300'
3700'
N
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Figure 4
DUNC CLAIM
GEOCHEMISTRY
and GEOPHYSICS
Slocan Mining Division
British Columbia
NTS: 82 K/2,7
August 1987
Drafting: BJM

is 3,000 feet long along strike, 500 feet down dip and between 20-100 feet in thickness. The deposit is thought to be of "Mississippi Valley" type.

In the southeast corner of the Dunc claim lies the old St. Patrick mine which saw minor production from 1917-1919 and in 1937 and 1938. The mineralization (Fyles 1964) occurs as scattered lenses along minor faults and as a replacement of limestone within units mapped (Reesor 1973) as Lardeau group. Galena and sphalerite occur in a gange of siderite. High silver values in the reported production suggest this mineralization is not of the "Duncan" type.

GEOCHEMISTRY

A total of 100 soil samples were collected on the Dunc property. Samples were taken every 50 metres along the 2600, 3000, 3300, and 3700 metre contours which ran north - south through the central portion of the claim.

The samples were taken from a depth of 12" - 18" from the "B" soil horizon. All the samples were dried and then shipped to Vangeochem Lab Ltd. in Vancouver where they were sieved to -80 mesh and analysed by I.C.P. methods

The soil survey revealed two areas having anomalous values of copper, lead, zinc and gold. They were located on the northern and central portions of the property (Fig. 5).

The northern anomaly consisted of five adjacent soil sample locations on the 3,000 and 3,300 metre contours. Zinc values were the highest at 400 and 430 ppm. Copper results ranged between 132 and 368 ppm and the highest lead assay was 232 ppm.

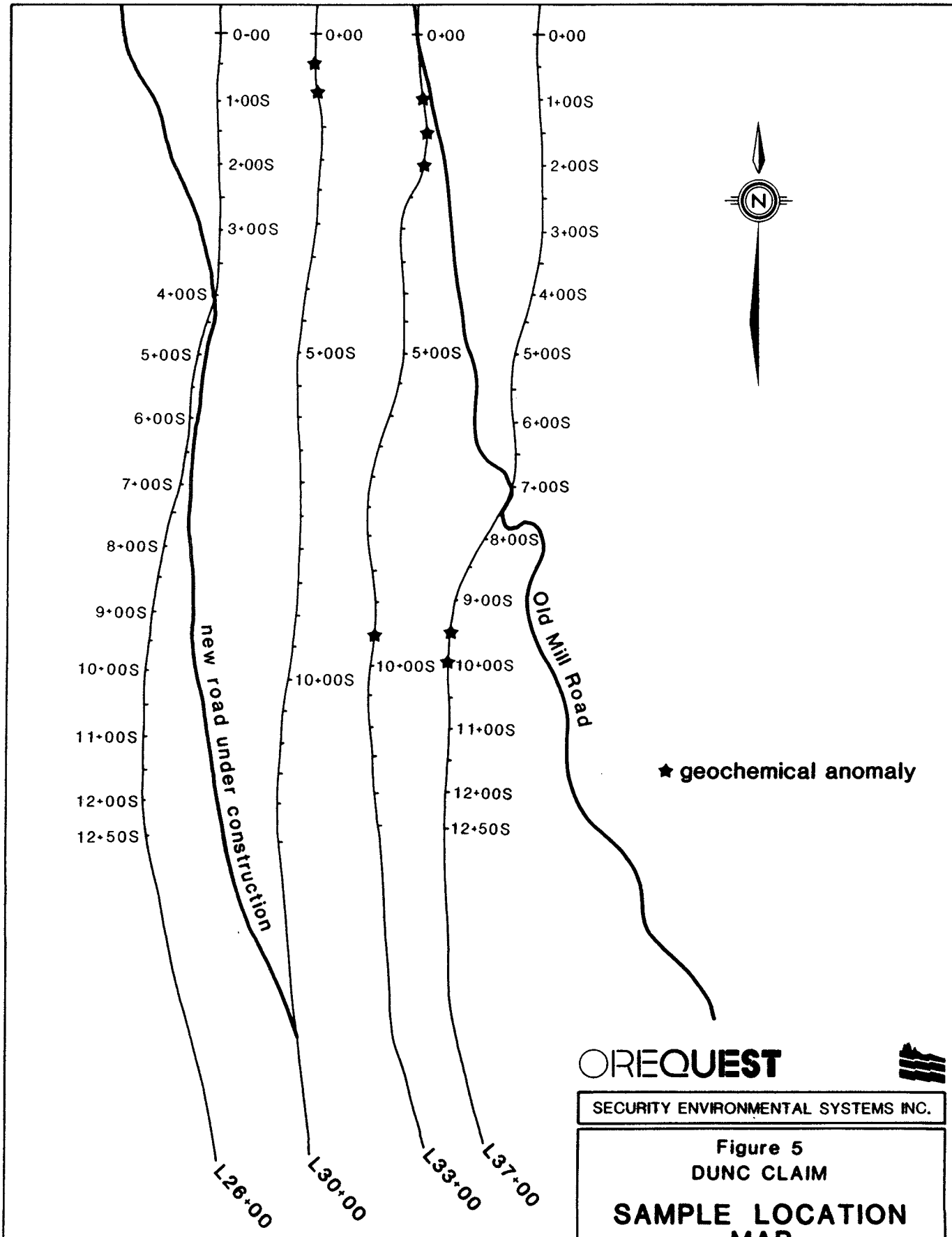


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Figure 5
DUNC CLAIM

# SAMPLE LOCATION MAP

Slocan Mining Division
British Columbia
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The presence of gold was strong at 5 ppm.

The central anomaly consisted of three adjacent soil sample locations on the 3,300 and 3,700 metre contours. The highest zinc value was 505 ppm. At the same location, lead content was 143 ppm. Again, gold was anomalous in this area, having two stations of 3 ppm each.

## CONCLUSIONS

The "Dunc" property has seen limited production in the past from the old St. Patrick Mine which is located in the southeast portion of the claim. This mineralization is probably in the Lardeau group.

Elsewhere in the area lead-zinc mineralization has been delineated in carbonate units of the Badshot-Mohican Formation.

The soil geochemical anomalies on the Dunc claim were probably due to sporadic stratabound lead - zinc mineralization within a relatively thin section of the Badshot - Mohican Formation, which strikes north - south through the centre of the property and coincides with a VLF-EM conductor axis as well as the geochemical anomaly sites.

## RECOMMENDATIONS

The present reconnaissance soil sampling program revealed two areas on the Dunc claim which were anomalous in lead, zinc, copper, and gold. It is recommended that a more detailed soil grid be sampled to determine the extent and continuity of these anomalous areas.

Geological mapping, prospecting and trenching (of geochemical anomalies) should also be carried out on the Dunc claim.

Ground VLF-EM and magnetometer surveys could also be run to help locate zones of mineralization as well as geological contacts.

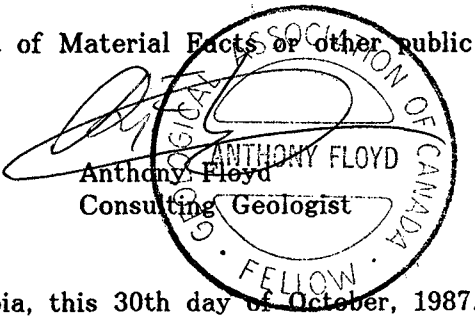
## COST STATEMENT

| | |
|---|---|
| 2 Technicians - 2 days @ $300/day | $ 600 |
| Analyses - 100 samples @ $20/sample | 2,000 |
| Truck - 2 days @ $75/day | 150 |
| Meals and Accommodation - 4 man days @ $50/day | 200 |
| Report and Supervision | 250 |
| TOTAL | $ 3,200 |

# CERTIFICATE of QUALIFICATIONS

I, Anthony Floyd, of 3400 West 2nd Avenue, Vancouver, British Columbia hereby certify that:

1. I am a 1971 graduate of Nottingham University, England, with a BSc. Honours degree in geology.
2. I am a 1972 graduate of Leicester University, England, with a M.Sc degree in Mineral Exploration and Mining Geology.
3. I have practised my profession for the past fourteen years in Canada, United States and Europe. For the past fourteen years I have been a resident in British Columbia.
4. I am a Fellow of the Geological Association of Canada.
5. The information contained in this report was obtained by direct supervision of the work done on the property by OreQuest Consultants Ltd. in 1987 and a review of all data listed in the Bibliography.
6. I have not received, nor do I expect to receive, any interest direct or indirect in the properties or securities of Security Environmental Systems Inc.
7. I consent to and authorize the use of the attached report and my name in the Company's Prospectus, Statement of Material Facts or other public document.




Anthony Floyd
Consulting Geologist

DATED at Vancouver, British Columbia, this 30th day of October, 1987.

## CERTIFICATE of QUALIFICATIONS

I, Ed McCrossan, of 3328 W. 2nd Avenue, Vancouver, British Columbia hereby certify:

1. I am a graduate of the University of British Columbia (1984) and hold a BSc. degree in geology.
2. I am presently employed as a consulting geologist with OreQuest Consultants Ltd. of 404-595 Howe Street, Vancouver, British Columbia.
3. I have been employed in my profession by various mining companies since graduation and have worked on projects in Canada, Hungary, Thailand, China, and Australia.
4. The information contained in this report was obtained by direct supervision of the work done on the property by OreQuest Consultants Ltd. in 1987 and a review of all data listed in the Bibliography.
5. Neither OreQuest Consultants Ltd. nor myself have or expect to receive direct or indirect interest in the property nor in the securities of Security Environmental Systems Inc.
6. I consent to and authorize the use of the attached report and my name in the Company's Prospectus, Statement of Material Facts or other public document.

Ed McCrossan
Consulting Geologist

DATED at Vancouver, British Columbia, this 30th day of October, 1987.

# BIBLIOGRAPHY

FLOYD, A.
1985: Report on the Dunc Claim, Nelson, B.C. for Jetta Resources Ltd. Unpublished company report.

FYLES, J.T.
1964: Geology of the Duncan Lake Area, British Columbia, Department of Mines.

KENNEDY, E.G.
1983: Report on the Dunc claim, Nelson Area, British Columbia for Jetta Resources Ltd.

REESOR, J.E.
1973: Memoir 369, Geological Survey of Canada, Geology of the Lardeau Map Area, East Half, British Columbia.

# APPENDIX A

## SOIL GEOCHEMICAL ANALYSES

MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH:(604)986-5211 TELEX:04-352578
BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH:(604)251-5656

# ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

COMPANY: OREQUEST CONSULTANTS
ATTENTION:
PROJECT: DUNC CLAIM

REPORT#: 871042PA
JOB#: 871042
INVOICE#: 871042NA

DATE RECEIVED: 87/08/13
DATE COMPLETED: 87/09/08
COPY SENT TO:

ANALYST



| SAMPLE NAME | AG PPM | AL % | AS PPM | AU PPM | BA PPM | BI PPM | CA % | CD PPM | CO PPM | CR PPM | CU PPM | FE % | K % | MG % | MN PPM | MO PPM | NA % | NI PPM | P % | PB PPM | PD PPM | PT PPM | SB PPM | SN PPM | SR PPM | U PPM | W PPM | ZN PPM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2600 0+50S | .1 | 2.95 | ND | ND | 163 | 3 | 1.13 | .3 | 13 | 26 | 28 | 2.70 | .06 | .53 | 712 | 1 | .10 | 46 | .27 | 22 | ND | ND | ND | ND | 89 | ND | ND | 189 |
| L2600 1+00S | .1 | 2.85 | ND | ND | 258 | ND | .77 | .3 | 18 | 35 | 26 | 3.38 | .07 | .73 | 789 | 2 | .11 | 53 | .10 | 29 | ND | ND | ND | ND | 44 | ND | ND | 207 |
| L2600 1+50S | .1 | 2.72 | 4 | ND | 190 | 4 | .27 | .1 | 19 | 38 | 28 | 3.60 | .06 | .60 | 508 | 2 | .13 | 72 | .06 | 28 | ND | ND | ND | ND | 29 | ND | ND | 206 |
| L2600 2+00S | .1 | 1.74 | ND | ND | 124 | 3 | .15 | .2 | 13 | 22 | 10 | 2.54 | .05 | .47 | 749 | 1 | .16 | 44 | .09 | 30 | ND | ND | 3 | ND | 18 | ND | 3 | 202 |
| L2600 2+50S | .1 | 2.55 | 6 | ND | 190 | 5 | .27 | .1 | 24 | 28 | 19 | 3.96 | .09 | .71 | 685 | 1 | .16 | 67 | .17 | 37 | ND | ND | ND | ND | 31 | ND | ND | 302 |
| L2600 3+00S | .1 | 2.73 | 7 | ND | 170 | ND | .27 | .1 | 21 | 33 | 27 | 3.90 | .09 | .82 | 519 | 2 | .14 | 81 | .13 | 33 | ND | ND | ND | ND | 35 | ND | ND | 243 |
| L2600 3+50S | .1 | 2.15 | ND | ND | 112 | ND | .18 | .1 | 16 | 36 | 28 | 3.19 | .06 | .83 | 318 | 1 | .13 | 53 | .07 | 29 | ND | ND | ND | ND | 17 | ND | ND | 238 |
| L2600 4+00S | .1 | 3.32 | 6 | ND | 135 | ND | .72 | .1 | 18 | 17 | 22 | 3.38 | .08 | .43 | 454 | 1 | .13 | 53 | .08 | 33 | ND | ND | ND | ND | 55 | ND | ND | 276 |
| L2600 4+50S | .1 | 1.94 | 3 | ND | 164 | ND | .17 | .1 | 16 | 25 | 6 | 2.64 | .05 | .42 | 1109 | 1 | .11 | 33 | .18 | 31 | ND | ND | 3 | ND | 19 | ND | 4 | 244 |
| L2600 5+00S | .1 | 1.88 | 18 | ND | 45 | ND | .21 | .1 | 18 | 44 | 56 | 3.97 | .07 | 1.00 | 289 | 2 | .09 | 60 | .08 | 31 | ND | ND | 3 | ND | 15 | ND | 5 | 127 |
| L2600 5+50S | .4 | 2.88 | 5 | ND | 182 | 3 | .43 | .1 | 17 | 20 | 25 | 3.35 | .11 | .52 | 794 | 2 | .11 | 51 | .25 | 28 | ND | ND | ND | ND | 48 | ND | ND | 253 |
| L2600 6+00S | .1 | 2.88 | 6 | ND | 115 | 4 | .18 | .1 | 20 | 52 | 50 | 4.06 | .07 | 1.09 | 410 | 1 | .13 | 74 | .16 | 27 | ND | ND | ND | ND | 16 | ND | 3 | 200 |
| L2600 6+50S | .1 | 1.85 | ND | ND | 343 | ND | .52 | .4 | 17 | 19 | 11 | 2.56 | .05 | .43 | 1396 | 1 | .15 | 39 | .28 | 26 | ND | ND | ND | ND | 64 | ND | ND | 326 |
| L2600 7+00S | .1 | 3.37 | 3 | ND | 133 | ND | .28 | .1 | 34 | 30 | 42 | 3.62 | .14 | .73 | 663 | 1 | .09 | 85 | .12 | 36 | ND | ND | ND | ND | 29 | ND | ND | 231 |
| L2600 7+50S | .1 | 2.03 | ND | ND | 172 | ND | .19 | .1 | 17 | 36 | 24 | 2.86 | .06 | .70 | 384 | 1 | .13 | 54 | .12 | 29 | ND | ND | ND | ND | 18 | ND | ND | 237 |
| L2600 8+00S | .1 | 2.18 | 5 | ND | 198 | ND | .27 | .6 | 16 | 37 | 21 | 3.12 | .06 | .74 | 498 | 2 | .14 | 53 | .17 | 36 | ND | ND | 3 | ND | 23 | ND | ND | 257 |
| L2600 8+50S | .1 | 2.52 | ND | ND | 137 | 3 | .18 | .2 | 19 | 42 | 41 | 3.65 | .07 | .65 | 407 | 2 | .13 | 71 | .09 | 31 | ND | ND | ND | ND | 15 | ND | ND | 230 |
| L2600 9+00S | .1 | 2.52 | ND | ND | 220 | ND | .24 | .5 | 19 | 34 | 26 | 3.29 | .08 | .72 | 1125 | 2 | .12 | 68 | .12 | 35 | ND | ND | ND | ND | 22 | ND | ND | 233 |
| L2600 9+50S | .1 | 2.18 | 6 | ND | 277 | ND | .37 | 1.1 | 24 | 32 | 19 | 3.19 | .10 | .67 | 1777 | 1 | .14 | 67 | .12 | 87 | ND | ND | ND | ND | 36 | 4 | ND | 329 |
| L2600 10+00S | .3 | 2.82 | ND | ND | 178 | ND | .30 | .7 | 15 | 17 | 11 | 2.74 | .06 | .44 | 586 | 1 | .14 | 75 | .18 | 17 | ND | ND | ND | ND | 34 | ND | ND | 315 |
| L2600 10+50S | .1 | 2.16 | 10 | ND | 119 | 3 | .35 | .1 | 23 | 22 | 18 | 3.21 | .09 | .56 | 1151 | 2 | .11 | 67 | .09 | 48 | ND | ND | ND | ND | 29 | ND | ND | 202 |
| L2600 11+00S | .2 | 1.09 | ND | ND | 148 | ND | .39 | .5 | 10 | 13 | 4 | 1.68 | .06 | .34 | 723 | ND | .07 | 31 | .10 | 24 | ND | ND | 3 | ND | 34 | ND | 5 | 168 |
| L2600 11+50S | .3 | 2.27 | 4 | ND | 127 | 5 | .30 | .1 | 36 | 20 | 28 | 3.81 | .15 | .62 | 625 | 1 | .07 | 66 | .09 | 23 | ND | ND | ND | ND | 36 | ND | ND | 196 |
| L2600 12+00S | .2 | 3.27 | ND | ND | 155 | ND | .25 | .1 | 42 | 26 | 40 | 4.73 | .18 | .81 | 843 | 1 | .12 | 97 | .24 | 23 | ND | ND | ND | ND | 40 | ND | ND | 258 |
| L2600 12+50S | .4 | 3.71 | ND | ND | 116 | ND | .37 | .1 | 24 | 23 | 44 | 3.86 | .13 | .70 | 500 | 2 | .09 | 58 | .16 | 17 | ND | ND | ND | ND | 41 | ND | ND | 181 |
| L3000 0+50S | .1 | 3.32 | ND | 3 | 458 | 5 | .36 | .4 | 29 | 111 | 67 | 4.02 | .07 | 1.69 | 1562 | 2 | .18 | 123 | .19 | 23 | ND | ND | ND | ND | 28 | ND | ND | 229 |
| L3000 1+00S | .1 | 4.54 | 5 | 5 | 403 | 6 | .55 | .1 | 52 | 274 | 153 | 7.39 | .16 | 3.23 | 1305 | 2 | .25 | 253 | .10 | 1 | ND | ND | ND | ND | 23 | ND | ND | 126 |
| L3000 1+50S | .1 | 3.26 | ND | ND | 230 | 4 | .39 | .6 | 30 | 128 | 50 | 4.45 | .09 | 1.71 | 644 | 3 | .20 | 152 | .12 | 25 | ND | ND | ND | ND | 32 | ND | ND | 297 |
| L3000 2+00S | .1 | 2.33 | 6 | ND | 180 | 3 | .46 | .5 | 19 | 31 | 28 | 3.82 | .09 | 1.17 | 1420 | 1 | .15 | 50 | .06 | 37 | ND | ND | ND | ND | 33 | ND | ND | 206 |
| L3000 2+50S | .1 | 1.72 | 8 | ND | 171 | ND | .51 | .7 | 17 | 24 | 51 | 3.36 | .08 | .80 | 1864 | 1 | .11 | 51 | .13 | 22 | ND | ND | ND | ND | 101 | ND | 3 | 152 |
| L3000 3+00S | .1 | 2.88 | ND | 3 | 166 | 4 | .39 | .1 | 26 | 33 | 84 | 5.58 | .10 | 1.27 | 979 | 2 | .13 | 80 | .08 | 33 | ND | ND | ND | ND | 28 | ND | ND | 187 |
| L3000 3+50S | .1 | .98 | ND | ND | 143 | 4 | .62 | .2 | 14 | 11 | 39 | 3.08 | .07 | .42 | 549 | 1 | .14 | 45 | .13 | 26 | ND | ND | 4 | ND | 62 | ND | ND | 269 |
| L3000 4+00S | .1 | 2.82 | ND | 3 | 149 | ND | .63 | .6 | 31 | 82 | 93 | 5.10 | .08 | 1.57 | 733 | 3 | .20 | 117 | .08 | 56 | ND | ND | ND | ND | 43 | ND | ND | 276 |
| L3000 4+50S | .1 | 1.37 | ND | ND | 196 | 3 | .86 | 1.0 | 14 | 16 | 27 | 3.08 | .08 | .65 | 1005 | 1 | .18 | 43 | .23 | 35 | ND | ND | ND | ND | 78 | ND | ND | 378 |
| L3000 5+00S | .1 | 1.23 | ND | ND | 175 | ND | .46 | .7 | 12 | 13 | 18 | 3.19 | .06 | .49 | 1080 | 1 | .16 | 40 | .15 | 35 | ND | ND | 4 | ND | 54 | ND | ND | 309 |
| L3000 5+50S | .1 | 2.56 | 3 | ND | 98 | ND | .31 | .1 | 20 | 56 | 44 | 3.95 | .07 | 1.12 | 342 | 2 | .15 | 77 | .11 | 29 | ND | ND | ND | ND | 26 | ND | ND | 224 |
| L3000 6+00S | .1 | 2.46 | ND | ND | 171 | ND | .78 | .1 | 13 | 32 | 11 | 2.86 | .06 | .88 | 491 | 1 | .13 | 53 | .06 | 24 | ND | ND | ND | ND | 36 | ND | ND | 235 |
| L3000 6+50S | .1 | 2.49 | ND | ND | 160 | ND | .45 | .1 | 22 | 38 | 33 | 3.53 | .08 | .86 | 553 | 2 | .12 | 68 | .15 | 29 | ND | ND | ND | ND | 35 | ND | ND | 208 |
| L3000 7+00S | .1 | 2.02 | ND | ND | 139 | ND | 1.21 | .1 | 13 | 19 | 19 | 2.90 | .07 | .67 | 732 | 1 | .07 | 41 | .07 | 31 | ND | ND | ND | ND | 48 | ND | ND | 129 |
| DETECTION LIMIT | .1 | .01 | 3 | 3 | 1 | 3 | .01 | .1 | 1 | 1 | 1 | .01 | .01 | .01 | 1 | 1 | .01 | 1 | .01 | 2 | 3 | 5 | 2 | 2 | 1 | 5 | 3 | 1 |

| SAMPLE NAME | AG PPM | AL % | AS PPM | AU PPM | BA PPM | BI PPM | CA % | CD PPM | CO PPM | CR PPM | CU PPM | FE % | K % | MG % | MN PPM | MO PPM | NA % | NI PPM | P % | PB PPM | PD PPM | PT PPM | SB PPM | SN PPM | SR PPM | U PPM | W PPM | ZN PPM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L3000 7+50S | .1 | 1.53 | ND | ND | 133 | ND | 4.45 | .1 | 9 | 17 | 17 | 2.32 | .09 | .69 | 501 | 1 | .08 | 31 | .09 | 22 | ND | ND | ND | ND | 114 | ND | 3 | 121 |
| L3000 8+00S | .1 | 1.81 | 4 | ND | 114 | ND | 1.28 | .1 | 14 | 16 | 22 | 3.52 | .09 | .62 | 420 | 2 | .08 | 50 | .07 | 25 | ND | ND | ND | ND | 57 | ND | ND | 110 |
| L3000 8+50S | .1 | 2.75 | 4 | ND | 139 | ND | .36 | .1 | 24 | 22 | 68 | 4.86 | .10 | 1.10 | 368 | 4 | .11 | 79 | .03 | 38 | ND | ND | ND | ND | 31 | ND | ND | 130 |
| L3000 9+00S | .1 | 2.53 | ND | ND | 137 | 6 | 2.60 | .1 | 18 | 22 | 49 | 4.44 | .11 | 2.80 | 1066 | 2 | .18 | 62 | .06 | 46 | ND | ND | ND | ND | 55 | ND | ND | 171 |
| L3000 9+50S | .3 | .96 | ND | ND | 94 | 3 | .45 | .2 | 9 | 9 | 15 | 2.19 | .06 | .37 | 546 | 1 | .11 | 25 | .03 | 66 | ND | ND | ND | ND | 39 | ND | ND | 240 |
| L3000 10+00S | .1 | .88 | ND | ND | 105 | ND | .76 | .7 | 9 | 9 | 15 | 2.31 | .07 | .40 | 979 | 1 | .13 | 26 | .04 | 63 | ND | ND | ND | ND | 63 | ND | ND | 271 |
| L3000 10+50S | .1 | 1.23 | 3 | ND | 185 | ND | 3.48 | .9 | 13 | 16 | 34 | 2.89 | .10 | .82 | 931 | 2 | .12 | 41 | .14 | 65 | ND | ND | ND | ND | 102 | ND | ND | 185 |
| L3000 11+00S | .2 | .61 | ND | ND | 88 | ND | .97 | .3 | 4 | 6 | 8 | 1.11 | .06 | .20 | 322 | ND | .05 | 10 | .11 | 11 | ND | ND | 3 | ND | 40 | 4 | 4 | 134 |
| L3000 11+50S | .1 | .91 | ND | ND | 149 | ND | 1.12 | .1 | 5 | 9 | 6 | 1.54 | .06 | .26 | 286 | ND | .05 | 17 | .18 | 11 | ND | ND | ND | ND | 46 | ND | 5 | 112 |
| L3000 12+00S | .1 | 1.92 | ND | ND | 114 | ND | 5.58 | .1 | 11 | 15 | 21 | 3.09 | .12 | .54 | 739 | ND | .06 | 41 | .07 | 14 | ND | ND | ND | ND | 231 | ND | ND | 81 |
| L3000 12+50S | .1 | 2.23 | ND | ND | 81 | ND | 1.35 | .1 | 22 | 34 | 48 | 4.02 | .12 | 1.02 | 594 | 1 | .07 | 64 | .09 | 25 | ND | ND | ND | ND | 43 | ND | ND | 103 |
| L3300 0+50S | .2 | 2.67 | 8 | ND | 187 | ND | .43 | .1 | 25 | 48 | 61 | 4.42 | .07 | 1.13 | 891 | 1 | .19 | 78 | .07 | 75 | ND | ND | ND | ND | 25 | ND | ND | 280 |
| L3300 1+00S | .3 | 3.16 | 24 | 4 | 170 | ND | .47 | .1 | 22 | 73 | 282 | 11.44 | .11 | 1.02 | 2480 | 6 | .38 | 119 | .26 | 232 | ND | ND | 4 | ND | 41 | ND | ND | 400 |
| L3300 1+50S | .1 | 3.29 | 56 | 3 | 107 | ND | .45 | .6 | 37 | 84 | 368 | 9.78 | .09 | 1.70 | 2085 | 4 | .39 | 148 | .27 | 141 | ND | ND | ND | ND | 29 | ND | ND | 430 |
| L3300 2+00S | .1 | 2.41 | 34 | ND | 286 | 4 | .55 | .1 | 27 | 59 | 132 | 5.08 | .08 | 1.08 | 1733 | 2 | .19 | 82 | .11 | 33 | ND | ND | ND | ND | 28 | ND | ND | 213 |
| L3300 2+50S | .1 | 2.90 | 13 | ND | 249 | 5 | .32 | .5 | 20 | 53 | 34 | 3.72 | .06 | .99 | 1060 | 1 | .21 | 68 | .26 | 23 | ND | ND | ND | ND | 22 | ND | ND | 331 |
| L3300 3+00S | .3 | 4.10 | 7 | ND | 235 | ND | .32 | .8 | 29 | 51 | 62 | 4.06 | .08 | .88 | 1169 | 2 | .16 | 107 | .18 | 17 | ND | ND | ND | ND | 25 | ND | ND | 251 |
| L3300 3+50S | .1 | 3.94 | ND | ND | 239 | 3 | .32 | .1 | 39 | 198 | 62 | 5.14 | .05 | 2.88 | 729 | 1 | .25 | 175 | .09 | ND | ND | ND | ND | ND | 15 | ND | ND | 230 |
| L3300 4+00S | .1 | 4.32 | ND | ND | 318 | 3 | .55 | .1 | 42 | 242 | 104 | 5.78 | .10 | 3.25 | 712 | 1 | .24 | 169 | .12 | ND | ND | ND | ND | ND | 18 | ND | ND | 132 |
| L3300 4+50S | .3 | 2.18 | 4 | ND | 148 | 3 | .17 | .1 | 18 | 44 | 29 | 3.07 | .06 | .77 | 428 | 2 | .16 | 68 | .07 | 30 | ND | ND | ND | ND | 14 | ND | ND | 265 |
| L3300 5+00S | .4 | 2.90 | 8 | ND | 180 | ND | .29 | 1.4 | 11 | 21 | 13 | 2.62 | .06 | .38 | 421 | 2 | .29 | 54 | .22 | 39 | ND | ND | ND | ND | 24 | 3 | ND | 636 |
| L3300 5+50S | .4 | 2.51 | 4 | ND | 174 | ND | .26 | .4 | 14 | 27 | 24 | 2.88 | .06 | .55 | 585 | 1 | .19 | 53 | .11 | 37 | ND | ND | ND | ND | 21 | ND | ND | 364 |
| L3300 6+00S | .3 | .69 | ND | ND | 124 | ND | .39 | .6 | 5 | 8 | 5 | 1.34 | .06 | .20 | 446 | ND | .12 | 16 | .08 | 19 | ND | ND | 4 | ND | 35 | ND | ND | 281 |
| L3300 6+50S | .4 | 2.16 | 5 | ND | 257 | 4 | .34 | .4 | 13 | 22 | 12 | 2.46 | .06 | .47 | 744 | 1 | .22 | 43 | .17 | 26 | ND | ND | ND | ND | 44 | ND | ND | 461 |
| L3300 7+00S | .1 | 2.10 | 5 | ND | 144 | 5 | .32 | .1 | 18 | 50 | 30 | 3.81 | .06 | 1.13 | 816 | 1 | .15 | 61 | .10 | 27 | ND | ND | ND | ND | 23 | ND | ND | 205 |
| L3300 7+50S | .1 | 2.25 | 6 | ND | 98 | 4 | .78 | .1 | 28 | 29 | 113 | 5.59 | .13 | 1.56 | 798 | 4 | .15 | 86 | .09 | 42 | ND | ND | ND | ND | 42 | ND | ND | 198 |
| L3300 8+00S | .1 | 1.91 | 3 | ND | 194 | ND | 1.01 | .4 | 29 | 22 | 84 | 5.70 | .12 | 1.00 | 1004 | 4 | .17 | 84 | .09 | 62 | ND | ND | ND | ND | 73 | ND | ND | 199 |
| L3300 8+50S | .1 | 1.77 | 9 | ND | 224 | ND | .58 | .4 | 22 | 24 | 47 | 4.84 | .10 | .65 | 1133 | 3 | .14 | 78 | .10 | 44 | ND | ND | 4 | ND | 66 | ND | ND | 196 |
| L3300 9+00S | .1 | 1.95 | 6 | ND | 168 | ND | .64 | .4 | 22 | 26 | 28 | 4.96 | .09 | 1.18 | 1177 | 2 | .21 | 71 | .08 | 72 | ND | ND | ND | ND | 60 | ND | ND | 310 |
| L3300 9+50S | .1 | 1.36 | 8 | ND | 97 | ND | .31 | 1.0 | 18 | 16 | 31 | 4.57 | .08 | .49 | 461 | 2 | .26 | 60 | .04 | 143 | ND | ND | 4 | ND | 30 | ND | ND | 505 |
| L3300 10+00S | .1 | 1.48 | ND | ND | 117 | ND | 2.44 | .1 | 24 | 20 | 85 | 5.74 | .14 | 1.26 | 849 | 6 | .14 | 82 | .10 | 62 | ND | ND | 3 | ND | 121 | ND | ND | 131 |
| L3300 10+50S | .1 | 1.69 | 7 | ND | 120 | ND | 1.78 | .1 | 21 | 20 | 57 | 4.52 | .12 | 1.18 | 767 | 4 | .11 | 62 | .07 | 73 | ND | ND | 3 | ND | 75 | ND | ND | 111 |
| L3300 11+00S | .1 | 1.99 | 6 | ND | 147 | ND | .78 | .1 | 22 | 21 | 41 | 4.53 | .11 | 1.03 | 512 | 2 | .10 | 69 | .06 | 45 | ND | ND | 3 | ND | 40 | ND | ND | 114 |
| L3300 11+50S | .1 | .88 | ND | ND | 198 | ND | 4.48 | .7 | 5 | 10 | 9 | 1.83 | .11 | .63 | 560 | ND | .09 | 20 | .18 | 56 | ND | ND | ND | ND | 127 | ND | 4 | 154 |
| L3300 12+00S | .1 | 1.37 | 9 | ND | 92 | ND | 1.75 | .1 | 11 | 15 | 23 | 3.25 | .09 | .68 | 512 | 1 | .07 | 39 | .07 | 28 | ND | ND | 3 | ND | 47 | ND | ND | 78 |
| L3300 12+50S | .1 | 2.09 | ND | ND | 117 | ND | 1.89 | .1 | 16 | 23 | 40 | 3.82 | .10 | .79 | 554 | 2 | .09 | 50 | .04 | 22 | ND | ND | ND | ND | 39 | ND | ND | 90 |
| L3700 0+50S | .1 | 1.81 | ND | ND | 396 | ND | .81 | .3 | 18 | 34 | 27 | 2.89 | .09 | .85 | 1442 | ND | .12 | 40 | .16 | 11 | ND | ND | 3 | ND | 39 | ND | ND | 143 |
| L3700 1+00S | .2 | 1.59 | 6 | ND | 275 | 4 | .47 | .1 | 20 | 29 | 25 | 3.14 | .06 | .66 | 1453 | 1 | .11 | 38 | .20 | 16 | ND | ND | 3 | ND | 29 | ND | ND | 136 |
| L3700 1+50S | .4 | 2.14 | ND | ND | 168 | ND | .19 | .5 | 16 | 41 | 24 | 2.96 | .06 | .71 | 708 | 2 | .16 | 60 | .20 | 11 | ND | ND | ND | ND | 14 | ND | ND | 269 |
| DETECTION LIMIT | .1 | .01 | 3 | 3 | 1 | 3 | .01 | .1 | 1 | 1 | 1 | .01 | .01 | .01 | 1 | 1 | .01 | 1 | .01 | 2 | 3 | 5 | 2 | 2 | 1 | 5 | 3 | 1 |

| SAMPLE NAME | AG PPM | AL % | AS PPM | AU PPM | BA PPM | BI PPM | CA % | CD PPM | CO PPM | CR PPM | CU PPM | FE % | K % | MG % | MN PPM | MO PPM | NA % | NI PPM | P % | PB PPM | PD PPM | PT PPM | SB PPM | SN PPM | SR PPM | U PPM | W PPM | ZN PPM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L3700 2+00S | .5 | 3.55 | 8 | ND | 98 | ND | .25 | 2.1 | 13 | 28 | 13 | 2.50 | .05 | .48 | 603 | 2 | .14 | 72 | .12 | 4 | ND | ND | ND | ND | 23 | ND | ND | 284 |
| L3700 2+50S | .1 | 2.13 | 11 | ND | 162 | ND | .19 | .4 | 19 | 41 | 25 | 3.61 | .06 | .66 | 1645 | 2 | .14 | 47 | .15 | 28 | ND | ND | ND | ND | 21 | ND | ND | 208 |
| L3700 3+00S | .1 | 2.51 | 11 | ND | 134 | ND | .37 | .1 | 21 | 35 | 48 | 5.06 | .11 | .63 | 804 | 2 | .08 | 74 | .11 | 36 | ND | ND | ND | ND | 39 | ND | ND | 141 |
| L3700 3+50S | .1 | 2.35 | 7 | ND | 181 | ND | .34 | .2 | 18 | 38 | 19 | 3.75 | .07 | .68 | 866 | 2 | .12 | 67 | .08 | 25 | ND | ND | ND | ND | 34 | ND | ND | 194 |
| L3700 4+00S | .1 | 2.74 | 10 | ND | 144 | 3 | .29 | .1 | 21 | 46 | 47 | 4.16 | .08 | .95 | 713 | 2 | .14 | 82 | .10 | 14 | ND | ND | ND | ND | 31 | ND | ND | 211 |
| L3700 4+50S | .2 | 2.63 | 7 | ND | 199 | ND | .22 | .1 | 19 | 39 | 26 | [illegible] | .06 | .56 | 2627 | 2 | .17 | 49 | .19 | 21 | ND | ND | ND | ND | 21 | ND | ND | 298 |
| L3700 5+00S | .1 | 2.49 | 9 | ND | 125 | 4 | .61 | .1 | 20 | 58 | 63 | 4.03 | .07 | 1.19 | 1197 | 2 | .15 | 79 | .10 | 35 | ND | ND | ND | ND | 40 | ND | ND | 225 |
| L3700 5+50S | .1 | 2.97 | 7 | ND | 170 | ND | .22 | .1 | 15 | 34 | 18 | 2.94 | .05 | .59 | 759 | 2 | .15 | 51 | .17 | 15 | ND | ND | ND | ND | 16 | ND | ND | 275 |
| L3700 6+00S | .1 | 2.47 | 16 | ND | 158 | ND | .22 | .1 | 25 | 64 | 34 | 3.41 | .05 | .96 | 1263 | 1 | .15 | 63 | .18 | 12 | ND | ND | ND | ND | 14 | ND | ND | 192 |
| L3700 6+50S | .1 | 2.37 | 3 | ND | 215 | ND | .19 | .1 | 15 | 32 | 13 | 2.77 | .05 | .52 | 1309 | 1 | .13 | 52 | .14 | 17 | ND | ND | ND | ND | 16 | ND | ND | 229 |
| L3700 7+00S | .1 | 2.78 | 18 | ND | 194 | ND | .34 | .1 | 43 | 83 | 133 | 3.70 | .05 | 1.35 | 1214 | 1 | .21 | 107 | .13 | 43 | ND | ND | ND | ND | 19 | ND | ND | 283 |
| L3700 7+50S | .1 | 2.17 | 9 | ND | 152 | 3 | .20 | .1 | 18 | 37 | 34 | 3.06 | .06 | .72 | 661 | 1 | .14 | 65 | .11 | 40 | ND | ND | ND | ND | 15 | ND | ND | 217 |
| L3700 8+00S | .1 | 2.87 | 25 | ND | 326 | 3 | .35 | .1 | 37 | 71 | 91 | 3.68 | .07 | 1.28 | 1568 | 2 | .17 | 103 | .13 | 40 | ND | ND | ND | ND | 17 | ND | ND | 210 |
| L3700 8+50S | .1 | 2.09 | 5 | ND | 280 | 4 | .37 | .1 | 14 | 49 | 14 | 2.70 | .07 | 1.37 | 1076 | 1 | .11 | 47 | .13 | 11 | ND | ND | ND | ND | 17 | ND | ND | 143 |
| L3700 9+00S | .1 | 4.00 | 10 | ND | 152 | ND | .39 | .1 | 36 | 223 | 103 | 5.77 | .07 | 3.54 | 578 | 1 | .23 | 154 | .09 | ND | ND | ND | ND | ND | 16 | ND | ND | 110 |
| L3700 9+50S | .1 | 3.86 | 5 | 3 | 290 | 5 | .38 | .1 | 39 | 170 | 86 | 5.37 | .08 | 2.30 | 1111 | 2 | .23 | 160 | .08 | 19 | ND | ND | ND | ND | 19 | ND | ND | 220 |
| L3700 10+00S | .1 | 3.91 | 29 | 3 | 163 | ND | .36 | .1 | 40 | 118 | 115 | 6.64 | .10 | 2.11 | 1183 | 2 | .29 | 136 | .08 | 59 | ND | ND | ND | ND | 28 | ND | ND | 354 |
| L3700 10+50S | .1 | 1.86 | 6 | ND | 141 | ND | .43 | .1 | 17 | 24 | 28 | 3.47 | .08 | .89 | 568 | 2 | .11 | 50 | .06 | 60 | ND | ND | 3 | ND | 40 | ND | ND | 161 |
| L3700 11+00S | .1 | 1.47 | 4 | ND | 136 | ND | .36 | .1 | 14 | 21 | 19 | 2.57 | .07 | .60 | 894 | 1 | .12 | 38 | .12 | 27 | ND | ND | 3 | ND | 32 | ND | ND | 221 |
| L3700 11+50S | .1 | 2.23 | ND | ND | 193 | 4 | .50 | .1 | 20 | 40 | 36 | 3.76 | .08 | .93 | 1133 | 2 | .16 | 65 | .08 | 44 | ND | ND | 3 | ND | 43 | ND | ND | 245 |
| L3700 12+00S | .1 | 1.91 | 10 | ND | 98 | 3 | .23 | .1 | 22 | 47 | 88 | 3.90 | .07 | .91 | 368 | 2 | .12 | 99 | .10 | 33 | ND | ND | 4 | ND | 14 | [illegible] | [illegible] | 167 |
| L3700 12+50S | .1 | 1.36 | 11 | ND | 84 | ND | .97 | .5 | 24 | 21 | 58 | 4.67 | .09 | .63 | 487 | 2 | .12 | 59 | .08 | 54 | ND | ND | 5 | ND | 65 | ND | ND | 157 |
| DETECTION LIMIT | .1 | .01 | 3 | 3 | 1 | 3 | .01 | .1 | 1 | 1 | 1 | .01 | .01 | .01 | 1 | 1 | .01 | 1 | .01 | 2 | 3 | 5 | 2 | 2 | 1 | 5 | 3 | 1 |