

ASSESSMENT REPORT OF THE 1985  
GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL AND TRENCHING PROGRAM  
ON THE

PHIL 1-HASLINGER OPTION CLAIM GROUPS  
(PHIL 1, A, B, AND MT. MILLIGAN CLAIM GROUPS)

OMINECA MINING DIVISION  
NTS 93N/1E, 930/4W

Latitude 55°07.5'N, Longitude 124°~~00'~~  
02'

Owner: BP Resources Canada Limited; R. Haslinger  
Operator: BP Resources Canada Limited

FILMED

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

BPVR 85-40

14,377

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December, 1985

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SUMMARY

Exploration activities in 1985 on the PHIL 1-Haslinger Option claim groups were primarily concentrated on the central portion of the claims. They included geological mapping, geophysical and geochemical surveys and a backhoe trenching program. The surveys were carried out to assist interpretation and to substantiate anomalies indicated by earlier soil and rock sampling surveys. In the 1985 surveys 638 soil samples and 503 rock chip samples were collected. The trenching program was carried out to assess the gold potential of anomalies in areas of shallow overburden prior to drill testing.

The geophysical survey delineated a broad north-south trending IP anomaly which coincides with an extensive disseminated pyrite zone. A small magnetic anomaly is believed to represent a dioritic intrusive. Geochemical fill-in soil sampling verified several gold anomalies of significant magnitude, which are peripheral to the magnetic anomalies. Some soil anomalies are spatially associated with anomalous gold in rock chip samples and most fall within the IP anomaly. A total of 1,413 metres of backhoe trenching was excavated and chip sampled. Results indicate the presence of several mineralized structures within three zones, containing >1,000 ppb gold and associated with intense Kspar and carbonate alteration, silicification and minor quartz-pyrite veining.

Deep overburden prevented complete trench evaluation of the geochemical and geophysical anomalies lying between the South Boundary Zone and the Creek Zone.

#### CONCLUSIONS

1. Gold mineralization known to date on the PHIL 1-Haslinger Option claims is concentrated in highly altered quartz-pyrite zones and veins, which are superimposed on, and enveloped by pervasive wallrock alteration zones of variable width and intensity.
2. The gold-rich structures contain gold values of at least an order of magnitude higher than the pervasively altered enveloping rocks. Gold/copper ratios are also substantially higher in the gold-rich zones.
3. Alteration and mineralization are apparently related to small epizonal diorite and monzodiorite stocks and dykes.
4. The broad north-south trending disseminated pyrite zone, reflected by an IP anomaly, may represent the contact metamorphic aureole of a "deep-seated" pluton of intermediate composition lying beneath the property. This aureole is likely to be the primary zone of influence affecting alteration and mineralization and should therefore hold the best potential for economic gold mineralization.

RECOMMENDATIONS

1. Additional backhoe trenching should be carried out to trace the extent of all gold-bearing structures.
2. Trenching should also be carried out to test the gold soil anomalies in the "North Slope" area.
3. If the gold-bearing structures can be extended on surface, consideration should be given for diamond drill testing the structures. Drilling is required in areas where trenching is restricted by deep overburden.
4. Detailed surface mapping (1:1 000 or 1:500) should be carried out within a 500 metre radius of any zones considered worthy of drill testing.
5. General prospecting, rock chip sampling and updated mapping should be carried out (1:5 000) in a continued search for surface gold showings and should be particularly concentrated near altered intrusive rocks and within the IP anomaly.

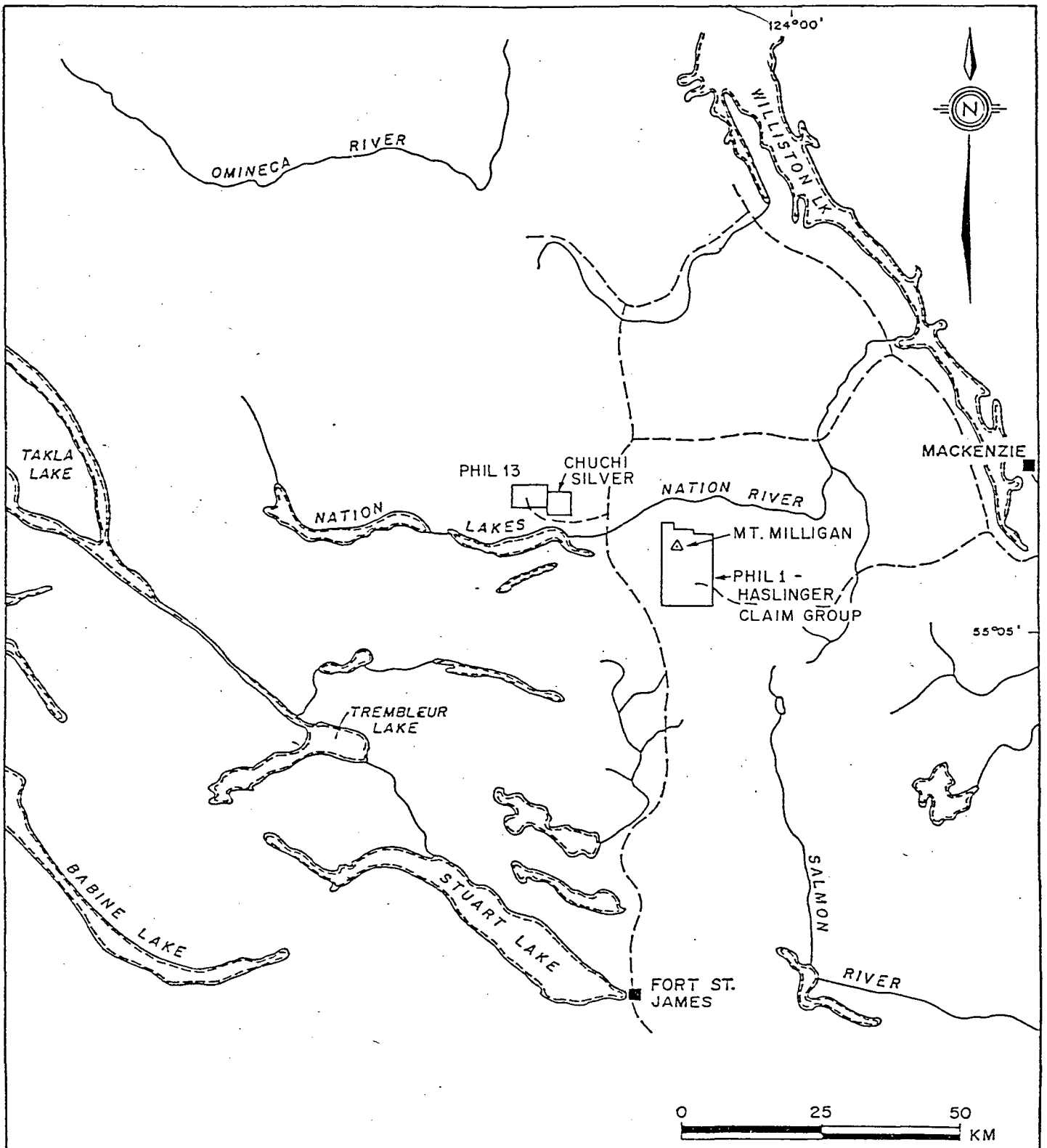



INTRODUCTION1. Location, Access and Terrain

The PHIL 1 and Haslinger Option claims are located at  $55^{\circ}08'N$  latitude and  $124^{\circ}04'W$  longitude in the Omineca Mining Division approximately 95 km north of Fort St. James and 10 km southeast of the Nation River bridge on the Manson Creek Highway (NTS 93N/1, Figure 1).

Access to the property is by a four-wheel drive access road which extends 10 km beyond Rainbow Creek at the end of the Philips North and Main Line logging road. Access to the Philips Main Line is gained from Windy Point on Highway 97, approximately 150 km north of Prince George.

The claims cover a series of northwest-trending ridges which extend from Mt. Milligan in the north to Rainbow Creek in the south. Local relief is in the order of 300 metres with an average elevation of 1200 metres. Drainage from the property is either east to Rainbow Creek or west to Suschona Creek, thence north to the Nation River. Vegetation consists of continuous dense growth of pine, fir, spruce, balsam, alder and aspen. The entire property is below treeline.



 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
<b>PHIL 1 - HASLINGER OPTION</b> <b>LOCATION MAP</b>		
SCALE 1,000,000	DRAWN BY: R. E. M.	FIG. 1
DATE AUG '85	DRAFTED BY: E. B. W.	
N.T.S. 93N/1,0/4	PROJ. 10131	REPORT BPVR 85-23

2. Claim Status

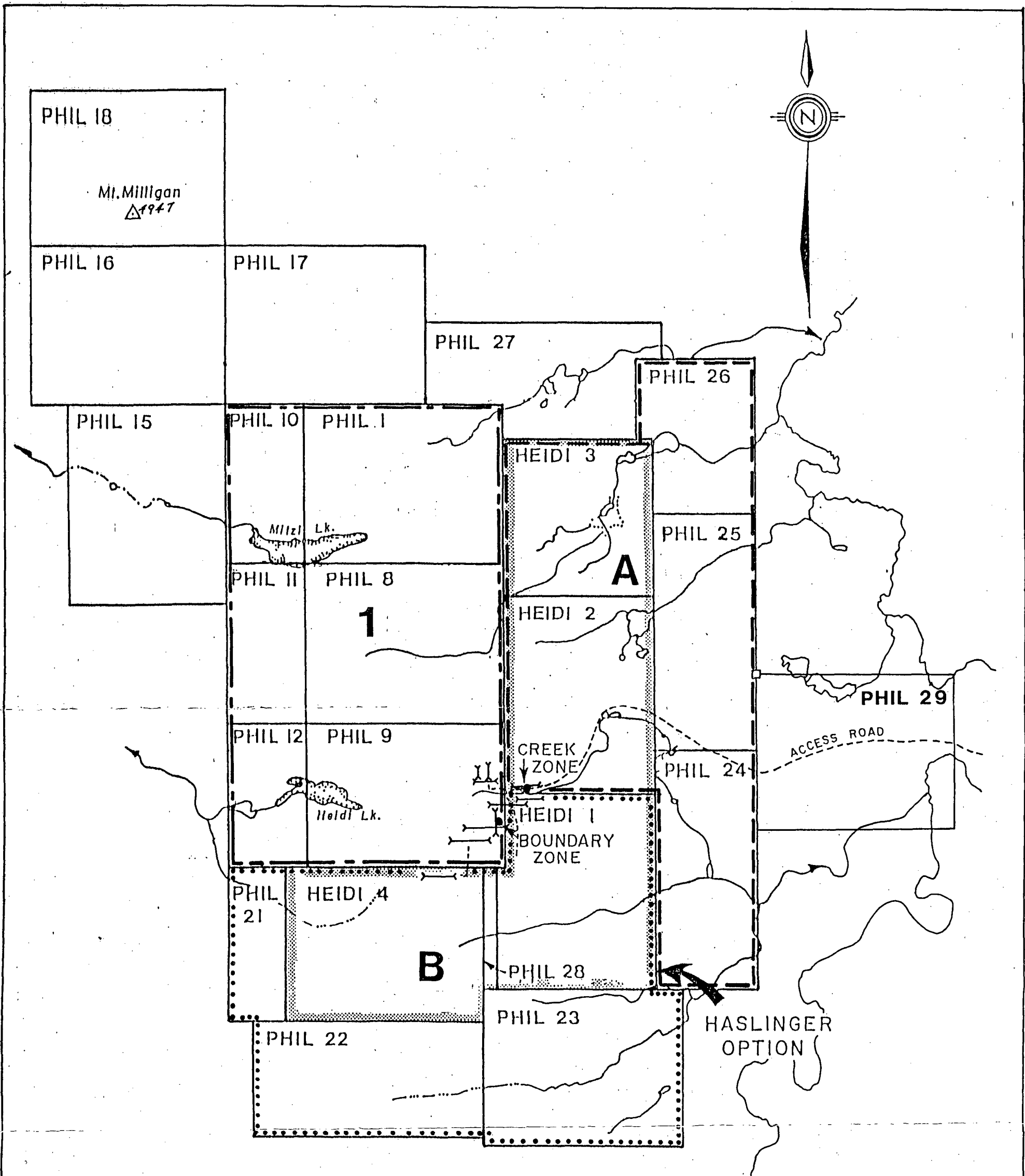
The PHIL 1 and Haslinger Option property is subdivided into four claim groups referred to as the PHIL 1, PHIL A, PHIL B and MT. MILLIGAN claim groups (Figure 2). The claim groups comprise 353 claim units. An additional 20 unit claim, PHIL 29 is not included in the groups. The groupings are listed as follows:

PHIL 1 GROUP

<u>CLAIM</u>	<u>NO. OF UNITS</u>	<u>RECORD NUMBER</u>	<u>RECORDING DATE</u>	<u>EXPIRY DATE</u>
Phil 1	20	5013	Feb. 28, 1983	Feb. 28, 1990
Phil 8	20	6030	Dec. 29, 1984	Dec. 29, 1990
Phil 9	20	6031	Dec. 29, 1984	Dec. 29, 1990
Phil 10	8	6032	Dec. 29, 1984	Dec. 29, 1990
Phil 11	8	6033	Dec. 29, 1984	Dec. 29, 1990
Phil 12	<u>8</u>	6034	Dec. 29, 1984	Dec. 29, 1990
TOTAL	84 Units			

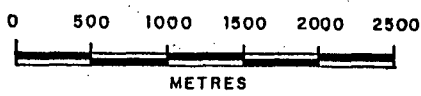
PHIL A GROUP

Heidi 2*	20	6137	April 26, 1984	April 26, 1990
Heidi 3*	16	6138	April 26, 1984	April 26, 1990
Phil 24	18	6647	Sept. 10, 1984	Sept. 10, 1989
Phil 25	18	6648	Sept. 10, 1984	Sept. 10, 1989
Phil 26	<u>12</u>	6649	Sept. 10, 1984	Sept. 10, 1989
TOTAL	84 Units			



**LEGEND**

- — — — PHIL 1 CLAIM GROUP
- - - - PHIL A CLAIM GROUP
- ..... PHIL B CLAIM GROUP
- — — — 1985 TRENCHING



SELCO DIVISION - BP RESOURCES CANADA LIMITED	
<b>PHIL 1 - HASLINGER OPTION          CLAIM GROUPS</b>	
<b>1985 TRENCHING</b>	
SCALE 1:50,000	DRAWN BY:
DATE DEC. 1985	DRAFTED BY: L.G.

PHIL B GROUP

CLAIM	NO. OF UNITS	RECORD NUMBER	RECORDING DATE	EXPIRY DATE
Heidi 1	20	6136	April 26, 1984	April 26, 1989
Heidi 4	20	6280	June 20, 1984	June 20, 1988
Phil 21	8	6652	Sept. 10, 1984	Sept. 10, 1988
Phil 22	18	6653	Sept. 10, 1984	Sept. 10, 1988
Phil 23	20	6646	Sept. 10, 1984	Sept. 10, 1988
Phil 28	<u>1</u>	6651	Sept. 10, 1984	Sept. 10, 1988
TOTAL	87 Units			

MT. MILLIGAN GROUP

Phil 15	20	6472	July 20, 1984	July 20, 1986
Phil 16	20	6473	July 20, 1984	July 20, 1986
Phil 17	20	6474	July 20, 1984	July 20, 1986
Phil 18	20	6475	July 20, 1984	July 20, 1986
Phil 27	<u>18</u>	6650	Sept. 10, 1984	Sept. 10, 1986
TOTAL	98 Units			

Phil 29	<u>20</u>	6853	March 5, 1985	March 5, 1989
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353 Units (Includes all group totals)

\* Haslinger Option

3. History

The Phil claims were originally staked by BP-Selco to cover areas of possible gold potential as indicated by the drill results of a porphyry-copper exploration program carried out in the 1970's by Pechiney Development Ltd. Subsequently the adjacent Heidi claims, staked by R. Haslinger, were acquired by an option agreement in 1984. Additional claims were staked late in 1984 and early 1985 following a property-wide geochemical program and preliminary geological mapping and prospecting. A more detailed account of the property history is described by Heberlein et al (1984).

4. 1985 Exploration Activities

In early March, prior to the commencement of exploration activities, approximately 11 km of four-wheel drive access road were constructed from Rainbow Creek through to the Creek Zone and Boundary Zone areas.

The 1985 program consisted of follow-up geological examinations, selected re-sampling of rocks and fill-in soil sampling in areas of gold geochemical anomalies outlined in 1984. In addition, an integrated geophysical survey, consisting of induced polarization (IP), magnetics

and EM (VLF), was carried out over the central portion of the property to cover the gold geochemical anomalies as well as geologically favourable gold targets.

Following an evaluation of the surface surveys, a comprehensive backhoe trenching program was carried out utilizing a backhoe mounted on a D-5 Caterpillar bulldozer. Trenching was contracted to Bruce M. Anderson Construction Ltd. of Prince George. All trenches encountering bedrock were mapped and sampled at 3 metre intervals. Trenches were excavated to maximum depth of 3.5 metres. In target areas where overburden exceeded this depth, test holes up to 4 metres were dug in efforts to locate additional bedrock samples. All rock and soil samples were analyzed by Acme Analytical Laboratories in Vancouver. Analytical data and methods are contained in Appendix 1 and Appendix 2.

5. Reclamation

Following completion of the trenching program and return of analytical results all of the deeper trenches that returned low or unencouraging sample results were filled in. In addition, following access road repairs carried out in early summer, uprooted or leaning trees were felled.

## REGIONAL GEOLOGY

The PHIL 1/Haslinger Option claim groups are situated in the central part of the Quesnel Trough within the Intermontane Tectonic Belt of the Canadian Cordillera.

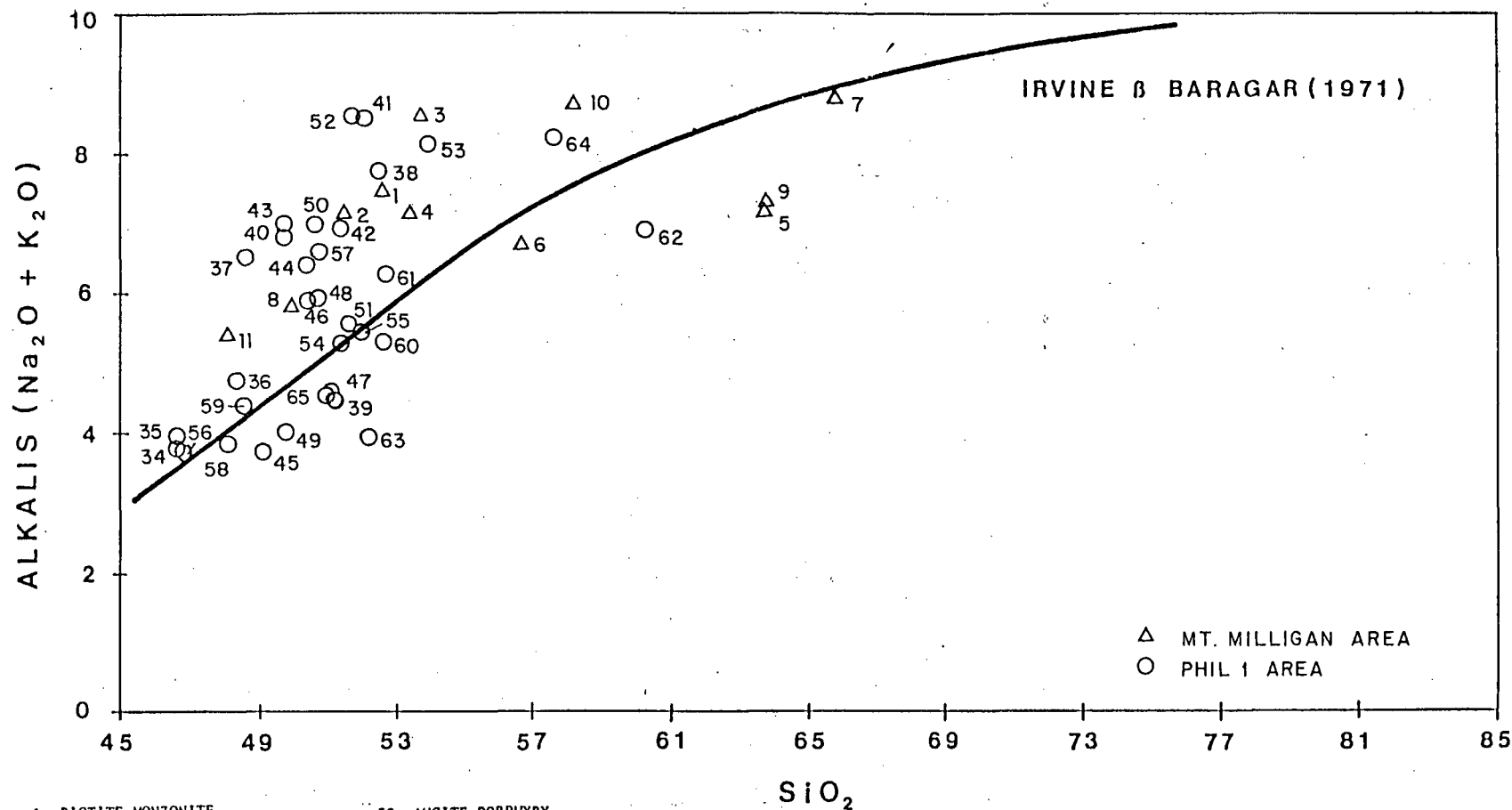
## PROPERTY GEOLOGY

### 1. General Statement

The property (Figure 3) is underlain by Takla Group massive volcanic flows, sills and volcanoclastic rocks of andesitic to basaltic composition (Figure 4). They have been metamorphosed to greenschist facies and are intruded by intermediate to mafic subvolcanic and plutonic rocks (Figure 5). Lithologies include augite and feldspar (plagioclase) porphyritic flows and tuffs and their subvolcanic equivalents, massive non-porphyritic flows and crystal-lapilli tuffs. Narrow sections of thinly laminated ash tuff are, in places, interlayered with the volcanic rocks and display sedimentary features suggesting top directions are to the east.

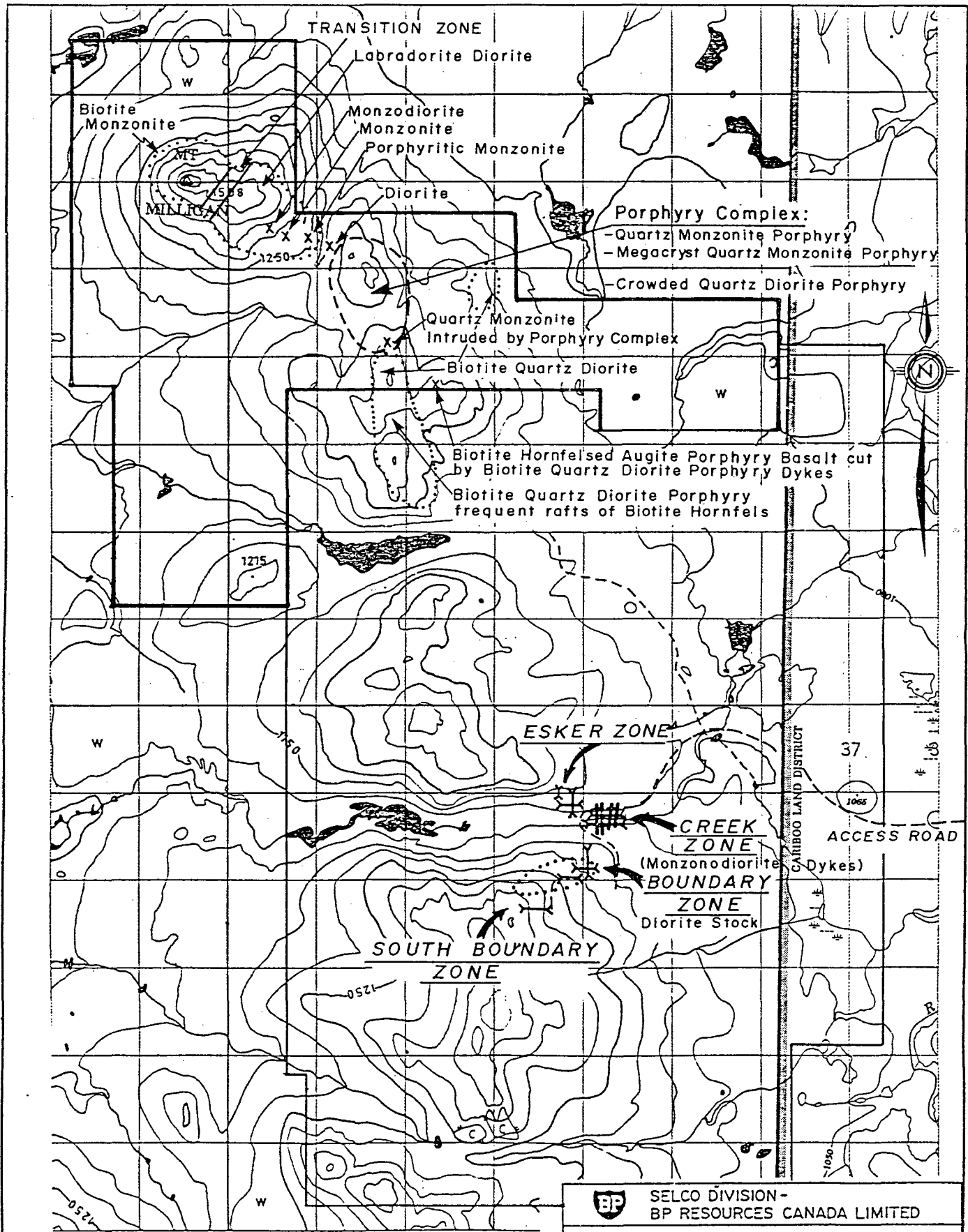
At the north end of the property, on the Mt. Milligan claim group the volcanic succession is intruded by an elliptical 5 km long composite pluton of intermediate composition (Figures 4 and 5). The complex intrusive is composed of





- |  |  |  |
|--|--|--|
| 1. BIOTITE MONZONITE                   | 39. AUGITE PORPHYRY                        | 52. STRONGLY ALTERED "MONZO-DIORITE" (K-SPAR-RICH) |
| 2. MONZODIORITE (TRANS. ZONE)          | 40. DIORITE (POTASSIC ALT'N)               | 53. HORNBLENDE DIORITE                             |
| 3. BIOTITE LABRADORITE DIORITE         | 41. AUGITE PORPHYRY (DIORITE)              | 54. LAMINATED ANDESITIC ASH TUFF                   |
| 4. MONZONITE                           | 42. AUGITE PORPHYRY                        | 55. AUGITE PLAG. PORPHYRY                          |
| 5. MEGACRYSTIC QTZ. MONZONITE PORPHYRY | 43. CRYSTAL-LAPILLI TUFF (PLAG-RICH)       | 56. AUGITIC CRYSTAL TUFF                           |
| 6. CROWDED QTZ. DIORITE PORPHYRY       | 44. HORNBLLENDE-FELDSPAR PORPHYRY DYKE     | 57. ANDESITE (BASALT) APHANITIC                    |
| 7. QTZ. MONZONITE PORPHYRY             | 45. AUGITE PORPHYRY                        | 58. DIORITE, MED-GR, EQUIGRANULAR                  |
| 8. BIOTITE QTZ. DIORITE                | 46. CRYSTAL-LAPILLI TUFF (PLAG-RICH)       | 59. AUGITIC ANDESITE                               |
| 9. BIOTITE QTZ. DIORITE PORPHYRY       | 47. CRYSTAL TUFF (AUG+PLAG)                | 60. ANDESITE, FINE-MED GR.                         |
| 10. QTZ. MONZONITE                     | 48. AUGITE PORPHYRY                        | 61. HORNBLLENDE PORPHYRY (DIORITE)                 |
| 11. BIOTITE HORNFELS AUGITE PORPHYRY   | 49. CRYSTAL TUFF (AUG+PLAG)                | 62. DIORITE-MED. GR.                               |
| 34. ANDESITE LAPILLI TUFF              | 50. DIORITE (PLAG-RICH)                    | 63. AUGITE PORPHYRY                                |
| 35. DIORITE                            | 51. AUGITE PORPHYRY (V. COARSE-INTRUSIVE?) | 64. DIORITE PORPHYRY (PLAG)                        |
| 36. AUGITE FELDSPAR PORPHYRY           |  | 65. AUGITIC ANDESITE(TUFF?)                        |
| 37. AUGITE PORPHYRY (COARSE)           |  |  |
| 38. AUGITE PORPHYRY (DIORITE)          |  |  |

<b>BP</b> SELCO DIVISION - BP RESOURCES CANADA LIMITED		
<b>PHIL 1 HASLINGER OPTION</b>		
<b>PLOT OF Na<sub>2</sub> + K<sub>2</sub>O vs SiO<sub>2</sub></b>		
<b>VOLCANIC AND INTRUSIVE ROCKS</b>		
SCALE	DRAWN BY	<b>FIG. 4</b>
DATE DEC. 1985	DRAFTED BY L.G.	
N.T.S.	PROJ. 10131	REPORT BPVR 85-23



**BP** SELCO DIVISION -  
 BP RESOURCES CANADA LIMITED

**PHIL 1. HASLINGER OPTION  
 INTERMEDIATE INTRUSIVE  
 ROCKS**

SCALE 1: 60,000	DRAWN BY:	FK 5
DATE JULY 1985	DRAFTED BY: E. B. W.	
N.T.S. 93N/1E		PROJ. 10131
		REPORT BPVR 85-23

coarse-grained labradorite diorite and biotite-bearing monzodiorite to the north, a central porphyritic segment, which is subdivided into quartz porphyritic and megacrystic feldspar porphyritic phases, and a southern segment of biotite quartz diorite. The pluton is complicated by several complex sheeted and pegmatitic dyke phases, and xenoliths and rafts of biotite hornfels wallrock. In general, excepting some porphyritic phases, the pluton is increasingly melanocratic from north to south.

## 2. Lithologies

The distribution of rocks as shown in Figure 3 has been modified from the previous report (Heberlein et al, 1984). The table of lithologies shown below is followed by a brief description of each rock type. Descriptions are primarily restricted to rocks in the central portion of the property where the main focus of the 1985 program was directed. More complete descriptions of rock types are found in the 1984 report and elsewhere in Meyers et al(1985).

Table of Lithologies

## INTRUSIVE ROCKS

Pyroxenite Dykes

Monzodiorite

Diorite

Subvolcanic Diorite (Feeder dykes, sills)

## VOLCANIC ROCKS

Unit 6 Augite &amp; Feldspar Porphyry Flows

Unit 5 Bedded Ash Tuff

Unit 4 Augite Porphyry Block Breccia &amp; Agglomerate

Unit 3 Andesite Flows &amp; Tuff

Unit 2 Augite Crystal Tuff

Unit 1 Hornblende Porphyry Flows

a) Volcanic Rocks

- i) Hornblende Porphyry Flows (Unit 1) are sparsely exposed near the northwest corner of the map area (Figure 3) in the lower part of the sequence. Medium grained acicular hornblende phenocrysts occur in a grey green, fine grained groundmass. Narrow ( $\leq$  1 metre) hornblende porphyritic dykes of similar composition, which crosscut the volcanic sequence at a few localities higher in the sequence, may be related to Unit 1 flows.

- ii) Augite Crystal Tuffs (Unit 2) make up as much as 30% of the sequence and are, in places, difficult to distinguish from the flow rocks. Medium to coarse crystal fragments of augite, plagioclase and minor hornblende occur in poorly bedded sections up to several metres thick. Less commonly, angular and subangular lithic fragments (1-5 mm) occur where the unit appears to grade into a crystal-lapilli tuff.
- iii) Andesite Flows & Tuff (Unit 3) are among the most common rocks on the property. Massive, fine grained andesite predominates and is interlayered with poorly bedded, weakly fragmental rocks of similar composition. Minor lithic fragments (2-10 mm) of augite and feldspar porphyry also occur within this unit.
- iv) Augite Porphyry Block Breccia & Agglomerate (Unit 4) occur on the west side of the property in the lower part of the sequence. Augite porphyry makes up most of the unit, but sections of multi-lithic agglomerate also occur in the northwestern part of the map area. Fragments range in size from 1 cm to >2 metres and are commonly clast supported.

- v) Bedded Ash Tuff (Unit 5) account for the smallest proportion of the stratigraphic sequence. Narrow, discontinuous sections 5 - 25 metres thick have been traced for several hundred metres. The unit usually displays well-formed subaqueous sedimentary features such as graded bedding, cross-bedding, load casts and rip-up clasts, all of which indicate top directions to the east.
- vi) Augite & Feldspar Porphyry Flows (Unit 6) predominate in the upper half of the sequence, but are common throughout the property. Massive, dark green flows may contain 10-40% augite phenocrysts (2 mm - 2 cm), with or without abundant plagioclase phenocrysts in a fine to medium grained equigranular groundmass of plagioclase and chloritized mafic minerals. Coarser grained equigranular and porphyritic equivalents form subvolcanic "feeder" dykes and sills which are intimately associated with the flows. They are referred to below in the description of intrusive rocks.

b) Intrusive Rocks

Intrusive rocks occurring in the central part of the claims fall into the three main categories of subvolcanic diorite ( $Di_v$ ), diorite (Di), and monzodiorite (Md). Subordinate units such as diorite porphyry (Dp) and pyroxenite (Px) form minor dykes which occur elsewhere on the property (Heberlein et al 1984), but are not described herein (Figure 3).

i) Subvolcanic Diorite ( $Di_v$ ) Rocks of this category are essentially an integral part of the volcanic sequence. Most occurrences are fine to medium grained, augite and/or feldspar porphyritic dykes or sills which are interlayered with or cross cut augite and feldspar porphyry flows of Unit 6. Some sections contain fine grained, porphyritic wallrock fragments identical to the flow rocks. They are believed to have acted as feeders to the Takla augite porphyry flows. In other areas it is difficult to distinguish between the intrusives of this type and their flow equivalents.

ii) Diorite (Di) is the most commonly occurring hypabyssal intrusive, forming the Boundary Zone stock as well as smaller plugs on the southern part

of the map area. The rock is medium to coarse grained and varies from equigranular to plagioclase and/or hornblende porphyritic. Outcrop distribution and trench exposures suggest that a northeast-oriented elliptical stock approximately 1000 metres X 400 metres is centred near 83+00N, 120+00E.

iii) Monzodiorite (Md) occurs most abundantly in the Creek Zone where it intrudes strongly altered sections of andesite and augite porphyry. Most exposures in this area are strongly altered, but usually a medium to coarse grained feldspar porphyritic texture is discernible. Mineralization in the Creek Zone is closely associated with this unit.

### 3. Structure

The dominant stratigraphic trends on the property are north-northwest. Most units are sub-vertically oriented, probably due to block faulting and rotation rather than folding. No direct evidence has been observed for isoclinal folding, such as minor fold closures. However, at a few locations possible graded bedding reversals may be present in laminated ash tuff. Faults and shear zones are mainly



oriented northeasterly and northwesterly. In places they appear to offset stratigraphic units and are reflected by local escarpments and canyon-like creek valleys.

#### GEOPHYSICAL SURVEYS

A comprehensive geophysical survey of IP Resistivity, EM (VLF) and magnetics was carried out over the central portion of the claims from line 79+00N to line 95+00N (Figure 6). Details of the survey are described in Appendix 3.

The survey assisted with subsurface geological interpretations and helped delineate the extent of sulphide concentrations. The IP survey outlined a broad anomaly, interpreted to be a zone of disseminated sulphides and is generally consistent with geological mapping. The anomaly ranges from 600 to 1000 metres in width and covers the full north-south extent of the grid. A VLF conductor along 114+00E extends from 79+00N to 82+00N and may indicate higher sulphide concentrations. The magnetic survey was masked by the high magnetic susceptibility of the volcanic rocks, however a (diorite?) intrusive was outlined northeast of the Creek Zone.

GEOCHEMICAL SURVEY

B horizon soil

Fill-in soil sampling surveys were carried out in 1985 over selected gold anomalies outlined by the 1984 property-wide soil survey. A total of 638 soil samples were collected. The surveys (Appendix 4 and Figure 6) closed up sample spacings from 200 X 100 metres to 50 X 50 metres or 25 X 50 metres over the South Boundary Zone and Boundary Zone, and over a broad area northwest of the Creek Zone. On the Boundary Zone a linear +100 ppb anomaly on the Selco side of the property line, with values up to 875 ppb Au trends northeasterly from line 82+00N to line 84+50N within the IP anomaly. Unfortunately, deep overburden prevented trench testing of that part of the anomaly. To the east, however, a section which also lies within the IP anomaly was trenched and the results are discussed later.

Approximately 250 fill-in samples collected northwest of the Creek Zone outlined several anomalies which are accompanied by enhanced copper, silver, and arsenic as well as molybdenum, lead and iron.

TRENCHING PROGRAM1. Objectives

A total of 1413 metres of backhoe trenching was completed on the PHIL 1 and Haslinger claims in four separate zones

(Figures 7, 8, 9, & 10). The trenching was completed following geological examinations and geophysical and geochemical surveys, which were carried out to substantiate anomalies indicated by earlier sampling surveys. The primary objectives were to determine anomaly sources by bedrock sampling, thereby establishing the presence or absence of surface gold targets worthy of drill testing.

On the Creek Zone, two east-west trenches were placed along the road cut, north and south of "King Richard Creek". Three trenches were placed on the Boundary Zone in a north-south and east-west orthogonal cross pattern. A similar configuration was applied on the Esker Zone. On the South Boundary Zone a single east-west trench was placed along line 79+00N. All trenches were sampled at 3 metre intervals. A total of 503 rock chip samples were collected and analyzed geochemically for gold and by inductively coupled plasma (ICP) multi-element analysis.

## 2. Results

### a) General

Encouraging gold values were returned from three of the four zones trenched; the Creek, Esker and South Boundary Zones. Boundary Zone results were somewhat

disappointing. However, trenching there exposed a large section of diorite. The main geochemical anomaly on the Boundary Zone remains untested due to deep overburden.

Trench orientation and sampling data are presented in Figures 7, 8, 9 & 10). The geology, alteration and mineralization encountered in each zone are summarized in the section that follows.

b) Trench Summaries

i) Creek Zone

The Creek Zone (Figures 7a,b,c) lies on the eastern side of the IP anomaly and immediately south of a broad magnetic anomaly believed to reflect the presence of a dioritic stock.

Strongly altered sections of andesite and augite porphyry are intruded by monzodiorite dykes and crosscut by fractures, shear zones and off-setting faults. Least altered rocks occur at the east and west ends of the zones where the volcanic rocks are only weakly affected by the intrusives. At the west end, massive augite porphyry flows are in fault contact with altered rocks within the zone. The

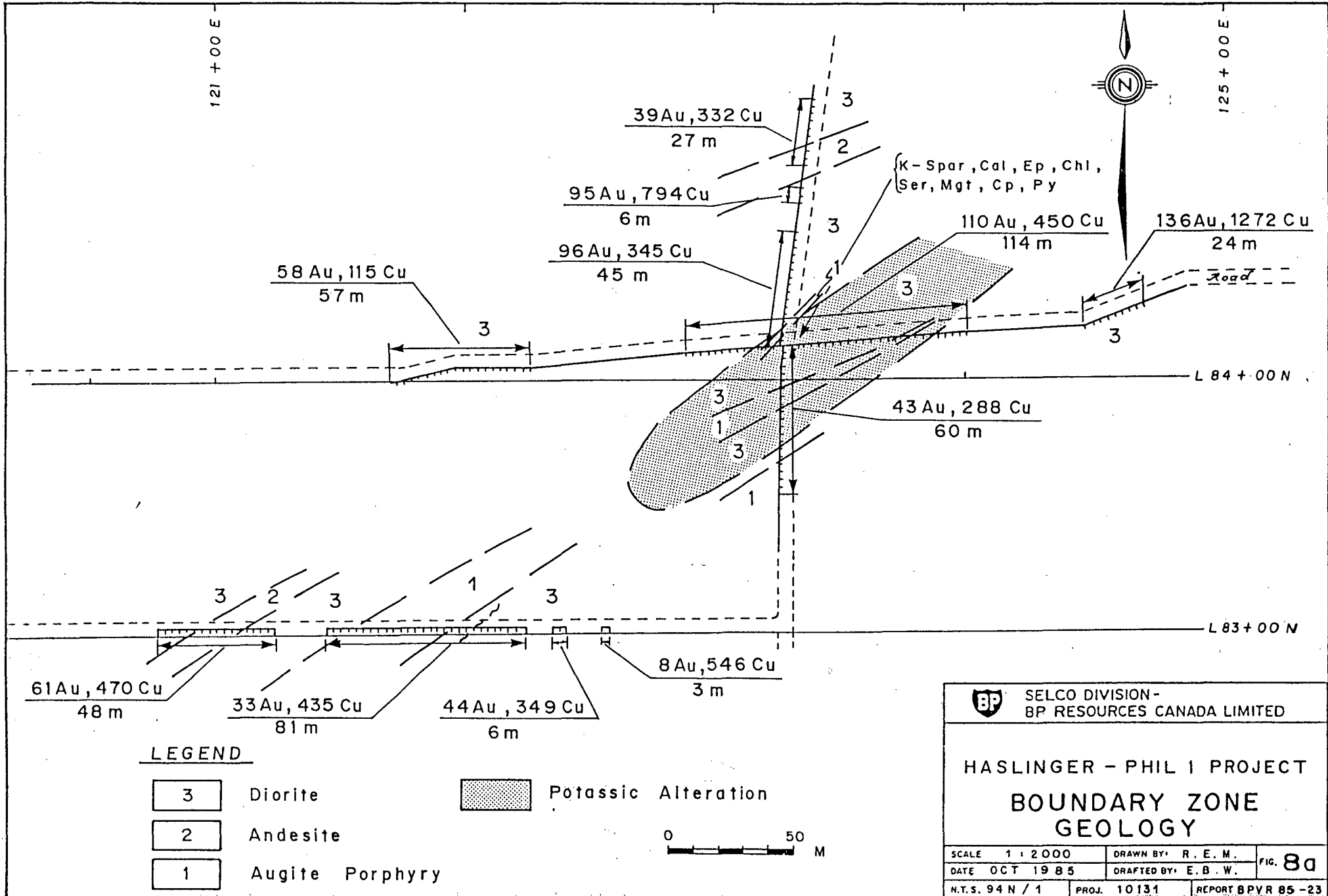
porphyries are moderately chloritized with very weak, local sericitic alteration and rare quartz-calcite veining. The unit is overprinted by weak biotite hornfels and, on the north side, contains about 1% disseminated pyrite. South of the creek the augite porphyry contains about 3-5% pyrite in a proliferation of irregular veinlets and fracture-fillings as well as very minor quartz-epidote-pyrite stringers.

The central part of the Creek Zone is characterized by a broad diffuse alteration zone of Fe-carbonate, disseminated pyrite and moderate Kspar, which appears to post date alteration and pyritic veining in the adjacent augite porphyry described above. Within this diffuse zone, more intense carbonate alteration is generally coincident with localized quartz-carbonate+epidote-pyrite+chalcopyrite stockwork zones.

Most elevated gold values (>100 ppb) fall within either the intensely altered Fe-carbonate zones or the magnetite zone (Figures 7b & c). Elevated copper values tend to follow gold in most sections.

ii) Boundary Zone

Trenching in the Boundary Zone encountered a broad section of hornblende and plagioclase porphyritic diorite which intrudes augite porphyry and andesitic flows and tuffs (Figures 8a,b,c). The general distribution of outcrop in the area (Figure 3) suggests the presence of a northeast-oriented elliptical diorite stock. Enhanced gold and copper values in soils are coincident with a wide section of the IP anomaly. Mapping and rock sampling in 1984 indicated the presence of intense Kspar-magnetite-calcite alteration in the diorite. Alteration is concentrated near the trench intersection on line 84+00N where a well-developed potassic alteration zone comprises pervasive Kspar and calcite, accompanied by variable amounts of epidote, chlorite and sericite. Localized chalcopyrite, magnetite and pyrite occur in the more intensely altered rocks. Trench results indicate that gold mineralization is generally weak, however, enhanced gold and copper values fall within the altered zones.



iii) Esker Zone

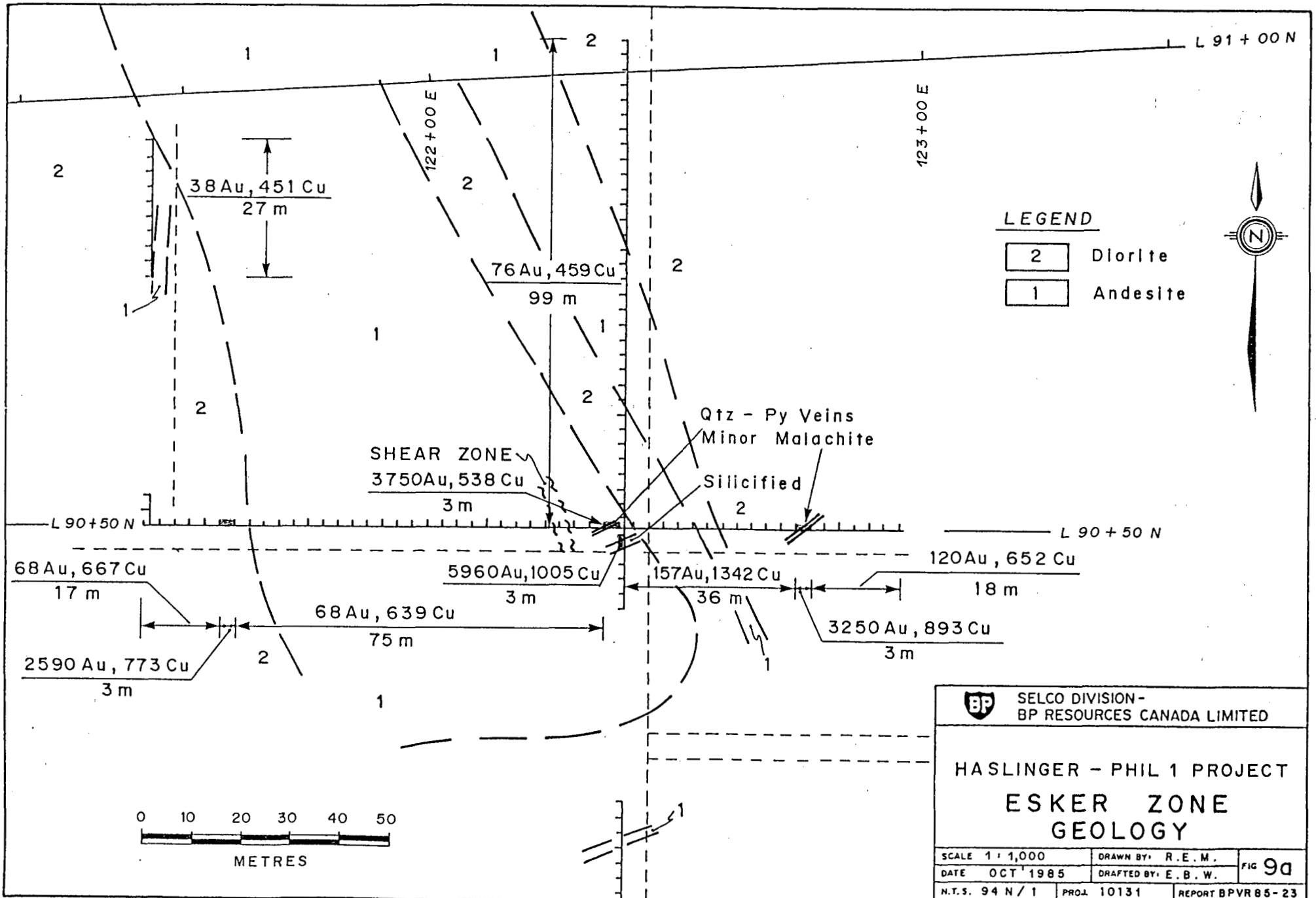
The Esker Zone (Figures 9a,b,c) is underlain by andesite and augite porphyry which are intruded by "subvolcanic" diorite. The volcanic rocks strike northwesterly and generally conform to regional trends. Trenching exposed weak alteration characterized by pervasive sericite epidote, minor Kspar and very localized silicification and quartz veining.

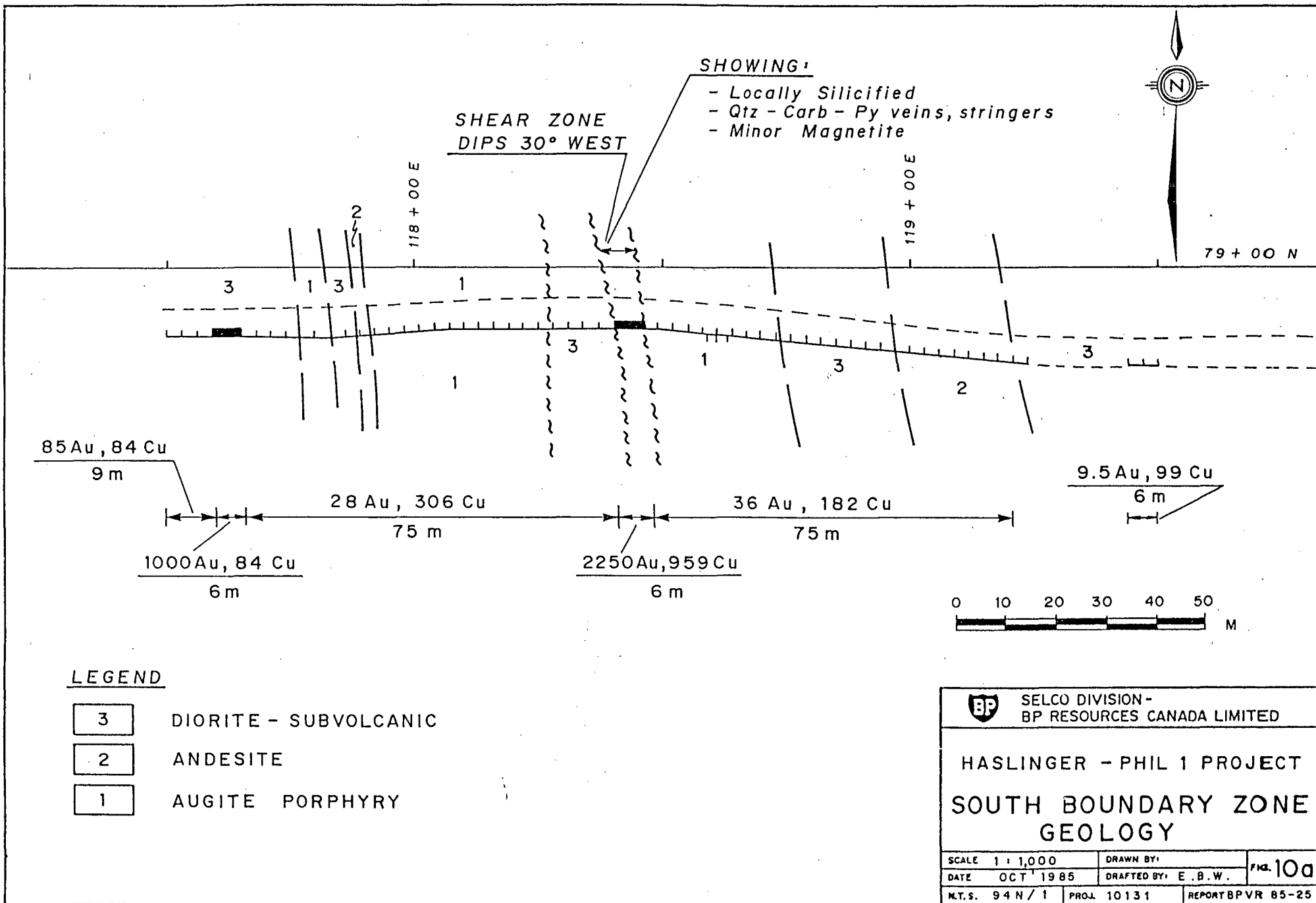
About 1-3% pyrite is disseminated throughout, but increases to 5% or 6% in a few narrow, silicified zones which strike  $\sim 070^{\circ}$ .

iv) South Boundary Zone

The South Boundary Zone (Figures 10a,b,c) lies on the southwest and uphill edge of the IP anomaly. A northwest-trending silicified and pyritized shear zone (1-3 metres) contains irregular quartz veins up to 10 cm wide. The zone dips about  $30^{\circ}$  west. Localized carbonate and magnetite alteration borders the veining in a highly sheared and fractured zone of about 15 metres width. A second narrow zone some 75 metres to the west returned 4.2 ppm Ag over 3 metres.







REFERENCES

- Heberlein, D.R., Rebagliati, C.M., and Hoffman, S.J., 1984. Summary Report on the 1984 Geological and Geochemical Exploration Activities - PHIL A, B and 1 Claim Groups, BPVR 84-19.
- Meyers, R.E., Rebagliati, C.M., and Hoffman, S.J., 1985. Assessment Report of the 1985 Geological and Geochemical Exploration Activities on the Mount Milligan Claim Group (PHIL 15, 16, 17, 18, 27 Claims), BPVR 85-7.
- Monger, J.W.H., 1977. The Triassic Takla Group in McConnell Creek Map Area, North Central B.C., GSC Paper 76-29.
- Richards, T.A., 1976. McConnell Creek Map Area (94D, East Half), British Columbia, in Report of Activities, Part A. GSC Paper 76-1A, p. 43-50.

APPENDIX 1

LIST OF ANALYTICAL DATA  
(Rock Chip & Soil Sample Analyses)



## PHIL 1 CLAIMS - ROCK CHIP SAMPLES 1985

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	IR?	CE?	NB?	TA?	PH
514048	117	31	.02	2.68	1.14	4.11	.05	.39	.14	3	4	311					
514049	97	25	.01	1.87	.82	2.43	.05	.28	.19	2	6	229	8185581855818558185581855				
514050	94	50	.02	1.77	.94	1.66	.11	.29	.19	2	6	117	8185581855818558185581855				
514051	119	48	.02	2.34	1.56	3.42	.04	.41	.17	2	3	257	8185581855818558185581855				
514052	94	23	.02	1.81	.8	2.53	.04	.22	.18	3	4	226	8185581855818558185581855				
514053	164	18	.02	2.61	.9	3.27	.03	.62	.17	5	6	162	8185581855818558185581855				
514054	171	24	.04	2.56	.84	3.53	.04	.33	.18	5	4	178	8185581855818558185581855				
514055	153	69	.02	2.21	1.35	3.51	.03	.32	.18	10	3	253	8185581855818558185581855				
514056	33	49	.02	.49	.91	.48	.03	.2	.21	11	6	7	8185581855818558185581855				
514057	134	57	.02	2.51	1.27	3.68	.04	.19	.19	6	9	239	8185581855818558185581855				
514058	58	80	.01	1.14	1.11	1.39	.02	.23	.22	8	11	69	8185581855818558185581855				
514059	67	221	.01	1.07	2.89	2.23	.02	.13	.21	7	12	83	8185581855818558185581855				
514060	138	79	.02	2.19	1.65	3.42	.03	.29	.21	7	2	248	8185581855818558185581855				
514061	159	54	.02	2.54	1.24	3.69	.03	.28	.21	6	4	225	8185581855818558185581855				
514062	140	27	.03	2.09	.79	2.76	.03	.12	.21	7	2	266	8185581855818558185581855				
514063	122	31	.01	1.83	1.13	2.55	.03	.09	.21	7	2	218	8185581855818558185581855				
514064	122	24	.04	1.64	1.07	2.23	.04	.09	.23	7	8	213	8185581855818558185581855				
514065	113	14	.02	1.55	.89	2.11	.04	.07	.21	6	2	195	8185581855818558185581855				
514066	165	68	.02	2.29	1.86	3.34	.03	.17	.21	7	4	212	8185581855818558185581855				
514067	154	31	.02	1.96	1.33	2.62	.05	.16	.23	6	2	167	8185581855818558185581855				
514068	142	36	.02	1.68	1.54	2.26	.05	.21	.23	6	10	128	8185581855818558185581855				
514069	129	31	.02	1.74	1.15	2.14	.04	.3	.2	6	2	204	8185581855818558185581855				
514070	159	14	.02	2.43	.79	3.28	.03	.49	.2	9	8	235	8185581855818558185581855				
515001													8185581855818558185581855				
515002													8185581855818558185581855				
515003													8185581855818558185581855				
515004													8185581855818558185581855				

## PHIL 1 CLAIMS - ROCK CHIP SAMPLES 1985

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515133	105	.6	429	13	10	5	1	7	2.89	.01	5	342	8	2	1	1	333	1	1	2
515134	125	1	599	15	7	9	1	8	2.54	.01	5	453	8	3	1	1	596	2	1	2
515135	190	.8	1249	18	3	5	1	11	2.57	.01	5	497	7	2	1	1	306	2	1	2
515146	55	.2	104	24	4	4	1	13	3.29	.14	5	469	6	2	1	1	36	2	1	2
515147	145	.6	355	24	6	2	1	11	2.54	.11	5	360	4	2	1	1	47	2	1	2
515148	50	.3	184	40	4	2	1	18	3.45	.11	5	589	8	2	1	2	38	1	1	2
515149	32	.3	169	25	4	5	1	6	1.98	.01	5	267	4	2	1	1	291	3	1	2
515150	120	.7	540	31	5	7	4	9	2.55	.01	5	486	6	2	1	1	139	4	1	2
515151	60	.5	238	28	4	9	1	4	2.22	.01	5	259	5	2	1	1	253	3	1	2
515153	35	.5	193	25	4	12	1	5	2.93	.01	5	344	6	2	1	1	274	3	1	2
515154	50	.6	183	21	5	4	2	5	2.15	.01	5	281	4	2	1	1	70	2	1	2
515155	46	.5	193	21	5	8	2	8	2.73	.01	5	347	6	2	1	1	95	3	1	2
515157	55	1	268	19	12	11	6	6	3.62	.01	5	308	6	2	1	1	223	2	1	2
515158	52	.6	220	18	13	8	3	3	4.51	.01	5	211	5	2	1	1	132	2	1	2
515159	80	.7	308	45	11	6	3	8	4.36	.05	5	517	13	2	1	1	102	3	1	2
515160	60	.2	161	43	4	7	1	8	4.04	.1	5	500	13	2	1	3	85	1	1	2
515161	80	.5	277	46	6	10	1	12	4.93	.06	5	601	18	2	1	1	44	3	1	2
515162	21	.3	129	56	3	6	1	13	2.87	.04	5	1044	21	3	1	1	19	2	1	2
515163	65	.4	196	49	6	9	1	11	3.9	.05	5	589	19	3	1	1	25	3	1	2
515164	34	.2	99	48	5	7	1	8	3.23	.12	5	474	8	2	1	1	29	2	1	2
515165	270	.3	78	50	6	8	1	7	2.93	.13	5	444	7	3	1	1	28	2	1	2
515166	16	.5	174	41	3	6	1	8	3.74	.12	5	332	9	2	1	1	29	2	1	2
515167	20	.5	146	42	6	5	1	14	4.08	.13	5	374	9	2	1	2	28	2	1	2
515168	85	.2	79	37	11	7	1	7	3.15	.14	5	316	7	2	1	1	27	2	1	2
515169	90	.3	120	34	5	11	1	8	3.98	.19	5	391	7	2	1	2	42	2	1	2
515170	10	.1	72	29	9	7	1	3	2.98	.12	5	215	4	2	1	1	33	2	1	2
515171	55	.3	122	30	6	6	2	5	3.36	.13	5	241	4	2	1	2	31	2	1	2
515172	56	.3	93	22	5	6	1	3	2.78	.14	5	145	2	2	1	1	25	2	1	2
515173	55	.3	72	15	3	7	3	3	3.15	.21	5	69	1	2	1	2	43	1	1	2
515174	105	.2	65	16	4	7	4	11	4.09	.2	5	75	3	2	1	1	43	1	1	2
515175	35	.3	87	23	7	8	2	6	4.43	.15	5	142	4	2	1	1	62	2	1	2
515176	24	.3	92	26	10	13	3	37	6.41	.14	5	176	12	2	1	1	28	2	1	2
515177	8	.1	75	25	8	14	1	23	3.79	.13	5	141	8	2	1	2	49	1	1	2
515179	16	.1	54	19	5	7	2	3	3.26	.22	5	82	1	2	1	2	73	1	1	2
515179	25	.3	121	14	2	5	1	4	2.82	.19	5	56	1	2	1	1	46	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515180	23	.3	148	33	8	10	3	6	4.47	.11	5	142	5	2	1	1	56	2	1	2
515181	12	.1	111	20	2	11	1	3	3.97	.14	5	71	1	2	1	2	31	2	1	2
515182	15	.1	83	19	2	11	2	3	3.57	.17	5	47	2	2	1	1	50	2	1	2
515183	16	.1	102	28	3	8	1	4	3.64	.17	5	92	2	2	1	1	44	2	1	2
515184	18	.1	180	44	4	13	4	7	3.92	.16	5	195	8	2	1	1	49	1	1	2
515185	12	.1	154	38	5	10	10	11	3.84	.19	5	119	4	2	1	1	85	1	1	2
515186	24	.3	381	44	7	17	22	24	6.96	.17	5	166	19	2	1	1	57	1	1	3
515187	65	.1	154	31	7	9	1	8	3.58	.13	5	441	10	2	1	1	44	1	1	2
514115																				
514116																				
514117																				
514118																				
514119																				
514237	65	.2	468	25	7	9	6	26	8.42	.22	5	257	36	2	1	1	25	1	1	2
514238	55	.3	519	26	5	9	10	24	6.6	.25	5	290	23	2	1	1	34	1	1	2
514239	44	.1	306	18	4	5	4	60	5.12	.23	5	240	28	2	1	1	46	1	1	2
514240	36	.1	171	21	3	4	3	73	4.81	.24	5	296	23	2	1	1	33	1	1	2
514241	55	.1	286	25	4	10	4	73	5.93	.24	5	295	34	2	1	1	38	1	1	3
514242	90	.1	220	29	6	7	5	62	6.28	.23	5	413	31	2	1	1	39	1	1	2
514243	85	.1	216	27	4	3	5	52	5.58	.25	5	350	23	2	1	1	74	1	1	2
515137	150	.7	961	23	3	2	1	13	2.77	.01	5	457	12	2	1	1	168	1	1	2
515138	135	.8	1708	34	49	8	2	5	3.01	.01	5	253	15	129	1	1	103	1	1	2
515139	125	.9	1047	23	51	3	3	4	3.18	.01	5	318	12	102	1	1	111	1	1	2
515140	110	.7	868	41	24	4	2	11	3.28	.02	5	610	13	72	1	1	105	1	1	2
515141	185	.5	1117	40	17	3	2	8	3.07	.02	5	324	13	64	1	1	265	1	1	2
515142	115	.3	647	61	8	2	4	13	3.45	.03	5	674	12	6	1	1	114	1	1	2
515143	110	.3	1215	31	5	8	2	6	3.01	.01	5	343	14	8	1	1	139	1	1	2
515144	165	.8	1855	29	7	6	1	5	3.21	.01	5	269	17	19	1	1	117	1	1	2
515145	140	.6	1717	25	4	2	1	5	3.17	.01	5	188	13	5	1	1	123	1	1	2
514220	140	.8	2014	62	14	5	3	77	6.7	.15	5	2812	29	2	1	1	53	1	1	2
514222	100	1	1419	48	11	7	4	60	6.55	.22	5	1626	29	2	1	1	113	1	1	2
514224	105	.3	1039	27	11	3	4	59	5.12	.31	5	477	26	2	1	1	34	1	1	3
514226	145	.3	1967	25	3	8	5	18	5.5	.15	5	359	28	2	1	1	68	1	1	2
514228	105	.4	1450	26	2	11	13	16	5.41	.2	5	327	28	2	1	1	50	2	1	2
514230	53	.2	567	17	2	2	3	25	4.34	.24	5	280	21	2	1	1	34	1	1	3
514232	35	.2	314	19	4	9	4	16	4.32	.23	5	388	27	2	1	1	100	1	1	4
514234	65	.4	789	27	6	7	5	18	6.8	.23	5	437	23	2	1	1	39	1	1	2
514236	105	.2	627	24	6	9	7	20	7.89	.23	5	237	20	2	1	1	29	1	1	2
514120	25	.3	559	40	14	12	8	130	4.33	.26	5	253	26	2	1	1	59	1	1	4
514121	85	.2	526	25	12	5	7	135	4.28	.22	5	376	22	2	1	1	52	1	1	2



SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SS	SN	W	BA	TH	CD	BI
514122	115	.4	992	26	10	3	7	37	5.51	.23	5	389	25	2	1	1	38	1	1	2
514123	6	.3	443	22	10	10	7	33	4.54	.25	5	246	34	2	1	1	32	1	1	8
514124	100	.4	714	17	8	4	13	30	3.78	.26	5	152	17	2	1	1	32	1	1	2
514126	360	.8	1872	26	8	7	33	28	4.15	.3	5	302	16	2	1	1	22	1	1	4
514127	75	.3	377	19	7	2	4	26	3.93	.26	6	240	24	2	1	1	25	1	1	6
514129	95	.2	480	26	7	2	6	26	3.9	.25	5	267	30	2	1	1	58	1	1	7
514131	40	.2	173	30	11	9	4	173	5.01	.2	5	556	22	2	1	1	108	1	1	2
514133	40	.1	228	41	12	14	3	124	4.97	.11	6	1262	29	2	1	1	185	1	1	2
514135	95	.4	720	33	9	2	12	49	6.69	.07	5	293	20	2	1	1	30	1	1	2
514137	180	.4	2135	31	3	4	2	17	3.74	.01	5	322	16	2	1	1	54	2	1	2
514139	495	.8	3864	47	8	4	6	40	5.29	.03	5	452	24	2	1	1	33	1	1	2
514141	370	1.1	3933	38	2	3	6	14	4.52	.01	5	341	23	2	1	1	93	2	1	2
514143	320	1	2284	34	13	8	6	14	3.94	.01	5	343	24	33	1	1	152	1	1	2
514145	85	.4	954	22	10	5	3	27	3.65	.01	5	890	15	8	1	1	47	1	1	2
514147	165	.5	1944	29	5	3	7	19	3.6	.01	5	491	15	2	1	1	154	2	1	2
514149	150	.4	1770	28	5	3	2	19	3.7	.01	5	456	15	2	1	1	105	2	1	2
514151	40	.1	595	32	10	4	8	56	5.02	.03	5	726	21	2	1	1	178	1	1	2
514153	75	.3	835	40	12	12	15	61	5.09	.02	5	781	25	5	1	1	88	1	1	2
514155	15	.4	517	29	11	9	14	42	4.59	.01	6	360	16	2	1	1	22	1	1	2
514157	105	.5	1013	36	5	13	12	18	5.21	.01	5	527	21	2	1	1	38	2	1	2
514159	80	.3	1341	40	6	2	13	21	5.39	.01	5	420	24	2	1	1	66	1	1	2
514161	105	.3	1168	47	5	2	19	22	4.65	.01	5	535	19	2	1	1	90	1	1	3
514163	265	.9	2667	40	5	3	10	23	5.93	.01	5	391	24	2	1	1	58	1	1	3
514165	130	.5	1054	35	7	2	15	33	5.82	.02	5	281	25	2	1	1	24	2	1	2
514167	75	.4	831	51	7	10	8	44	5.51	.02	5	489	23	2	1	1	40	2	1	2
514169	2	.1	89	46	2	9	4	17	3.83	.01	5	1105	12	2	1	1	81	4	1	2
514171	105	.6	911	63	4	2	6	17	6.16	.01	5	716	17	2	1	1	186	2	1	3
514173	75	.4	737	40	2	2	13	15	4.57	.03	5	344	15	2	1	1	46	2	1	2
514175	65	.3	936	17	4	2	10	9	3.46	.01	5	256	16	2	1	1	61	1	1	2
514177	21	.3	987	31	7	3	6	10	4.29	.01	5	468	18	2	1	1	40	1	1	3
514179	105	.5	804	42	6	5	6	15	4.43	.01	5	668	17	2	1	1	89	1	1	2
514181	28	.4	566	62	4	6	9	16	4.25	.01	5	604	18	2	1	1	192	1	1	2
514183	28	.3	455	63	12	9	5	44	6.41	.03	5	896	43	2	1	1	76	1	1	4
514184	150	.4	1736	43	11	2	3	31	5.74	.25	5	1011	28	2	1	1	62	1	1	2
514185	65	.1	506	25	28	5	3	9	4.2	.01	5	1645	11	2	1	1	88	1	1	2
514186	105	.2	1133	20	7	6	2	8	3.71	.01	5	705	10	2	1	1	205	1	1	2
514187	115	.3	1582	23	4	3	2	9	4.3	.01	5	1150	13	2	1	1	156	1	1	2
514188	125	.3	1407	28	5	5	2	8	4.41	.01	5	823	15	2	1	1	102	1	1	2
514189	110	.3	1213	29	8	6	3	15	4.87	.01	5	737	19	4	1	1	107	1	1	2
514190	145	.3	738	50	7	7	2	35	3.89	.06	5	365	18	2	1	1	83	2	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SH	W	BA	TH	CD	BI
514191	105	.2	913	27	8	5	2	15	3.62	.01	5	249	14	2	1	1	102	2	1	2
514192	50	.2	1211	27	7	5	3	13	4.12	.01	5	364	18	16	1	1	70	2	1	2
514193	175	.4	2503	21	28	8	6	19	3.99	.01	5	352	19	17	1	1	66	1	1	2
514194	80	.4	2644	21	14	5	5	18	4.02	.01	5	309	18	9	1	1	98	1	1	2
514195	105	3.1	2301	81	339	9	8	53	5.72	.01	5	844	31	405	1	1	72	1	1	2
514196	70	.7	1091	47	87	9	8	73	11.21	.01	7	1043	33	104	1	1	102	1	1	2
514197	15	.5	937	52	42	7	12	87	7.22	.01	5	1243	26	21	1	1	97	1	1	2
514198	90	.6	1394	36	22	8	5	63	6.79	.03	5	997	28	20	1	1	78	1	1	2
514199	65	.5	1304	41	14	5	6	80	6.5	.06	5	911	27	2	1	1	32	1	1	2
514200	75	2.5	3354	62	13	21	4	86	7.66	.03	5	1305	39	2	1	1	26	3	1	2
514201	50	.2	499	41	11	2	5	78	5.71	.18	5	1033	40	2	1	1	119	1	1	2
514202	37	.5	515	29	14	2	4	91	5.2	.23	5	633	22	2	1	1	137	1	1	2
514203	32	.2	362	33	20	10	5	73	5.1	.21	5	716	30	2	1	1	96	1	1	2
514204	32	.3	430	31	14	5	3	62	5.14	.24	5	932	32	2	1	1	171	1	1	2
514205	165	1.4	2192	47	18	4	4	85	5.89	.2	5	1329	28	2	1	1	210	1	1	2
514206	180	.8	1428	33	25	5	3	78	5.83	.24	5	933	23	2	1	1	91	1	1	2
514207	485	1.7	3090	35	34	2	4	57	5.78	.2	5	1019	21	5	1	1	138	1	1	2
514208	65	.1	184	42	4	4	3	16	4.93	.03	5	1017	14	2	1	1	103	2	1	2
514209	29	.1	156	29	5	4	6	17	4.02	.01	5	662	13	2	1	1	127	2	1	2
514210	55	.1	129	19	4	2	6	6	3.53	.01	5	455	11	2	1	1	76	3	1	2
514211	220	.9	1000	33	21	2	2	29	5.96	.29	5	680	25	2	1	1	188	1	1	4
514212	185	1	1954	29	17	2	4	35	5.91	.35	5	603	34	2	1	1	85	1	1	4
514213	90	.7	1555	31	21	2	4	51	5.41	.31	5	552	32	2	1	1	56	1	1	2
514214	140	.6	1364	35	20	4	6	63	5.67	.31	5	609	26	2	1	1	69	1	1	3
514215	60	.2	345	35	21	7	5	84	5.82	.26	5	901	38	2	1	1	127	1	1	2
514216	187009.9		912	71	568	30	7	92	10.26	.15	5	4683	32	19	1	3	15	1	1	3
514217	320	.8	2672	48	17	13	4	54	8.71	.26	5	818	31	2	1	1	50	1	1	2
514218	190	.9	1949	45	19	2	7	50	8.42	.23	5	931	27	2	1	1	54	1	1	2
514219	195	.6	2757	42	13	2	3	88	7.04	.25	5	832	37	2	1	1	52	1	1	2
514221	145	.7	1838	38	12	2	3	52	5.39	.24	5	796	27	2	1	1	27	1	1	2
514223	70	.2	616	31	10	5	3	75	5.24	.27	5	665	24	2	1	1	158	1	1	2
514225	185	.5	1472	27	16	3	2	51	6.08	.28	5	486	25	2	1	1	70	1	1	2
514227	120	.5	1580	19	2	2	6	13	4.14	.17	5	294	24	2	1	1	84	2	1	2
514229	75	.2	920	24	4	13	10	18	5.75	.23	5	299	24	2	1	1	32	1	1	2
514231	95	.3	801	24	9	12	7	21	8.65	.24	5	360	22	2	1	1	41	1	1	2
514233	42	.2	180	20	5	8	3	19	4.36	.22	5	495	25	2	1	1	86	1	1	2
514235	135	.5	1040	27	12	15	9	15	14.43	.21	5	254	24	2	1	1	29	2	1	2
514125	490	.9	2597	22	8	2	7	31	4.47	.29	5	192	21	2	1	1	33	1	1	2
514128	115	.3	515	22	7	2	17	27	4.02	.27	5	228	19	2	1	1	26	1	1	6
514130	145	.4	1398	34	13	10	13	49	5.43	.15	5	541	24	2	1	1	83	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SH	W	BA	TH	CD	BI
514132	110	.3	599	25	12	7	8	173	5.29	.24	5	347	24	2	1	1	69	1	1	2
514134	140	.1	554	60	16	8	5	71	5.77	.02	5	1065	26	2	1	1	43	1	1	2
514136	130	.2	1492	42	6	5	6	32	4.64	.03	5	442	20	2	1	1	47	1	1	2
514138	200	1	1844	45	8	5	4	47	4.37	.01	5	627	24	16	1	1	46	1	1	2
514140	400	.8	2898	33	3	5	7	17	4.29	.01	5	411	21	2	1	1	73	1	1	2
514142	265	.9	4357	39	11	4	6	15	4.35	.01	5	408	25	23	1	1	84	1	1	2
514144	290	.8	2048	35	33	8	6	22	4.59	.01	5	475	23	45	1	1	105	2	1	2
514146	400	.3	996	33	5	6	2	20	3.5	.01	5	532	14	2	1	1	335	2	1	2
514148	255	.6	2386	29	3	3	7	19	3.36	.01	5	441	13	2	1	1	49	2	1	2
514150	170	.4	1730	37	5	5	2	45	4.12	.01	5	542	15	2	1	1	160	2	1	3
514152	80	.3	962	33	13	14	14	55	5.83	.03	5	717	30	2	1	1	86	1	1	2
514154	65	.5	916	45	8	12	13	60	5.58	.01	5	650	27	2	1	1	47	1	1	2
514156	60	.5	758	32	10	5	12	21	4.42	.01	5	389	18	4	1	1	30	1	1	2
514158	160	.7	3017	45	23	8	10	16	8.12	.01	5	489	25	2	1	1	36	1	1	2
514160	115	.4	897	41	2	2	11	19	4.56	.01	5	440	20	2	1	1	99	1	1	2
514162	130	.6	1362	47	8	7	14	20	5.23	.01	5	382	22	2	1	1	55	1	1	2
514164	190	.5	1565	39	7	8	13	37	6.12	.02	5	336	25	2	1	1	44	2	1	2
514166	115	.4	1059	39	8	2	5	41	6.32	.04	5	398	24	2	1	1	73	2	1	2
514168	35	.2	532	53	7	6	8	29	4.7	.01	5	923	18	2	1	1	107	3	1	2
514170	2	.1	107	53	2	6	5	8	3.96	.01	5	1181	12	2	1	1	56	4	1	2
514172	120	1	1082	54	5	4	15	19	5.34	.01	5	408	24	3	1	1	34	1	1	2
514174	95	.2	749	26	3	10	2	10	7.34	.01	5	318	13	2	1	1	119	2	1	2
514176	22	.7	1437	26	3	5	16	13	5.09	.01	5	307	18	2	1	1	37	2	1	2
514178	22	.4	1001	37	4	2	21	13	3.87	.01	5	566	15	2	1	1	109	1	1	2
514180	30	.5	913	46	7	6	12	14	5.03	.01	5	525	20	2	1	1	76	1	1	2
514182	50	.3	458	48	9	8	5	18	5.31	.01	5	659	35	2	1	1	74	1	1	2
515114	175	.6	769	21	2	7	1	7	2.14	.14	5	318	9	2	1	1	40	1	1	2
515115	65	.4	363	24	3	4	1	7	2.61	.13	5	311	19	2	1	1	43	2	1	2
515116	90	.3	315	22	3	3	1	7	2.68	.14	5	339	17	2	1	1	47	1	1	2
515117	75	.5	557	18	13	9	4	7	3.33	.02	5	276	10	5	1	1	447	1	1	2
515118	90	.4	239	28	2	3	4	6	3.42	.14	5	345	17	2	1	1	60	1	1	2
515119	80	.5	318	27	4	10	2	9	3.74	.03	5	454	22	2	1	1	847	2	1	2
515120	195	.9	633	21	4	6	2	7	3.16	.14	5	422	11	2	1	1	125	1	1	2
515121	80	.4	315	22	3	2	1	6	2.92	.02	5	441	20	2	1	1	505	2	1	2
515122	105	.4	524	26	5	6	1	9	3.68	.01	5	536	12	2	1	1	222	1	1	2
515123	50	.2	515	21	3	8	1	5	3.26	.02	5	479	9	2	1	1	281	2	1	2
515124	37	.5	338	27	2	3	1	4	3.53	.1	5	564	20	2	1	1	86	1	1	2
515125	155	1.2	828	22	15	9	3	4	3.45	.08	5	384	9	2	1	1	91	2	1	2
515126	150	.9	622	18	19	9	2	3	3.43	.02	5	306	8	3	1	1	222	2	1	2
515127	115	.5	522	30	19	7	4	8	4.98	.02	5	493	10	2	1	1	428	2	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515128	195	.7	600	28	25	8	3	8	4.39	.01	5	669	13	3	1	1	204	1	1	2
515129	75	.4	322	50	9	7	2	8	5.21	.08	5	795	24	2	1	1	109	1	1	2
515130	110	.5	214	27	6	2	1	5	4.33	.14	5	607	18	2	1	1	56	1	1	2
515131	340	.9	396	28	12	7	3	7	4.21	.09	5	435	21	2	1	1	154	1	1	2
515132	110	.7	754	14	12	13	2	6	2.74	.01	5	462	12	5	1	1	111	1	1	2
515136	335	.7	874	28	20	7	2	11	4.23	.01	5	472	12	2	1	1	108	1	1	2
515348	60	1.2	593	42	10	2	6	26	4.94	.18	5	471	20	2	1	1	25	1	1	2
515349	210	1.7	806	37	13	2	2	17	5.71	.18	5	301	16	2	1	1	27	1	1	4
515350	36	1.6	348	41	32	9	9	13	4.81	.26	5	250	20	2	1	1	30	1	1	8
515351	50	1.5	341	52	14	9	6	12	5.92	.2	5	353	24	2	1	1	33	1	1	6
515352	75	3.4	662	63	20	13	7	19	6.76	.18	5	503	14	2	1	1	35	1	1	3
515353	290	6.3	1160	396	155	51	7	30	12.56	.07	5	2751	20	3	1	1	26	1	2	2
515354	3250	48.7	893	83	352	48	53	21	7.78	.08	5	633	14	94	1	1	37	1	1	4
515355	175	6.7	1343	112	19	10	24	25	6.8	.2	5	561	15	3	1	1	45	1	1	4
515356	250	6.5	730	82	39	29	21	18	5.48	.23	5	448	11	10	1	1	77	1	1	2
515357	210	5.5	2752	273	19	20	38	63	4.55	.16	5	1978	33	2	1	1	40	1	2	3
515358	265	7.5	2909	212	41	27	63	62	4.8	.14	5	1187	31	7	1	1	42	1	1	2
515359	75	2.1	890	193	28	18	22	51	5.04	.13	5	1143	34	5	1	1	44	1	1	2
515360	55	1.3	764	261	27	33	12	63	5.61	.15	5	2583	33	2	1	1	56	1	2	2
515361	135	3.7	1349	387	142	83	30	59	6.89	.17	5	2107	42	6	1	1	31	1	3	2
515362	270	5.9	2274	113	42	8	66	62	6.11	.14	5	997	40	2	1	1	27	1	1	2
515363	185	5.1	1359	109	155	28	35	49	6.44	.14	5	1072	35	2	1	1	33	1	1	2
515364	130	3.8	1017	149	115	19	27	50	5.85	.16	5	1024	28	8	1	1	36	1	1	2
515365	75	2.4	311	30	128	6	32	13	3.88	.16	5	213	16	6	1	1	40	1	1	2
515366	70	3.7	391	47	289	23	29	14	4.63	.19	5	582	21	30	1	1	52	1	1	4
515367	3750	54.7	538	498	6415	1124	18	11	6.54	.14	5	648	7	345	1	1	82	1	4	5
515368	415	16.9	334	86	996	69	14	9	6.21	.21	5	695	17	293	1	4	86	1	1	8
515369	345	7.3	285	44	137	46	5	13	5.01	.19	5	408	18	37	1	1	41	1	1	2
515370	26	.6	458	62	33	9	5	35	5.13	.12	5	505	39	2	1	1	63	1	1	2
515371	55	1.1	297	44	16	3	5	19	4.34	.16	5	429	26	2	1	1	30	1	1	2
515372	43	.9	257	17	13	4	18	16	3.61	.15	5	135	20	2	1	1	42	1	1	2
515373	29	.9	200	15	27	2	37	16	3.23	.17	5	127	16	4	1	1	22	1	1	2
515374	22	.5	118	19	16	6	21	14	4.1	.17	5	196	17	2	1	1	52	1	1	2
515375	24	.3	131	26	10	10	8	21	4.34	.2	5	285	12	2	1	1	29	1	1	2
515376	37	.5	352	23	8	6	8	42	4.26	.18	5	307	29	2	1	1	47	1	1	4
515377	52	.8	441	27	11	8	10	55	4.27	.18	5	353	31	2	1	1	68	1	1	5
515378	60	1	436	24	11	8	9	42	5.22	.18	5	272	33	2	1	1	31	1	1	7
515379	60	1.8	881	27	13	2	9	42	5.19	.21	5	294	24	2	1	1	31	1	1	4
515380	70	1.8	751	41	16	6	13	44	6.32	.2	5	406	24	2	1	1	41	1	1	2
515381	75	1.5	1150	53	14	3	6	61	5.6	.07	5	608	29	2	1	1	52	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515382	85	3	1125	67	14	8	17	49	6	.04	5	571	28	2	1	1	77	1	1	2
515383	8	.6	319	21	15	2	5	45	2.93	.15	5	377	24	2	1	1	62	1	1	2
515384	30	2	740	45	32	6	31	14	6.92	.21	5	397	11	4	1	1	129	1	1	3
515385	18	1.2	653	28	20	3	5	15	3.51	.19	5	254	12	3	1	1	55	1	1	4
515386	95	5.6	1929	110	164	24	37	22	10.41	.13	5	718	24	12	1	1	90	1	1	2
515387	31	2.5	1892	55	158	12	18	18	9.78	.18	5	531	24	16	1	1	67	1	1	2
515388	24	8.5	1023	65	325	19	10	13	7.79	.17	5	412	10	48	1	1	97	1	1	7
515389	16	.8	381	33	23	9	13	14	6.21	.18	5	306	29	2	1	1	50	1	1	6
515390	32	2	647	38	27	2	16	15	5.46	.18	7	251	14	3	1	1	46	1	1	3
515391	24	1.7	545	94	99	23	5	20	6.01	.13	5	616	11	2	1	1	85	1	1	2
515392	26	1.4	636	46	45	9	8	24	7.56	.1	5	514	13	2	1	1	34	1	1	3
515393	2590	14.2	773	82	1050	103	14	23	9.39	.08	5	778	12	6	1	29	67	1	1	11
515394	22	1.3	549	62	34	2	9	36	5.54	.14	5	409	12	2	1	1	79	1	1	3
515395	140	2.8	608	41	58	14	17	34	5.92	.18	5	373	16	2	1	2	53	1	1	6
515396	90	5.9	993	40	26	3	32	37	6.72	.18	5	257	24	2	1	1	46	1	1	2
515397	65	1	605	35	12	5	15	38	4.81	.17	5	329	13	2	1	1	61	1	1	4
515398	21	1.8	582	31	15	4	4	41	3.92	.16	5	213	15	2	1	1	45	1	1	2
515399	26	1.7	464	31	22	3	33	33	5.1	.21	5	305	11	2	1	1	71	1	1	3
515400	37	2.3	482	30	22	8	44	21	6.19	.22	5	309	13	3	1	1	75	1	1	2
515401	31	.3	261	27	11	2	5	16	4.07	.2	5	286	21	2	1	1	34	1	1	2
515402	25	.3	268	19	3	3	7	36	5.25	.23	5	343	26	2	1	1	40	2	1	5
515403	39	.6	256	37	9	6	9	18	4.18	.19	5	324	20	2	1	1	58	1	1	3
515404	30	.8	297	38	11	2	9	18	4.57	.17	5	384	26	2	1	1	30	1	1	4
515405	36	.5	199	41	12	3	6	15	3.9	.17	5	327	17	2	1	1	34	1	1	2
515406	50	.6	259	47	10	6	8	14	3.61	.17	5	333	20	2	1	1	33	1	1	3
515407	21	.9	303	38	14	3	4	26	4.93	.18	5	324	25	2	1	1	48	1	1	2
515408	65	2	787	53	17	12	15	21	8.59	.08	5	585	31	4	1	1	67	1	1	2
515409	41	1	1426	93	10	8	4	25	6.05	.05	5	562	24	2	1	1	61	1	1	2
515410	27	.4	562	26	13	2	3	46	3.46	.18	5	279	14	3	1	1	60	1	1	2
515411	14	.8	388	26	15	4	7	36	5.29	.14	5	218	35	2	1	1	36	1	1	4
515412	12	.7	444	26	12	6	11	47	4.49	.14	5	223	31	2	1	1	53	1	1	4
515413	11	.5	207	22	14	5	7	37	3.59	.17	5	254	18	2	1	1	58	1	1	2
515414	17	.4	170	26	22	2	9	26	4.77	.2	5	264	16	2	1	1	45	1	1	2
515415	13	.7	149	36	20	3	15	26	6.43	.15	5	359	15	2	1	1	44	1	1	2
515416	6	.2	154	19	9	2	6	27	2.91	.19	5	204	15	2	1	1	27	1	1	3
515417	13	.3	89	25	13	2	16	28	3.28	.2	5	241	14	3	1	1	38	1	1	2
515418	70	5.5	344	29	21	14	32	27	3.78	.2	5	222	22	3	1	1	66	1	1	3
515419	16	1.1	298	34	20	13	16	27	5.88	.16	5	291	24	2	1	1	34	1	1	2
515420	85	4.9	882	56	39	19	49	27	6.78	.19	5	504	15	5	1	1	47	1	1	2
515421	190	8.8	640	105	39	28	13	49	6.35	.15	5	647	18	3	1	1	33	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CB	BI
515422	165	13.5	459	78	49	45	15	34	8.65	.16	5	475	30	2	1	1	36	1	1	9
515423	22	1.4	394	37	15	7	8	29	3.75	.2	5	423	24	2	1	1	51	1	1	2
515424	41	1.5	563	37	12	7	9	23	5.24	.17	5	374	12	3	1	1	44	1	1	2
515425	18	1.1	370	30	8	4	6	38	4.31	.17	5	323	28	2	1	1	40	1	1	2
515426	28	1.8	777	24	13	3	9	23	5.33	.18	5	220	17	3	1	1	34	1	1	2
515427	16	.9	258	27	21	2	8	32	5.36	.18	5	258	30	2	1	1	35	1	1	2
515429	25	.9	500	62	15	4	29	54	5.47	.14	5	551	20	2	1	1	36	1	1	2
515430	32	3	465	35	10	7	23	42	4.51	.15	5	412	34	2	1	1	30	1	1	2
515431	28	1.1	438	29	16	9	14	45	5.26	.14	5	307	38	2	1	1	34	1	1	2
515432	24	.8	336	32	14	3	14	41	4.64	.16	5	372	30	2	1	1	34	1	1	2
515433	32	.9	289	31	13	7	18	46	4.78	.17	5	362	35	2	1	1	29	1	1	2
515434	33	.9	261	39	15	2	21	46	4.57	.16	5	359	31	2	1	1	54	1	1	2
515435	32	.8	193	28	29	4	19	34	3.98	.18	5	224	23	2	1	1	37	1	1	2
515436	75	2.7	447	43	35	8	85	44	7.39	.2	5	301	50	2	1	1	23	1	1	3
515437	70	2.9	539	45	36	2	75	37	5.29	.19	5	298	35	2	1	1	27	1	1	2
515438	150	5.4	1599	84	31	7	148	52	5.1	.16	5	414	29	9	1	1	23	1	1	2
515439	70	3.2	912	75	37	7	85	47	7.19	.14	5	461	27	9	1	1	25	1	1	2
515440	650	78.4	533	460	862	994	43	17	8.7	.22	5	489	9	370	1	1	71	1	3	5
515441	215	6.6	581	109	187	45	57	36	9.44	.2	5	823	19	9	1	1	30	1	1	2
515442	120	6	623	72	132	32	64	32	6.54	.18	5	549	15	12	1	1	36	1	1	2
515443	135	2.2	377	145	101	103	18	25	5.05	.2	5	776	23	7	1	1	40	1	1	2
515444	5960	36.7	1005	346	1893	136	22	23	11.02	.16	5	791	16	136	1	3	14	1	3	7
515445	55	3.5	405	101	156	38	42	25	6.97	.21	5	679	34	6	1	1	27	1	1	3
515446	70	1.3	324	83	50	16	19	23	4.54	.2	5	566	24	3	1	1	36	1	1	2
515447	32	1.1	374	86	21	17	33	20	4.27	.22	5	525	26	2	1	1	31	1	1	2
515448	75	1.9	841	51	22	6	19	23	3.73	.2	5	270	11	2	1	1	40	1	1	2
515449	30	.1	349	38	7	2	8	15	4.34	.18	5	821	26	2	1	1	59	1	1	2
515450	28	.3	309	29	5	5	3	16	3.52	.2	5	270	24	2	1	1	42	1	1	2
515451	10	.1	242	33	6	7	3	24	3.84	.2	5	426	24	2	1	1	50	1	1	2
515452	35	.2	265	25	5	10	5	9	3.94	.21	5	243	14	2	1	1	50	1	1	2
515453	24	.1	118	23	4	2	11	10	3.49	.22	5	208	10	2	1	1	45	1	1	2
515454	44	.2	94	18	5	9	3	9	3.14	.22	5	190	7	2	1	1	59	1	1	2
515455	50	.3	171	19	4	2	2	15	4.17	.22	5	200	11	2	1	1	36	1	1	2
515456	65	.4	263	17	3	2	5	19	3.59	.2	5	195	14	2	1	1	36	1	1	2
515457	65	.8	263	16	7	2	16	22	2.96	.15	5	179	11	2	1	1	40	1	1	4
515458	43	.3	93	15	7	2	4	21	3.24	.14	5	155	6	2	1	1	31	1	1	5
515459	60	1.2	624	25	20	7	8	9	3.18	.01	5	575	24	2	1	1	24	1	1	2
515460	41	1.2	489	38	16	7	14	19	4.52	.01	5	710	37	2	1	1	29	1	1	4
515461	9	.1	120	109	17	9	2	36	5.11	.18	5	1040	23	2	1	1	29	1	1	2
515462	17	.2	141	35	10	2	3	21	3.56	.09	5	414	16	2	1	1	32	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SE	SN	W	BA	TH	CD	BI
515463	2	.1	57	38	6	2	5	29	2.84	.1	5	443	11	2	1	1	35	1	1	2
515290	3850	9.4	935	56	1217	24	10	4	7.98	.08	5	385	20	12	1	30	33	3	1	8
515291	180	.4	70	58	15	5	15	30	4.49	.18	5	556	12	6	1	1	34	2	1	2
515292	70	.3	78	46	8	2	10	28	4.12	.2	5	504	13	6	1	3	25	1	1	2
515293	4	.3	104	66	2	5	24	26	5.19	.18	5	671	13	2	1	1	40	1	1	2
515294	1420	4.2	353	51	274	12	28	20	5.74	.17	5	503	14	4	1	1	39	2	1	2
515295	550	.3	147	54	6	7	29	23	5.3	.19	5	667	14	2	1	1	34	2	1	2
515296	37	.3	169	38	2	2	8	28	5.13	.18	5	537	20	2	1	1	37	2	1	2
515297	2	.1	42	38	2	3	11	23	3.49	.19	5	552	11	2	1	1	37	2	1	2
515298	22	.1	64	41	5	2	9	23	3.73	.2	5	583	11	2	1	1	36	1	1	3
515299	4	.1	71	44	4	3	25	22	4.41	.2	5	637	10	2	1	1	28	2	1	2
515300	8	.1	81	47	5	2	17	25	5.64	.21	5	724	9	4	1	1	40	2	1	2
515301	9	.3	185	61	3	9	13	24	5.96	.18	5	804	15	2	1	1	13	2	1	2
515302	37	.4	249	52	8	2	22	43	6.47	.21	5	812	16	2	1	1	133	2	1	2
515303	4	.2	207	66	11	3	14	51	5.26	.19	5	839	18	2	1	1	44	2	1	2
515304	18	.6	285	67	5	7	6	47	4.6	.19	5	762	14	2	1	1	36	2	1	2
515305	22	.5	182	51	5	3	7	39	4.13	.21	5	709	19	2	1	1	23	2	1	2
515306	48	.4	225	50	6	3	5	42	4.08	.21	5	689	19	2	1	1	33	1	1	2
515307	27	.2	136	47	3	5	2	45	4	.22	5	609	15	2	1	1	30	2	1	3
515308	15	.6	358	62	10	4	2	45	5.43	.22	5	739	24	2	1	1	30	2	1	2
515309	12	.6	363	51	9	7	5	23	3.78	.07	5	711	10	2	1	1	41	3	1	2
515310	26	.6	377	52	13	4	2	46	6.27	.19	5	776	16	6	1	1	34	2	1	2
515311	3	.3	345	90	10	3	14	62	7.6	.01	5	886	23	4	1	1	21	2	1	2
515312	12	.9	860	72	12	9	7	52	6.8	.16	5	818	19	4	1	1	44	2	1	2
515313	14	.8	363	60	11	7	2	38	5.18	.2	5	637	12	2	1	1	51	2	1	2
515314	31	1.4	676	38	34	6	2	11	3.48	.15	5	482	17	2	1	1	23	2	1	2
515315	46	1	367	50	59	5	3	10	3.62	.16	5	517	14	2	1	1	29	2	1	2
515316	23	.6	289	37	21	2	3	8	3.39	.18	5	525	9	2	1	1	30	2	1	2
515317	90	.7	428	41	24	3	6	16	4.13	.17	5	569	21	2	1	1	30	1	1	2
515318	115	.6	431	49	20	2	7	10	3.26	.14	5	600	20	2	1	1	28	2	1	2
515319	55	.8	669	37	21	6	5	9	3.48	.17	5	528	16	3	1	1	39	2	1	2
515320	26	.3	221	38	10	5	4	21	5.1	.19	5	609	11	2	1	1	28	1	1	2
515321	1250	8.5	803	58	1167	9	3	41	9.01	.18	5	932	21	8	1	1	28	2	1	2
515322	3250	7.2	1114	67	374	13	8	8	6.73	.1	5	488	17	6	1	1	34	3	1	4
515323	350	1.8	570	68	121	12	5	42	10.17	.15	5	969	19	6	1	1	26	2	1	2
515324	27	.4	193	53	16	9	5	45	6.29	.14	5	1020	13	5	1	1	39	2	1	2
515325	12	.4	127	63	12	4	4	44	5.85	.15	5	993	15	2	1	1	32	1	1	2
515326	70	.7	290	60	29	8	5	45	6.57	.18	5	989	21	2	1	1	36	2	1	2
515327	29	1	411	48	26	13	9	30	5.17	.09	5	756	22	2	1	1	41	2	1	2
515328	48	1.6	620	45	20	8	23	23	5.03	.01	5	839	25	2	1	1	45	3	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PR	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515329	51	.8	328	51	9	9	6	30	5.86	.19	5	782	16	2	1	1	51	2	1	2
515330	6	.4	148	68	15	11	7	35	4.88	.21	5	826	16	2	1	1	55	1	1	2
515331	14	.4	159	84	11	7	7	36	4.96	.24	5	816	12	2	1	1	31	1	1	2
515332	52	.6	189	64	17	9	14	34	5.46	.21	5	816	14	3	1	1	28	1	1	2
515333	3	.3	133	85	30	11	2	43	5.26	.27	6	1025	13	2	1	1	24	3	1	2
515334	2	.2	96	89	29	6	1	37	5.21	.28	5	1043	13	2	1	1	22	3	1	3
515335	2	.2	106	88	33	12	2	35	5.49	.25	5	1126	14	2	1	1	23	3	1	2
515336	14	.3	119	90	37	13	1	33	5.03	.27	5	1022	14	5	1	1	20	3	1	2
515337	7	.2	112	89	28	9	1	33	5.32	.29	5	1081	14	2	1	1	28	2	1	2
515338	13	.2	100	64	19	9	5	18	4.6	.24	5	889	10	2	1	1	31	2	1	2
515339	15	.4	158	66	15	10	6	40	6.15	.14	5	956	17	2	1	1	18	2	1	2
515340	100	.6	126	104	49	10	7	44	4.73	.04	5	1127	13	2	1	1	20	1	1	2
515341	16	.5	128	69	21	10	4	19	5.13	.2	5	868	20	2	1	1	27	2	1	2
515342	13	.3	82	40	12	11	3	31	3.86	.19	5	673	15	2	1	2	34	1	1	2
515343	4	.4	82	58	14	7	4	51	4.42	.19	5	810	13	2	1	1	28	1	1	2
515344	2	.2	79	42	11	7	2	54	3.47	.2	5	601	15	3	1	1	34	1	1	2
515345	12	.1	64	37	18	7	5	50	3.76	.2	5	563	13	2	1	1	43	1	1	2
515346	9	.1	50	36	11	6	10	54	3.56	.23	5	589	11	2	1	2	49	1	1	2
515347	25	.2	69	67	14	6	7	50	4.67	.28	5	865	13	2	1	1	41	2	1	2
515428																				
515238	80	.4	104	64	28	6	1	20	4.51	.15	5	1024	13	2	1	1	58	3	1	2
515239	80	.3	91	58	35	5	2	23	4.36	.18	5	723	10	2	1	1	50	2	1	2
515240	17	.2	64	62	18	5	2	35	3.72	.18	5	593	12	3	1	1	55	4	1	2
515241	29	.1	92	58	22	9	1	51	4.11	.18	5	904	13	2	1	1	45	1	1	2
515242	46	.4	139	57	25	7	2	42	4.1	.18	5	603	15	2	1	1	50	3	1	2
515243	55	.1	136	65	32	6	2	26	4.48	.19	5	682	13	2	1	1	66	3	1	2
515244	26	.1	303	55	9	2	4	61	3.47	.21	5	467	17	2	1	1	45	1	1	2
515245	21	.2	303	52	8	11	9	22	4.21	.17	5	336	15	2	1	1	40	1	1	2
515246	16	.2	313	71	10	9	9	74	5.48	.17	5	673	23	2	1	1	74	1	1	2
515247	28	.3	372	45	10	6	13	46	5.66	.17	5	370	14	2	1	1	36	1	1	2
515248	32	.1	137	48	10	25	9	43	5.33	.2	5	437	11	2	1	1	67	1	1	2
515249	51	.2	156	31	8	5	8	22	4.15	.19	5	323	8	2	1	1	58	1	1	2
515250	60	2.8	568	274	50	70	18	31	12.9	.13	5	1521	27	2	1	1	29	3	1	2
515251	190	7.8	740	221	174	79	24	33	17.59	.13	5	1444	26	2	1	1	20	2	1	3
515252	325	2.1	390	129	39	52	8	23	7.8	.17	5	569	10	2	1	1	54	1	1	2
515253	36	.1	179	37	10	5	4	27	3.44	.17	5	206	9	2	1	1	46	1	1	2
515254	52	.9	319	89	9	7	5	12	5.04	.19	5	367	8	2	1	1	45	1	1	2
515255	20	.4	403	38	8	3	9	11	4.18	.17	5	183	9	2	1	1	56	1	1	2
515256	51	.7	849	114	11	13	27	17	8.2	.19	5	348	11	2	1	1	66	2	1	2
515257	25	.6	475	50	9	5	7	17	5.93	.21	5	317	10	3	1	1	106	1	1	2



SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515258	27	1	922	76	9	7	22	20	7.78	.14	5	317	21	2	1	1	66	2	1	2
515259	14	.9	1064	95	12	17	18	20	6.75	.13	5	2077	92	2	1	1	104	2	1	2
515260	28	.3	561	24	4	9	13	55	4.97	.17	5	126	14	2	1	1	48	1	1	2
515261	20	.2	397	35	7	4	5	56	5.05	.18	5	249	21	2	1	1	54	1	1	3
515262	25	.4	441	22	7	8	4	42	6.31	.16	5	147	19	2	1	1	30	3	1	2
515263	20	.3	157	23	8	4	1	46	4.59	.15	5	204	15	2	1	1	33	2	1	3
515264	32	.3	141	32	14	12	3	54	7.6	.19	5	218	30	2	1	1	23	2	1	2
515265	26	.2	168	30	9	11	3	59	6.56	.22	5	226	18	2	1	1	31	1	1	2
515266	7	.1	119	30	8	4	3	41	5.06	.18	5	212	16	2	1	1	41	2	1	2
515267	6	.2	132	32	3	7	3	40	4.79	.2	5	204	11	2	1	1	69	1	1	2
515268	22	.1	253	37	6	11	6	47	5.78	.16	5	209	19	5	1	1	49	2	1	2
515269	11	.3	229	34	7	10	19	45	6.03	.18	5	109	18	2	1	1	35	2	1	2
515270	15	.1	178	27	8	6	5	61	5.38	.16	5	129	22	2	1	1	26	1	1	2
515271	16	.2	181	34	9	11	3	48	6.54	.19	5	130	16	2	1	2	27	4	1	2
515272	14	.3	140	28	3	8	12	46	6.66	.19	5	112	19	2	1	1	27	3	1	2
515273	9	.1	151	21	10	8	5	45	6.22	.17	5	111	16	2	1	1	30	1	1	2
515274	18	.2	435	44	7	8	8	47	6.95	.15	5	150	15	2	1	1	50	1	1	2
515275	40	.7	584	65	5	19	14	37	9.26	.17	5	300	17	2	1	1	95	4	1	2
515276	26	.4	363	48	8	10	12	38	8.76	.14	5	165	20	2	1	1	27	3	1	2
515277	70	.3	491	29	7	11	16	41	7.27	.17	5	107	20	2	1	1	25	3	1	2
515278	30	.9	1816	36	8	14	66	51	9.16	.17	5	194	42	5	1	1	21	2	1	2
515279	65	.8	757	40	8	4	22	57	5.92	.17	5	195	15	5	1	1	35	3	1	2
515280	50	.5	547	60	6	13	10	41	5.54	.11	5	324	20	4	1	1	59	3	1	2
515281	60	.4	641	86	11	7	16	40	7.18	.11	5	947	36	2	1	1	79	2	1	3
515282	50	.5	933	119	10	14	20	44	8.67	.04	5	1344	77	2	1	1	66	1	1	2
515283	60	1.1	1018	105	8	17	31	31	9.27	.12	5	983	41	2	1	1	50	2	1	4
515284	32	.5	639	92	7	12	21	25	8.67	.12	5	800	26	2	1	1	84	2	1	2
515285	90	.4	743	108	10	15	20	38	7.11	.11	5	1309	47	2	1	1	190	3	1	2
515286	50	.8	632	151	14	51	20	45	8.81	.02	5	1234	42	3	1	1	74	4	1	2
515287	28	.5	248	102	13	16	13	17	5.52	.06	5	296	14	3	1	1	58	3	1	2
515288	60	.7	450	171	18	14	18	30	7.6	.09	5	646	18	2	1	1	98	3	1	2
515289	8	.7	546	46	4	7	2	42	4.21	.17	5	411	15	2	1	1	66	3	1	2
515188	52	.1	161	22	7	4	2	9	2.26	.16	5	386	4	2	1	1	34	1	1	2
515189	145	.3	512	24	10	9	7	11	3.37	.06	5	357	4	2	1	1	47	3	1	2
515190	85	.3	507	29	8	2	2	21	3.02	.2	5	582	6	2	1	2	47	1	1	2
515191	115	.7	525	33	8	12	3	19	4.04	.18	5	757	10	4	1	1	74	3	1	2
515192	145	.9	534	57	20	10	4	26	4.9	.17	5	662	13	4	1	1	518	2	1	2
515193	28	.1	306	66	11	7	2	29	5.44	.21	5	789	12	2	1	1	46	2	1	2
515194	7	.1	127	86	9	8	3	42	5.26	.24	5	1037	17	4	1	1	38	2	1	2
515195	3	.1	106	73	18	6	2	57	4.55	.22	5	875	17	4	1	1	36	1	1	2

SAMPLE #	HU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515196	11	.1	146	104	9	8	4	50	6.11	.06	5	1179	20	2	1	1	143	3	1	2
515197	12	.1	179	31	7	7	2	14	2.89	.04	5	425	7	4	1	2	241	2	1	2
515198	6	.1	98	36	7	7	2	12	3.04	.04	5	563	8	2	1	1	88	3	1	2
515199	15	.8	333	58	13	9	2	12	4.1	.05	5	563	8	2	1	1	65	2	1	2
515200	23	.4	395	86	31	12	5	13	4.9	.05	5	627	11	2	1	1	93	3	1	2
515201	55	.1	387	61	18	12	5	10	4.8	.07	5	594	12	2	1	1	46	3	1	2
515202	18	.1	263	64	13	11	4	20	4.71	.14	5	843	15	2	1	2	223	3	1	2
515203	15	.1	184	88	14	9	3	39	4.99	.22	5	925	16	2	1	1	124	2	1	2
515204	75	.2	252	86	15	14	5	23	5.83	.1	5	911	14	2	1	1	163	2	1	2
515206	6	.1	195	111	9	8	4	50	6.3	.07	5	1576	21	2	1	1	110	3	1	2
515207	3	.1	205	124	8	14	3	53	6.38	.05	5	1339	25	2	1	1	50	3	1	2
515208	90	.1	178	39	8	9	23	16	3.84	.12	5	447	7	2	1	1	86	1	1	2
515209	16	.1	239	47	6	11	2	17	3.23	.11	5	559	9	2	1	1	59	3	1	2
515210	35	.1	247	65	12	29	3	31	4.89	.15	5	781	15	2	1	1	152	3	1	2
515211	25	.1	193	29	8	8	3	15	3.62	.13	5	310	5	2	1	2	139	1	1	2
515212	115	1.3	363	33	29	33	6	11	4.24	.06	5	274	7	3	1	2	215	2	1	2
515213	60	.3	225	33	18	12	2	14	3.8	.15	5	455	7	2	1	1	73	2	1	2
515214	95	.6	318	32	14	9	6	17	4.16	.19	5	380	6	2	1	1	55	2	1	2
515215	170	.4	337	29	11	2	2	17	3.51	.16	5	359	6	2	1	2	66	2	1	2
515216	280	1.2	897	45	28	10	4	25	7.6	.19	5	384	9	2	1	3	53	2	1	2
515217	115	.3	500	49	20	13	3	15	6.72	.22	5	338	6	2	1	2	90	3	1	2
515218	240	3.2	450	59	33	63	2	12	5.48	.1	5	371	8	4	1	1	198	2	1	2
515219	35	.1	295	35	7	10	2	6	2.75	.03	5	339	6	2	1	2	141	3	1	3
515220	50	.4	290	36	7	5	1	28	3.21	.16	5	615	12	2	1	1	40	2	1	3
515221	75	.5	421	40	7	5	3	22	4.06	.16	5	611	16	2	1	2	60	2	1	2
515222	34	.1	448	52	11	3	3	41	4.84	.15	5	811	15	2	1	1	100	2	1	2
515223	125	1.1	900	41	23	14	15	13	3.68	.01	5	300	10	2	1	2	64	2	1	2
515224	65	.6	688	35	13	3	8	24	5.94	.24	5	280	7	2	1	2	75	3	1	2
515225	3	.1	125	72	8	2	1	4	3.8	.22	5	680	9	2	1	1	33	3	1	2
515226	22	.1	146	81	6	6	1	6	3.86	.21	5	756	9	2	1	1	30	3	1	2
515227	23	.1	229	46	3	2	1	14	3.25	.17	5	513	9	2	1	1	27	2	1	2
515228	27	.2	343	23	3	2	1	25	2.97	.22	5	332	7	2	1	1	23	1	1	2
515229	48	.2	393	18	6	2	2	25	3.77	.23	5	246	6	2	1	1	38	2	1	2
515230	50	.4	443	18	3	2	1	26	3.22	.23	5	261	7	2	1	1	25	3	1	2
515231	70	.3	543	19	4	2	1	30	3.43	.22	5	303	10	2	1	1	35	1	1	2
515232	60	.4	472	16	7	7	6	21	3.48	.22	5	233	5	2	1	1	32	2	1	2
515233	46	.3	392	24	8	7	3	26	4.07	.24	5	371	9	2	1	1	21	2	1	2
515234	2	.1	99	53	6	2	1	37	4.17	.2	5	591	17	2	1	1	89	1	1	2
515235	26	.3	241	43	16	2	1	32	4.05	.26	5	426	38	2	1	1	138	1	1	2
515236	3	.1	68	44	6	5	1	11	3.6	.15	5	938	10	2	1	1	43	3	1	2

39.

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SH	W	BA	TH	CD	BI
515237	8	.1	66	53	11	7	1	24	3.67	.23	5	693	12	2	1	1	38	1	1	2

## PHIL 1 CLAIMS - ROCK CHIP SAMPLES 1985

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	IR?	CE?	NR?	TA?	PH
515133	44	34	.06	.42	.73	.11	.03	.16	.25	2	4	1					
515134	42	40	.05	.38	.61	.1	.02	.15	.22	3	6	1					
515135	51	42	.06	.37	.7	.13	.02	.15	.22	3	5	2					
515146	184	16	.04	1.14	.57	1.35	.03	.07	.18	2	3	41					
515147	175	11	.05	.97	.38	1.32	.02	.07	.14	2	3	40					
515148	183	13	.05	1.37	.49	1.95	.02	.06	.17	2	3	54					
515149	130	25	.04	.67	.34	.67	.04	.09	.14	4	2	5					
515150	78	22	.04	.47	.3	.25	.03	.1	.14	2	2	11					
515151	111	27	.04	.72	.41	.72	.04	.09	.14	5	2	4					
515153	150	27	.04	.94	.5	.89	.04	.08	.16	7	4	5					
515154	106	18	.03	.69	.26	.69	.03	.08	.13	5	3	7					
515155	101	17	.04	.74	.29	.69	.03	.08	.15	3	2	7					
515157	35	21	.03	.49	.23	.29	.02	.12	.13	2	3	5					
515158	55	26	.04	.49	.2	.29	.03	.11	.14	2	3	3					
515159	109	18	.07	1.34	.41	1.62	.03	.1	.21	6	3	7					
515160	72	29	.08	1.43	.48	1.41	.04	.07	.18	7	2	7					
515161	81	21	.05	1.65	.41	1.52	.03	.06	.18	3	2	10					
515162	119	12	.05	1.65	.36	2.05	.05	.05	.19	5	2	11					
515163	90	17	.06	1.49	.41	1.62	.04	.06	.18	4	2	9					
515164	81	21	.04	1.31	.48	1.45	.05	.05	.19	5	2	7					
515165	85	23	.04	1.36	.48	1.58	.05	.05	.18	5	2	9					
515166	62	35	.04	1.12	.5	1.09	.04	.05	.18	2	2	4					
515167	70	30	.06	1.32	.46	1.26	.04	.06	.19	3	2	29					
515168	56	31	.04	1.05	.55	1.04	.05	.07	.18	5	2	9					
515169	73	26	.06	1.07	.47	.9	.04	.08	.17	2	3	9					
515170	45	35	.04	.82	.49	.73	.04	.06	.18	2	2	5					
515171	54	29	.03	.92	.43	.86	.04	.06	.18	2	3	9					
515172	49	26	.04	.71	.4	.67	.04	.06	.17	2	3	7					
515173	65	22	.03	.63	.27	.61	.04	.06	.11	2	2	10					
515174	66	26	.04	.79	.35	.74	.04	.06	.15	2	2	17					
515175	76	31	.03	.86	.31	.74	.04	.08	.14	2	3	10					
515176	73	29	.04	1.13	.49	1.32	.03	.06	.19	2	3	54					
515177	55	24	.05	1.04	.66	.98	.04	.06	.16	2	6	29					
515178	85	42	.05	.84	.22	.91	.05	.06	.08	2	2	7					
515179	66	26	.04	.71	.31	.58	.05	.06	.09	2	3	8					

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	S	CR	ZR?	CE?	NR?	TA?	PH
515180	100	30	.05	1.17	.23	1.15	.04	.06	.16	5	2	13					
515181	76	19	.04	.76	.32	.67	.04	.07	.17	2	5	10					
515192	52	39	.04	.54	.35	.29	.04	.08	.15	2	6	6					
515193	91	27	.03	.82	.36	.67	.04	.07	.16	2	7	8					
515184	76	44	.04	1	.4	.85	.04	.06	.17	2	4	7					
515185	65	70	.04	.96	.38	.89	.05	.09	.13	2	4	21					
515186	78	52	.07	1.12	.55	1.11	.04	.08	.14	2	6	44					
515187	62	30	.06	1.29	.57	1.32	.04	.1	.17	2	5	6					
514115																	
514116																	
514117																	
514118																	
514119																	
514237	97	13	.01	1.47	.53	1.67	.04	.17	.2	2	2	126					
514238	108	21	.02	1.8	.63	2.05	.05	.23	.22	2	2	134					
514239	91	16	.02	1.41	.67	1.66	.04	.14	.22	2	2	150					
514240	106	17	.01	1.65	.7	1.9	.04	.19	.24	2	2	168					
514241	101	29	.02	1.55	.69	1.75	.05	.22	.24	2	2	171					
514242	105	28	.02	1.73	.7	1.87	.03	.11	.22	2	2	173					
514243	95	31	.01	1.69	.69	1.66	.04	.16	.22	2	3	145					
515137	64	48	.03	.42	.68	.2	.03	.15	.2	5	2	2					
515138	44	56	.02	.63	.69	.41	.03	.13	.22	4	4	2					
515139	40	46	.02	.58	.46	.26	.03	.13	.21	3	2	3					
515140	56	43	.02	.89	.53	.5	.03	.13	.21	4	2	8					
515141	52	60	.01	.81	.72	.49	.03	.12	.22	5	2	2					
515142	96	63	.02	.74	.99	.74	.04	.12	.21	5	2	6					
515143	71	57	.02	.73	.67	.42	.03	.14	.21	3	4	3					
515144	90	54	.02	.8	.66	.48	.03	.12	.22	5	2	4					
515145	105	70	.02	.76	.77	.59	.03	.13	.22	5	2	2					
514220	142	24	.02	2.3	1.48	2.65	.03	.26	.25	7	3	196					
514222	147	20	.02	2.33	.93	2.74	.03	.15	.24	3	4	172					
514224	103	17	.02	1.67	.74	2.09	.04	.1	.24	4	2	151					
514226	150	17	.02	1.87	.53	2.21	.05	.23	.23	5	2	35					
514228	161	23	.02	1.9	.55	2.1	.06	.27	.2	3	2	19					
514230	68	24	.02	1.14	.71	1.22	.05	.09	.21	2	2	88					
514232	93	25	.02	1.21	.76	1.31	.05	.12	.22	2	2	101					
514234	102	17	.03	1.78	.58	1.97	.04	.14	.23	2	2	134					
514236	89	14	.01	1.21	.55	1.37	.04	.09	.22	2	2	117					
514120	84	25	.03	1.71	.66	2.18	.07	.36	.19	6	4	192					
514121	115	58	.03	2.01	1.14	3.14	.06	.67	.17	5	4	258					

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	ZR?	CE?	NR?	TA?	PH
514122	131	36	.04	1.74	.83	2.49	.05	.31	.19	5	5	119					
514123	93	11	.03	1.28	.6	1.75	.04	.07	.19	5	3	100					
514124	63	13	.02	.95	.58	1.02	.05	.1	.19	4	8	58					
514126	112	21	.02	1.63	.68	1.84	.04	.08	.2	3	9	102					
514127	92	23	.02	1.19	.67	1.18	.05	.11	.19	5	6	80					
514129	112	20	.02	1.39	.73	1.63	.05	.21	.18	4	9	93					
514131	109	27	.02	2.69	.59	3.46	.04	.63	.16	5	2	307					
514133	93	57	.02	1.98	1.18	2.37	.03	.49	.21	8	6	254					
514135	154	17	.01	2.52	.27	3.55	.02	.29	.2	5	9	309					
514137	94	43	.02	1.29	.62	1.27	.03	.14	.26	12	5	23					
514139	130	48	.02	1.87	.67	2.37	.03	.2	.24	7	3	139					
514141	63	69	.02	1.3	.6	1.11	.03	.19	.26	10	4	10					
514143	25	43	.01	.84	.51	.49	.03	.2	.23	9	9	4					
514145	30	138	.01	.59	1.17	.64	.03	.16	.2	7	13	22					
514147	42	67	.01	.95	.97	.92	.03	.15	.22	7	6	15					
514149	83	54	.01	1.01	.95	1.43	.04	.11	.22	7	6	37					
514151	79	86	.01	1.69	1.9	2.81	.02	.31	.19	7	10	177					
514153	77	58	.02	1.67	1.2	2.61	.03	.26	.2	7	8	178					
514155	79	125	.01	.97	1.86	2.8	.04	.15	.17	4	6	70					
514157	34	153	.02	.52	1.39	1.27	.04	.19	.19	2	9	8					
514159	29	97	.03	.51	.99	.74	.03	.21	.19	2	10	5					
514161	41	41	.02	.74	.52	.52	.04	.23	.23	9	7	10					
514163	53	51	.02	.74	.67	.96	.02	.29	.23	5	8	15					
514165	104	19	.02	1.78	.46	2.56	.04	.19	.23	5	7	62					
514167	76	64	.01	1.58	1	2.49	.03	.27	.24	5	6	97					
514169	13	18	.01	.47	.36	.13	.04	.17	.19	12	6	1					
514171	78	29	.01	1.13	.53	1.03	.04	.2	.2	9	7	15					
514173	95	26	.02	1.4	.49	1.79	.03	.26	.22	3	5	23					
514175	23	51	.01	.57	.5	.35	.02	.14	.22	5	6	3					
514177	28	183	.01	.54	1.51	1.02	.04	.16	.24	3	11	1					
514179	31	102	.01	.81	1.18	.73	.03	.16	.27	4	7	1					
514181	33	69	.01	.94	.84	.55	.03	.16	.27	7	10	5					
514183	84	48	.01	1.73	.68	1.78	.02	.1	.22	6	2	118					
514184	157	24	.02	2.49	.9	3.3	.03	.18	.2	3	2	150					
514185	62	26	.02	.97	.58	.64	.03	.21	.23	8	7	5					
514186	61	35	.03	.88	.71	.68	.04	.21	.22	9	7	8					
514187	50	43	.03	.6	.86	.38	.03	.21	.25	8	7	4					
514188	61	27	.03	.85	.56	.52	.04	.21	.23	8	7	13					
514189	49	31	.03	.96	.54	.66	.03	.2	.23	8	7	45					
514190	49	40	.01	1.51	.7	1.11	.03	.14	.22	9	6	78					

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	IR?	CE?	MS?	TA?	PH
514191	26	48	.01	1.13	.56	.4	.03	.16	.25	11	5	4					
514192	28	52	.01	1.3	.59	.41	.03	.18	.27	13	9	5					
514193	27	73	.01	.96	.67	.44	.02	.2	.28	9	15	7					
514194	24	103	.01	.98	.85	.53	.02	.23	.25	9	14	3					
514195	31	170	.01	.77	1.63	1	.01	.21	.25	7	18	21					
514196	47	64	.02	1.28	.59	.81	.02	.27	.28	7	14	59					
514197	75	64	.02	1.97	.96	1.91	.02	.25	.26	9	16	126					
514198	118	120	.02	1.73	2.31	3.02	.02	.25	.23	3	10	159					
514199	142	119	.02	2.34	1.79	3.58	.03	.29	.22	4	3	197					
514200	138	209	.02	2.37	4.64	3.88	.02	.08	.21	5	5	209					
514201	155	79	.02	2.42	2.13	3.54	.03	.19	.23	4	2	229					
514202	116	25	.02	1.92	.87	2.59	.04	.09	.22	3	5	219					
514203	128	25	.03	1.97	.87	2.8	.04	.11	.23	6	2	218					
514204	150	28	.03	2.14	1.08	3.08	.04	.24	.24	2	2	194					
514205	166	51	.03	2.73	1.47	3.99	.04	.26	.25	9	2	242					
514206	156	24	.02	2.04	1.07	2.83	.04	.22	.24	6	3	207					
514207	143	20	.02	1.58	.91	1.96	.04	.24	.23	3	6	155					
514208	103	22	.02	1.31	.56	1.4	.04	.12	.14	8	4	53					
514209	68	18	.02	1.03	.39	.92	.04	.15	.14	7	6	45					
514210	25	15	.02	.58	.32	.29	.04	.18	.13	7	5	5					
514211	160	33	.02	1.66	.84	1.89	.05	.09	.26	10	5	50					
514212	153	25	.03	1.76	.85	1.92	.05	.1	.28	8	6	48					
514213	134	19	.02	1.67	.82	1.88	.05	.11	.26	5	3	92					
514214	151	15	.03	2.06	.73	2.73	.03	.08	.23	4	2	184					
514215	154	21	.02	2.28	.77	2.98	.04	.19	.23	7	4	259					
514216	82	15	.02	1.49	.71	1.57	.02	.31	.21	5	5	159					
514217	149	12	.03	2.47	.55	2.93	.03	.51	.21	2	2	231					
514218	153	10	.03	2.72	.55	3.54	.03	.25	.25	6	2	239					
514219	132	12	.02	2.02	.75	2.64	.03	.19	.26	5	2	206					
514221	123	14	.02	1.48	.86	1.98	.04	.09	.23	3	2	141					
514223	126	25	.02	1.66	.87	2.19	.04	.2	.24	4	3	195					
514225	135	21	.02	1.78	.81	2.3	.05	.12	.28	5	4	155					
514227	101	17	.02	1.54	.61	1.6	.05	.26	.18	6	7	27					
514229	120	24	.02	1.63	.64	1.77	.05	.16	.21	2	2	47					
514231	92	20	.02	1.33	.69	1.41	.05	.12	.21	2	2	97					
514233	102	22	.02	1.23	.76	1.29	.04	.09	.23	3	2	119					
514235	99	17	.01	1.08	.46	1.09	.04	.11	.21	2	2	105					
514125	93	14	.02	1.27	.58	1.52	.05	.08	.21	4	7	89					
514128	85	13	.02	1.25	.57	1.38	.04	.1	.19	4	2	87					
514130	166	31	.02	2.38	.69	3.39	.03	.41	.2	7	7	184					

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	IR?	CE?	NR?	TA?	PH
514132	111	15	.03	2.45	.47	3.89	.04	.49	.17	5	2	410					
514134	79	78	.02	1.48	1.83	1.87	.02	.22	.21	9	5	140					
514136	102	53	.02	1.62	.79	1.83	.03	.21	.24	11	5	103					
514138	59	77	.02	1.54	.85	1.78	.02	.17	.22	11	5	101					
514140	49	48	.01	1.03	.44	.52	.03	.17	.25	10	8	8					
514142	37	85	.02	.83	.59	.69	.04	.22	.26	8	10	4					
514144	29	49	.02	.84	.57	.42	.03	.18	.24	9	10	6					
514146	70	78	.01	1.06	.91	1.16	.04	.13	.26	11	6	32					
514148	69	81	.01	.93	1.33	1.48	.04	.13	.18	6	7	32					
514150	64	102	.02	1.21	1.56	1.65	.03	.18	.21	11	6	82					
514152	98	48	.03	2.13	.93	3.24	.02	.31	.21	8	8	211					
514154	50	86	.01	1.13	1.33	1.7	.03	.18	.2	4	8	70					
514156	32	186	.01	.52	1.79	1.51	.04	.18	.18	2	12	9					
514158	52	121	.02	.4	1.37	1.11	.03	.18	.2	2	7	9					
514160	36	32	.02	.72	.41	.42	.04	.21	.24	7	6	9					
514162	35	55	.02	.67	.76	.79	.03	.25	.23	5	10	8					
514164	100	16	.02	1.86	.51	2.44	.03	.25	.24	3	5	78					
514166	89	29	.02	1.77	.88	2.27	.03	.32	.24	5	3	75					
514168	35	42	.01	1.16	.72	.95	.03	.17	.19	7	6	30					
514170	11	18	.02	.53	.35	.15	.04	.16	.19	12	8	1					
514172	64	26	.01	1.31	.54	1.52	.04	.18	.23	3	8	18					
514174	118	45	.01	.77	.5	.65	.02	.21	.19	2	8	8					
514176	26	76	.01	.6	.89	.54	.04	.17	.25	3	13	2					
514178	29	133	.01	.75	1.53	.85	.03	.18	.26	4	6	2					
514180	35	84	.01	.8	1.01	.86	.03	.16	.26	6	9	9					
514182	58	71	.02	1.11	.84	.96	.03	.15	.25	6	5	9					
515114	158	30	.01	.92	.66	.97	.04	.1	.22	3	2	7					
515115	178	29	.01	.84	.67	.79	.04	.1	.23	3	5	4					
515116	183	40	.01	.93	.8	.86	.04	.11	.22	4	2	4					
515117	59	69	.02	.77	.43	.28	.04	.2	.21	4	5	5					
515118	228	34	.01	1.17	.66	1.13	.03	.12	.22	3	2	5					
515119	143	47	.01	1.24	.47	1.11	.04	.15	.21	4	3	4					
515120	157	45	.02	1.25	.62	1.2	.04	.14	.22	5	7	3					
515121	117	54	.01	.91	.66	.8	.04	.18	.2	6	2	2					
515122	159	38	.01	1.09	.63	1.03	.04	.15	.25	5	5	3					
515123	175	54	.01	.93	1.18	.88	.04	.18	.25	7	4	1					
515124	165	26	.02	1.21	.67	1.06	.04	.15	.24	6	5	1					
515125	113	30	.02	.91	.53	.71	.03	.17	.22	4	3	1					
515126	100	47	.01	.66	.34	.48	.03	.22	.19	4	3	3					
515127	108	39	.01	1	.43	.72	.03	.21	.25	6	2	4					



SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	ZR?	CE?	NB?	TA?	PH
515128	122	33	.02	.8	.44	.48	.03	.21	.24	6	7	3					
515129	186	27	.01	1.51	.67	1.58	.03	.16	.27	6	2	11					
515130	191	19	.01	1.37	.62	1.31	.03	.16	.26	4	22	2					
515131	159	30	.02	1.29	.45	1.24	.03	.15	.2	4	4	5					
515132	97	30	.02	.48	.86	.12	.03	.22	.27	6	6	2					
515136	123	61	.01	.58	1.01	.4	.03	.17	.27	4	4	3					
515348	89	44	.02	1.41	.74	1.5	.04	.04	.18	2	2	31					
515349	78	53	.02	1.22	.66	1.22	.03	.04	.19	2	23	15					
515350	70	33	.02	1.02	.5	.97	.03	.06	.13	2	2	17					
515351	78	38	.02	1.07	.58	1.09	.03	.08	.18	2	6	19					
515352	101	28	.01	1.29	.53	1.37	.03	.08	.2	2	3	21					
515353	150	11	.02	2.1	.22	1.74	.01	.12	.21	5	3	60					
515354	92	13	.01	1.1	.17	.87	.02	.16	.15	2	29	49					
515355	118	21	.01	1.46	.39	1.58	.03	.06	.2	2	22	37					
515356	69	73	.01	1.19	.39	.91	.04	.11	.15	4	9	56					
515357	81	40	.02	1.71	.89	1.62	.06	.1	.19	2	23	84					
515358	64	37	.03	1.56	.84	1.62	.05	.1	.18	2	2	83					
515359	95	35	.03	1.75	.83	2.14	.05	.1	.16	2	26	91					
515360	144	43	.02	2.47	1.11	2.93	.06	.13	.17	3	3	134					
515361	122	30	.02	2.1	1.11	2.17	.05	.11	.19	2	2	124					
515362	71	29	.02	1.74	.79	1.9	.04	.07	.2	2	2	109					
515363	71	31	.03	1.79	.91	1.74	.06	.11	.17	3	23	100					
515364	67	28	.02	1.74	.62	1.68	.04	.1	.18	2	25	86					
515365	49	34	.02	1.04	.51	.82	.04	.08	.16	2	22	32					
515366	72	32	.02	1.33	.61	1.08	.06	.12	.18	2	22	29					
515367	76	40	.01	1.16	.27	1.01	.04	.2	.16	2	18	30					
515368	96	31	.01	1.46	.32	1.34	.03	.15	.17	2	22	39					
515369	99	27	.02	1.78	.44	1.88	.04	.1	.19	2	27	36					
515370	96	34	.02	2.52	.66	2.5	.03	.12	.17	2	24	48					
515371	90	22	.02	1.53	.56	1.86	.04	.09	.18	3	20	37					
515372	40	31	.01	.73	.52	.64	.03	.11	.18	3	3	18					
515373	43	36	.01	.7	.56	.65	.03	.06	.18	2	23	21					
515374	56	33	.01	.92	.45	1.02	.04	.11	.17	2	17	40					
515375	77	50	.01	1.46	.63	1.54	.04	.07	.19	3	22	55					
515376	71	42	.02	1.42	.71	1.39	.05	.09	.18	5	25	74					
515377	64	47	.01	1.58	.73	1.59	.05	.08	.18	3	24	110					
515378	62	45	.02	1.16	.55	1.21	.03	.08	.19	3	21	71					
515379	68	41	.02	1.3	.55	1.3	.04	.08	.21	4	18	80					
515380	118	30	.03	1.91	.55	2.17	.04	.08	.2	4	19	122					
515381	131	43	.02	2.35	.92	2.86	.03	.14	.2	9	21	107					

SAMPLE #	V	SR	SI	AL	CA	MS	NA	K	P	LA	S	CR	IR?	CE?	NB?	TA?	PH
515382	111	23	.02	2.52	.33	2.94	.02	.1	.22	6	23	103					
515383	70	50	.02	1.43	.71	1.24	.05	.09	.2	3	22	83					
515384	100	71	.02	1.56	.37	1.29	.06	.11	.22	4	4	25					
515385	56	40	.01	1.1	.7	.87	.04	.1	.22	2	6	15					
515386	157	53	.02	2.26	.41	1.69	.04	.09	.24	10	5	34					
515387	164	55	.01	2.04	.46	1.46	.04	.08	.24	11	2	43					
515388	100	60	.01	1.75	.46	1.24	.05	.08	.2	6	2	33					
515389	71	41	.02	1.28	.67	.83	.05	.07	.19	3	8	22					
515390	77	34	.02	1.37	.53	1.03	.04	.07	.18	3	6	20					
515391	107	19	.02	2.23	.49	1.74	.03	.09	.19	3	2	39					
515392	84	26	.02	2.06	.44	1.73	.03	.05	.19	2	2	45					
515393	103	21	.02	2.15	.34	1.68	.02	.09	.18	2	7	62					
515394	73	43	.02	1.83	.6	1.43	.04	.05	.18	2	6	62					
515395	64	37	.02	1.35	.54	1.06	.04	.05	.2	3	14	55					
515396	46	51	.02	1.03	.49	.75	.03	.03	.19	2	11	54					
515397	65	35	.02	1.49	.64	1.3	.04	.11	.18	3	10	50					
515398	43	35	.01	1.11	.71	1.06	.04	.03	.19	2	12	46					
515399	65	64	.01	1.18	.49	.96	.07	.08	.16	3	2	51					
515400	58	66	.02	1.18	.48	.84	.05	.05	.21	3	8	62					
515401	92	65	.02	1.42	.9	1.39	.04	.06	.21	2	8	25					
515402	97	36	.03	.97	.85	.7	.04	.05	.22	4	6	32					
515403	79	56	.02	1.42	.84	1.47	.03	.06	.19	3	7	26					
515404	86	40	.01	1.31	.68	1.34	.03	.07	.21	2	10	28					
515405	76	76	.01	1.37	.94	1.19	.03	.05	.21	5	4	23					
515406	73	55	.01	1.4	.76	1.33	.04	.06	.19	3	3	29					
515407	98	38	.02	1.5	.73	1.49	.04	.09	.21	3	11	25					
515408	129	24	.01	2	.34	1.95	.02	.14	.22	7	10	28					
515409	123	39	.02	2.27	1.07	2.7	.03	.13	.22	7	7	34					
515410	66	58	.01	1.13	1.01	1.08	.04	.05	.18	2	9	91					
515411	41	44	.02	.95	.6	.81	.03	.06	.13	2	2	46					
515412	37	46	.01	1.1	.62	.98	.03	.08	.11	2	9	60					
515413	43	43	.01	.99	.76	.97	.03	.07	.13	2	10	71					
515414	61	34	.01	.99	.49	.98	.03	.09	.16	2	9	55					
515415	86	31	.02	1.52	.43	1.75	.03	.08	.15	2	2	75					
515416	50	57	.01	1.08	.82	1.04	.04	.05	.17	3	12	33					
515417	58	67	.01	1.27	.86	1.28	.03	.05	.18	3	14	46					
515418	61	68	.01	1.18	.83	1.06	.04	.07	.17	4	9	34					
515419	66	26	.02	1.18	.49	1.19	.03	.08	.16	3	7	41					
515420	99	29	.02	1.56	.46	1.52	.03	.09	.2	2	2	56					
515421	67	33	.02	1.68	.53	1.98	.03	.09	.13	2	11	119					

SAMPLE #	V	SR	SI	AL	CA	MS	NA	K	P	LA	B	CR	ZR?	CE?	NB?	TA?	PH
515422	66	28	.01	1.3	.54	1.16	.02	.13	.12	2	2	94					
515423	73	42	.01	1.47	.7	1.59	.04	.09	.19	4	18	42					
515424	80	25	.02	1.49	.48	1.4	.03	.1	.2	2	20	52					
515425	60	26	.02	1.19	.62	1.42	.04	.09	.18	2	15	57					
515426	63	35	.02	1.05	.54	1.03	.04	.11	.2	2	19	41					
515427	74	24	.02	1.38	.54	1.3	.05	.13	.18	4	20	46					
515429	103	21	.02	2	1.12	2.56	.04	.11	.15	2	11	120					
515430	66	25	.02	1.44	.77	1.68	.04	.1	.15	3	13	79					
515431	61	22	.02	1.26	.64	1.41	.05	.11	.14	2	17	84					
515432	62	30	.02	1.35	.73	1.51	.05	.08	.18	2	29	74					
515433	56	35	.02	1.25	.88	1.5	.05	.06	.14	2	18	87					
515434	59	32	.01	1.36	.67	1.67	.05	.07	.15	2	14	96					
515435	53	56	.01	1	.7	1.06	.03	.05	.15	2	12	74					
515436	76	41	.01	1.21	.52	1.4	.03	.06	.15	2	2	72					
515437	56	38	.01	1.19	.6	1.32	.04	.05	.15	2	9	83					
515438	58	29	.02	1.55	.54	1.86	.03	.05	.15	2	17	103					
515439	58	24	.02	1.5	.52	1.82	.03	.05	.14	2	2	109					
515440	85	17	.01	1.05	.17	.95	.02	.24	.13	2	7	95					
515441	116	15	.01	1.97	.33	2.23	.02	.1	.15	2	17	170					
515442	75	28	.01	1.45	.58	1.52	.03	.11	.15	2	16	110					
515443	71	34	.02	1.41	.55	1.2	.05	.1	.18	2	19	45					
515444	50	19	.01	.8	.34	.55	.03	.19	.16	2	2	30					
515445	74	26	.01	1.05	.64	1.04	.04	.11	.18	2	2	45					
515446	68	29	.01	1.3	.64	1.26	.04	.09	.18	2	20	30					
515447	62	46	.02	1.22	.68	1.05	.03	.07	.17	2	2	45					
515448	52	30	.02	1.21	.63	1.15	.04	.08	.19	2	12	37					
515449	89	54	.02	1.3	.85	1.14	.07	.1	.21	3	12	17					
515450	74	59	.02	1.19	.95	.96	.06	.09	.19	2	21	22					
515451	84	46	.02	1.68	.87	1.63	.06	.09	.17	2	17	37					
515452	86	68	.01	1.22	.85	1.01	.08	.11	.23	2	18	7					
515453	65	63	.01	1	.68	.9	.05	.09	.19	3	19	7					
515454	66	52	.01	.92	.63	.73	.06	.1	.18	2	18	21					
515455	61	42	.01	.89	.66	.62	.04	.09	.19	2	16	39					
515456	64	50	.01	.91	.76	.85	.04	.09	.19	2	17	43					
515457	47	45	.01	.79	.64	.58	.04	.07	.18	2	3	50					
515458	46	45	.01	.7	.54	.49	.03	.06	.17	2	2	72					
515459	18	113	.01	.4	3.23	.68	.02	.14	.18	4	7	4					
515460	22	148	.02	.57	4.11	.99	.02	.15	.16	2	6	14					
515461	116	48	.01	2.04	.95	2.16	.02	.04	.24	5	2	63					
515462	78	18	.01	1.45	.5	1.52	.03	.03	.19	2	4	30					

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	ZR?	CE?	NB?	TA?	PH
515463	65	27	.01	1.49	.72	1.5	.03	.05	.19	2	2	50					
515290	112	10	.03	1.44	.34	1.31	.01	.11	.17	2	2	1					
515291	97	31	.03	1.99	1.35	1.69	.04	.06	.23	5	12	44					
515292	97	36	.03	1.91	1.2	1.75	.05	.07	.22	5	10	57					
515293	115	35	.03	2.12	1.02	1.93	.04	.06	.23	5	6	49					
515294	100	28	.04	1.71	.91	1.62	.04	.11	.19	5	7	34					
515295	137	25	.05	2.12	.95	2.12	.05	.12	.25	7	9	44					
515296	87	44	.04	1.97	.84	2.19	.04	.09	.21	3	7	44					
515297	83	51	.03	1.83	1.03	1.86	.04	.06	.21	4	7	33					
515298	88	48	.04	1.93	1.03	2.02	.05	.06	.22	6	7	37					
515299	101	44	.04	2.05	.97	2.13	.05	.09	.23	6	6	34					
515300	149	30	.04	2.33	1.16	2.32	.06	.19	.23	8	6	44					
515301	175	16	.05	2.44	1.02	2.51	.05	.05	.23	11	8	48					
515302	175	32	.02	3.11	1.6	3.97	.03	.66	.18	11	7	109					
515303	120	29	.03	2.54	.88	3.05	.03	.21	.16	6	7	96					
515304	101	31	.05	2.52	.81	3.35	.03	.14	.16	4	7	91					
515305	91	33	.04	2.25	.79	2.99	.03	.07	.17	3	6	101					
515306	91	35	.04	2.22	.99	2.88	.04	.1	.16	5	6	91					
515307	87	36	.04	2.15	.81	2.74	.04	.08	.16	4	5	96					
515308	117	41	.06	2.64	1.09	3.19	.03	.13	.16	7	7	54					
515309	124	28	.05	1.77	.7	2.14	.05	.17	.17	7	7	29					
515310	150	81	.05	2.75	1.93	3.56	.04	.27	.18	12	11	91					
515311	130	30	.04	2.72	.47	3.26	.02	.12	.17	6	17	113					
515312	154	46	.03	3.09	1.02	4.04	.04	.38	.16	8	8	93					
515313	118	33	.03	2.55	.84	3.18	.05	.33	.17	3	5	64					
515314	120	28	.02	1.59	1.36	1.84	.07	.09	.21	2	5	7					
515315	128	31	.04	1.69	1.04	1.88	.06	.1	.21	5	4	12					
515316	117	41	.03	1.64	.93	1.75	.06	.09	.21	4	7	8					
515317	115	30	.03	1.69	1.07	1.82	.06	.08	.18	4	6	34					
515318	132	19	.03	1.61	.79	1.9	.06	.07	.21	6	9	15					
515319	116	30	.04	1.55	.95	1.78	.06	.09	.21	5	7	7					
515320	124	39	.04	2.3	1.14	2.35	.08	.1	.17	6	8	37					
515321	152	20	.03	3.19	1.19	3.84	.02	.26	.13	10	5	100					
515322	121	21	.04	1.76	.65	1.9	.03	.1	.17	4	8	11					
515323	179	19	.04	3.25	.77	3.47	.02	.17	.15	9	3	174					
515324	148	33	.01	2.99	1.33	3.27	.04	.21	.14	6	9	117					
515325	138	50	.03	2.88	1.97	3.2	.04	.15	.14	5	4	117					
515326	163	30	.08	3.39	1.45	4.03	.05	.21	.15	2	2	136					
515327	103	52	.08	2.22	1.94	2.44	.04	.2	.17	4	6	70					
515328	42	36	.07	1.03	1.11	.72	.03	.22	.2	3	9	15					

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	IR?	CE?	NB?	TA?	FH
515329	130	42	.07	2.53	1.3	2.53	.06	.2	.15	3	4	65					
515330	112	52	.06	2.38	1.41	2.67	.04	.1	.14	2	4	73					
515331	121	49	.06	2.56	1.26	2.77	.05	.11	.14	3	3	57					
515332	116	53	.06	2.48	1.28	2.68	.04	.09	.16	5	5	67					
515333	130	65	.06	2.04	1.27	2.26	.04	.09	.25	7	6	93					
515334	123	61	.05	2.18	1.07	2.39	.03	.06	.26	7	5	80					
515335	131	80	.06	2.16	1.21	2.32	.03	.06	.28	8	7	72					
515336	106	88	.08	2.01	1.15	2.2	.04	.06	.27	8	8	66					
515337	122	71	.08	2.26	1.11	2.61	.04	.07	.27	7	5	68					
515338	133	35	.08	1.99	.77	2.27	.05	.06	.21	7	6	38					
515339	170	19	.07	2.87	.91	3.51	.03	.04	.19	6	2	112					
515340	127	88	.05	1.94	3.66	2.14	.03	.05	.16	10	6	112					
515341	179	18	.06	2.31	.66	2.57	.05	.06	.2	5	7	38					
515342	111	48	.04	1.84	.94	2.04	.07	.09	.17	4	6	70					
515343	109	33	.05	2.19	1.15	2.51	.04	.08	.16	3	3	143					
515344	84	39	.08	1.86	.84	2.13	.05	.09	.18	4	6	124					
515345	99	53	.04	1.85	.82	1.91	.04	.09	.19	4	6	107					
515346	91	56	.06	1.94	.91	2.18	.05	.09	.19	4	6	117					
515347	120	49	.06	2.26	.98	2.65	.04	.07	.22	6	8	110					
515428																	
515238	96	101	.01	1.82	2.8	1.41	.03	.14	.18	12	4	32	4	6	2	1	
515239	126	84	.03	1.95	3.18	1.66	.07	.12	.17	14	7	45	4	4	2	1	
515240	78	55	.02	1.74	1.59	1.43	.05	.23	.14	14	6	60	4	7	2	1	
515241	93	48	.02	1.71	1.9	1.6	.03	.17	.17	12	7	65	4	5	2	1	
515242	97	66	.01	1.94	2.91	1.68	.05	.12	.15	10	9	78	4	5	2	1	
515243	112	57	.02	1.76	1.13	1.38	.04	.11	.18	10	9	47	4	7	3	1	
515244	71	50	.04	1.65	.98	1.85	.04	.06	.16	7	5	139	2	5	2	1	
515245	70	57	.03	1.29	.79	1.15	.03	.07	.18	7	6	36	2	4	3	1	
515246	87	36	.03	1.94	.8	2.42	.02	.06	.17	11	7	127	2	5	3	1	
515247	65	44	.03	1.34	.69	1.52	.03	.05	.17	7	4	77	3	4	2	1	
515248	73	42	.03	1.37	.73	1.59	.04	.07	.18	8	4	85	3	4	2	1	
515249	55	60	.03	1.08	.78	1.04	.03	.07	.16	6	5	46	3	4	2	1	
515250	117	17	.06	2.41	.41	2.04	.01	.08	.15	13	2	103	3	3	2	1	
515251	142	11	.03	2.46	.31	1.81	.01	.09	.15	16	2	138	3	2	2	1	
515252	64	36	.03	1.32	.73	.74	.02	.1	.14	9	5	49	3	3	2	1	
515253	51	50	.03	1.01	.89	.83	.03	.07	.15	5	6	38	2	4	3	1	
515254	94	37	.03	1.48	.64	1.51	.03	.1	.16	7	4	12	2	4	3	1	
515255	72	28	.04	1	.7	.93	.04	.09	.16	5	5	19	2	4	2	1	
515256	159	23	.02	1.76	.44	1.96	.02	.09	.16	12	4	43	2	5	3	1	
515257	155	15	.03	1.83	.54	2.34	.03	.14	.18	10	7	96	2	5	2	1	

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	IR?	CE?	NB?	TA?	PH
515258	130	22	.04	1.56	.5	1.81	.03	.11	.17	10	5	42	2	5	2	1	
515259	133	35	.03	1.62	.46	1.74	.03	.11	.17	13	5	47	3	6	3	2	
515260	50	25	.04	1	.57	1.22	.04	.08	.15	6	2	90	1	2	2	1	
515261	75	27	.05	1.43	.6	1.74	.04	.08	.16	8	4	102	2	4	2	1	
515262	49	31	.04	.93	.63	1.04	.03	.08	.17	7	4	67	2	2	3	1	
515263	62	21	.03	1.05	.54	1.15	.03	.1	.17	5	2	66	2	3	2	1	
515264	74	29	.04	1.31	.7	1.3	.04	.1	.19	11	4	78	2	3	3	2	
515265	70	34	.04	1.41	.66	1.6	.04	.07	.15	9	5	100	2	2	2	2	
515266	53	51	.03	1.14	.76	1.03	.04	.05	.15	6	6	56	2	3	2	2	
515267	61	36	.03	1.17	.62	1.15	.04	.08	.15	3	4	64	2	3	2	1	
515268	67	42	.04	1.24	.67	1.23	.04	.09	.19	8	5	58	2	2	2	1	
515269	64	29	.03	1.04	.53	1	.04	.09	.16	9	7	66	2	2	2	3	
515270	54	26	.04	1.02	.62	1.05	.04	.08	.18	6	5	85	1	2	2	2	
515271	59	33	.03	1.02	.49	1.07	.03	.08	.18	8	4	65	2	2	2	1	
515272	62	27	.03	1.06	.6	1	.04	.1	.17	6	7	63	2	3	2	1	
515273	59	24	.03	1.11	.72	.89	.04	.1	.18	10	8	55	1	2	2	1	
515274	98	22	.04	1.51	.53	1.68	.03	.12	.18	10	5	106	1	3	2	1	
515275	176	19	.06	2.25	.4	3.03	.03	.11	.16	13	5	154	2	4	2	1	
515276	116	18	.03	1.5	.37	1.74	.03	.11	.16	12	6	98	2	3	2	3	
515277	65	24	.03	1	.44	.95	.03	.11	.17	7	4	49	2	3	2	1	
515278	77	27	.04	1.44	.51	1.41	.03	.1	.17	10	3	84	1	2	2	2	
515279	86	21	.04	1.43	.51	1.7	.04	.1	.17	6	2	117	1	3	3	2	
515280	84	16	.05	1.33	.47	1.53	.03	.14	.18	6	5	80	1	3	2	3	
515281	98	24	.05	1.7	.5	1.65	.03	.1	.17	10	5	104	1	4	2	2	
515282	130	14	.05	2.22	.42	2.5	.02	.08	.18	12	2	138	1	5	2	1	
515283	138	14	.05	2	.42	2.19	.03	.09	.17	13	2	107	1	4	2	1	
515284	127	27	.04	1.79	.38	1.81	.03	.09	.16	10	2	98	1	4	2	1	
515285	122	24	.05	1.98	.5	1.97	.03	.11	.17	8	4	101	2	6	2	1	
515286	80	20	.04	1.65	.39	1.43	.01	.14	.18	6	3	54	1	6	3	1	
515287	90	37	.02	1.17	.36	1.08	.03	.1	.13	6	4	33	2	3	2	3	
515288	139	44	.04	1.96	.47	1.86	.03	.11	.17	8	3	77	2	4	2	1	
515289	69	23	.05	1.35	.63	1.37	.04	.08	.16	4	3	73	3	4	2	1	
515188	189	26	.02	.99	.6	1.04	.05	.09	.18	4	4	8	1	5	2	1	
515189	169	19	.01	.86	.42	.77	.04	.12	.15	4	2	4	1	5	2	1	
515190	216	34	.05	1.27	.76	1.34	.05	.1	.16	4	3	44	1	6	2	1	
515191	233	28	.02	1.26	.74	1.24	.04	.09	.18	4	2	54	1	7	2	2	
515192	162	32	.04	1.43	.67	1.53	.04	.1	.15	7	5	50	3	6	2	3	
515193	219	19	.02	1.89	.81	2.17	.03	.07	.2	4	2	59	3	7	2	2	
515194	130	35	.03	2.03	.98	2.37	.03	.06	.2	7	7	83	4	7	2	2	
515195	106	56	.03	1.91	1.12	2.19	.03	.15	.2	5	4	130	4	6	2	2	

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	IR?	CE?	NB?	TA?	PH
515196	155	40	.02	2.51	.82	2.9	.02	.09	.19	5	3	76	2	5	2	1	
515197	110	23	.01	.89	.43	.77	.05	.14	.16	9	3	6	1	6	2	1	
515198	114	21	.02	1.03	.49	.84	.04	.12	.14	8	2	9	1	6	2	1	
515199	142	20	.02	1.41	.61	1.45	.04	.09	.19	9	2	14	1	6	2	2	
515200	143	21	.05	1.52	.41	1.52	.05	.07	.19	9	3	13	2	7	2	3	
515201	129	13	.02	1.36	.4	1.43	.04	.06	.19	9	3	10	1	6	2	2	
515202	104	32	.02	1.81	.54	1.82	.04	.07	.18	9	6	16	2	6	2	2	
515203	114	49	.02	1.93	.79	2.07	.03	.05	.19	7	5	58	3	6	2	1	
515204	136	31	.01	2.1	.59	2.26	.04	.06	.19	9	6	36	2	7	2	3	
515206	136	31	.01	2.47	.64	2.7	.02	.12	.21	7	5	77	1	8	2	2	
515207	122	24	.01	2.23	.56	2.36	.01	.13	.22	8	6	79	2	8	2	1	
515208	201	21	.05	1.26	.42	1.35	.04	.1	.15	5	3	30	1	4	2	1	
515209	191	15	.02	1.31	.48	1.54	.04	.09	.16	5	3	29	1	5	2	2	
515210	201	21	.02	2.01	.55	2.37	.03	.11	.19	7	5	56	1	6	2	3	
515211	162	22	.02	.97	.47	1.03	.04	.12	.16	7	2	23	1	4	2	1	
515212	89	40	.01	.84	.39	.7	.03	.19	.16	8	2	15	1	4	2	1	
515213	156	28	.01	1.08	.55	1.08	.04	.11	.17	5	2	20	1	5	2	1	
515214	179	28	.02	1.21	.6	1.38	.03	.07	.19	4	3	51	1	5	2	1	
515215	163	21	.02	1.08	.55	1.22	.04	.07	.2	5	4	43	1	4	2	1	
515216	204	23	.02	1.3	.48	1.53	.03	.07	.16	7	5	70	1	4	2	1	
515217	200	49	.02	1.59	.45	1.69	.04	.19	.15	5	2	36	2	4	2	2	
515218	151	60	.02	.97	.24	.84	.04	.3	.17	7	4	32	1	4	2	1	
515219	141	17	.02	.86	.27	.85	.05	.08	.15	7	3	7	1	5	2	1	
515220	215	11	.02	1.62	.48	2.28	.02	.05	.14	3	2	123	1	4	2	1	
515221	180	14	.03	1.72	.49	2.53	.03	.06	.18	4	3	83	2	5	2	1	
515222	294	19	.01	2.46	.56	3.73	.02	.14	.2	5	4	135	1	6	2	1	
515223	65	36	.01	.76	.2	.46	.02	.14	.11	6	3	20	1	4	2	2	
515224	231	21	.02	1.2	.28	1.47	.02	.13	.14	7	2	103	1	5	2	1	
515225	44	65	.03	1.26	.66	1.18	.03	.07	.18	12	4	5	6	7	2	1	
515226	52	72	.03	1.44	.81	1.32	.04	.06	.19	14	7	6	6	8	2	1	
515227	109	27	.02	1.21	.63	1.4	.03	.07	.22	9	2	49	3	7	2	1	
515228	170	16	.02	1.14	.56	1.47	.03	.07	.15	5	2	65	1	6	2	1	
515229	178	56	.03	1.12	.67	1.21	.03	.08	.16	8	3	57	2	5	2	1	
515230	190	26	.02	1.13	.6	1.35	.03	.08	.14	5	4	64	1	5	3	1	
515231	193	24	.02	1.21	.65	1.43	.03	.09	.15	6	2	56	1	6	3	1	
515232	154	30	.03	1.1	.58	1.3	.03	.08	.14	6	4	36	2	5	2	1	
515233	203	28	.02	1.34	.75	1.58	.04	.09	.16	9	5	35	2	5	2	1	
515234	102	35	.04	2	1.42	1.78	.06	.43	.18	11	3	46	5	5	2	1	
515235	121	42	.04	2.32	1.9	1.56	.1	.55	.15	10	10	45	2	4	2	1	
515236	79	83	.03	1.71	3.4	1.12	.05	.17	.25	13	4	15	4	6	2	1	

SAMPLE #	V	SR	SI	AL	CA	MS	NA	K	P	LA	B	CR	ZR?	CE?	NB?	TA?	PH
515237	114	53	.02	1.84	2.67	1.55	.06	.09	.18	10	6	55	4	5	3	1	



## PHIL 1 CLAIMS - SOIL SAMPLES 1985

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515060	55	.5	118	91	66	6	5	21	6.27	.12	5	383	17	2	1	1	85	1	1	2
515061	75	.6	68	56	42	15	4	14	4.12	.12	5	268	11	2	1	1	60	1	1	2
515062	110	.3	83	70	64	15	4	19	5.52	.11	5	334	14	2	1	1	66	2	1	2
515063	90	.5	62	75	49	7	4	17	4.82	.12	5	480	17	3	1	1	123	1	1	2
515064	115	.6	115	113	69	9	4	28	6.14	.11	5	482	17	2	1	1	67	1	1	2
515065	40	.2	78	81	41	5	4	19	5.21	.13	5	420	14	2	1	1	58	2	1	2
515066	90	.3	253	71	81	6	8	28	6.47	.09	5	404	28	2	1	1	90	1	1	2
515067	30	1.7	70	58	64	9	5	18	6.53	.14	5	311	12	2	1	1	78	1	1	4
515068	40	.3	121	62	56	8	5	27	6.45	.11	5	305	15	2	1	1	54	1	1	3
515069	85	.2	36	74	30	7	4	13	4.88	.08	5	258	7	2	1	1	45	2	1	2
515070	150	.3	113	76	57	10	5	25	5.3	.1	5	389	14	2	1	1	51	2	1	3
515071	90	.1	83	113	75	6	6	21	6.4	.09	5	396	13	2	1	1	64	2	1	2
515072	70	.1	46	63	57	10	6	15	5.21	.1	5	220	9	2	1	1	61	1	1	2
515073	40	.6	67	88	61	16	7	18	5.73	.1	5	300	12	3	1	1	56	2	1	2
515074	32	.1	26	66	32	6	6	11	3.92	.11	5	183	6	2	1	1	65	2	1	2
515075	11	.2	25	61	18	11	3	18	3.44	.12	5	230	6	2	1	1	59	1	1	2
515076	15	.4	36	91	30	10	5	12	5.19	.09	5	322	9	2	1	1	62	1	1	2
515077	20	.1	69	221	102	7	7	27	6.39	.07	6	362	13	3	1	1	65	1	1	2
515078	15	.1	32	77	39	13	3	14	4.84	.1	5	253	9	2	1	1	66	1	1	2
515079	22	.2	26	52	30	11	3	18	3.78	.11	5	193	6	2	1	1	69	1	1	2
515080	17	.1	43	77	57	16	4	13	6.14	.09	5	568	10	2	1	1	53	1	1	2
515081	28	.1	31	61	29	9	3	15	4.49	.09	5	260	7	2	1	1	58	1	1	2
515082	36	.3	58	95	50	11	4	21	5.52	.07	5	343	12	2	1	1	61	2	1	2
515083	18	.8	74	93	33	6	5	17	6.95	.1	5	346	15	4	1	1	46	1	1	2
515084	16	.2	56	84	34	4	5	22	5.54	.11	5	336	12	2	1	1	70	2	1	2
515085	13	.2	34	110	25	15	4	13	6.34	.14	5	438	12	2	1	1	54	2	1	2
515086	22	.6	35	87	43	17	3	12	4.62	.09	5	350	9	2	1	1	59	2	1	2
515087	26	.3	31	61	22	9	3	10	3.29	.1	5	214	7	2	1	1	52	2	1	2
515088	60	.4	91	111	64	13	4	25	5.77	.08	5	516	15	2	1	1	89	2	1	3
515089	18	.4	33	104	53	12	3	14	5.58	.1	5	379	10	2	1	1	63	1	1	2
515090	15	.4	23	72	21	9	2	10	3.3	.11	5	326	6	2	1	1	90	1	1	2
515091	18	.4	54	158	44	16	3	19	5.19	.1	5	474	15	2	1	1	73	2	1	2
515092	14	1	51	70	27	15	6	15	3.44	.09	5	1341	16	2	1	1	102	1	1	2
515093	17	.5	36	72	28	7	3	12	3.22	.1	5	621	9	2	1	1	134	1	1	2
515094	30	.5	70	71	29	14	5	16	3.42	.08	5	860	12	2	1	1	154	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SR	SN	W	BA	TH	CD	BI
515095	55	.7	140	88	54	16	8	29	4.49	.05	5	817	22	3	1	1	85	1	1	2
515096	45	.8	120	105	42	11	8	27	3.77	.05	5	1276	19	2	1	1	96	1	1	2
515097	13	.9	112	81	27	11	5	27	3.94	.07	5	314	13	2	1	1	84	1	1	2
515098	6	.5	183	172	34	11	8	28	4	.07	5	1448	25	2	1	1	104	1	1	2
515099	19	.5	37	101	19	11	3	17	4.51	.1	5	248	9	2	1	1	101	1	1	2
515100	20	.6	41	94	44	14	3	18	5.88	.09	5	367	11	2	1	1	61	2	1	2
515101	14	.1	36	84	26	8	2	15	5.07	.1	5	423	10	2	1	1	63	2	1	3
515102	36	.1	72	94	50	17	3	27	6.03	.08	5	537	15	2	1	1	81	1	1	2
515103	70	.6	114	75	65	13	4	31	5.55	.09	5	463	17	2	1	1	88	1	1	2
515104	34	.2	37	109	60	16	3	19	6.15	.1	5	322	12	2	1	1	58	2	1	5
515105	18	.9	135	132	84	18	4	25	7.9	.11	5	563	20	2	1	1	67	1	1	2
515106	745	.9	31	82	55	53	2	46	3.86	.17	5	593	10	2	1	1	67	1	1	3
515107	65	.5	62	75	38	14	2	22	5.27	.11	5	386	11	2	1	1	67	1	1	2
515108	8	.2	29	73	23	9	2	15	5.47	.1	5	331	8	2	1	1	59	1	1	2
515109	17	.2	16	53	18	10	2	13	3.75	.13	5	304	7	2	1	1	47	1	1	2
515110	5	.2	42	79	22	10	2	19	4.55	.1	5	353	9	2	1	1	52	1	1	2
515111	7	.6	41	73	26	20	3	20	4.74	.08	5	332	10	2	1	1	54	1	1	2
515112	3	.5	46	112	32	12	3	26	5.42	.11	5	428	13	2	1	1	68	1	1	2
515113	11	.4	64	112	35	7	3	28	5.93	.11	5	489	15	2	1	1	66	1	1	2
513590																				
515464	31	.1	359	50	16	10	2	59	4.01	.11	5	476	12	2	1	1	58	2	1	2
515465	49	.2	496	56	19	10	1	42	3.92	.12	5	614	13	2	1	1	59	4	1	2
515466	90	.1	1088	65	24	13	6	55	5.33	.12	5	1048	22	2	1	1	69	2	1	3
515467	130	1.7	2493	152	48	103	24	54	11.3	.01	5	3492	48	2	1	1	45	4	2	2
515468	245	1.5	2377	93	145	30	21	53	11.64	.03	5	2348	54	2	1	1	57	4	1	3
515469	110	.3	136	66	24	3	3	26	3.82	.11	5	603	12	2	1	1	53	1	1	2
515470	115	.1	225	55	48	14	4	29	4.56	.13	5	707	20	2	1	1	84	1	1	2
515471	60	.1	350	106	48	16	6	42	6.17	.13	5	1041	23	2	1	1	100	4	1	2
515472	43	.8	2795	125	2	24	35	19	24.99	.09	5	395	25	2	1	1	26	5	1	2
515473	15	.8	74	57	7	4	2	21	3.77	.12	5	258	7	2	1	1	56	3	1	2
515474	175	.1	203	64	35	8	5	41	5.56	.13	5	594	18	2	1	1	94	4	1	2
515475	295	.6	2578	135	22	18	64	49	22.11	.1	5	728	44	2	1	1	249	4	1	2
515476	150	.4	2789	158	6	16	120	37	22.62	.06	5	598	37	2	1	1	141	3	1	2
515477	110	.6	1288	64	14	8	4	36	4.72	.08	5	410	11	2	1	1	163	2	1	2
515478	160	.1	819	64	20	6	4	41	4.69	.11	5	361	10	2	1	1	142	1	1	2
515479	390	.7	869	53	33	15	5	31	6.39	.1	5	587	16	2	1	1	433	5	1	2
515480	1320	2.1	1776	60	94	17	11	34	11.09	.07	5	661	19	2	1	1	267	5	1	3
515481	20	.5	72	47	10	6	1	32	4.69	.11	5	286	12	2	1	1	60	4	1	2
515482	18	.1	133	77	5	8	1	28	4.27	.16	5	871	15	2	1	1	90	3	1	2
515483	17	.4	145	47	8	6	1	36	3.28	.13	5	495	11	2	1	1	121	4	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SE	SN	W	BA	TH	CD	BI
515484	13	.3	190	47	23	7	1	33	4.29	.14	5	614	14	2	1	1	134	4	1	2
515485	17	.1	63	47	7	2	1	28	3.85	.13	5	563	10	2	1	1	94	1	1	2
515486	10	.1	51	36	6	3	1	27	3.09	.11	5	408	8	2	1	1	87	4	1	2
515487	5	.1	53	38	4	3	1	25	3.06	.11	5	505	8	2	1	1	93	4	1	2
515488	40	.1	43	40	7	4	1	27	4.4	.11	5	460	9	2	1	1	60	3	1	2
515489	10	.4	63	58	11	10	1	32	3.81	.1	5	253	10	2	1	1	63	2	1	2
515490	32	.4	99	43	12	7	1	33	4.32	.12	5	446	11	2	1	1	76	3	1	2

## PHIL 1 CLAIMS - SOIL SAMPLES 1985

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	ZR?	CE?	NB?	TA?	PH
515060	118	43	.01	2.29	.35	.82	.01	.04	.16	2	3	59	1	13	2	1	
515061	108	40	.01	1.32	.34	.44	.01	.04	.14	2	2	35	1	14	2	1	
515062	116	46	.01	1.65	.39	.75	.01	.05	.18	2	2	43	1	12	2	1	
515063	110	60	.01	1.39	.48	.6	.01	.05	.14	4	2	38	1	13	2	1.1	
515064	118	52	.01	2.26	.47	1.11	.01	.05	.31	2	2	53	1	14	2	1	
515065	117	38	.01	2.04	.31	.69	.01	.04	.17	4	5	48	1	11	2	1	
515066	103	57	.01	2.85	.29	1.02	.01	.04	.22	2	4	51	1	10	2	1	
515067	170	62	.01	1.6	.3	.73	.01	.07	.25	3	2	50	1	8	2	1	
515068	126	36	.01	2.72	.29	.85	.01	.05	.24	2	2	58	1	8	2	1	
515069	93	25	.01	1.8	.23	.47	.01	.04	.21	2	2	37	1	12	2	1	
515070	90	36	.01	2.31	.37	.89	.01	.04	.21	2	4	37	2	9	2	1.4	
515071	113	34	.01	2.41	.28	.74	.01	.04	.27	2	5	44	1	9	2	1	
515072	135	27	.01	1.86	.24	.47	.01	.04	.21	3	2	35	1	12	2	1	
515073	119	35	.01	2.28	.27	.66	.01	.04	.18	2	6	44	1	10	2	1	
515074	120	28	.01	1.4	.24	.25	.01	.04	.14	3	5	27	1	12	2	1.7	
515075	113	38	.01	1.32	.27	.35	.01	.04	.14	4	2	30	1	12	2	2.6	
515076	121	37	.01	1.58	.35	.53	.01	.04	.2	2	2	36	1	9	2	1.6	
515077	114	42	.01	2.06	.21	.77	.01	.05	.2	2	2	48	1	9	2	1	
515078	132	35	.01	1.6	.23	.41	.01	.04	.17	2	2	34	1	9	2	1	
515079	127	39	.01	1.64	.23	.32	.01	.04	.12	3	2	26	1	10	2	1	
515080	143	40	.01	1.72	.26	.65	.01	.04	.43	2	2	44	1	5	2	1	
515081	108	29	.01	1.54	.25	.46	.01	.04	.28	2	5	31	1	11	2	1	
515082	92	32	.01	2.46	.26	.78	.01	.04	.28	2	3	42	1	7	2	1	
515083	118	37	.01	2.4	.25	.61	.01	.04	.32	3	2	55	1	9	2	2.5	
515084	105	32	.01	2.49	.25	.65	.01	.04	.13	4	5	43	2	10	2	1	
515085	149	28	.01	1.83	.27	.46	.01	.04	.22	6	4	37	1	11	2	1	
515086	113	34	.01	1.57	.22	.45	.01	.04	.25	6	3	44	1	11	2	1	
515087	97	31	.01	1.43	.24	.32	.01	.04	.13	6	2	32	1	13	2	1	
515088	114	50	.01	2.28	.43	1.04	.01	.05	.36	5	2	51	1	13	2	1	
515089	121	32	.01	1.67	.29	.5	.01	.04	.31	5	2	42	1	13	2	1	
515090	97	37	.01	1.13	.32	.27	.01	.04	.14	6	2	28	1	14	2	1	
515091	108	35	.01	2.13	.28	.61	.01	.04	.22	3	2	51	1	13	2	1	
515092	92	50	.01	1.36	.43	.42	.01	.05	.11	8	2	34	1	18	2	1	
515093	96	48	.01	1.17	.39	.39	.01	.04	.1	5	2	31	1	12	2	1	
515094	89	63	.01	1.2	.77	.47	.01	.06	.09	5	2	36	1	12	2	1	

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	ZR?	CE?	NB?	TA?	PH
515095	85	72	.01	1.91	1.03	.87	.01	.04	.15	7	2	47	1	17	2	2.7	
515096	72	64	.01	1.72	1.07	.71	.01	.04	.14	9	4	48	1	13	2	2.8	
515097	87	62	.01	1.75	.75	.47	.01	.03	.09	11	2	45	1	17	2	1	
515098	74	51	.01	1.87	.74	.66	.01	.03	.12	10	5	44	1	15	2	1	
515099	136	33	.01	1.39	.35	.47	.01	.03	.19	7	2	44	1	12	2	1	
515100	121	31	.01	1.95	.28	.65	.01	.03	.31	6	4	47	1	11	2	1	
515101	111	29	.01	1.84	.28	.6	.01	.04	.36	5	2	50	1	9	2	1.3	
515102	125	38	.01	2.53	.33	.86	.01	.03	.51	3	2	66	1	8	2	1	
515103	111	52	.01	2.38	.3	.85	.01	.04	.31	3	2	63	1	5	2	1	
515104	127	24	.01	2.27	.18	.64	.01	.03	.26	5	2	56	1	10	2	1.2	
515105	127	35	.01	2.55	.29	.71	.01	.05	.35	5	2	52	1	8	2	1	
515106	101	37	.01	1.98	.61	1.74	.02	.06	.16	3	2	130	2	6	2	1.5	
515107	119	39	.01	1.99	.28	.78	.01	.04	.29	5	2	52	1	8	2	1	
515108	126	34	.01	1.66	.26	.49	.01	.04	.31	6	2	47	1	9	2	1	
515109	109	28	.01	1.32	.25	.53	.01	.05	.18	8	4	52	1	10	2	2.3	
515110	97	33	.01	2.06	.25	.67	.01	.03	.17	7	2	53	1	10	2	2.2	
515111	107	36	.01	1.64	.29	.68	.01	.04	.25	5	2	50	1	8	2	1.4	
515112	121	49	.01	1.93	.4	.93	.01	.04	.13	7	2	62	1	6	2	1	
515113	116	50	.01	2.47	.33	1.1	.01	.04	.31	8	2	72	1	7	2	1.4	
513590																	
515464	100	47	.01	1.54	.63	.73	.01	.02	.12	5	3	57	1	9	2	1	
515465	92	56	.01	1.16	.66	.83	.01	.06	.12	3	3	48	2	7	3	1	
515466	95	68	.03	1.5	.83	1.12	.02	.05	.19	6	4	56	1	8	2	1	
515467	143	41	.03	1.98	.79	1.84	.01	.02	.19	20	2	9	1	12	3	1	
515468	147	43	.03	2.45	.75	2.13	.01	.03	.19	14	2	16	2	10	2	1	
515469	85	45	.01	1.71	.57	.78	.01	.03	.11	3	5	43	1	7	3	1	
515470	96	61	.02	1.57	.71	.96	.01	.03	.17	8	5	43	2	8	3	1	
515471	110	70	.03	1.83	.77	1.23	.01	.07	.19	4	3	57	2	8	4	1	
515472	122	13	.01	1.73	.34	1.65	.01	.01	.21	5	2	32	2	6	6	1	
515473	87	42	.01	1.6	.54	.6	.01	.04	.12	4	3	39	1	7	3	1	
515474	99	55	.02	2.03	.65	1.07	.02	.05	.16	6	6	65	1	9	2	1	
515475	110	43	.01	1.99	.46	1.41	.01	.02	.21	2	2	81	1	8	4	1	
515476	120	33	.01	2.04	.35	1.98	.01	.02	.25	6	2	111	1	5	5	1	
515477	94	54	.01	1.75	.66	.75	.01	.03	.13	6	2	40	1	7	2	1	
515478	95	51	.01	1.81	.54	.82	.01	.04	.11	4	3	42	1	6	3	1	
515479	93	69	.04	1.18	.65	.7	.02	.08	.22	4	3	34	1	7	2	1	
515480	90	106	.04	1.6	.55	.65	.03	.12	.28	11	2	29	1	7	2	1	
515481	139	27	.06	1.99	.35	.6	.01	.05	.2	2	4	54	1	5	2	1	
515482	113	60	.01	1.66	.81	.95	.02	.08	.19	7	5	45	3	7	3	1	
515483	85	41	.02	1.8	.55	.73	.01	.07	.13	7	5	48	2	9	3	1	

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR	ZR?	CE?	NB?	TA?	PH
515484	98	44	.02	1.78	.54	.75	.02	.06	.13	6	4	45	2	8	2	1	
515485	113	41	.04	1.79	.6	.85	.02	.07	.15	4	4	45	2	5	2	1	
515486	92	38	.01	1.14	.52	.6	.01	.05	.13	4	3	41	3	7	2	1	
515487	91	45	.01	1.12	.61	.63	.02	.06	.14	7	3	38	3	5	2	1	
515488	142	41	.01	.86	.67	.52	.02	.04	.16	4	3	54	3	5	2	1	
515489	95	27	.02	1.78	.33	.56	.01	.04	.1	4	3	40	1	5	2	1	
515490	127	33	.02	1.67	.45	.7	.01	.05	.11	3	3	52	1	6	2	1	

## PHIL 1 CLAIMS - SOIL SAMPLES 1985

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SS	SN	W	BA	TH	CD	BI
516001	60	.4	542	50	4	8	2	27	4.95	.14	5	301	13	2	1	1	79	1	1	2
514523	38	.3	22	34	2	4	1	6	1.31	.03	5	72	2	2	1	1	58	1	1	3
514524	5	.3	72	32	7	5	1	12	2	.11	5	161	3	2	1	1	43	2	1	2
514525	3	.1	19	41	7	6	1	12	3.17	.12	5	155	4	2	1	1	57	2	1	2
514526	2	.2	45	64	3	6	2	19	4.04	.09	5	1592	14	2	1	1	82	2	1	2
514527	6	.1	313	106	17	8	6	28	4.57	.06	6	2728	14	2	1	1	91	3	1	2
514528	2	.1	14	24	2	7	1	4	1.29	.14	5	69	1	2	1	1	54	1	1	2
514529	5	.1	20	49	6	7	1	14	4.25	.12	5	160	5	2	1	1	51	3	1	2
514530	32	.1	15	36	11	10	1	8	2.15	.11	5	131	3	2	1	1	46	2	1	2
514531	2	.1	26	51	3	8	1	13	3.38	.13	5	235	5	2	1	1	59	3	1	2
514532	2	.3	18	52	7	4	1	9	2.47	.1	5	839	5	2	1	1	72	1	1	2
514533	3	.1	18	37	3	4	1	9	1.35	.1	5	155	4	2	1	1	75	1	1	2
514534	31	.1	34	35	7	5	1	23	2.97	.1	5	213	7	2	1	1	69	3	1	4
514535	10	.1	12	36	7	4	1	9	3.07	.1	5	106	3	2	1	1	52	1	1	2
514536	4	.1	15	45	8	7	1	9	2.89	.08	5	134	3	2	1	2	38	2	1	2
514537	3	.7	154	33	4	5	1	14	3.09	.1	5	198	4	2	1	1	38	3	1	2
514538	4	.4	82	69	11	10	1	23	4.05	.09	5	775	10	2	1	1	106	4	1	2
514539	3	.1	56	70	9	6	1	24	3.28	.08	5	668	8	2	1	1	139	2	1	2
514540	2	.2	18	35	3	4	1	9	2.71	.1	5	182	3	3	1	1	52	3	1	2
514541	3	.1	24	42	2	8	1	11	3.02	.13	5	186	5	2	1	1	69	3	1	2
514542	2	.1	26	41	2	9	1	6	3.38	.14	5	181	3	2	1	1	35	4	1	2
514543	3	.2	21	53	8	4	1	14	3.1	.08	5	161	4	2	1	1	46	3	1	2
514544	2	.7	48	69	3	11	2	17	3.72	.09	5	1112	7	2	1	1	127	3	1	2
514545	1	.4	17	40	5	7	1	11	2.31	.1	5	251	4	2	1	1	59	3	1	3
514546	4	.1	37	37	7	6	1	18	2.11	.11	5	246	6	2	1	1	93	3	1	3
514547	4	.2	32	48	2	6	1	17	2.13	.09	5	204	6	2	1	1	62	3	1	2
514548	3	.1	35	59	9	7	1	18	4.7	.13	5	503	7	4	1	1	77	3	1	2
514549	2	.2	21	25	4	6	1	10	2.53	.1	5	122	3	2	1	1	56	2	1	3
514550	4	.2	21	36	3	8	1	14	2.55	.14	5	151	4	2	1	1	55	2	1	2
515551	2	.1	45	47	5	2	1	24	3.39	.14	5	307	9	2	1	1	97	2	1	2
516323	1	.1	30	49	2	4	1	19	3.76	.13	5	247	6	3	1	1	55	2	1	2
516324	1	.1	33	46	5	6	1	21	3.98	.13	5	239	7	4	1	1	58	1	1	3
516325	1	.4	36	17	3	4	2	10	2.35	.06	5	146	3	2	1	1	81	1	1	2
516331	3	.3	75	65	5	2	1	18	3.4	.11	5	1415	13	2	1	1	89	2	1	3
516332	1	.2	14	50	2	2	1	9	2.74	.11	5	195	3	3	1	1	55	2	1	3

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MM	CO	SB	SH	W	BA	TH	CD	BI
516333	1	.4	24	66	9	2	1	14	3.32	.12	5	302	5	2	1	1	66	1	1	2
516334	1	.4	20	63	2	2	1	10	2.81	.09	5	193	3	2	1	1	45	3	1	2
516335	2	.3	21	38	2	4	1	11	2.74	.1	5	151	3	2	1	1	46	2	1	2
516336	5	.2	16	63	3	7	1	11	3.31	.1	5	197	3	3	1	1	57	2	1	5
516337	4	.1	34	53	6	9	1	8	4.79	.12	7	137	3	2	1	1	64	4	1	4
516338	2	.3	48	67	2	6	1	17	2.22	.06	5	525	7	4	1	1	163	1	1	2
516339	1	.1	17	72	2	3	1	9	2.82	.12	5	260	4	2	1	1	90	1	1	2
516340	1	.1	19	43	2	3	1	13	3.46	.11	5	312	4	2	1	1	63	2	1	3
516341	6	.3	9	13	2	9	1	1	.57	.1	5	53	1	2	1	1	33	3	1	5
516342	4	.6	19	46	2	13	1	9	2.44	.11	5	139	3	2	1	2	74	6	1	2
516343	3	.7	164	60	13	12	3	23	4.9	.05	5	1363	9	2	1	1	98	6	1	2
516344	2	.6	55	58	6	5	1	19	3.04	.1	5	370	6	2	1	2	109	4	1	3
516345	6	.6	27	46	6	11	1	20	4.3	.12	5	207	6	2	1	1	51	4	1	2
516346	3	.5	18	33	2	9	1	15	2.94	.13	5	154	4	2	1	1	50	4	1	2
516347	1	.5	31	38	2	4	1	16	2.18	.09	5	193	5	2	1	2	76	4	1	2
516348	1	.5	24	42	5	8	1	14	2.22	.11	5	199	4	2	1	2	51	4	1	2
516349	2	1.2	168	84	9	19	1	41	5.23	.08	5	2434	11	2	1	1	181	11	1	2
516301	5	.2	50	42	5	5	1	23	2.75	.1	5	409	7	2	1	1	76	2	1	2
516302	3	.1	24	64	3	9	1	17	3.04	.1	5	185	5	2	1	1	63	4	1	2
516303	2	.1	20	67	8	5	1	19	3.77	.09	5	212	7	2	1	1	79	3	1	2
516304	2	.1	20	49	2	5	1	15	3.75	.09	5	172	5	2	1	1	68	4	1	2
516305	12	.1	31	49	2	7	1	17	3.86	.1	5	203	7	2	1	1	69	3	1	2
516306	3	.1	29	39	7	3	1	18	3.18	.1	5	211	7	2	1	1	74	2	1	3
516307	1	.2	27	65	4	8	1	18	2.55	.15	5	189	5	2	1	1	83	2	1	2
516308	1	.1	43	60	6	4	1	15	4.07	.13	5	305	9	4	1	1	60	3	1	2
516309	1	.1	22	44	5	5	1	11	2.16	.11	5	168	3	2	1	1	61	3	1	3
516310	2	.1	37	74	6	6	1	16	4.93	.16	7	272	8	2	1	1	81	3	1	4
516311	8	.1	23	65	2	6	1	17	8.25	.17	7	269	9	2	1	1	89	4	1	2
516312	1	.1	25	48	7	7	1	15	5.48	.11	7	225	7	2	1	1	67	4	1	2
516313	9	.1	53	39	4	3	1	15	3.51	.09	5	974	11	3	1	1	65	2	1	2
516314	1	.1	17	58	3	5	1	10	4.57	.1	5	217	5	3	1	1	80	3	1	2
516315	1	.3	23	93	8	5	1	15	4.71	.09	8	474	10	2	1	1	104	3	1	3
516316	1	.1	17	32	5	2	1	11	3.15	.08	5	163	4	2	1	1	45	1	1	2
516317	10	.1	27	34	3	2	1	15	3.83	.09	6	323	6	2	1	1	43	2	1	2
516318	4	.1	131	44	5	6	1	22	3.41	.08	5	530	9	2	1	1	74	3	1	3
516319	1	.1	77	67	5	9	1	21	3.45	.11	5	705	10	2	1	1	89	2	1	4
516320	1	.1	26	71	5	8	1	11	7.17	.13	5	237	6	2	1	1	63	3	1	5
516321	2	.1	24	58	4	4	1	14	4.4	.14	6	198	5	2	1	1	75	3	1	3
516322	8	.3	43	36	2	3	1	11	3.61	.13	5	212	4	2	1	1	58	2	1	3
514501	2	.2	11	19	2	2	1	7	1.76	.07	5	98	2	2	1	1	42	3	1	3



SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
514502	1	.7	54	130	2	9	2	9	1.18	.02	5	2725	3	2	1	1	231	1	1	3
514503	7	.1	10	26	2	6	1	7	2.77	.08	6	240	3	2	1	1	49	3	1	3
514504	2	.1	13	31	2	7	1	10	2.92	.08	5	201	4	2	1	1	40	1	1	2
514505	2	.1	14	49	2	3	1	10	2.79	.09	5	167	4	2	1	1	48	2	1	2
514506	1	.1	37	62	8	6	1	24	5.08	.14	5	297	10	2	1	1	61	3	1	2
514507	1	.2	29	63	2	9	1	16	4.01	.11	5	277	7	2	1	1	94	2	1	2
514508	6	.1	13	24	2	2	1	8	2.4	.13	5	118	3	2	1	1	40	1	1	3
514509	1	.3	13	29	5	2	1	5	2.19	.05	5	86	2	2	1	1	51	1	1	2
514510	2	.1	10	27	2	3	1	16	1.61	.17	5	196	3	2	1	1	44	1	1	2
514511	1	.1	12	53	3	4	1	12	3.44	.15	5	165	4	2	1	1	55	3	1	2
514512	2	.1	23	58	12	6	1	16	3.97	.1	5	211	7	2	1	1	54	3	1	2
514513	55	.1	25	67	2	5	1	14	3.84	.09	5	376	6	3	1	1	64	3	1	2
514514	2	.1	14	26	7	5	1	9	3.23	.11	5	110	3	2	1	1	47	3	1	2
514516	1	.1	19	56	10	6	1	15	2.99	.1	5	212	5	2	1	1	61	4	1	2
514517	2	.1	17	49	8	7	1	10	4.26	.08	5	131	4	2	1	1	66	3	1	3
514518	1	.1	20	45	6	2	1	12	5.11	.08	5	390	7	2	1	1	64	3	1	3
514519	3	.1	20	53	5	7	1	15	3.81	.09	5	167	6	2	1	1	49	2	1	2
514520	8	.1	15	29	2	2	1	8	1.26	.15	5	165	2	2	1	1	41	2	1	2
514521	6	.2	7	14	2	2	1	2	.66	.02	5	31	1	2	1	1	45	1	1	3
514522	9	.1	13	19	5	3	2	8	2.28	.14	5	90	2	2	1	1	42	1	1	2
514501	2	.2	11	19	2	2	1	7	1.76	.07	5	99	2	2	1	1	42	3	1	3
514502	1	.7	54	130	2	9	2	9	1.18	.02	5	2725	3	2	1	1	231	1	1	3
514503	7	.1	10	26	2	6	1	7	2.77	.08	6	240	3	2	1	1	49	3	1	3
514504	2	.1	13	31	2	7	1	10	2.92	.08	5	201	4	2	1	1	40	1	1	2
514505	2	.1	14	49	2	3	1	10	2.79	.09	5	167	4	2	1	1	48	2	1	2
514506	1	.1	37	62	8	6	1	24	5.08	.14	5	297	10	2	1	1	61	3	1	2
514507	1	.2	29	63	2	9	1	16	4.01	.11	5	277	7	2	1	1	94	2	1	2
514508	6	.1	13	24	2	2	1	8	2.4	.13	5	118	3	2	1	1	40	1	1	3
514509	1	.3	13	29	5	2	1	5	2.19	.05	5	86	2	2	1	1	51	1	1	2
514510	2	.1	10	27	2	3	1	16	1.61	.17	5	196	3	2	1	1	44	1	1	2
514511	1	.1	12	53	3	4	1	12	3.44	.15	5	165	4	2	1	1	55	3	1	2
514512	2	.1	23	58	12	6	1	16	3.97	.1	5	211	7	2	1	1	54	3	1	2
514513	55	.1	25	67	2	5	1	14	3.84	.09	5	376	6	3	1	1	64	3	1	2
514514	2	.1	14	26	7	5	1	9	3.23	.11	5	110	3	2	1	1	47	3	1	2
514516	1	.1	19	56	10	6	1	15	2.99	.1	5	212	5	2	1	1	61	4	1	2
514517	2	.1	17	49	8	7	1	10	4.26	.08	5	131	4	2	1	1	66	3	1	3
514518	1	.1	20	45	6	2	1	12	5.11	.08	5	390	7	2	1	1	64	3	1	3
514519	3	.1	20	53	5	7	1	15	3.81	.09	5	167	6	2	1	1	49	2	1	2
514520	8	.1	15	29	2	2	1	8	1.26	.15	5	165	2	2	1	1	41	2	1	2
514521	6	.2	7	14	2	2	1	2	.66	.02	5	31	1	2	1	1	45	1	1	3

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SH	W	BA	TH	CD	BI
514522	9	.1	13	19	5	3	2	8	2.28	.14	5	80	2	2	1	1	42	1	1	2
514523	38	.3	22	34	2	4	1	6	1.31	.03	5	72	2	2	1	1	58	1	1	3
514524	5	.3	72	32	7	5	1	12	2	.11	5	161	3	2	1	1	43	2	1	2
514525	3	.1	19	41	7	6	1	12	3.17	.12	5	155	4	2	1	1	57	2	1	2
514526	2	.2	45	64	3	6	2	18	4.04	.09	5	1592	14	2	1	1	82	2	1	2
514527	6	.1	313	106	17	8	6	28	4.57	.06	6	2728	14	2	1	1	81	3	1	2
514528	2	.1	14	24	2	7	1	4	1.29	.14	5	68	1	2	1	1	54	1	1	2
514529	5	.1	20	48	6	7	1	14	4.25	.12	5	160	5	2	1	1	51	3	1	2
514530	32	.1	15	36	11	10	1	8	2.15	.11	5	131	3	2	1	1	46	2	1	2
514531	2	.1	26	51	3	8	1	13	3.38	.13	5	235	5	2	1	1	59	3	1	2
514532	2	.3	18	52	7	4	1	9	2.47	.1	5	839	5	2	1	1	72	1	1	2
514533	3	.1	18	37	3	4	1	9	1.35	.1	5	155	4	2	1	1	75	1	1	2
514534	31	.1	34	35	7	5	1	23	2.97	.1	5	213	7	2	1	1	69	3	1	4
514535	10	.1	12	36	7	4	1	9	3.07	.1	5	106	3	2	1	1	52	1	1	2
514536	4	.1	15	45	8	7	1	9	2.89	.08	5	134	3	2	1	2	38	2	1	2
514537	3	.7	154	33	4	5	1	14	3.09	.1	5	198	4	2	1	1	38	3	1	2
514538	4	.4	82	69	11	10	1	23	4.05	.09	5	775	10	2	1	1	106	4	1	2
514539	3	.1	56	70	9	6	1	24	3.28	.08	5	668	8	2	1	1	139	2	1	2
514540	2	.2	18	35	3	4	1	9	2.71	.1	5	182	3	3	1	1	52	3	1	2
514541	3	.1	24	42	2	8	1	11	3.02	.13	5	186	5	2	1	1	69	3	1	2
514542	2	.1	26	41	2	9	1	6	3.38	.14	5	181	3	2	1	1	35	4	1	2
514543	3	.2	21	53	8	4	1	14	3.1	.08	5	161	4	2	1	1	46	3	1	2
514544	2	.7	48	69	3	11	2	17	3.72	.09	5	1112	7	2	1	1	127	3	1	2
514545	1	.4	17	40	5	7	1	11	2.31	.1	5	251	4	2	1	1	59	3	1	3
514546	4	.1	37	37	7	6	1	18	2.11	.11	5	246	6	2	1	1	93	3	1	3
514547	4	.2	32	48	2	6	1	17	2.13	.09	5	204	6	2	1	1	62	3	1	2
514548	3	.1	35	59	9	7	1	18	4.7	.13	5	503	7	4	1	1	77	3	1	2
514549	2	.2	21	25	4	6	1	10	2.53	.1	5	122	3	2	1	1	56	2	1	3
514550	4	.2	21	36	3	8	1	14	2.55	.14	5	151	4	2	1	1	55	2	1	2
514551	3	.1	23	42	3	8	1	16	3.53	.12	5	182	5	2	1	1	46	2	1	2
515501	3	.1	21	54	22	7	1	11	3.04	.09	5	170	4	2	1	1	56	1	1	2
515502	2	.2	11	55	17	10	1	9	2.36	.1	5	246	3	2	1	1	41	3	1	2
515503	2	.5	23	60	27	9	1	15	3.24	.09	5	215	5	2	1	1	58	2	1	2
515504	3	.2	28	75	28	9	1	19	4.18	.09	5	218	5	5	1	1	47	4	1	4
515505	5	.2	9	66	26	10	1	10	2.51	.09	5	675	4	3	1	1	60	2	1	2
515506	3	.4	79	106	4	10	2	19	4.62	.22	5	483	9	2	1	1	82	2	1	2
515507	3	.3	25	71	9	8	1	15	3.34	.14	5	353	8	3	1	1	75	3	1	2
515508	4	.2	14	30	6	8	1	10	2.46	.1	5	135	3	3	1	1	62	2	1	4
515509	3	.1	22	38	8	4	1	16	2.61	.1	5	238	5	2	1	1	75	3	1	2
515510	4	.3	28	48	6	7	1	10	1.49	.04	5	181	4	2	1	1	93	3	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
515511	5	.5	17	38	5	7	1	13	2.14	.1	5	167	4	2	1	1	68	2	1	2
515512	1	.4	16	34	7	4	1	10	1.54	.08	5	153	3	2	1	1	70	2	1	3
515513	485	.3	31	54	8	7	1	17	1.95	.07	5	374	5	2	1	1	100	1	1	2
515514	2	.2	17	38	5	4	1	11	1.58	.09	5	244	4	3	1	1	68	3	1	2
515515	2	.2	27	41	6	6	1	16	2.21	.07	5	416	6	2	1	1	90	2	1	2
515516	2	.2	11	58	4	5	1	10	2.82	.08	5	239	3	2	1	1	87	3	1	2
515517	3	.3	22	42	8	6	1	10	1.57	.05	5	387	4	3	1	1	77	2	1	2
515518	1	.3	27	43	8	6	1	17	2.02	.07	5	294	6	2	1	1	79	2	1	2
515519	4	.2	52	62	9	8	1	23	2.87	.07	5	298	7	2	1	1	107	2	1	2
515520	3	.1	31	43	10	7	1	21	2.77	.09	5	399	7	2	1	1	84	2	1	2
515521	1	.3	32	49	5	4	1	17	2.2	.05	5	515	5	2	1	1	83	2	1	2
515522	1	.1	14	50	6	7	1	9	2.57	.1	5	271	3	2	1	2	61	2	1	2
515523	2	.1	23	61	10	10	1	14	3	.08	5	501	4	2	1	1	83	1	1	3
515524	2	.4	12	60	22	11	2	8	2.03	.04	5	105	2	3	1	1	57	1	1	2
515525	7	.2	23	78	30	16	2	17	3.35	.04	5	323	4	5	1	1	66	2	1	4
515526	2	.6	42	76	12	12	2	17	3.5	.09	5	1140	9	2	1	1	111	2	1	2
515527	24	.1	29	58	20	12	1	19	4.11	.09	5	260	6	2	1	1	53	3	1	3
515528	2	.3	28	67	7	11	1	16	3.74	.13	5	236	6	3	1	1	72	2	1	3
515529	2	.1	20	43	2	4	1	12	2.2	.18	5	205	4	2	1	1	77	1	1	3
515530	1	.1	16	66	3	8	1	14	2.55	.18	5	250	6	2	1	1	67	2	1	2
515531	2	.1	38	81	7	11	1	18	5.08	.19	5	250	7	2	1	1	83	3	1	2
515532	2	.2	46	73	4	7	1	18	3.94	.23	5	219	7	2	1	1	116	2	1	2
515533	3	.1	30	37	12	2	2	20	2.98	.1	5	734	6	2	1	1	104	2	1	2
515534	4	.1	56	109	5	28	1	19	2.02	.06	5	410	6	3	1	1	170	1	1	2
515535	11	.1	27	97	10	7	1	21	4.13	.09	5	521	8	2	1	1	83	3	1	5
515536	1	.1	17	55	5	12	1	14	4.08	.1	5	225	5	2	1	1	52	3	1	3
515537	2	.1	16	47	6	6	1	14	3.07	.07	5	351	5	2	1	1	69	2	1	2
515538	18	.2	14	37	4	6	1	12	2.7	.1	5	428	4	2	1	1	73	2	1	2
515539	2	.1	46	48	11	7	1	24	3.62	.11	5	311	7	2	1	1	98	2	1	2
515540	9	.1	41	47	4	5	1	23	2.55	.08	5	215	6	2	1	1	70	3	1	3
515541	7	.1	44	49	3	8	1	26	2.59	.09	5	251	8	4	1	1	75	3	1	2
515542	50	.2	24	114	9	9	1	22	4.24	.08	5	405	7	2	1	1	75	3	1	5
515543	2	.2	21	90	3	7	1	18	3.99	.08	5	581	6	2	1	1	59	4	1	3
515544	5	.1	14	28	3	5	2	11	1.67	.12	5	145	3	4	1	1	53	1	1	2
515545	4	.1	9	26	2	5	1	6	.95	.07	5	104	1	2	1	1	46	1	1	2
515546	1	.1	14	31	6	6	1	12	2.48	.12	5	135	3	2	1	1	57	2	1	2
515547	2	.1	26	89	10	6	1	25	3.99	.12	5	249	9	2	1	1	108	3	1	3
515548	2	.3	32	118	10	10	1	18	3.81	.15	5	230	7	2	1	1	100	3	1	3
515549	2	.1	19	50	3	10	1	11	2.17	.19	5	209	4	2	1	1	66	1	1	2
515550	2	.2	37	110	4	5	1	22	3.72	.12	5	350	9	2	1	1	65	2	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SR	SN	W	BA	TH	CD	BI
515551	2	.1	45	47	5	2	1	24	3.39	.14	5	307	9	2	1	1	97	2	1	2
515552	7	.2	21	49	6	7	1	12	3.49	.12	5	271	5	2	1	1	59	2	1	2
515553	4	.1	9	30	2	8	1	7	2.68	.09	5	121	2	2	1	1	45	2	1	2
516301	5	.2	50	42	5	5	1	23	2.75	.1	5	409	7	2	1	1	76	2	1	2
516302	3	.1	24	64	3	9	1	17	3.04	.1	5	185	5	2	1	1	63	4	1	2
516303	2	.1	20	67	8	5	1	19	3.77	.09	5	212	7	2	1	1	79	3	1	2
516304	2	.1	20	49	2	5	1	15	3.75	.09	5	172	5	2	1	1	68	4	1	2
516305	12	.1	31	49	2	7	1	17	3.86	.1	5	293	7	2	1	1	69	3	1	2
516306	3	.1	29	39	7	3	1	18	3.19	.1	5	211	7	2	1	1	74	2	1	3
516307	1	.2	27	65	4	8	1	18	2.55	.15	5	189	5	2	1	1	83	2	1	2
516308	1	.1	43	60	6	4	1	15	4.07	.13	5	305	9	4	1	1	60	3	1	2
516309	1	.1	22	44	5	5	1	11	2.16	.11	5	168	3	2	1	1	61	3	1	3
516310	2	.1	37	74	6	6	1	16	4.93	.16	7	272	8	2	1	1	81	3	1	4
516311	8	.1	23	65	2	6	1	17	8.25	.17	7	269	9	2	1	1	89	4	1	2
516312	1	.1	25	48	7	7	1	15	5.48	.11	7	225	7	2	1	1	67	4	1	2
516313	9	.1	53	39	4	3	1	15	3.51	.09	5	974	11	3	1	1	65	2	1	2
516314	1	.1	17	58	3	5	1	10	4.57	.1	5	217	5	3	1	1	80	3	1	2
516315	1	.3	23	93	8	5	1	15	4.71	.09	8	474	10	2	1	1	104	3	1	3
516316	1	.1	17	32	5	2	1	11	3.15	.08	5	163	4	2	1	1	45	1	1	2
516317	10	.1	27	34	3	2	1	15	3.83	.09	6	323	6	2	1	1	43	2	1	2
516318	4	.1	131	44	5	6	1	22	3.41	.08	5	530	9	2	1	1	74	3	1	3
516319	1	.1	77	67	5	9	1	21	3.45	.11	5	705	10	2	1	1	89	2	1	4
516320	1	.1	26	71	5	8	1	11	7.17	.13	5	237	6	2	1	1	63	3	1	5
516321	2	.1	24	58	4	4	1	14	4.4	.14	6	198	5	2	1	1	75	3	1	3
516322	8	.3	43	36	2	3	1	11	3.61	.13	5	212	4	2	1	1	58	2	1	3
516323	1	.1	30	49	2	4	1	19	3.76	.13	5	247	6	3	1	1	55	2	1	2
516324	1	.1	33	46	5	6	1	21	3.98	.13	5	239	7	4	1	1	58	1	1	3
516325	1	.4	36	17	3	4	2	10	2.35	.06	5	146	3	2	1	1	81	1	1	2
516331	3	.3	75	65	5	2	1	18	3.4	.11	5	1415	13	2	1	1	88	2	1	3
516332	1	.2	14	50	2	2	1	9	2.74	.11	5	195	3	3	1	1	55	2	1	3
516333	1	.4	24	66	9	2	1	14	3.32	.12	5	302	5	2	1	1	66	1	1	2
516334	1	.4	20	63	2	2	1	10	2.81	.09	5	193	3	2	1	1	45	3	1	2
516335	2	.3	21	38	2	4	1	11	2.74	.1	5	151	3	2	1	1	46	2	1	2
516336	5	.2	16	63	3	7	1	11	3.31	.1	5	197	3	3	1	1	57	2	1	5
516337	4	.1	34	53	6	9	1	8	4.79	.12	7	137	3	2	1	1	64	4	1	4
516338	2	.3	48	67	2	6	1	17	2.22	.06	5	525	7	4	1	1	163	1	1	2
516339	1	.1	17	72	2	3	1	9	2.82	.12	5	260	4	2	1	1	90	1	1	2
516340	1	.1	19	43	2	3	1	13	3.46	.11	5	312	4	2	1	1	63	2	1	3
516341	6	.3	9	13	2	9	1	1	.57	.1	5	53	1	2	1	1	33	3	1	5
516342	4	.6	19	46	2	13	1	9	2.44	.11	5	139	3	2	1	2	74	6	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
516343	3	.7	164	60	13	12	3	23	4.9	.05	5	1363	9	2	1	1	98	6	1	2
516344	2	.6	55	58	6	5	1	19	3.04	.1	5	370	6	2	1	2	109	4	1	3
516345	6	.6	27	46	6	11	1	20	4.3	.12	5	207	6	2	1	1	51	4	1	2
516346	3	.5	18	33	2	9	1	15	2.94	.13	5	154	4	2	1	1	50	4	1	2
516347	1	.5	31	38	2	4	1	16	2.18	.09	5	193	5	2	1	2	76	4	1	2
516348	1	.5	24	42	5	8	1	14	2.22	.11	5	199	4	2	1	2	51	4	1	2
516349	2	1.2	169	84	9	19	1	41	5.23	.08	5	2434	11	2	1	1	181	11	1	2
516401	11	.5	19	40	9	7	1	19	3.47	.1	5	190	5	2	1	2	55	2	1	2
516402	3	.8	80	70	30	14	3	17	3.31	.05	5	297	7	2	1	1	68	5	1	2
516403	1	.5	9	37	3	7	1	7	1.47	.05	5	218	1	3	1	2	42	4	1	2
516404	2	.4	17	71	20	6	2	14	3.12	.07	5	200	4	3	1	1	44	4	1	4
516405	1	.4	17	117	5	14	1	15	3.41	.09	5	279	5	2	1	1	70	4	1	5
516406	4	.6	16	52	4	9	1	14	3.51	.12	5	184	4	2	1	1	55	4	1	2
516407	1	.4	20	35	5	9	1	14	2.3	.1	5	241	5	2	1	2	80	3	1	3
516408	1	.6	41	47	5	9	1	16	2.45	.06	5	314	5	2	1	2	109	3	1	2
516409	6	.7	62	51	2	8	1	22	2.01	.05	6	398	5	2	1	1	148	4	1	2
516410	1	.3	36	57	2	3	1	9	.22	.01	17	264	1	2	1	1	98	4	1	2
516411	3	.4	21	44	3	6	1	10	1.29	.05	5	312	3	3	1	1	81	3	1	2
516412	2	.3	36	53	2	5	1	10	1.49	.02	6	1649	6	2	1	1	87	2	1	2
516413	1	.2	29	47	2	3	1	6	.58	.01	9	110	1	2	1	2	60	2	1	2
516414	2	.6	38	58	2	5	2	14	1.77	.02	5	1257	6	2	1	1	115	3	1	2
516415	4	.5	23	39	2	6	1	12	1.89	.05	5	475	7	2	1	1	91	2	1	2
516416	3	.4	21	40	6	9	1	13	2.48	.09	5	183	4	2	1	1	67	4	1	2
516417	9	.3	16	31	5	4	1	14	2.34	.12	5	202	4	2	1	1	64	3	1	3
516418	2	.5	13	29	3	4	1	10	1.82	.08	5	182	3	2	1	1	58	3	1	2
516419	5	.5	31	46	27	9	2	9	4.19	.04	5	161	4	2	1	1	66	3	1	2
516420	1	.7	35	130	43	10	1	30	4.07	.07	5	638	8	2	1	1	65	5	1	2
516421	4	.6	22	83	26	9	2	19	3.51	.08	5	236	4	2	1	1	45	3	1	4
516422	6	.5	21	85	16	10	1	20	3.06	.08	5	228	7	2	1	1	67	4	1	2
516423	5	.5	32	77	29	11	2	21	4.07	.06	5	190	5	2	1	1	56	2	1	2
516424	6	.3	57	107	33	13	4	30	4.52	.09	5	466	11	2	1	1	125	5	1	2
516425	2	.4	28	75	20	8	2	19	3.76	.06	5	249	6	2	1	1	68	3	1	4
516426	5	.4	22	42	7	9	1	14	2.62	.09	5	146	4	2	1	2	54	4	1	3
516427	3	.4	16	24	2	8	1	10	2.56	.1	5	128	3	2	1	1	43	3	1	3
516428	10	.2	13	23	2	5	2	5	1.63	.08	5	84	2	3	1	1	61	2	1	2
516429	8	.3	6	17	3	3	1	3	1.07	.12	5	67	1	2	2	1	70	1	1	2
516430	2	.2	14	23	4	3	1	8	2.35	.14	5	138	2	4	1	1	42	2	1	2
516431	100	.1	9	27	5	7	1	6	2.36	.11	5	103	2	3	1	1	48	2	1	2
516432	6	.2	25	66	6	2	1	13	4.06	.08	5	335	5	2	1	1	68	1	1	3
516433	4	.2	16	67	5	6	1	8	2.97	.08	5	196	3	2	1	1	82	2	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
516434	5	.2	12	34	7	2	1	13	1.85	.09	5	184	3	3	1	1	66	1	1	3
516435	36	.2	7	21	4	5	1	4	1.62	.11	5	85	1	2	1	1	58	1	1	5
516436	9	.4	12	44	7	2	1	9	3.94	.09	5	273	3	2	1	1	41	1	1	4
516437	295	.2	26	70	5	7	1	14	3.53	.17	5	262	6	2	1	1	91	2	1	2
516438	4	.1	11	49	7	2	1	7	2.73	.07	5	422	3	2	1	1	52	1	1	2
516439	6	.1	29	50	9	5	1	16	2.88	.09	5	191	5	2	1	1	66	3	1	2
516526																				
516527																				
516528																				
516529																				
516530																				
823025	535	.1	28	43	9	11	1	17	3.86	.06	2	221	9	2	2	2	97	2	1	2
823026	5	.5	87	36	3	6	2	15	2.55	.03	2	1185	8	2	2	2	73	2	1	2
823027	5	.1	22	39	8	5	1	12	2.25	.06	2	219	6	2	2	2	52	2	1	2
823028	5	.3	15	37	3	6	1	12	2.21	.05	2	305	7	2	2	2	65	2	1	2
823029	5	.5	76	37	9	7	1	16	2.97	.06	2	719	9	2	2	2	108	2	1	2
823030	5	.2	49	23	4	3	1	12	1.69	.04	2	340	5	2	2	2	86	2	1	2
823031	5	.1	21	55	2	5	1	14	2.34	.08	2	209	5	2	2	2	56	2	1	2
823032	5	.2	20	62	2	2	1	13	2.45	.09	2	218	5	2	2	2	53	2	1	2
823033	5	.4	68	58	6	13	1	18	3.21	.07	2	1279	13	2	2	2	125	2	2	2
823034	5	.1	52	39	9	10	1	22	2.95	.06	2	193	8	2	2	2	119	3	1	2
823035	270	.1	18	37	10	5	1	9	2.04	.06	3	142	5	2	2	2	37	2	1	2
823530	5	.1	39	38	2	4	1	16	2.2	.07	3	375	7	2	2	2	71	2	1	2
823531	5	.1	26	30	2	6	2	17	2.34	.1	2	170	7	2	2	2	75	3	1	2
823532	5	.1	20	30	2	2	1	17	3.05	.09	2	160	8	2	2	2	70	3	1	2
823533	5	.1	22	44	2	2	1	9	3.14	.09	2	249	7	2	2	2	61	3	1	2
823534	5	.1	45	65	2	3	1	9	3.52	.1	2	239	10	2	2	2	62	3	1	2
823535	5	.1	79	48	2	3	2	15	3.66	.08	2	177	9	2	2	2	72	4	1	2
823536	5	.1	35	42	2	3	2	18	2.56	.11	2	242	8	2	2	2	85	3	1	2
823537	5	.1	59	53	2	3	2	25	6.72	.08	2	284	13	2	2	2	93	5	2	2
823538	5	.1	33	35	2	5	2	17	2.81	.09	2	171	7	2	2	2	108	3	1	2
823539	5	.1	49	40	2	2	1	21	4.3	.1	2	301	11	2	2	2	107	3	1	2
823540	5	.1	19	35	2	1	1	16	2.84	.08	2	157	8	2	2	2	62	3	1	2
822538	5	.1	18	28	2	7	1	11	1.69	.06	2	142	4	2	2	2	63	2	1	2
822539	5	.1	26	23	2	4	1	13	2.17	.08	2	293	6	2	2	2	67	2	1	2
822540	5	.1	30	23	2	5	1	12	1.44	.06	2	162	5	2	2	2	57	2	1	3
822541	5	.1	35	33	2	5	1	11	2.96	.04	2	495	7	2	2	2	60	2	1	2
822542	5	.1	26	47	2	6	1	9	2.93	.08	2	195	6	2	2	2	53	2	1	2
822543	5	.1	26	39	5	2	1	17	3.29	.07	2	154	6	2	2	2	54	2	1	2
822544	5	.1	33	45	4	8	1	15	2.43	.05	2	345	7	2	2	2	55	2	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PS	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
822545	5	.1	28	34	2	5	1	19	1.94	.04	2	314	6	2	2	2	81	2	1	3
822546	5	.1	18	41	4	6	1	11	3.94	.06	2	304	6	2	2	2	117	2	1	2
822547	5	.1	14	43	3	10	2	8	2.95	.06	2	225	5	2	2	2	63	2	1	2
822548	5	.1	16	18	5	2	2	12	2.38	.08	2	116	4	2	2	2	65	2	1	2
822515	295	1.5	276	322	13	35	5	24	3.71	.05	2	257	10	3	2	2	48	2	2	2
822516	5	.1	36	71	6	18	2	17	3.66	.07	2	199	8	2	2	2	90	2	1	2
822517	5	.1	49	43	8	1	1	20	3.4	.05	2	192	8	2	2	2	108	2	1	2
822518	5	.3	52	61	8	12	3	17	4.06	.06	2	332	10	2	2	2	72	2	1	2
822519	5	.3	35	47	9	8	2	15	3.71	.07	2	200	8	2	2	2	68	2	1	2
822520	5	.5	32	70	9	10	1	20	4.54	.05	2	841	12	2	2	2	96	2	1	2
822521	495	.2	37	67	9	13	2	18	4.04	.06	2	228	9	2	2	2	83	2	2	2
822522	5	.3	33	53	16	12	2	17	4.18	.06	2	219	8	2	2	2	55	2	1	2
822523	55	.4	984	212	18	4	9	46	5.72	.16	2	257	9	2	2	2	37	2	1	2
822524	15	.2	116	39	9	10	4	24	3.33	.07	2	181	8	2	2	2	59	2	1	2
822525	5	.3	38	87	7	4	4	14	4.23	.07	2	205	6	2	2	2	64	2	2	2
822526	5	.5	49	70	11	9	3	25	3.76	.07	2	335	10	2	2	2	62	2	1	2
822527	5	.1	42	67	8	7	3	19	3.39	.07	2	242	8	2	2	2	74	2	1	2
822528	5	.1	41	65	6	15	3	14	3.68	.07	2	212	8	2	2	2	92	2	2	2
822529	5	.2	40	53	10	8	4	19	3.54	.08	2	213	9	2	2	2	80	2	1	2
822530	5	.3	140	43	10	11	7	22	3.62	.11	2	164	7	2	2	2	79	2	1	2
822531	2800	1.9	8200	59	79	18	16	22	15.07	.01	4	3461	82	76	2	2	116	2	1	2
822532	125	.5	146	30	20	10	3	33	4.54	.21	2	374	8	2	2	2	47	2	1	7
822533	5	.1	59	41	7	10	3	14	3.25	.07	2	332	8	2	2	2	71	2	1	2
822534	5	.1	27	32	4	11	1	8	2.3	.07	2	103	4	2	2	2	87	2	1	2
822535	5	.2	27	37	3	11	1	11	3.76	.13	2	216	6	2	2	2	74	2	1	2
822536	5	.1	28	59	5	5	1	15	4.25	.05	2	179	6	2	2	2	64	2	1	2
822537	5	.1	25	40	7	8	1	15	4.72	.06	2	173	5	2	2	2	58	2	2	2
823001	5	.2	121	37	5	9	22	25	6.23	.27	2	146	6	2	2	2	58	2	2	8
823002	45	.1	218	24	12	1	16	27	5.66	.16	2	312	10	2	2	2	34	2	1	11
823003	5	.2	67	121	18	11	16	31	5.89	.17	2	293	8	2	2	2	48	2	2	6
823004	5	.2	161	72	13	15	13	21	3.33	.09	2	111	9	2	2	2	35	2	1	2
823005	5	.2	467	140	11	10	2	58	2.39	.05	2	438	24	2	2	2	35	2	1	2
823006	5	.5	231	160	15	8	1	30	2.31	.05	2	163	8	2	2	2	27	2	2	2
823007	120	.1	48	68	14	12	1	12	3.37	.04	2	138	5	2	2	2	35	2	1	2
823008	125	.2	81	94	12	11	2	26	3.9	.06	2	205	9	2	2	2	79	3	2	2
823009	5	.1	51	60	16	9	2	14	3.99	.05	2	147	6	2	2	2	45	2	1	2
823010	5	.2	76	45	15	12	1	28	3.44	.06	2	388	11	2	2	2	53	2	1	2
823011	5	.3	115	48	9	11	1	16	3.29	.05	2	178	7	2	2	2	50	2	1	2
823012	5	.3	36	50	11	9	1	12	3.96	.05	2	180	7	2	2	2	57	2	1	4
823013	5	.1	23	62	13	9	1	11	2.76	.04	2	152	6	2	2	2	41	2	1	3

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
823014	5	.2	24	76	13	11	1	12	3.43	.04	2	220	7	2	2	2	60	2	1	2
823015	5	.1	25	64	9	7	1	11	2.76	.05	2	237	6	2	2	2	57	2	1	2
823016	5	.1	33	71	15	6	1	17	3.66	.05	2	377	10	2	2	2	62	2	2	2
823017	10	.2	37	73	11	17	1	13	3.32	.05	2	178	6	2	2	2	65	2	2	2
823018	5	.1	39	72	16	9	1	15	3.15	.05	2	279	9	2	2	2	86	2	1	3
823019	5	.1	18	131	13	10	1	11	3.03	.04	2	238	9	2	2	2	74	2	2	2
823020	5	.1	103	195	21	11	3	26	3.16	.07	2	170	7	2	2	2	90	2	1	2
823021	5	.1	31	50	5	6	1	17	2.84	.05	2	193	9	2	2	2	68	2	1	4
823022	5	.1	30	49	13	7	1	16	3.16	.04	2	268	9	2	2	2	88	2	1	2
823023	5	.1	32	74	12	10	1	16	3.84	.06	2	245	10	2	2	2	75	2	1	2
823024	5	.3	33	72	13	5	1	16	3.14	.06	5	270	10	2	2	2	73	2	1	3
823510	5	.3	18	43	6	10	1	9	2.2	.04	2	154	5	2	2	2	49	2	1	2
823511	5	.1	19	41	9	10	1	10	2.51	.05	2	157	6	2	2	2	53	2	1	2
823512	5	.2	33	61	2	7	1	20	3.77	.1	2	261	9	2	2	2	69	2	1	2
823513	25	.1	59	80	23	15	2	31	4.26	.08	2	305	15	2	2	2	66	2	1	2
823514	5	.1	150	61	13	1	3	63	2.66	.07	2	440	28	2	2	2	48	2	1	2
823515	35	.1	39	70	20	7	1	20	4.22	.08	2	259	10	2	2	2	80	2	1	2
823516	250	.1	91	38	23	3	9	24	3.33	.08	2	334	11	2	2	2	93	2	1	2
823517	10	.3	132	25	15	1	13	22	3.22	.06	2	497	13	2	2	2	90	2	1	2
823518	20	.2	106	26	17	3	9	20	3.22	.07	2	307	10	2	2	2	94	2	1	2
823519	5	.1	23	22	8	2	3	13	3.51	.08	4	137	6	2	2	2	87	2	1	2
823520	20	.1	20	45	2	4	2	12	2.95	.1	3	165	6	2	2	2	70	2	1	2
823521	5	.1	42	35	3	2	2	21	3.63	.1	2	204	9	2	2	2	62	2	1	2
823522	105	.1	35	70	2	3	2	17	4.01	.09	3	182	8	2	2	2	69	4	1	2
823523	5	.1	29	60	4	5	2	14	3.84	.09	2	180	7	2	2	2	88	3	1	2
823524	5	.2	71	36	7	4	2	28	3.39	.11	2	231	11	2	2	2	74	3	1	2
823525	20	.2	38	52	4	4	4	12	3.71	.1	2	158	6	2	2	2	72	3	1	2
823526	235	.1	390	91	4	6	13	29	15.82	.13	2	342	18	3	3	2	159	3	1	4
823527	5	.1	55	40	4	5	2	22	3.8	.09	2	219	10	2	2	2	69	2	1	2
511300	29	.1	164	68	26	18	1	18	4.1	.14	5	697	11	2	1	1	78	5	1	2
511301	15	2.3	269	211	46	48	1	18	3.6	.03	5	1237	9	2	1	1	295	1	1	2
511302	4	2.6	73	87	33	30	1	10	3.52	.03	5	294	4	2	1	1	133	1	1	2
511303	7	1.2	101	111	33	40	1	10	3.03	.04	5	232	4	2	1	1	237	2	1	2
511304	1	1.2	103	128	191	96	2	9	5.42	.03	5	1116	8	4	1	1	288	2	1	2
511305	18	1.6	92	116	256	124	2	6	6.78	.02	6	588	5	2	1	1	373	2	1	2
511306	9	.4	70	75	112	64	2	5	4.09	.03	5	210	4	2	1	1	187	1	1	2
511307	13	1.4	151	137	126	55	1	12	4.12	.03	5	582	7	2	1	1	184	2	1	2
511308	5	.8	70	77	115	86	2	6	3.87	.04	5	244	4	2	1	1	331	1	1	2
511309	43	2	566	329	175	65	2	18	5.62	.02	5	3097	25	2	1	1	246	1	2	2
511310	17	1.8	1729	403	148	79	1	13	3.97	.02	6	835	7	2	1	1	243	2	1	2



SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
511311	5	.7	66	73	76	77	2	6	4.04	.04	5	232	3	2	1	1	176	1	1	2
511312	4	.2	25	55	16	20	1	5	2.14	.05	5	377	3	2	1	1	88	1	1	2
511313	6	.9	40	69	33	38	1	8	3.58	.05	5	205	4	2	1	1	143	3	1	2
511314	5	.8	69	170	37	31	1	11	3.43	.03	5	1315	6	2	1	1	348	1	1	2
511315	5	.4	24	35	24	17	1	5	2.11	.04	5	115	2	2	1	2	106	1	1	2
511316	4	.6	26	50	33	27	1	6	2.72	.03	5	331	2	2	1	1	104	1	1	2
511317	9	1.4	72	242	106	109	2	10	5.74	.04	5	485	5	2	1	1	269	2	1	2
511318	18	.3	27	59	31	24	1	6	2.84	.06	5	314	3	2	1	1	69	1	1	2
511319	4	.2	34	55	28	22	1	7	2.43	.04	5	322	3	2	1	1	69	1	1	2
511320	2	.9	99	184	50	42	1	10	3.59	.03	5	562	6	2	1	1	110	2	2	2
511321	21	9.7	172	343	112	39	1	17	4.06	.02	5	2043	10	2	1	1	208	2	3	2
511322	4	2	95	291	61	38	1	15	3.54	.02	5	3786	9	2	1	1	215	2	2	2
511323	2	.7	47	72	22	20	1	9	2.69	.05	5	382	4	2	1	1	80	1	1	2
511324	1900	.5	95	183	93	55	1	15	4.59	.04	5	1050	14	2	1	1	157	3	1	2
511325	4	.9	130	423	103	54	2	13	5.8	.03	5	5298	28	2	1	1	217	2	1	2
511326	7	2	180	399	103	57	1	16	4.61	.03	5	4631	15	2	1	1	216	1	3	2
511327	4	1.4	108	674	41	41	1	14	3.97	.02	5	7914	13	2	1	1	229	2	3	2
511328	13	.2	37	220	13	17	1	7	3.19	.06	5	1250	5	2	1	1	70	1	1	2
511329	5	.2	30	62	42	26	1	6	2.97	.05	5	247	3	2	1	1	67	1	1	2
511330	4	2.4	141	155	27	24	1	9	3.09	.03	5	2263	15	2	1	1	148	1	1	2
511331	1	.6	80	149	31	25	1	9	3.36	.03	5	1633	7	2	1	1	119	1	1	2
511332	1	.1	36	109	28	19	1	19	4.39	.09	5	525	7	2	1	1	97	3	1	2
511333	4	1.1	108	122	31	13	1	17	3.3	.04	5	1201	8	2	1	1	91	2	1	2
511334	5	.9	55	74	14	18	1	13	2.2	.06	5	378	4	2	1	1	76	1	1	2
511335	3	.6	81	134	16	15	1	13	3.24	.06	5	1529	10	2	1	1	90	1	1	2
511336	3	1	101	135	17	15	1	12	3.07	.02	5	2666	6	2	1	1	108	1	2	2
511337	6	.5	56	51	15	10	1	9	4.62	.03	5	668	7	2	1	2	47	2	1	2
511338	5	.2	38	61	7	13	1	9	2.19	.03	5	261	4	2	1	1	107	2	1	2
511339	36	.6	84	55	29	10	1	18	3.31	.04	5	606	9	2	1	1	104	2	1	2
511340	27	1.1	87	54	15	16	1	12	3.44	.03	5	857	12	2	1	1	95	2	1	3
511344	4	.4	76	87	43	15	1	10	2.51	.03	5	600	5	5	1	1	74	2	1	2
511345	4	.9	69	105	26	20	1	13	3.78	.03	5	412	6	2	1	1	106	2	1	2
511346	2	.3	80	29	7	9	1	7	1.49	.04	5	86	2	3	1	1	151	1	1	2
511347	3	.1	33	35	17	13	1	6	2.8	.09	5	134	2	3	1	1	35	2	1	2
511348	95	1.3	314	2358	15	13	2	41	3.09	.05	5	1639111	3	1	1	1	268	1	18	2
511349	5	.6	79	85	14	18	1	11	3.26	.05	5	605	4	2	1	1	60	2	1	2
511350	2	.6	37	85	9	9	1	6	2.27	.03	5	1676	5	3	1	1	157	1	1	2
511351	4	.2	20	52	6	10	1	5	1.88	.04	5	793	4	2	1	1	122	1	1	2
511352	7	.3	39	125	10	17	1	8	3.36	.03	5	1799	6	4	1	1	116	1	1	2
511353	5	.5	48	107	24	22	1	10	3.14	.03	5	1285	6	2	1	1	185	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SM	W	BA	TH	CD	BI
511354	10	3.8	109	392	36	33	1	16	3.09	.02	5	1701	8	2	1	1	260	3	2	2
511355	9	.6	43	67	51	55	1	4	3.23	.03	5	451	4	5	1	1	112	1	1	2
511356	5	.8	91	158	47	43	1	14	4.58	.04	5	1148	11	4	1	1	146	2	1	2
511357	3	2.5	116	106	20	35	1	9	3.13	.01	10	623	4	2	1	1	119	2	1	2
511358	9	1.5	134	136	35	51	1	8	3.78	.01	5	1506	6	4	1	1	281	2	1	3
511359	3	.7	35	57	21	32	1	6	2.69	.03	5	590	3	5	1	1	124	2	1	2
511360	4	.9	35	55	15	21	1	8	1.98	.03	6	304	3	4	1	1	171	1	1	3
511361	9	.4	88	151	32	35	1	11	3.84	.04	5	493	6	5	1	1	185	2	1	3
511362	12	5.3	146	69	34	41	1	7	3.42	.01	5	1076	5	2	1	1	238	2	1	2
511363	18	1.4	68	64	51	46	1	6	3	.02	8	363	4	2	1	1	154	2	1	3
511364	24	1.8	172	151	279	119	5	11	7.12	.02	5	1426	9	3	1	1	275	1	1	2
511365	24	2	185	92	151	90	4	12	7.97	.02	5	790	10	2	1	1	338	1	1	2
511366	50	.6	51	48	59	56	1	5	3.61	.02	5	157	3	2	1	1	265	1	1	2
511367	60	1.3	85	165	318	120	1	5	6.06	.02	5	1006	7	4	1	1	142	1	1	2
511368	22	1.6	59	97	200	119	1	7	4.5	.01	5	273	4	4	1	1	174	1	1	2
511369	24	.4	60	99	91	60	1	9	4.43	.03	5	537	5	3	1	1	111	2	1	4
511370	21	.3	19	41	22	41	1	5	1.93	.02	5	128	2	2	1	1	62	1	1	3
511371	12	.3	40	99	92	46	1	6	4.55	.03	5	551	4	3	1	1	85	1	1	2
511372	4	.2	23	103	32	41	1	4	2.51	.02	5	2578	6	3	1	1	195	1	1	4
511373	11	1	48	133	77	53	1	7	3.55	.02	5	622	5	2	1	1	134	1	1	4
511374	8	1.3	88	227	127	66	1	9	3.49	.02	5	1989	9	2	1	1	217	1	1	2
511375	9	2.9	218	399	341	113	1	15	5.46	.02	5	4109	13	4	1	1	612	2	2	3
511376	18	1.6	74	116	1205	177	1	8	4.12	.02	5	442	4	4	1	1	93	1	1	5
511377	4	.6	70	242	311	53	1	7	3.71	.02	5	2063	9	2	1	1	193	1	1	2
511378	2	2.7	115	218	200	72	7	6	8.87	.02	5	447	5	2	1	1	410	1	1	2
511379	3	1.5	49	224	190	93	3	4	6.85	.01	5	640	4	5	1	1	316	1	1	3
511380	10	1	26	73	61	55	1	5	2.64	.04	5	335	3	2	1	1	103	1	1	3
511381	2	2.2	56	135	83	170	1	9	4.98	.03	5	412	5	9	1	1	225	1	1	4
511382	1	2.1	97	908	381	279	1	9	4.7	.02	5	2167	10	8	1	1	243	1	1	3
511383	1	.6	60	255	51	71	1	11	5.02	.04	5	2260	13	4	1	1	161	2	1	5
511384	5	.6	50	108	39	54	1	8	4.42	.05	5	723	5	2	1	1	75	1	1	4
511385	6	.5	34	66	16	27	1	6	2.75	.04	5	1245	4	3	1	1	119	1	1	2
511386	14	.3	46	90	31	39	1	8	4.04	.05	5	349	5	2	1	1	52	1	1	2
511387	26	2.4	63	118	45	111	1	6	5.43	.02	5	2121	6	4	1	1	97	1	1	5
511388	90	3.1	148	323	122	238	3	7	6.69	.01	5	2908	11	9	1	1	152	1	1	3
511389	8	1.7	48	94	28	59	1	5	3.21	.02	5	3355	6	2	1	1	156	1	1	3
511390	6	.6	46	105	39	78	1	7	3.65	.03	5	2102	5	2	1	1	144	1	1	5
511391	11	1.8	73	161	60	132	1	6	4.26	.02	5	1506	5	8	1	1	107	1	1	4
511392	4	1.2	40	94	40	94	1	5	3.3	.02	5	546	3	5	1	1	82	1	1	2
511393	6	5	53	143	82	194	1	6	4.42	.02	5	677	4	4	1	1	110	1	1	3

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SS	SN	W	BA	TH	CD	BI
511394	2	13	247	441	55	257	3	13	4.94	.01	5	5619	9	4	1	1	653	3	5	4
511395	4	1.8	22	61	27	137	1	3	1.58	.01	5	153	2	2	1	1	109	1	1	4
511396	26	3.5	46	141	71	306	1	3	3.33	.01	5	174	2	3	1	1	225	1	1	3
511397	12	6.3	107	194	83	241	2	7	6.89	.01	5	919	6	6	1	1	520	2	1	3
511398	4	1.6	81	118	65	145	3	6	5.21	.01	5	1532	5	4	1	1	480	1	1	3
511399	7	2.5	47	72	47	80	1	5	3.48	.01	5	1081	4	2	1	3	376	1	1	5
511400	3	1.8	50	75	77	70	2	5	4.87	.01	5	449	3	6	1	1	342	1	1	4
511401	2	2.8	99	46	18	31	1	4	1.58	.01	5	452	3	2	1	1	252	1	1	3
511402	5	.6	39	82	40	33	1	9	3.19	.04	5	484	5	3	1	1	115	1	1	2
511403	8	.9	46	88	74	56	1	6	3.95	.02	5	513	4	2	1	1	127	1	1	3
511404	2	.8	55	105	76	69	1	6	3.87	.01	5	437	5	2	1	1	164	1	1	3
511405	13	.1	48	41	9	13	1	15	3	.08	5	244	5	2	1	2	47	3	1	2
511406	5	.1	23	59	9	13	1	9	3.07	.08	5	208	3	2	1	1	51	1	1	3
511407	3	.3	25	34	6	18	1	8	2.58	.06	5	259	2	2	1	2	48	1	1	4
511408	9	.2	54	43	9	14	1	12	3.69	.05	5	352	5	2	1	1	54	1	1	3
511409	14	.7	25	46	13	23	1	7	2.6	.05	5	605	4	2	1	1	67	1	1	3
511410	15	2	66	91	13	18	1	13	3.84	.05	5	294	5	2	1	1	74	1	1	4
511411	14	.6	71	165	31	34	1	12	3.73	.05	5	534	6	2	1	1	96	1	1	3
511412	6	3.1	76	86	11	25	2	7	1.68	.01	5	422	3	2	1	1	200	1	1	6
511413	9	1.9	46	98	23	37	1	6	2.76	.02	5	394	4	6	1	1	133	1	1	4
511414	7	1	43	85	13	30	1	5	2.17	.05	5	320	4	2	1	1	126	1	1	3
511415	9	1.5	72	135	14	29	3	10	3.2	.02	7	2743	14	2	1	1	241	1	1	6
511416	2	.8	37	85	18	23	1	7	3.12	.04	5	570	5	2	1	1	90	1	1	2
511417	3	.9	52	43	12	23	2	5	1.95	.02	5	237	3	2	1	1	123	1	1	2
511418	10	.9	33	59	24	35	1	6	3.03	.02	5	208	6	2	1	1	112	1	1	3
511419	7	2.6	143	236	31	33	3	11	3.94	.01	5	1952	7	2	1	1	264	1	1	5
511420	2	3.8	71	192	68	121	1	6	5.48	.01	5	1127	7	2	1	1	117	1	1	4
511421	9	2.7	96	148	47	79	1	8	4.7	.01	5	3433	8	2	1	1	219	1	1	3
511422	6	3.2	56	124	28	58	1	6	3.43	.02	5	1053	5	2	1	1	161	1	1	4
511423	10	2.2	100	144	36	83	1	7	3.77	.01	5	1225	5	2	1	1	183	1	1	3
511424	9	4.9	118	210	51	89	1	8	5.45	.01	5	2120	8	2	1	1	151	1	1	4
511425	6	1.4	80	159	40	57	1	8	4.08	.02	5	1096	5	2	1	1	159	1	1	4
511426	10	6.9	292	166	28	65	1	9	3.32	.01	5	850	5	2	1	1	142	2	2	2
511427	15	1.6	111	197	67	110	1	8	6.59	.02	5	1306	8	2	1	1	104	1	1	4
511428	9	.9	44	85	25	49	1	5	3.43	.03	5	1423	5	2	1	1	98	1	1	2
511429	7	2.3	73	83	13	26	1	9	2.57	.03	5	306	4	2	1	1	78	1	1	2
511430	5	1.4	74	121	21	30	1	11	3.53	.05	5	695	6	2	1	1	82	1	1	2
511431	11	.4	52	93	22	30	1	8	4.28	.04	5	391	5	2	1	1	61	1	1	6
511432	16	1.4	51	43	13	13	1	10	3.38	.04	5	287	4	2	1	1	46	1	1	3
511433	9	.2	31	50	10	11	1	9	3.43	.07	5	488	4	2	1	1	77	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	BA	TH	CD	BI
511434	6	.7	33	66	6	10	1	10	3.5	.05	5	378	5	2	1	1	68	1	1	2
511435	4	.1	30	37	11	11	1	7	2.62	.05	5	241	4	2	1	1	95	1	1	3
511436	4	.5	8	16	3	7	2	3	.84	.04	5	172	1	2	1	1	42	1	1	2
511437	13	.4	54	66	17	15	1	13	5.56	.08	5	351	5	2	1	1	37	2	1	3
511438	4	.2	31	61	17	22	1	9	3.44	.06	5	302	3	2	1	1	41	1	1	2
511439	49	1.8	42	32	9	25	2	4	1.12	.01	5	1630	16	2	1	1	144	1	1	2
511440	7	.4	36	64	19	22	2	7	2.16	.05	5	285	4	2	1	1	94	1	1	2
511441	5	1.5	75	58	14	17	1	7	2.19	.03	5	529	4	2	1	1	151	1	1	2
511442	6	1.8	119	158	31	37	2	13	4.27	.02	5	3368	13	2	1	1	252	2	1	4
511443	4	1.1	153	137	36	29	1	15	5.18	.03	5	1221	13	2	1	1	209	2	1	4
511444	11	3	129	120	30	36	1	12	3.92	.03	7	1543	9	5	11	1	242	3	1	2
511445	3	.1	39	43	13	17	1	5	2.32	.05	5	807	9	2	1	1	115	2	1	2
511446	4	1	104	84	23	20	1	11	3.79	.02	5	833	8	2	1	1	152	1	1	2
511447	2	.2	69	74	13	14	1	11	3.03	.02	5	1539	10	2	1	1	136	1	1	2
511448	8	.5	54	63	16	16	1	10	3.09	.06	5	303	5	2	1	1	95	1	1	3
511449	13	.7	56	78	15	21	1	8	2.83	.02	5	498	6	2	1	1	129	2	1	2
511450	9	.6	57	60	13	12	1	6	2.2	.02	5	750	5	2	1	1	171	1	1	3
511451	16	1.2	33	42	9	18	1	7	1.64	.04	5	191	3	2	1	1	71	1	1	2
511452	22	1	47	31	7	13	1	4	1.29	.01	5	183	3	2	1	1	85	1	1	2
511453	4	.8	17	22	6	9	1	3	.99	.02	5	85	1	2	1	1	55	1	1	2
511454	5	.9	48	75	10	12	1	11	2.93	.06	5	275	5	2	1	1	57	1	1	2
511455	3	.5	24	47	15	17	1	7	2.63	.06	5	199	3	2	1	1	42	4	1	2
511456	10	.4	25	39	7	11	1	6	2.72	.05	5	173	3	2	1	1	55	1	1	2
511457	6	.6	42	47	13	11	1	5	3.52	.07	5	262	4	2	1	1	55	2	1	2
511458	11	1.6	67	78	7	11	1	11	3.73	.02	5	1218	9	2	1	1	130	1	1	3
511459	2	1.2	57	94	17	21	1	8	4.17	.05	5	348	5	2	1	1	55	1	1	2
511460	4	.4	39	31	23	23	1	8	4.29	.05	5	329	4	2	1	1	53	2	1	4
511461	6	.3	31	63	16	23	1	7	3.92	.06	5	289	4	2	1	1	59	2	1	2
511462	4	.1	29	37	8	10	1	4	1.87	.06	5	274	3	2	1	1	101	1	1	2
511463	5	.3	38	44	10	7	1	7	3.33	.07	5	352	4	2	1	1	74	1	1	3
511464	3	.7	58	70	9	9	1	9	3.13	.05	5	437	5	2	1	1	112	1	1	2
511465	29	.9	41	52	7	12	1	7	2.13	.02	5	334	5	2	1	1	102	2	1	2
511466	5	.4	40	54	4	14	1	7	2.22	.04	5	315	5	2	1	1	76	1	1	2
511467	3	.2	30	46	4	7	1	7	2.07	.07	5	261	4	2	1	1	68	1	1	2
511468	8	1.2	75	20	3	17	1	3	.58	.01	5	197	2	2	3	1	140	1	1	2
511469	2	.2	29	42	6	9	1	3	2.35	.05	5	259	4	2	1	1	106	1	1	2
511470	4	.2	40	61	3	15	1	7	2.06	.03	5	411	6	2	1	1	127	1	1	2
511471	6	.8	18	19	5	10	1	4	.92	.02	5	77	1	2	1	1	65	1	1	2
511472	2	.9	57	67	9	12	1	12	2.75	.02	5	514	8	2	1	1	171	1	1	2
511473	2	.2	50	69	13	10	1	9	2.79	.03	5	332	5	2	1	1	158	1	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	NO	NI	FE	TI	U	MN	CO	SB	SM	W	BA	TH	CD	BI
511474	9	.8	22	22	5	6	1	3	1.05	.02	5	76	2	2	1	1	63	1	1	2
511475	18	.9	32	28	3	5	1	4	1.39	.02	5	170	3	2	1	1	93	1	1	2
511500	6	2.3	73	110	51	45	1	9	4.01	.02	5	698	6	2	1	1	108	1	1	2
511501	7	.9	79	117	181	70	1	10	5.96	.02	5	305	6	2	1	1	179	2	1	2
511502	10	2.2	128	144	130	80	1	6	4.9	.01	5	1796	7	2	1	1	318	1	1	2
511603	14	3.8	74	93	79	39	1	8	4.24	.02	5	525	5	2	1	1	148	1	1	3
511604	6	1.2	77	59	52	41	1	7	3.25	.03	8	701	5	2	1	1	130	1	1	2
511605	12	3.9	222	91	144	74	3	8	5.49	.02	5	569	4	2	1	1	233	2	1	3
511606	70	3.2	177	190	181	72	2	8	4.18	.01	9	409	4	2	1	1	264	2	1	2
511607	11	3.3	187	440	100	47	2	16	3.96	.02	9	4237	35	2	1	1	294	3	2	2
511608	7	1.2	93	148	204	82	3	5	6.51	.02	5	2999	10	2	1	1	228	1	1	2
511609	32	2.6	424	296	303	109	4	13	5.2	.01	16	7870	15	2	1	1	457	3	3	2
511610	11	2.2	134	121	438	179	2	5	9.61	.02	6	779	5	4	1	1	322	2	1	3
511611	16	1.2	312	369	85	58	2	11	4.38	.01	5	1871	8	2	1	1	341	1	1	2
511612	3	.1	9	17	8	10	1	2	.86	.04	5	73	1	2	1	1	24	1	1	2
511613	8	1	16	30	13	17	1	27	1.83	.06	9	135	1	2	1	2	51	2	1	2
511614	3	.3	18	44	20	38	1	5	2.08	.03	5	116	2	2	1	2	145	1	1	2
511615	7	.4	31	60	42	32	1	6	3.75	.04	5	343	3	3	1	1	94	1	1	2
511616	5	1.6	76	112	220	163	1	4	6.13	.02	5	675	4	3	1	1	312	2	1	2
511617	14	3	105	540	285	137	1	12	5.62	.02	6	655	6	2	1	1	293	3	1	2
511618	3	1.4	37	54	44	33	1	6	2.14	.02	5	261	3	2	1	1	121	1	1	2
511619	7	1.2	62	90	182	70	1	4	4.23	.02	7	240	3	2	1	1	192	1	1	2
511620	19	3.3	152	702	224	110	2	11	6.32	.02	5	3080	11	2	1	1	381	2	3	2
511621	5	1.1	57	101	131	83	1	5	5.52	.03	5	399	4	2	1	1	261	3	1	2
511622	8	1.8	89	139	234	115	1	8	7.09	.02	5	455	5	2	1	1	169	2	1	6
511623	6	1.3	53	98	150	337	1	5	5.13	.03	5	738	4	3	1	1	282	1	1	2
511624	7	3.1	48	173	421	247	1	6	7.79	.03	8	837	6	4	1	1	452	2	1	2
511625	10	3.4	59	104	196	86	1	5	7.19	.02	5	394	3	14	1	1	412	2	1	2
511626	3	1.1	29	68	42	27	1	5	3.36	.05	5	421	2	2	1	1	108	1	1	2
511627	2	.2	47	103	32	23	1	7	3.44	.04	5	471	4	2	1	1	90	1	1	2
511628	20	4.9	220	433	153	100	1	8	7.36	.01	5	2539	12	2	1	1	146	3	2	2
511629	22	.2	30	53	9	14	2	21	3.24	.08	5	174	2	2	1	1	40	6	1	2
511630	27	.4	31	50	15	12	2	10	3.7	.05	8	250	3	2	1	1	23	10	1	2
511631	16	.1	21	31	12	9	1	5	2.14	.05	5	97	1	2	1	2	20	6	1	2
511632	17	.2	17	29	9	8	1	6	1.86	.05	10	108	1	2	1	2	34	2	1	2
511633																				
511634	11	.1	21	42	15	8	1	11	2.57	.05	5	154	2	2	1	2	36	1	1	2
511635	1	.1	19	44	165	17	11	26	12.69	.04	5	1004	5	2	1	1	79	3	1	2
511636	4	.1	37	59	8	6	1	15	1.37	.06	8	201	4	2	1	1	89	3	1	2
511637	2	.1	40	43	10	9	2	10	2.53	.08	5	427	5	2	1	2	60	3	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SH	W	BA	TH	CD	BI
511638	4	.1	53	41	4	6	1	11	1.96	.08	5	195	3	2	1	1	59	3	1	2
511639	5	.1	69	50	10	7	1	11	2.78	.08	5	271	4	2	1	1	58	3	1	2
511640																				
511641	4	.1	41	39	6	11	1	8	2.47	.05	5	267	6	2	1	1	55	3	1	2
511642	3	.3	37	33	6	12	1	7	1.95	.06	5	134	2	2	1	2	44	2	1	2
511643	2	.1	36	32	10	12	1	6	2.32	.06	5	106	2	2	1	1	42	2	1	2
511644	5	.5	62	97	29	10	1	11	2.55	.03	5	770	5	2	1	1	113	3	1	2
511645	4	.9	58	88	7	15	1	11	2.52	.04	5	427	5	2	1	1	108	4	1	2
511646	1	.4	30	37	7	9	1	8	2.16	.05	5	167	2	2	1	2	44	2	1	2
511647	6	.8	62	49	4	12	1	6	1.65	.04	5	142	2	2	1	2	57	2	1	2
511648	4	1.7	66	53	11	10	1	6	1.95	.02	5	251	2	2	1	1	51	1	1	2
511649	3	.4	47	88	18	13	1	13	3.71	.07	5	293	4	3	1	1	58	4	1	2
511650	5	.9	77	175	14	13	1	10	2.2	.02	5	626	4	2	1	1	88	2	1	4
511651	1	.6	69	143	20	20	1	10	3.06	.06	5	868	5	2	1	1	136	4	1	2
511652	3	.8	87	178	34	18	1	15	4.89	.06	5	694	11	2	1	1	106	5	1	2
511653	19	.5	35	57	19	20	1	9	3.64	.07	5	202	3	2	1	1	49	3	1	2
511654	2	.3	36	36	8	8	1	8	3.04	.07	5	196	3	2	1	1	47	3	1	2
511655	7	.4	33	52	23	27	1	7	3.47	.05	5	205	3	2	1	1	72	3	1	2
511656	19	.6	62	78	19	26	1	9	3	.05	5	514	6	2	1	1	156	2	1	2
511657	85	.5	80	112	40	27	1	13	3.62	.05	5	582	13	6	1	1	86	3	1	2
511658	6	.9	42	131	26	34	1	5	2.99	.04	5	532	5	2	1	1	153	1	1	2
511659	22	1.4	75	186	49	61	1	10	5.05	.05	5	871	7	2	1	1	195	3	1	2
511660	23	2	104	204	54	80	1	8	5.76	.06	5	1604	10	2	1	1	166	2	1	4
511661	28	3.2	137	714	81	101	1	12	5.32	.02	5	2462	11	2	1	1	232	3	1	4
511662	75	2.2	91	169	100	118	1	7	6.09	.02	5	3271	9	2	1	1	143	2	1	2
511663	50	2.6	122	305	106	155	1	7	6.4	.01	5	1353	7	2	1	1	219	3	1	2
511664	60	2.5	189	333	133	170	1	9	6.75	.02	5	2174	11	2	1	1	115	4	1	2
511665	5	1.1	58	141	57	61	1	5	5.24	.03	5	921	5	2	1	1	130	2	1	2
511666	7	3.8	69	130	47	44	1	4	3.88	.03	5	1822	6	3	1	1	145	1	1	2
511667	4	1.8	73	147	45	48	1	7	4.58	.04	5	481	4	3	1	1	113	2	1	2
511668	8	1.1	124	207	62	72	1	8	5.09	.03	5	1410	8	2	1	1	242	2	1	2
511669	9	1.3	76	89	73	54	1	5	4.17	.02	5	315	4	2	1	1	273	2	1	2
511670	12	1.8	112	113	116	124	5	8	6.23	.01	5	433	6	306	1	1	431	4	1	2
511671	4	2.1	100	107	78	61	3	5	6.35	.01	5	459	4	2	1	1	437	2	1	2
511672	115	2.1	94	78	61	61	5	5	5.36	.01	5	608	9	4	1	1	300	2	1	2
511673	21	2	51	87	105	27	1	3	5.87	.01	5	1273	7	2	1	1	227	1	1	3
511674	14	3.4	100	95	40	25	1	7	3.06	.02	5	1909	9	2	1	1	115	1	1	2
511675	1	.7	43	95	67	41	1	7	4.41	.04	5	509	4	2	1	1	133	2	1	2
511676	6	3.7	97	267	283	58	1	10	3.95	.03	8	2334	10	2	1	1	206	2	2	2
511677	2	.7	37	91	38	25	1	7	4.09	.06	11	594	5	2	1	1	105	3	1	4

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SN	W	SA	TH	CD	BI
511678	7	.4	43	63	10	12	1	6	3.57	.12	5	400	3	2	1	1	116	3	1	4
511679	1	.1	70	80	17	14	2	10	4.54	.02	6	714	9	2	1	1	190	3	1	4
511680	2	.3	91	122	190	25	1	8	5.01	.02	5	1535	13	2	1	1	235	2	1	3
511681	1	.3	50	83	25	11	1	7	4.19	.04	5	1534	9	2	1	1	149	2	1	2
511682	2	.1	40	116	20	11	1	8	4.87	.06	5	649	7	2	1	1	134	3	1	3
511683	1	.2	81	161	62	20	1	10	5.06	.02	5	2382	14	2	1	1	342	3	1	2
511684	26	4.7	129	936	225	189	2	8	6.29	.01	5	3979	6	8	1	1	203	2	4	2
511685	6	.8	58	134	34	28	1	9	3.99	.04	5	409	4	2	1	1	67	2	1	2
511686	8	4.4	37	174	42	58	1	8	4.45	.04	5	592	4	2	1	1	101	3	1	2
511687	3	.7	70	665	46	279	2	12	5.5	.01	5	3610	12	2	1	1	105	2	2	4
511688	13	1.4	108	1537	352	322	1	12	6.33	.01	5	5756	23	2	1	1	342	3	3	2
511689	14	.7	71	140	36	42	1	11	4.31	.02	5	618	6	2	1	1	151	3	1	4
511690	6	.3	60	103	21	18	1	16	4.34	.06	6	861	12	3	1	1	113	3	1	2
511691	3	.6	136	179	22	20	1	19	4.65	.05	10	2361	15	2	1	1	267	3	1	2
511692	6	.5	47	150	37	27	1	9	4.19	.07	11	444	5	2	1	1	62	3	1	2
511693	8	1.5	134	543	54	50	1	12	5.86	.01	5	2680	13	2	1	1	187	2	2	2
511694	16	.8	226	650	39	34	2	15	4.67	.02	5	1128221	2	2	1	1	97	2	3	2
511695	3	1.2	44	162	27	32	1	8	3.4	.02	8	936	6	2	1	1	72	2	1	2
511696	4	.3	52	81	22	23	1	8	4.65	.05	6	302	4	2	1	1	54	2	1	2
511697	50	.6	84	123	27	15	1	15	3.59	.06	17	1278	9	2	1	1	111	3	1	2
511698	3	.8	71	83	20	26	1	10	3.82	.07	15	727	10	2	1	1	117	3	1	2
511699	2	.2	76	99	16	18	1	17	4.31	.1	9	1257	11	2	1	1	107	3	1	2
511700	8	.7	76	76	8	10	1	32	3.08	.1	5	689	10	2	1	1	66	4	1	3
511701	38	1.5	120	186	40	37	1	14	4.48	.05	5	983	8	2	1	1	92	2	1	2
511702	75	.4	96	203	61	93	1	9	6.34	.03	5	1459	7	2	1	1	195	3	1	4
511703	9	.9	65	145	34	43	4	8	5.06	.03	5	777	5	2	1	1	91	2	1	2
511704	16	1.8	94	133	34	41	2	6	4.4	.03	7	616	5	2	1	1	78	2	1	2
511705	8	.8	59	131	35	77	1	8	4.83	.03	5	1202	5	2	1	1	95	2	1	2
511706	17	1.6	168	424	48	79	2	10	4.5	.02	13	2213	7	2	1	1	288	2	1	3
511707	10	2.4	79	253	46	51	1	13	5.78	.03	6	573	6	2	1	1	143	3	1	2
511708	16	3.4	127	229	87	177	1	9	7.41	.02	5	681	7	2	1	1	268	3	1	2
511709	19	2.1	143	359	100	149	2	11	7.28	.02	5	2097	11	2	1	1	175	3	1	2
511710	7	1.4	99	199	40	70	1	9	4.16	.02	5	1103	7	2	1	1	193	2	1	2
511711	6	2.1	194	366	38	67	2	15	4.51	.01	6	2608	10	2	1	1	251	2	2	2
511712	12	1.3	127	401	59	74	2	11	4.88	.01	5	2331	12	2	1	1	264	3	1	2
511713	8	1.7	122	192	72	155	2	6	6.29	.01	11	584	5	2	1	1	178	3	1	5
511714	7	2.2	99	203	86	140	2	5	5.43	.01	5	604	6	4	1	1	366	3	1	2
511715	17	2.7	334	513	59	62	3	15	5.67	.02	9	3913	12	2	1	1	421	4	2	3
511716	2	.4	73	160	35	29	1	13	4.73	.07	12	782	11	2	1	1	266	4	1	3
511717	3	.5	56	116	47	19	1	11	3.41	.06	6	534	6	2	1	1	108	2	1	2

SAMPLE #	AU	AG	CU	ZN	AS	PB	MO	NI	FE	TI	U	MN	CO	SB	SH	W	BA	TH	CD	BI
511718	9	.9	17	33	9	16	1	4	1.38	.05	5	174	1	2	1	1	67	2	1	2
511719	2	2.3	27	44	18	19	1	4	1.52	.02	86	258	3	2	1	1	115	6	1	16
511720	5	.6	39	59	27	49	1	4	2.26	.01	5	532	4	2	1	1	224	1	1	4
511721	5	1.1	40	51	44	60	2	3	3.51	.02	5	234	3	2	1	1	300	1	1	4
511722	2	1.5	54	83	77	68	1	7	4.43	.02	8	841	6	2	1	1	405	2	1	2
511723	16	2.3	76	94	47	79	1	6	3.75	.01	13	549	5	2	1	1	440	2	1	4
511724	19	1.9	105	159	76	151	1	5	5.36	.01	11	2041	7	2	1	1	470	3	1	6
511725	14	1.5	54	97	50	131	1	4	3.9	.01	6	871	3	2	1	1	297	1	1	3
511726	15	1.4	49	116	42	143	1	3	3.59	.01	5	550	2	2	1	1	211	2	1	5
511727	10	2.3	58	131	61	240	1	4	5.1	.02	5	571	3	2	1	1	234	2	1	5
511728	5	2.2	106	268	87	219	3	8	5.94	.01	12	1758	8	2	1	1	163	3	1	6
511729	7	1.4	46	114	25	75	1	4	3.16	.02	5	2013	6	2	1	1	173	2	1	6
511730	18	.6	24	51	15	37	1	4	1.92	.02	5	1118	2	2	1	1	94	1	1	4
511731	6	1.3	50	108	45	78	1	6	4.99	.05	6	811	4	2	1	1	106	4	1	5
511732	32	2	110	282	90	151	1	8	6.46	.02	9	1592	9	2	1	1	132	2	1	5
511733	19	2	42	72	32	52	1	4	3.24	.03	5	654	3	2	1	1	72	2	1	6
511734	9	1	69	96	15	21	1	13	3.6	.07	8	364	5	2	1	1	57	2	1	3
511735	11	1.8	56	82	10	21	1	7	1.77	.03	12	240	3	2	1	1	67	2	1	3
511736	47	.3	19	27	4	14	1	5	1.15	.09	5	112	1	2	1	1	56	1	1	3
511737	6	.3	32	47	4	13	1	9	1.83	.06	5	186	3	2	1	1	68	1	1	4
511738	5	.3	36	48	11	11	1	10	2.25	.07	14	251	4	2	1	2	62	2	1	5
511739																				
511740																				
511741	2	.6	24	25	11	14	1	6	1.88	.05	15	101	2	2	1	1	56	1	1	2
511742	9	.7	61	81	13	16	1	10	2.81	.02	5	609	7	2	1	1	152	2	1	2
511743	3	.2	48	65	12	15	1	11	2.77	.06	7	391	5	2	1	1	106	1	1	4
511744	2	.5	94	93	20	17	1	14	3.62	.04	7	451	7	2	1	1	102	1	1	7
511745	1	.8	79	59	11	11	1	11	2.63	.03	10	332	5	2	1	1	74	2	1	2
511746	16	.7	102	52	10	13	1	9	2.49	.02	5	392	5	2	1	1	101	1	1	5
511747	18	1.2	135	71	21	14	1	12	3.03	.03	5	688	7	2	1	1	133	1	1	3
511748	31	.8	70	55	14	13	1	8	2.08	.02	15	351	4	2	1	1	77	2	1	4
511749	7	.5	64	83	18	10	1	14	4.27	.07	7	491	6	2	1	1	108	2	1	5
511750	2	.2	57	73	17	17	1	10	3.36	.08	12	832	6	2	1	1	80	3	1	7
511751	2	1.1	76	131	19	23	1	16	4.51	.03	5	2049	13	2	1	1	255	2	1	4
511752	190	1.3	68	46	10	13	1	10	1.7	.02	14	278	3	2	1	2	98	2	1	7
511753	10	1.5	88	85	13	17	1	14	2.77	.04	11	357	5	2	1	1	96	2	1	5
511754	1	.3	34	46	11	10	1	10	2.25	.07	9	227	3	2	1	1	52	2	1	2
511755	1	.4	29	64	7	9	1	9	1.64	.04	5	272	4	2	1	1	90	1	1	5
511756	4	4.3	68	43	10	16	1	9	1.9	.01	7	196	3	2	1	1	70	1	1	6
511757	8	.5	44	56	9	16	1	10	2.13	.05	13	256	4	2	1	1	68	1	1	7





## FHIL 1 CLAIMS - SOIL SAMPLES 1985

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
514501	110	30	.01	2.28	.25	.84	.01	.04	.21	2	2	67
514523	43	32	.01	.57	.31	.11	.01	.04	.04	4	2	20
514524	62	50	.01	.79	.71	.32	.02	.04	.04	5	2	26
514525	107	37	.01	1.08	.43	.37	.01	.04	.17	6	2	33
514526	131	63	.01	1.15	.9	.51	.01	.05	.09	9	2	45
514527	126	129	.02	1.76	1.41	.58	.02	.03	.2	37	8	47
514528	75	35	.02	.61	.26	.09	.01	.02	.02	4	2	16
514529	122	31	.01	1.6	.3	.38	.02	.04	.21	6	6	50
514530	72	34	.01	.88	.3	.26	.01	.04	.09	6	3	27
514531	112	39	.01	1.09	.41	.45	.01	.06	.13	7	7	33
514532	86	34	.01	.76	.35	.23	.01	.04	.07	6	4	29
514533	43	43	.01	1.24	.43	.35	.02	.02	.05	5	2	22
514534	87	36	.01	1.44	.43	.48	.02	.03	.14	7	8	40
514535	112	29	.01	1.08	.3	.23	.01	.02	.07	6	6	36
514536	92	28	.01	1.14	.25	.27	.01	.01	.18	6	4	30
514537	83	31	.02	1.25	.3	.3	.01	.03	.12	6	2	38
514538	113	49	.01	1.85	.53	.56	.01	.05	.16	13	3	41
514539	94	69	.01	1.68	.68	.68	.01	.07	.09	10	4	41
514540	94	34	.01	.83	.31	.24	.01	.02	.06	5	2	28
514541	92	70	.01	1.21	.4	.43	.01	.03	.13	7	3	28
514542	111	89	.02	1.31	.4	.32	.01	.03	.16	5	2	20
514543	83	24	.01	1.34	.31	.31	.01	.04	.21	6	4	36
514544	99	64	.02	1.6	.47	.39	.01	.06	.09	13	3	36
514545	69	38	.02	1.02	.37	.32	.01	.04	.13	7	2	29
514546	72	69	.02	1.46	.63	.52	.02	.03	.06	7	4	27
514547	63	39	.02	1.31	.41	.47	.01	.04	.05	8	2	28
514548	147	52	.02	1.27	.42	.5	.01	.06	.18	8	4	51
514549	91	41	.01	.63	.39	.19	.01	.04	.03	4	2	30
514550	105	35	.01	1.02	.38	.38	.02	.04	.04	4	3	34
515551	96	60	.01	1.76	.59	.67	.02	.06	.09	3	2	37
516323	102	48	.01	1.79	.47	.67	.02	.06	.14	4	4	48
516324	109	33	.01	1.58	.41	.58	.01	.05	.12	3	2	47
516325	71	118	.03	1.32	1.27	.18	.01	.03	.1	4	2	27
516331	97	52	.01	1.55	.58	.47	.01	.06	.1	4	2	34
516332	80	29	.01	1.19	.33	.27	.01	.05	.14	5	2	31

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
516333	98	42	.01	1.33	.46	.47	.01	.07	.15	5	3	36
516334	76	36	.02	1.45	.31	.31	.01	.05	.23	4	2	32
516335	79	29	.01	1.65	.31	.29	.01	.04	.12	2	2	33
516336	84	29	.01	1.38	.27	.32	.01	.06	.2	4	2	33
516337	168	41	.01	1.88	.29	.35	.01	.04	.4	4	2	34
516338	59	78	.01	1.51	.68	.46	.02	.08	.09	6	2	33
516339	88	47	.01	.99	.5	.41	.01	.07	.17	4	2	29
516340	106	45	.01	1.16	.51	.37	.01	.06	.26	3	2	35
516341	27	31	.02	.64	.2	.04	.01	.01	.02	10	2	8
516342	76	37	.02	.7	.35	.2	.01	.04	.11	6	2	28
516343	151	94	.01	1.68	1.29	.51	.01	.03	.21	19	2	54
516344	91	60	.02	1.48	.49	.56	.01	.09	.08	7	2	37
516345	130	38	.01	1.4	.42	.49	.01	.04	.2	6	2	51
516346	97	44	.01	1.13	.42	.34	.01	.03	.1	7	2	41
516347	73	47	.02	1.26	.48	.48	.01	.01	.13	11	2	30
516348	64	36	.01	1.3	.38	.46	.01	.02	.08	8	3	31
516349	128	91	.02	3.91	1.15	.77	.02	.07	.19	33	2	72
516301	81	57	.01	1.47	.65	.63	.02	.05	.1	8	2	44
516302	89	45	.01	1.53	.45	.44	.01	.04	.15	6	3	37
516303	101	28	.02	1.73	.32	.41	.01	.04	.21	9	4	37
516304	107	31	.02	1.46	.3	.32	.01	.04	.2	7	2	38
516305	109	42	.05	1.96	.47	.42	.02	.04	.25	5	7	39
516306	91	37	.02	1.42	.46	.47	.01	.05	.25	6	2	36
516307	96	48	.01	1.43	.47	.56	.02	.06	.08	4	2	37
516308	127	59	.01	1.37	.45	.58	.02	.07	.16	6	5	43
516309	78	39	.01	1.02	.37	.39	.01	.05	.06	5	3	28
516310	142	38	.01	1.56	.44	.61	.01	.09	.4	4	2	41
516311	288	46	.01	1.3	.46	.49	.02	.06	.21	4	2	67
516312	176	41	.02	1.48	.44	.45	.01	.05	.3	2	2	47
516313	116	60	.01	1.3	.54	.52	.02	.04	.11	12	4	36
516314	138	29	.02	1.39	.29	.29	.01	.04	.45	4	2	40
516315	121	31	.02	2.02	.32	.41	.01	.06	.46	5	2	42
516316	104	45	.01	.95	.49	.34	.01	.03	.08	4	2	31
516317	134	53	.02	.91	.69	.44	.02	.03	.21	8	4	40
516318	96	55	.01	1.18	.61	.55	.02	.05	.12	14	3	49
516319	100	61	.01	1.71	.57	.62	.01	.06	.07	14	2	45
516320	204	30	.06	2.95	.35	.37	.01	.04	.85	3	2	56
516321	127	39	.01	1.41	.34	.43	.01	.05	.14	4	2	42
516322	99	38	.01	1.33	.46	.41	.01	.06	.33	4	2	40
514501	64	29	.01	.68	.25	.18	.01	.02	.04	4	4	23

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
514502	36	90	.01	.48	1.91	.1	.01	.06	.09	8	3	16
514503	83	31	.01	.95	.29	.18	.02	.04	.16	6	3	23
514504	96	34	.01	.66	.4	.3	.01	.05	.12	5	3	29
514505	89	32	.01	.85	.33	.26	.01	.06	.13	6	3	30
514506	154	37	.01	1.59	.44	.72	.01	.04	.18	7	3	59
514507	118	35	.01	1.31	.33	.42	.01	.08	.18	6	4	40
514508	87	30	.01	.64	.29	.25	.01	.04	.06	5	2	30
514509	83	30	.02	.29	.28	.06	.01	.04	.02	4	2	26
514510	56	16	.01	.59	.28	.33	.01	.06	.04	3	2	42
514511	124	44	.01	.8	.48	.31	.01	.04	.09	4	3	42
514512	119	23	.04	1.69	.32	.42	.01	.03	.29	5	2	46
514513	114	23	.02	1.59	.33	.34	.01	.03	.25	5	2	43
514514	109	33	.02	1.19	.3	.27	.01	.01	.06	5	2	32
514516	77	30	.01	1.25	.3	.38	.01	.04	.17	7	2	31
514517	123	35	.02	1.32	.26	.28	.01	.03	.32	6	2	36
514518	164	46	.02	1.35	.39	.35	.01	.04	.34	4	2	44
514519	126	32	.02	1.61	.38	.46	.01	.02	.17	7	2	46
514520	64	45	.01	.83	.62	.22	.01	.02	.02	5	2	20
514521	26	31	.01	.42	.19	.05	.01	.02	.03	4	2	13
514522	111	30	.01	.76	.25	.23	.01	.01	.04	4	2	26
514501	64	29	.01	.68	.25	.18	.01	.02	.04	4	4	23
514502	36	90	.01	.48	1.01	.1	.01	.06	.09	8	3	16
514503	83	31	.01	.95	.29	.18	.02	.04	.16	6	3	23
514504	96	34	.01	.66	.4	.3	.01	.05	.12	5	3	29
514505	89	32	.01	.85	.33	.26	.01	.06	.13	6	3	30
514506	154	37	.01	1.59	.44	.72	.01	.04	.18	7	3	59
514507	118	35	.01	1.31	.33	.42	.01	.08	.18	6	4	40
514508	87	30	.01	.64	.29	.25	.01	.04	.06	5	2	30
514509	83	30	.02	.29	.28	.06	.01	.04	.02	4	2	26
514510	56	16	.01	.59	.28	.33	.01	.06	.04	3	2	42
514511	124	44	.01	.8	.48	.31	.01	.04	.09	4	3	42
514512	119	23	.04	1.69	.32	.42	.01	.03	.29	5	2	46
514513	114	23	.02	1.59	.33	.34	.01	.03	.25	5	2	43
514514	109	33	.02	1.19	.3	.27	.01	.01	.06	5	2	32
514516	77	30	.01	1.25	.3	.38	.01	.04	.17	7	2	31
514517	123	35	.02	1.32	.26	.28	.01	.03	.32	6	2	36
514518	164	46	.02	1.35	.39	.35	.01	.04	.34	4	2	44
514519	126	32	.02	1.61	.38	.46	.01	.02	.17	7	2	46
514520	64	45	.01	.83	.62	.22	.01	.02	.02	5	2	20
514521	26	31	.01	.42	.19	.05	.01	.02	.03	4	2	13

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
514522	111	30	.01	.76	.25	.23	.01	.01	.04	4	2	26
514523	43	32	.01	.57	.31	.11	.01	.04	.04	4	2	20
514524	62	50	.01	.79	.71	.32	.02	.04	.04	5	2	26
514525	107	37	.01	1.08	.43	.37	.01	.04	.17	6	2	33
514526	131	63	.01	1.15	.9	.51	.01	.05	.09	9	2	45
514527	126	120	.02	1.76	1.41	.58	.02	.03	.2	37	8	47
514528	75	35	.02	.61	.26	.09	.01	.02	.02	4	2	16
514529	122	31	.01	1.6	.3	.38	.02	.04	.21	6	6	50
514530	72	34	.01	.86	.3	.26	.01	.04	.09	6	3	27
514531	112	39	.01	1.08	.41	.45	.01	.06	.13	7	7	33
514532	86	34	.01	.76	.35	.23	.01	.04	.07	6	4	29
514533	43	43	.01	1.24	.43	.35	.02	.02	.05	5	2	22
514534	87	36	.01	1.44	.43	.48	.02	.03	.14	7	8	40
514535	112	29	.01	1.08	.3	.23	.01	.02	.07	6	6	36
514536	92	28	.01	1.14	.25	.27	.01	.01	.18	6	4	30
514537	83	31	.02	1.25	.3	.3	.01	.03	.12	6	2	38
514538	113	49	.01	1.85	.53	.56	.01	.05	.16	13	3	41
514539	94	69	.01	1.68	.68	.68	.01	.07	.09	10	4	41
514540	94	34	.01	.83	.31	.24	.01	.02	.06	5	2	28
514541	92	70	.01	1.21	.4	.43	.01	.03	.13	7	3	28
514542	111	89	.02	1.31	.4	.32	.01	.03	.16	5	2	20
514543	83	24	.01	1.34	.31	.31	.01	.04	.21	6	4	36
514544	99	64	.02	1.6	.47	.39	.01	.06	.09	13	3	36
514545	69	38	.02	1.02	.37	.32	.01	.04	.13	7	2	29
514546	72	69	.02	1.46	.63	.52	.02	.03	.06	7	4	27
514547	63	39	.02	1.31	.41	.47	.01	.04	.05	8	2	28
514548	147	52	.02	1.27	.42	.5	.01	.06	.18	8	4	51
514549	91	41	.01	.63	.39	.19	.01	.04	.03	4	2	30
514550	105	35	.01	1.02	.38	.38	.02	.04	.04	4	3	34
514551	98	26	.02	1.74	.31	.42	.01	.03	.14	5	2	43
515501	88	29	.02	1.03	.31	.32	.01	.05	.05	5	3	28
515502	70	29	.02	.81	.37	.27	.01	.05	.11	6	4	24
515503	80	27	.02	1.46	.31	.43	.01	.05	.11	5	2	33
515504	84	24	.02	1.36	.31	.43	.01	.05	.24	6	6	40
515505	76	24	.02	.84	.3	.24	.01	.04	.07	6	3	26
515506	110	21	.02	2.18	.35	1.06	.01	.17	.17	3	2	41
515507	95	41	.02	1.46	.63	.74	.01	.07	.17	7	6	33
515508	81	31	.02	.86	.36	.19	.01	.03	.07	4	4	27
515509	81	41	.02	1.3	.56	.41	.02	.04	.08	6	4	29
515510	47	56	.02	1.18	.77	.32	.01	.04	.08	8	2	23

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
515511	64	35	.02	1.2	.46	.36	.01	.05	.09	5	3	24
515512	49	36	.02	.99	.46	.31	.01	.04	.05	6	2	20
515513	56	53	.02	1.43	.82	.52	.02	.05	.05	7	2	28
515514	52	46	.02	1	.76	.45	.01	.03	.06	6	2	22
515515	67	47	.02	1.26	.81	.48	.01	.03	.08	6	3	29
515516	90	27	.02	.9	.35	.23	.01	.03	.11	5	2	31
515517	49	49	.02	.93	.83	.35	.01	.04	.09	6	2	20
515518	61	44	.02	1.16	.66	.45	.01	.04	.1	7	2	27
515519	77	55	.02	1.59	.8	.51	.01	.05	.09	9	3	36
515520	77	50	.02	1.24	.87	.44	.02	.04	.05	7	4	37
515521	63	74	.02	1.13	1.54	.33	.02	.04	.11	6	4	27
515522	79	28	.02	1.04	.34	.24	.01	.04	.12	4	4	27
515523	81	32	.02	.96	.35	.39	.01	.04	.14	4	4	32
515524	53	28	.02	.8	.33	.17	.01	.04	.04	8	3	17
515525	59	30	.02	1.1	.35	.37	.01	.06	.26	9	5	26
515526	90	44	.02	1.68	.59	.72	.02	.06	.08	7	4	46
515527	102	29	.01	1.33	.36	.5	.01	.05	.17	5	4	41
515528	105	49	.02	1.78	.34	.5	.02	.06	.19	6	5	37
515529	76	95	.01	1.09	.5	.52	.02	.05	.02	4	3	29
515530	82	45	.02	1.41	.41	.46	.02	.06	.08	5	6	29
515531	141	55	.01	1.89	.53	.66	.02	.09	.21	2	2	41
515532	127	77	.02	1.84	1.05	.7	.03	.11	.09	2	2	34
515533	85	48	.01	1.04	.77	.55	.03	.04	.16	10	4	42
515534	50	73	.02	1.19	1.14	.42	.02	.07	.1	16	4	22
515535	112	25	.05	2.37	.3	.45	.02	.04	.29	4	5	44
515536	134	30	.02	1.37	.36	.37	.01	.04	.15	4	4	40
515537	93	25	.02	1.69	.33	.29	.01	.03	.24	5	5	37
515538	88	26	.01	1.03	.27	.25	.01	.02	.05	2	4	36
515539	115	46	.02	1.84	.64	.61	.02	.03	.1	7	3	48
515540	77	30	.03	1.6	.36	.43	.01	.03	.17	5	3	39
515541	77	31	.03	1.65	.37	.45	.01	.04	.16	5	3	41
515542	88	23	.08	2.94	.26	.47	.01	.04	.38	4	5	40
515543	106	21	.02	2.03	.25	.4	.01	.04	.24	4	3	43
515544	77	30	.01	.95	.36	.3	.01	.03	.03	4	3	24
515545	34	43	.01	.68	.41	.21	.01	.04	.02	5	2	18
515546	90	33	.01	1.05	.4	.27	.01	.03	.03	5	3	31
515547	114	59	.03	1.82	.39	.53	.02	.05	.1	5	4	52
515548	102	44	.02	2.11	.35	.59	.02	.07	.27	6	3	41
515549	67	61	.01	1.08	.47	.4	.02	.06	.08	6	2	26
515550	79	56	.01	1.84	.45	.77	.02	.07	.26	7	3	35

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	S	CR
515551	96	60	.01	1.76	.59	.67	.02	.06	.09	3	2	37
515552	99	43	.01	1.38	.36	.41	.02	.05	.23	4	3	31
515553	90	30	.01	1.01	.39	.19	.01	.03	.12	4	2	30
516301	81	57	.01	1.47	.65	.63	.02	.05	.1	8	2	44
516302	99	45	.01	1.53	.45	.44	.01	.04	.15	6	3	37
516303	101	28	.02	1.73	.32	.41	.01	.04	.21	9	4	37
516304	107	31	.02	1.46	.3	.32	.01	.04	.2	7	2	38
516305	109	42	.05	1.96	.47	.42	.02	.04	.25	5	7	39
516306	91	37	.02	1.42	.46	.47	.01	.05	.25	6	2	36
516307	96	48	.01	1.43	.47	.56	.02	.06	.08	4	2	37
516308	127	59	.01	1.37	.45	.58	.02	.07	.16	6	5	43
516309	78	39	.01	1.02	.37	.39	.01	.05	.06	5	3	28
516310	142	38	.01	1.56	.44	.61	.01	.09	.4	4	2	41
516311	298	46	.01	1.3	.46	.49	.02	.06	.21	4	2	67
516312	176	41	.02	1.48	.44	.45	.01	.05	.3	2	2	47
516313	116	60	.01	1.3	.54	.52	.02	.04	.11	12	4	36
516314	138	29	.02	1.39	.29	.29	.01	.04	.45	4	2	40
516315	121	31	.02	2.02	.32	.41	.01	.06	.46	5	2	42
516316	104	45	.01	.95	.49	.34	.01	.03	.08	4	2	31
516317	134	53	.02	.91	.69	.44	.02	.03	.21	8	4	40
516318	96	55	.01	1.18	.61	.55	.02	.05	.12	14	3	49
516319	100	61	.01	1.71	.57	.62	.01	.06	.07	14	2	45
516320	204	30	.06	2.95	.35	.37	.01	.04	.85	3	2	56
516321	127	39	.01	1.41	.34	.43	.01	.05	.14	4	2	42
516322	99	38	.01	1.33	.46	.41	.01	.06	.33	4	2	40
516323	102	48	.01	1.79	.47	.67	.02	.06	.14	4	4	48
516324	109	33	.01	1.58	.41	.58	.01	.05	.12	3	2	47
516325	71	118	.03	1.32	1.27	.18	.01	.03	.1	4	2	27
516331	97	52	.01	1.55	.58	.47	.01	.06	.1	4	2	34
516332	80	29	.01	1.19	.33	.27	.01	.05	.14	5	2	31
516333	98	42	.01	1.33	.46	.47	.01	.07	.15	5	3	36
516334	76	36	.02	1.45	.31	.31	.01	.05	.23	4	2	32
516335	79	29	.01	1.65	.31	.29	.01	.04	.12	2	2	33
516336	84	29	.01	1.38	.27	.32	.01	.06	.2	4	2	33
516337	163	41	.01	1.88	.29	.35	.01	.04	.4	4	2	34
516338	59	78	.01	1.51	.68	.46	.02	.08	.09	6	2	33
516339	68	47	.01	.99	.5	.41	.01	.07	.17	4	2	29
516340	106	45	.01	1.16	.51	.37	.01	.06	.26	3	2	35
516341	27	31	.02	.64	.2	.04	.01	.01	.02	10	2	8
516342	76	37	.02	.7	.35	.2	.01	.04	.11	6	2	28

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
516343	151	94	.01	1.68	1.29	.51	.01	.03	.21	19	2	54
516344	91	60	.02	1.48	.49	.56	.01	.09	.08	7	2	37
516345	130	38	.01	1.4	.42	.49	.01	.04	.2	6	2	51
516346	97	44	.01	1.13	.42	.34	.01	.03	.1	7	2	41
516347	73	47	.02	1.26	.48	.48	.01	.01	.13	11	2	30
516348	64	36	.01	1.3	.38	.46	.01	.02	.08	8	3	31
516349	128	91	.02	3.91	1.15	.77	.02	.07	.19	33	2	72
516401	86	26	.03	1.66	.36	.4	.01	.02	.08	6	2	41
516402	67	53	.02	1.45	.8	.3	.01	.01	.06	17	2	33
516403	43	25	.02	.5	.33	.09	.01	.04	.04	8	3	29
516404	71	23	.01	1.18	.31	.33	.01	.05	.12	9	2	30
516405	77	44	.01	1.43	.32	.36	.01	.04	.15	8	3	37
516406	108	28	.01	1.11	.38	.27	.01	.04	.07	3	2	34
516407	75	41	.01	1.42	.66	.43	.01	.03	.04	7	2	29
516408	74	37	.02	1.41	.46	.34	.01	.04	.07	9	2	32
516409	52	75	.01	1.43	1.31	.4	.01	.05	.13	11	2	29
516410	9	109	.01	.21	5.42	.09	.01	.01	.13	2	8	6
516411	35	64	.01	.87	2.01	.34	.01	.02	.09	3	4	27
516412	43	83	.01	.74	2.01	.29	.01	.01	.11	7	2	19
516413	7	104	.01	.44	2.81	.17	.01	.01	.07	6	3	7
516414	42	113	.01	1.15	2.91	.37	.01	.01	.19	6	3	23
516415	60	57	.01	1.12	.9	.42	.02	.02	.07	5	16	25
516416	70	35	.01	1.44	.46	.34	.01	.02	.1	7	2	33
516417	70	32	.01	1.08	.41	.38	.01	.03	.05	6	3	31
516418	58	35	.01	.75	.45	.29	.01	.05	.04	5	3	27
516419	64	22	.02	1.02	.25	.12	.01	.06	.08	8	2	19
516420	76	22	.01	1.64	.3	.55	.01	.03	.2	3	2	36
516421	78	22	.01	1.16	.3	.38	.01	.03	.23	5	2	38
516422	70	20	.03	1.53	.29	.35	.01	.02	.13	8	2	38
516423	71	22	.01	1.48	.25	.41	.01	.03	.13	6	2	37
516424	73	51	.01	1.88	.41	.7	.01	.08	.16	7	2	29
516425	75	32	.02	1.65	.34	.44	.01	.04	.27	4	2	32
516426	63	23	.03	1.54	.19	.31	.01	.01	.09	6	2	43
516427	90	22	.01	.68	.34	.22	.01	.01	.05	4	2	31
516428	55	29	.02	.66	.23	.09	.01	.03	.04	8	2	22
516429	48	43	.02	.62	.57	.09	.01	.02	.01	6	2	19
516430	104	24	.01	.83	.3	.25	.01	.03	.02	6	2	28
516431	97	20	.01	.79	.19	.15	.01	.02	.05	8	2	21
516432	97	21	.04	2.18	.26	.34	.01	.03	.39	8	2	37
516433	79	19	.02	1.79	.24	.26	.01	.03	.19	10	2	24



SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
516434	55	27	.01	.98	.38	.43	.01	.03	.07	10	6	27
516435	56	28	.02	.89	.21	.15	.01	.03	.09	8	4	19
516436	120	20	.02	1.66	.27	.28	.01	.03	.33	9	10	38
516437	101	68	.01	1.53	.43	.55	.02	.06	.21	7	2	37
516438	83	21	.02	1.34	.24	.21	.01	.02	.11	10	2	25
516439	77	25	.02	1.78	.24	.38	.01	.03	.14	9	2	38
516526												
516527												
516528												
516529												
516530												
823025	112	43	.06	1.68	.42	.44	.01	.07	.33	5	11	38
823026	79	84	.06	1.68	1.04	.38	.02	.06	.12	12	9	27
823027	65	21	.07	1.31	.25	.28	.01	.03	.08	4	5	25
823028	68	24	.07	1.1	.29	.25	.01	.03	.1	5	7	27
823029	95	76	.04	1.77	1.11	.49	.02	.08	.14	12	8	30
823030	47	76	.05	1.5	1.06	.28	.01	.05	.11	11	6	25
823031	66	24	.04	1.55	.3	.33	.01	.04	.08	6	7	29
823032	70	24	.07	1.61	.31	.31	.01	.03	.07	5	5	28
823033	92	44	.07	2.16	.53	.37	.01	.05	.07	7	9	36
823034	89	23	.07	2.08	.26	.33	.01	.03	.13	4	8	36
823035	66	21	.06	.84	.31	.24	.01	.03	.1	4	6	23
823530	66	52	.06	1.56	.59	.43	.02	.05	.08	7	5	33
823531	71	33	.06	1.54	.41	.37	.02	.04	.11	7	6	33
823532	91	25	.26	2.25	.36	.31	.02	.04	.3	4	6	34
823533	90	55	.04	1.88	.62	.4	.03	.09	.28	7	5	19
823534	89	80	.07	2.46	.61	.34	.03	.08	.4	7	2	18
823535	96	40	.06	2.45	.47	.47	.02	.08	.23	9	5	32
823536	74	39	.03	1.73	.44	.52	.02	.04	.06	8	6	36
823537	211	38	.06	2.28	.49	.56	.02	.17	.28	6	2	60
823538	83	47	.06	1.64	.57	.39	.02	.05	.11	6	5	37
823539	137	42	.06	1.76	.52	.49	.02	.18	.3	3	5	53
823540	83	24	.1	1.54	.33	.31	.01	.06	.14	5	7	37
822538	52	28	.01	1.07	.41	.32	.01	.03	.05	6	2	24
822539	67	30	.01	1.01	.48	.37	.02	.03	.1	10	3	33
822540	48	33	.01	1.11	.45	.31	.01	.02	.05	7	2	28
822541	79	49	.01	1.28	.68	.37	.01	.04	.15	16	2	26
822542	80	36	.01	1.41	.35	.4	.01	.02	.06	10	3	30
822543	90	22	.01	1.54	.33	.44	.01	.03	.11	9	2	41
822544	63	27	.01	1.55	.32	.48	.01	.03	.06	6	4	43

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
822545	55	30	.01	1.32	.41	.4	.01	.03	.07	8	2	31
822546	113	34	.01	1.23	.49	.31	.01	.07	.39	6	2	42
822547	85	16	.01	1.15	.25	.22	.01	.03	.16	5	2	33
822548	73	29	.01	1.22	.37	.29	.01	.02	.05	5	3	29
822515	82	20	.01	1.3	.3	.55	.01	.03	.04	5	2	58
822516	96	16	.01	1.6	.18	.42	.01	.03	.09	5	3	34
822517	93	17	.01	1.96	.22	.39	.01	.02	.22	2	3	33
822518	110	18	.02	2.31	.23	.44	.01	.03	.29	2	3	42
822519	107	16	.02	2.16	.19	.33	.01	.03	.18	4	3	40
822520	138	16	.02	2.51	.23	.38	.01	.02	.31	4	2	49
822521	112	15	.03	2.57	.19	.36	.01	.02	.16	2	3	47
822522	127	16	.02	1.91	.25	.35	.01	.02	.25	2	4	47
822523	147	14	.01	2.05	.21	.95	.01	.04	.06	3	3	128
822524	87	14	.01	2.01	.16	.46	.01	.02	.09	2	4	41
822525	115	19	.01	1.61	.23	.35	.01	.03	.15	2	2	37
822526	100	18	.03	3.08	.21	.49	.01	.03	.26	2	3	43
822527	79	12	.03	3.24	.14	.44	.01	.02	.25	2	2	38
822528	99	47	.01	2.09	.34	.45	.01	.05	.32	2	2	33
822529	91	19	.01	2.08	.24	.47	.01	.04	.08	2	6	33
822530	111	18	.01	1.75	.22	.47	.01	.03	.07	2	4	35
822531	62	17	.01	1.62	.19	.3	.01	.05	.45	2	15	14
822532	170	6	.01	1.65	.14	1.46	.01	.13	.06	2	4	144
822533	105	33	.01	1.1	.5	.43	.01	.03	.04	7	2	42
822534	80	20	.01	.89	.23	.16	.01	.02	.04	4	2	27
822535	138	18	.01	1.23	.24	.35	.01	.04	.06	4	4	34
822536	117	16	.02	2.08	.26	.37	.01	.02	.32	8	2	44
822537	141	17	.01	1.63	.28	.33	.01	.02	.38	10	2	47
823001	145	13	.01	2.07	.16	1.4	.01	.09	.08	2	2	187
823002	115	26	.01	2.48	.62	1.84	.02	.69	.06	3	3	180
823003	136	31	.01	2.19	.72	1.85	.02	.06	.04	2	4	229
823004	109	13	.07	.99	.17	.39	.01	.04	.06	4	10	65
823005	63	15	.07	1.07	.17	.33	.01	.03	.06	4	8	31
823006	71	12	.07	.94	.18	.3	.01	.02	.07	4	9	27
823007	113	9	.1	1.33	.13	.19	.01	.03	.16	2	9	34
823008	123	14	.1	1.71	.17	.37	.01	.03	.24	5	11	42
823009	119	9	.24	2.06	.11	.19	.01	.02	.17	4	12	38
823010	115	13	.11	1.62	.15	.41	.01	.03	.16	3	10	43
823011	87	10	.21	2.37	.11	.34	.01	.02	.22	3	10	32
823012	112	10	.24	2.41	.12	.28	.01	.03	.31	2	9	36
823013	86	10	.1	1.29	.15	.21	.01	.04	.12	3	8	28

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
823014	94	10	.16	1.98	.15	.25	.01	.03	.32	2	11	34
823015	84	9	.14	1.67	.1	.21	.01	.02	.22	4	9	30
823016	95	12	.31	2.91	.14	.33	.01	.03	.37	5	11	43
823017	93	11	.17	1.88	.13	.28	.01	.03	.23	4	11	33
823018	87	18	.08	1.45	.2	.31	.01	.03	.36	4	11	34
823019	93	13	.07	1.07	.16	.23	.01	.04	.2	2	10	30
823020	101	21	.07	1.61	.29	.36	.01	.05	.04	3	8	32
823021	91	21	.07	1.18	.2	.28	.01	.04	.08	2	8	30
823022	109	15	.08	1.25	.19	.27	.01	.03	.12	2	8	35
823023	126	19	.08	1.53	.19	.38	.01	.04	.08	2	9	40
823024	100	15	.07	1.51	.16	.36	.01	.04	.09	2	9	31
823510	59	9	.09	1.45	.11	.21	.01	.03	.15	3	7	26
823511	83	10	.28	1.89	.12	.2	.01	.02	.17	3	7	30
823512	103	12	.12	2.35	.15	.69	.01	.04	.2	2	8	38
823513	155	14	.46	2.3	.2	.4	.01	.04	.15	5	11	49
823514	82	22	.07	1.13	.35	.47	.01	.04	.08	4	8	38
823515	133	18	.3	2.56	.25	.41	.01	.05	.37	3	10	37
823516	94	35	.07	1.61	.47	.53	.01	.04	.07	4	8	34
823517	94	38	.07	1.44	.5	.53	.01	.06	.06	3	7	38
823518	94	35	.09	1.7	.47	.51	.01	.03	.07	5	8	37
823519	133	17	.08	1.22	.17	.25	.01	.02	.09	2	6	34
823520	95	24	.05	1.36	.32	.3	.01	.07	.14	3	7	34
823521	118	26	.06	1.68	.34	.4	.01	.05	.15	3	6	40
823522	103	20	.14	2.65	.26	.38	.01	.05	.33	2	6	35
823523	114	23	.07	2.16	.3	.38	.02	.05	.43	3	5	36
823524	108	36	.19	2.07	.49	.58	.02	.05	.11	5	7	45
823525	117	21	.06	1.6	.23	.25	.01	.05	.2	4	4	34
823526	153	35	.06	1.9	.12	.69	.01	.07	.6	2	2	132
823527	121	37	.13	1.94	.54	.48	.01	.06	.13	2	4	43
511300	116	53	.02	1.55	.63	.69	.02	.08	.19	13	7	50
511301	67	71	.01	2.42	.68	.46	.02	.1	.28	51	10	34
511302	77	26	.01	1.71	.21	.3	.01	.05	.32	10	7	30
511303	79	63	.01	1.84	.65	.35	.02	.06	.12	12	6	22
511304	95	42	.01	1.28	.29	.32	.01	.1	.23	12	7	24
511305	103	52	.02	1.27	.13	.28	.03	.15	.4	12	8	18
511306	111	27	.02	.99	.14	.12	.01	.06	.14	9	8	21
511307	79	54	.02	1.62	.46	.45	.01	.05	.18	21	7	29
511308	102	61	.02	.76	.69	.12	.02	.07	.15	12	8	24
511309	73	61	.02	2	.63	.33	.02	.06	.33	41	7	25
511310	56	69	.01	2.02	.91	.33	.01	.06	.38	19	8	17

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
511311	112	32	.02	.98	.14	.17	.02	.08	.19	11	8	25
511312	55	21	.92	1.04	.19	.18	.01	.04	.13	8	6	18
511313	53	27	.92	1.14	.18	.29	.01	.06	.23	12	9	22
511314	74	52	.02	1.98	.66	.34	.01	.08	.17	12	6	23
511315	70	21	.02	.97	.23	.19	.01	.02	.1	7	6	24
511316	71	21	.02	.88	.15	.16	.01	.05	.21	9	8	20
511317	129	52	.02	1.9	1.02	.3	.01	.06	.16	18	6	24
511318	86	22	.02	.83	.23	.19	.01	.03	.14	10	7	25
511319	65	22	.02	.97	.27	.25	.01	.06	.21	9	8	21
511320	92	36	.02	1.23	.59	.16	.01	.05	.18	13	7	22
511321	76	59	.01	2.18	1.42	.28	.01	.06	.41	34	8	27
511322	78	47	.02	1.57	1.05	.29	.01	.05	.28	20	9	25
511323	72	28	.02	1.07	.41	.26	.01	.04	.09	8	7	23
511324	77	32	.02	1.69	.25	.49	.02	.08	.14	10	9	27
511325	93	54	.02	1.32	.71	.18	.01	.06	.28	22	8	27
511326	90	50	.02	1.89	.96	.33	.01	.08	.3	30	7	27
511327	85	44	.02	2.05	.59	.32	.01	.07	.29	17	8	30
511328	102	27	.02	1.03	.35	.2	.01	.02	.1	8	7	31
511329	101	18	.02	1.12	.15	.15	.01	.02	.1	5	7	23
511330	78	28	.02	2.11	.42	.28	.01	.03	.15	34	6	26
511331	86	29	.02	1.61	.49	.27	.01	.04	.14	33	8	27
511332	110	27	.02	1.83	.37	.52	.02	.06	.16	12	8	46
511333	69	31	.02	1.81	.45	.38	.01	.08	.22	16	8	35
511334	52	28	.02	1.52	.31	.42	.01	.05	.08	12	6	25
511335	92	40	.02	1.59	.62	.52	.01	.07	.13	18	8	27
511336	55	53	.01	1.16	.84	.2	.01	.06	.26	26	6	25
511337	94	24	.01	.97	.35	.22	.01	.05	.2	9	8	36
511338	47	27	.01	.85	.33	.18	.01	.04	.14	11	6	23
511339	57	39	.01	1.17	1.12	.37	.01	.04	.12	17	6	36
511340	73	36	.01	1.59	.66	.27	.01	.04	.14	23	7	29
511344	49	45	.01	1.23	1.18	.27	.01	.03	.2	26	6	26
511345	72	54	.01	1.43	1.2	.27	.01	.03	.15	22	6	31
511346	43	42	.01	.49	.67	.07	.01	.03	.09	9	4	16
511347	86	22	.01	.65	.19	.11	.01	.02	.05	7	6	20
511348	71	67	.02	2.08	1.27	.5	.01	.06	.23	36	7	31
511349	83	25	.01	.8	.32	.16	.01	.04	.08	9	6	29
511350	64	25	.02	.65	.32	.1	.01	.04	.1	9	6	20
511351	62	17	.02	.55	.19	.07	.01	.02	.05	7	4	19
511352	80	22	.02	1.06	.37	.21	.01	.03	.13	12	6	25
511353	82	21	.02	.85	.28	.12	.01	.05	.12	9	6	29

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
511354	52	44	.01	2.2	.96	.32	.01	.05	.35	26	6	23
511355	86	22	.01	.75	.13	.1	.01	.05	.11	8	7	20
511356	81	26	.01	1.73	.23	.53	.02	.09	.23	14	8	27
511357	61	27	.01	1.69	.19	.24	.01	.05	.16	16	7	22
511358	65	37	.01	1.4	.24	.15	.01	.08	.2	14	5	20
511359	67	21	.01	.7	.21	.15	.01	.06	.11	7	5	18
511360	61	22	.01	.81	.23	.18	.01	.05	.08	7	6	21
511361	81	40	.01	1.47	.4	.4	.02	.06	.12	12	5	24
511362	64	36	.02	1.03	.3	.12	.01	.07	.17	13	6	17
511363	58	26	.01	.8	.15	.16	.01	.06	.15	10	6	17
511364	66	45	.01	1.67	.3	.32	.01	.08	.33	24	6	21
511365	83	53	.01	1.26	.49	.22	.02	.11	.29	25	6	19
511366	78	36	.01	.72	.11	.08	.01	.07	.13	8	7	17
511367	115	24	.01	1.01	.21	.36	.01	.1	.26	7	7	7
511368	85	29	.01	.9	.12	.11	.01	.07	.2	8	8	15
511369	77	21	.01	1.15	.15	.31	.01	.06	.24	8	8	23
511370	47	15	.02	.66	.11	.1	.01	.03	.1	6	4	12
511371	86	17	.02	1.2	.14	.26	.01	.04	.22	8	8	19
511372	62	26	.01	.66	.31	.1	.01	.05	.13	8	6	17
511373	71	20	.01	1.04	.16	.28	.01	.05	.2	8	9	18
511374	69	51	.01	1.37	1.23	.38	.01	.07	.27	19	10	22
511375	82	42	.01	2.25	.59	.48	.01	.13	.29	35	7	28
511376	68	25	.01	.82	.22	.17	.01	.06	.27	7	9	20
511377	70	42	.01	1.13	.79	.29	.01	.07	.23	13	9	20
511378	131	53	.01	1.07	.17	.16	.02	.15	.37	18	4	16
511379	131	40	.01	.93	.14	.17	.01	.15	.32	14	8	13
511380	72	23	.01	.7	.28	.13	.01	.07	.12	7	7	21
511381	90	32	.01	1.38	.15	.3	.02	.11	.28	11	9	24
511382	97	29	.01	1.79	.41	.34	.01	.05	.13	15	8	26
511383	124	30	.01	1.51	.41	.8	.01	.06	.29	14	7	22
511384	108	21	.01	1.22	.18	.29	.01	.04	.24	7	7	25
511385	80	21	.01	.79	.21	.2	.01	.04	.16	5	8	22
511386	112	20	.01	1.11	.2	.28	.01	.03	.21	7	9	30
511387	102	20	.01	1.34	.15	.19	.01	.06	.29	9	8	23
511388	83	27	.01	1.68	.2	.39	.01	.08	.38	12	6	20
511389	75	19	.01	1.1	.13	.11	.01	.04	.13	9	9	21
511390	79	21	.01	.92	.17	.18	.01	.05	.19	7	9	19
511391	76	18	.01	1.04	.14	.26	.01	.06	.2	9	10	18
511392	75	16	.02	.97	.08	.14	.01	.05	.13	8	9	18
511393	94	20	.02	1.19	.09	.21	.01	.07	.18	10	9	15

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
511394	54	84	.01	2.38	.74	.32	.01	.13	.66	39	7	13
511395	51	19	.02	.6	.09	.04	.01	.05	.07	9	7	14
511396	75	27	.02	1.11	.06	.07	.01	.08	.18	9	11	9
511397	85	51	.02	1.82	.09	.23	.02	.18	.29	16	7	15
511398	72	53	.02	1.15	.24	.14	.02	.16	.26	17	9	16
511399	56	49	.02	.89	.14	.16	.02	.18	.23	12	10	11
511400	70	56	.02	1.01	.07	.33	.02	.21	.25	14	9	9
511401	37	36	.02	.83	.27	.09	.01	.06	.14	18	5	10
511402	63	25	.01	1.07	.16	.32	.01	.04	.13	7	8	19
511403	83	18	.02	1.07	.1	.27	.01	.06	.18	8	10	16
511404	100	18	.02	1.01	.13	.16	.01	.07	.14	8	9	13
511405	93	21	.03	1.47	.27	.36	.01	.03	.17	7	8	41
511406	91	23	.01	1.14	.27	.28	.01	.03	.18	8	8	31
511407	89	21	.01	.97	.15	.18	.01	.02	.08	5	7	25
511408	92	27	.01	1.18	.24	.36	.01	.03	.25	4	10	38
511409	87	22	.02	.76	.19	.15	.01	.04	.1	5	8	26
511410	88	27	.02	1.74	.23	.48	.01	.04	.12	6	10	31
511411	93	30	.02	1.82	.28	.69	.01	.06	.13	10	10	28
511412	47	45	.01	1.39	.43	.26	.01	.05	.19	15	5	17
511413	67	31	.02	1.38	.2	.31	.01	.04	.14	7	8	15
511414	67	52	.01	1.38	.31	.4	.01	.04	.09	6	6	10
511415	74	46	.02	1.98	.35	.42	.01	.05	.19	14	9	17
511416	66	30	.02	1.33	.18	.35	.01	.04	.18	6	8	15
511417	51	38	.02	1.23	.22	.16	.01	.04	.16	9	6	13
511418	89	22	.02	1.12	.13	.11	.01	.04	.11	5	10	18
511419	79	52	.02	2.11	.55	.55	.01	.05	.34	21	10	21
511420	129	21	.03	1.56	.13	.27	.01	.05	.24	6	10	14
511421	91	30	.02	1.3	.21	.15	.01	.06	.26	14	9	21
511422	77	22	.02	1.32	.14	.24	.01	.05	.16	9	9	21
511423	77	32	.02	1.19	.27	.15	.01	.06	.19	12	8	19
511424	87	31	.02	1.63	.22	.35	.01	.06	.29	13	10	20
511425	83	22	.02	1.25	.14	.23	.01	.04	.16	12	9	20
511426	58	23	.02	2.17	.15	.29	.01	.05	.27	22	9	24
511427	112	21	.02	1.46	.12	.42	.01	.06	.38	6	9	21
511428	86	20	.02	1.01	.12	.16	.01	.05	.16	6	8	20
511429	54	25	.02	1.42	.2	.33	.01	.03	.12	10	9	25
511430	85	24	.02	1.41	.2	.47	.01	.04	.11	8	9	27
511431	99	20	.02	1.21	.2	.34	.01	.03	.19	6	9	28
511432	81	27	.01	1.24	.21	.31	.01	.02	.14	5	8	29
511433	96	25	.02	1.16	.25	.26	.01	.02	.15	4	7	27

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
511434	88	30	.01	1.25	.32	.31	.01	.03	.27	6	8	30
511435	76	26	.02	.85	.27	.22	.01	.02	.09	8	7	33
511436	32	18	.02	.53	.11	.06	.01	.03	.05	6	3	12
511437	118	20	.02	1.37	.21	.39	.01	.03	.19	7	9	42
511438	84	19	.02	1.16	.17	.31	.01	.02	.13	5	8	23
511439	28	39	.02	.95	.33	.12	.01	.04	.2	11	4	15
511440	69	32	.02	1.16	.27	.36	.01	.02	.08	6	6	13
511441	62	39	.02	1.25	.33	.22	.01	.04	.12	12	5	16
511442	92	66	.02	2.42	.73	.59	.01	.06	.37	24	7	22
511443	112	64	.01	2.18	.89	.64	.01	.06	.24	23	7	25
511444	71	104	.01	2.14	1.88	.53	.01	.07	.45	35	7	24
511445	67	26	.01	1.14	.25	.29	.01	.04	.09	9	6	10
511446	81	29	.01	1.96	.23	.55	.01	.06	.2	14	8	21
511447	63	28	.01	1.49	.24	.51	.01	.06	.16	12	7	23
511448	74	27	.01	1.36	.2	.51	.01	.04	.07	8	7	20
511449	57	37	.01	1.44	.44	.38	.01	.05	.17	13	5	17
511450	57	52	.01	1.23	.64	.33	.01	.05	.14	11	4	15
511451	48	25	.01	1.23	.21	.29	.01	.04	.09	6	5	14
511452	29	20	.02	1.33	.13	.16	.01	.03	.18	7	5	14
511453	30	17	.02	.73	.11	.13	.01	.03	.07	3	3	10
511454	83	21	.02	1.5	.18	.48	.01	.04	.09	8	6	27
511455	76	16	.01	1.11	.12	.3	.01	.04	.08	6	6	17
511456	77	18	.02	1	.16	.22	.01	.03	.14	5	5	24
511457	90	22	.01	1.13	.18	.24	.01	.04	.18	4	6	21
511458	86	44	.01	2.23	.43	.45	.01	.05	.3	18	7	31
511459	95	17	.01	1.71	.18	.39	.01	.03	.13	7	6	23
511460	97	16	.01	1.33	.17	.33	.01	.03	.19	6	7	23
511461	109	17	.01	1.4	.18	.36	.01	.03	.24	7	6	23
511462	59	31	.01	1.13	.2	.22	.01	.03	.08	4	4	16
511463	89	24	.01	.94	.23	.25	.01	.04	.12	3	6	23
511464	72	32	.01	1.36	.27	.38	.01	.03	.11	11	5	26
511465	49	24	.01	1.12	.17	.28	.01	.04	.12	11	5	16
511466	56	24	.01	1.32	.2	.35	.01	.04	.09	9	4	18
511467	54	25	.01	1.2	.23	.37	.01	.04	.07	7	4	16
511468	22	36	.01	1.17	.55	.98	.01	.02	.27	9	2	18
511469	65	69	.01	1.1	.23	.26	.01	.05	.13	4	5	10
511470	54	45	.01	1.62	.29	.37	.01	.04	.1	9	5	19
511471	31	26	.01	.8	.11	.1	.01	.03	.08	6	3	12
511472	64	39	.01	1.69	.52	.56	.01	.05	.25	14	6	24
511473	60	37	.01	1.41	.4	.45	.01	.03	.17	12	5	21

SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
511474	27	16	.01	.87	.11	.14	.01	.03	.08	4	3	10
511475	27	28	.01	.9	.22	.22	.01	.05	.15	9	4	10
511600	76	19	.01	1.49	.11	.27	.01	.05	.22	8	6	25
511601	95	27	.02	1.71	.15	.4	.02	.07	.49	15	8	23
511602	73	62	.01	1.33	.36	.28	.02	.11	.31	18	5	18
511603	71	24	.01	1.43	.2	.36	.01	.06	.24	10	5	21
511604	66	30	.01	1.32	.25	.28	.01	.08	.21	9	2	21
511605	77	46	.01	1.37	.31	.16	.01	.1	.4	12	2	28
511606	59	52	.01	1.5	.4	.27	.01	.1	.33	17	2	18
511607	58	70	.03	3.79	.88	.35	.01	.08	.44	21	3	27
511608	113	26	.01	1.32	.24	.54	.01	.1	.5	4	2	14
511609	73	58	.01	1.99	.7	.4	.01	.09	.33	65	2	25
511610	111	67	.01	1.35	.12	.37	.03	.2	.49	5	2	16
511611	72	56	.01	1.57	.74	.31	.01	.08	.24	13	2	18
511612	24	13	.01	.45	.1	.05	.01	.02	.03	8	2	8
511613	62	15	.01	.77	.14	.15	.01	.05	.08	6	2	21
511614	49	22	.02	.91	.14	.18	.01	.07	.09	8	2	15
511615	87	21	.01	1.05	.13	.21	.01	.06	.18	6	2	23
511616	112	41	.01	.93	.17	.2	.02	.13	.32	5	2	18
511617	73	50	.01	1.63	.78	.38	.01	.07	.18	9	2	20
511618	48	18	.01	.86	.14	.16	.01	.05	.12	8	2	16
511619	95	29	.02	.95	.17	.14	.01	.08	.18	7	2	16
511620	85	63	.01	1.91	.78	.49	.02	.11	.3	17	2	25
511621	125	39	.01	1.16	.16	.3	.01	.09	.23	8	2	15
511622	115	31	.01	1.69	.13	.46	.01	.09	.38	7	2	18
511623	104	42	.01	1.02	.16	.18	.02	.11	.2	4	2	15
511624	128	39	.01	1.35	.1	.21	.02	.11	.39	11	2	18
511625	106	56	.01	1.33	.18	.31	.03	.15	.42	12	2	19
511626	86	24	.01	1.09	.22	.19	.01	.05	.15	6	2	23
511627	78	28	.01	.98	.46	.25	.01	.06	.15	6	2	28
511628	63	50	.01	2.38	.18	.7	.02	.18	.43	7	2	16
511629	60	14	.04	2.34	.12	.28	.01	.03	.11	6	2	36
511630	74	11	.03	1.59	.16	.23	.01	.04	.23	3	2	43
511631	48	9	.03	1.05	.11	.13	.01	.02	.07	4	2	24
511632	41	17	.01	.74	.19	.14	.01	.03	.05	8	2	27
511633												
511634	50	17	.01	.82	.22	.25	.01	.02	.06	5	2	21
511635	85	28	.01	.78	.34	.19	.01	.03	.33	7	2	25
511636	45	30	.01	.97	.38	.28	.01	.03	.1	14	2	36
511637	56	26	.01	1.08	.25	.32	.01	.03	.08	9	2	25



SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	R	CR
511638	47	36	.01	1	.37	.33	.01	.04	.11	10	2	29
511639	57	27	.01	1.45	.28	.36	.01	.03	.1	10	2	36
511640												
511641	51	34	.01	.95	.33	.29	.01	.03	.12	12	2	29
511642	49	30	.01	.95	.34	.27	.01	.04	.05	6	2	21
511643	56	35	.01	.89	.48	.2	.01	.03	.05	6	2	20
511644	49	64	.01	1.3	1.56	.32	.01	.06	.2	16	4	28
511645	52	60	.01	1.7	.92	.37	.01	.05	.16	28	4	26
511646	50	32	.01	.92	.4	.29	.01	.03	.09	8	3	20
511647	41	33	.01	1.02	.37	.19	.01	.04	.09	18	2	20
511648	50	24	.01	1.39	.27	.19	.01	.03	.12	14	2	22
511649	66	26	.01	1.49	.3	.44	.01	.05	.17	12	3	28
511650	44	31	.01	1.39	.41	.33	.01	.05	.18	16	2	24
511651	71	33	.01	1.41	.54	.34	.01	.06	.1	17	2	23
511652	114	26	.01	1.64	.33	.56	.01	.05	.09	9	2	46
511653	97	22	.03	1.07	.33	.34	.01	.05	.19	8	2	35
511654	87	25	.01	1.28	.37	.31	.01	.04	.2	6	2	38
511655	96	23	.01	1.17	.24	.26	.01	.05	.18	5	2	28
511656	78	60	.01	1.23	.81	.44	.02	.06	.14	8	3	25
511657	74	25	.01	1.9	.35	.46	.01	.06	.29	7	2	30
511658	72	28	.01	1.52	.27	.4	.01	.05	.14	6	2	20
511659	106	35	.01	1.38	.28	.4	.01	.07	.18	8	2	33
511660	111	33	.01	1.49	.31	.26	.01	.06	.15	11	2	33
511661	91	44	.01	1.9	.42	.5	.01	.07	.2	10	5	33
511662	100	26	.01	1.35	.15	.35	.01	.07	.32	7	3	24
511663	95	32	.01	2.09	.17	.44	.01	.11	.51	6	2	19
511664	94	26	.01	1.99	.23	.45	.01	.07	.27	8	4	26
511665	92	25	.01	1.36	.15	.27	.02	.08	.24	7	3	18
511666	72	25	.01	1.32	.15	.29	.01	.07	.21	8	2	18
511667	92	31	.01	1.47	.24	.41	.01	.06	.3	6	2	22
511668	81	48	.01	1.84	.2	.41	.02	.12	.28	10	2	18
511669	76	48	.01	1.24	.12	.21	.02	.15	.2	13	2	14
511670	67	101	.01	1.99	.2	.4	.03	.2	.33	19	2	20
511671	78	87	.01	1.45	.15	.3	.03	.18	.27	16	2	18
511672	64	85	.01	1.18	.25	.27	.03	.2	.27	16	2	12
511673	89	42	.01	1.01	.16	.48	.02	.13	.4	7	2	8
511674	59	33	.01	1.7	.29	.3	.01	.04	.16	19	2	20
511675	79	29	.01	.99	.24	.32	.01	.09	.25	4	2	19
511676	86	32	.01	1.93	.59	.39	.01	.06	.19	14	7	30
511677	112	29	.01	1.43	.28	.33	.01	.05	.21	6	3	22

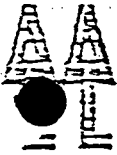
SAMPLE #	V	SR	SI	AL	CA	MG	NA	K	P	LA	B	CR
511678	112	43	.01	1.74	.23	.45	.01	.04	.16	6	4	13
511679	89	42	.01	1.82	.25	.48	.01	.09	.3	6	4	14
511680	95	18	.01	2.59	.34	.82	.01	.11	.42	6	5	9
511681	101	19	.01	1.56	.25	.41	.01	.06	.22	10	3	13
511682	111	39	.01	2.15	.25	.46	.01	.06	.33	7	3	18
511683	101	53	.01	2.57	.59	.63	.01	.06	.24	12	5	18
511684	84	72	.01	1.7	.88	.38	.02	.2	.35	13	4	16
511685	83	24	.01	1.6	.35	.4	.01	.05	.26	6	2	30
511686	91	21	.01	1.61	.22	.33	.01	.06	.31	9	4	23
511687	83	21	.02	1.83	.3	.52	.01	.08	.45	7	2	27
511688	94	45	.01	2.17	1.14	1.31	.01	.08	.26	11	4	24
511689	82	20	.01	1.92	.19	.41	.01	.06	.09	10	4	29
511690	91	40	.01	1.62	1.13	.49	.01	.05	.14	12	4	37
511691	97	41	.01	2.2	1.27	.7	.01	.1	.26	21	5	32
511692	96	26	.01	1.34	.42	.33	.02	.05	.11	8	4	31
511693	99	35	.01	2.1	.47	.44	.01	.07	.28	9	2	29
511694	92	20	.01	2.69	.25	.7	.01	.07	.34	10	4	33
511695	76	22	.01	1.05	.32	.28	.01	.05	.19	6	2	23
511696	94	28	.01	1.79	.36	.21	.01	.04	.09	6	2	32
511697	77	41	.01	1.5	1.01	.43	.01	.05	.13	15	4	32
511698	87	58	.03	2.12	1.8	.31	.01	.04	.15	13	5	33
511699	99	37	.01	1.76	.74	.75	.01	.08	.12	10	2	38
511700	76	28	.01	1.81	.38	.63	.01	.05	.14	11	2	49
511701	91	31	.01	2.23	.36	.54	.01	.04	.32	8	5	29
511702	123	24	.01	1.72	.2	.51	.01	.09	.46	8	5	26
511703	113	22	.01	1.94	.18	.35	.01	.04	.2	5	2	31
511704	103	24	.01	1.77	.23	.37	.01	.05	.24	7	4	29
511705	121	22	.02	1.39	.14	.26	.01	.06	.2	9	3	30
511706	76	59	.01	2.01	.67	.43	.01	.08	.3	21	4	27
511707	104	29	.02	2.26	.23	.6	.01	.06	.16	9	4	32
511708	106	35	.01	1.94	.16	.42	.01	.13	.38	9	5	26
511709	102	29	.01	2.11	.17	.6	.01	.11	.4	11	5	26
511710	76	38	.01	1.52	.41	.44	.01	.08	.15	11	4	21
511711	78	53	.01	1.85	.64	.41	.01	.08	.23	20	5	23
511712	84	53	.01	1.91	.64	.61	.01	.07	.26	11	2	19
511713	103	27	.01	2.17	.09	.39	.01	.07	.19	4	2	13
511714	78	70	.01	1.51	.62	.34	.02	.12	.23	16	2	15
511715	84	85	.01	2.75	1.31	.56	.01	.06	.37	40	2	26
511716	102	53	.01	1.66	.75	.62	.01	.05	.17	13	2	25
511717	80	44	.01	1.68	.29	.56	.01	.04	.12	8	2	19

SAMPLE #	V	GR	SI	AL	CA	MG	NA	K	P	LA	B	CR
511718	35	15	.01	.64	.1	.07	.01	.03	.04	11	2	10
511719	38	16	.01	.77	.14	.13	.01	.15	.06	9	2	9
511720	60	33	.01	1.09	.21	.12	.01	.06	.12	11	2	10
511721	72	35	.01	.95	.08	.12	.02	.13	.15	11	2	13
511722	73	39	.01	1.39	.09	.26	.02	.15	.21	11	3	15
511723	61	47	.01	1.4	.17	.28	.01	.16	.18	11	2	14
511724	84	58	.01	1.17	.27	.18	.01	.17	.28	11	2	11
511725	78	29	.01	.78	.1	.07	.01	.11	.19	8	3	13
511726	67	23	.01	1.08	.06	.15	.01	.08	.16	9	2	10
511727	71	26	.01	1.46	.07	.2	.01	.09	.23	9	2	13
511728	86	24	.01	1.74	.12	.43	.01	.08	.28	7	2	16
511729	67	22	.01	1.3	.14	.18	.01	.05	.14	9	2	14
511730	61	21	.01	.76	.15	.08	.01	.03	.08	7	2	15
511731	108	24	.01	1.38	.16	.21	.01	.05	.15	7	2	22
511732	103	23	.01	1.92	.2	.56	.01	.07	.29	7	4	22
511733	71	15	.01	1	.1	.16	.01	.04	.17	7	3	16
511734	82	26	.01	2.21	.22	.59	.01	.05	.09	9	3	30
511735	51	24	.01	1.57	.22	.37	.01	.04	.07	7	2	19
511736	44	27	.01	1.11	.19	.21	.01	.02	.03	7	2	14
511737	53	26	.01	1.43	.22	.37	.01	.02	.07	7	2	20
511738	77	27	.01	1.31	.27	.43	.01	.03	.1	7	3	23
511739												
511740												
511741	44	22	.01	1.3	.22	.24	.01	.03	.08	5	2	18
511742	63	51	.01	1.83	.67	.52	.01	.05	.22	13	3	19
511743	69	30	.01	1.66	.28	.58	.01	.05	.07	7	4	19
511744	80	29	.01	2.36	.25	.69	.01	.06	.12	12	4	26
511745	64	27	.01	1.9	.23	.48	.01	.05	.14	9	2	25
511746	57	28	.01	1.86	.24	.44	.01	.04	.2	12	2	22
511747	73	30	.01	1.95	.23	.45	.01	.04	.17	13	2	26
511748	55	26	.01	1.64	.25	.33	.01	.04	.16	10	3	20
511749	109	28	.01	1.79	.26	.55	.01	.05	.17	8	4	36
511750	90	22	.01	1.34	.19	.38	.01	.05	.12	7	2	24
511751	96	59	.01	2.54	.8	.61	.01	.07	.28	13	5	27
511752	46	36	.01	1.28	.38	.24	.01	.05	.14	11	2	22
511753	70	26	.01	2.07	.22	.54	.01	.06	.1	11	4	30
511754	64	24	.01	1.2	.32	.44	.01	.04	.1	7	3	19
511755	46	26	.01	1.23	.21	.36	.01	.05	.07	6	2	19
511756	36	22	.01	1.85	.14	.25	.01	.04	.21	8	2	32
511757	57	29	.01	1.63	.23	.4	.01	.04	.07	10	3	23



APPENDIX 2

GEOCHEMICAL PREPARATION & ANALYTICAL PROCEDURES



## ACME ANALYTICAL LABORATORIES LTD.

Assaying &amp; Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone : 253 - 3158

Geochemical Analysis for Uranium

0.5 gram samples are digested with hot aqua regia and diluted to 10 ml.

Aliquots of the acid extract are solvent extracted using a salting agent and aliquots of the solvent extract are fused with NaF,  $K_2CO_3$  and  $Na_2CO_3$  flux in a platinum dish.

The fluorescence of the pellet is determined on the Jarrel Ash Fluorometer.

Geochemical Analysis for Fluorine

0.25 gram samples are fused with sodium hydroxide and leached with 10 ml water. The solution is neutralized, buffered, adjusted to pH 7.8 and diluted to 100 ml.

Fluorine is determined by Specific Ion Electrode using an Orion Model 404 meter.

Geochemical Analysis for Tin

1.0 gram samples are fused with ammonium iodide in a test tube. The sublimed iodine is leached with dilute hydrochloric acid.

The solution is extracted with MIBK and tin is determined in the extract by Atomic Absorption.

Geochemical Analysis for Chromium

0.1 gram samples are fused with  $Na_2O_2$ . The melt is leached with HCl and analysed by AA or ICP.

Geochemical Analysis for Hg

0.5 gram samples is digested with aqua regia and diluted with 20% HCl.

Hg in the solution is determined by cold vapour AA using a F & J Scientific Hg assembly. An aliquot of the extract is added to a stannous chloride / hydrochloric acid solution. The reduced Hg is swept out of the solution and passed into the Hg cell where it is measured by AA.

Geochemical Analysis for Ga & Ge

0.5 gram samples are digested with hot aqua regia with HF in pressure bombs.

Ga and Ge in the solution are determined by graphite furnace AA.

Geochemical Analysis for Tl (Thallium)

0.5 gram samples are digested with 1:1  $HNO_3$ . Tl is determined in the extract by graphite AA.

Geochemical Analysis for Te (Tellurium)

0.5 gram samples are digested with hot aqua regia. The Te extracted in MIBK is analysed by AA graphite furnace.



## ACME ANALYTICAL LABORATORIES LTD.

Assaying &amp; Trace Analysis

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GEOCHEMICAL LABORATORY METHODOLOGY - 1984Sample Preparation

1. Soil samples are dried at 60°C and sieved to -80 mesh.
2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis (AA and ICP)

0.5 gram samples are digested in hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water. Extracted metals are determined by :

## A. Atomic Absorption (AA)

Ag\*, Bi\*, Cd\*, Co, Cu, Fe, Ga, In, Mn, Mo, Ni, Pb, Sb\*, Tl, V, Zn  
 (\* denotes with background correction.)

## B. Inductively Coupled Argon Plasma (ICP)

Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cu, Cr, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Geochemical Analysis for Au\*

10.0 gram samples that have been ignited overnight at 600°C are digested with hot dilute aqua regia, and the clear solution obtained is extracted with Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 5 ppb direct AA and 1 ppb graphite AA.)

Geochemical Analysis for Au\*\*, Pd, Pt, Rh

10.0 - 30.0 gram samples are subjected to Fire Assay preconcentration techniques to produce silver beads.

The silver beads are dissolved and Au, Pd, Pt and Rh are determined in the solution by graphite furnace Atomic Absorption.

Geochemical Analysis for As

0.5 gram samples are digested with hot dilute aqua regia and diluted to 10 ml. As is determined in the solution by Graphite Furnace Atomic Absorption (AA) or by Inductively Coupled Argon Plasma (ICP).

Geochemical Analysis for Barium

0.1 gram samples are digested with hot NaOH and EDTA solution, and diluted to 10 ml.

Ba is determined in the solution by Atomic Absorption or ICP.

Geochemical Analysis for Tungsten

1.0 gram samples are fused with KCl, KNO<sub>3</sub> and Na<sub>2</sub>CO<sub>3</sub> flux in a test tube, and the fusions are leached with 20 ml water. W in the solution determined by ICP with a detection of 1 ppm.

APPENDIX 3

GEOPHYSICAL SURVEYS REPORT  
(Maps for this report in pocket)



PHIL 1-HASLINGER OPTION GEOPHYSICS

INTERPRETATION REPORT

JULY, 1985

A. Wynne

## INTRODUCTION

An integrated geophysical program has been completed on the Phil 1-Haslinger option property of Selco Division - BP Resources Canada Limited.

The purpose of the surveys was to try to map subsurface geology and locate any areas of disseminated sulphides which may correlate to gold mineralization. Magnetics, VLF and frequency domain Induced Polarization (IP) was run. A total of 18.5 km of IP and 47.7 km of VLF and magnetics was run.

A wide zone of disseminated sulphides was outlined by the IP frequency effect. Close spatial relationships of these anomalies to favourable lithologies and high gold in soils geochemistry provide two major zones of interest within the anomaly. One of these zones is further defined into four discrete targets.

## EQUIPMENT

### IP

A Phoenix model IPV-1 IP and resistivity receiver was used in conjunction with a Phoenix model IPT-1 transmitter, powered by a 2 kw generator. IP effect is recorded directly as percent frequency effect (P.F.E.) at operating frequencies of 4.0 and 0.25 hz. Apparent resistivity values are normalized in units of ohm-metres, while metal factors are calculated according to the formula:

$$MF = (P.F.E. \times 1000) - \text{Apparent Resistivity}$$

A dipole-dipole array was used with a basic interelectrode distance of 50 metres. Four N spacings were read. Data is presented as stacked profiles of resistivity and frequency effect data, and as frazer filtered plan maps of resistivity and frequency effect data.

Magnetics

*Total field measured in gammas*

An EDA ppm 350 and ppm 400 base station and field magnetometer was employed. This system employs two microchip controlled proton precession magnetometers and automatically corrects for diurnal activity. Data is presented as contoured plan map.

VLF

A Geonics EM16 was used. This unit measures the in-phase and quadrature components of the horizontal field generated by a vertical coil used for communication. Readings are taken parallel to the field and any non-horizontal perturbations caused by local conductive phenomena are measured. Data is presented as profiles of the in-phase and quadrature data.

DISCUSSION OF RESULTS

The IP survey delineated a zone of increased frequency effect which covers the entire north-south extent of the grid, indicating a length of at least 1.7 km. On line 96+00N, the zone

extends from 114+00E to 124+00E. On line 79+00N, the zone covers 117+00E to at least 122+00E. Between these lines, the zone has a general concave shape, arced to the east (Map 7). Within this zone of enhanced values, there are four areas where the IP profiles (Map 1) indicate a polarization centre which is probably due to higher sulphide content. These are located at 91+00N/121+50E, 89+00N/125+00E, 87+00N/123+00E and 83+00N/121+50E. The resistivity data generally mimics the frequency effect, indicating a generally lower resistivity over the disseminated body. The VLF responds weakly to the lithological contact and in general indicates a lower resistivity zone corresponding to the chargeability high (Maps 4 and 7). One VLF trace appears to be caused by a conductive plate, lines 82+00N to 79+00N at 114+00E. This corresponds to an IP high and may indicate a massive zone.

Gold in soil geochemistry generally mimics the IP high also, with a strong trend at about  $040^{\circ}$  from line 79+00N to 89+00N corresponding to the core of the IP anomaly. The correspondence of the frequency effect data and soil geochemistry is much poorer in the northeast, probably at least in part due to severe topographic effects on both techniques. The most interesting zone here may be a short VLF trace which correlates with Au geochemistry (96+00N - 94+00N/112+00E) and a magnetic high which may indicate a diorite intrusive.

A magnetic high in the northeast corner of the grid indicates an intrusive. Apart from that, the magnetics renders little information because of high susceptibilities of the volcanics masking any geological information.

The entire section is in favourable volcanic rocks and correlates quite well to the greater than 1% pyrite in rocks as mapped from outcrop.

#### CONCLUSIONS

The IP, VLF and magnetic surveys have delineated a 1.7 km long section of disseminated sulphides. Within this section there are four areas of special interest outlined by discrete frequency effect signatures and spatially related gold in soils. These are 91+00N/120+50E, 89+00N/125+00E, 87+00N/123+00E and 83+00N/121+50E. Two zones of interest exist outside the large frequency effect high. These are at 82+00N to 79+00N/114+00E where VLF indicates a massive source and there is a frequency effect anomaly, and at 96+00N to 94+00N/112+00E where a VLF trace correlates to gold in soils and is upslope from the major frequency effect and gold in soil anomalies.

RECOMMENDATIONS

It is recommended that the six discrete geophysical targets listed above, five of which have spatially related Au in soil anomalies, be used as a focus to test the larger overall structure for gold content. This could be done either with trenching or percussion drilling.

APPENDIX 4  
GEOCHEMICAL SURVEYS - MEMOS

114  
Stankoff

## SELCO Memorandum

subject: PHIL 1 SOIL ORIENTATION STUDY

date : August 20, 1985

from : S. Hoffman

to : M. Rebagliati, R. Meyers

cc: D.K. Mustard  
H. Squair ✓

---

Summary

A soil orientation survey was undertaken northwest of the CREEK zone on the PHIL-1, Haslinger project to investigate genesis of apparently linear east-west trending geochemical anomalies for elements such as Fe, Cu and Co parallel to grid lines. Orientation sampling positioned a grid having a sample density of 50 m X 100 m to overlap existing work halfway between existing lines. This plan, involving collection of about 250 samples, gives the anomalous area an effective sample density of 50 m X 50 m or 50 m X 100 m.

Three geochemical signatures are identified for gold anomalies, probably corresponding to different geological environments. Most of the gold-rich area appears to trend parallel to geology across a 750 m wide band. An east-northeast trending fault mapped in 1984 represents the northern boundary for anomalous features for many of the distribution patterns, for example for Co, Mn, Mg, Ca, Ni and Fe, suggesting the structure has superimposed different geologic units in juxtaposition. One gold-rich target zone some 500 m long and parallel to lithology and also trending up and down slope, lies partly in the northern environment, the gold being surrounded by halos of Ag, Mo, Cu, Pb, Ni and Fe. Maximum gold content is 5.5 ppm. A second zone lies in the southeast corner of the grid, characterized by overlapping anomalies of Ag, Cu, Mo and peripheral zones of Pb and Zn enhancement. This gold anomaly was discovered in 1985 as a consequence of the orientation work and is associated with a maximum value of 11.5 ppm Au. Its limited dimensions of about 100 to 150 m across reflects exposure of a small area of residual soils in a predominately outwash-covered area where anomalies would be expected to be poorly developed.

The third anomaly represents the largest of the gold-rich zones, overlying an area of about 500 m X 500 m. Boundary on the north is the previously mentioned east-northeast fault; boundary to



the south is the extensive outwash deposits of the main valley. A maximum gold value of 19.5 ppm lies along the western side of the gold-rich region, accompanied by Ag, As, Sb, Cu, Mo, Pb, Mg, Fe and Ni. Co, Mn, and Ca zones of enhancement trending northeast lie to the south of the highest gold values.

The third gold anomaly trends approximately east-west along L93N. About 300 m to the east of the gold anomaly described in the paragraph above, lies a zone of weaker gold enhancement accompanied by strong accumulation of As, Sb, Fe, Pb, Zn, Co, Mn and weaker enrichment of Ag, Mo, Ca, Mg and Ni. The element signature is similar to that of the QR deposit of Dome Mines, the best grades of gold predicted to underly or lie to the west of the western portion of the arsenic anomaly.

All soil gold anomalies are developed in residual soil or talus fine material. Glacial dispersion in a northeasterly direction is evident north of the orientation grid, but not within the present report area. Evidence for glacial dispersion parallel to the major valley in the south is also not apparent, geochemical gradients best being explained by sources within or at the upslope margin of the gold anomaly, displaced 50 to 150 m downslope mechanically under the influence of gravity. Bedrock source(s) would appear to have an east-west orientation. Followup would be most effective within or immediately upslope of the gold-rich areas defined by the greater than 100 ppb contour.

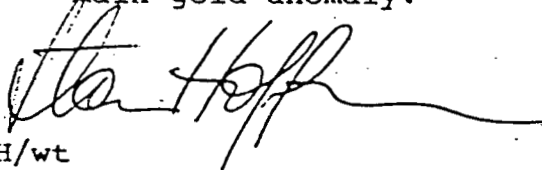
High backgrounds of copper and gold in bedrock appear to have been cut by east-northeast and easterly trending structures. This would explain the absence of wide spread enhancement of other elements. Faulting parallel to the one mapped trending east northeastward introduced additional gold and the pathfinder elements Co, Mn, Ca, Mg, Ni and Fe along a 200 m wide zone. The zone is broken in an interpreted fault aligned parallel to volcanic stratigraphy. Local focuses of hydrothermal activity are marked by Mo, Ag, Sb and to a lesser extent As accumulation. Outstanding enhancement of As, Fe, Pb, Zn, Co, Mn along the eastern margin of the Au anomaly extends further eastward into a region devoid of anomalous gold-in-soil values. The multielement anomaly may represent a non gold-bearing pyritic unit or some other metal-rich geological unit.

The significance of the soil gold anomalies needs to be tested to determine geologic controls and geologic affiliation. The present geological information is not sufficiently detailed to explain the geochemical anomalies. IP anomalies are strongly associated with the southeastern gold zone, are weakly associated with the large central zone which is surrounded by better IP anomalies, and are absent in the northwest. Magnetic highs reflecting acid intrusions are found east of the orientation grid and associated with the northwestern gold zone. VLF anomalies support a structure parallel to the northwesterly structure

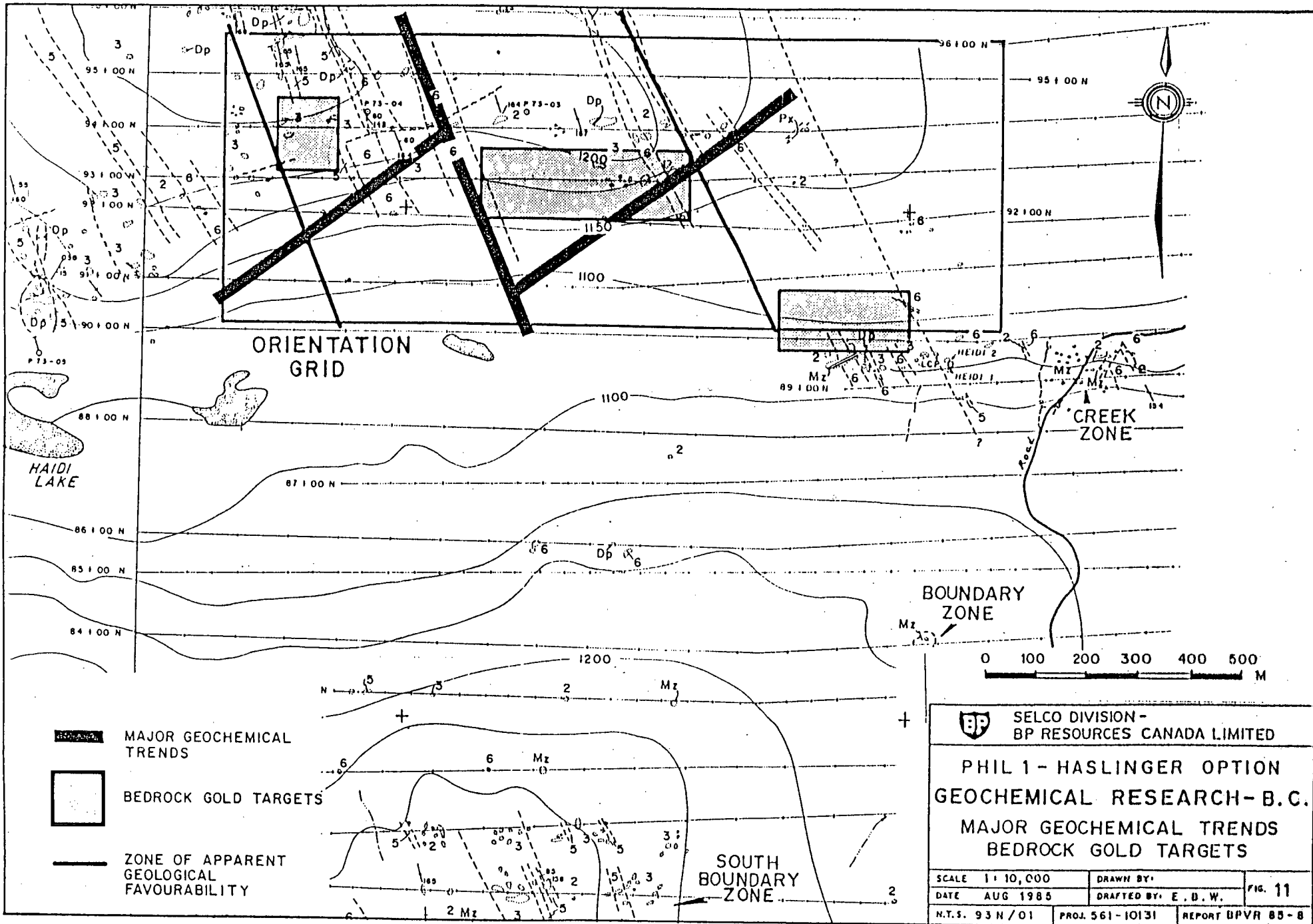
interpreted on the basis of geochemical data and suggest the northwestern gold anomaly lies within a conductive zone. The three gold targets each warrant followup, particularly in view of their contrasting geochemical and geophysical signatures.

#### Recommendations

- (1) Detailed geological mapping and continuous rock chip sampling at 5 m intervals is required of the three areas outlined for additional study.
- (2) Trenching across anomalous zones in a north-south direction, extending up to 50 m upslope (or more as dictated by topography) is needed to locate bedrock source zones for the gold anomalies.
- (3) Following completion of (1) above, and a return of favourable indications for the rock chip sampling program in (2) above, drill targets will emerge. At least one hole should be considered for each of the gold targets. A second hole is probably needed to test the eastern portion of the main gold anomaly.

  
SH/wt

attachments



**BP SELCO DIVISION - BP RESOURCES CANADA LIMITED**

**PHIL 1 - HASLINGER OPTION**

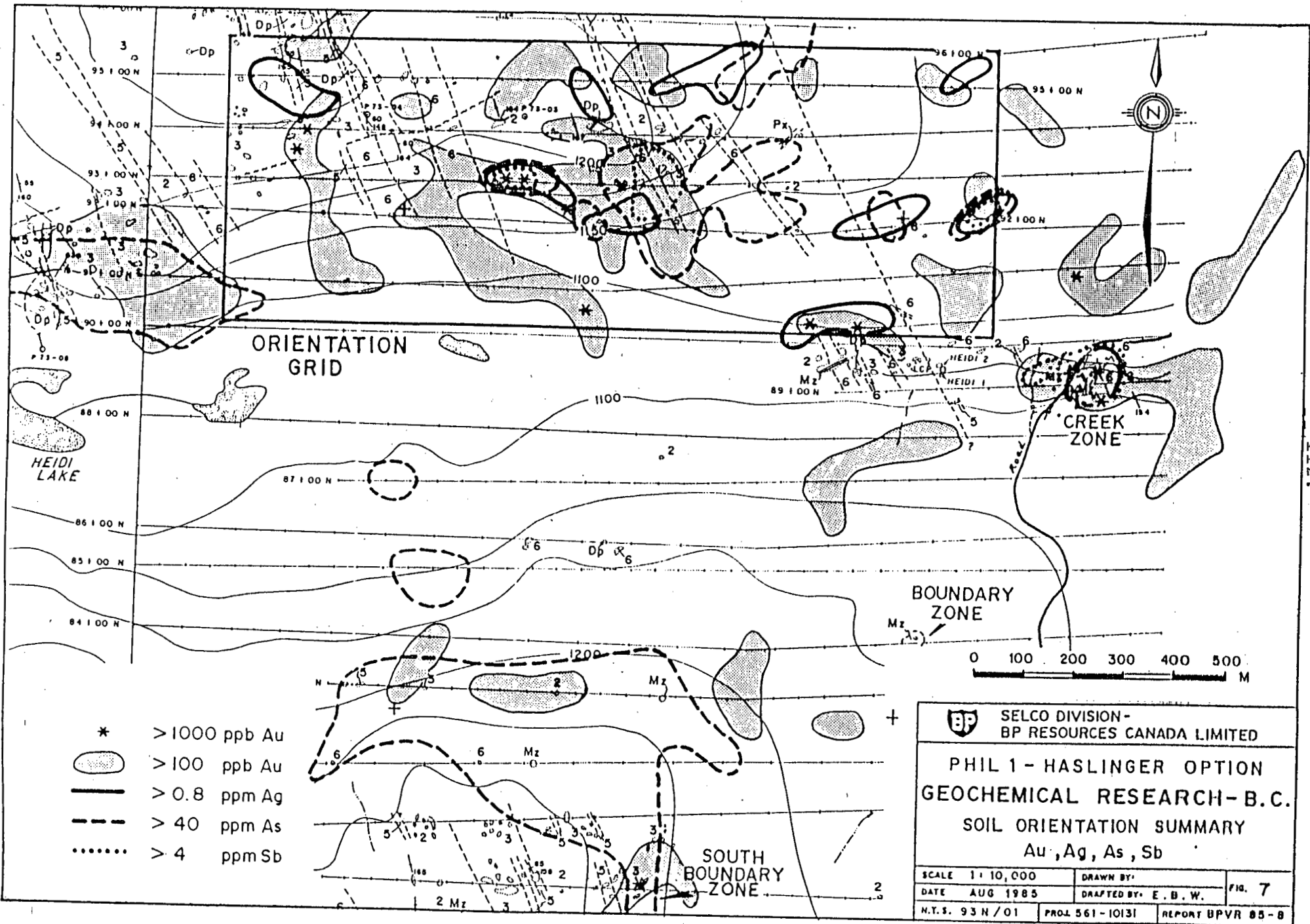
**GEOCHEMICAL RESEARCH - B.C.**

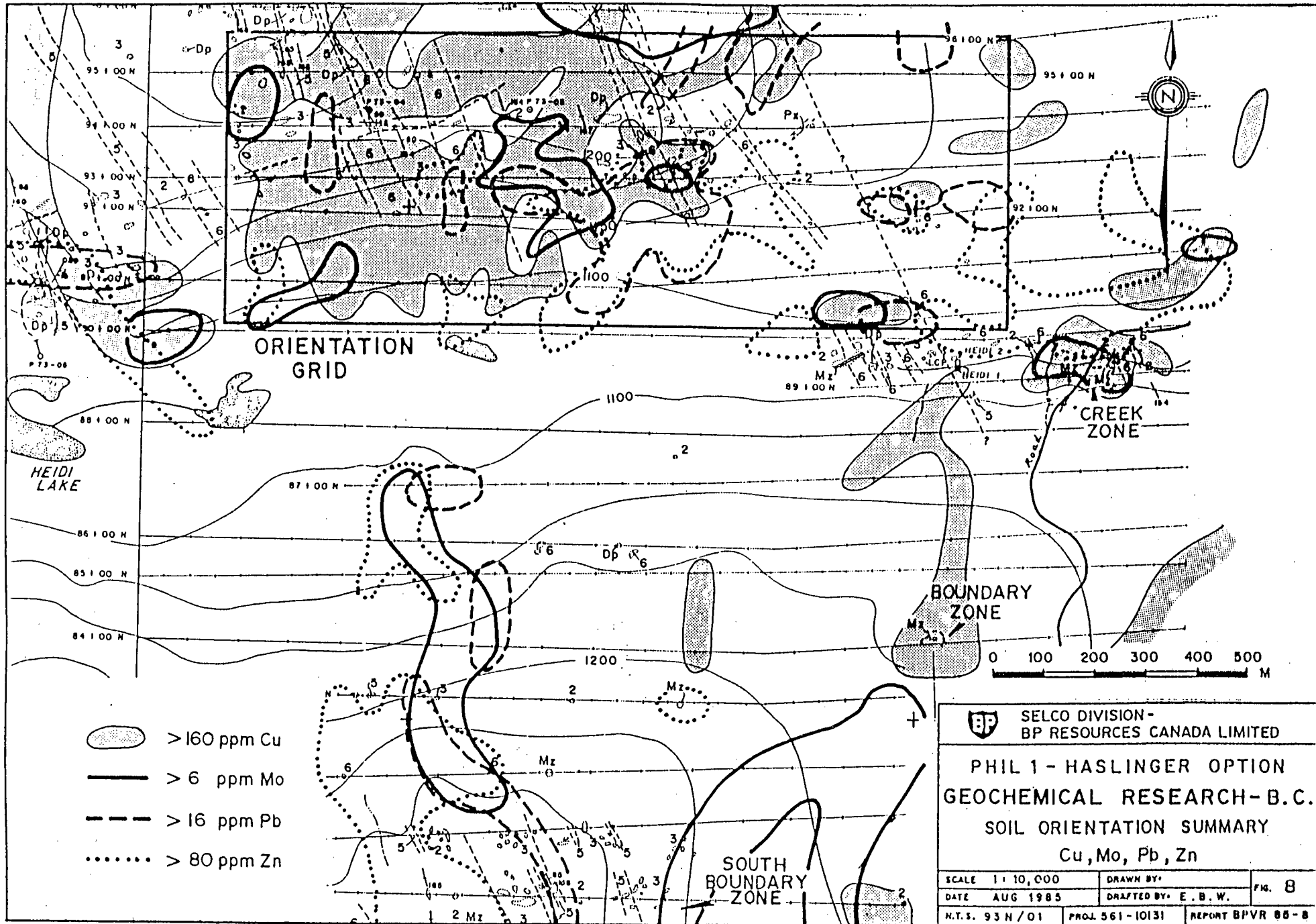
**MAJOR GEOCHEMICAL TRENDS**

**BEDROCK GOLD TARGETS**

SCALE 1 : 10,000	DRAWN BY:	FIG. 11
DATE AUG 1985	DRAFTED BY: E. D. W.	
N.T.S. 93 N / 01	PROJ. 561-10131	REPORT BPVR 85-8

111.

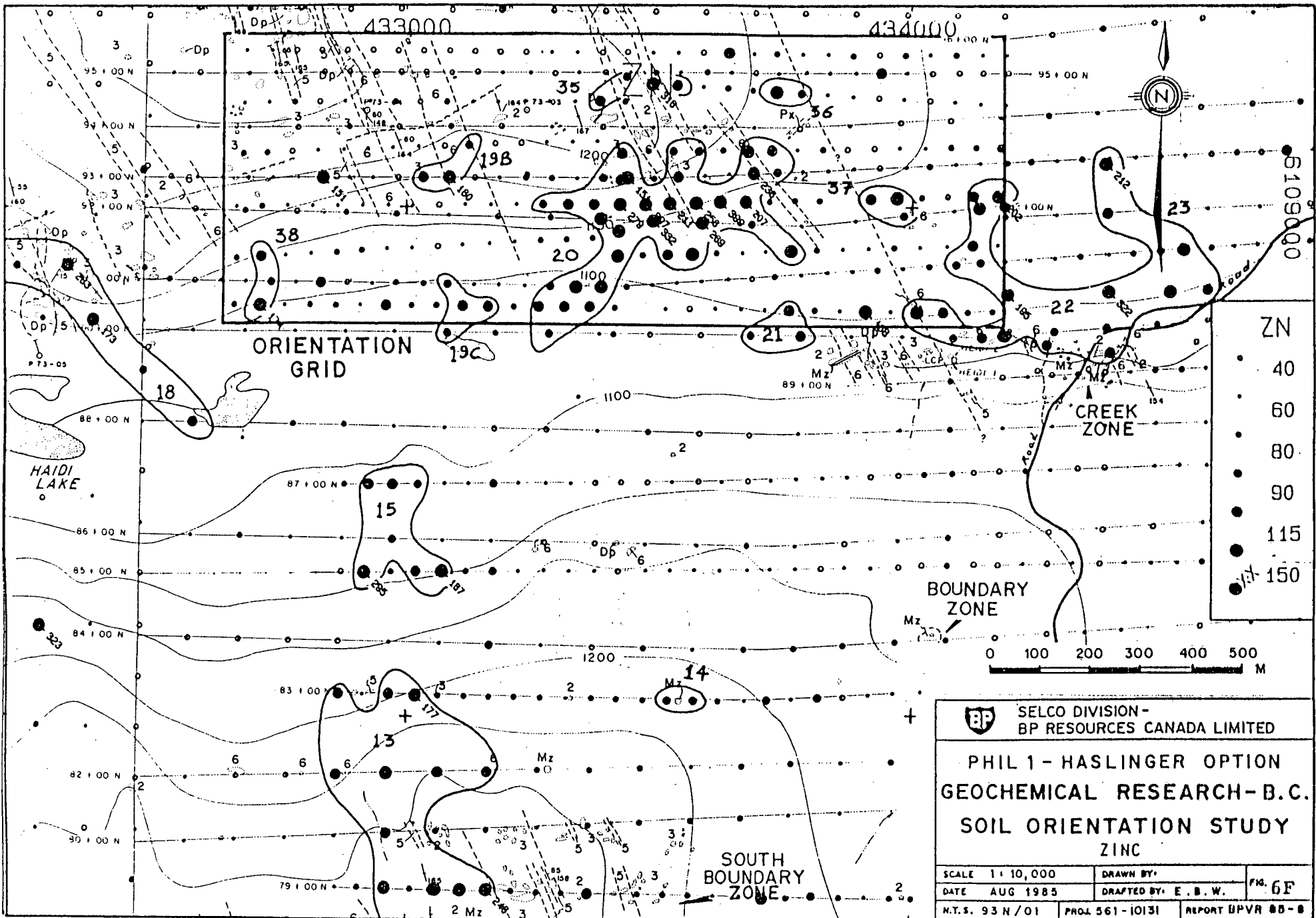





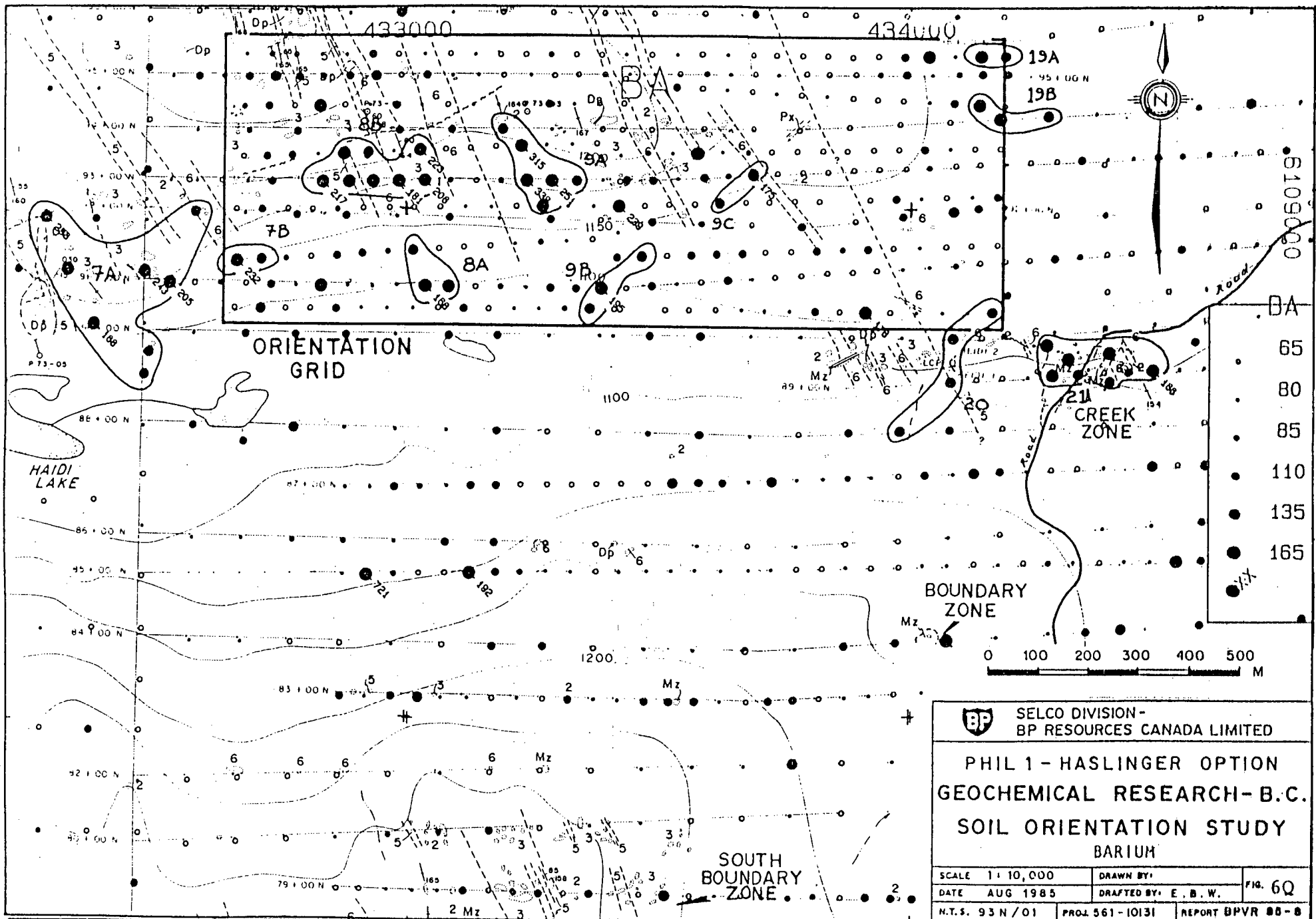
**BP SELCO DIVISION - BP RESOURCES CANADA LIMITED**


**PHIL 1 - HASLINGER OPTION  
GEOCHEMICAL RESEARCH - B.C.  
SOIL ORIENTATION SUMMARY  
Cu, Mo, Pb, Zn**

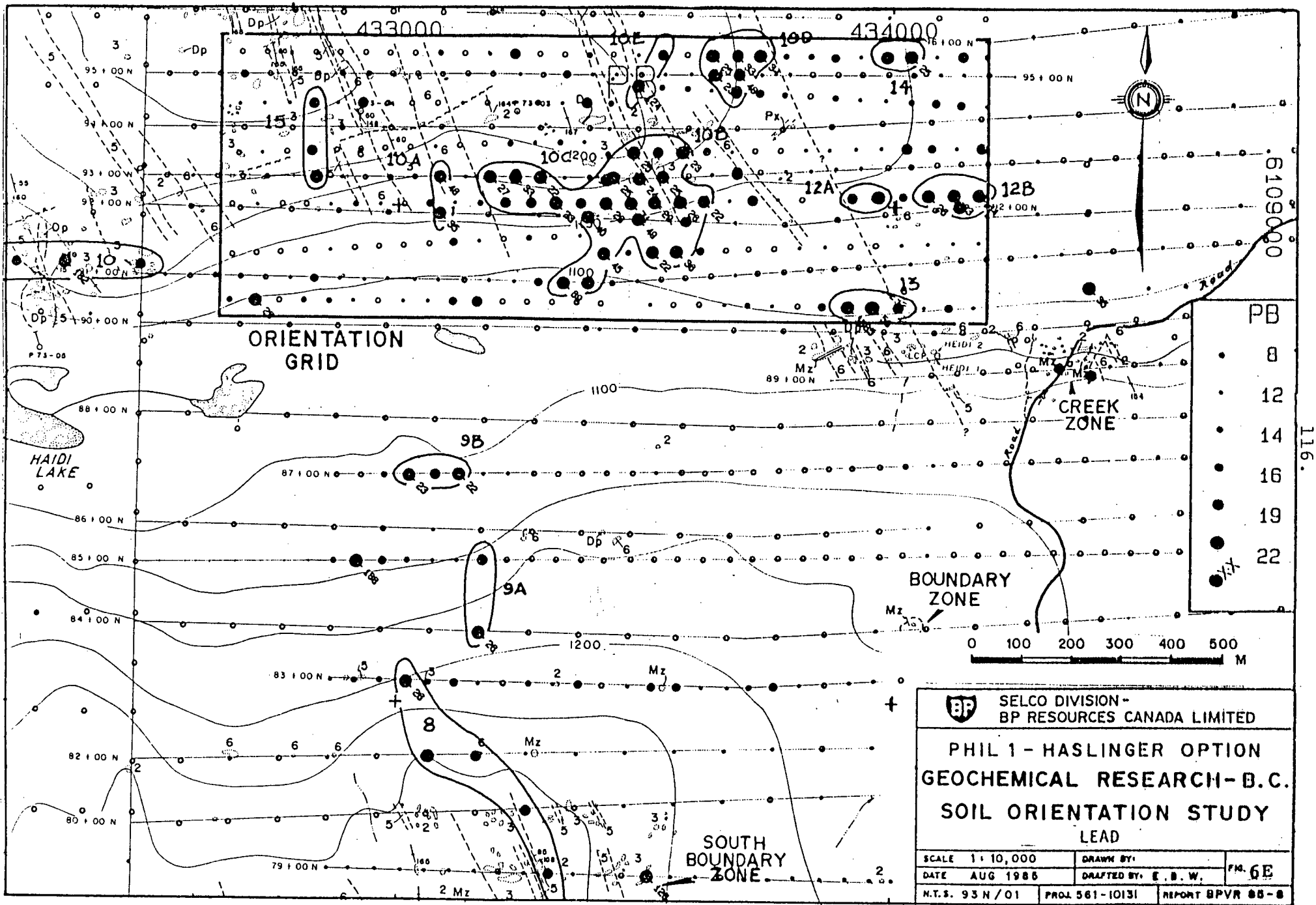
SCALE 1:10,000	DRAWN BY:	FIG. 8
DATE AUG 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N / 01	PROJ. 561 - 10131	REPORT BPVR 85 - 8



 <b>SELCO DIVISION - BP RESOURCES CANADA LIMITED</b>		
<b>PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY ZINC</b>		
SCALE 1:10,000	DRAWN BY:	FIG. 6F
DATE AUG 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/01	PROJ 561-10131	REPORT UPVR 85-8




 <b>SELCO DIVISION - BP RESOURCES CANADA LIMITED</b>		
<b>PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY BARIUM</b>		
SCALE 1: 10,000	DRAWN BY:	FIG. 6Q
DATE AUG 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N / 01	PROJ. 561 - 10131	REPORT BPVR 80 - 8

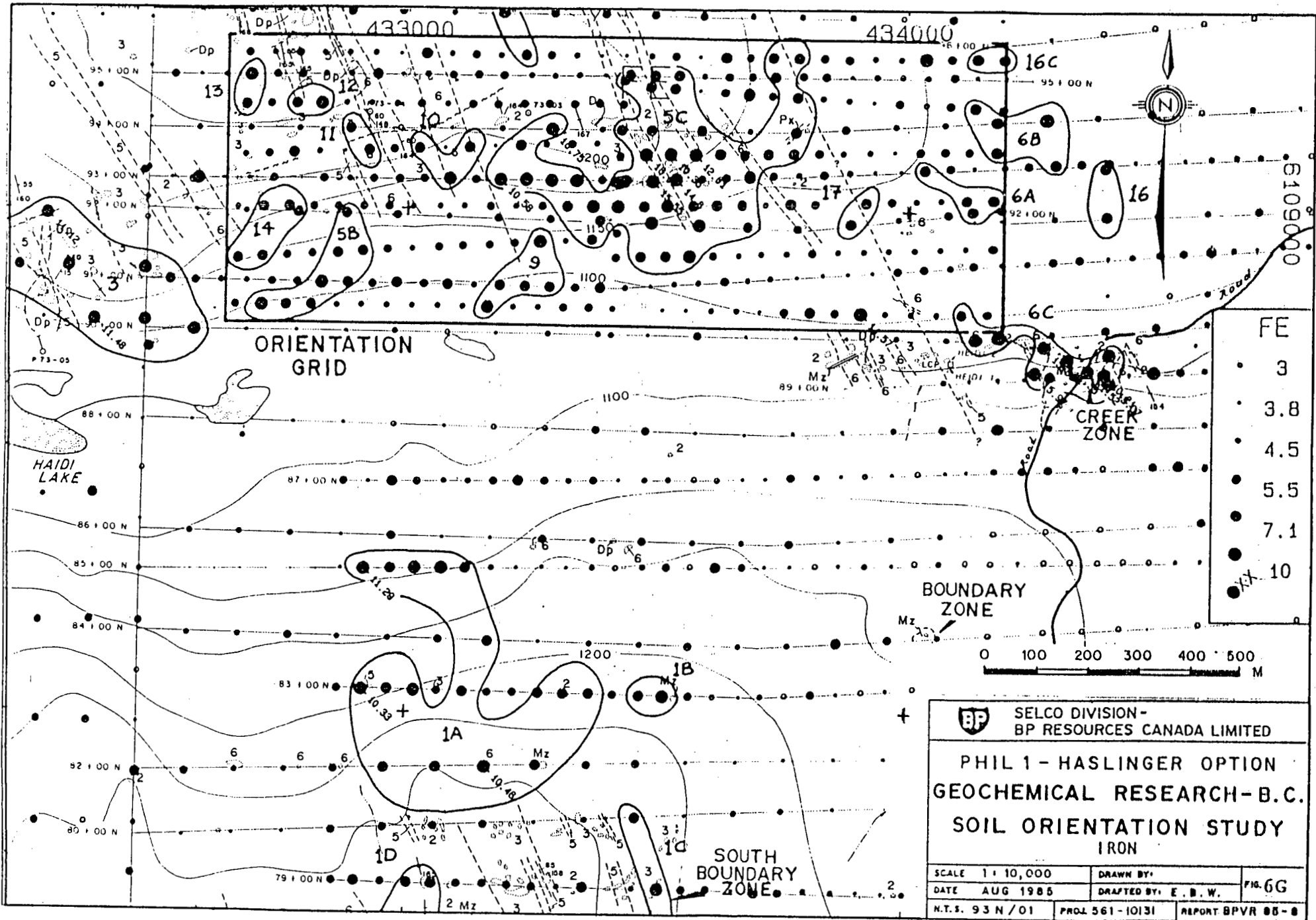



PB  
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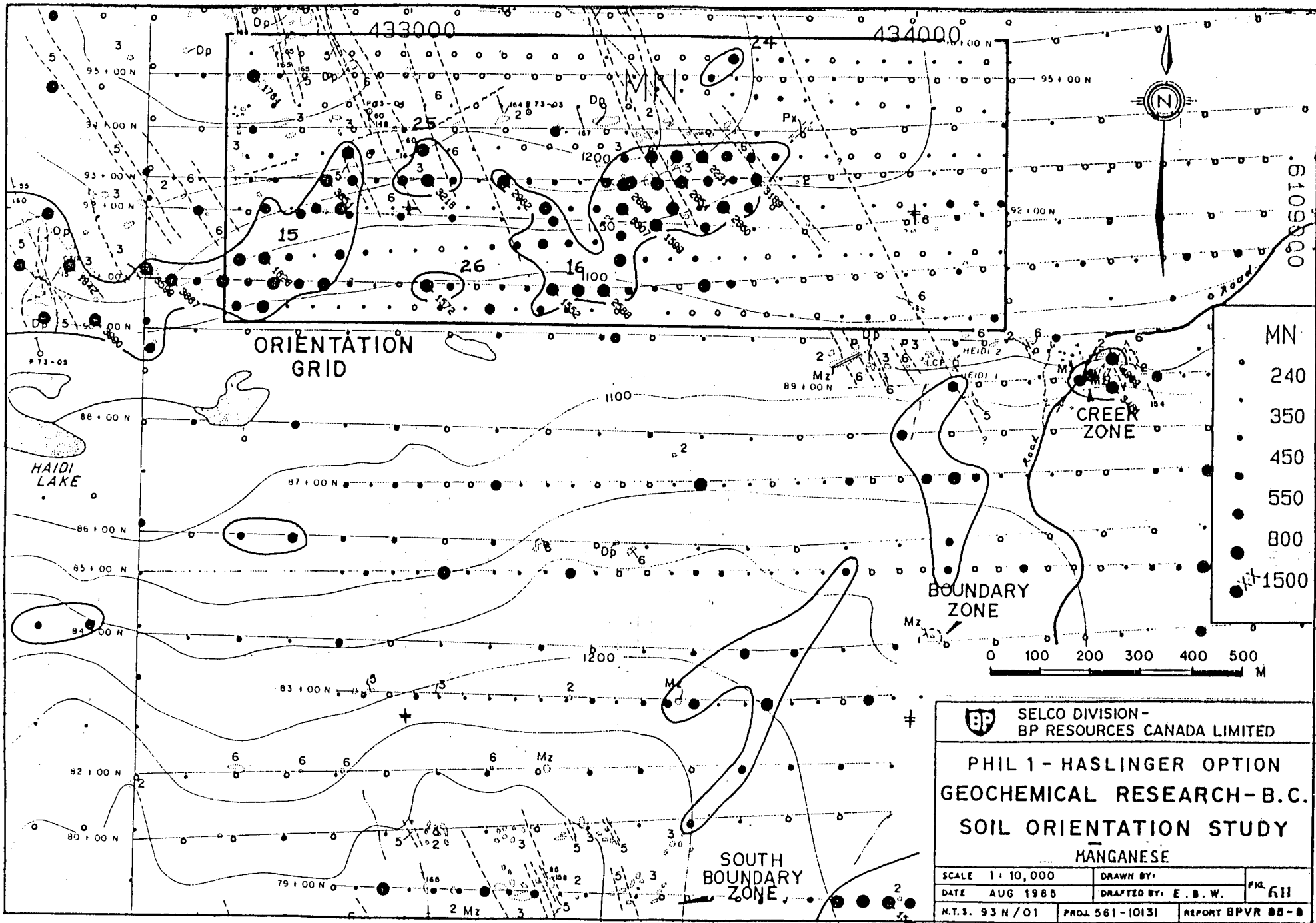
116.

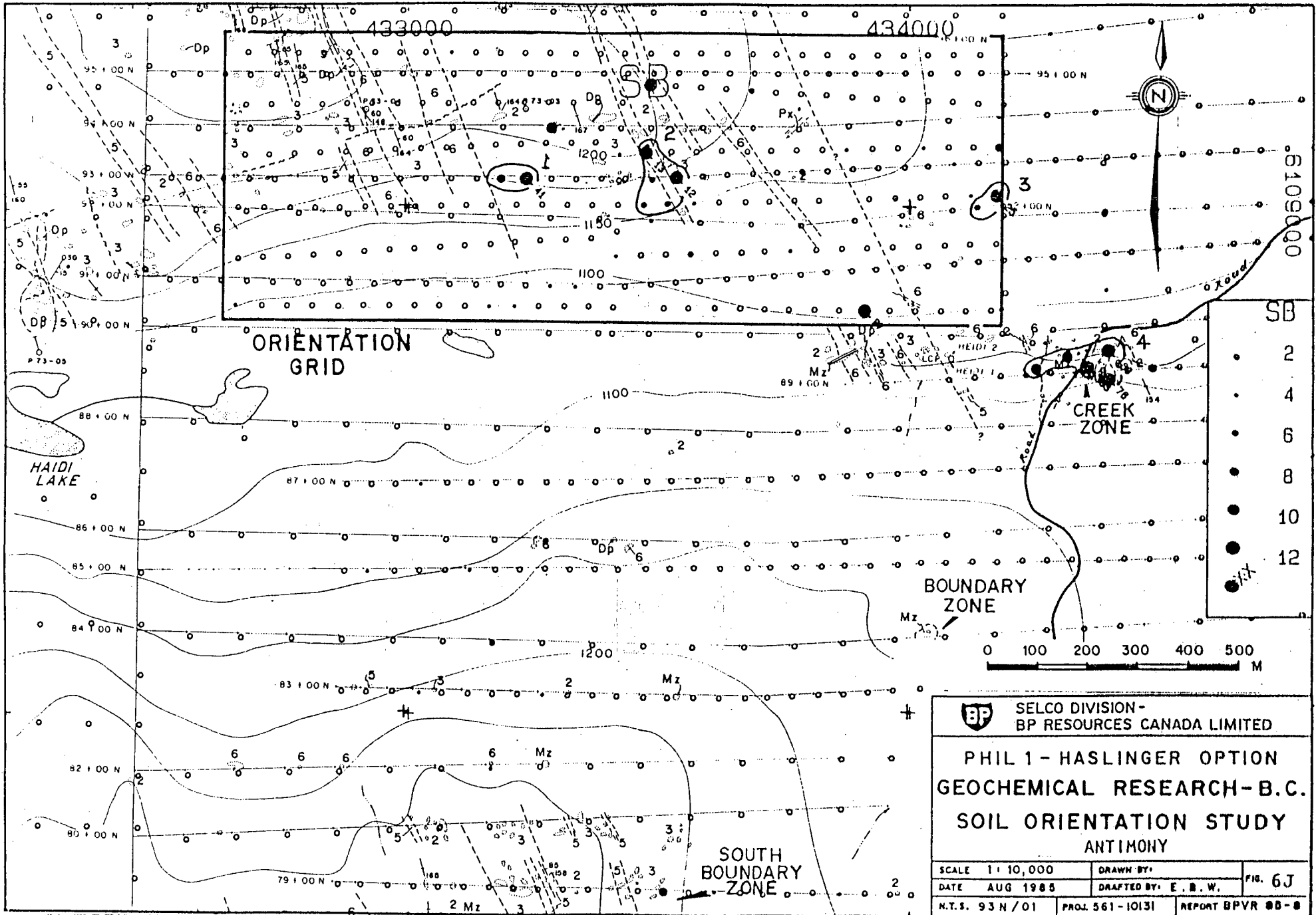
 <b>SELCO DIVISION - BP RESOURCES CANADA LIMITED</b>		
<b>PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY LEAD</b>		
SCALE 1:10,000	DRAWN BY:	FIG. 6E
DATE AUG 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/01	PROJ. 561-10131	REPORT BPVR 85-8






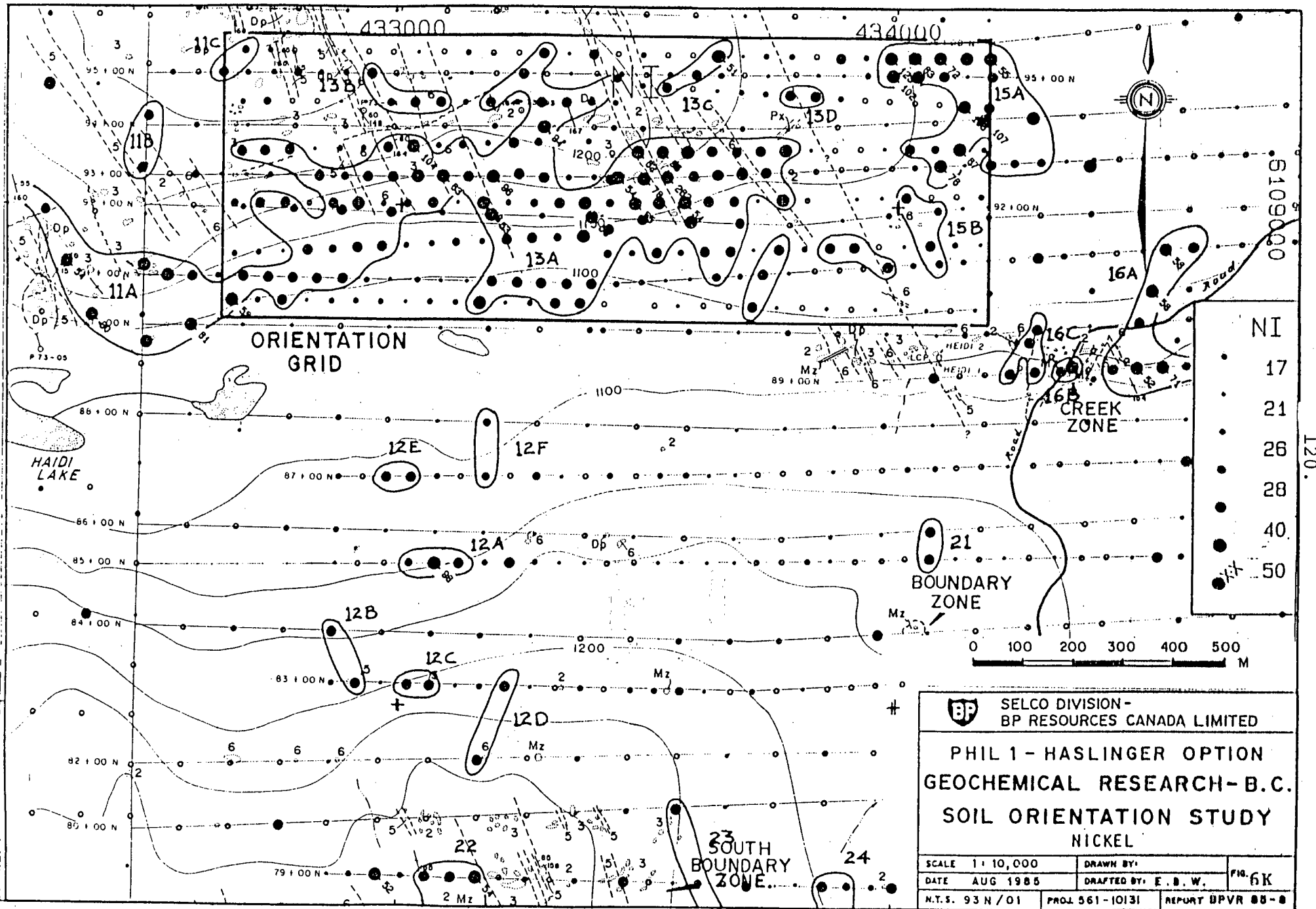
 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY IRON		
SCALE 1 : 10,000	DRAWN BY:	FIG. 6G
DATE AUG 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N / 01	PROJ 561 - 10131	REPORT BPVR 85 - 8





119.

 <b>SELCO DIVISION - BP RESOURCES CANADA LIMITED</b>		
<b>PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY ANTIMONY</b>		
SCALE 1 : 10,000	DRAWN BY:	FIG. 6J
DATE AUG 1985	DRAFTED BY: E. B. W.	
M.T.S. 93 N / 01	PROJ. 561 - 10131	REPORT BPVR 88 - 8



ORIENTATION GRID

HAIDI LAKE

CREEK ZONE

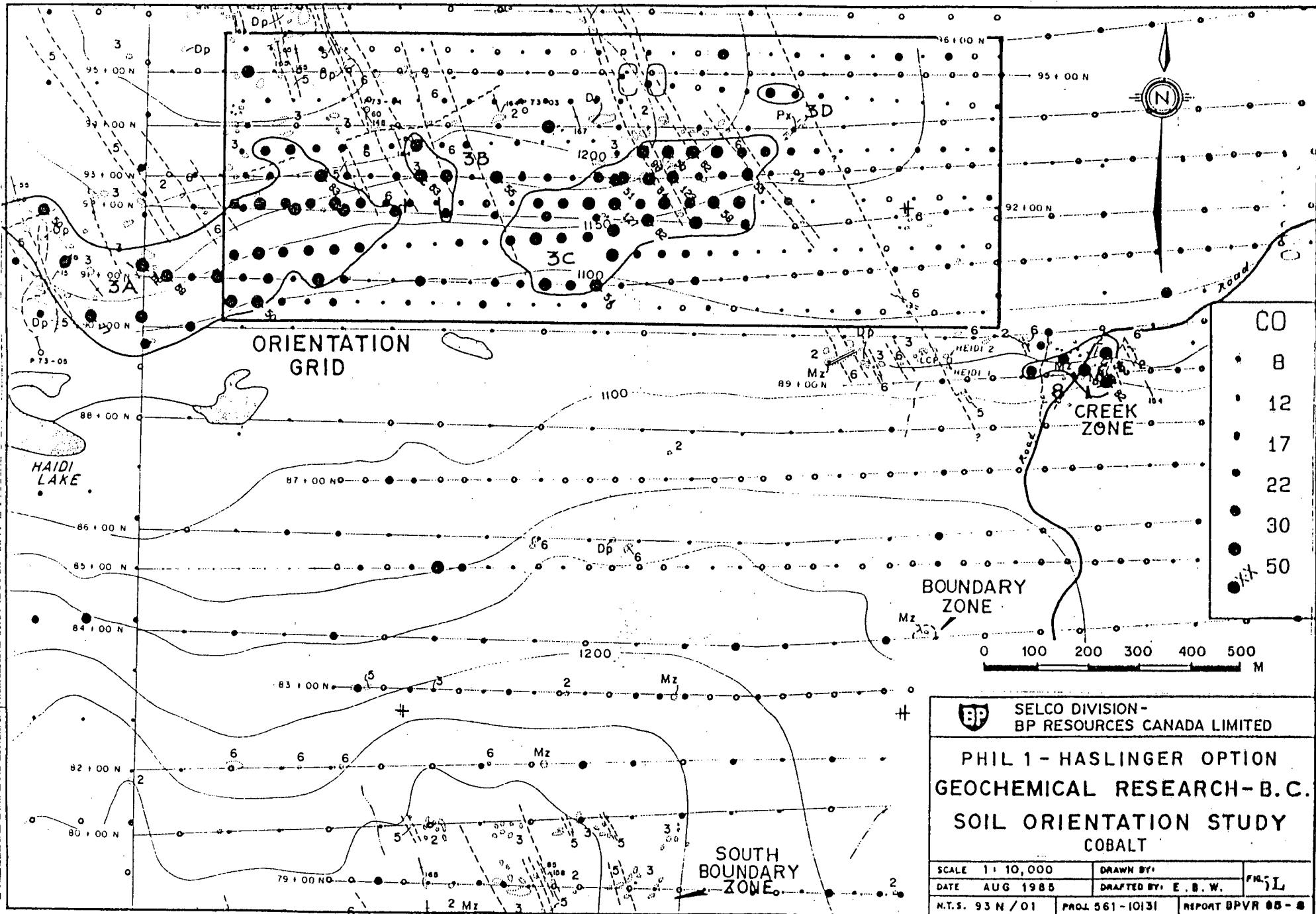
BOUNDARY ZONE

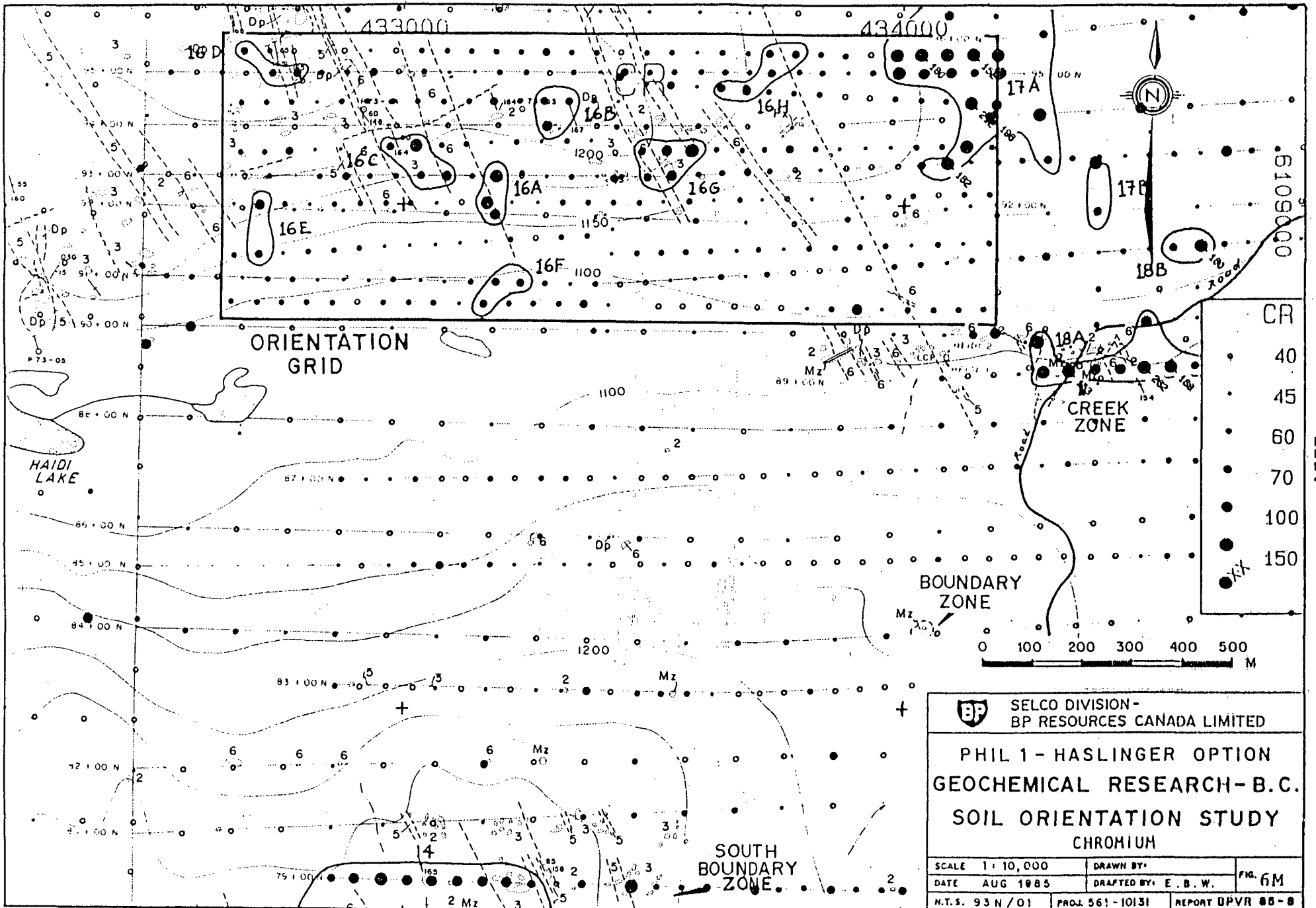
23 SOUTH BOUNDARY ZONE


NI  
17  
21  
26  
28  
40  
50

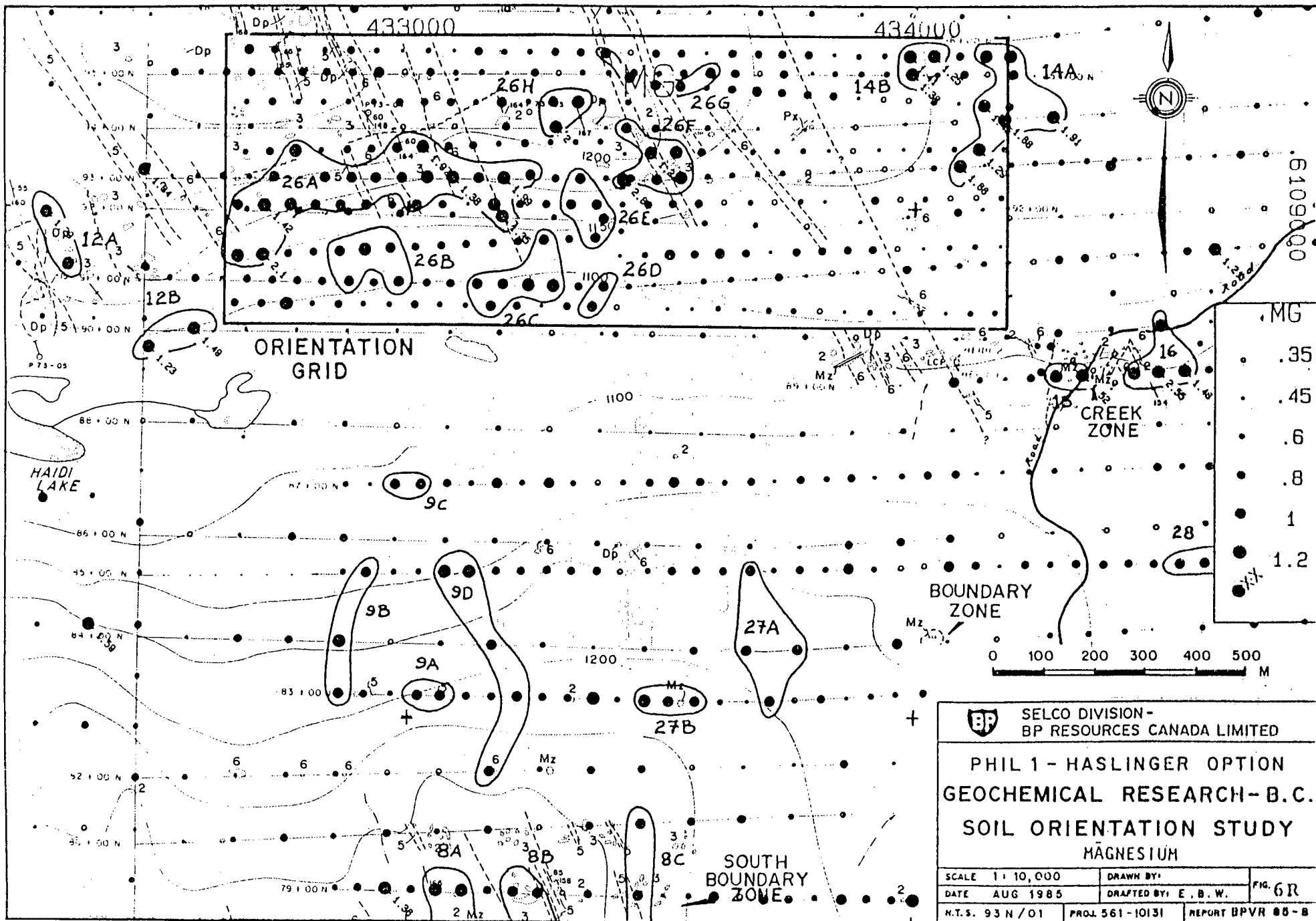
SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY NICKEL		
SCALE 1:10,000	DRAWN BY:	FIG. 6K
DATE AUG 1985	DRAFTED BY: E. B. W.	
M.T.S. 93 N/01	PROJ. 561-10131	REPORT BPVR 88-8

120.






 <b>SELCO DIVISION - BP RESOURCES CANADA LIMITED</b>		
<b>PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY CHROMIUM</b>		
SCALE 1:10,000	DRAWN BY:	FIG. 6M
DATE AUG 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/01	PROJ. 561-10131	REPORT DPVR 85-8



123.

 <b>SELCO DIVISION - BP RESOURCES CANADA LIMITED</b>		
<b>PHIL 1 - HASLINGER OPTION GEOCHEMICAL RESEARCH - B.C. SOIL ORIENTATION STUDY MAGNESIUM</b>		
SCALE 1: 10,000	DRAWN BY:	FIG. 6R
DATE AUG 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N / 01	PROJ. 561 - 10131	REPORT BPVR 88 - B

APPENDIX 5  
WHOLE ROCK GEOCHEMISTRY



PHIL - L  
MT. MILLIGAN

ROCK  
DATA

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**      **      *****      *****      *****
****    ****    ****          ****          ****
***  ****  ***  ***          ***          ***          ***
***    ***  ***  ****          ****          ****          ****
***          ***  ****          ****          ****          ****
**      **      ****          ****          ****          ****
*        *      *      ****          ****          ****          *

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| Midland Earth Science Associates | Maurette Resources & Services |
| Conway House, Conway Street, | Ltd. |
| LONG EATON, NOTTINGHAM, U. K. | 109 - 5621 - 11 Street N.E. |
|                               | CALGARY, ALBERTA, CANADA |
| Phone NOTTINGHAM (0602) 725244 | Phone (403) 295 - 1081 |
| Telex 377538 MESAUK G |                               |
|                               |                               |
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Usercode: CMR

File-code: CMR1

Date 1 : 27-SEP-85

Maurette ref: CGY 44

Date 2 : 02-OCT-85

BP Selco ref: 10131

Mark Rebasliat

BP/Selco  
700-890 W. Fender Street  
Vancouver, B.C.  
Canada V6C1K5

N.B.

1. Oxide data are quoted in weight percent oxide
2. Values below the (2s) detection limit are quoted as zero

\*CMR1

Midland Earth Science Associates

Page 1

Var.\ID: 113549101 113549102 113549103 113549104 113549105 113549106

	1	2	3	4	5	6
SI02	52.61	50.95	53.64	53.37	63.77	56.70
AL203	15.57	14.47	15.28	13.20	14.64	17.95
TI02	0.86	0.95	0.70	0.89	0.27	0.33
FE203	8.24	8.47	7.66	8.49	2.16	4.39
MGO	3.02	3.46	2.56	3.02	1.03	1.69
CA0	7.28	7.36	6.67	5.26	2.83	6.30
NA20	3.37} 7.6	3.09} 7.26	3.89} 8.58	2.83} 7.21	3.87} 7.32	5.19} 6.77
K20	4.23	4.17	4.69	4.42	3.45	1.58
MNO	0.16	0.19	0.16	0.17	0.05	0.10
P205	0.44	0.44	0.44	0.34	0.09	0.19
Total	95.79	93.55	95.69	92.01	92.16	94.42

Var.\ID: 113549107 113549108 113549109 113549110 113549111 515034

	7	8	9	10	11	12
SI02	65.82	49.89	63.67	58.20	48.12	46.64
AL203	15.76	14.11	14.97	15.98	10.96	10.89
TI02	0.22	1.02	0.35	0.71	0.65	0.83
FE203	2.09	9.40	3.34	7.05	9.44	10.31
MGO	0.93	4.32	1.06	2.56	6.24	6.02
CA0	2.51	8.76	3.57	5.89	9.78	12.30
NA20	4.10} 8.98	3.03} 5.22	3.48} 7.36	3.86} 8.84	2.06} 5.50	2.18} 3.68
K20	4.88	2.79	3.88	4.95	3.44	1.50
MNO	0.05	0.19	0.06	0.13	0.18	0.20
P205	0.09	0.49	0.17	0.42	0.40	0.19
Total	96.43	93.99	94.56	99.75	91.27	91.06

Var.\ID: 515035 515036 515037 515038 515039 515040

	35	36	37	38	39	40
SI02	46.67	48.35	48.62	52.47	51.06	49.60
AL203	11.36	11.21	14.29	15.62	11.74	14.62
TI02	0.78	0.79	0.78	0.66	0.84	0.80
FE203	9.94	10.06	9.23	8.80	9.34	9.27
MGO	8.33	8.69	6.02	3.84	7.05	4.44
CA0	9.14	7.06	5.82	5.30	8.60	6.26
NA20	2.61} 4.00	1.73} 4.76	3.09} 6.54	3.39} 7.82	1.90} 4.53	3.17} 6.88
K20	1.39	3.03	3.45	4.43	2.60	3.71
MNO	0.15	0.17	0.19	0.17	0.21	0.17
P205	0.19	0.16	0.40	0.42	0.28	0.40
Total	90.57	91.26	91.89	95.10	93.63	92.44

\*CHR1

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Var.\ID:	515041	515042	515043	515044	515045	515046
	41	42	43	44	45	46
SI02	52.00	51.35	49.70	50.41	49.13	50.36
AL203	15.26	14.63	14.41	14.12	10.46	13.22
TI02	0.62	0.69	0.77	0.63	0.73	0.82
FE203	8.19	8.77	8.76	7.84	10.82	8.83
MGO	2.70	3.42	4.07	4.43	7.68	6.07
CAO	6.05	6.14	6.14	8.05	9.91	6.27
NA20	2.51	2.81	3.10	3.19	2.33	2.55
K20	5.65	4.18	4.02	3.26	1.39	3.40
MNO	0.17	0.16	0.19	0.14	0.14	0.12
P205	0.41	0.38	0.37	0.34	0.20	0.26
Total	93.54	92.53	91.53	92.41	92.80	91.90

Var.\ID:	515047	515048	515049	515050	515051	515052
	47	48	49	50	51	52
SI02	51.01	50.69	49.72	50.55	51.55	51.68
AL203	12.72	11.59	12.16	15.91	12.30	14.70
TI02	0.70	0.84	1.02	0.60	0.90	0.46
FE203	8.99	9.98	9.43	3.39	8.38	5.04
MGO	6.77	7.20	7.79	3.65	6.95	1.30
CAO	8.91	5.74	8.10	7.77	7.01	6.37
NA20	2.80	1.77	2.29	5.33	2.63	5.54
K20	1.78	4.23	1.78	1.72	3.06	3.07
MNO	0.12	0.11	0.13	0.09	0.13	0.06
P205	0.24	0.26	0.32	0.45	0.29	0.17
Total	94.04	92.43	92.73	89.47	93.19	88.38

Var.\ID:	515053	515054	515055	515056	515057	515058
	53	54	55	56	57	58
SI02	53.91	51.26	51.96	46.75	50.68	48.10
AL203	16.31	12.00	14.14	12.17	16.22	12.54
TI02	0.60	0.80	0.92	0.81	0.96	0.75
FE203	6.05	9.17	10.15	10.43	9.87	10.77
MGO	3.97	6.41	6.13	7.76	5.04	6.93
CAO	4.61	7.92	6.78	8.62	5.19	9.09
NA20	4.50	2.46	3.79	2.08	4.32	2.17
K20	3.71	2.88	1.76	1.63	2.33	1.69
MNO	0.09	0.15	0.15	0.24	0.12	0.19
P205	0.40	0.25	0.35	0.16	0.25	0.18
Total	94.16	93.29	96.12	90.67	94.98	92.40

\*CMR1

Midland Earth Science Associates

Page 3

Var.\ID:	515059	515060	515061	515062	515063	515064
	59	60	61	62	63	64
SI02	48.56	52.60	52.70	60.29	52.18	57.55
AL203	13.51	13.39	14.54	12.77	11.39	18.04
TI02	0.83	0.75	0.89	0.63	0.76	0.57
FE203	9.31	9.30	8.57	8.31	9.96	5.94
MGO	4.86	6.79	4.53	4.96	9.12	3.01
CAO	11.99	6.91	8.03	3.84	9.71	3.32
NA20	3.13} 4.43	4.15} 5.34	3.75} 6.35	2.47} 6.96	2.57} 5.97	5.02} 8.36
K20	1.30	1.19	2.60	4.49	1.40	3.34
MNO	0.19	0.12	0.09	0.09	0.15	0.12
P205	0.26	0.32	0.36	0.16	0.17	0.24
Total	93.94	95.51	96.06	98.01	97.42	97.17

Var.\ID: 515065

Var.\ID:	515065
	65
SI02	50.80
AL203	12.19
TI02	0.83
FE203	10.82
MGO	7.29
CAO	8.35
NA20	2.70} 4.61
K20	1.91
MNO	0.15
P205	0.23
Total	95.27

APPENDIX 6

THIN-SECTION DESCRIPTION

*Harris*  
EXPLORATION  
SERVICES

## MINERALOGY AND GEOCHEMISTRY

534 ELLIS STREET, NORTH VANCOUVER, B.C., CANADA V7H 2G6

TELEPHONE (604) 929-5867.

Job #85-67

December 20th, 1985

Report for: Mark Rebagliati,  
B.P. Canada, Selco Division,  
700-890 West Pender St.,  
Vancouver, B.C.  
V6C 1K5

## Samples:

8 rock samples from Project 10131 for petrographic study.

Samples containing substantial opaques were prepared as polished thin sections; the remainder were prepared as conventional thin sections.

Cross reference between sample numbers and slide numbers is as follows:

Sample No.	Slide No.	Preparation type
515-215	85-206X	Thin section
-274	207X	Polished thin section
-278	208X	Thin section
-321	209X	Polished thin section
-321(A)	210X	Polished thin section
-328	211X	Thin section
-360	212X	Polished thin section
-402	213X	Thin section

Two samples numbered 515-321 were included. Though similar, these show some differences; they are designated 321 and 321A respectively.

## Summary:

The rocks of this suite are a more varied assemblage than those from Project 10130. However, they show the consistent feature of a lack of primary quartz.

Two samples from this suite contain only minor K-feldspar and are classified as andesites. These are #s 515-278 and 360. The second of these is clearly pyroclastic (with lithic and crystal clasts) whilst the first exhibits more obscure fragmental features. The plagioclase in both rocks is strongly sericitized and the mafics are altered to chlorite and sphene/rutile in 278 and to carbonate or chlorite, epidote and sphene in 360. Both rocks contain rather abundant disseminated pyrite.

Sample 515-328 is of similar type to some of the samples from the Project 10130 suite, being a latite porphyry in which the groundmass is pervasively carbonated and mafics are totally replaced by carbonate and rutile. It is also cut by hairline veinlets of carbonate and rare quartz. The minor disseminated pyrite and chalcopyrite are not obviously associated with the alteration or veining.

Another porphyritic latite or monzonite is 515-215. This sample is relatively fresh (containing recognizable pyroxene and amphibole phenocrysts) and unmineralized.

Three rocks of the suite (515-274, 321 and 321A) are composed dominantly of K-feldspar. This is not confined to the groundmass as in the latites but also forms abundant, small prismatic phenocrysts, sometimes in parallel arrangement. They are classified as trachytes.

All three show substantial contents of sulfides, associated with vein quartz.

Sample 274 appears to contain both trachyte and latite in uncertain relationship. The sulfides are essentially pyrite, with associated quartz, epidote and sericite/chlorite.

The host rock in samples 321 and 321A appears to be the same but in 321A the K-feldspar phenocrysts are noticeably altered. The sulfides in the quartz veins of 321A are essentially pyrite, with associated sericite. In 321 they include sphalerite as a major component as well as traces of arsenopyrite, and have associated epidote. The latter sample is cut by two phases of quartz veining, one barren and the other sulfide-bearing.

The remaining rock of the suite (515-402) is of distinctive and well-defined type, being a fine-grained, quartz-free crystal tuff with alternating potassic and sodic laminae containing varying amounts of fine-grained pyrite.



J.F. Harris Ph.D.

Sample 515-278 (Slide 85-208X) FRAGMENTAL(?) ANDESITE

## Estimated mode

Plagioclase	55
Sericite	8
K-feldspar	3
Chlorite	19
Sphene )	5
Leucoxene )	
Limonite	1
Pyrite	9

This rock differs from the majority of others in the suite in its low content of K-feldspar. It is composed dominantly of plagioclase, as close-packed, small euhedral grains, 0.2 - 0.5mm, in a cryptocrystalline interstitial matrix strongly pervaded with very fine-grained chlorite and sub-opaques.

Mafic euhedra (originally amphibole?) of similar size to the plagioclase are now pseudomorphed by chlorite flecked with sphene/leucoxene, or exist merely as brownish (limonitic?) ghosts.

The euhedral plagioclase is variably altered to very fine-grained sericite.

In a few areas the felsitic groundmass is of potassic composition. These areas may represent fragments of a different, though related, rock type. The whole rock has a vaguely fragmental aspect in the form of ill-defined, patchy variations in grain size and texture.

The rock contains rather abundant disseminated pyrite, as equant subhedral grains, 0.1 - 0.5mm, often clustered. To some degree these are associated with hairline veinlets of chlorite and traces of albite(?) but in general they are randomly distributed and not, apparently, structurally controlled.



Sample 515-360 (Slide 85-212X) ANDESITE LAPILLI TUFF

## Estimated mode

Plagioclase	15
K-feldspar	2
Sericite	17
Amphibole	16
Chlorite	15
Carbonate	12
Epidote	7
Sphene	11
Limonite )	5
Opaques )	

This is a texturally heterogenous rock which appears to be made up of close-packed fragments (to about 10mm in size) of two main types. One of the common fragment types is a porphyritic rock consisting of abundant euhedral prismatic phenocrysts, 0.2 - 2.0mm in size, of strongly altered plagioclase and amphibole (or pyroxene) in a groundmass consisting of fine-grained sericite, carbonate and chlorite with remnants of felsitic plagioclase. The plagioclase phenocrysts are strongly sericitized and the mafic silicates are largely pseudomorphed by carbonate. Some altered mafics which are now epidote or chlorite also occur, as well as occasional small unaltered phenocrysts of K-feldspar.

The other common type is distinctive for its high content of tiny granules of sphene and limonite. It often has a marked lamellar structure which looks like a cleavage. It forms angular masses and in most cases appears to represent strongly altered amphibole crystal clasts. The base material to the sub-opaque inclusions is not readily recognizable but includes chlorite, epidote and, probably, remnant amphibole.

A similar material, but lacking the directional fabric of the (?) altered amphibole clasts, appears to form a matrix and may be a form of altered felsite.

Small clusters of partially limonitized pyrite grains appear to be concentrated in the interstices between clasts.

Sample 515-328 (Slide 211X) CARBONATED LATITE PORPHYRY

## Estimated mode

K-feldspar	40
Sericitized plagioclase	35
Carbonate	20
Rutile	2
Apatite	trace
Quartz	1
Pyrite	1
Chalcopyrite	1

This is a homogenous, fine-grained porphyritic rock consisting dominantly of euhedral phenocrysts of plagioclase, 0.2 - 2.0mm in size, set in a microcrystalline felsitic groundmass of K-feldspar.

The plagioclase is variably, but generally quite strongly altered to extremely fine-grained sericite. The K-spar groundmass, though itself unaltered, contains abundant, irregular to subhedral patches of carbonate in a similar size range to the plagioclase, and also extending down to a few microns. Many of the larger of these contain flecks of rutile and may represent totally altered mafic phenocrysts. The smaller flecks of carbonate throughout the groundmass may be a form of pervasive carbonatization related to the veining phase.

Tiny disseminated grains of apatite are the only accessory other than the opaques.

The total lack of minerals like chlorite and epidote is remarkable.

The rock is cut by hairline veinlets of carbonate and, occasionally, carbonate with intergrown quartz.

Opaques, as disseminated individuals and clusters of subhedral grains, 0.02 - 0.4mm, appear to be pyrite and chalcopyrite. These are not associated to any significant degree with the obvious veining, although their occurrence, in some cases, as elongate strings suggests partial control by microfracturing.

At one end of the slide (a weathered zone?) the carbonate shows strong limonitic staining, suggesting that it may be of ferruginous (ankeritic) composition.

Sample 515-215 (Slide 85-206X)FINE-GRAINED PORPHYRITIC MONZONITE

## Estimated mode

K-feldspar	30
Sericitized plagioclase	30
Amphibole	22
Chlorite	10
Rutile )	
Sphene )	3
Pyroxene	1
Epidote	3
Apatite	trace
Opagues	1

The K-feldspar in this rock occurs as an anhedral aggregate of varying grain size (0.1 - 2.0mm) which forms a matrix to euhedral prismatic grains of plagioclase 0.5 - 3.0mm, and abundant, rather scrappy-looking mafic silicates.

The plagioclase shows a rather even alteration to very fine-grained sericite. Locally the plagioclase appears partially replaced and assimilated by the enclosing K-spar. The K-spar is essentially fresh.

Mafics are dominantly subhedral grains of pale green amphibole to 2mm in size. Locally this shows remnant cores of pyroxene and much of it may have crystallized originally as that mineral.

The amphiboles are often clustered and intergrown with the other principal mafic - a chlorite or altered biotite extensively pervaded by sub-opaque, very fine-grained rutile and sphene. This mineral forms clumps and networks of grains mainly in the size range 0.2 - 0.5mm.

Epidote forms scattered rather coarse grains intergrown with the other mafics.

Accessories are scattered subhedral apatite to 0.5mm and disseminated granules of opaques (mainly magnetite) 0.05 - 0.2mm.

The rock exhibits an obscure fragmental structure - probably a form of late magmatic autobrecciation - in which patches of coarser-grained monzonite are separated by ramifying networks or pockets of fine-grained mafic-rich material, or monzonite with the K-spar component much finer-grained, more felsitic.

Sample 515-321A (Slide 210X)MINERALISED BRECCIATED TRACHYTE PORPHYRY

## Estimated mode

K-feldspar	40
Secondary amphibole (?)	7
Sericite )	6
Clays )	
Chlorite	4
Epidote	trace
Apatite	trace
Sphene )	3
Leucoxene )	
Quartz	20
Pyrite	20
Arsenopyrite	trace
Chalcopyrite	trace
Magnetite	trace

This is a rock of rather similar aspect to 321, being a strongly K-feldspathic host, brecciated and veined by quartz and sulfides.

There are, however, some significant differences. Texturally the K-spar is similar to 321, consisting of rather ill-defined prismatic phenocrysts, 0.2 - 2.0mm, in a fine-grained felsitic matrix. Most of these phenocrysts are, however, more or less strongly altered to felted or reticulate masses of chlorite, sericite, secondary amphibole and sphene/leucoxene in various proportions.

The veining quartz is of very heterogenous grain size and contains remnants of the K-feldspar host.

The sulfides associated with the quartz are essentially monomineralic pyrite, as coalescent clumps of euhedral grains to 1mm in size. The sulfide masses lack the associated epidote seen in 321, but instead show partial rims and pockets of a fine-grained fibrous sericite/clay material.

Trace constituents are rare individual euhedra of arsenopyrite in the quartz and fine-grained impregnations of chalcopyrite in the sericite/clay pockets and in the K-spar host marginal to the vein. The chalcopyrite is commonly associated with magnetite.

Pyrite, and minor magnetite and chalcopyrite, also occurs disseminated through the host rock - sometimes, but not always, associated with threads and pockets of quartz, epidote and chlorite.

Sample 515-274 (Slide 85-207X) MINERALIZED LATITE/TRACHYTE

## Estimated mode

K-feldspar	42
Plagioclase	14
Sericite	2
Epidote	9
Chlorite	14
Sphene	1
Quartz	3
Pyrite	15
Chalcopyrite	trace

The dominant constituent of this rock is K-feldspar. It forms the matrix to euhedral grains of plagioclase and chloritized mafics (probably ex-amphibole).

The K-spar shows a considerable range of grain size. In its matrix mode it is predominantly an anhedral felsitic aggregate in the range 0.01 - 0.05mm. However, this material is more or less densely packed with elongate prismatic crystals ranging from 0.1 - 1.0mm in size. Locally these prismatic grains show partial parallelism (sub-trachytic texture). A few plagioclase grains occur along with the sub-porphyrific K-spar.

Both the K-spar and the minor intergrown plagioclase are essentially unaltered.

This material contains relatively few mafics, in the form of scattered small subhedral grains now composed almost entirely of epidote and chlorite.

At one end of the slide a somewhat different mode and textural features are seen and it is possible that the sample includes two different rock types, or that the central K-rich (trachytic) zone is of metasomatic origin. The contact between the two appears gradational.

The other rock type in question is of latite composition and contains abundant euhedral phenocrysts, 0.2 - 1.0mm, of sericitized plagioclase in a matrix of felsitic K-spar heavily impregnated by fine-grained chlorite. Phenocrysts of altered (chloritized) amphibole are also relatively common.

The rock is permeated throughout by veinlets and wisps of chlorite and epidote with associated disseminated pyrite. More concentrated sulfides occur as irregular and elongate coalescent masses of euhedral-subhedral pyrite grains, 0.2 - 1.0mm, with associated granular epidote, quartz and a pale-brown sericitic material. This association forms semi-continuous veinlike bodies and isolated pockets throughout. The adjacent feldspathic host shows little or no associated alteration.

The sulfides are predominantly pyrite. Minor accessory chalcopyrite forms dispersed flecks in the host rock and small pockets associated with the smaller epidote/chlorite/quartz veinlets. It is always separate from the pyrite rather than intergrown.

Sample 515-402 (Slide 85-213X) LAMINATED PYRITIC FELSIC TUFF

## Estimated mode

K-feldspar	30
Plagioclase	25
Sericite	3
Amphibole	5
Mineral X	2
Epidote )	30
Sphene )	
Pyrite	5

This is a fine-grained laminated tuff composed of small euhedral-subhedral clasts of feldspar and lesser hornblende, 0.02 - 0.2mm in size, set in a felsitic matrix heavily impregnated with very fine-grained high relief, sub-opaque material (probably a mixture of sphene and epidote).

The laminated structure is produced by variations in the grain size and abundance of crystal clasts and the content of fine-grained disseminated sulfides (mainly pyrite). Laminar variations in the ratio of plagioclase to K-feldspar also occur, as clearly shown on the stained cut-off chip.

Some bands contain notable amounts of mineral X - a yellowish-brown, fine-grained, fibrous material forming local crustified or colloform patches. This may be pumpellyite, or possibly a form of altered glass. In one band the plagioclase clasts are strongly sericitized. For the most part, however, the feldspars and mafics are relatively unaltered.

This rock is quartz-free and appears compositionally similar to the latitic to andesitic volcanic or sub-volcanic rocks making up the rest of the suite.

Sample 515-321 (Slide 85-209X) TRACHYTE PORPHYRY WITH QUARTZ-SULFIDE VEINS

## Estimated mode

K-feldspar	40
Quartz	33
Sericite	2
Epidote	2
Chlorite	2
Apatite	trace
Pyrite	11
Sphalerite	7
Arsenopyrite	1
Chalcopyrite	1

The slide of this sample consists of three well-differentiated components.

One, which is apparently the host rock, consists very largely of K-feldspar. This exhibits a porphyritic igneous texture of subhedral prismatic (K-spar) phenocrysts, 0.2 - 2.0mm in size, set in a groundmass composed of a very fine-grained anhedral felsitic aggregate of the same mineral. The outlines of the phenocrysts are somewhat diffuse and gradational with the groundmass.

The groundmass K-spar, and most of the phenocrysts, is essentially fresh. A few of the larger phenocrysts, however, show a light dusting of sericite.

The only other constituents are minute disseminated flecks of chlorite and tiny grains of apatite.

The nature of this rock is uncertain. It may well be what it appears - a primary igneous rock of syenitic origin. However, the extreme composition (essentially monomineralic K-spar) makes one wonder. This could be a metasomatic product with the porphyritic texture inherited by pseudomorphism of original plagioclase (e.g. the grains showing sericitization). There is no actual evidence for this, however, and the homogeneity and lack of any vein structures in the K-spar could be taken as contra-indications.

The K-spar rock is cut by two distinct veining phases.

One is of essentially monomineralic granular quartz. It contains rare tiny pockets of epidote and includes a few ragged remnants of the K-spar host rock.

The other is of fine-grained, often feathery/lamellar textured quartz with abundant sulfides. The sulfide masses within the quartz are commonly rimmed by and intergrown with epidote.

The sulfides consist of irregular/elongate coarse-grained patches of coalescent subhedral pyrite, and extensive areas of sphalerite, forming the matrix to abundant strings and clumps of tiny pyrite granules. Locally the sphalerite shows concentrations of exsolution blebs of chalcopyrite.

Chalcopyrite also occurs as small pockets intergrown with a selvage zone which consists largely of granular arsenopyrite.

Pyrite also occurs in association with the network of threads and pockets of quartz (and minor epidote) which penetrate the K-spar wall rock adjacent to the main quartz-sulfide veinlet.

APPENDIX 7

STATEMENT OF COSTS - PHIL 1-HASLINGER



STATEMENT OF COSTS - PHIL 1/HASLINGER OPTION CLAIMSANALYTICAL COSTS

638 soil samples (Au + ICP) + preparation @ \$12/sample	\$7,656.00
503 rock samples (Au + ICP) + preparation @ \$13/sample	6,539.00
Computer processing - 1141 samples @ \$2/sample	2,282.00
Geochemist - 2 days @ \$102/day	204.00
Shipping Charges	1,000.00
TOTAL	<u>\$17,681.00</u>

FIELD LABOUR COSTS

Project Geologist (R. Meyers) (June 23-July 20; Aug. 15-Sept. 8; Sept. 11-13, Sept. 16-22, 27-29) 66 days @ \$141/day	\$9,306.00
Geological Assistant (R. Diment) (June 30-July 20; Aug. 15-29) 43 days @ \$55/day	2,365.00
Geochemist (J. Gravel) (June 30-July 7) 8 days @ \$102/day	816.00
Geological Assistant (G. Campbell) (Aug. 23-Sept. 7) 16 days @ \$73/day	1,168.00
Geologist (R. Lane) (Aug. 30-Sept. 30) 32 days @ \$94/day	3,008.00
Geological Assistant (G. MacKay) (Sept. 2-13) 12 days @ \$88/day	1,056.00
Field Assistant (D. Rajala) (June 30-July 18) 19 days @ \$100/day	1,900.00
Field Assistant (S. Cooke) (June 30-July 18) 19 days @ \$100/day	1,900.00
Supervisory Visits (C.M. Rebagliati) (June 26, July 5-6, 14, 28, Aug. 22, Sept 7, 22) 8 days @ \$200/day	1,600.00
TOTAL	<u>\$23,119.00</u>

STATEMENT OF COSTS - PHIL 1-HASLINGER Cont'd.VEHICLE RENTAL AND OPERATION

66 days @ \$100/day		\$ 6,600.00
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CAMP COSTS

223 mandays @ \$50/day (includes all equipment, food & lodging)		\$11,150.00
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TRAVEL EXPENSES

9 Return airfares - Van.-Prince George @ \$282/person	\$2,538.00	
Hotel & Meals 9 men x 2 nights @ \$50/night	<u>900.00</u>	
		\$ 3,438.00

GEOPHYSICS (IP Survey Only)

18.4 line km (includes contractors, labour & camp costs)		\$18,795.00
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MAPS AND REPORT PREPATATION

Geologist (R. Meyers) 5 days (Dec. 2-6) @ \$141/day	705.00	
Drafting 15 hrs. @ \$18/hr.	270.00	
Maps & Materials	<u>100.00</u>	
		\$ 1,075.00

TRENCHING & ROAD REPAIRS

Backhoe Trenching (Aug. 23-Sept. 23)	19,560.00	
Road Repairs (June 23-26)	<u>3,000.00</u>	
TOTAL		\$ 22,560.00
TOTAL COSTS		\$104,418.00
	=====	

APPORTIONMENT OF COSTS

PHIL 1 GROUP (PHIL 9 CLAIM) -	\$35,313.00
PHIL A GROUP (HEIDI 2, PHIL 24, 25 CLAIMS) -	\$33,039.00
PHIL B GROUP (HEIDI 1, HEIDI 4 CLAIMS) -	\$36,066.00

APPENDIX 8  
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS - C.M. REBAGLIATI

I, C.M. Rebagliati, of Vancouver, in the Province of British Columbia, hereby certify the following:

1. That I am a registered Professional Engineer in the Province of British Columbia.
2. That I have practised my profession since graduation from the Haileybury School of Mines of Ontario in 1966 and from the Michigan Technological University in 1969 with a B.Sc. degree in Geological Engineering.
3. That I am presently employed by Selco Division - BP Resources Canada Limited in Vancouver, B.C. as Senior Geologist.
4. That I personally examined the property to confirm and evaluate the exploration program.

Respectfully submitted,



C.M. Rebagliati, P.Eng.

Vancouver, B.C.  
January, 1986

STATEMENT OF QUALIFICATIONS - R.E. MEYERS

B.Sc. (Hons.) Geology 1974 - Carleton University, Ottawa

M.Sc. Economic Geology 1980 - McGill University, Montreal

Associate Member of the Geological Association of Canada (1974)

Member of the Canadian Institute of Mining and Metallurgy.

I have practised my profession continuously since graduation in 1974, as a Mine Geologist (1974-1977); in Economic Geology research (1977-1979); and in mineral exploration (1979-present).

APPENDIX 9  
1985 TRENCH GEOCHEMISTRY

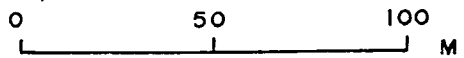
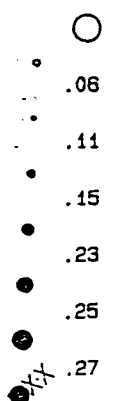
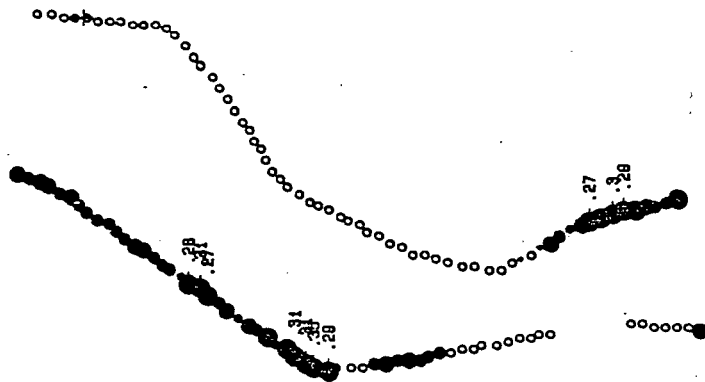
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE TITANIUM (%)		
DWG. NO. REPORT NO. NO. ACCOMPANYING SHEETS	DATE OCT/85 PROJECT 561/10131 NTS 93N/1 SCALE 1: 2000	FIG.

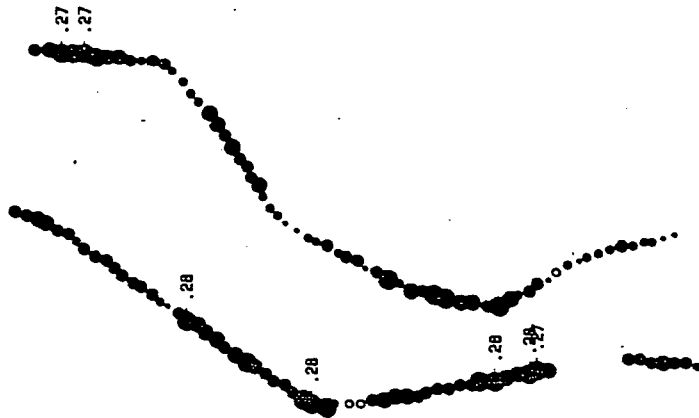
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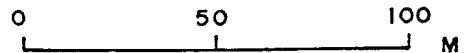
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE PHOSPHORUS (ppm)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
FIG.		

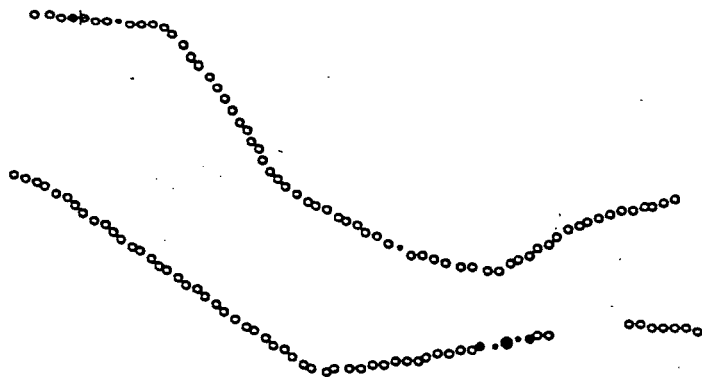


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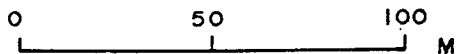
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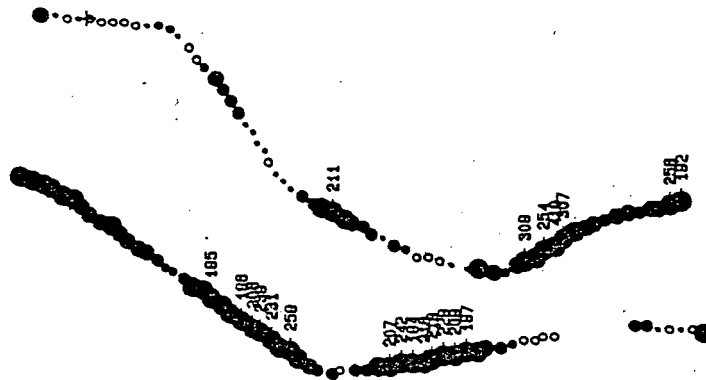
 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE BORON (ppm)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
FIG.		

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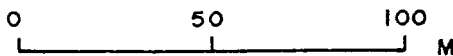
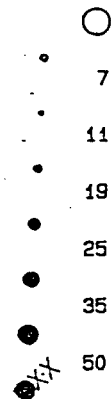
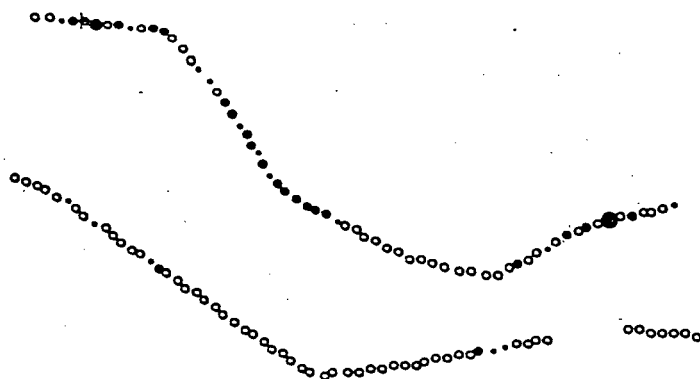
 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE CHROMIUM (ppm)		
JWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1	SCALE 1: 2000
NO ACCOMPANY	MT	

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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE MOLYBDENUM (ppm)		
JWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1	SCALE 1: 2000
TO ACCOMPANY:	MAP	

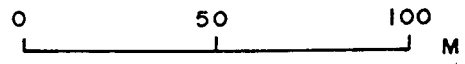
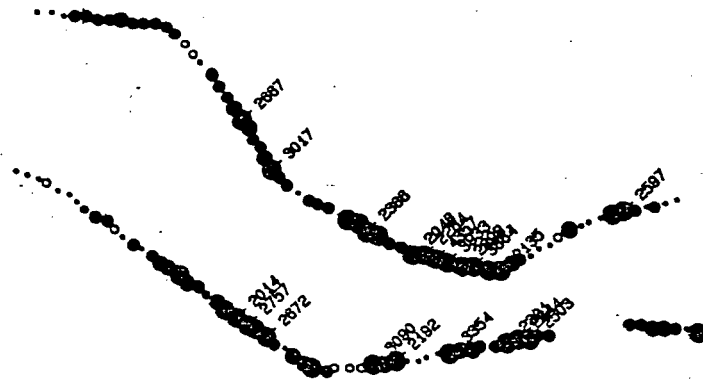
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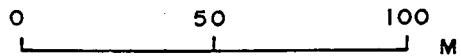
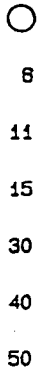
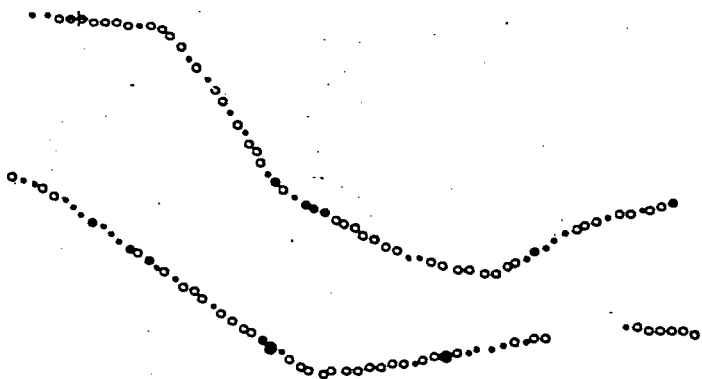
 SELCO DIVISION BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE COPPER (ppm)		
DWG. NO. REPORT NO. TO: GEOCHEMISTRY	DATE OCT/85 NTS 93N/1	PROJECT 561/10131 SCALE 1: 2000 FIG.

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SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION		
ALEX GOLD PROJECT - B.C.		
1985 TRENCH GEOCHEMISTRY - CREEK ZONE		
LEAD (ppm)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
BY ACCOMPANY	MTI	FIG.

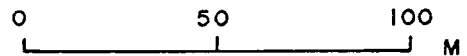
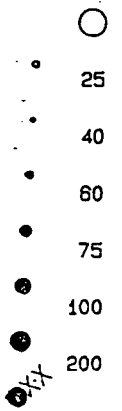
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 SELCO DIVISION BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE ZINC (ppm)		
DWG. NO. REPORT NO. TO ACCOMPANY	DATE OCT/85 PROJECT 561/10131 NTS 93N/1 SCALE 1: 2000	FIG.

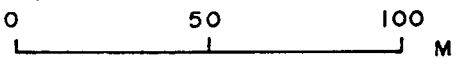
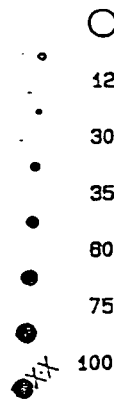
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SELCO DIVISION BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE NICKEL (ppm)		
DATE OCT/85	PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1	SCALE 1: 2000
TO ACCOMPANY		

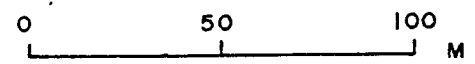
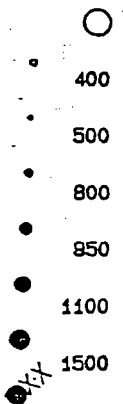
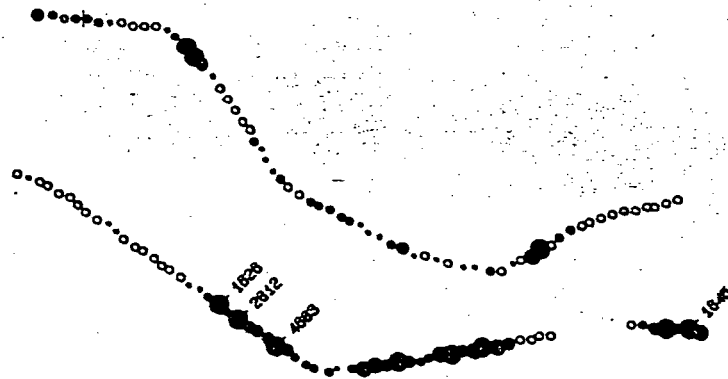
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE MANGANESE (.ppm)		
JWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
<small>TO ACCOMPANY</small>		

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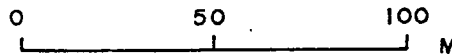
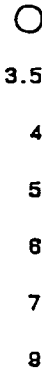


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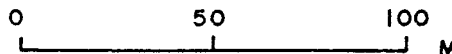
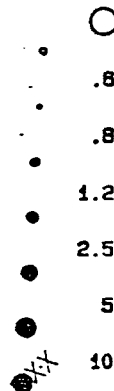
 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE IRON (%)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
<small>TO ACCOMPANY</small>		<small>FIG.</small>

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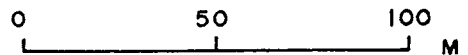
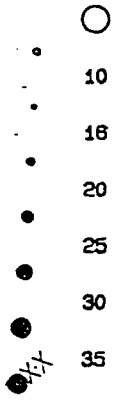
 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE SILVER (ppm)		
DWG. NO. REPORT NO. ACCOMPANY	DATE OCT/85 PROJECT 561/10131 NTS 93N/1 SCALE 1: 2000	FIG.

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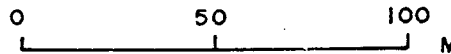
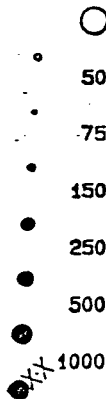
SELCO DIVISION BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE COBALT (ppm)	
JWG. NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 93N/1 SCALE 1: 2000
FIG.	

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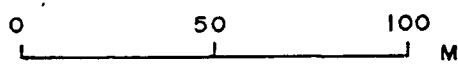
 SELCO DIVISION BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE GOLD. (ppb)		
DWG. NO. REPORT NO. TO ACCOMPANY	DATE OCT/85 PROJECT 561/10131 NTS 93N/1	FIG. SCALE 1: 2000

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SELCO DIVISION BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C.	
1985 TRENCH GEOCHEMISTRY - CREEK ZONE ARSENIC, (ppm)	
JWG. NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 93N/1 SCALE 1: 2000
FIG.	

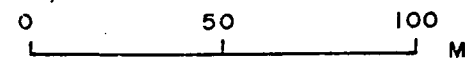
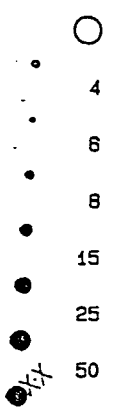
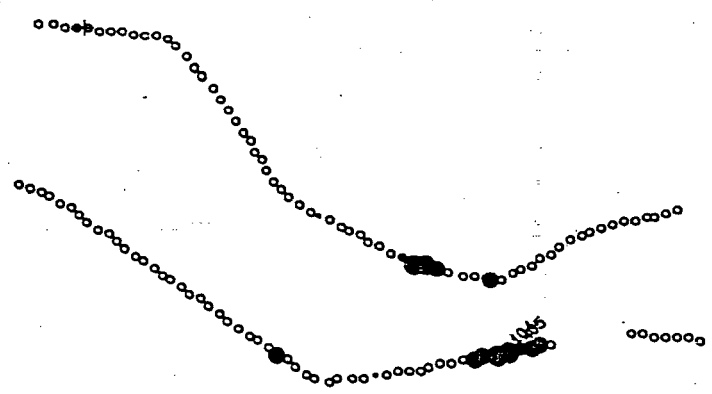
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE ANTIMONY (ppm)		
DWG. NO. REPORT NO.	DATE OCT/85 PROJECT 561/10131 NTS 93N/1	FIG. SCALE 1: 2000

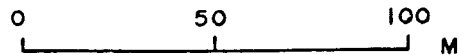
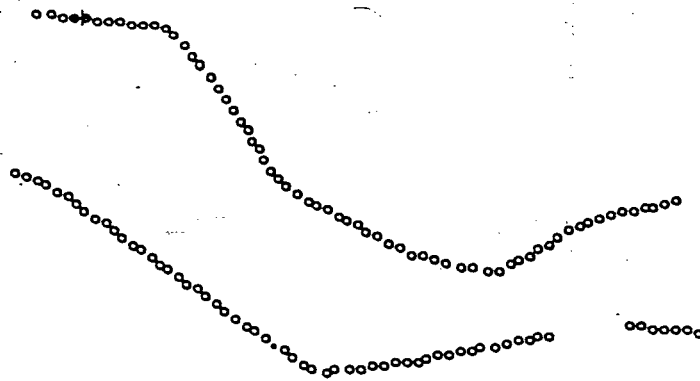
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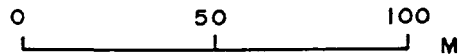
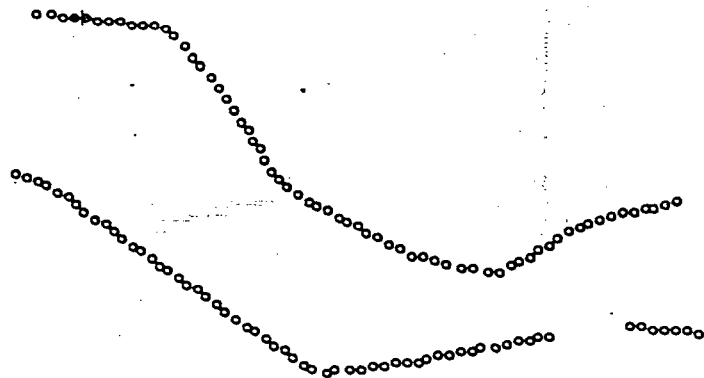
 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE TUNGSTEN* (ppm)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
<small>*3 SECONDARY</small>		FIG.

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 SELCO DIVISION BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE CADMIUM (ppm)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
FIG.		

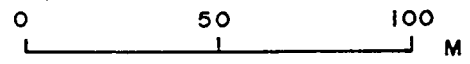
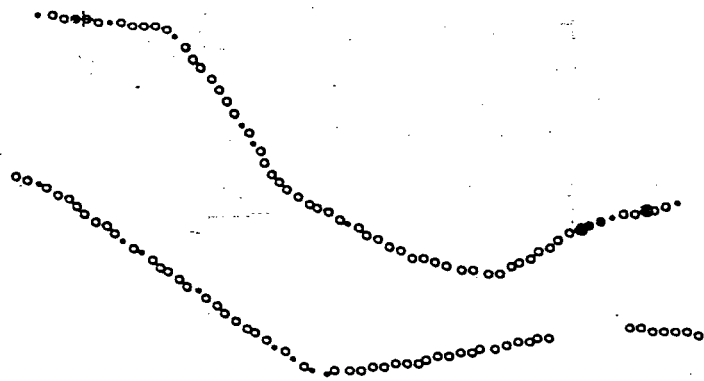


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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE BISMUTH (ppm)		
JWG. NO. REPORT NO. TO ACCOMPANY	DATE OCT/85 PROJECT 561/10131 NTS 93N/1 SCALE 1: 2000	FIG.

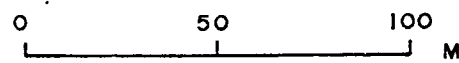
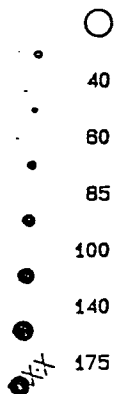
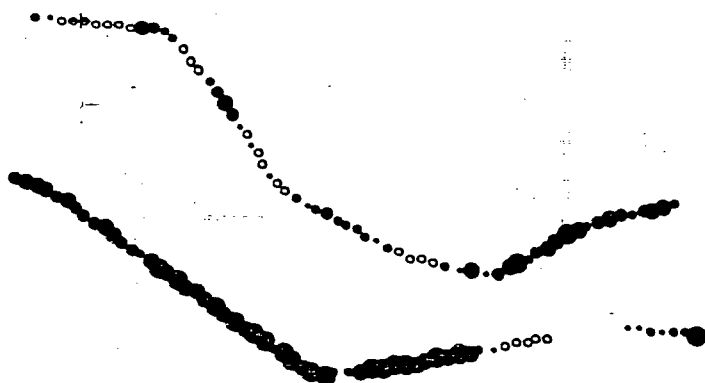
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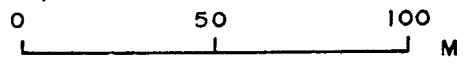
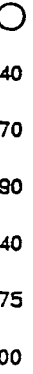
 SELCO DIVISION BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE VANADIUM (ppm)		
JWG. NO. REPORT NO. ACCOMPANY	DATE OCT/85 PROJECT 561/10131 NTS 93N/1 SCALE 1: 2000	FIG.

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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE BARIUM (ppm)		
JWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
<small>TO ACCURACY</small>		

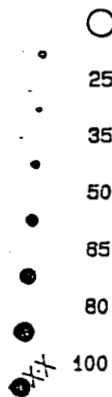
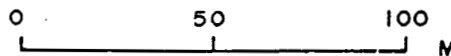
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE STRONTIUM (ppm)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
FIG.		

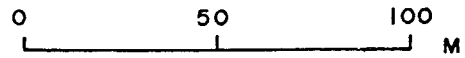
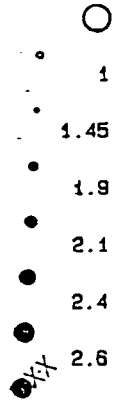
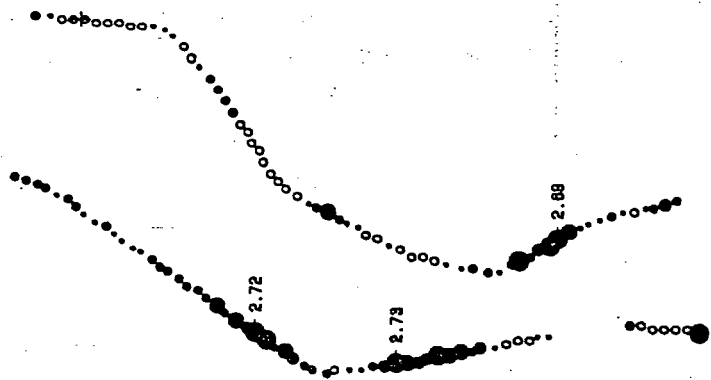
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE ALUMINUM (%)		
J.W.G. M.D. REPORT NO. NTS 93N/1	DATE OCT/85 PROJECT 561/10131 SCALE 1: 2000	FIG.

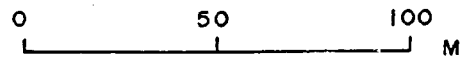
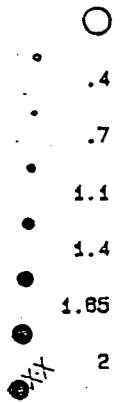
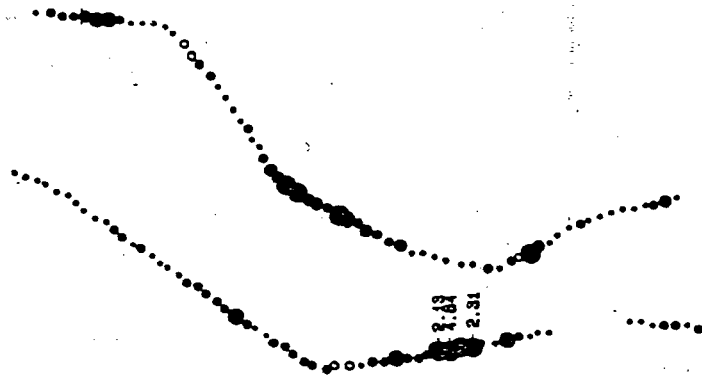
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
<b>PHIL 1 - HASLINGER OPTION</b> ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE CALCIUM (%)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
FIG.		

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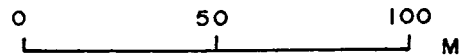
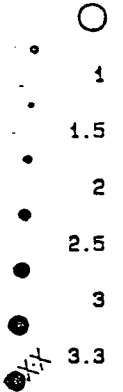
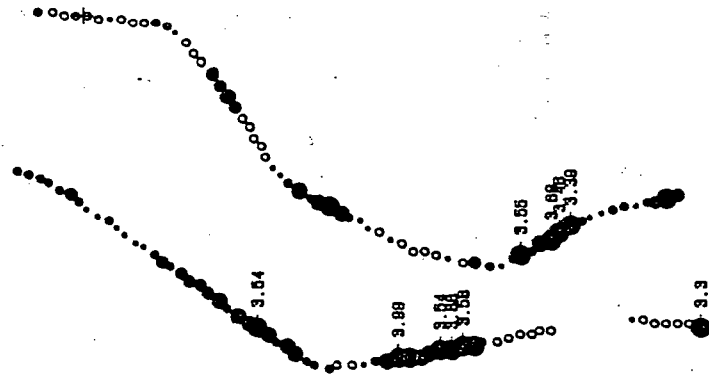
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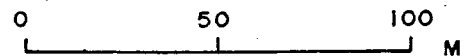
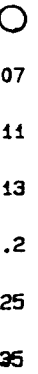
SELCO DIVISION BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE MAGNESIUM (%)	
JWG. NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 93N/1 SCALE 1: 2000
FIG.	

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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - CREEK ZONE POTASSIUM (%)		
JWG. NO.	DATE OCT/85	PROJECT 561/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
TO ACCOMPANY		FIG.



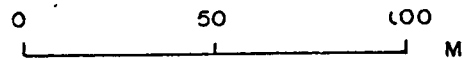
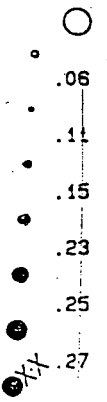
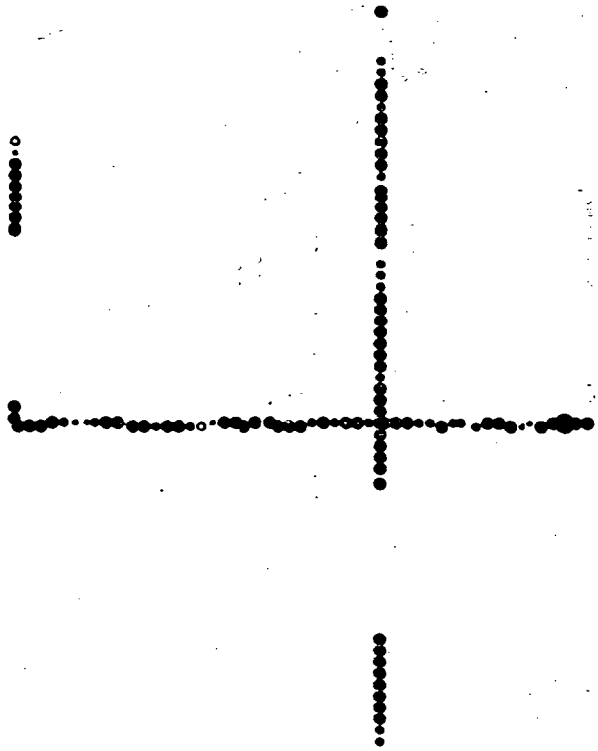
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BP RESOURCES CANADA LIMITED

PHIL 1. - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.  
1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
TITANIUM (%)

OWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		

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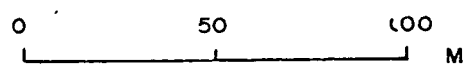
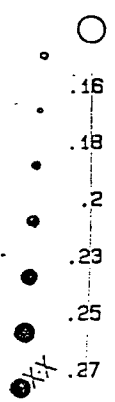
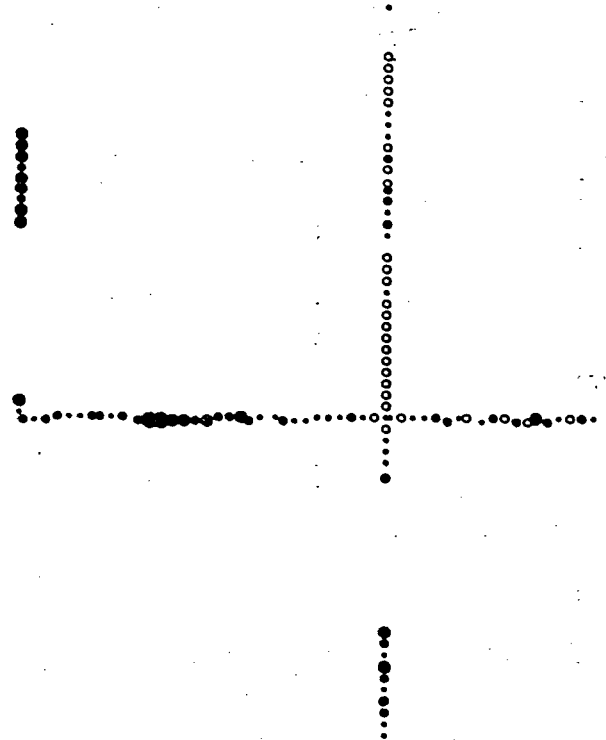
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1. - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE PHOSPHORUS (ppm)		
OWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		

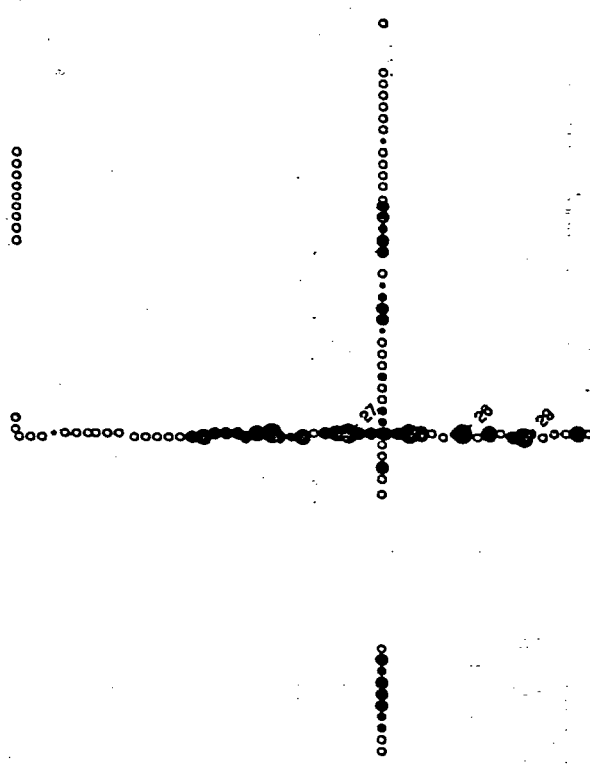
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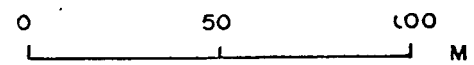
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE BORON (ppm)		
DWG. NO. REPORT NO. TO ACCOMPANY REPORT:	DATE OCT/85 PROJECT 561/10131 NTS 93N/1 - SCALE 1: 2000	FIG.

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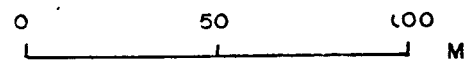
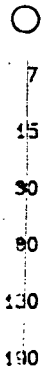
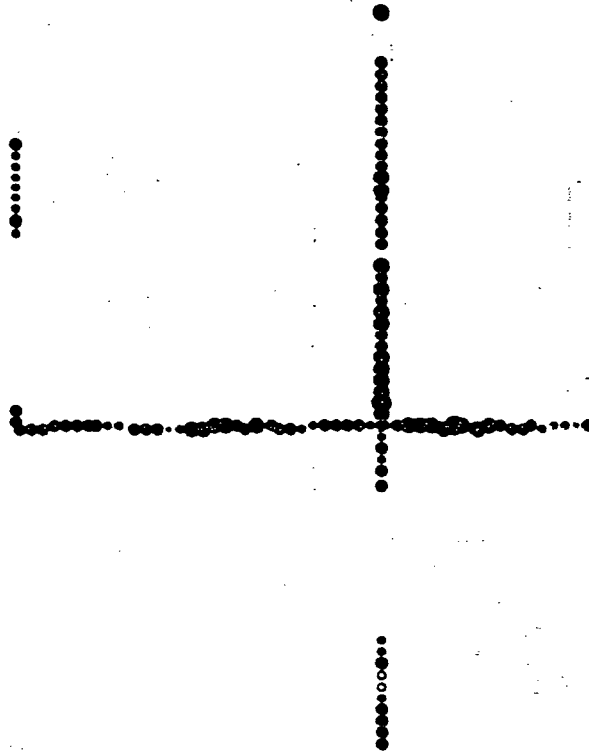
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PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
CHROMIUM (ppm)

DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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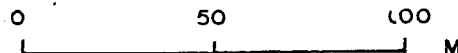
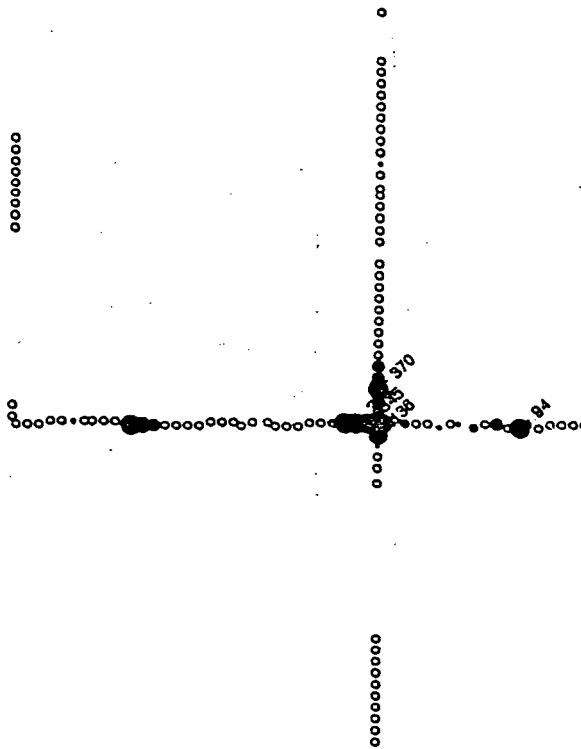
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PHIL 1. - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - ESKER ZONE

ANTIMONY (ppm)

DWG. NO.	DATE OCT/85	PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1	SCALE 1: 2000	
TO ACCOMPANY REPORT:			

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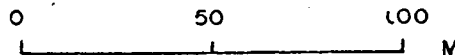
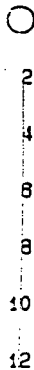
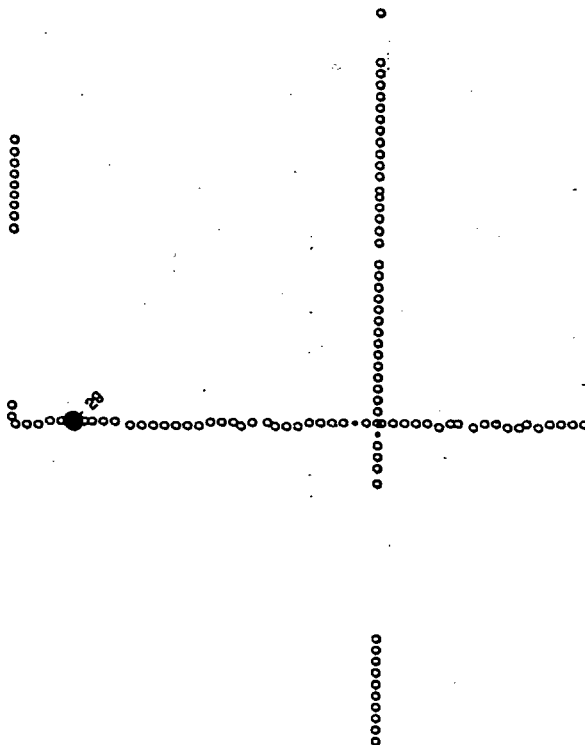
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PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - ESKER ZONE

TUNGSTEN (ppm)

DWG NO.	DATE OCT/85	PROJECT 561/10131	FIG.
REPORT NO	NTS 93M/1	SCALE 1: 2000	
TO ACCOMPANY REPORT:			

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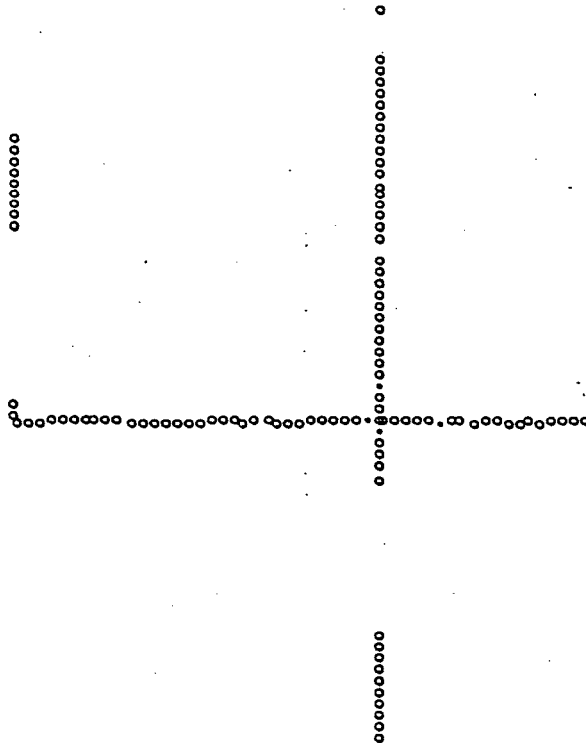
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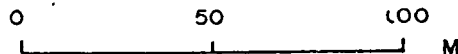
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BP RESOURCES CANADA LIMITED

PHIL 1. - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
CADMIUM (ppm)

DWG NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	

TO ACCOMPANY REPORT:

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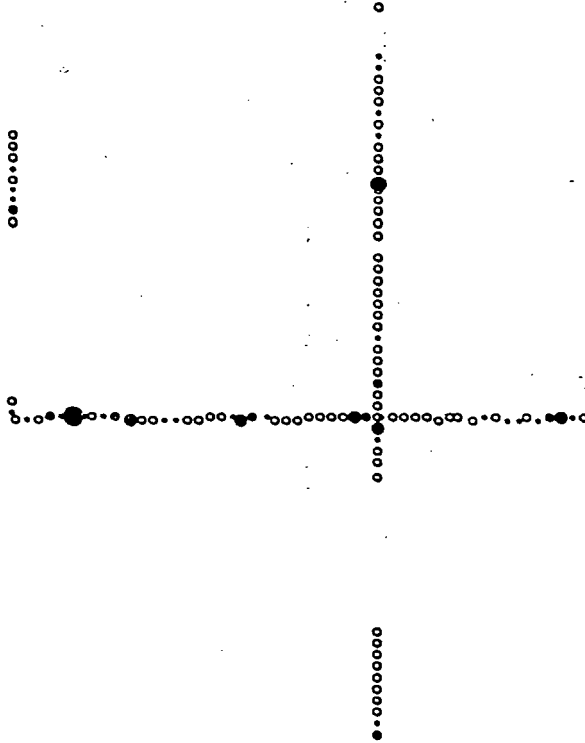
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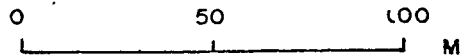
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE BISMUTH (ppm)		
DWG NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		



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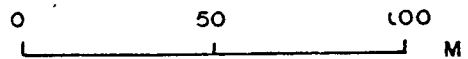
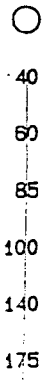
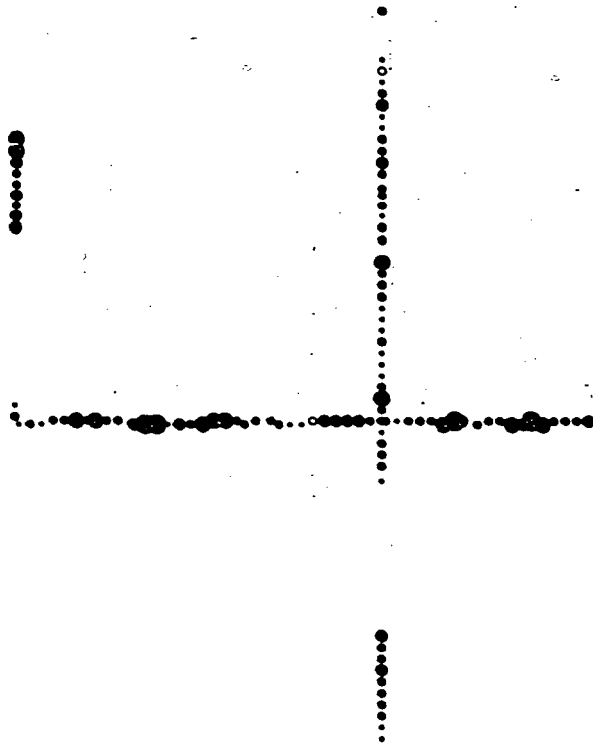
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PHIL 1. - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.  
1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
VANADIUM (ppm)

DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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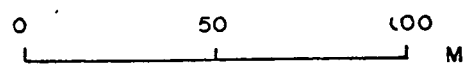
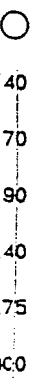
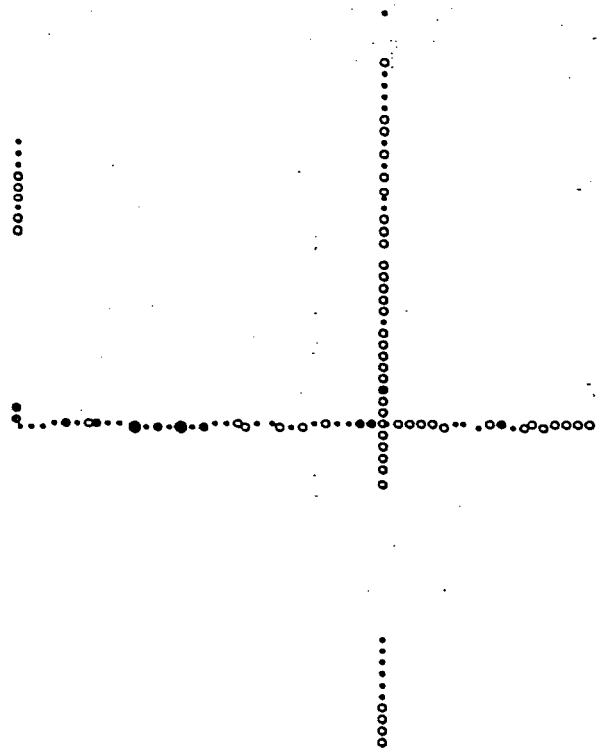
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 SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1. - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.  
1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
BARIUM (ppm)

OWC. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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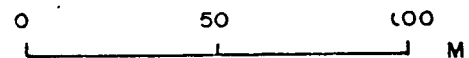
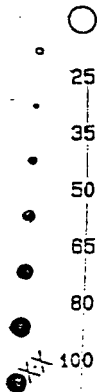
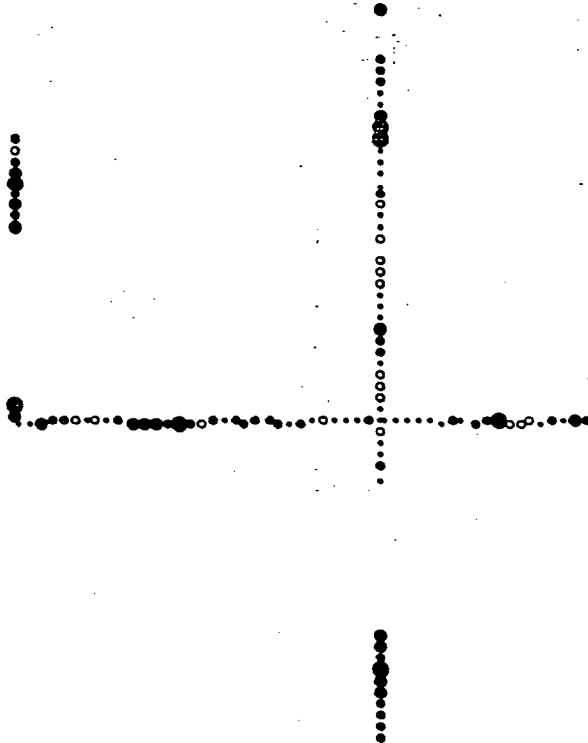
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1. - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE STRONTIUM (ppm)		
DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1	SCALE 1: 2000
TO ACCOMPANY REPORT:		

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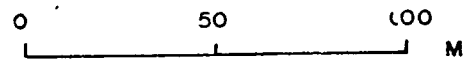
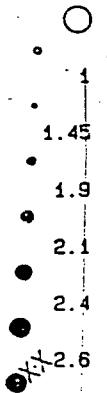
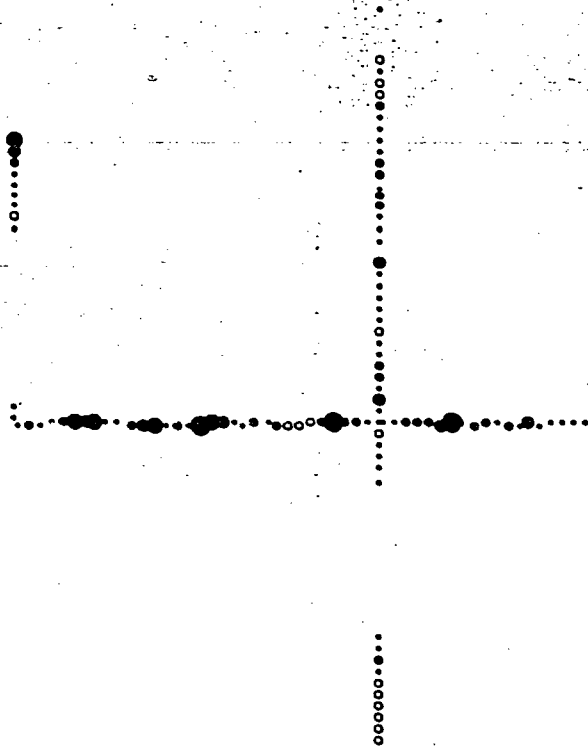
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE ALUMINUM (%)		
DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		

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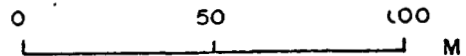
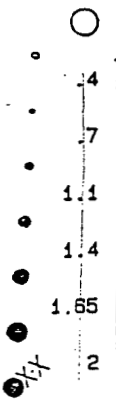
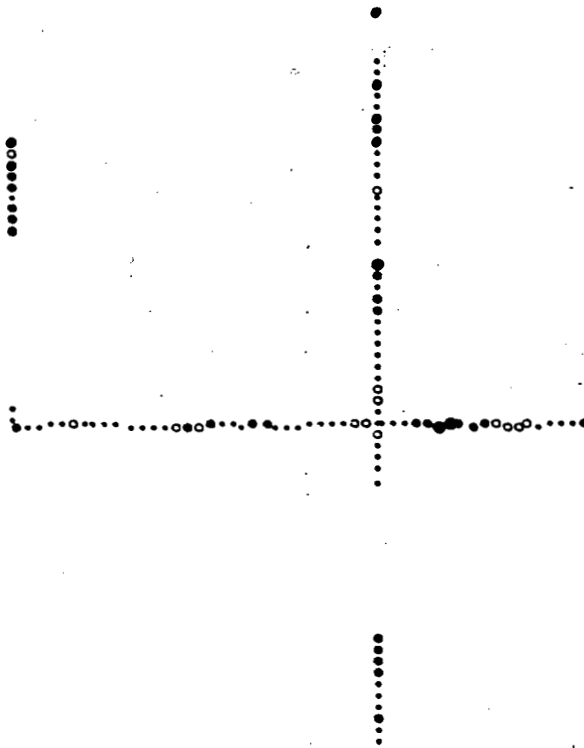
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1. - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE CALCIUM (%)		
DWG NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		

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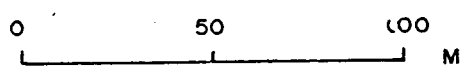
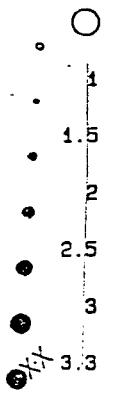
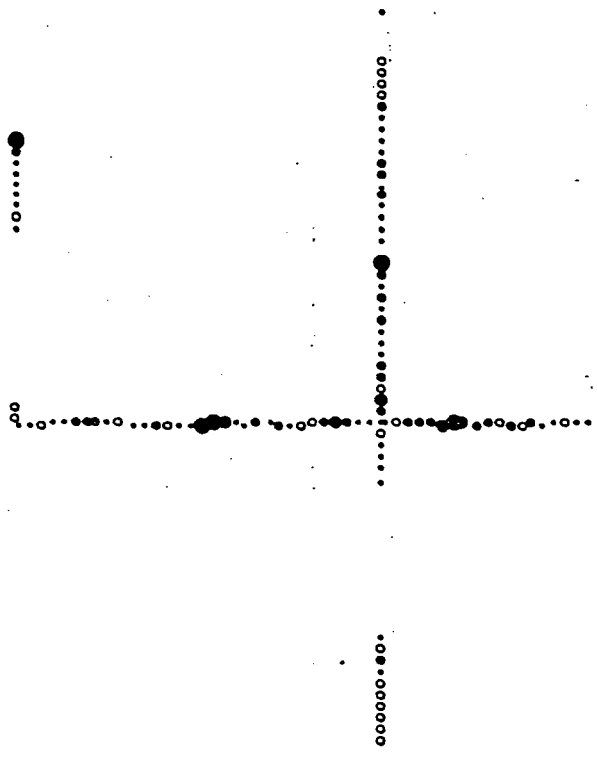
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 SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1 - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.  
1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
MAGNESIUM (%)

DWG. NO. DATE OCT/85 PROJECT 561/10131

REPORT NO. NTS 93N/1 SCALE 1: 2000

FIG.

TO ACCOMPANY REPORT

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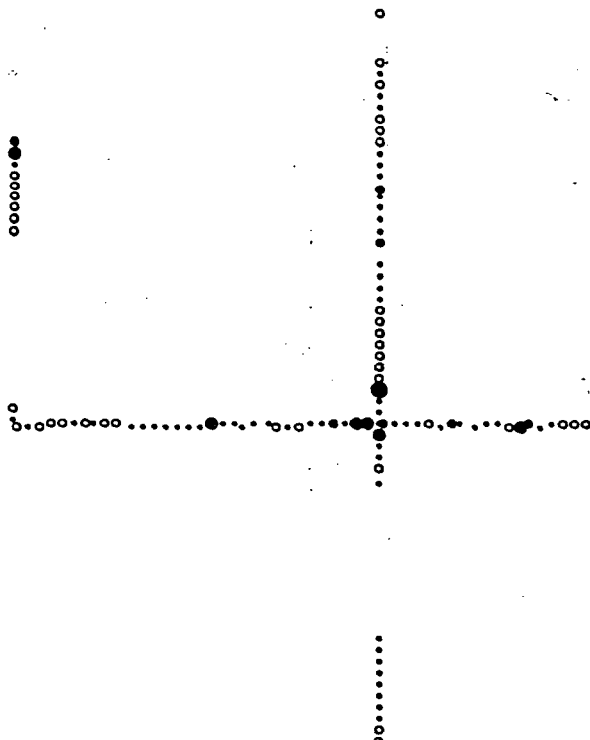
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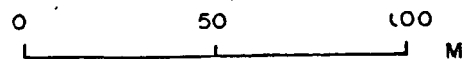
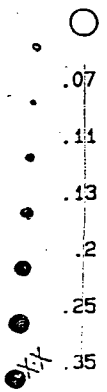
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1. - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE POTASSIUM (%)		
DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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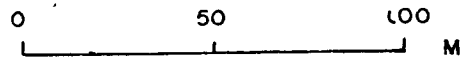
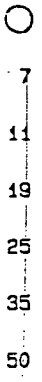
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PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
MOLYBDENUM (ppm)

DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		



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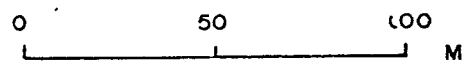
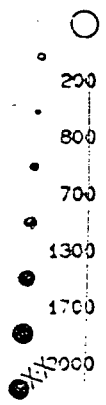
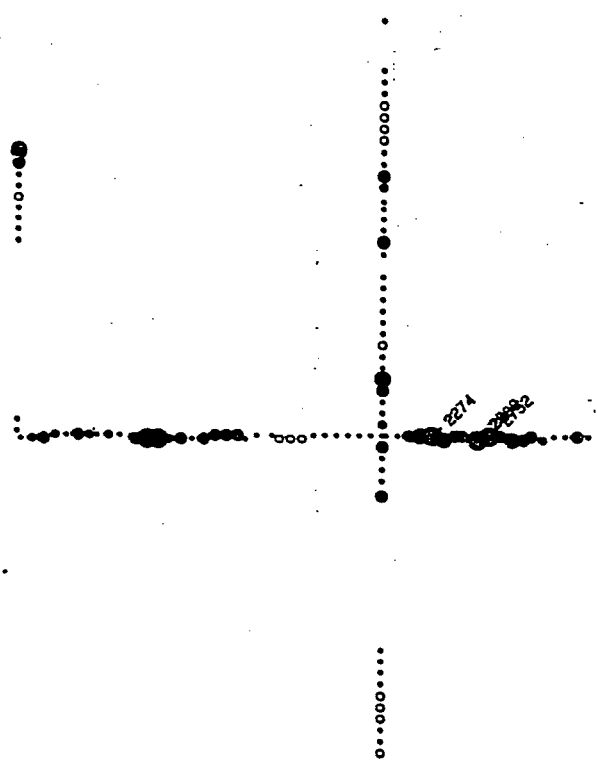
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE COPPER (ppm)		
DWG NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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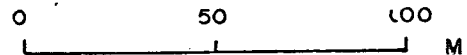
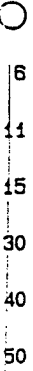
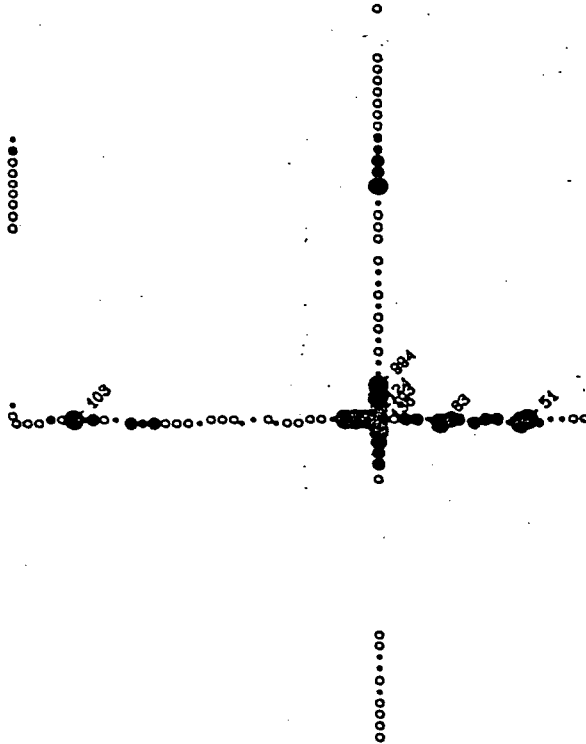
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SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1. - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
LEAD (ppm)

DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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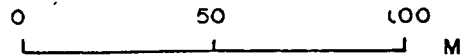
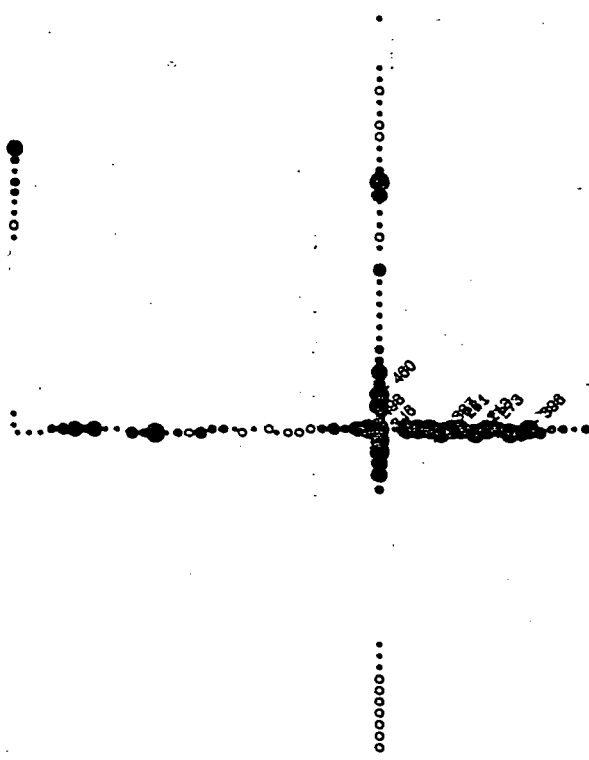
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE ZINC (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 93N/1 SCALE 1: 2000
TO ACCOMPANY REPORT:	

FIG.

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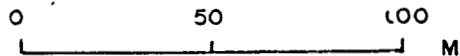
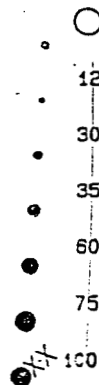
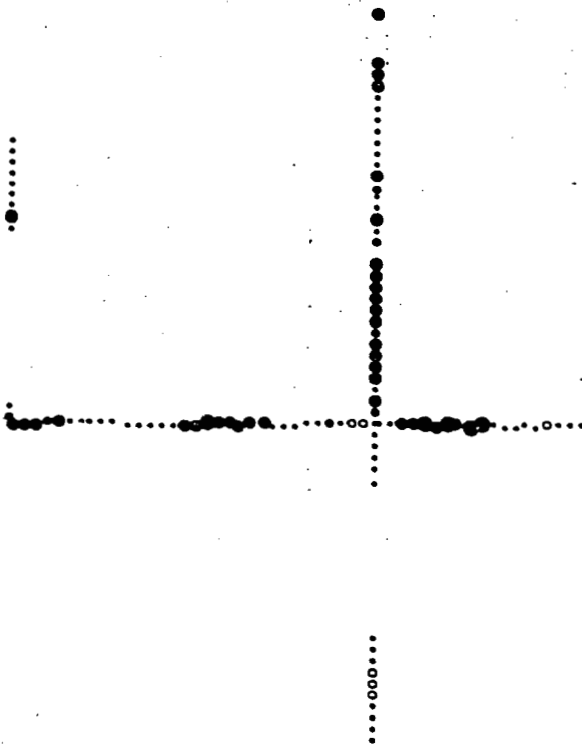
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE NICKEL (ppm)		
DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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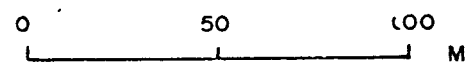
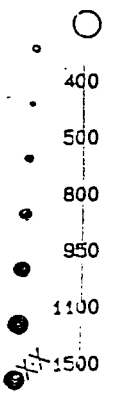
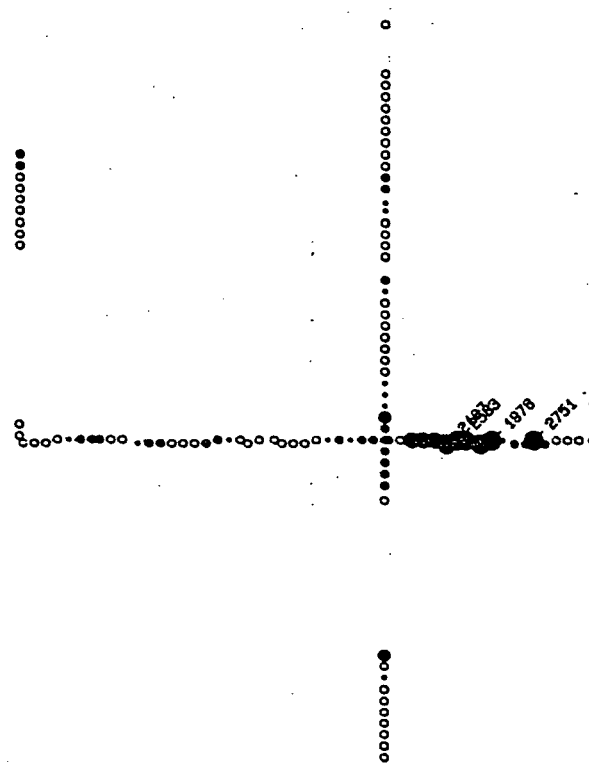
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE MANGANESE (ppm)		
DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT:		

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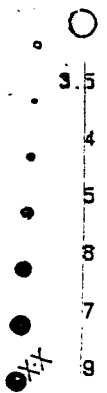
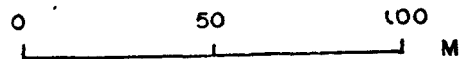
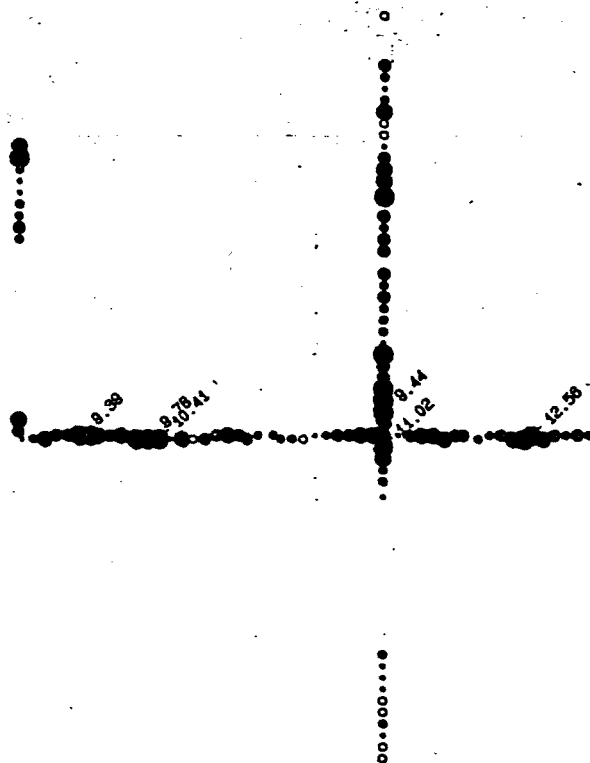
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE IRON (%)		
DWG. NO.	DATE OCT/85	PROJECT 581/10131
REPORT NO.	NTS 93N/1	SCALE 1: 2000
TO ACCOMPANY REPORT		

FIG.

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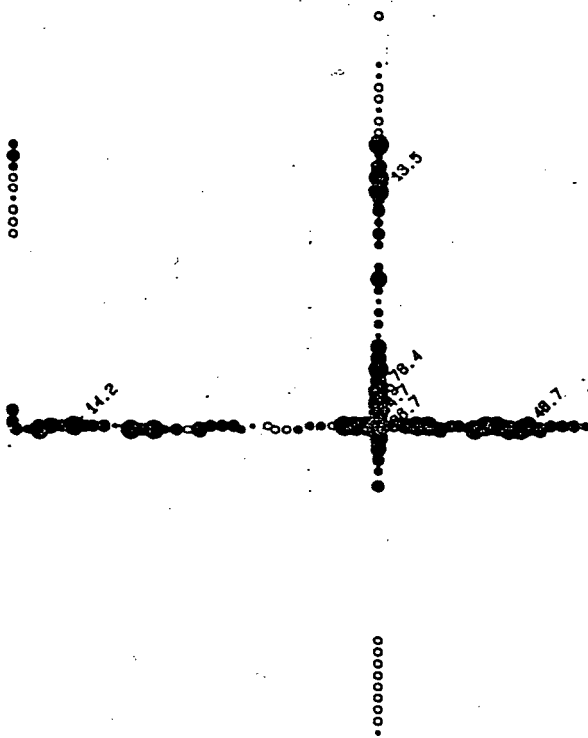
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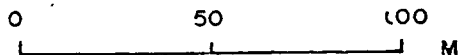
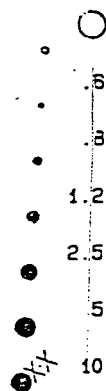
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE SILVER (ppm)		
DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		

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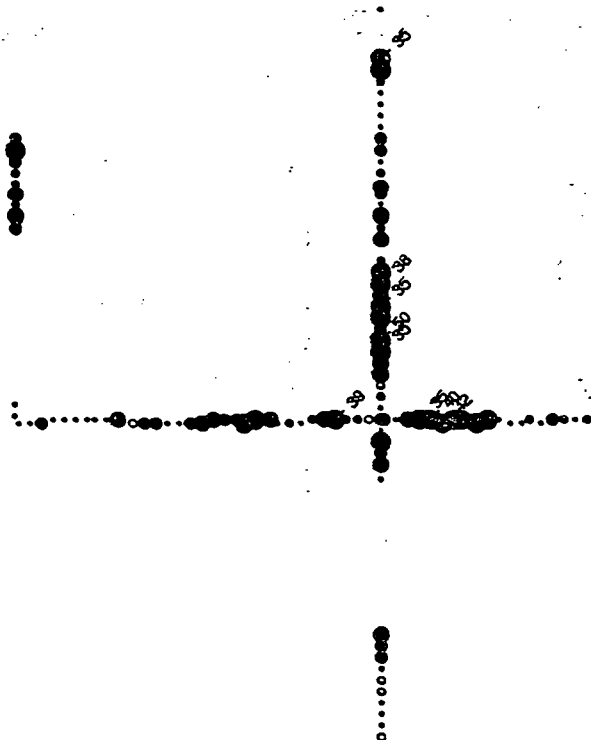
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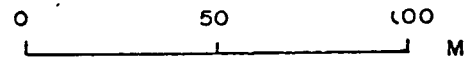
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SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1. - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - ESKER ZONE  
COBALT (ppm)

DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		



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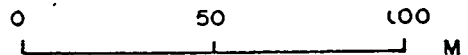
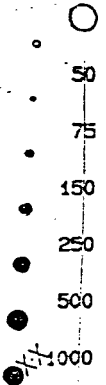
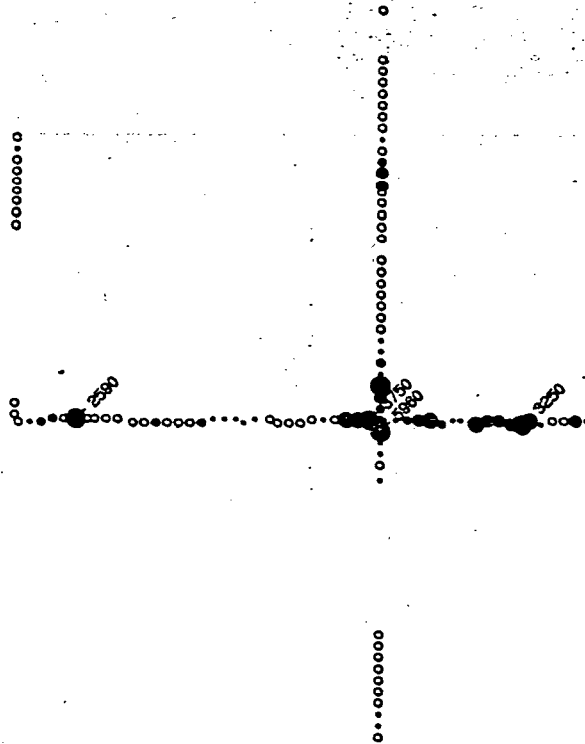
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE GOLD (ppb)		
OWC NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO	NTS 93N/1 SCALE 1: 2000	
TO ACCOMPANY REPORT		

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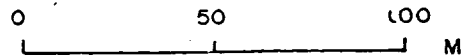
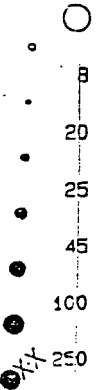
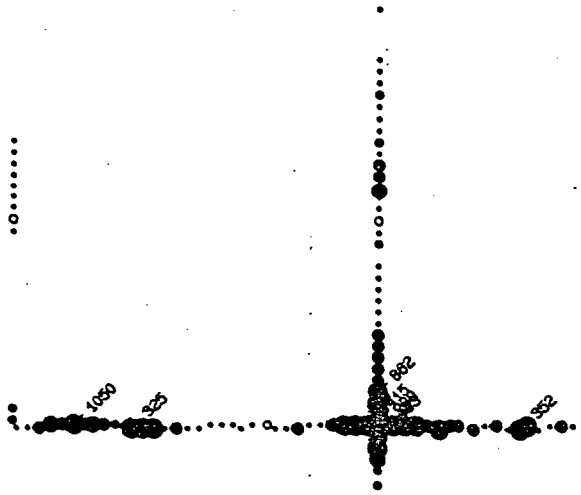
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED			
PHIL 1. - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - ESKER ZONE ARSENIC (ppm)			
DWG NO.	DATE OCT/85	PROJECT 561/10131	FIG.
REPORT NO.	NTS 93N/1	SCALE 1: 2000	
TO ACCOMPANY REPORT			

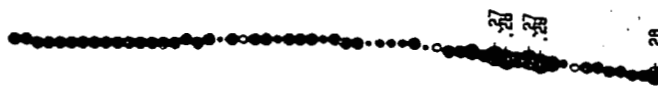
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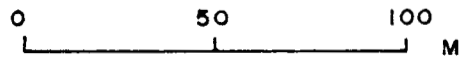
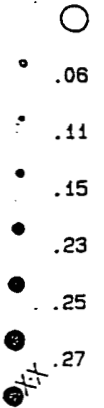
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY TITANIUM (%)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 03M/1 SCALE 1: 2000

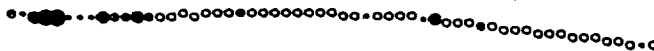
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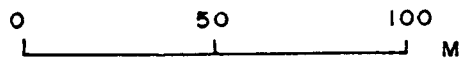
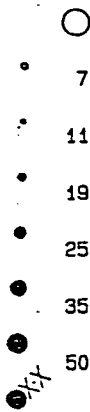
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY MOLYBDENUM (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 82M7 SCALE 1:2000

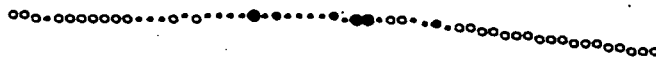
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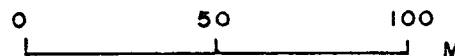
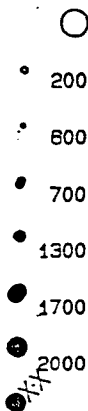
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY COPPER (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131 FIG.
REPORT NO.	NTS 80M SCALE 1: 2000

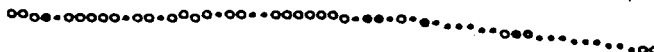
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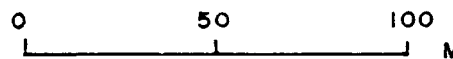
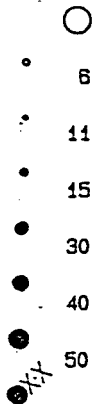
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY LEAD (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 85/11 SCALE 1:2000

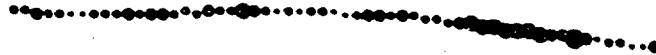
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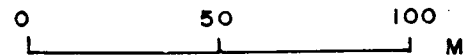
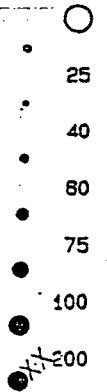
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY ZINC (ppm)	
Dwg. no.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 87M/11 SCALE 1: 2000

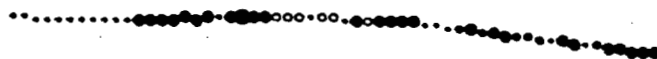
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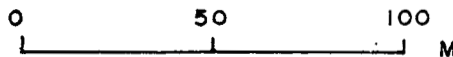
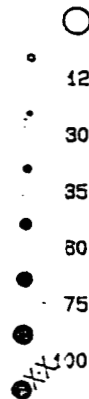
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY NICKEL (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 22N/74 SCALE 1:2000



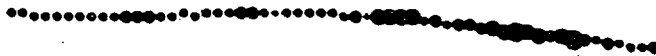
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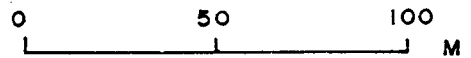
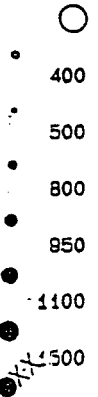
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**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY  
MANGANESE (ppm)

DWG NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 02N/1	SCALE 1: 2000

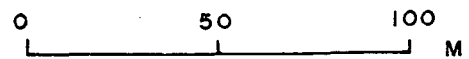
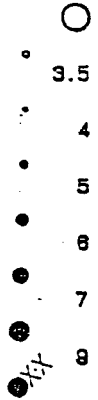
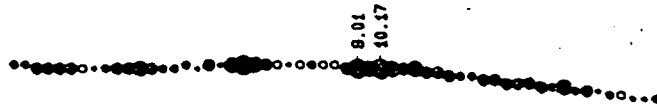
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY IRON (%)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 324/1 SCALE 1:2000

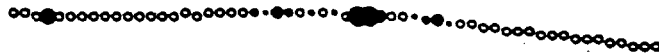
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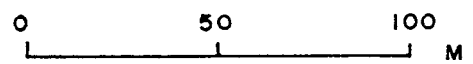
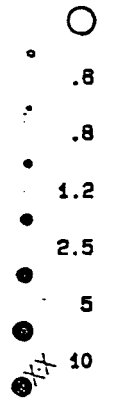
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY SILVER (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 02M/1 SCALE 1: 2000

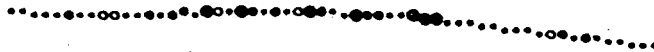
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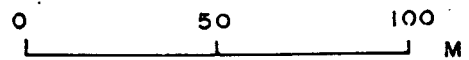
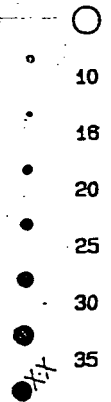
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SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY  
COBALT (ppm)

DWG. NO.	DATE OCT/85 PROJECT 561/10131	FIG.
REPORT NO.	NTS 02N/1	SCALE 1: 2000

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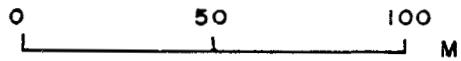
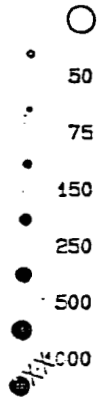
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SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1 - HASLINGER OPTION  
ALEX GOLD PROJECT - B.C.  
1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY  
GOLD (ppb)

DWG NO. -	DATE OCT/85 PROJECT 561/10131	FIG.
PROJECT NO.	NTS 30N/1	SCALE 1: 2000

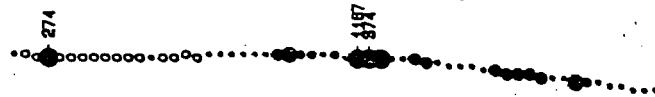
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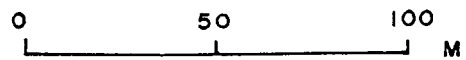
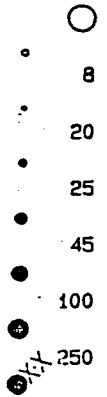
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SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY ARSENIC (ppm)	
DWG. NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	SCALE 1: 2000

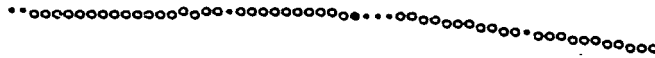
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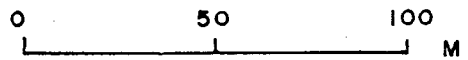
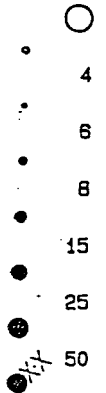
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY ANTIMONY (ppm)	
DWG. NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS SEMI SCALE 1:2000

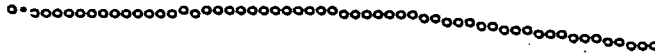
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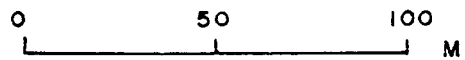
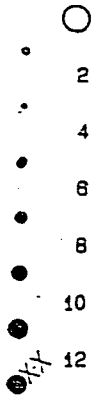
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
<b>PHIL 1 - HASLINGER OPTION</b> ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY TUNGSTEN (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 82M/A SCALE 1:2000



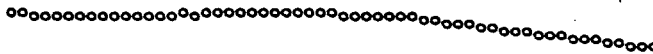
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CD



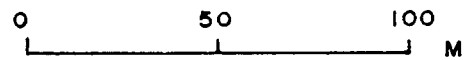
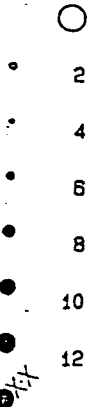
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SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY

COBALT (ppm)

DWG NO.

DATE OCT/85 PROJECT 561/10131

REPORT NO.

NTS 30M/1 SCALE 1:2000

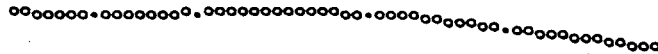
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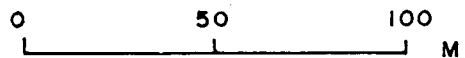
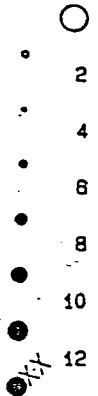
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY BISMUTH (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 001/4 SCALE 1: 2000

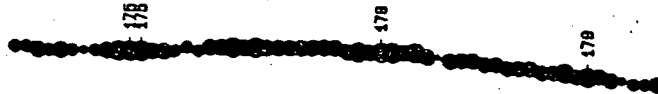
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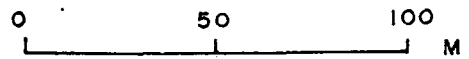
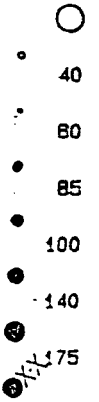
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SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY  
VANADIUM (ppm)

DWG NO.

DATE OCT/85 PROJECT 561/10131

DATE

NTS 50M/1

SCALE 1: 2000

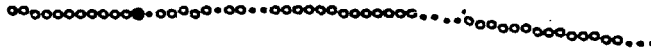
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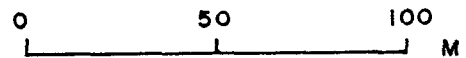
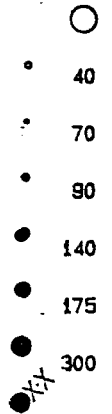
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SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

PHIL 1 - HASLINGER OPTION

ALEX GOLD PROJECT - B.C.

1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY  
BARIUM (ppm)

DWG NO. DATE OCT/85 PROJECT 561/10131 FIG.

REPORT NO. NTS 88M/1 SCALE 1:2000

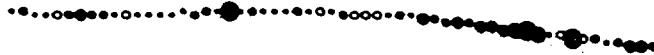
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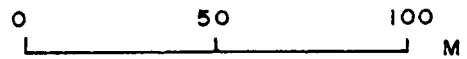
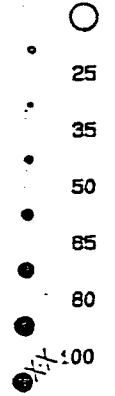
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX. GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY STRONTIUM (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131 FIG.
REPORT NO.	NFS 82N4 SCALE 1: 2000

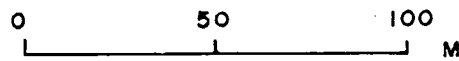
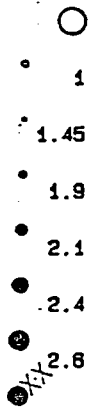
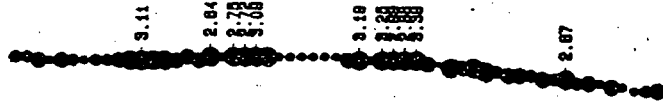
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SELCO DIVISION - BP RESOURCES CANADA LIMITED	
<b>PHIL 1 - HASLINGER OPTION</b>	
ALEX GOLD PROJECT - B.C.	
1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY ALUMINUM (%)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS GRN/11 SCALE 1: 2000

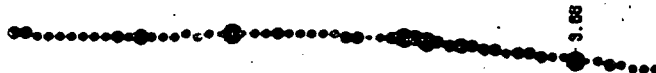
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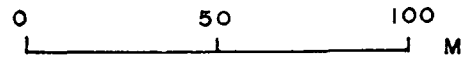
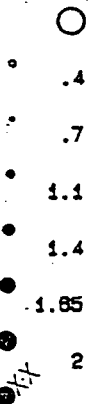
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY CALCIUM (%)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 88N/1 SCALE 1: 2000

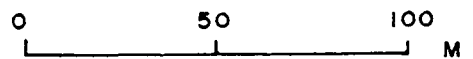
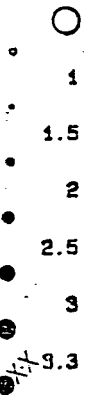
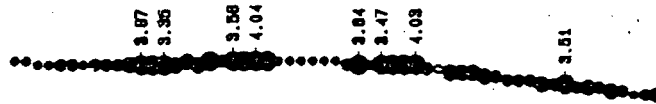
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY MAGNESIUM (%)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 03N1 SCALE 1:2000



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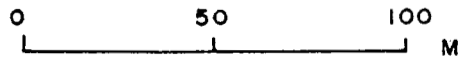
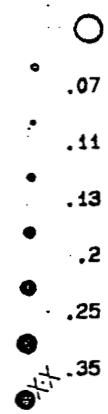
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY POTASSIUM (%)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REVISION NO.	NTS 99N/1 SCALE 1: 2000

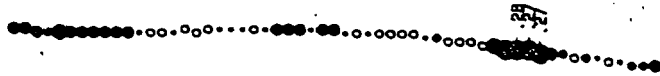
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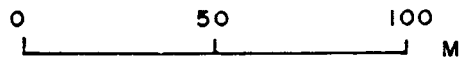
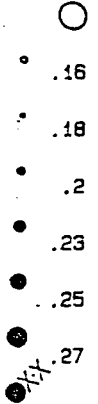
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY PHOSPHORUS (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131 FIG.
REPORT NO.	NTS 93N/A SCALE 1: 2000

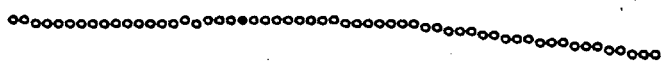
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B



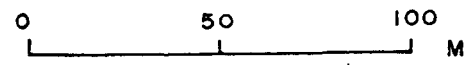
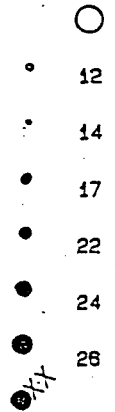
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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
<b>PHIL 1 - HASLINGER OPTION</b> ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY BORON (ppm)	
DWG NO.	DATE OCT/85 PROJECT 561/10131
REPORT NO.	NTS 32N/4 SCALE 1: 2000

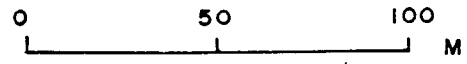
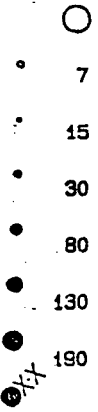
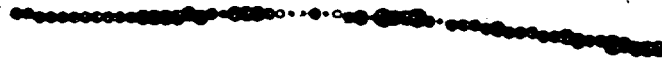
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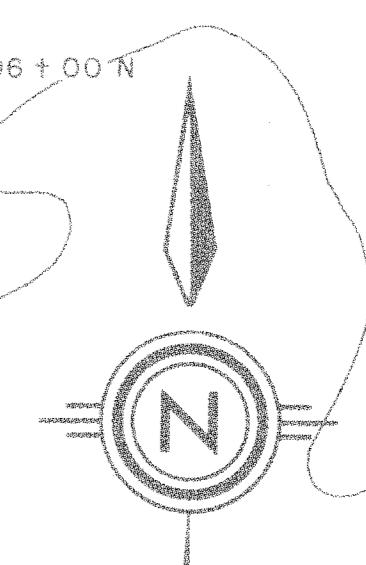
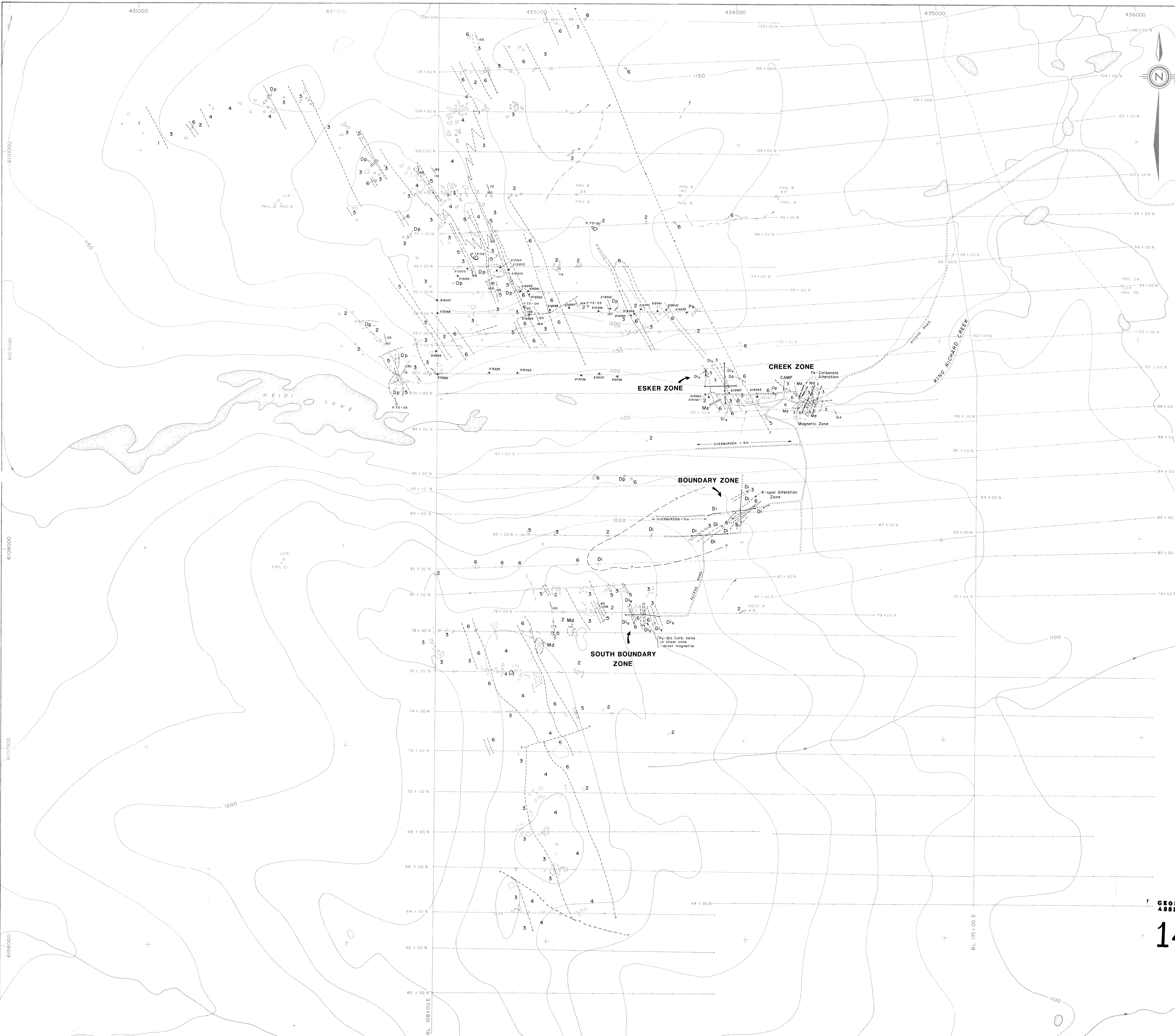


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 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
PHIL 1 - HASLINGER OPTION ALEX GOLD PROJECT - B.C. 1985 TRENCH GEOCHEMISTRY - SOUTH BOUNDARY CHROMIUM (ppm)	
DWG. NO. REPORT NO.	DATE OCT/85 PROJECT 561/10131 NTS 93N/7 SCALE 1: 2000



- LEGEND:**
- UPPER TRIASSIC - LOWER JURASSIC**
- INTRUSIVE ROCKS**
- Px** PYROXENITE DYKES
  - Md** MONZODIORITE
  - Di** DIORITE, STOOKS, DYKES
  - Dv** DIORITE, SUBVOLCANIC EQUIVALENT OF UNIT 1 & 6 FLOWS
  - Dp** DIORITE PORPHYRY
- VOLCANIC & SEDIMENTARY ROCKS (TAKLA GROUP)**
- 6** BASALTIC ANDESITE/AUGITE & AUGITE FELDSPAR PORPHYRIES
  - 5** VOLCANICLASTIC ROCKS: THINLY LAMINATED ASH TUFF
  - 4** AUGITE PORPHYRY BRECCIAS, AGGLOMERATE
  - 3** ANDESITIC FLOWS, CRYSTAL AND LAPILLI TUFF WITH AUGITE PORPHYRY FRAGMENTS
  - 2** AUGITE CRYSTAL TUFFS
  - 1** BASALTIC ANDESITE FLOWS: HORNBLENDE PORPHYRY HORNBLENDE FELDSPAR PORPHYRY
- GEOLOGIC SYMBOLS**
- GEOLGIC CONTACT (KNOWN INFERRED)
  - BEDDING ATTITUDE
  - FAULT (DOWNTHROWN SIDE INDICATED)
  - OUTCROP
  - CREEK (WITH DIRECTION OF FLOW)
  - P-72-11 PECHINEY DIAMOND DRILL HOLE
  - TRENCH
  - ▲ WHOLE ROCK SAMPLE LOCATION

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

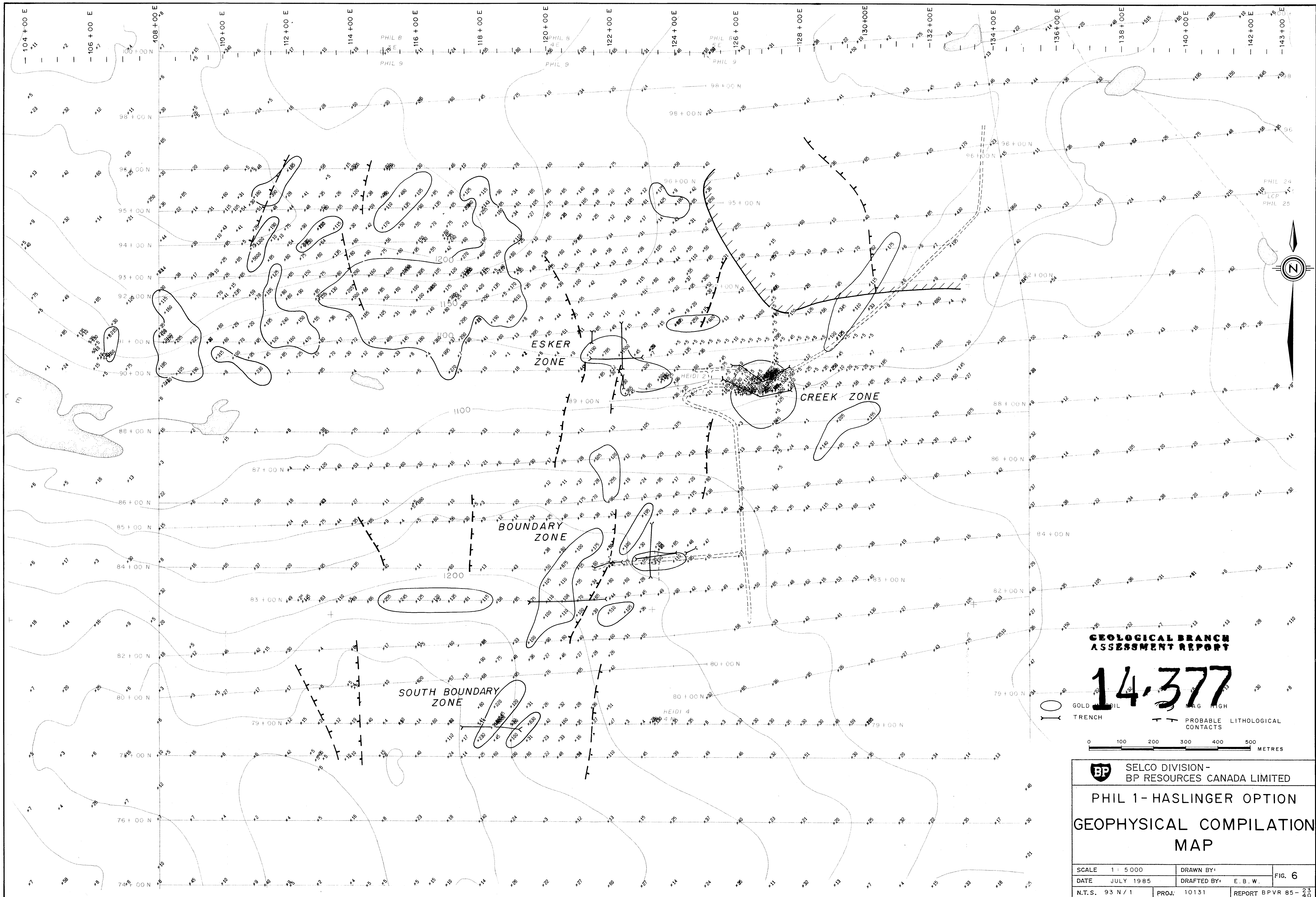
**14,377**

50 100 200 300 400 500 METRES

**BP** SELCO DIVISION - BP RESOURCES CANADA LIMITED

**PHIL I & HEIDI CLAIM GROUPS**  
ALEX GOLD PROJECT / HASLINGER OPTION  
**GEOLOGY**

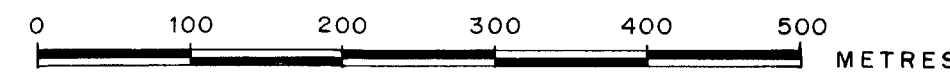
SCALE 1:5,000 ORGN BY: D.H. & R.M. FIG. 3  
DATE DEC. 1985 DRAFTED BY: E.B.W.  
N.T.S. 93 N/1 PROJ. 10130/10131 REPORT SPVR 85-23



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14-377**

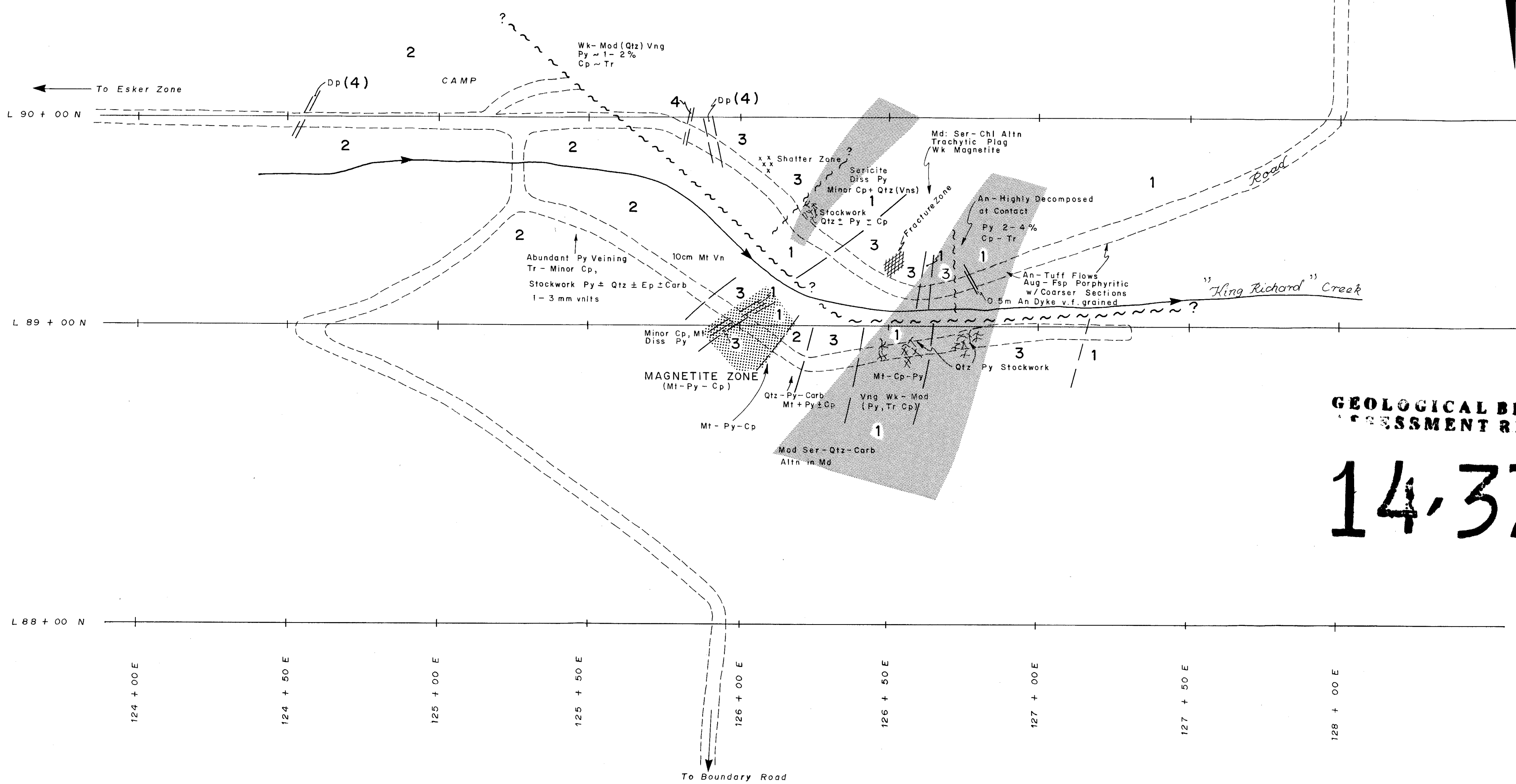
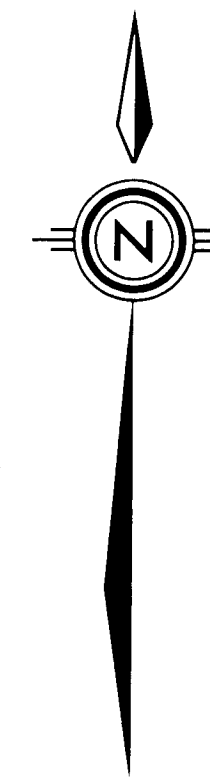
-  GOLD DRILL HOLE
-  TRENCH
-  PROBABLE LITHOLOGICAL CONTACTS



**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

**PHIL 1- HASLINGER OPTION  
GEOPHYSICAL COMPILATION  
MAP**

SCALE 1 : 5 000	DRAWN BY:	FIG. 6
DATE JULY 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N / 1	PROJ. 10131	REPORT BPVR 85- 23 40



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14,377**

**LEGEND**

**INTRUSIVE ROCKS**

- 4** DIORITE, Dp-DIORITE PORPHYRY
- 3** MONZODIORITE

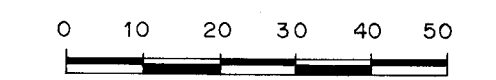
**VOLCANIC ROCKS**

- 2** AUGITE PORPHYRY: FLOWS, TUFF
- 1** ANDESITE: FLOWS, TUFF, MINOR DIORITE (Div)

**SYMBOLS & ABBREVIATIONS**

- |                   |                           |
|-------------------|---------------------------|
| Py - Pyrite       | Aug - Augite              |
| Cp - Chalcopyrite | Fsp - Feldspar            |
| Mt - Magnetite    | An - Andesite             |
| Qtz - Quartz      | Div - Subvolcanic Diorite |
| Ep - Epidote      | Ap - Augite Porphyry      |
| Carb - Carbonate  | Chlor - Chlorite          |

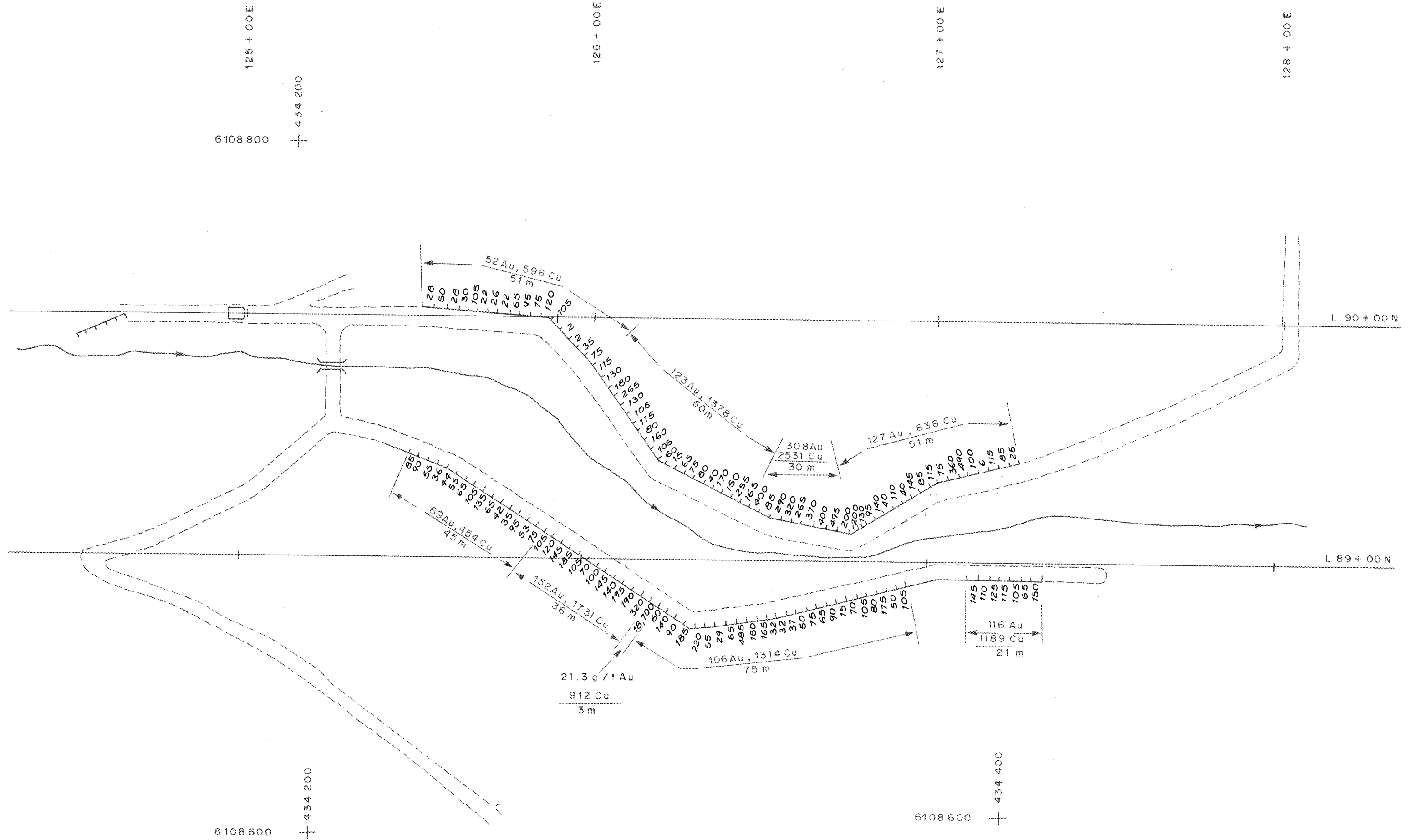
- MAGNETITE ZONE
- STOCKWORK
- FRACTURE ZONE
- SHATTER ZONE
- Fe Carbonate, pervasive alteration



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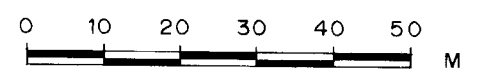
**PHIL 1 HASLINGER  
CREEK ZONE  
GEOLOGY**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 7a
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93N/1,04	PROJ. 10131	REPORT BPVR 85-230



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14-377**



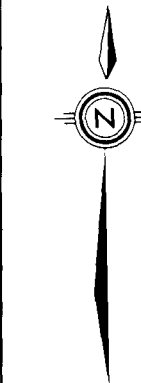
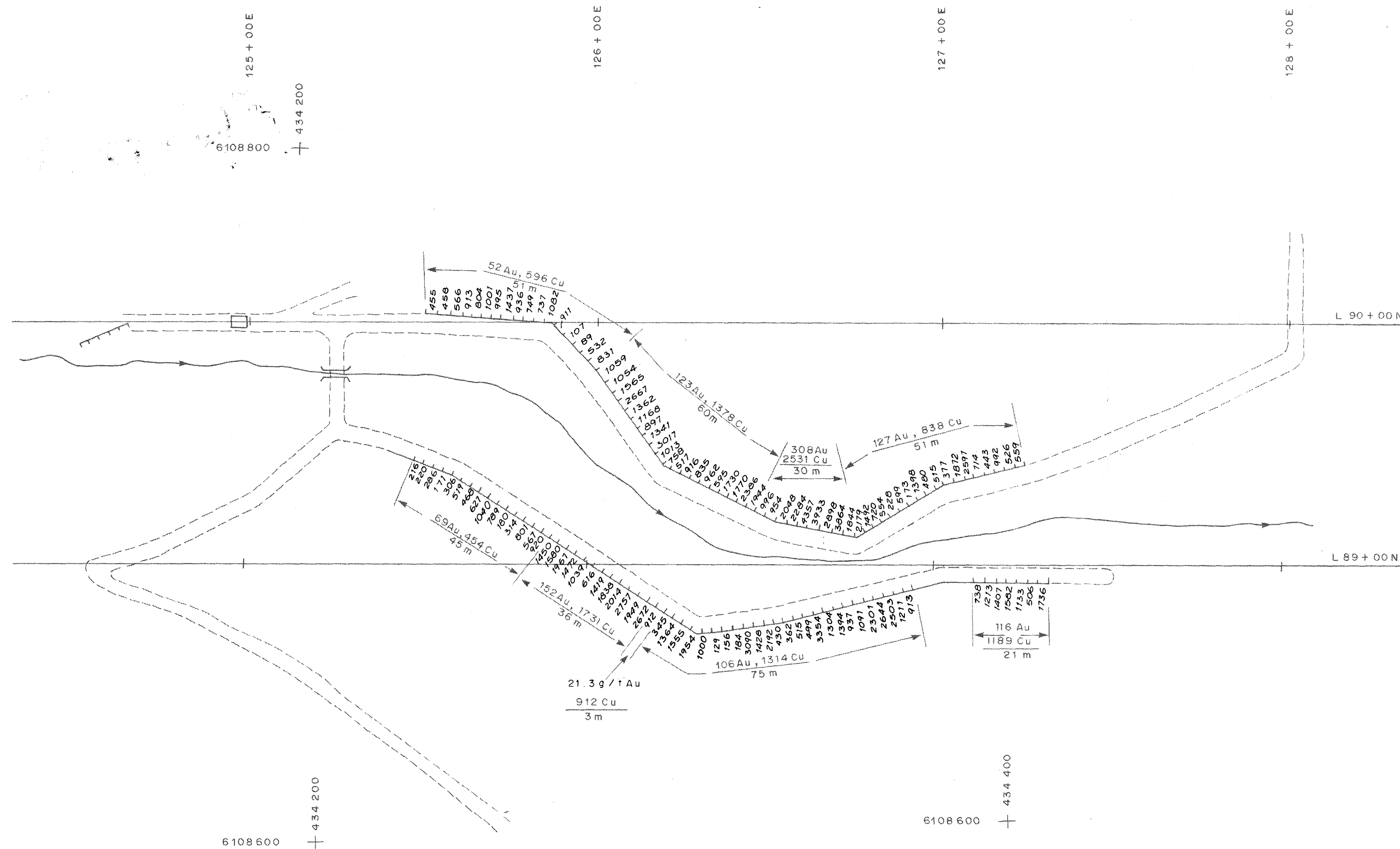
**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

**PHIL 1 HASLINGER  
CREEK ZONE  
TRENCH SAMPLING**

**GOLD (ppb)**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 7 b
DATE DEC ' 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 0 4	PROJ. 10131	REPORT BPVR 85-23 40



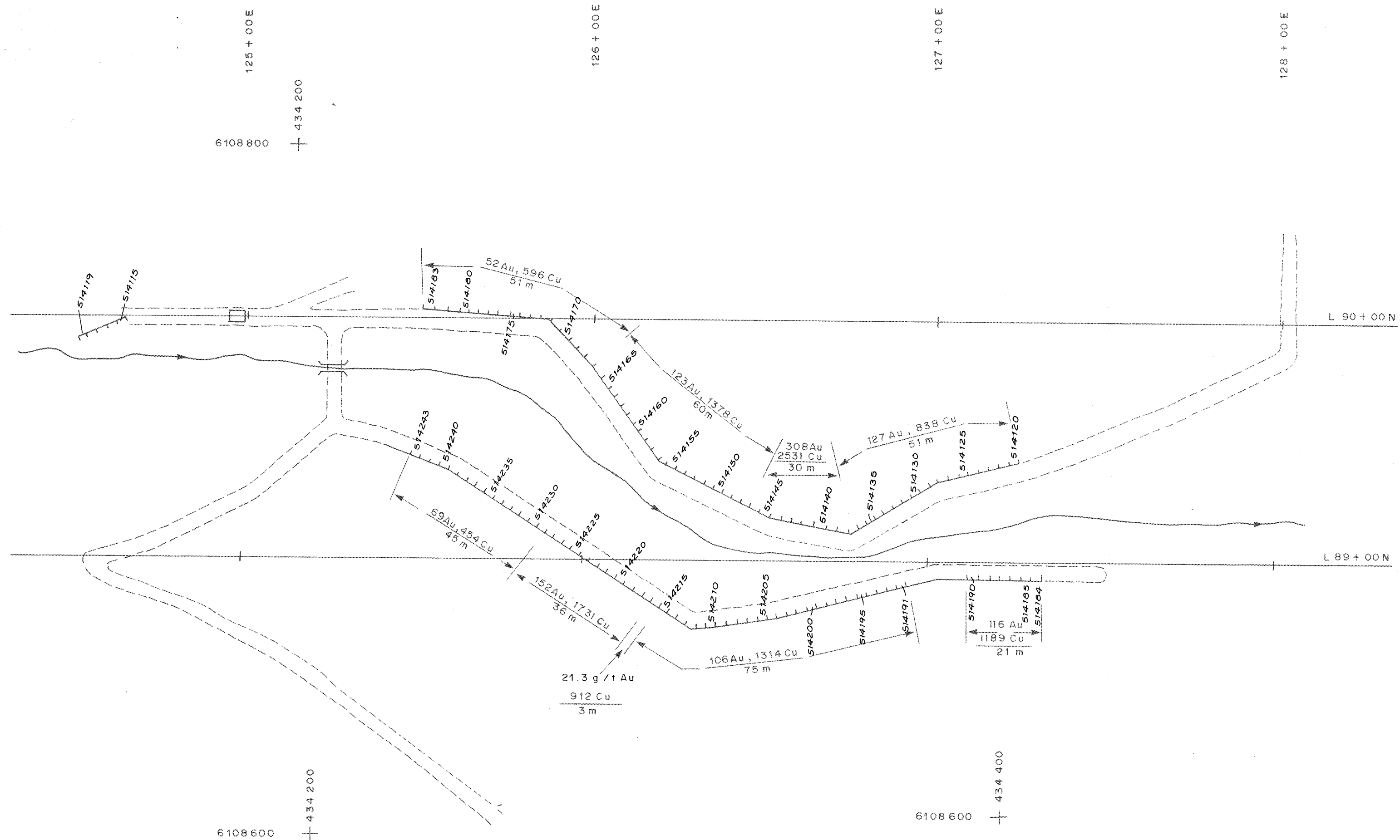


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14-377**

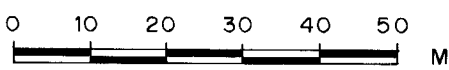
0 10 20 40 50 M

<b>BP</b> SELCO DIVISION - BP RESOURCES CANADA LIMITED	
<b>PHIL 1 HASLINGER CREEK ZONE TRENCH SAMPLING</b>	
<b>COPPER(ppm)</b>	
SCALE 1 : 1,000	DRAWN BY: R. M.
DATE DEC 1985	DRAFTED BY: E. B. W.
N.T.S. 93N/1, 0 4	PROJ. 10131
REPORT BPVR 85 - 23	FIG. 7c
REPORT BPVR 85 - 40	



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

14-377

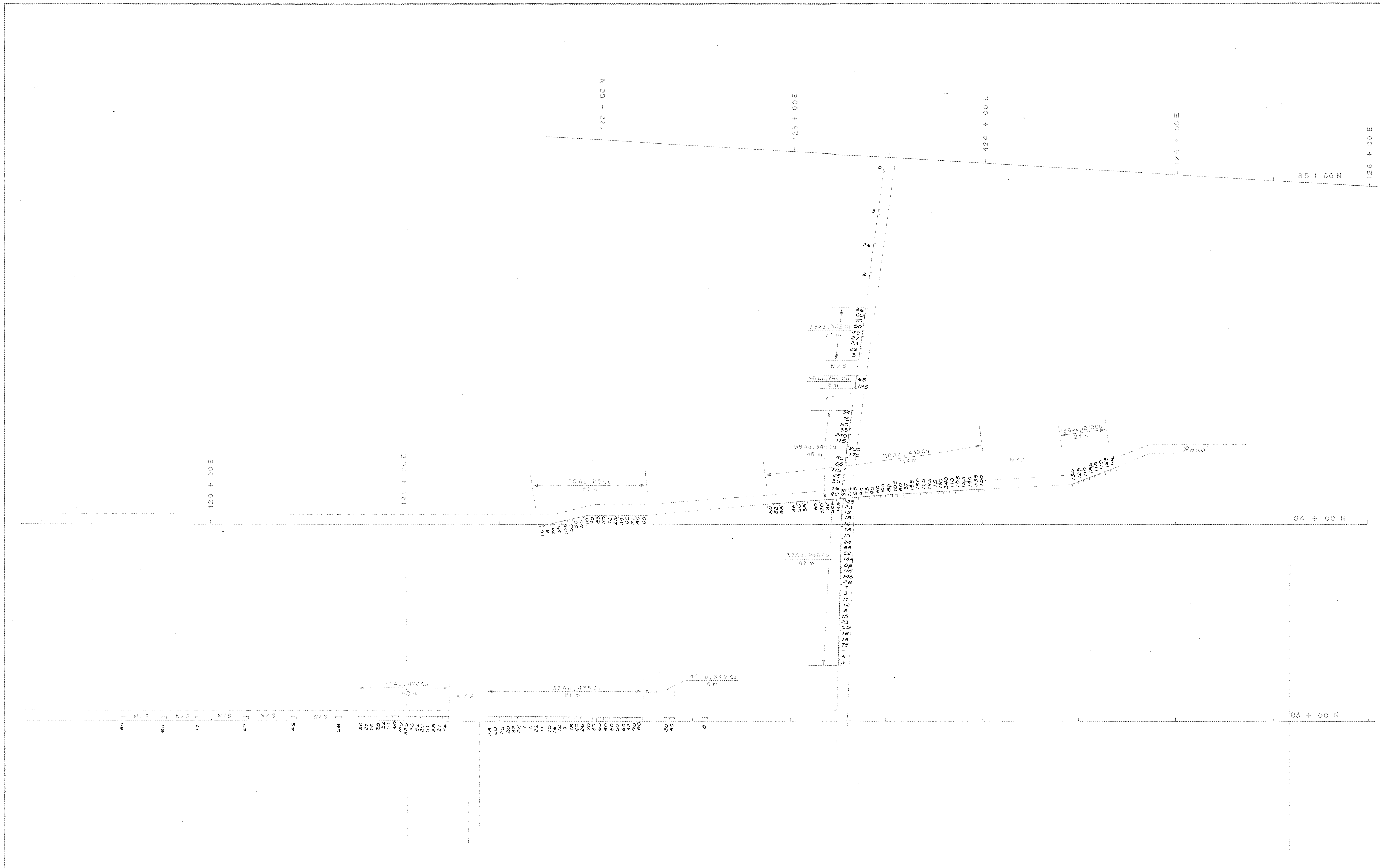


**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

**PHIL 1 HASLINGER  
CREEK ZONE  
TRENCH SAMPLING**

**SAMPLE LOCATIONS**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 7 d
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93N/1, 0 4	PROJ. 10131	REPORT BPVR 85-23/40



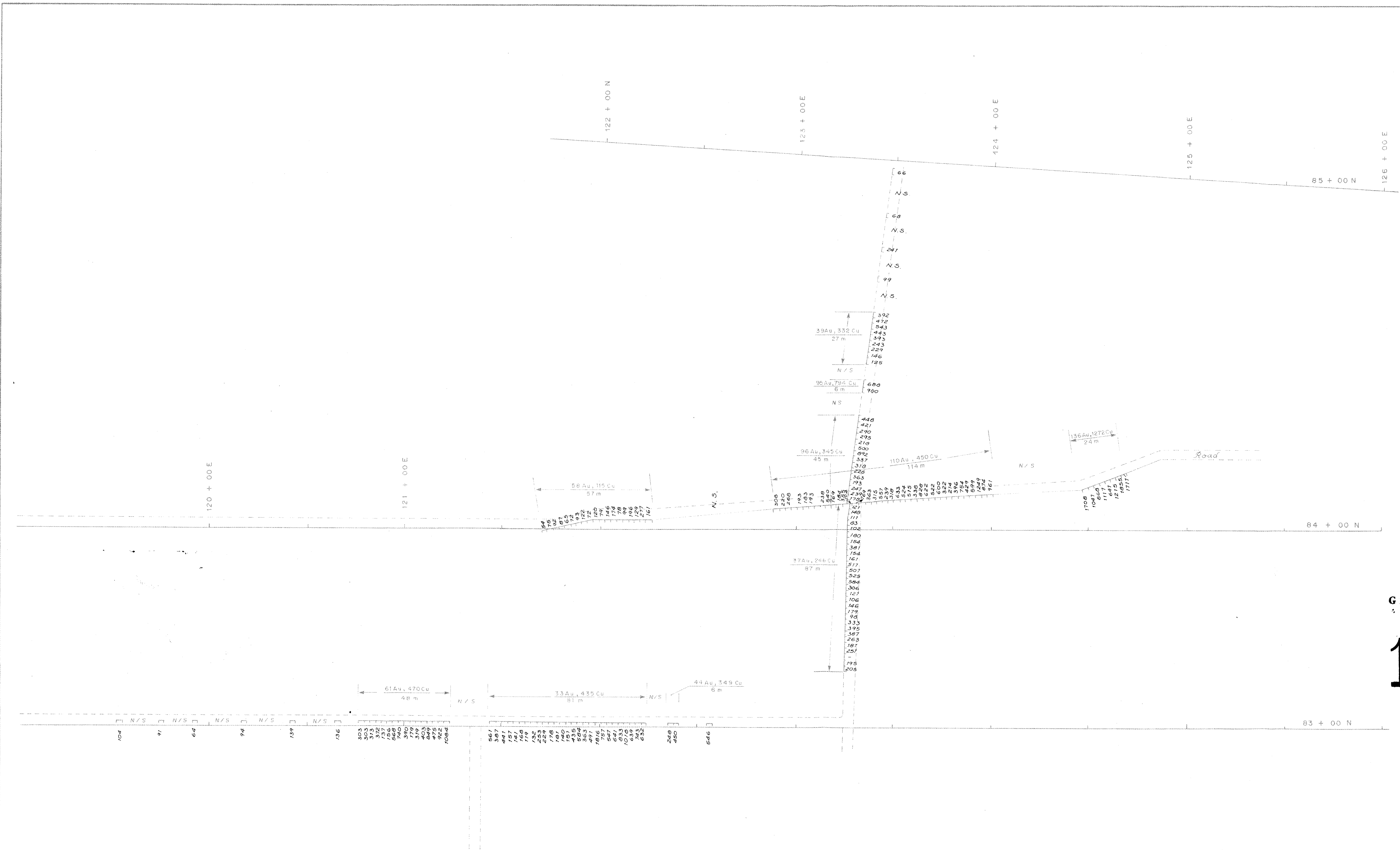
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14,377**

**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

**PHIL 1 HASLINGER  
BOUNDARY ZONE  
TRENCH SAMPLING  
GOLD (ppb)**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 8 b
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 04	PROJ. 10131	REPORT BPVR 85-23



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

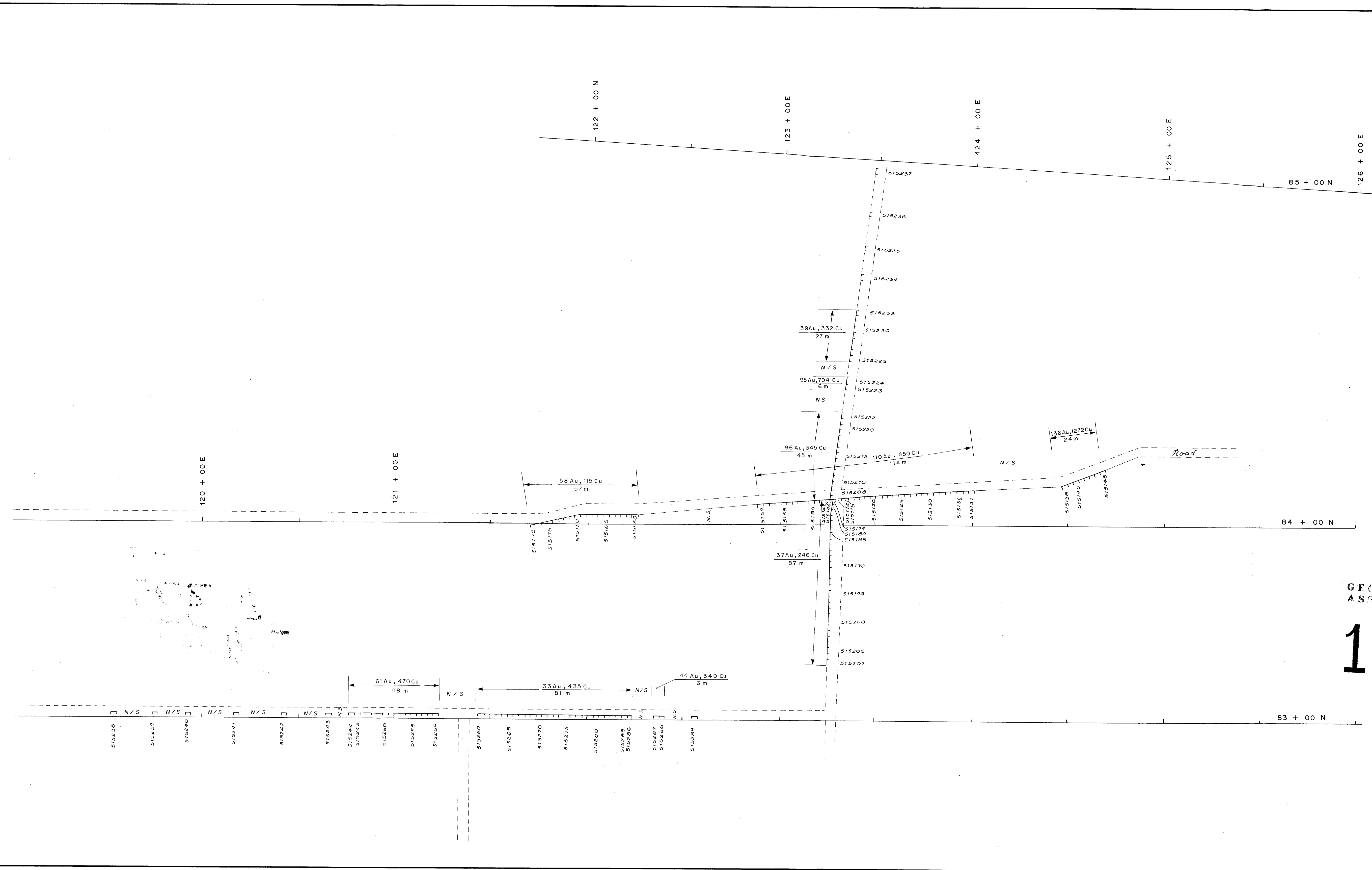
14,377



**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

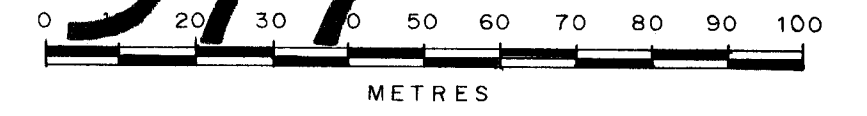
**PHIL 1 HASLINGER**  
**BOUNDARY ZONE**  
**TRENCH SAMPLING**  
**COPPER (ppm)**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 8 C
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 04	PROJ. 10131	REPORT BPVR 85 - 23 / 40



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

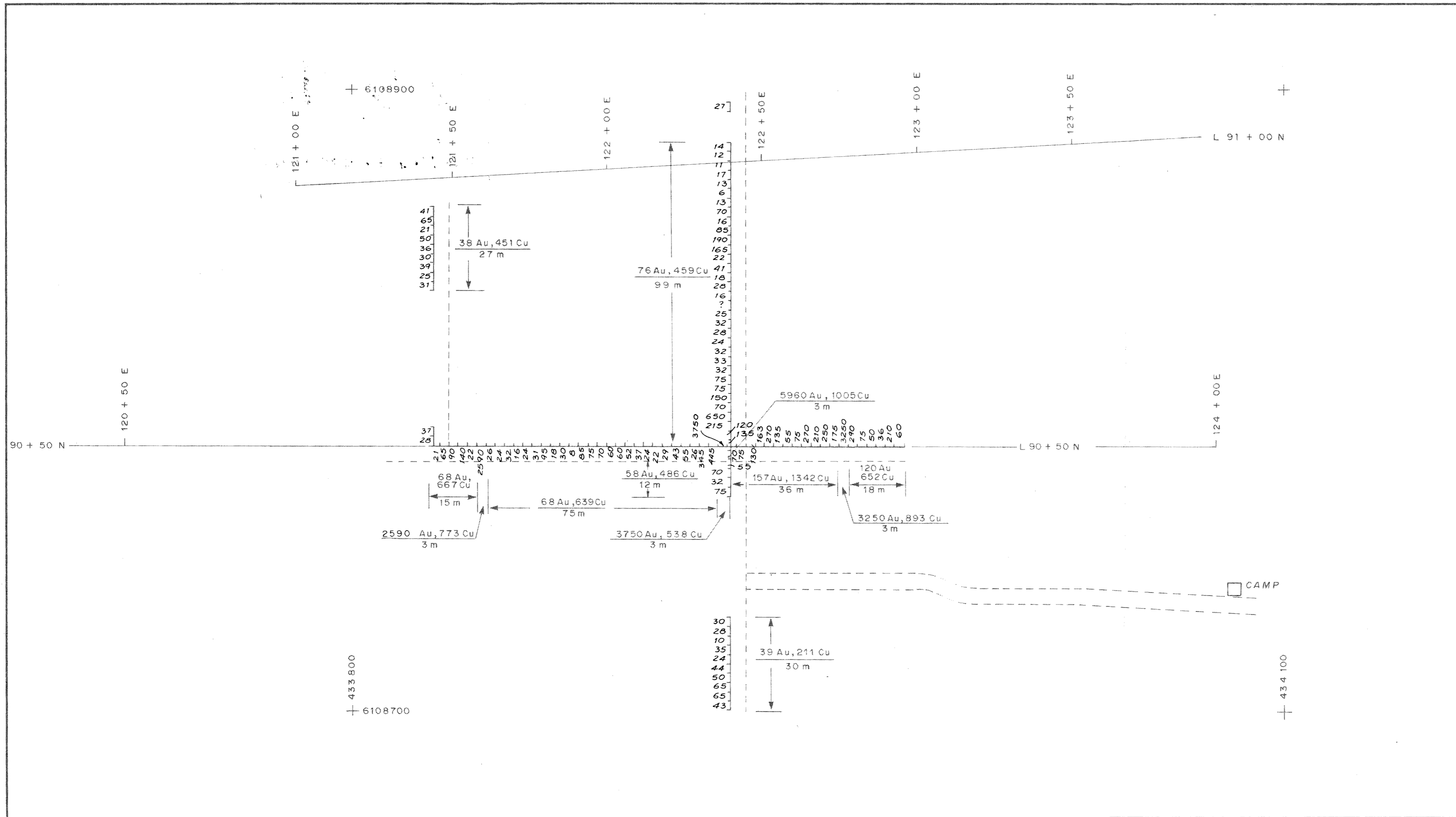
14-377



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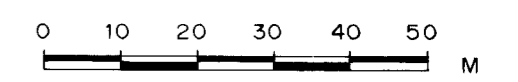
**PHIL 1 HASLINGER  
BOUNDARY ZONE  
TRENCH SAMPLING  
SAMPLE LOCATIONS**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 8 d
DATE DEC ' 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 04	PROJ. 10131	REPORT BPVR 85 - 23 40



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

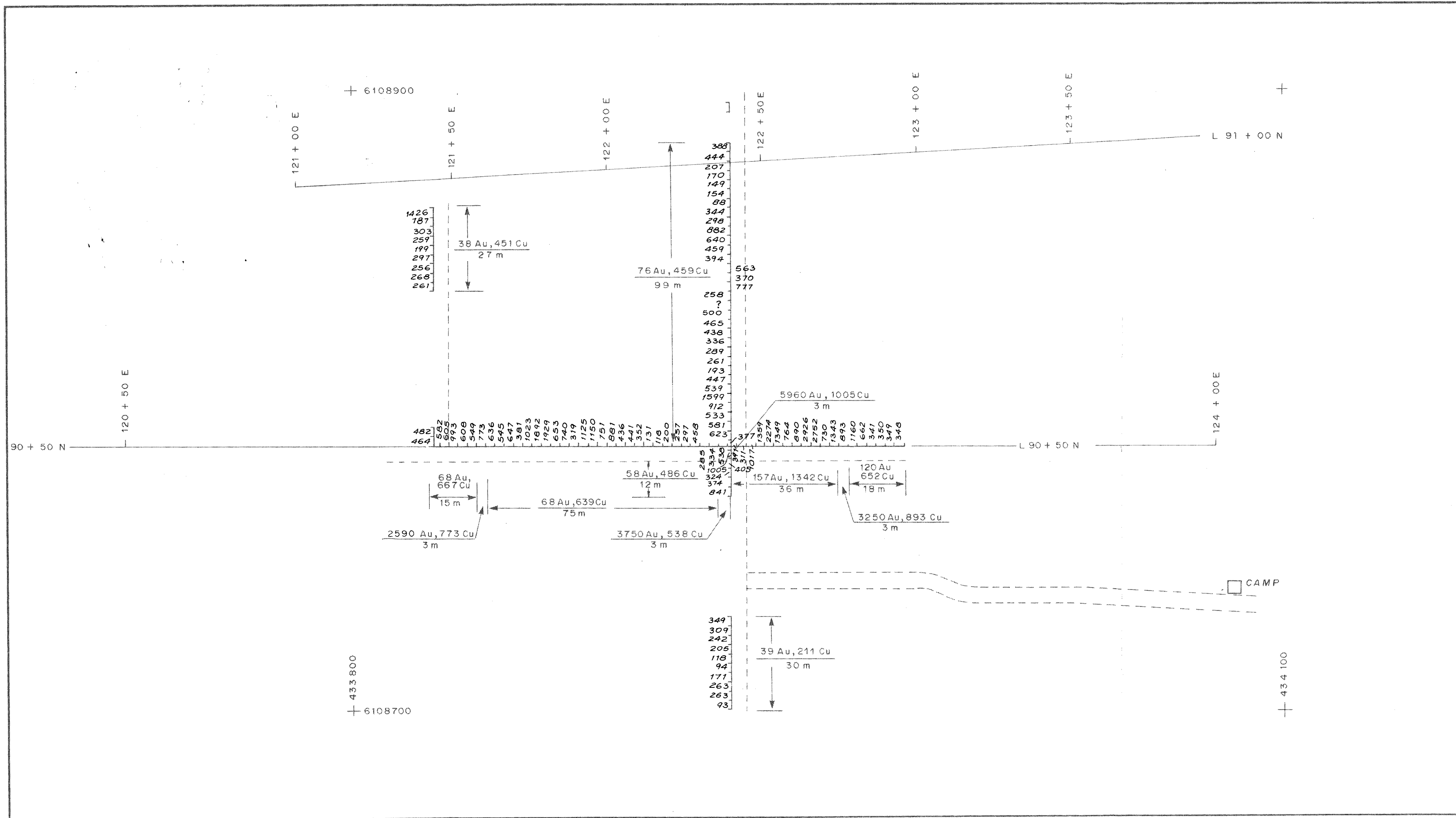
**14,377**



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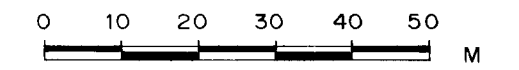
**PHIL 1 HASLINGER  
ESKER ZONE  
TRENCH SAMPLING  
GOLD (ppb)**

SCALE 1 : 1 000	DRAWN BY: R. M.	FIG. 9b
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N / 1, 0 4	PROJ. 10 131	REPORT BPVR 85 - 40



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14,377**

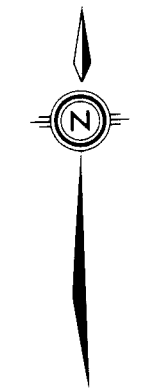
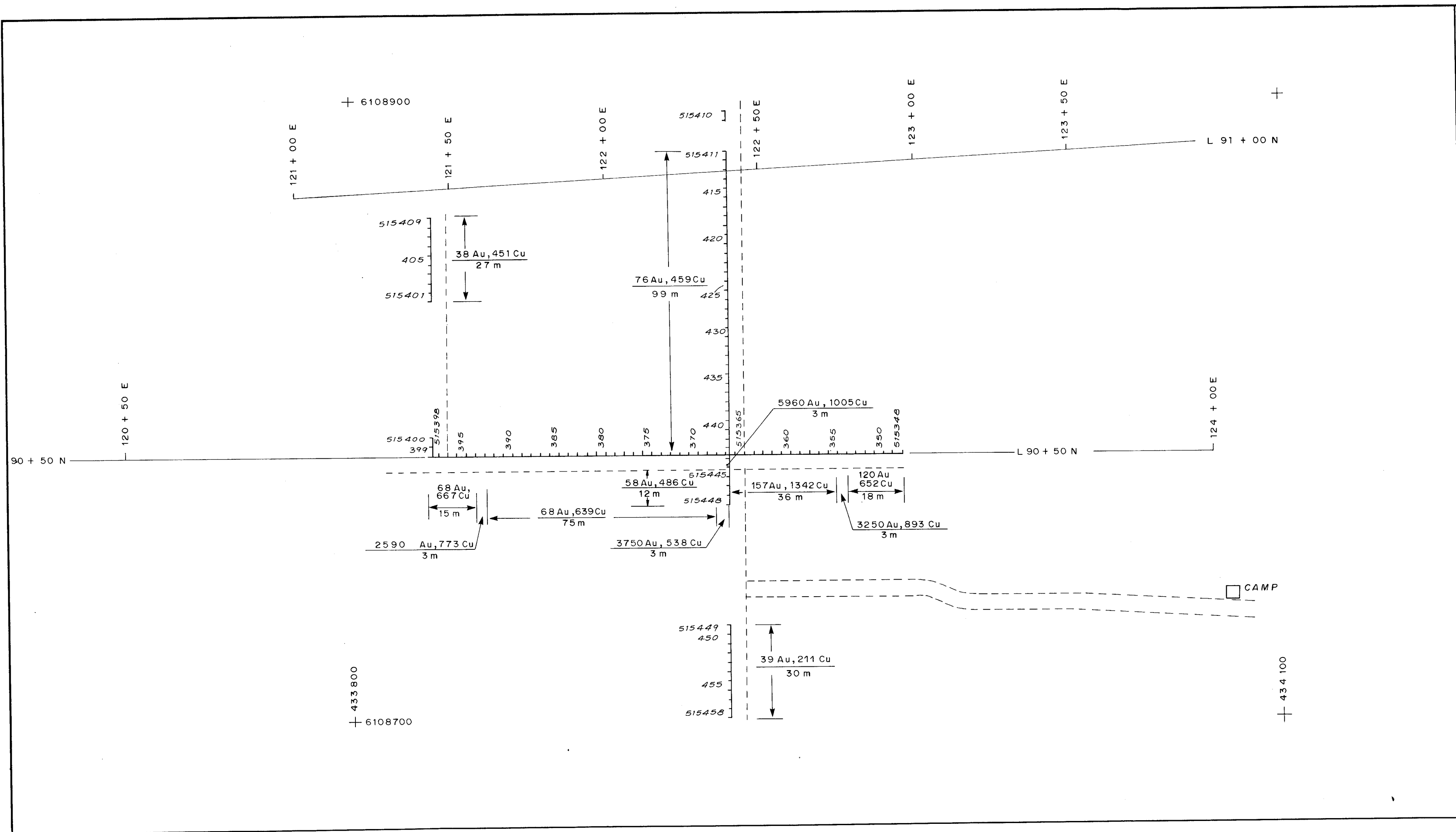


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**PHIL 1 HASLINGER  
ESKER ZONE  
TRENCH SAMPLING**

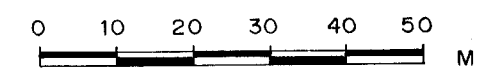
**COPPER (ppm)**

SCALE 1 : 1 000	DRAWN BY: R. M.	FIG. 9c
DATE DEC ' 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 04	PROJ. 10 131	REPORT BPVR 85-23 40



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14-377**

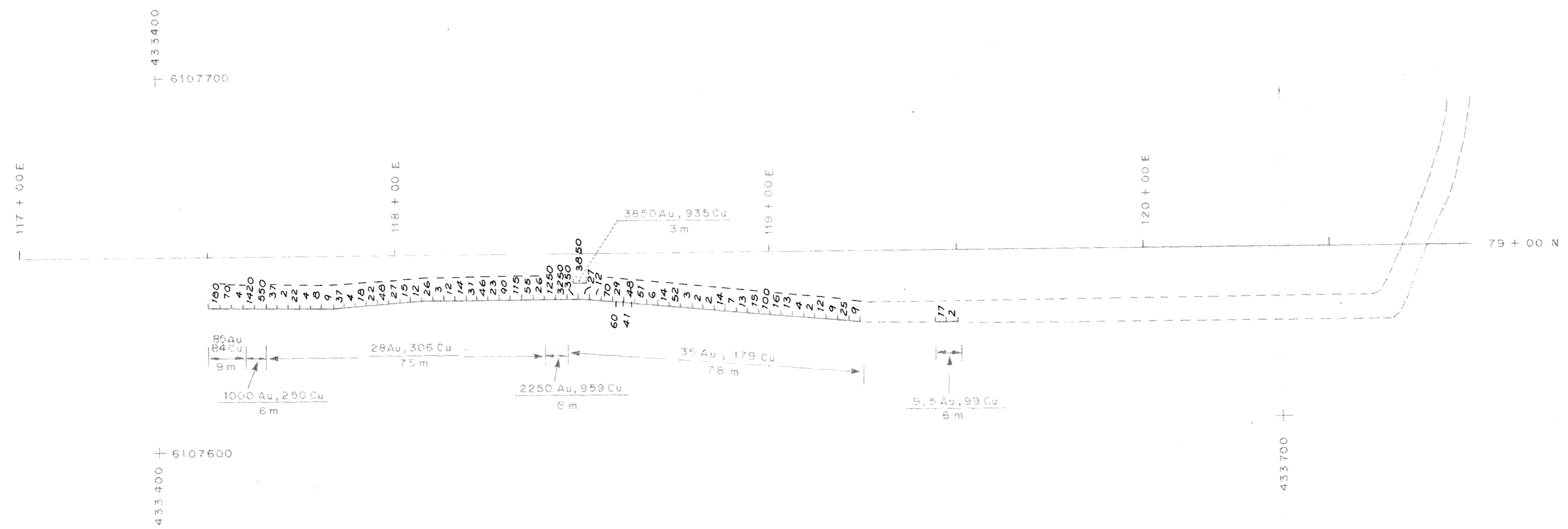


**BP** SELCO DIVISION -  
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**PHIL 1 HASLINGER  
ESKER ZONE  
TRENCH SAMPLING  
SAMPLE LOCATIONS**

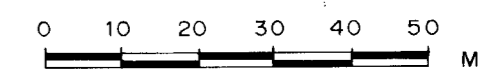
SCALE	1 : 1 000	DRAWN BY:	R. M.	FIG. 9d
DATE	DEC ' 1985	DRAFTED BY:	E. B. W.	
N.T.S.	93 N / 1, 0 4	PROJ.	10 131	REPORT BPVR 85 - 23 40





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

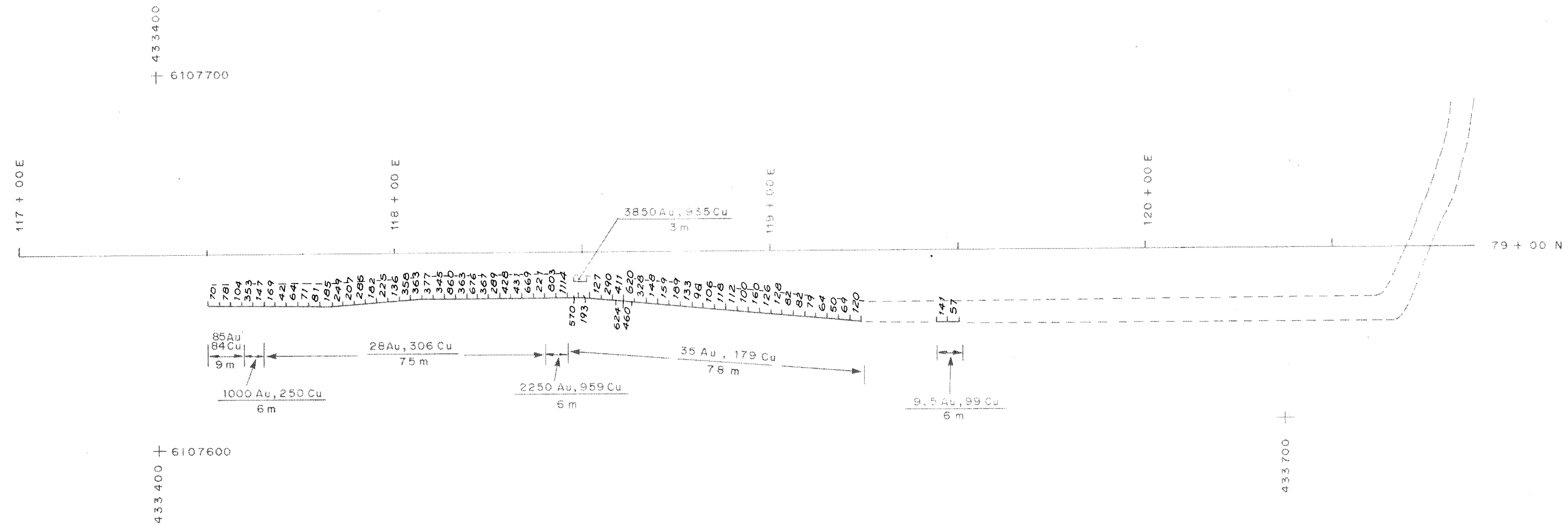
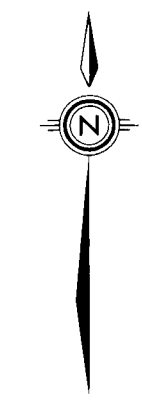
**14,377**



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BP RESOURCES CANADA LIMITED

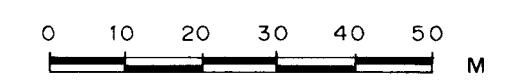
**PHIL 1 HASLINGER  
SOUTH BOUNDARY ZONE  
TRENCH SAMPLING  
GOLD (ppb)**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 10b
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 04	PROJ. 10131	REPORT BPVR 85-23/40



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14-377**

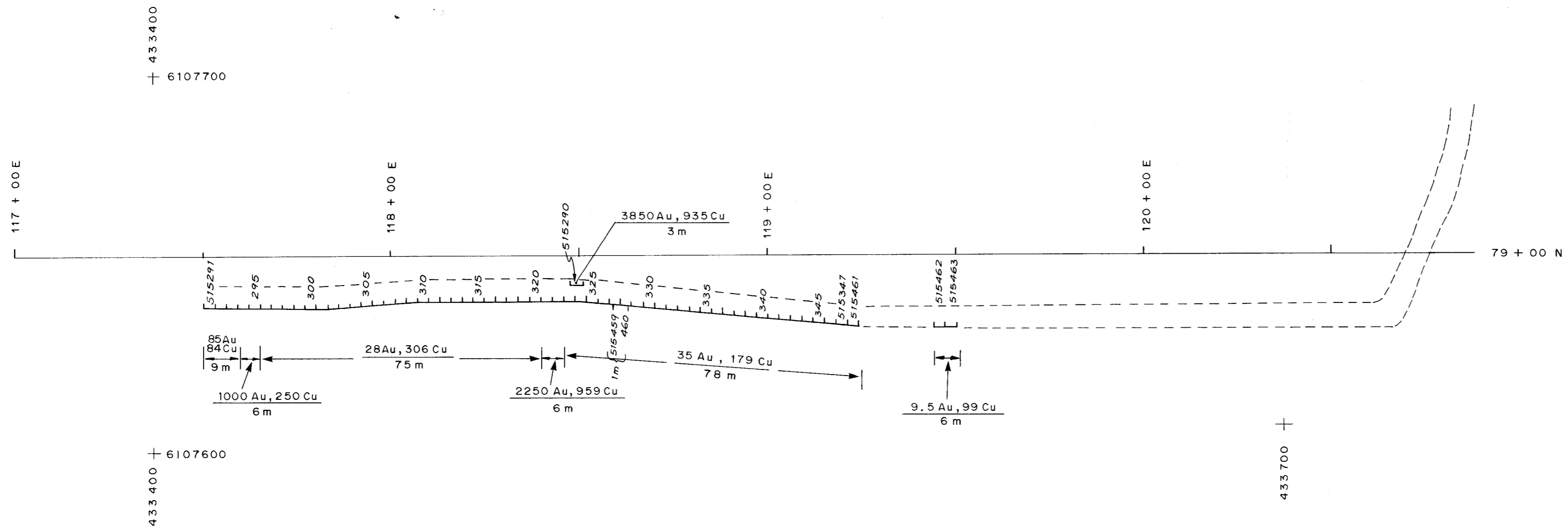


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**PHIL 1 HASLINGER  
SOUTH BOUNDARY ZONE  
TRENCH SAMPLING**

**COPPER (ppm)**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 10c
DATE DEC ' 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 04	PROJ. 10131	REPORT BPVR 85- 23/40



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14.377**

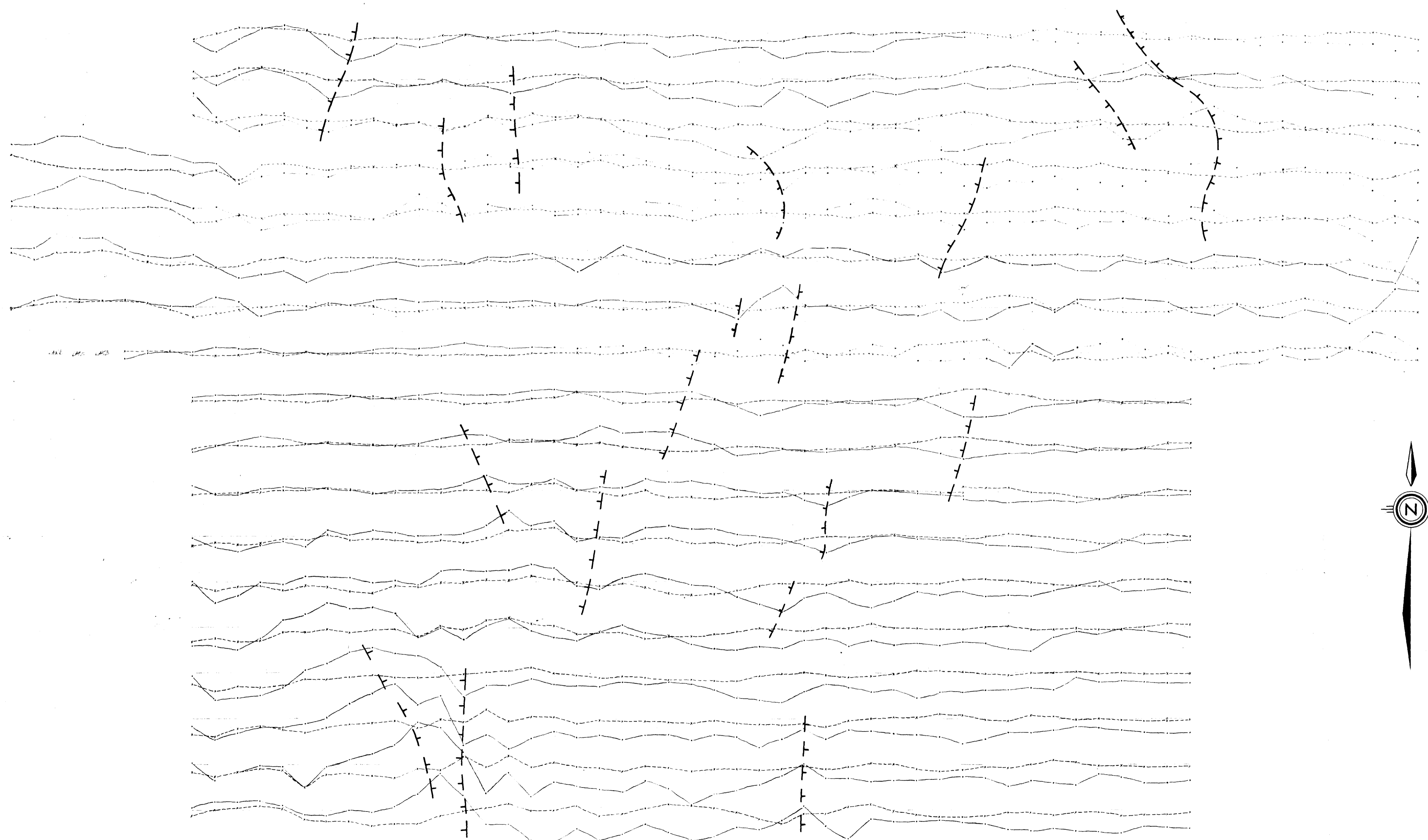
**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

**PHIL 1 HASLINGER  
SOUTH BOUNDARY ZONE  
TRENCH SAMPLING  
SAMPLE LOCATIONS**

SCALE 1 : 1,000	DRAWN BY: R. M.	FIG. 10d
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1, 04	PROJ. 10131	REPORT BPVR 85- 23/40

2

10400 E  
10450  
10500  
10550  
10600 E  
10650  
10700  
10750 E  
10800  
10850  
10900  
10950  
11000  
11050  
11100  
11150  
11200  
11250  
11300  
11350  
11400  
11450  
11500  
11550  
11600  
11650  
11700  
11750  
11800  
11850  
11900  
11950  
12000  
12050  
12100  
12150  
12200  
12250  
12300  
12350  
12400  
12450  
12500  
12550  
12600  
12650  
12700  
12750  
12800  
12850  
12900  
12950  
13000  
13050  
13100  
13150  
13200  
13250  
13300  
13350  
13400  
13450  
13500



10400  
10450  
10500  
10550  
10600  
10650  
10700  
10750  
10800  
10850  
10900  
10950  
11000  
11050  
11100  
11150  
11200  
11250  
11300  
11350  
11400  
11450  
11500  
11550  
11600  
11650  
11700  
11750  
11800  
11850  
11900  
11950  
12000  
12050  
12100  
12150  
12200  
12250  
12300  
12350  
12400  
12450  
12500  
12550  
12600  
12650  
12700  
12750  
12800  
12850  
12900  
12950  
13000  
13050  
13100  
13150  
13200  
13250  
13300  
13350  
13400  
13450  
13500

96 + 00 N  
95 + 00 N  
94 + 00 N  
93 + 00 N  
92 + 00 N  
91 + 00 N  
90 + 00 N  
89 + 00 N  
88 + 00 N  
87 + 00 N  
86 + 00 N  
85 + 00 N  
84 + 00 N  
83 + 00 N  
82 + 00 N  
80 + 00 N  
79 + 00 N  
78 + 00 N

**LEGEND**

— IN PHASE  
 x---x QUADRATURE  
 y---y PROBABILE CONTACT

Low  $\Omega$   $\swarrow$   
 High  $\Omega$   $\searrow$

+ 20  
 + 10  
 0  
 - 10  
 - 20

1 cm = 20 %

X

TRUE CROSS-OVER

NOTE: DIRECTION FACED  
 $\approx 80^\circ$  AZIMUTH WHEN MAKING READINGS

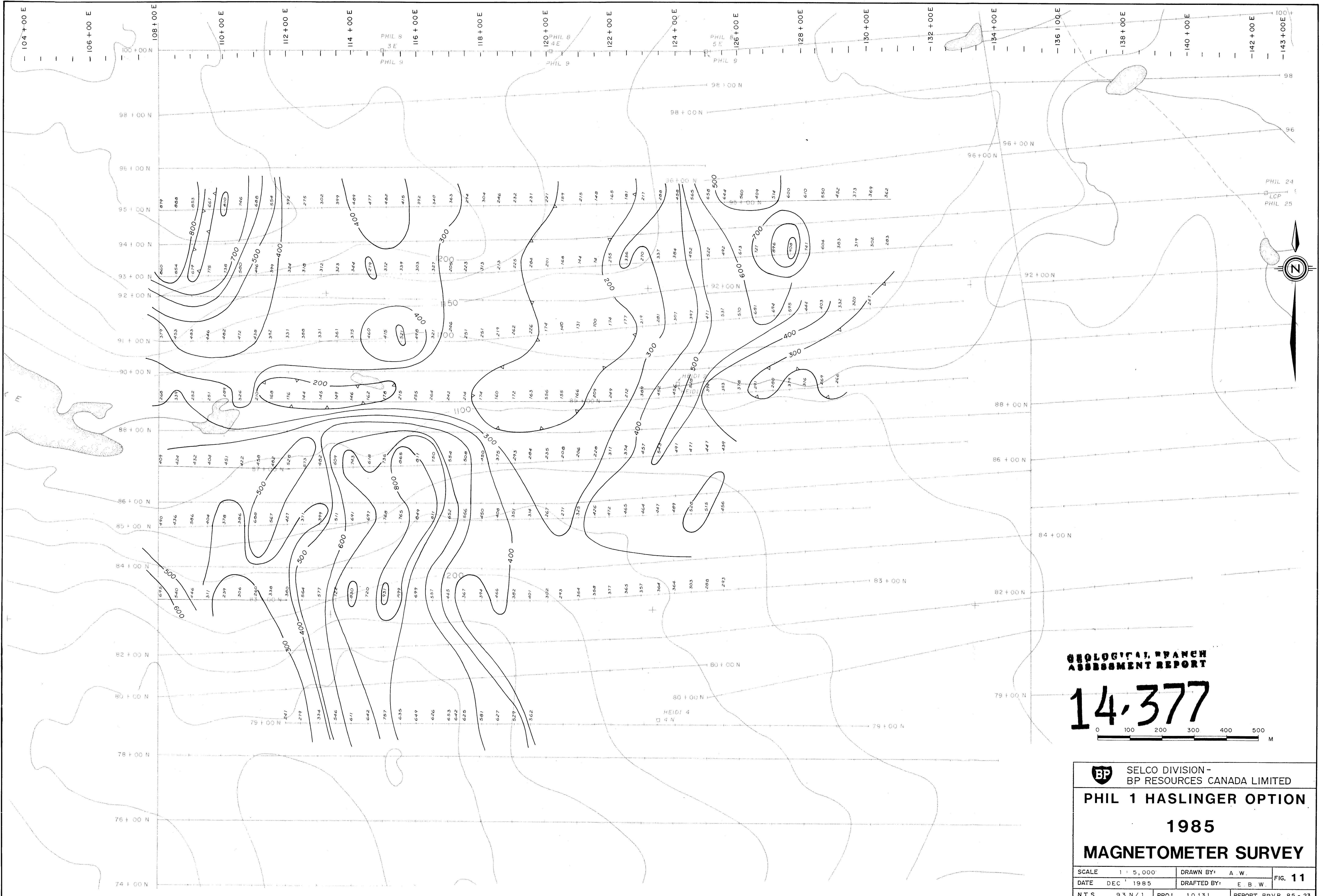
**GEOLOGICAL BRANCH  
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BP RESOURCES CANADA LIMITED

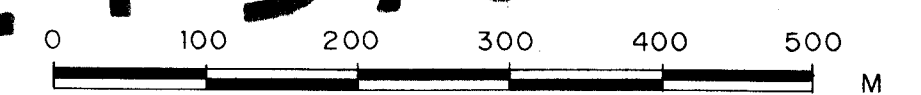
PHIL 1-HASLINGER OPTION  
VLF PROFILES  
SEATTLE  
GEONICS EM 16

SCALE 1 : 5000 DRAWN BY: **FIG 12**  
DATE JULY 1985 DRAFTED BY: E. B. W.  
N.T.S. 93 N / 1 PROJ. 10131 REPORT BPVR 85-23



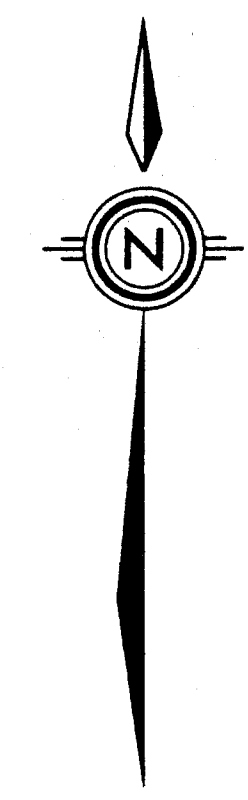
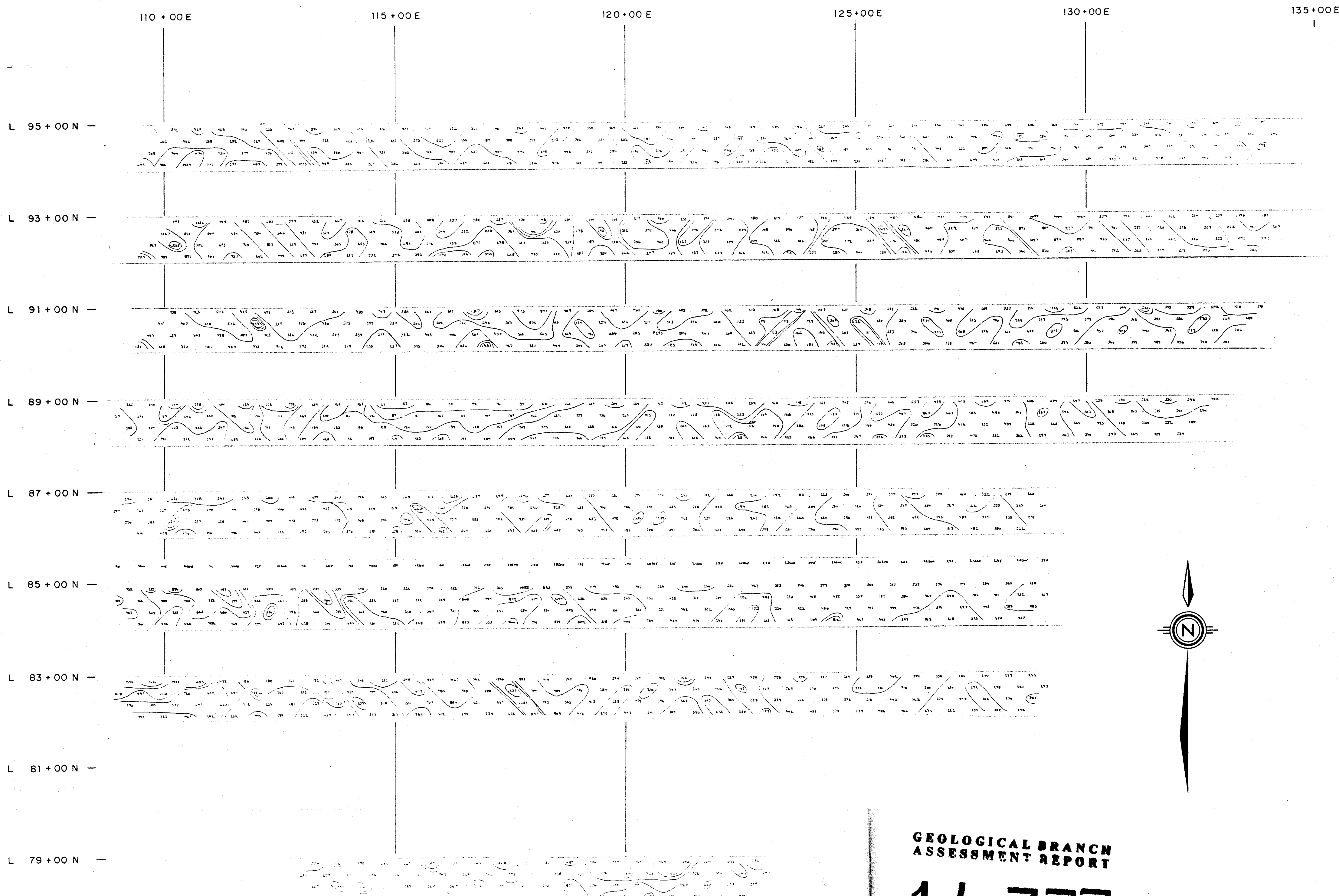
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

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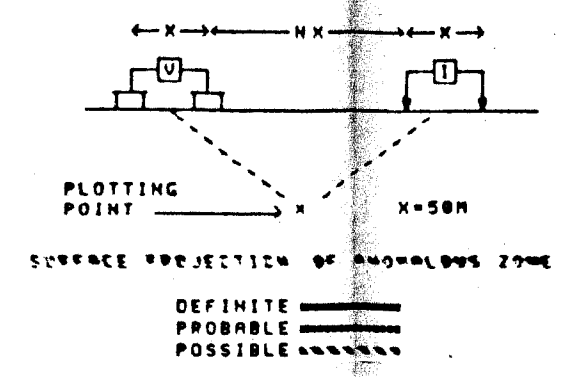
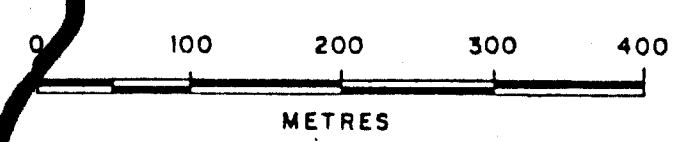
**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED  
**PHIL 1 HASLINGER OPTION**  
**1985**  
**MAGNETOMETER SURVEY**

SCALE 1 : 5,000	DRAWN BY: A. W.	FIG. 11
DATE DEC 1985	DRAFTED BY: E. B. W.	
N.T.S. 93 N/1	PROJ. 10 131	REPORT BPVR 85 - 23



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FREQUENCY (HERTZ)  
4 8 25  
NOTE - CONTOURS  
AT LOGRITHMIC  
INTERVALS 1-1.5  
2-3-5-7 5-10

SELCO DIVISION - BP RESOURCES CANADA LIMITED		
ALEX GOLD PROJECT - PHIL 1 CLAIM RESISTIVITY (ohm-metres ) STACKED PROFILES		
SCALE 1:5000	DRAWN BY: A.WYNNE	FIG. 14
DATE JULY 1985	DRAFTED BY: L.G.	
N.T.S. 93 N/1	PROJ. 10131	REPORT BPVR 85-23

110 + 00 E

115 + 00 E

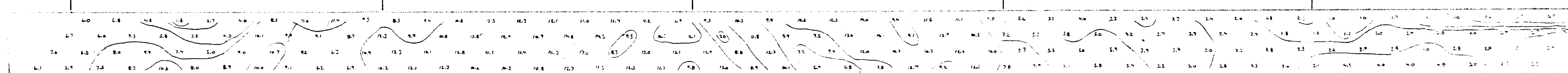
120 + 00 E

125 + 00 E

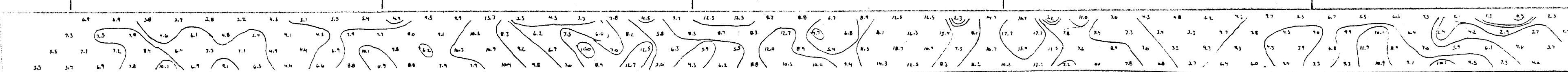
130 + 00 E

135 + 00 E

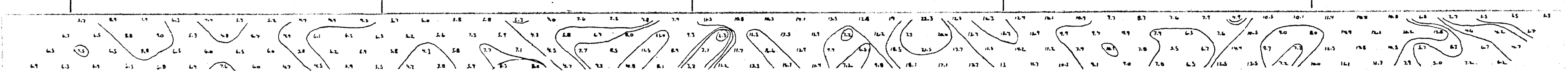
L 95 + 00 N -



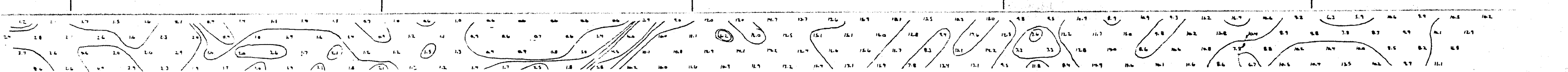
L 93 + 00 N -



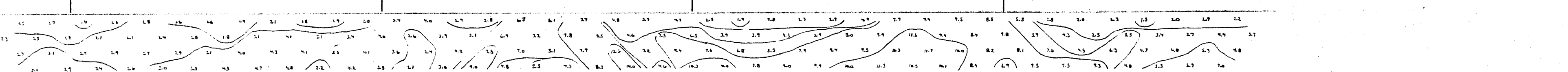
L 91 + 00 N -



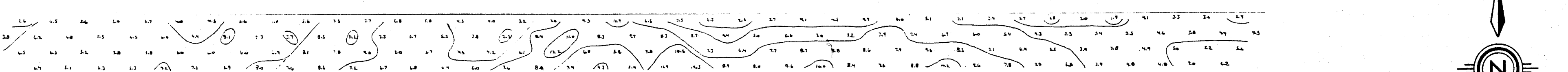
L 89 + 00 N -



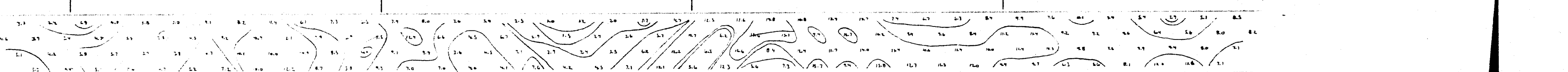
L 87 + 00 N -



L 85 + 00 N -



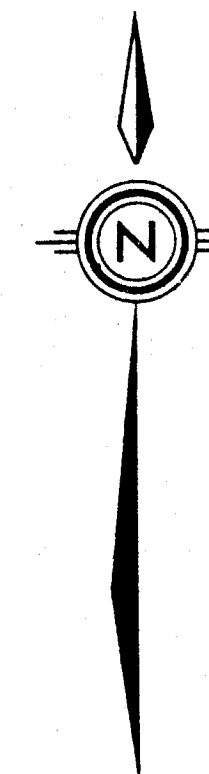
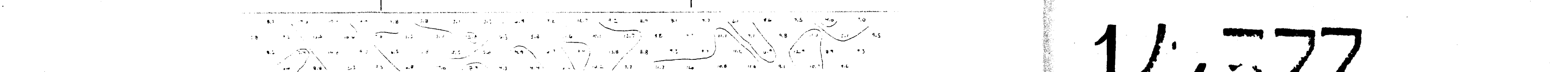
L 83 + 00 N -



L 81 + 00 N -

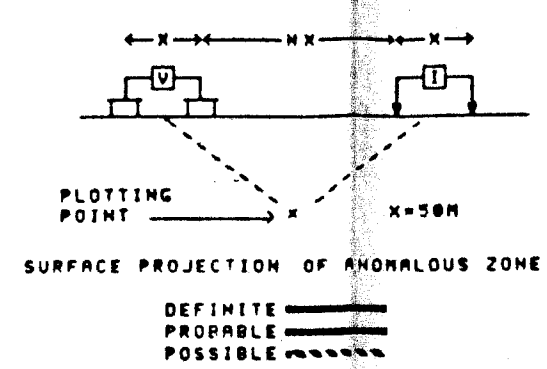
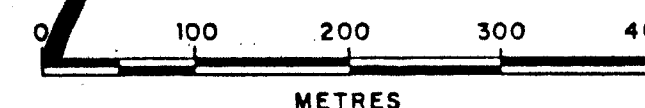


L 79 + 00 N -



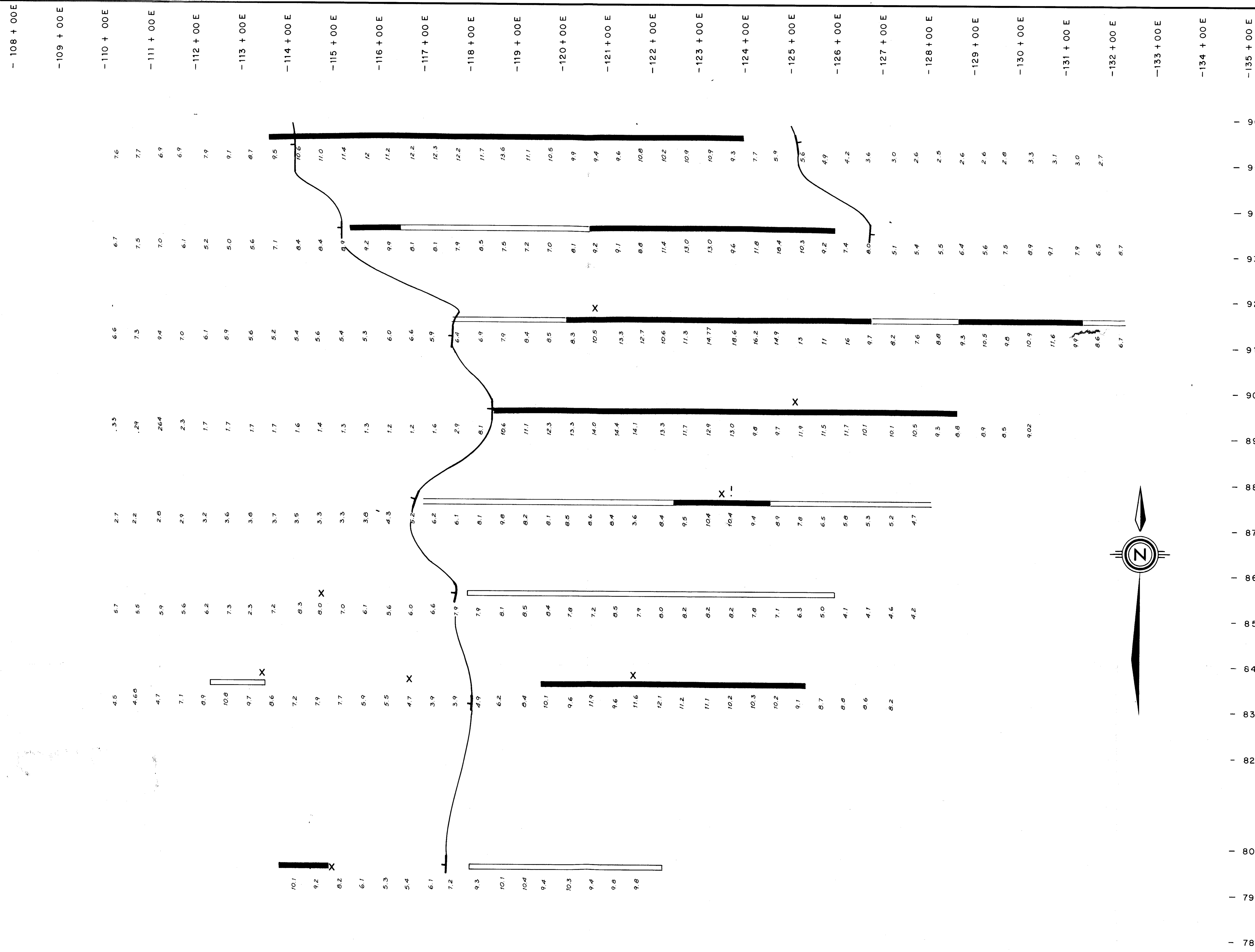
**GEOLOGICAL BRANCH  
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FREQUENCY (HERTZ)  
4 0.0 25  
NOTE - CONTOURS  
AT LOGARITHMIC  
INTERVALS 1.-1.5  
2.-3.-5.-7 5.-10

SELCO DIVISION - BP RESOURCES CANADA LIMITED		
ALEX GOLD PROJECT - PHIL 1 CLAIM PERCENT FREQUENCY EFFECT STACKED PROFILES		
SCALE 1:5,000	DRAWN BY: A. WYNNE	FIG. 13
DATE JULY 1985	DRAFTED BY: L.G.	
N.T.S. 93 N/1	PROJ. 10131	REPORT BPVR 85-23



**LEGEND**  
 ——— DEFINITE ANOMALOUS ZONE  
 ——— PROBABLE ANOMALOUS ZONE

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 BP RESOURCES CANADA LIMITED

**PHIL 1-HASLINGER OPTION  
 FRASER FILTERED  
 FREQUENCY EFFECT**

SCALE 1 : 5000	DRAWN BY:	FIG. 15
DATE JULY 1985	DRAFTED BY: E. B. W.	
M.T.S. 93 N / 1	PROJ. 10131	REPORT BPVR 85-23