# GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT ON THE HANK CLAIM GROUP

BALL CREEK AREA
Liard Mining Division

N.T.S. 104G 1, 2

Latitude 57° 13'
Longitude 130° 30'


Owner and Operator: LAC MINERALS LTD.
#470 - 1055 West Hastings Street
Vancouver, B.C
V6E 2E9

Report by: Rein Turna
LAC MINERALS LTD.


Date: February 24, 1984

## CONTENTS



## APPENDICES



## TABLES



## FIGURES

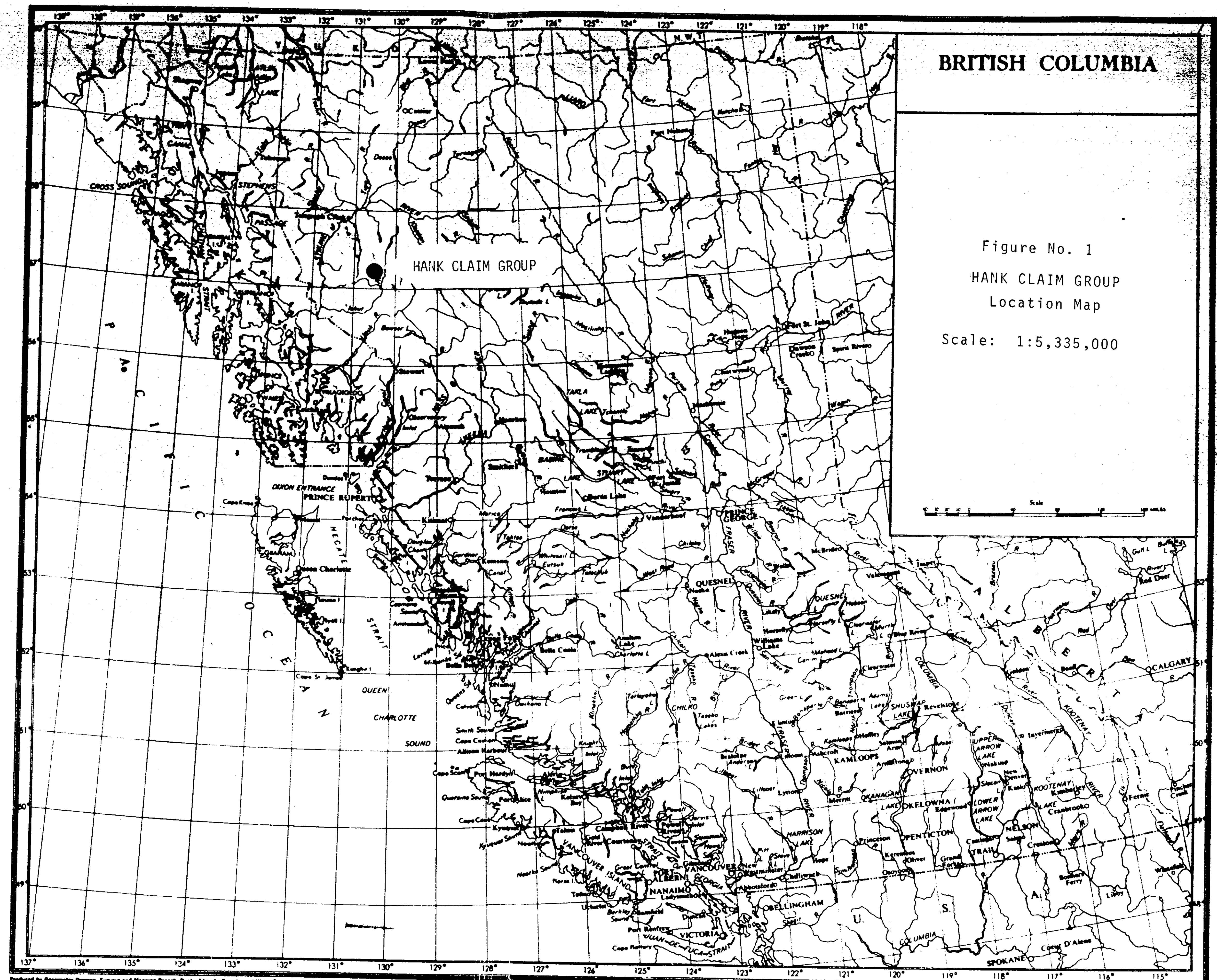



Figure No. 1
HANK CLAIM GROUP
Location Map
Scale: 1:5,335,000

Produced by Geographic Division, Surveys and Mapping Branch, Dept. of Lands, Forests, and Water Resources, Victoria, B.C.

MAP NO. 1S

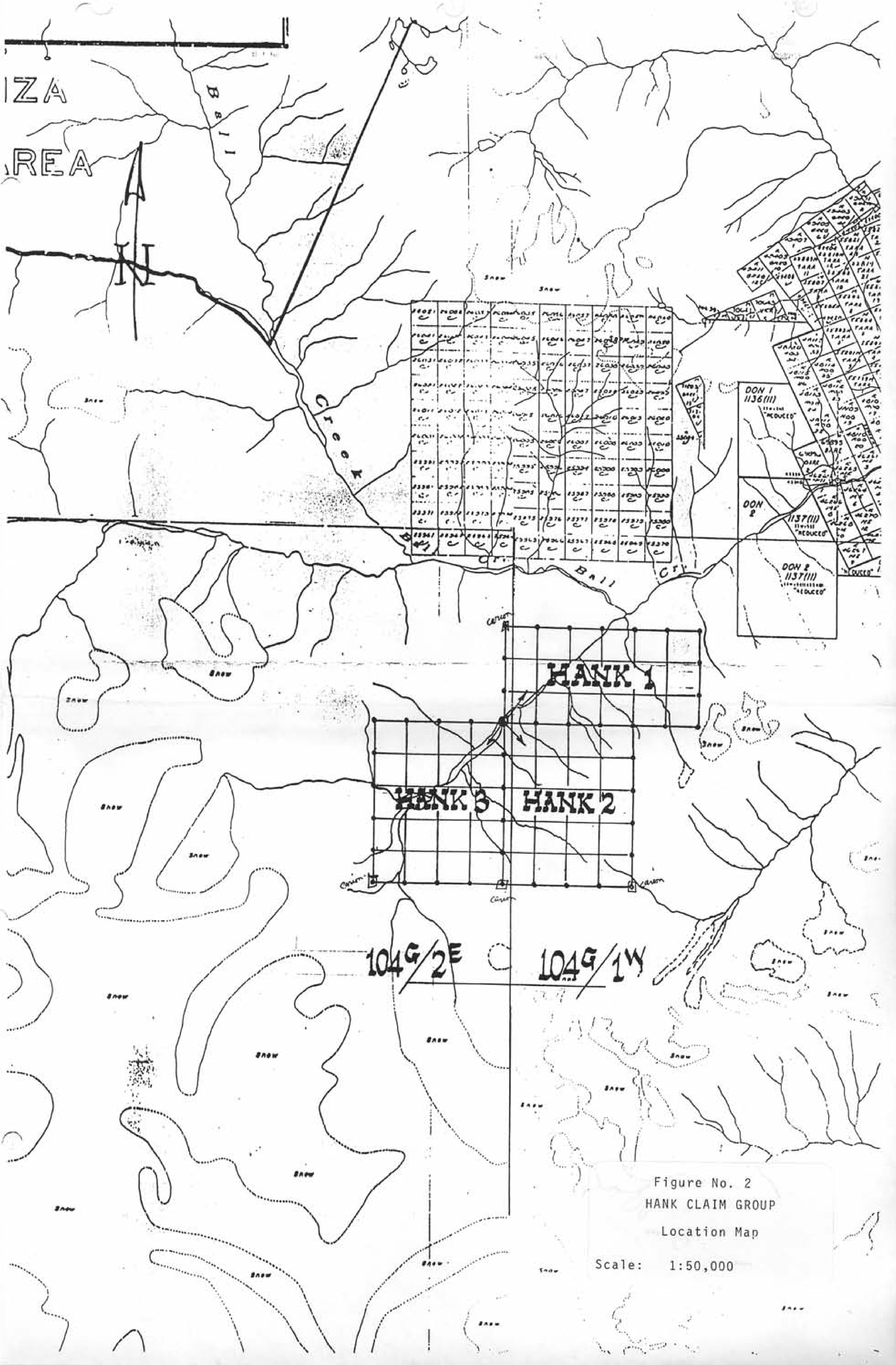



Figure No. 2
HANK CLAIM GROUP
Location Map
Scale: 1:50,000

TABLE NO. 1

HANK CLAIM GROUP Status - 1984

| Claim Name | Number of Claims | Tag Number | Record Number | Record Date | Assessment |
|---|---|---|---|---|---|
| HANK 1 | 18 | 78941 | 2691 | March 10/83 | Claims are grouped into the HANK CLAIM GROUP and 3 years assessment is to be filed. |
| HANK 2 | 20 | 78942 | 2692 | March 10/83 | |
| HANK 3 | 20 | 78943 | 2693 | March 10/83 | |

## INTRODUCTION

The HANK CLAIM GROUP, totaling 58 units was staked to cover streams anomalous in gold and draining a hillside with gossanous rocks also anomlaous in gold.

Lac Minerals Ltd. performed silt, soil and rock sampling and geological mapping from August 3 to 11, 1983. Field personel consisted of Messrs. Rein Turna and Robert Brown, Lac staff geologists, and Joe Conway, geologist, temporary employee. 95 rock samples, 223 soils and 85 silt samples were collected. Soil samples were taken on line at 100 meter intervals. Rock sampling and geologic mapping at 1: 5,000 scale were done mainly in the creek valleys.

### Location and Access:

The HANK CLAIM GROUP is located on the tributary of Ball Creek flowing northeast from Hankin Peak. The southern boundary of Mount Edziza Provincial Park is 13 kilometers to the northwest. The nearest town, Iskut— also called Tenajon is 75km to the north east. Travel to and from Vancouver by truck is three days each way. One day is required to helicopter to the property and set up camp.

Access to the property is via helicopter from Tenajon. The nearest road to the property is 15km to the east. It travels north from near Hazelton, through Tenajon to the Alaska Highway.

### Topography:

The area of the HANK CLAIM GROUP is mountainous with moderately steep hillsides. Elevations range from 860 meters in the main creek at the north side of HANK 1 claim to 1860 meters on the east side of HANK 2 claim.

Vegetation consists of sparse coniferous forest in valleys and on hillsides. Alpine meadows begin at around the 1300m mark.

Drainage is good. All of the property's area is traversed by creeks flowing northwest into the main creek which flows a fairly linear path northeast. Most of the nothwest flowing creeks are fairly deeply incised and where they traverse the Alteration Zones they form wide deep gorges.

Overburden depth appears to be generally less than 3 meters over most of the property. Nearer to the mountain tops outcrop is abundant with a relatively thin poorly developed soil or regolith covering. The valley of the main creek – the Ball tributary – is narrow and outcrop often occurs along it.

The tributary's water is heavily silted and undrinkable before it has been allowed to settle. The other creeks on the property are acid and metallic tasting. Below the Alteration Zones stones in the creek bed are stained orange where water runs over them.

## GEOCHEMICAL SURVEY

Samples collected: 85 stream silts and 223 soils analysed for 30 elements and Au. (see Appendix No. 1)
95 rocks analysed for Cu, Mo, Ag, As, Au. (see Appendix No.1)

The Au, Ag and As values for the above samples are plotted on Figure Nos. 5, 6, and 7 respectively. Results for other elements are in Appendix No. 1. Locations of all samples are depicted on Figure No. 3.

Field Methodology:

Soil samples were collected from the "B" soil horizon generally from a depth of .20 to 30 centimeters below the ground surface. The typical colour of the soil samples is orangey brown.

Stream bank samples consisted of soils which may have sloughed or have been washed or contaminated by stream silts. These samples therefore are depicted on the geochem maps with a different symbol from soils.

Approximately ½ kilogram of material was collected at each site.

Stream sediment samples were collected from the active part of the stream bed approximately every 250 meters.

Sampling lines were run using a compass and hip chain for orientation and distance measurement. Lines were run generally north west downhill between creek valleys. Sampling was not done on a regular grid pattern. Lines range from about 200 to 500 meters separations. Soils were collected every 100 meters along the lines.

Rock samples were collected in no regular pattern. Both mineralized and unmineralized rock was sampled. Most outcrops occurred in the creek valleys. Rock samples consisted of either spot grabs or sparse chip sampling over 25 or 50 meter intervals.

Geological mapping was performed where outcrop was encountered in the creek valleys or along soil lines.

Laboratory Methodology:

Sample Preparation:

Bondar-Clegg & Company Ltd. prepared all samples. Soil and silt samples were dried and sieved to -80 mesh. Rock samples were pulverized to -100 mesh.

Geochemical analysis for Cu, Mo, Ag:

Metals were extracted with hot Lefort aqua regia and analysed by atomic absorption.

Geochemical analysis for As:

As was extracted with HC104-HN03 arsine. The method of analysis was colourimetric.

Geochemical analysis for Au:

Au was extracted by fire assay and hot aqua regia and analysed by closed cell, flameless atomic absorption.

ACME analytical labratories Ltd. analysed the pulps of the soils and silts for 30 elements (see Appendix No. 1), by ICP (Inductively Coupled Argon Plasma) geochemical analysis, using the following procedure:

A .500 gram of sample is digested with 3 ml of 3:1:3 nitric acid to hydrochloric acid to water at 90$^{o}$C for 1 hour. The sample is diluted to 10ml with water. This leach is only partial for: Ca, P, Mg, Al, Ti, La, Na, K, W, Cr.

ICP analysis is comparable to current atomic absorption technology.

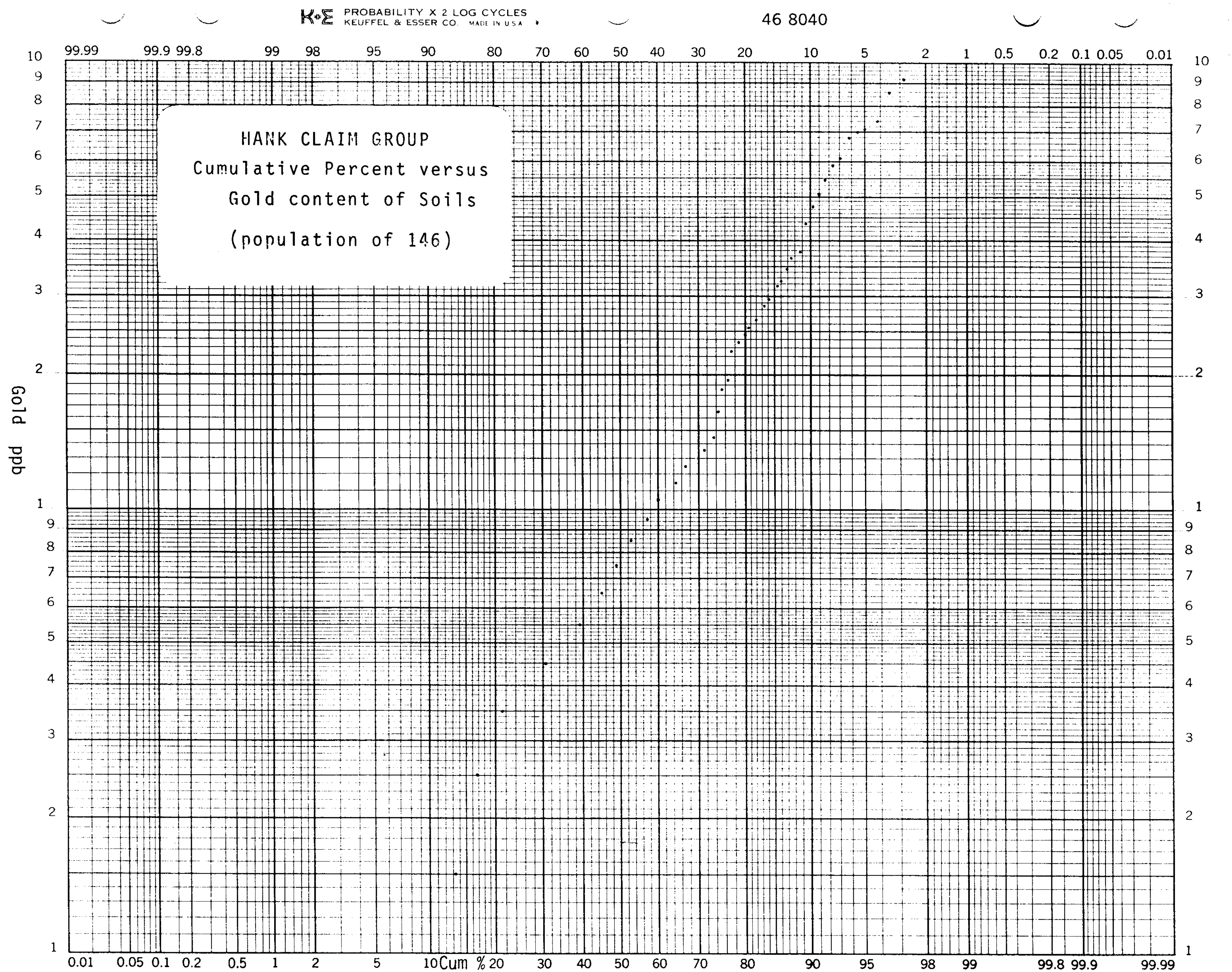
Statistical Analysis of Results:

Statistical analyses were made of 146 soil samples. Soils taken along stream banks were not included as they were not sure to be representative of the local "B" horizon.

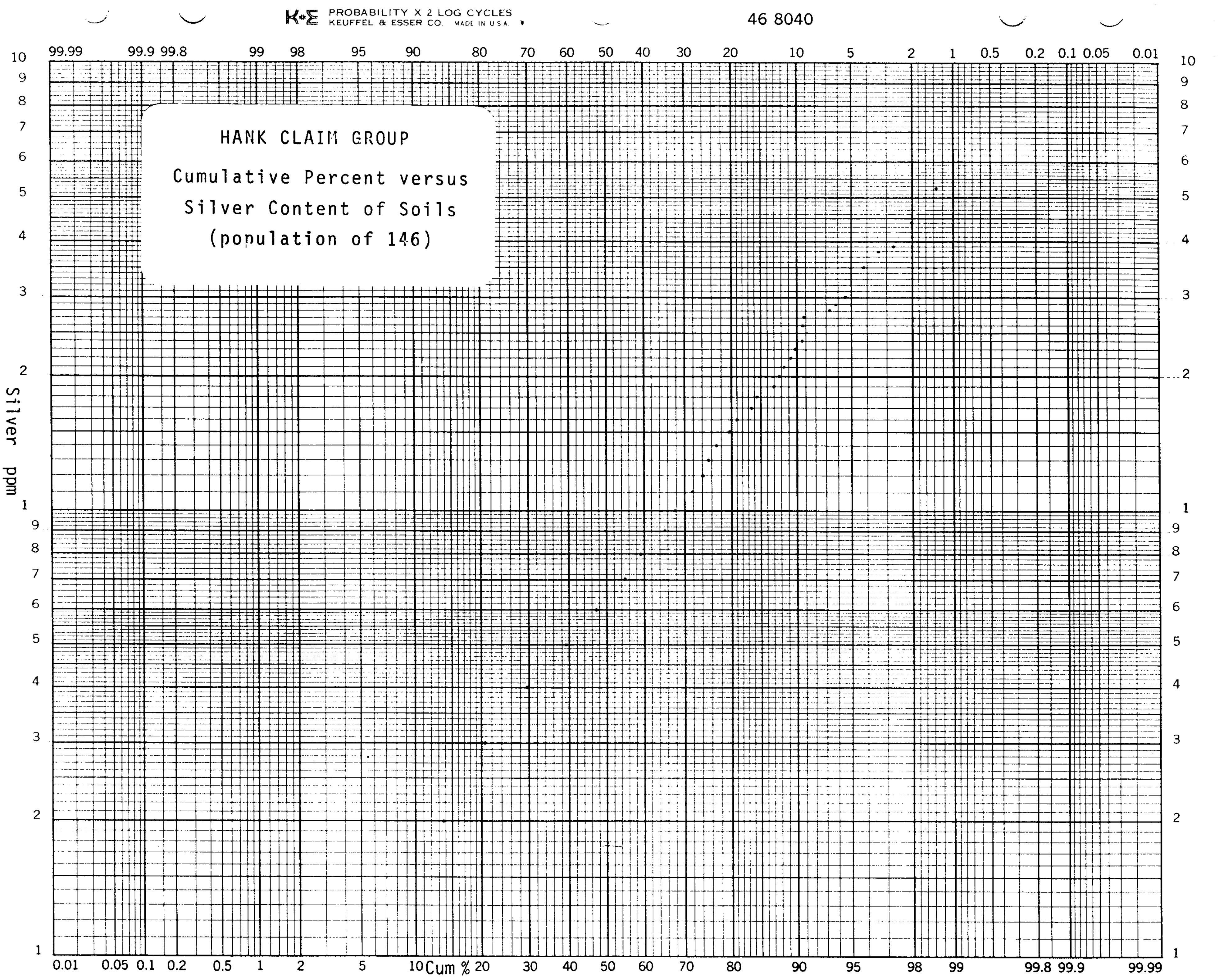
Gold, Silver, Arsenic:

Statistical analyses of the results from soils do not clearly define anomalous populations for these metals.

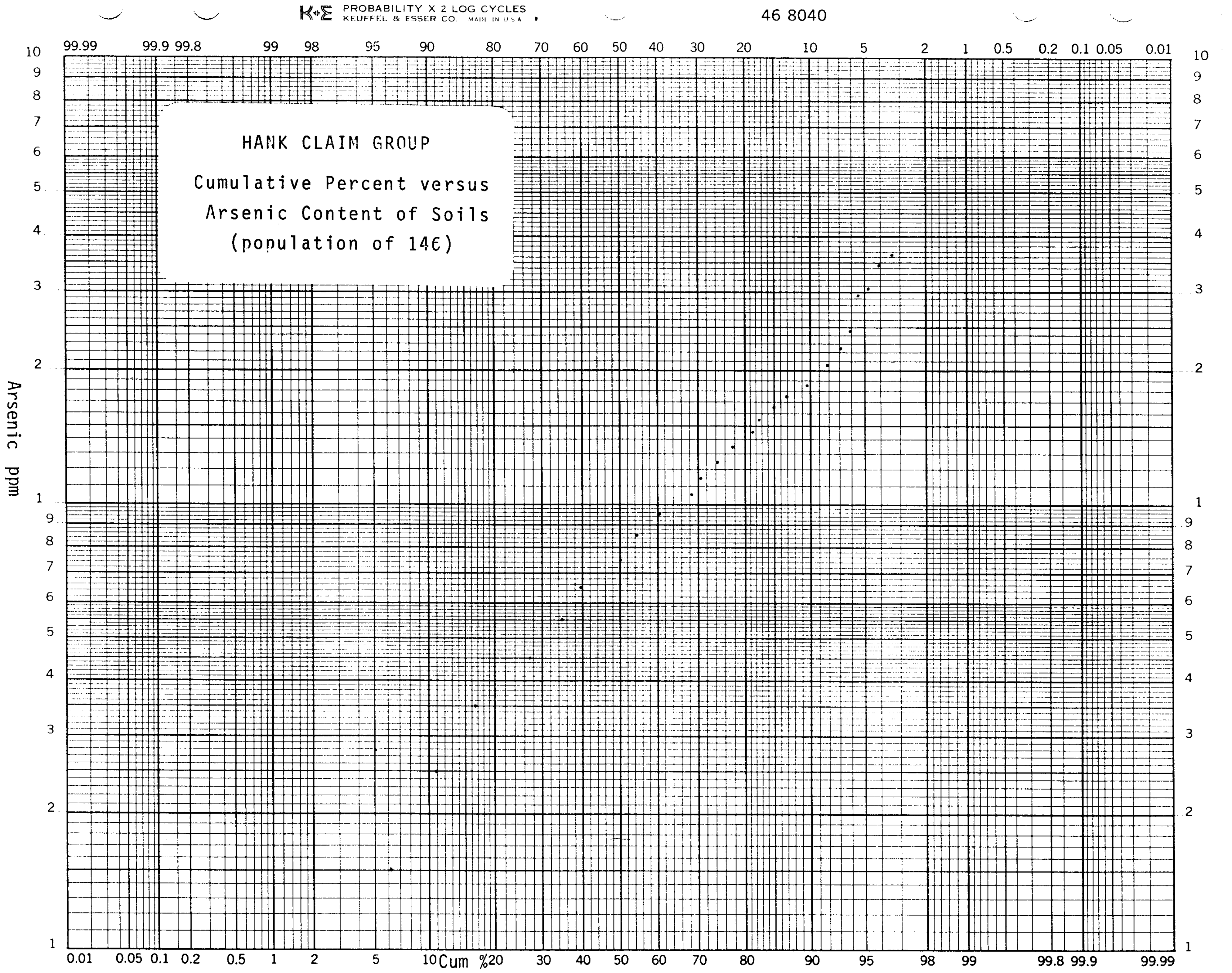
For Au, Ag, As soil values of 100 ppb, 1.0 ppm, 100 ppm respectively were arbitrarily chosen to be contoured on the geochem maps (Figure Nos. 5, 6, 7 respectively).



K+E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 8040
HANK CLAIM GROUP
Cumulative Percent versus
Gold content of Soils
(population of 146)
Gold ppb
Cum %
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
10 9 8 7 6 5 4 3 2 1 9 8 7 6 5 4 3 2 1



K+E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 8040
HANK CLAIM GROUP
Cumulative Percent versus
Silver Content of Soils
(population of 146)
Silver ppm
Cum %
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
10 9 8 7 6 5 4 3 2 1 9 8 7 6 5 4 3 2 1


K+E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 8040
HANK CLAIM GROUP
Cumulative Percent versus
Arsenic Content of Soils
(population of 146)
Arsenic ppm
Cum %

Failure of the statistical method to define anomalous populations is the result of most of the sampled area being high in these metals. Not enough background values exist for balance.

Anomalies

The size of the anomalous area is approximately 4km x 1½km Gold, silver and arsenic were found roughly correlatable in that anomalous areas of each coincide.

The sampling to date has been too sparse to draw firm conclusions but a northeast strike parallel to rocks' bedding and correlation with the Alteration Zones is suggested on the geochem maps.

The geochem anomalies are not entirely restricted to the zones of intensely altered rock but occur uphill and downhill of the zones. The anomalous area is open on both its sides to the northeast and southeast and appears to narrow toward its ends, the northeast and southwest, but still should be considered open to all directions.

## GEOLOGY

The HANK CLAIM GROUP is partly underlain by Tertiary age sediments (unit 2) containing cross bedded greenish grey sandstones with fossil logs and wood fragments. Chert and claystones boulders observed are at this time grouped with unit 2 because the only sedimentary rock outcrops located above nearby are those of unit 2. It's recognized however that the claystone and chert may represent a more deepwater environment than the continental sandstones of unit 2.

The sediments are intruded by rhyolite dykes and sills (unit 3). These intrusives are off-white in colour but weathered surfaces are rusty brown, orange, yellow and red. Pyrite exists disseminated in these rocks though generally not more than 1%.

Most of the claim group area is underlain by upper Triassic andesitic pyroclastics with lesser amounts of flows and thin siltstone beds (unit 1). These andesites are generally green coloured due to chlorite. The different lithologic types of unit 1 are described in the legend of the Geology map, Figure No. 4 and depicted on the map. At this time it is not known if these represent distinct mapable subunits within unit 1.

Strike measurements of interbedded siltstones suggest an overall northeast strike for unit 1.

Zones of intense alteration exist in unit 1 rocks. These zones are characterized by varying degrees of pyritization, silicification, argillization, sericitation and carbonitization. Outcrops in the Zones are heavily gossanous and usually bleached white or grey. The rocks are more highly fractured and deeply weathered, creating deep wide gorges when creeks flow over them. Some of the Alteration Zones appear to have a central siliceous zone where more pyrite exists.

The Alteration Zones align with each other in a north easterly pattern but it is not known if the zones join together or represent several semi parallel zones. It also has not been determined how closely the Zones parallel the strike of the country rocks.

Mineralization

Visible sulphide mineralization consists of pyrite which is common, disseminated in rocks of unit 1 and 3. Greater amounts of pyrite exist in the Alteration Zone where it occurs disseminated and in blebs and veinlets.

Small blebs of galena were found in a silicified tuff at HANK 606.

Small amounts of malachite were found at four locations including HANK 331 which had the highest gold assay. (.354 oz/T)

A brecciated soft claystone boulder (HANK 333) contained 20% pyrite and some cinnabar in the breccia portion. This specimen was anomalous in Au (745 ppb) and in Cu, Mo, As and

Ag. In the same area large chert boulders lay. One specimen (HANK 334) with a dark vein was anomalous in Au (155 ppb). If the claystone and chert are of Tertiary age they suggest that precious metals mineralization may be related to Tertiary intrusions and may not be restricted to upper Triassic volcanics.

Rocks anomalous in Au and Ag are wide spread over the property. They occur both inside the Alteration Zone and outside of them. Generally more altered rocks are higher in precious metals.

## CONCLUSIONS

1. The HANK CLAIM GROUP is underlain by an upper Triassic volcanic suite comprising andesitic pyroclastics and flows and sediments. These are overlain by Tertiary sediments. All rocks are intruded by Tertiary rhyolite dykes and sills.

2. Rocks and soils on the property are coincidentally anomalous in Au, Ag and As. The size of the anomalous area has not yet been determined. At this time it is about 4km x 1½km.

3. These anomalies appear partly related but not restricted to zones of intensly altered rock. Alterizations consist of pyritization, silicification, argillization, sericitation and carbonitization.

RECOMMENDATIONS:

1. A program of rock and soil sampling on a regular pattern on the property is recommended. Detailed geologic mapping is also neccessary. VLF-EM geophysics should also be performed.

2. Streams peripheral to the claims and draining upper Triassic volcanics should be sampled, together with prospecting and recconnaisance mapping.

# APPENDIX 1

Geochemical Results

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BONDAR-CLEGG

**Geochemica Lab Repor**

REPORT: 123-2144 PROJECT: HANK



| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | NOTES | SAMPLE NUMBER | ELEMENT UNITS | Au PPB | NO |
|---|---|---|---|---|---|---|---|
| S HANK-16 | | 150 | | S HANK-62 | | 2900 | |
| S HANK-17 | | 360 | | S HANK-63 | | 7180 | |
| S HANK-18 | | 350 | | S HANK-65 | | 895 | |
| S HANK-19 | | 140 | | S HANK-67 | | 3600 | |
| S HANK-20 | | 225 | | S HANK-69 | | 2610 | |
| S HANK-21 | | 130 | | S HANK-70 | | 1980 | |
| S HANK-22 | | 55 | | S HANK-73 | | 75 | |
| S HANK-23 | | 30 | | S HANK-75 | | 80 | |
| S HANK-24 | | 120 | | S HANK-76 | | 405 | |
| S HANK-25 | | 165 | | S HANK-78 | | 170 | |
| S HANK-26 | | 75 | | S HANK-79 | | 535 | |
| S HANK-27 | | 40 | | S HANK-82 | | 25 | |
| S HANK-29 | | 85 | | S HANK-83 | | 85 | |
| S HANK-30 | | 45 | | S HANK-84 | | 60 | |
| S HANK-32 | | 70 | | S HANK-85 | | 340 | |
| S HANK-33 | | 20 | | S HANK-86 | | 110 | |
| S HANK-34 | | 115 | | S HANK-87 | | 50 | |
| S HANK-35 | | 80 | | S HANK-88 | | 135 | |
| S HANK-36 | | 45 | | S HANK-101 | | 25 | |
| S HANK-38 | | 185 | | S HANK-102 | | 35 | |
| S HANK-39 | | 80 | | S HANK-103 | | 95 | |
| S HANK-40 | | <5 | | S HANK-105 | | 535 | |
| S HANK-41 | | 50 | | S HANK-107 | | 125 | |
| S HANK-42 | | 55 | | S HANK-108 | | 15 | |
| S HANK-43 | | 35 | | S HANK-109 | | 70 | |
| S HANK-45 | | 40 | | S HANK-111 | | 40 | |
| S HANK-47 | | 1840 | | S HANK-112 | | 60 | |
| S HANK-48 | | 1340 | | S HANK-113 | | 70 | |
| S HANK-49 | | 265 | | S HANK-116 | | 90 | |
| S HANK-50 | | 855 | | S HANK-117 | | 70 | |
| S HANK-51 | | 600 | | S HANK-118 | | 10 | |
| S HANK-52 | | 10 | | S HANK-120 | | 30 | |
| S HANK-53 | | 90 | | S HANK-121 | | 15 | |
| S HANK-54 | | 1790 | | S HANK-122 | | 10 | |
| S HANK-55 | | 1920 | | S HANK-123 | | 70 | |
| S HANK-56 | | 1470 | | S HANK-124 | | 50 | |
| S HANK-57 | | 1920 | | S HANK-125 | | 85 | |
| S HANK-58 | | 355 | | S HANK-126 | | 35 | |
| S HANK-60 | | 85 | | S HANK-127 | | 60 | |
| S HANK-61 | | 120 | | S HANK-128 | | 30 | |

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REPORT: 123-2144 PROJECT: HANK



| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | NOTES | SAMPLE NUMBER | ELEMENT UNITS | Au PPB | NO |
|---|---|---|---|---|---|---|---|
| S HANK-130 | | 255 | | S HANK-343 | | 125 | |
| S HANK-131 | | 90 | | S HANK-344 | | 45 | |
| S HANK-132 | | 35 | | S HANK-346 | | 10 | |
| S HANK-133 | | 65 | | S HANK-347 | | 10 | |
| S HANK-134 | | 235 | | S HANK-356 | | 105 | |
| S HANK-136 | | 200 | | S HANK-357 | | 10 | |
| S HANK-138 | | 75 | | S HANK-359 | | 5 | |
| S HANK-139 | | 30 | | S HANK-360 | | 95 | |
| S HANK-140 | | 320 | | S HANK-361 | | 15 | |
| S HANK-143 | | 910 | | S HANK-362 | | 10 | |
| S HANK-145 | | 735 | | S HANK-363 | | 25 | |
| S HANK-148 | | 10 | | S HANK-364 | | 5 | |
| S HANK-150A | | 60 | | S HANK-365 | | 10 | |
| S HANK-150B | | 90 | | S HANK-366 | | 670 | |
| S HANK-151 | | 40 | | S HANK-367 | | 310 | |
| S HANK-152 | | 5 | | S HANK-368 | | 165 | |
| S HANK-311 | | 100 | | S HANK-371 | | 45 | |
| S HANK-312 | | 125 | | S HANK-372 | | 20 | |
| S HANK-313 | | 255 | | S HANK-373 | | 105 | |
| S HANK-314 | | 40 | | S HANK-374 | | 540 | |
| S HANK-315 | | 40 | | S HANK-375 | | 40 | |
| S HANK-316 | | 140 | | S HANK-376 | | 10 | |
| S HANK-317 | | 85 | | S HANK-377 | | 310 | |
| S HANK-318 | | 135 | | S HANK-391 | | 50 | |
| S HANK-320 | | 695 | | S HANK-392 | | 10 | |
| S HANK-321 | | 190 | | S HANK-393 | | 45 | |
| S HANK-322 | | 15 | | S HANK-394 | | 115 | |
| S HANK-323 | | 5 | | S HANK-395 | | 220 | |
| S HANK-324 | | 115 | | S HANK-396 | | 290 | |
| S HANK-325 | | 10 | | S HANK-397 | | 60 | |
| S HANK-327 | | 30 | | S HANK-398 | | 40 | |
| S HANK-328 | | 60 | | S HANK-399 | | 10 | |
| S HANK-329 | | 5 | | S HANK-400 | | 55 | |
| S HANK-336 | | 90 | | S HANK-401 | | 145 | |
| S HANK-337 | | 125 | | S HANK-411 | | 240 | |
| S HANK-338 | | 55 | | S HANK-412 | | 265 | |
| S HANK-339 | | 115 | | S HANK-413 | | 180 | |
| S HANK-340 | | 50 | | S HANK-414 | | 100 | |
| S HANK-341 | | 60 | | S HANK-415 | | 705 | |
| S HANK-342 | | 10 | | S HANK-416 | | 70 | |

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| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | NOTES | SAMPLE NUMBER | ELEMENT UNITS | Au PPB | NOT |
|---|---|---|---|---|---|---|---|
| S HANK-417 | | 50 | | S HANK-661 | | 80 | |
| S HANK-418 | | 55 | | S HANK-662 | | <5 | |
| S HANK-419 | | 45 | | S HANK-663 | | <5 | |
| S HANK-420 | | 130 | | S HANK-697 | | 230 | |
| S HANK-421 | | 145 | | S HANK-698 | | 125 | |
| S HANK-422 | | 285 | | S HANK-699 | | 195 | |
| S HANK-423 | | 375 | | S HANK-700 | | 50 | |
| S HANK-424 | | 430 | | S HANK-701 | | 85 | |
| S HANK-425 | | 95 | | S HANK-702 | | 90 | |
| S HANK-611 | | 130 | | S HANK-703 | | 35 | |
| S HANK-612 | | 130 | | S HANK-704 | | 40 | |
| S HANK-613 | | 40 | | S HANK-705 | | 50 | |
| S HANK-614 | | 5 | | S HANK-706 | | 110 | |
| S HANK-615 | | 135 | | S HANK-707 | | 45 | |
| S HANK-616 | | 135 | | S HANK-709 | | 75 | |
| S HANK-617 | | 70 | | S HANK-715 | | 10 | |
| S HANK-618 | | 60 | | S HANK-716 | | 80 | |
| S HANK-619 | | 105 | | S HANK-717 | | 5 | |
| S HANK-621 | | 20 | | S HANK-719 | | <5 | |
| S HANK-622 | | 105 | | S HANK-720 | | 50 | |
| S HANK-623 | | 365 | | S HANK-722 | | 75 | |
| S HANK-624 | | 370 | | S HANK-723 | | 130 | |
| S HANK-635 | | 470 | | S HANK-724 | | 605 | |
| S HANK-636 | | 280 | | T HANK-1 | | 65 | |
| S HANK-637 | | 185 | | T HANK-2 | | 10 | |
| S HANK-638 | | 25 | | T HANK-5 | | 35 | |
| S HANK-639 | | 240 | | T HANK-6 | | 75 | |
| S HANK-640 | | 75 | | T HANK-11 | | 115 | |
| S HANK-641 | | 110 | | T HANK-12 | | 135 | |
| S HANK-642 | | 55 | | T HANK-13 | | 30 | |
| S HANK-643 | | 15 | | T HANK-31 | | 20 | |
| S HANK-644 | | 190 | | T HANK-37 | | 55 | |
| S HANK-645 | | 585 | | T HANK-40 | | 40 | |
| S HANK-646 | | 505 | | T HANK-44 | | 140 | |
| S HANK-655 | | 90 | | T HANK-46 | | 1430 | |
| S HANK-656 | | 45 | | T HANK-59 | | 85 | |
| S HANK-657 | | 45 | | T HANK-64 | | 90 | |
| S HANK-658 | | 45 | | T HANK-68 | | 295 | |
| S HANK-659 | | 60 | | T HANK-71 | | 580 | |
| S HANK-660 | | 20 | | T HANK-77 | | 300 | |

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| SAMPLE NUMBER | ELEMENT UNITS Au PPB | NOTES | SAMPLE NUMBER | ELEMENT UNITS Au PPB | NOTES |
|---|---|---|---|---|---|
| T HANK-80 | 375 | | T HANK-604 | 440 | |
| T HANK-81 | 130 | | T HANK-607 | 290 | |
| T HANK-100 | 90 | | T HANK-608 | 610 | |
| T HANK-104 | 30 | | T HANK-610 | 895 | |
| T HANK-114 | <5 | | T HANK-620 | 595 | |
| T HANK-115 | 35 | | T HANK-625 | 820 | |
| T HANK-129 | 415 | | T HANK-626 | 375 | |
| T HANK-135 | 90 | | T HANK-627 | 635 | |
| T HANK-301 | 75 | | T HANK-629 | 1450 | |
| T HANK-302 | 90 | | T HANK-630 | 370 | |
| T HANK-304 | 90 | | T HANK-631 | 205 | |
| T HANK-306 | 150 | | T HANK-633A | 265 | |
| T HANK-307 | 55 | | T HANK-633B | 105 | |
| T HANK-308 | 50 | | T HANK-647A | 1620 | |
| T HANK-309 | 40 | | T HANK-647B | 270 | |
| T HANK-310 | 15 | | T HANK-650 | 110 | |
| T HANK-326 | 1005 | | T HANK-653 | 85 | |
| T HANK-330 | 80 | | T HANK-654 | 185 | |
| T HANK-335 | 95 | | T HANK-686 | <5 | |
| T HANK-345 | 15 | | T HANK-688 | 5 | |
| T HANK-348 | 220 | | T HANK-690 | <5 | |
| T HANK-349 | 185 | | T HANK-696 | 30 | |
| T HANK-352 | 95 | | T HANK-708 | 85 | |
| T HANK-353 | 75 | | T HANK-712 | 125 | |
| T HANK-354 | 65 | | T HANK-714 | 55 | |
| T HANK-355 | 85 | | T HANK-718 | 90 | |
| T HANK-384 | 80 | | T HANK-721 | 150 | |
| T HANK-385 | 10 | | T HANK-725 | 270 | |
| T HANK-387 | 90 | | | | |
| T HANK-389 | 100 | | | | |
| T HANK-390 | 5 | | | | |
| T HANK-402 | 75 | | | | |
| T HANK-403 | 70 | | | | |
| T HANK-405 | 85 | | | | |
| T HANK-406 | 130 | | | | |
| T HANK-407 | 20 | | | | |
| T HANK-409 | 60 | | | | |
| T HANK-410 | 190 | | | | |
| T HANK-601 | 240 | | | | |
| T HANK-603 | 450 | | | | |

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| SAMPLE NUMBER (ELEMENT UNITS) | Cu PPM | Mo PPM | As PPM | As PPM | Au PPB | NOTES | SAMPLE NUMBER (ELEMENT UNITS) | Cu PPM | Mo PPM | As PPM | As PPM | Au PPB | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R HANK-9 | 6 | 3 | 0.5 | 22 | 10 | | R HANK-404 | 28 | 1 | 2.2 | 145 | 80 | |
| R HANK-72 | 7 | 2 | 0.2 | 20 | 10 | | R HANK-408 | 21 | 1 | 1.9 | >1000 | 1690 | |
| R HANK-74 | 105 | 4 | 1.8 | 230 | 120 | | R HANK-426 | 91 | <1 | 8.3 | 65 | 100 | |
| R HANK-92 | 162 | 2 | 0.4 | 10 | 5 | | R HANK-427 | 11 | 4 | 0.3 | 60 | 15 | |
| R HANK-93 | 202 | 2 | 0.4 | 13 | 5 | | R HANK-428 | 5 | 8 | 0.2 | 38 | 10 | |
| R HANK-94 | 161 | 2 | 1.3 | 43 | 20 | | R HANK-429 | 9 | 8 | 0.3 | 30 | 155 | |
| R HANK-95 | 97 | 3 | 0.9 | 42 | 20 | | R HANK-430 | 6 | 5 | 0.5 | 42 | 235 | |
| R HANK-96 | 128 | 2 | 1.9 | 38 | 65 | | R HANK-431 | 11 | 4 | <0.2 | 15 | 5 | |
| R HANK-97 | 32 | 2 | 0.5 | 47 | 5 | | R HANK-432 | 10 | 1 | <0.2 | 22 | <5 | |
| R HANK-98 | 239 | 2 | 1.9 | 40 | 30 | | R HANK-433 | 8 | <1 | <0.2 | 20 | <5 | |
| R HANK-99 | 117 | 2 | 0.7 | 35 | 5 | | R HANK-602 | 5 | 9 | 1.3 | 130 | 70 | |
| R HANK-106 | 13 | 2 | 1.1 | 22 | 70 | | R HANK-605 | 8 | 2 | 2.5 | 63 | 100 | |
| R HANK-110 | 79 | 2 | 1.9 | 15 | 50 | | R HANK-606 | 101 | 1 | 6.6 | 170 | 125 | |
| R HANK-114 | 28 | 3 | 0.6 | 3 | <5 | | R HANK-648 | 18 | 2 | 0.5 | 83 | <5 | |
| R HANK-119 | 31 | 2 | <0.2 | 13 | <5 | | R HANK-649 | 7 | 2 | 0.2 | 6 | <5 | |
| R HANK-141 | 41 | 2 | 0.5 | 37 | <5 | | R HANK-651 | 63 | <1 | 1.2 | 80 | 75 | |
| R HANK-142 | 11 | 2 | 0.6 | 17 | 25 | | R HANK-652 | 133 | 1 | 0.9 | 52 | 240 | |
| R HANK-144 | 23 | 1 | 0.8 | 13 | 55 | | R HANK-664 | 7 | 2 | 0.3 | 53 | 135 | |
| R HANK-146 | 39 | 2 | 0.4 | 13 | 30 | | R HANK-665 | 13 | 1 | 0.4 | 40 | 100 | |
| R HANK-147 | 22 | 2 | <0.2 | 20 | 20 | | R HANK-666 | 20 | 1 | 0.6 | 550 | 815 | |
| R HANK-149 | 14 | 4 | <0.2 | 18 | <5 | | R HANK-667 | 10 | <1 | 0.2 | 50 | 105 | |
| R HANK-151 | 675 | 1 | 3.0 | 10 | 10 | | R HANK-668 | 8 | 1 | 0.4 | 60 | 65 | |
| R HANK-303 | 10 | 2 | 0.3 | 10 | <5 | | R HANK-669 | 11 | 1 | 0.6 | 290 | 375 | |
| R HANK-305 | 16 | 2 | 0.8 | 82 | 5 | | R HANK-670 | 6 | <1 | 0.3 | 105 | 85,95 | |
| R HANK-331 | 3400 | 3 | >50.0 | 180 | >10000 | | R HANK-672 | 8 | 1 | 2.6 | 60 | 255 | |
| R HANK-332 | 22 | 1 | 2.4 | 34 | 5 | | R HANK-674 | 12 | 1 | 1.6 | 50 | 105 | |
| R HANK-333 | 101 | 56 | 1.0 | 75 | 745 | | R HANK-676 | 11 | 1 | 1.0 | 58 | 45 | |
| R HANK-333A | 261 | 46 | 0.2 | 52 | 175 | | R HANK-677 | 9 | 2 | 0.5 | 60 | 25 | |
| R HANK-334 | 11 | 6 | 0.3 | 22 | 155 | | R HANK-678 | 5 | 2 | 0.2 | 36 | 5 | |
| R HANK-358 | 12 | 2 | <0.2 | 11 | <5 | | R HANK-679 | 5 | 1 | 0.2 | 58 | 25 | |
| R HANK-369 | 17 | 1 | 0.3 | 12 | 5 | | R HANK-680 | 6 | 2 | 0.2 | 24 | <5 | |
| R HANK-370 | 12 | 1 | 0.4 | 11 | 5 | | R HANK-681 | 5 | <1 | 0.2 | 10 | <5 | |
| R HANK-378 | 27 | 1 | 1.8 | 12 | 20 | | R HANK-682 | 21 | 5 | <0.2 | 23 | <5 | |
| R HANK-379 | 34 | 1 | 3.9 | 13 | 515 | | R HANK-683 | 27 | 10 | <0.2 | 210 | 15 | |
| R HANK-380 | 9 | 1 | 2.5 | 25 | 25 | | R HANK-684 | 11 | 6 | <0.2 | 42 | 15 | |
| R HANK-381 | 29 | <1 | 3.6 | 40 | 25 | | R HANK-685 | 8 | 10 | 0.3 | 63 | 5 | |
| R HANK-382 | 11 | 1 | 0.2 | 20 | <5 | | R HANK-687 | 111 | 4 | 0.4 | 20 | 5 | |
| R HANK-383 | 14 | 1 | <0.2 | 20 | 10 | | R HANK-689 | 16 | 3 | 0.9 | 13 | <5 | |
| R HANK-386 | 102 | 1 | 0.2 | 4 | <5 | | R HANK-691 | 10 | 3 | 0.3 | 12 | 20 | |
| R HANK-388 | 4 | 1 | 0.2 | 4 | 5 | | R HANK-692 | 3 | 2 | 0.2 | 2 | <5 | |

671 prob called 771; 673 prob called 773

Bondar-Clegg & Company Ltd.
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# Geochemical Lab Report

REPORT: 123-2145 PROJECT: HANK



| SAMPLE NUMBER | ELEMENT UNITS | Cu PPM | Mo PPM | Ag PPM | As PPM | Au PPB | NOTES |
|---|---|---|---|---|---|---|---|
| R HANK-693 | | 5 | 2 | 0.3 | 3 | <5 | |
| R HANK-694 | | 6 | 2 | <0.2 | 7 | <5 | |
| R HANK-695 | | 8 | 3 | <0.2 | 4 | <5 | |
| R HANK-710 | | 8 | 3 | 0.6 | 11 | <5 | |
| R HANK-711 | | 5 | 2 | 0.3 | 13 | <5 | |
| R HANK-713 | | 11 | 2 | 0.2 | 10 | <5 | |
| R HANK-719 | | 28 | 8 | 0.3 | 14 | 10 | |
| R HANK-726 | | 8 | 4 | <0.2 | 10 | <5 | |
| R HANK-727 | | 12 | 2 | <0.2 | 10 | <5 | |
| R HANK-728 | | 60 | 2 | 0.2 | 20 | 90 | |
| R HANK-729 | | 56 | 2 | <0.2 | 47 | <5 | |
| R HANK-730 | | 49 | 2 | 1.3 | 500 | 700 | |
| R HANK-731 | | 27 | 4 | 3.9 | 50 | 545 | |
| R HANK-771 | | 7 | 2 | 0.6 | 105 | 195 | probably 671 |
| R HANK-773 | | 7 | 3 | 16.0 | 83 | 220 | " 673 |

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Geochemi
Lab Rep

REPORT: 323-2145

PROJECT: HANK PAGE 1

| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | NOTES Reanalyses |
|---|---|---|---|
| R HANK-693 | | 10 | |
| R HANK-694 | | <5 | |
| R HANK-695 | | 5 | |
| R HANK-710 | | 5 | |
| R HANK-711 | | <5 | |
| R HANK-713 | | 10 | |
| R HANK-719 | | 20 | |
| R HANK-726 | | 10 | |
| R HANK-727 | | 5 | |
| R HANK-728 | | | |
| R HANK-729 | | 10 | |
| R HANK-730 | | 950 | |
| R HANK-731 | | 620 | |
| R HANK-771 | | 215 | |
| R HANK-773 | | 260 | |

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ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH:253-3158 TELEX:04-53124

# ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
SAMPLE TYPE - PULP

DATE RECEIVED SEPT 21 1983 DATE REPORTS MAILED Sept 23/83 ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

LAC MINERALS LTD PROJECT # HANK FILE # 83-2251



| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S HANK-16 | 3 | 41 | 69 | 73 | 1.1 | 6 | 8 | 478 | 5.51 | 190 | 2 | ND | 2 | 19 | 1 | 2 | 2 | 51 | .02 | .14 | 10 | 11 | .28 | 256 | .01 | 3 | 1.22 | .01 | .10 | 2 |
| S HANK-17 | 1 | 31 | 60 | 154 | 1.2 | 6 | 18 | 1999 | 5.97 | 604 | 2 | ND | 2 | 12 | 1 | 2 | 2 | 25 | .19 | .19 | 10 | 4 | .13 | 511 | .01 | 2 | .85 | .01 | .12 | 2 |
| S HANK-18 | 3 | 48 | 68 | 101 | 2.3 | 10 | 11 | 636 | 7.86 | 178 | 2 | ND | 2 | 13 | 1 | 2 | 2 | 61 | .07 | .17 | 8 | 11 | .35 | 198 | .01 | 2 | 1.39 | .01 | .11 | 2 |
| S HANK-19 | 1 | 66 | 49 | 131 | 1.5 | 13 | 17 | 1620 | 5.84 | 79 | 4 | ND | 2 | 11 | 1 | 2 | 2 | 96 | .17 | .16 | 9 | 19 | .75 | 206 | .01 | 3 | 2.22 | .01 | .08 | 2 |
| S HANK-20 | 2 | 61 | 38 | 81 | .4 | 12 | 14 | 772 | 4.79 | 499 | 2 | ND | 2 | 61 | 1 | 14 | 2 | 83 | .11 | .17 | 8 | 20 | .48 | 732 | .01 | 5 | 2.17 | .01 | .20 | 2 |
| S HANK-21 | 3 | 26 | 31 | 29 | .1 | 6 | 6 | 506 | 5.48 | 410 | 2 | ND | 2 | 211 | 1 | 56 | 2 | 50 | .03 | .17 | 19 | 3 | .10 | 458 | .01 | 3 | 1.36 | .01 | .55 | 2 |
| S HANK-22 | 4 | 50 | 28 | 27 | .4 | 13 | 5 | 184 | 20.40 | 360 | 2 | ND | 2 | 37 | 1 | 2 | 2 | 56 | .03 | .25 | 7 | 7 | .13 | 169 | .01 | 2 | .98 | .01 | .11 | 2 |
| S HANK-23 | 9 | 263 | 29 | 518 | .9 | 40 | 97 | 9843 | 5.28 | 102 | 10 | ND | 2 | 32 | 4 | 2 | 2 | 146 | .46 | .08 | 9 | 30 | 1.21 | 552 | .06 | 9 | 8.55 | .02 | .08 | 2 |
| S HANK-24 | 10 | 142 | 52 | 105 | .4 | 15 | 9 | 360 | 24.62 | 3963 | 2 | ND | 3 | 166 | 1 | 2 | 2 | 44 | .03 | .19 | 8 | 7 | .07 | 509 | .01 | 2 | 1.01 | .01 | .41 | 2 |
| S HANK-25 | 2 | 26 | 24 | 73 | 1.0 | 7 | 15 | 1919 | 5.77 | 454 | 2 | ND | 2 | 73 | 1 | 2 | 2 | 30 | .64 | .19 | 7 | 5 | .17 | 229 | .01 | 3 | .60 | .01 | .19 | 2 |
| S HANK-26 | 1 | 55 | 28 | 116 | .5 | 20 | 24 | 832 | 6.19 | 79 | 2 | ND | 2 | 42 | 2 | 2 | 2 | 142 | .78 | .11 | 4 | 39 | .93 | 244 | .04 | 4 | 1.71 | .03 | .07 | 2 |
| S HANK-27 | 13 | 18 | 282 | 100 | 7.1 | 5 | 6 | 410 | 6.45 | 190 | 2 | ND | 4 | 74 | 1 | 10 | 2 | 13 | .01 | .11 | 6 | 4 | .06 | 330 | .01 | 2 | .47 | .01 | .58 | 2 |
| S HANK-29 | 3 | 71 | 51 | 139 | .6 | 14 | 21 | 1966 | 6.47 | 112 | 2 | ND | 2 | 26 | 1 | 2 | 2 | 95 | .24 | .13 | 11 | 21 | .72 | 336 | .01 | 3 | 2.11 | .01 | .11 | 2 |
| S HANK-30 | 5 | 52 | 158 | 171 | 1.0 | 12 | 22 | 1379 | 5.09 | 100 | 3 | ND | 2 | 22 | 1 | 3 | 2 | 55 | .22 | .11 | 12 | 15 | .39 | 313 | .01 | 2 | 1.48 | .01 | .13 | 2 |
| S HANK-32 | 1 | 93 | 61 | 142 | .3 | 17 | 24 | 1382 | 6.35 | 63 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 140 | .24 | .09 | 11 | 29 | .98 | 536 | .01 | 2 | 2.68 | .01 | .07 | 2 |
| S HANK-33 | 2 | 29 | 21 | 40 | .2 | 7 | 5 | 227 | 4.07 | 28 | 2 | ND | 2 | 12 | 1 | 2 | 2 | 77 | .08 | .12 | 6 | 12 | .18 | 147 | .01 | 2 | 1.75 | .01 | .04 | 2 |
| S HANK-34 | 2 | 41 | 30 | 115 | 1.6 | 10 | 13 | 1153 | 4.91 | 68 | 2 | ND | 2 | 15 | 1 | 3 | 2 | 64 | .24 | .11 | 9 | 14 | .39 | 284 | .01 | 2 | 2.53 | .01 | .06 | 2 |
| S HANK-35 | 2 | 41 | 31 | 94 | .7 | 8 | 13 | 1333 | 5.20 | 75 | 2 | ND | 2 | 9 | 1 | 2 | 2 | 66 | .09 | .11 | 11 | 15 | .32 | 184 | .01 | 2 | 2.05 | .01 | .06 | 2 |
| S HANK-36 | 1 | 118 | 50 | 62 | 1.2 | 10 | 36 | 1347 | 3.66 | 132 | 2 | ND | 2 | 11 | 1 | 2 | 2 | 54 | .26 | .11 | 7 | 5 | .35 | 661 | .01 | 2 | 1.45 | .01 | .22 | 2 |
| S HANK-38 | 1 | 87 | 23 | 88 | .1 | 12 | 21 | 1749 | 5.89 | 33 | 3 | ND | 2 | 6 | 1 | 2 | 2 | 97 | .09 | .10 | 5 | 15 | .79 | 195 | .01 | 2 | 3.53 | .01 | .07 | 2 |
| S HANK-39 | 2 | 80 | 40 | 146 | 1.0 | 17 | 25 | 1609 | 6.04 | 139 | 2 | ND | 2 | 35 | 1 | 2 | 2 | 115 | .62 | .13 | 9 | 23 | .85 | 624 | .01 | 2 | 2.30 | .01 | .08 | 2 |
| S HANK-40 | 1 | 40 | 13 | 58 | .1 | 11 | 13 | 890 | 5.30 | 2 | 5 | ND | 2 | 7 | 1 | 2 | 2 | 133 | .09 | .13 | 2 | 17 | .88 | 227 | .01 | 2 | 2.75 | .01 | .04 | 2 |
| S HANK-41 | 1 | 56 | 31 | 122 | .2 | 15 | 22 | 1299 | 5.34 | 80 | 2 | ND | 2 | 28 | 1 | 2 | 2 | 114 | .57 | .13 | 7 | 23 | .80 | 394 | .02 | 3 | 1.78 | .02 | .07 | 2 |
| S HANK-42 | 2 | 66 | 47 | 136 | .3 | 17 | 26 | 1738 | 5.90 | 102 | 2 | ND | 2 | 32 | 2 | 2 | 2 | 113 | .59 | .14 | 7 | 23 | .81 | 518 | .01 | 3 | 1.97 | .02 | .08 | 2 |
| S HANK-43 | 2 | 39 | 27 | 59 | .4 | 10 | 7 | 500 | 5.58 | 42 | 3 | ND | 2 | 7 | 1 | 2 | 2 | 99 | .08 | .09 | 4 | 22 | .35 | 102 | .02 | 2 | 2.20 | .01 | .02 | 2 |
| S HANK-45 | 1 | 48 | 27 | 115 | .5 | 15 | 19 | 1427 | 5.34 | 61 | 2 | ND | 2 | 18 | 1 | 2 | 2 | 116 | .31 | .15 | 5 | 24 | .73 | 229 | .01 | 3 | 2.32 | .01 | .04 | 2 |
| S HANK-47 | 1 | 31 | 17 | 102 | 2.1 | 6 | 10 | 1547 | 4.76 | 288 | 2 | 5 | 2 | 45 | 1 | 4 | 2 | 36 | .71 | .14 | 15 | 5 | .23 | 1278 | .01 | 2 | 1.38 | .01 | .11 | 2 |
| S HANK-48 2X | 1 | 16 | 12 | 43 | 1.2 | 3 | 5 | 855 | 2.89 | 163 | 2 | ND | 2 | 4 | 1 | 2 | 2 | 25 | .01 | .07 | 2 | 2 | .06 | 236 | .01 | 2 | .90 | .01 | .05 | 2 |
| S HANK-49 | 1 | 23 | 15 | 71 | 2.2 | 5 | 8 | 729 | 5.53 | 300 | 2 | ND | 2 | 5 | 1 | 8 | 2 | 51 | .02 | .08 | 3 | 4 | .15 | 338 | .01 | 2 | 2.07 | .01 | .06 | 2 |
| S HANK-50 5X | 1 | 8 | 5 | 22 | .6 | 2 | 3 | 565 | 1.27 | 68 | 2 | ND | 2 | 3 | 1 | 2 | 2 | 9 | .03 | .04 | 5 | 5 | .06 | 66 | .01 | 2 | .49 | .01 | .04 | 2 |
| S HANK-51 | 2 | 13 | 20 | 43 | .9 | 7 | 6 | 328 | 7.56 | 121 | 4 | 2 | 2 | 3 | 1 | 5 | 2 | 99 | .01 | .09 | 3 | 12 | .11 | 62 | .09 | 2 | 1.46 | .01 | .05 | 2 |
| S HANK-52 | 1 | 13 | 12 | 62 | 1.1 | 6 | 8 | 2793 | 5.05 | 58 | 3 | ND | 2 | 6 | 1 | 2 | 2 | 67 | .04 | .27 | 4 | 7 | .16 | 170 | .01 | 2 | 1.70 | .01 | .08 | 2 |
| S HANK-53 | 2 | 14 | 15 | 54 | .3 | 4 | 6 | 254 | 3.65 | 186 | 2 | ND | 2 | 12 | 1 | 2 | 2 | 61 | .09 | .11 | 5 | 5 | .07 | 306 | .01 | 2 | 1.51 | .01 | .06 | 2 |
| S HANK-54 | 61 | 40 | 128 | 97 | 7.6 | 13 | 16 | 1033 | 7.25 | 910 | 2 | 2 | 2 | 43 | 1 | 7 | 2 | 13 | .48 | .14 | 10 | 5 | .13 | 541 | .01 | 2 | .37 | .01 | .13 | 2 |
| S HANK-55 | 1 | 39 | 20 | 73 | 2.8 | 7 | 24 | 11555 | 8.74 | 1625 | 5 | ND | 2 | 117 | 1 | 7 | 2 | 22 | .59 | .15 | 20 | 3 | .09 | 1555 | .01 | 7 | .54 | .01 | .16 | 2 |
| S HANK-56 | 1 | 71 | 926 | 216 | 65.1 | 7 | 10 | 3259 | 5.31 | 428 | 2 | ND | 2 | 33 | 1 | 35 | 2 | 18 | .22 | .12 | 10 | 2 | .08 | 853 | .01 | 2 | .59 | .01 | .13 | 2 |
| S HANK-57 | 3 | 29 | 24 | 59 | 2.7 | 5 | 8 | 3158 | 4.40 | 565 | 2 | ND | 2 | 8 | 1 | 5 | 2 | 26 | .06 | .10 | 5 | 7 | .07 | 436 | .01 | 2 | 1.55 | .01 | .07 | 2 |
| STD A-1 | 1 | 30 | 39 | 178 | .3 | 36 | 12 | 998 | 2.85 | 10 | 2 | ND | 2 | 38 | 1 | 2 | 2 | 59 | .59 | .09 | 6 | 71 | .74 | 278 | .08 | 7 | 2.07 | .02 | .20 | 2 |

2x 5x multiply results because 0.1 & .25gm used. (insufficient sample)

LAC MINERALS LTD   PROJECT # HANK   FILE # 83-2251



| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S HANK-58 | 3 | 42 | 22 | 84 | 1.5 | 7 | 10 | 1321 | 5.03 | 168 | 2 | ND | 2 | 48 | 1 | 3 | 3 | 57 | .77 | .16 | 8 | 13 | .28 | 537 | .01 | 3 | 1.56 | .01 | .09 | 2 |
| S HANK-60 | 16 | 5 | 96 | 14 | .1 | 3 | 2 | 64 | 2.89 | 42 | 2 | ND | 2 | 86 | 1 | 5 | 2 | 19 | .01 | .07 | 3 | 4 | .03 | 461 | .01 | 3 | .40 | .01 | .22 | 2 |
| S HANK-61 | 4 | 18 | 19 | 62 | .6 | 4 | 10 | 684 | 4.47 | 72 | 2 | ND | 2 | 41 | 1 | 2 | 2 | 25 | .09 | .12 | 8 | 6 | .13 | 580 | .01 | 3 | .98 | .01 | .10 | 2 |
| S HANK-62 | 21 | 25 | 27 | 45 | .9 | 6 | 16 | 1912 | 6.48 | 327 | 2 | ND | 2 | 53 | 1 | 2 | 2 | 39 | .12 | .12 | 11 | 4 | .17 | 1424 | .01 | 3 | 1.24 | .01 | .07 | 2 |
| S HANK-63 | 1 | 23 | 31 | 104 | 6.1 | 4 | 15 | 2793 | 4.97 | 196 | 2 | 2 | 2 | 55 | 1 | 3 | 2 | 42 | .80 | .16 | 22 | 3 | .86 | 951 | .01 | 4 | 1.90 | .01 | .16 | 2 |
| S HANK-65 | 9 | 17 | 46 | 217 | 4.6 | 9 | 20 | 8674 | 14.34 | 1556 | 3 | ND | 2 | 4 | 1 | 2 | 2 | 32 | .02 | .18 | 28 | 3 | .03 | 510 | .01 | 2 | .40 | .01 | .09 | 2 |
| S HANK-67 | 3 | 41 | 33 | 99 | 6.6 | 6 | 25 | 9524 | 8.34 | 1189 | 5 | 2 | 2 | 59 | 1 | 6 | 2 | 32 | .45 | .14 | 23 | 2 | .16 | 1076 | .01 | 8 | .83 | .01 | .18 | 2 |
| S HANK-69 | 5 | 49 | 33 | 112 | 7.0 | 7 | 17 | 2684 | 6.55 | 352 | 2 | 6 | 2 | 41 | 1 | 7 | 2 | 32 | .50 | .14 | 16 | 4 | .15 | 560 | .01 | 3 | .76 | .01 | .13 | 2 |
| S HANK-70 | 3 | 32 | 19 | 89 | 1.0 | 5 | 11 | 1368 | 4.43 | 233 | 2 | ND | 2 | 45 | 1 | 2 | 2 | 34 | .58 | .14 | 13 | 6 | .17 | 1128 | .01 | 3 | .82 | .01 | .11 | 2 |
| S HANK-73 | 1 | 1060 | 60 | 90 | 4.1 | 24 | 34 | 1914 | 6.68 | 80 | 2 | ND | 2 | 34 | 1 | 2 | 2 | 30 | .21 | .23 | 11 | 12 | .44 | 277 | .01 | 3 | 2.47 | .01 | .13 | 2 |
| S HANK-75 | 4 | 84 | 250 | 66 | 2.7 | 10 | 7 | 331 | 6.60 | 116 | 2 | ND | 2 | 35 | 1 | 2 | 3 | 22 | .02 | .26 | 8 | 6 | .07 | 248 | .01 | 3 | .46 | .01 | .18 | 2 |
| S HANK-76 | 2 | 65 | 659 | 162 | 7.7 | 5 | 6 | 277 | 5.23 | 87 | 2 | ND | 2 | 20 | 1 | 4 | 2 | 16 | .09 | .21 | 8 | 4 | .05 | 521 | .01 | 3 | .38 | .01 | .13 | 2 |
| S HANK-78 | 4 | 155 | 129 | 229 | 1.9 | 18 | 42 | 2392 | 7.64 | 183 | 2 | ND | 2 | 24 | 2 | 2 | 2 | 46 | .46 | .15 | 9 | 6 | .31 | 429 | .01 | 2 | 1.28 | .01 | .11 | 2 |
| S HANK-79 | 3 | 101 | 108 | 179 | 1.6 | 12 | 19 | 1295 | 6.43 | 149 | 2 | ND | 2 | 28 | 1 | 2 | 2 | 53 | .41 | .15 | 11 | 12 | .30 | 817 | .01 | 3 | 1.34 | .01 | .10 | 2 |
| S HANK-82 | 3 | 45 | 20 | 52 | .5 | 9 | 9 | 705 | 6.21 | 42 | 3 | ND | 2 | 7 | 1 | 2 | 2 | 118 | .03 | .11 | 5 | 17 | .29 | 140 | .01 | 3 | 2.29 | .01 | .03 | 2 |
| S HANK-83 | 2 | 82 | 483 | 454 | 1.2 | 11 | 21 | 1814 | 6.78 | 221 | 2 | ND | 2 | 31 | 2 | 2 | 2 | 59 | .45 | .13 | 11 | 10 | .45 | 323 | .01 | 2 | 1.67 | .01 | .08 | 2 |
| S HANK-84 | 3 | 59 | 225 | 134 | 1.9 | 8 | 11 | 598 | 6.94 | 108 | 2 | ND | 2 | 26 | 1 | 2 | 2 | 76 | .28 | .14 | 9 | 12 | .10 | 352 | .02 | 2 | 1.61 | .01 | .06 | 2 |
| S HANK-85 | 2 | 115 | 182 | 555 | 3.5 | 21 | 13 | 2434 | 6.24 | 70 | 2 | ND | 2 | 67 | 4 | 2 | 2 | 56 | .75 | .20 | 17 | 16 | .28 | 648 | .01 | 3 | 2.19 | .01 | .06 | 2 |
| S HANK-86 | 3 | 33 | 66 | 79 | 2.4 | 8 | 7 | 378 | 7.83 | 118 | 3 | 2 | 2 | 6 | 1 | 2 | 2 | 86 | .03 | .07 | 5 | 12 | .10 | 133 | .02 | 2 | 2.16 | .01 | .03 | 2 |
| S HANK-87 | 3 | 20 | 32 | 51 | .3 | 6 | 5 | 284 | 5.89 | 93 | 2 | 2 | 2 | 5 | 1 | 2 | 2 | 52 | .01 | .09 | 6 | 9 | .10 | 124 | .01 | 3 | 1.40 | .01 | .06 | 2 |
| S HANK-88 | 4 | 31 | 47 | 54 | 1.0 | 7 | 6 | 392 | 7.59 | 200 | 3 | ND | 2 | 7 | 1 | 2 | 2 | 83 | .03 | .21 | 5 | 12 | .11 | 142 | .01 | 2 | 1.65 | .01 | .05 | 2 |
| S HANK-101 | 1 | 49 | 21 | 73 | .5 | 11 | 28 | 1789 | 5.75 | 71 | 2 | ND | 2 | 30 | 1 | 2 | 2 | 56 | .56 | .12 | 14 | 6 | .20 | 572 | .01 | 5 | .61 | .01 | .15 | 2 |
| S HANK-102 | 2 | 286 | 48 | 119 | 2.0 | 13 | 42 | 1745 | 9.28 | 65 | 4 | ND | 2 | 59 | 1 | 2 | 2 | 169 | .63 | .27 | 21 | 7 | .79 | 853 | .01 | 3 | 2.15 | .01 | .11 | 2 |
| S HANK-103 | 1 | 34 | 43 | 121 | .3 | 7 | 14 | 1345 | 5.04 | 28 | 3 | ND | 2 | 46 | 1 | 2 | 2 | 86 | .73 | .17 | 14 | 10 | .53 | 900 | .01 | 4 | 1.45 | .01 | .10 | 2 |
| S HANK-105 | 1 | 37 | 90 | 123 | 1.4 | 7 | 15 | 1819 | 5.05 | 31 | 2 | ND | 2 | 42 | 1 | 3 | 2 | 78 | .65 | .17 | 17 | 9 | .56 | 725 | .01 | 4 | 1.51 | .01 | .10 | 2 |
| S HANK-107 | 2 | 17 | 162 | 85 | 1.5 | 7 | 11 | 1572 | 8.44 | 22 | 2 | ND | 2 | 49 | 1 | 2 | 2 | 41 | .10 | .26 | 17 | 4 | .25 | 704 | .01 | 3 | .85 | .01 | .13 | 2 |
| S HANK-108 | 5 | 22 | 30 | 57 | .8 | 7 | 6 | 338 | 6.55 | 39 | 2 | 2 | 2 | 7 | 1 | 2 | 2 | 132 | .02 | .07 | 7 | 13 | .09 | 111 | .08 | 2 | 1.58 | .01 | .03 | 2 |
| S HANK-109 | 2 | 41 | 57 | 75 | 1.0 | 7 | 12 | 1187 | 7.95 | 81 | 3 | ND | 2 | 9 | 1 | 2 | 2 | 69 | .14 | .22 | 10 | 7 | .36 | 160 | .01 | 3 | 1.94 | .01 | .03 | 2 |
| S HANK-111 | 2 | 38 | 16 | 82 | .3 | 8 | 13 | 1305 | 4.81 | 38 | 4 | ND | 2 | 45 | 1 | 2 | 2 | 72 | .36 | .13 | 17 | 9 | .55 | 625 | .01 | 2 | 2.06 | .01 | .07 | 2 |
| S HANK-112 | 2 | 46 | 55 | 114 | .4 | 8 | 16 | 1485 | 6.09 | 102 | 3 | ND | 2 | 22 | 1 | 2 | 2 | 61 | .34 | .16 | 13 | 9 | .40 | 473 | .01 | 3 | 1.61 | .01 | .08 | 2 |
| S HANK-113 | 1 | 29 | 16 | 76 | .1 | 7 | 13 | 1336 | 4.41 | 45 | 2 | ND | 2 | 31 | 1 | 2 | 2 | 62 | .51 | .16 | 11 | 11 | .43 | 641 | .01 | 4 | 1.40 | .01 | .14 | 2 |
| S HANK-116 | 1 | 36 | 23 | 89 | .3 | 11 | 19 | 1565 | 6.60 | 71 | 2 | ND | 2 | 38 | 1 | 2 | 2 | 84 | .35 | .16 | 15 | 19 | .55 | 706 | .03 | 4 | 1.53 | .01 | .08 | 2 |
| S HANK-117 | 2 | 19 | 14 | 91 | .1 | 9 | 16 | 1319 | 6.29 | 51 | 2 | ND | 2 | 18 | 1 | 2 | 2 | 77 | .08 | .10 | 10 | 14 | .36 | 270 | .04 | 3 | 3.11 | .01 | .06 | 2 |
| S HANK-118 | 3 | 27 | 25 | 52 | .1 | 5 | 11 | 1851 | 3.92 | 48 | 2 | ND | 2 | 26 | 1 | 2 | 2 | 29 | .24 | .14 | 11 | 7 | .14 | 313 | .01 | 2 | 1.14 | .01 | .15 | 2 |
| S HANK-120 | 2 | 31 | 19 | 43 | .1 | 4 | 6 | 818 | 3.42 | 53 | 2 | ND | 2 | 28 | 1 | 2 | 2 | 36 | .11 | .11 | 8 | 6 | .08 | 515 | .01 | 2 | 1.04 | .01 | .10 | 2 |
| S HANK-121 | 3 | 32 | 21 | 48 | .1 | 5 | 6 | 349 | 4.82 | 39 | 2 | ND | 2 | 13 | 1 | 2 | 2 | 36 | .03 | .09 | 10 | 13 | .14 | 225 | .01 | 2 | 1.60 | .01 | .08 | 2 |
| S HANK-122 | 2 | 92 | 20 | 74 | .5 | 9 | 22 | 2176 | 9.10 | 45 | 3 | ND | 2 | 13 | 1 | 2 | 2 | 80 | .19 | .30 | 17 | 10 | .69 | 406 | .01 | 2 | 2.13 | .01 | .10 | 2 |
| STD A-1 | 1 | 30 | 40 | 183 | .3 | 36 | 13 | 994 | 2.83 | 10 | 2 | ND | 2 | 37 | 1 | 2 | 2 | 57 | .58 | .09 | 7 | 71 | .74 | 283 | .07 | 8 | 2.00 | .02 | .21 | 2 |

| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S HANK-123 | 2 | 39 | 41 | 61 | 1.9 | 7 | 9 | 682 | 7.38 | 71 | 2 | ND | 2 | 6 | 1 | 2 | 2 | 69 | .04 | .15 | 5 | 11 | .27 | 96 | .01 | 2 | 2.07 | .01 | .05 | 2 |
| S HANK-124 | 5 | 32 | 36 | 38 | .9 | 10 | 6 | 354 | 9.55 | 75 | 2 | 3 | 2 | 6 | 1 | 5 | 2 | 109 | .02 | .10 | 7 | 16 | .10 | 165 | .06 | 2 | 1.90 | .01 | .05 | 2 |
| S HANK-125 | 2 | 25 | 34 | 48 | .3 | 8 | 8 | 526 | 8.85 | 70 | 2 | ND | 2 | 6 | 1 | 2 | 2 | 101 | .03 | .30 | 4 | 13 | .25 | 119 | .02 | 2 | 2.11 | .01 | .03 | 2 |
| S HANK-126 | 5 | 22 | 46 | 31 | 1.8 | 9 | 6 | 216 | 9.59 | 59 | 4 | 4 | 2 | 5 | 1 | 2 | 2 | 154 | .02 | .14 | 7 | 25 | .10 | 51 | .09 | 2 | 1.89 | .01 | .03 | 2 |
| S HANK-127 | 3 | 62 | 39 | 85 | .5 | 9 | 19 | 1433 | 7.22 | 83 | 2 | ND | 2 | 12 | 1 | 2 | 2 | 62 | .16 | .17 | 8 | 12 | .40 | 230 | .01 | 2 | 3.12 | .01 | .05 | 2 |
| S HANK-128 | 3 | 41 | 26 | 57 | .1 | 7 | 11 | 915 | 6.09 | 40 | 2 | ND | 2 | 6 | 1 | 2 | 2 | 48 | .08 | .12 | 7 | 10 | .27 | 138 | .01 | 2 | 2.21 | .01 | .06 | 2 |
| S HANK-130 | 2 | 94 | 171 | 294 | 1.6 | 15 | 30 | 1954 | 7.84 | 105 | 2 | ND | 2 | 20 | 2 | 2 | 3 | 61 | .16 | .15 | 11 | 11 | .43 | 498 | .01 | 2 | 2.11 | .01 | .07 | 2 |
| S HANK-131 | 2 | 55 | 520 | 233 | 1.2 | 7 | 9 | 409 | 6.68 | 61 | 2 | ND | 2 | 9 | 1 | 2 | 2 | 54 | .01 | .10 | 5 | 8 | .30 | 211 | .01 | 2 | 1.49 | .01 | .07 | 2 |
| S HANK-132 | 9 | 15 | 778 | 78 | 1.2 | 4 | 3 | 58 | 5.30 | 113 | 2 | ND | 2 | 9 | 1 | 2 | 2 | 84 | .01 | .10 | 3 | 6 | .02 | 170 | .01 | 2 | 1.06 | .01 | .07 | 2 |
| S HANK-133 | 4 | 31 | 356 | 51 | 1.7 | 5 | 3 | 128 | 5.20 | 141 | 2 | ND | 2 | 7 | 1 | 2 | 2 | 114 | .01 | .11 | 4 | 10 | .07 | 95 | .02 | 2 | 1.56 | .01 | .05 | 2 |
| S HANK-134 | 4 | 47 | 256 | 52 | 4.4 | 10 | 8 | 616 | 14.31 | 130 | 2 | ND | 2 | 10 | 1 | 2 | 2 | 113 | .05 | .27 | 6 | 18 | .15 | 164 | .02 | 2 | 1.79 | .01 | .07 | 2 |
| S HANK-136 | 2 | 96 | 169 | 237 | 1.5 | 10 | 29 | 1593 | 7.72 | 105 | 2 | ND | 2 | 9 | 2 | 2 | 2 | 64 | .15 | .15 | 6 | 13 | .43 | 225 | .01 | 2 | 2.67 | .01 | .07 | 2 |
| S HANK-138 | 1 | 23 | 25 | 100 | .1 | 5 | 12 | 1815 | 5.10 | 124 | 2 | ND | 2 | 21 | 1 | 2 | 2 | 49 | .17 | .20 | 14 | 9 | .28 | 435 | .01 | 2 | 1.48 | .01 | .08 | 2 |
| S HANK-139 | 3 | 26 | 41 | 40 | .5 | 7 | 8 | 293 | 7.31 | 69 | 2 | ND | 2 | 4 | 1 | 2 | 2 | 117 | .01 | .10 | 4 | 12 | .15 | 69 | .03 | 2 | 1.88 | .01 | .03 | 2 |
| S HANK-140 | 2 | 44 | 137 | 125 | .5 | 9 | 13 | 579 | 8.95 | 95 | 2 | ND | 2 | 4 | 1 | 2 | 2 | 80 | .01 | .21 | 3 | 13 | .45 | 136 | .01 | 2 | 2.38 | .01 | .05 | 2 |
| S HANK-143 | 1 | 95 | 1464 | 154 | 19.8 | 6 | 4 | 297 | 9.20 | 96 | 2 | ND | 2 | 54 | 1 | 10 | 3 | 66 | .01 | .13 | 2 | 8 | .62 | 436 | .01 | 2 | 1.94 | .03 | .20 | 2 |
| S HANK-145 | 4 | 89 | 1354 | 123 | 3.5 | 10 | 6 | 239 | 16.26 | 187 | 2 | ND | 2 | 31 | 1 | 16 | 2 | 79 | .01 | .19 | 5 | 10 | .35 | 250 | .01 | 2 | 2.38 | .02 | .15 | 2 |
| S HANK-148 | 5 | 20 | 244 | 44 | 1.6 | 9 | 7 | 131 | 14.09 | 22 | 2 | ND | 2 | 17 | 1 | 2 | 2 | 100 | .03 | .28 | 3 | 8 | .11 | 228 | .02 | 2 | 1.48 | .01 | .06 | 2 |
| S HANK-150A | 2 | 104 | 149 | 182 | .8 | 9 | 13 | 675 | 9.45 | 111 | 2 | ND | 2 | 9 | 1 | 2 | 2 | 107 | .02 | .16 | 3 | 14 | .36 | 478 | .01 | 2 | 1.84 | .01 | .07 | 2 |
| S HANK-150B | 2 | 63 | 288 | 626 | 1.3 | 6 | 18 | 1216 | 6.74 | 106 | 2 | ND | 2 | 172 | 3 | 2 | 2 | 43 | .53 | .17 | 8 | 4 | .40 | 174 | .01 | 2 | 1.03 | .02 | .13 | 2 |
| S HANK-151 | 2 | 38 | 70 | 160 | .6 | 9 | 9 | 442 | 6.02 | 51 | 2 | ND | 2 | 22 | 1 | 3 | 2 | 105 | .10 | .16 | 4 | 13 | .28 | 197 | .01 | 2 | 1.86 | .01 | .07 | 2 |
| S HANK-152 | 1 | 15 | 19 | 620 | .6 | 6 | 21 | 15043 | 3.51 | 20 | 9 | ND | 2 | 137 | 8 | 2 | 2 | 14 | .40 | .04 | 70 | 1 | .03 | 87 | .01 | 12 | 12.94 | .01 | .01 | 2 |
| S HANK-311 | 3 | 63 | 30 | 170 | .1 | 19 | 32 | 1274 | 6.48 | 62 | 2 | ND | 2 | 39 | 1 | 2 | 2 | 165 | .71 | .12 | 7 | 21 | 1.34 | 171 | .07 | 2 | 2.83 | .02 | .07 | 2 |
| S HANK-312 | 5 | 89 | 109 | 200 | 1.9 | 18 | 35 | 1697 | 9.16 | 106 | 4 | ND | 2 | 14 | 1 | 3 | 3 | 121 | .09 | .14 | 12 | 19 | .76 | 643 | .07 | 2 | 3.13 | .01 | .07 | 2 |
| S HANK-313 | 2 | 65 | 93 | 103 | .8 | 9 | 14 | 680 | 6.20 | 161 | 2 | ND | 2 | 25 | 1 | 7 | 2 | 74 | .35 | .11 | 7 | 14 | .36 | 560 | .01 | 2 | 1.95 | .01 | .09 | 2 |
| S HANK-314 | 24 | 16 | 60 | 27 | 4.4 | 3 | 3 | 187 | 3.91 | 46 | 2 | ND | 2 | 84 | 1 | 10 | 2 | 15 | .02 | .12 | 2 | 5 | .06 | 298 | .01 | 2 | .57 | .04 | .10 | 2 |
| S HANK-315 | 1 | 15 | 15 | 100 | 2.7 | 2 | 6 | 1763 | 2.81 | 40 | 2 | ND | 2 | 4 | 1 | 4 | 2 | 20 | .02 | .11 | 11 | 6 | .02 | 395 | .01 | 2 | .30 | .01 | .09 | 2 |
| S HANK-316 | 2 | 62 | 51 | 192 | 2.6 | 11 | 20 | 1412 | 12.33 | 176 | 2 | ND | 2 | 3 | 1 | 5 | 2 | 60 | .01 | .19 | 12 | 8 | .09 | 66 | .01 | 2 | 1.21 | .01 | .06 | 2 |
| S HANK-317 | 1 | 25 | 94 | 124 | 1.7 | 6 | 9 | 1319 | 8.53 | 99 | 2 | ND | 2 | 8 | 1 | 5 | 2 | 73 | .03 | .20 | 5 | 8 | .11 | 133 | .01 | 2 | 1.61 | .01 | .05 | 2 |
| S HANK-318 | 1 | 22 | 144 | 30 | 3.0 | 3 | 4 | 626 | 5.38 | 30 | 2 | ND | 2 | 95 | 1 | 14 | 2 | 15 | .01 | .16 | 12 | 5 | .03 | 483 | .01 | 2 | .73 | .03 | .20 | 2 |
| S HANK-320 | 2 | 45 | 295 | 82 | 3.9 | 8 | 6 | 341 | 11.51 | 167 | 2 | ND | 2 | 14 | 1 | 8 | 2 | 83 | .02 | .17 | 4 | 14 | .15 | 205 | .01 | 2 | 2.36 | .01 | .09 | 2 |
| S HANK-321 | 4 | 55 | 85 | 93 | 2.1 | 9 | 6 | 275 | 13.74 | 147 | 2 | ND | 2 | 3 | 1 | 2 | 2 | 89 | .01 | .17 | 3 | 14 | .08 | 58 | .07 | 2 | 1.93 | .01 | .02 | 2 |
| S HANK-322 | 4 | 29 | 144 | 39 | 1.1 | 7 | 4 | 137 | 7.78 | 34 | 2 | 3 | 2 | 5 | 1 | 2 | 2 | 95 | .01 | .07 | 9 | 14 | .04 | 91 | .02 | 2 | 2.67 | .01 | .03 | 2 |
| S HANK-323 | 5 | 15 | 23 | 34 | .8 | 8 | 5 | 298 | 9.53 | 18 | 5 | 5 | 2 | 3 | 1 | 6 | 2 | 121 | .03 | .07 | 2 | 19 | .12 | 48 | .22 | 2 | 2.08 | .01 | .02 | 2 |
| S HANK-324 | 3 | 32 | 77 | 44 | .8 | 7 | 6 | 356 | 8.53 | 116 | 2 | ND | 2 | 6 | 1 | 7 | 2 | 95 | .02 | .09 | 3 | 16 | .13 | 98 | .01 | 2 | 2.47 | .01 | .06 | 2 |
| S HANK-325 | 4 | 19 | 21 | 35 | .2 | 5 | 4 | 215 | 5.44 | 59 | 2 | ND | 2 | 5 | 1 | 6 | 2 | 150 | .03 | .07 | 4 | 13 | .04 | 40 | .03 | 2 | 1.17 | .01 | .03 | 2 |
| S HANK-327 | 4 | 27 | 35 | 33 | .6 | 6 | 6 | 243 | 6.66 | 69 | 2 | ND | 2 | 5 | 1 | 5 | 2 | 190 | .02 | .10 | 4 | 12 | .15 | 62 | .03 | 2 | 1.50 | .01 | .03 | 2 |
| STD A-1 | 1 | 30 | 40 | 185 | .3 | 35 | 13 | 1037 | 2.81 | 11 | 2 | ND | 2 | 35 | 1 | 2 | 2 | 60 | .61 | .09 | 7 | 72 | .74 | 281 | .08 | 7 | 2.05 | .02 | .21 | 2 |

| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S HANK-328 | 4 | 26 | 21 | 37 | .4 | 6 | 6 | 304 | 6.30 | 40 | 4 | ND | 2 | 6 | 1 | 8 | 2 | 170 | .02 | .06 | 4 | 14 | .09 | 54 | .05 | 2 | 1.46 | .01 | .05 | 2 |
| S HANK-329 | 2 | 48 | 14 | 108 | .5 | 26 | 15 | 648 | 4.63 | 16 | 2 | ND | 2 | 15 | 1 | 2 | 2 | 97 | .20 | .08 | 5 | 37 | .97 | 247 | .02 | 2 | 3.04 | .01 | .07 | 2 |
| S HANK-336 | 1 | 29 | 45 | 95 | .7 | 6 | 12 | 1601 | 6.96 | 203 | 2 | ND | 2 | 7 | 1 | 2 | 2 | 59 | .02 | .13 | 6 | 5 | .08 | 113 | .01 | 2 | 1.33 | .01 | .06 | 2 |
| S HANK-337 | 2 | 19 | 38 | 42 | .3 | 4 | 6 | 576 | 4.62 | 73 | 2 | ND | 2 | 8 | 1 | 2 | 2 | 70 | .05 | .16 | 6 | 7 | .10 | 98 | .01 | 2 | 1.52 | .01 | .06 | 2 |
| S HANK-338 | 2 | 26 | 47 | 67 | .6 | 6 | 8 | 1069 | 5.66 | 58 | 2 | ND | 2 | 7 | 1 | 2 | 2 | 60 | .03 | .16 | 5 | 10 | .11 | 86 | .01 | 2 | 1.48 | .01 | .07 | 2 |
| S HANK-339 | 2 | 35 | 77 | 141 | .4 | 10 | 14 | 829 | 6.96 | 108 | 2 | ND | 2 | 22 | 1 | 2 | 2 | 63 | .30 | .14 | 8 | 14 | .34 | 475 | .01 | 2 | 1.95 | .01 | .05 | 2 |
| S HANK-340 | 1 | 24 | 53 | 122 | .4 | 7 | 13 | 1133 | 5.49 | 107 | 2 | ND | 2 | 12 | 1 | 3 | 2 | 51 | .09 | .16 | 6 | 10 | .18 | 369 | .01 | 2 | 1.62 | .01 | .09 | 2 |
| S HANK-341 | 1 | 28 | 39 | 57 | .7 | 8 | 10 | 579 | 7.52 | 45 | 2 | ND | 2 | 16 | 1 | 2 | 2 | 116 | .16 | .11 | 6 | 18 | .29 | 294 | .01 | 2 | 2.49 | .01 | .05 | 2 |
| S HANK-342 | 1 | 62 | 16 | 66 | .1 | 11 | 15 | 1119 | 4.59 | 2 | 2 | ND | 2 | 18 | 1 | 3 | 2 | 83 | .29 | .10 | 9 | 14 | .73 | 514 | .01 | 2 | 2.77 | .01 | .08 | 2 |
| S HANK-343 | 1 | 55 | 28 | 111 | .6 | 12 | 15 | 1154 | 4.81 | 38 | 2 | ND | 2 | 39 | 1 | 2 | 2 | 70 | .58 | .14 | 11 | 12 | .65 | 484 | .01 | 2 | 2.07 | .01 | .10 | 2 |
| S HANK-344 | 1 | 57 | 35 | 119 | .2 | 15 | 22 | 1118 | 5.33 | 76 | 2 | ND | 2 | 24 | 1 | 3 | 2 | 125 | .46 | .12 | 7 | 27 | .87 | 365 | .03 | 2 | 1.96 | .02 | .07 | 2 |
| S HANK-346 | 1 | 70 | 14 | 121 | .1 | 34 | 21 | 1330 | 4.73 | 14 | 2 | ND | 2 | 32 | 1 | 2 | 2 | 104 | .64 | .11 | 9 | 43 | 1.34 | 215 | .05 | 4 | 2.60 | .02 | .13 | 2 |
| S HANK-347 | 1 | 102 | 24 | 126 | .1 | 32 | 24 | 1473 | 4.91 | 34 | 2 | ND | 2 | 40 | 1 | 2 | 2 | 102 | .70 | .12 | 8 | 55 | 1.14 | 235 | .05 | 4 | 2.18 | .01 | .08 | 2 |
| S HANK-356 | 1 | 14 | 15 | 130 | .7 | 6 | 19 | 2452 | 7.48 | 912 | 2 | ND | 2 | 50 | 1 | 12 | 2 | 29 | .71 | .24 | 23 | 4 | .12 | 193 | .01 | 2 | .65 | .01 | .15 | 2 |
| S HANK-357 | 1 | 12 | 16 | 101 | .2 | 5 | 18 | 1996 | 6.52 | 62 | 2 | ND | 2 | 83 | 1 | 2 | 2 | 32 | 1.24 | .20 | 20 | 4 | .35 | 164 | .01 | 4 | .75 | .01 | .15 | 2 |
| S HANK-359 | 1 | 8 | 20 | 66 | .1 | 4 | 11 | 897 | 6.31 | 34 | 2 | ND | 2 | 38 | 1 | 5 | 2 | 36 | .18 | .20 | 13 | 4 | .37 | 668 | .01 | 2 | .93 | .01 | .14 | 2 |
| S HANK-360 | 1 | 20 | 22 | 109 | .5 | 6 | 17 | 1603 | 6.68 | 142 | 2 | ND | 2 | 74 | 1 | 7 | 2 | 42 | .71 | .19 | 16 | 4 | .31 | 383 | .01 | 2 | .95 | .01 | .15 | 2 |
| S HANK-361 | 2 | 12 | 30 | 77 | .1 | 3 | 11 | 1327 | 4.45 | 28 | 2 | ND | 2 | 70 | 1 | 2 | 2 | 50 | .43 | .15 | 12 | 5 | .28 | 1016 | .01 | 2 | 1.56 | .01 | .15 | 2 |
| S HANK-362 | 1 | 41 | 15 | 72 | .2 | 6 | 17 | 889 | 4.46 | 33 | 2 | ND | 2 | 101 | 1 | 2 | 2 | 51 | .69 | .17 | 12 | 4 | .29 | 1011 | .01 | 2 | 1.53 | .01 | .16 | 2 |
| S HANK-363 | 1 | 31 | 28 | 86 | .3 | 6 | 17 | 1155 | 5.06 | 46 | 2 | ND | 2 | 42 | 1 | 4 | 2 | 60 | .36 | .14 | 12 | 6 | .34 | 870 | .01 | 2 | 1.73 | .01 | .14 | 2 |
| S HANK-364 | 4 | 8 | 31 | 45 | .1 | 5 | 5 | 436 | 4.73 | 13 | 2 | ND | 2 | 36 | 1 | 2 | 2 | 77 | .05 | .12 | 4 | 10 | .15 | 304 | .04 | 3 | 1.83 | .01 | .11 | 2 |
| S HANK-365 | 1 | 45 | 29 | 59 | .1 | 5 | 16 | 586 | 5.28 | 15 | 2 | ND | 2 | 68 | 1 | 2 | 2 | 65 | .35 | .09 | 7 | 4 | .31 | 783 | .01 | 2 | 2.26 | .01 | .11 | 2 |
| S HANK-366 | 1 | 113 | 402 | 441 | 1.1 | 8 | 13 | 656 | 8.62 | 74 | 2 | ND | 2 | 19 | 1 | 7 | 2 | 67 | .02 | .16 | 6 | 13 | .40 | 854 | .01 | 2 | 1.31 | .01 | .11 | 2 |
| S HANK-367 | 1 | 105 | 529 | 168 | 1.5 | 6 | 4 | 196 | 7.99 | 58 | 2 | ND | 2 | 9 | 1 | 5 | 2 | 72 | .01 | .14 | 2 | 8 | .40 | 294 | .01 | 2 | 1.84 | .01 | .09 | 2 |
| S HANK-368 | 1 | 58 | 2081 | 244 | 2.9 | 4 | 8 | 517 | 5.95 | 35 | 2 | ND | 2 | 83 | 1 | 10 | 2 | 47 | .01 | .13 | 2 | 4 | .47 | 716 | .01 | 2 | 1.36 | .03 | .16 | 2 |
| S HANK-371 | 2 | 30 | 79 | 142 | .5 | 8 | 7 | 332 | 12.33 | 21 | 3 | ND | 2 | 72 | 1 | 2 | 2 | 64 | .01 | .22 | 3 | 4 | .66 | 427 | .01 | 2 | 1.28 | .04 | .22 | 2 |
| S HANK-372 | 1 | 11 | 288 | 147 | .9 | 8 | 7 | 402 | 10.16 | 188 | 2 | ND | 2 | 37 | 1 | 2 | 6 | 32 | .05 | .15 | 2 | 4 | .07 | 947 | .01 | 2 | .60 | .02 | .14 | 2 |
| S HANK-373 | 1 | 26 | 128 | 121 | .2 | 4 | 11 | 1209 | 4.87 | 43 | 2 | ND | 2 | 34 | 1 | 2 | 2 | 61 | .17 | .15 | 6 | 7 | .29 | 638 | .01 | 2 | 1.59 | .01 | .09 | 2 |
| S HANK-374 | 1 | 13 | 72 | 78 | .7 | 4 | 6 | 387 | 5.52 | 41 | 2 | ND | 2 | 21 | 1 | 6 | 2 | 112 | .06 | .13 | 3 | 6 | .19 | 200 | .01 | 2 | 1.40 | .01 | .08 | 2 |
| S HANK-375 | 1 | 12 | 79 | 100 | .6 | 3 | 4 | 321 | 3.12 | 25 | 2 | ND | 2 | 21 | 1 | 2 | 2 | 59 | .16 | .08 | 4 | 5 | .21 | 277 | .01 | 2 | 1.53 | .01 | .08 | 2 |
| S HANK-376 | 1 | 48 | 50 | 1004 | .4 | 21 | 16 | 943 | 4.31 | 17 | 2 | ND | 2 | 45 | 2 | 2 | 2 | 82 | .38 | .10 | 6 | 30 | .63 | 315 | .01 | 2 | 3.58 | .01 | .07 | 2 |
| S HANK-377 | 2 | 60 | 349 | 207 | .9 | 9 | 17 | 1275 | 5.46 | 343 | 2 | ND | 2 | 30 | 2 | 2 | 2 | 62 | .38 | .14 | 6 | 11 | .49 | 592 | .01 | 6 | 1.56 | .01 | .10 | 2 |
| S HANK-391 | 1 | 38 | 22 | 71 | .1 | 20 | 17 | 912 | 4.26 | 12 | 3 | ND | 2 | 33 | 1 | 2 | 2 | 84 | .25 | .10 | 9 | 60 | .65 | 611 | .02 | 3 | 1.58 | .01 | .13 | 2 |
| S HANK-392 | 1 | 33 | 20 | 70 | .1 | 18 | 14 | 811 | 4.31 | 6 | 2 | ND | 2 | 16 | 1 | 2 | 2 | 89 | .09 | .10 | 5 | 60 | .54 | 310 | .01 | 2 | 1.71 | .01 | .11 | 2 |
| S HANK-393 | 2 | 32 | 21 | 64 | .3 | 11 | 11 | 673 | 4.63 | 29 | 2 | ND | 2 | 15 | 1 | 4 | 2 | 68 | .06 | .11 | 7 | 30 | .37 | 220 | .01 | 2 | 1.91 | .01 | .09 | 2 |
| S HANK-394 | 2 | 45 | 25 | 74 | .1 | 12 | 15 | 936 | 5.92 | 24 | 2 | ND | 2 | 20 | 1 | 2 | 2 | 88 | .16 | .13 | 8 | 35 | .47 | 172 | .02 | 2 | 2.27 | .01 | .09 | 2 |
| S HANK-395 | 1 | 55 | 49 | 81 | .8 | 6 | 12 | 1031 | 6.05 | 86 | 2 | ND | 2 | 7 | 1 | 2 | 2 | 62 | .05 | .16 | 6 | 10 | .31 | 233 | .01 | 2 | 1.82 | .01 | .06 | 2 |
| STD A-1 | 1 | 30 | 37 | 186 | .3 | 36 | 13 | 1020 | 2.83 | 11 | 2 | ND | 2 | 35 | 1 | 2 | 2 | 59 | .60 | .09 | 6 | 72 | .73 | 275 | .08 | 7 | 2.07 | .02 | .21 | 2 |

| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S HANK-396 | 3 | 21 | 36 | 51 | .5 | 6 | 6 | 408 | 5.03 | 72 | 2 | ND | 2 | 12 | 1 | 2 | 2 | 83 | .05 | .22 | 6 | 10 | .13 | 349 | .02 | 3 | 1.40 | .01 | .05 | 2 |
| S HANK-397 | 5 | 13 | 27 | 43 | .7 | 5 | 4 | 446 | 6.13 | 25 | 2 | 5 | 2 | 5 | 1 | 2 | 2 | 76 | .02 | .08 | 12 | 11 | .11 | 85 | .08 | 3 | 1.89 | .01 | .04 | 2 |
| S HANK-398 | 2 | 48 | 42 | 114 | .5 | 6 | 9 | 682 | 7.03 | 70 | 2 | ND | 2 | 14 | 1 | 2 | 2 | 75 | .13 | .12 | 6 | 7 | .27 | 386 | .01 | 3 | 1.64 | .01 | .07 | 2 |
| S HANK-399 | 2 | 35 | 24 | 87 | .7 | 7 | 11 | 2173 | 4.80 | 29 | 2 | ND | 2 | 30 | 1 | 2 | 2 | 64 | .26 | .17 | 6 | 6 | .19 | 584 | .01 | 4 | 1.27 | .01 | .13 | 2 |
| S HANK-400 | 5 | 99 | 228 | 243 | 2.3 | 9 | 13 | 1748 | 12.81 | 294 | 3 | ND | 2 | 10 | 1 | 2 | 2 | 154 | .17 | .44 | 4 | 8 | .64 | 145 | .01 | 2 | 1.78 | .01 | .09 | 2 |
| S HANK-401 2X | 1 | 28 | 45 | 64 | .3 | 4 | 6 | 329 | 4.28 | 41 | 2 | ND | 2 | 9 | 1 | 4 | 2 | 35 | .05 | .06 | 5 | 7 | .18 | 164 | .01 | 3 | .80 | .01 | .05 | 2 |
| S HANK-411 | 1 | 33 | 18 | 80 | .4 | 7 | 16 | 1984 | 5.44 | 130 | 3 | ND | 2 | 5 | 1 | 2 | 2 | 62 | .07 | .12 | 11 | 7 | .45 | 142 | .01 | 3 | 1.99 | .01 | .09 | 2 |
| S HANK-412 | 2 | 24 | 20 | 67 | 1.4 | 5 | 8 | 726 | 5.01 | 101 | 2 | ND | 2 | 22 | 1 | 3 | 2 | 55 | .31 | .14 | 8 | 8 | .22 | 349 | .01 | 4 | 1.58 | .01 | .10 | 2 |
| S HANK-413 | 6 | 21 | 31 | 64 | .4 | 6 | 14 | 1408 | 5.33 | 75 | 2 | ND | 2 | 64 | 1 | 3 | 2 | 46 | .34 | .20 | 13 | 7 | .31 | 610 | .01 | 2 | 1.02 | .01 | .09 | 2 |
| S HANK-414 | 1 | 22 | 16 | 61 | .2 | 5 | 8 | 835 | 3.74 | 50 | 2 | ND | 2 | 16 | 1 | 2 | 2 | 57 | .08 | .13 | 7 | 6 | .29 | 505 | .01 | 2 | 1.87 | .01 | .09 | 2 |
| S HANK-415 | 2 | 44 | 38 | 88 | .5 | 8 | 21 | 1617 | 8.46 | 204 | 3 | ND | 2 | 16 | 1 | 10 | 2 | 58 | .10 | .13 | 13 | 8 | .28 | 323 | .01 | 2 | 3.34 | .01 | .05 | 2 |
| S HANK-416 | 3 | 28 | 45 | 58 | .9 | 7 | 7 | 570 | 7.76 | 141 | 2 | 2 | 2 | 8 | 1 | 4 | 2 | 76 | .05 | .18 | 8 | 10 | .17 | 88 | .01 | 2 | 1.80 | .01 | .04 | 2 |
| S HANK-417 | 2 | 76 | 50 | 54 | .4 | 7 | 7 | 443 | 6.62 | 75 | 2 | ND | 2 | 9 | 1 | 3 | 2 | 76 | .08 | .19 | 6 | 12 | .16 | 151 | .01 | 2 | 1.78 | .01 | .04 | 2 |
| S HANK-418 | 2 | 77 | 17 | 57 | .3 | 7 | 7 | 595 | 4.40 | 81 | 4 | ND | 2 | 21 | 1 | 2 | 2 | 61 | .07 | .11 | 5 | 12 | .17 | 168 | .01 | 3 | 1.56 | .01 | .07 | 2 |
| S HANK-419 | 2 | 27 | 35 | 50 | 1.5 | 7 | 8 | 2147 | 6.02 | 74 | 2 | ND | 2 | 10 | 1 | 2 | 2 | 81 | .03 | .14 | 5 | 9 | .12 | 215 | .01 | 3 | 1.54 | .01 | .04 | 2 |
| S HANK-420 | 4 | 22 | 32 | 42 | .6 | 8 | 6 | 369 | 8.95 | 72 | 3 | ND | 2 | 6 | 1 | 2 | 2 | 124 | .02 | .16 | 7 | 15 | .09 | 118 | .04 | 2 | 1.83 | .01 | .03 | 2 |
| S HANK-421 | 2 | 51 | 27 | 78 | .6 | 10 | 13 | 1117 | 7.08 | 79 | 2 | 2 | 2 | 7 | 1 | 8 | 2 | 72 | .14 | .26 | 8 | 16 | .24 | 105 | .07 | 3 | 3.42 | .01 | .04 | 2 |
| S HANK-422 | 2 | 45 | 47 | 98 | .6 | 9 | 13 | 1562 | 6.98 | 101 | 2 | ND | 2 | 8 | 1 | 8 | 2 | 75 | .12 | .14 | 5 | 10 | .29 | 217 | .02 | 2 | 1.45 | .01 | .05 | 2 |
| S HANK-423 | 4 | 37 | 33 | 112 | .8 | 10 | 17 | 1423 | 7.42 | 93 | 3 | ND | 2 | 7 | 1 | 2 | 2 | 74 | .05 | .09 | 14 | 19 | .41 | 189 | .01 | 2 | 3.32 | .01 | .05 | 2 |
| S HANK-424 | 9 | 104 | 575 | 616 | 5.2 | 18 | 26 | 2131 | 10.20 | 693 | 2 | ND | 2 | 24 | 3 | 6 | 2 | 22 | .41 | .14 | 12 | 1 | .21 | 188 | .01 | 3 | .68 | .01 | .10 | 2 |
| S HANK-425 | 3 | 73 | 59 | 108 | .9 | 11 | 22 | 2767 | 6.93 | 173 | 3 | ND | 2 | 56 | 1 | 2 | 2 | 54 | .38 | .17 | 19 | 6 | .50 | 1134 | .01 | 3 | 1.36 | .01 | .12 | 2 |
| S HANK-611 | 1 | 18 | 33 | 87 | .9 | 5 | 14 | 3206 | 5.06 | 153 | 2 | ND | 2 | 12 | 1 | 10 | 2 | 47 | .15 | .17 | 12 | 5 | .13 | 327 | .01 | 3 | 1.06 | .01 | .10 | 2 |
| S HANK-612 | 1 | 19 | 33 | 101 | .5 | 5 | 11 | 1440 | 6.02 | 101 | 2 | ND | 2 | 6 | 1 | 4 | 2 | 63 | .05 | .12 | 5 | 3 | .21 | 158 | .01 | 3 | 1.86 | .01 | .12 | 2 |
| S HANK-613 | 2 | 31 | 25 | 59 | .4 | 6 | 6 | 365 | 4.38 | 74 | 2 | ND | 2 | 48 | 1 | 10 | 2 | 83 | .85 | .11 | 4 | 11 | .21 | 157 | .01 | 3 | 1.35 | .01 | .07 | 2 |
| S HANK-614 | 1 | 7 | 11 | 36 | .3 | 4 | 5 | 249 | 4.82 | 52 | 2 | ND | 2 | 7 | 1 | 6 | 2 | 96 | .05 | .15 | 3 | 6 | .07 | 138 | .02 | 3 | 1.64 | .01 | .07 | 2 |
| S HANK-615 | 1 | 15 | 27 | 89 | .9 | 4 | 10 | 1713 | 4.51 | 101 | 2 | ND | 2 | 51 | 1 | 4 | 2 | 37 | 1.15 | .17 | 14 | 4 | .12 | 341 | .01 | 4 | .89 | .01 | .10 | 2 |
| S HANK-616 | 5 | 27 | 53 | 61 | 1.4 | 8 | 8 | 605 | 9.21 | 121 | 2 | ND | 2 | 8 | 1 | 2 | 2 | 112 | .04 | .17 | 4 | 12 | .11 | 108 | .02 | 3 | 1.77 | .01 | .05 | 2 |
| S HANK-617 | 2 | 33 | 71 | 80 | 1.1 | 6 | 5 | 249 | 6.43 | 108 | 3 | ND | 2 | 9 | 1 | 9 | 2 | 89 | .04 | .16 | 4 | 10 | .08 | 176 | .01 | 4 | 1.28 | .01 | .05 | 2 |
| S HANK-618 | 2 | 24 | 39 | 90 | 1.3 | 5 | 5 | 266 | 6.06 | 100 | 2 | ND | 2 | 7 | 1 | 6 | 2 | 65 | .09 | .16 | 3 | 9 | .11 | 93 | .01 | 3 | 1.23 | .01 | .04 | 2 |
| S HANK-619 | 3 | 52 | 49 | 120 | .7 | 12 | 13 | 602 | 7.84 | 130 | 2 | ND | 2 | 6 | 1 | 2 | 2 | 69 | .13 | .12 | 4 | 14 | .38 | 79 | .01 | 2 | 2.08 | .01 | .04 | 2 |
| S HANK-621 | 4 | 15 | 19 | 40 | .2 | 4 | 4 | 271 | 3.65 | 59 | 4 | ND | 2 | 7 | 1 | 4 | 2 | 128 | .04 | .06 | 4 | 9 | .06 | 122 | .03 | 4 | 1.11 | .01 | .04 | 2 |
| S HANK-622 | 3 | 20 | 27 | 78 | 1.1 | 6 | 5 | 632 | 4.55 | 67 | 2 | ND | 2 | 7 | 1 | 4 | 2 | 66 | .06 | .06 | 4 | 11 | .13 | 175 | .02 | 2 | 1.34 | .01 | .07 | 2 |
| S HANK-623 | 2 | 25 | 30 | 77 | 1.7 | 5 | 7 | 700 | 5.40 | 226 | 2 | ND | 2 | 6 | 1 | 7 | 2 | 45 | .04 | .14 | 3 | 5 | .08 | 174 | .01 | 3 | 1.05 | .01 | .08 | 2 |
| S HANK-624 | 3 | 29 | 43 | 75 | .6 | 5 | 8 | 394 | 6.00 | 136 | 2 | ND | 2 | 18 | 1 | 4 | 2 | 48 | .24 | .14 | 7 | 7 | .26 | 388 | .01 | 3 | 1.18 | .01 | .10 | 2 |
| S HANK-635 | 2 | 23 | 15 | 58 | .4 | .5 | 10 | 999 | 4.06 | 58 | 2 | ND | 2 | 10 | 1 | 2 | 2 | 58 | .16 | .15 | 4 | 5 | .36 | 246 | .01 | 3 | 1.56 | .01 | .09 | 2 |
| S HANK-636 | 1 | 34 | 22 | 104 | 1.6 | 6 | 12 | 961 | 4.96 | 146 | 2 | ND | 2 | 39 | 1 | 2 | 2 | 48 | .64 | .17 | 15 | 4 | .84 | 239 | .01 | 3 | 1.97 | .01 | .14 | 2 |
| S HANK-637 | 1 | 30 | 13 | 68 | .9 | 6 | 14 | 2172 | 5.45 | 125 | 2 | ND | 2 | 15 | 1 | 2 | 2 | 68 | .26 | .23 | 7 | 2 | .38 | 307 | .01 | 2 | 2.06 | .01 | .13 | 2 |
| STD A-1 | 1 | 30 | 39 | 178 | .3 | 36 | 12 | 1009 | 2.81 | 10 | 2 | ND | 2 | 37 | 1 | 2 | 2 | 59 | .60 | .09 | 7 | 72 | .73 | 276 | .07 | 8 | 2.02 | .02 | .21 | 2 |

| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S HANK-638 | 1 | 40 | 14 | 76 | .5 | 6 | 12 | 1548 | 5.22 | 36 | 2 | ND | 2 | 36 | 1 | 2 | 2 | 65 | .79 | .14 | 15 | 5 | .29 | 329 | .01 | 3 | 1.76 | .01 | .12 | 2 |
| S HANK-639 | 2 | 20 | 20 | 89 | 2.0 | 4 | 9 | 904 | 3.91 | 123 | 2 | ND | 2 | 83 | 1 | 2 | 2 | 35 | 1.44 | .14 | 20 | 2 | .24 | 471 | .01 | 4 | 1.22 | .01 | .09 | 2 |
| S HANK-640 | 2 | 24 | 11 | 58 | .7 | 4 | 7 | 456 | 4.07 | 99 | 2 | ND | 2 | 35 | 1 | 2 | 2 | 63 | .46 | .10 | 5 | 4 | .09 | 245 | .01 | 3 | 1.48 | .01 | .07 | 2 |
| S HANK-641 | 2 | 16 | 17 | 74 | .2 | 3 | 6 | 390 | 3.94 | 181 | 2 | ND | 2 | 8 | 1 | 6 | 2 | 47 | .09 | .08 | 4 | 2 | .07 | 168 | .01 | 3 | 1.19 | .01 | .05 | 2 |
| S HANK-642 | 2 | 18 | 12 | 53 | .7 | 4 | 7 | 1672 | 3.10 | 49 | 2 | ND | 2 | 10 | 1 | 4 | 2 | 55 | .07 | .10 | 5 | 8 | .10 | 245 | .03 | 3 | 1.19 | .01 | .07 | 2 |
| S HANK-643 | 2 | 44 | 14 | 83 | .3 | 7 | 13 | 1043 | 9.62 | 248 | 3 | ND | 2 | 5 | 1 | 2 | 2 | 68 | .13 | .26 | 4 | 4 | .25 | 108 | .01 | 4 | 1.71 | .01 | .10 | 2 |
| S HANK-644 | 3 | 63 | 228 | 109 | 2.8 | 9 | 14 | 917 | 10.04 | 150 | 2 | ND | 2 | 32 | 1 | 2 | 2 | 82 | .18 | .15 | 5 | 13 | .12 | 308 | .01 | 4 | 1.99 | .01 | .08 | 2 |
| S HANK-645 | 2 | 16 | 24 | 44 | .5 | 3 | 4 | 272 | 4.03 | 175 | 2 | ND | 2 | 7 | 1 | 4 | 2 | 51 | .06 | .11 | 3 | 4 | .04 | 178 | .01 | 4 | 1.22 | .01 | .07 | 2 |
| S HANK-646 | 2 | 15 | 16 | 43 | .7 | 2 | 4 | 310 | 2.33 | 129 | 2 | ND | 2 | 6 | 1 | 4 | 2 | 44 | .04 | .08 | 3 | 3 | .03 | 148 | .01 | 4 | 1.09 | .01 | .07 | 2 |
| S HANK-655 | 3 | 29 | 23 | 87 | 1.1 | 6 | 9 | 1914 | 4.02 | 94 | 2 | ND | 2 | 36 | 1 | 2 | 2 | 41 | .55 | .21 | 28 | 8 | .20 | 751 | .01 | 3 | 1.75 | .01 | .08 | 2 |
| S HANK-656 | 2 | 160 | 29 | 131 | .5 | 7 | 8 | 1372 | 3.90 | 37 | 2 | ND | 2 | 78 | 1 | 2 | 2 | 45 | .74 | .18 | 21 | 7 | .28 | 1825 | .01 | 3 | 2.15 | .01 | .08 | 2 |
| S HANK-657 | 2 | 63 | 117 | 140 | .7 | 6 | 9 | 393 | 5.46 | 48 | 2 | ND | 2 | 18 | 1 | 2 | 2 | 61 | .17 | .12 | 6 | 9 | .27 | 794 | .01 | 3 | 1.95 | .01 | .07 | 2 |
| S HANK-658 | 3 | 32 | 80 | 67 | .9 | 5 | 5 | 233 | 5.25 | 46 | 2 | ND | 2 | 9 | 1 | 7 | 2 | 77 | .06 | .11 | 5 | 12 | .10 | 124 | .03 | 4 | 1.27 | .01 | .04 | 2 |
| S HANK-659 | 3 | 57 | 245 | 394 | 1.5 | 15 | 12 | 2128 | 8.32 | 73 | 2 | ND | 2 | 55 | 4 | 3 | 2 | 74 | .53 | .21 | 10 | 11 | .20 | 805 | .01 | 4 | 1.90 | .01 | .04 | 2 |
| S HANK-660 | 3 | 30 | 255 | 183 | 1.9 | 5 | 6 | 497 | 5.29 | 147 | 2 | ND | 2 | 9 | 1 | 2 | 2 | 50 | .12 | .11 | 7 | 8 | .13 | 120 | .01 | 4 | 1.69 | .01 | .05 | 2 |
| S HANK-661 | 3 | 45 | 156 | 274 | 1.7 | 8 | 14 | 1824 | 4.90 | 80 | 2 | ND | 2 | 85 | 4 | 2 | 2 | 42 | .68 | .20 | 11 | 5 | .27 | 719 | .01 | 4 | 1.89 | .01 | .09 | 2 |
| S HANK-662 | 3 | 17 | 15 | 44 | .4 | 6 | 6 | 371 | 4.30 | 15 | 2 | ND | 2 | 8 | 1 | 5 | 2 | 142 | .08 | .09 | 4 | 10 | .17 | 67 | .04 | 4 | 1.42 | .01 | .04 | 2 |
| S HANK-663 | 2 | 60 | 17 | 100 | .2 | 12 | 13 | 768 | 5.70 | 31 | 2 | ND | 2 | 11 | 1 | 2 | 2 | 102 | .11 | .14 | 6 | 17 | .52 | 222 | .01 | 4 | 2.68 | .01 | .04 | 2 |
| S HANK-697 | 4 | 43 | 105 | 78 | 1.0 | 7 | 9 | 1067 | 7.00 | 90 | 2 | ND | 2 | 7 | 1 | 8 | 2 | 64 | .07 | .19 | 8 | 10 | .18 | 84 | .01 | 4 | 2.31 | .01 | .04 | 2 |
| S HANK-698 | 3 | 62 | 86 | 145 | 3.8 | 8 | 15 | 1254 | 8.54 | 147 | 2 | ND | 2 | 8 | 1 | 2 | 2 | 75 | .06 | .22 | 6 | 10 | .21 | 116 | .01 | 4 | 1.70 | .01 | .04 | 2 |
| S HANK-699 | 2 | 33 | 31 | 53 | 1.5 | 6 | 7 | 948 | 6.59 | 83 | 3 | ND | 2 | 6 | 1 | 3 | 2 | 92 | .06 | .17 | 7 | 11 | .17 | 139 | .02 | 4 | 1.89 | .01 | .05 | 2 |
| S HANK-700 | 2 | 25 | 22 | 72 | .6 | 6 | 7 | 586 | 3.98 | 96 | 2 | ND | 2 | 23 | 1 | 4 | 2 | 54 | .23 | .14 | 6 | 9 | .20 | 365 | .01 | 4 | 1.62 | .01 | .07 | 2 |
| S HANK-701 | 2 | 53 | 34 | 116 | .4 | 9 | 11 | 1452 | 4.91 | 80 | 4 | ND | 2 | 31 | 1 | 2 | 2 | 58 | .32 | .17 | 19 | 12 | .37 | 608 | .01 | 3 | 2.31 | .01 | .05 | 2 |
| S HANK-702 | 3 | 25 | 34 | 38 | .6 | 6 | 6 | 520 | 5.76 | 48 | 2 | 2 | 2 | 11 | 1 | 3 | 2 | 85 | .13 | .41 | 5 | 13 | .11 | 161 | .04 | 5 | 1.27 | .01 | .04 | 2 |
| S HANK-703 | 3 | 54 | 38 | 261 | .6 | 9 | 15 | 1471 | 4.99 | 69 | 2 | ND | 2 | 85 | 2 | 2 | 2 | 57 | 1.37 | .14 | 12 | 8 | .44 | 384 | .01 | 4 | 2.03 | .01 | .07 | 2 |
| S HANK-704 | 4 | 22 | 40 | 95 | .8 | 6 | 10 | 1669 | 5.22 | 46 | 2 | ND | 2 | 10 | 1 | 2 | 2 | 89 | .06 | .09 | 4 | 12 | .15 | 164 | .01 | 4 | 1.71 | .01 | .04 | 2 |
| S HANK-705 | 3 | 27 | 30 | 69 | .7 | 7 | 7 | 593 | 7.22 | 42 | 3 | ND | 2 | 7 | 1 | 2 | 2 | 80 | .04 | .14 | 5 | 9 | .20 | 104 | .01 | 4 | 2.09 | .01 | .04 | 2 |
| S HANK-706 | 2 | 65 | 56 | 173 | 1.0 | 10 | 17 | 1386 | 4.99 | 71 | 2 | ND | 2 | 118 | 2 | 2 | 2 | 54 | .88 | .15 | 12 | 11 | .63 | 225 | .01 | 5 | 1.54 | .01 | .09 | 2 |
| S HANK-707 | 3 | 59 | 11 | 126 | .5 | 8 | 16 | 1698 | 6.79 | 44 | 3 | ND | 2 | 19 | 1 | 2 | 2 | 34 | .13 | .21 | 20 | 3 | .12 | 684 | .01 | 4 | 1.12 | .01 | .14 | 2 |
| S HANK-709 | 3 | 55 | 31 | 89 | .1 | 6 | 19 | 1918 | 5.67 | 85 | 2 | ND | 2 | 65 | 1 | 2 | 2 | 42 | .19 | .13 | 15 | 4 | .21 | 867 | .01 | 4 | 1.48 | .01 | .10 | 2 |
| S HANK-715 | 2 | 11 | 11 | 34 | .6 | 3 | 4 | 325 | 7.08 | 114 | 2 | ND | 2 | 11 | 1 | 2 | 2 | 14 | .07 | .21 | 7 | 3 | .13 | 50 | .01 | 4 | .44 | .01 | .10 | 2 |
| S HANK-716 | 3 | 34 | 20 | 87 | 1.0 | 7 | 16 | 2370 | 6.80 | 119 | 4 | ND | 2 | 17 | 1 | 2 | 2 | 37 | .32 | .16 | 21 | 1 | .45 | 387 | .01 | 3 | 1.59 | .01 | .09 | 2 |
| S HANK-717 | 1 | 15 | 8 | 45 | .1 | 15 | 13 | 518 | 3.81 | 7 | 2 | ND | 2 | 38 | 1 | 2 | 2 | 35 | .72 | .15 | 9 | 9 | .54 | 202 | .03 | 5 | .83 | .01 | .12 | 2 |
| S HANK-719 | 2 | 16 | 15 | 73 | .7 | 5 | 13 | 1483 | 4.52 | 36 | 2 | ND | 2 | 27 | 1 | 2 | 2 | 55 | .41 | .35 | 9 | 3 | .38 | 973 | .01 | 3 | 2.00 | .01 | .18 | 2 |
| S HANK-720 | 2 | 46 | 38 | 84 | .1 | 6 | 12 | 1628 | 4.95 | 90 | 2 | ND | 2 | 27 | 1 | 2 | 2 | 39 | .20 | .16 | 8 | 4 | .30 | 540 | .01 | 4 | 1.29 | .01 | .08 | 2 |
| S HANK-722 | 3 | 36 | 20 | 79 | .5 | 6 | 15 | 1660 | 5.52 | 99 | 2 | ND | 2 | 15 | 1 | 2 | 2 | 41 | .08 | .13 | 12 | 4 | .29 | 194 | .01 | 4 | 1.68 | .01 | .08 | 2 |
| S HANK-723 | 2 | 83 | 38 | 121 | .4 | 10 | 17 | 1421 | 5.98 | 99 | 2 | ND | 2 | 22 | 1 | 2 | 2 | 60 | .25 | .15 | 12 | 9 | .54 | 531 | .01 | 3 | 1.97 | .01 | .08 | 2 |
| S HANK-724 | 1 | 125 | 245 | 525 | 4.8 | 21 | 23 | 2287 | 7.10 | 1006 | 2 | ND | 2 | 50 | 4 | 2 | 2 | 163 | .78 | .22 | 12 | 51 | 2.04 | 357 | .04 | 4 | 2.53 | .01 | .23 | 2 |
| STD A-1 | 1 | 30 | 38 | 180 | .3 | 35 | 12 | 979 | 2.79 | 11 | 2 | ND | 2 | 36 | 2 | 2 | 2 | 57 | .59 | .10 | 7 | 70 | .73 | 279 | .08 | 9 | 2.07 | .02 | .21 | 2 |

| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T HANK-1 | 1 | 58 | 6 | 79 | .4 | 31 | 14 | 596 | 3.77 | 30 | 8 | ND | 2 | 95 | 1 | 2 | 2 | 85 | 3.01 | .10 | 3 | 79 | 1.38 | 140 | .05 | 5 | 1.50 | .01 | .05 | 2 |
| T HANK-2 | 1 | 61 | 1 | 80 | .2 | 29 | 14 | 565 | 3.80 | 25 | 6 | ND | 2 | 93 | 1 | 2 | 2 | 84 | 2.97 | .08 | 2 | 73 | 1.28 | 100 | .05 | 4 | 1.45 | .01 | .04 | 2 |
| T HANK-5 | 1 | 45 | 24 | 173 | .7 | 10 | 22 | 3185 | 6.41 | 115 | 2 | ND | 2 | 29 | 1 | 2 | 2 | 36 | .57 | .20 | 10 | 6 | .30 | 143 | .01 | 2 | 1.12 | .01 | .09 | 2 |
| T HANK-6 | 2 | 35 | 20 | 141 | 1.1 | 9 | 20 | 2254 | 6.79 | 121 | 2 | ND | 2 | 27 | 1 | 2 | 2 | 36 | .55 | .21 | 9 | 3 | .30 | 110 | .01 | 2 | 1.11 | .01 | .09 | 2 |
| T HANK-11 | 2 | 43 | 24 | 162 | 1.5 | 11 | 26 | 3035 | 9.91 | 210 | 2 | ND | 2 | 29 | 1 | 2 | 2 | 35 | .72 | .21 | 8 | 4 | .30 | 78 | .01 | 2 | .85 | .01 | .08 | 2 |
| T HANK-12 | 2 | 59 | 28 | 234 | 1.2 | 12 | 28 | 3745 | 8.80 | 205 | 2 | ND | 2 | 69 | 1 | 2 | 2 | 40 | .62 | .20 | 13 | 6 | .31 | 107 | .01 | 2 | 1.42 | .01 | .08 | 2 |
| T HANK-13 | 2 | 19 | 16 | 98 | .9 | 5 | 13 | 2098 | 4.01 | 88 | 2 | ND | 2 | 27 | 1 | 2 | 2 | 29 | .60 | .21 | 13 | 6 | .17 | 255 | .01 | 2 | .64 | .01 | .12 | 2 |
| T HANK-31 | 2 | 75 | 26 | 290 | .8 | 20 | 53 | 4601 | 5.59 | 249 | 2 | ND | 2 | 38 | 2 | 2 | 3 | 78 | .67 | .14 | 8 | 22 | .73 | 285 | .01 | 3 | 1.80 | .02 | .09 | 2 |
| T HANK-37 | 2 | 90 | 30 | 249 | 1.1 | 19 | 46 | 3781 | 5.78 | 158 | 2 | ND | 2 | 38 | 2 | 4 | 2 | 80 | .66 | .14 | 8 | 21 | .70 | 287 | .01 | 3 | 1.88 | .01 | .10 | 2 |
| T HANK-40 | 2 | 72 | 30 | 215 | .6 | 17 | 33 | 2682 | 5.25 | 113 | 2 | ND | 2 | 39 | 2 | 2 | 2 | 89 | .66 | .14 | 8 | 23 | .73 | 358 | .01 | 3 | 1.80 | .01 | .09 | 2 |
| T HANK-44 | 1 | 65 | 30 | 171 | .6 | 15 | 24 | 1636 | 5.24 | 87 | 2 | ND | 2 | 40 | 1 | 2 | 2 | 97 | .70 | .15 | 9 | 23 | .78 | 431 | .01 | 3 | 1.83 | .01 | .09 | 2 |
| T HANK-46 | 1 | 35 | 21 | 101 | 2.0 | 6 | 15 | 2883 | 5.26 | 247 | 2 | ND | 2 | 45 | 1 | 4 | 2 | 42 | .75 | .16 | 12 | 3 | .33 | 762 | .01 | 3 | 1.13 | .01 | .12 | 2 |
| T HANK-59 | 36 | 10 | 51 | 47 | .1 | 3 | 3 | 179 | 5.16 | 43 | 2 | ND | 2 | 77 | 1 | 3 | 2 | 26 | .05 | .13 | 7 | 2 | .09 | 311 | .01 | 3 | .57 | .02 | .16 | 2 |
| T HANK-64 | 29 | 12 | 37 | 46 | .3 | 3 | 5 | 428 | 6.45 | 58 | 2 | ND | 2 | 61 | 1 | 2 | 2 | 30 | .04 | .16 | 6 | 4 | .09 | 250 | .01 | 3 | .63 | .01 | .14 | 2 |
| T HANK-68 | 17 | 23 | 30 | 84 | 1.7 | 4 | 12 | 995 | 6.39 | 151 | 2 | 2 | 2 | 43 | 1 | 3 | 2 | 32 | .22 | .17 | 9 | 4 | .15 | 224 | .01 | 3 | .85 | .01 | .13 | 2 |
| T HANK-71 | 16 | 28 | 28 | 95 | 1.4 | 5 | 14 | 1149 | 6.21 | 136 | 2 | ND | 2 | 40 | 1 | 4 | 2 | 33 | .20 | .16 | 9 | 2 | .14 | 246 | .01 | 3 | .95 | .01 | .13 | 2 |
| T HANK-77 | 11 | 71 | 95 | 175 | 2.9 | 8 | 21 | 1437 | 6.58 | 152 | 2 | ND | 2 | 38 | 1 | 2 | 2 | 32 | .23 | .18 | 9 | 7 | .17 | 234 | .01 | 3 | 1.18 | .01 | .13 | 2 |
| T HANK-80 | 11 | 85 | 80 | 223 | 1.7 | 10 | 27 | 2018 | 6.88 | 150 | 2 | ND | 2 | 33 | 1 | 2 | 2 | 33 | .17 | .16 | 9 | 5 | .17 | 238 | .01 | 3 | 1.63 | .01 | .13 | 2 |
| T HANK-81 | 8 | 99 | 70 | 299 | 1.8 | 13 | 32 | 2313 | 6.64 | 141 | 2 | ND | 2 | 32 | 2 | 2 | 2 | 40 | .21 | .16 | 10 | 6 | .28 | 236 | .01 | 3 | 2.02 | .01 | .13 | 2 |
| T HANK-100 | 1 | 46 | 9 | 97 | .1 | 8 | 14 | 1076 | 5.05 | 44 | 4 | ND | 2 | 76 | 1 | 2 | 2 | 82 | 2.02 | .21 | 11 | 11 | .62 | 189 | .02 | 4 | .92 | .01 | .10 | 2 |
| T HANK-104 | 1 | 40 | 8 | 75 | .2 | 7 | 13 | 1133 | 4.18 | 36 | 2 | ND | 2 | 78 | 1 | 2 | 2 | 64 | 1.92 | .19 | 10 | 9 | .61 | 262 | .01 | 3 | .97 | .01 | .10 | 2 |
| T HANK-114 | 1 | 44 | 11 | 81 | .1 | 6 | 16 | 1249 | 4.42 | 18 | 2 | ND | 2 | 105 | 1 | 2 | 2 | 67 | 1.07 | .18 | 13 | 5 | .30 | 281 | .01 | 3 | 1.06 | .02 | .16 | 2 |
| T HANK-115 | 1 | 45 | 6 | 79 | .3 | 8 | 13 | 1061 | 4.35 | 47 | 3 | ND | 2 | 70 | 1 | 2 | 2 | 66 | 2.23 | .20 | 10 | 11 | .66 | 211 | .01 | 3 | .87 | .01 | .09 | 2 |
| T HANK-129 | 2 | 52 | 396 | 3157 | 1.5 | 17 | 42 | 5258 | 9.58 | 79 | 2 | ND | 2 | 142 | 6 | 2 | 2 | 48 | .39 | .15 | 7 | 5 | .35 | 348 | .01 | 2 | 1.09 | .02 | .09 | 2 |
| T HANK-135 | 1 | 49 | 32 | 142 | .7 | 7 | 15 | 2074 | 4.81 | 111 | 2 | ND | 2 | 92 | 1 | 2 | 2 | 48 | .77 | .17 | 13 | 8 | .45 | 503 | .01 | 3 | 1.31 | .01 | .09 | 2 |
| T HANK-301 | 6 | 45 | 32 | 98 | .7 | 7 | 12 | 660 | 7.80 | 73 | 2 | ND | 2 | 22 | 1 | 8 | 2 | 59 | .20 | .12 | 4 | 7 | .42 | 108 | .01 | 3 | 1.21 | .01 | .09 | 2 |
| T HANK-302 | 6 | 48 | 28 | 90 | .8 | 7 | 12 | 626 | 8.55 | 69 | 3 | ND | 2 | 20 | 1 | 5 | 2 | 59 | .18 | .12 | 2 | 7 | .41 | 93 | .01 | 2 | 1.23 | .01 | .09 | 2 |
| T HANK-304 | 6 | 46 | 33 | 89 | 1.1 | 7 | 13 | 703 | 8.39 | 72 | 2 | ND | 2 | 23 | 1 | 7 | 2 | 60 | .21 | .12 | 4 | 5 | .42 | 96 | .01 | 3 | 1.29 | .01 | .09 | 2 |
| T HANK-306 | 2 | 51 | 71 | 364 | 2.6 | 7 | 23 | 4140 | 5.74 | 76 | 2 | ND | 2 | 30 | 2 | 6 | 2 | 25 | .36 | .16 | 13 | 3 | .10 | 340 | .01 | 3 | .81 | .01 | .10 | 2 |
| T HANK-307 | 5 | 39 | 18 | 84 | .6 | 6 | 11 | 655 | 7.00 | 79 | 2 | ND | 2 | 33 | 1 | 8 | 2 | 62 | .27 | .11 | 4 | 7 | .48 | 164 | .01 | 3 | 1.17 | .01 | .09 | 2 |
| T HANK-308 | 8 | 42 | 27 | 77 | .3 | 7 | 12 | 686 | 7.25 | 61 | 2 | ND | 2 | 25 | 1 | 9 | 2 | 66 | .23 | .12 | 5 | 8 | .53 | 142 | .01 | 3 | 1.39 | .01 | .09 | 2 |
| T HANK-309 | 8 | 34 | 21 | 59 | .5 | 7 | 9 | 540 | 9.41 | 58 | 2 | ND | 2 | 18 | 1 | 9 | 2 | 83 | .14 | .10 | 3 | 9 | .69 | 156 | .02 | 2 | 1.33 | .01 | .08 | 2 |
| T HANK-310 | 7 | 28 | 22 | 59 | .3 | 7 | 8 | 597 | 7.89 | 45 | 4 | ND | 2 | 18 | 1 | 4 | 2 | 86 | .16 | .12 | 4 | 6 | .80 | 190 | .03 | 2 | 1.45 | .01 | .08 | 2 |
| T HANK-326 | 1 | 55 | 44 | 235 | 4.8 | 10 | 32 | 2744 | 5.48 | 89 | 3 | ND | 2 | 24 | 2 | 5 | 2 | 47 | .36 | .15 | 8 | 11 | .24 | 318 | .01 | 3 | 1.33 | .01 | .09 | 2 |
| T HANK-330 | 1 | 28 | 52 | 219 | 1.6 | 6 | 11 | 1475 | 5.31 | 74 | 2 | ND | 2 | 37 | 2 | 4 | 2 | 28 | .54 | .19 | 11 | 4 | .21 | 420 | .01 | 3 | .98 | .01 | .09 | 2 |
| T HANK-335 | 3 | 52 | 54 | 125 | 4.4 | 6 | 31 | 2633 | 9.24 | 155 | 4 | ND | 2 | 7 | 1 | 7 | 2 | 40 | .09 | .21 | 7 | 6 | .07 | 163 | .01 | 2 | 2.07 | .01 | .08 | 2 |
| STD A-1 | 1 | 30 | 39 | 184 | .3 | 35 | 12 | 1011 | 2.82 | 9 | 2 | ND | 2 | 38 | 1 | 2 | 2 | 56 | .59 | .10 | 7 | 74 | .74 | 279 | .08 | 8 | 2.09 | .02 | .21 | 2 |

LAC MINERALS LTD    PROJECT # HANK    FILE # 83-2251    

| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T HANK-345 | 1 | 86 | 15 | 119 | .4 | 25 | 14 | 961 | 3.88 | 18 | 2 | ND | 2 | 59 | 1 | 2 | 2 | 77 | 1.17 | .12 | 13 | 37 | 1.03 | 335 | .02 | 5 | 2.04 | .01 | .09 | 2 |
| T HANK-348 | 2 | 46 | 159 | 414 | .4 | 5 | 17 | 1328 | 5.67 | 113 | 2 | ND | 2 | 96 | 3 | 2 | 2 | 41 | .55 | .15 | 10 | 4 | .39 | 202 | .01 | 2 | 1.02 | .01 | .09 | 2 |
| T HANK-349 | 2 | 47 | 217 | 524 | .7 | 5 | 16 | 1160 | 6.03 | 106 | 2 | ND | 2 | 156 | 3 | 2 | 2 | 39 | .54 | .15 | 9 | 2 | .39 | 211 | .01 | 2 | .95 | .01 | .11 | 2 |
| T HANK-352 | 2 | 11 | 23 | 69 | .3 | 3 | 15 | 998 | 3.66 | 115 | 2 | ND | 2 | 124 | 1 | 2 | 2 | 24 | .60 | .13 | 10 | 3 | .18 | 243 | .01 | 2 | .80 | .01 | .11 | 2 |
| T HANK-353 | 2 | 12 | 25 | 93 | .1 | 3 | 15 | 1269 | 4.48 | 128 | 2 | ND | 2 | 121 | 1 | 2 | 2 | 30 | .66 | .15 | 10 | 3 | .22 | 212 | .01 | 2 | .84 | .01 | .11 | 2 |
| T HANK-354 | 2 | 12 | 22 | 66 | .2 | 3 | 16 | 1128 | 3.79 | 84 | 2 | ND | 2 | 140 | 1 | 2 | 2 | 28 | .70 | .14 | 11 | 4 | .18 | 260 | .01 | 2 | .91 | .01 | .11 | 2 |
| T HANK-355 | 3 | 14 | 25 | 83 | .3 | 3 | 15 | 1145 | 4.40 | 86 | 2 | ND | 2 | 151 | 1 | 2 | 2 | 33 | .66 | .13 | 10 | 3 | .19 | 233 | .01 | 2 | 1.03 | .01 | .11 | 2 |
| T HANK-384 | 1 | 45 | 17 | 89 | .1 | 11 | 17 | 1124 | 5.55 | 65 | 2 | ND | 2 | 61 | 1 | 2 | 2 | 77 | 1.16 | .15 | 13 | 21 | .62 | 136 | .01 | 2 | 1.16 | .01 | .08 | 2 |
| T HANK-385 | 1 | 44 | 13 | 72 | .1 | 10 | 15 | 1091 | 4.23 | 33 | 2 | ND | 2 | 61 | 1 | 2 | 2 | 59 | .99 | .13 | 14 | 19 | .62 | 244 | .01 | 2 | 1.13 | .01 | .07 | 2 |
| T HANK-387 | 1 | 44 | 17 | 79 | .1 | 10 | 16 | 1143 | 4.88 | 48 | 4 | ND | 2 | 67 | 1 | 2 | 2 | 69 | 1.25 | .14 | 14 | 20 | .60 | 173 | .01 | 2 | 1.14 | .01 | .08 | 2 |
| T HANK-389 | 6 | 23 | 32 | 53 | .8 | 4 | 7 | 865 | 4.28 | 80 | 2 | ND | 2 | 83 | 1 | 2 | 2 | 20 | .19 | .09 | 19 | 5 | .08 | 288 | .01 | 2 | .39 | .01 | .11 | 2 |
| T HANK-390 | 1 | 68 | 17 | 61 | .1 | 18 | 18 | 841 | 4.90 | 10 | 4 | ND | 2 | 119 | 1 | 2 | 2 | 129 | .69 | .11 | 17 | 44 | .62 | 492 | .03 | 2 | 1.06 | .01 | .08 | 2 |
| T HANK-402 | 2 | 46 | 30 | 139 | .1 | 8 | 22 | 2840 | 5.34 | 93 | 2 | ND | 2 | 140 | 1 | 2 | 2 | 36 | .41 | .12 | 16 | 4 | .33 | 273 | .01 | 2 | 1.05 | .01 | .08 | 2 |
| T HANK-403 | 2 | 37 | 30 | 151 | .2 | 8 | 25 | 3587 | 5.86 | 100 | 2 | ND | 2 | 149 | 1 | 2 | 2 | 37 | .42 | .13 | 18 | 5 | .33 | 301 | .01 | 2 | 1.16 | .01 | .08 | 2 |
| T HANK-405 | 2 | 37 | 34 | 143 | .1 | 7 | 23 | 3149 | 6.00 | 104 | 3 | ND | 2 | 145 | 1 | 2 | 2 | 40 | .41 | .14 | 17 | 5 | .32 | 287 | .01 | 2 | 1.10 | .01 | .08 | 2 |
| T HANK-406 | 3 | 29 | 38 | 119 | .1 | 6 | 23 | 3325 | 6.63 | 70 | 2 | ND | 2 | 132 | 1 | 2 | 2 | 36 | .23 | .16 | 19 | 3 | .24 | 374 | .01 | 2 | 1.21 | .01 | .08 | 2 |
| T HANK-407 | 3 | 20 | 46 | 96 | .1 | 5 | 18 | 2545 | 6.49 | 59 | 2 | ND | 2 | 148 | 1 | 2 | 2 | 34 | .28 | .17 | 17 | 2 | .24 | 399 | .01 | 2 | 1.14 | .01 | .08 | 2 |
| T HANK-409 | 2 | 19 | 26 | 40 | .2 | 3 | 4 | 305 | 4.60 | 67 | 2 | ND | 2 | 78 | 1 | 18 | 2 | 25 | .01 | .12 | 8 | 5 | .18 | 467 | .01 | 2 | .46 | .01 | .14 | 2 |
| T HANK-410 | 3 | 25 | 20 | 70 | .1 | 5 | 12 | 1224 | 4.96 | 112 | 2 | ND | 2 | 50 | 1 | 5 | 2 | 53 | .09 | .12 | 12 | 5 | .28 | 522 | .01 | 2 | 1.44 | .01 | .08 | 2 |
| T HANK-601 | 2 | 23 | 43 | 114 | .9 | 5 | 12 | 908 | 6.06 | 175 | 2 | ND | 2 | 18 | 1 | 6 | 2 | 27 | .32 | .16 | 8 | 3 | .21 | 104 | .01 | 2 | 1.30 | .01 | .09 | 2 |
| T HANK-603 | 2 | 27 | 45 | 132 | 1.4 | 6 | 16 | 1083 | 7.63 | 244 | 2 | ND | 2 | 25 | 1 | 6 | 2 | 31 | .50 | .18 | 9 | 2 | .24 | 80 | .01 | 2 | 1.11 | .01 | .09 | 2 |
| T HANK-604 | 4 | 27 | 35 | 130 | 1.5 | 6 | 16 | 943 | 8.17 | 287 | 2 | ND | 2 | 20 | 1 | 3 | 2 | 32 | .43 | .18 | 9 | 4 | .23 | 63 | .01 | 2 | 1.48 | .01 | .09 | 2 |
| T HANK-607 | 3 | 22 | 15 | 85 | .8 | 5 | 14 | 974 | 6.37 | 176 | 2 | ND | 2 | 23 | 1 | 2 | 2 | 32 | .41 | .15 | 8 | 3 | .25 | 99 | .01 | 2 | 1.10 | .01 | .11 | 2 |
| T HANK-608 | 1 | 18 | 23 | 107 | 1.4 | 5 | 16 | 1859 | 6.26 | 243 | 2 | ND | 2 | 33 | 1 | 3 | 2 | 28 | .56 | .18 | 14 | 4 | .13 | 196 | .01 | 2 | .52 | .01 | .11 | 2 |
| T HANK-610 | 5 | 22 | 17 | 75 | .6 | 5 | 12 | 825 | 6.24 | 130 | 2 | ND | 2 | 16 | 1 | 2 | 2 | 33 | .21 | .13 | 6 | 3 | .24 | 105 | .01 | 2 | .96 | .01 | .09 | 2 |
| T HANK-620 | 1 | 41 | 28 | 128 | 1.3 | 6 | 16 | 1713 | 5.35 | 173 | 2 | ND | 2 | 48 | 1 | 2 | 2 | 46 | .92 | .16 | 14 | 7 | .33 | 396 | .01 | 4 | .99 | .01 | .11 | 2 |
| T HANK-625 | 1 | 35 | 24 | 124 | 1.7 | 7 | 17 | 2067 | 6.00 | 267 | 2 | 3 | 2 | 38 | 1 | 5 | 2 | 32 | .85 | .17 | 12 | 4 | .34 | 137 | .01 | 2 | .78 | .01 | .11 | 2 |
| T HANK-626 | 1 | 32 | 44 | 127 | 1.5 | 6 | 16 | 1773 | 5.87 | 274 | 2 | ND | 2 | 40 | 1 | 4 | 2 | 38 | .77 | .17 | 13 | 2 | .33 | 244 | .01 | 2 | .92 | .01 | .09 | 2 |
| T HANK-627 | 1 | 32 | 20 | 121 | 1.3 | 5 | 16 | 2307 | 5.31 | 219 | 3 | ND | 2 | 37 | 1 | 2 | 2 | 28 | .87 | .15 | 12 | 3 | .31 | 145 | .01 | 3 | .72 | .01 | .11 | 2 |
| T HANK-629 | 1 | 30 | 15 | 100 | 1.7 | 5 | 17 | 2012 | 5.93 | 262 | 2 | ND | 2 | 43 | 1 | 2 | 2 | 30 | 1.04 | .16 | 12 | 3 | .34 | 112 | .01 | 2 | .75 | .01 | .12 | 2 |
| T HANK-630 | 1 | 25 | 13 | 94 | .9 | 4 | 13 | 2042 | 4.51 | 134 | 2 | ND | 2 | 36 | 1 | 3 | 2 | 22 | .63 | .14 | 12 | 3 | .18 | 168 | .01 | 3 | .54 | .01 | .11 | 2 |
| T HANK-631 | 1 | 26 | 14 | 97 | 1.2 | 4 | 13 | 1796 | 4.74 | 138 | 2 | ND | 2 | 39 | 1 | 5 | 2 | 20 | .70 | .14 | 11 | 3 | .17 | 133 | .01 | 2 | .51 | .01 | .11 | 2 |
| T HANK-633A | 1 | 30 | 15 | 76 | .9 | 5 | 14 | 1522 | 4.90 | 140 | 2 | 5 | 2 | 12 | 1 | 3 | 2 | 54 | .26 | .14 | 8 | 7 | .49 | 297 | .01 | 2 | 1.48 | .01 | .08 | 2 |
| T HANK-633B | 1 | 21 | 10 | 85 | .7 | 4 | 11 | 1753 | 4.10 | 90 | 2 | ND | 2 | 38 | 1 | 3 | 2 | 17 | .52 | .13 | 11 | 1 | .07 | 148 | .01 | 2 | .33 | .01 | .11 | 2 |
| T HANK-647A | 1 | 33 | 49 | 122 | 1.4 | 5 | 14 | 2004 | 5.27 | 220 | 6 | ND | 2 | 17 | 1 | 2 | 2 | 37 | .30 | .18 | 9 | 5 | .26 | 681 | .01 | 3 | .97 | .01 | .08 | 2 |
| T HANK-647B | 5 | 45 | 75 | 171 | .6 | 6 | 16 | 929 | 5.24 | 72 | 2 | ND | 2 | 68 | 1 | 2 | 2 | 42 | .21 | .13 | 10 | 7 | .24 | 261 | .01 | 2 | 1.71 | .01 | .11 | 2 |
| T HANK-650 | 5 | 47 | 161 | 253 | .7 | 6 | 17 | 1067 | 5.10 | 78 | 2 | ND | 2 | 70 | 1 | 2 | 2 | 41 | .23 | .13 | 11 | 5 | .24 | 261 | .01 | 3 | 1.72 | .01 | .09 | 2 |
| STD A-1 | 1 | 30 | 38 | 182 | .3 | 35 | 13 | 1023 | 2.83 | 10 | 2 | ND | 2 | 36 | 1 | 2 | 2 | 60 | .60 | .09 | 8 | 71 | .72 | 280 | .07 | 8 | 2.00 | .01 | .19 | 2 |

LAC MINERALS LTD    PROJECT # HANK    FILE # 83-2251



| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T HANK-653 | 4 | 31 | 26 | 95 | 1.1 | 5 | 11 | 703 | 4.69 | 77 | 2 | ND | 2 | 73 | 1 | 2 | 2 | 39 | .20 | .12 | 9 | 7 | .21 | 264 | .01 | 2 | 1.59 | .01 | .11 | 2 |
| T HANK-654 | 4 | 21 | 31 | 68 | .7 | 3 | 9 | 635 | 4.64 | 75 | 2 | ND | 2 | 85 | 1 | 2 | 2 | 36 | .19 | .12 | 8 | 5 | .18 | 290 | .01 | 3 | 1.32 | .01 | .11 | 2 |
| T HANK-686 | 1 | 14 | 10 | 77 | .1 | 3 | 15 | 912 | 4.74 | 18 | 2 | ND | 2 | 107 | 1 | 2 | 2 | 88 | 1.05 | .13 | 12 | 3 | .84 | 225 | .05 | 3 | 1.75 | .01 | .11 | 2 |
| T HANK-688 | 1 | 16 | 10 | 77 | .1 | 3 | 18 | 932 | 4.95 | 16 | 2 | ND | 2 | 104 | 1 | 2 | 2 | 84 | 1.02 | .14 | 11 | 1 | .81 | 205 | .04 | 3 | 1.77 | .01 | .12 | 2 |
| T HANK-690 | 1 | 14 | 12 | 80 | .2 | 3 | 17 | 1055 | 4.93 | 18 | 2 | ND | 2 | 112 | 1 | 2 | 2 | 84 | .98 | .14 | 12 | 2 | .86 | 235 | .04 | 3 | 1.83 | .01 | .14 | 2 |
| T HANK-696 | 3 | 19 | 35 | 43 | .9 | 3 | 3 | 240 | 3.44 | 46 | 2 | ND | 2 | 20 | 1 | 2 | 2 | 54 | .04 | .13 | 5 | 5 | .11 | 119 | .01 | 3 | 1.18 | .01 | .05 | 2 |
| T HANK-708 | 3 | 52 | 28 | 110 | .2 | 7 | 23 | 2570 | 7.06 | 80 | 3 | ND | 2 | 76 | 1 | 2 | 2 | 38 | .23 | .16 | 16 | 6 | .16 | 522 | .01 | 2 | 1.24 | .01 | .08 | 2 |
| T HANK-712 | 2 | 5 | 32 | 19 | 1.1 | 1 | 1 | 155 | 3.35 | 112 | 3 | ND | 2 | 58 | 1 | 2 | 2 | 14 | .02 | .09 | 12 | 1 | .07 | 204 | .01 | 2 | .38 | .01 | .16 | 2 |
| T HANK-714 | 3 | 51 | 27 | 194 | .5 | 10 | 19 | 2935 | 6.23 | 59 | 2 | ND | 2 | 142 | 1 | 2 | 2 | 37 | .52 | .11 | 10 | 3 | .20 | 134 | .01 | 2 | .70 | .01 | .09 | 2 |
| T HANK-718 | 3 | 58 | 26 | 150 | .7 | 9 | 20 | 2329 | 6.90 | 108 | 2 | ND | 2 | 108 | 1 | 2 | 2 | 37 | .41 | .14 | 15 | 5 | .21 | 200 | .01 | 2 | .95 | .01 | .09 | 2 |
| T HANK-721 | 2 | 51 | 22 | 152 | .5 | 11 | 19 | 3013 | 6.49 | 96 | 2 | ND | 2 | 110 | 1 | 2 | 2 | 38 | .47 | .13 | 13 | 7 | .25 | 168 | .01 | 3 | .86 | .01 | .09 | 2 |
| T HANK-725 | 2 | 54 | 27 | 148 | .4 | 11 | 20 | 4433 | 6.16 | 80 | 3 | ND | 2 | 135 | 1 | 2 | 2 | 39 | .54 | .13 | 13 | 6 | .26 | 189 | .01 | 3 | .85 | .01 | .09 | 2 |
| STD A-1 | 1 | 29 | 37 | 184 | .3 | 36 | 13 | 1060 | 2.85 | 10 | 2 | ND | 2 | 37 | 1 | 2 | 2 | 61 | .60 | .10 | 7 | 71 | .72 | 278 | .07 | 8 | 2.08 | .01 | .19 | 2 |

# APPENDIX 2

## Petrographic Study

VP

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Report for: Robert Brown,
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Samples: 58 cut-off chips were submitted for K-feldspar staining. 17 thin sections (sample numbers Hank 10, 99A, 117, 137, 352A, 353A, 353B, 426A, 427, 429, 430B, 431, 431B, 726, 727, 728 and 730) were submitted for petrographic description.

The material for staining included some, but not all, of the chips corresponding to the thin sections. The 5 missing chips were later provided and stained in order to facilitate the descriptive work.

Summary:

All but one (353A) of the slides examined are rocks of the volcanic association.

The majority appear to be tuffs or volcanic fragmentals, though the intensity of alteration is such as to obscure the original textural details.

The commonest alteration styles are sericitization and carbonatization. These may be superimposed on an early clay alteration. Some of the more andesitic rocks also show considerable chlorite development. The accessory quartz in some of the rocks may be partially an introduced silicification.

The alteration is characteristically pervasive, with a notable lack of veinlets and fracture controlled features.

The 10 samples numbered 353B, 426A, 429, 430B, 431, 431B, 726, 727, 728 and 730 constitute a group possessing similar compositional and textural features. Almost all these rocks contain quartz in minor to moderate amounts; they contain disseminated pyrite of a distinctive textural type (see description for sample 426A); all are highly sericitic; and all have low or negligible contents of chlorite.

Most of these highly altered rocks apparently represent original tuffs. Their composition is in the andesite to dacite range.

Samples 10 and 427 are generally similar but have higher chlorite contents and are thought to be of andesitic composition.

The remaining 5 rocks in the suite all possess distinct and different characteristics.

Sample 99A is one of the few rocks in the suite which displays a normal (non-fragmental) volcanic texture. It appears to be an altered andesitic augite porphyry.

Sample 137 is also an andesite but is unique in showing amygdaloidal character; it is also fragmental.

Sample 117 is quite unlike any of the other rocks of the suite, being a lapilli tuff composed of close-packed, sharply defined, often essentially unaltered fragments of a variety of rock types (including trachytic and other K-feldspathic types as well as more normal andesites and dacites).

Sample 352 is another distinctive K-feldspathic type; it has the mineralogy and texture of a trachyte (similar to the material of some of the fragments seen in 117).

Other K-feldspathic rocks not examined in thin section but indicated by positive stains on the rock chips are samples 28, 331, 331B and 378.

Sample 353A is a carbonate-barite rock, presumably of vein origin.

J.F. Harris Ph.D.

10th January, 1984

Sample No: Hank 10 ALTERED ANDESITIC TUFF

Estimated mode

| | |
|---|---|
| Plagioclase | 40 |
| Carbonate | 22 |
| Chlorite | 18 |
| Sericite | 12 |
| Sphene ) Rutile ) | 4 |
| Fe/Ti oxides | 4 |
| Apatite | trace |
| Pyrite | trace |

This rock consists of a fine-grained groundmass of felsitic plagioclase (0.01 - 0.02mm) set with coarser crystals of strongly altered plagioclase and patches of carbonate, sericite and chlorite which are probably pseudomorphous after various crystal and lithic fragments.

The phenocryst-like plagioclase crystals are subhedral, prismatic, 0.1 - 0.8mm in size. They are weakly to moderately altered to sericite and carbonate.

The abundant carbonate patches are of similar size: they range from angular prismatic to irregular in shape. In a few cases remnant rims or cores of plagioclase are present but it does not appear that the majority of these carbonate patches are pseudomorphs. The rock shows abundant carbonate veining and many of these patches are connected by hair-line veinlets and are probably of introduced (replacement) origin.

The felsitic groundmass has a considerable content of chlorite as a fine-grained intergrowth with the plagioclase. The latter is pervasively kaolinized and patchily sericitized. The sericitized patches often have rather distinct outlines and appear to be altered lithic fragments.

The rock is traversed by several thin (0.5 - 3.0mm) sub-parallel bands of fine-grained strongly sericitized material free of plagioclase crystals and carbonate patches. These are believed to represent thin ashy laminae in an altered crystal tuff.

The rock contains rather abundant disseminated sub-opaques and opaques. These consist of anhedral, sometimes skeletal grains of rutile and leucoxene, 0.1 - 0.5mm, and individual cubic euhedra of similar size which appear to be mainly oxides and minor pyrite.

Sample No: Hank 99A    ALTERED AUGITE PORPHYRY

Estimated mode

| | |
|---|---|
| Felsitic plagioclase | 22 |
| Carbonate | 35 |
| Chlorite | 20 |
| Sericite | 12 |
| Amphibole | 5 |
| Quartz | 3 |
| Rutile | 3 |

This is a strongly altered porphyritic rock with abundant euhedral phenocryst forms 1 - 10mm in size.

These original phenocrysts are completely pseudomorphed by various secondary minerals. They are of several types: the commonest are polygonal or hexagonal euhedra now composed of carbonate, chlorite and fibrous amphibole in various proportions (rarely with traces of remnant pyroxene, and sometimes with patches of intergrown rutile and cherty or fine-grained euhedral quartz). Also present are less well-defined subhedral prismatic sericitic patches which probably represent original plagioclase phenocrysts; and subhedral- euhedral patches composed entirely of carbonate.

These phenocrysts are set in a felsitic groundmass, heavily impregnated throughout with fine-grained carbonate, plus chlorite, sericite and flecks of rutile.

This rock appears to be a typical porphyritic andesite. There are no obvious fragmental textures on the thin section scale.

Sample No: Hank 117 POTASSIC LAPILLI TUFF

Estimated mode

| | |
|---|---|
| Plagioclase | 37 |
| K-feldspar | 25 |
| Quartz | 8 |
| Chlorite | 15 |
| Sericite | 7 |
| Carbonate | 5 |
| Opaques ) Rutile ) | 3 |

This rock consists of close-packed angular crystal and lithic fragments 0.2 - 10.0mm in size.

The lithic fragments are of various types. Most abundant are various chloritized andesite, felsitic and chloritic devitrified volcanic glass fragments; also present is a trachytic rock consisting of plagioclase phenocrysts in a very fine-grained K-feldspathic matrix.

The crystal fragments are plagioclase and K-feldspar, with carbonate and occasional quartz. The carbonate is of uncertain origin: it forms discrete, often angular, grains similar in size and textural relationships to the plagioclase and K-spar crystals, and does not appear to be pseudomorphic.

There is very little matrix as such in this rock. The fragments and crystals are largely in contact and intersitices are filled with finer and finer grained ejecta. Thin sericitic films are, however, sometimes developed between fragments and there are also small interstitial pockets of cherty quartz which appears to represent a late cementing phase. A little carbonate is also of this nature.

The minor opaques are mainly rutile and oxides. Sulfides appear absent.

The overall freshness of this rock is a distinctive feature compared with most others of the suite. The feldspars (both the phenocrysts in the lithic fragments and the disaggregated crystals) show only a very mild sericitization. The chloritisation of the andesitic fragments appears to be a pre-fragmental (probably deuteric) feature.

Sample No: Hank 137 FRAGMENTAL ANDESITE

Estimated mode

| | |
|---|---|
| Chlorite | 32 |
| Carbonate | 27 |
| Felsitic plagioclase | 25 |
| Sericite | 10 |
| Amphibole ) Biotite ) | 3 |
| Sphene ) Rutile ) | 3 |

This is a microporphyritic rock showing partial amygdaloidal character. It is made up of somewhat ill-defined, rounded to angular fragments, 1 - 10mm or more in size, of the same, or similar, rock type.

This is composed of abundant phenocrysts now completely altered to carbonate and, less abundantly, to sericite and chlorite. Also present are chlorite and carbonate in irregular amoeboid areas which appear to be amygdules.

The pseudomorphed phenocrysts and amygdules are set in a fine-grained felsitic matrix which is pervasively sericitized and strongly impregnated throughout with chlorite.

Minor secondary amphibole and/or green biotite is associated with some of the chloritized phenocrysts.

The fragments making up this rock show slightly varying textures and degrees of alteration but are mineralogically similar. There is no clear distinction between fragments and matrix.

Sample No: Hank 352A TRACHYTE

Estimated mode

| | |
|---|---|
| Plagioclase | 22 |
| K-feldspar | 25 |
| Sericite | 30 |
| Carbonate | 12 |
| Biotite | 2 |
| Rutile ) Opaques) | 12 |
| Pyrite | trace |

This rock exhibits classic trachytic features. It consists of euhedral plagioclase (plus, possibly, K-feldspar) phenocrysts, 0.5 - 3.0mm in size, now almost completely altered to sericite and minor carbonate. These are set in a K-feldspathic groundmass showing a flow-oriented microlitic texture. The groundmass is pervasively sericitized and sprinkled with small flecks of carbonate. It has a high content of evenly disseminated, very fine-grained (0.01 - 0.1mm) rutile and Fe oxides. This causes the distinctive dark colour of this rock.

There are also some larger grains of oxides and limonite up to 0.5mm. Some of these may contain traces of pyrite.

The groundmass also contains scattered small shreds of brown biotite.

Sample No: Hank 353A CARBONATE-BARITE ROCK

Estimated mode

| | |
|---|---|
| Carbonate | 70 |
| Barite | 22 |
| Quartz | 5 |
| Pyrite )<br>Limonite) | 2 |
| Sericite | 1 |

The major component of the thin section is carbonate. This shows extreme grain size variation from coarse sparry crystals up to 1 cm or more in size, down to fine-grained polycrystalline mosaics in the 0.2 - 0.5mm size range. This finely granular material appears as buff coloured zones, apparently part of a crustified vein filling. The buff coloured zones show a complex intergrowth of grains within grains and probably involve two separate carbonate species.

One side of the slide consists of a coarse bladed aggregate of barite. Barite also occurs as a few isolated elongate crystals within the carbonate.

Finely granular, cherty or micro-crustified quartz occurs as a thin zone along the main barite/carbonate contact. It also forms occasional patches within the carbonate, and is associated with the isolated barite crystals in the carbonate, and with wall rock remnants (see below).

A few small patches of apparent sericitized fine-grained volcanic rock occur within the carbonate. These are presumed to be partially assimilated wall-rock remnants within the vein material.

Partially limonitized pyrite occurs as disseminated anhedral grains, 0.1 - 0.5mm, closely associated with the zones of brown fine-grained carbonate.

Sample No: Hank 353B ALTERED VOLCANIC (FRAGMENTAL?)

Estimated mode

| | |
|---|---|
| Sericite | 30 |
| Carbonate | 25 |
| Quartz | 20 |
| Plagioclase | 10 |
| Limonite )<br>Opaques ) | 15 |

This is an intensely altered rock whose original composition is uncertain. It still retains obvious volcanic textures in the form of equant and elongate "phenocrysts", 0.5 - 2.5mm in size, set in a fine felsitic groundmass.

The "phenocrysts" are now composed essentially of carbonate prominently rimmed and permeated by limonite. Their shapes are subhedral, rather ragged, and obscured by the limonite rims. They sometimes consist of clear cores overgrown by brown, fine-grained carbonate.

The groundmass is strongly sericitized and impregnated throughout by fluffy dendritic growths of limonite. Another prominent groundmass component is quartz which occurs as an intimate impregnation of fine-grained cherty material and scattered small pockets, as well as some distinct, coarser grained veniform masses.

The quartz (which may be largely an introduced phase of silicification) tends to concentrate as networks outlining less silicified patches of porphyritic felsite. The limonite locally concentrates in similar manner, possibly outlining an obscure breccia or fragmental structure.

The only plagioclase remaining in this rock is a minor component of the sericitized groundmass. The carbonate "phenocrysts" may be pseudomorphous after feldspars. The combination of strong carbonatization, ferruginization, sericitization and silicification is distinctive.

Sample No: Hank 426A ALTERED VOLCANIC

Estimated mode

| | |
|---|---|
| Sericite | 45 |
| Carbonate | 20 |
| Quartz | 12 |
| Felsitic plagioclase | 8 |
| Pyrite | 10 |
| Limonite | 3 |
| Rutile | 2 |

This is another intensely altered, rather obscure-textured volcanic.

The dominant component is sericite, which occurs as fine-grained felted masses - possibly altered felsite (which it grades into locally). Ghostly phenocryst-like shapes up to 2 or 3mm in size are sometimes seen within the sericite.fabric. Carbonate is a component of some of these possible pseudomorphs and also forms elongate phenocryst-like masses in its own right, as well as ragged fine-grained disseminated shreds throughout.

Quartz forms anhedral granular patches, individual ameoboid grains, and fine-grained cherty impregnations (which, as in 353B, sometimes appear to represent a network of silicification outlining an obscure fragmental structure).

There is a rather high content of opaques, which appear to be dominantly pyrite. This occurs in a rather distinctive form (seen in several of the rocks of this suite) as clusters of tiny anhedral grains, which often coalesce to form emulsion-like patches and sieved masses up to a few mm in size enclosing numerous groundmass inclusions.

The sericitic host is frequently stained golden yellow by dispersed limonite in the vicinity of the pyrite clots.

The strong sericitization, carbonatization and silicification are similar to 353B. The substantial pyrite content is a distinctive feature.

Sample No: Hank 427 ALTERED ANDESITE (FRAGMENTAL?)

Estimated mode

| | |
|---|---|
| Sericite | 29 |
| Carbonate | 22 |
| Plagioclase | 20 |
| Chlorite | 15 |
| K-feldspar | 3 |
| Quartz | 2 |
| Rutile | 3 |
| Pyrite | 6 |

This is another strongly altered volcanic.

It contains abundant altered phenocrysts, 0.2 - 3.0mm in size. These are typically elongate, prismatic, subhedral to euhedral. They are mainly composed of sericite with lesser carbonate, but in a few cases contain remnants of feldspar (plagioclase and possible K-spar) which attest to their origin. There are also phenocryst pseudomorphs which consist of intergrown carbonate and chlorite and a few which are totally chlorite, or chlorite with intergrown rutile and opaques. These probably represent altered mafic silicates.

These phenocryst pseudomorphs are set in a groundmass of variably sericitized felsite which contains minor K-spar (as indicated by a weakly positive cobaltinitrite stain) and small clear unaltered patches which may be quartz (or possibly albite). Chlorite and carbonate are developed pervasively throughout.

Opaques consist dominantly of small patches of coalescent pyrite granules (similar to those described in 426A, though smaller and not so abundant). These are commonly, though not exclusively, associated with chlorite-rich pseudomorphs and chloritic patches in the groundmass.

The patchy distribution of chlorite in the groundmass may be indicative of a fragmental structure (though of the same, or similar, rock types). The wide size range of "phenocrysts" - extending down to 0.2mm or less - could be considered more characteristic of a crystal tuff than a porphyry.

Sample No: Hank 429 ALTERED LITHIC TUFF

Estimated mode

| | |
|---|---|
| Plagioclase | 42 |
| Sericite (and clays) | 35 |
| Quartz | 10 |
| Carbonate | 8 |
| Pyrite | 5 |
| (?)Barite | trace |

This is another texturally obscure volcanic of similar general composition to the preceding slides, but with several distinctive features.

It is not as intensely altered as, say, 353B and 426A, and contains a relatively high proportion of surviving plagioclase.

It lacks the strongly porphyritic (or crystal tuff) character of most of the previous rocks and consists essentially of a felsitic aggregate (containing significant quartz) showing patchy variations in grain size and degree of sericitization on a scale of 1 - 5mm, which probably represent altered lithic fragments. There are also irregular patches of brown, very fine-grained clay-rich material which represent original glassy fragments.

Scattered, rather diffuse but generally elongate masses of sericite and/or carbonate, occasionally with remnant feldspar, probably represent a component of crystal fragments.

Opaques are the knobbly, coalescent clusters of tiny anhedral pyrite grains, as seen in the previous slides. These are sparsely scattered throughout without any particular association.

The surface of the cut-off chip is noticeably porous and the slide contains many voids. It is unclear whether these represent a fragile component lost during the cutting, or a primary porosity. On balance the former appears more likely. They could represent lost clay minerals. Also the rock contains traces of what appears to be disseminated barite which may have originally been more abundant.

Sample No: Hank 430B ALTERED TUFF

Estimated mode

| | |
|---|---|
| Plagioclase | 30 |
| Sericite | 37 |
| Carbonate | 20 |
| Quartz | 5 |
| Pyrite | 8 |

This is a rather similar rock to 429.

It consists dominantly of a patchily sericitized mass of felsitic plagioclase of grain size 0.02 - 0.1mm. This seems to contain somewhat less intergrown quartz than 429, though a few recognizable anhedral patches do occur. Carbonate occurs throughout as small, ragged shreds.

Angular patches of sericite, 1 - 5mm in size, often with associated opaques, probably represent altered phenocrysts or crystal fragments. There are also rather abundant smaller, less well-defined, ghost-like pseudomorphs of intergrown carbonate and sericite.

Opaques are loose clusters of fine-grained pyrite up to several mm in size. These often seem to be associated with clumps of sericite pseudomorphs.

The texture of this rock is obscure. It has some of the variable grain size and intensity of alteration which suggests a fragmental character, but the fragment outlines are ill-defined; also there are more crystal pseudomorphs than in, say, 429. It is tentatively classified as an altered lithic-crystal tuff.

Sample No: Hank 431 ALTERED TUFF

Estimated mode

| | |
|---|---|
| Plagioclase | 40 |
| Sericite | 26 |
| Carbonate | 12 |
| Chlorite | 8 |
| Quartz | 5 |
| Rutile | 2 |
| Pyrite | 7 |

This is another rock of the same general type as the preceding ones in the suite.

It contains rather abundant altered plagioclase crystals 0.5 - 2.0mm in size. These are subhedral to euhedral, prismatic in form, and are moderately to completely altered to sericite and carbonate. The least sericitized ones often show a cloudy argillic alteration.

These crystals are set in a groundmass of variably sericitized felsitic plagioclase containing minor quartz. There is also a minor component of chlorite: this occurs intergrown with the felsite, as small angular patches; often with intergrown rutile (which are probably pseudomorphed mafic crystals); and as brown spherulitic masses which possibly represent altered vitric fragments.

Rutile is more evident in this rock than some of the related ones. It occurs as disseminated grains, often of skeletal form.

Pyrite is present as the sieved grains and coalescent droplet-like clusters previously described. It is often, but not exclusively, associated with the more chloritic areas.

The texture of this rock is, like the others of this type, obscure. The patchy variability of sericitization and chlorite content of the felsite suggests a fragmental structure on a scale of c. 2 - 5mm and this is probably another altered lithic/crystal tuff.

Sample No: Hank 431B ALTERED TUFF

Estimated mode

| | |
|---|---|
| Plagioclase | 35 |
| Quartz | 10 |
| Sericite | 22 |
| Brown mineral | 20 |
| Rutile | 3 |
| Limonite | 2 |
| Pyrite | 8 |

This rock, though of similar textural and compositional type to the previous ones, differs from them in its lack of carbonate and in the presence of an enigmatic constituent referred to as "brown mineral".

Essentially the rock is a partially sericitized felsitic aggregate containing significant quartz. This forms the groundmass to rather numerous ragged pseudomorphs of felted sericite, 0.5 - 2.0mm in size. These sometimes contain intergrown fine-grained rutile and often show zonation to cores or rims of brownish sub-opaque material (gradational to "brown mineral").

The "brown mineral" is variable in form and properties. It occurs as streaks and patches, ranging from dark tan to pale buff in colour. It is structureless and appears very finely fibrous. It often shows an obscure reticulate fabric and has a birefringence similar to, or somewhat lower than, sericite. It is thought to be a secondary product composed of variable proportions of sericite, biotite and clays and may be derived from alteration of volcanic glass. Sometimes it appears porous and is impregnated with limonite.

Pyrite forms the same amoeboid grains and coalescent clusters of small anhedra as in the other rocks.

The general textural aspect of this rock, with its patchy variability in grain size and alteration, and the presence of some reasonably well-defined fragmental outlines on the scale of 2 - 10mm, indicates that it is probably another altered tuff.

Sample No: Hank 726 ALTERED LITHIC FRAGMENTAL

Estimated mode

| | |
|---|---|
| Sericite/clays | 50 |
| Plagioclase | 35 |
| Quartz | 10 |
| Pyrite | 5 |

This rock is rather similar to 429. It consists largely of felsite (ranging in grain size from 0.01 - 0.1mm), composed dominantly of plagioclase but with a significant proportion of intergrown quartz. The plagioclase of the felsite is variably sericitized and there is a continuum or cement of interstitial sericite.

Sericite also forms more concentrated patches and streaks, 0.2 - 2.0mm in size, throughout the rock. These are generally diffuse and ill-defined in shape. They are often brown in colour, finely fibrous and similar to the brown/buff coloured material in 429. Like this rock, there is a notable tendency for a natural or induced porosity.

The pyrite is of the usual disseminated, cluster form.

The patchy distribution of sericite, brown clayey material and more quartzose felsite suggests a fragmental nature. The lack of well-defined crystal pseudomorphs in this rock distinguishes it from many of the others in the suite.

Sample No: Hank 727 ALTERED TUFF

Estimated mode

| | |
|---|---|
| Sericite/clay | 55 |
| Quartz | 20 |
| Plagioclase | 18 |
| Pyrite | 5 |
| Limonite | 2 |

This rock consists dominantly of fine-grained felted sericite grading to brown clayey material (as in 429, 726).

In this are set scattered subhedral crystals of plagioclase, 0.5 - 3.0mm in size, extensively altered to sericite, and irregular patches and networks of anhedral mosaic quartz (with plagioclase) of grain size 0.1 - 0.4mm. There are also many ghostlike forms of smaller crystals (presumably originally plagioclase) down to 0.1mm or less in size throughout the sericite groundmass.

The textural aspect of this rock is that of an altered tuff. Like 429 and 726 the slide and cut surface show extensive porosity. In some cases the voids are limonite coated and may represent the original sites of oxidized, or partially oxidized, pyrite.

The pyrite shows the same poikilitic/cluster form as in the related rocks.

Sample No: Hank 728 ALTERED LITHIC TUFF

Estimated mode

| | |
|---|---|
| Sericite | 46 |
| Carbonate | 25 |
| Plagioclase | 15 |
| Quartz | 5 |
| Chlorite | 3 |
| Pyrite | 4 |
| Rutile | 2 |

This is another variant of the altered tuffs, differing from the previous few rocks in having a considerable content of carbonate.

It consists essentially of variably sericitized felsite, containing ill-defined ghostly pseudomorphic forms of more concentrated sericite and abundant irregular patches of carbonate. The felsite shows patches and networks of coarser grain size and development of unaltered cherty quartz/feldspar mosaics.

There are also scattered, rather rounded patches, 2 - 8mm in size, of brown clay/sericite with interstitial chlorite. These appear to be altered lithic fragments.

Pseudomorphed coarse feldspars or other crystals are essentially lacking.

The rock contains granular anhedral clusters of fine-grained pyrite and finely dispersed specks of rutile.

Sample No: Hank 730 ALTERED TUFF

Estimated mode

| | |
|---|---|
| Sericite | 45 |
| Carbonate | 30 |
| Plagioclase) Quartz ) | 15 |
| Pyrite | 10 |

This rock consists dominantly of a mass of fine-grained felted sericite set with abundant irregular shaped patches (0.05 - 0.5mm) of carbonate. This contains occasional angular pseudorphic shapes of coarser sericite and, rarely, partial remnants of plagioclase crystals.

Throughout the sericite/carbonate are pockets and elongate streaks of clear, unaltered, cherty or granular mosaic quartz and/or untwinned plagioclase ranging up to 0.1mm in grain size.

Pyrite is rather abundant as coalescent clusters and anhedral poiklitic grains up to 1mm or more in size.

There is a tendency for the greatest concentration of pyrite to occur within, and adjacent to, a central thin band of sericite-free chert.

# APPENDIX 3

## HANK CLAIM GROUP Expenditure Summary

# APPENDIX 3

## HANK CLAIM GROUP Expenditure Summary

## APPENDIX 3

HANK CLAIM GROUP Expenditure Summary

Salaries and Wages - Field Work August 3 to 11, 1983

| | | |
|---|---|---|
| R.F. Brown | 9 days @ $140.00/day | $1260.00 |
| R. Turna | 9 days @ $127.50/day | $1147.50 |
| J. Conway | 9 days @ $101.65/day | $ 914.85 |

Salaries and Wages - Mobilization and Demobilization,
Travel to and from Claims.

| | | |
|---|---|---|
| R.F. Brown | 9 days @ $140.00/day | $1260.00 |
| R. Turna | 9 days @ $127.50/day | $1147.50 |
| J. Conway | 9 days @ $101.65/day | $ 914.85 |

Geochemical Analysis:

Bondar Clegg and Company Ltd.
130 Pemberton Avenue
North Vancouver, B.k.

| | |
|---|---|
| 308 soils and silts @ $6.70/sample | $2,063.60 |
| 95 rocks @ $15.70/sample | $1,491.50 |
| 15 pulps @ $6.00/sample | $ 90.00 |

ACME Analytical Laboratories Ltd.
852 East Hastings Street
Vancouver, B.C.

| | |
|---|---|
| 308 pulps @ $5.50/sample | $1,694.00 |

Rock Thin Section Preparation: $ 663.75

Vancouver Petrograhics Ltd.
8887 Nash Street - P.O. Box 39
Fort Langley, B.C.

Petrographic Study: $812.00

Vancouver Petrographics Ltd.

Appendix 3 continued...

| | |
|---|---|
| **Helicopter Rental:** | |
| Northern Mountain Helicopers Inc. | $1,201.95 |
| Edgeworth Helicopters Inc.<br>P.O. Box 3130<br>Fort Nelson, B.C. | $2,432.70 |
| **Truck Rental:** | |
| Rentway Canada Ltd.<br>2916 Norland Avenue<br>Burnaby, B.C. | |
| 2 trucks for 18 days @ $1016.50/month/truck | $1,180.45 |
| **Hotel:** | |
| Tenajon Inn, Tenajon, B.C.<br>2 rooms for 1 day @ $40.00/day/room | $80.00 |
| **Supply Costs, Including Food** | |
| 54 man days @ $40.00/day | $2,160.00 |
| **Fuel:** | $400.00 |
| **Field Equipment:** | $200.00 |
| **Salaries and Wages - Report Preparation, Drafting** | |
| R. Turna, January 9 - February 20, 1984<br>20 days @ $127.50/day | $2,550.00 |
| **Topographic Base Map Preparation:** | $2,049.00 |
| Pacific Survey Corporation<br>1409 West Pender Street | |
| TOTAL EXPENDITURES | $25,713.65 |

# APPENDIX 4

## Statement of Exploration and Development

# APPENDIX 5

Notice to Group

# APPENDIX 6

## Statement of Author's Qualifications

# APPENDIX 6

I, Rein Turna, certify that:

1. I graduated from the University of British Columbia in 1975 with a BSc in Geology.

2. Since 1975 I have been engaged in mineral exploration in British Columbia and Yukon Territory.

3. I have been personally engaged in field work on the HANK CLAIM GROUP and am responsible for the interpretation of the data included in this report.

4. My business address:

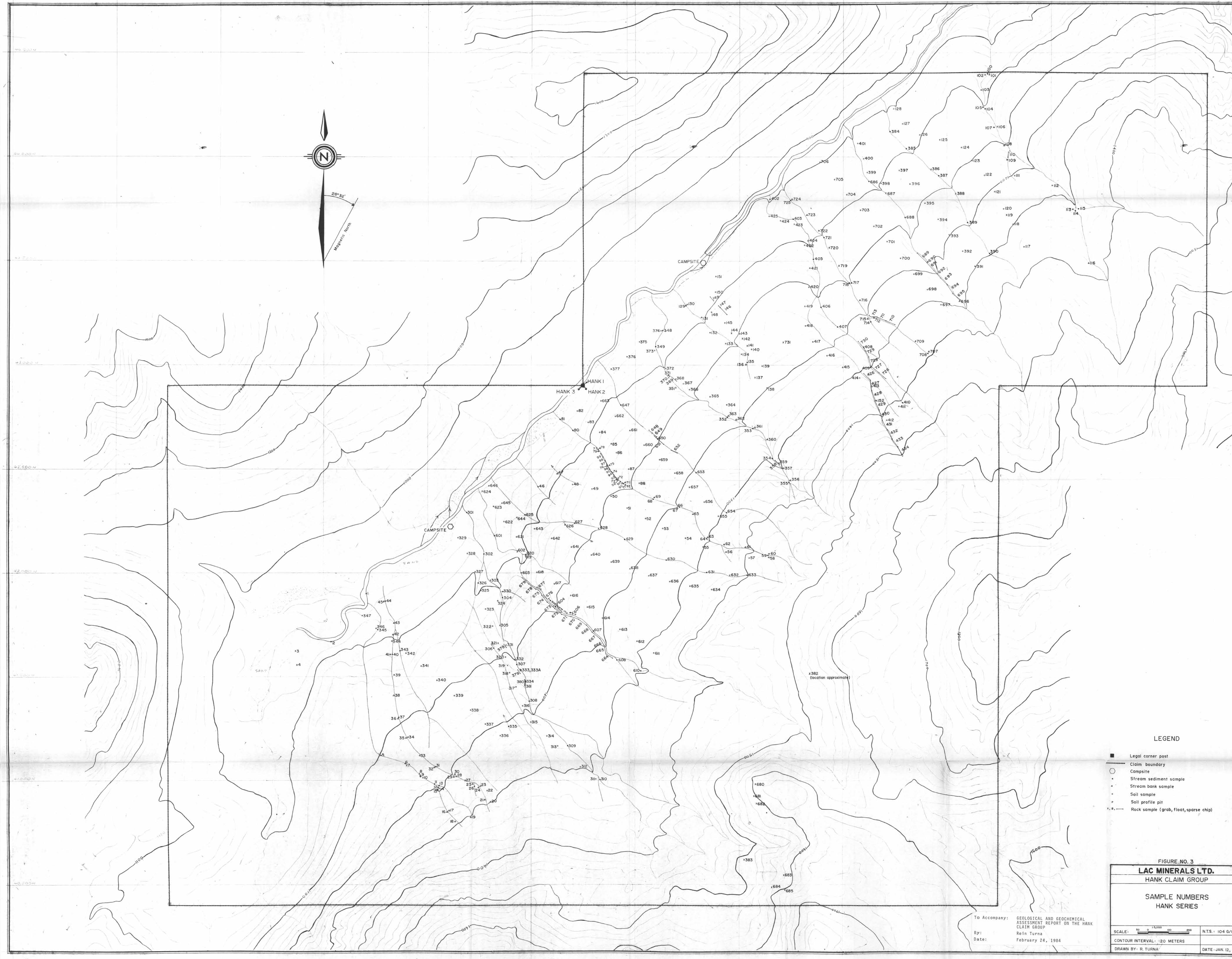
   Lac Minerals Limited
   #470 - 1055 West Hastings Street
   Vancouver, B.C. V6E 2E9

   My home address:

   5818 Falcon Road
   West Vancouver, B.C. V7W 1W5

Rein Turna

Endorsed by: J. Hogan, P.Eng.




To Accompany: GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT ON THE HANK CLAIM GROUP

By: Rein Turna

Date: February 24, 1984

FIGURE NO. 3

**LAC MINERALS LTD.**

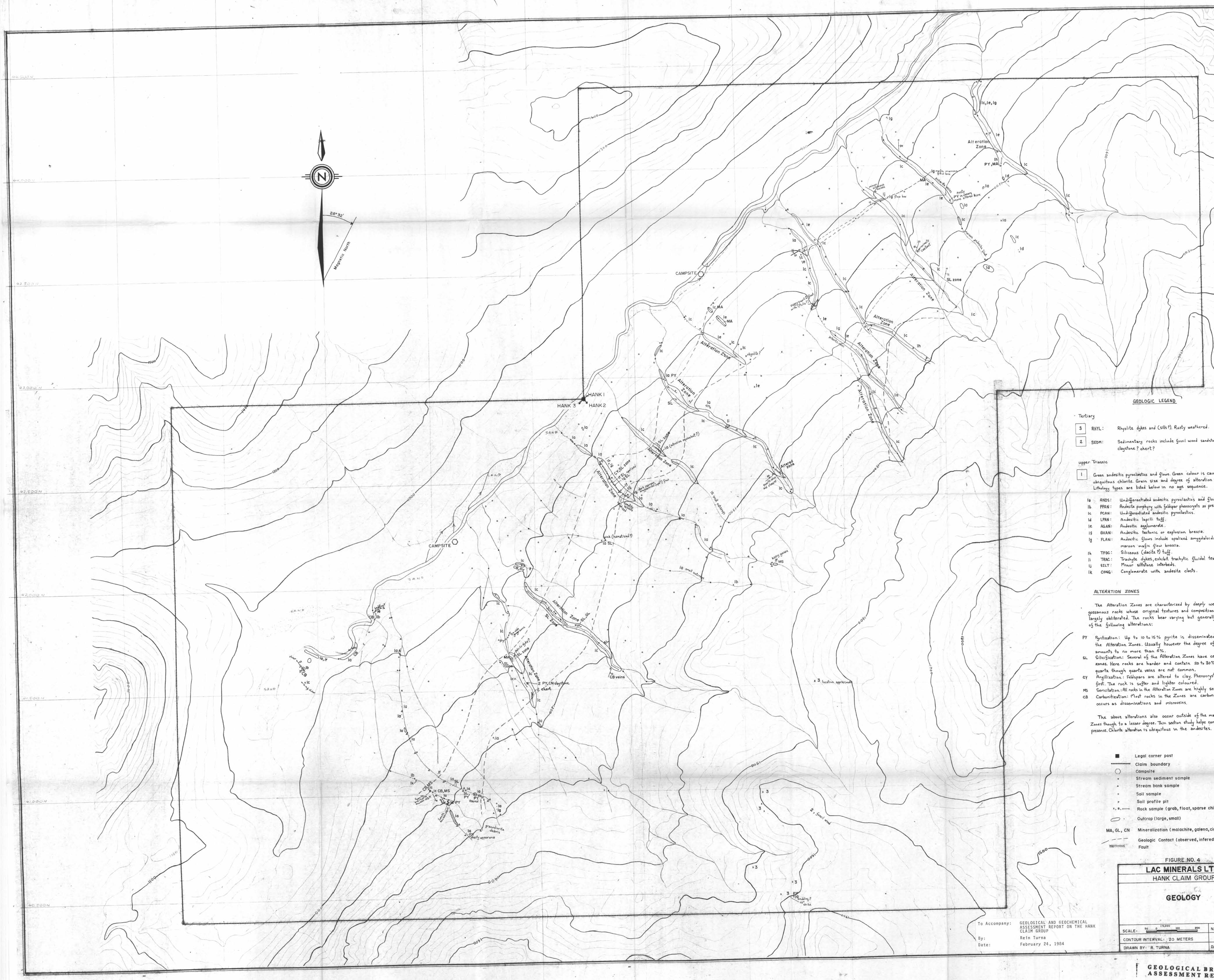
HANK CLAIM GROUP

SAMPLE NUMBERS
HANK SERIES

| | |
|---|---|
| SCALE: 1:5,000 (50 0 100 200) | N.T.S.: 104 G/1,2 |
| CONTOUR INTERVAL: 20 METERS | |
| DRAWN BY: R. TURNA | DATE: JAN. 12, 1984 |

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

12,098




## GEOLOGIC LEGEND

Tertiary

| | | |
|---|---|---|
| 3 | RHYL: | Rhyolite dykes and (sills?). Rusty weathered. |
| 2 | SEDM: | Sedimentary rocks include fossil wood sandstone, claystone? chert? |

upper Triassic

| | |
|---|---|
| 1 | Green andesitic pyroclastics and flows. Green colour is caused by ubiquitous chlorite. Grain size and degree of alteration vary considerably. Lithology types are listed below in no age sequence. |

| | | |
|---|---|---|
| 1a | ANDS: | Undifferentiated andesitic pyroclastics and flows. |
| 1b | PPAN: | Andesite porphyry with feldspar phenocrysts as predominant texture. |
| 1c | PCAN: | Undifferentiated andesitic pyroclastics. |
| 1d | LPAN: | Andesitic lapilli tuff. |
| 1e | AGAN: | Andesitic agglomerate. |
| 1f | BXAN: | Andesitic tectonic or explosion breccia. |
| 1g | FLAN: | Andesitic flows include opalized amygdaloidal flow and maroon mafic flow breccia. |
| 1h | TFDC: | Siliceous (dacite?) tuff. |
| 1i | TRAC: | Trachyte dykes, exhibit trachytic fluidal texture. |
| 1j | SILT: | Minor siltstone interbeds. |
| 1k | CONG: | Conglomerate with andesite clasts. |

### ALTERATION ZONES

The Alteration Zones are characterized by deeply weathered gossanous rocks whose original textures and compositions have been largely obliterated. The rocks bear varying but generally high degrees of the following alterations:

- PY Pyritization: Up to 10 to 15% pyrite is disseminated in rocks in the Alteration Zones. Usually however the degree of pyritization amounts to no more than 5%.
- SL Silicification: Several of the Alteration Zones have central siliceous zones. Here rocks are harder and contain 20 to 30% disseminated quartz though quartz veins are not common.
- CY Argillization: Feldspars are altered to clay. Phenocrysts are altered first. The rock is softer and lighter coloured.
- MS Sericitation: All rocks in the Alteration Zones are highly sericitized.
- CB Carbonitization: Most rocks in the Zones are carbonatized. This occurs as disseminations and microveins.

The above alterations also occur outside of the main Alteration Zones though to a lesser degree. Thin section study helps confirm their presence. Chlorite alteration is ubiquitous in the andesites.

| | |
|---|---|
| ■ | Legal corner post |
| ------------ | Claim boundary |
| ⬡ | Campsite |
| • | Stream sediment sample |
| ▴ | Stream bank sample |
| ∘ | Soil sample |
| P | Soil profile pit |
| x, ⊗, ⊢⊣ | Rock sample (grab, float, sparse chip) |
| ⬭ · | Outcrop (large, small) |
| MA, GL, CN | Mineralization (malachite, galena, cinnabar) |
| — — — | Geologic Contact (observed, infered) |
| ~~~~ | Fault |

FIGURE NO. 4

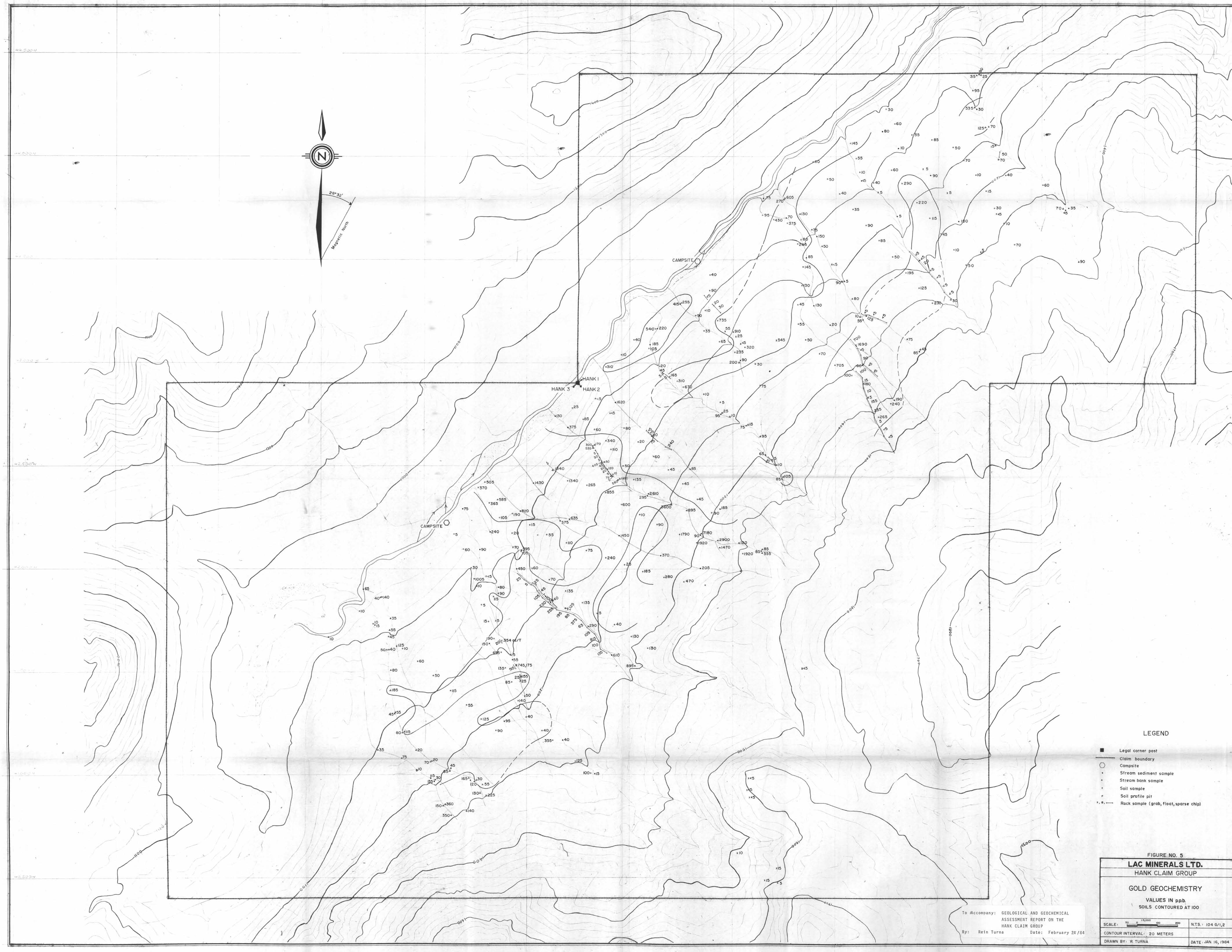
**LAC MINERALS LTD.**

HANK CLAIM GROUP

**GEOLOGY**

| | |
|---|---|
| SCALE: 1:5,000 (50 0 100 200) | N.T.S.: 104 G/1,2 |
| CONTOUR INTERVAL: 20 METERS | |
| DRAWN BY: R. TURNA | DATE: FEB. 7, 1984 |

| | |
|---|---|
| To Accompany: | GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT ON THE HANK CLAIM GROUP |
| By: | Rein Turna |
| Date: | February 24, 1984 |




GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,098

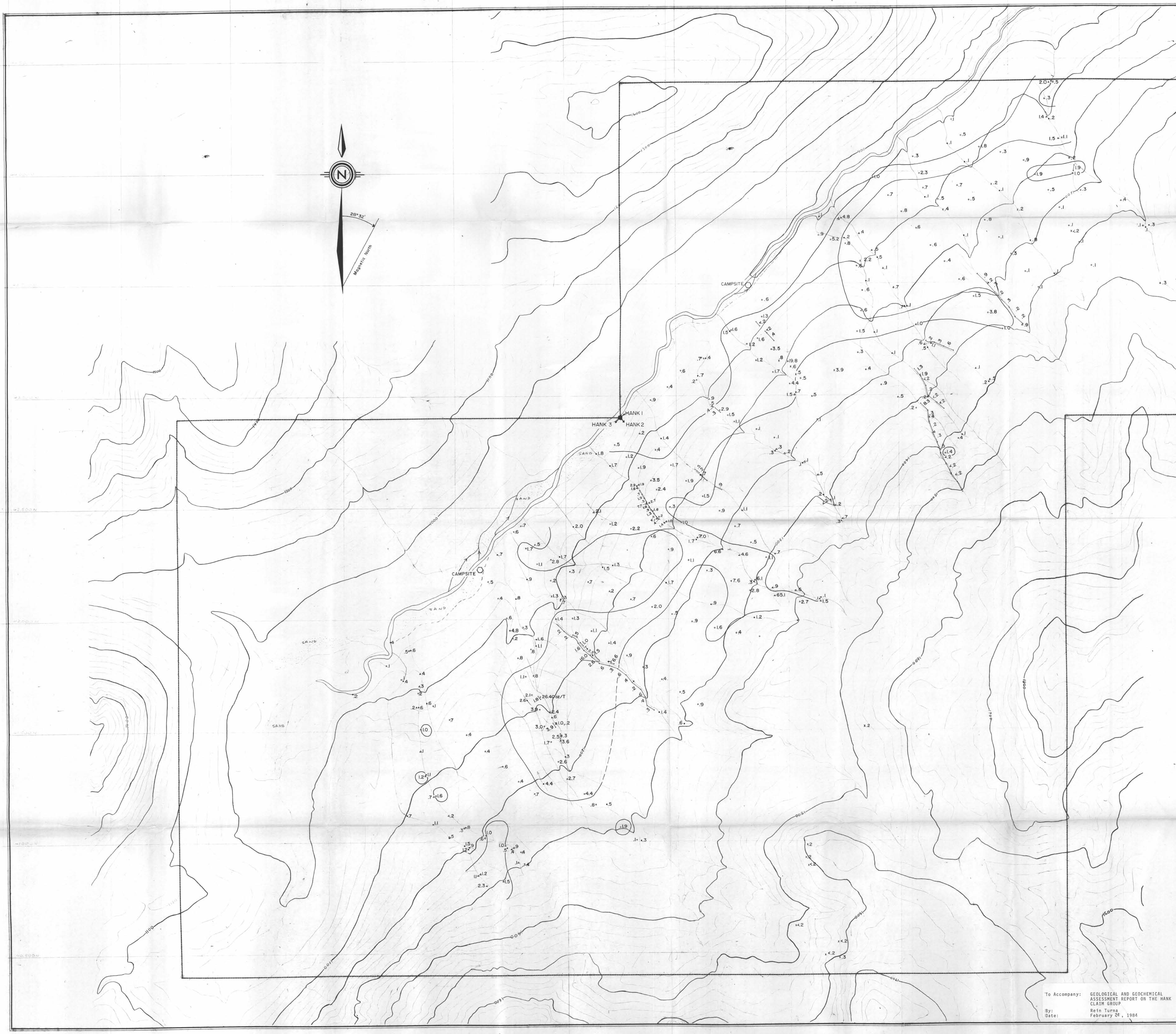


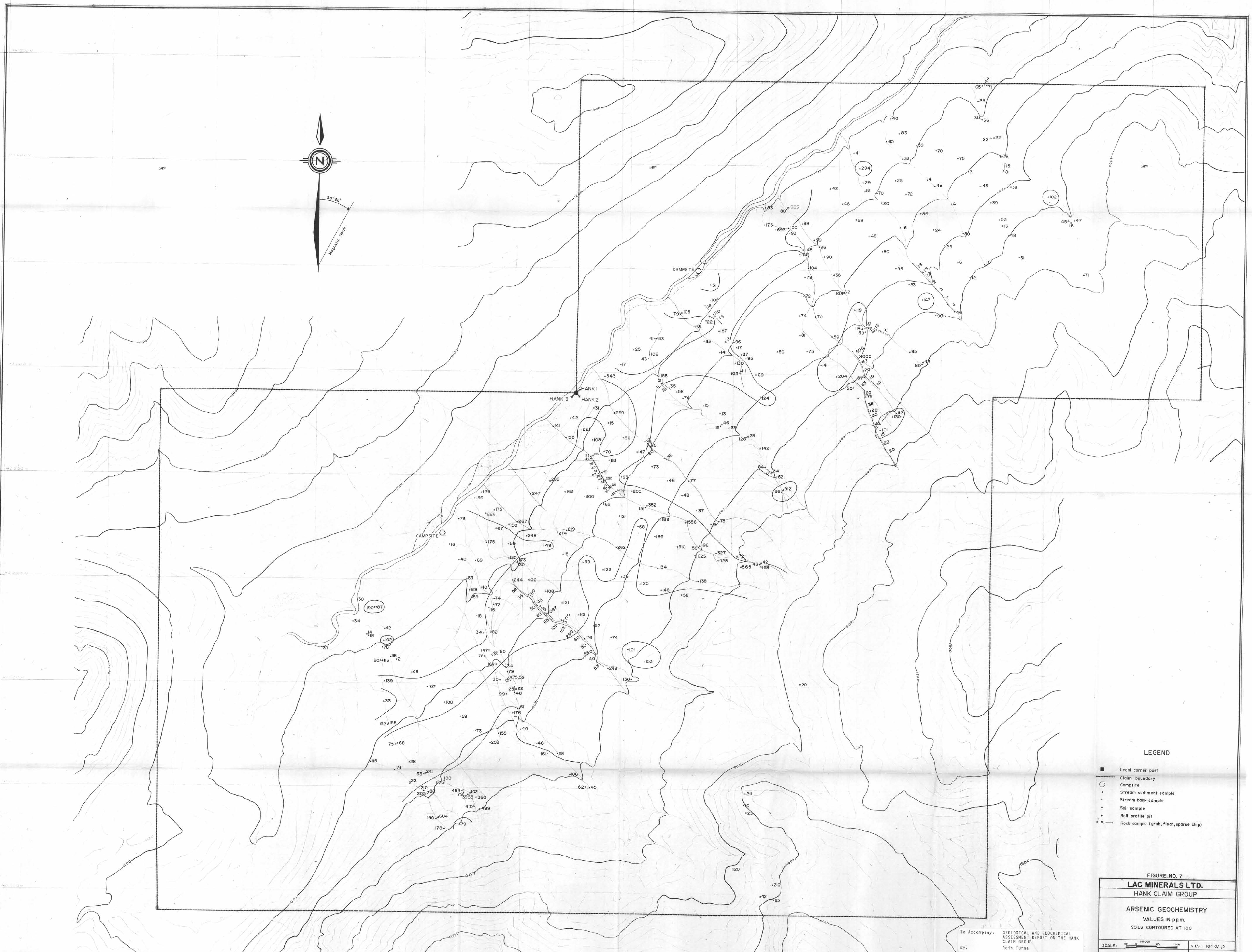

FIGURE NO. 6

| LAC MINERALS LTD. | |
|---|---|
| HANK CLAIM GROUP | |
| SILVER GEOCHEMISTRY<br>VALUES IN p.p.m.<br>SOILS CONTOURED AT 1.0 | |
| SCALE: 1:5,000 | N.T.S.: 104 G/1,2 |
| CONTOUR INTERVAL: 20 METERS | |
| DRAWN BY: R. TURNA | DATE: JAN. 18, 1984 |

To Accompany: GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT ON THE HANK CLAIM GROUP
By: Rein Turna
Date: February 24, 1984

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,098




GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,098