

A SUMMARY REPORT ON THE  
J & L MINERAL OPTION  
LEAD-ZINC-GOLD-SILVER PROSPECT  
BRITISH COLUMBIA

NTS: 82M/8E

For: Selco Division - B.P. Resources Canada Limited  
700-890 West Pender Street  
Vancouver, B.C.

BPVR 85-29

R. Pegg, B.A.Sc., P.Eng.  
Project Geologist

December, 1985

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
INTRODUCTION	1
1. Location, Access, Physiography and Climate	1
2. Property Status	2
3. History of Exploration	4
4. 1985 Work Program Summary	9
PHYSICAL WORK	10
GEOLOGY	11
1. Surface Geology	11
2. Mineralization	13
GEOCHEMISTRY	14
1. Sampling	14
2. Analysis	14
3. Discussion of Results	16
METALLURGY	19
CONCLUSIONS AND RECOMMENDATIONS	23
BIBLIOGRAPHY	25

LIST OF FIGURES

FOLLOWING PAGE

FIGURE 1	LOCATION MAP - REGIONAL	1
FIGURE 2	LOCATION MAP - LOCAL	2
FIGURE 3	CLAIM MAP	4
FIGURE 4	REGIONAL GEOLOGY	12
FIGURE 5	ROSEBERRY GRID-SOIL SAMPLE LOCATIONS	18
FIGURE 6	ROSEBERRY GRID-ROCK SAMPLE LOCATIONS	18
FIGURE 7	ROSEBERRY GRID-GOLD RESULTS, SOILS	18
FIGURE 8	ROSEBERRY GRID-GOLD RESULTS, ROCKS	18
FIGURE 9	ROSEBERRY GRID-SILVER RESULTS, SOILS	18
FIGURE 10	ROSEBERRY GRID-SILVER RESULTS, ROCKS	18
FIGURE 11	ROSEBERRY GRID-LEAD RESULTS, SOILS	18
FIGURE 12	ROSEBERRY GRID-LEAD RESULTS, ROCKS	18
FIGURE 13	ROSEBERRY GRID-ZINC RESULTS, SOILS	18
FIGURE 14	ROSEBERRY GRID-ZINC RESULTS, ROCKS	18
FIGURE 15	ROSEBERRY GRID-ARSENIC RESULTS, SOILS	18
FIGURE 16	ROSEBERRY GRID-ARSENIC RESULTS, ROCKS	18
FIGURE 17	ROSEBERRY GRID-COPPER RESULTS, SOILS	18
FIGURE 18	ROSEBERRY GRID-COPPER RESULTS, ROCKS	18
FIGURE 19	ROSEBERRY GRID-POTASSIUM RESULTS, SOILS	18
FIGURE 20	ROSEBERRY GRID-POTASSIUM RESULTS, ROCKS	18
FIGURE 21	ROSEBERRY GRID-TITANIUM RESULTS, SOILS	18
FIGURE 22	ROSEBERRY GRID-TITANIUM RESULTS, ROCKS	18
FIGURE 23	ROSEBERRY GRID-ANTIMONY RESULTS, SOILS	18
FIGURE 24	ROSEBERRY GRID-ANTIMONY RESULTS, ROCKS	18
FIGURE 25	NORTHERN AREA -ROCK SAMPLE LOCATIONS	19
FIGURE 26	NORTHERN AREA -GOLD RESULTS	19
FIGURE 27	NORTHERN AREA -SILVER RESULTS	19
FIGURE 28	NORTHERN AREA -LEAD RESULTS	19
FIGURE 29	NORTHERN AREA -ZINC RESULTS	19
FIGURE 30	NORTHERN AREA -ARSENIC RESULTS	19
FIGURE 31	NORTHERN AREA -COPPER RESULTS	19
FIGURE 32	NORTHERN AREA -POTASSIUM RESULTS	19
FIGURE 33	NORTHERN AREA -TITANIUM RESULTS	19
FIGURE 34	NORTHERN AREA -ANTIMONY RESULTS	19

LIST OF PLANS

IN POCKETS

PLAN 1	PHYSICAL WORK PLAN	1:10,000
PLAN 2	SURFACE GEOLOGY - SOUTH	1:10,000
PLAN 3	SURFACE GEOLOGY - NORTH	1:10,000

LIST OF APPENDICES

PAGE NUMBER

APPENDIX I	LIST OF FIELD PERSONNEL	26
APPENDIX II	ROCK SAMPLE DESCRIPTIONS	27
APPENDIX III	GEOCHEMICAL RESULTS	34

1.

INTRODUCTION

During the period of August 19th to September 7th, a field crew of one geological assistant and the author completed a rock-soil-silt geochemical survey over part of the Kirk and Shannon 600 claims. Demobilization of the mining contractor's camp and reclamation work was also completed during these months. The exploration target in this area is economic lead-zinc-gold-silver mineralization.

A metallurgical-mineralogical study was completed at Sunbury, England in order to confirm the recovery problems by Lakefield Research.

1. Location, Access, Physiography and Climate

The property is located along and north of Carnes Creek, approximately 32 air km north of the town of Revelstoke (see Figures 1 and 2), at latitude 51°17'N and longitude 118°08'W.

Access is provided by approximately 35 km of paved road (Highway #23), and then a rough 10 km bush road to the property. Helicopter service is also available from Revelstoke. A rough four-wheel drive road and several overgrown walking trails are found within the property.

Maximum relief in the area of the property is 2349 metres (3050 to 701 metres). The J & L adits are found at the 830



SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

J & L PROJECT  
LOCATION MAP

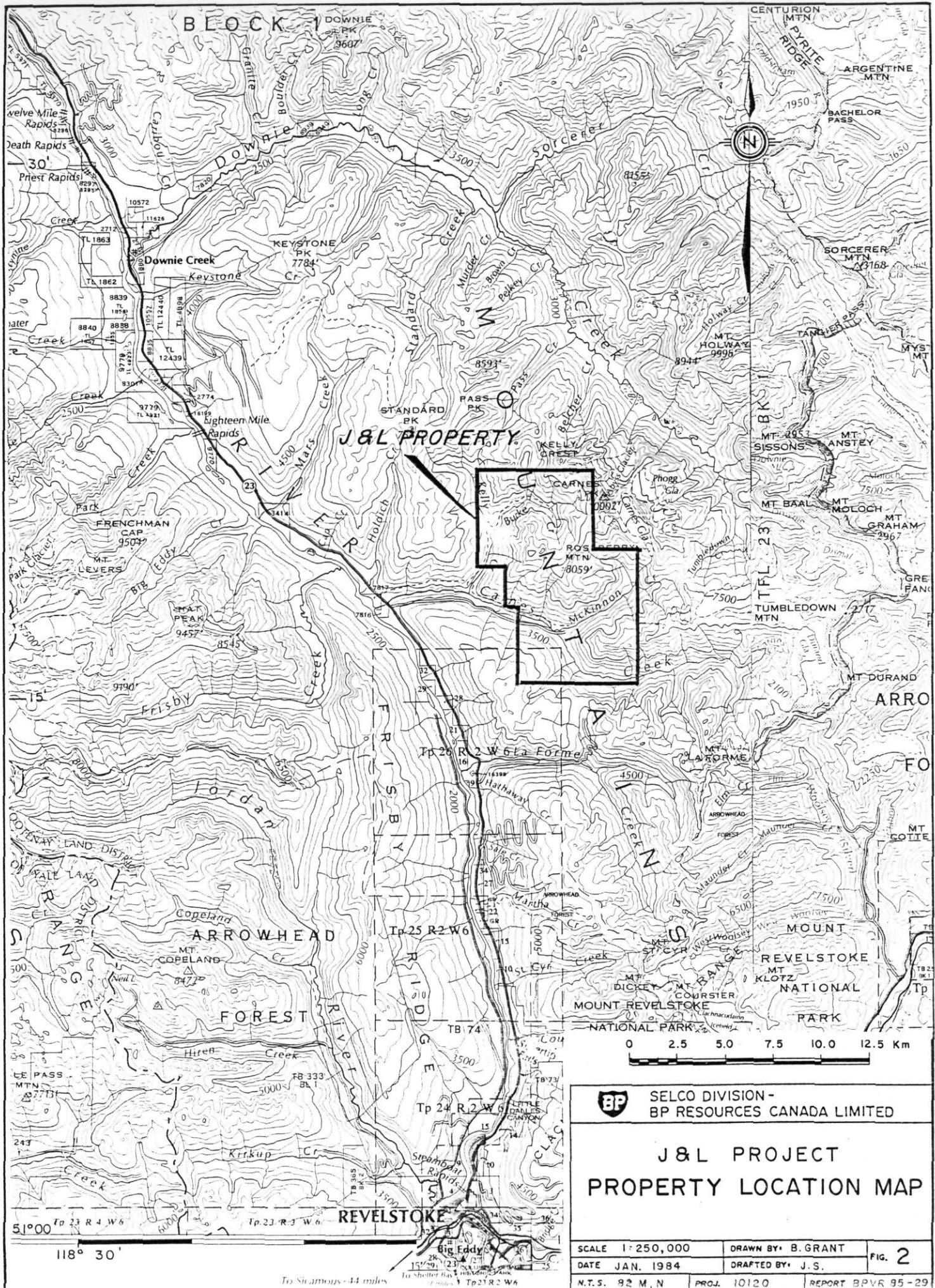
SCALE 1:1,000,000	DRAWN BY: R. PEGG	FIG. 1
DATE: NOV. 1984	DRAFTED BY: J. S.	
N.T.S.	PROJ. 10120	REPORT BPVR 85-29

metre elevation and the 986 metre elevation respectively, and are accessible by road and/or trail. Access throughout most of the property is difficult and slow as the steep-sided valleys generally obtain slopes 30 to 40 degrees and are densely covered with rotting cedar and hemlock trees. Locally, windfall, deadfall, alders, devils club, stinging nettles and second growth are extensive. Treeline is at, approximately, the 1980 metre elevation and permanent glaciers are found above 2286 metres. The property is fairly well drained on the south and east by Carnes and McKinnon Creeks and on the west by Kelly Creek.

Climatic conditions dictate a June to October field season. The winters are long and relatively mild with snowfall of between 1 and 4 metres. The mountainous terrain results in numerous snow and earth slides. The summers "usually" have a medium rainfall and temperatures range from 16 to 30 degrees centigrade.

## 2. Property Status

The property consists of 10 crown granted claims and 28 claim blocks (285 mineral claim units, see Figure 2). Pivak Explorco Limited of Toronto is the owner. The Arty 1-4 claims (record #1219-1222), which consist of 72 claim units, have been returned to Mr. Ted Arnold.



BP

SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

J & L PROJECT  
PROPERTY LOCATION MAP

SCALE 1:250,000

---

DRAWN BY: B. GRANT

3

DATE JAN 1984

DRAFTED BY: J. S.

FIG. 2

N.T.S. 92 M.N.

10120 REP

BPVR 95-29

The mineral claims and blocks have been placed into five mineral claim groups and consist of the following:

Arty #1 Group (58 Units)

<u>Name</u>	<u>Record #</u>	<u>Date Recorded</u>	<u>No. Units</u>	<u>Expiry Date</u>
L14827 (View Fraction)				
L14829 (Creek Fraction)				
G.D.	603	Apr. 17/79	16	Apr. 17/93
Min	604	Apr. 17/79	8	Apr. 17/90*
Tom	605	Apr. 17/79	20	Apr. 17/94
Mary 5	758	Oct. 10/79	1	Oct. 10/90*
Mary 6	759	Oct. 10/79	1	Oct. 10/90*
Mary 7	760	Oct. 10/79	1	Oct. 10/90*
Burke 1	1485	Sep. 30/82	9	Sep. 30/90*

Arty #3 Group (47 Units)

<u>Name</u>	<u>Record #</u>	<u>Date Recorded</u>	<u>No. Units</u>	<u>Expiry Date</u>
L14821 (Goat Fraction)				
L14822 (Goat No. 2 Fraction)				
L14823 (Goat No. 3 Fraction)				
L14824 (Goat No. 4 Fraction)				
L14825 (Goat No. 5 Fraction)				
L14826 (Goat No. 6 Fraction)				
L14828 (View No. 2 Fraction)				
Shannon	400	1143	Dec. 17/80	20
Shannon	500	1144	Dec. 17/80	20

Tom Group (28 Units)

<u>Name</u>	<u>Record #</u>	<u>Date Recorded</u>	<u>No. Units</u>	<u>Expiry Date</u>
Shannon	100	1140	Dec. 17/80	12
Shannon	300	1142	Dec. 17/80	16

Sam Group (83 Units)

<u>Name</u>	<u>Record #</u>	<u>Date Recorded</u>	<u>No. Units</u>	<u>Expiry Date</u>
Sam	1549	Nov. 30/82	8	Nov. 30/93
Sam 1	1550	Nov. 30/82	8	Nov. 30/93
Mary	1545	Nov. 30/82	1	Nov. 30/93
Mary 1	1546	Nov. 30/82	1	Nov. 30/93
Mary 2	1547	Nov. 30/82	1	Nov. 30/93
Mary 3	1548	Nov. 30/82	1	Nov. 30/93
Mary 4	757	Oct. 10/79	1	Oct. 10/90*
Shannon 700	1146	Dec. 17/80	18	Dec. 17/90*
Shannon 800	1147	Dec. 17/80	8	Dec. 17/90*
Shannon 900	1148	Dec. 17/80	20	Dec. 17/90*
Shannon 1000	1149	Dec. 17/80	10	Dec. 17/90*
Shannon 1100	1150	Dec. 17/80	6	Dec. 17/90*

Burke Group (79 Units)

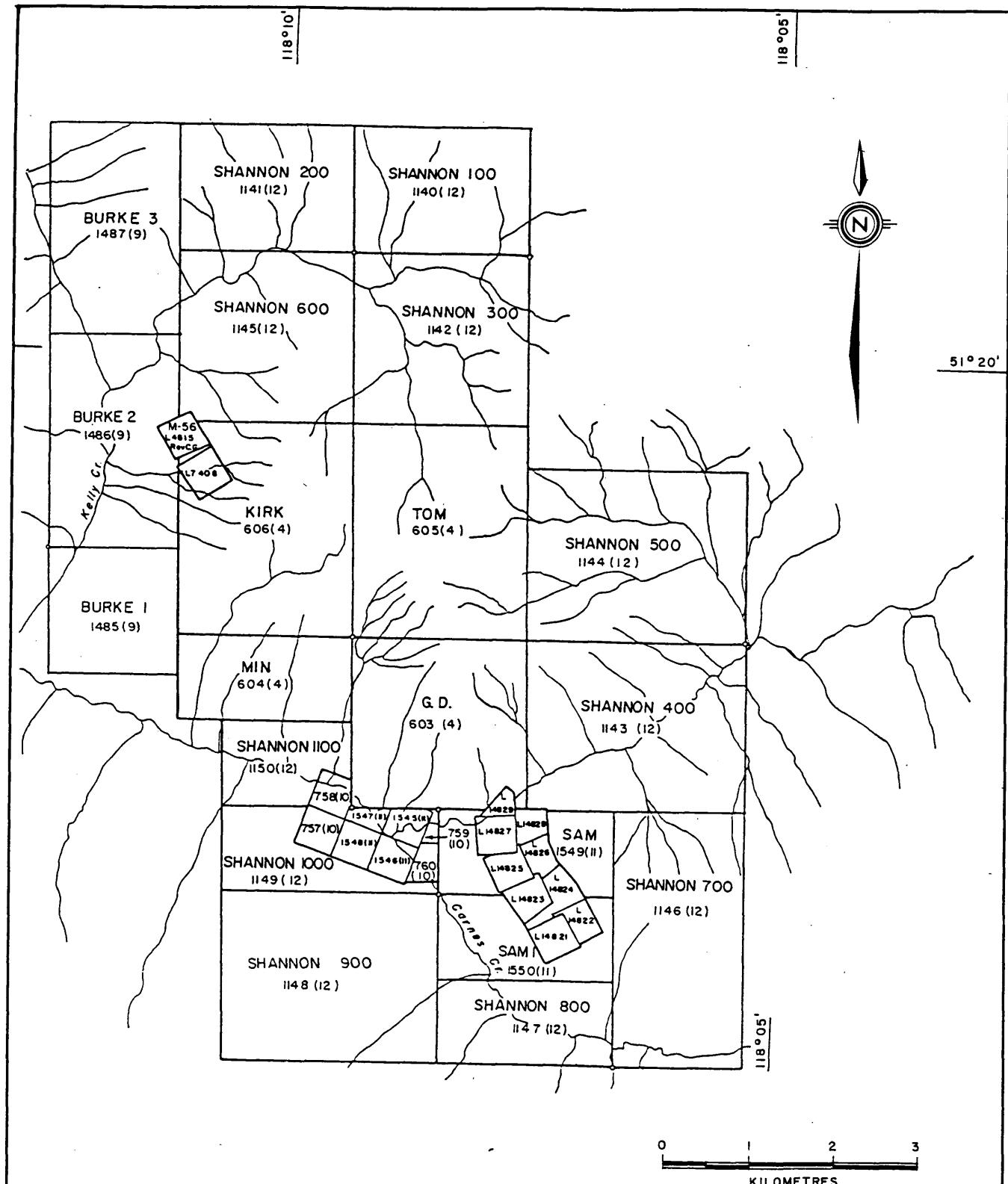
<u>Name</u>	<u>Record #</u>	<u>Date Recorded</u>	<u>No. Units</u>	<u>Expiry Date</u>
<b>L7408 (Aberdeen)</b>				
Kirk	606	Apr. 17/79	20	Apr. 17/93
Shannon 200	1141	Dec. 17/80	12	Dec. 17/93
Shannon 600	1145	Dec. 17/80	16	Dec. 17/93
Burke 2	1486	Sep. 30/82	15	Sep. 30/90*
Burke 3	1487	Sep. 30/82	15	Sep. 30/90*

\*Assessment approval pending.

Please Note: L4815 (Hardpan) is a reverted crown grant which is now a Mineral Lease (M.R. #56) and is owned by a James H. Elliot who resides at 910 - 3rd Street West, Revelstoke, BC.

3. History of Exploration

The area first became an exploration target after 1865 when placer gold was discovered in Carnes Creek and other creeks



 SELCO DIVISION - BP RESOURCES CANADA LIMITED	
<b>J &amp; L PROJECT CLAIM MAP AREA OF INTEREST</b>	
SCALE As Shown	
DRAWN BY: R. PEGG	
DATE NOV. 1984	
DRAFTED BY: J.S.	
N.T.S. 82 M/8E	PROJ. 10120
REPORT BPVR 85-29	

in the vicinity. Prospecting began in the late 1800's and the J & L Prospect was first staked in 1896. The area then was intensely prospected and by the early 1900's, there were over 20 base and precious metal prospects discovered. Three of these, the J & L (Au-Ag-Pb-Zn), the Roseberry (Au) and the A & E (Zn-Pb-Ag), are found within the property boundary.

The property was worked, intermittently, from the time of discovery to 1942. During this time, the underground development on the J & L consisted of a total of 495 feet of tunnelling and two inclined shafts which had a total length of 255 feet. The Number 1 Zone was supposedly tested over a length in excess of 5000 feet (1524 metres) on surface, by 30 trenches, and the Number 2 zone was tested over a length of 250 feet (76 metres) with four trenches. The Roseberry occurrence was tested by 895 feet of drifting and cross-cutting on three levels.

In 1934, T.E. Arnold acquired the claims. In the early 1940's, Rain dor Gold Mines extended the 986 level adit to a length of 500 feet (152.4 metres), sank two shallow shafts and dug several surface trenches.

During the period 1962 to 1967, Westairs Mines Limited carried out an exploration program which consisted of geological mapping, prospecting, trenching, underground exploration development and diamond drilling. The diamond drilling (1004 feet) was completed at the Roseberry and A & E Prospects. A 320 foot crosscut was driven north of the workings and the A & E 6000 foot level adit was driven to 265 feet, to facilitate drilling. They also completed 975 feet (297.18 metres) of underground development on the J & L Prospect, at the 830 metre level. Westairs drilled at least ten diamond drill underground holes from within the 830 metre level adit.

Pan American Minerals Corporation of Vancouver optioned the claims in late 1980 and 11 claims blocks (158 mineral units). Then, in June of 1981, Arnold had an additional four claim blocks (72 mineral units) staked. On December 16, 1981, Pivak Explorco Limited optioned the property. The geology of the area has been studied twice by the G.S.C. In the mid 1920's, H.C. Gunning completed his work while in the early 1960's, J.O. Wheeler did his mapping. Numerous geological studies have been completed to the north of the property area. During July of 1982 Geotext Consultants of Vancouver, under contract for the G.S.C., completed a quick

geological survey of the area between Carnes Peak and McKinnon-Carnes Creeks.

The only significant producing mines in the area were the Mastodon Highland Bell (south of the J & L) which produced 6,112 ounces silver, 180,334 pounds lead, 5,911,618 pounds zinc and 24,716 pounds cadmium from 31,900 tons of ore and the Goldstream massive sulphide deposit which was discovered in 1973 and is owned by Noranda Exploration Company Limited. It is approximately 43 km north-northwest of the J & L property and had reserves (diluted) of 3.94 million tonnes grading 3.7% copper, 2.7% zinc and 0.56 ounces/tonne silver. The discovery of this deposit has increased exploration activity in this area in recent years.

Amax, Lac Minerals and Union Oil were active in the Downie Creek area during 1982 and 1983. It appears that they have been working on high elevation tungsten prospects. Preussag Canada Limited were also active at the Standard Prospect which is to the northwest of the J & L. A number of independents and junior companies were also in the region, investigation carbonatite, tungsten, copper, gold and massive sulphide prospects.

During 1982, Selco completed a preliminary geological and geochemical surface survey of the important part of the claim area. This included reconnaissance geology, 1:2 500 grid mapping and detailed mapping and sampling of the known surface showings. Selco had two airborne electromagnetic surveys flown over the property. Road building and repair, bridge construction and line cutting were also done.

During 1983, Selco completed a detailed geological and geochemical surface survey on Goat Mountain. This included detailed mapping and sampling of mineralized showings, 1:100 grid mapping and 1:5 000 reconnaissance mapping. Preliminary mapping (1:5 000) of part of Roseberry Mountain, to the north of the J & L Main Zone, was also completed. The 1982 airborne geophysical anomalies were investigated with ground geophysics (Genie EM and Mag.) and/or reconnaissance geology. An underground geological and geochemical study of part of the J & L Main Zone, at the 830 metre level elevation, was also completed. This consisted of 354.94 metres of track drift which followed the Main Zone mineralization and three hangingwall crosscuts which totalled 216.60 metres. This underground development was an extension of the drifting completed by Westairs Mines Limited during the 1960's. Subsequent drilling consisted of 35 holes which totalled 1657.89 metres.

During 1984, Selco completed a detailed geological and geochemical surface survey on part of Roseberry Mountain. This included detailed mapping and sampling of mineralized showings and grid mapping (1:100) of the surrounding stratigraphy. An underground geological and geochemical study of part of the J & L Main Zone, at the 830 metre level elevation, was also completed. This consisted of 315.80 metres of track drift which followed the Main Zone mineralization and two hangingwall crosscuts which totalled 136.23 metres. This underground development was an extension of the drifting completed by Selco during 1983. Subsequent drilling consisted of 30 holes which totalled 982.51 metres. Metallurgical and environmental studies continued as part of an ongoing process.

#### 4. 1985 Work Program Summary

During the course of the field season, contractors completed the demobilization of their equipment on site, reclamation work and effectively closed off the underground workings. The geological crew completed a geochemical/geological grid program and a short reconnaissance geochemical/geological traverse during this period. A total of 274 soil samples, 50 rock samples and 1 silt sample were collected. All

10.

samples were located with the use of prepared topographic base maps, altimeters, compass and nylon chain. Mapping was done at a scale of 1:5,000.

PHYSICAL WORK

During August of 1985, Rocbore (1980) Limited of Kamloops demobilized their trailer camp and mining equipment from the J & L property. This included the removal of five camp trailers, one storage container, eleven mine cars, three-1,000 gallon fuel tanks and stands, 4160V and 600V diamond drill cables, electrical panels, two-1,000 gallon propane tanks, an explosive magazine, two air receivers, a 45 foot van and four loads of scrap. Rocbore also removed all of their temporary surface buildings, graded both their camp and portal work areas and installed a portal closure bulkhead with a locking door at each of the two portals. Minor road repair of a few slide areas was also completed during this period.

Once the Rocbore demobilization was complete, reseeding and fertilizing was done at Rocbore's camp site, areas below the ore dump, the south road and exposed banks above and below the road from the ore dump to the portal. Canada No. 1 mixture grass seed was used for the reseeding process.

In September, S. McKenzie Contracting Ltd. of Revelstoke dug a ditch on the up-hill side of the ore dump in order to drain off any rain waters. Warning signs were also placed at the two portals.

The physical work was performed on L14827 and the following mineral claims: Sam, Mary, Mary 1, Mary 3, Mary 4, Mary 6 and Mary 7 (see Plan 1).

#### GEOLOGY

##### 1. Surface Geology

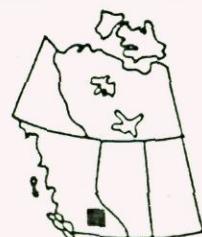
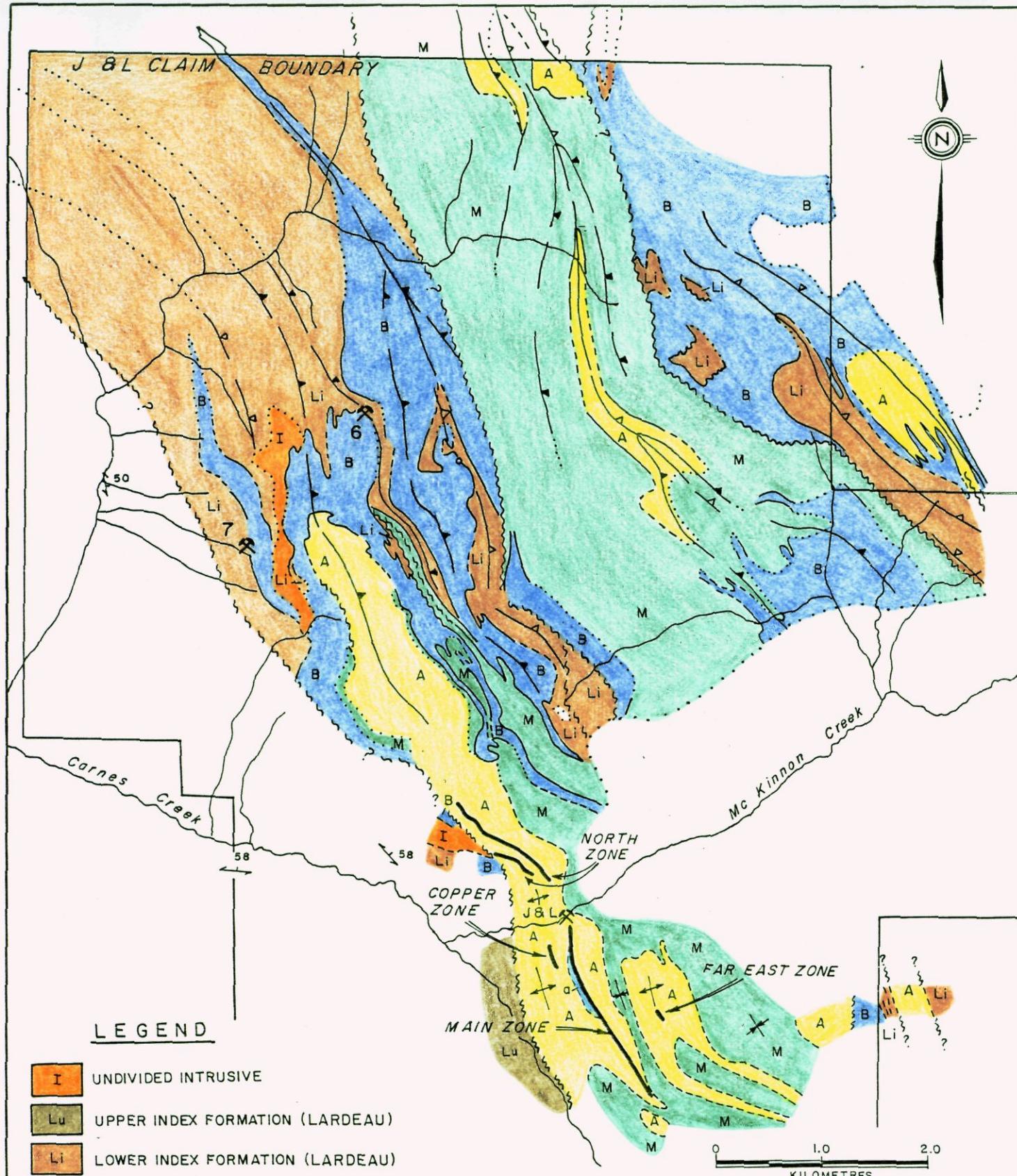
Northwest striking, moderately east dipping and isoclinally folded sediments and metasediments of the Lardeau (Lower Cambrian and older), Badshot (Lower Cambrian and older) and Hamill (Lower Cambrian) Formations cover the investigated areas.

The Lardeau Group consists of graphite-quartz phyllite with minor chlorite-graphite and graphite phyllite. The phyllites

contain minor amounts of pyrite and iron oxide and local calcareous lenses and fracture fillings and abundant pyrite and pyrrhotite.

The Badshot is predominately a medium to fine-grained, recrystallized, grey banded (poor to well) limestone with local medium-grained calcite veinlets. Calcareous sericite phyllite occupies a number of shear zones and hosts numerous, but erratic tan weathering quartz-carbonate lenses.

The Hamill Group consists of quartzite, chlorite-quartz, quartz-chlorite, chlorite-sericite-quartz and quartz-sericite phyllite. The quartzites are clean to dirty, massive to well foliated and contain minor calcareous fracture fillings, especially near its' contact with the Badshot limestones. All rock types appear "spotted" to some degree as a result of leaching of the pervasive pyrite mineralization. Minor goethite and pyrite still remain and pyrrhotite was observed at one locality. This anticlinal Hamill stratigraphy pinches, on surface, to the north-west of the Roseberry grid, where exposures of Badshot limestone are found on a southwest trending ridge.



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

**J & L PROJECT  
REGIONAL GEOLOGY**

SCALE 1:50,000	DRAWN BY: R. PEGG	FIG. 4
DATE JAN. 1985	DRAFTED BY: L.G. + J.S.	
N.T.S. 92 M / BE	PROJ. 10100	REPORT 3PVR 85-29

## 2. Mineralization

Two sites revealed significant mineralization within the investigated area.

The first was just south of L6N, at approximately 2+20E and this consisted of well oxidized and leached pyritic (up to 5%) lenses occupying shears within the Hamill quartzites. The lenses display abundant jarosite staining and measure up to 70 X 90 cm. Sericitic alteration was observed within and surrounding the lenses. This type of occurrence was noted at several locations within the North Zone, to the southeast.

The second area was to the north of the Roseberry grid, on a north-trending ridge, at an elevation of 2155 metres. Here, discontinuous pods of tan weathering quartz (crystalline, chalcedonic and amethystine) - carbonate occupy shear zones within the Badshot limestone. These pods pinch and swell and contain erratic tetrahedrite  $\pm$  galena  $\pm$  malachite  $\pm$  pyrite  $\pm$  sphalerite  $\pm$  azurite  $\pm$  scorodite  $\pm$  jarosite mineralization. The maximum observed width of the erratic mineralization, known as Zone 'C', is 1.79 metres, which is the site of rock sample number 810-049 and 810-050, but overburden and talus obscure many sections of the assumed shear zone. This

mineralization was first noted by Westairs geologists in 1965 and is found on the ridge that forms the west side of the cirque where the A & E project is located.

## GEOCHEMISTRY

### 1. Sampling

The majority of the geochemical samples were collected on a chained grid pattern with a baseline running at 318° and crosslines every 100 metres. Samples were taken every 50 metres along the baseline and every 25 metres along the crosslines. Soil samples were collected from the 'B' horizon at depths of between 15 and 40 cm. Grab rock chip samples were collected at stations where outcrops are present. Sample stations are indicated by pickets which were marked with the grid coordinates of the station. Several rock chip samples were also collected during the course of a reconnaissance traverse.

### 2. Analysis

The samples were shipped from Revelstoke to Chemex Labs Ltd. of North Vancouver for analysis. All samples were analyzed geochemically for Au, As, Sb and 24 element ICP (Mo, W, Zn, P, Pb, Bi, Cd, Co, Ni, Ba, Fe, Mn, Cr, Mg, V, Al, Be, Ca, Cu, Ag, Ti, Sr, Na, K. Fourteen of the rocks were also analyzed for gallium and germanium.

The methods of analysis are as follows:

24 element ICP - Nitric-perchloric-hydrofluoric acid digestion to dry leach residue with hydrochloric acid, dilute to final volume and mix. Final acid concentration is 10% (v/v) hydrochloric acid.

- Instruments SAJY48P Inductively Coupled Plasma using Labtest GMK Babington type nebulizer. This is a simultaneous instrument measuring the emitted light characteristic for each element.

24 element ICP cont. Interelement corrections and calibration are automatically performed by the onboard computer.

- Accuracy is better than  $\pm$  10% and for most elements is better than  $\pm$  5%. Accuracy in this analysis is a combination of digestion efficiency and analytical instrumentation calibration and reproducibility.

- Sb
- 2.0 gm sample is digested with conc. HCl-KClO<sub>3</sub> at low heat. The iron is reduced to

16.

$\text{Fe}^{+2}$  state and the Sb extracted with TOPO-MIBK and analyzed via A.A. Correcting for background absorption. Detection limit of 0.2 ppm  $\pm$  0.2.

As

- 1.0 gm sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digested is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with  $\text{NaBH}_4$  and the arsenic content determined using flameless atomic absorption. Detection limit of 1 ppm.

Au

- Aqua regia; acid digestion; atomic absorption analysis. Detection limit of 5 ppb.

#### 4. Discussion of Results

##### a) Roseberry Grid (see Figures 5 - 24)

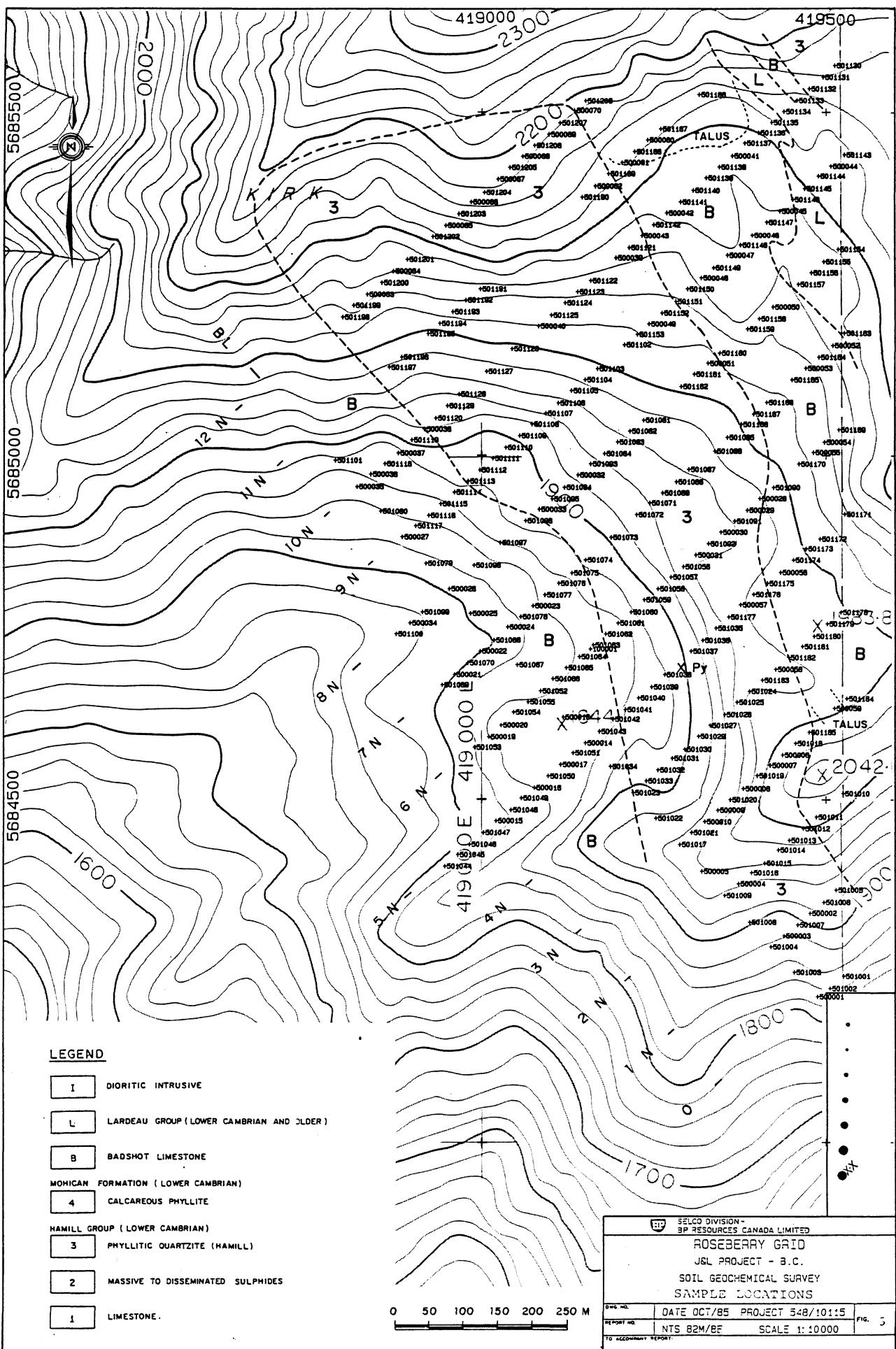
Gold and silver soil anomalies represent weak and isolated features which could be important if geochemical

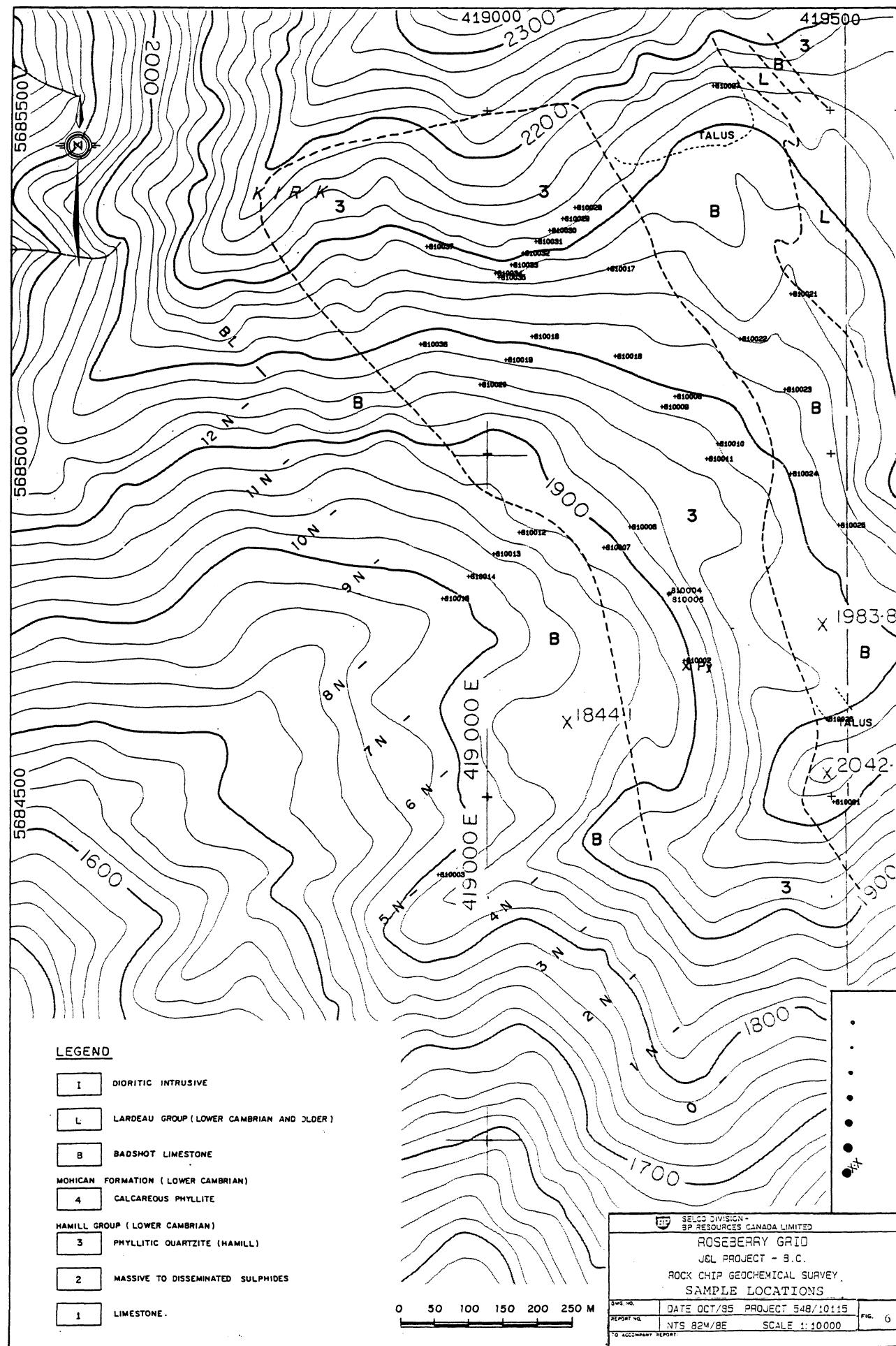
factors are unfavourable (i.e tip of a large but buried mineral occurrence; mainly in impenetrable overburden; unfavourable surface leaching conditions, etc.). Otherwise, the gold and silver distributions would not stimulate further activity. Distributions of copper and zinc complement nickel, chromium, phosphorus, potassium, magnesium, aluminum, barium, vanadium, cobalt, manganese, and iron anomalies and are interpreted to reflect signatures of isolated, primarily Badshot limestone units intercalated with Lardeau group rocks. These base metal anomalies are not indicating the presence of a nearby mineral occurrence.

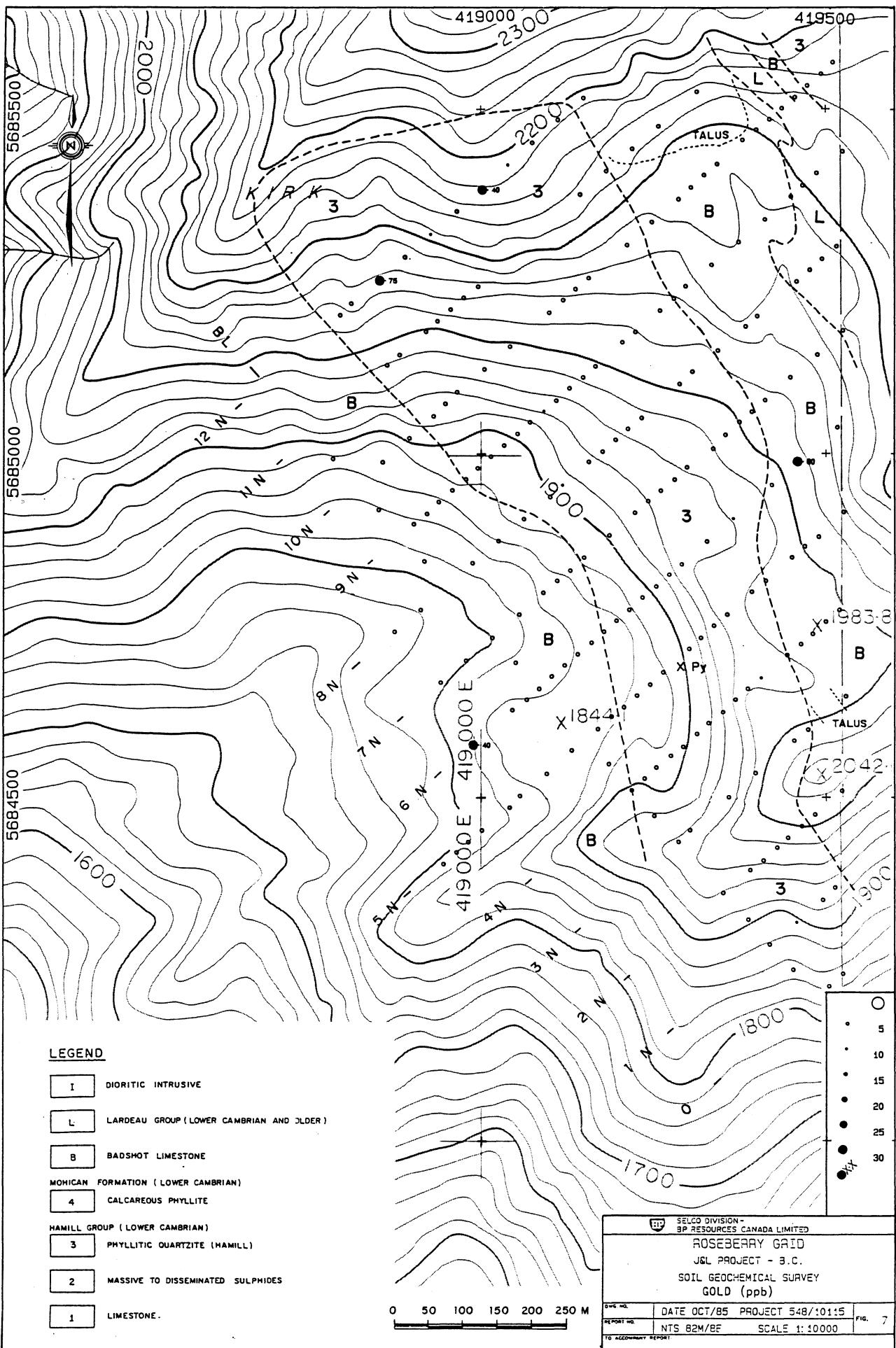
Lead and arsenic, however, are indicating features of exploration interest. Anomalies for both metals are large and exhibit a high degree of contrast to background, with the arsenic feature larger than its corresponding lead anomaly, suggesting potential use as a pathfinder element. Both elements are represented at J & L, and the lead values suggest galena will be discovered on followup. Weak silver enhancement complements the lead distribution and an antimony anomaly is found within the larger arsenic-lead feature. Absence of gold and zinc is a negative factor which might be due to adverse

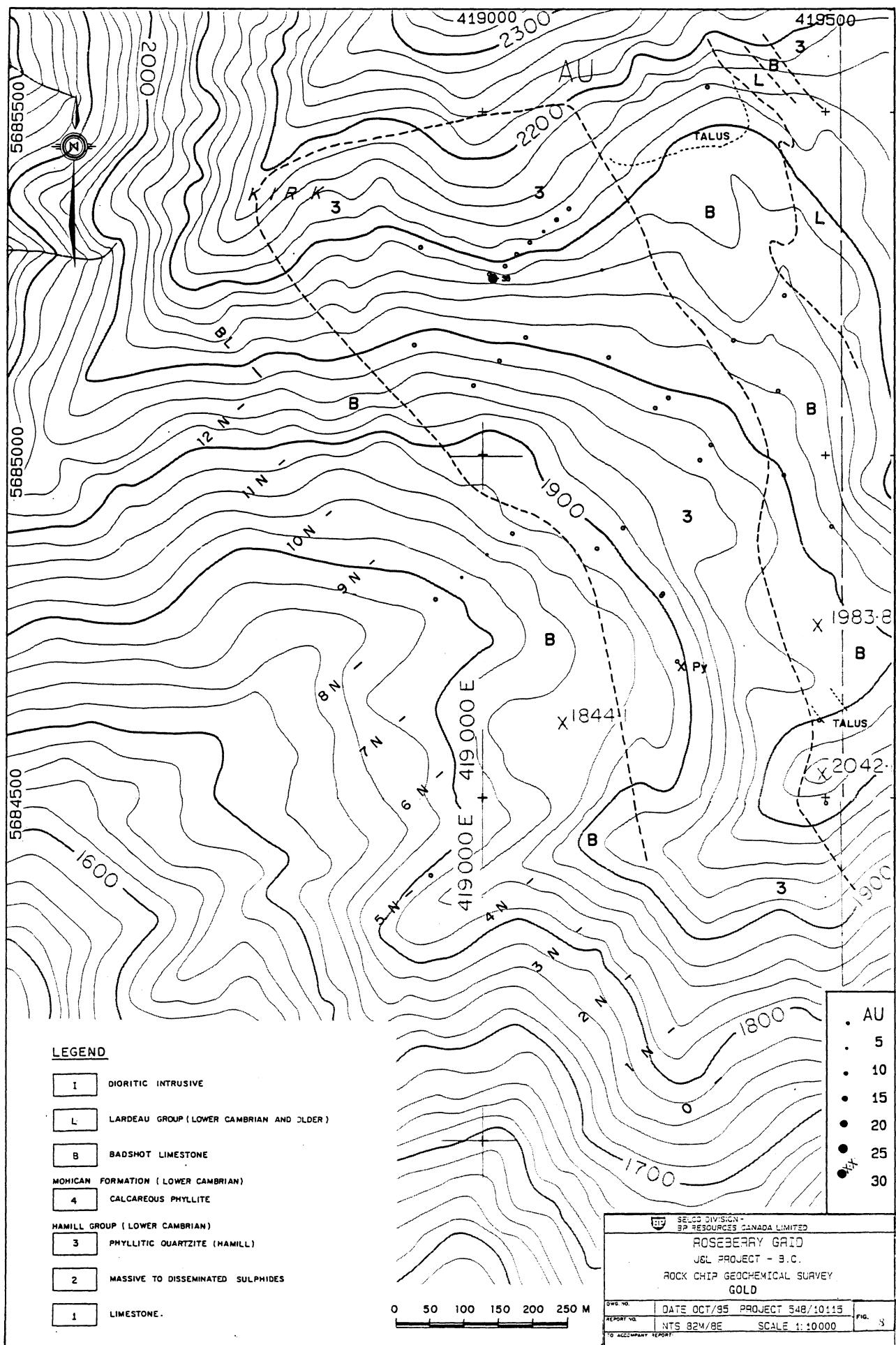
geochemical factors or to primary zonation of metal in bedrock. Additionally for zinc, the element may be soluble in the surficial environment and leached despite sphalerite in underlying bedrock. The potassium accompanying the arsenic and lead is perhaps reflecting a geologic unit rich in potassium or indicating a sericite alteration.

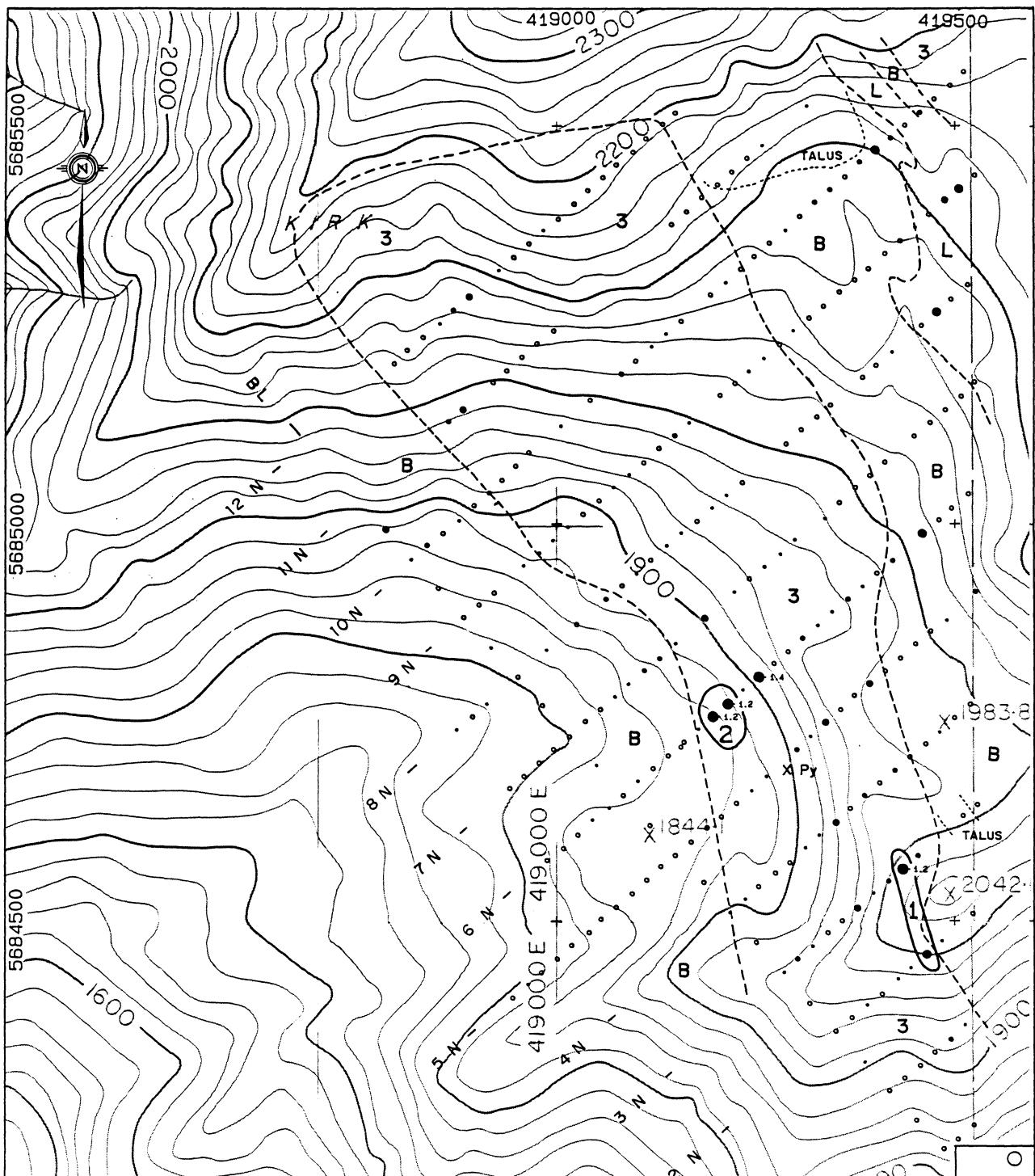
Only titanium appears to have a distribution reflecting geology, that of the Hamill Group. Other elements such as vanadium, aluminum, sodium, potassium, and chromium reflect the southern Hamill as enriched whereas phosphorus enhancement typifies northern units. Barium appears silicate-contained in Badshot, or if the barium is present in barite, the quantity of barite is minimal. Sampling or analytical problems are suggested in the southwest by alternating high and low values. These typically lie remote from lead and arsenic features, and hence do not adversely affect geochemical interpretation. Although there are few rock samples, the data appears to indicate that the Hamill Group contains elevated levels of potassium, barium, sodium and titanium. The first three elevated element contents are probably due to alteration and/or veining while the titanium is probably a primary constituent.









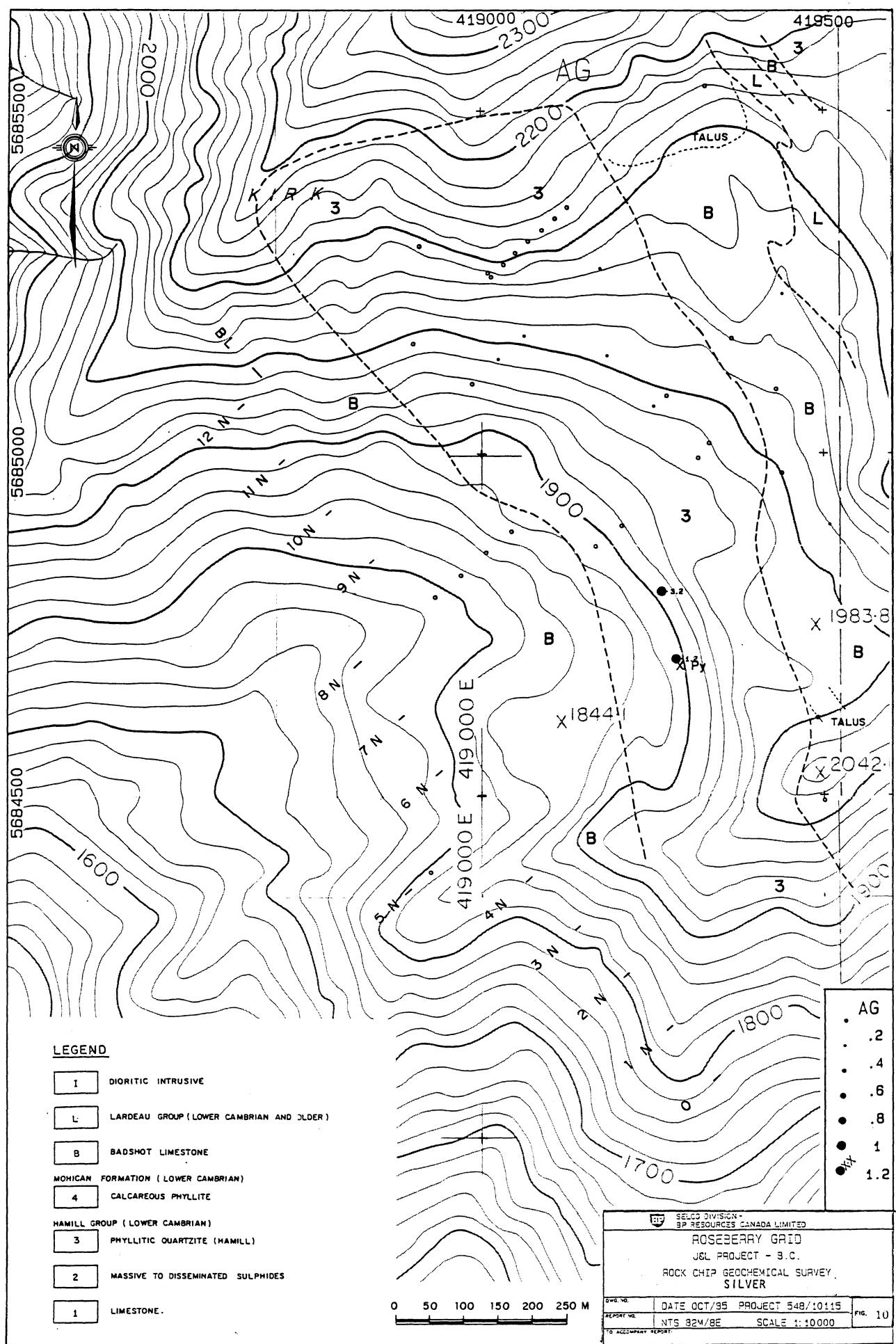


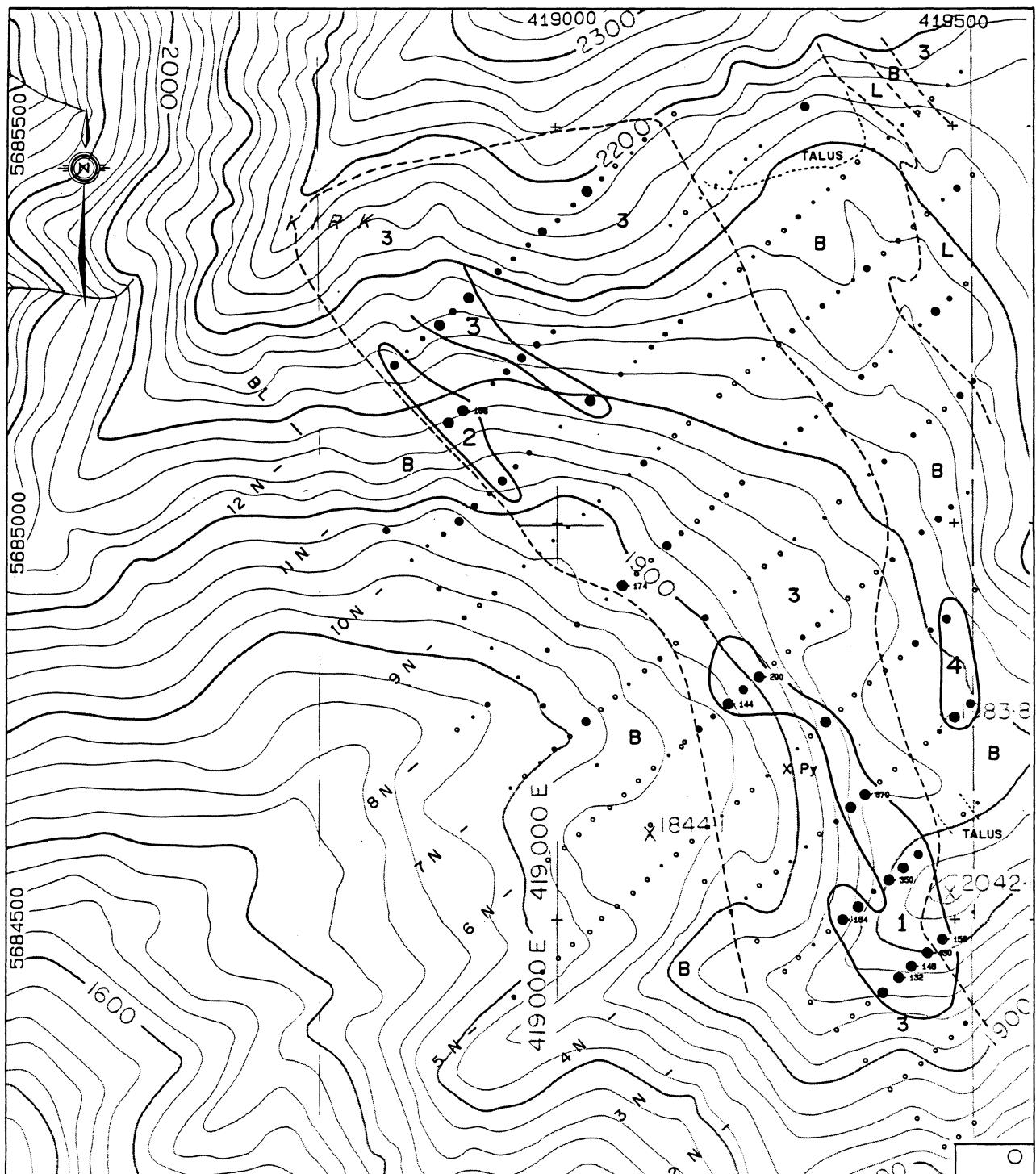
**LEGEND**

- [Box] I DIORITIC INTRUSIVE
- [Box] L LARDEAU GROUP (LOWER CAMBRIAN AND OLDER)
- [Box] B BADSHOT LIMESTONE
- MOCIAN FORMATION (LOWER CAMBRIAN)
- [Box] 4 CALCAREOUS PHYLLITE
- HAMILL GROUP (LOWER CAMBRIAN)
- [Box] 3 PHYLLITIC QUARTZITE (HAMILL)
- [Box] 2 MASSIVE TO DISSEMINATED SULPHIDES
- [Box] 1 LIMESTONE.

0 50 100 150 200 250 M

SELCO DIVISION - SP RESOURCES CANADA LIMITED	
ROSEBERRY GRID	
JSL PROJECT - B.C.	
SOIL GEOCHEMICAL SURVEY	
SILVER (ppm)	
DRG. NO.	DATE OCT/85 PROJECT 548/10115
REPORT NO.	NTS 82M/6E SCALE 1:10000 FIG. 9
TO ACCOMMODATE REPORT	





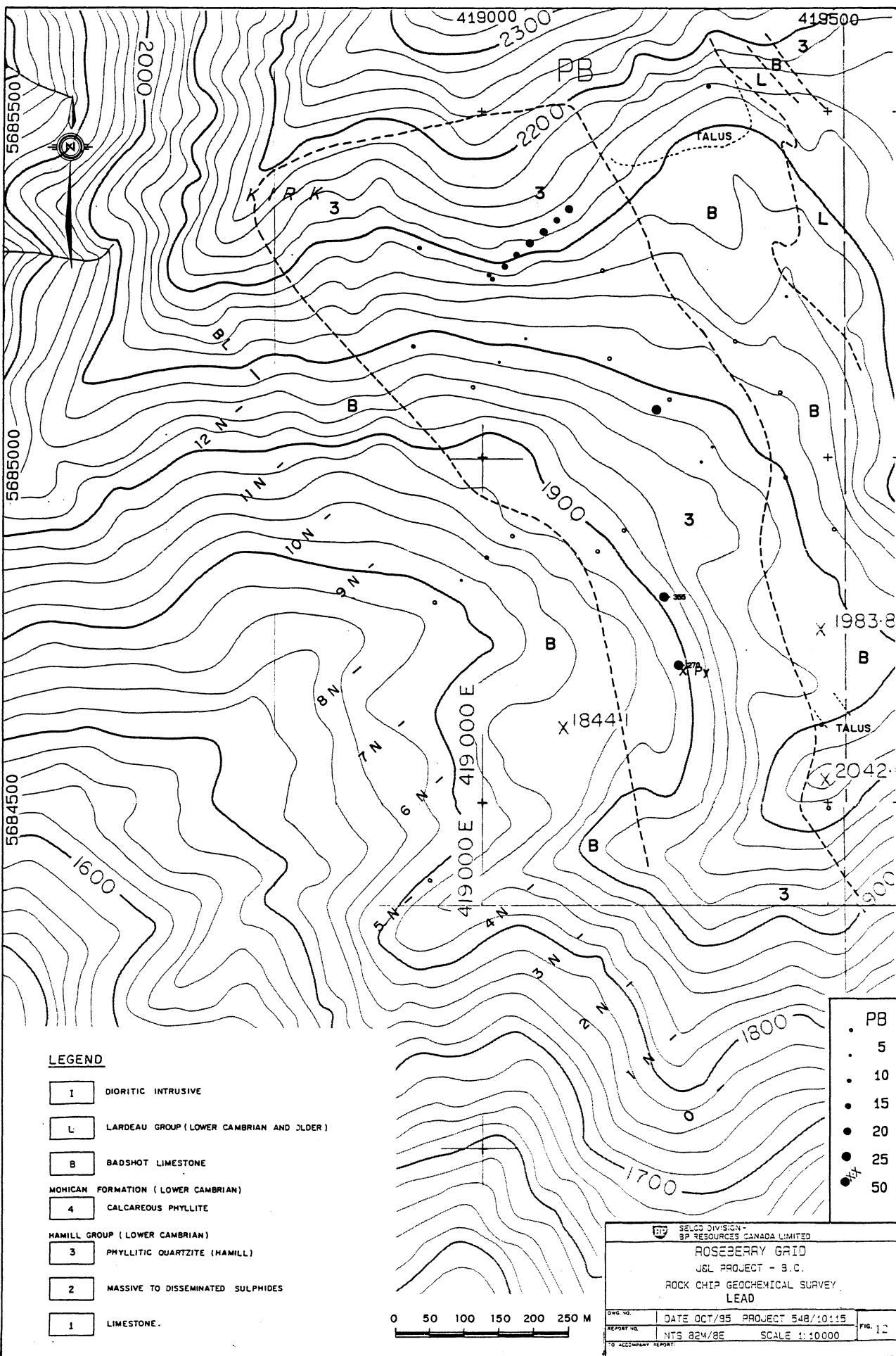
LEGEND

- [Box] I DIORITIC INTRUSIVE
- [Box] L LARDEAU GROUP (LOWER CAMBRIAN AND OLDER)
- [Box] B BADSHOT LIMESTONE
- [Box] MOHICAN FORMATION (LOWER CAMBRIAN)
- [Box] 4 CALCIROUS PHYLLITE
- [Box] HAMILL GROUP (LOWER CAMBRIAN)
- [Box] 3 PHYLLITIC QUARTZITE (HAMILL)
- [Box] 2 MASSIVE TO DISSEMINATED SULPHIDES
- [Box] 1 LIMESTONE.

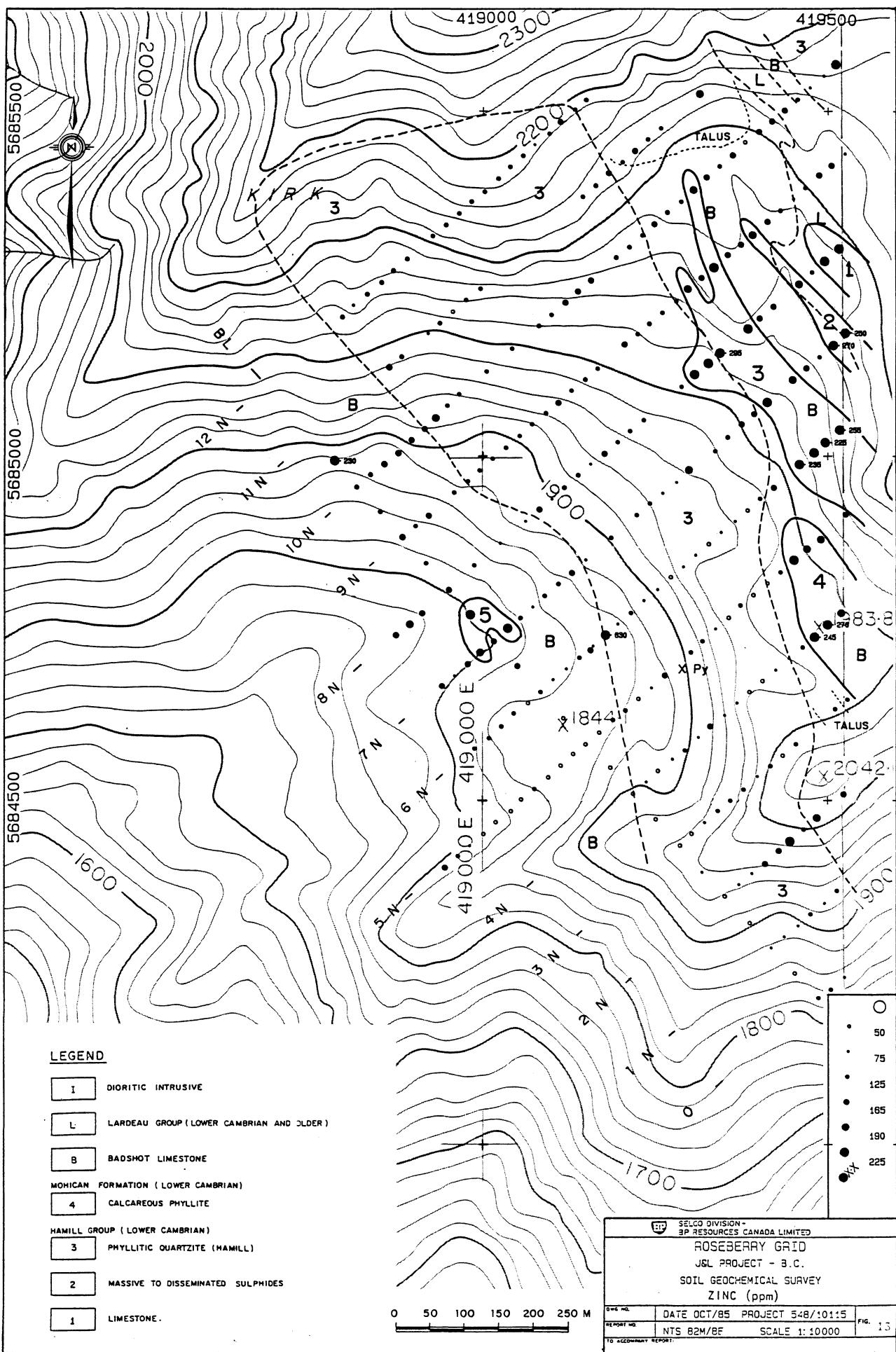
0 50 100 150 200 250 M

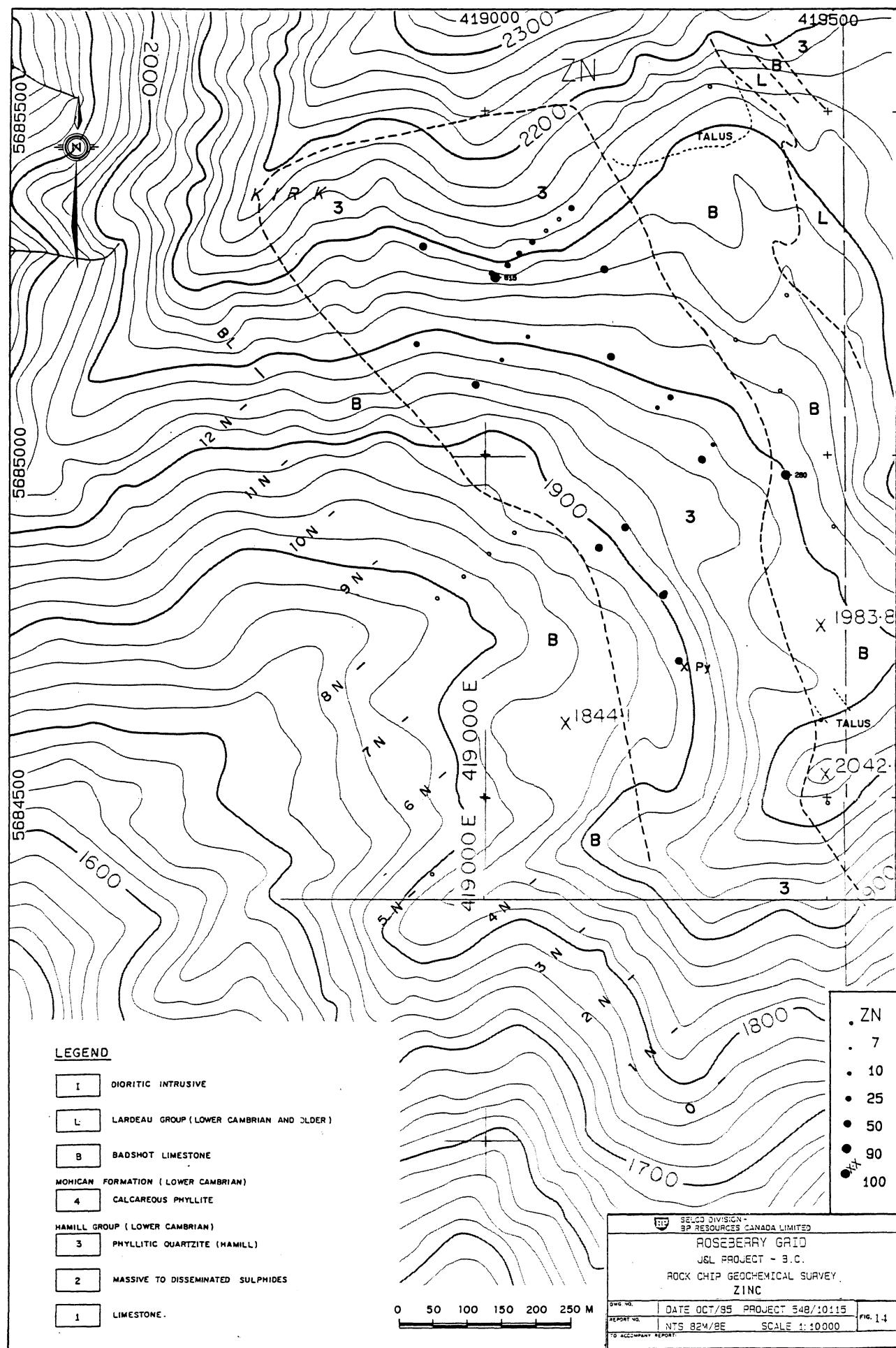
SELCO DIVISION - BP RESOURCES CANADA LIMITED		
ROSEBERRY GRID		
JSL PROJECT - B.C.		
SOIL GEOCHEMICAL SURVEY		
LEAD (ppm)		
DRG. NO.	DATE OCT/85	PROJECT 548/10115
REPORT NO.	NTS 82M/8F	SCALE 1:10000
TO ACCOMPANY REPORT:		

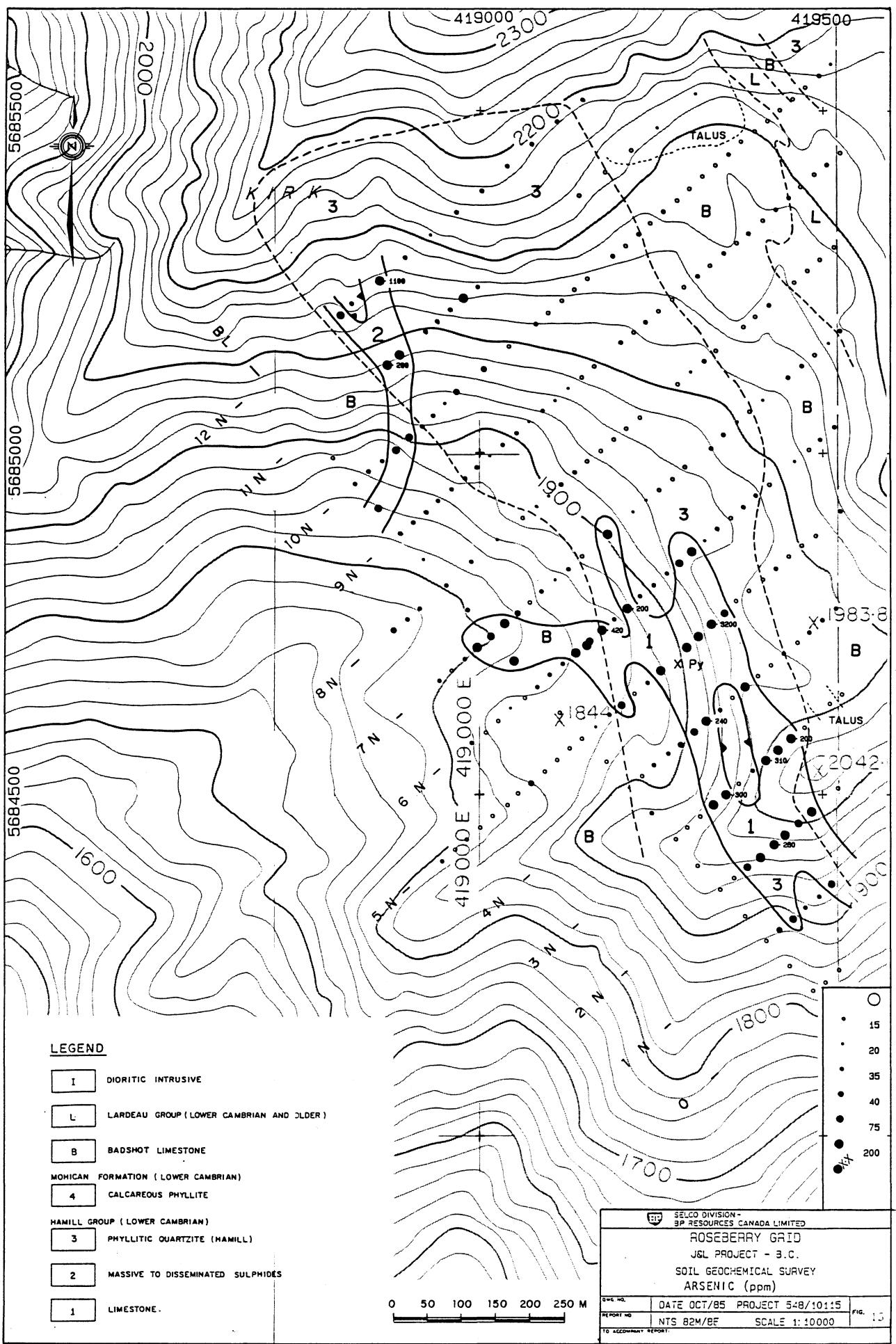
FIG. 11

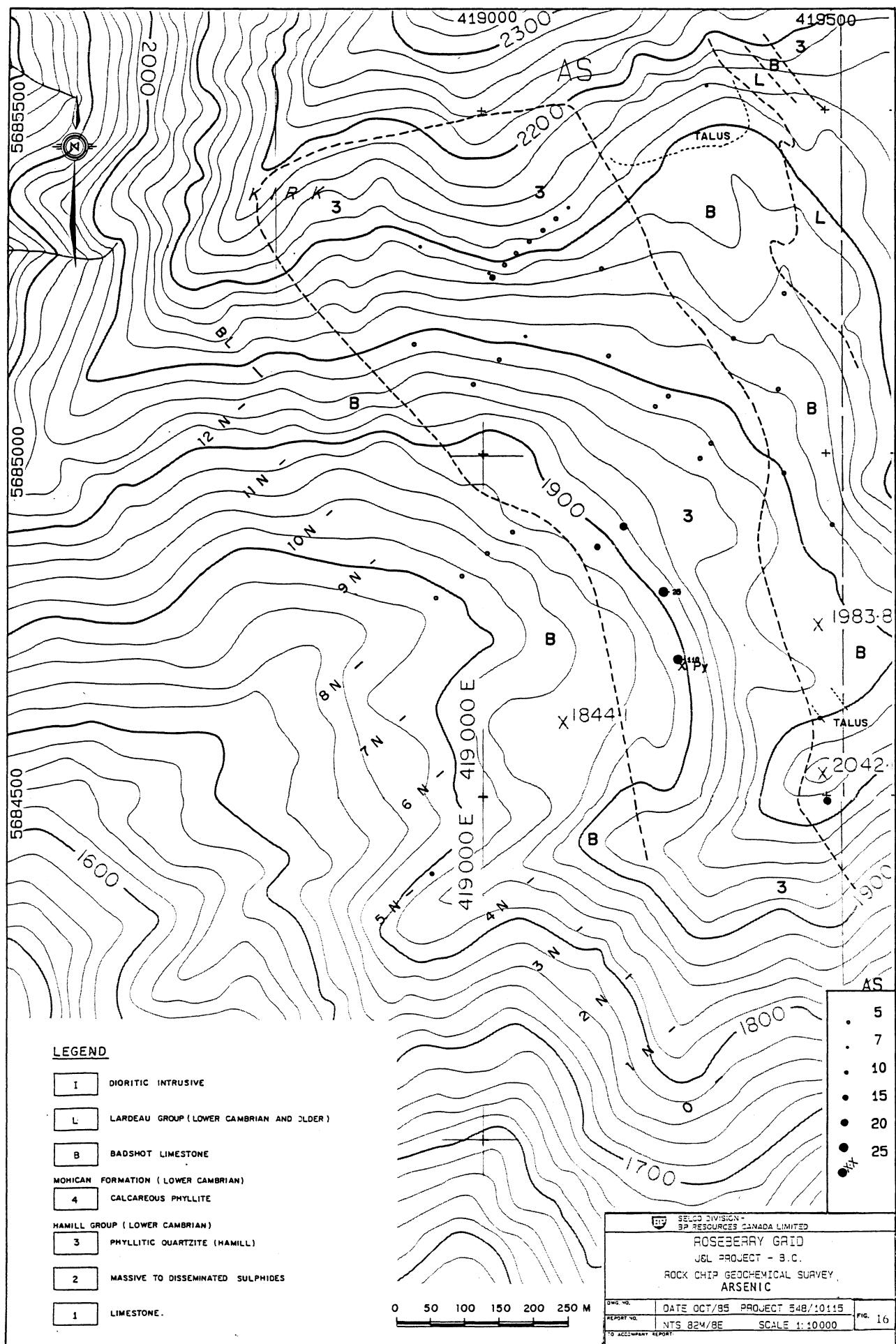


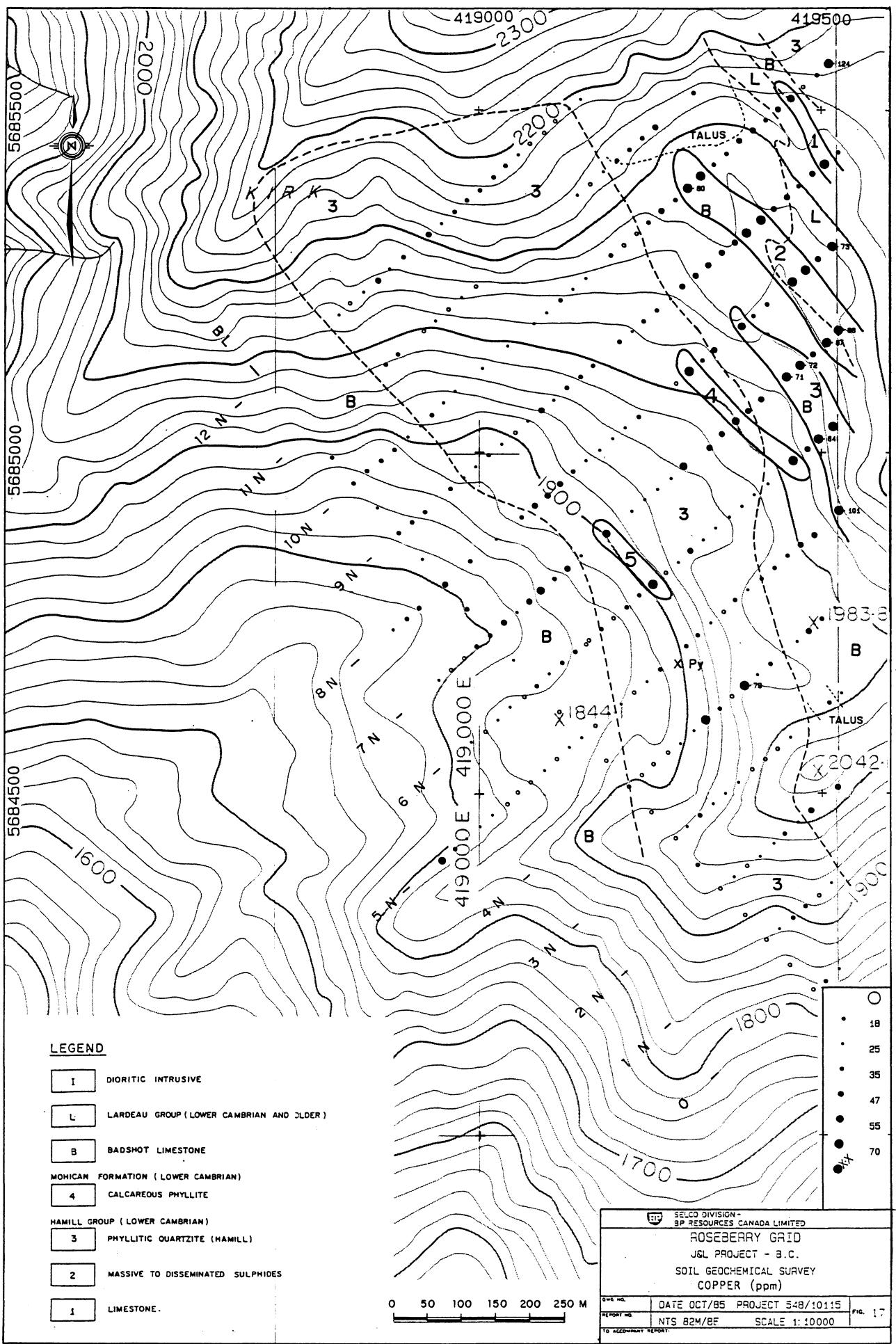
SELCO DIVISION -	
BP RESOURCES CANADA LIMITED	
ROSEBERRY GRID	
JGL PROJECT - B.C.	
ROCK CHIP GEOCHEMICAL SURVEY,	
LEAD	
DWG. NO.	DATE OCT/95 PROJECT 548/10115
REPORT NO.	NTS 82M/8E SCALE 1:10000 FIG. 12
TO ACCOMPANY REPORT	

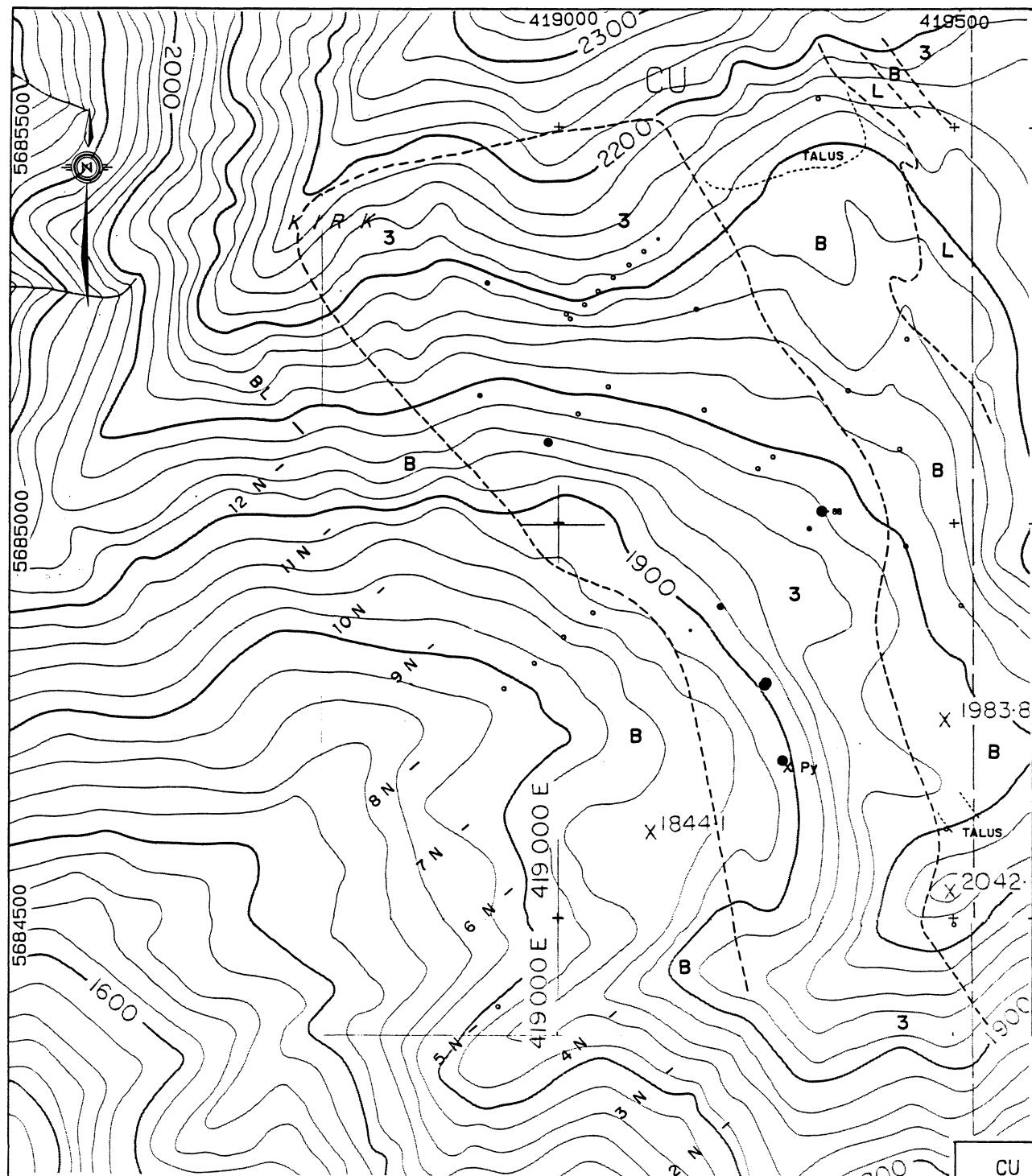












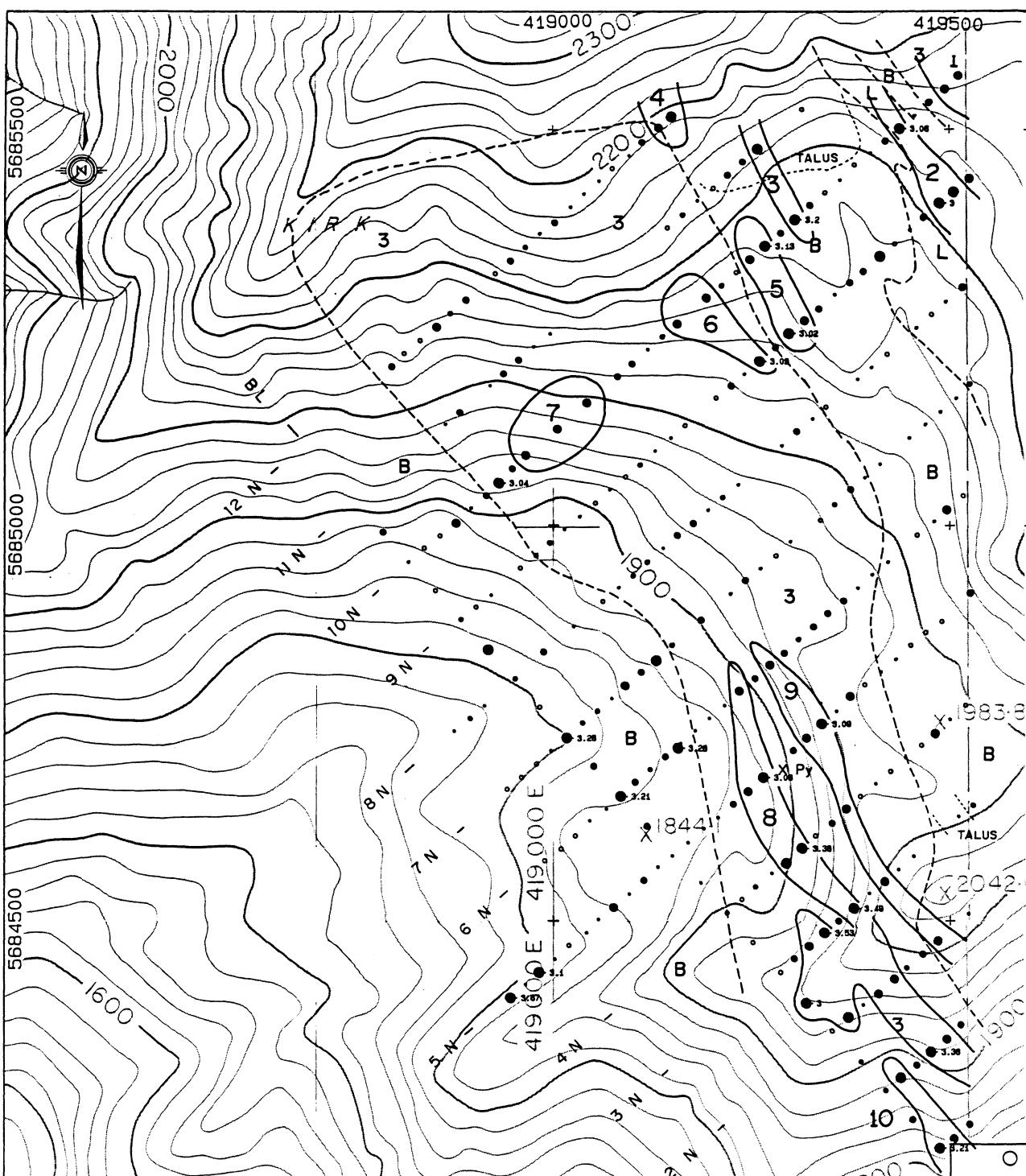
#### LEGEND

- [Box] I DIORITIC INTRUSIVE
- [Box] L LARDEAU GROUP (LOWER CAMBRIAN AND OLDER)
- [Box] B BADSHOT LIMESTONE
- MOCIAN FORMATION (LOWER CAMBRIAN)
- [Box] 4 CALCAREOUS PHYLLITE
- HAMILL GROUP (LOWER CAMBRIAN)
- [Box] 3 PHYLLITIC QUARTZITE (HAMILL)
- [Box] 2 MASSIVE TO DISSEMINATED SULPHIDES
- [Box] 1 LIMESTONE.

0 50 100 150 200 250 M

SELCO DIVISION - BP RESOURCES CANADA LIMITED	
ROSEBERRY GRID	
JEL PROJECT - B.C.	
ROCK CHIP GEOCHEMICAL SURVEY,	
COPPER	
DWG. NO.	DATE OCT/95 PROJECT 548/10115
REPORT NO.	NTS 82M/8E SCALE 1:10000
TO ACCOMPANY REPORT	

FIG. 18

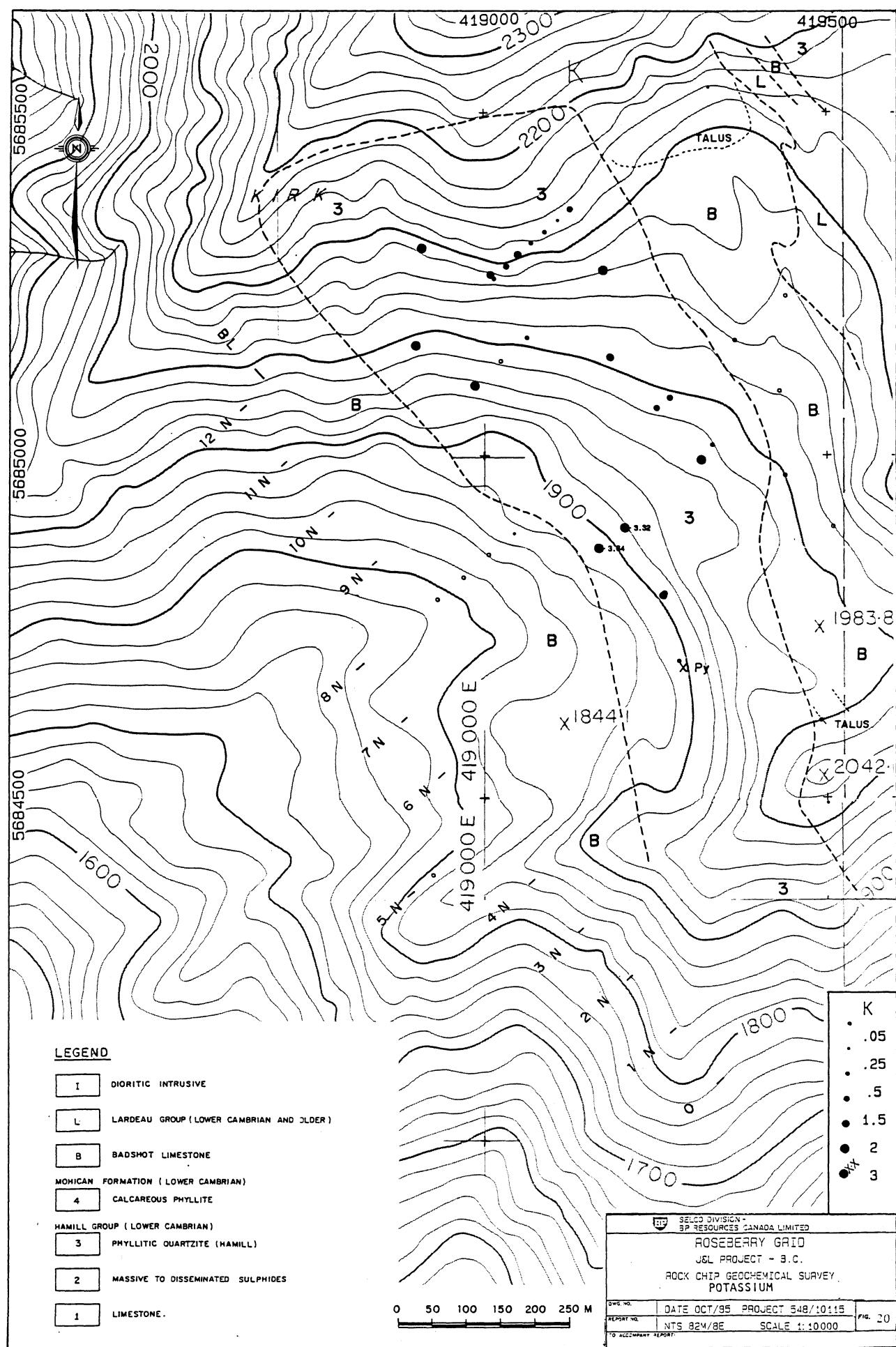


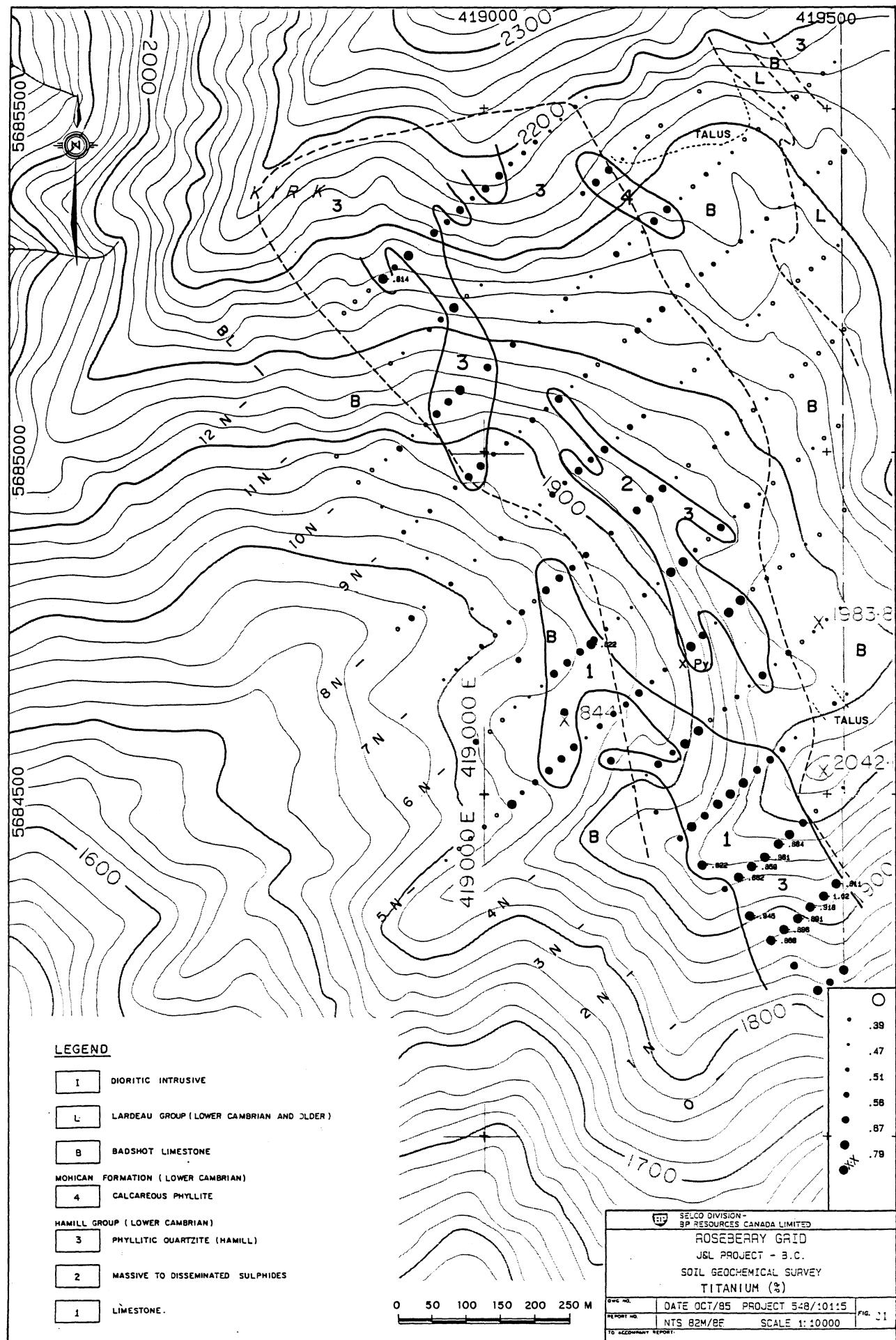
LEGEND

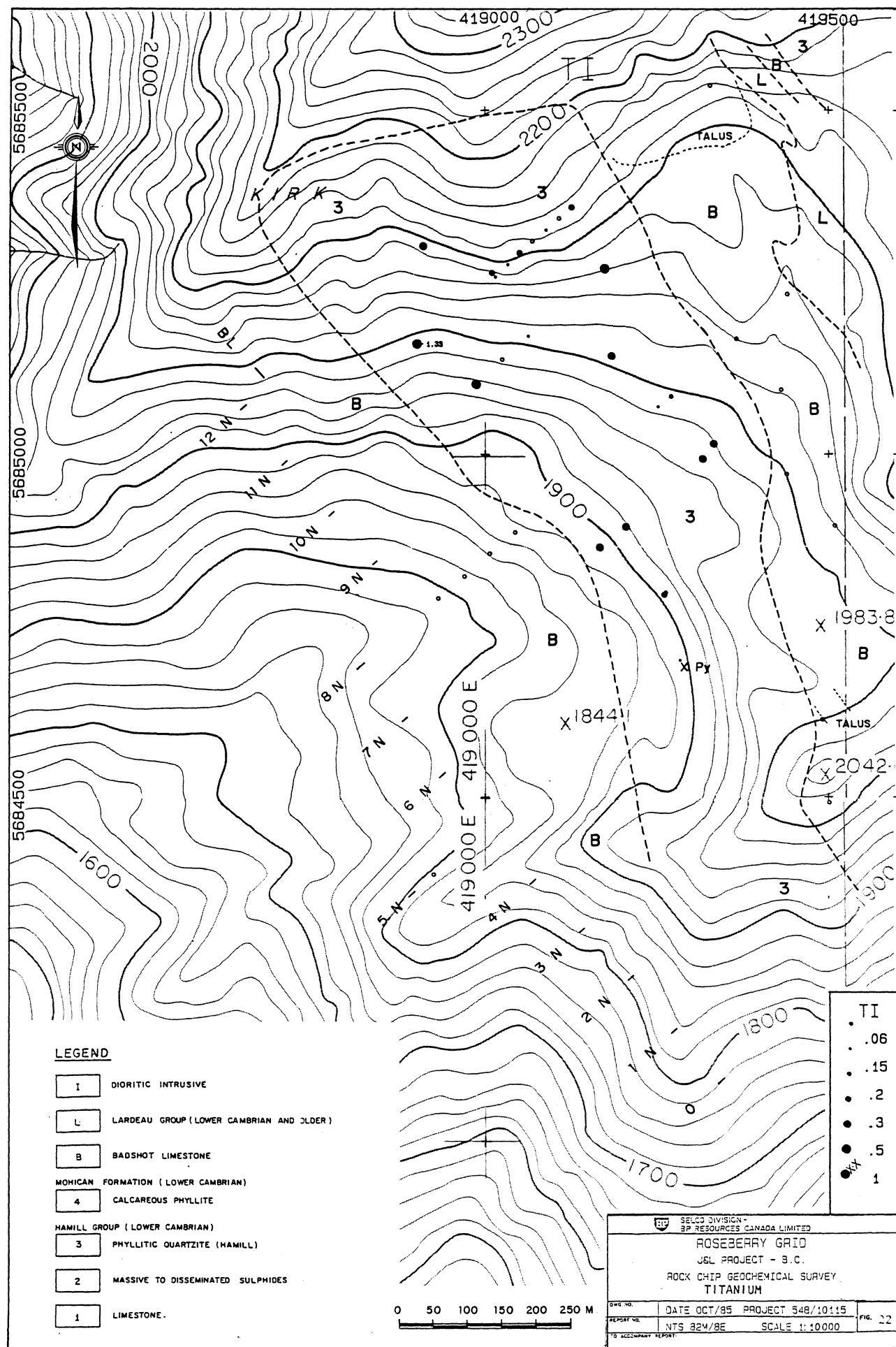
- [Box] I DIORITIC INTRUSIVE
- [Box] L LARDEAU GROUP (LOWER CAMBRIAN AND OLDER)
- [Box] B BADSHOT LIMESTONE
- [Box] MOHICAN FORMATION ( LOWER CAMBRIAN )
- [Box] 4 CALCAREOUS PHYLLITE
- [Box] HAMIL GROUP ( LOWER CAMBRIAN )
- [Box] 3 PHYLLITIC QUARTZITE ( HAMIL )
- [Box] 2 MASSIVE TO DISSEMINATED SULPHIDES
- [Box] 1 LIMESTONE.

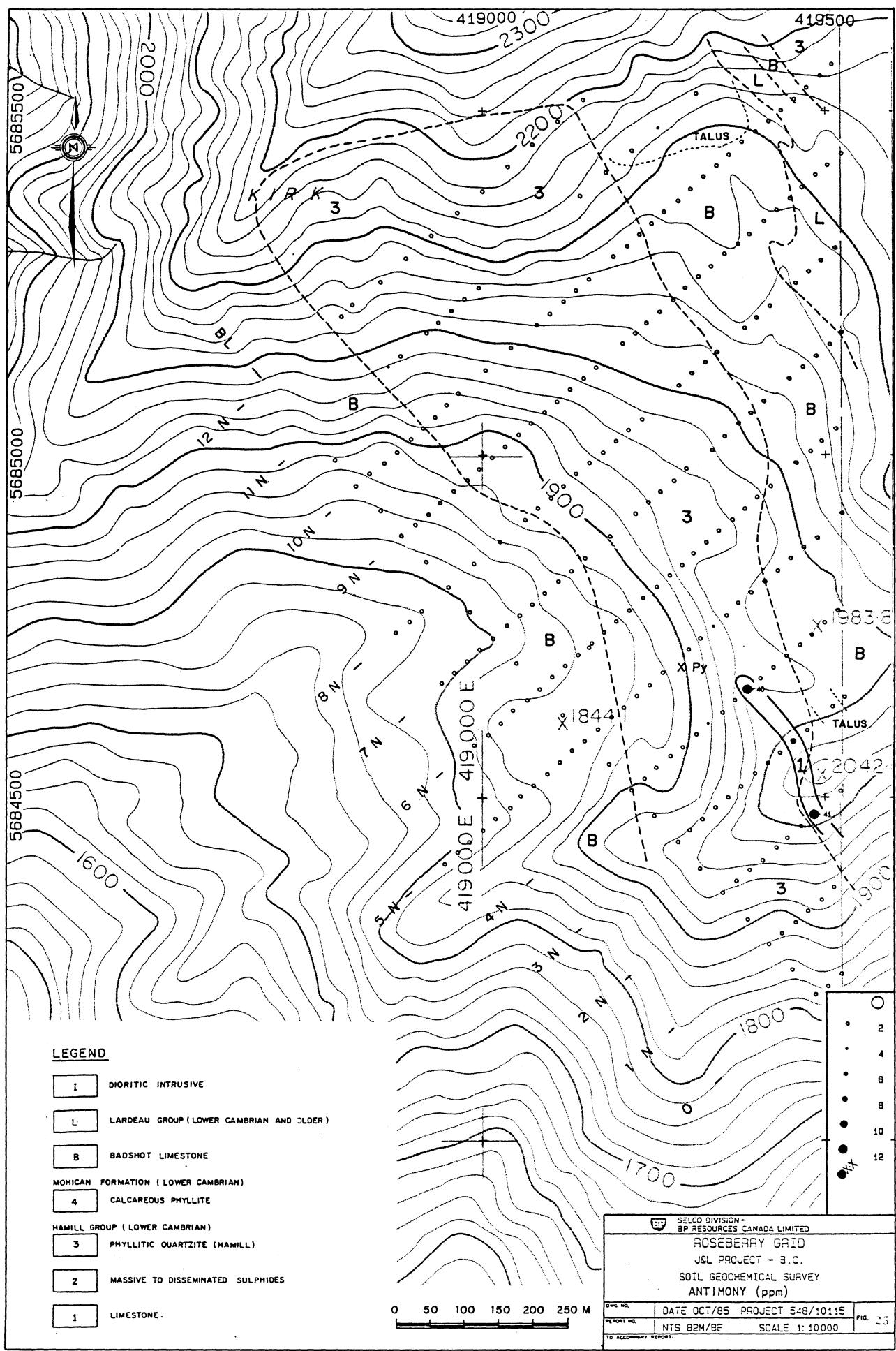
0 50 100 150 200 250 M

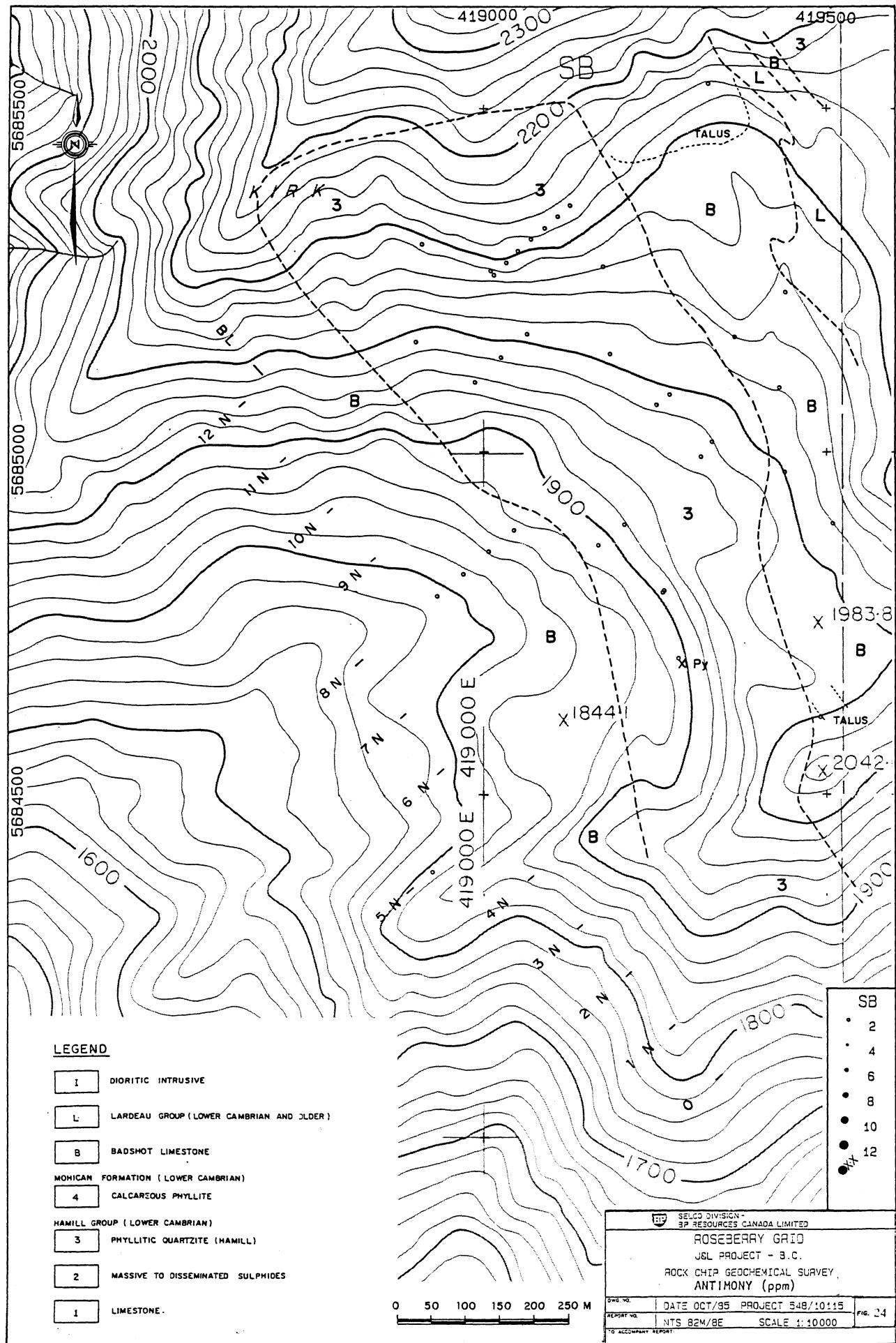
SELCO DIVISION - BP RESOURCES CANADA LIMITED	
ROSEBERRY GRID	
JGL PROJECT - B.C.	
SOIL GEOCHEMICAL SURVEY	
POTASSIUM (%)	
DRW NO.	DATE OCT/85 PROJECT 548/1015
REPORT NO.	NTS 82M/EE SCALE 1:10000 FIG. 10
TO ACCOMPLISH REPORT	











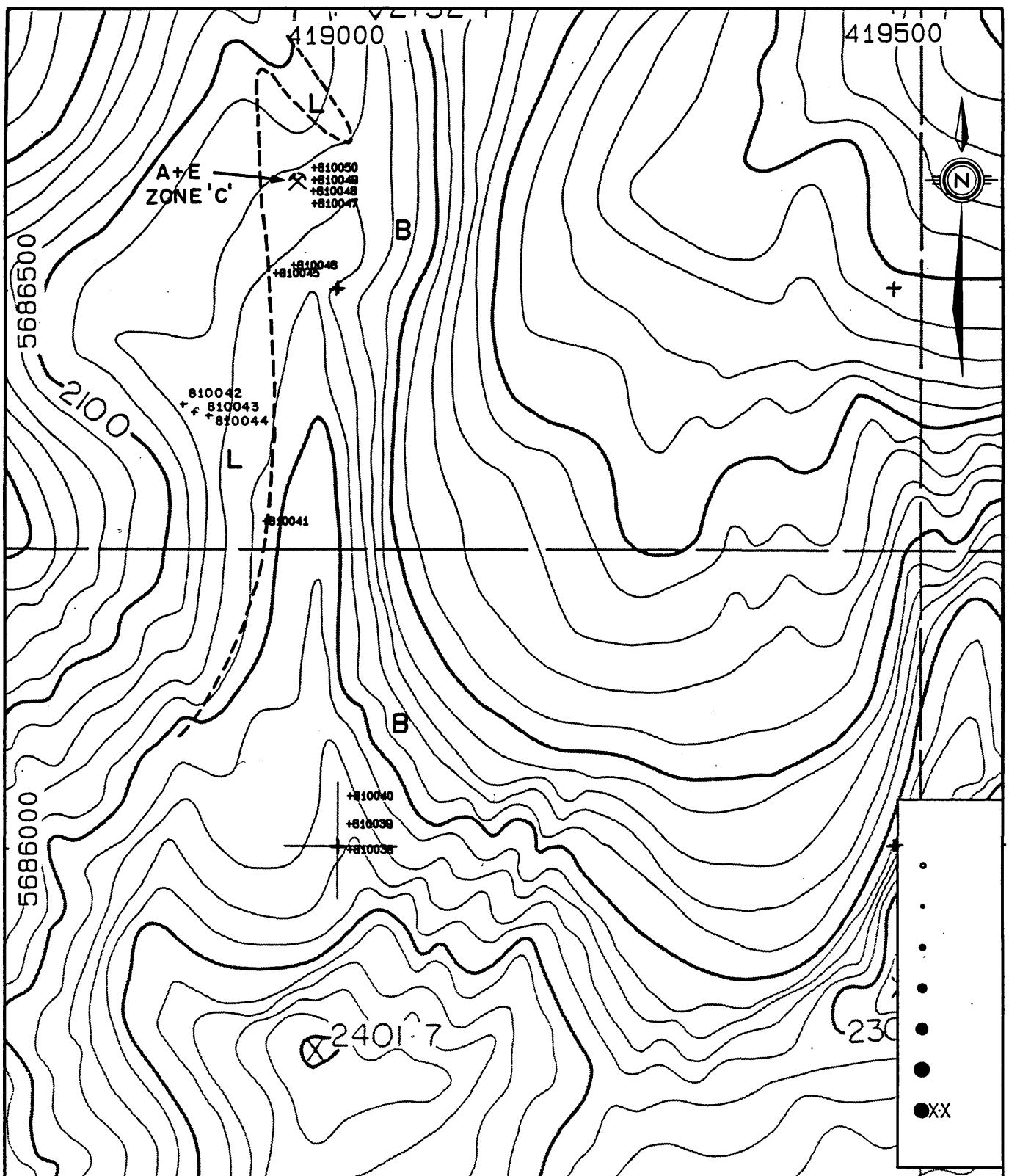
The rock sample results also indicate that, although there is no economically significant mineralization present on surface, lead, arsenic and silver levels are geochemically significant. There is a rough correlation between lead, silver and arsenic and they represent multi-element anomalies at two locations. These two locations are found at sheared, altered and pyritic quartzite to quartz-sericite phyllite of the Hamill Group which hosts economically significant mineralization to the southeast. Leaching of the sulphide mineralization in the sampled Hamill Group rocks has, possibly, lowered the base and precious metal contents.

b) Northern Area (see Figures 25-34)

The rock geochemistry indicates that the only significant surface mineralization is located in shear zones within the Badshot limestones. Multi-element anomalies (Pb, Sb ± Ag, Zn, As, Au, Cu, Cd, Ba) are present from all four samples from this Zone which was located by previous workers (Hope, 1965). Leaching and oxidation has probably reduced the reported metal content of this zone.

METALLURGY

The poor metallurgical test results obtained from the sample (composite 4) collected from the underground workings during 1984



#### LEGEND



LARDEAU GROUP (LOWER CAMBRIAN AND OLDER)

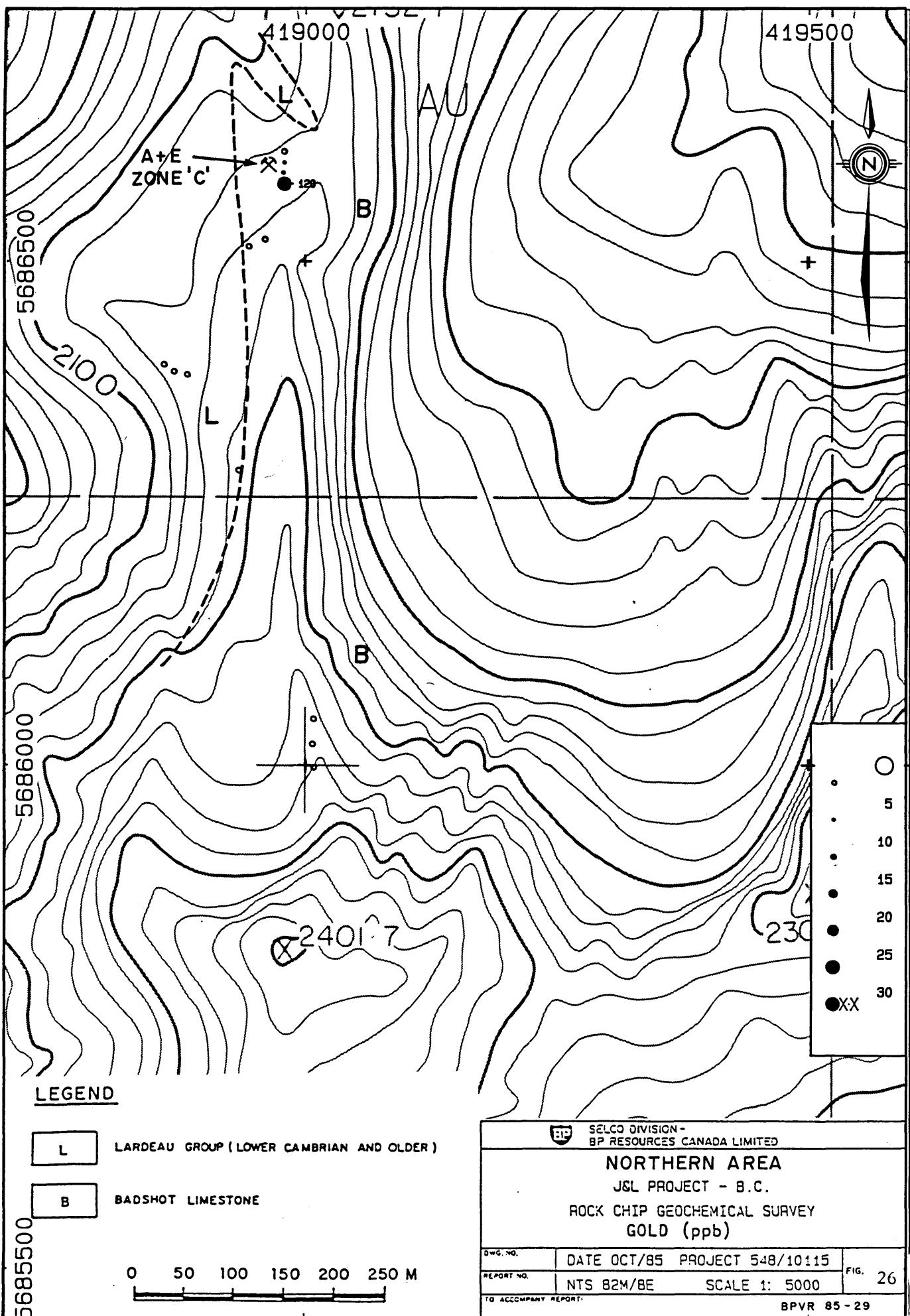


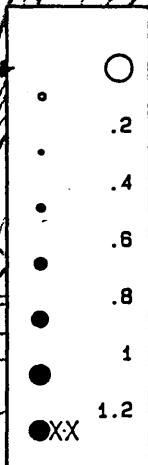
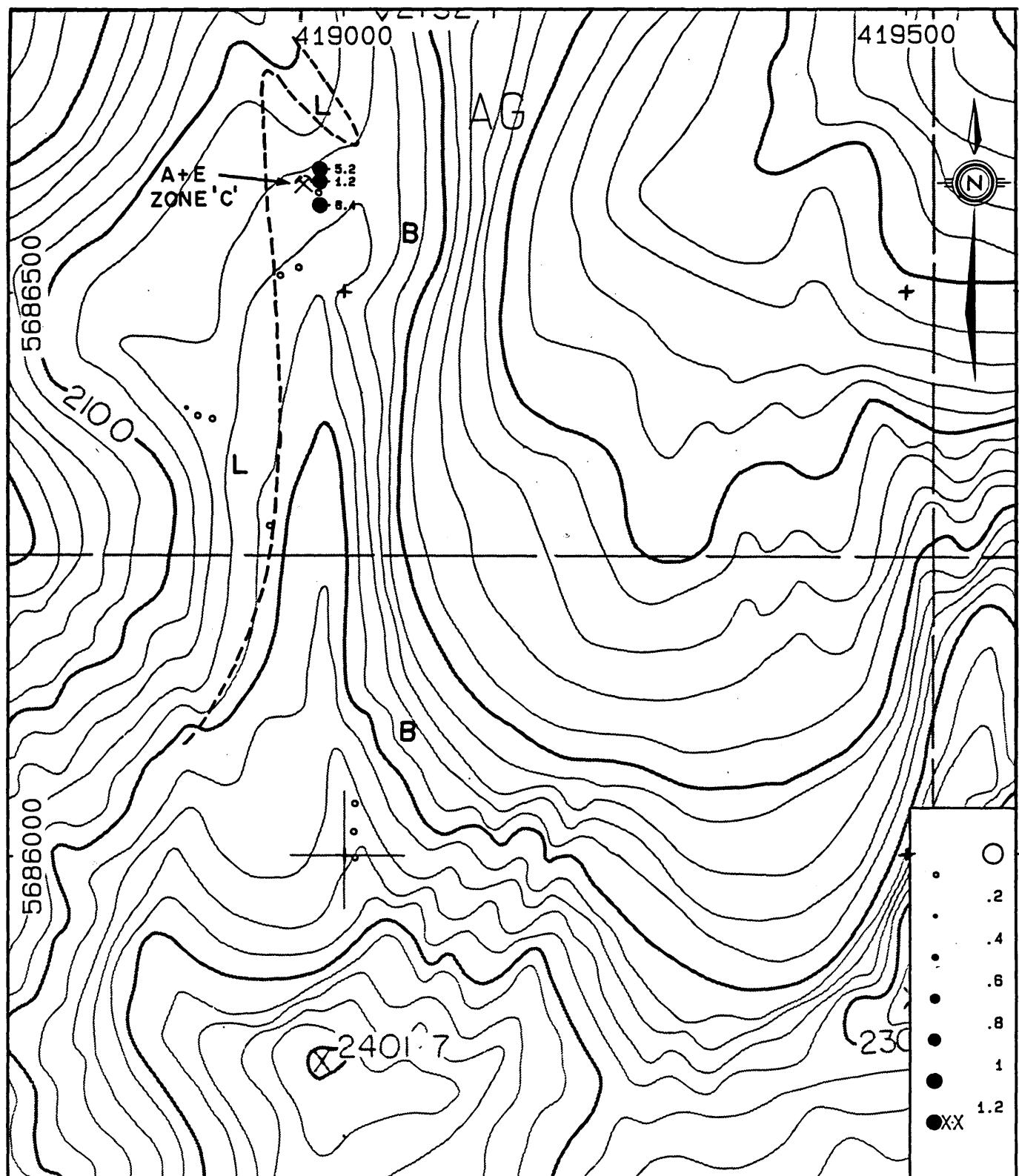
BADSHOT LIMESTONE

5685500

0 50 100 150 200 250 M

		SELCO DIVISION - BP RESOURCES CANADA LIMITED
NORTHERN AREA		
JCL PROJECT - B.C.		
ROCK CHIP GEOCHEMICAL SURVEY		
SAMPLE LOCATION		
DWG. NO.	DATE OCT/85 PROJECT 548/10115	
REPORT NO.	NTS 82M/BE	SCALE 1: 5000
TO ACCOMPANY REPORT:		FIG. 25
BPVR 85-29		



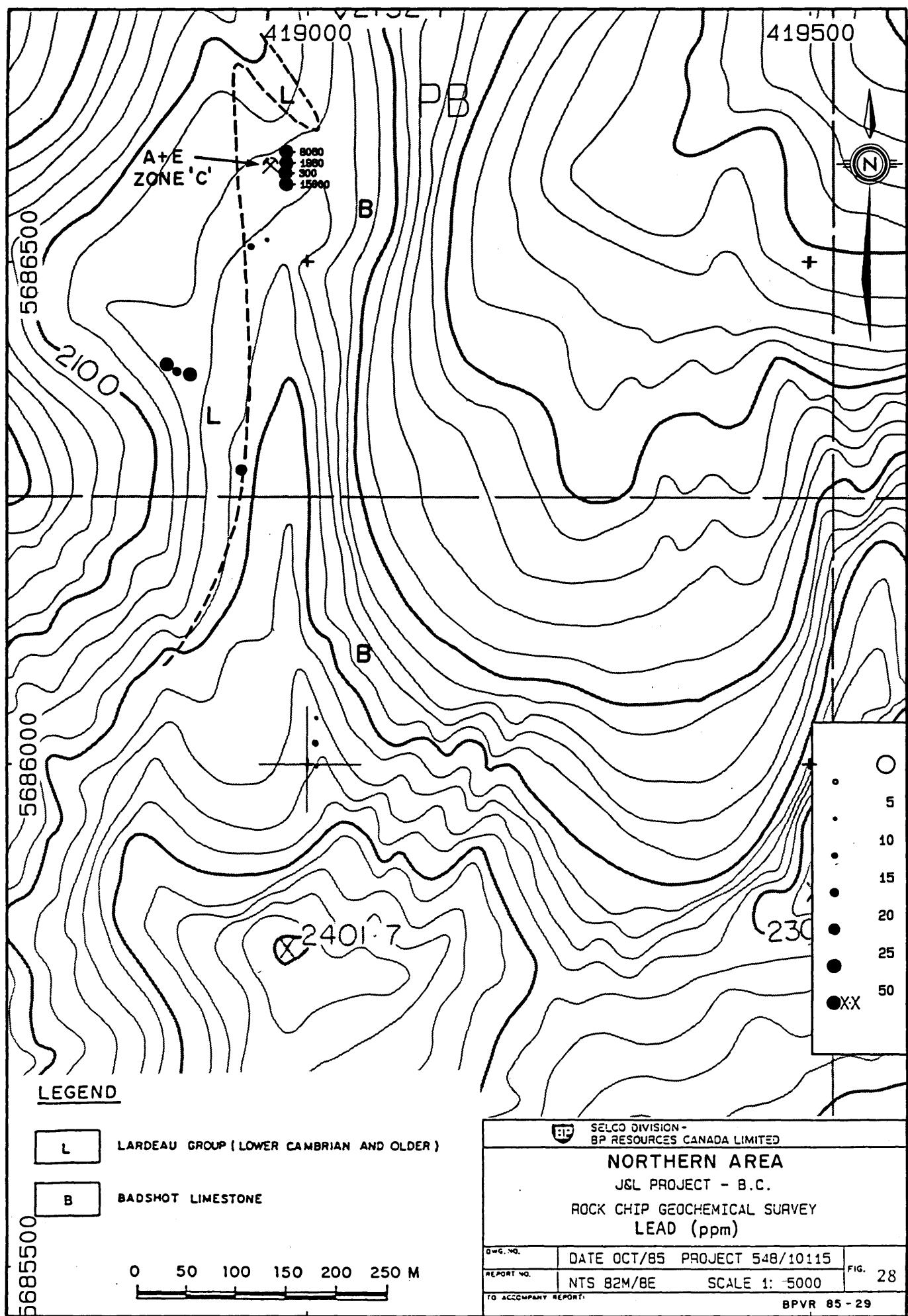


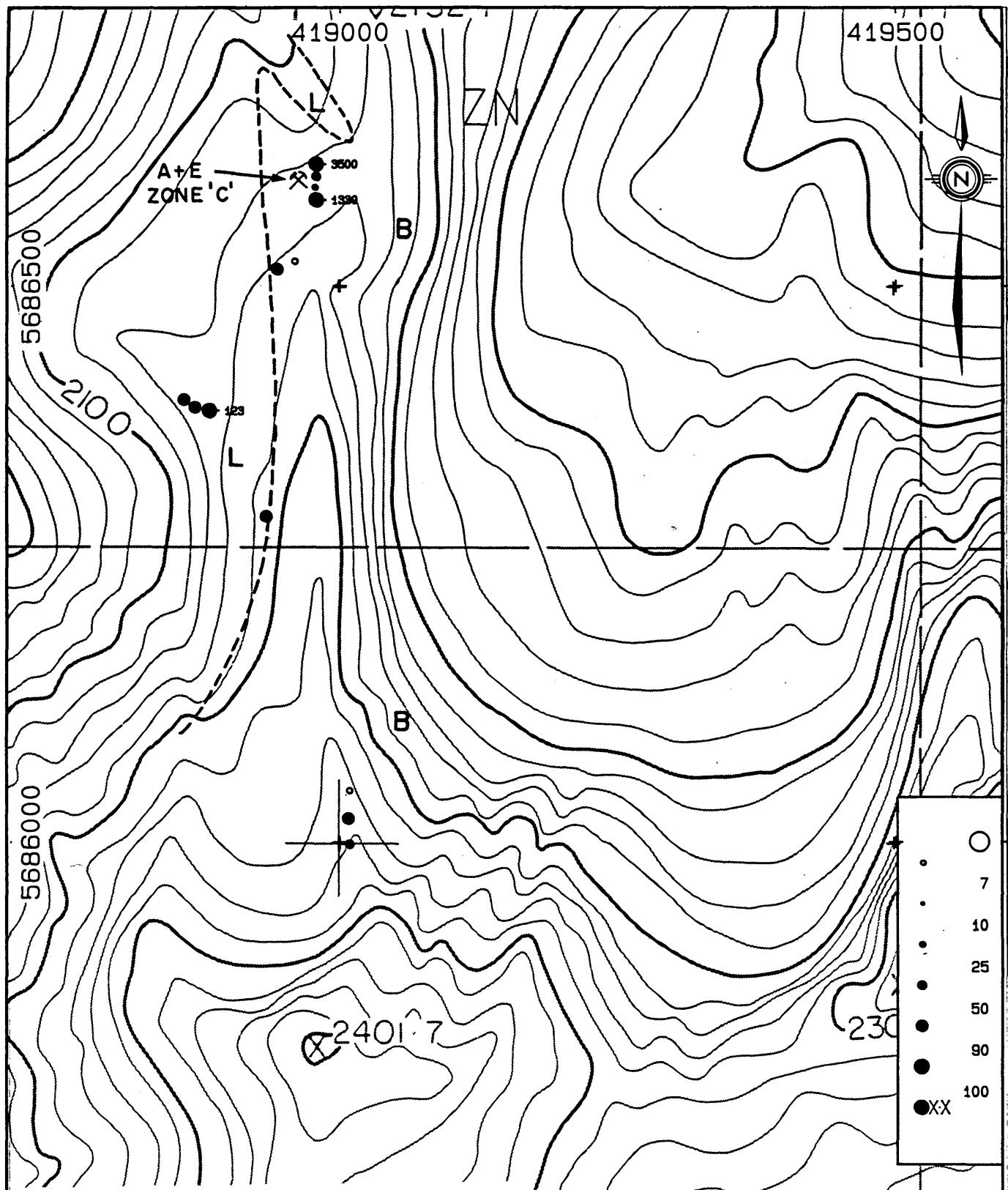
<b>SELCO DIVISION - BP RESOURCES CANADA LIMITED</b>	
<b>NORTHERN AREA</b>	
JSL PROJECT - B.C.	
ROCK CHIP GEOCHEMICAL SURVEY	
<b>SILVER (ppm)</b>	
DWG. NO.	DATE OCT/85 PROJECT 548/10115
REPORT NO.	NTS 82M/8E SCALE 1: 5000
TO ACCOMPANY REPORT	
BPVR 85-29	

FIG. 27

5685500

0 50 100 150 200 250 M





LEGEND

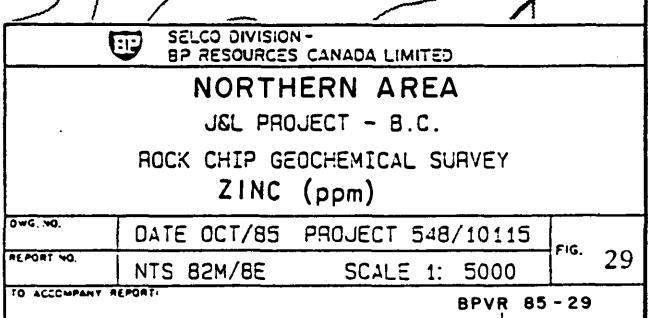
L

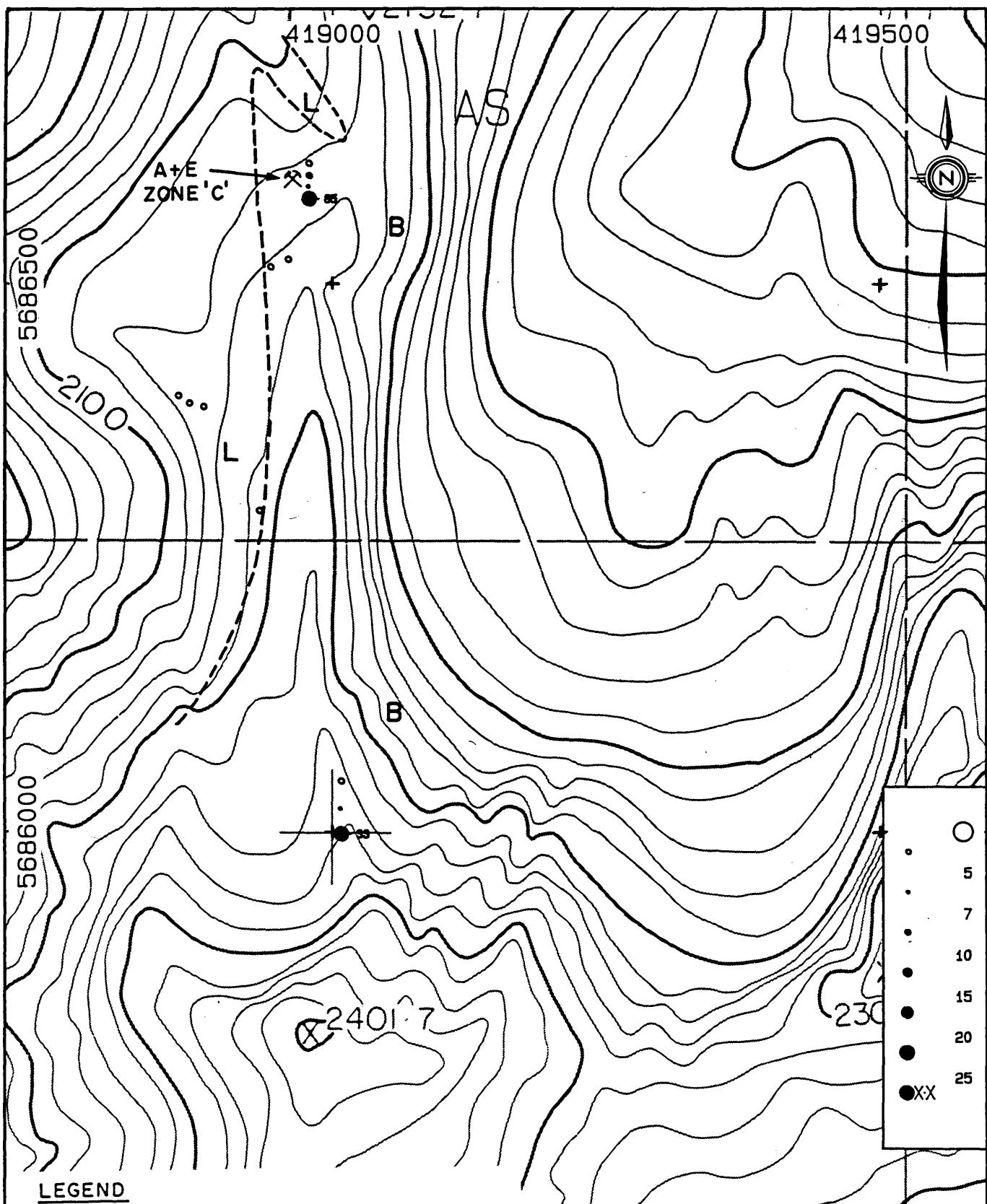
## LARDEAU GROUP ( LOWER CAMBRIAN AND OLDER )

B

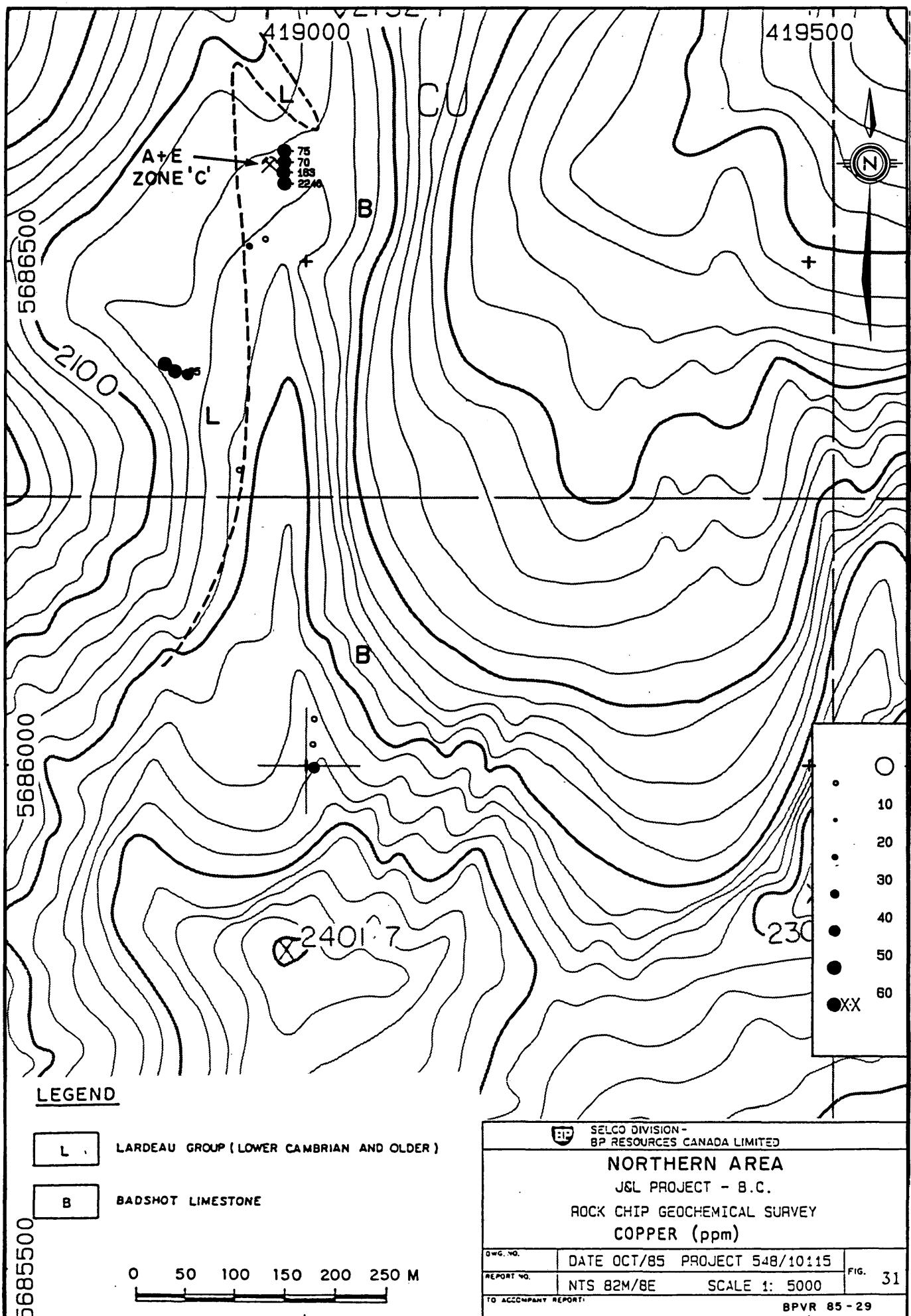
## **BADSHOT LIMESTONE**

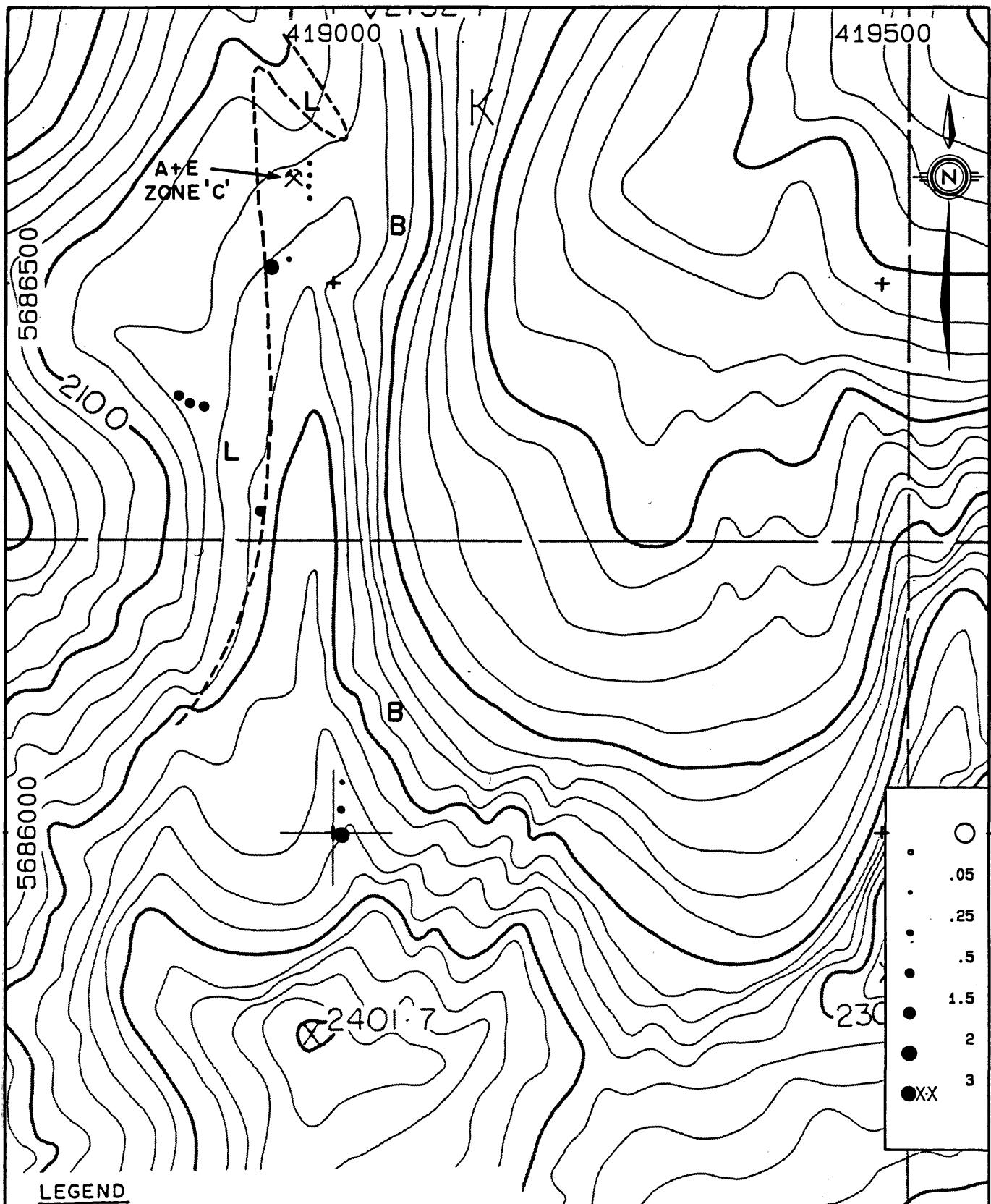
A horizontal scale bar with numerical markings at 0, 50, 100, 150, 200, and 250. The label 'M' is positioned at the far right end of the bar.





SELCO DIVISION - BP RESOURCES CANADA LIMITED	
NORTHERN AREA	
JGL PROJECT - B.C.	
ROCK CHIP GEOCHEMICAL SURVEY	
ARSENIC (ppm)	
DWG. NO.	DATE OCT/85 PROJECT 548/10115
REPORT NO.	NTS 82M/BE SCALE 1: 5000
FIG. 30	
TO ACCOMPANY REPORT:	
BPVR 85-29	





#### LEGEND

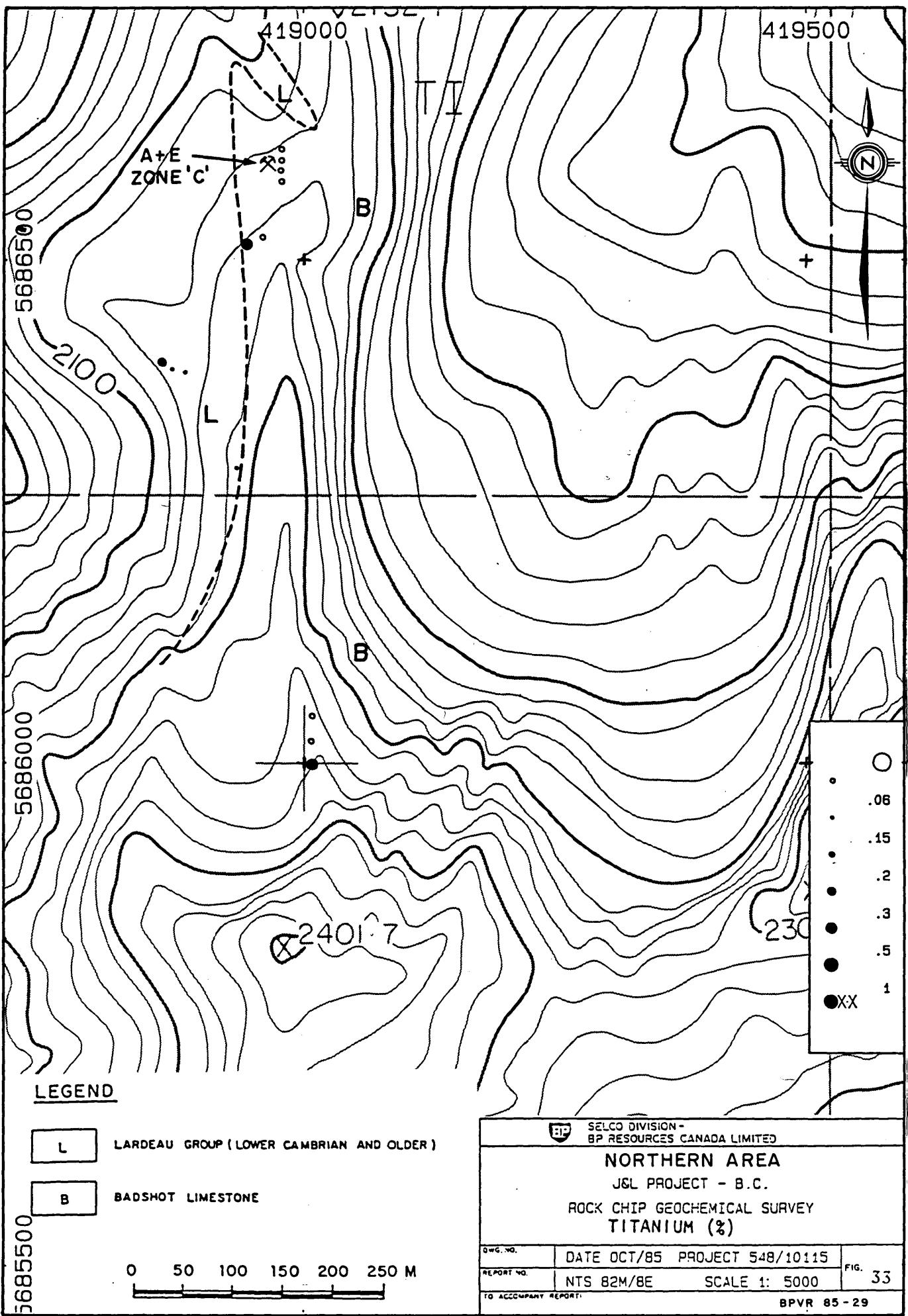
LARDEAU GROUP ( LOWER CAMBRIAN AND OLDER )

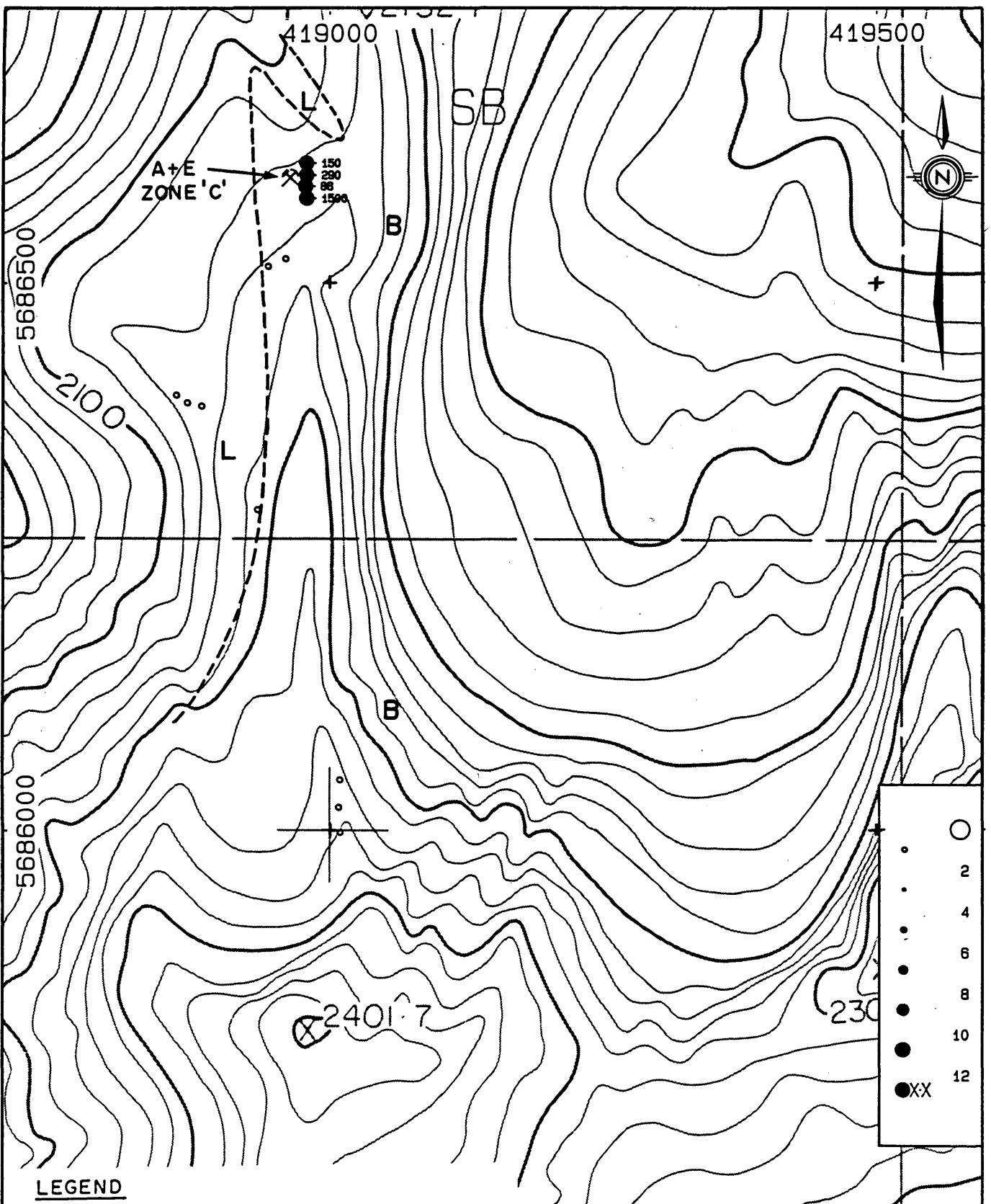
BADSHOT LIMESTONE

5685500  
000  
5686000  
5686500  
2100

0 50 100 150 200 250 M

SELCO DIVISION - BP RESOURCES CANADA LIMITED	
NORTHERN AREA	
J&L PROJECT - B.C.	
ROCK CHIP GEOCHEMICAL SURVEY	
POTASSIUM (%)	
DWG. NO.	DATE OCT/85 PROJECT 548/10115
REPORT NO.	NTS 82M/8E SCALE 1: 5000
TO ACCOMPANY REPORT	
BPVR 85-29	
FIG. 32	





#### LEGEND



LARDEAU GROUP ( LOWER CAMBRIAN AND OLDER )



BADSHOT LIMESTONE

0 50 100 150 200 250 M

SELCO DIVISION - BP RESOURCES CANADA LIMITED	
NORTHERN AREA J&L PROJECT - B.C.	
ROCK CHIP GEOCHEMICAL SURVEY ANTIMONY (ppm)	
DWG. NO.	DATE OCT/85 PROJECT 548/10115
REPORT NO.	NTS 82M/8E SCALE 1: 5000
TO ACCOMPANY REPORT: FIG. 34	
BPVR 85-29	

(see J & L Summary Report, dated February 27, 1985) led to the testing of additional samples organized from the "drift face sulphide bucket" samples collected during 1983 and 1984.

Six sulphide samples, which supposedly represent the main sulphide "types" at the J & L, were subjected to mineralogical and metallurgical studies at the Sunbury Research Centre in England. These 6 ore types are described as follows:

- Type 1: Banded high iron sphalerite sulphides
- Type 2: Banded high arsenopyrite sulphides
- Type 3: High sphalerite, low gold arsenopyrite sulphides
- Type 4: Milled pyrite, massive fine-grained sulphides
- Type 5: Mixed sulphides
- Type 6: Coarse-grained, remobilized pyrite/arsenopyrite

A summary of the Sunbury results is as follows:

1. Analytical, mineralogical and preliminary flotation studies have been carried out on the six main ore types identified at J & L to determine which, if any, of the types were responsible for the metallurgical problems encountered in previous testwork.

2. Extensive analysis of the bulk ores and individual size fractions showed correlations of silver with lead and antimony, and of gold with iron and arsenic. There was no correlation of gold and silver with zinc or each other.
3. The analytical and mineralogical data showed that all the ores were complex and although varying widely in head grade exhibited very similar mineral associations and textures.
4. The mineral associations, together with the liberation data for the major minerals (galena, sphalerite, pyrite and arsenopyrite) suggested that the best flotation strategy would be the production of a dirty lead concentrate followed by sphalerite and arsenopyrite-pyrite flotation.
5. Although a standardised, rather than optimised, flotation procedure was used for each ore type, the metallurgical results confirmed the mineralogical predictions. None of the ore types gave a notably superior or inferior metallurgical performance to the other types. However, ore Types 3 and 6 gave probably the cleanest lead and zinc floats, with Type 2 the worst.

6. Recoveries of lead, zinc and arsenic to their respective concentrates were approximately 70%, 80% and 80%. Corresponding concentrate grades were 35-40%, 53-58%, and 10-27% depending on ore type. The lead concentrate contained most of the antimony in the ore whereas the zinc concentrate was relatively clean.
7. Although most of the silver reported to the lead concentrate, gold was split between the lead (30-35%) and arsenopyrite-pyrite concentrates (55-60%). Cyanidation tests and mineralogical work showed the gold in the lead concentrate to be coarse and cyanidable whereas that in the arsenopyrite concentrate was sub-micron and virtually unleachable. Cyanidation tests of individual ores and the composite further supported the presence of two modes of gold mineralization.
8. The present results also confirm that the results obtained by Lakefield Research on their Composite 4 were not due to an anomalous sample. In fact their results from Composite 4, which is closer in head grade to the predicted mill feed than any of the samples tested in this report, may be representative of the ore.

CONCLUSIONS AND RECOMMENDATIONS

The 1985 geological/geochemical survey identified two lead-arsenic-potassium soil anomalies and the mineralization at Zone "C" which all merit followup. Trenching of the soil anomalies, in an effort to locate their sources, and Zone "C", in order to fully evaluate its tenor and dimensions, would be the recommended followup program, but this is not a high priority. If the Main Zone mineralization is not economic, then there can be little support to explore for similar mineralization which is less accessible. If additional surface work is contemplated, testing and extending the North Zone mineralization along strike, to the northwest, would be the primary target. It should be noted that if the North Zone mineralization extends as far north as the Roseberry grid area, it would be found at depth.

The metallurgical study completed at the Sunbury Research Centre confirmed the recovery problems encountered by Lakefield Research during 1984. These preliminary investigations appear to indicate that the deposit is not economic with standard recovery technology. However, the potential mineral content of the J & L is quite significant and may prove to be an economic operation if the metallurgical problems are resolved. Thus, further research on extraction methods may be justified and new metallurgical

24.

processes should be evaluated as they become available. Since an early solution to the metallurgical problems do not appear evident, no further surface or underground work should be contemplated by Selco. The decision on the future of the property should consider the time and expense required for the extraction research and the overlying, heavy property payments that are derived from the agreements.

Respectfully submitted,

---

Rex Pegg, B.A.Sc., P.Eng.

BIBLIOGRAPHY

Bennett, C.A.; 1985, Preliminary Metallurgical Evaluation of Six  
Ore Types from the J & L Property, B.C., Canada

Pegg, Rex; 1983, A Summary Report on the J & L Mineral Option

Pegg, R. & Grant, B.; 1984, A Summary Report on the J & L  
Mineral Option

Pegg, R. & Grant, B.; 1985, A Summary Report on the J & L  
Mineral Option

Pegg, R. & Hoffman, S.; 1985, Geochemical and Physical Work  
Report on the Sam, Burke and Arty #1  
Claim Groups, J & L Property

APPENDIX I  
LIST OF FIELD PERSONNEL

1. Rex Pegg (Project Geologist) - August 19th - September 7th
2. John Michell (Contract Mining Engineer)  
August 12th - 16th and August 19th - 23rd
3. Brian Baker (Contract - Geological Assistant)  
August 19th -28th and September 3rd - 7th.

APPENDIX II

## ROCK SAMPLE DESCRIPTIONS

- 810-001 L2+00N, 2+00E  
 - Grey banded, medium grained limestone  
 - Minor graphite along foliation planes
- 810-002 L5+00N, 1+75E  
 - Fine-grained Quartzite  
 - 1 to 3% cubic fine-grained pyrite in fractures  
 - Minor jarosite staining
- 810-003 L5+00N, 3+00W  
 - Grey banded, medium-grained limestone  
 - Light grey to white on fresh surface
- 810-004 L6+00N, 6 metres south of 2+22E  
 - Gossanous lens (pyritic) within Quartzite  
 - Oxidized and leached  
 - 5% fine-grained pyrite and abundant jarosite and sericitic alteration  
 - Lens measures 70 X 90 cm (horizontal measurement)
- 810-005 L6+00N, 6 metres south of 2+12E  
 - Gossanous, pyritic lens (20 cm wide) in Quartzite  
 - Oxidized and leached  
 - Abundant jarosite and sericitic alteration
- 810-006 L7+00N, 2+50E  
 - Quartz-sericite phyllite with 1% pyrite (fine-grained)  
 - Speckled oxidation  
 - Minor calcareous fracture filling  
 - Sampled over 40 cm
- 810-007 L7+00N, 2+00E  
 - Quartz-sericite phyllite to sericitic Quartzite  
 - Fe oxide along foliation planes and as speckles  
 - Minor, local calcareous fracture filling  
 - Minor bull quartz lenses (up to 60 cm wide)
- 810-008 L8+00N, 4+25E  
 - Light brownish grey Quartzite  
 - Fe oxide patches throughout and minor sericite along foliation planes  
 - Local calcareous fracture filling and narrow (up to 5 mm) quartz veinlets (vertically dipping, most parallel with foliation)  
 - Minor bull quartz lenses

- 810-009 L8+00N, 4+00E  
- Light grey to brownish grey Quartzite (sericitic)  
- <1% fine-grained pyrite still visible but most is leached or oxidized (goethite - cubic to subrounded)  
- Minor Fe oxide fracture filling and white bull quartz lenses
- 810-010 - L7+00N, 4+25E  
- Dirty, oxidized Quartzite  
- Fe oxide blebs and stringers  
- Minor fine-grained pyrite and blebs of magnetite  
- Local, calcareous fracture filling  
- Minor bull quartz veins (up to 9 cm wide)
- 810-011 L7+00N, 4+00E  
- Quartz-sericite phyllite to sericitic Quartzite  
- Abundant oxide spots (subrounded to cubic goethite) and fracture filling  
- Minor quartz lenses and calcareous fracture filling
- 810-012 L8+00N, 1+25E  
- Light grey weathering, grey banded, medium-grained limestone  
- Small, slumped exposure
- 810-013 L8+00N, 0+75E  
- Light grey weathering, grey banded, medium-grained limestone  
- Light grey to white on fresh surface  
- Appears slumped
- 810-014 L8+00N, 0+25E  
- Light grey weathering, grey banded, medium-grained limestone  
- Poorly banded with mostly a white colour on the fresh surface
- 810-015 L8+00N, 0+25W  
- Light grey weathering, grey banded, medium-grained limestone  
- Poorly banded  
- Slumped exposure

- 810-016 L9+00N, 4+00E  
- Chlorite-sericite-quartz to sericite-chlorite  
- quartz phyllite with minor Quartzite  
- Minor quartz lenses  
- Quartzite is dirty white, partially recrystallized  
and contains minor calcareous fracture filling and  
Fe oxide stringers and blebs
- 810-017 L10+00N, 4+75E  
- Chlorite-sericite-quartz phyllite with minor  
intercalated, isoclinally folded Quartzite layers  
- Minor Fe oxide blebs  
- Minor calcareous fracture filling and quartz  
lenses
- 810-018 L10+00N, 3+25E  
- White to light grey Quartzite (fractured)  
- Sericite along foliation planes  
- >Minor Fe oxide blebs  
- Trace oxidized fine-grained pyrite
- 810-019 L10+00N, 2+75E  
- Brown, sericitic Quartzite with local sericite  
phyllite  
- Crosscutting bull quartz veins (up to 40 cm wide)  
- >Minor Fe oxide blebs  
- Minor fine-grained patches and cubes of pyrite
- 810-020 L10+00N, 2+25E  
- Chlorite-quartz phyllite  
- Abundant Fe oxide spots; partially leached  
- Slumped exposure
- 810-021 L8+00N, 6+50E  
- Light grey weathering, grey banded, medium-grained  
limestone
- 810-022 L8+00N, 5+50E  
- Light grey weathering, grey banded, medium-grained  
limestone
- 810-023 L7+00N, 5+50E  
- Light grey weathering, jointed grey banded,  
medium-grained limestone  
- Poorly banded  
- Light grey to dirty white on fresh surface

- 810-024 L6+00N, 4+75E  
- Light grey weathering, grey banded, medium-grained limestone  
- White to dirty white on fresh surface  
- Poorly banded
- 810-025 L5+00N, 4+75E  
- Light grey weathering, grey banded, medium-grained limestone  
- White to light grey on fresh surface  
- Slumped exposure
- 810-026 L3+00N, 2+75E  
- Light grey weathering, grey banded, medium-grained limestone  
- Light to medium grey on fresh surface
- 810-027 L11+00N, 7+67E  
- Light grey weathering, grey banded, jointed medium-grained limestone  
- Minor white to light pinkish brown calcite bands (< 7 cm wide)  
- Minor narrow (up to 10 cm wide) shear zones, parallel with foliation; some containing calcite and minor graphite
- 810-028 L11+00N, 5+00E  
- Blocky, light brownish grey, massive, sericitic Quartzite  
- >Minor Fe oxide blebs and streaks  
- Minor coarse bull quartz lenses and veinlets  
- Slumped exposure  
- Trace fine-grained pyrite
- 810-029 L11+00N, 4+75E  
- Light brownish grey, massive, sericitic Quartzite  
- >Minor Fe oxide blebs and streaks  
- Minor coarse bull quartz lenses and veinlets  
- Trace fine-grained pyrite
- 810-030 L11+00N, 4+50E  
- Dirty white, massive Quartzite  
- >Minor Fe oxide streaks and blebs  
- Minor fine-grained cubic pyrite  
- Minor bull quartz lenses and veinlets  
- Very minor, narrow chloritic stringers

- 810-031 L11+00N, 4+25E  
- Quartz-sericite phyllite to sericitic Quartzite  
- >Minor Fe oxide blebs  
- Minor fine-grained pyrite
- 810-032 L11+00N, 4+00E  
- Slumped blocks of dirty Quartzite  
- Locally, very phyllitic  
- Abundant sericitic alteration but very chloritic,  
locally
- 810-033 L11+00N, 3+75E  
- Dirty Quartzite  
- Sericite along foliation planes
- 810-034 L11+00N, 3+50E  
- Highly contorted, dirty, sericitic Quartzite with  
minor quartz-chlorite to chlorite-quartz phyllite
- 810-035 L11+00N, 5 metres south of 3+50E  
- Gossanous Quartzite  
- Abundant jarosite and >minor fine-grained pyrite
- 810-036 L11+00N, 2+00E  
- Dirty Quartzite to quartz-chlorite phyllite  
- Minor, irregular folded bands of more massive  
Quartzite  
- Minor Fe oxide blebs and streaks  
- Minor calcareous fracture filling
- 810-037 L12+00N, 3+00E  
- Thinly intercalated sericitic Quartzite and  
quartz-sericite phyllite; very minor  
quartz-chlorite phyllite  
- Well oxidized and altered  
- Frost-heaved and slumped exposure
- 810-038 - Brownish grey weathering calcareous (+ chlorite)  
phyllite  
- Approx. 2 metres wide within a grey banded  
limestone  
- Appears to be a shear zone which pinches out to  
the north  
- Abundant oxidation and very local chlorite  
- 1 to 2% goethite  
- 1% fine-grained cubic pyrite  
- Minor quartz blebs

- 810-039      - Graphitic, medium grey coloured, <medium-grained limestone which overlies a chlorite-carbonate phyllite  
              - 30 to 40 cm wide  
              - Crosscutting, medium-grained white (brown weathering) calcite veinlets (up to 1 cm wide) and lenses
- 810-040      - Light grey weathering, grey banded, medium-grained limestone
- 810-041      - Sheared graphite-quartz phyllite which structurally underlies grey banded limestone  
              - Abundant Fe oxidation and pitting  
              - 1% fine-grained, oxidized cubic pyrite  
              - Quartz lenses and veinlets throughout  
              - Minor to abundant calcareous fracture filling
- 810-042      - Calcareous chlorite-sericite-quartz phyllite  
              - Minor quartz lenses and veinlets  
              - >1% fine-grained cubic pyrite and abundant Fe oxide  
              - 4.3 metres wide chip sample
- 810-043      - Graphite-quartz phyllite  
              - Brown to black on weathered surface  
              - Black and medium brown irregular bands on fresh surface  
              - Local abundant calcareous fracture filling  
              - Abundant Fe oxide (after pyrite?)  
              - Minor quartz lenses and knots and calcite knots  
              - Approx. 8 metre chip sample
- 810-044      - Graphite-quartz phyllite  
              - Calcareous fracture filling throughout  
              - Abundant Fe oxide  
              - Minor quartz knots and lenses and calcite knots
- 810-045      - Chlorite-graphite-quartz phyllite  
              - Minor sericite along foliation planes  
              - Minor quartz lenses  
              - Abundant Fe oxide  
              - Approx. 6 metre chip sample
- 810-046      - Light grey weathering limestone  
              - Dirty white to light grey on fresh surface  
              - Recrystallized and medium-grained

- 810-047      - Tan weathering quartz-calcite mineralized zone within a light grey weathering limestone; 1.31 metre wide chip sample  
- White to amethystine quartz and chalcedonic quartz  
- Well oxidized discontinuous zone  
- Abundant malachite, jarosite, scorodite and minor azurite  
- <1% visible tetrahedrite and pyrite  
- Trace to minor galena and trace sphalerite
- 810-048      - Light grey weathering, medium-grained limestone (hangingwall to sample #810-047)  
- 1 metre wide chip sample
- 810-049      - Western (footwall) half of 2nd mineralized zone (just to southwest of sample #810-047)  
- Minor tetrahedrite and trace galena  
- Predominately crystalline quartz with minor chalcedonic quartz and carbonate  
- Abundant coarse quartz crystals (up to 3 cm long)  
- White to translucent to amethystine (minor) quartz  
- 0.97 metre wide (horizontal) chip sample; footwall side of zone not observed (overburden and limestone debris)  
- Mineralized zone has swelled significantly at chip sample location
- 810-050      - Eastern (hangingwall) half of 2nd mineralized zone  
- Minor tetrahedrite and galena, trace sphalerite  
- More chalcedonic quartz section  
- >Minor crystalline quartz  
- White to translucent to amethystine (minor) quartz  
- 0.82 metre wide (horizontal) chip sample; hangingwall side of zone not observed (overbruden and limestone debris).

APPENDIX III  
GEOCHEMICAL RESULTS

## SELECTION # 1

SAMPLE TYPE(S) 81  
 BEDROCK TYPE(S) ALL  
 SOIL HORIZON(S) ALL  
 SAMPLE TEXTURE(S) ALL  
 OVERBURDEN ORIGIN(S) ALL  
 LABORATORY-SIZE FRACTION-EXTRACTION(S) ALL  
 PAIR STATUS ALL

REC#	SMPL#	UTM-E	UTM-N		HQ	CU	P9	ZH	NI	U	MN	FE	AG
61	8185448A	810003	4189255684387	82M08	B	.5	9	2	4	2	88	.07	.1
214	8185448A	810001	4195015684492	82M08	B	.5	9	4	6	2	98	.18	.1
215	8185448A	810002	4192845684699	82M08	H	.5	54	270	58	17	1200	3.92	1.2
219	8185448A	810025	4195095684896	82M08	B	.5	8	2	4	1	51	.02	.4
235	8185448A	810024	4194395684971	82M08	B	.5	9	4	280	2	52	.05	.1
239	8185448A	810004	4192635684798	82M08	H	.5	59	355	34	12	121	6.57	3.2
240	8185448A	810005	4192615684795	82M08	H	.5	59	8	90	15	124	6.07	.1
242	8185448A	810007	4191675684864	82M08	H	.5	20	2	75	24	355	6.18	.1
243	8185448A	810006	4192055684894	82M08	H	.5	31	4	88	38	285	4.96	.1
247	8185448A	810011	4193175684993	82M08	H	.5	22	8	80	34	665	4.14	.1
248	8185448A	810010	4193335685015	82M08	H	.5	68	6	17	14	440	3.01	.1
251	8185448A	810023	4194315685094	82M08	B	.5	8	4	5	3	57	.06	.1
254	8185448A	810008	4192715685084	82M08	H	.5	5	2	46	13	755	3.08	.1
255	8185448A	810009	4192525685069	82M08	H	.5	10	30	22	10	158	1.22	.4
256	8185448A	810021	4194405685233	82M08	B	.5	9	10	4	2	200	.11	.4
257	8185448A	810022	4193665685168	82M08	B	.5	8	2	4	2	33	.05	.1
261	8185448A	810016	4191845685143	82M08	H	.5	10	4	62	18	995	3.84	.4
274	8185448A	810026	4194915684613	82M08	B	.5	9	2	24	2	76	.09	.1
276	8185448A	810012	4190445684896	82M08	B	.5	8	4	4	2	69	.08	.1
277	8185448A	810013	4190075684855	82M08	B	.5	8	12	4	2	173	.14	.1
278	8185448A	810014	4189705684822	82M08	B	.5	8	10	6	2	60	.06	.1
279	8185448A	810015	4189325684790	82M08	B	.5	8	2	4	2	48	.06	.1
286	8185448A	810017	4191745685270	82M08	H	.5	23	2	76	20	325	5.39	.4
287	8185448A	810018	4190635685172	82M08	H	.5	10	5	14	11	177	1.03	.4
288	8185448A	810019	4190255685138	82M08	H	.5	7	8	18	7	130	1.02	.4
289	8185448A	810020	4189875685102	82M08	H	.5	46	2	88	29	585	5.77	.1
290	8185448A	810027	4193285685536	82M08	B	.5	8	12	2	.5	150	.15	.1
291	8185448A	810028	4191265685359	82M08	H	.5	11	22	26	13	105	1.53	.1
292	8185448A	810029	4191085685343	82M08	H	.5	3	18	2	4	48	.64	.1
293	8185448A	810030	4190895685326	82M08	H	1	4	22	7	10	77	.93	.1
294	8185448A	810031	4190695685310	82M08	H	.5	3	24	31	6	196	.77	.1
295	8185448A	810032	4190505685293	82M08	H	.5	9	18	28	15	315	2.48	.1
296	8185448A	810033	4190335685276	82M08	H	.5	6	16	38	9	54	1.39	.1
297	8185448A	810034	4190105685264	82M08	H	.5	8	12	40	12	315	2.65	.1
298	8185448A	810035	4190155685258	82M08	H	.5	9	14	815	5	194	4.13	.1
299	8185448A	810036	4189015685161	82M08	H	.5	24	14	47	15	555	3.48	.1
300	8185448A	810037	4189105685303	82M08	H	.5	30	14	83	21	330	5.75	.1
325	8185548A	810038C3A4190095685998		82M08 -	B	.5	49	10	29	33	370	4.22	.1
326	8185548A	810039C3A4190095686021		82M08 -	B	.5	7	14	89	4	435	.74	.1

328	8185548A	810040C8A4199645686Q45	82M08	-	B		.5	3	32	75	15		203	.58	.1										
329	8185548A	810042C8A4188605686398	82M08	-	L		.5	54	25	79	20		860	2.36	.4										
330	8185548A	810043C8A4188705686391	82M08	-	L		2	95	16	74	28		335	1.84	.1										
331	8185548A	810044C8A4188835686388	82M08	-	L		2	47	44	123	22		315	1.22	.1										
332	8185548A	810045C8A4189445686515	82M08	-	L		.5	30	12	82	34		755	4.91	.1										
333	8185548A	810046C8A4189605686522	82M08	-	B		.5	6	8	.5	.5		280	.13	.1										
334	8185548A	810047C8A4189795686577	82M08	-	B		3	2240	150001330	10			235	.35	6.4										
335	8185548A	810048C8A4189795686598	82M08	-	B		.5	163	300	11	2		350	.18	.1										
336	8185548A	810049C8A4189795686598	82M08	-	B		.5	70	1960	33	3		34	.16	1.2										
337	8185548A	810050C8A4189795686609	82M08	-	B		2	75	8060	3500	8		140	.39	5.2										
REC#	SMPL#	CO	AU	AU?	AS	HG	SB	SN	W	F	TH	CD	BI	V	BA	SR	SI	AL	CA	M6	NA	K	BE	GA	TI
61	810003	.5	2.5		9		.1		5			.5	1	8	5	1450		.05	41.7	.14	.03	.03	1		.003
214	810001	.5	2.5		20		.1		5			1	1	10	105	320		.13	40	1.22	.06	.06	.5		.003
215	810002	8	2.5		110		.6		5			.25	1	19	75	68		1.04	1.84	.22	.04	.34	.25		.093
219	810025	.5	2.5		2		.1		5			.5	1	6	5	275		.005	41.5	.03	.02	.02	.25		.0005
235	810024	.5	2.5		2		.1		5			1.5	1	4	5	220		.02	39.5	.07	.03	.02	.25		.0005
239	810004	4	5		25		.2		5			.25	1	46	150	139		7.07	.16	.08	7.5	.54	.25		.194
240	810005	4	2.5		6		.3		5			.25	1	123	320	86		9.01	.19	.54	7.02	1.71	.25		.272
242	810007	10	2.5		11		.7		5			.25	1	111	870	15		9.73	.04	.52	1.26	3.64	2		.403
243	810006	19	2.5		16		.4		5			.25	1	104	875	46		9.21	.28	.57	1.83	3.32	1.5		.385
247	810011	13	5		3		.1		5			.25	1	62	420	89		7.45	1.07	.83	1.37	2.7	.5		.413
248	810010	6	2.5		5		.1		5			.25	1	53	115	104		8.36	.27	.12	8.43	.41	.25		.329
251	810023	.5	5		3		.1		5			1	1	11	100	156		.05	41	.1	.04	.03	.25		.002
254	810008	7	2.5		4		.2		5			.25	1	33	225	21		3.26	.17	.43	.78	.86	.25		.199
255	810009	4	2.5		4		.1		5			.25	1	22	120	29		2.46	.04	.21	1.24	.51	.25		.111
256	810021	.5	2.5		4		.1		5			.5	1	13	20	157		.12	38.9	.14	.09	.04	.25		.006
257	810022	.5	2.5		2		.1		5			.5	1	7	5	720		.04	38.5	.09	.03	.03	.5		.002
261	810016	7	5		4		.3		5			.25	1	49	260	49		5.76	.44	.76	1.8	1.57	.25		.491
274	810025	.5	5		3		.2		5			1	1	8	25	325		.08	39.7	.68	.03	.05	.5		.002
276	810012	.5	5		4		.1		5			.5	1	6	5	1570		.11	38.6	.15	.09	.06	.5		.004
277	810013	.5	10		3		.1		5			1	1	6	5	1210		.07	38.8	.14	.05	.03	.5		.003
278	810014	.5	10		3		.1		5			1	1	7	5	1790		.05	39.2	.15	.05	.02	.5		.001
279	810015	.5	2.5		3		.1		5			1	1	6	5	350		.05	39.5	.12	.04	.03	.25		.002
286	810017	9	10		3		.2		5			.25	1	105	585	39		8.69	.36	.9	1.57	2.97	1.5		.849
287	810018	3	2.5		7		.3		5			.5	1	21	105	7		1.42	.05	.1	.34	.37	.25		.104
288	810019	.5	5		4		.4		5			.5	1	6	15	24		1.25	.15	.02	1.21	.04	.25		.013
289	810020	11	2.5		3		.2		5			.25	1	122	440	41		7.9	.17	.78	1.99	2.49	1		.998
290	810027	.5	2.5		6		.4		5			.5	1	8	65	720		.17	40.3	.19	.16	.16	.5	1	.008
291	810028	1	2.5		7		.9		5			.25	1	60	300	74		4.3	.18	.14	2.02	1.15	.25	10	.264
292	810029	.5	15		1		.9		5			.5	1	6	10	20		1.43	.14	.01	1.27	.14	.25	4	.029
293	810030	2	10		4		.9		5			.25	1	21	80	18		1.58	.04	.06	.76	.39	.25	4	.069
294	810031	2	2.5		4		.4		5			.5	1	11	75	6		1	.03	.05	.15	.35	.25	1	.054
295	810032	5	2.5		3		.4		5			.25	1	36	165	19		3.63	.1	.17	.42	1.51	.25	6	.208
296	810033	3	2.5		4		.8		5			.25	1	24	85	6		2.66	.02	.16	.2	.87	.25	4	.122
297	810034	4	2.5		7		.4		5			.25	1	52	245	41		4.76	.27	.44	.4	1.86	.25	8	.298
298	810035	.5	35		12		.5		5			3	1	17	65	44		1.2	.19	.12	.25	.38	.25	2	.097
299	810036	4	2.5		4		.5		5			.25	1	83	465	44		6.32	.39	.47	2.18	2.21	.25	9	1.33
300	810037	10	2.5		7		.4		5			.25	1	71	415	18		6.84	.03	.32	.71	2.79	.5	10	.305
325	810038	14	2.5		33		1		5			.25	1	56	275	99		8.99	.73	.3	2.93	2.49	.5	15	.311
326	810039	1	2.5		6		.2		5			.5	1	20	40	515		.77	33.1	.3	.18	.41	.25	2	.032
327	810040	.5	2.5		1		.2		5			.5	1	5	5	890		.11	37	.12	.07	.16	.25	1	.005



328 810041 255	5	150
329 810042 1350	5	110
330 810043 905	5	145
331 810044 955	5	145
332 810045 410	5	215
333 810046 15	5	12
334 810047 75	5	140
335 810048 30	5	18
336 810049 40	5	78
337 810050 55	5	245

## SELECTION # 1

SAMPLE TYPE(S) 50  
 BEDROCK TYPE(S) ALL  
 SOIL HORIZON(S) ALL  
 SAMPLE TEXTURE(S) ALL  
 OVERBURDEN ORIGIN(S) ALL  
 LABORATORY-SIZE FRACTION-EXTRACTION(S) ALL  
 PAIR STATUS ALL

REC#	SMPL#	UTM-E	UTM-N	MO	CU	PB	ZN	NI	U	MN	FE	AG
1	5085448A 500001	4194865684213	82M08	.5	17	24	79	16		405	4.81	.1
2	5085448A 500002	4194755684335	82M08	.5	30	26	76	21		845	5.63	.1
3	5085448A 500003	4194375684302	82M08	.5	20	20	55	11		365	4.29	.1
4	5085448A 500004	4193715684378	82M08	.5	21	20	58	10		345	4.25	.1
5	5085448A 500005	4193185684396	82M08	.5	30	26	63	17		335	4.88	.1
6	5085448A 500006	4194355684565	82M08	.5	16	104	38	3		210	2.7	1.2
7	5085448A 500007	4194175684550	82M08	.5	15	350	86	8		705	4.03	.6
8	5085448A 500008	4193785684516	82M08	.5	19	114	92	12		1030	4.06	.8
9	5085448A 500009	4193415684485	82M08	.5	22	34	83	20		1490	4.81	.1
10	5085448A 500010	4193225684468	82M08	.5	33	38	73	17		2660	5.83	.4
11	5085448A 501001	4195245684243	82M08	.5	23	28	70	14		410	4.53	.1
12	5085448A 501002	4195045684225	82M08	.5	32	28	96	28		305	4.45	.1
13	5085448A 501003	4194525684249	82M08	.5	13	14	44	12		240	3.84	.1
14	5085448A 501004	4194185684286	82M08	.5	18	16	60	13		390	4.11	.1
15	5085448A 501005	4195135684369	82M08	.5	21	60	95	19		1150	4.62	.4
16	5085448A 501006	4194955684351	82M08	.5	17	12	51	12		305	4.72	.6
17	5085448A 501007	4194575684318	82M08	.5	26	26	75	18		400	4.62	.1
18	5085448A 501008	4193875684322	82M08	.5	18	16	44	9		280	4.18	.4
19	5085448A 501009	4193515684361	82M08	.5	12	16	35	3		305	2.76	.1
20	5085448A 501010	4195235684509	82M08	.5	39	40	145	42		1870	4.74	.1
21	5085448A 501011	4194845684475	82M08	.5	47	158	180	30		1180	4.38	.4
22	5085448A 501012	4194655684458	82M08	.5	25	430	94	9		335	3.76	1
23	5085448A 501013	4194455684441	82M08	.5	27	146	194	16		645	4.29	.4
24	5085448A 501014	4194295684427	82M08	.5	24	132	137	15		375	4.89	.4
25	5085448A 501015	4194095684408	82M08	.5	24	94	145	15		2160	4.59	.1
26	5085448A 501016	4193905684394	82M08	.5	15	30	58	8		400	3.88	.4
27	5085448A 501017	4192865684435	82M08	.5	14	16	20	2		270	1.96	.4
28	5085448A 501018	4194545684582	82M08	.5	21	86	121	14		1060	3.92	.6
29	5085448A 501019	4193985684535	82M08	.5	13	62	52	7		255	3.1	.4
30	5085448A 501020	4193595684500	82M08	.5	22	164	116	16		1890	4.62	.1
31	5085448A 501021	4193035684452	82M08	.5	19	14	47	11		245	3.5	.6
32	5085448A 501022	4192515684473	82M08	.5	16	18	34	7		225	5.32	.1
33	5085448A 501023	4192185684510	82M08	.5	13	20	30	5		295	3.34	.4
34	5085448A 501024	4193875684658	82M08	.5	79	670	32	5		360	2.98	.6
35	5085448A 501025	4193695684642	82M08	.5	10	96	52	5		205	3.55	.1
36	5085448A 501026	4193515684624	82M08	.5	30	54	60	10		240	4.06	.9
37	5085448A 501027	4193305684608	82M08	.5	60	22	163	35		230	6.12	.4
38	5085448A 501029	4193135684592	82M08	.5	22	44	69	14		1040	4.9	.4
39	5085448A 501030	4192935684573	82M08	.5	22	44	77	16		580	5.3	.1
40	5085448A 501031	4192755684560	82M08	.5	14	34	61	8		395	3.61	.1

41	5085448A	501032	4192545684543	82M08	.5	16	30	49	10	440	3.46	.1
42	5085448A	501033	4192375684527	82M08	.5	16	48	60	7	280	3.59	.4
43	5085448A	501034	4191855684548	82M08	.5	5	12	17	6	184	1.6	.1
44	5085448A	501035	4193385684750	82M08	.5	24	96	58	9	149	5.39	.8
45	5085448A	501036	4193195684732	82M08	.5	34	26	76	25	1840	4.43	.4
46	5085448A	501037	4193025684716	82M08	.5	29	38	100	20	4530	4.22	.6
47	5085448A	501038	4192645684682	82M08	.5	31	46	126	23	1340	4.96	.4
48	5085448A	501039	4192455684664	82M08	.5	20	22	57	13	465	3.4	.4
49	5085448A	501040	4192265684648	82M08	.5	13	28	46	8	565	3.12	.1
50	5085448A	501041	4192075684631	82M08	.5	22	46	88	16	1150	3.93	.1
51	5085448A	501042	4191895684617	82M08	.5	19	34	50	11	400	3.73	.1
52	5085448A	501043	4191695684599	82M08	.5	13	20	25	7	245	3.62	.1
53	5085448A	501044	4189455684403	82M08	.5	52	60	160	55	1280	5.7	.1
54	5085448A	501045	4189645684420	82M08	.5	26	48	82	29	610	3.3	.4
55	5085448A	501046	4189815684435	82M08	.5	23	20	66	26	540	5.36	.1
56	5085448A	501047	4190015684452	82M08	.5	21	22	23	2	300	1.71	.1
57	5085448A	501048	4190195684470	82M08	.5	10	10	25	3	295	1.78	.1
58	5085448A	501049	4190565684502	82M08	.5	11	14	36	5	510	2.23	.1
59	5085448A	501050	4190955684534	82M08	.5	20	24	23	3	265	2.58	.1
60	5085448A	501051	4191315684568	82M08	.5	22	38	38	5	475	2.43	.1
62	5085448A	500015	4190195684469	82M08	.5	22	20	24	2	265	2.19	.1
63	5085448A	500016	4190755684517	82M08	.5	14	28	50	11	240	3.76	.1
64	5085448A	500017	4191135684551	82M08	.5	14	22	40	8	225	2.83	.1
65	5085448A	501053	4189885684576	82M08	.5	19	32	122	22	425	4.06	.1
66	5085448A	501054	4190455684627	82M08	.5	25	34	96	13	765	3.5	.4
67	5085448A	501052	4190845684658	82M08	.5	29	30	99	25	575	4.57	.1
68	5085448A	501055	4190665684642	82M08	.5	17	32	31	4	450	2.65	.4
69	5085448A	501056	4192915684839	82M08	.5	23	30	65	10	305	4.48	.1
70	5085448A	501057	4192735684824	82M08	.5	12	24	42	8	157	2.64	.1
71	5085448A	501058	4192545684807	82M08	.5	58	200	72	15	181	2.9	1.4
72	5085448A	501059	4192345684791	82M08	.5	27	90	64	12	225	4.17	.4
73	5085448A	501060	4192155684773	82M08	.5	33	144	87	10	1660	3.76	1.2
74	5085448A	501061	4191965684757	82M08	.5	17	56	57	6	450	2.74	1.2
75	5085448A	501062	4191785684741	82M08	.5	34	72	630	33	2510	4.47	.4
76	5085448A	501063	4191605684725	82M08	.5	18	28	68	12	570	4.42	.1
77	5085448A	501064	4191405684708	82M08	.5	29	44	105	19	1540	4.78	.1
78	5085448A	501065	4191215684692	82M08	.5	26	20	56	13	270	4.1	.1
79	5085448A	501066	4191025684676	82M08	.5	25	32	67	12	480	4.1	.4
80	5085448A	501067	4190505684696	82M08	.5	22	38	131	31	3030	4.26	.4
81	5085448A	501068	4190165684732	82M08	.5	29	18	144	36	710	5.41	.1
82	5085448A	501069	4189415684667	82M08	.5	20	50	133	18	975	4.14	.1
83	5085448A	501070	4189785684699	82M08	.5	13	40	156	13	920	3.33	.1
94	5085448A	501071	4192425684931	82M08	.5	25	36	93	19	660	4.73	.1
85	5085448A	501072	4192235684914	82M08	.5	25	40	113	16	1220	4.57	.4
86	5085448A	501073	4191865684881	82M08	.5	48	70	106	27	1130	5.98	.8
87	5085448A	501074	4191495684849	82M08	.5	20	34	67	13	620	4.2	.4
88	5085448A	501075	4191295684830	82M08	.5	42	54	164	45	2470	5.19	.6
89	5085448A	501076	4191105684815	82M08	.5	32	32	108	20	1080	4.87	.6
90	5085448A	501077	4190905684798	82M08	.5	50	42	110	26	730	5.47	.4
91	5085448A	501078	4190555684766	82M08	.5	20	24	87	18	305	4.14	.1
92	5085448A	501079	4189175684844	82M08	.5	22	36	109	26	1370	4.5	.4

93	5085448A	501080	4188515684919	82M08	.5	25	60	99	22	1070	4.09	.1
94	5085448A	501081	4192335685052	82M08	.5	26	32	92	23	1450	4.62	.1
95	5085448A	501082	4192135685036	82M08	.5	25	34	105	25	1550	4.8	.4
96	5085448A	501083	4191955685020	82M08	.5	23	28	111	21	1160	4.26	.4
97	5085448A	501084	4191765685003	82M08	.5	24	28	135	22	1140	4.83	.1
98	5085448A	501093	4191565684988	82M08	.5	21	28	58	11	600	4.51	.4
99	5085448A	501094	4191185684954	82M08	.5	36	30	122	32	1070	5.1	.1
100	5085448A	501095	4191005684937	82M08	.5	37	34	74	18	465	4.7	.4
101	5085448A	501096	4190625684905	82M08	.5	30	44	58	12	480	4.03	.6
102	5085448A	501097	4190255684873	82M08	.5	24	28	74	22	640	4.84	.1
103	5085448A	501098	4189875684841	82M08	.5	31	58	114	32	2120	5.3	.4
104	5085448A	501099	4189125684773	82M08	.5	30	58	148	30	1100	4.63	.4
105	5085448A	501100	4188745684741	82M08	.5	22	34	160	22	1560	3.97	.4
106	5085448A	501101	4187855684993	82M08	.5	35	72	230	34	2730	5.09	.9
107	5085448A	501102	4192055685162	82M08	.5	31	30	146	15	1850	3.15	.1
108	5085448A	501103	4191665685127	82M08	.5	27	26	83	20	1140	4.38	.4
109	5085448A	501104	4191485685111	82M08	.5	27	32	99	22	1030	4.32	.6
110	5085448A	501105	4191285685095	82M08	.5	31	40	106	24	1630	4.65	.1
111	5085448A	501106	4191095685077	82M08	.5	25	66	140	21	1190	4.91	.1
112	5085448A	501107	4190915685062	82M08	.5	42	50	109	29	1370	4.74	.4
113	5085448A	501108	4190715685046	82M08	.5	20	42	80	18	1090	4.04	.4
114	5085448A	501109	4190535685029	82M08	.5	18	44	97	16	1330	3.64	.1
115	5085448A	501110	4190335685012	82M08	.5	21	44	115	18	1360	4.3	.1
116	5085448A	501111	4190145684996	82M08	.5	27	40	115	25	1200	3.79	.4
117	5085448A	501112	4189955684979	82M08	.5	20	42	110	16	1490	4.33	.4
118	5085448A	501113	4189785684963	82M08	.5	22	46	118	14	1590	4.24	.4
119	5085448A	501114	4189585684947	82M08	.5	26	46	108	15	2090	3.89	.4
120	5085448A	501115	4189385684930	82M08								
121	5085448A	501116	4189215684913	82M08	.5	31	60	138	30	2790	4.56	.1
122	5085448A	501117	4189025684898	82M08	.5	31	32	113	21	1360	3.31	.1
123	5085448A	501118	4188575684988	82M08	.5	26	58	149	17	1980	3.96	.1
124	5085448A	501119	4188965685023	82M08	.5	22	74	133	19	1820	4.28	.1
125	5085448A	501120	4189315685055	82M08	.5	28	81	184	17	1120	4.25	.1
126	5085448A	501121	4192125685303	82M08	.5	16	40	87	12	1570	3.59	.4
127	5085448A	501122	4191565685255	82M08	.5	22	60	146	20	3060	4.53	.1
128	5085448A	501123	4191375685239	82M08	.5	20	60	156	18	2800	4.32	.4
129	5085448A	501124	4191195685223	82M08	.5	26	52	134	21	1510	4.15	.4
130	5085448A	501125	4190995685205	82M08	.5	23	44	110	23	960	4.14	.1
131	5085448A	501126	4190425685156	82M08	.5	21	104	98	16	585	4.37	.1
132	5085448A	501127	4190055685123	82M08	.5	22	46	93	18	620	4.59	.4
133	5085448A	501128	4189655685090	82M08	.5	21	64	114	16	2010	4.44	.1
134	5085448A	501129	4189485685073	82M08	.5	22	60	108	16	1900	4.27	.1
135	5085448A	501130	4195115685568	82M08	1	124	38	200	55	2000	7.48	.1
136	5085448A	501131	4194945685551	82M08	.5	28	36	73	21	1690	4.9	.1
137	5085448A	501132	4194745685534	82M08	.5	15	24	60	13	875	3.77	.1
138	5085448A	501133	4194565685517	82M08	.5	54	26	99	22	1270	4.87	.6
139	5085448A	501134	4194375685501	82M08	.5	36	38	138	46	1900	5.62	.1
140	5085448A	501135	4194195685485	82M08	.5	35	46	139	46	1590	4.82	.6
141	5085448A	501136	4194005685470	82M08	.5	45	44	129	35	1270	4.79	1
142	5085448A	501137	4193805685455	82M08	.5	44	18	35	9	485	2.58	.6
143	5085448A	501138	4193435685420	82M08	.5	29	46	83	16	905	4.06	.6

144	5085448A	501137	4193245685404	82M08	.5	62	46	130	44	1290	5.32	.1
145	5085448A	501140	4193055685386	82M08	.5	80	60	181	78	3370	9.74	.1
146	5085448A	501141	4192875685369	82M08	.5	35	32	109	29	1280	4.96	.4
147	5085448A	501142	4192465685336	82M08	.5	33	44	128	28	1270	5.01	.1
148	5085448A	501143	4192315685319	82M08	.5	32	28	64	13	520	3.17	.1
149	5085448A	501144	4194875685407	82M08	.5	42	40	143	51	4200	5.11	.8
150	5085448A	501145	4194675685389	82M08	.5	28	28	89	22	2570	5.02	.1
151	5085448A	501146	4194505685373	82M08	.5	38	24	64	10	850	3.58	.4
152	5085448A	501147	4194125685340	82M08	.5	66	30	151	32	720	4.95	.1
153	5085448A	501148	4193745685307	82M08	.5	40	38	142	23	1430	4.98	.1
154	5085448A	501149	4193355685274	82M08	.5	37	52	215	29	1370	5.1	.1
155	5085448A	501150	4192975685243	82M08	.5	45	54	183	41	1650	5.21	.4
156	5085448A	501151	4192805685225	82M08	.5	20	30	113	15	1360	3.95	.1
157	5085448A	501152	4192605685208	82M08	.5	32	40	101	25	1220	5.18	.4
158	5085448A	501153	4192245685177	82M08	.5	21	30	108	16	1330	4.57	.1
159	5085448A	501154	4195165685301	82M08	.5	73	28	215	44	2820	6.67	.1
160	5085448A	501155	4194955685283	82M08	.5	43	56	220	32	2370	6.31	.1
161	5085448A	501156	4194775685267	82M08	.5	60	84	96	21	810	4.9	.1
162	5085448A	501157	4194585685250	82M08	.5	66	42	169	36	1530	5.55	.1
163	5085448A	501158	4194015485200	82M08	.5	26	34	146	23	1360	4.09	.1
164	5085448A	501159	4193845685185	82M08	.5	50	52	205	39	1450	5.13	.1
165	5085448A	501160	4193445685150	82M08	.5	41	54	295	28	1910	4.42	.1
166	5085448A	501161	4193075685119	82M08	.5	58	62	193	33	1760	5.85	.1
167	5085448A	501162	4192885685101	82M08	.5	13	38	83	16	820	4.68	.1
168	5085448A	501163	4195255685179	82M08	.5	98	64	250	44	1780	6.21	.1
169	5085448A	501164	4194885685144	82M08	.5	42	24	76	15	1470	4.77	.1
170	5085448A	501165	4194495685111	82M08	.5	71	56	182	31	1960	5.57	.1
171	5085448A	501166	4194125685078	82M08	.5	47	62	220	39	1840	4.85	.1
172	5085448A	501167	4193935685061	82M08	.5	45	40	140	20	810	4.77	.1
173	5085448A	501168	4193755685046	82M08	.5	48	48	147	30	1410	5.15	.1
174	5085448A	501169	4195175685038	82M08	.5	64	44	255	37	2140	5.99	.1
175	5085448A	501170	4194595684988	82M08	.5	57	62	235	35	1570	6.53	.1
176	5085448A	501171	4195265684915	82M08	.5	101	32	135	40	2060	6.35	.6
177	5085448A	501172	4194905684879	82M08	.5	37	84	169	25	1010	4.1	.4
178	5085448A	501173	4194705684865	82M08	.5	40	56	174	29	845	4.53	.1
179	5085448A	501174	4194515684849	82M08	.5	31	74	195	22	1030	3.93	.1
180	5085448A	501175	4194135684815	82M08	.5	4	10	24	6	170	1.83	.1
181	5085448A	501176	4193935684799	82M08	.5	20	18	20	2	240	1.97	.8
182	5085448A	501177	4193575684766	82M08	.5	13	24	38	6	560	3.06	.1
183	5085448A	501178	4195205684773	82M08	.5	24	88	177	23	1660	3.88	.1
184	5085448A	501179	4195005684756	82M08	.5	26	92	270	25	905	4.09	.1
185	5085448A	501180	4194815684738	82M08	.5	38	60	245	36	905	5.09	.4
186	5085448A	501181	4194645684723	82M08	.5	20	22	84	9	1000	2.67	.1
187	5085448A	501182	4194445684707	82M08	.5	21	44	66	6	515	3.26	.1
188	5085448A	501183	4194065684674	82M08	.5	20	32	36	3	235	2.11	.1
189	5085448A	501184	4195295684647	82M08	.5	21	38	95	14	2060	4.04	.1
190	5085448A	501185	4194745684598	82M08	.5	29	82	184	17	1690	2.36	.4
191	5085448A	501186	4193145685525	82M08	.5	38	40	105	33	900	4.66	.4
192	5085448A	501187	4192585685475	82M08	.5	28	42	163	21	540	3.88	.1
193	5085448A	501188	4192205685442	82M08	.5	22	40	126	13	1260	3.89	.1
194	5085448A	501189	4191825685410	82M08	.5	21	38	95	14			

195	5085448A	501190	4191445685376	82M08	.5	19	33	81	14	1000	3.66	.1
196	5085448A	501191	4189755685143	82M08	.5	14	52	89	14	1660	3.42	.1
197	5085448A	501192	4189755685227	82M08	.5	19	70	102	18	1090	3.71	.1
198	5085448A	501193	4189565685210	82M08	.5	12	80	40	9	285	2.75	.1
199	5085448A	501194	4189375685193	82M08	.5	19	68	98	16	2210	3.84	.1
200	5085448A	501195	4189205685178	82M08	.5	18	52	68	15	695	3.5	.1
201	5085448A	501196	4188825685144	82M08	.5	34	166	118	19	980	4.39	.8
202	5085448A	501197	4188645685129	82M08	.5	27	108	150	23	1880	3.85	.6
203	5085448A	501198	4187965685202	82M08	.5	22	88	114	23	1350	3.81	.1
204	5085448A	501199	4188125685219	82M08	.5	13	40	65	15	885	3.44	.1
205	5085448A	501200	4188535685252	82M08	.5	37	92	92	32	1460	5.49	.4
206	5085448A	501201	4188905685286	82M08	.5	27	124	121	18	2990	4.16	.8
207	5085448A	501202	4189275685319	82M08	.5	38	74	108	27	1830	4.95	.4
208	5085448A	501203	4189655685352	82M08	.5	26	52	97	19	1790	4.4	.1
209	5085448A	501204	4190025685383	82M08	.5	30	62	93	21	1260	4.54	.1
210	5085448A	501205	4190395685419	82M08	.5	30	100	122	26	2090	4.21	.1
211	5085448A	501206	4190755685451	82M08	.5	18	26	58	9	630	3.52	.1
212	5085448A	501207	4191125685484	82M08	.5	19	56	140	22	1520	4.41	.1
213	5085448A	501208	4191495685516	82M08	.5	24	32	92	30	580	4.21	.1
216	5085448A	500058	4194255684690	82M08	.5	32	24	70	7	1280	3.19	.6
217	5085448A	500056	4194325684831	82M08	.5	34	30	90	18	870	4.49	.1
218	5085448A	500057	4193745684784	82M08	.5	32	34	85	19	1090	5.55	.1
220	5085448A	500014	4191495684582	82M08	.5	24	26	34	6	500	3.02	.1
221	5085448A	500019	4190095684591	82M08	.5	15	28	84	7	400	3	.1
222	5085448A	500020	4190275684608	82M08	.5	22	28	101	10	600	2.84	.1
223	5085448A	500021	4189595684682	82M08	.5	14	28	74	12	440	2.99	.1
224	5085448A	500022	4189965684716	82M08	.5	28	64	173	25	475	4.38	.1
225	5085448A	500023	4190735684792	82M08	.5	37	30	56	17	230	4.08	.4
226	5085448A	500024	4190365684751	82M08	.5	43	90	200	30	425	5.36	.1
227	5085448A	500025	4189825684771	82M08	.5	30	54	205	29	985	4.65	.1
228	5085448A	500026	4189515684807	82M08	.5	46	50	158	34	2230	4.98	.1
229	5085448A	500028	4194025684938	82M08	.5	25	32	90	12	1820	4.25	.1
230	5085448A	500029	4193845684921	82M08	.5	20	24	50	9	325	3.63	.4
231	5085448A	500030	4193465684899	82M08	.5	23	36	74	14	945	4.68	.4
232	5085448A	500031	4193095684856	82M08	.5	36	62	63	9	665	3.57	.6
233	5085448A	500054	4194965685020	82M08	.5	84	62	225	73	2940	6.63	.1
234	5085448A	500055	4194905685005	82M08	.5	37	74	205	34	1940	4.86	.1
236	5085448A	501090	4194225684954	82M08	.5	24	54	151	19	1020	4.72	.6
237	5085448A	501091	4193665684905	82M08	.5	24	14	56	16	460	4.73	.6
238	5085448A	501092	4193285684872	82M08	.5	21	16	49	15	405	4.27	.4
241	5085448A	500018	4191175684620	82M08	.5	12	34	50	8	620	2.82	.1
244	5085448A	501087	4192995684930	82M08	.5	49	44	168	30	2260	5.61	.4
245	5085448A	501088	4192815684962	82M08	.5	24	22	65	13	910	3.9	.4
246	5085448A	501089	4192615684946	82M08	.5	21	18	58	15	710	4.67	.4
249	5085448A	501086	4193375685007	82M08	.5	36	36	94	24	1070	4.73	.4
250	5085448A	501085	4193555685027	82M08	.5	38	34	114	26	1140	4.77	.1
252	5085448A	500052	4195085685161	82M08	.5	87	70	270	52	2150	7.54	.1
253	5085448A	500053	4194695685128	82M08	.5	72	34	143	23	3290	6.49	.1
258	5085448A	500050	4194215685217	82M08	.5	32	36	136	19	1130	3.84	.4
259	5085448A	500051	4193275685135	82M08	.5	31	44	210	23	1750	4.45	.1
260	5085448A	500033	4190825684922	82M08	.5	43	174	142	29	2140	6.64	.1

262	5085448A	500046	4193915685321	82M08	.5	59	70	176	48	1560	5.66	.1													
263	5085448A	500047	4193556685292	82M08	.5	58	58	147	18	1760	4.32	.1													
264	5085448A	500048	4193175685259	82M08	.5	37	44	152	29	1240	4.8	.1													
265	5085448A	500045	4194315685356	82M08	.5	37	20	40	7	555	3.43	.1													
266	5085448A	500044	4195055685421	82M08	4	63	70	131	70	3550	9.27	1													
267	5085448A	500049	4192415685192	82M08	.5	32	34	102	18	1260	4.51	.4													
268	5085448A	500027	4188835684882	82M08	.5	32	58	131	26	1760	4.28	.1													
269	5085448A	500035	4188175684953	82M08	.5	29	48	90	21	1180	3.13	.4													
270	5085448A	500036	4188375684973	82M08	.5	28	48	93	21	1180	3.38	.6													
271	5085448A	500037	4188775685004	82M08	.5	27	73	151	22	1870	4.92	.4													
272	5085448A	500038	4189155685039	82M08	.5	22	59	135	17	1180	4.52	.6													
273	5085448A	500059	4195115684633	82M08	.5	26	32	115	22	820	4	.1													
275	5085448A	500032	4191385684972	82M08	.5	32	88	115	27	2080	5.14	.4													
280	5085448A	500034	4188945684757	82M08	.5	26	46	172	25	1870	4.87	.1													
281	5085448A	500041	4193625685436	82M08	.5	27	32	135	24	1460	4.54	.1													
282	5085448A	500042	4192675685353	82M08	.5	37	34	99	42	785	5.37	.1													
283	5085448A	500043	4192315685320	82M08	.5	15	24	80	10	740	3.23	.1													
284	5085448A	500039	4191935685288	82M08	.5	29	58	107	24	1500	4.73	.1													
285	5085448A	500040	4190815685189	82M08	.5	21	54	114	20	1650	4.32	.1													
301	5085448A	500060	4192395685459	82M08	.5	33	38	95	36	1010	4.35	.1													
302	5085448A	500061	4192025685426	82M08	.5	27	40	118	18	965	3.4	.1													
303	5085448A	500062	4191635685392	82M08	.5	18	28	76	16	1520	4.12	.1													
304	5085448A	500063	4188325685235	82M08	.5	21	60	83	19	1510	2.97	.1													
305	5085448A	500064	4188705685269	82M08	.5	22	74	112	19	1580	3.93	.6													
306	5085448A	500065	4189465685335	82M08	.5	25	56	102	23	2430	4.43	.1													
307	5085448A	500066	4189835685369	82M08	.5	26	78	80	22	1160	3.77	.4													
308	5085448A	500067	4190225685402	82M08	.5	27	64	87	24	1110	4.05	.1													
309	5085448A	500068	4190585685435	82M08	.5	20	52	94	20	780	3.6	.1													
310	5085448A	500069	4190965685467	82M08	.5	17	50	123	19	1450	4.03	.1													
311	5085448A	500070	4191335685502	82M08	.5	19	38	96	23	1110	4.08	.1													
REC#	SMPL#	CO	AU	AU?	AS	HG	SB	SN	W	F	TH	CD	BI	V	BA	SR	SI	AL	CA	MG	NA	K	BE	GA	TI
1	500001	4			4	.2			5			.25	1	107	625	79		10.4	.19	.92	2.02	3.21	1	.782	
2	500002	6			30	.3			5			.25	1	112	575	92		11.3	.24	1	1.72	3.36	1.5	.918	
3	500003	1			36	.4			5			.25	1	100	475	90		9.94	.24	.68	1.81	2.95	1	.896	
4	500004	1			10	.2			5			.25	1	79	545	109		10.7	.36	.61	2.09	2.93	1	.882	
5	500005	5			15	.4			5			.25	1	102	550	79		10.4	.17	.66	1.88	3	1	.822	
6	500006	.5			83	.9			5			.25	1	54	465	146		8.18	.56	.44	2.26	2.27	.25	.553	
7	500007	3			310	5.8			5			.25	1	86	440	86		8.22	.31	.64	1.79	2.76	.5	.61	
8	500008	10			15	.6			5			.25	1	109	650	81		10.1	.2	.67	2	3.49	1	.733	
9	500009	16			120	1.4			5			.25	1	104	630	70		9.96	.22	.61	1.74	3.53	1.5	.69	
10	500010	9			3	.2			5			.25	1	81	550	106		9.14	.32	.56	2.04	2.9	1	.581	
11	501001	5	2.5		5	.2			5			.25	1	70	600	103		9.15	.37	.75	2.06	2.57	.5	.707	
12	501002	13	2.5		6	.1			5			.25	1	92	595	85		9.93	.16	.64	2.59	2.78	1	.639	
13	501003	5	2.5		4	.2			5			.25	1	95	595	63		8.38	.17	.65	1.92	2.68	1	.613	
14	501004	4	2.5		12	.3			5			.25	1	89	475	92		8.42	.34	.73	1.92	2.4	1	.668	
15	501005	14	2.5		53	1			5			.25	1	92	525	63		8	.34	.73	1.79	2.53	1	.811	
16	501006	2	2.5		32	.5			5			.25	1	111	530	63		9.5	.16	.77	1.55	2.88	1	1.02	
17	501007	7	10		50	.6			5			.25	1	88	500	67		9.7	.16	.73	1.55	2.54	1	.891	
18	501008	1	2.5		10	.3			5			.25	1	85	455	67		9.07	.2	.5	1.78	2.35	1	.945	
19	501009	3	2.5		4	.2			5			.25	1	51	400	135		8.06	.69	.41	2.15	1.62	.25	.517	
20	501010	17	2.5		15	1.8			5			.25	1	76	670	122		8.93	1.1	.74	1.47	2.16	1	.45	

21	501011	11	2.5	120	.41	5	.25	1	60	835	84	9	.87	.62	1.12	2.92	1	.352
22	501012	4	2.5	55	.9	5	.25	1	87	645	84	8.02	.19	.43	2.13	2.5	1	.607
23	501013	7	2.5	90	.8	5	.25	1	87	600	77	8.29	.28	.52	2.02	2.35	1	.757
24	501014	4	2.5	260	1	5	.25	1	108	580	66	9.09	.16	.62	1.94	2.8	1	.884
25	501015	9	2.5	160	1.2	5	.25	1	102	605	87	9.19	.32	.7	1.9	2.77	1	.981
26	501016	3	2.5	64	.6	5	.25	1	84	460	111	8.62	.52	.66	2.01	2.27	.5	.859
27	501017	.5	2.5	4	.2	5	.25	1	45	425	157	7.57	.76	.38	2.32	1.69	.25	.516
28	501018	14	2.5	200	6.6	5	.25	1	60	535	64	7.08	.25	.52	1.67	2.08	.25	.45
29	501019	3	2.5	30	1	5	.25	1	85	425	98	7.75	.45	.58	2.08	2.2	.25	.66
30	501020	18	2.5	300	1	5	.25	1	90	590	78	8.29	.27	.62	1.82	2.69	1	.748
31	501021	2	2.5	9	.2	5	.25	1	94	495	87	8.08	.26	.48	1.77	2.64	.5	.77
32	501022	.5	5	25	.4	5	.25	1	64	360	79	6.27	.27	.35	1.46	1.68	.25	.501
33	501023	1	2.5	17	.2	5	.25	1	57	390	198	7.32	1	.52	2.29	1.89	.25	.461
34	501024	2	2.5	100	.40	5	.25	1	44	455	155	8.67	.67	.4	2.14	1.85	.25	.409
35	501025	1	5	7	.4	5	.25	1	91	565	115	8.56	.51	.54	1.95	2.82	.5	.496
36	501026	3	2.5	29	.5	5	.25	1	80	535	144	10	.48	.43	2.55	2.54	1	.504
37	501027	9	2.5	240	3	5	.25	1	60	305	111	9.05	.06	.22	5.18	1.75	.5	.189
38	501029	7	2.5	61	.5	5	.25	1	102	620	102	10.2	.35	.71	1.91	3.38	1	.752
39	501030	5	2.5	39	.5	5	.25	1	94	540	68	8.79	.17	.64	1.61	2.93	1	.767
40	501031	1	2.5	29	.3	5	.25	1	70	455	99	6.57	.43	.54	1.74	2.13	.25	.552
41	501032	3	2.5	24	.4	5	.25	1	71	480	96	7.24	.37	.5	1.79	2.37	.5	.608
42	501033	2	2.5	11	.2	5	.25	1	62	485	161	8.42	.72	.58	2.11	1.97	.25	.442
43	501034	.5	2.5	5	.2	5	.25	1	76	475	98	7.53	.32	.55	2.07	2.26	.25	.608
44	501035	.5	2.5	3200	2.4	5	.25	1	103	580	44	8.37	.04	.56	1.22	3.09	1	.442
45	501036	22	2.5	160	.4	5	.25	1	70	505	44	6.9	.24	.48	1.21	2.85	1	.602
46	501037	12	2.5	160	.3	5	.25	1	78	570	60	7.61	.21	.53	1.6	2.59	.5	.673
47	501038	21	2.5	140	1.6	5	.25	1	96	635	72	8.95	.18	.46	2.18	3.08	1	.505
48	501039	6	2.5	29	.8	5	.25	1	87	525	163	8.15	.71	.85	2.11	2.83	1	.493
49	501040	3	2.5	15	.4	5	.25	1	83	525	117	7.76	.49	.61	1.97	2.58	.5	.639
50	501041	10	2.5	41	.9	5	.25	1	70	455	118	7.74	.81	.57	1.9	2.08	.5	.528
51	501042	5	2.5	33	.6	5	.25	1	66	455	83	7.33	.32	.4	1.69	2.22	.5	.516
52	501043	.5	2.5	19	.2	5	.25	1	73	460	116	6.9	.47	.49	1.97	2.1	.25	.522
53	501044	17	2.5	35	1	5	.25	1	137	1150	123	11.9	.74	1.35	1.29	3.67	2.5	.451
54	501045	8	2.5	14	.4	5	.25	1	86	525	200	7.75	2.17	.74	1.15	2.05	1	.291
55	501046	10	2.5	9	.4	5	.25	1	90	460	119	10.4	.41	.53	2.03	3.1	1.5	.347
56	501047	.5	2.5	3	.2	5	.25	1	28	560	210	6.77	.89	.34	2.61	2.17	.25	.369
57	501048	.5	2.5	2	.2	5	.25	1	60	410	149	7.91	.71	.54	2.29	2.02	.25	.798
58	501049	3	2.5	3	.2	5	.25	1	51	470	240	7.23	1.19	.86	2.54	2.09	.25	.5
59	501050	.5	2.5	11	.3	5	.25	1	59	515	179	6.94	.73	.37	2.43	2.16	.25	.597
60	501051	1	2.5	9	.3	5	.25	1	55	550	235	7.65	1.01	.5	2.75	2.28	.5	.647
62	500015	.5		1	.2	5	.25	1	30	425	200	8.29	.79	.36	2.5	1.87	.25	.385
63	500016	2		36	.2	5	.25	1	72	485	42	7.58	.05	.48	1.64	2.75	.5	.514
64	500017	.5		14	.2	5	.25	1	93	530	86	7.87	.21	.44	1.94	2.48	.25	.661
65	501053	9	40	23	.9	5	.25	1	76	455	145	9.63	.87	.64	1.77	1.77	1.5	.528
66	501054	7	2.5	19	.6	5	.25	1	73	495	115	8.94	.49	.5	1.92	2.3	.5	.42
67	501052	8	2.5	27	.8	5	.25	1	105	635	81	9.93	.39	.61	1.69	3.21	1.5	.444
68	501055	1	2.5	14	.2	5	.25	1	47	450	199	8.49	.94	.5	2.36	2.26	.25	.422
69	501056	1	2.5	65	.6	5	.25	1	94	540	109	8.33	.4	.51	1.98	2.58	.5	.704
70	501057	.5	2.5	30	.6	5	.25	1	95	495	57	8.48	.15	.5	1.59	2.79	.5	.759
71	501059	3	5	24	.3	5	.25	1	86	435	57	7.93	.19	.38	1.31	2.65	1	.425
72	501059	3	2.5	24	.2	5	.25	1	92	410	76	9.32	.22	.46	1.96	2.71	.5	.499

73	501060	7	2.5	200	.4	5	.25	1	51	410	117	7.94	.5	.41	1.83	2.04	.25	.408
74	501061	3	2.5	25	.4	5	.25	1	66	400	170	7.83	.79	.64	2.48	2.12	.25	.412
75	501062	14	2.5	420	.6	5	1	1	68	425	126	8.13	.96	.63	1.72	2.17	.5	.481
76	501063	5	2.5	48	.5	5	.25	1	80	460	88	7.72	.38	.44	2.15	2.3	.5	.629
77	501064	13	2.5	90	.6	5	.25	1	80	525	85	8.25	.27	.54	1.91	2.6	1	.568
78	501065	5	2.5	22	.6	5	.25	1	88	450	76	8.25	.19	.45	2.39	2.36	.5	.646
79	501066	6	2.5	30	.4	5	.25	1	80	530	88	8.19	.31	.53	1.85	2.48	1	.612
80	501067	12	2.5	100	.4	5	.25	1	75	525	129	8.07	.83	.76	1.7	2.5	1	.513
81	501068	15	2.5	75	.3	5	.25	1	70	440	73	9.3	.4	.65	1.19	3.26	1.5	.323
82	501069	10	2.5	29	1	5	.25	1	69	445	127	8.23	.73	.66	1.76	1.66	1	.459
83	501070	7	2.5	30	.5	5	.25	1	61	425	152	7.09	1.09	.61	1.71	1.42	.25	.406
84	501071	8	2.5	19	.6	5	.25	1	95	600	69	8.37	.19	.7	1.59	2.55	1	.611
85	501072	11	2.5	16	.6	5	.25	1	81	535	109	7.42	.47	.58	1.86	2.29	.5	.596
86	501073	20	2.5	130	.7	5	.25	1	84	495	58	7.32	.17	.46	1.84	2.46	1	.478
87	501074	5	2.5	12	.4	5	.25	1	80	520	90	7.44	.32	.48	2.14	2.34	.5	.528
88	501075	16	2.5	30	1.6	5	.25	1	102	715	103	9.63	.62	.75	1.61	2.98	1.5	.556
89	501076	9	2.5	19	.6	5	.25	1	90	600	128	9.47	.48	.63	2.17	2.68	1	.623
90	501077	12	2.5	35	.7	5	.25	1	104	675	88	9.72	.25	.72	1.91	2.9	1	.63
91	501078	4	2.5	39	.6	5	.25	1	90	455	84	8.29	.28	.66	1.83	2.38	.5	.517
92	501079	11	2.5	16	2	5	.25	1	97	475	147	9.43	.65	.82	1.54	2.92	1.5	.417
93	501080	13	2.5	50	1	5	.25	1	65	430	73	7.02	.35	.49	1.72	2	1	.457
94	501081	13	2.5	9	.5	5	.25	1	71	450	84	8.64	.29	.64	1.68	2.14	1	.5
95	501082	16	2.5	7	.4	5	.25	1	70	475	74	7.44	.25	.68	1.61	2.33	1	.543
96	501083	9	2.5	7	.4	5	.25	1	70	440	140	7.78	.92	.72	1.83	2.08	1	.47
97	501084	11	2.5	10	.4	5	.25	1	86	540	89	7.85	.48	.76	1.57	2.43	1	.613
98	501093	6	5	12	.4	5	.25	1	89	570	93	8.56	.3	.62	1.79	2.53	1	.55
99	501094	18	10	23	.6	5	.25	1	80	475	64	7.57	.33	.78	1.4	2.37	1	.498
100	501095	7	2.5	20	.8	5	.25	1	78	500	78	7.7	.21	.42	1.85	2.32	.5	.551
101	501096	5	2.5	10	.3	5	.25	1	74	435	92	6.96	.27	.39	2.19	1.9	.5	.437
102	501097	9	2.5	19	1.4	5	.25	1	62	355	63	6.85	.2	.45	1.89	2.09	.5	.376
103	501098	14	2.5	22	1	5	.25	1	84	465	115	9.01	.93	.7	1.57	2.56	1.5	.439
104	501099	11	2.5	30	1	5	.25	1	84	545	147	8.22	1.19	.7	1.5	2.05	1	.462
105	501100	10	2.5	39	1.5	5	.25	1	81	490	95	7.27	.49	.65	1.37	2.09	1	.349
106	501101	12	2.5	14	.9	5	.25	1	133	540	115	8.66	1.49	.76	1.55	2.57	1.5	.365
107	501102	7	2.5	24	.8	5	.25	1	50	375	190	6.04	4.69	.94	1.67	1.12	.5	.309
108	501103	14	5	15	.3	5	.25	1	78	380	122	7.76	.97	.58	2.27	1.99	.5	.371
109	501104	15	2.5	10	.2	5	.25	1	81	395	117	7.94	1.33	.61	1.8	2.13	1	.501
110	501105	17	2.5	16	.3	5	.25	1	78	445	106	7.9	.86	.57	1.86	2.3	1	.459
111	501106	14	2.5	17	.6	5	.25	1	86	465	119	8.58	.54	.7	1.97	2.35	1	.563
112	501107	13	10	23	.6	5	.25	1	75	510	93	6.9	.7	.57	1.83	1.99	1	.475
113	501108	11	2.5	20	.4	5	.25	1	70	435	69	6.48	.27	.44	1.67	2.05	.5	.533
114	501109	11	5	27	.6	5	.25	1	63	370	94	6.12	.43	.54	1.71	1.83	.5	.449
115	501110	12	2.5	30	.5	5	.25	1	73	415	87	7.19	.53	.58	1.72	2.21	1	.494
116	501111	11	5	18	.5	5	.25	1	66	405	100	6.83	1.09	.57	1.67	2.07	1	.498
117	501112	12	2.5	22	.3	5	.25	1	84	500	94	7.5	.48	.61	1.91	2.39	1	.536
118	501113	11	2.5	22	.4	5	.25	1	80	510	111	7.98	.47	.58	2.1	2.33	1	.609
119	501114	13	2.5	22	.4	5	.25	1	63	455	124	7.75	.63	.5	2.03	1.95	1	.473
120	501115		2.5	32	.6													
121	501116	14	5	33	1	5	.25	1	83	575	88	8.22	1.25	.68	1.61	2.28	1.5	.484
122	501117	9	5	24	.8	5	.25	1	61	380	142	6.02	10.2	.47	1.43	1.95	1	.404
123	501118	12	2.5	35	.8	5	.25	1	61	460	124	8.08	.87	.58	1.93	1.92	1	.43

124	501119	14	.5	51	.7					.25	1	70	540	116	7.85	.94	.55	2.04	2.29	1	.462
125	501120	11	2.5	33	.4					.25	1	88	610	92	9.13	.53	.62	2.16	3.04	1	.501
126	501121	10	2.5	6	.3					.25	1	74	495	180	7.92	.83	.89	2.18	2.4	.25	.458
127	501122	27	2.5	5	.2					.25	1	74	550	84	7.96	.34	.55	1.81	2.8	1	.411
128	501123	16	2.5	11	.4					.25	1	67	515	98	7.64	.44	.58	1.87	2.37	.25	.432
129	501124	13	2.5	14	.6					.25	1	66	500	101	8.41	.45	.54	1.94	2.15	.5	.477
130	501125	13	2.5	11	.4					.25	1	71	455	82	8.19	.4	.54	1.56	2.46	1	.444
131	501126	7	2.5	15	.8					.25	1	73	560	89	8.15	.34	.49	2.1	2.75	.5	.535
132	501127	9	2.5	39	.4					.25	1	89	570	66	8.46	.17	.46	2.12	2.87	.5	.612
133	501128	20	2.5	39	.2					.25	1	89	690	73	8.15	.35	.54	2	2.79	1	.775
134	501129	18	2.5	16	.4					.25	1	68	605	87	7.74	.4	.56	2.13	2.69	.5	.571
135	501130	22	2.5	19	.6					.25	1	151	2320	70	8.96	.15	.95	1.79	2.84	1.5	.464
136	501131	23	2.5	7	.3					.25	1	85	775	72	8.2	.31	.52	1.51	2.77	.5	.326
137	501132	10	2.5	5	.2					.25	1	90	750	61	8.19	.22	.7	1.77	2.62	1	.366
138	501133	10	2.5	14	.4					.25	1	105	1060	85	7.92	.25	.66	1.71	2.2	.5	.396
139	501134	28	2.5	10	.2					.25	1	82	820	119	10.6	.2	.89	1.42	3.06	1.5	.458
140	501135	21	2.5	11	.4					.25	1	91	765	117	9.5	.39	.84	1.25	2.58	1.5	.401
141	501136	14	2.5	10	.5					.25	1	98	770	120	8.23	.33	.66	1.42	2.21	1	.38
142	501137	6	2.5	5	.2					.25	1	28	400	191	9.24	.82	.35	2.37	1.4	.5	.365
143	501138	8	2.5	11	.4					.25	1	71	565	126	8.77	.5	.51	1.86	1.69	1	.391
144	501139	16	2.5	15	.9					.25	1	114	1020	120	9.17	.62	.78	1.77	2.64	1.5	.492
145	501140	34	2.5	3	.3					.25	1	54	500	85	8.54	.48	.41	1.6	3.2	1	.326
146	501141	18	2.5	4	.4					.25	1	63	470	123	9.36	.52	.86	1.98	2.58	1	.398
147	501142	14	2.5	10	.6					.25	1	80	620	102	9.29	.55	.74	1.92	2.88	1.5	.587
148	501143	6	2.5	6	.2					.25	1	90	830	119	9.52	.46	.66	1.94	2.78	1	.552
149	501144	34	2.5	10	.3					.25	1	65	690	133	10.2	.22	.92	1.2	3	1	.437
150	501145	16	2.5	9	.3					.25	1	81	560	176	8.71	.58	.89	1.91	2.7	.5	.438
151	501146	5	2.5	6	.4					.25	1	52	500	187	9.23	.81	.54	2.33	2.05	.25	.413
152	501147	11	2.5	11	.6					.25	1	108	995	133	10.4	.47	.75	1.91	2.95	1.5	.491
153	501148	12	2.5	9	.4					.25	1	88	715	136	10.1	.51	.73	1.99	2.6	1	.488
154	501149	12	2.5	10	.4					.25	1	94	680	132	9.79	.61	.87	1.89	2.44	1	.488
155	501150	13	2.5	14	1.2					.25	1	91	805	143	9.88	1.55	.86	1.61	3.02	1.5	.481
156	501151	11	2.5	5	.2					.25	1	66	495	169	8.47	.76	.85	2.12	2.45	.5	.429
157	501152	17	2.5	7	.3					.25	1	73	530	78	9.09	.22	.8	1.76	3.03	1	.544
158	501153	10	2.5	7	.3					.25	1	72	555	103	8.06	.4	.72	2.01	2.55	.5	.544
159	501154	38	2.5	5	.2					.25	1	117	470	128	9.49	.49	.56	1.64	2.62	1	.415
160	501155	16	2.5	15	.4					.25	1	102	700	103	7.63	.42	.52	1.62	2.21	.5	.341
161	501156	9	2.5	9	.3					.5	17	68	490	90	6.58	.33	.32	1.6	1.79	.25	.292
162	501157	14	2.5	10	.4					.25	10	82	660	102	7.11	.55	.65	1.58	2.15	.5	.334
163	501158	10	2.5	9	.3					.25	1	80	605	128	8.99	.67	1	1.74	2.25	1	.398
164	501159	14	2.5	14	.3					.25	1	82	650	111	8.54	.56	.76	1.55	2.25	1	.422
165	501160	11	2.5	10	.8				1	1	63	635	175	9.26	1.69	.83	1.69	1.92	1.5	.442	
166	501161	18	2.5	19	1				.25	1	82	695	76	7.65	.28	.64	1.52	2.45	1	.362	
167	501162	12	2.5	9	.2				.25	1	75	530	127	7.79	.74	.76	1.71	2.19	1	.423	
168	501163	16	2.5	22	.4				.25	1	106	820	118	8.84	.45	.58	1.43	2.4	1	.315	
169	501164	9	2.5	11	.5				.25	1	68	545	117	7.26	.4	.51	1.51	2.08	.5	.327	
170	501165	17	2.5	22	1				.25	1	81	600	100	8.46	.48	.52	1.63	2.17	1	.351	
171	501166	13	2.5	16	1.1				.5	1	89	650	100	8.48	.75	.68	1.49	2.26	1	.409	
172	501167	8	2.5	14	.6				.25	1	78	575	116	8.92	.46	.53	1.73	2.12	.5	.389	
173	501168	15	2.5	20	.6				.25	1	89	695	100	8.9	.38	.67	1.73	2.53	1	.443	
174	501169	13	5	24	.7	5			.25	1	85	600	136	8.53	.75	.54	1.56	1.99	1	.374	

175	501170	10	.60	17	1.1	5	.25	1	149	485	105	8.23	.95	.65	1.35	1.87	1	.351
176	501171	17	2.5	22	.9	5	.25	1	126	745	90	9.05	.15	.34	1.05	2.63	1	.371
177	501172	9	2.5	11	.9	5	.25	1	61	685	153	9.52	1.31	.51	1.65	1.64	1	.387
178	501173	10	2.5	12	.8	5	.25	1	75	590	133	8.77	.72	.66	1.71	1.81	1	.399
179	501174	9	2.5	10	.7	5	.25	1	60	470	133	8.02	.79	.61	1.58	1.47	.5	.361
180	501175	2	2.5	2	.1	5	.25	1	44	525	46	7.05	.19	.41	1.95	2.06	.25	.386
181	501176	.5	2.5	7	.2	5	.25	1	30	430	183	7.94	.78	.31	2.37	1.7	.25	.364
182	501177	.5	2.5	45	.3	5	.25	1	77	475	124	8.35	.53	.59	2.12	2.29	.25	.731
183	501178	10	2.5	30	.6	5	.25	1	59	470	132	8.6	1.2	.74	1.54	1.77	1	.405
184	501179	10	2.5	23	1	5	.25	1	68	705	107	8.5	1.03	.7	1.62	2.15	1	.437
185	501180	14	2.5	29	4.8	5	.25	1	85	890	81	9.83	.74	.71	1.45	2.78	1.5	.424
186	501181	5	5	10	.6	5	.25	1	47	435	168	8.41	.96	.49	2.15	1.54	.25	.375
187	501182	1	2.5	11	.6	5	.25	1	61	475	185	7.88	.73	.42	2.27	2.09	.25	.523
188	501183	.5	10	7	.3	5	.25	1	49	445	166	8.06	.67	.45	2.23	2.24	.25	.584
189	501184	9	2.5	14	.7	5	.25	1	74	485	139	8.17	.49	.58	1.83	2.32	.5	.454
190	501185	5	4	.4														
191	501186	6	5	17	.8	5	1	1	39	415	340	3.79	19.1	2.69	.76	1.47	1	.174
192	501187	14	2.5	20	3	5	.25	1	77	435	189	8.69	4.6	.7	1.07	2.91	1	.346
193	501188	8	2.5	6	.7	5	.25	1	80	500	205	8.77	1.85	1.11	2.01	2.47	.5	.448
194	501189	13	2.5	7	.4	5	.25	1	73	485	91	7.94	.4	.61	1.75	2.13	1	.58
195	501190	9	5	9	.4	5	.25	1	68	405	92	8.94	.37	.5	1.78	2	.25	.502
196	501191	15	2.5	30	.2	5	.25	1	64	385	77	6.41	.3	.5	1.45	2.11	.25	.399
197	501192	9	5	100	1.4	5	.25	1	63	465	72	6.49	.24	.37	1.76	2.13	.25	.379
198	501193	2	2.5	10	.4	5	.25	1	79	515	77	7.91	.26	.51	2.15	2.5	.25	.723
199	501194	15	2.5	27	.3	5	.25	1	67	515	78	7.29	.33	.47	1.9	2.47	1	.526
200	501195	8	2.5	32	.2	5	.25	1	71	475	85	7.95	.42	.46	2.27	2.17	.25	.507
201	501196	18	2.5	100	1	5	.25	1	67	485	51	7.01	.17	.39	1.86	2.41	.5	.42
202	501197	12	2.5	200	2.2	5	.25	1	57	485	113	7.39	2.26	.48	1.74	2.22	.5	.311
203	501198	12	2.5	41	1	5	.25	1	69	510	92	8.11	.6	.53	1.85	2.51	1	.385
204	501199	9	2.5	32	.4	5	.25	1	48	600	67	6.76	.39	.45	1.84	1.66	1	.302
205	501200	28	75	1100	1.6	5	.25	1	70	730	70	7.78	.22	.5	1.69	2.89	1	.814
206	501201	18	2.5	24	.4	5	.25	1	95	705	71	8.85	.21	.48	2.21	2.43	1	.762
207	501202	20	10	17	.4	5	.25	1	99	525	91	9.82	.2	.53	2.36	1.26	1	.649
208	501203	16	5	7	.2	5	.25	1	84	495	85	8.67	.31	.52	2.09	2.31	1	.599
209	501204	15	40	11	.4	5	.25	1	92	535	70	8.68	.17	.46	2.44	2.51	.5	.64
210	501205	19	10	22	1	5	.25	1	72	545	79	8.47	.34	.53	1.99	2.28	1	.489
211	501206	6	5	6	.2	5	.25	1	57	395	137	7.45	.64	.56	2.03	1.73	.25	.473
212	501207	12	2.5	10	.6	5	.25	1	67	560	94	8.26	.37	.58	2.01	2.57	1	.454
213	501208	12	2.5	24	.6	5	.25	1	77	465	89	9.5	.64	.62	1.38	2.92	1	.435
216	500058	7	7	1	.5	5	.25	1	52	515	183	9.6	.76	.48	2.41	1.97	.25	.464
217	500056	9	10	.6	.5	5	.25	1	64	505	129	8.46	.53	.49	1.95	2.23	.25	.371
218	500057	6	9	.3	.5	5	.25	1	92	505	71	8.89	.21	.97	1.84	2.76	1	.759
220	500014	1	7	.3	.5	5	.25	1	44	470	175	8.21	.66	.36	2.42	2.29	.25	.452
221	500019	4	6	.4	.5	5	.25	1	40	330	157	8.86	.73	.42	2.09	1.29	.25	.371
222	500020	5	9	.2	.5	5	.25	1	44	375	134	8.99	.6	.39	1.95	1.43	1	.358
223	500021	5	11	.4	.5	5	.25	1	71	380	210	8.45	1.42	.6	2.05	1.69	.5	.451
224	500022	10	83	.6	.5	5	.25	1	85	500	90	8.3	.38	.61	1.62	2.28	1	.485
225	500023	6	11	.4	.5	5	.25	1	59	410	98	9.27	.3	.36	2.23	2.3	.5	.374
226	500024	8	180	1	.5	5	.25	1	86	535	72	7.72	.23	.49	1.68	2.4	1	.486
227	500025	13	27	1.2	.5	5	.25	1	70	500	98	8.5	.62	.51	1.5	1.95	1	.433
228	500026	13	33	1	.5	5	.25	1	94	630	113	9.53	.56	.77	1.62	2.33	1.5	.49

229	500025	9	7	.4	5	.25	1	73	475	143	7.81	.52	.67	2.25	2.17	.5	.45	
230	500029	2	7	.3	5	.25	1	78	505	127	7.94	.48	.46	2.21	2.28	.25	.52	
231	500030	8	7	.4	5	.25	1	85	515	94	8.22	.33	.54	1.93	2.51	1	.581	
232	500031	9	100	.3	5	.25	1	57	510	172	9.63	.7	.52	2.34	2.32	1	.492	
233	500054	20	30	1.4	5	.5	1	92	715	92	9.05	.75	.62	1.3	2.72	1.5	.358	
234	500055	11	11	1.5	5	.5	1	96	615	120	8.84	1	.79	1.52	2.22	1.5	.413	
236	501090	12	2.5	9	.4	5	.25	1	66	435	90	7.54	.3	.61	1.61	2.3	1	.383
237	501091	8	10	9	.4	5	.25	1	84	605	74	7.83	.31	.45	1.47	2.66	1	.421
238	501092	7	5	16	.3	5	.25	1	75	545	66	7.01	.28	.41	1.29	2.53	1	.359
241	500018	2	15	.4	5	.25	1	80	490	106	7.95	.4	.61	1.97	2.55	.5	.625	
244	501087	17	2.5	15	.6	5	.25	1	92	630	96	7.24	.36	.6	1.64	2.17	1	.383
245	501088	8	2.5	7	.5	5	.25	1	70	465	107	7.03	.44	.56	1.78	1.94	.5	.461
246	501089	6	2.5	10	.4	5	.25	1	88	540	80	7.67	.25	.66	1.65	2.26	.5	.649
249	501086	15	2.5	10	.6	5	.25	1	72	465	77	7.16	.22	.44	2.13	1.93	.25	.488
250	501085	15	2.5	10	.6	5	.25	1	87	620	76	7.76	.25	.64	1.58	2.37	1.5	.501
252	500052	20	17	1.4	5	.25	1	88	680	157	8.99	.54	.5	1.51	2.25	1	.357	
253	500053	15	14	.8	5	.25	1	73	560	107	7.32	.36	.51	1.48	2.05	1	.345	
258	500050	9	10	.4	5	.25	1	67	560	120	8.26	.51	.58	1.8	1.94	.5	.368	
259	500051	11	7	.6	5	.5	1	68	575	126	8.81	.77	.67	1.78	2.13	1	.427	
260	500033	24	16	.6	5	.25	1	63	450	48	6.93	.2	.52	1.92	2.25	1	.43	
262	500046	20	22	1.2	5	.25	1	95	730	107	9.03	.66	.68	1.61	2.48	1	.409	
263	500047	11	9	.4	5	.25	1	65	595	134	8.71	.56	.64	1.95	2.1	.25	.413	
264	500048	13	11	.7	5	.25	1	96	840	96	9.77	.29	.79	1.83	2.83	1.5	.49	
265	500045	4	11	.2	5	.25	1	38	480	210	9.09	.85	.49	2.48	2	.25	.414	
266	500044	22	23	.4	5	.25	1	88	745	149	10	.25	.35	1.37	2.97	1.5	.295	
267	500049	12	9	.6	5	.25	1	68	550	98	7.97	.36	.52	1.9	2.27	.5	.489	
268	500027	14	29	.9	5	.25	1	75	495	91	7.87	.68	.62	1.83	2.32	1	.499	
269	500035	8	30	1.6	5	1	1	54	380	171	5.87	12.8	.56	1.28	2.02	1	.32	
270	500036	9	25	1.6	5	.5	1	55	430	270	7.33	8	.63	1.51	1.99	1	.37	
271	500037	16	50	1.2	5	.25	1	74	600	95	8.76	.57	.66	2.02	2.82	1	.535	
272	500038	11	33	.6	5	.25	1	69	525	149	8.91	.93	.82	2.19	2.48	1	.496	
273	500059	7	9	.6	5	.25	1	78	645	184	10.7	1.19	.58	2.16	2.23	1	.479	
275	500032	20	14	.5	5	.25	1	74	515	91	7.67	.46	.64	1.81	2.28	1	.596	
280	500034	13	23	.8	5	.25	1	88	565	109	8.46	.73	.81	1.81	2.33	1	.522	
281	500041	17	9	.6	5	.25	1	72	625	117	8.43	.38	.64	1.68	2.18	.5	.394	
282	500042	19	6	.4	5	.25	1	76	615	57	8.94	.26	.91	1.69	3.13	1	.562	
283	500043	8	5	.4	5	.25	1	54	355	149	7.07	.76	.74	1.92	1.66	.25	.412	
284	500039	17	11	.6	5	.25	1	73	550	72	8.14	.21	.54	1.83	2.9	1	.523	
285	500040	15	11	.6	5	.25	1	66	480	111	7.78	.52	.67	1.88	2.47	.5	.449	
301	500060	14			5	.25	1	74	425	136	8.23	3.43	.71	1.08	2.66	1	.298	
302	500061	8			5	.25	1	54	430	173	8.85	1.29	.72	1.95	1.72	.5	.402	
303	500062	15			5	.25	1	91	430	59	7.72	.19	.68	1.56	2.32	.5	.64	
304	500063	10			5	.25	1	51	455	335	6.29	5.92	.48	1.43	1.95	.5	.309	
305	500064	15			5	.25	1	72	535	72	7.76	.28	.46	2.15	2.32	.25	.541	
306	500065	19			5	.25	1	88	500	69	8.06	.23	.53	2	2.42	1	.56	
307	500066	15			5	.25	1	68	470	58	6.93	.18	.39	2.13	2.22	.25	.489	
308	500067	16			5	.25	1	76	490	56	7.31	.18	.5	1.97	2.23	.25	.67	
309	500068	11			5	.25	1	67	480	81	7.23	.32	.47	1.93	2.06	1	.472	
310	500069	11			5	.25	1	66	485	102	8.4	.39	.54	2	2.3	.5	.465	
311	500070	12			5	.25	1	69	555	105	9.2	.54	.72	2.04	2.73	1	.475	

REC# SMPLE# P LA GE R CR AES AES GRIDN GRIDM

1	500001	645	98
2	500002	600	100
3	500003	820	83
4	500004	2190	72
5	500005	590	87
6	500006	625	42
7	500007	860	67
8	500008	900	90
9	500009	1950	97
10	500010	2680	74
11	501001	795	80
12	501002	610	96
13	501003	475	94
14	501004	655	78
15	501005	800	83
16	501006	540	105
17	501007	765	87
18	501008	860	73
19	501009	1600	40
20	501010	1720	90
21	501011	1110	84
22	501012	670	71
23	501013	790	71
24	501014	755	90
25	501015	965	82
26	501016	495	68
27	501017	470	34
28	501018	1070	62
29	501019	445	68
30	501020	2110	81
31	501021	735	84
32	501022	765	57
33	501023	590	40
34	501024	2020	34
35	501025	1360	78
36	501026	635	67
37	501027	940	84
38	501029	980	110
39	501030	1270	91
40	501031	1260	60
41	501032	840	65
42	501033	1260	42
43	501034	280	77
44	501035	790	100
45	501036	945	78
46	501037	1000	81
47	501038	1550	100
48	501039	1400	70
49	501040	1160	68
50	501041	2150	60
51	501042	985	62

52	501043	1380	53
53	501044	655	135
54	501045	1750	74
55	501046	530	105
56	501047	1170	17
57	501048	405	48
58	501049	485	27
59	501050	745	28
60	501051	1200	28
62	500015	1570	17
63	500018	530	72
64	500017	620	64
65	501053	520	64
66	501054	1920	61
67	501052	1990	100
68	501055	2180	40
69	501056	705	70
70	501057	390	91
71	501058	1040	100
72	501059	755	99
73	501060	2440	51
74	501061	640	53
75	501062	2550	67
76	501063	985	65
77	501064	1930	75
78	501065	775	67
79	501066	1350	72
80	501067	3860	72
81	501068	955	100
82	501069	1350	53
83	501070	1590	45
84	501071	985	98
85	501072	1740	65
86	501073	1930	82
87	501074	1470	67
88	501075	1900	94
89	501076	2050	71
90	501077	915	94
91	501078	680	84
92	501079	1150	88
93	501080	1510	62
94	501081	1190	68
95	501082	1810	77
96	501083	3300	58
97	501084	1450	80
98	501093	1120	76
99	501094	1440	82
100	501095	790	66
101	501096	1010	57
102	501097	1020	69
103	501098	1460	92

104	501099	1470	73
105	501100	2250	66
106	501101	3700	84
107	501102	2640	37
108	501103	1650	92
109	501104	1830	74
110	501105	2630	71
111	501106	1410	72
112	501107	1850	63
113	501108	2080	62
114	501109	1830	56
115	501110	1850	72
116	501111	2110	65
117	501112	2240	73
118	501113	2580	65
119	501114	2950	50
120	501115		
121	501116	2430	73
122	501117	2450	55
123	501118	2530	53
124	501119	2070	62
125	501120	2500	82
126	501121	1490	50
127	501122	2440	86
128	501123	1860	68
129	501124	1610	64
130	501125	1320	91
131	501126	1430	74
132	501127	1470	84
133	501128	1850	82
134	501129	2210	68
135	501130	2010	115
136	501131	1400	82
137	501132	1180	88
138	501133	1900	78
139	501134	1340	125
140	501135	1900	105
141	501136	1760	88
142	501137	1530	18
143	501138	1810	56
144	501139	1640	95
145	501140	2120	96
146	501141	2060	68
147	501142	2080	78
148	501143	1280	75
149	501144	1320	110
150	501145	1960	71
151	501146	2770	34
152	501147	1900	88
153	501148	1780	71
154	501149	2770	75

155	501150	2140	89
156	501151	2470	53
157	501152	1470	86
158	501153	2570	67
159	501154	2580	85
160	501155	2130	71
161	501156	2400	50
162	501157	1880	71
163	501158	1810	66
164	501159	1610	76
165	501160	2380	62
166	501161	2040	78
167	501162	3800	57
168	501163	2360	79
169	501164	1900	50
170	501165	3090	66
171	501166	2400	74
172	501167	2310	66
173	501168	1640	81
174	501169	3750	66
175	501170	2650	76
176	501171	1940	100
177	501172	1210	54
178	501173	1020	61
179	501174	1440	48
180	501175	435	54
181	501176	1040	17
182	501177	1240	63
183	501178	1860	57
184	501179	1540	66
185	501180	1630	87
186	501181	2060	30
187	501182	1020	33
188	501183	1410	33
189	501184	1540	59
190	501185		
191	501186	1760	45
192	501187	2130	140
193	501188	2380	56
194	501189	2190	63
195	501190	1740	57
196	501191	1150	64
197	501192	1640	67
198	501193	565	69
199	501194	1590	62
200	501195	740	63
201	501196	1410	62
202	501197	2700	61
203	501198	1680	71
204	501199	1640	50
205	501200	1360	70

206	501201	1630	74
207	501202	1240	89
208	501203	1800	70
209	501204	1520	77
210	501205	1960	67
211	501206	2230	64
212	501207	2340	71
213	501208	1710	88
216	500058	1670	39
217	500058	1530	59
218	500057	1250	96
220	500014	1230	33
221	500019	710	27
222	500020	1260	30
223	500021	925	42
224	500022	980	72
225	500023	675	56
226	500024	1240	74
227	500025	2350	64
228	500026	1990	76
229	500028	2120	50
230	500029	965	53
231	500030	1320	66
232	500031	1510	46
233	500054	4740	100
234	500055	3070	76
236	501090	1510	69
237	501091	1670	70
238	501092	1540	63
241	500018	1230	64
244	501087	2150	72
245	501088	1850	55
246	501089	1300	76
249	501086	1420	65
250	501085	1300	77
252	500052	2570	85
253	500053	3320	59
258	500050	2460	55
259	500051	2560	62
260	500033	2540	73
262	500046	3320	90
263	500047	2300	58
264	500048	1260	94
265	500045	2800	30
266	500044	1390	100
267	500049	2230	64
268	500027	2160	64
269	500035	1960	58
270	500036	2080	60
271	500037	2310	77
272	500038	2460	57

273 500059 1260	68
275 500032 2070	72
280 500034 2880	75
281 500041 2190	73
282 500042 870	98
283 500043 1810	41
284 500039 1640	78
285 500040 1690	66
301 500060 1880	82
302 500061 1910	46
303 500062 1130	77
304 500063 1760	52
305 500064 1420	64
306 500065 1110	75
307 500066 1410	62
308 500067 1340	69
309 500068 1610	59
310 500069 1950	67
311 500070 1590	71