82-#687-#10950

GEOCHEMICAL REPORT

on the

BAP MINERAL CLAIMS

Nos. 10,14, and 18

owned by BP MINERALS LIMITED

KLIYUL CREEK AREA

Omineca Mining Division, B.C.

located 11 km S.S.E. of Johanson Lake, B.C.

(126°05' Long., 56°29' Lat.)

N.T.S. 94 D/8

Dr. S.J. Hoffman
Geochemist
BP MINERALS LIMITED

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

Summary

Eighty-nine soil and talus fine samples collected on a regular grid in 1974 were submitted for reanalysis using the ICP multielement procedure of Acme Analytical to investigate the precious metal potential of the claim group. Gold was also determined, using standard procedures after an aqua regia digestion. The multielement analysis enabled lithogeochemical mapping of the claim group.

The most outstanding feature of the new work was the definition of extremely high average gold concentrations, to a maximum of 1.7 ppm, in soils on the northern and eastern edges of the grid, accompanied by higher silver values to 2.6 ppm. Elevated gold and silver values accompany a manganese-rich horizon enriched in lead, zinc, and copper. A zonal pattern between iron (at lower elevations of at depth) and manganese is suggestive of an exhalite iron formation. The potential vent for mineralizing solutions is thought to be indicated by a potash anomaly which accompanies the richest zinc and cadmium accumulation. A second potential channelway for mineralizing fluids lies to the south, reflected by a linear silver anomaly. In the latter case, hydrothermal solutions containing the iron, manganese, and base metals would have had to dispersion into a paleodepression lying to the north of the current silver anomaly.

The survey characterized southern geology known to be more chloritic and less gossanized than the northern zones by enrichment of nickel, arsenic, vanadium, aluminum, calcium and magnesium and depletion of sodium. An ultramafic intrusion

to the southwest contributes enhanced copper, chromium, and nickel concentrations to the soil. A monzonite, also lying to the southwest, is indicated by anomalous molybdenum, copper, barium, calcium, magnesium, phosphorus, and cerium levels.

The next phase of exploration on BAP requires detailed geological mapping, channel sampling, trenching and drilling on the northern half of the BAP claims. The target is a potential gold and silver-rich massive sulphide associated with an iron and manganese exhalite horizon.

Recommendations

(1) A detailed geological map at a scale of 1:5,000 is necessary to improve on the geological understanding of the claim group.

(2) Lithogeochemical channel sampling at 10 metre interval along lines spaced no greater than 100 metre apart could indicate mineralized sections if outcrop exposures are suitable.

(3) Anomalous zones indicated by (2) would then be trenched to reveal relatively fresh bedrock, or alternatively, a diamond drill hole of at least 300 metres could be positioned to test the anomalous zone. Site location and drill depth depend on local topography and orientation of underlying bedrock strata.

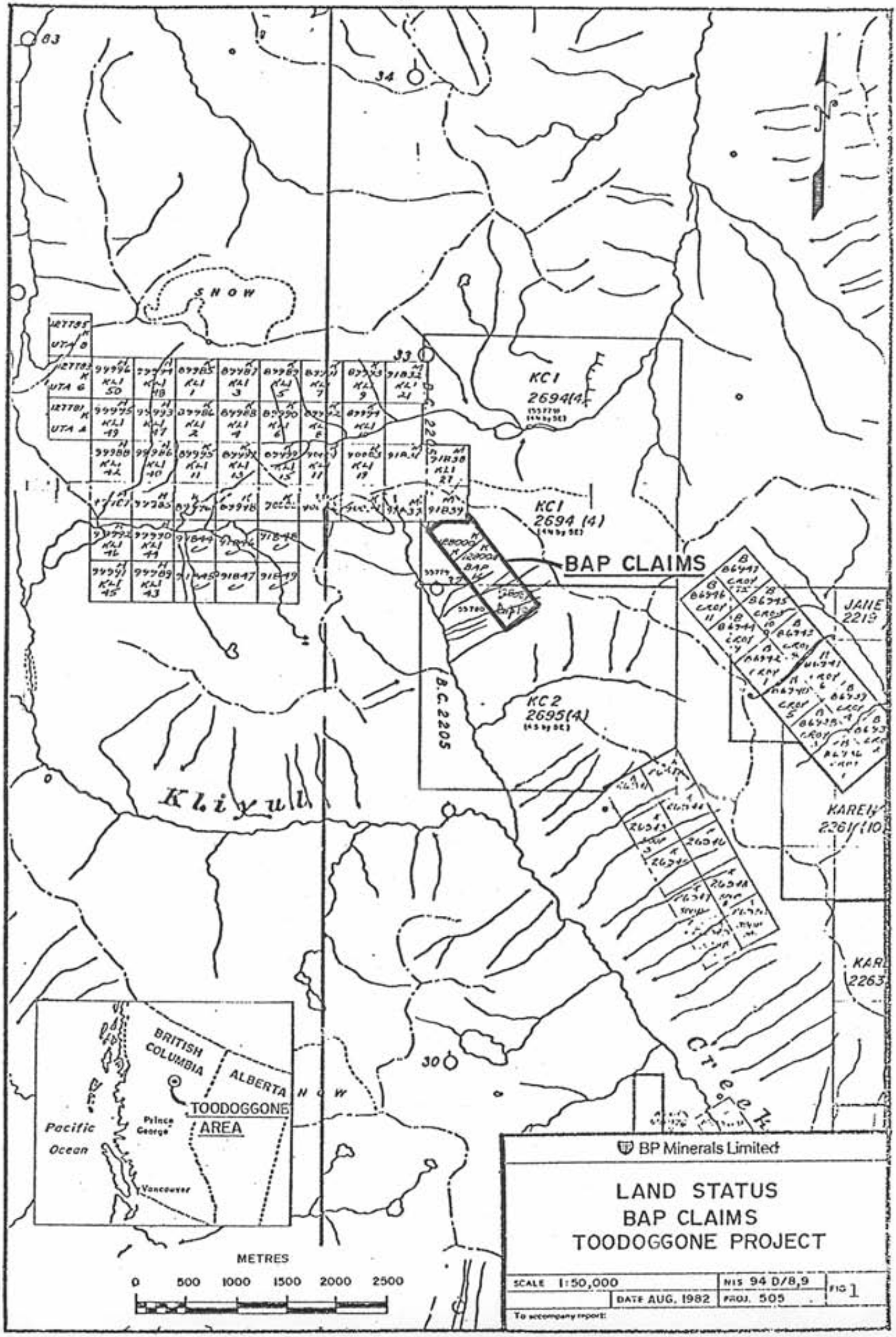
Introduction

The BAP 10, 14, and 18 mineral claims were staked in 1973 to cover a prominent gossan zone developed on pyritic flows and tuffs of the Takla group intruded to the west by Omineca ultrabasic and monzonite intrusions. A soil goechemical study of the gossan was conducted in 1974 to compliment lithogeochemical investigations and geophysical surveys. (Assessment report number 5135). Further geochemical rock chip studies were undertaken in 1975 to evaluate chalcocite occurrences on BAP 18 (Assessment report number 5600). The search for a massive sulphide target within the gossanized zone continued in 1978 (Assessment report number 5976) with weakly positive results.

The present study was initiated following the recent dramatic rise in the price of gold. Soil samples previously collected at an approximate interval of 60 metres along lines 120 metres apart were reanalyzed for gold and thirty other metals. This report summarizes results and recommends further studies.

Location and Access

The BAP claims are within the Omineca Mining Division of central British Columbia, approximately 11 km south southeast of Johanson Lake and 22 km northwest of Aiken Lake (126°05' Long., 56°29' Lat.), along the northeast flank of the headwaters of Kliyul Creek, on NTS 94D/8 (Figure 1).


SNOW
KC1
2694(4)
KC1
2694 (4)
BAP CLAIMS
KC2
2695(4)
B.C. 2205
JAIE
2219
KAREY
2261(10)
KAR
2263
Kliyul
Creek
BRITISH COLUMBIA
ALBERTA
TOODOGGONE AREA
Pacific Ocean
Prince George
Vancouver
METRES
0 500 1000 1500 2000 2500
BP Minerals Limited
LAND STATUS
BAP CLAIMS
TOODOGGONE PROJECT
SCALE 1:50,000
NTS 94 D/8,9
DATE AUG. 1982
PROJ. 505
FIG 1
To accompany report:

Access to the property is by helicopter from the Johanson Lake airstrip along the BCDM Omineca Highway from Fort St. James. The Johanson Lake airstrip can be reached by road or by fixed-wing aircraft from Prince George to the southeast (370 air km) or by fixed-wing aircraft from Smithers to the southwest (210 air km).

Work Program

Grid preparation and sample collection procedures have been described previously (see BCDM Assessment report 5135). Pulps available at Vangeochem Labs Ltd., were analyzed for their gold content (procedure is reported in Appendix 1). Vangeochem submitted the pulps to Acme Analytical for their multielement ICP analysis. Acme procedures are also contained in Appendix 1.

Method of Data Evaluation

Appendix 2 lists the field technical data and analytical results in three parts, appropriately numbered in the upper right hand corner of each page. Appendix 3 summarizes statistics for data sets grouped according to sample type (see coding format for columns 1 and 2 in Appendix 3). Selection of arithmetic or logarithmic statistics is determined by a coefficient of variation less than 0.5 (arithmetic) or greater than 0.5 (logarithmic) of data sets where the lowest and highest 5% of the values have been ignored (truncated) to prevent outliers adversely influencing the shape of the histogram.

The minimum and maximum values of the truncated survey data and the range of concentrations they represent are indicated, as are the mean, median (value midway in the frequency distribution) and mode (most commonly occurring value). The standard deviation and statistical anomaly threshold (mean plus 2 standard deviation intervals) are quoted. Large values of the standard deviation compared to the mean suggest bimodal distributions and anomaly thresholds are best estimated with reference to histograms contained in Appendix 4.

Deviations from normality can be calculated using skewness and kurtosis measurements. A large positive skewness indicates many samples have low values near the mean, and high values extend far above the mean. A negative skewness represents population with an extended lower tail of values. Kurtosis values for a normal distribution equals 3. Negative kurtosis values (after subtracting 3 from the kurtosis value) result from distribution curves having a flatter top than usual whereas positive values represent peaked distributions.

Description of Results

1. Introduction

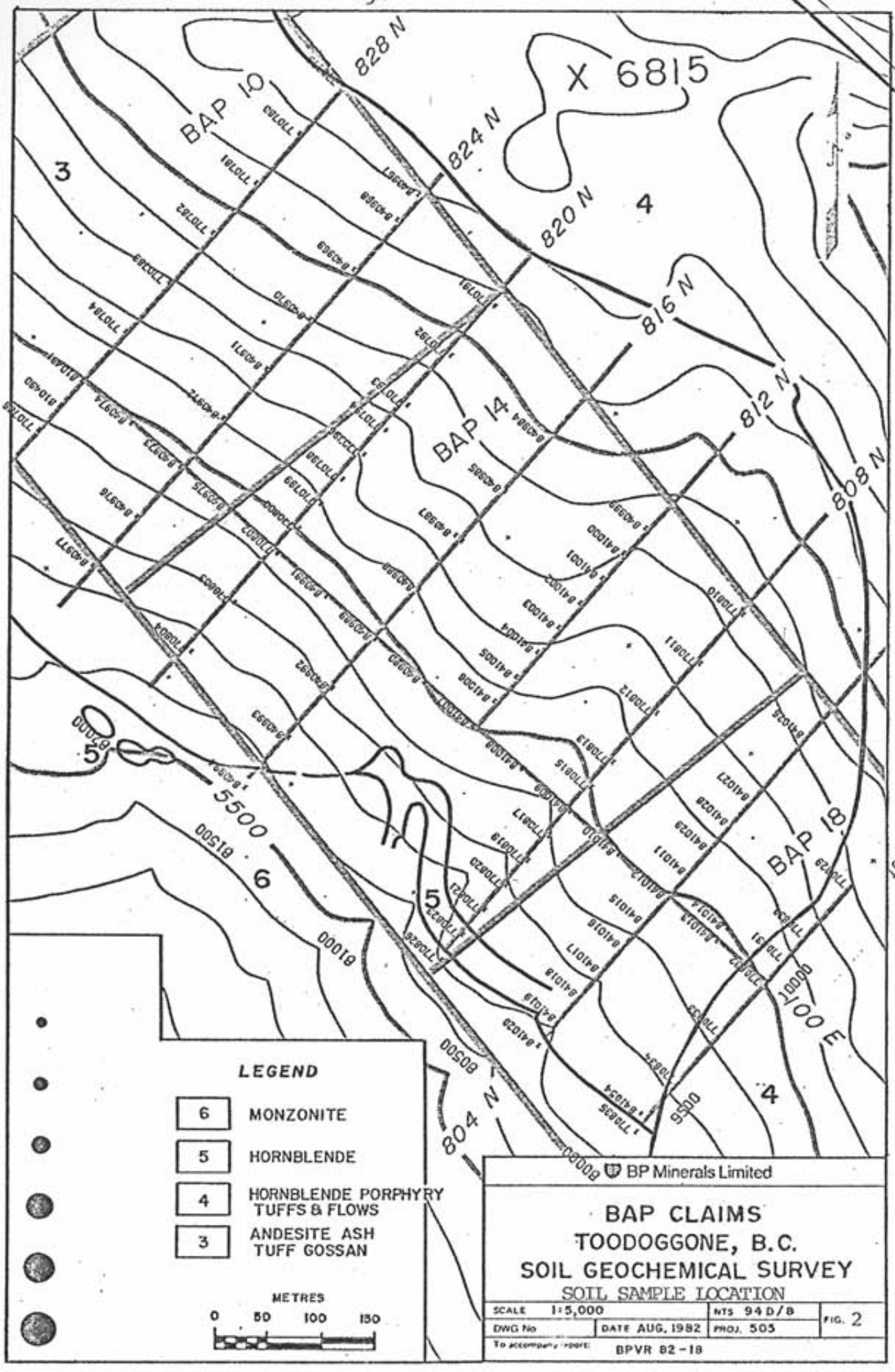
Trace element plots for 34 elements were prepared and are included at the end of this report. The sample location plot (Figure 2) indicates the location of samples taken for this study. Most samples comprise talus fines, and soil data, were encountered in grass covered portions of the gossan, are included within the talus fine survey. Appendix 2 notes the different sample types in columns 1 and 2 of the listing.

2. Molybdenum (Fig. 3)

Molybdenum concentrations are highest on the western half the grid, upslope of the margins of a monzonite unit of the Omineca Intrusions which lies to the west of the grid area. Quartz veins cutting the monzonite contain minor molybdenite, chalcopyrite and bornite. The molybdenum anomaly may be due to contact metamorphism of the volcanic units related to emplacement of the monzonite stock.

3. Copper (Fig. 4)

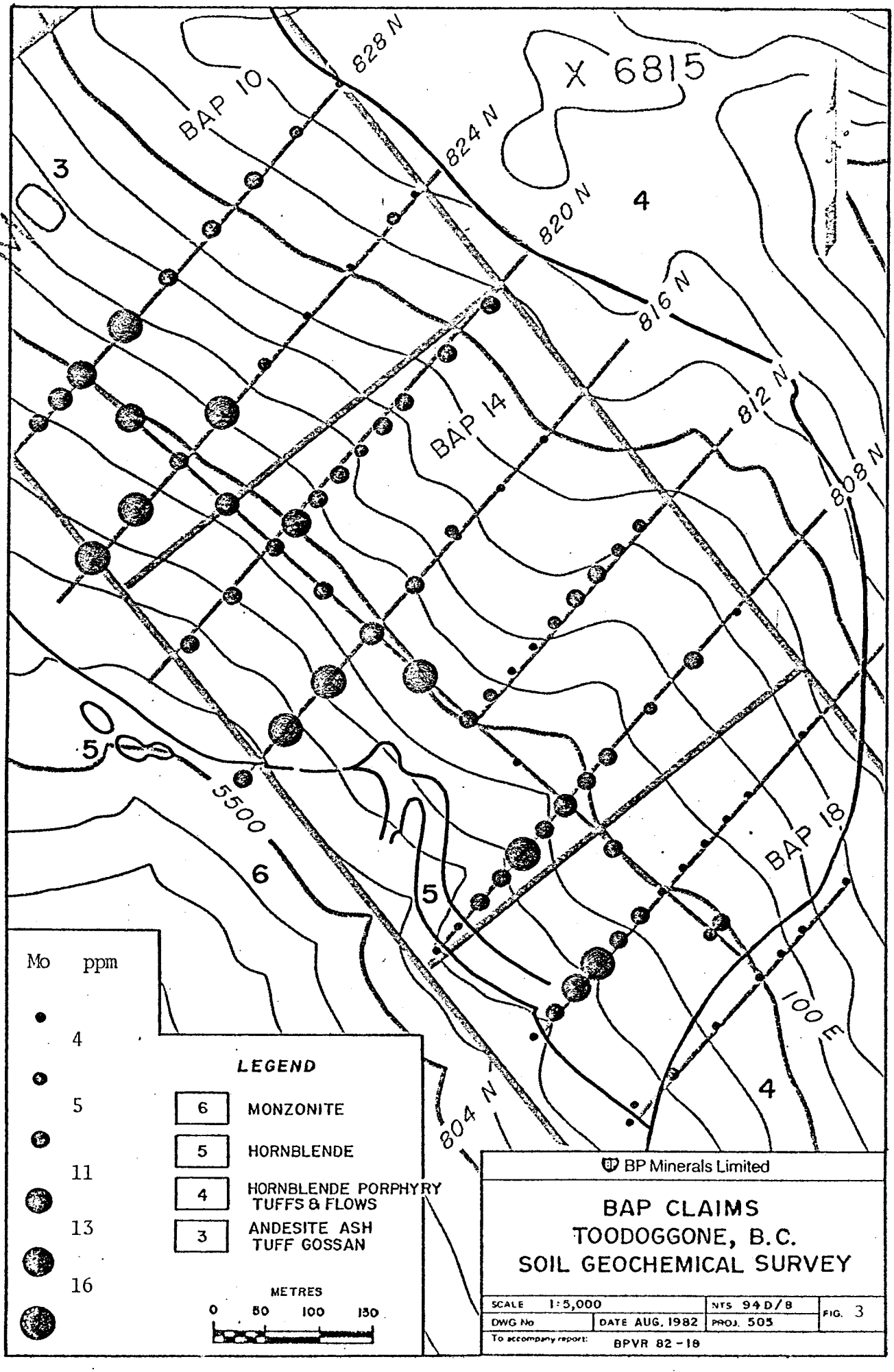
Copper concentrations average almost 160 ppm over the claim group. An anomalous zone in the south is associated with an ultramafic, biotite-rich intrusion between the Omineca monzonite in the west and gossanized Takla volcanic units in the east. Copper anomalies reflect bornite, chalcopyrite, and malachite noted within the ultramafic and several zones

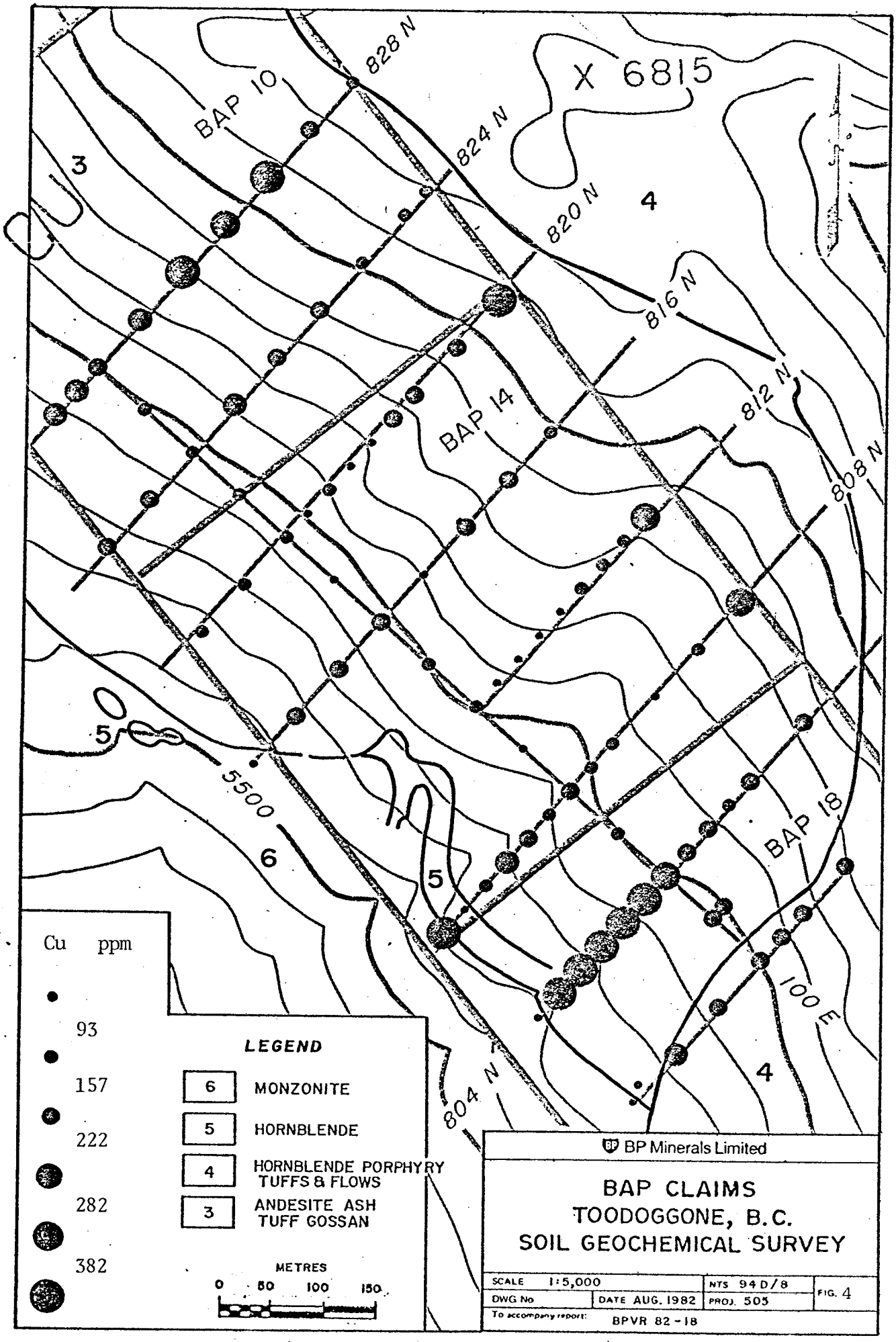


BP Minerals Limited

BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SOIL SAMPLE LOCATION

SCALE 1:5,000		NTS 94D/8	FIG. 2
DWG No	DATE AUG. 1982	PROJ. 503	
To accompany report	BPVR 82-18		


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
Mo ppm
4
5
11
13
16
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
FIG. 3
DWG No
DATE AUG. 1982
PROJ. 505
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
816 N
812 N
808 N
804 N
BAP 14
BAP 18
100 E
5500
3
4
5
6
Cu ppm
93
157
222
282
382
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 4
To accompany report: BPVR 82-18

of chalcocite grading to 2% copper over 1 metre intervals in the volcanic rocks upslope. Copper enrichment is also found in the north and east, over gossanized Takla volcanic units.

4. Lead (Fig. 5)

Lead concentrations are regionally anomalous, averaging about 21 ppm. Values exceeding 50 ppm are found on the eastern half of the grid. Maximum concentrations of 200 to 1200 ppm lead are suggestive of galena occurrences.

5. Zinc (Fig. 6)

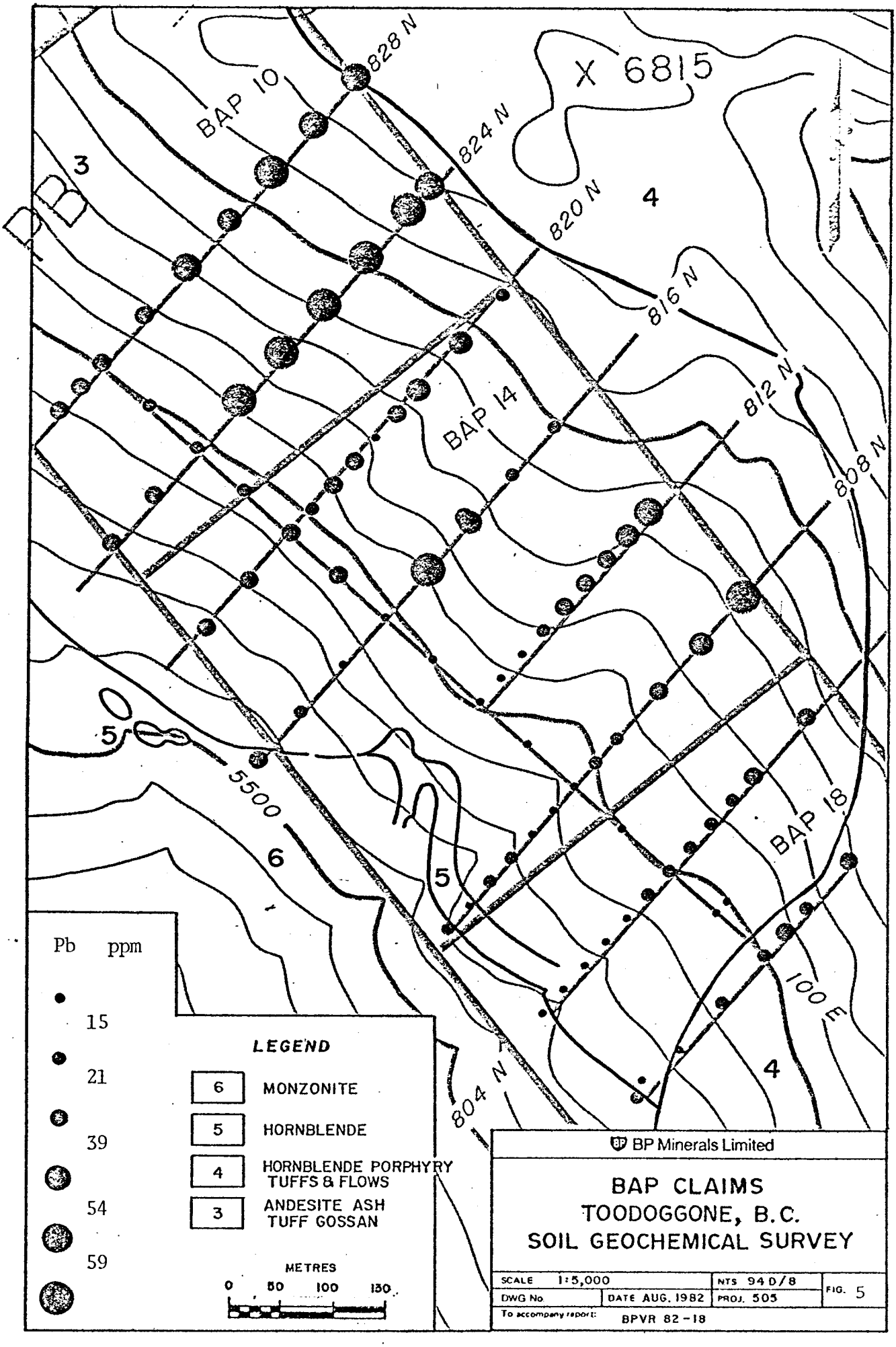
Zinc levels are anomalous along the east-central portion of the grid sympathetic to the lead distribution, but also displaced downslope up to several hundred metres from high lead and copper values at the extreme eastern portion of the survey. Zinc concentrations are weakly en-riched in the southwest, in association with acidic and ultramafic intrusions.

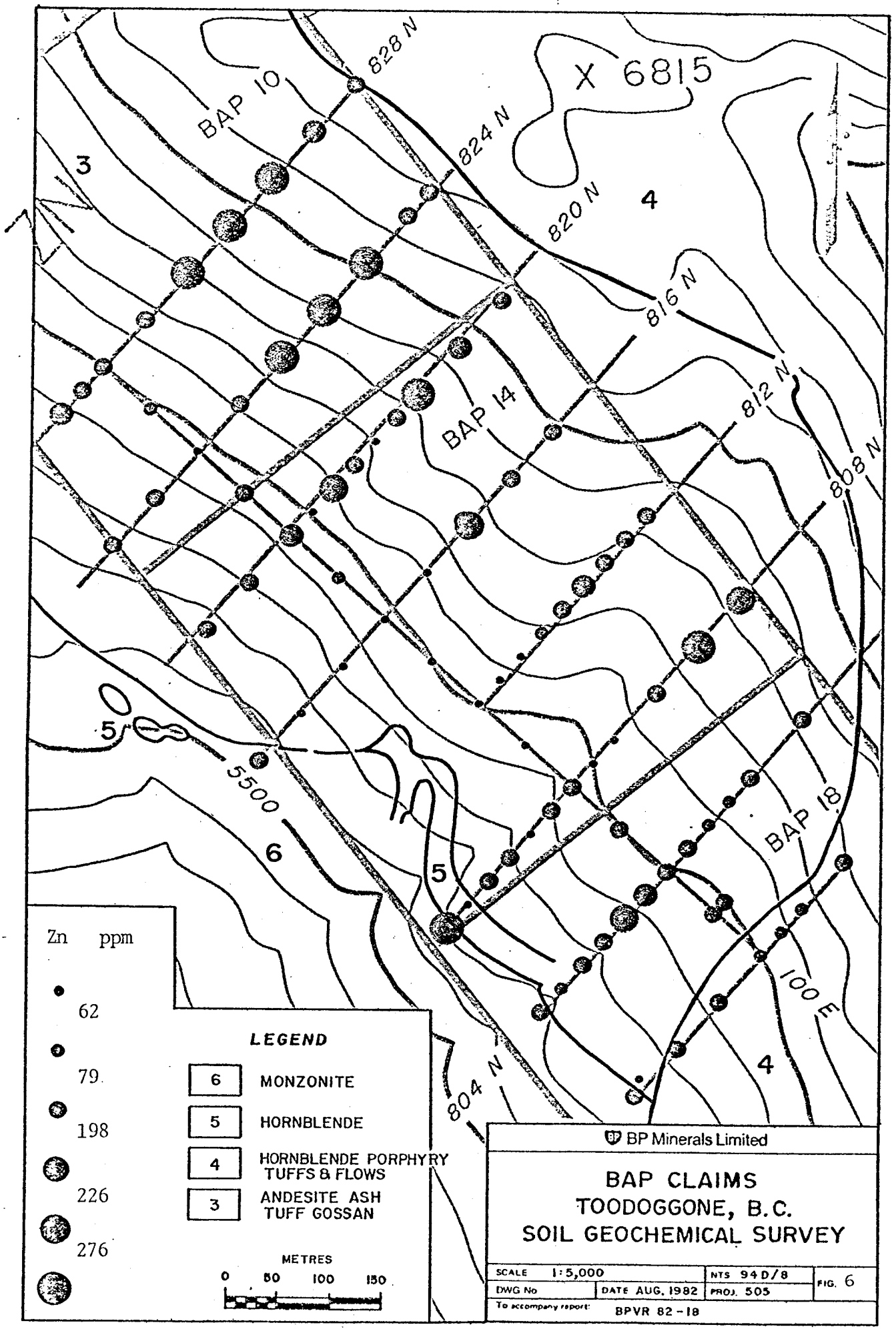
6. Nickel (Fig. 7)

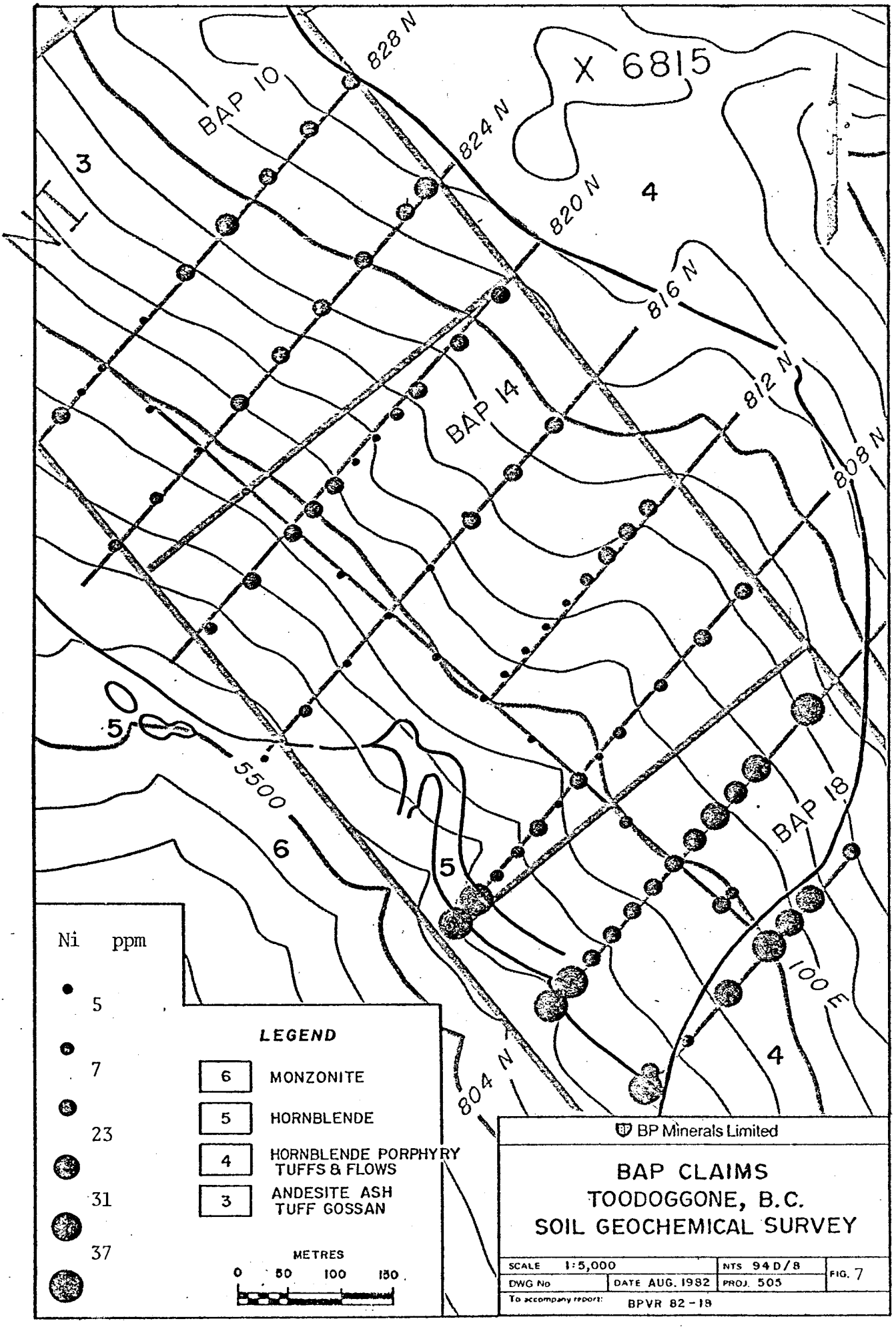
Nickel values are highest in the south, downslope of the ultramafic intrusion to the west and associated with chloritic schists in the east.

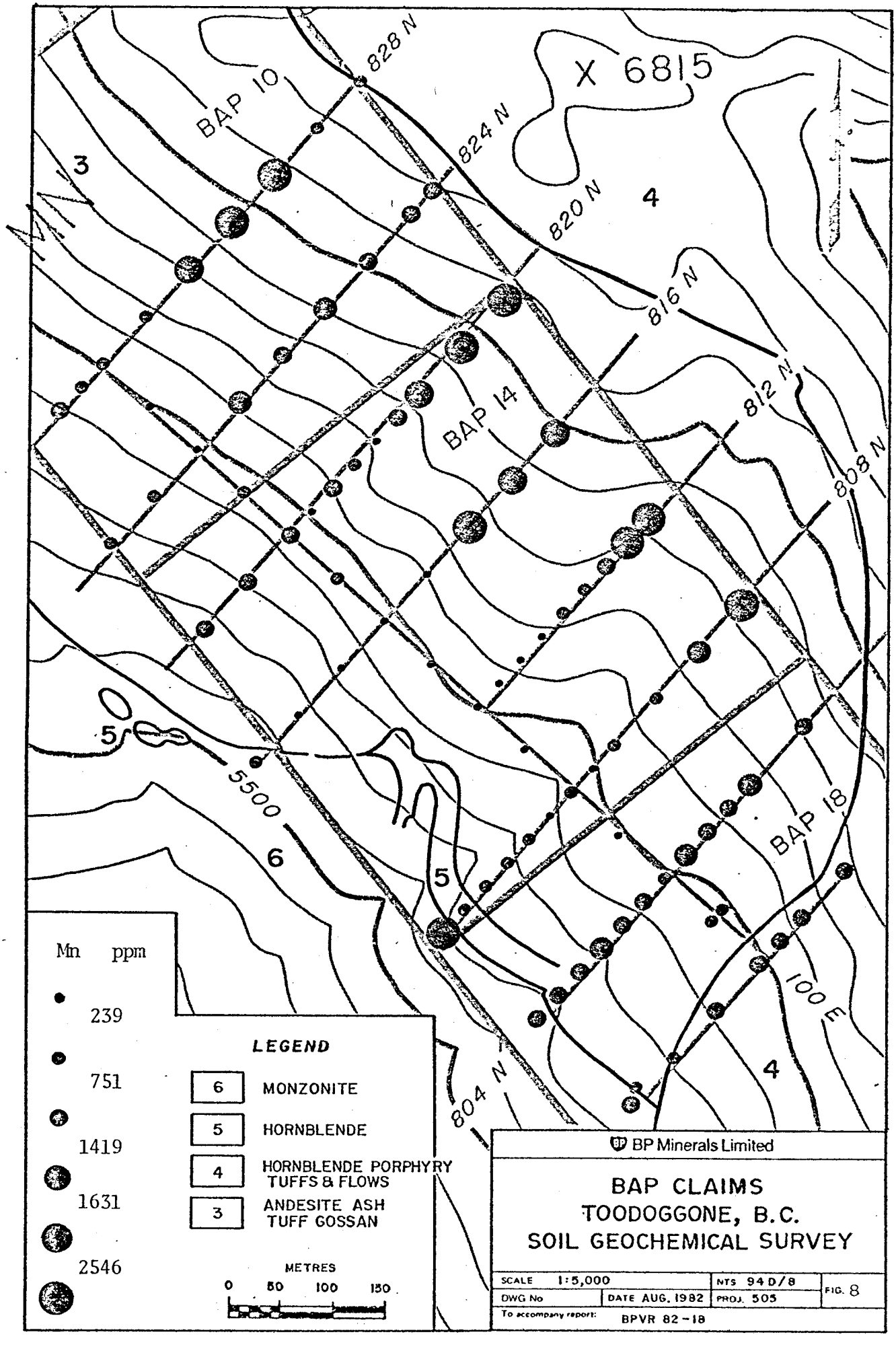
7. Manganese (Fig. 8)

A zone of manganese enrichment approximately 150 metres wide trends northwestward across the eastern portion of the grid. The manganese pattern is sympathetic to that of zinc.


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
Pb ppm
15
21
39
54
59
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 5
To accompany report: BPVR 82-18


828 N
824 N
820 N
816 N
812 N
808 N
804 N
X 6815
BAP 10
BAP 14
BAP 18
100 E
3
4
5
6
5500
Zn ppm
62
79
198
226
276
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
FIG. 6
DWG No
DATE AUG. 1982
PROJ. 505
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
Ni ppm
5
7
23
31
37
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
FIG. 7
DWG No
DATE AUG. 1982
PROJ. 505
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
816 N
812 N
808 N
804 N
BAP 14
BAP 18
100 E
3
4
5
6
5500
Mn ppm
239
751
1419
1631
2546
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 8
To accompany report: BPVR 82-18

8. Iron (Fig. 9)

The iron distribution compliments that of manganese. Maximum iron accumulation is displaced 100 to 200 metres westward, downslope from manganese and coincident with the molybdenum anomaly.

9. Silver (Fig. 10)

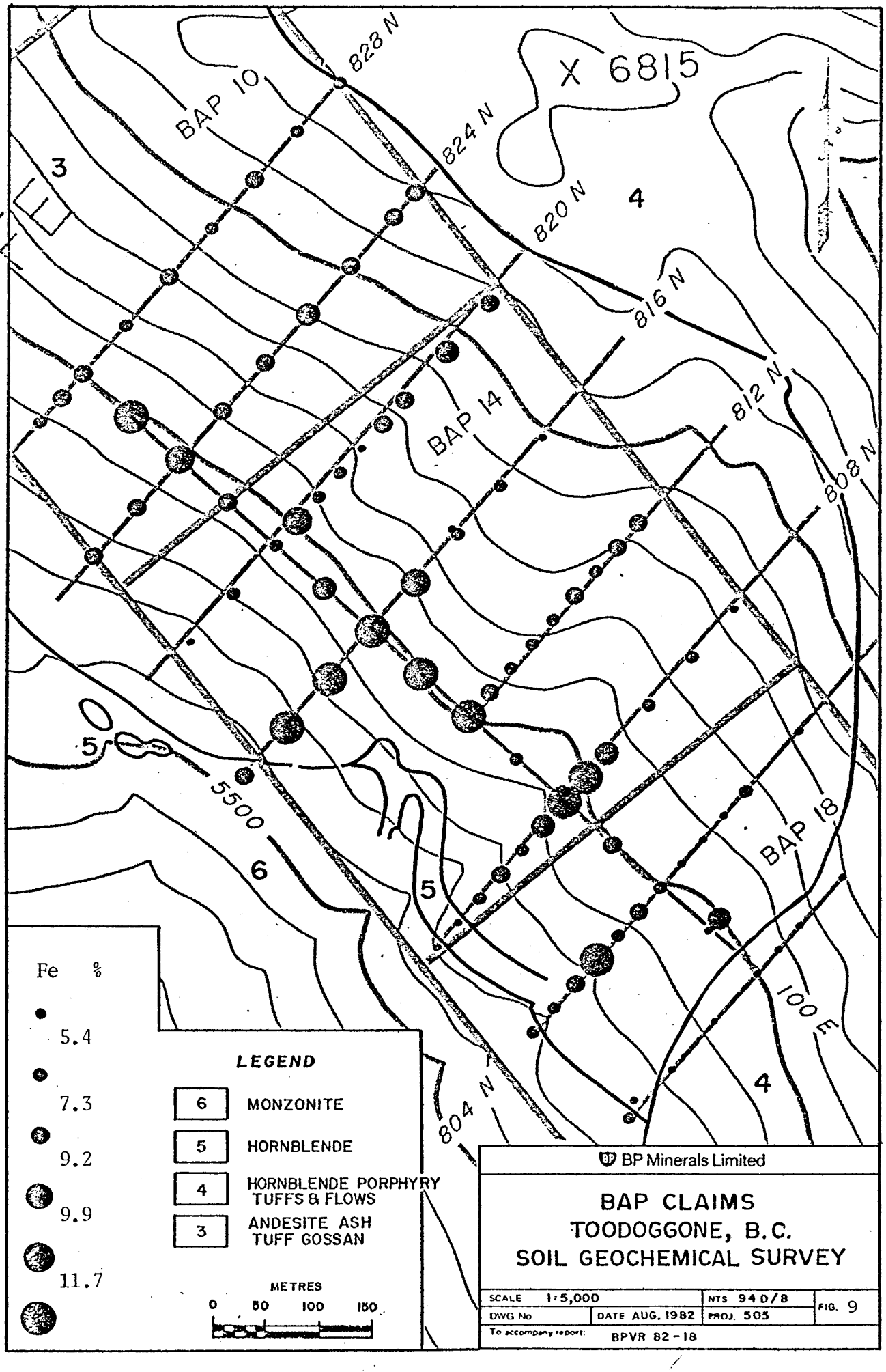
Two silver anomalies exceeding a 1.3 ppm threshold are found on BAP. The southern anomaly crosses lines 804N, 808N, and 812N and its linear character suggests fault control. The northern anomaly trends west northwestward and compliments enhanced values of manganese, zinc, and in part copper. The maximum silver value is 2.6 ppm

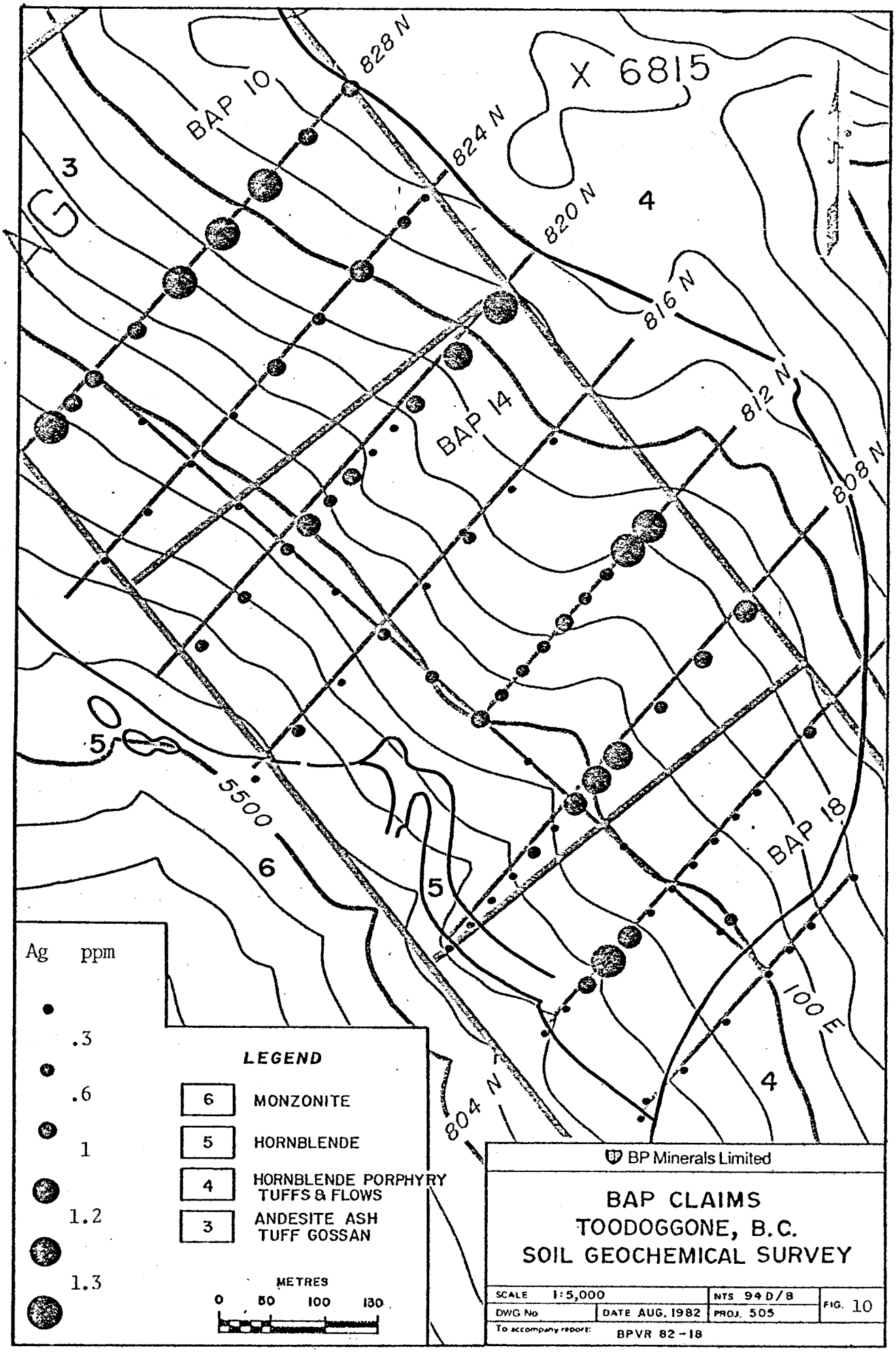
10. Cobalt (Fig. 11)

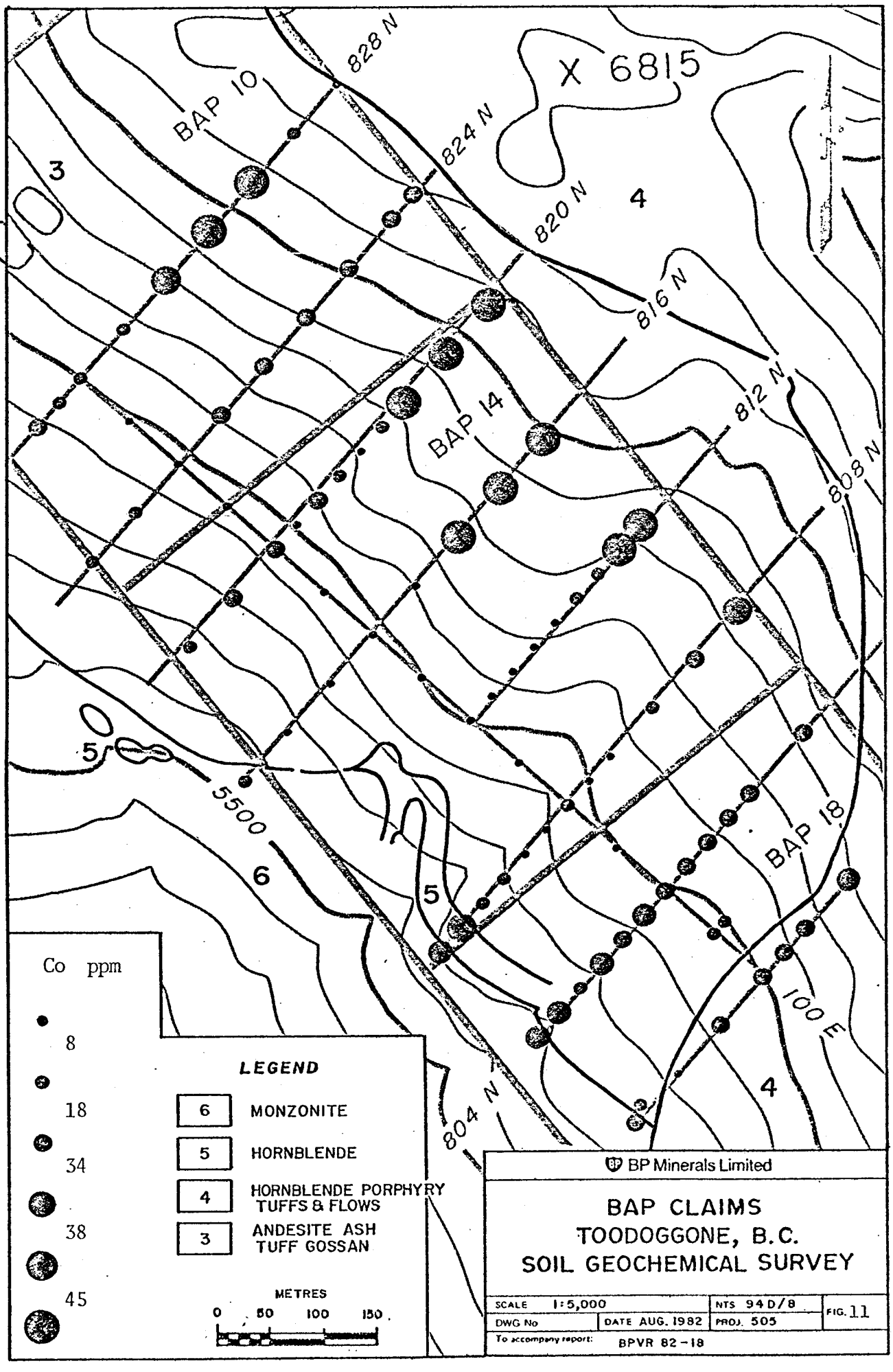
The cobalt distribution is almost identical to that of manganese.

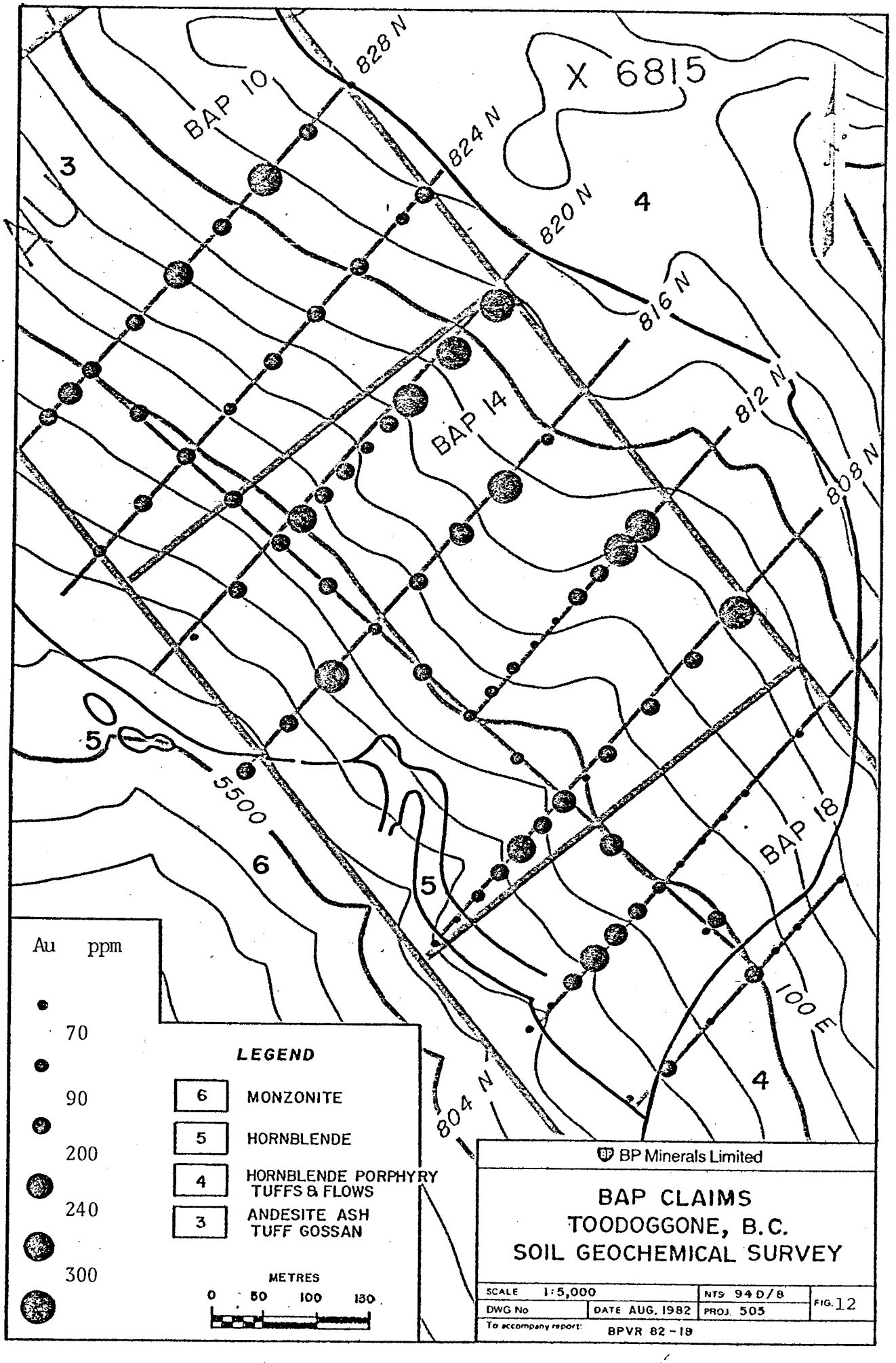
11. Gold (Fig. 12)

Gold concentrations on BAP are regionally anomalous, reaching a maximum of 1750 ppm (770791). One gold anomaly is sympathetic to that of copper and manganese along the eastern edge of the grid. The northward trending silver anomaly is also moderately gold-rich. Several zones of gold enhancement are found in the west along L820N and L816N, accompanying elevated iron and molybdenum contents. The average background gold concentration on BAP varies between 100 and 150 ppb.


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
Fe %
5.4
7.3
9.2
9.9
11.7
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 503
FIG. 9
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
AG
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
804 N
4
Ag ppm
.3
.6
1
1.2
1.3
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 10
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
816 N
812 N
808 N
BAP 14
3
5
5500
6
5
BAP 18
100 E
4
804 N
Co ppm
8
18
34
38
45
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 11
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
816 N
812 N
808 N
804 N
BAP 14
BAP 18
100 E
5500
3
4
6
5
Au ppm
70
90
200
240
300
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 12
To accompany report: BPVR 82-18

12. Arsenic (Fig. 13)

Arsenic concentrations are regionally average at between 7 and 48 ppm, excluding outlier values to a maximum of 72 ppm. The arsenic distribution resembles that of iron on the northern and central portions of the grid. High values in the southeast are not complimented by enhanced values of other elements described previously.

13. Antimony (Fig. 14)

Significant concentrations of antimony are found on BAP, on the central portion of the grid. The antimony anomaly, to 15 ppm, is in part associated with higher iron, arsenic, and molybdenum concentrations and in part with the northerly trending silver and gold anomaly.

14. Tungsten (Fig. 15)

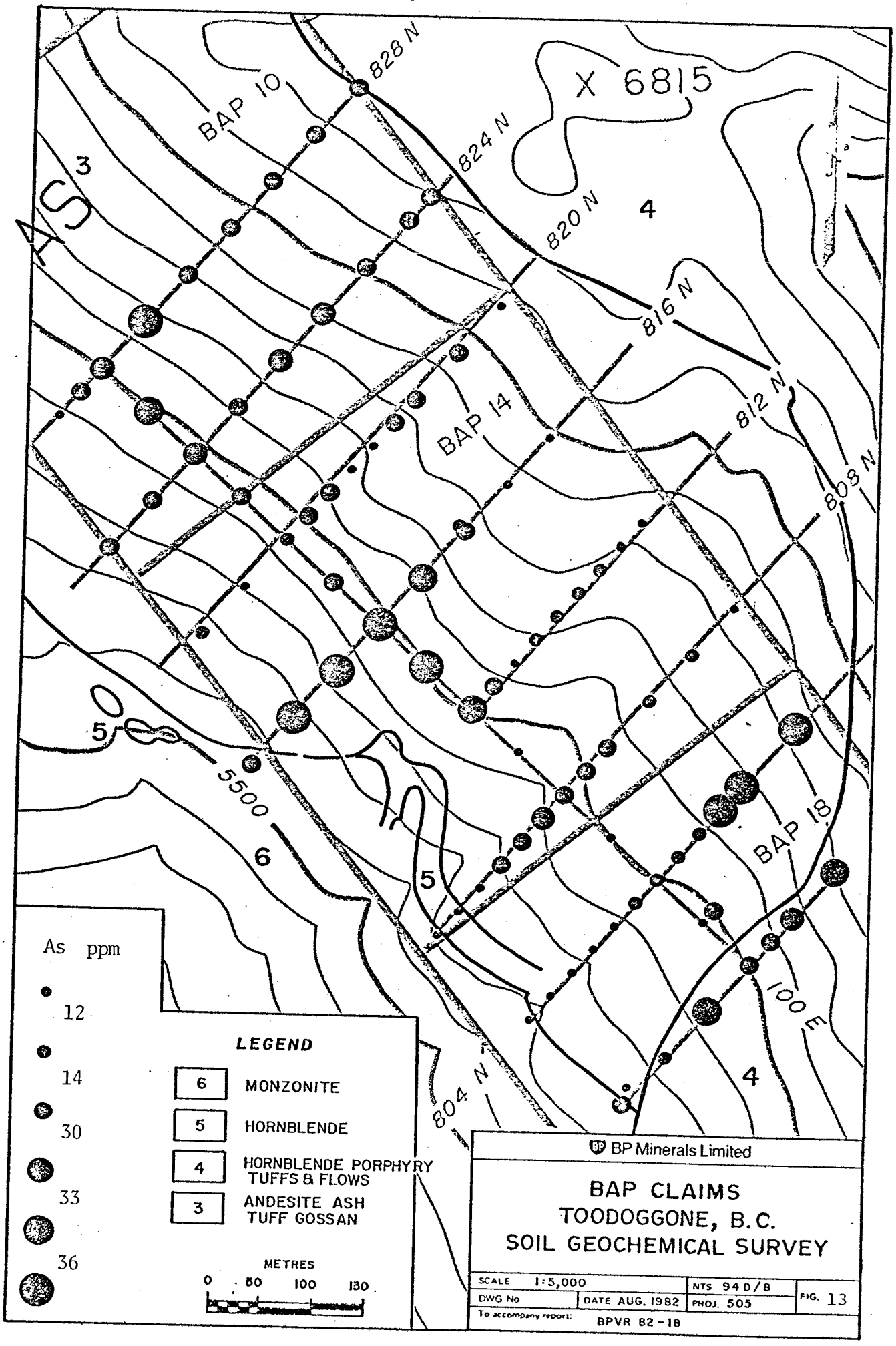
Two samples contain anomalous tungsten levels of 21 and 34 ppm, along the eastern end of L812N.

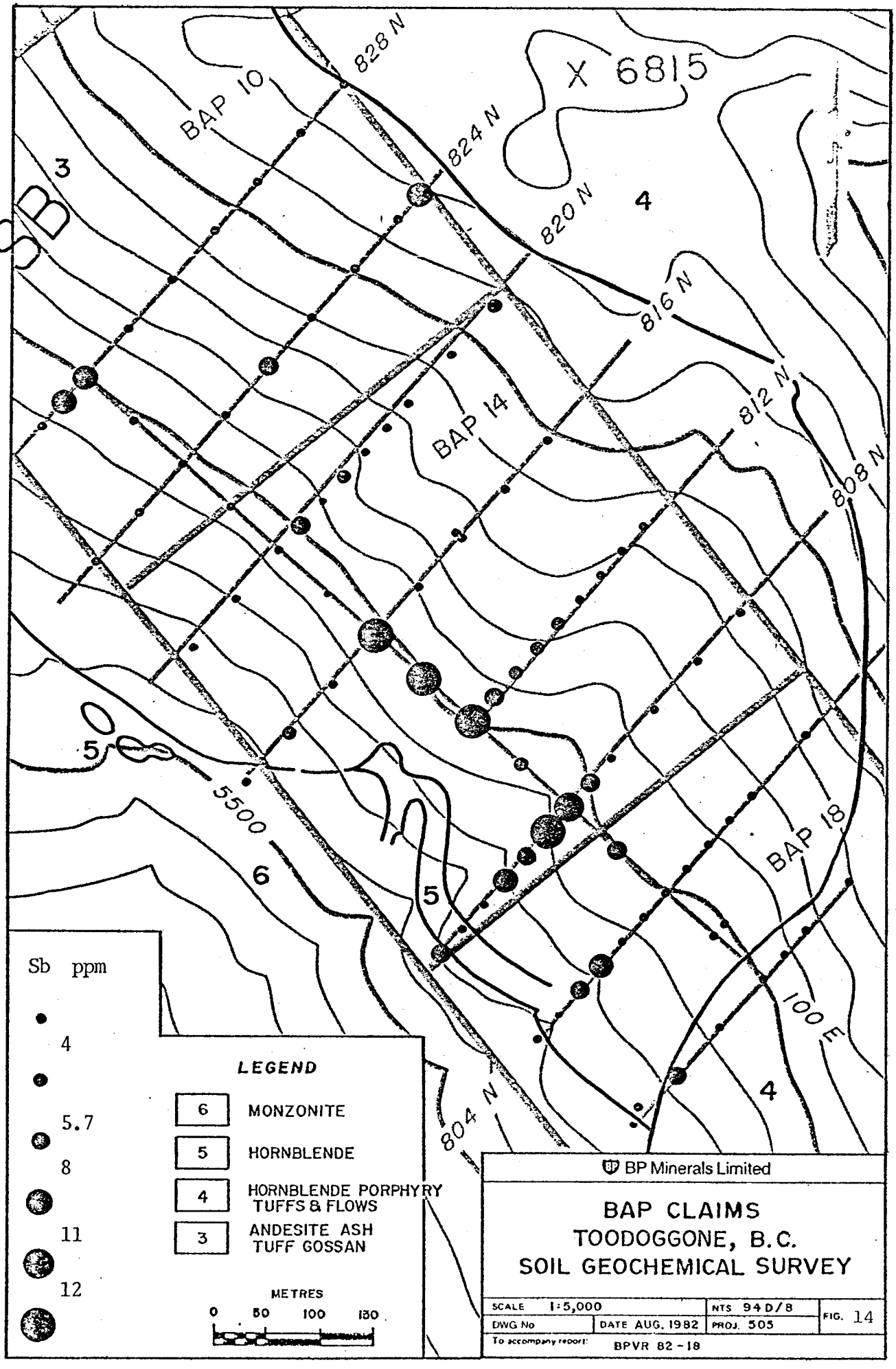
15. Cadmium (Fig. 16)

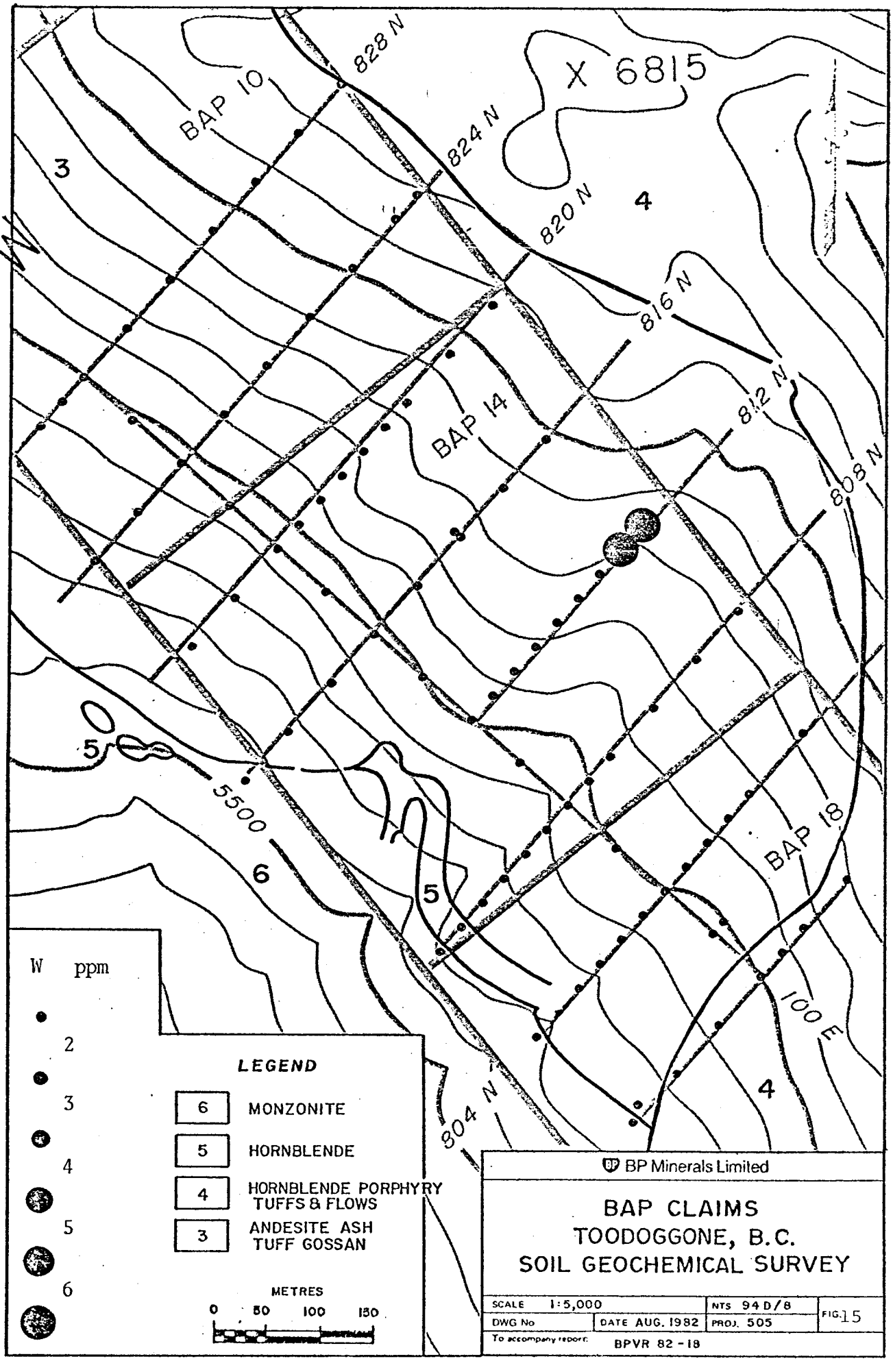
Cadmium follows zinc, forming smaller anomalous zones at the centres of the zinc anomalies.

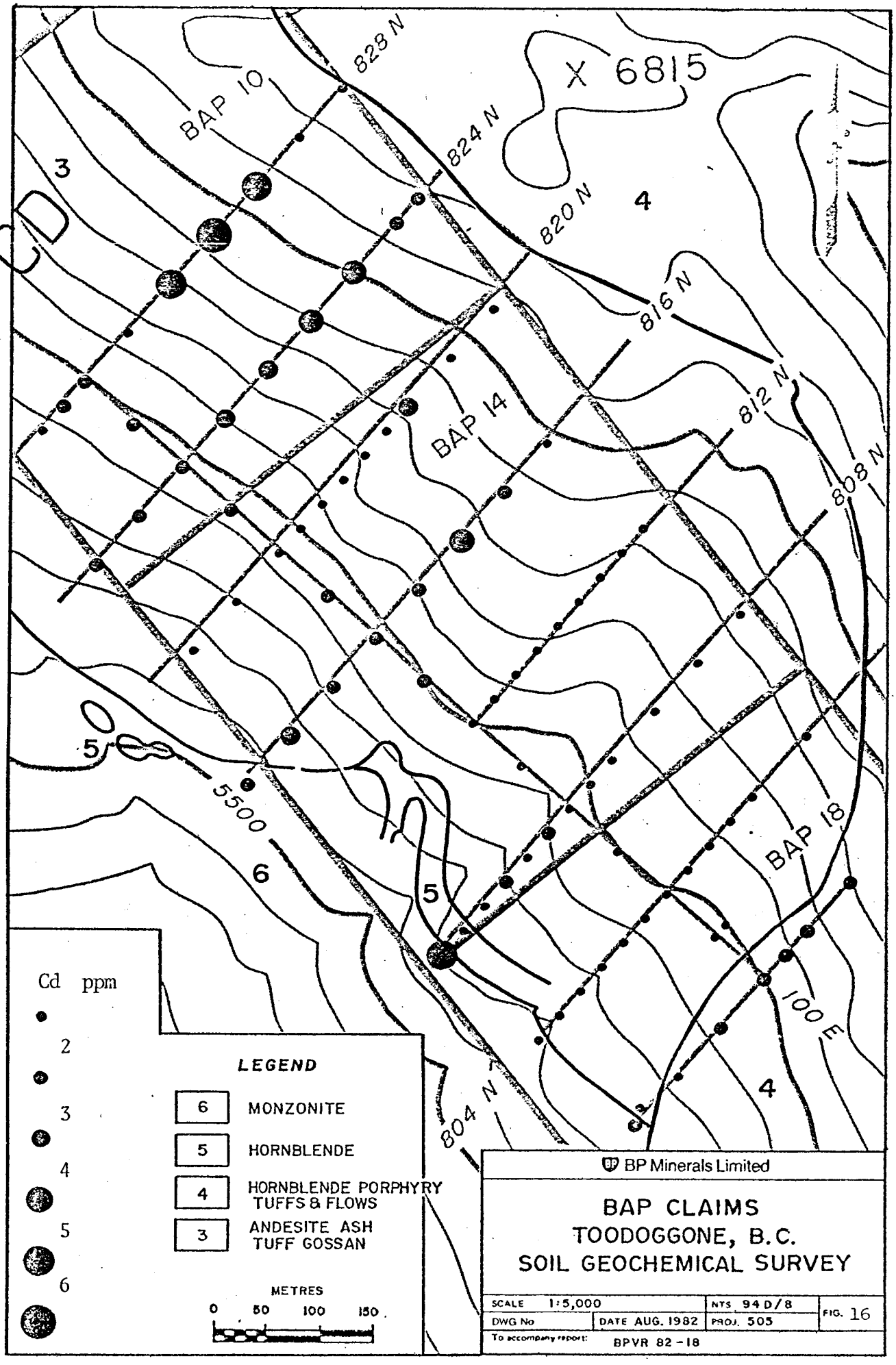
16. Vanadium (Fig. 17)

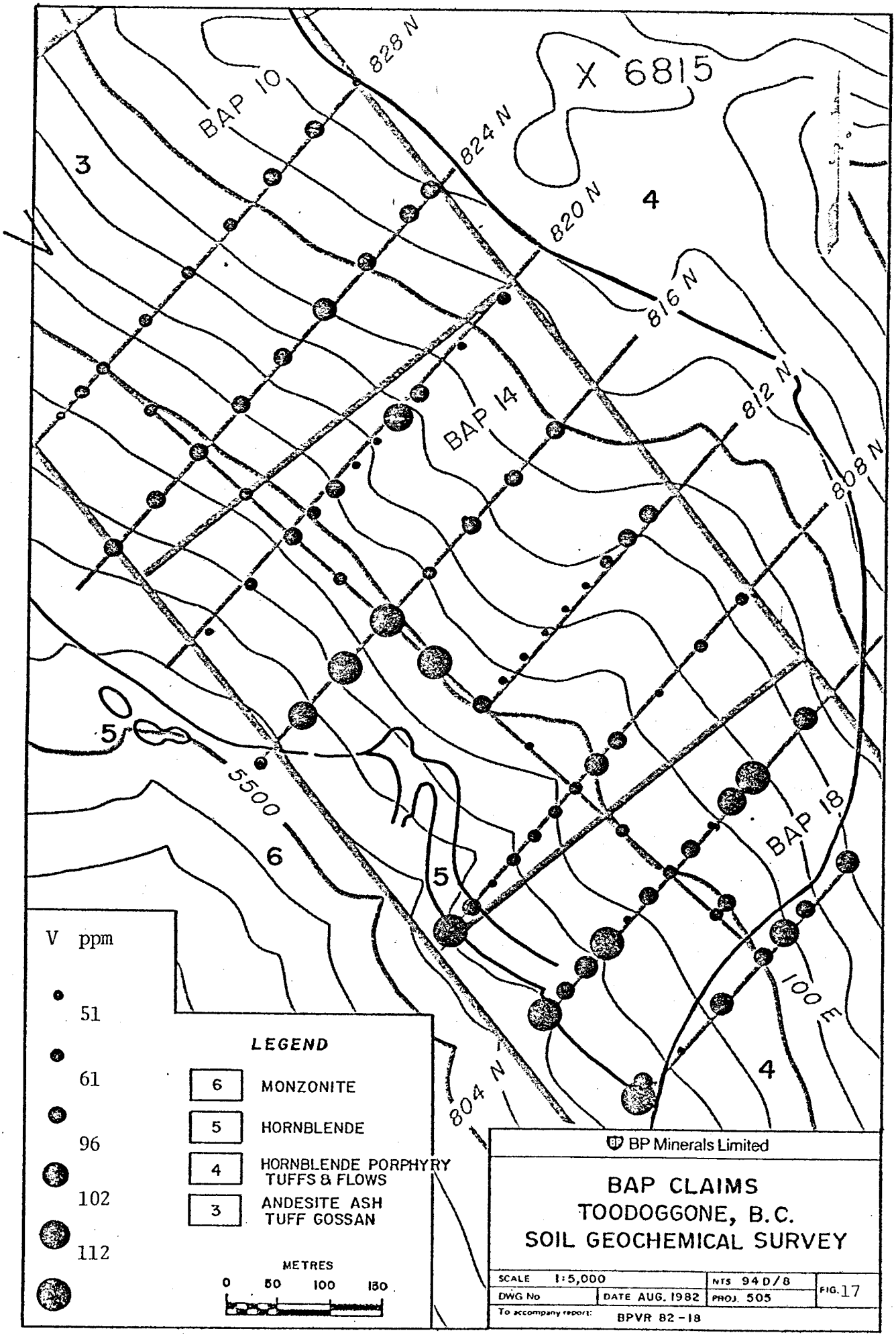
The distribution of enhanced vanadium values parallels the location of the iron-rich zone at the centre of the grid and the nickel-rich zone in the south.


828 N
824 N
820 N
816 N
812 N
808 N
804 N
BAP 10
BAP 14
BAP 18
X 6815
AS
3
4
5
6
5500
100 E
As ppm
12
14
30
33
36
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 130
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 13
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
SB
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
Sb ppm
4
5.7
8
11
12
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 14
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
804 N
4
W ppm
2
3
4
5
6
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 15
To accompany report: BPVR 82-18


828 N
BAP 10
824 N
X 6815
820 N
4
3
CD
816 N
812 N
BAP 14
808 N
0
5
5500
6
5
BAP 18
100 E
4
804 N
Cd ppm
2
3
4
5
6
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 16
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
V ppm
51
61
96
102
112
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 17
To accompany report: BPVR 82-18

17. Barium (Fig. 18)

Barium levels leachable into aqua regia are sufficiently high to be considered regionally anomalous and probably indicative of occurrences of barite on the property. Barium contents are high to the southwest near the monzonite intrusion. High values are also found in the east-central portion of the grid, but anomaly contrast is weak. The zone of enhanced values resembles that of manganese, cobalt, zinc and copper.

18. Strontium (Fig. 19)

Strontium is erratically enriched in the north. A well defined anomaly in the southeast, is similar to the arsenic distribution.

19. Silica (Fig. 20)

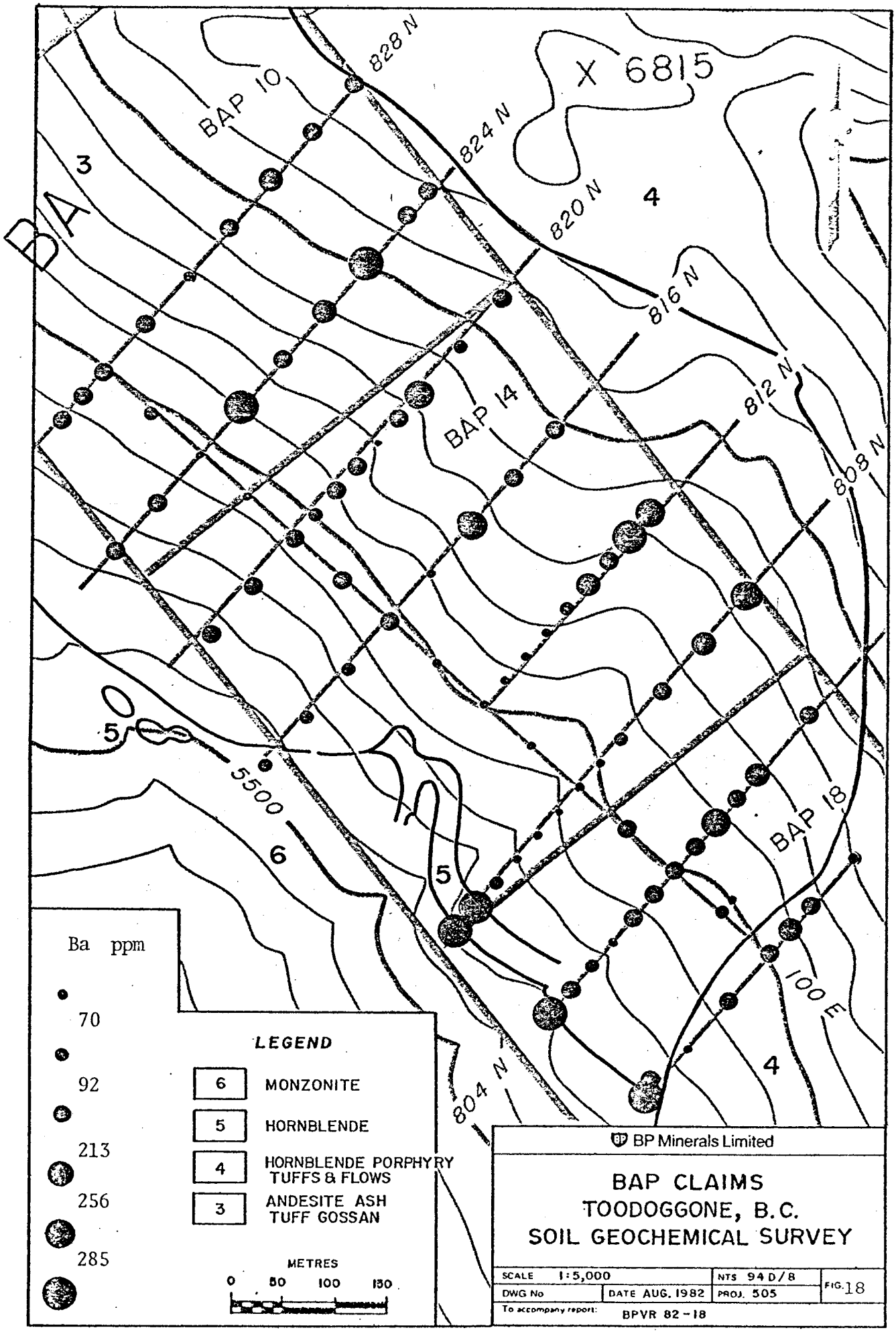
Silica is comparable to that of strontium. High values for both elements along lines 828N and 820N may represent analytical error.

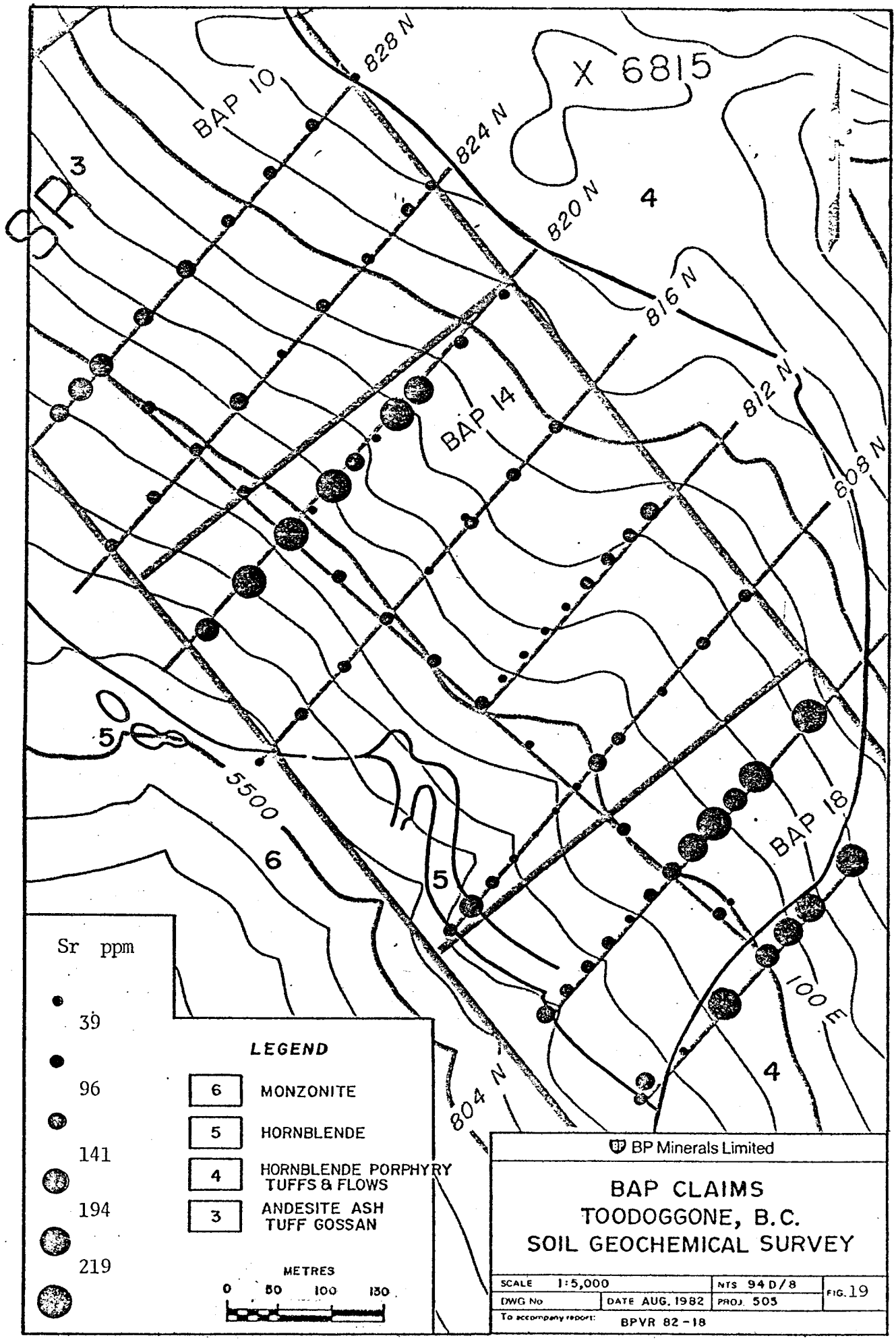
20. Aluminum (Fig. 21)

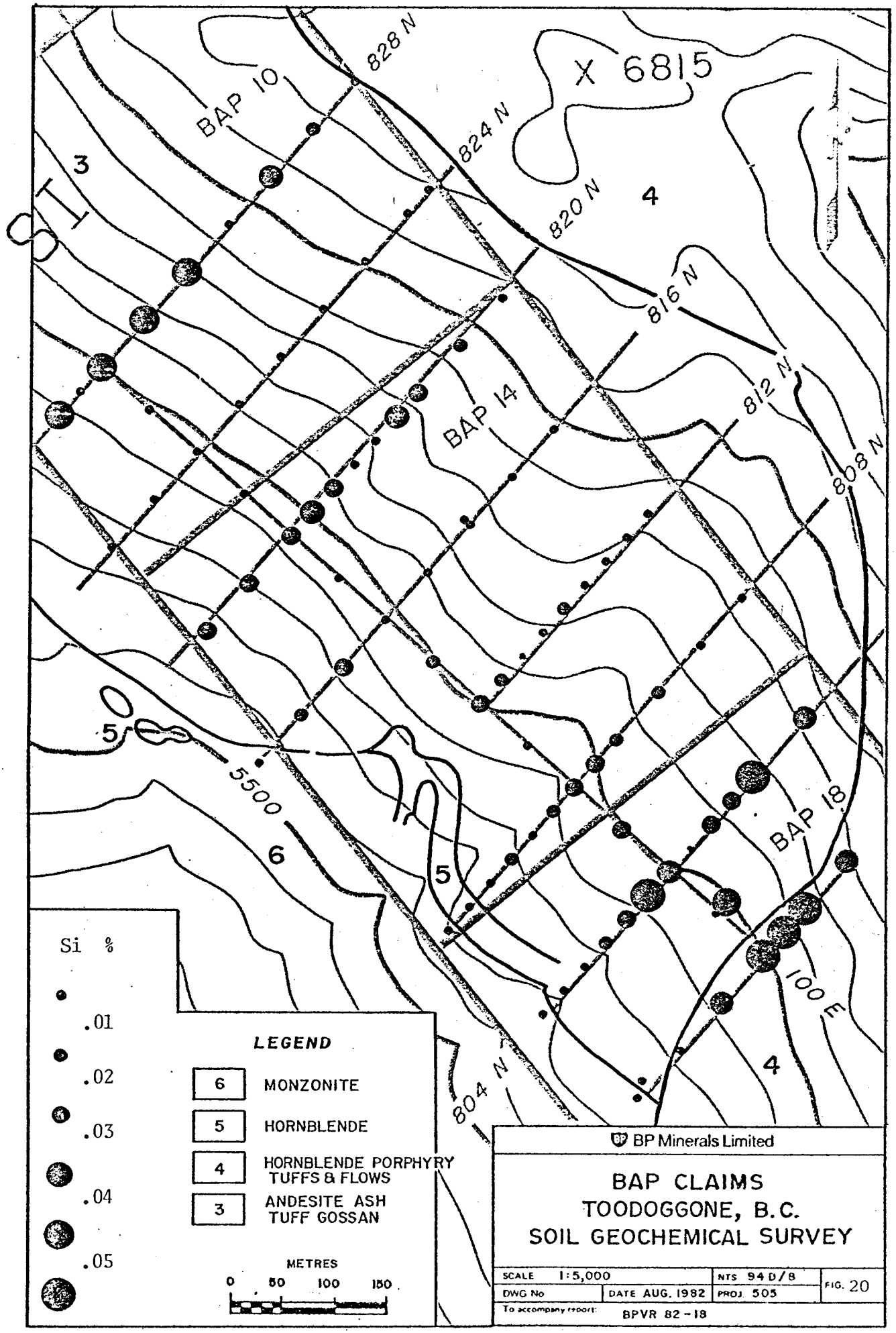
High aluminum values classify the southeastern portion of the grid as distinctive. Very weakly enriched values accompany the manganese, cobalt, zinc and copper anomaly.

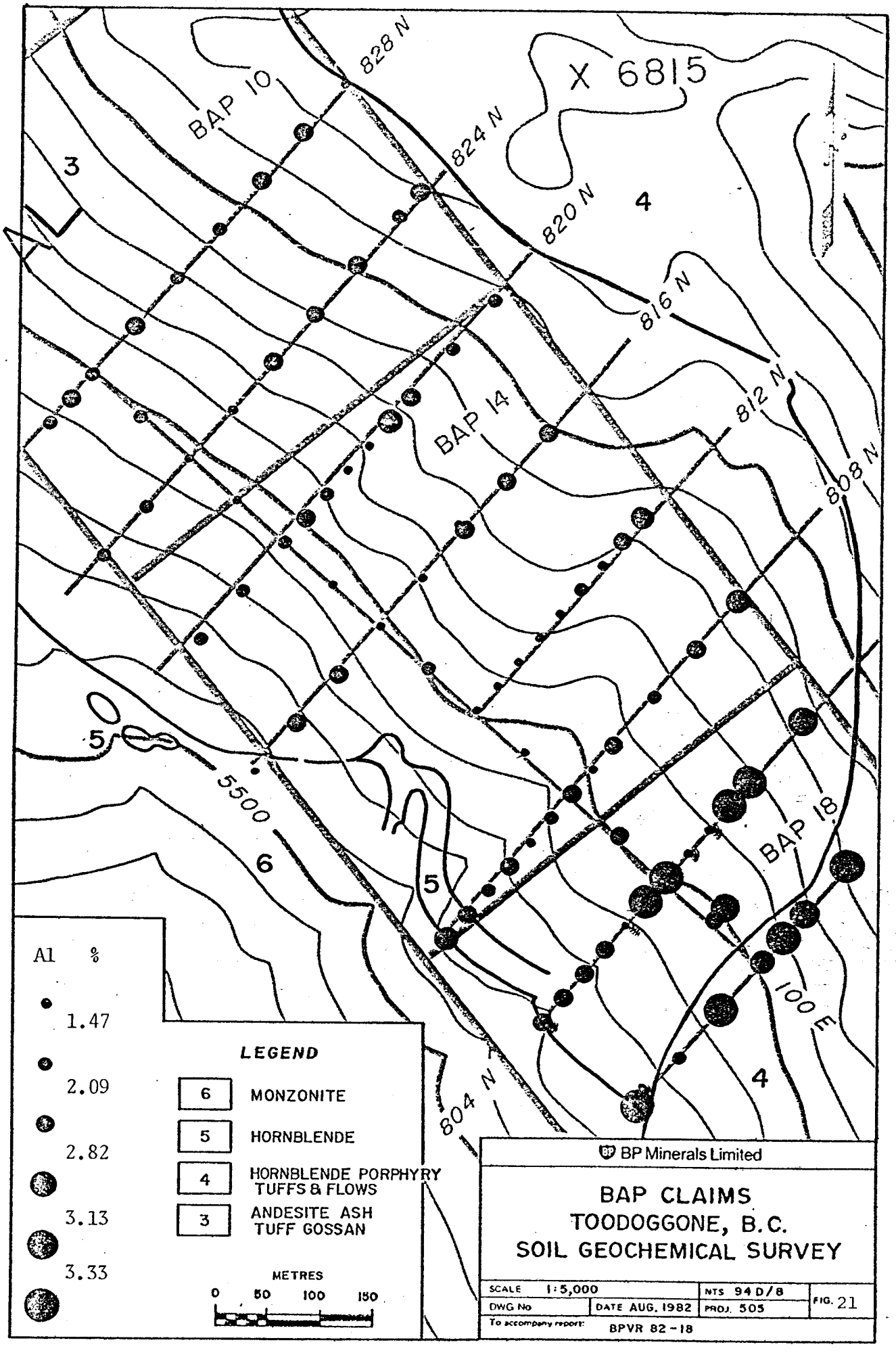
21. Calcium (Fig. 22)

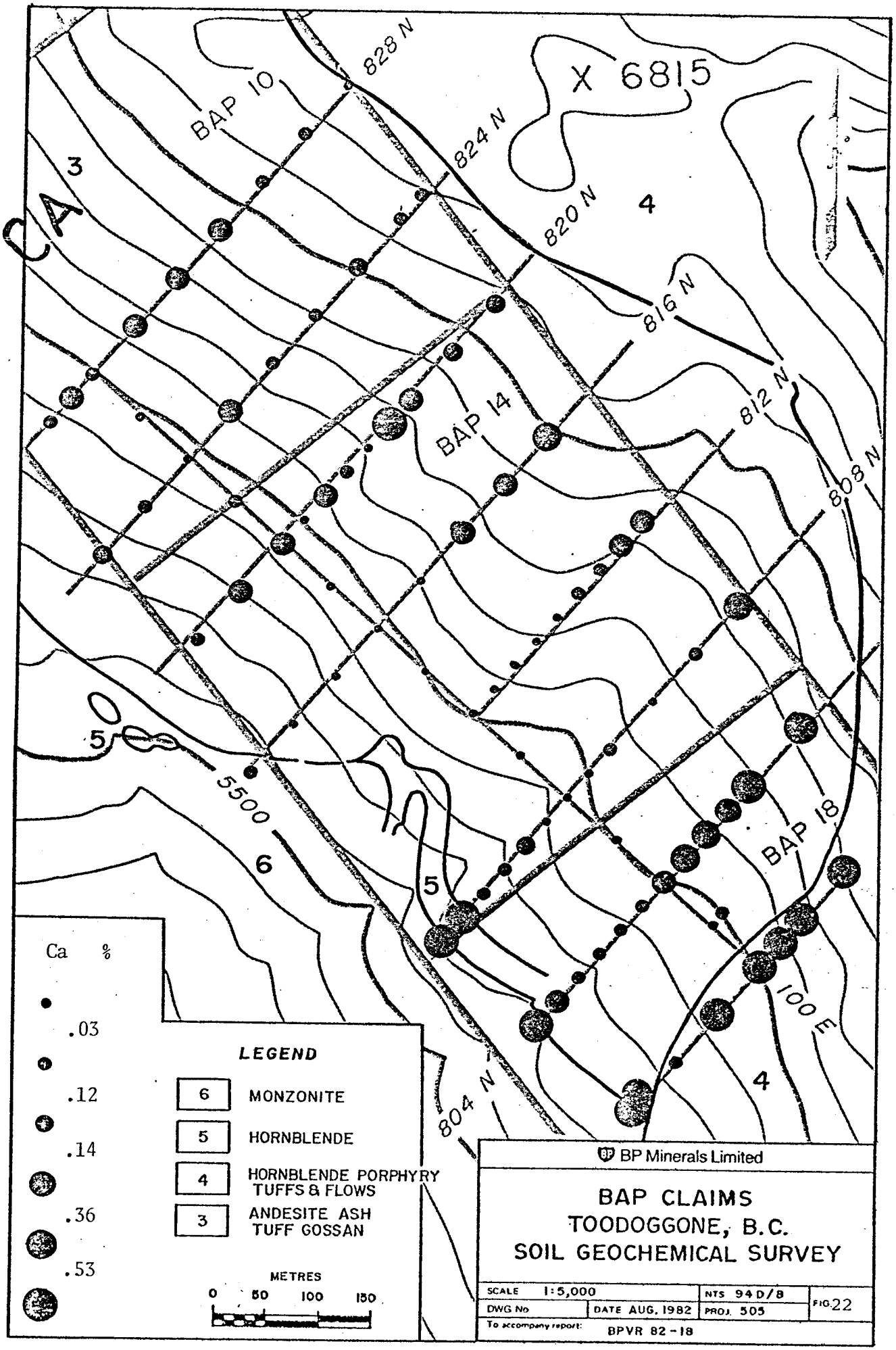
The calcium pattern follows that of aluminum, but contrast between areas of high and low values is more pronounced. The monzonite to the west is reflected by calcium-rich soils.


828 N
X 6815
BAP 10
824 N
820 N
4
3
BA
816 N
812 N
808 N
BAP 14
5
5500
6
5
BAP 18
100 E
4
804 N
Ba ppm
70
92
213
256
285
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 18
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
808 N
BAP 14
5
5500
6
5
BAP 18
100 E
4
804 N
Sr ppm
39
96
141
194
219
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 19
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
SIL
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
804 N
4
Si %
.01
.02
.03
.04
.05
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 20
To accompany report BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
816 N
812 N
808 N
804 N
BAP 14
BAP 18
100 E
5500
3
4
5
6
Al %
1.47
2.09
2.82
3.13
3.33
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 21
To accompany report: BPVR 82-18


X 6815
828 N
824 N
820 N
816 N
812 N
808 N
804 N
BAP 10
BAP 14
BAP 18
100 E
5500
Ca
3
4
5
6
Ca %
.03
.12
.14
.36
.53
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 22
To accompany report: BPVR 82-18

22. Magnesium (Fig. 23)

Relationships described for calcium in the south are repeated for magnesium. A very weak correlation of magnesium with the manganese, cobalt, zinc and copper anomaly is evident.

23. Sodium (Fig. 24)

Sodium enrichment characterizes the northern half of the grid.

24. Potassium (Fig. 25)

The central portion of the zinc-cadmium anomaly is potash-rich, as is the monzonite intrusion in the southwest.

25. Titanium (Fig. 26)

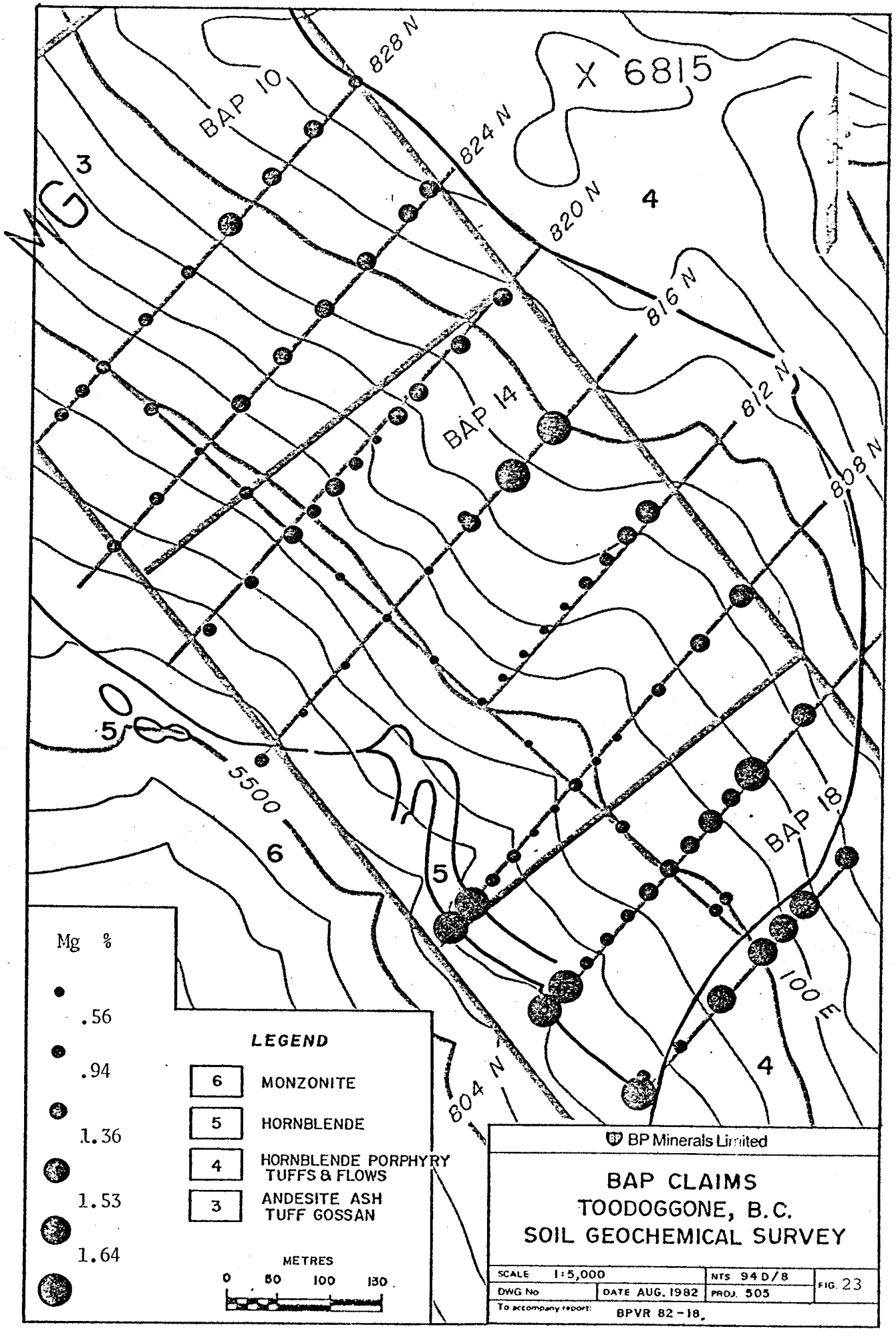
Leachable titanium is found associated with the lead-zinc anomaly in the north and the iron-rich zone at the centre of the grid. Several isolated high titanium values are found on southern lines.

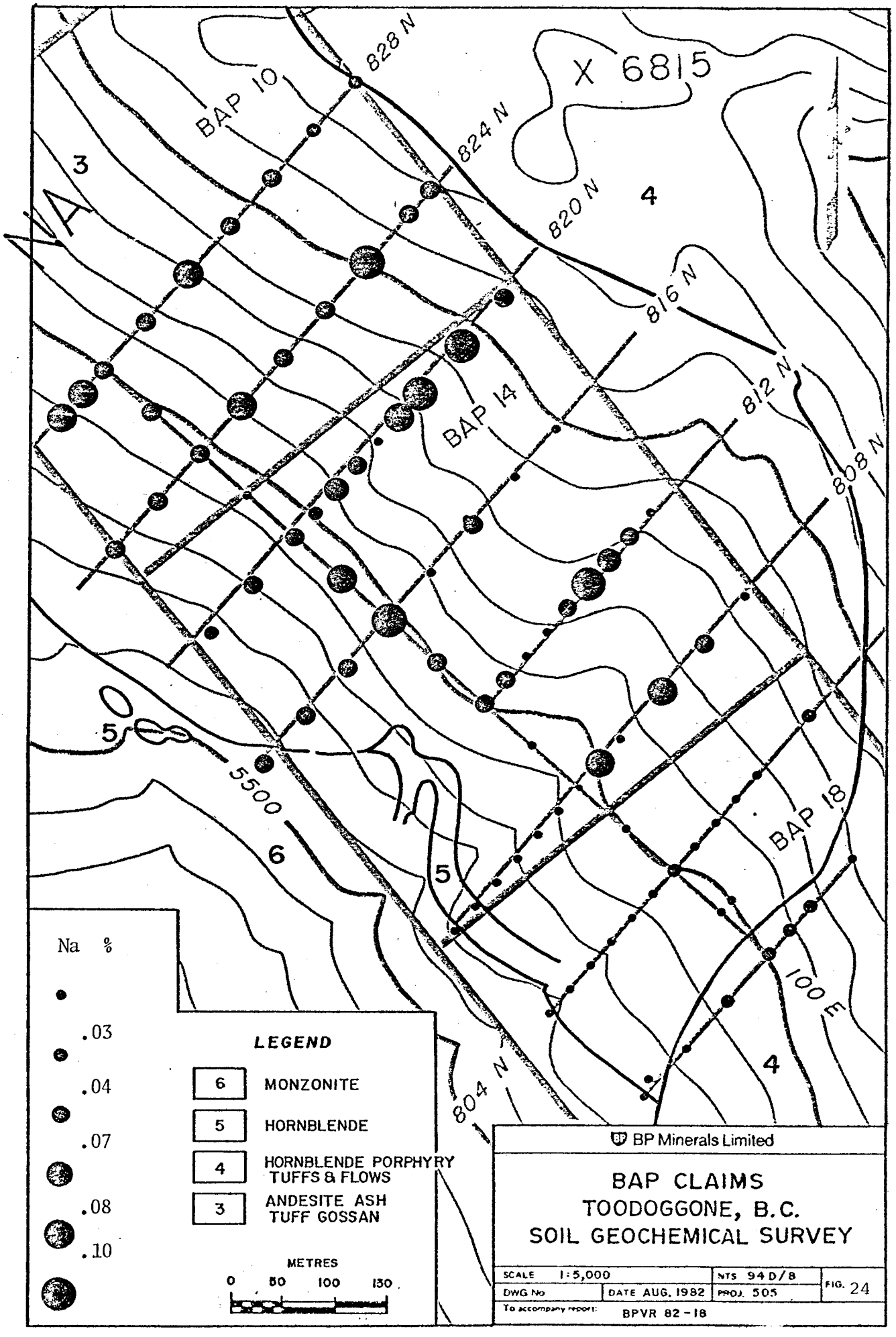
26. Phosphorus (Fig. 27)

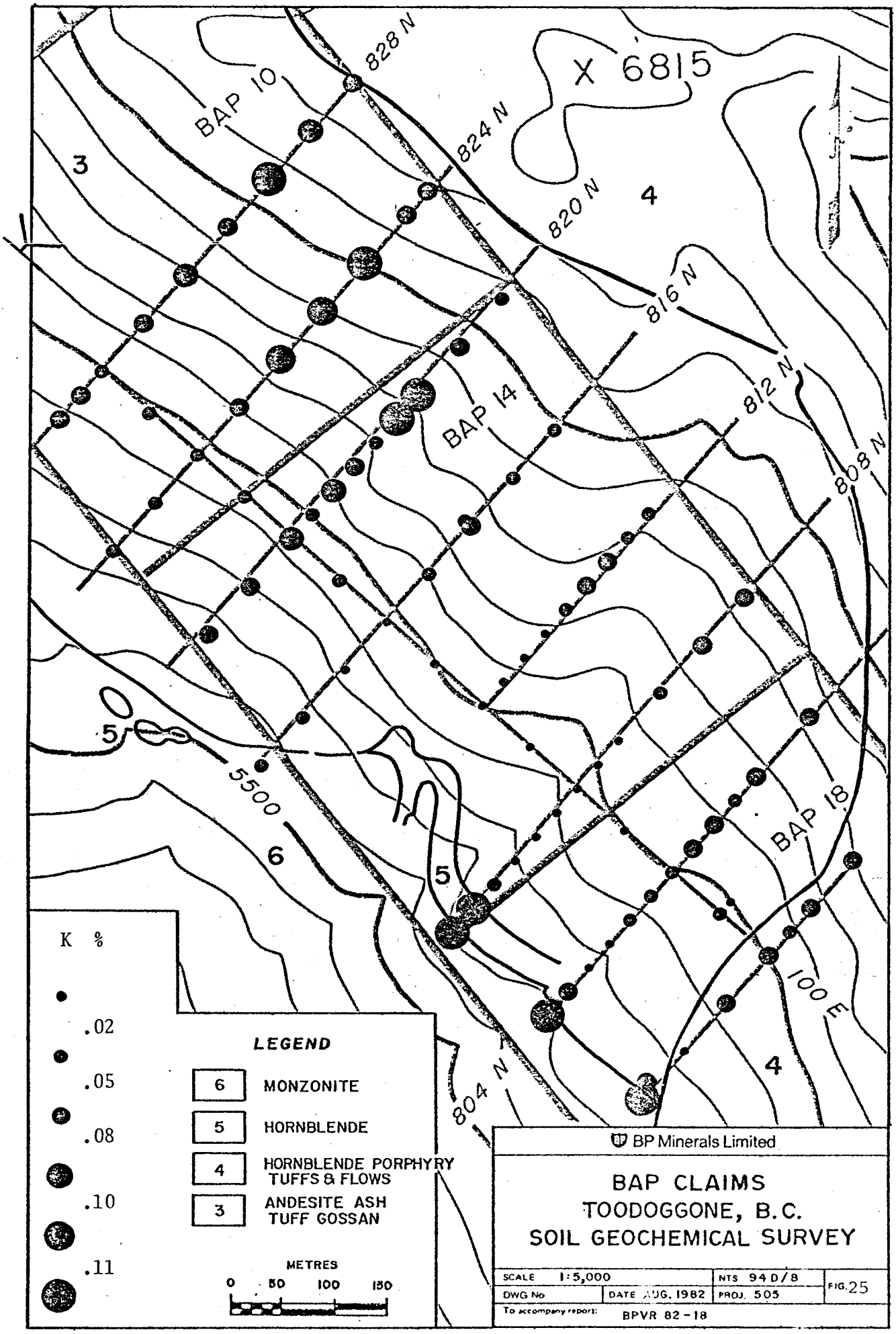
Phosphorus anomalies follow the distribution of iron anomalies in addition to being associated with the western Omineca Intrusion.

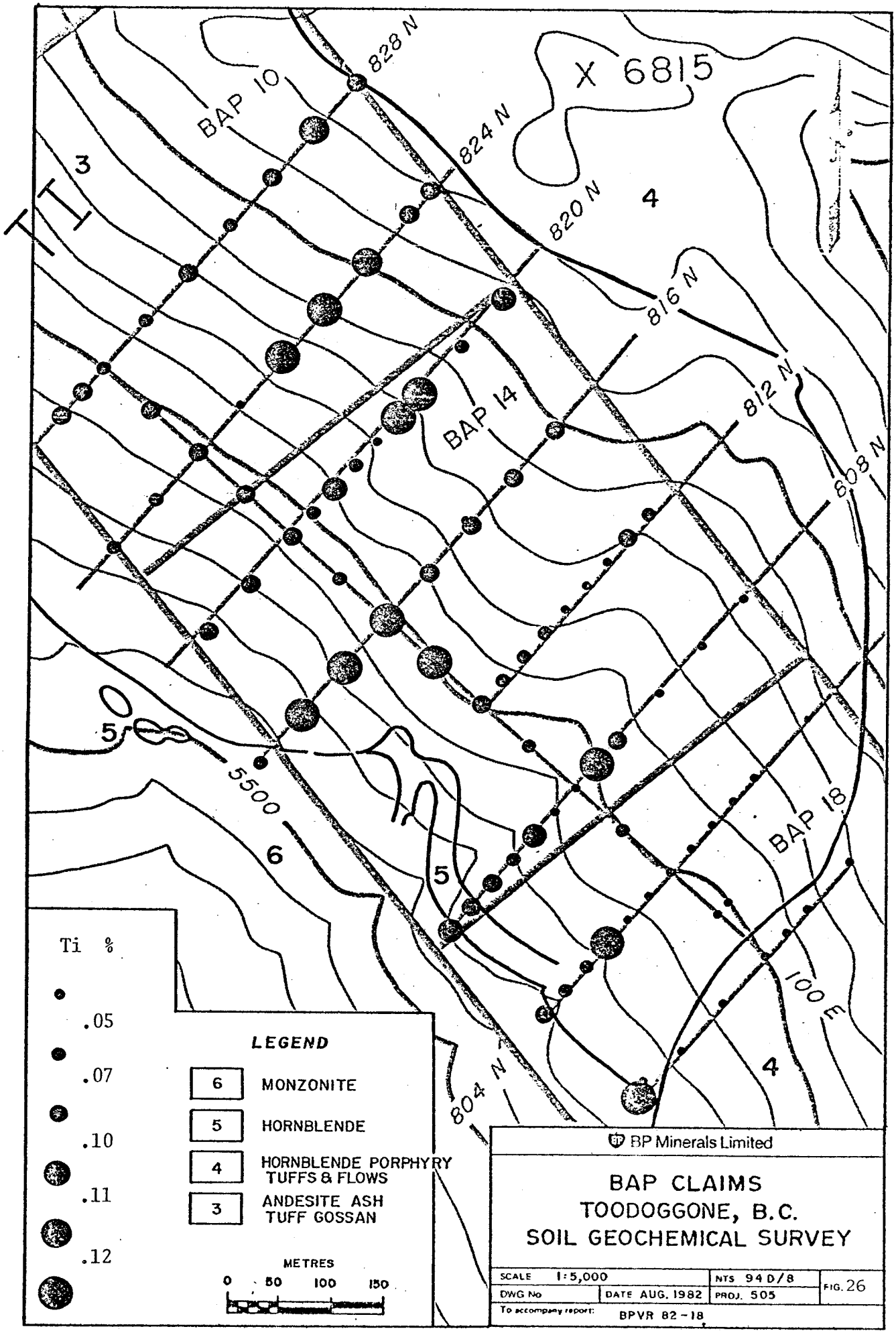
27. Lanthanum (Fig. 28)

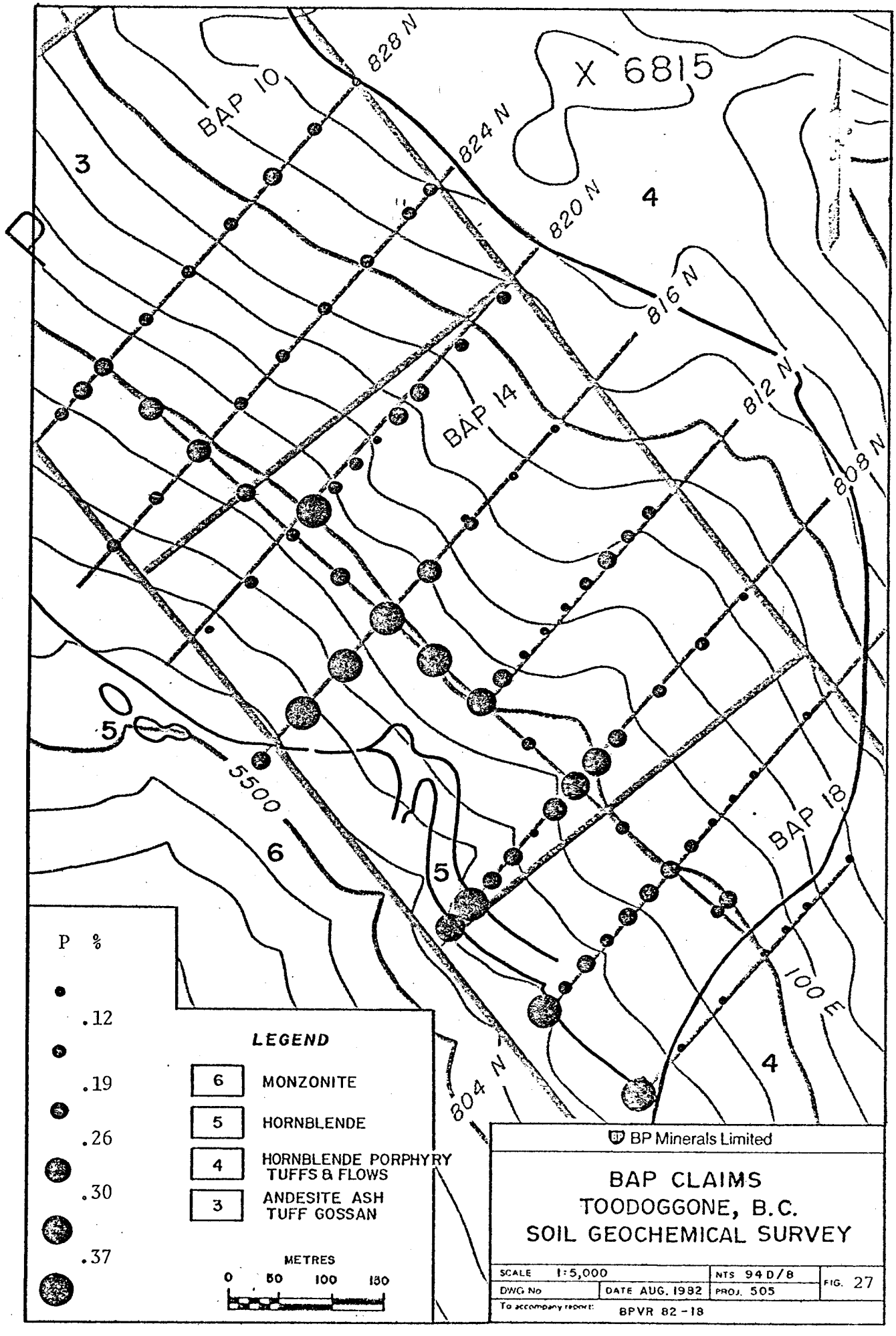
A central lanthanum anomaly approximately corresponds in position to that of an iron anomaly.

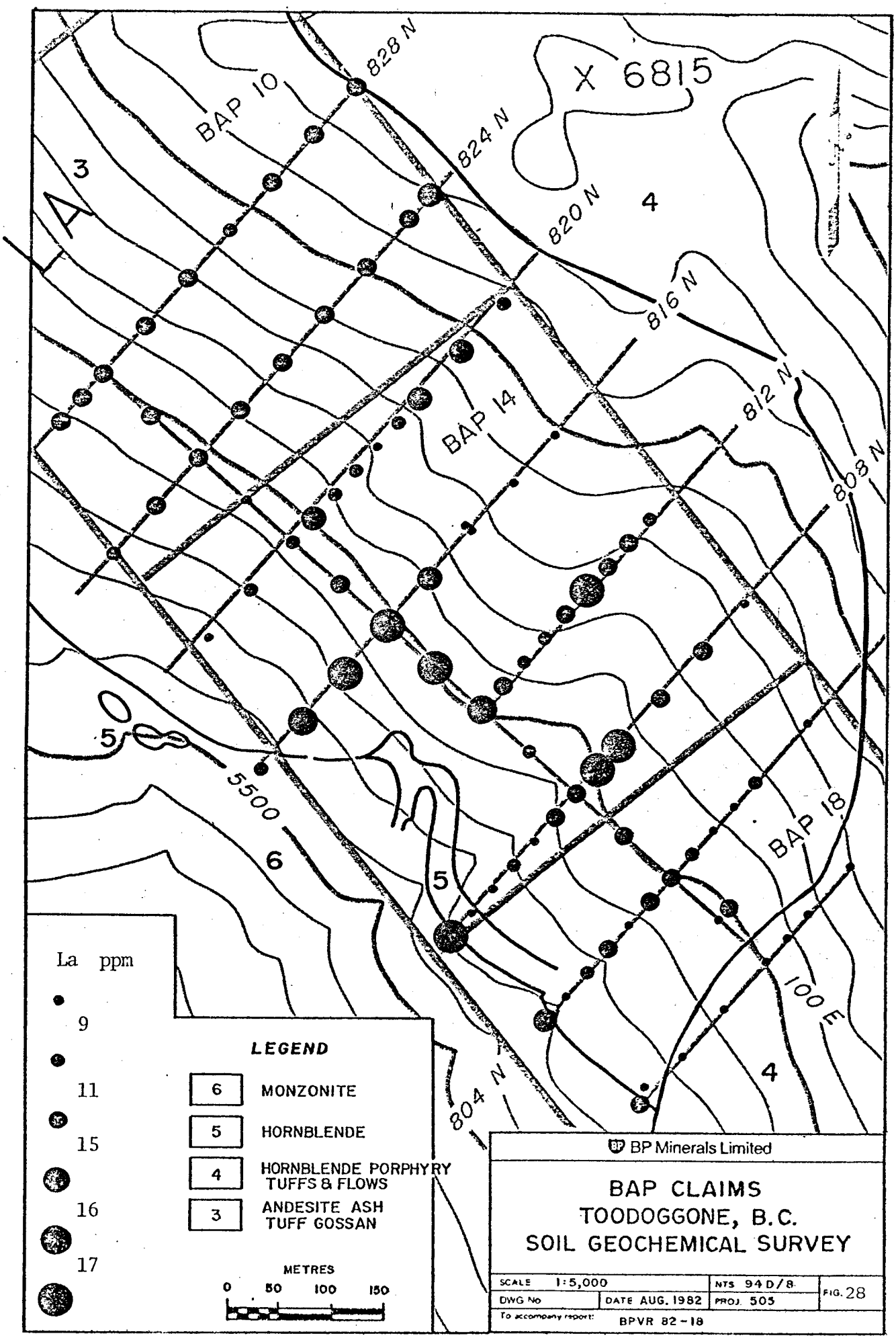

828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
Mg %
.56
.94
1.36
1.53
1.64
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 23
To accompany report: BPVR 82-18


828 N
824 N
820 N
816 N
812 N
808 N
804 N
X 6815
BAP 10
BAP 14
BAP 18
100 E
3
4
5
6
7
5500
Na %
.03
.04
.07
.08
.10
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 24
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
804 N
4
K %
.02
.05
.08
.10
.11
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
FIG. 25
DWG No
DATE AUG. 1982
PROJ. 505
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
Ti %
.05
.07
.10
.11
.12
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
FIG. 26
DWG No
DATE AUG. 1982
PROJ. 505
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
P %
.12
.19
.26
.30
.37
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 27
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
3
A
820 N
4
816 N
BAP 14
812 N
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
La ppm
9
11
15
16
17
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 503
FIG. 28
To accompany report: BPVR 82-18

28. Boron (Fig. 29)

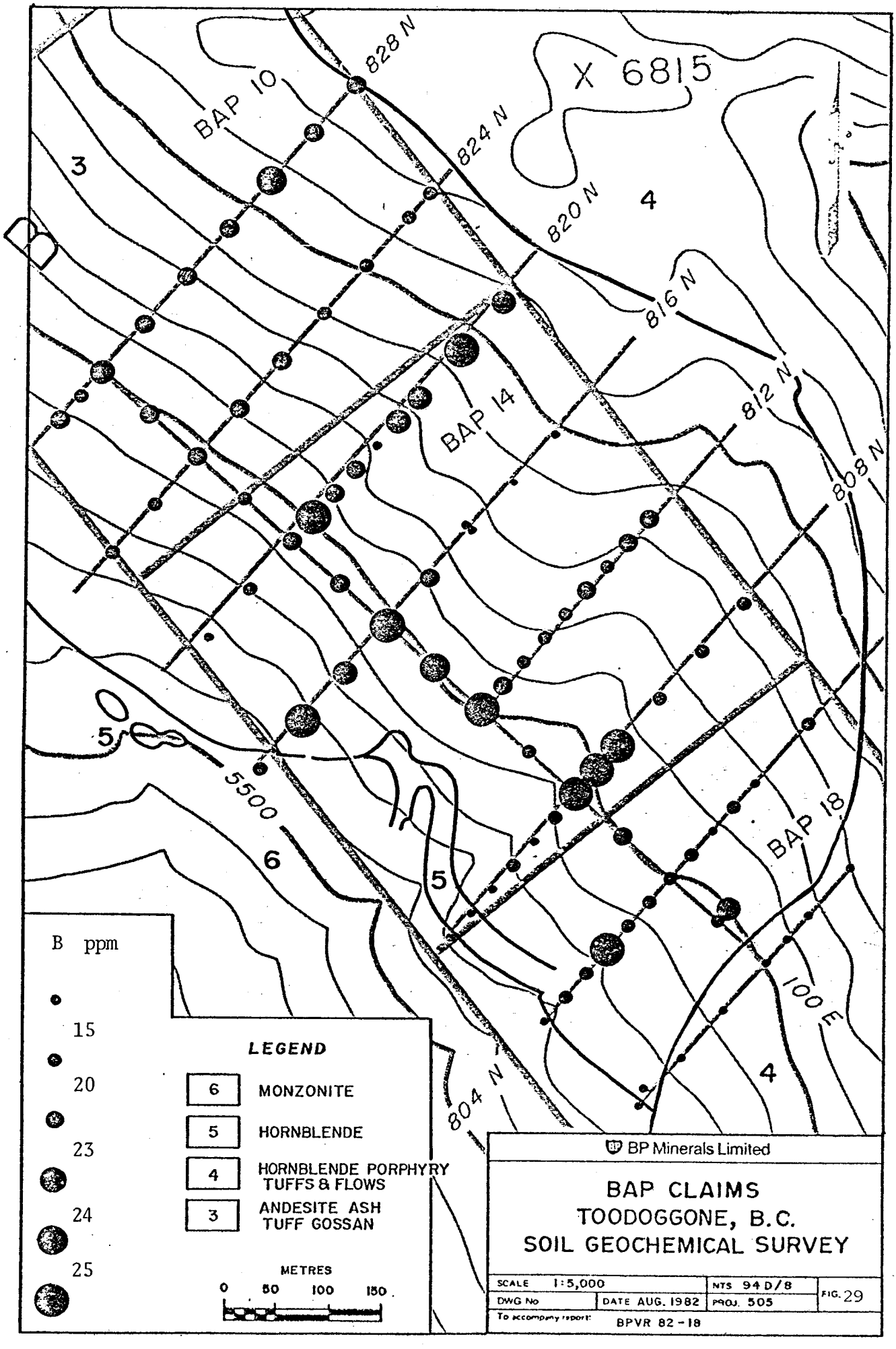
Boron is enhanced in association with the central iron anomaly and the northerly trending silver anomaly.

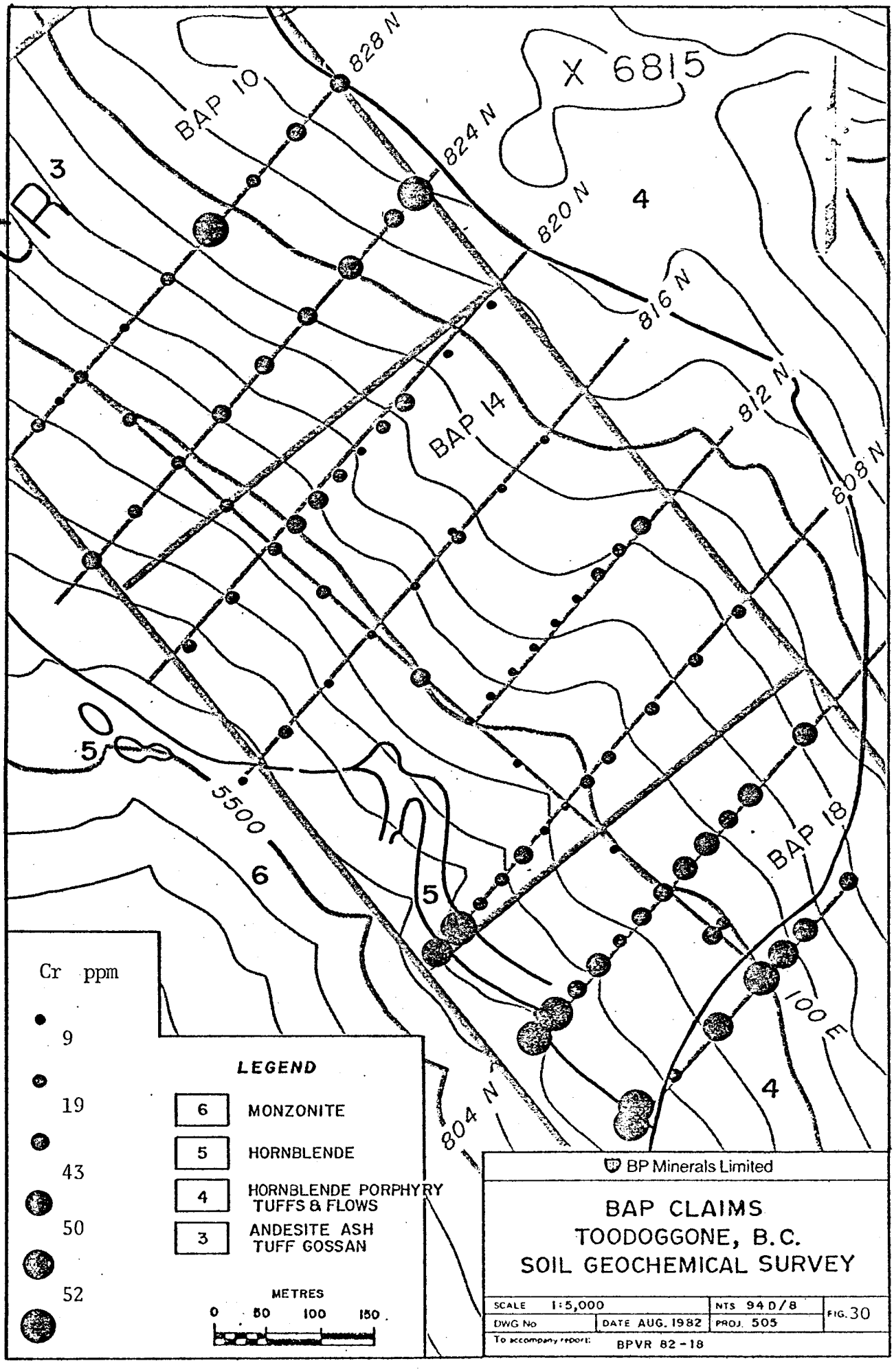
29. Chromium (Fig. 30)

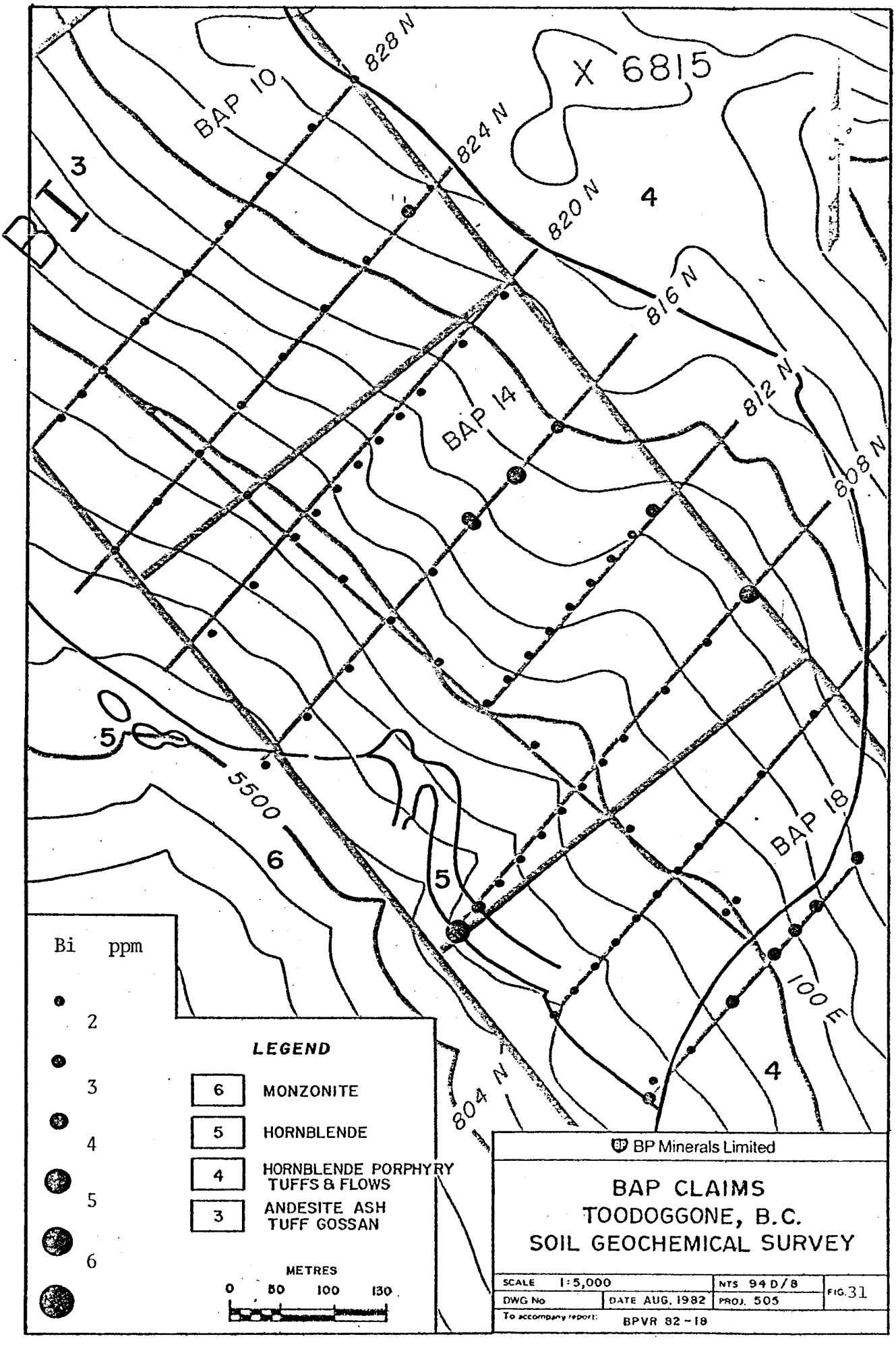
Chromium values are higher in the south downslope of the ultramafic intrusion. A weak chromium anomaly is suggested by an erratic pattern in the northeast corner of the grid.

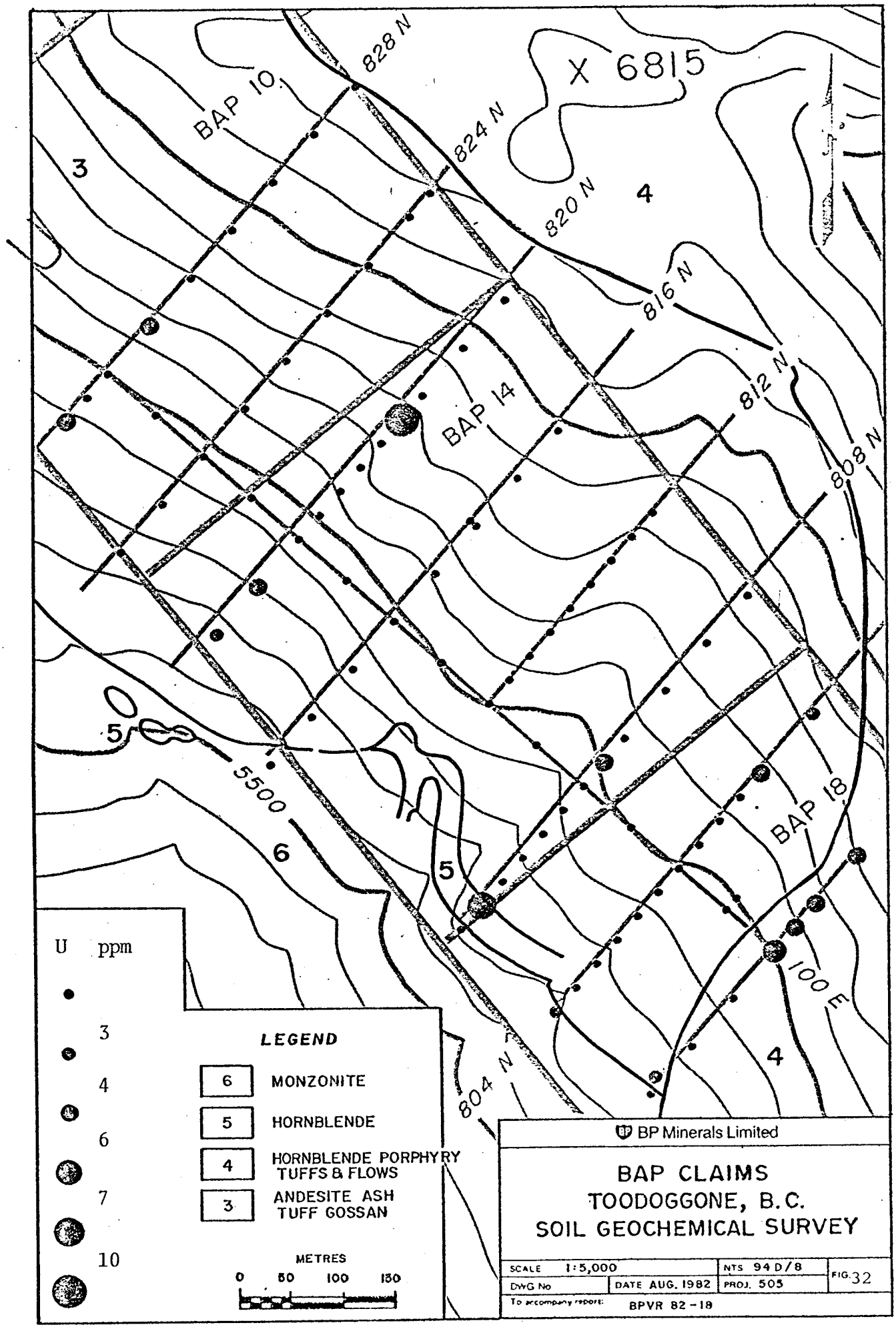
30. Other Elements (Fig. 31 - 35)

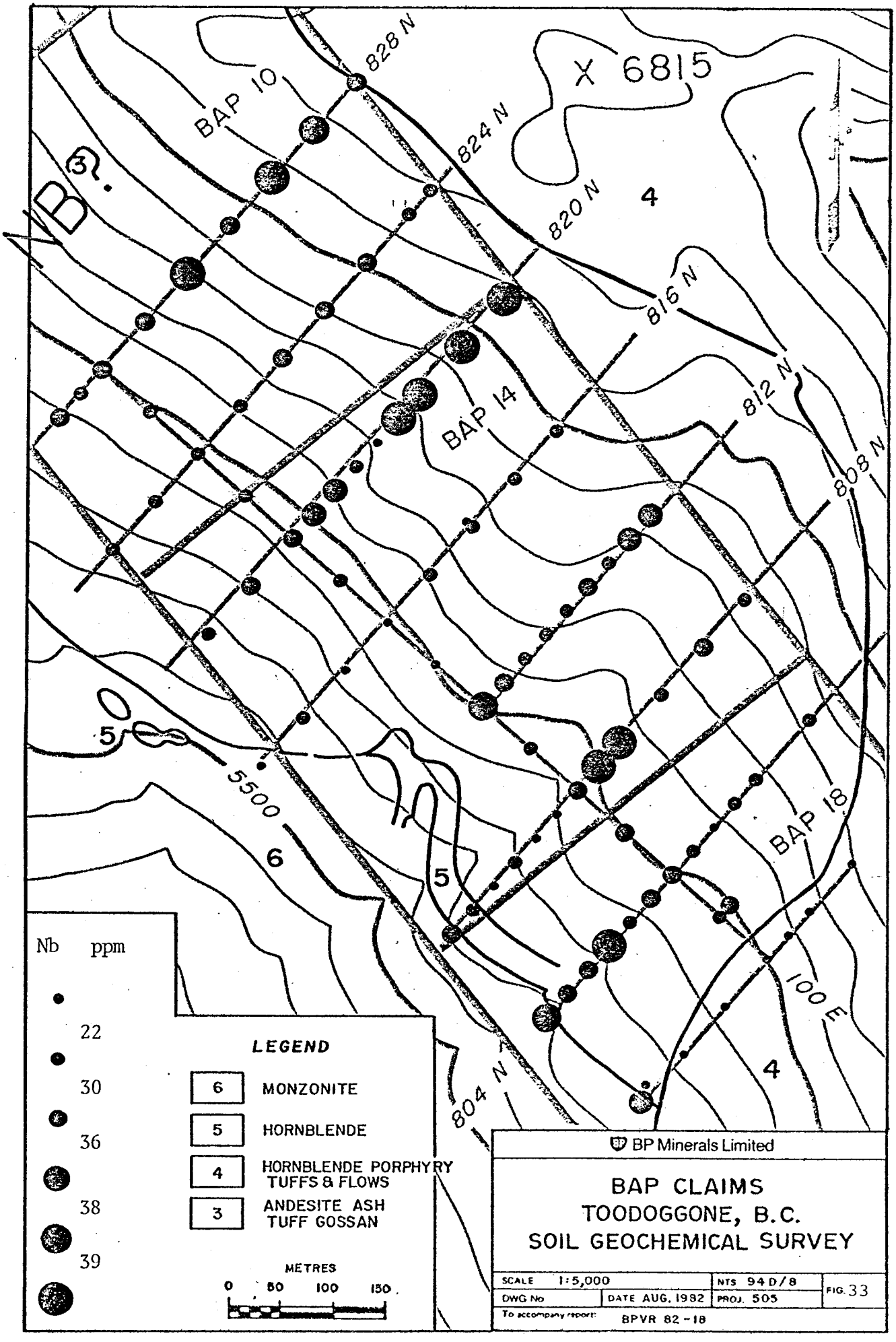
Bismuth (Fig. 31) and uranium (Fig. 32) distributions are featureless. Reliability of niobium (Fig. 33), zirconium (Fig. 34), and cerium (Fig. 35) analyses are not guaranteed by Acme, but patterns suggest viability of the data. Zirconium anomalies cluster in the south and central portions of the grid similar to iron. Both cerium and niobium contain a north trending anomaly similar in position to that of silver. The monzonite intrusion is reflected by a cerium anomaly and portions of the cerium and niobium distributions compliment the manganese pattern.

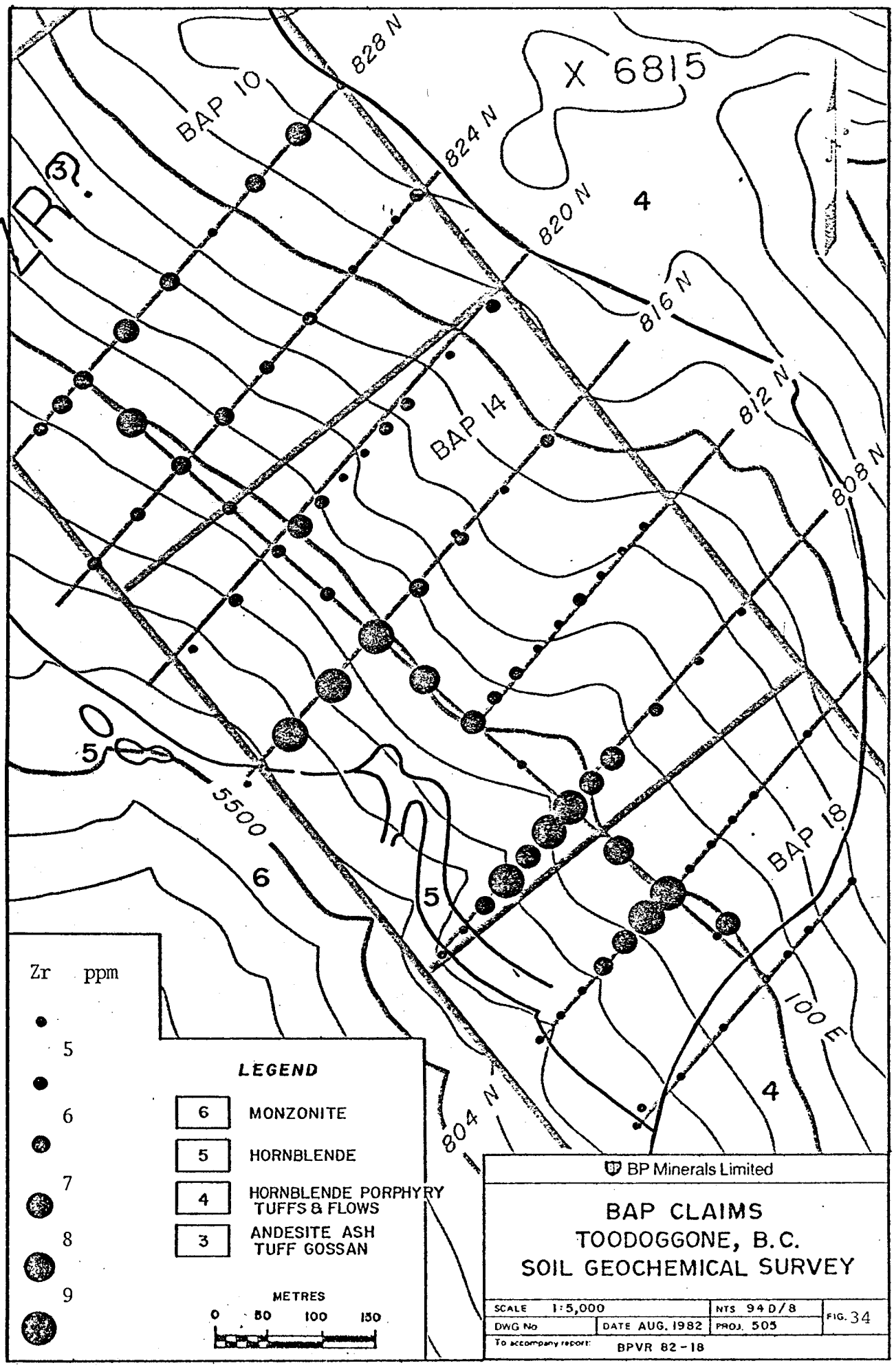

828 N
X 6815
BAP 10
824 N
820 N
4
3
816 N
812 N
BAP 14
808 N
5
5500
6
5
BAP 18
100 E
4
804 N
B ppm
15
20
23
24
25
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 29
To accompany report: BPVR 82-18

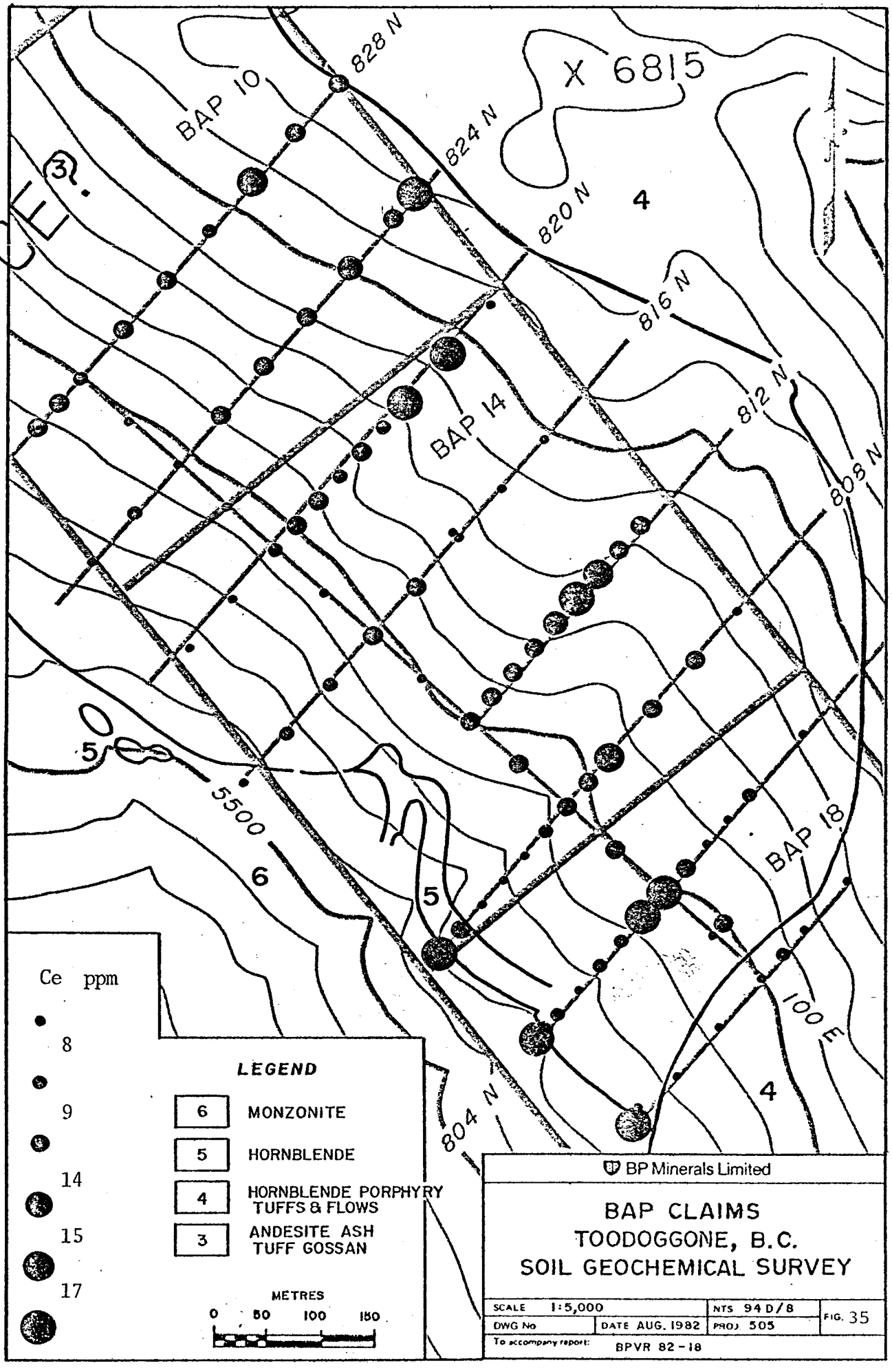

828 N
824 N
820 N
816 N
812 N
808 N
804 N
X 6815
BAP 10
BAP 14
BAP 18
100 E
CR
3
4
5
6
5500
Cr ppm
9
19
43
50
52
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
FIG. 30
DWG No
DATE AUG. 1982
PROJ. 505
To accompany report: BPVR 82-18


828 N
824 N
820 N
816 N
812 N
808 N
804 N
X 6815
BAP 10
BAP 14
BAP 18
100 E
BI
3
4
5
6
5500
Bi ppm
2
3
4
5
6
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 31
To accompany report: BPVR 82-18


X 6815
828 N
824 N
820 N
816 N
812 N
808 N
804 N
BAP 10
BAP 14
BAP 18
100 E
5500
3
4
5
6
U ppm
3
4
6
7
10
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 32
To accompany report: BPVR 82-18


828 N
824 N
820 N
816 N
812 N
808 N
804 N
X 6815
BAP 10
BAP 14
BAP 18
100 E
NB.
4
5
6
5500
Nb ppm
22
30
36
38
39
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 33
To accompany report: BPVR 82-18


828 N
X 6815
BAP 10
824 N
820 N
4
816 N
812 N
808 N
BAP 14
BAP 18
5500
5
6
5
100 E
804 N
4
Zr ppm
5
6
7
8
9
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ. 505
FIG. 34
To accompany report: BPVR 82-18


828 N
824 N
820 N
816 N
812 N
808 N
804 N
X 6815
BAP 10
BAP 14
BAP 18
100 E
5500
3
4
5
6
Ce ppm
8
9
14
15
17
LEGEND
6 MONZONITE
5 HORNBLENDE
4 HORNBLENDE PORPHYRY TUFFS & FLOWS
3 ANDESITE ASH TUFF GOSSAN
METRES
0 50 100 150
BP Minerals Limited
BAP CLAIMS
TOODOGGONE, B.C.
SOIL GEOCHEMICAL SURVEY
SCALE 1:5,000
NTS 94 D/8
DWG No
DATE AUG. 1982
PROJ 505
FIG. 35
To accompany report: BPVR 82-18

Discussion of Results

The geochemical study of 1974 on BAP was limited in scope, only three elements being analyzed: copper, molybdenum and zinc. Geochemical distributions for these elements are repeated here. Availability of an additional 32 metal distributions improves an understanding of geological relationships on the claim group. The following patterns probably reflecting control of underlying lithologies or structures are recognized.

(1) The monzonite intrusion in the southwest is reflected by enhanced molybdenum, copper, barium, calcium, magnesium, phosphorus, and cerium levels.

(2) The ultramafic pluton, also in the southwest, contributes elevated concentrations of copper, chromium, and nickel to soils overlying or immediately downslope of surface exposures of this unit.

(3) Less gossanized portions of the BAP gossan in the south are reflected by nickel, arsenic, vanadium, aluminum, calcium, and magnesium enrichment. Bedrock underlying this portion of the claim also tends to be more chloritized and contains narrow bands of chalcocite grading to 2% copper, a feature reported previously. The zone is notably depleted in sodium compared to northern regions.

(4) A trace element zonation pattern is evident on the northern, more iron-stained portion of the gossan. Towards grid west, molybdenum, some gold, arsenic, some antimony, some vanadium, some sodium, some titanium, phosphorus, lanthanum, boron, and some zirconium accompany iron enrichment. Many of these elements, such as molybdenum, can be scavenged by iron. The presence of molybdenite further west of the property and the young age of the overburden covering the gossan mitigates against active scavenging to explain anomalous values.

A potash-cadmium anomaly along the northern two or three lines is accompanied by larger zones of accumulation of copper, lead, zinc, manganese, silver, cobalt, gold, weak barium, weak aluminum, weak calcium, weak magnesium, some sodium, some titanium, and some cerium. Stratigraphically, the lead zone accompanies and overlies the zinc-rich area, and in this respect compliments the copper, manganese, silver, cobalt and gold distributions. Association of cobalt and manganese probably reflects scavenging, whereas other metals are probably present in an exhalite type of formation. The manganese anomaly is inter-

preted geochemically to be accompanied by weak clay mineral alteration, as reflected by the aluminum, calcium and magnesium distributions. The source of hydrothermal fluids is probably near the potash anomaly.

(5) Linear anomalies, of the type noted for silver in the southern portion of the grid, accompanied by some gold, tungsten, lanthanum, boron and niobium, may be due to a secondary structural control or another hydrothermal channelway.

The distribution pattern noted under (4) above is the most interesting because of the possible indication of a massive sulphide deposit lying within the northern portion of the claims. The very high values of lead, zinc, and copper accompanying gold and silver are encouraging and work is warranted to explain anomalous conditions.

Conclusions

Trace metal zonation on BAP suggests a massive sulphide target containing elevated levels of gold and silver at the northern end of the claim group. A secondary precious metal structural target is suggested by a linear silver anomaly in the south. The survey was able to map lithogeochemical variations probably due to changes in rock type underlying the claims area.

Appendix 1

Analytical Procedures

1. Gold analysis
2. ICP Multielement analysis

VANGEOCHEM LAB LTD. 1521 PEMBERTON AVE., NORTH VANCOUVER, B.C., CANADA V7P 2S3
986-5211
604-XXXXXXXX

October 7, 1982

To: BP Exploration Canada Ltd.
Suite 700, 890 W. Pender Street
Vancouver, B.C. V6C 1K5

From: Vangeochem Lab Ltd.
1521 Pemberton Avenue
North Vancouver, B.C. V7P 2S3

Subject: Analytical procedure used to determine Aqua Regia soluble gold in geochemical samples.
Re: 1982 Project 505 Gold analyses.

1. Method of Sample Preparation

(a) Geochemical soil, silt ot rock samples were received in the laboratory in wet-strength 4 x 6 Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.

(b) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100 - mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

(a) 5.00 - 10.00 grams of the minus 80-mesh samples were used. Samples were weighed out by using a top-loading balance into beakers.

(b) 20 ml of Aqua Regia (3:1 HCL : HNO_3) were used to digest the samples over a hot plate vigorously.

(c) The digested samples were filtered and the washed pulps were discarded and the filtrate was reduced to about 5 ml.

(d) The Au comples ions were extracted into diisobutyl ketone and thiourea medium. (Anion exchange liquids "Aliquot 336").

... 2

(e) Separate Funnels were used to separate the organic layer.

3. Method of Detection

The gold analyses were detected by using a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode Lamp. The results were read out on a strip chart recorder. A hydrogen lamp was used to correct any background interferences. The gold values in parts per billion were calculated by comparing them with a set of gold standards.

4. The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and his laboratory staff.

for Eddie Tang
VANGEOCHEM LAB LTD.

ET: jl

VGC

VANGEOCHEM LAB LTD. 1521 PEMBERTON AVE., NORTH VANCOUVER, B.C., CANADA 604-986-5211

V7P 2S3

Oct. 7, 1982

TO: B P Explorations Canada Ltd.
Suite 700, 890 W. Pender St.
Vancouver, B C V6C 1K5

FROM: Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B. C. V7P 2S3

SUBJECT: Analytical procedure used to determine elements in hot acid soluble by ICP. Direct reading emission spectrograph analysis.

Re: 1982 Project 505 I C P Analyses.

1. Method of Sample Preparation

(a) Geochemical soil, silt, lake sediments or rock samples were received in the laboratory in wet-strength 3½ x 6½ Kraft paper bags and rock samples in 4" x 6" Kraft paper bags.

(b) The wet samples were dried in a ventilated oven.

(c) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieves. The plys 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(d) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

(a) 0.500 gram of -80 mesh sample was used.

(b) Samples were digested in a hot water bath with conc. HNO_3 and conc. HCl acids.

(c) The digested samples were diluted to a fixed volume and shaken well.

... 2

3. Method of Analysis

The ICP analyses elements were determined by using Jarrel Ash, model 885. Direct reading emission spectragraph of a inductive coupled plasma excitation source. All major matrix and trace elements are interelement corrected to trace elements. All data is entered into Apple II plus, stored on floppy discs, and printed by Epson 100.

4. Analysts

The analyses were surpervised by Mr. Dean Toye of Acme Lab Ltd. and his staff.

Conway Chun

VANGEOCHEM LAB LTD.

Appendix 2

Coding format for geochemical samples.

List of geochemical data.

GENERAL

1,2 SAMPLE TYPE

10. Stream sediment
11. Stream water
20. Seepage (spring) sediment
21. Seepage (spring) water
30. Lake sediment - lake center
31. Lake water
32. Lake sediment - near shore
40. Bog-upper 100 cm
41. Bog-stagnant water
42. Bog-below 100 cm
43. Bog-organic material at mineral horizon interface
44. Bog-mineral horizon
50. Soil-top of the B horizon (or top of the C horizon if B horizon absent)
51. Soil-other horizons (organic-rich samples or when 2 samples taken at same hole)
52. Frost boil
53. Seepage boil
54. Deep overburden sample
55. Intermediate overburden
57. Sample (depth determined in field)
59.
60. Talus fines-mid slope
61. Talus fine-in gully
62. Talus fines-base of slope
63. Talus blocks-hand sample
64. Talus block-chips
70. Biogeochemical
75. Radon-track etch
76. Radon-Alpha Meters
77. Radon-emanometers
80. Bedrock hand sample
81. Bedrock chips + hand sample
82. Float hand sample
83. Float chips + hand sample
84. Drill core specimens
85. Channel sample
86. Drill sludge
87. Drill chips
*89. High grade sample
*90. Special sample-specify
*clearly label if high grade

Special note
For keypunchers benefit, 7's should be crossed ⊁ and 0's (letter) should be slashed ⌀

3,4 YEAR

5-7 PROJECT NUMBER

8 PROJECT IDENTIFICATION

Blank reconnaissance
A, B, C, etc. = properties, anomalies (List 6)

9 DUPLICATE SAMPLES

*Star both samples (collect 1 in 30)

10,11 SAMPLER IDENTIFICATION
*12 (List 7)

12-15 SAMPLE NUMBER
or
13-15 leave out all numbers ending in 00 and 50

17,18 UTM ZONE

see NTS map sheets; for properties use
XX Property-feet
YY Property-meters
ZZ Property-other

19-24 EAST COORDINATE

25-31 NORTH COORDINATE

34-38 MAP SHEET NUMBER

STREAM SEDIMENTS

40 SAMPLE ENVIRONMENT

1. Next to bank
2. Behind boulders
3. Among roots below stream bank
4. Middle of stream
5. Among grass or reeds of creek bed
6. Bar in creek
7. Middle-very wide, shallow creek
8. Base of slope
9. Composite across stream
A. Soil

42 PRECIPITATE

1. Record colour (report presence of precipitate in immediate vicinity in stream bed. If heavy precipitate, sample separately).

43 OVERBURDEN TRANSPORT

L. Local
E. Extensive
M. Mixed local & extensive
U. Unknown

45 OVERBURDEN ORIGIN

1. Till-angular boulders
2. Outwash-sandy, rounded boulders
3. Lake sediment-sand/silt
4. Alluvium-stream deposit
5. Peat-bog
6. Colluvium*
7. Lake sediment-clay
8. Talus
9. Residual
A. Frost boil*
B. Seepage boil*
C. Boulder field*
D. Gravel*
E. Soil*

*use only if former origin cannot be identified

46 BEDROCK

M. Mineralized
P. Present within 100m-200m upslope
D. Present within 100m-200m downslope
B. Underlies sample site
G. Gossan
F. Fe surface stains
R. Radioactivity

47,48 pH

49 SAMPLE TEXTURE

Ø. Organic-decomposed
1. Clay
2. Silt and fine sand
3. Sand
4. Gravel
5. Frozen
6. Cemented
7. Precipitate
8. Twigs or undecomposed organic matter

50-52 AVERAGE WIDTH OF STREAM-M

decimal point in col 51 (or col 52 if stream > 10 m wide)

53-55 AVERAGE DEPTH OF STREAM-CM

56 STREAM VELOCITY

1. Dry
2. Stagnant
3. Slow
4. Moderate
5. Fast
6. Turbulent

57 INDICATE AS TRIBUTARY

R. Stream enters on right looking down main stream
L. Stream enters on left looking down main stream

58-60 LOCAL BEDROCK COMPOSITION

Estimate-use lists 1-4

61 COLOUR-STREAM SEDIMENTS

1. Colour noted in information

63-66 CONDUCTIVITY-WATER

67 CONTAMINATION

Blank-none
P. possible
D. definite

68 ORGANIC FRACTION

1. Minor amount of undecomposed twigs, leaves, etc.
2. Large amount of undecomposed twigs, leaves, etc.
3. Minor amount of well-decomposed vegetation
4. Large amount of well-decomposed vegetation
5. Mosses
6. Some sediment grains coated in organic matter
7. All sediment grains coated in organic matter
8. Looks like lake sediment material

69 MINERAL FRACTION

1. Primarily light coloured silicate minerals
2. Primarily carbonate sand
3. Minor, but notable content of mafic minerals, resustates etc.
4. High proportion of mafics, resistates

71 GAMMA SOLID ANGLE

1. Ridge
2. Flat surface (2π)
3. Base of section (3π)
4. Deep gullies (4π)
5. A
6. B
7. C
8. D

72-75 GAMMA COUNT AT SAMPLE SITE

76 ROCK

*If bedrock is influencing scint counts

77,78 APPROXIMATE SLOPE ANGLE

79,80 APPROXIMATE SLOPE DIRECTION

SOILS

40 SITE TOPOGRAPHY

1. Hill Top
2. Gentle slope
3. Steep slope > 20°
4. Base of slope
5. Valley floor
6. Depression
7. Level
8. Rolling
9. Bog

41 SAMPLE ENVIRONMENT

1. Tundra-hummocky
2. Tundra-dry
3. Tundra-swampy
4. Grassland, meadows
5. Peat mounds
6. Bog in depression
7. Forest-coniferous
8. Forest-deciduous
9. Forest-mixed
A. Alder or willows
B. Cultivated land
C. Desert, semi-arid
D. Barren
E. Talus fan
F. Bank soil-stream
G. Bank soil-lake
H. Road cut

42 SITE DRAINAGE

1. Dry
2. Moist
3. Wet
4. Saturated

43 OVERBURDEN TRANSPORT

L. Local
E. Extensive
U. Unknown
M. Mixed - two sources

44 WATER MOVEMENT

S. Seepage

45 OVERBURDEN ORIGIN

1. Till-angular boulders
2. Outwash-sandy, rounded boulders
3. Lake sediment-sand/silt
4. Alluvium-stream deposit
5. Peat-bog
6. Colluvium
7. Lake sediment-clay
8. Talus
9. Residual
A. Frost boil*
B. Seepage boil*
C. Boulder field*
D. Gravel*

*Use only if formed origin cannot be identified

46 BEDROCK

M. Mineralized
P. Present within 100m-200m upslope
D. Present within 100m-200m downslope
B. Underlies sample site
G. Gossan
F. Fe surface stains
R. Radioactivity

48 pH

49 SAMPLE TEXTURE

Ø. Organic muck
1. Fibrous, peaty organic matter
2. Very sandy
3. Sandy
4. Sand-silt
5. Sand-silt-clay
6. Silt
7. Silt-clay
8. Clay
9. Gravel

50,51 TOP OF SAMPLE INTERVAL-CM

52-54 BOTTOM OF SAMPLE INTERVAL-CM

55,56 SOIL HORIZON

LH. Leaf, humus layer, undecomposed vegetation lying on the ground surface (do not sample)
AH. Dark grey to black, organic-rich mineral horizon usually no deeper than 15 cm from the surface (do not sample)
AE. Grey to white (occasionally brown) leached mineral horizon near ground surface, usually sandy; accompanied by BF or BT horizon at depth (do not sample)
BH. Black, organic-rich mineral horizon at depths greater than 15 cm (do not sample)
BF. Red brown, iron-rich horizon
BT. Brown, clay-rich horizon
BG. Horizon which is water-saturated most of the year, identified by red brown mottles
BM. Brown horizon which is only slightly different in appearance from underlying parent material
C1, C2, C3, etc.-Parent material for soil
CA. White calcium carbonate precipitate in C horizon
Ø1, Ø2, Ø3 etc.-Bog samples at various depths
TF. Talus fines

57 SOIL TYPE

C. Chernozem-prairie soil usually under grassland or meadow, thick Ah >10cm, CA horizon at depth
S. Solonetz-saline soil, high content of NaCl
L. Luvisol-BT horizon diagnostic
P. Podzol-BF horizon diagnostic
B. Brunisol-BM horizon is only B horizon of profile
R. Regosol-little or no soil development. No B soil horizon, only LH (maybe) and C horizon
G. Gleysol-BG horizon diagnostic
Ø. Organic soil-bog vegetation-no mineral matter

58-60 LOCAL BEDROCK COMPOSITION

Estimate-use lists 1-4

61-66 COLOUR

Munsell notation or abbreviation

67 CONTAMINATION

Blank-none
P. possible
D. definite

68-69 % COARSE FRAGMENTS

70 SHAPE OF COARSE FRAGMENTS

A. Angular
R. Rounded
S. Subrounded, subangular
M. Mixed above types

71 GAMMA SOLID ANGLE

1. Ridge
2. Flat surface (2π)
3. Base of section (3π)
4. Deep gullies (4π)
5. A
6. B
7. C
8. D

72-75 GAMMA COUNT AT SAMPLE SITE

Scint reading at ground level over hole

76 ROCK

*If bedrock is influencing scint counts

77,78 APPROXIMATE SLOPE ANGLE

79,80 APPROXIMATE SLOPE DIRECTION

LIST 1

1-- INTRUSIVE ROCKS

-1- QUARTZ RICH
--1 Granite
--2 Quartz Monzonite
--3 Granodiorite
--4 Quartz diorite

-2- INTERMEDIATE
--1 Syenite
--2 Monzonite
--3 Diorite
--4 Gabbro

-3- FELDSPATHOID RICH
--1 Nepheline syenite
--2 Nepheline monzonite

-40 ULTRABASIC

-50 CARBONATITES

-60 SPECIAL TYPES
--1 Pegmatite
--2 Aplite
--3 Lamprophyre
--4 Trap
--5 Felsite
--6 Intrusion breccia
--7 Diabase

LIST 2

2-- VOLCANIC ROCKS

-0- UNDIFFERENTIATED

-1- BASALT

-2- ANDESITE

-3- DACITE

-4- RHYOLITE

-5- QUARTZ LATITE

-6- LATITE

-7- TRACHYTE

-8- PHONOLITE

-9- NEPHELINE LATITE
--1 Fine grained flows
--2 Prophyritic flows
--3 Crystal tuffs
--4 Ash tuffs
--5 Lapilli tuffs
--6 Agglomerate
--7 Lapilli breccia
--8 Block breccia
--9 Turbidite

LIST 3

3-- SEDIMENTARY ROCKS

-1- ARENACEOUS
--1 Siltstone
--2 Mudstone
--3 Greywake
--4 Sandstone
--5 Quartzite
--6 Conglomerate

-2- ARGILLACEOUS
--1 Shale
--2 Argillite

-3- CALCAREOUS
--1 Limestone
--2 Dolomite

-4- CHEMICAL PRECIPITATE
--1 Chert
--2 Marble
--3 Iron formation

LIST 4

4-- METAMORPHIC ROCKS

-1- FINE GRAINED CONTACT

-2- PHANERITIC
--1 Meta quartzite
--2 Marble
--3 Soapstone
--4 Hornfels
--5 Serpentine
--6 Skarn
--7 Amphibolite
--8 Eclogite

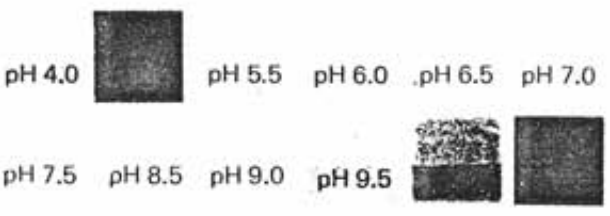
-3- MECHANICAL
--1 Mylonite
--2 Flaser
--3 Augen
--4 Ultramylonite

-40 SLATE

-50 PHYLLITE

-60 SCHIST

-7- GNEISS*
-8- MIGMATITE*
--1 *Granite
--2 Monzonite
--3 Granodiorite
--4 Conglomerate
--5 Sandstone
--6 Augen
--7 Granulite
--8 Quartz diorite
--9 Diorite
--0 Amphibolite



LISTING OF BAP JULY 20, 1982 PART 1 PAGE 1

RECD	TY	YE	PRJ	ID	UTM-E	UTM-N	NTS		pH		ROK		SCINT	SLPE	Mo	Cu	Pb	Zn	Ni
1	60	74	505 B	770779	11200	82800	94D08	1 11	5.0		TF	224 6		05SW	3	129	55	104	8
2	60	74	505 B	770780	11000	82800	94D08	2 11			TF	234 6		15N	5	176	59	216	16
3	60	74	505 B	770781	10800	82800	94D08	3 11			TF	234 6		30W	6	483	88	702	23
4	60	74	505 B	770782	10600	82800	94D08	3 11			TF	224 6		40W	7	302	45	957	30
5	60	74	505 B	770783	10400	82800	94D08	3 11			TF	234 6		40W	9	417	55	586	17
6	50	74	505 B	770784	10200	82800	94D08	3211193		210020BBF	X		8 5	40SW	27	244	31	108	5
7	60	74	505 B	770785	10000	82800	94D08	3 11			TF	234		40SW	14	220	19	79	5
8	60	74	505 B	770786	9800	82800	94D08	3 11			TF	224		35SW	8	282	34	225	8
9	60	74	505 B	770791	11000	82000	94D08	3 11			TF	224 6		25S	11	383	20	128	14
10	60	74	505 B	770792	10800	82000	94D08	3 11			TF	224		30S	6	204	54	201	12
11	60	74	505 B	770793	10600	82000	94D08	3 11			TF	20 6		40S	6	215	51	368	15
12	50	74	505 B	770794	10500	82000	94D08	321119		220050BBF	224			40S	7	199	25	183	7
13	50	74	505 B	770796	10400	82000	94D08	321119		260075BBF	20	7		40S	5	35	13	46	5
14	50	74	505 B	770798	10300	82000	94D08	321119		235045BBF	244	3	6 0	40S	9	91	27	123	5
15	50	74	505 B	770799	10200	82000	94D08	321119		230040BBF	224	3	6 0	40S	7	157	39	241	10
16	50	74	505 B	770800	10100	82000	94D08	321119		290095BBF	234	6	6 0	35SW	14	93	16	49	17
17	50	74	505 B	770802	10000	82000	94D08	321119		290095BBF	224	4	7 0	35SW	7	149	37	226	10
18	60	74	505 B	770803	9800	82000	94D08	3 11			TF	224		35S	7	133	31	194	8
19	60	74	505 B	770804	9600	82000	94D08	3 11			TF	224		35S	6	109	25	167	7
20	50	74	505 B	770810	10800	80800	94D08	3212192		203007BBM	226		3 0	35S	2	382	85	276	10
21	50	74	505 B	770811	10600	80800	94D08	3211183		215030PBF	226		2 0	35S	6	150	45	376	9
22	60	74	505 B	770812	10400	80800	94D08	3 11			TF	234 6		35S	5	89	26	198	7
23	50	74	505 B	770813	10200	80800	94D08	3211193		207020BBF	X		3 3	40SW	6	105	21	62	7
24	60	74	505 B	770815	10100	80800	94D08	3 11			TF	X		35S	6	109	16	24	3
25	60	74	505 B	770817	9900	80800	94D08	3 11			TF	234 4		40S	9	125	15	84	4
26	50	74	505 B	770819	9800	80800	94D08	3211193		205015BBF	234	3	3 0	45S	26	161	12	60	9
27	60	74	505 B	770820	9700	80800	94D08	3 11			TF	X		40S	11	274	16	122	7
28	50	74	505 B	770821	9600	80800	94D08	3211193		215020BBF	224			40S	8	147	16	90	7
29	50	74	505 B	770823	9500	80800	94D08	3225192		210025GBG	143		2 0	45S	1	23	12	39	411
30	60	74	505 B	770826	9400	80800	94D08	3 11			TF	122		40S	1	446	17	393	60
31	60	74	505 B	770829	10400	80000	94D08	3 1			TF	224		35S	2	214	26	82	23
32	60	74	505 B	770830	10200	80000	94D08	3 1			TF	224		35S	2	188	20	79	35
33	60	74	505 B	770831	10100	80000	94D08	3 11			TF	224		35S	3	181	25	77	32
34	60	74	505 B	770832	10000	80000	94D08	3 1			TF	224		30S	2	170	18	77	40
35	60	74	505 B	770833	9800	80000	94D08	3 1			TF	224		30S	2	195	21	82	37
36	60	74	505 B	770834	9600	80000	94D08	3 11			TF	224		30S	5	259	12	119	7
37	50	74	505 B	770835	9400	80000	94D08	312192		215030PBM	122		3 0	45SW	1	93	21	92	76
38	60	74	505 B	810490	9900	82800	94D08	3 11	5.0		TF			30SW	13	263	31	131	5
39	60	74	505 B	810491	10000	82800	94D08	3 11	5.0		TF			30SW	12	207	23	85	5
40	60	74	505 B	840967	11100	82400	94D08	221118	5.3 2		TF			10NW	4	138	59	145	30
41	60	74	505 B	840968	11000	82400	94D08	221118	5.2 2		TF			10SW	5	132	245	172	16
42	60	74	505 B	840969	10800	82400	94D08	321118	5.3 2		TF	3		35SW	4	147	228	334	22
43	60	74	505 B	840970	10600	82400	94D08	321118	5.4 2		TF	3		35SW	4	180	214	486	13
44	60	74	505 B	840971	10400	82400	94D08	3211181	5.2 2		TF	2		38SW	5	197	1167	432	14
45	60	74	505 B	840972	10200	82400	94D08	3211182	4.5 2		TF			40SW	45	254	62	186	11
46	60	74	505 B	840973	10000	82400	94D08	321118	4.4 2		TF			40SW	11	95	18	53	4
47	60	74	505 B	840974	10000	82600	94D08	321118	4.7 2		TF			40SW	16	144	19	72	4
48	60	74	505 B	840975	10000	82200	94D08	3211182	4.7 2		TF			40SW	13	117	16	88	4
49	60	74	505 B	840976	9800	82400	94D08	321118	5.2 2		TF	3		40S	18	193	27	126	7
50	60	74	505 B	840977	9600	82400	94D08	321118	5.3 2		TF			35S	17	187	25	123	7
51	60	74	505 B	840984	10800	81600	94D08	321 18	5.2 2		TF			40SW	3	133	18	107	9
52	60	74	505 B	840985	10600	81600	94D08	321 18	5.2 2		TF			40SW	4	162	21	133	10
53	60	74	505 B	840986	10400	81600	94D08	321 18	5.3 2		TF			40W	4	186	49	262	13
54	60	74	505 B	840987	10400	81625	94D08	321118	5.4 2		TF			40SW	5	65	24	101	4

RECD	TY	YE	PRJ	ID	UTM-E	UTM-N	NTS	pH	ROK	SCINT	SLPE	Mo	Cu	Pb	Zn	Ni
55	60	74	505 B	840988	10200	81600	94D08	321118 4.9 2	TF 3		40W	6	82	84	51	3
56	60	74	505 B	840989	10000	81600	94D08	3211182 3.9 2	TF		40SW	13	192	11	35	3
57	60	74	505 B	840990	10000	81400	94D08	3211182 4.2 2	TF		40SW	18	143	13	37	5
58	60	74	505 B	840991	10000	81800	94D08	3211182 4.6 2	TF		40SW	9	82	22	71	4
59	60	74	505 B	840992	9800	81600	94D08	321118 4.8 2	TF		40SW	20	198	15	43	5
60	60	74	505 B	840993	9600	81600	94D08	321118 5.0 2	TF		40SW	20	161	18	49	7
61	60	74	505 B	840994	9400	81600	94D08	321118 4.9 2	TF		40S	7	84	25	96	4
62	60	74	505 B	840999	10800	81200	94D08	321 18 5.2 2	TF		40SW	5	294	56	194	19
63	60	74	505 B	841000	10700	81200	94D08	321118 5.0 2	TF		40SW	5	145	40	162	11
64	60	74	505 B	841001	10600	81200	94D08	321118 5.0 2	TF		40SW	6	98	39	193	8
65	60	74	505 B	841002	10500	81200	94D08	321118 4.9 2	TF		40SW	10	121	35	216	6
66	60	74	505 B	841003	10400	81200	94D08	211182 4.6 2	TF		40SW	5	57	29	125	3
67	60	74	505 B	841004	10300	81200	94D08	21118 4.8 2	TF 3		40SW	3	41	20	78	2
68	60	74	505 B	841005	10200	81200	94D08	211182 4.8 2	TF		40SW	4	50	13	40	1
69	60	74	505 B	841006	10100	81200	94D08	3211182 4.4 2	TF		40SW	5	65	15	28	2
70	60	74	505 B	841007	10000	81200	94D08	3211182 4.5 2	TF 3		40SW	8	119	11	25	3
71	60	74	505 B	841008	10000	81000	94D08	3211182 4.8 2	TF		40SW	3	65	15	27	1
72	60	74	505 B	841009	10000	80800	94D08	3211182 5.0 2	TF		40SW	12	222	15	129	8
73	60	74	505 B	841010	10000	80600	94D09	3211182 5.2 2	TF 3			7	114	12	93	6
74	60	74	505 B	841011	10100	80400	94D08	321 18 5.2 2	TF		40W	4	173	18	97	31
75	60	74	505 B	841012	10000	80400	94D08	321 181 5.2 2	TF		40W	4	312	21	164	19
76	60	74	505 B	841013	10000	80200	94D08	321 18 5.0 2	TF		40W	5	174	13	98	16
77	60	74	505 B	841014	10050	80200	94D08	321118 5.4 2	TF		40W	6	183	15	88	7
78	60	74	505 B	841015	9900	80400	94D09	321 18 5.5 2	TF		40W	11	422	21	215	19
79	60	74	505 B	841016	9800	80400	94D08	321 18 5.2 2	TF		40W	8	878	14	232	14
80	60	74	505 B	841017	9700	80400	94D08	321 18 5.0 2	TF		40W	28	548	14	114	9
81	60	74	505 B	841018	9600	80400	94D08	321118 4.9 2	TF		40W	16	384	10	90	11
82	60	74	505 B	841019	9500	80400	94D08	21 18 5.0 2	TF		10SE	6	448	11	77	102
83	60	74	505 B	841020	9400	80400	94D08	21 18 5.4 2	TF		40SW	1	87	11	85	82
84	60	74	505 B	841026	10650	80400	94D08	321 18 5.6 2	TF		40S	2	198	23	108	45
85	60	74	505 B	841027	10400	80400	94D08	322 18 5.5 2	TF		40S	3	192	22	92	37
86	50	74	505 B	841028	10300	80400	94D08	321 19 5.2 210	15BBM	7 5	40S	3	129	17	79	25
87	60	74	505 B	841029	10200	80400	94D08	321 18 5.2 2	TF		40S	2	170	16	67	33
88	60	74	505 B	841030	9400	80400	94D08	321 18 5.3 2	TF		40SW	2	89	10	72	53
89	50	74	505 B	841054	9450	80025	94D08	321 16 5.0 215	20BBM		30W	2	85	10	50	22

* ALL VALUES ARE IN PPM UNLESS INDICATED TO BE IN PERCENT.

LISTING OF BAP JULY 20, 1982 PART 2 PAGE 1

RECD	TY	YE	PRJ	ID	U	Mn	Fe%	Ag	Co	Au	As	Hg	Sb	Sn	W	F	Th	Cd	Bi	V	Ba	Sr
1	60	74	505	770779	2.0	581	6.1	0.8	8	60	15	0	4	0	2	0	2	1	2	51	145	36
2	60	74	505	770780	2.0	751	7.3	0.7	12	100	15	0	4	0	2	0	2	1	2	86	141	42
3	60	74	505	770781	2.0	2575	8.7	2.5	73	340	18	0	2	0	2	0	3	6	2	67	224	64
4	60	74	505	770782	3.0	2937	6.9	1.4	57	200	18	0	2	0	2	0	2	9	2	58	211	55
5	60	74	505	770783	2.0	2192	7.9	2.2	45	260	17	0	4	0	2	0	2	6	2	53	192	138
6	50	74	505	770784	6.0	443	7.2	0.9	15	200	70	0	2	0	2	0	2	1	2	59	119	120
7	60	74	505	770785	2.0	440	8.0	0.7	15	120	18	0	3	0	2	0	2	1	2	51	101	131
8	60	74	505	770786	5.0	897	6.9	1.6	19	150	12	0	4	0	2	0	2	2	2	47	134	141
9	60	74	505	770791	2.0	2847	8.6	2.6	74	1750	11	0	5	0	2	0	2	1	2	53	100	65
10	60	74	505	770792	2.0	2714	9.6	1.3	56	320	20	0	2	0	2	0	2	1	2	46	88	78
11	60	74	505	770793	2.0	2204	7.7	1.0	55	590	21	0	2	0	2	0	2	4	2	62	285	219
12	50	74	505	770794	14.0	782	8.8	0.2	18	160	16	0	2	0	2	0	2	2	2	111	180	939
13	50	74	505	770796	2.0	126	4.1	0.3	6	90	9	0	3	0	2	0	2	1	2	18	41	27
14	50	74	505	770798	2.0	563	6.6	0.7	14	120	12	0	5	0	2	0	2	1	2	42	121	137
15	50	74	505	770799	3.0	1220	7.1	0.6	29	190	17	0	2	0	2	0	2	1	2	65	204	269
16	50	74	505	770800	2.0	170	11.7	1.1	4	270	26	0	6	0	2	0	2	1	2	60	85	30
17	50	74	505	770802	2.0	1122	6.9	0.6	26	110	14	0	3	0	2	0	2	2	2	62	187	249
18	60	74	505	770803	5.0	972	6.2	0.6	22	100	12	0	3	0	2	0	2	1	2	57	163	227
19	60	74	505	770804	4.0	783	5.2	0.5	16	70	13	0	2	0	2	0	2	1	2	46	122	159
20	50	74	505	770810	2.0	4310	5.2	1.1	39	510	9	0	2	0	2	0	3	2	4	60	609	71
21	50	74	505	770811	2.0	1448	6.2	0.7	24	150	14	0	2	0	2	0	2	2	2	55	250	47
22	60	74	505	770812	2.0	655	6.4	0.5	13	100	14	0	3	0	2	0	2	1	2	43	142	44
23	50	74	505	770813	3.0	367	9.9	1.3	5	130	23	0	4	0	2	0	2	1	2	83	83	64
24	60	74	505	770815	5.0	47	14.0	1.3	2	60	23	0	8	0	2	0	3	1	2	102	70	108
25	60	74	505	770817	2.0	236	9.9	0.1	6	120	33	0	13	0	2	0	2	3	2	59	66	31
26	50	74	505	770819	2.0	260	6.5	0.4	5	300	18	0	8	0	2	0	2	2	2	61	41	21
27	60	74	505	770820	2.0	555	9.2	0.1	15	170	21	0	11	0	2	0	2	3	2	61	64	23
28	50	74	505	770821	2.0	503	6.2	0.1	10	80	9	0	2	0	2	0	2	2	2	47	88	49
29	50	74	505	770823	10.0	354	3.6	0.1	41	5	6	0	2	0	2	0	2	2	3	84	606	159
30	60	74	505	770826	2.0	4186	5.1	0.1	36	30	10	0	6	0	2	0	3	6	5	239	490	49
31	60	74	505	770829	5.0	1301	4.7	0.1	37	50	35	0	2	0	2	0	2	3	3	100	154	252
32	60	74	505	770830	6.0	1093	4.8	0.1	31	20	31	0	2	0	2	0	2	3	3	96	185	207
33	60	74	505	770831	6.0	1131	5.2	0.1	29	40	24	0	2	0	2	0	2	3	3	103	256	208
34	60	74	505	770832	7.0	911	4.6	0.1	28	170	29	0	3	0	2	0	2	3	3	98	148	188
35	60	74	505	770833	3.0	1159	4.8	0.1	33	20	36	0	2	0	2	0	2	3	3	102	188	231
36	60	74	505	770834	2.0	426	5.2	0.3	8	180	14	0	6	0	2	0	2	2	2	45	64	37
37	50	74	505	770835	3.0	1235	6.0	0.1	31	0	15	0	2	0	2	0	2	3	3	355	594	95
38	60	74	505	810490	3.0	587	8.1	0.9	15	220	30	0	10	0	2	0	2	3	2	56	146	194
39	60	74	505	810491	2.0	493	8.6	0.3	17	120	32	0	11	0	2	0	2	3	2	55	107	143
40	60	74	505	840967	2.0	1245	9.1	0.1	25	140	26	0	11	0	2	0	2	3	2	87	191	59
41	60	74	505	840968	2.0	977	8.6	0.5	20	90	19	0	3	0	2	0	2	3	3	67	141	64
42	60	74	505	840969	2.0	1372	9.0	1.1	25	150	28	0	4	0	2	0	2	5	2	87	360	109
43	60	74	505	840970	2.0	1559	9.4	0.4	30	110	31	0	3	0	2	0	2	5	2	101	245	98
44	60	74	505	840971	2.0	1355	9.1	0.9	24	170	31	0	7	0	2	0	2	4	2	97	189	98
45	60	74	505	840972	2.0	1536	9.2	0.1	30	80	27	0	2	0	2	0	2	4	2	74	313	107
46	60	74	505	840973	2.0	187	10.4	0.1	5	130	31	0	4	0	2	0	2	3	2	69	65	41
47	60	74	505	840974	2.0	208	11.9	0.2	7	130	36	0	4	0	2	0	2	3	2	57	82	42
48	60	74	505	840975	2.0	284	8.8	0.1	7	120	29	0	3	0	2	0	2	3	2	60	67	77
49	60	74	505	840976	2.0	666	8.5	0.1	17	100	26	0	2	0	2	0	2	3	2	68	145	86
50	60	74	505	840977	2.0	697	8.3	0.1	18	90	24	0	2	0	2	0	2	3	2	66	156	78
51	60	74	505	840984	2.0	2137	5.2	0.2	49	90	9	0	2	0	2	0	2	2	3	67	194	98
52	60	74	505	840985	2.0	2546	5.8	0.3	57	330	12	0	2	0	2	0	2	3	4	70	178	84
53	60	74	505	840986	2.0	2926	6.4	0.6	66	230	16	0	2	0	2	0	2	5	3	62	284	91
54	60	74	505	840987	2.0	722	4.8	0.3	16	90	13	0	2	0	2	0	2	2	3	32	97	27

RECD	TY	YE	PRJ	ID	U	Mn	Fe%	Ag	Co	Au	As	Hg	Sb	Sn	W	F	Th	Cd	Bi	V	Ba	Sr
55	60	74	505	840988	2.0	100	10.0	0.1	2	110	35	0	4	0	2	0	2	3	2	61	48	26
56	60	74	505	840989	2.0	42	22.0	0.6	1	90	72	0	13	0	2	0	3	3	2	188	100	87
57	60	74	505	840990	2.0	146	21.4	0.6	2	140	66	0	15	0	2	0	3	3	2	204	60	60
58	60	74	505	840991	2.0	240	9.5	0.1	6	120	29	0	3	0	2	0	2	3	2	59	104	56
59	60	74	505	840992	2.0	127	16.7	0.3	2	630	48	0	4	0	2	0	3	3	2	137	92	58
60	60	74	505	840993	2.0	184	14.4	0.5	3	170	44	0	5	0	2	0	3	4	2	112	92	51
61	60	74	505	840994	2.0	519	7.4	0.3	10	130	19	0	2	0	2	0	2	3	2	52	92	36
62	60	74	505	840999	2.0	4039	7.5	1.5	67	730	2	0	2	0	34	0	3	2	3	65	275	117
63	60	74	505	841000	2.0	2608	7.5	1.6	49	460	6	0	4	0	21	0	3	1	2	65	296	103
64	60	74	505	841001	2.0	968	7.3	0.6	18	130	14	0	2	0	2	0	2	1	2	55	162	49
65	60	74	505	841002	2.0	724	8.6	0.6	18	100	14	0	3	0	2	0	2	1	2	45	227	97
66	60	74	505	841003	2.0	242	5.7	0.8	7	70	13	0	5	0	2	0	2	1	2	27	83	33
67	60	74	505	841004	2.0	139	6.3	0.6	4	60	13	0	5	0	2	0	2	1	2	34	54	20
68	60	74	505	841005	2.0	66	5.9	0.6	3	80	11	0	5	0	2	0	2	1	2	30	34	18
69	60	74	505	841006	2.0	57	8.1	0.6	2	80	15	0	8	0	2	0	2	1	2	50	42	39
70	60	74	505	841007	2.0	80	13.0	0.9	2	90	35	0	13	0	2	0	2	1	2	93	56	56
71	60	74	505	841008	2.0	51	6.7	0.3	2	90	12	0	5	0	2	0	2	1	2	45	37	39
72	60	74	505	841009	2.0	469	11.9	1.1	17	240	21	0	12	0	2	0	3	1	2	60	64	31
73	60	74	505	841010	2.0	239	8.5	0.2	8	220	12	0	6	0	2	0	2	1	2	54	126	81
74	60	74	505	841011	2.0	1631	5.4	0.3	29	60	14	0	2	0	2	0	2	1	2	81	213	209
75	60	74	505	841012	2.0	717	6.8	0.3	23	90	13	0	2	0	2	0	2	1	2	61	178	114
76	60	74	505	841013	2.0	351	5.4	0.2	9	60	8	0	2	0	2	0	2	1	2	58	90	59
77	60	74	505	841014	2.0	445	9.7	0.6	10	150	17	0	4	0	2	0	2	1	2	77	65	37
78	60	74	505	841015	2.0	881	7.5	0.3	38	170	14	0	2	0	2	0	2	1	2	63	181	59
79	60	74	505	841016	2.0	852	6.8	1.2	25	230	5	0	2	0	2	0	3	1	2	41	114	36
80	60	74	505	841017	2.0	1529	13.7	1.5	35	270	12	0	9	0	2	0	2	1	2	152	70	50
81	60	74	505	841018	2.0	803	8.7	0.9	17	130	8	0	7	0	2	0	2	1	2	101	80	70
82	60	74	505	841019	3.0	1086	5.5	0.2	36	0	4	0	2	0	2	0	2	1	2	84	123	51
83	60	74	505	841020	4.0	1035	6.1	0.1	35	10	4	0	2	0	2	0	2	1	2	246	544	111
84	60	74	505	841026	4.0	1232	5.4	0.4	34	20	52	0	2	0	2	0	2	1	2	102	197	314
85	60	74	505	841027	5.0	1524	5.5	0.3	34	30	55	0	2	0	2	0	2	1	2	113	240	300
86	50	74	505	841028	2.0	1144	4.6	0.1	22	40	37	0	2	0	2	0	2	1	2	103	206	178
87	60	74	505	841029	2.0	1239	4.6	0.1	27	30	13	0	2	0	2	0	2	1	2	95	269	231
88	60	74	505	841030	2.0	1419	5.0	0.1	26	30	7	0	2	0	2	0	2	1	2	174	319	134
89	50	74	505	841054	4.0	653	3.3	0.2	12	0	8	0	2	0	2	0	2	1	2	93	190	114

* ALL VALUES ARE IN PPM UNLESS INDICATED TO BE IN PERCENT, EXCEPT FOR HG AND AU, WHICH ARE IN PPB.

LISTING OF BAP JULY 20, 1982 PART 3 PAGE 1

RECD	TY	YE	PRJ	ID	SiO2%	Al%	Ca%	Mg%	Na%	K%	Fe%	Mn	Ti%	P%	La	In	B	Cr	Nb	Zr	Ce	ICPAu
1	60	74	505	770779	0.01	1.44	0.03	0.75	0.04	0.07	6.1	581	0.09	0.12	12	0	22	25	32	5	14	2
2	60	74	505	770780	0.02	2.45	0.07	1.13	0.04	0.09	7.3	751	0.12	0.17	14	0	22	42	39	8	14	2
3	60	74	505	770781	0.04	2.58	0.07	1.03	0.07	0.15	8.7	2575	0.10	0.22	15	0	25	18	41	7	17	2
4	60	74	505	770782	0.01	2.09	0.15	1.39	0.05	0.07	6.9	2937	0.07	0.15	11	0	21	69	34	4	9	2
5	60	74	505	770783	0.05	2.00	0.20	0.90	0.10	0.10	7.9	2192	0.10	0.19	13	0	23	17	40	7	13	2
6	50	74	505	770784	0.05	2.22	0.16	0.94	0.06	0.06	7.2	443	0.06	0.17	12	0	22	9	33	8	11	2
7	60	74	505	770785	0.05	1.93	0.09	0.77	0.07	0.05	8.0	440	0.07	0.20	12	0	24	12	36	7	9	2
8	60	74	505	770786	0.05	1.80	0.11	0.74	0.10	0.08	6.9	897	0.09	0.18	12	0	23	13	33	6	11	2
9	60	74	505	770791	0.01	1.89	0.13	1.25	0.06	0.03	8.6	2847	0.11	0.16	11	0	24	9	41	6	7	2
10	60	74	505	770792	0.02	2.09	0.13	1.02	0.19	0.07	9.6	2714	0.06	0.17	16	0	27	8	41	5	18	2
11	60	74	505	770793	0.03	2.34	0.26	1.00	0.13	0.12	7.7	2204	0.13	0.21	16	0	24	23	43	6	20	2
12	50	74	505	770794	0.04	3.12	0.65	1.21	0.10	0.20	8.8	782	0.15	0.23	11	0	24	13	46	6	9	2
13	50	74	505	770796	0.01	0.59	0.03	0.43	0.01	0.03	4.1	126	0.01	0.06	9	0	15	3	18	5	12	2
14	50	74	505	770798	0.01	1.38	0.08	0.70	0.05	0.06	6.6	563	0.06	0.14	11	0	21	14	30	5	9	2
15	50	74	505	770799	0.03	2.09	0.22	1.01	0.08	0.10	7.1	1220	0.11	0.17	11	0	22	23	38	6	10	2
16	50	74	505	770800	0.04	2.32	0.02	0.72	0.04	0.04	11.7	170	0.06	0.42	16	0	32	39	38	8	10	2
17	50	74	505	770802	0.03	1.97	0.19	0.96	0.07	0.10	6.9	1122	0.10	0.17	11	0	22	19	34	6	9	2
18	60	74	505	770803	0.03	1.75	0.17	0.86	0.06	0.08	6.2	972	0.09	0.16	10	0	20	18	33	6	8	2
19	60	74	505	770804	0.03	1.55	0.12	0.81	0.04	0.06	5.2	783	0.08	0.12	8	0	17	15	29	5	6	2
20	50	74	505	770810	0.01	2.84	0.50	1.40	0.01	0.07	5.2	4310	0.04	0.08	7	0	17	17	30	2	5	2
21	50	74	505	770811	0.01	2.42	0.12	0.98	0.06	0.06	6.2	1448	0.05	0.15	13	0	20	13	31	3	13	2
22	60	74	505	770812	0.02	1.83	0.03	0.73	0.09	0.05	6.4	655	0.04	0.16	13	0	20	12	28	6	14	2
23	50	74	505	770813	0.02	2.56	0.06	0.57	0.02	0.02	9.9	367	0.10	0.26	18	0	29	13	43	8	16	2
24	60	74	505	770815	0.03	1.31	0.02	0.35	0.10	0.02	14.0	47	0.14	0.31	20	0	34	11	44	8	12	2
25	60	74	505	770817	0.02	2.01	0.01	0.58	0.03	0.02	9.9	236	0.05	0.30	12	0	18	6	21	11	9	2
26	50	74	505	770819	0.01	1.47	0.13	0.48	0.01	0.01	6.5	260	0.11	0.11	8	0	13	30	22	8	5	2
27	60	74	505	770820	0.02	2.43	0.04	0.72	0.02	0.02	9.2	555	0.07	0.25	11	0	17	16	24	10	8	2
28	50	74	505	770821	0.01	1.92	0.05	0.89	0.03	0.04	6.2	503	0.08	0.21	9	0	15	16	22	7	6	2
29	50	74	505	770823	0.01	2.76	1.29	5.86	0.03	1.24	3.6	354	0.10	0.41	9	0	11	858	29	3	12	2
30	60	74	505	770826	0.01	3.00	0.94	2.33	0.01	0.85	5.1	4186	0.11	0.36	19	0	11	52	31	4	26	2
31	60	74	505	770829	0.04	3.66	1.03	1.43	0.03	0.07	4.7	1301	0.05	0.09	6	0	12	32	20	3	6	2
32	60	74	505	770830	0.10	3.25	1.10	1.59	0.04	0.07	4.8	1093	0.05	0.08	7	0	12	48	19	4	6	2
33	60	74	505	770831	0.07	3.85	0.70	1.55	0.04	0.04	5.2	1131	0.05	0.09	9	0	12	52	18	4	9	2
34	60	74	505	770832	0.08	3.01	1.04	1.60	0.04	0.07	4.6	911	0.05	0.09	7	0	10	55	19	4	5	2
35	60	74	505	770833	0.04	3.47	1.14	1.64	0.04	0.07	4.8	1159	0.05	0.08	6	0	10	51	20	4	5	2
36	60	74	505	770834	0.01	1.95	0.09	0.94	0.03	0.02	5.2	426	0.05	0.10	6	0	12	11	16	4	4	2
37	50	74	505	770835	0.01	3.80	1.99	4.00	0.01	1.73	6.0	1235	0.15	0.67	14	0	12	111	37	3	21	2
38	60	74	505	810490	0.01	2.24	0.15	0.81	0.10	0.07	8.1	587	0.10	0.24	12	0	18	9	25	7	11	2
39	60	74	505	810491	0.02	1.99	0.10	0.78	0.07	0.05	8.6	493	0.07	0.23	11	0	17	10	26	7	9	2
40	60	74	505	840967	0.01	2.55	0.07	1.36	0.05	0.07	9.1	1245	0.09	0.17	16	0	17	68	30	6	18	2
41	60	74	505	840968	0.01	1.87	0.05	1.10	0.07	0.08	8.6	977	0.08	0.15	15	0	20	36	27	5	14	2
42	60	74	505	840969	0.01	2.42	0.14	1.25	0.12	0.21	9.0	1372	0.12	0.19	15	0	20	50	31	5	15	2
43	60	74	505	840970	0.01	2.63	0.11	1.35	0.07	0.11	9.4	1559	0.16	0.19	14	0	19	38	36	6	12	2
44	60	74	505	840971	0.01	2.72	0.11	1.32	0.07	0.11	9.1	1355	0.15	0.19	15	0	21	37	34	6	13	2
45	60	74	505	840972	0.01	1.96	0.18	0.99	0.10	0.08	9.2	1536	0.04	0.15	12	0	21	32	26	7	11	2
46	60	74	505	840973	0.01	1.29	0.02	0.58	0.05	0.03	10.4	187	0.10	0.30	14	0	23	17	28	7	8	2
47	60	74	505	840974	0.01	1.61	0.02	0.72	0.05	0.03	11.9	208	0.08	0.29	15	0	23	14	25	9	8	2
48	60	74	505	840975	0.01	1.41	0.04	0.65	0.03	0.04	8.8	284	0.08	0.20	11	0	20	14	25	6	6	2
49	60	74	505	840976	0.01	1.95	0.09	0.92	0.06	0.05	8.5	666	0.06	0.19	12	0	20	19	24	6	9	2
50	60	74	505	840977	0.01	1.90	0.13	0.94	0.06	0.05	8.3	697	0.06	0.18	11	0	18	23	25	6	8	2
51	60	74	505	840984	0.01	2.74	0.50	1.91	0.02	0.05	5.2	2137	0.09	0.09	6	0	13	7	24	6	3	2
52	60	74	505	840985	0.01	2.53	0.35	1.78	0.02	0.04	5.8	2546	0.08	0.08	7	0	13	9	23	4	4	2
53	60	74	505	840986	0.01	2.22	0.33	1.33	0.05	0.06	6.4	2926	0.10	0.13	9	0	15	13	26	6	8	2
54	60	74	505	840987	0.01	1.09	0.11	0.59	0.03	0.04	4.8	722	0.05	0.08	9	0	12	8	18	5	8	2

RECD	TY	YE	PRJ	ID	SiO2%	Al%	Ca%	Mg%	Na%	K%	Fe%	Mn	Ti%	P%	La	In	B	Cr	Nb	Zr	Ce	ICPAu
55	60	74	505	840988	0.01	1.29	0.01	0.39	0.03	0.03	10.0	100	0.09	0.28	16	0	21	7	26	7	13	2
56	60	74	505	840989	0.01	1.45	0.02	0.31	0.16	0.02	22.0	42	0.17	0.57	23	0	26	9	7	10	10	2
57	60	74	505	840990	0.02	1.90	0.03	0.57	0.06	0.02	21.4	146	0.14	0.64	22	0	25	23	6	9	8	2
58	60	74	505	840991	0.01	1.45	0.03	0.55	0.09	0.05	9.5	240	0.06	0.26	13	0	22	11	24	6	8	2
59	60	74	505	840992	0.03	2.29	0.03	0.51	0.06	0.02	16.7	127	0.15	0.49	19	0	24	9	19	11	9	2
60	60	74	505	840993	0.02	2.39	0.03	0.56	0.06	0.03	14.4	184	0.15	0.45	17	0	26	10	25	10	9	2
61	60	74	505	840994	0.01	1.47	0.04	0.68	0.05	0.04	7.4	519	0.06	0.20	11	0	17	8	21	5	7	2
62	60	74	505	840999	0.01	2.86	0.36	1.44	0.03	0.05	7.5	4039	0.06	0.13	11	0	21	28	38	5	12	2
63	60	74	505	841000	0.01	2.29	0.17	1.13	0.06	0.05	7.5	2608	0.10	0.15	12	0	21	12	38	5	12	2
64	60	74	505	841001	0.01	1.98	0.05	0.73	0.08	0.06	7.3	968	0.04	0.20	14	0	20	13	30	4	16	2
65	60	74	505	841002	0.01	1.84	0.09	0.75	0.14	0.06	8.6	724	0.03	0.18	19	0	23	8	33	6	26	2
66	60	74	505	841003	0.02	1.07	0.01	0.50	0.07	0.04	5.7	242	0.04	0.10	12	0	17	5	26	5	15	2
67	60	74	505	841004	0.01	0.82	0.01	0.38	0.03	0.02	6.3	139	0.07	0.12	11	0	20	6	30	5	12	2
68	60	74	505	841005	0.01	0.62	0.01	0.24	0.02	0.02	5.9	66	0.06	0.12	11	0	18	6	28	6	13	2
69	60	74	505	841006	0.02	0.86	0.01	0.31	0.05	0.02	8.1	57	0.07	0.23	13	0	23	6	34	6	13	2
70	60	74	505	841007	0.03	1.37	0.02	0.37	0.06	0.02	13.0	80	0.10	0.37	17	0	29	8	39	8	12	2
71	60	74	505	841008	0.01	0.80	0.01	0.27	0.02	0.02	6.7	51	0.07	0.14	11	0	18	7	30	5	10	2
72	60	74	505	841009	0.03	2.54	0.02	0.59	0.03	0.02	11.9	469	0.05	0.32	15	0	26	9	36	12	11	2
73	60	74	505	841010	0.03	2.59	0.05	0.85	0.01	0.01	8.5	239	0.06	0.18	13	0	22	9	35	9	13	2
74	60	74	505	841011	0.01	3.13	0.43	1.29	0.03	0.07	5.4	1631	0.04	0.19	11	0	18	48	28	4	12	2
75	60	74	505	841012	0.04	4.40	0.20	1.05	0.04	0.05	6.8	717	0.05	0.20	14	0	20	20	33	15	21	2
76	60	74	505	841013	0.01	2.82	0.12	0.88	0.02	0.03	5.4	351	0.02	0.19	9	0	16	29	23	3	8	2
77	60	74	505	841014	0.05	3.33	0.04	0.88	0.03	0.01	9.7	445	0.05	0.23	13	0	24	16	36	8	10	2
78	60	74	505	841015	0.08	4.50	0.10	1.09	0.03	0.04	7.5	881	0.04	0.20	12	0	20	23	32	13	18	2
79	60	74	505	841016	0.03	3.50	0.08	0.86	0.01	0.03	6.8	852	0.03	0.26	9	0	17	16	28	8	9	2
80	60	74	505	841017	0.02	2.41	0.06	0.80	0.03	0.02	13.7	1529	0.17	0.19	15	0	27	44	46	7	9	2
81	60	74	505	841018	0.01	2.65	0.09	0.77	0.01	0.01	8.7	803	0.07	0.21	10	0	20	36	36	4	8	2
82	60	74	505	841019	0.01	2.73	0.21	2.23	0.01	0.07	5.5	1086	0.07	0.17	9	0	16	251	31	3	9	2
83	60	74	505	841020	0.01	3.66	2.35	3.98	0.02	0.93	6.1	1035	0.07	0.59	11	0	15	107	39	3	16	2
84	60	74	505	841026	0.04	3.24	1.06	1.53	0.04	0.08	5.4	1232	0.04	0.09	9	0	18	48	29	5	8	2
85	60	74	505	841027	0.06	3.61	0.75	1.73	0.03	0.07	5.5	1524	0.04	0.12	10	0	14	50	30	4	9	2
86	50	74	505	841028	0.03	3.46	0.42	1.29	0.02	0.05	4.6	1144	0.03	0.09	7	0	16	43	23	2	6	2
87	60	74	505	841029	0.03	3.28	0.55	1.52	0.02	0.06	4.6	1239	0.03	0.09	8	0	13	46	22	3	8	2
88	60	74	505	841030	0.01	2.61	1.76	2.68	0.02	0.38	5.0	1419	0.09	0.61	16	0	12	78	34	3	23	2
89	50	74	505	841054	0.01	2.28	0.38	0.85	0.02	0.06	3.3	653	0.02	0.12	5	0	10	56	17	2	5	2

* ALL VALUES ARE IN PPM UNLESS INDICATED TO BE IN PERCENT.

Appendix 3

Summary statistics for the soil survey on the BAP claims.

ARITHMETIC SUMMARY STATISTICS

BP MINERALS
SOIL SURVEY DATA
PROPERTY NAME: BAP

ELEMENTS	Mo	Cu	Pb	Zn	Ni	U	Mn	Fe	Ag	Co	Au
NO OF SAMPLES	70	80	77	80	75	22	80	78	54	71	79
DETECTION LIMIT	1.00	2.00	2.00	2.00	2.00	2.00	10.00	0.10	0.10	2.00	5.00
MINIMUM VALUE	3.00	57.00	12.00	35.00	4.00	3.00	66.00	4.70	0.30	5.00	20.00
MAXIMUM VALUE	18.00	422.00	85.00	393.00	53.00	14.00	2847.00	13.70	1.50	56.00	460.00
RANGE	15.00	365.00	73.00	358.00	49.00	11.00	2781.00	9.00	1.20	51.00	440.00
MEDIAN	6.00	161.00	21.00	101.00	10.00	4.00	751.00	7.30	0.60	20.00	120.00
MODE	5.00	65.00	21.00	79.00	7.00	3.00	2847.00	5.20	0.60	18.00	90.00
MEAN	7.51	174.81	27.43	130.30	14.11	5.05	912.24	7.56	0.70	22.49	133.67
ST DEVIATION	3.95	83.05	16.33	80.71	11.06	2.63	681.88	2.02	0.35	12.73	83.91
MEAN + 2SD	15.42	340.91	60.08	291.72	36.23	10.30	2275.99	11.59	1.40	47.95	301.50
COEFF VARIATION	0.53	0.48	0.60	0.62	0.78	0.52	0.75	0.27	0.50	0.57	0.63
SKEWNESS	1.08	1.15	1.64	1.39	1.49	2.11	1.08	0.77	0.69	0.62	1.30
KURTOSIS	0.32	1.17	2.36	1.71	1.61	4.51	0.70	0.34	-0.50	-0.20	2.09
2.5 PERCENTILE	3.00	65.00	12.00	37.00	4.00	3.00	80.00	4.80	0.30	5.00	20.00
5.0 PERCENTILE	3.00	65.00	12.00	40.00	4.00	3.00	126.00	4.80	0.30	6.00	30.00
16.5 PERCENTILE	4.00	93.00	15.00	62.00	5.00	3.00	239.00	5.40	0.30	8.00	60.00
50.0 PERCENTILE	6.00	161.00	21.00	101.00	10.00	4.00	751.00	7.30	0.60	20.00	120.00
82.2 PERCENTILE	11.00	222.00	39.00	198.00	23.00	6.00	1419.00	9.20	1.10	34.00	200.00
90.0 PERCENTILE	13.00	282.00	54.00	226.00	31.00	7.00	1631.00	9.90	1.30	38.00	240.00
95.0 PERCENTILE	16.00	382.00	59.00	276.00	37.00	10.00	2546.00	11.70	1.30	45.00	300.00
97.5 PERCENTILE	17.00	384.00	62.00	368.00	40.00	10.00	2608.00	11.90	1.50	49.00	330.00
99.0 PERCENTILE	18.00	417.00	84.00	376.00	45.00	14.00	2714.00	13.00	1.50	55.00	340.00

ELEMENTS	As	Sb	W	Cd	Bi	V	Ba	Sr	Si%	Al%	Ca%
NO OF SAMPLES	78	34	2	31	15	80	80	80	27	79	70
DETECTION LIMIT	2.00	2.00	2.00	1.00	2.00	2.00	3.00	2.00	0.01	0.01	0.01
MINIMUM VALUE	7.00	4.00	21.00	3.00	3.00	34.00	42.00	26.00	0.03	0.86	0.03
MAXIMUM VALUE	48.00	12.00	34.00	5.00	5.00	174.00	360.00	249.00	0.07	3.61	1.10
RANGE	41.00	8.00	13.00	2.00	2.00	140.00	318.00	223.00	0.04	2.75	1.07
MEDIAN	17.00	5.00	0.0	3.00	0.0	62.00	141.00	77.00	0.04	2.24	0.12
MODE	14.00	4.00	0.0	3.00	0.0	61.00	92.00	98.00	0.03	2.09	0.03
MEAN	19.85	6.15	0.0	3.32	0.0	72.54	150.35	93.42	0.04	2.24	0.24
ST DEVIATION	9.40	2.49	0.0	0.65	0.0	25.97	74.98	59.06	0.01	0.64	0.28
MEAN + 2SD	38.64	11.12	0.0	4.63	0.0	124.48	300.32	211.55	0.06	3.53	0.79
COEFF VARIATION	0.47	0.40	0.0	0.20	0.0	0.36	0.50	0.63	0.28	0.29	1.18
SKEWNESS	0.83	1.03	0.0	1.78	0.0	1.37	0.66	1.03	1.14	0.12	1.88
KURTOSIS	-0.10	-0.21	0.0	1.72	0.0	2.31	-0.31	0.10	0.71	-0.61	2.60
2.5 PERCENTILE	8.00	4.00	0.0	3.00	0.0	41.00	48.00	27.00	0.03	1.07	0.03
5.0 PERCENTILE	8.00	4.00	0.0	3.00	0.0	43.00	56.00	30.00	0.03	1.29	0.03
16.5 PERCENTILE	12.00	4.00	0.0	3.00	0.0	51.00	70.00	39.00	0.03	1.47	0.05
50.0 PERCENTILE	17.00	5.00	0.0	3.00	0.0	62.00	141.00	77.00	0.04	2.24	0.12
82.2 PERCENTILE	30.00	8.00	0.0	4.00	0.0	98.00	213.00	141.00	0.05	2.82	0.42
90.0 PERCENTILE	33.00	11.00	0.0	4.00	0.0	102.00	256.00	194.00	0.05	3.13	0.65
95.0 PERCENTILE	36.00	11.00	0.0	5.00	0.0	112.00	285.00	219.00	0.06	3.33	0.94
97.5 PERCENTILE	37.00	11.00	0.0	5.00	0.0	137.00	313.00	231.00	0.06	3.47	1.04
99.0 PERCENTILE	44.00	12.00	0.0	5.00	0.0	152.00	319.00	231.00	0.07	3.50	1.06

ARITHMETIC SUMMARY STATISTICS

BP MINERALS
SOIL SURVEY DATA
PROPERTY NAME: BAP

ELEMENTS	Mg%	Na%	K%	Ti%	P%	La	B	Cr	Nb	Zr	Ce
NO OF SAMPLES	80	63	65	74	78	78	78	78	80	60	76
DETECTION LIMIT	0.01	0.01	0.01	0.01	0.01	2.00	3.00	3.00	3.00	3.00	3.00
MINIMUM VALUE	0.35	0.03	0.03	0.04	0.09	7.00	12.00	7.00	18.00	5.00	6.00
MAXIMUM VALUE	2.23	0.10	0.21	0.14	0.49	18.00	26.00	69.00	41.00	10.00	20.00
RANGE	1.88	0.07	0.18	0.10	0.40	11.00	14.00	62.00	23.00	5.00	14.00
MEDIAN	0.89	0.05	0.06	0.07	0.18	12.00	20.00	17.00	30.00	6.00	10.00
MODE	0.94	0.03	0.07	0.05	0.19	11.00	20.00	9.00	30.00	6.00	9.00
MEAN	0.98	0.05	0.07	0.07	0.20	11.87	19.10	23.91	29.38	6.57	10.76
ST DEVIATION	0.40	0.02	0.03	0.03	0.09	2.71	3.96	16.48	6.36	1.41	3.27
MEAN + 2SD	1.77	0.10	0.14	0.13	0.37	17.30	27.03	56.87	42.10	9.38	17.31
COEFF VARIATION	0.40	0.41	0.53	0.35	0.43	0.23	0.21	0.69	0.22	0.21	0.30
SKEWNESS	0.71	0.67	2.20	0.54	1.31	0.12	-0.28	0.98	0.01	0.80	0.71
KURTOSIS	0.15	-0.52	6.13	-0.50	1.78	-0.68	-0.85	-0.19	-0.95	-0.13	-0.06
2.5 PERCENTILE	0.37	0.03	0.03	0.04	0.09	7.00	12.00	7.00	18.00	5.00	6.00
5.0 PERCENTILE	0.39	0.03	0.03	0.04	0.09	7.00	12.00	8.00	19.00	5.00	6.00
16.5 PERCENTILE	0.58	0.03	0.04	0.05	0.12	9.00	15.00	9.00	22.00	5.00	8.00
50.0 PERCENTILE	0.89	0.05	0.06	0.07	0.18	12.00	20.00	17.00	30.00	6.00	10.00
82.2 PERCENTILE	1.36	0.07	0.08	0.10	0.26	15.00	23.00	43.00	36.00	8.00	14.00
90.0 PERCENTILE	1.53	0.09	0.10	0.11	0.30	16.00	24.00	50.00	38.00	8.00	15.00
95.0 PERCENTILE	1.64	0.10	0.12	0.12	0.37	16.00	25.00	52.00	39.00	9.00	17.00
97.5 PERCENTILE	1.78	0.10	0.15	0.13	0.42	17.00	26.00	56.00	41.00	10.00	18.00
99.0 PERCENTILE	1.91	0.10	0.20	0.14	0.45	17.00	26.00	68.00	41.00	10.00	18.00

ELEMENTS	pH
NO OF SAMPLES	46
DETECTION LIMIT	0.10
MINIMUM VALUE	3.90
MAXIMUM VALUE	5.30
RANGE	1.40
MEDIAN	5.00
MODE	5.20
MEAN	4.94
ST DEVIATION	0.32
MEAN + 2SD	5.57
COEFF VARIATION	0.06
SKEWNESS	-1.18
KURTOSIS	1.22
2.5 PERCENTILE	3.90
5.0 PERCENTILE	4.20
16.5 PERCENTILE	4.60
50.0 PERCENTILE	5.00
82.2 PERCENTILE	5.20
90.0 PERCENTILE	5.20
95.0 PERCENTILE	5.30
97.5 PERCENTILE	5.30
99.0 PERCENTILE	5.30

LOGARITHMIC SUMMARY STATISTICS

BP MINERALS
SOIL SURVEY DATA
PROPERTY NAME: BAP

ELEMENTS	Mo	Cu	Pb	Zn	Ni	U	Mn	Fe	Ag	Co	Au
NO OF SAMPLES	70	80	77	80	75	22	80	78	54	71	79
DETECTION LIMIT	1.00	2.00	2.00	2.00	2.00	2.00	10.00	0.10	0.10	2.00	5.00
MINIMUM VALUE	3.00	57.00	12.00	35.00	4.00	3.00	66.00	4.70	0.30	5.00	20.00
MAXIMUM VALUE	18.00	422.00	85.00	393.00	53.00	14.00	2847.00	13.70	1.50	56.00	460.00
RANGE	15.00	365.00	73.00	358.00	49.00	11.00	2781.00	9.00	1.20	51.00	440.00
MEDIAN	6.00	161.00	21.00	101.00	10.00	4.00	751.00	7.30	0.60	20.00	120.00
MODE	5.00	65.00	21.00	79.00	7.00	3.00	2847.00	5.20	0.60	18.00	90.00
MEAN	6.64	157.56	23.92	110.18	10.92	4.59	658.60	7.31	0.62	18.74	109.23
LOG ST DEV	0.21	0.20	0.22	0.25	0.30	0.18	0.39	0.11	0.22	0.28	0.29
MEAN + 2SD	17.85	394.91	65.16	350.61	44.44	10.54	3925.49	12.27	1.72	68.05	424.51
COEFF VARIATION	0.26	0.09	0.16	0.12	0.29	0.27	0.14	0.13	-1.06	0.22	0.14
SKEWNESS	0.27	0.02	0.72	0.16	0.41	0.98	-0.58	0.21	-0.02	-0.45	-0.56
KURTOSIS	-0.74	-0.37	-0.36	-0.53	-0.83	0.67	-0.31	-0.66	-1.08	-0.72	0.25
2.5 PERCENTILE	3.00	65.00	12.00	37.00	4.00	3.00	80.00	4.80	0.30	5.00	20.00
5.0 PERCENTILE	3.00	65.00	12.00	40.00	4.00	3.00	126.00	4.80	0.30	6.00	30.00
16.5 PERCENTILE	4.00	93.00	15.00	62.00	5.00	3.00	239.00	5.40	0.30	8.00	60.00
50.0 PERCENTILE	6.00	161.00	21.00	101.00	10.00	4.00	751.00	7.30	0.60	20.00	120.00
82.2 PERCENTILE	11.00	222.00	39.00	198.00	23.00	6.00	1419.00	9.20	1.10	34.00	200.00
90.0 PERCENTILE	13.00	282.00	54.00	226.00	31.00	7.00	1631.00	9.90	1.30	38.00	240.00
95.0 PERCENTILE	16.00	382.00	59.00	276.00	37.00	10.00	2546.00	11.70	1.30	45.00	300.00
97.5 PERCENTILE	17.00	384.00	62.00	368.00	40.00	10.00	2608.00	11.90	1.50	49.00	330.00
99.0 PERCENTILE	18.00	417.00	84.00	376.00	45.00	14.00	2714.00	13.00	1.50	55.00	340.00

ELEMENTS	As	Sb	W	Cd	Bi	V	Ba	Sr	Si%	Al%	Ca%
NO OF SAMPLES	78	34	2	31	15	80	80	80	27	79	70
DETECTION LIMIT	2.00	2.00	2.00	1.00	2.00	2.00	3.00	2.00	0.01	0.01	0.01
MINIMUM VALUE	7.00	4.00	21.00	3.00	3.00	34.00	42.00	26.00	0.03	0.86	0.03
MAXIMUM VALUE	48.00	12.00	34.00	5.00	5.00	174.00	360.00	249.00	0.07	3.61	1.10
RANGE	41.00	8.00	13.00	2.00	2.00	140.00	318.00	223.00	0.04	2.75	1.07
MEDIAN	17.00	5.00	0.0	3.00	0.0	62.00	141.00	77.00	0.04	2.24	0.12
MODE	14.00	4.00	0.0	3.00	0.0	61.00	92.00	98.00	0.03	2.09	0.03
MEAN	17.84	5.73	1.00	3.27	1.00	68.65	132.28	77.47	0.04	2.14	0.14
LOG ST DEV	0.20	0.16	0.0	0.07	0.0	0.14	0.23	0.27	0.11	0.13	0.44
MEAN + 2SD	45.16	11.94	1.00	4.61	1.00	131.69	374.85	265.83	0.06	3.97	1.06
COEFF VARIATION	0.16	0.21	0.0	0.14	0.0	0.08	0.11	0.14	-0.08	0.40	-0.52
SKEWNESS	0.12	0.65	0.0	1.66	0.0	0.49	-0.15	0.14	0.72	-0.55	0.39
KURTOSIS	-0.90	-0.90	0.0	1.19	0.0	-0.16	-0.93	-0.97	-0.54	-0.05	-0.67
2.5 PERCENTILE	8.00	4.00	0.0	3.00	0.0	41.00	48.00	27.00	0.03	1.07	0.03
5.0 PERCENTILE	8.00	4.00	0.0	3.00	0.0	43.00	56.00	30.00	0.03	1.29	0.03
16.5 PERCENTILE	12.00	4.00	0.0	3.00	0.0	51.00	70.00	39.00	0.03	1.47	0.05
50.0 PERCENTILE	17.00	5.00	0.0	3.00	0.0	62.00	141.00	77.00	0.04	2.24	0.12
82.2 PERCENTILE	30.00	8.00	0.0	4.00	0.0	98.00	213.00	141.00	0.05	2.82	0.42
90.0 PERCENTILE	33.00	11.00	0.0	4.00	0.0	102.00	256.00	194.00	0.05	3.13	0.65
95.0 PERCENTILE	36.00	11.00	0.0	5.00	0.0	112.00	285.00	219.00	0.06	3.33	0.94
97.5 PERCENTILE	37.00	11.00	0.0	5.00	0.0	137.00	313.00	231.00	0.06	3.47	1.04
99.0 PERCENTILE	44.00	12.00	0.0	5.00	0.0	152.00	319.00	231.00	0.07	3.50	1.06

LOGARITHMIC SUMMARY STATISTICS

BP MINERALS
SOIL SURVEY DATA
PROPERTY NAME: BAP

ELEMENTS	Mg%	Na%	K%	Ti%	P%	La	B	Cr	Nb	Zr	Ce
NO OF SAMPLES	80	63	65	74	78	78	78	78	80	60	76
DETECTION LIMIT	0.01	0.01	0.01	0.01	0.01	2.00	3.00	3.00	3.00	3.00	3.00
MINIMUM VALUE	0.35	0.03	0.03	0.04	0.09	7.00	12.00	7.00	18.00	5.00	6.00
MAXIMUM VALUE	2.23	0.10	0.21	0.14	0.49	18.00	26.00	69.00	41.00	10.00	20.00
RANGE	1.88	0.07	0.18	0.10	0.40	11.00	14.00	62.00	23.00	5.00	14.00
MEDIAN	0.89	0.05	0.06	0.07	0.18	12.00	20.00	17.00	30.00	6.00	10.00
MODE	0.94	0.03	0.07	0.05	0.19	11.00	20.00	9.00	30.00	6.00	9.00
MEAN	0.90	0.05	0.06	0.07	0.18	11.56	18.66	19.13	28.67	6.43	10.30
LOG ST DEV	0.18	0.17	0.19	0.15	0.18	0.10	0.10	0.29	0.10	0.09	0.13
MEAN + 2SD	2.06	0.11	0.14	0.14	0.41	18.57	29.11	72.75	45.00	9.68	18.67
COEFF VARIATION	-3.97	-0.13	-0.16	-0.13	-0.24	0.10	0.08	0.23	0.07	0.11	0.13
SKEWNESS	-0.19	0.12	0.53	-0.00	0.20	-0.35	-0.62	0.27	-0.35	0.46	0.12
KURTOSIS	-0.44	-1.14	0.47	-1.01	-0.21	-0.49	-0.59	-1.20	-0.78	-0.70	-0.63
2.5 PERCENTILE	0.37	0.03	0.03	0.04	0.09	7.00	12.00	7.00	18.00	5.00	6.00
5.0 PERCENTILE	0.39	0.03	0.03	0.04	0.09	7.00	12.00	8.00	19.00	5.00	6.00
16.5 PERCENTILE	0.58	0.03	0.04	0.05	0.12	9.00	15.00	9.00	22.00	5.00	8.00
50.0 PERCENTILE	0.89	0.05	0.06	0.07	0.18	12.00	20.00	17.00	30.00	6.00	10.00
82.2 PERCENTILE	1.36	0.07	0.08	0.10	0.26	15.00	23.00	43.00	36.00	8.00	14.00
90.0 PERCENTILE	1.53	0.09	0.10	0.11	0.30	16.00	24.00	50.00	38.00	8.00	15.00
95.0 PERCENTILE	1.64	0.10	0.12	0.12	0.37	16.00	25.00	52.00	39.00	9.00	17.00
97.5 PERCENTILE	1.78	0.10	0.15	0.13	0.42	17.00	26.00	56.00	41.00	10.00	18.00
99.0 PERCENTILE	1.91	0.10	0.20	0.14	0.45	17.00	26.00	68.00	41.00	10.00	18.00

ELEMENTS	pH
NO OF SAMPLES	46
DETECTION LIMIT	0.10
MINIMUM VALUE	3.90
MAXIMUM VALUE	5.30
RANGE	1.40
MEDIAN	5.00
MODE	5.20
MEAN	4.93
LOG ST DEV	0.03
MEAN + 2SD	5.64
COEFF VARIATION	0.04
SKEWNESS	-1.37
KURTOSIS	1.94
2.5 PERCENTILE	3.90
5.0 PERCENTILE	4.20
16.5 PERCENTILE	4.60
50.0 PERCENTILE	5.00
82.2 PERCENTILE	5.20
90.0 PERCENTILE	5.20
95.0 PERCENTILE	5.30
97.5 PERCENTILE	5.30
99.0 PERCENTILE	5.30

Appendix 4

Histograms for trace element distributions.

Histrograms selected on the basis of

coefficient of variations less than 0.5

(arithmetic) or greater than 0.5 (logarithmetic)

ARITHMETIC VALUES
INTERVAL INCREMENT 20.762 NO. SAMPLES 80
PROPERTY NAME: BAP

TRUNCATED DATA SET

Cu

INTERVAL PPM		%	C%
8.72			
29.48		0.0	0.0
50.24		0.0	0.0
71.00	*****	5.0	5.0
91.76	**********	10.0	15.0
112.53	********	8.8	23.8
133.29	**********	12.5	36.3
154.05	**********	10.0	46.3
174.81	**********	10.0	56.3
195.57	**********	13.8	70.0
216.34	**********	10.0	80.0
237.10	**	2.5	82.5
257.86	**	2.5	85.0
278.62	***	3.8	88.8
299.38	**	2.5	91.3
320.15	**	2.5	93.8
340.91		0.0	93.8
361.67		0.0	93.8
382.43	*	1.3	95.0
403.19	**	2.5	97.5
423.96	**	2.5	100.0
444.72		0.0	100.0
465.48		0.0	100.0
486.24		0.0	100.0
507.00		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 0.505 NO. SAMPLES 78
PROPERTY NAME: BAP

TRUNCATED DATA SET

Fe

INTERVAL PPM		%	C%
1.50			
2.00		0.0	0.0
2.51		0.0	0.0
3.01		0.0	0.0
3.52		0.0	0.0
4.02		0.0	0.0
4.53		0.0	0.0
5.03	******	6.4	6.4
5.54	**********	14.1	20.5
6.04	*****	5.1	25.6
6.55	**********	11.5	37.2
7.05	********	9.0	46.2
7.56	**********	10.3	56.4
8.06	***	3.8	60.3
8.56	******	6.4	66.7
9.07	**********	11.5	78.2
9.57	*******	7.7	85.9
10.08	******	6.4	92.3
10.58	*	1.3	93.6
11.09		0.0	93.6
11.59		0.0	93.6
12.10	***	3.8	97.4
12.60		0.0	97.4
13.11	*	1.3	98.7
13.61		0.0	98.7

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 2.350 NO. SAMPLES 78
PROPERTY NAME: BAP

TRUNCATED DATA SET

As

INTERVAL PPM		%	C%
1.05			
		0.0	0.0
3.40			
		0.0	0.0
5.75			
	*****	5.1	5.1
8.10			
	******	6.4	11.5
10.45			
	**********	11.5	23.1
12.80			
	**********	23.1	46.2
15.15			
	******	6.4	52.6
17.50			
	*******	7.7	60.3
19.85			
	*****	5.1	65.4
22.20			
	*****	5.1	70.5
24.55			
	***	3.8	74.4
26.90			
	******	6.4	80.8
29.24			
	******	6.4	87.2
31.59			
	**	2.6	89.7
33.94			
	******	6.4	96.2
36.29			
	*	1.3	97.4
38.64			
		0.0	97.4
40.99			
		0.0	97.4
43.34			
	*	1.3	98.7
45.69			
	*	1.3	100.0
48.04			
		0.0	100.0
50.39			
		0.0	100.0
52.74			
		0.0	100.0
55.09			
		0.0	100.0
57.44			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 1.000 NO. SAMPLES 34
PROPERTY NAME: BAP

TRUNCATED DATA SET

Sb

INTERVAL PPM		%	C%
1.00		0.0	0.0
2.00		0.0	0.0
3.00		0.0	0.0
4.00	**********	35.3	35.3
5.00	**********	20.6	55.9
6.00	**********	11.8	67.6
7.00	*****	5.9	73.5
8.00	**********	8.8	82.4
9.00	**	2.9	85.3
10.00	**	2.9	88.2
11.00	**********	8.8	97.1
12.00	**	2.9	100.0
13.00		0.0	100.0
14.00		0.0	100.0
15.00		0.0	100.0
16.00		0.0	100.0
17.00		0.0	100.0
18.00		0.0	100.0
19.00		0.0	100.0
20.00		0.0	100.0
21.00		0.0	100.0
22.00		0.0	100.0
23.00		0.0	100.0
24.00		0.0	100.0
25.00		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 1.000 NO. SAMPLES 31
PROPERTY NAME: BAP

TRUNCATED DATA SET

Cd

INTERVAL PPM		%	C%
1.00			
		0.0	0.0
2.00			
		0.0	0.0
3.00	**********	77.4	77.4
4.00	**********	12.9	90.3
5.00	*********	9.7	100.0
6.00		0.0	100.0
7.00		0.0	100.0
8.00		0.0	100.0
9.00		0.0	100.0
10.00		0.0	100.0
11.00		0.0	100.0
12.00		0.0	100.0
13.00		0.0	100.0
14.00		0.0	100.0
15.00		0.0	100.0
16.00		0.0	100.0
17.00		0.0	100.0
18.00		0.0	100.0
19.00		0.0	100.0
20.00		0.0	100.0
21.00		0.0	100.0
22.00		0.0	100.0
23.00		0.0	100.0
24.00		0.0	100.0
25.00		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 6.493 NO. SAMPLES 80
PROPERTY NAME: BAP

TRUNCATED DATA SET

V

INTERVAL PPM		%	C%
1.11			
		0.0	0.0
7.60			
		0.0	0.0
14.10			
		0.0	0.0
20.59			
		0.0	0.0
27.08			
		0.0	0.0
33.58			
	*	1.3	1.3
40.07			
	**********	10.0	11.3
46.56			
	**********	10.0	21.3
53.06			
	**********	15.0	36.3
59.55			
	**********	20.0	56.3
66.04			
	*******	7.5	63.8
72.54			
	**	2.5	66.3
79.03			
	*****	5.0	71.3
85.52			
	***	3.8	75.0
92.02			
	*******	7.5	82.5
98.51			
	**********	10.0	92.5
105.00			
	*	1.3	93.8
111.50			
	**	2.5	96.3
117.99			
		0.0	96.3
124.48			
		0.0	96.3
130.98			
	*	1.3	97.5
137.47			
		0.0	97.5
143.97			
		0.0	97.5
150.46			
	*	1.3	98.8
156.95			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 18.746 NO. SAMPLES 80
PROPERTY NAME: BAP

TRUNCATED DATA SET

Ba

INTERVAL PPM		%	C%
0.38		0.0	0.0
19.13		0.0	0.0
37.87	*****	5.0	5.0
56.62	**********	12.5	17.5
75.37	**********	13.8	31.3
94.11	*******	7.5	38.8
112.86	*******	7.5	46.3
131.60	**********	10.0	56.3
150.35	*****	5.0	61.3
169.10	*******	7.5	68.8
187.84	**********	11.3	80.0
206.59	***	3.8	83.8
225.33	**	2.5	86.3
244.08	***	3.8	90.0
262.82	**	2.5	92.5
281.57	***	3.8	96.3
300.32	**	2.5	98.8
319.06		0.0	98.8
337.81		0.0	98.8
356.55	*	1.3	100.0
375.30		0.0	100.0
394.05		0.0	100.0
412.79		0.0	100.0
431.54		0.0	100.0
450.28			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 0.010 NO. SAMPLES 27
PROPERTY NAME: BAP

TRUNCATED DATA SET

Si%

INTERVAL PPM		%	C%
0.01		0.0	0.0
0.02		0.0	0.0
0.03	**********	48.1	48.1
0.04	**********	25.9	74.1
0.05	**********	18.5	92.6
0.06	***	3.7	96.3
0.07	***	3.7	100.0
0.08		0.0	100.0
0.09		0.0	100.0
0.10		0.0	100.0
0.11		0.0	100.0
0.12		0.0	100.0
0.13		0.0	100.0
0.14		0.0	100.0
0.15		0.0	100.0
0.16		0.0	100.0
0.17		0.0	100.0
0.18		0.0	100.0
0.19		0.0	100.0
0.20		0.0	100.0
0.21		0.0	100.0
0.22		0.0	100.0
0.23		0.0	100.0
0.24		0.0	100.0
0.25		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 0.161 NO. SAMPLES 79
PROPERTY NAME: BAP

TRUNCATED DATA SET

A1%

INTERVAL PPM		%	C%
0.31			
		0.0	0.0
0.47			
		0.0	0.0
0.63			
		0.0	0.0
0.79			
	*	1.3	1.3
0.95			
	**	2.5	3.8
1.11			
		0.0	3.8
1.28			
	*******	7.6	11.4
1.44			
	*******	7.6	19.0
1.60			
	**	2.5	21.5
1.76			
	********	8.9	30.4
1.92			
	**********	12.7	43.0
2.08			
	*******	7.6	50.6
2.24			
	*******	7.6	58.2
2.40			
	**********	11.4	69.6
2.56			
	*******	7.6	77.2
2.72			
	*******	7.6	84.8
2.88			
	**	2.5	87.3
3.05			
	**	2.5	89.9
3.21			
	*****	5.1	94.9
3.37			
	***	3.8	98.7
3.53			
	*	1.3	100.0
3.69			
		0.0	100.0
3.85			
		0.0	100.0
4.01			
		0.0	100.0
4.17			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES — TRUNCATED DATA SET

INTERVAL INCREMENT 0.100 NO. SAMPLES 80

PROPERTY NAME: BAP

Mg%

INTERVAL PPM		%	C%
0.10		0.0	0.0
0.20		0.0	0.0
0.30	*****	5.0	5.0
0.40	**	2.5	7.5
0.50	**********	12.5	20.0
0.60	**	2.5	22.5
0.70	**********	15.0	37.5
0.80	**********	12.5	50.0
0.90	**********	10.0	60.0
1.00	*******	7.5	67.5
1.10	***	3.8	71.3
1.20	******	6.3	77.5
1.30	******	6.3	83.8
1.40	***	3.8	87.5
1.50	*****	5.0	92.5
1.60	**	2.5	95.0
1.70	**	2.5	97.5
1.80		0.0	97.5
1.90	*	1.3	98.8
2.00		0.0	98.8
2.10		0.0	98.8
2.20	*	1.3	100.0
2.30		0.0	100.0
2.40		0.0	100.0
2.50			

0 10 20 30 40 50 60 70 80 90 100

% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES — TRUNCATED DATA SET

INTERVAL INCREMENT 0.010 NO. SAMPLES 63

PROPERTY NAME: BAP

Na%

INTERVAL PPM		%	C%
0.01		0.0	0.0
0.02		0.0	0.0
0.03	*************************	25.4	25.4
0.04	***************	15.9	41.3
0.05	************	12.7	54.0
0.06	*****************	17.5	71.4
0.07	************	12.7	84.1
0.08	***	3.2	87.3
0.09	***	3.2	90.5
0.10	*********	9.5	100.0
0.11		0.0	100.0
0.12		0.0	100.0
0.13		0.0	100.0
0.14		0.0	100.0
0.15		0.0	100.0
0.16		0.0	100.0
0.17		0.0	100.0
0.18		0.0	100.0
0.19		0.0	100.0
0.20		0.0	100.0
0.21		0.0	100.0
0.22		0.0	100.0
0.23		0.0	100.0
0.24		0.0	100.0
0.25		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100

% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 0.010 NO. SAMPLES 74
PROPERTY NAME: BAP

TRUNCATED DATA SET

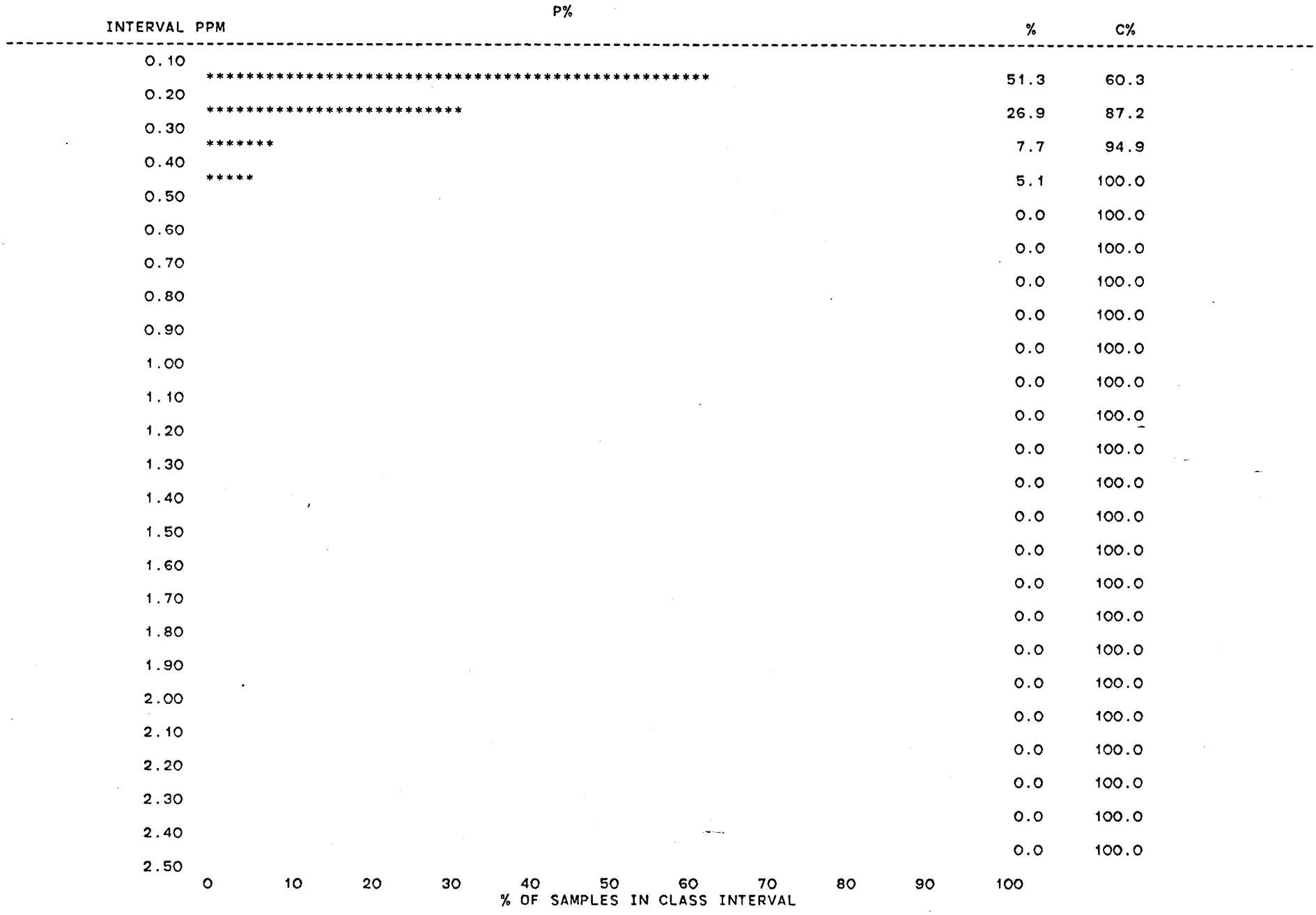
INTERVAL PPM	T1%	%	C%
0.01		0.0	0.0
0.02		0.0	0.0
0.03		0.0	0.0
0.04	**********	12.2	12.2
0.05	**********	16.2	28.4
0.06	**********	14.9	43.2
0.07	**********	13.5	56.8
0.08	********	8.1	64.9
0.09	*********	9.5	74.3
0.10	**********	13.5	87.8
0.11	*****	5.4	93.2
0.12	**	2.7	95.9
0.13	*	1.4	97.3
0.14	**	2.7	100.0
0.15		0.0	100.0
0.16		0.0	100.0
0.17		0.0	100.0
0.18		0.0	100.0
0.19		0.0	100.0
0.20		0.0	100.0
0.21		0.0	100.0
0.22		0.0	100.0
0.23		0.0	100.0
0.24		0.0	100.0
0.25		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES — TRUNCATED DATA SET

INTERVAL INCREMENT 0.100 NO. SAMPLES 78

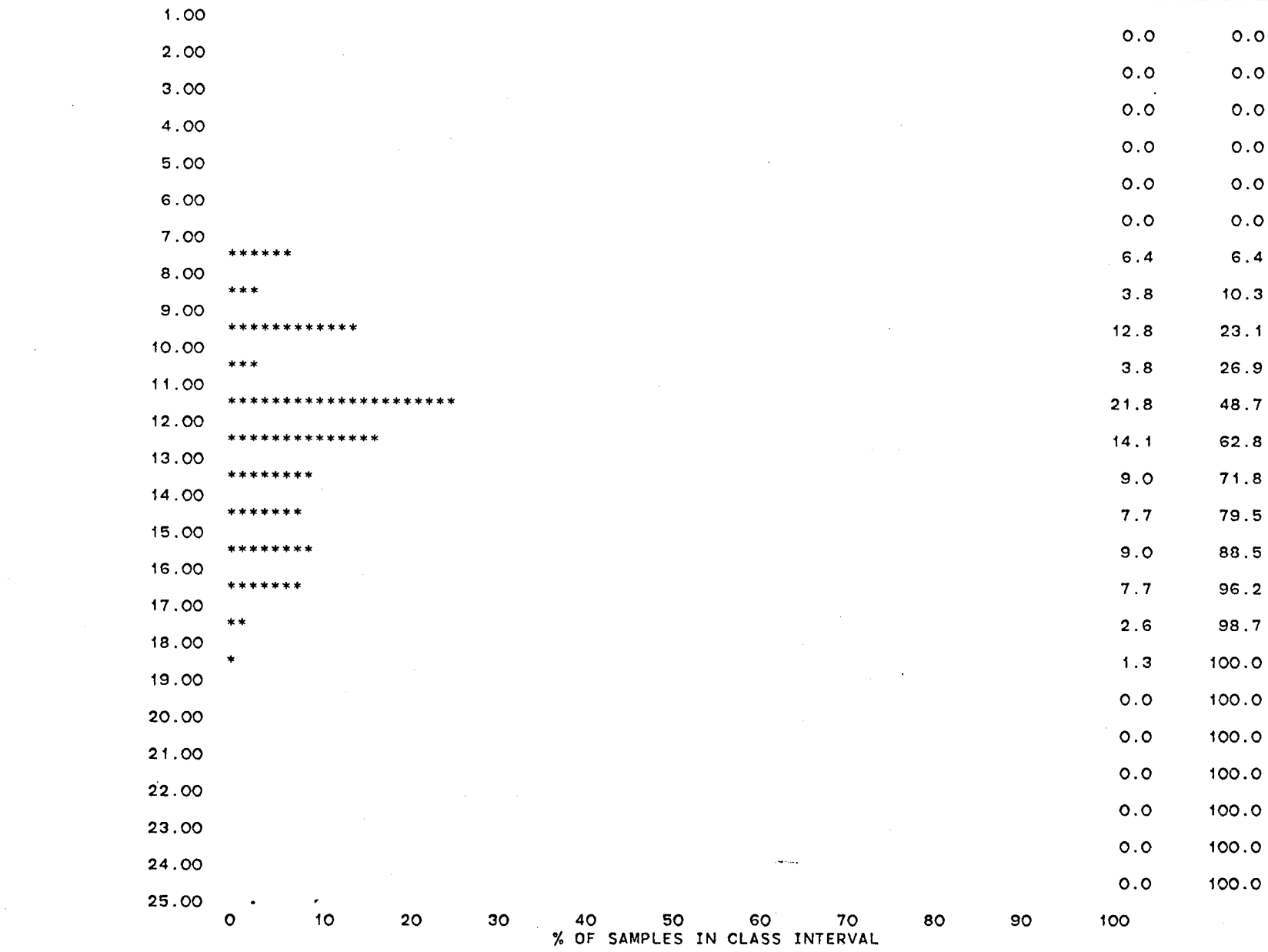
PROPERTY NAME: BAP



ARITHMETIC VALUES
INTERVAL INCREMENT 1.000 NO. SAMPLES 78
PROPERTY NAME: BAP

TRUNCATED DATA SET

La



ARITHMETIC VALUES
INTERVAL INCREMENT 0.991 NO. SAMPLES 78
PROPERTY NAME: BAP

TRUNCATED DATA SET

B

INTERVAL PPM		%	C%
7.21			
8.20		0.0	0.0
9.20		0.0	0.0
10.19		0.0	0.0
11.18		0.0	0.0
12.17	********	9.0	9.0
13.16	*****	5.1	14.1
14.15	*	1.3	15.4
15.14	*****	5.1	20.5
16.13	***	3.8	24.4
17.12	**********	10.3	34.6
18.11	********	9.0	43.6
19.10	*	1.3	44.9
20.09	***************	15.4	60.3
21.08	********	9.0	69.2
22.07	********	9.0	78.2
23.07	*******	7.7	85.9
24.06	*******	7.7	93.6
25.05	**	2.6	96.2
26.04	***	3.8	100.0
27.03		0.0	100.0
28.02		0.0	100.0
29.01		0.0	100.0
30.00		0.0	100.0
30.99		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 1.591 NO. SAMPLES 80
PROPERTY NAME: BAP

TRUNCATED DATA SET

Nb

INTERVAL PPM		%	C%
10.29			
11.88		0.0	0.0
13.47		0.0	0.0
15.06		0.0	0.0
16.65		0.0	0.0
18.24	***	3.8	3.8
19.83	***	3.8	7.5
21.42	*****	5.0	12.5
23.01	*******	7.5	20.0
24.60	*****	5.0	25.0
26.19	**********	12.5	37.5
27.78	*	1.3	38.8
29.37	**********	10.0	48.8
30.97	********	8.8	57.5
32.56	*******	7.5	65.0
34.15	**********	12.5	77.5
35.74	*	1.3	78.8
37.33	*******	7.5	86.3
38.92	*****	5.0	91.3
40.51	*****	5.0	96.3
42.10	***	3.8	100.0
43.69		0.0	100.0
45.28		0.0	100.0
46.87		0.0	100.0
48.46		0.0	100.0

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES — TRUNCATED DATA SET

INTERVAL INCREMENT 1.000 NO. SAMPLES 60

PROPERTY NAME: BAP

Zr

INTERVAL PPM		%	C%
1.00		0.0	0.0
2.00		0.0	0.0
3.00		0.0	0.0
4.00		0.0	0.0
5.00	************************	25.0	25.0
6.00	*********************************	33.3	58.3
7.00	**********	16.7	75.0
8.00	**********	15.0	90.0
9.00	*****	5.0	95.0
10.00	*****	5.0	100.0
11.00		0.0	100.0
12.00		0.0	100.0
13.00		0.0	100.0
14.00		0.0	100.0
15.00		0.0	100.0
16.00		0.0	100.0
17.00		0.0	100.0
18.00		0.0	100.0
19.00		0.0	100.0
20.00		0.0	100.0
21.00		0.0	100.0
22.00		0.0	100.0
23.00		0.0	100.0
24.00		0.0	100.0
25.00		0.0	100.0

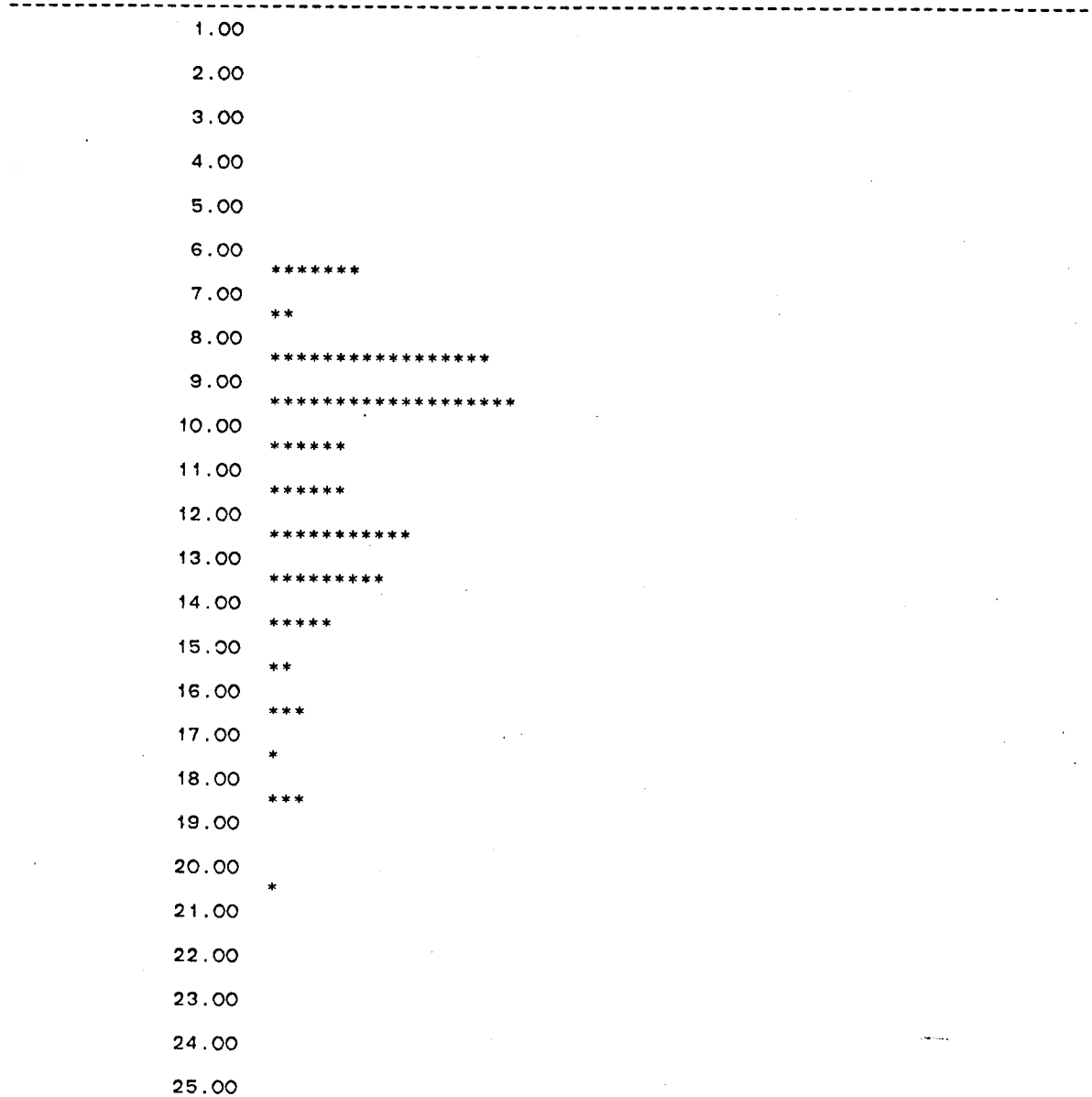
0 10 20 30 40 50 60 70 80 90 100

% OF SAMPLES IN CLASS INTERVAL

ARITHMETIC VALUES
INTERVAL INCREMENT 1.000 NO. SAMPLES 76
PROPERTY NAME: BAP

TRUNCATED DATA SET

Ce



%	C%
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0
7.9	7.9
2.6	10.5
17.1	27.6
19.7	47.4
6.6	53.9
6.6	60.5
11.8	72.4
9.2	81.6
5.3	86.8
2.6	89.5
3.9	93.4
1.3	94.7
3.9	98.7
0.0	98.7
1.3	100.0
0.0	100.0
0.0	100.0
0.0	100.0
0.0	100.0

ARITHMETIC VALUES
INTERVAL INCREMENT 0.079 NO. SAMPLES 46
PROPERTY NAME: BAP

TRUNCATED DATA SET

pH

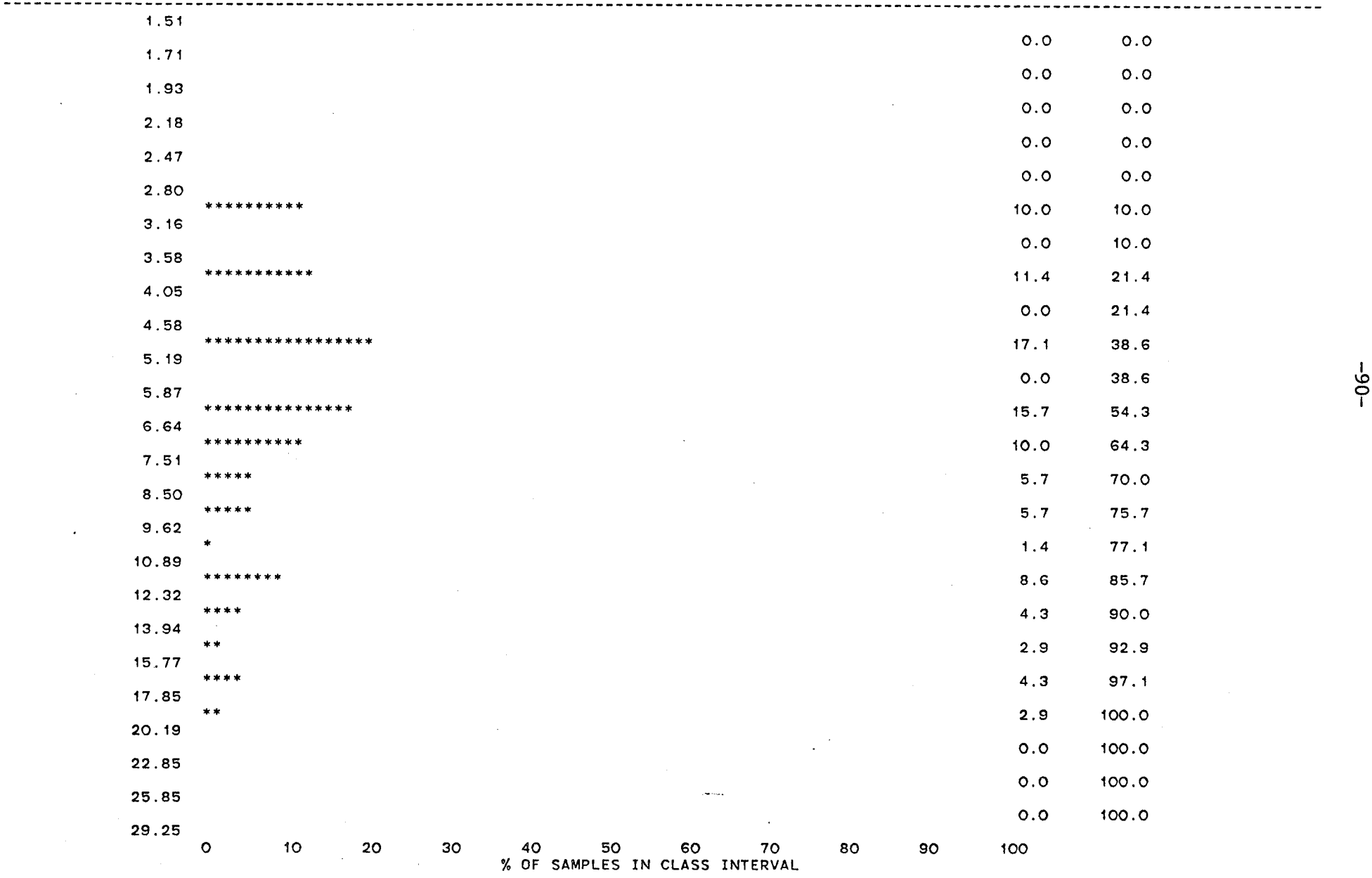
INTERVAL PPM		%	C%
3.99			
		0.0	2.2
4.07			
		0.0	2.2
4.15			
	**	2.2	4.3
4.23			
		0.0	4.3
4.30			
		0.0	4.3
4.38			
	****	4.3	8.7
4.46			
	****	4.3	13.0
4.54			
	****	4.3	17.4
4.62			
	****	4.3	21.7
4.70			
		0.0	21.7
4.78			
	********	8.7	30.4
4.86			
	********	8.7	39.1
4.94			
	**********	23.9	63.0
5.02			
		0.0	63.0
5.10			
		0.0	63.0
5.18			
	**********	26.1	89.1
5.26			
	**********	10.9	100.0
5.34			
		0.0	100.0
5.41			
		0.0	100.0
5.49			
		0.0	100.0
5.57			
		0.0	100.0
5.65			
		0.0	100.0
5.73			
		0.0	100.0
5.81			
		0.0	100.0
5.89			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.054 NO.SAMPLES 70
PROPERTY NAME: BAP

TRUNCATED DATA SET

Mo



LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.054 NO.SAMPLES 77
PROPERTY NAME: BAP

TRUNCATED DATA SET

Pb

INTERVAL PPM		%	C%
5.32			
		0.0	0.0
6.03			
		0.0	0.0
6.84			
		0.0	0.0
7.75			
		0.0	0.0
8.78			
		0.0	0.0
9.95			
		0.0	0.0
11.28			
	*****	5.2	5.2
12.79			
	*******	7.8	13.0
14.49			
	**********	15.6	28.6
16.43			
	*********	9.1	37.7
18.62			
	**********	14.3	51.9
21.10			
	*****	5.2	57.1
23.92			
	**********	13.0	70.1
27.11			
	*	1.3	71.4
30.73			
	*****	5.2	76.6
34.83			
	*****	5.2	81.8
39.48			
	*	1.3	83.1
44.75			
	***	3.9	87.0
50.72			
	******	6.5	93.5
57.48			
	***	3.9	97.4
65.16			
		0.0	97.4
73.85			
		0.0	97.4
83.70			
	**	2.6	100.0
94.87			
		0.0	100.0
107.53			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.063 NO.SAMPLES 80
PROPERTY NAME: BAP

TRUNCATED DATA SET

Zn

INTERVAL PPM		%	C%
19.41			
		0.0	0.0
22.43			
		0.0	0.0
25.92			
		0.0	0.0
29.96			
		0.0	0.0
34.62			
	*****	5.0	5.0
40.01			
	**	2.5	7.5
46.24			
	******	6.3	13.8
53.44			
	*	1.3	15.0
61.76			
	***	3.8	18.8
71.38			
	**********	13.8	32.5
82.49			
	**********	12.5	45.0
95.33			
	**********	10.0	55.0
110.17			
	********	8.8	63.8
127.33			
	******	6.3	70.0
147.15			
	***	3.8	73.8
170.06			
	*******	7.5	81.3
196.53			
	********	8.8	90.0
227.13			
	***	3.8	93.8
262.50			
	*	1.3	95.0
303.36			
	*	1.3	96.3
350.59			
	***	3.8	100.0
405.18			
		0.0	100.0
468.26			
		0.0	100.0
541.16			
		0.0	100.0
625.42			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES — TRUNCATED DATA SET

INTERVAL(STDV/F) 0.076 NO.SAMPLES 75
PROPERTY NAME: BAP

N1

INTERVAL PPM		%	C%
1.33			
		0.0	0.0
1.59			
		0.0	0.0
1.89			
		0.0	0.0
2.25			
		0.0	0.0
2.69			
		0.0	0.0
3.20			
		0.0	0.0
3.81			
	*********	9.3	9.3
4.55			
	**********	10.7	20.0
5.42			
	**	2.7	22.7
6.46			
	**********	14.7	37.3
7.69			
	**********	12.0	49.3
9.17			
	*****	5.3	54.7
10.92			
	********	8.0	62.7
13.02			
	*****	5.3	68.0
15.51			
	******	6.7	74.7
18.49			
	******	6.7	81.3
22.03			
	****	4.0	85.3
26.26			
	****	4.0	89.3
31.29			
	******	6.7	96.0
37.29			
	*	1.3	97.3
44.44			
	*	1.3	98.7
52.95			
	*	1.3	100.0
63.10			
		0.0	100.0
75.20			
		0.0	100.0
89.62			

0 10 20 30 40 50 60 70 80 90 100

% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.045 NO.SAMPLES 22
PROPERTY NAME: BAP

TRUNCATED DATA SET

U

INTERVAL PPM		%	C%
1.32			
		0.0	0.0
1.47			
		0.0	0.0
1.63			
		0.0	0.0
1.80			
		0.0	0.0
2.00			
		0.0	0.0
2.22			
		0.0	0.0
2.46			
		0.0	0.0
2.73			
	**********	31.8	31.8
3.03			
		0.0	31.8
3.36			
		0.0	31.8
3.73			
	**********	18.2	50.0
4.14			
		0.0	50.0
4.59			
	**********	22.7	72.7
5.10			
		0.0	72.7
5.65			
	**********	13.6	86.4
6.27			
		0.0	86.4
6.96			
	****	4.5	90.9
7.72			
		0.0	90.9
8.57			
		0.0	90.9
9.50			
	****	4.5	95.5
10.54			
		0.0	95.5
11.70			
		0.0	95.5
12.97			
	****	4.5	100.0
14.39			
		0.0	100.0
15.97			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.097 NO.SAMPLES 80
PROPERTY NAME: BAP

TRUNCATED DATA SET

Mn

INTERVAL PPM		%	C%
45.26			
		0.0	0.0
56.58	*	1.3	1.3
70.72	*	1.3	2.5
88.40	*	1.3	3.8
110.50	**	2.5	6.3
138.12	***	3.8	10.0
172.65	***	3.8	13.8
215.81	******	6.3	20.0
269.77	*	1.3	21.3
337.21	***	3.8	25.0
421.51	**********	10.0	35.0
526.88	*******	7.5	42.5
658.60	***********	11.3	53.8
823.25	********	8.8	62.5
1029.06	***************	15.0	77.5
1286.32	***********	11.3	88.8
1607.89	*	1.3	90.0
2009.86	***	3.8	93.8
2512.31	******	6.3	100.0
3140.38		0.0	100.0
3925.46		0.0	100.0
4906.82		0.0	100.0
6133.50		0.0	100.0
7666.85		0.0	100.0
9583.53			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.055 NO.SAMPLES 54
PROPERTY NAME: BAP

TRUNCATED DATA SET

Ag

INTERVAL PPM		%	C%
0.13			
		0.0	0.0
0.15			
		0.0	0.0
0.17			
		0.0	0.0
0.20			
		0.0	0.0
0.22			
		0.0	0.0
0.25			
		0.0	0.0
0.29			
	**********	22.2	22.2
0.33			
		0.0	22.2
0.37			
	*****	5.6	27.8
0.42			
		0.0	27.8
0.48			
	*******	7.4	35.2
0.54			
	**********	22.2	57.4
0.62			
	*******	7.4	64.8
0.70			
		0.0	64.8
0.80			
	**********	13.0	77.8
0.91			
	*	1.9	79.6
1.03			
	*******	7.4	87.0
1.17			
	*******	7.4	94.4
1.33			
	*****	5.6	100.0
1.51			
		0.0	100.0
1.72			
		0.0	100.0
1.95			
		0.0	100.0
2.22			
		0.0	100.0
2.52			
		0.0	100.0
2.86			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.070 NO.SAMPLES 71
PROPERTY NAME: BAP

TRUNCATED DATA SET

Co

INTERVAL PPM		%	C%
2.71			
		0.0	0.0
3.18			
		0.0	0.0
3.74			
		0.0	0.0
4.39			
	****	4.2	4.2
5.16			
	****	4.2	8.5
6.07			
	****	4.2	12.7
7.13			
	****	4.2	16.9
8.37			
	*	1.4	18.3
9.84			
	****	4.2	22.5
11.56			
	****	4.2	26.8
13.58			
	*******	7.0	33.8
15.95			
	**********	14.1	47.9
18.74			
	*****	5.6	53.5
22.02			
	********	8.5	62.0
25.87			
	**********	12.7	74.6
30.40			
	*********	9.9	84.5
35.71			
	********	8.5	93.0
41.96			
	****	4.2	97.2
49.30			
	**	2.8	100.0
57.92			
		0.0	100.0
68.05			
		0.0	100.0
79.95			
		0.0	100.0
93.93			
		0.0	100.0
110.35			
		0.0	100.0
129.65			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES — TRUNCATED DATA SET

INTERVAL(STDV/F) 0.074 NO.SAMPLES 79

PROPERTY NAME: BAP

Au

INTERVAL PPM		%	C%
14.26		0.0	0.0
16.89	***	3.8	3.8
20.02		0.0	3.8
23.72		0.0	3.8
28.11	*****	5.1	8.9
33.30		0.0	8.9
39.46	**	2.5	11.4
46.76	*	1.3	12.7
55.41	******	6.3	19.0
65.65	**	2.5	21.5
77.79	**********	16.5	38.0
92.18	******	6.3	44.3
109.23	**********	11.4	55.7
129.43	**********	15.2	70.9
153.36	********	8.9	79.7
181.72	***	3.8	83.5
215.33	******	6.3	89.9
255.15	*****	5.1	94.9
302.34	***	3.8	98.7
358.25		0.0	98.7
424.50	*	1.3	100.0
503.01		0.0	100.0
596.03		0.0	100.0
706.25		0.0	100.0
836.86			

0 10 20 30 40 50 60 70 80 90 100

% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.067 NO.SAMPLES 80
PROPERTY NAME: BAP

TRUNCATED DATA SET

Sr

INTERVAL PPM		%	C%
12.19			
		0.0	0.0
14.22			
		0.0	0.0
16.59			
		0.0	0.0
19.35			
		0.0	0.0
22.58			
	*	1.3	1.3
26.34			
	***	3.8	5.0
30.73			
	***	3.8	8.8
35.85			
	**********	10.0	18.8
41.82			
	*****	5.0	23.8
48.79			
	**********	11.3	35.0
56.92			
	**********	11.3	46.3
66.40			
	***	3.8	50.0
77.47			
	*******	7.5	57.5
90.38			
	********	8.8	66.3
105.44			
	**********	10.0	76.3
123.01			
	*******	7.5	83.8
143.50			
	**	2.5	86.3
167.42			
	***	3.8	90.0
195.31			
	******	6.3	96.3
227.86			
	***	3.8	100.0
265.83			
		0.0	100.0
310.12			
		0.0	100.0
361.80			
		0.0	100.0
422.09			
		0.0	100.0
492.42			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.111 NO.SAMPLES 70
PROPERTY NAME: BAP

TRUNCATED DATA SET

Ca%

INTERVAL PPM		%	C%
0.01		0.0	0.0
0.01		0.0	0.0
0.01		0.0	0.0
0.01		0.0	0.0
0.02		0.0	0.0
0.02		0.0	0.0
0.03	**********	10.0	10.0
0.04	*****	5.7	15.7
0.05	********	8.6	24.3
0.06	*******	7.1	31.4
0.08	**********	10.0	41.4
0.11	***************	15.7	57.1
0.14	********	8.6	65.7
0.18	********	8.6	74.3
0.23	*	1.4	75.7
0.30	*****	5.7	81.4
0.38	**	2.9	84.3
0.49	****	4.3	88.6
0.64	****	4.3	92.9
0.82	*****	5.7	98.6
1.06	*	1.4	100.0
1.37		0.0	100.0
1.77		0.0	100.0
2.29		0.0	100.0
2.95			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.048 NO.SAMPLES 65
PROPERTY NAME: BAP

TRUNCATED DATA SET

K%

INTERVAL PPM		%	C%
0.02			
		0.0	0.0
0.02			
		0.0	0.0
0.02			
		0.0	0.0
0.02			
		0.0	0.0
0.02			
		0.0	0.0
0.03			
	**********	12.3	12.3
0.03			
		0.0	12.3
0.03			
		0.0	12.3
0.04			
	**********	13.8	26.2
0.04			
		0.0	26.2
0.05			
	**********	16.9	43.1
0.05			
		0.0	43.1
0.06			
	**********	13.8	56.9
0.07			
	**********	20.0	76.9
0.07			
	*******	7.7	84.6
0.08			
	*	1.5	86.2
0.09			
	****	4.6	90.8
0.10			
	***	3.1	93.8
0.12			
	*	1.5	95.4
0.13			
		0.0	95.4
0.14			
	*	1.5	96.9
0.16			
		0.0	96.9
0.18			
		0.0	96.9
0.20			
	***	3.1	100.0
0.22			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

LOGARITHMIC VALUES
INTERVAL(STDV/F) 0.073 NO.SAMPLES 78
PROPERTY NAME: BAP

TRUNCATED DATA SET

Cr

INTERVAL PPM		%	C%
2.58		0.0	0.0
3.05		0.0	0.0
3.60		0.0	0.0
4.26		0.0	0.0
5.03		0.0	0.0
5.95	***	3.8	3.8
7.03	******	6.4	10.3
8.30	**********	10.3	20.5
9.81	******	6.4	26.9
11.60	***********	11.5	38.5
13.70	**********	10.3	48.7
16.19	********	9.0	57.7
19.13	*	1.3	59.0
22.61	*******	7.7	66.7
26.72	***	3.8	70.5
31.57	******	6.4	76.9
37.31	******	6.4	83.3
44.09	***********	11.5	94.9
52.10	**	2.6	97.4
61.56	**	2.6	100.0
72.74		0.0	100.0
85.96		0.0	100.0
101.58		0.0	100.0
120.03		0.0	100.0
141.84			

0 10 20 30 40 50 60 70 80 90 100
% OF SAMPLES IN CLASS INTERVAL

Appendix 5

Statement of Costs

BAP CLAIMS ASSESSMENT REPORT

Statement of Costs

Analytical costs - 89 samples @ $8.83	$786.00
Computer processing - 89 samples @$3/sample	267.00
Printing, reproduction	60.00
Drafting - 5.5 hours @ $18.95/hour	93.25
Report writing - 3 days @ $225/day	675.00
Subtotal	$1881.25
Portable Assessment Credits	519.00
	$2400.00

Apportionment of Exploration Work

Record Numbers: 128000, 128004, 128008 (August 13, 1973)

Apply four (4) years @ $200 per year to the above claims,

= $2400.00

Appendix 6

List of Qualifications

List of Qualifications - S.J. Hoffman

BSc 1969 - McGill University (Hons Geology and Chemistry)

MSc 1972 - The University of British Columbia (Geochemistry)

PhD 1976 - The University of British Columbia (Geochemistry)

List of Publications

1. Hoffman, S.J., 1972

Geochemical dispersion in bedrock and glacial overburden around a copper property in south central British Columbia. MSc thesis, unpublished, U.B.C., 209 pp.

2. Hoffman, S.J. and Fletcher, W.K., 1972

Distribution of copper at the Dansey-Rayfield River property, south central British Columbia.
J. Geoch. Expl. 1, 163-180.

3. Hoffman, S.J. and Waskett-Myers, M.J., 1974

Determination of molybdenum in soils and sediments with a modified zinc dithiol procedure.
J. Geoch. Expl. 3, 61-66.

4. Hoffman, S.J., 1974

Pebble Cards - A record of the coarse fraction of stream sediments for geochemical exploration.
J. Geoch. Expl. 3, 387-388.

5. Hoffman, S.J. and Fletcher, W.K., 1976

Reconnaissance geochemistry on the Nechako Plateau, B.C., using lake sediments.
J. Geoch. Expl. 5, 101-114.

6. Hoffman, S.J., 1976

Mineral Exploration of the Nechako Plateau, central British Columbia, using lake sediment geochemistry.
PhD thesis, unpublished, U.B.C., 347 pp.

7. Hoffman, S.J., 1977

Talus fine sampling as a regional geochemical exploration technique in mountainous regions.
J. Geoch. Expl. 7, 349-360.

8. Hoffman, S.J. and Fletcher, W.K., 1979

Sequential extraction of copper, zinc, iron manganese and molybdenum from soils and sediments.
In Geochemical Exploration 1978, Proceedings of the Seventh International Geochemical Exploration symposium, Golden, Colorado, 289-299.

9. Hoffman, S.J. and Fletcher, W.K., 1981

Detailed lake sediment sampling of anomalous lakes on the Nechako Plateau, central British Columbia - Comparison of trace metal distributions in Capoose and Fish Lakes.
J. Geochemical Exploration 14, 221-224.

10. Hoffman, S.J. and Fletcher, W.K., 1981

Organic matter scavenging of copper, zinc, molybdenum, iron, and manganese, estimated by a sodium hypochlorite extraction (pH 9.5).
J. Geochemical Exploration 15, 549-562.

11. Hoffman, S.J., Arnold, P.M. and Zink, E.W., 1981

Rapid field determination of copper by anodic stripping voltammetry (ASV).
In press, Encyclopedia of Earth Sciences.

12. Hoffman, S.J., 1981

Lake sediment geochemistry.
In press, Encyclopedia of Earth Sciences.

13. Hoffman, S.J., 1981

Geochemical exploration for unconformity-type uranium deposits in permafrost terrain - Hornby Bay basin, Northwest Territories, Canada. In press.

List Of Memberships

1. Geological Association of Canada, since 1967.
2. Canadian Institute of Mining and Metallurgy, since 1973.
3. Association of Exploration Geochemists, since 1973.
4. American Society of Agronomy, since 1973.

Other Qualifications

1. Instructor on methods of geochemical exploration for the B.C. Department of Mines prospecting shcool, May 1977 - 1982 (6 years).
2. Instructor, Short course on Geochemical Exploration in the Canadian Shield, McGill University, January 1979.

3. Speaker, CIM in Prince George, B.C. on "Lake Sediment Geochemistry", May, 1977.

4. Speaker, Geosciences Council, Yellowknife on "Lake Sedimentary Geochemistry, Hornby Bay area", December 1978, and also December 1980.

5. Instructor, Short course on Geochemical Exploration (computer and statistical applications), Northwest Mining Association, Spokane, Washington, December 1979.

6. Council member, Association of Exploration Geochemists, 1980-1984

7. Chairman, GOLD-81 Symposium. Precious Metals in the Northern Cordillera: April 12-15, 1981. Co-sponsored by the Association of Exploration Geochemists and the Cordilleran Section of the Geological Association of Canada.

8. Business Editor, Proceedings of the GOLD-81 Symposium published Feb., 1982.