WESTMIN

1993 ASSESSMENT REPORT

VOLUME I

BELL CREEK PROPERTY
(BELL, BELL 1 TO 12, ROCHE, PASAYTEN, STAR, STAR 1, TELL, TELL 1, AU CLAIMS)

GEOLOGICAL MAPPING, LITHOGEOCHEMICAL SAMPLING, SOIL SAMPLING, MAGNETOMETER AND HORIZONTAL LOOP EM SURVEYS

SIMILKAMEEN MINING DIVISION
NTS 92H/2
LATITUDE 49° 08' N, LONGITUDE 120° 38' W

CLAIM OWNERS
STEVE TODORUK, DOUG FULCHER AND MIKE STAMMERS
PAMICON DEVELOPMENTS LTD.

OPERATOR
WESTMIN RESOURCES LIMITED

REPORT BY

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WESTMIN RESOURCES LIMITED

MARCH 28, 1994

RPT/94-004

PART 1 OF 2

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

LIST OF APPENDICES

LIST OF FIGURES

LIST OF FIGURES
(Continued)

LIST OF TABLES

VOLUME I

TECHNICAL REPORT

RPT/94-004

1.0 SUMMARY

The 1993 exploration program was designed to investigate the potential for an economic Zn-Cu massive sulphide deposit on the Bell Creek property. Approximately 43 line kilometres of cut and flagged grid was established which provided the base for detailed geological mapping (1:1,250 and 1:2,500 scale) in conjunction with lithogeochemical sampling and magnetometer/VLF-EM surveying. More focused areas were covered by soil sampling, including overburden-penetrating plugger drill sampling, and a Horizontal Loop EM survey.

The work was done predominantly in the northwest part of the property, west of Crowley Creek, in the area of historical workings at the Red Star and Knob Hill showings. The geological, lithogeochemical and geophysical information allows for subdivision of the geology into a substantial number of volcanic, sedimentary and intrusive rock units. Several sections of mafic to felsic igneous rocks are present within the space of the map area. The felsic volcanic rocks commonly are quite evolved with abundant quartz and feldspar phenocrysts and elevated lithophile element contents. There is evidence of severe, polyphase deformation in most of the rocks investigated with most signs of primary layering in the rocks destroyed.

Several areas of strong alteration, with associated Zn and Cu enrichment, were identified. The alteration zones are characterized by Ba enrichment, which is directly associated with mineralization, and strong Ca and Na depletion and Mg enrichment, which are spatially associated with mineralization. The most substantial alteration zone has been found in the vicinity of the Red Star showing. Soil sampling with the plugger drill, has identified two Zn-Cu anomalies in this area, one of which is directly associated with exposed massive sulphide mineralization at the Red Star. Both anomalies are elongate parallel to the apparent stratigraphic orientation. This is encouraging from the perspective of the exploration models for volcanogenic massive sulphide deposits. Another substantial alteration zone, with associated mineralization is the Knob Hill showing. Soil sampling has detected alteration and mineralization as much as 500 metres south of the known workings on this zone.

Geophysical surveying has identified several EM conductors which have potential for representing mineralization. Within the alteration zone at the Red Star showing, there is a weak conductor which is continuous over at least 200 metres. This conductor is well situated in the stratigraphy to be a mineralized body. Also, near the north edge of the Knob Hill Grid, there is a VLF-EM conductor which is located on the strike projection (based on magnetic patterns) from the main Knob Hill showing. This conductor is apparently buried under overburden and is as yet untested by soil sampling.

Recommendations for 1994 include drill testing of the Red Star area and the best of the other anomalies identified in the 1993 program. Prior to drilling, additional soil sampling should be done to delineate anomalies which remain open along strike, and to test geophysical anomalies not yet covered. This would involve extension of the grid in some areas. As well, a detailed structural analysis should be completed in the area which would guide the placement of drillholes on the mineralized horizons. Additional work should be done in other areas of the property, particularly to the south, across the Similkameen River, along the strike extension of the Red Star mineralized horizon.

2.0 INTRODUCTION

2.1 Location and Access

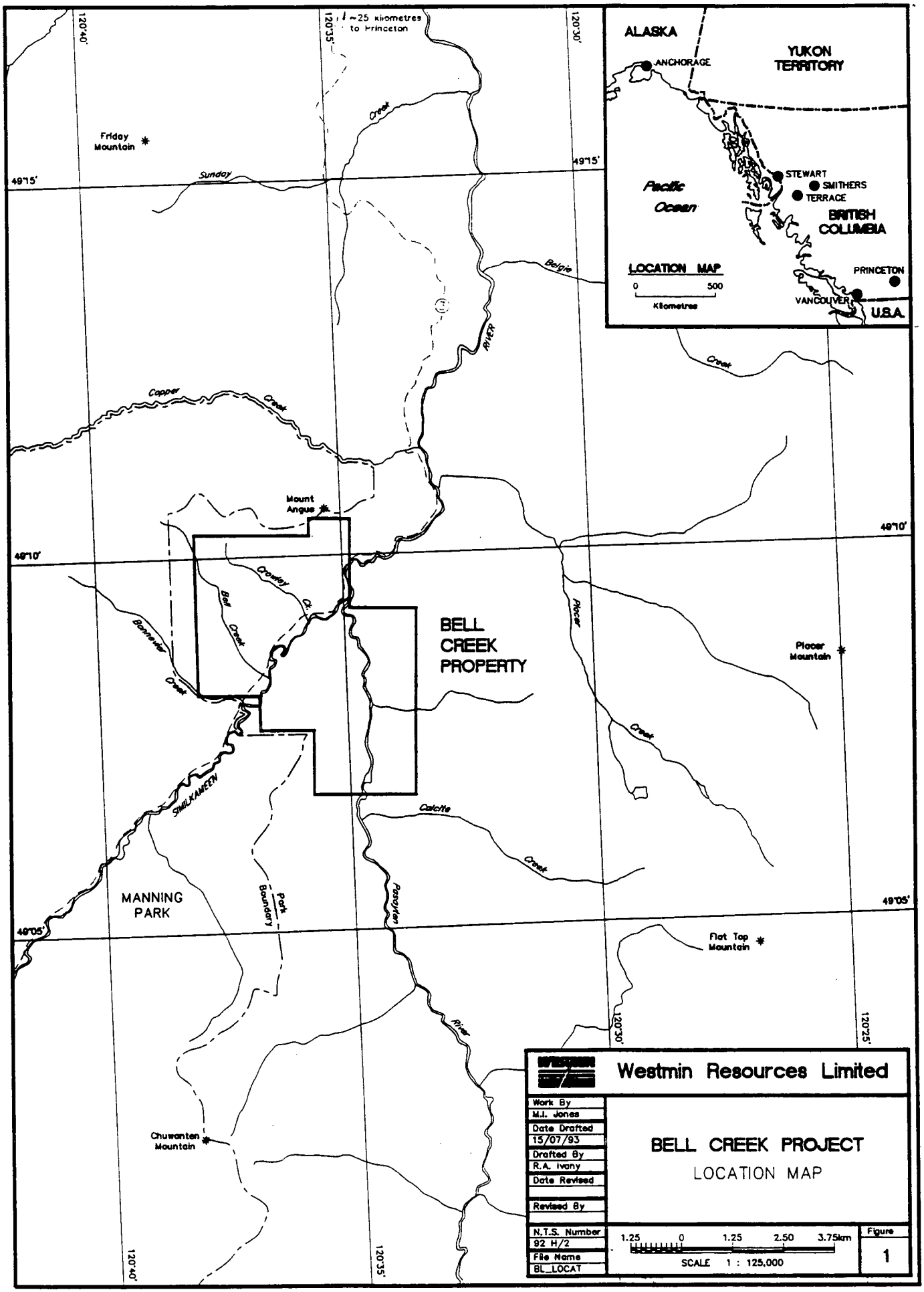
The Bell Creek property is located in the Similkameen Mining District, approximately 50 kilometres south of Princeton, British Columbia, immediately east of the eastern boundary of Manning Park, along Highway 3 (Figure 1). The claims are located on NTS map sheet 92H/2, at 49° 08' N and 120° 38' W. The claims straddle the Similkameen and Pasayten rivers, including their confluence. The Copper Mountain-Ingerbell porphyry Cu-Au deposits lie approximately 30 kilometres north of the property along the Similkameen River.

The claims may be accessed directly from Highway 3, or via various all-weather gravel logging roads which provide excellent coverage of the area.

2.2 Physiography and Vegetation

The property covers moderately mountainous terrane, sloping towards the river valleys which dominate the physiography. Moderate to thick glacial overburden covers the outcrop in most areas, especially in the higher areas of the claim. As a result, outcrop is predominantly seen in road cuts.

The area has a dry climate, typical of the south-central interior of British Columbia resulting in open pine forest covering south and west facing slopes, with mixed spruce, fir and pine elsewhere on the property.


~25 kilometres to Princeton
Friday Mountain
Sunday Creek
Belgie
River
Copper Creek
Mount Angus
Crowley Ck.
Bell Creek
Bonanza Creek
BELL CREEK PROPERTY
Placer Creek
Placer Mountain
Similkameen
Calotte Creek
MANNING PARK
Park Boundary
Passayten River
Flat Top Mountain
Chuwanten Mountain
120°40'
120°35'
120°30'
120°25'
49°15'
49°10'
49°05'
ALASKA
YUKON TERRITORY
ANCHORAGE
Pacific Ocean
STEWART
SMITHERS
TERRACE
BRITISH COLUMBIA
PRINCETON
VANCOUVER
U.S.A.
LOCATION MAP
0 500
Kilometres
Westmin Resources Limited
Work By
M.I. Jones
Date Drafted
15/07/93
Drafted By
R.A. Ivany
Date Revised
Revised By
N.T.S. Number
92 H/2
File Name
BL_LOCAT
BELL CREEK PROJECT
LOCATION MAP
1.25 0 1.25 2.50 3.75km
SCALE 1 : 125,000
Figure
1

2.3 Claims

The Bell Creek property consists of 20 claims for a total of 120 units (Figure 2). The entire group of claims is contiguous. The claims which make up the property are listed in Table 1. The claims are under option by Westmin Resources Limited, Vancouver, British Columbia, from the owners Steve Todoruk, Doug Fulcher and Mike Stammers, all of Pamicon Developments Ltd., Vancouver, British Columbia.

2.4 Previous Work

There is a long history of exploration work in the area of the Bell Creek property. The majority of this work has focused on a couple showings near the east boundary of Manning Park, just north of Eastgate, British Columbia. The showing of most interest has been the Red Star (MinFile No. 092HSE067), which has actually had some very minor production. Several other prospects have received considerable attention including the Knob Hill (MinFile No. 092HSE069), Roche and Pasayten (MinFile No. 092HSE068), Golden Crown (MinFile No. 092HSE191) and Paw (MinFile No. 092HSE093) prospects. Descriptions of these various properties can be found in the reports of the B.C. Department of Mines going back as far as 1900. Several adits were put in on the better showings by the early workers, some of these representing substantial underground development (up to 1,090 feet). There are at least five adits on the former Red Star claims, which include internal raises and shafts, totalling at least 565 metres of tunnelling. There are two adits on the Knob Hill showing, with much less total development (about 45 metres). Two other adits are known to exist, one on the former Roche Crown grant claim and the other on the former Pasayten Crown grant claim.

In the period 1967 to 1970, Spheno Mines Ltd. (Assessment Reports 878 and 2807) carried out a program of geological mapping, soil sampling plus limited magnetometer and EM surveying covering the Knob Hill/Red Star area, as well as claims southeast of the Similkameen River. They followed this work with diamond drilling (five holes?) in the Knob Hill and Red Star areas which encountered weak mineralization.

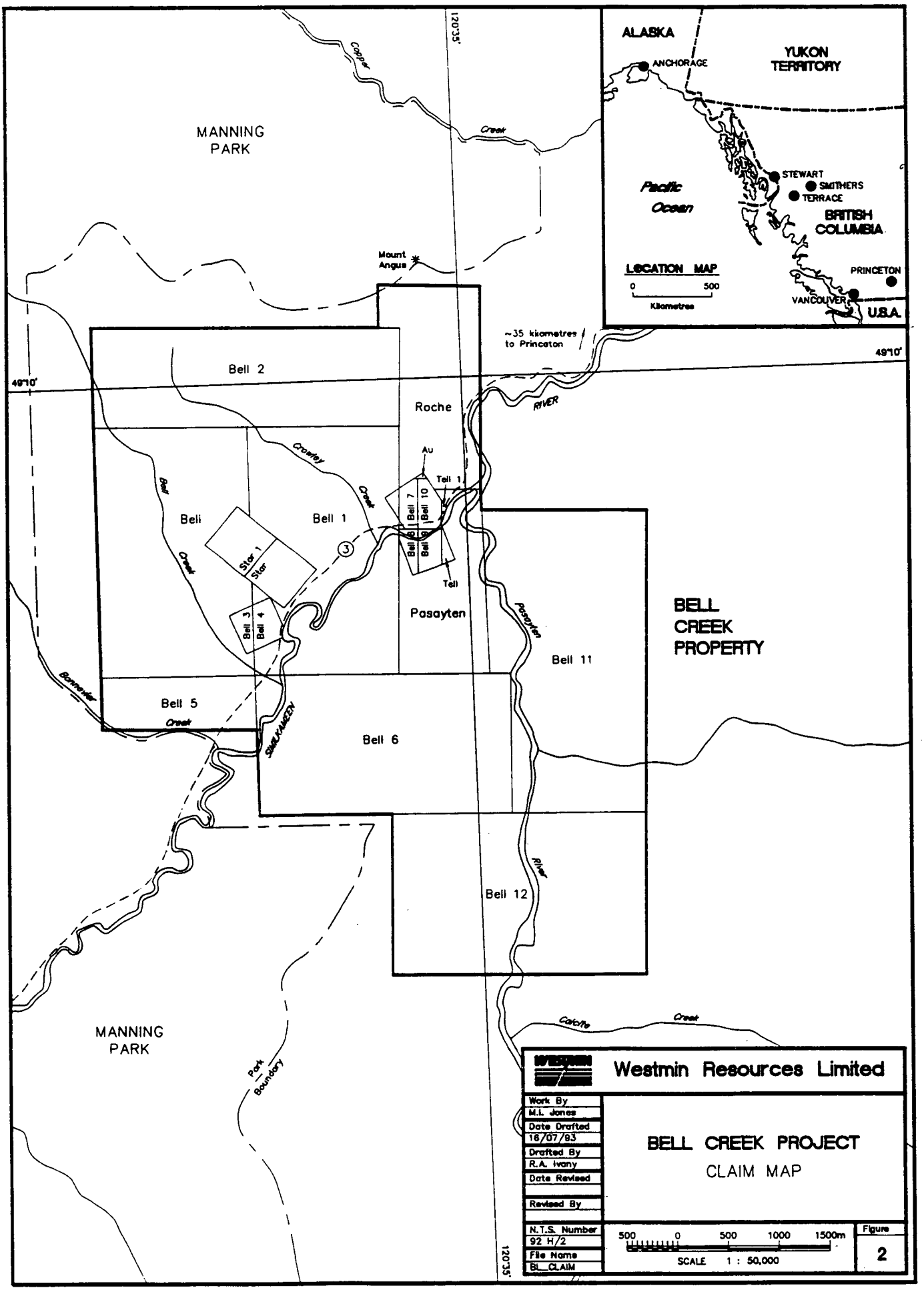

ALASKA
YUKON TERRITORY
ANCHORAGE
STEWART
SMITHERS
TERRACE
Pacific Ocean
BRITISH COLUMBIA
LOCATION MAP
0 500
Kilometres
PRINCETON
VANCOUVER
U.S.A.
MANNING PARK
Mount Angus
120°35'
49°10'
~35 kilometres to Princeton
Bell 2
Roche
Bell 1
Bell
Bell 3
Bell 4
Bell 5
Bell 6
Bell 7
Bell 8
Bell 9
Bell 10
Bell 11
Bell 12
Star 1
Star
Au
Tell 1
Tell
Pasayten
BELL CREEK PROPERTY
Crowley Creek
Bell Creek
Bonneville Creek
SIMILKAMEEN
Pasayten River
Coleman Creek
Park Boundary
Westmin Resources Limited
Work By
M.I. Jones
Date Drafted
16/07/93
Drafted By
R.A. Ivany
Date Revised
Revised By
N.T.S. Number
92 H/2
File Name
BL_CLAIM
BELL CREEK PROJECT
CLAIM MAP
500 0 500 1000 1500m
SCALE 1 : 50,000
Figure
2

TABLE 1

BELL CREEK CLAIMS

Claim Name	Tenure No.	No. of Units	Record Date	Expiry Date *
Bell	249803	15	1990/04/11	1995/04/11
Bell 1	249839	15	1990/07/01	1995/07/01
Bell 2	250041	12	1991/04/16	1995/04/16
Bell 3	250042	1	1991/04/14	1995/04/14
Bell 4	250043	1	1991/04/14	1995/04/14
Star	300055	1	1991/06/03	1995/06/03
Star #1	300057	1	1991/06/03	1995/06/03
Bell 5	302971	3	1991/08/09	1995/08/09
Bell 6	302972	15	1991/08/09	1995/08/09
Roche	308587	8	1992/04/05	1995/04/05
Pasayten	308588	8	1992/04/10	1995/04/10
Tell	310135	1	1992/06/15	1995/06/15
Au	310136	1	1992/06/15	1995/06/15
Bell 7	310491	1	1992/06/15	1995/06/15
Bell 8	310492	1	1992/06/15	1995/06/15
Bell 9	310493	1	1992/06/15	1995/06/15
Bell 10	310494	1	1992/06/15	1995/06/15
Tell #1	310667	1	1992/06/28	1995/06/28
Bell 11	311154	18	1992/06/27	1995/06/27
Bell 12	311155	15	1992/06/27	1995/06/27

* Expiry dates do not reflect filing of the assessment work.

Cominco Ltd. (Assessment Report 8170) optioned claims covering the Red Star showing in 1980 and conducted a comprehensive exploration program looking for volcanogenic massive sulphide deposits. Cominco defined a strong, coincident VLF-EM conductor/induced polarization (IP) anomaly, extending for 900 metres, and a weak Cu-Zn anomaly in soil, associated with the Red Star horizon. However, Cominco never followed up these apparently encouraging results. Later, in 1986 and 1987, Bukara Resources Ltd. (Assessment Report 16,465) completed additional geological mapping and IP surveying, along with 1,100 metres of excavator trenching on the main mineralized horizon at the Red Star. The focus of this exploration program was to evaluate the Au potential of the pyritiferous schists in that horizon. Although the Au content of the schists was disappointing, Bukara did identify zones of anomalous Zn and Cu in the course of their sampling. As well, during this trenching Bukara opened up the Red Star massive sulphide lens by uncovering the caved, earlier, underground workings. The lens is traceable over 16 metres of strike and ranges between 0.1 and 1.2 metres in thickness.

The Red Star showing, and the surrounding area, was restaked by Pamicon Developments Ltd. in 1990. Pamicon resampled and remapped many of the old surface showings, although the underground workings are inaccessible for the most part. Pamicon conducted detailed sampling of the massive sulphide lens at the main Red Star showing. A 1.1 metre chip sample across the widest part of the lens gave values of 40.0% Zn, 3.72% Cu, 950 ppb Au, 1.12 oz/ton Ag and 1.56% Ba.

In 1992 Westmin Resources Limited optioned the claims from Pamicon Developments Ltd. and completed two phases of exploration consisting of reconnaissance scale geological mapping, lithogeochemical and stream sediment sampling (Assessment Reports 22606 and 22934). In addition, a sample of massive quartz-feldspar porphyry from the Bell 1 claim was submitted for a U-Pb age date to the geochronology lab at the University of British Columbia. The age of the rock was determined to be 116 ± 2 Ma, although this date may be inaccurate as insufficient zircons were obtained from the rock sample to allow a statistically valid analysis.

Some of the better results from the work on these former properties are summarized in Table 2.

TABLE 2

REPORTED WIDTHS AND GRADES FROM PREVIOUS SAMPLING ON THE VARIOUS ZONES EXPLORED ON THE BELL CREEK PROPERTY

Showing	Width	Zn (%)	Cu (%)	Au (ppb)	Ag (ppm)	Pb (ppm)
Red Star	1.1 m	40.0	3.72	950	38.1	42
	9.0 ft	10.0	2.65	330	17	
	1.0 m	7.95	2.5	1,000	13.5	
	3 ft	8	22			
(Hand-cobbed)	28 t	8.1	6.5		71	
Knob Hill	0.75 m	0.08	0.82	115	5.0	18
	grab	0.22	1.23	235	10.5	34
Paw	grab		9.23	1,900	1.9	
Pasayten	grab		1.36	30.4 g/T		

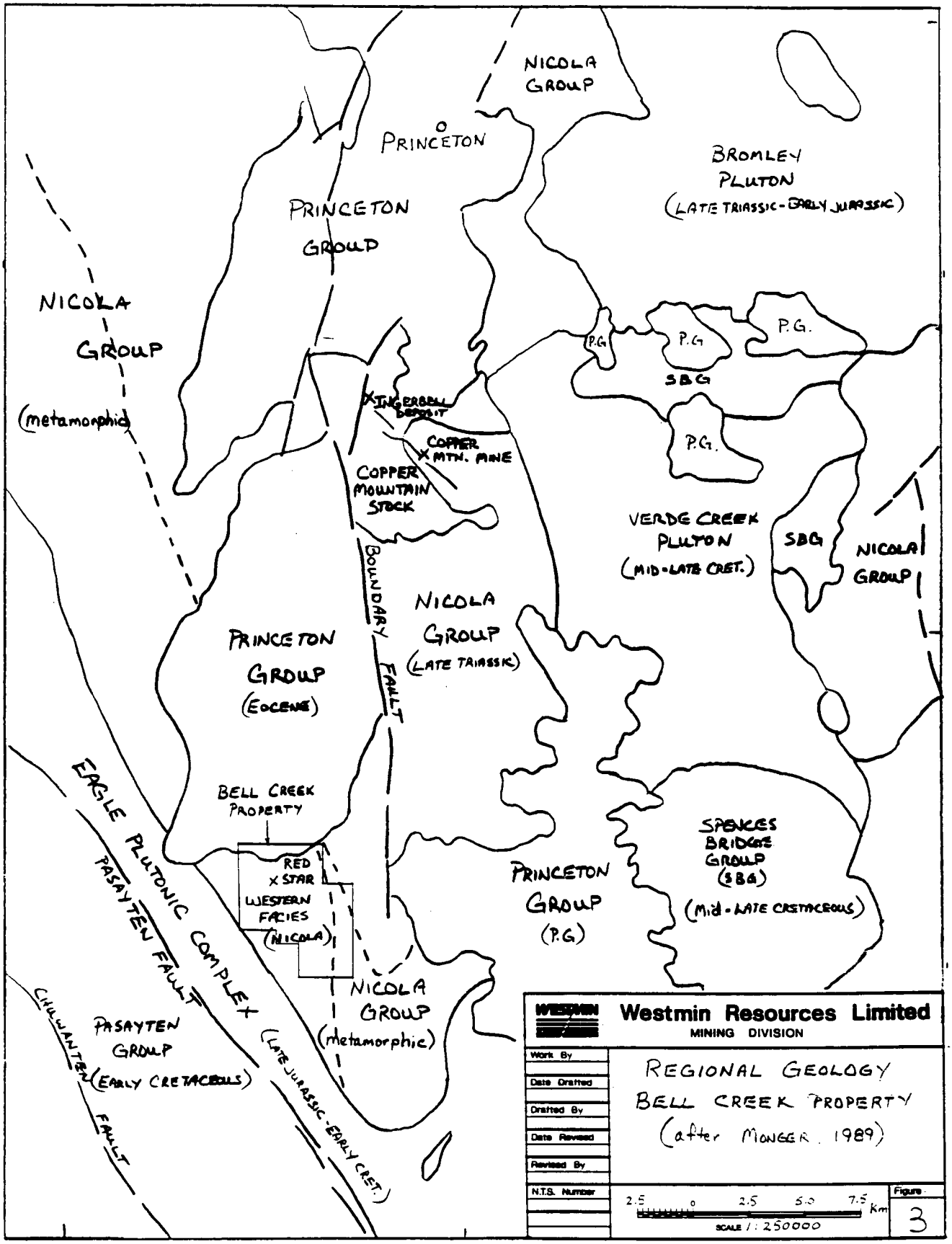
2.5 1993 Work Program

In 1993 Westmin Resources Limited completed a detailed geological mapping, soil sampling and geophysical program, concentrated in the area of the Red Star showing. This program entailed 19.6 kilometres of baseline and line cutting, plus an additional 23.5 kilometres of flagged line, to establish a working grid. This grid is divided, by name, into the Red Star Grid (east of Baseline 0+00 E/W) and Knob Hill Grid (west of Baseline 0+00 E/W). Geological mapping was done along grid lines for a total of 40 kilometres. The Red Star Grid was mapped at a scale of 1:1,250 whereas the Knob Hill Grid was mapped at scale of 1:2,500. In conjunction with the grid mapping, 41 whole rock samples, 12 rock geochem samples and 2 silt samples were taken. Thin section examinations, including one strain analysis, were done on three of these rock samples. A magnetometer/VLF survey (total 41 kilometres) was done over the entire grid. As well, a Horizontal Loop EM survey, totalling 15 kilometres, was done on the Red Star Grid (see Volume II for geophysical report).

Soil geochemical sampling was done in two areas. The main soil survey was done on the Red Star Grid in the vicinity of, and along strike from, the main Red Star showing. This sampling was carried out using a Pionjar Wacker (or Plugger) drill with a "flow through" sampling bit to obtain samples at the overburden/bedrock interface, in order to "see" through the relatively thick overburden and/or surface material disturbed by previous exploration efforts. The plugger samples were supplemented by deep soil samples in areas of lesser overburden. A total of 193 plugger samples and 37 soil samples were taken at 25 metre intervals along the grid lines in this survey. The other sample area was on the Knob Hill Grid, east of Bell Creek, on Lines 3+00 N to 5+00 N. This survey was undertaken to test the presence of a strong Zn-Cu soil anomaly southeast of the Knob Hill showing as reported by Spheno Mines Ltd. (Assessment Report 2807). The sample method used in this area, with relatively thin (though consistent) overburden cover, was to dig fairly deep pits, 50 to 100 centimetres, in an attempt to sample "C Horizon" material. A total of 72 samples, at 25 metre intervals, were taken in this area.

3.0 REGIONAL GEOLOGY (Figure 3)

The Bell Creek property is situated within the Quesnel Trough, an extensive, generally north-south trending terrane consisting largely of alkalic intrusive and volcanic rocks and their sedimentary equivalents. The claims are located at the south end, and near the western margin, of this structural province. The western margin of the Quesnel Trough is defined in this area by the north-northwest-south-southeast trending contact with granodioritic and gneissic rocks of the Late Jurassic to Early Cretaceous Eagle Plutonic Complex.



Westmin Resources Limited
MINING DIVISION

Work By	
Date Drafted	
Drafted By	
Date Revised	
Revised By	
N.T.S. Number	

REGIONAL GEOLOGY
BELL CREEK PROPERTY
(after MONGER, 1989)

2.5 0 2.5 5.0 7.5 Km
SCALE 1 : 250000

Figure 3

Mapping by Monger (1989) has shown that the property area is underlain by metamorphosed sedimentary rocks and volcanic rocks of the Upper Triassic Nicola Group. The volcanic rocks of the Nicola Group are dominated by mafic to intermediate alkalic volcanic rocks, tuffs and flows, which are commonly characterized by the presence of pyroxene, or pyroxene-plagioclase, phenocrysts. Also, included in the local stratigraphy are intermediate to felsic calc-alkaline volcanic rocks and sedimentary rocks, typical of the "Western" facies of the Nicola Group (Preto, 1979). Greenschist to lower amphibolite grade metamorphism is reflected in most of the Nicola Group rocks, with strong amphibolitization near the contact with the Eagle Plutonic Complex. There is a strong structural orientation in the Nicola Group rocks close to the Eagle Plutonic Complex parallel to the intrusive contact.

Unconformably overlying the Nicola Group and Eagle Plutonic Complex rocks in the area are rocks of the Eocene-aged Princeton Group. These include alkalic volcanic (primarily hornblende-plagioclase-pyroxene porphyritic) rocks and sedimentary rocks ranging from argillites to conglomerates. Common hematite staining in these rocks indicates that the volcanic sequence was largely extruded sub-aerially. These rocks are not strongly deformed and in general have been only weakly metamorphosed. Princeton Group rocks are present at the north end and east of the claim group. They will not be discussed in detail as the focus of this program to date has been the underlying Nicola Group rocks.

Mineralization has been identified in the area on the Red Star reverted Crown grant claim (now Star, Star 1 claims). At this showing, intermediate to felsic Nicola Group volcanic rocks host a small massive sulphide lens consisting largely of sphalerite and pyrite with associated copper mineralization and barite. Elsewhere, massive pyrite, with strong copper and zinc values has been identified in several shears, in particular, at the Knob Hill showing. Several other showings are known in the vicinity, mostly consisting of spotty Cu-Au mineralization in quartz veins oriented along the dominant foliation directions. About 30 kilometres north of the property is the large Copper Mountain-Ingerbell alkaline porphyry Cu-Au deposit complex, presently operated by Similco Mines Ltd. These deposits are found within and adjacent to, alkaline intrusions which are cogenetic with the alkaline Nicola Group volcanic rocks.

4.0 PROPERTY GEOLOGY

4.1 General Geology of the Nicola Group

East of the Eagle Plutonic Complex, and west of the Pasayten River, is a wide section of mafic to intermediate to felsic volcanic rocks and sedimentary rocks,

including limestone and argillites. This correlates well with the "Western" facies of the Nicola Group (Preto, 1979). There is repetition of mafic and felsic intervals in this section which may be due to cyclical volcanism or structural complexities (folding, thrusting?) not yet unravelled. East of the Pasayten River valley, the bedrock is dominated by typical mafic volcanic rocks and sedimentary rocks of the alkaline section of the Nicola Group (Preto, 1979). No significant intrusive bodies have been identified on the property to date. Bedrock is not exposed in the floodplains of the Similkameen and Pasayten rivers.

An assumption is made that the Nicola Group is built eastward (Monger, 1985), resulting in the emergent, oxidized volcanic rock units which are common in the alkaline volcanic suite which typifies the Nicola Group to the east. This is corroborated by descriptions of the "Western" facies of the Nicola Group by previous workers which have indicated that it is east facing (Rice, 1943; Moore and Pettipas, 1990). Assuming no structural convolutions, the more westerly rocks on the property should be stratigraphically lower within the Nicola Group. This assumption fits with the correlation of the rocks on the western part of the property with the "Western" facies of the Nicola Group. The only indication of tops observed in the course of mapping the area was a westerly-dipping, graded lapilli tuff bed in the area of the Paw showing. The grading indicated that the bedding top is to the east. Consequently, bedding in this area is overturned.

It is also assumed that these "Western" facies rocks were deposited in a moderately distal submarine environment, as indicated by the presence of fine-grained clastic sediments. However, they must not have been deposited in water that was very deep as there are several limestone units in the section north and south of the Bell Creek property. In fact, in other areas, the "Western" facies may have been locally emergent (Moore and Pettipas, 1990).

4.2 Geological Units of the Knob Hill and Red Star Areas

The geological mapping in 1993 has focused on the central to western part of the property, representing the "Western" facies Nicola Group rocks. The detailed mapping, in conjunction with interpretation of the geophysical surveys and lithogeochemical sampling results, has divided this section into numerous mafic to felsic volcanic units and sedimentary units. Minor intrusions may also be present. The section is outlined below, from apparently oldest to youngest rocks. The unit numbers assigned in the following descriptions correspond to the map units in Figures 4 to 6.

4.2.1 Unit 1

At the western contact of the Nicola Group rocks, with the Eagle Plutonic Complex, there is an irregular "zone" of amphibolitized (generally mafic) rocks. These amphibolites have not been included as part of the Nicola Group rocks (assigned to Map Unit 19). The structurally lowest unit in the map area (Unit 1) is represented by a 450 to 500 metre wide section of intermediate to felsic, hornfelsed volcanic and sedimentary rocks. The hornfels nature of the rocks and a general lack of outcrop makes detailed subdivision of this unit difficult. The unit does contain a compositional range of sub-units from chlorite schists to quartz-sericite schists. The more felsic sub-units tend to be fairly homogeneous in appearance, possibly as a result of metamorphic processes. They are grey to cream coloured, locally porphyritic with an aphanitic, feldspathic groundmass, and commonly with biotite as disseminated clots or flakes. The porphyritic examples usually contain quartz and/or feldspar phenocrysts, concentrated up to 10 to 15% of the rock volume. Locally, the rocks contain porphyroblasts of magnetite, up to 3% of the rock. A petrographic analysis of a sample from the east side of Knob Hill (Sample 7+50 W/5+85 N, Appendix B) suggests that the relatively massive nature of the rock could be indicative of a sub-volcanic intrusion, or related flow. In the vicinity of the Knob Hill showing, the felsic rocks are typically more schistose, with a distinct "talcose" feel. Here, the rocks are dominantly quartz-sericite schists, with silicification (accentuated by metamorphism?) in some samples.

4.2.2 Unit 2

East of Unit 1 is a poorly exposed section, about 200 metres wide, of chloritic rocks, commonly with biotite as a significant component. These are dominantly mafic in composition and are locally amphibolitic (hornblende). The unit is cut by several, later quartz porphyry dykes (Unit 20c). Unit 2 is bounded in the east by the trace of Bell Creek, possibly representing a fault contact with Unit 3.

4.2.3 Unit 3

Unit 3 is a mixed unit consisting of apparent intermediate to felsic volcanic rocks and mixed sedimentary and volcanic rocks. This section of about 150 metres contains chlorite schist with hornblende phenocrysts as well as red to green, banded or laminated, sericite and chlorite-sericite schists. The sediments observed appear to be cherty locally, but otherwise form chlorite-biotite schists.

4.2.4 Unit 4

The next unit is an irregularly shaped, felsic volcanic unit. The unit is dominated by feldspar-quartz (minor biotite) porphyritic, massive appearing rock, but the eastern margin has a banded appearance due, at least in part, to the pronounced foliation in that area. Whole rock analyses indicate that this unit is a sodium-rich rhyolite and thin section examinations (made in 1992) revealed that the phenocryst population can reach at least 10% of the rock. The rock may be related genetically to other Na-rich porphyritic units on the property (e.g. Unit 15), but this rock has considerably more Zr (up to 318 ppm) which sets it apart.

4.2.5 Unit 5

Unit 5, about 150 to 200 metres wide, stretches from the north to south edge of the map area, in the vicinity of the 0+00 E/W baseline. The unit consists dominantly of mafic volcanic rocks, with some sedimentary component. The mafic volcanic rocks, chlorite schists, are characterized by the presence of epidote and locally they are strongly magnetic. Hornblende porphyroblasts are common in these rocks, usually concentrated in layers. The mafic units are generally massive in appearance, although locally there is a texture reminiscent of lapilli-agglomerate tuff. Near the centre of the unit, outcropping at 12+80 N/2+65 W, there is a chlorite-sericite schist, possibly representing a more intermediate composition (Sample 560503). A light coloured volcanic or sedimentary unit outcrops in the trench area west of Baseline 0+00 E/W, around 12+00 N.

The sedimentary rocks observed in this section tend to be cherty, commonly with a laminated appearance and hematization. Whether or not these sedimentary rocks represent "lean" Fe formation is speculative. However, Unit 5 is distinctive with respect to its very strong magnetic signature (Figure 4, Volume II). The continuity of this magnetic susceptibility, and the variability of the magnetic response in the volcanic rocks, suggests that the Fe formation horizon may be extensive within this unit.

4.2.6 Unit 6

The outcrop area of Unit 6 becomes progressively wider along strike, from about 40 metres in the south part of the grid to about 120 metres in the north. The unit is bounded on the east by a sedimentary rock sequence, although a good part of the boundary may be a fault. The unit is dominantly chlorite schist which is homogenous and generally massive. The chlorite schist commonly contains biotite, porphyroblastic magnetite and lens-like, epidote-altered domains up to 25 centimetres in length. The chlorite schist is interbedded with intermediate lapilli

tuffs, commonly with scattered, bluish quartz eyes (up to 3% and 4 millimetres in size) and feldspar phenocrysts (to 2% and 3 millimetres). The lapilli fragments generally stand out due to alteration and range in size up to 20 centimetres (long axis). Deformation has resulted in flattening of the fragments which is locally quite severe. Magnetite porphyroblasts are common in this rock type. A less common rock type in Unit 6 is a light coloured, quartz-sericite schist which is generally and weakly gossanous. The schist contains 2 to 3% quartz eyes, and 1 to 2% feldspar phenocrysts, up to 2 millimetres. A small outcrop of gabbro (?, Unit 6d) has been included in this section. It is likely fault bounded and occurs at the south end of the sedimentary sequence to the east of Unit 6.

4.2.7 Unit 7

A narrow, irregularly shaped, sliver of sedimentary rocks occurs locally on the east margin of Unit 6. Labelled Unit 7, this package of rocks is characterized by dark coloured argillite and siltstone. These rocks appear weakly foliated and folding is observed locally. The rocks commonly have a hornfels or gneissic appearance. Metamorphic alteration has resulted in the creation of ubiquitous biotite and the segregation of numerous quartz lenses and bands. A carbonate-rich layer (or vein?) is present in outcrop at 10+60 N/1+35 E (Sample 560460). The unit coincides closely with a number of narrow, anastomosing shears which are commonly graphitic. The association with shearing may account for the irregular shape of the unit.

4.2.8 Unit 8

This unit is perhaps the most important strata on the property. The main mineralized showing, the Red Star showing, occurs in this section. Unit 8 is generally 50 to 60 metres wide in plan. The dominant rock type in Unit 8 is sericite-quartz (± chlorite) papery (well cleaved) schist. Whole rock geochemistry shows that the rocks in this section have trace element concentrations (Zr, Y in particular) indicative of more acidic igneous rocks. Also, the presence of quartz eyes in the rocks points to a felsic igneous source. Unit 8 likely represents a sequence of evolved felsic volcanic precursor rocks.

Overall, the rocks in this sequence are very altered. Intense sericitization (Sample 560491, Appendix B) of the rocks has resulted in a "talcose" feel. Anastomosing sericitic partings surround quartz-feldspathic lenses in these yellow-green to dark green and grey rocks. The quartz-rich lenses commonly have a boxwork after pyrite. Quartz eyes are still identifiable and are commonly present in the felsic rocks. Magnetite, presumably secondary, is also present locally. Small chloritic patches in some rocks may be altered mafic phenocrysts. Silicification and

pyritization of some horizons is common, possibly associated with faulting. Severe foliation along with numerous shears and kink folds demonstrate strong deformation. Identification of primary rock types in this sequence is difficult due to the combination of strong alteration and deformation.

4.2.9 Unit 9

Unit 9 is a 40 to 50 metre wide, continuous band of apparently mafic volcanic rocks. The dominant rock types are chlorite schist and chlorite-sericite schist. Feldspar phenocrysts are common. Alteration of the unit is quite variable, with local papery, "talcose" sections. The more altered rocks usually contain some secondary pyrite. Geochemically, the lesser altered rocks typically have greater than 1.0% TiO_2 and 10% total iron oxides. The rocks in the vicinity of the Red Star have anomalous levels of MgO, possibly as a result of alteration. Sample 443204, from the northern area of the Red Star Grid (16+85 N/0+35 W), has slightly different geochemical characteristics and has been placed in Unit 9 by stratigraphic correlation.

4.2.10 Unit 10

This unit may have as much economic potential as Unit 8, although to date there is not a significant showing within the sequence. Overall, this unit is as altered as Unit 8 and there is a distinct Cu-Zn association, with anomalous values common in rock samples. The unit ranges in width from 30 to 100 metres, and locally the boundaries of the unit seem to be a fault. Unit 10 is quite variable in appearance. Rock types include quartz-sericite and sericite-chlorite schists, generally light green to light grey and strongly foliated. There is evidence of some thin, argillaceous(?), sedimentary beds within the section. Quartz eyes are common, bluish to rose coloured, up to 5% and 3 millimetres in diameter. The groundmass of the rocks, when not strongly foliated, tends to appear sugary, with abundant tiny biotite speckles, possibly indicating a quartz-rich hornfels. A lapilli tuff sub-unit occurs near the middle of the section, containing flattened, whitish, aphanitic fragments up to 4 centimetres in length. The groundmass of this sub-unit is a non-magnetic sericite-chlorite schist with 3% feldspar phenocrysts and trace quartz eyes.

Whole rock analysis shows a strongly acidic composition for the rocks in Unit 10 with Zr content in the range of 150 to 175 ppm. A couple of rocks stand out as being somewhat different. Samples 560427 and 560480 are examples of a homogeneous, less foliated rock with tiny chloritic spots throughout. These rocks may be from a slightly more mafic sub-unit (dyke?) within the section. Sample 560484 is a strongly altered rock that nonetheless has a very low Zr content relative to the other rocks in Unit 10.

Unit 10c is a siliceous, pyritic schist which is traceable through trenching over 300 metres of strike despite being quite narrow (5 to 10 metres wide). Large quartz eyes are visible, but it is speculative whether or not these are primary. Due to weathering, this sub-unit is strongly gossanous, commonly with heavy ferricrete associated, and with only a boxwork after pyrite remaining. The sub-unit seems to wander within Unit 10, suggesting that it is an alteration zone related to shears or faults within the overall Red Star section. This unit appears to have been the target of the earlier Au exploration on the property (Assessment Report 16,465).

4.2.11 Unit 11

Unit 11 is a section of sericite-chlorite schists which have a distinctive red and green, banded appearance caused by variable hematite staining and biotite content. The unit is 50 to 100 metres wide. There are lapilli visible locally and the heterogeneous nature of the unit suggests that it may be largely tuffaceous. Trace to 1% quartz eyes, up to 8 millimetres in diameter, are normally present. The eastern contact of the unit, with a quartz-feldspar porphyry, is somewhat arbitrary and may be transitional. At the western margin of the unit, at 10+56 N/2+97 E, there is an outcrop of homogeneous, light bluish-grey coloured, Na-rich rhyolite (Sample 560485). This is a massive rock with weak laminations visible. The laminations define an isoclinal fold at the scale of the outcrop.

Unit 11 is at this time a fairly poorly defined unit geochemically. Only three samples were taken within the unit, all showing distinct chemistry (i.e. Zr values of 71, 160 and 222 ppm). In some respects the geochemistry of the various rock samples from Unit 11 fit better into the adjacent units. Nonetheless, the unit is retained based on its geologic characteristics.

4.2.12 Unit 12

East of a quartz-feldspar porphyry intrusive unit (Unit 15), Unit 12 is a mafic appearing, dominantly chlorite-biotite schist. This unit is 50 to 100 metres wide. It is locally described as chlorite-sericite schist and sericite schist, both with pervasive biotite. Feldspar phenocrysts are common, up to 5% of the rock, and generally small (<3 millimetres). This unit is possibly of mixed volcanic-sedimentary affinity, locally appearing laminated with argillaceous layers. Lapilli tuff was also noted, although this occurrence was weakly defined. Small quartz veins are quite common in the section.

4.2.13 Unit 13

Stratigraphically overlying Unit 12, is an approximately 350 metre wide section of black to grey, locally graphitic, argillite and siltstone. The rocks are well foliated with the foliation attitude being quite variable. Biotite is common on the foliation planes. Sedimentary layers are quite finely laminated locally. As well, there are cherty or siliceous layers apparent. White quartz occurs throughout the section, as segregations along layers or veins. Deformation is common and is especially noticeable, as are quartz veins, near the eastern contact of the unit.

4.2.14 Unit 14

Unit 14 is defined by a couple of outcrops, one on Crowley Creek, the other at 9+40 E on Line 15+00 N (Sample 560453). Both outcrops are of relatively homogeneous, chlorite schist. The outcrop on Crowley Creek exhibits strong shearing with intersecting foliation planes. This fabric could be related to the apparent change in dominant foliation attitude near Crowley Creek (see Section 4.2).

4.2.15 Unit 15

Unit 15 is a massive, quartz-feldspar porphyritic igneous rock, possibly representing a sub-volcanic intrusion. It is arbitrarily inserted at this point in the stratigraphic column since its relationship to the units to the east of 15+00 E on Line 15+00 N was not investigated in detail in this mapping program. If this is an intrusive unit it may yet prove to be younger than Units 16, 17 and 18. There are several sub-types of this unit scattered over the eastern Red Star Grid area. There is a large body of this rock at the east edge of the present Red Star Grid, extending from around 10+00 E to 15+00 E. A long, narrow (60 to 100 metre wide) body lies between Units 11 and 12, roughly conformable to the trend of the bounding units (Unit 15b). Small dykes can be found in other areas, such as at Sample 560499 at 13+50 N/4+85 E.

This unit is consistently quartz and feldspar porphyritic with up to 20% phenocrysts ranging in size from 2 to 4 millimetres. The rocks generally have moderate foliation. There are outcrops where the foliation is stronger, but these tend to be near the margins of the unit. The unit is light bluish grey to cream coloured, with a biotite-sericite-feldspar-rich, recrystallized matrix. There is minor chlorite, generally in clots, and trace porphyroblastic magnetite.

One sample from the eastern outcrop area (Sample 560470) was examined petrographically (in 1992) and described as a crystal tuff. This interpretation places

the assumption that all of Unit 15 is intrusive in doubt. It is possible that the massive character of this unit results from volcanic flows rather than sub-volcanic intrusions, at least in some areas. It may be very difficult to separate flows from dykes or sill-like intrusions given the metamorphic and tectonic history of the Bell Creek area.

The geochemistry of rocks from Unit 15 show similarities between different outcrop areas. The geochemistry also points out the difference between Units 15 and 4, which are very similar visually, but Unit 4 rocks have much higher Zr content. Whether the rocks of Unit 15 are genetically related (i.e. as a sub-volcanic intrusion) to any of the rocks which host the mineralized zones is questionable. Testing of this hypothesis is limited by the analytical data which may not be sensitive enough to allow the proper distinctions.

4.2.16 Unit 16

East of the Red Star Grid (effectively east of 10+00 E) there was not a significant attempt to map the geology in detail in 1993. Line 15+00 N was extended east from the Red Star Grid to Highway 3 and the geology was mapped along this line to 18+75 E (Figure 4). With a lack of detailed mapping, a wide section of this geology has been included in Unit 16. Additional data is drawn from reconnaissance mapping done in 1992 (Assessment Report 22934) and part of the descriptions below are from that work.

On the eastern contact of the quartz-feldspar porphyry (Unit 15), is a quartz eye lapilli tuff (Unit 16a). This unit is quite similar to sub-unit 6b, west of the Red Star showing. It is darkly coloured in general, with minor bluish quartz eyes. The lapilli are not prominent on the weathered surfaces. Mixed in with this lapilli unit is chlorite schist. Outcrop of the lapilli tuff continues about 60 to 70 metres from the Unit 15 contact.

To the east there is a wide section of chlorite schist (Unit 16b), with minor interlayered argillaceous sediments. The chlorite schist is strongly carbonatized from about 16+30 E to 17+30 E with large ankerite porphyroblasts the most prominent feature of the rock. It is within this carbonatized section that auriferous quartz veins were explored historically (MinFile No. 092HSE068).

The eastern end of this section is exposed in road cuts along Highway 3, next to the Similkameen River. In these cuts, a highly altered (carbonate, sericite) section is exposed which is spatially associated with a strong fault. The alteration and intense foliation quickly dies away on either side of this fault.

4.2.17 Units 17 and 18

Immediately east of the fault at Highway 3, an outcrop of pyroxene porphyritic mafic volcanic rock (Sample 560463) signals the start of the alkaline portion of the Nicola Group (Unit 17), which dominates the eastern margin of the property and beyond. The area south of the Similkameen River, and west of the Pasayten River, was not mapped in 1993. The ridge between the Similkameen and Pasayten rivers is predominantly underlain by amphibolites (Unit 19), whereas the eastern slope is underlain by a mixed felsic and mafic volcanic (Unit 16?) and sedimentary (Unit 18) package. The package includes rhyolites and cherty sediments. Near the middle of the slope to the Pasayten River, best exposed on the Pasayten claim, is a 100 to 150 metre wide section of carbonatized and sericitized schists of mixed volcanic and sedimentary origin. This section could be correlative with the altered section seen in the road cut on Highway 3.

East of the altered section, dark green, chlorite schist outcrops west of the Pasayten River. Across the river there are prominent outcrops of pyroxene porphyritic volcanic rock (Unit 17), including lapilli and agglomerate tuffaceous rocks, typical of the alkaline section of the Nicola Group. These rocks are moderately foliated.

4.2.18 Units 19 and 20

The Eagle Plutonic Complex (Unit 20) is situated west of the Nicola Group rocks exposed on the Bell Creek property. The eastern edge of this complex is found west of about 12+50 W on the Knob Hill Grid. Compositionally layered rocks, mafic amphibolites (Unit 19) and quartz-rich gneisses (Unit 20b), occur in this area. The rocks are strongly foliated and locally weakly magnetic. More felsic(?) examples are seen west of the grid near Line 17+00 N, with light bluish-grey colouration and a sugary, fine-grained groundmass.

4.2.19 Unit 21

The Eocene-aged Princeton Group volcanic and sedimentary rocks occur at the north edge of the map area. The outcrops are primarily volcanic in origin with both massive and brecciated, volcanic flows of hornblende porphyritic basalt/andesite. Several basalt dykes (feeders?) are found scattered around the map area, commonly close to faults.

Quartz porphyritic rhyolite dykes (Unit 21e, Sample 560512), which are not foliated, crosscut the Nicola Group section on the Knob Hill Grid. These dykes are likely offshoots of the Eagle intrusions which range in composition from granodiorite to

granite. The dykes appear to be magnetically susceptible and strike generally north-south.

4.3 Structure

Most rocks in the Bell Creek property area have a strong foliation. This is somewhat dependent on the rock composition. For example, foliation is less obvious in the fine-grained, felsic hornfels rocks present on Knob Hill. The dominant structural orientation of the foliation planes is north-northwest to north with moderate to steep westerly dips, although steep easterly dips are also found, in particular on the east side of Bell Creek. The overall structural direction parallels the nearby contact between the Nicola Group volcanic and sedimentary rocks and rocks of the Eagle Plutonic Complex. The Eagle Complex is also strongly foliated, to gneissic, in the area of the Bell Creek property. Another strong foliation plane orientation exists throughout the property but is more obvious (stronger?) east of the Red Star area near Crowley Creek. This fabric has a north-northeast strike and moderate to steep westerly dip. It is possible that the two structural orientations reflect two deformation events. The more obvious of the two, with the north-northwest strike, would likely be the later event (S_2?). It is important to consider that strong alignment of metamorphic minerals, such as hornblende in the mafic units, is not noted. This is consistent with an age of deformation for S_2 later than the formation of the Eagle Plutonic Complex.

Folding has been noted locally in the rocks of the Bell Creek property. Large folds may be present on a property scale. This is possibly indicated by the generally repetitive nature of the geologic section (mafic to felsic volcanic units), although there are other possible explanations such as thrust faulting. Parasitic folds, with various plunges, are seen at the outcrop scale. The folds are generally observed in the foliation fabric. The lack of definitive bedding throughout the property precludes identification of folding in the primary bedding. The relationship of the folded foliation to primary bedding planes is also uncertain. The nature of the folding is variable, from open kinks in the foliation to isoclinal folding of compositional layers (foliation parallel?). The fold hinges measured in the field have shallow plunges to both the north and south.

Thin section examination of altered and deformed samples in the mineralized horizons also provide evidence of folding (Sample 560491, Appendix B). The texture of the rocks suggests tight folding of an earlier planar fabric, with recrystallization of muscovite in the axial plane of these folds. This axial planar foliation corresponds to the dominant foliation in the rocks. Stretching lineation study (Sample 560486, Appendix B) shows that the maximum stretching direction appears to be in the plane of the foliation with elongation along the lineation.

Examination of the measured foliation planes using stereonet interpretation has not shown a coherent structural pattern. Plotting the poles to the foliations resulted in a diffuse scatter of points indicating variable dips on a fairly consistent strike direction (Figure 7). The diffuse nature of the plot suggests that there is not a single dominant fold orientation present in the area. Beta plots, using the intersection points of the various planes (Figures 8 and 9), show roughly a great-circle trace, giving an average foliation plane orientation of about 172/50 SW. The main concentration of points along the great-circle gives a very rough foliation intersection line plunging approximately 20 to 25° to the northwest. This information is not apparent in the plot of the poles to the foliations. A secondary concentration indicates another possible intersection line plunging approximately 30° to the southwest. These foliation intersection lines do not necessarily represent fold axes.

Faults on the Bell Creek property generally follow the orientation of the foliation planes. They can be quite steep or relatively shallow dipping. The potential for thrust faulting has been mentioned and several structures could be representative of this type of movement. The low angle fault (176/46° W), exposed in outcrop at the east end of Line 15+00 N (Figure 4) on Highway 3, is a good example. Here, rocks of the calc-alkaline section of the Nicola Group are placed over porphyritic mafic volcanic rocks of the alkaline part of the Nicola Group.

A series of low to high angle, anastomosing shears occur in association with the altered zone around the Red Star showing. These structures appear to be concentrated on the west side of the Red Star horizon, but can be found in trenches in Unit 10, 150 metres east. Where these structures concentrate, the resulting rock is a "sheared schist", broken, strongly foliated rock with no discernible preferred orientation. These shears are quite important as they may cut off the potentially mineralized horizons at depth.

Additional faults have been recognized in the area through mapping and geophysical interpretation. A set of apparently late faults cross the dominant structural trend of the rock units, striking 060 to 070°. Locally, these faults seem to have minor left-lateral offset. In at least one area (Baseline 0+00 E/W at 6+00 N) the faulting has cut off geologic units. This fault orientation may be related to the presumed major fault (fracture?) which is situated in the (suspiciously) linear Similkameen River valley (bearing 045°).

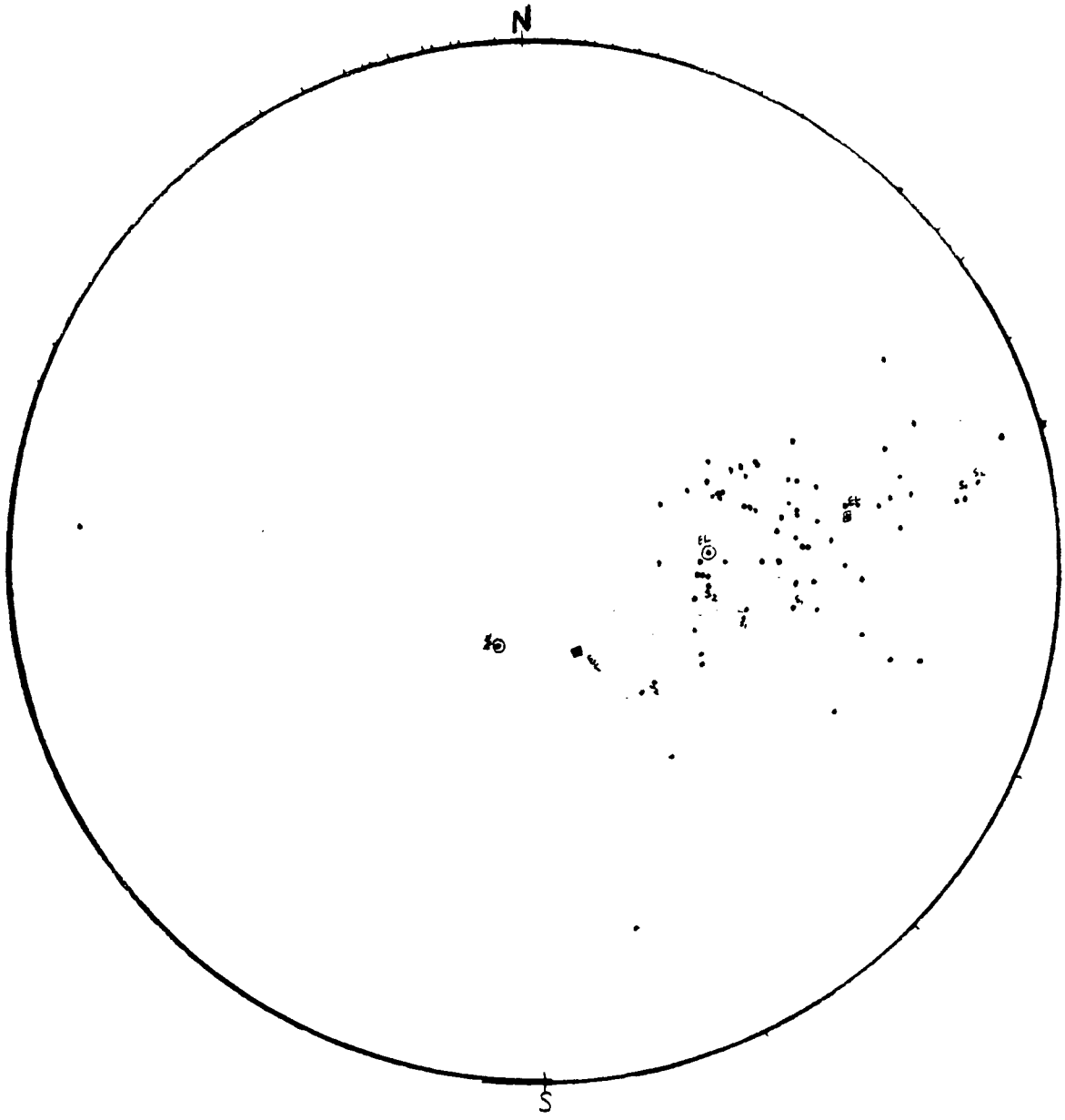


Figure 7: Stereo-net plot of poles to foliations on the Bell Creek property. Plot indicates variably dipping foliation planes at a fairly consistent strike direction. Folding is not apparent in this data.

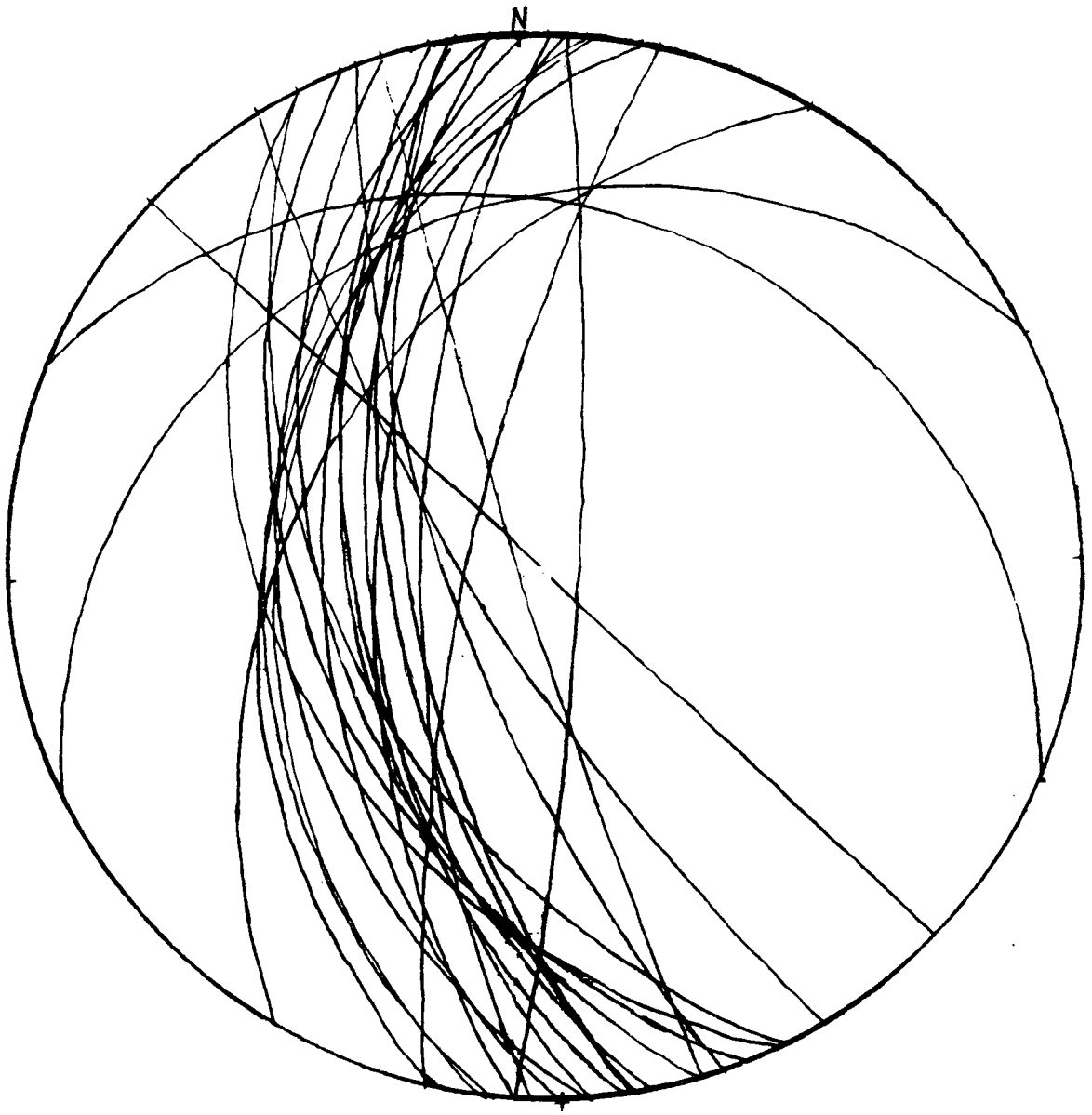


Figure 8: Stereo-net (Beta) plot of foliation planes in the Red Star showing area. Plot shows the pre-dominant westerly dip on most planes.

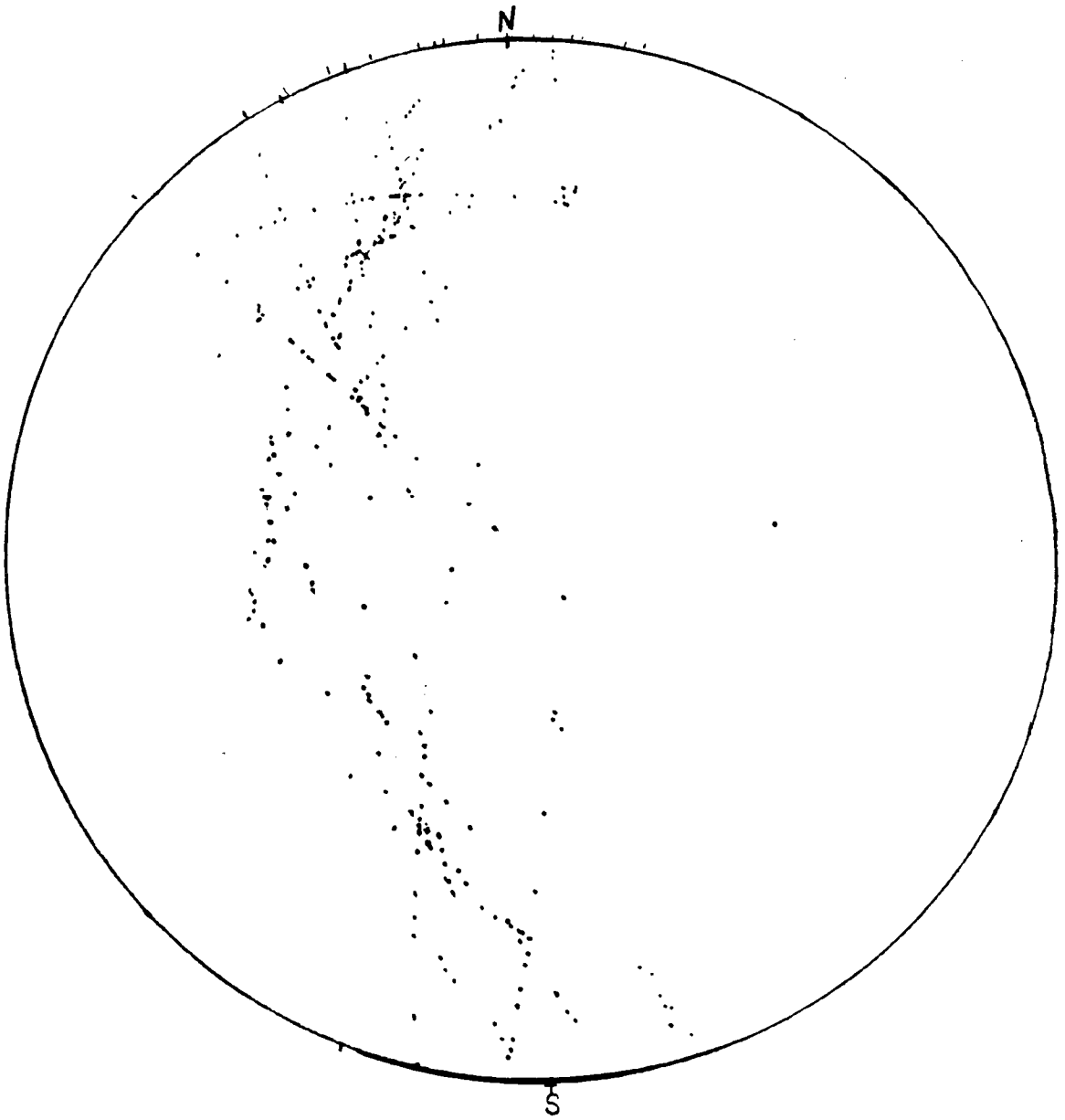


Figure 9: Stereo-net (Beta) plot of the intersection of foliation planes in the Red Star showing area. The points trace a rough great circle, giving an average foliation attitude of 172°/50° W. Concentrations of points along this great circle can indicate hinge orientation of dominant folds. There is apparently two concentration points: the stronger one giving a foliation intersection line plunging 20° to 25° to the northwest; a secondary concentration giving a plunge of approximately 30° to the southwest.

4.4 Lithogeochemistry

The lithogeochemical sampling in 1992 established the tectonic and chemical affinities of the volcanic rocks on the Bell Creek property quite well (Assessment Report 22934). The rocks were likely formed in an arc setting and form a calc-alkaline suite. Alteration studies indicated that the mineralization at the Red Star showing was associated with apparent additions of MgO, SiO_2, Ba and sulphur and depletions in CaO and possibly Na_2O.

Sampling in 1993 was designed to provide detailed geochemical cross sections of the geology to allow refinement of the geologic map units, especially in areas of strong alteration and deformation. Additional sampling was done to confirm the previous results regarding alteration associated with mineralization. The overall sampling was widespread to search for other areas within the property which have similar alteration characteristics to the mineralized rocks. This was done in the hope of identifying exploration targets not necessarily discovered by traditional soil geochemistry and mapping. The samples were analyzed for whole rock (total oxides) composition as well as numerous trace elements which help to characterize the various volcanic units. Sedimentary rocks were avoided because of their obvious mixed origin. Rocks which contained strong sulphide contents (i.e. greater than 3 to 5% sulphides) were also avoided for whole rock analyses. Results of the whole rock analyses are tabulated in Appendix C.

4.4.1 Determination of Altered Samples

Figure 10 shows the samples from 1993 on a plot of MgO versus SiO_2 (both in weight percentage) designed to separate the least altered from strongly altered samples (de Rosen-Spence, 1992). A large percentage of the samples from the 1993 work have some alteration. A sub-set of strongly altered rocks is highlighted on the diagram. The samples plot outside the normal igneous spectrum, as determined on this diagram, and for the purposes of this study are taken to represent significant alteration from their original composition. This corresponds to MgO and/or SiO_2 addition and interestingly, includes all samples from Unit 8, the mineralized Red Star horizon (solid squares).

4.4.2 Chemical Affinity

The 1993 samples were plotted on the alkaline-sub-alkaline diagram of Irvine and Baragar (1971) (Figure 11) and all samples plotted in the sub-alkaline field. Figure 12 shows a subset of the lesser altered samples from the Bell Creek section plotted on a Jensen Cation Diagram (Jensen, 1976). A clear calc-alkaline trend is

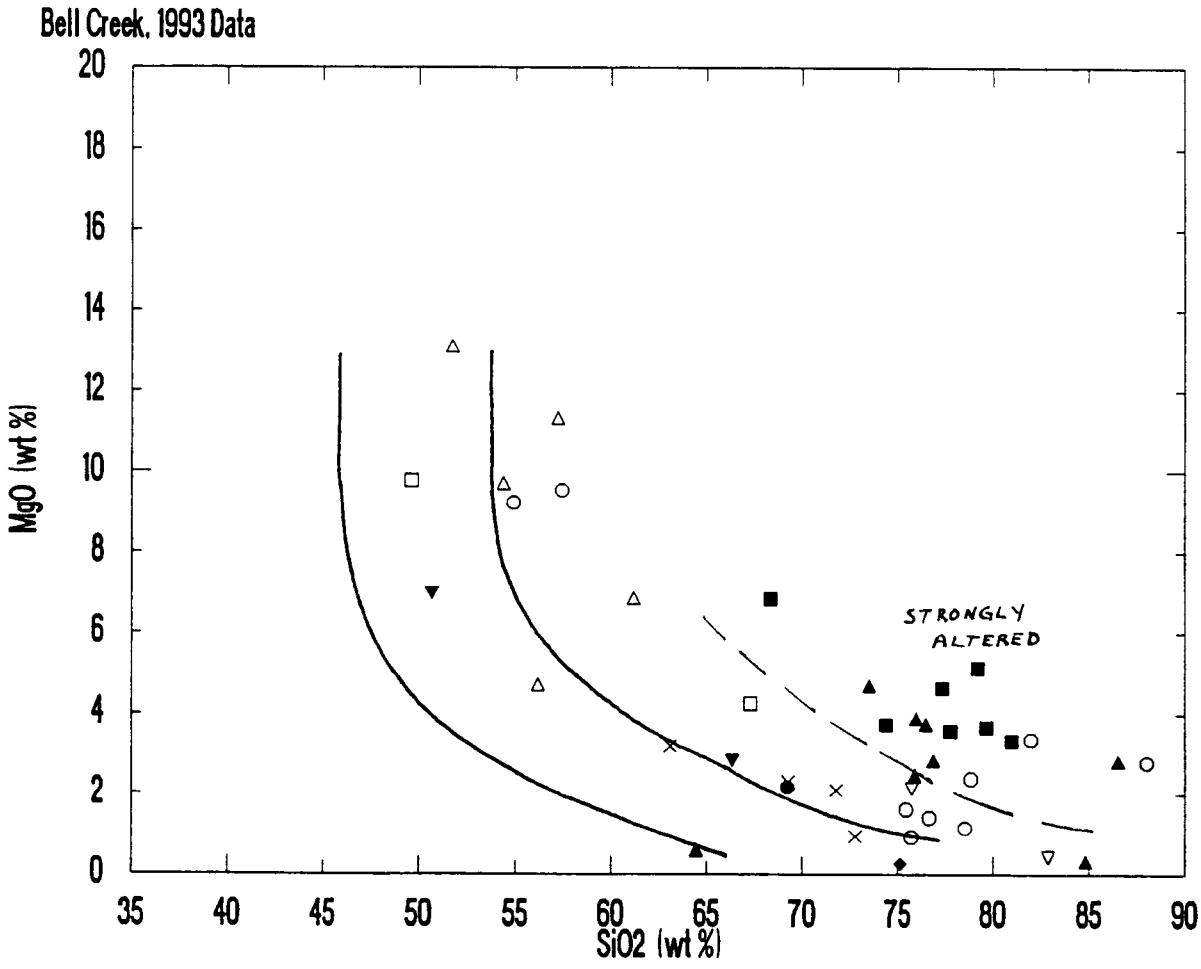


Figure 10: Plot of MgO versus SiO_2 for 1993 Bell Creek whole rock data. The field of unaltered igneous rocks lies between the two curved lines (de Rosen-Spence, 1992). Most of the rocks collected on the property have some alteration indicated. The rocks of Units 8, 9 and 10 appear altered as a group, with few exceptions. The legend for rock unit symbols is found at the end of Appendix A.

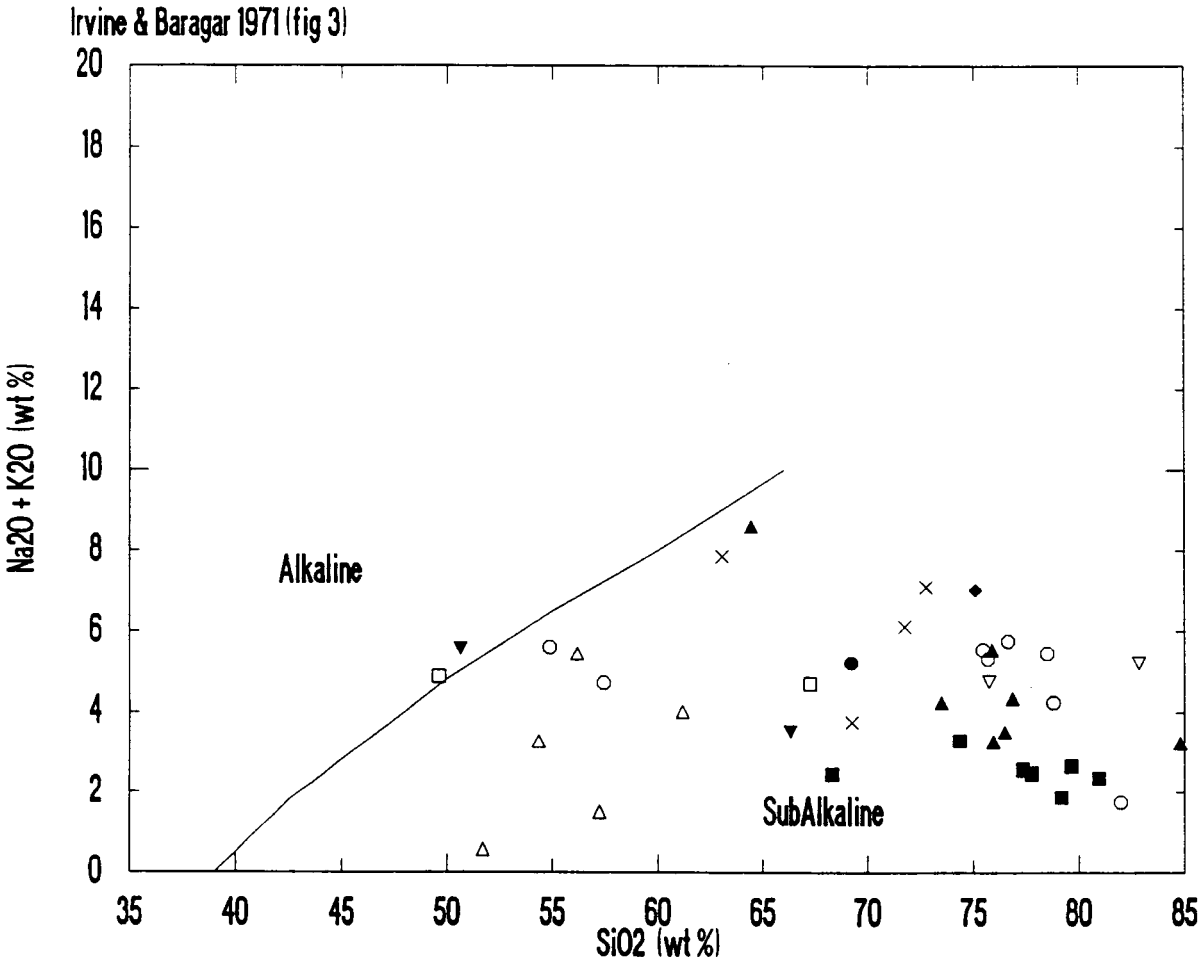


Figure 11: Alkaline-subalkaline plot for 1993 whole rock data from the Bell Creek property (Irvine and Baragar, 1971). The vast majority of the rocks plot well into the subalkaline field, possibly indicating some silica enrichment in more altered samples. The legend for rock unit symbols is found at the end of Appendix A.

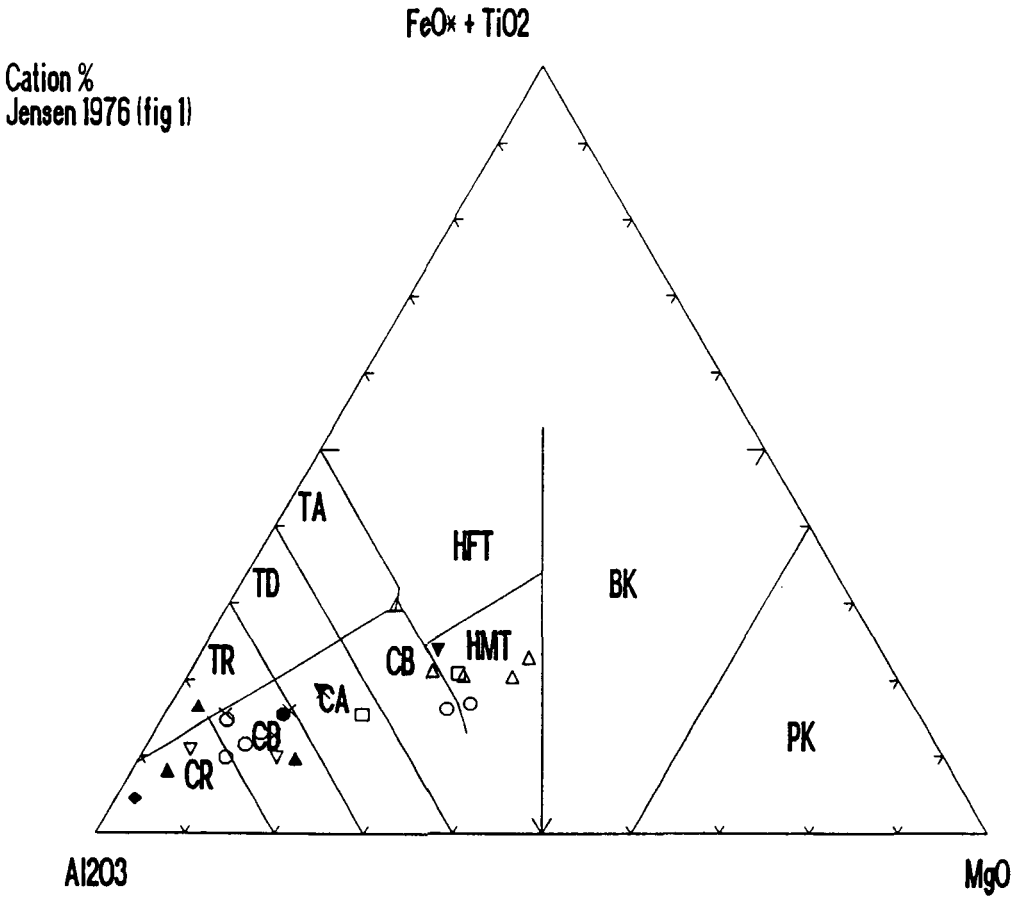


Figure 12: Jensen Cation Plot (Jensen, 1976) for a sub-set of lesser altered rocks from the 1993 rock samples on the Bell Creek property. The rocks define quite clearly a strong calc-alkaline trend within the volcanic rocks sampled. The samples from Unit 9 plot well into the mafic fields, whereas the rocks of Units 10 and 11 are generally quite felsic (dacite and rhyolite). Samples from Unit 8 were judged too altered for interpretation on this diagram. The most felsic rock is the sample of late quartz eye rhyolite dyke (Unit 21e). The legend for rock unit symbols is found at the end of Appendix A.

apparent even allowing for some distortions due to the possible inclusion of altered samples.

4.5 Alteration and Mineralization

As discussed above, the Red Star showing represents the most significant mineralized horizon located on the Bell Creek property to date. The showing is part of a wide zone of strongly sheared, locally faulted, schistose rocks which contain a variety of rock types, including quartz-sericite-pyrite schist, sericite schist and chlorite schist. Large, boudinaged quartz veins (predeformation?) are common in this sequence of rocks. Smaller, fractured quartz veins are also present and they occupy gougy, sub-vertical structures. The schists commonly have a "talcose feel". However, thin section examination of rocks from the Red Star horizon (Sample 560491, Appendix B) did not detect any talc in the rock. Rather, the talcose feel is apparently due to seams of fine-grained muscovite which parallel the foliation. Intense sericitization is characteristic of the entire exposure of the Red Star horizon and is observed along strike to the north and south. Although the alteration is cut off abruptly in the structural hanging wall to the Red Star horizon (Units 6 and 7), it does continue into the structural footwall rocks (Unit 9). The second altered unit, Unit 10 to the east, also has considerable sericitization associated with it. Here, alteration is cut off in the structural footwall and continues into the hanging wall, opposite to the situation at the Red Star showing.

Other sericitic horizons can be found in the map area. The Knob Hill showing rocks have abundant sericite resulting in a "talcose feel". There is also strong pyrite-chalcopyrite-sphalerite mineralization associated with these rocks. This horizon extends from about 8+50 N to 3+00 N, just east of the 10+00 W baseline. The continuity of the Knob Hill horizon is not as obvious as the Red Star horizon largely due to lack of exposure in the Knob Hill area. Several other small zones of intense sericitization can be found, notably in the Paw showing area (Sample 560503) and just east of the Knob Hill showing, at the contact of Units 1 and 2 (3+00 N/6+00 E). These occurrences do not have associated massive sulphide mineralization identified to date.

At the Paw showing, there are several, lens-like quartz veins. These veins contain locally, massive pods of bornite mineralization. The bornite does contain some precious metal content (see Table 2). Near the Paw showing, at 15+30 N/4+75 W, in a large trench, a small mineralized shear zone in mafic to intermediate volcanic rocks returned anomalous copper (577 ppm) and zinc (124 ppm) values. This small (<5 metre wide) zone is characterized by scattered malachite staining. The shear projects to the area of quartz veining at the Paw showing. Numerous smaller

showings, similar to the Paw, can be found scattered throughout the property. None of these occurrences offer any real hope as economic deposits.

Looking at the lithogeochemical data, the alteration index of Date *et al* (1983) works quite well, highlighting the alteration associated with mineralization in the Bell Creek rocks. The index, defined as,

$$(MgO+K_2O)/(MgO+K_2O+CaO+Na_2O)$$
(oxides in wt%),

was developed for the Kuroko massive sulphide deposits in Japan and gives a qualitative measure of the extent of additions and subtractions of elements (K, Na, Ca, Mg) in rocks which may be anticipated in association with a massive sulphide hydrothermal system. The inclusion of the ratio of MgO to CaO is useful to distinguish less important carbonate alteration (low MgO/CaO) from Mg-silicate alteration (high MgO/CaO), which is more significant to volcanogenic massive sulphide deposit models. Additionally, the ratio of K_2O to total alkalis (including CaO) is commonly used in massive sulphide environments to determine zones of relative potassium enrichment and, particularly, sodium depletion. Figures 13 to 14 show this Alteration Index (A.I.), calculated for the Bell Creek samples, plotted versus the ratio K_2O/K_2O+Na_2O both for the 1993 samples alone and for all samples collected to date on the property.

It is important to note that the alteration models being considered here relate to footwall and/or feeder type zones. Massive sulphide mineralization commonly shows a very close spatial correlation to these types of alteration zones but is usually not exactly coincident. Consequently, high Cu and Zn values do not generally correlate exactly with the most strongly altered rocks.

Figure 13a, K_2O/K_2O+Na_2) versus the A.I., demonstrates the strong alteration associated with the mineralized Red Star horizon (Unit 8). All the samples from that unit plot as a group at the extreme corner of the diagram. Other units tend to show more of a progression to the extremely altered region of the diagram (Units 1, 9 and 10) from the region of lesser altered samples toward the origin of the diagram. Strongly altered samples are found in:

- Unit 1 at Knob Hill;
- Unit 8 at the north end of the grid and east of the Red Star showing;
- Unit 9 in association with the Red Star showing; and
- Unit 5 in the Paw Showing area.

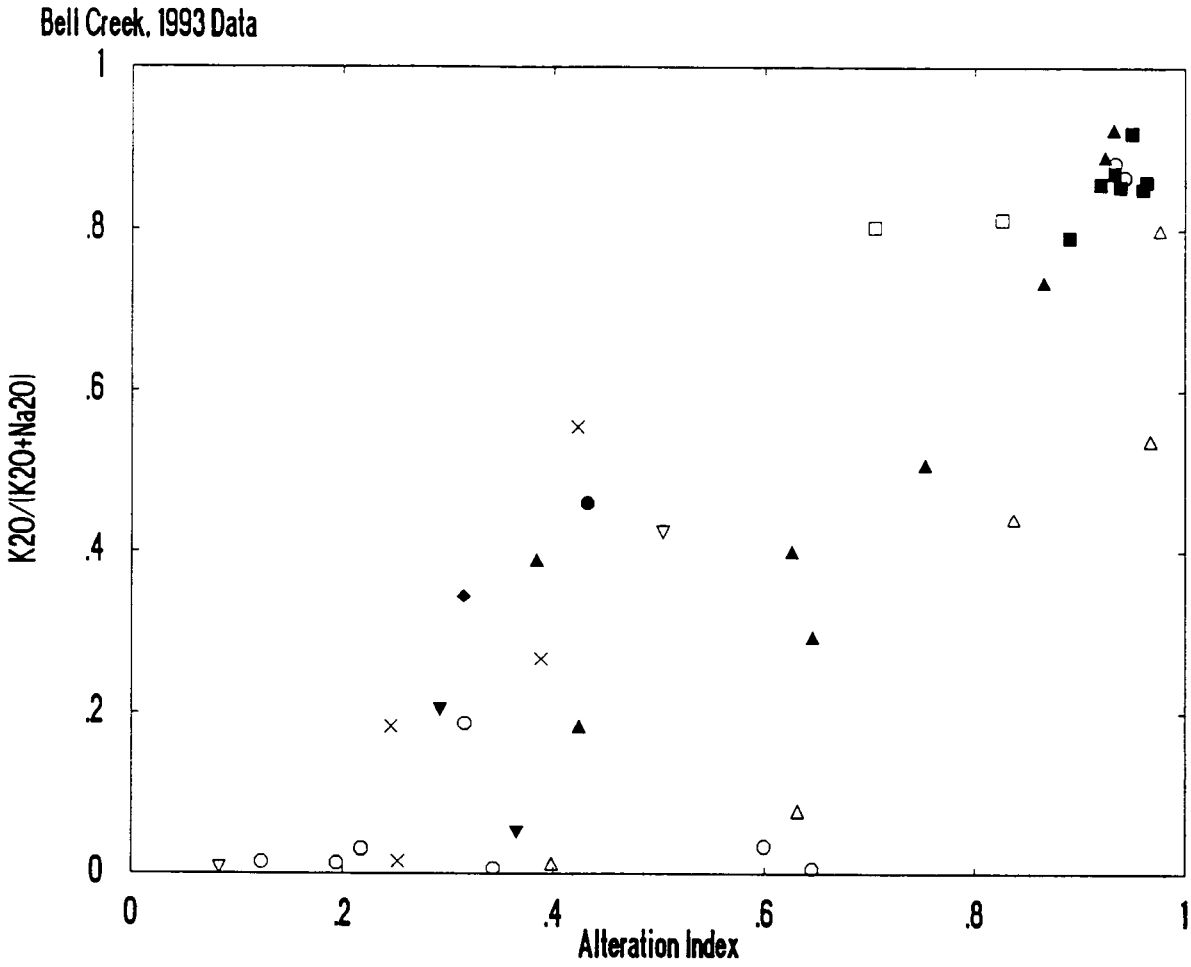


Figure 13a: Plot of $K_2O/(K_2O+Na_2O)$ versus Alteration Index (see text) for 1993 sample data from the Bell Creek property. Note that all samples from Unit 8 (solid squares) display strong alteration, whereas samples from other units show more of a progression to the strongly altered field. The legend for rock unit symbols is found at the end of Appendix A.

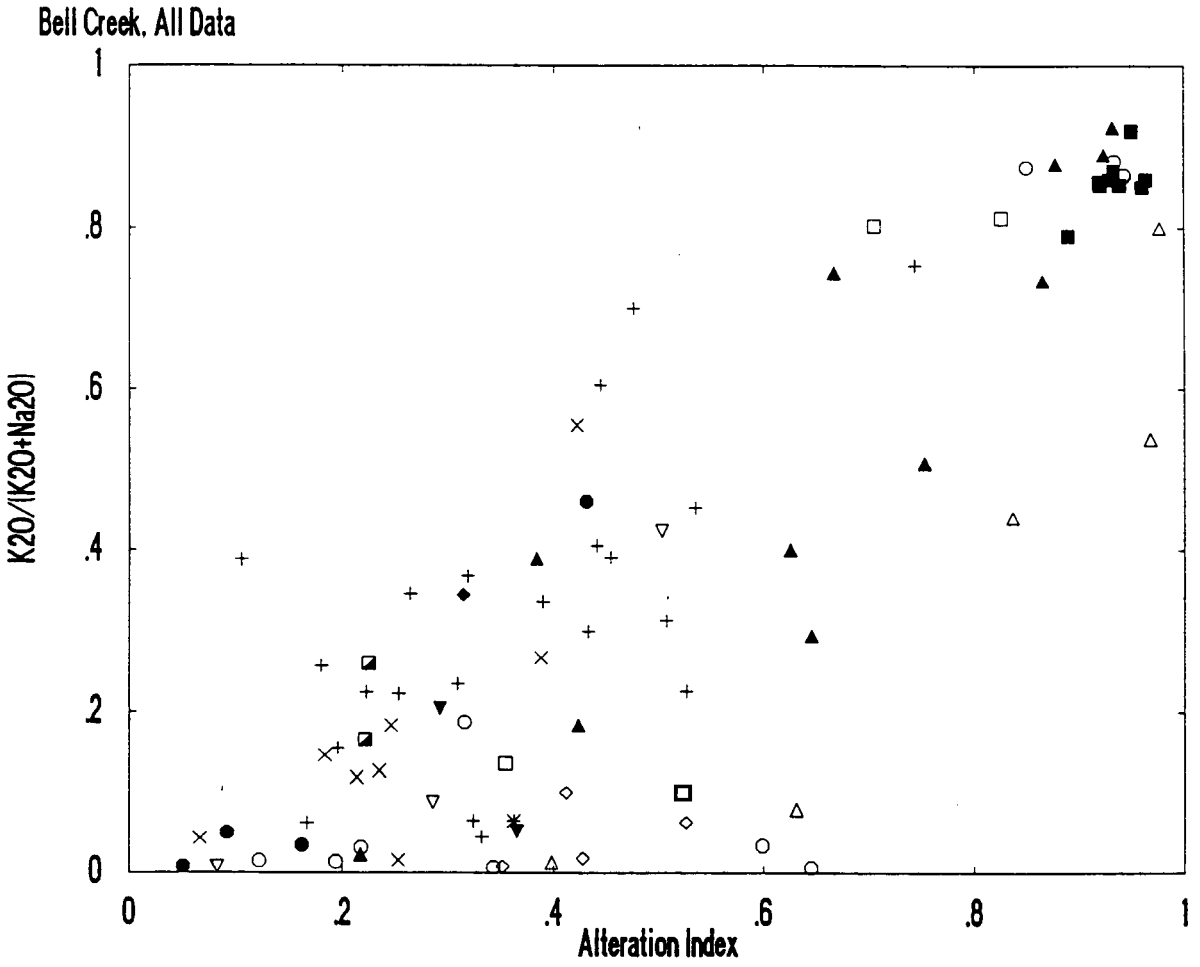


Figure 13b: As Figure 13a, including all whole rock analyses to date on the Bell Creek property. The data shows more scatter than in Figure 13a, possibly reflecting other styles of alteration than found in Unit 8. The legend for rock unit symbols is found at the end of Appendix A.

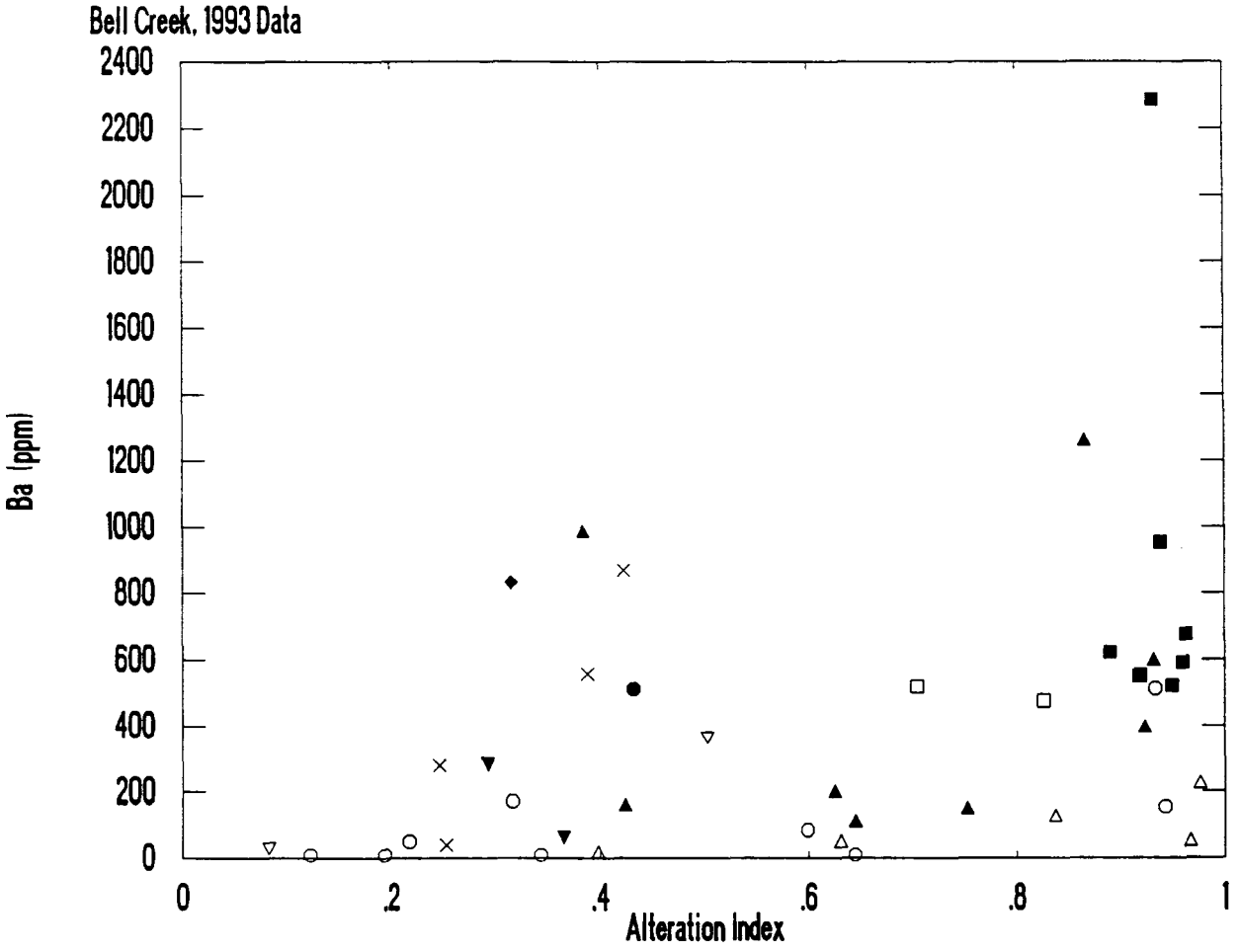


Figure 14a: Plot of Ba versus Alteration Index (see text) for 1993 sample data from the Bell Creek property. The sub-set of strongly altered rocks (high A.I.) has both high and average Ba contents. The samples containing the highest Ba content are also associated with Zn-Cu mineralization. What this plot may be demonstrating is that Ba is more directly associated with massive sulphide mineralization on the Bell Creek property than rocks with high A.I. values, which are from more widespread footwall alteration zones. The legend for rock unit symbols is found at the end of Appendix A.

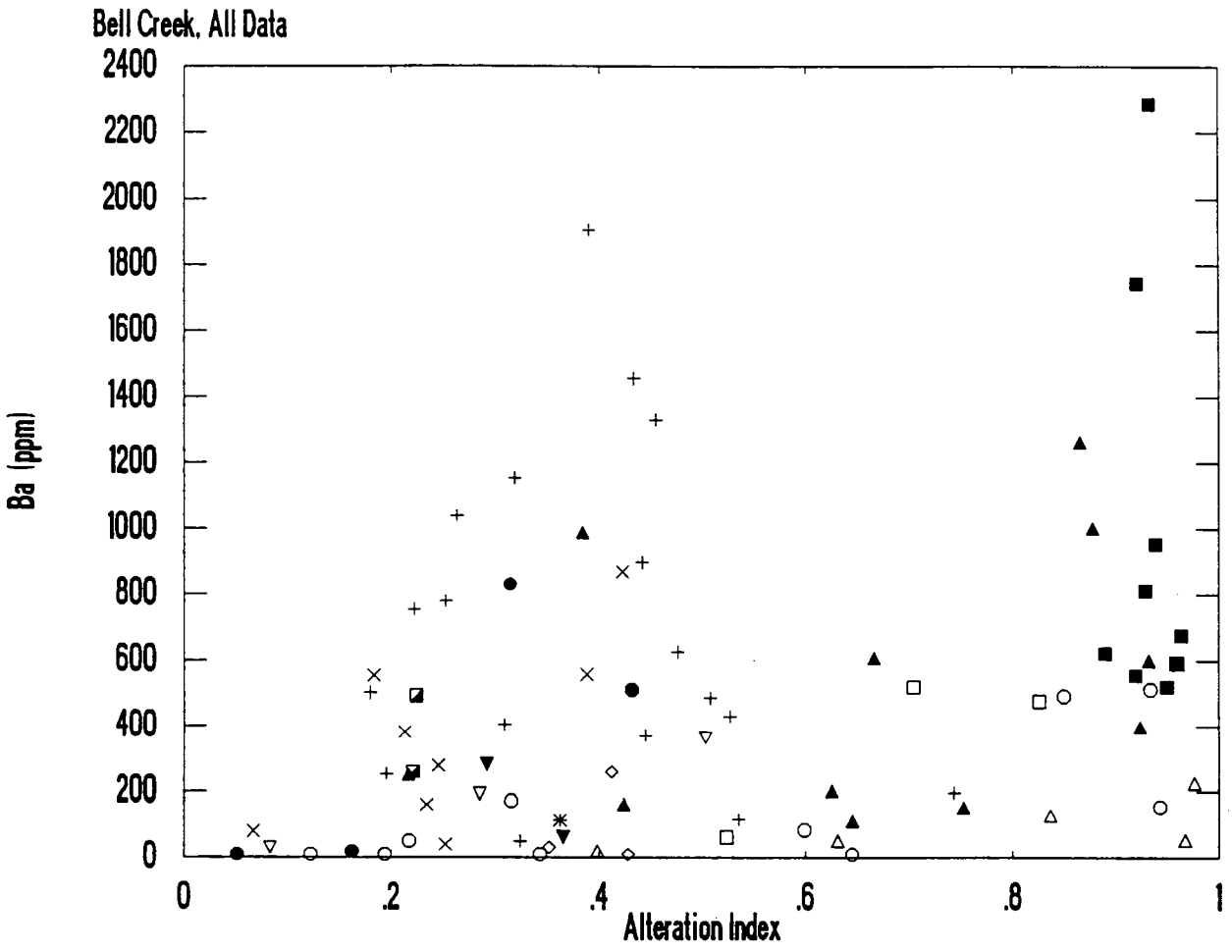


Figure 14b: As Figure 14a, including all whole rock analyses to date from the Bell Creek property. Of note in this diagram is a set of samples with high Ba content and quite average A.I. values. It is possible that these samples are indicating a different style of occurrence for Ba as they have no signs of significant associated alteration. The legend for rock unit symbols is found at the end of Appendix A.

Data from 1992 backs up the 1993 results (Figure 13b), with some additional scatter in the plot, possibly reflecting other styles of alteration (Assessment Report 22934).

Barite is a significant component of the mineralization at the Red Star showing and so it is reasonable to expect that Ba is a good indicator of mineralized alteration zones. However, the plot of Ba versus the A.I. (Figure 14a) shows somewhat less than a direct relationship. The sub-set of rocks which are significantly altered, as indicated by high A.I. values, contain the rocks with the most anomalous Ba content. This sub-set also contains rocks with no apparent Ba enrichment. What this plot may be telling us is that Ba is a much more spatially restricted indicator of alteration than other indicators such as the A.I. and the ratio of K_2O/K_2O+Na_2O, and consequently a lot of variation in the Ba values, relates to rock type. The plot with all the data collected to date (Figure 14b) confirms this observation, having numerous rocks with high Ba content and quite average A.I.

These diagrams serve to point out some of the anomalous characteristics of the altered schists in the Bell Creek area. The examination of numerous diagrams helps to avoid spurious results which may be due to factors such as dilution and/or leaching of elements during the course of alteration. No doubt there has been substantial volume change in the rocks of the Red Star area, but the relative changes in their abundance may still be interpreted. The rocks associated with the Red Star massive sulphide showing are anomalous in several aspects of their chemistry. Primarily they have anomalously high K_2O/Na_2O ratios, enriched SiO_2, Mg and Ba contents, depleted CaO content, and locally they have elevated sulphide content, most notably in the extensive pyritiferous schists. These characteristics can be located in rocks in other areas on the property and this suggests other targets for exploration.

5.0 SILT GEOCHEMISTRY

Two silt samples were collected in the course of mapping in the Red Star Grid area. One sample, at 20+00 N/4+75 E, was taken in the bed of a dry creek which drains the northern part of the grid, along strike from the Red Star. The other sample was taken from a seep, at 19+10 N/9+00 E, which is emanating, apparently, from the vicinity of the unconformable contact of the overlying Princeton Group with the Nicola Group rocks. Neither sample contained significantly anomalous base metal values. These results are included with soil samples in Appendix E.

6.0 SOIL GEOCHEMISTRY

6.1 Red Star Grid—Plugger Survey

The overburden-penetrating plugger survey was conducted in the area of the Red Star Grid (augmented by some minor soil sampling), looking for extensions of that mineralized zone and other mineralized horizons. This survey was originally designed to cover the entire Red Star Grid east of Baseline 00 E/W. However, due to budgetary constraints, only Lines 11+00 N, 12+00 N, 14+00 N, 16+00 N and parts of Lines 8+00 N, 9+00 N and 10+00 N were completed. This coverage included the area of the Red Star showing and approximately 800 metres of north-south strike.

Selected results of this sampling survey are shown in Figures 15a to 15f. Complete results of the survey are located in Appendix E. Copper and zinc, along with several alteration elements, have been plotted. The selection of alteration elements is based on the lithogeochemical characteristics of the mineralized zones. In addition, the A.I. (Date *et al*, 1983) has been calculated from the analytical data for the soil samples. Statistical analysis has identified anomalous results for all element concentrations determined and also for selected element ratios. These statistics are tabulated in Appendix F.

In addition to defining anomalous results, the statistical analysis has provided correlation matrices. Significant correlations exist between Zn and Cu and other possible indicator elements. Zn is positively correlated with Cu, Ba, Mg and the calculated A.I. Cu is also correlated positively with Ba and Mg as well as Fe, V, Co and Ni, reflecting apparently some mafic rock affinities.

Copper and zinc results show several relatively anomalous zones on the Red Star Grid. Several of these anomalies have been labelled as Anomalies A through E. For the most part these anomalies follow the trend of the local geologic units. The most significant anomalies are considered to be Anomalies A and B. All the anomalies will be described in terms of the elements which have been plotted.

6.1.1 Anomaly A

The area around the Red Star showing is labelled Anomaly A. Not surprisingly, the best single plugger soil sample in the survey is located immediately down slope from the Red Star showing, at 10+00 N/2+00 E (1,640 ppm Zn, 735 ppm Cu). The anomaly extends only over two sample lines, occurring from 10+00 N/1+75 E-2+40 E to 9+00 N/2+00 E-2+85 E. Copper values in this area range from 52 to 735 ppm and Zn values range from 178 to 1,640 ppm. The base metal values are

more or less coincident with a strong Ba anomaly (>1,250 ppm) which shows less apparent down slope dispersal. This Ba anomaly may extend into the structural hanging wall to the Cu-Zn anomaly. Anomalously negative Na and Ca and positive A.I. values occur in the structural footwall to the base metal anomaly.

6.1.2 Anomaly B

Anomaly B occurs about 100 metres east of the Red Star horizon, at the contact of Units 10 and 11. The Cu-Zn anomaly stretches from 14+00 N/2+00 E-2+40 E to 9+00 N/2+75 E-3+25 E and is open to the south. Cu values range from 63 to 235 ppm and Zn values range from 100 to 478 ppm. The higher Cu and Zn values are slightly displaced from each other (Cu north, Zn south) within the overall anomaly. Ba overlaps the Cu-Zn anomaly, although it shows a slightly different overall trend. There is a significant, broad negative Ca and coincident positive A.I. anomaly in the rocks immediately west of the Cu-Zn anomaly. A negative Na anomaly also overlaps the Ca and A.I. pattern.

6.1.3 Anomaly C

This anomaly occurs about 150 metres east of Anomaly B, again roughly parallel to the strike of the geologic units. The Cu-Zn anomaly is situated at the contact of quartz-feldspar porphyry (Unit 15) and mafic to intermediate schists (Unit 12). It is detectable from about 9+00 N/4+00 E to 14+00 N/4+40 E-4+60 E. Cu and Zn values range from 25 to 162 ppm and 64 to 188 ppm respectively. Significantly, there is only one value which is considered highly anomalous (greater than the 95th percentile) for these two elements in this area. There is a negative correlation of Ba with this anomaly and no specific pattern with respect to A.I. Ca and Na apparently reflect the composition of the host rocks rather than alteration.

6.1.4 Anomaly D

Anomaly D follows the contact of the volcanic rocks and the wide section of argillaceous sediments, from 11+00 N/6+00 E to 16+00 N/4+20 E-4+60 E, and open in north and south directions. The anomaly primarily consists of elevated Zn contents, possibly in graphitic argillites. The Cu and Zn values range from 72 to 138 ppm and 84 to 288 ppm respectively. The anomaly has a good spatial correlation with anomalous (>1,250 ppm) Ba contents. The other alteration indicator elements do not show any specific pattern related to this Cu-Zn anomaly.

6.1.5 Anomaly E

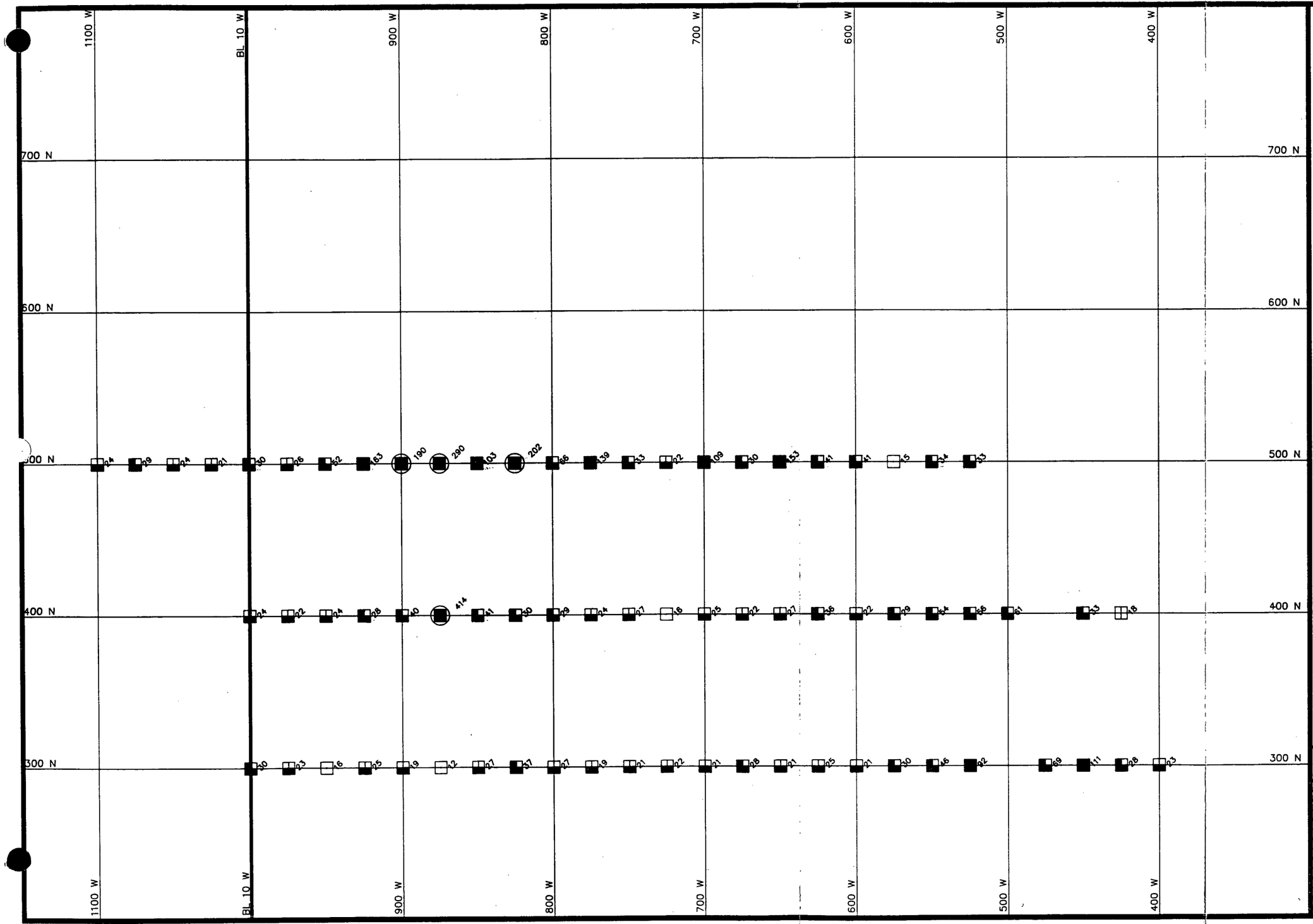
This anomaly occurs at the very northwestern corner of the plugger soil survey. It is related to strongly altered, mafic to felsic volcanic rocks on strike from the Red Star horizon. The Cu and Zn values are quite low, however, and not directly related to the most altered rocks. The Cu values range from 67 to 141 ppm and Zn values range from 70 to 102 ppm, neither range reaching highly anomalous values in any sample. The other indicator elements define a strong anomaly associated with the altered rocks. This may be a potential target which requires further definition.

6.2 Knob Hill Grid—Soil Sampling

Soil sampling in the Knob Hill area (Figures 16a to 16f) also detected some anomalous results for Zn and Cu. Results of the sampling can be found in Appendix E. The Zn anomaly defined by Spheno Mines Ltd. in the late 1960's is evident in the 1993 soil sampling. The anomaly covers from 3+00 N/4+50 W-5+40 W to 4+00 N/4+50 W-5+50 W (although east-west width may be partially due to steep slope toward the east). The anomaly appears to be Zn only (up to 978 ppm) as coincident Cu values are not anomalous. Also, none of the typical alteration indicators (A.I., Ca, Ba) are anomalous. The anomaly is spatially associated with late quartz eye rhyolite dykes (Unit 21e). However, there are altered felsic schists in the vicinity as well.

The only other anomaly of apparent significance is located near the 10+00 W baseline, on strike, about 300 metres south, from mineralization at the Knob Hill showing. A discontinuous negative Ca and positive A.I. anomaly, associated with elevated to highly anomalous Cu and Zn values, stretches from 3+00 N/8+70 W-9+10 W to 5+00 N/8+25 W-9+40 W and is open at both ends. Cu values range from 12 to 414 ppm and Zn values range from 178 to 732 ppm. A strong VLF conductor was detected coincident with this geochemical anomaly (Volume II).

Statistical analysis of the data from this soil survey is included in Appendix F. The small size of the soil sampling grid in this area makes it difficult to assign significance to these anomalies and relate them confidently to the underlying geology. Also, the area is almost completely drift covered making direct correlation with bedrock even more difficult. Followup sampling covering a larger area is recommended to better define significant anomalies.



Cu Values in PPM

⊡	<1 – 16
⊞	16 – 18
■	18 – 27
■	27 – 73
■	73 – 187
◉	187 >>>>>>>

WESTMIN RESOURCES LTD.

Work By	MJ/SMD
Date Drafted	02-24-94
Drafted By	S. DYKES
Date Revised	02-24-94
Revised By	
N.T.S. Number	92H/2E
File Name	BCSKNOBP

BELL CREEK SOIL DATA

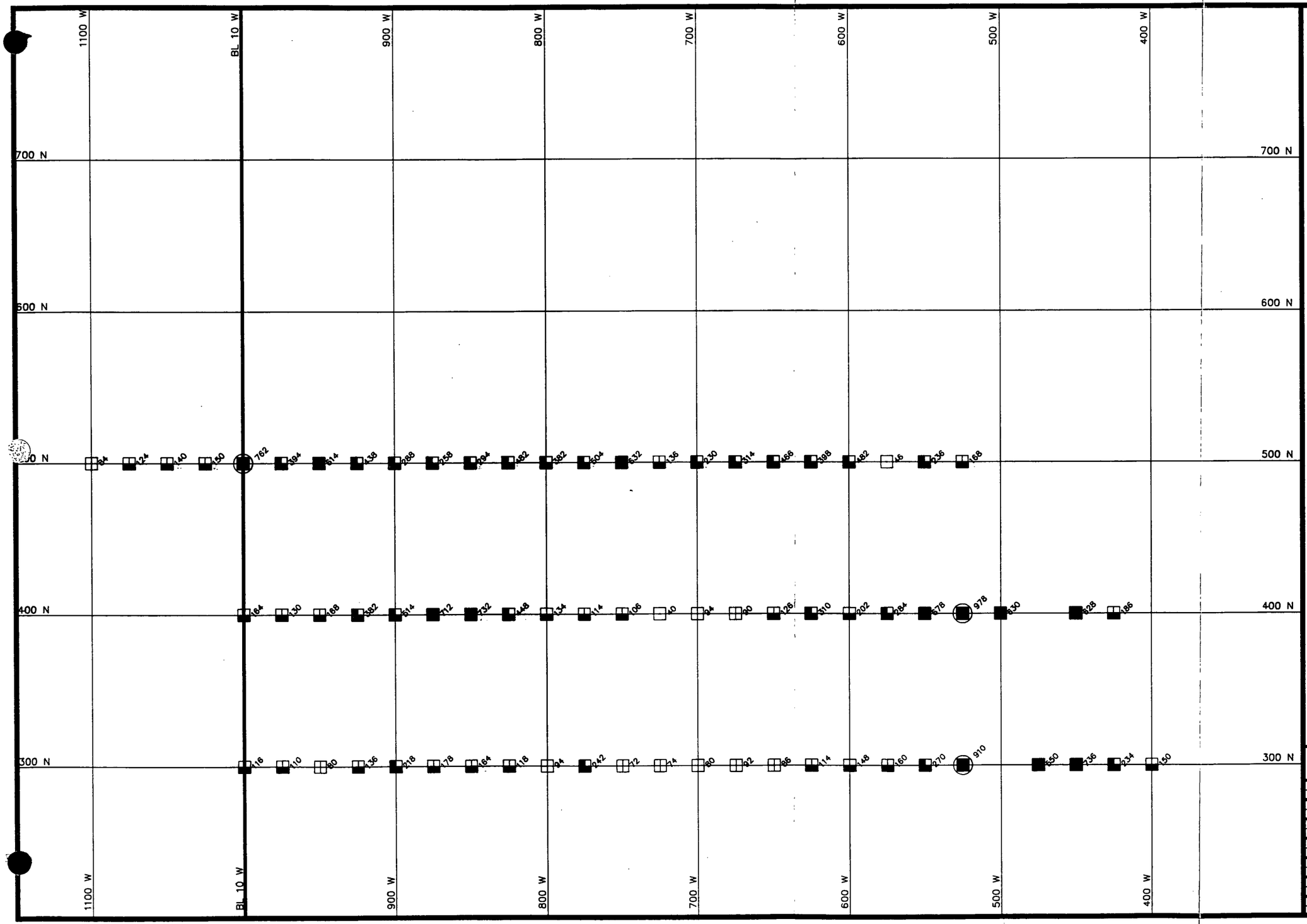
KNOB HILL AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 16a



Zn Values in PPM

⊡	<1 –	62
⊞	62 –	98
▣	98 –	206
◪	206 –	543
■	543 –	742
◉	742 >>>>>>>	

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Work By	MIJ/SMD
Date Drafted	02-24-94
Drafted By	S. DYKES
Date Revised	02-24-94
Revised By	
N.T.S. Number	82H/2E
File Name	BCSKNOBP

BELL CREEK SOIL DATA

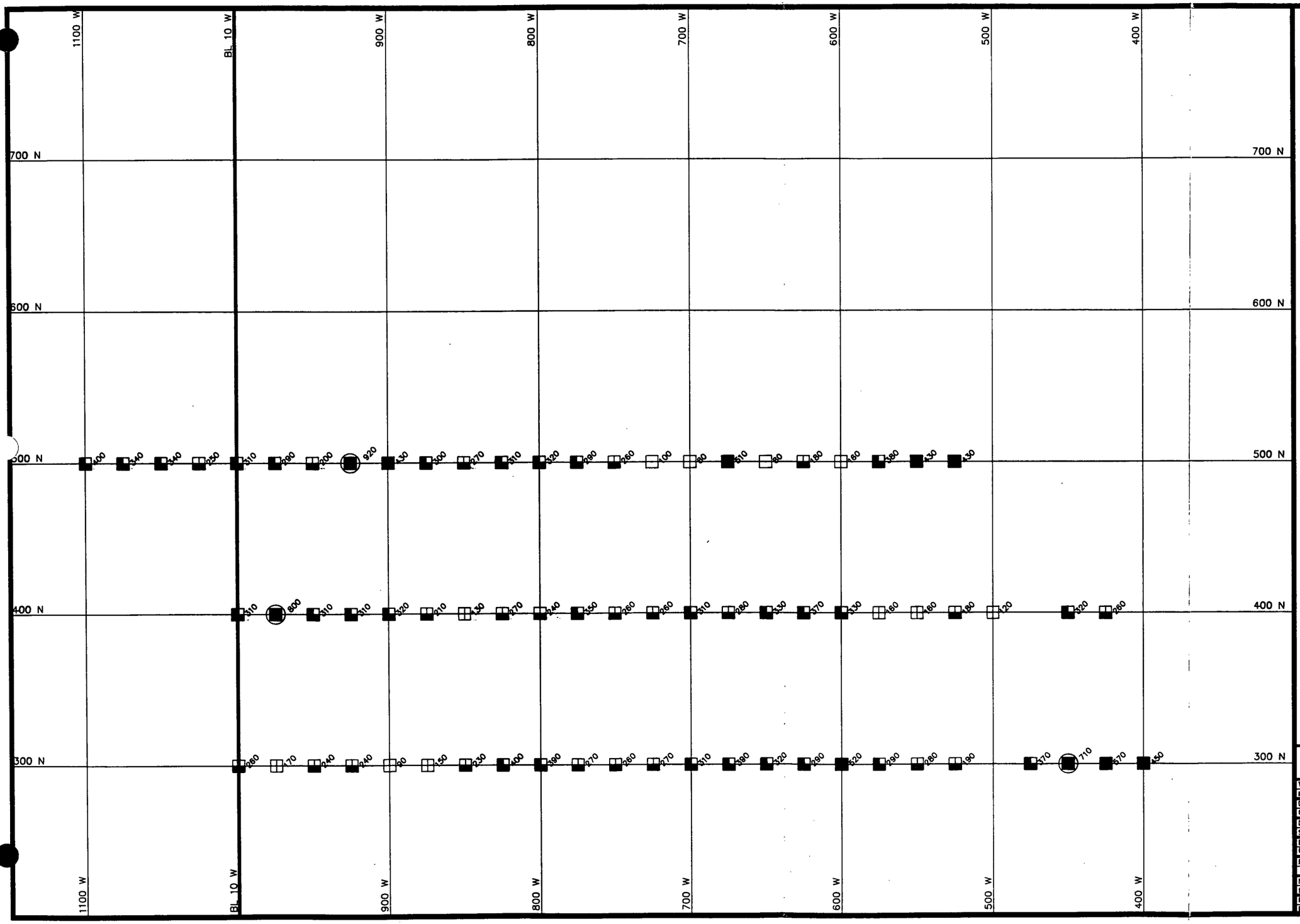
KNOB HILL AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 16b



Ba Values in PPM

⊡	<1 – 101
⊞	101 – 177
■	177 – 287
■	287 – 408
■	408 – 575
◉	575 >>>>>>>

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Work By	MIJ/SMD
Date Drafted	02-24-94
Drafted By	S. DYKES
Date Revised	02-24-94
Revised By	
N.T.S. Number	92H/2E
File Name	BCSKNOBP

BELL CREEK SOIL DATA

KNOB HILL AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 16c

1100 W | BL 10 W | 900 W | 800 W | 700 W | 600 W | 500 W | 400 W

700 N

600 N

500 N: 1.20 1.71 1.45 1.11 | 1.59 1.18 1.16 0.53 0.82 1.14 1.35 2.02 1.69 1.88 1.90 1.65 | 0.79 1.62 0.67 1.64 1.73 3.19 2.15 2.48

400 N: 1.66 1.15 1.37 1.48 1.51 1.34 1.10 1.58 1.56 2.08 2.05 0.83 1.64 1.74 1.64 1.87 1.59 1.90 1.20 1.41 2.23 2.18 3.06

300 N: 1.68 1.79 1.10 1.46 1.00 0.89 1.49 1.75 1.89 1.75 1.50 1.39 1.53 1.85 1.12 1.57 1.00 1.44 1.61 2.00 2.08 1.83 2.48 2.54

1100 W | BL 10 W | 900 W | 800 W | 700 W | 600 W | 500 W | 400 W

Ca Values in Percent (%)

⊡	<0.01 – 0.82
⊞	0.82 – 1.00
◪	1.00 – 1.40
◼	1.40 – 1.80
■	1.80 – 2.00
◉	2.00 >>>>>>>

WESTMIN RESOURCES LTD.

Work By	MJ/SMD
Date Drafted	02-24-94
Drafted By	S. DYKES
Date Revised	02-24-94
Revised By	
N.T.S. Number	92H/2E
File Name	BCSKNOBP

BELL CREEK SOIL DATA

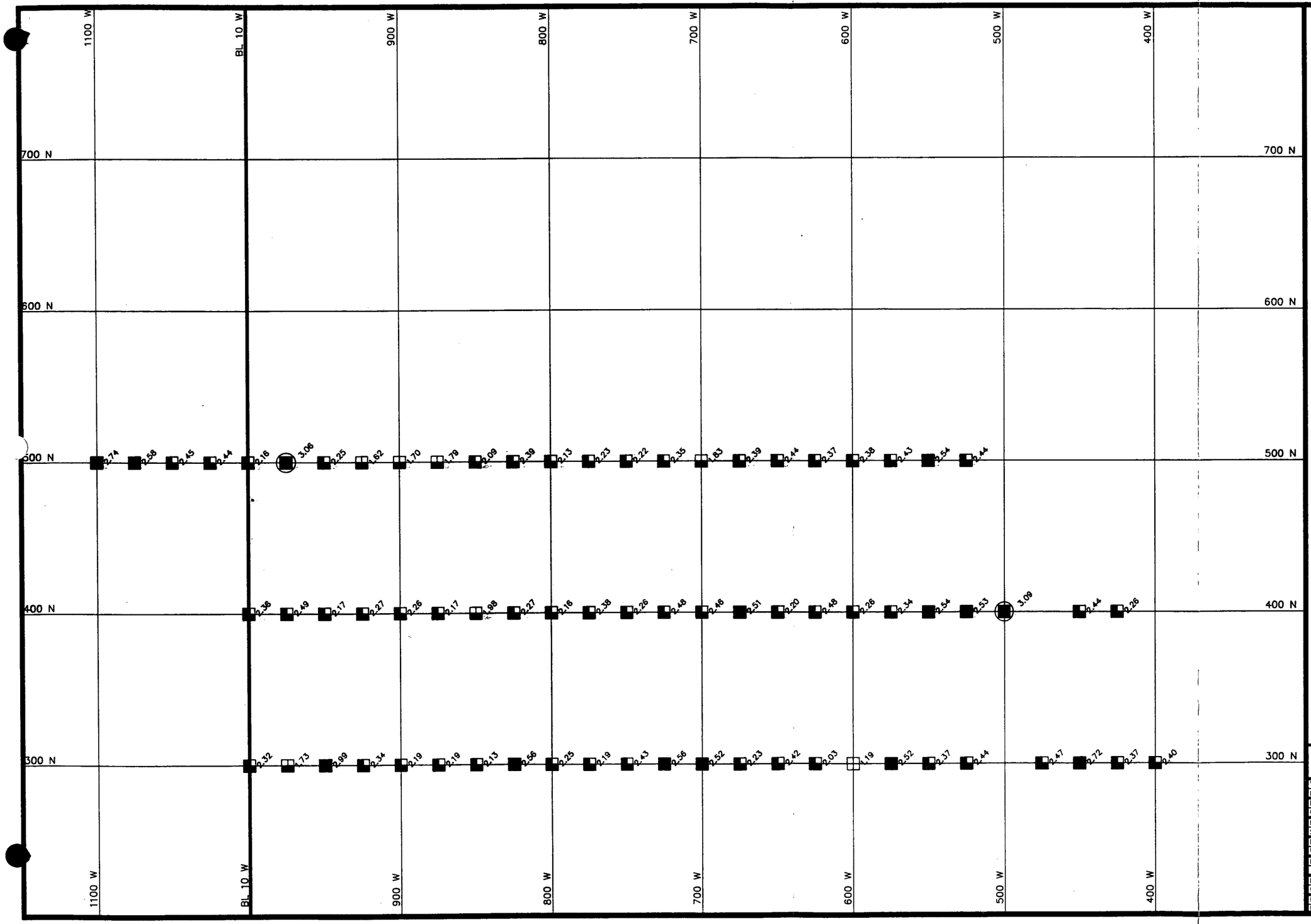
KNOB HILL AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 16d



Na Values in Percent (%)

⊡	<0.01 – 1.00
⊞	1.00 – 1.50
■	1.50 – 2.00
■	2.00 – 2.50
■	2.50 – 3.00
◉	3.00 >>>>>>>

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Work By	MJ/SMD
Date Drafted	02-24-94
Drafted By	S. DYKES
Date Revised	02-24-94
Revised By	
N.T.S. Number	92H/2E
File Name	BCSKNOBP

BELL CREEK SOIL DATA

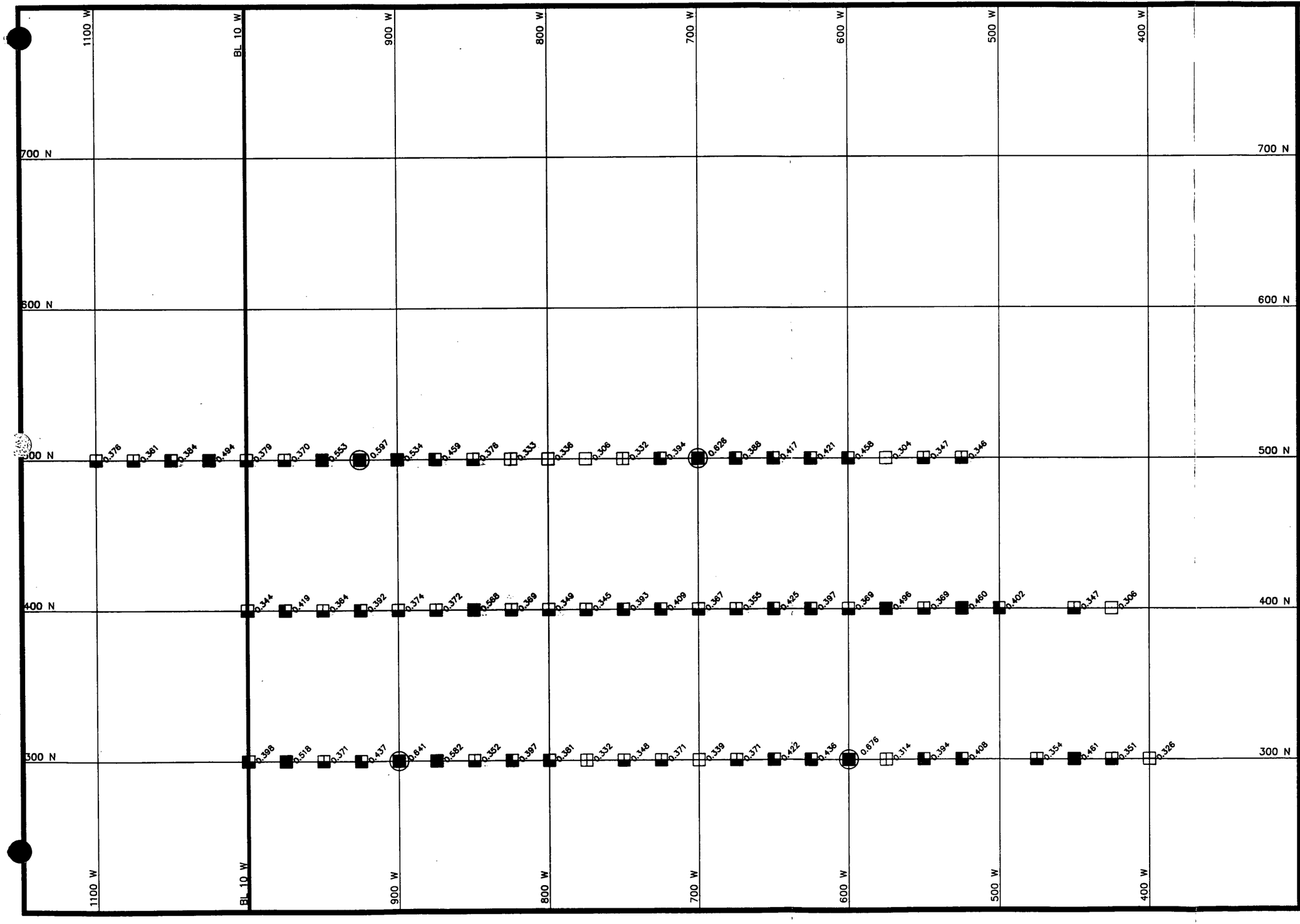
KNOB HILL AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 16e



Alteration Index**

⊡	0.000 –	0.310
⊞	0.310 –	0.340
◪	0.340 –	0.380
■	0.380 –	0.460
■	0.460 –	0.590
◉	0.590 >>>>>>>	

** see section 4.5 of report

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Work By	MJ/SMD
Date Drafted	02-24-94
Drafted By	S. DYKES
Date Revised	02-24-94
Revised By	
N.T.S. Number	92H/2E
File Name	BCSKNOBP

BELL CREEK SOIL DATA

KNOB HILL AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 16

7.0 GEOPHYSICS

A report on the 1993 geophysical surveys, by Grant Hendrickson of Delta Geoscience Ltd., has been included in this report (Volume II). This report points out some of the anomalous aspects of the geophysical surveys. A few additional points should be made about the geophysical signatures of the Bell Creek rocks as they relate to geological interpretations made in the main body of this report.

7.1 Magnetometer/VLF Survey

The magnetometer/VLF survey covered the entire 1993 grid. A couple of features stand out in this survey. The most prominent magnetic feature is the strong susceptibility of Unit 5. This unit has such a strong magnetic response that it may even be masking more subtle features alongside. The response of this unit is presumably due to remnant(?) magnetism in the hematitic cherty sediments which can be followed over the entire strike length of the unit. The magnetic trace does give a good idea of the overall trend of the geology.

Another strong magnetic feature is the high on the east side of the mineralized horizons in the Red Star area. This high corresponds to the quartz feldspar porphyry (Unit 15). In contrast, the highly altered rocks around the Red Star showing and in the area immediately east of the showing correspond with a magnetic low. This is to be expected in that the hydrothermal alteration associated with the mineralization has likely destroyed any magnetite originally present in the rocks. The magnetic patterns around this area suggests the possibility of folding, with magnetic units on both the east and west sides of the Red Star showing. However, the geology of the magnetic units is quite different from one side to the other (i.e. Unit 15 to the east, Unit 6 to the west).

There are several VLF conductors apparent in the grid area (Figure 7, Volume II). They parallel the Horizontal Loop Electromagnetic conductors on the Red Star Grid. Commonly, the conductors are roughly traceable from the south to the north edge of the survey, sub-parallel to the stratigraphy. One such conductor is traceable from about 3+00 N/2+00 W to 17+00 N/5+50 W, just west of Unit 5. This could represent a structure, fault or shear, or perhaps a stratigraphic unit.

7.2 Horizontal Loop Electromagnetic (HLEM) Survey

This survey was only done over the Red Star Grid. It identified several conductors, particularly in the vicinity of the Red Star showing. The conductor west of the showing, extending from 5+00 N/2+50 E to 16+00 N/0+15 W, is attributable to graphitic shears which occur in the structural hanging wall to the zone. Another

large conductor extending from 9+00 N/5+75 E to 18+00 N/4+00 E, coincides with graphitic sediments (or graphitic material in a fault) on the west side of Unit 13. A secondary conductor occurs over three(?) lines between these two larger conductors, extending from 9+00 N/2+75 E to 11+00 N/2+50 E (further on higher frequencies). This conductor does not coincide with known surface mineralization, although it is situated within favourable stratigraphy and associated with substantial alteration. In light of the fact that massive sulphide bodies, and particularly sphalerite dominated bodies, are not always good conductors, this weak conductor may be quite promising. On the other hand, it is possible that this conductor is simply a structure, reflecting the extreme sensitivity of the upper frequencies of the HLEM system to changes in bulk rock conductivities.

8.0 CONCLUSIONS

Previous work has already indicated that mineralization on the Bell Creek property is volcanogenic massive sulphide (VMS) style hosted by rocks in a calc-alkaline arc tectonic setting (Assessment Report 22934). The local geology contains abundant felsic volcanic units, including pyroclastics, porphyritic flows and possibly intrusions. The felsic volcanic units in the Red Star area commonly have abundant quartz and feldspar phenocrysts and have quite high Zr content, indicative of evolved igneous rocks. The main showing on the property, the Red Star showing, is a massive sphalerite-pyrite-chalcopyrite (Zn-Cu) lens, reflecting the apparently evolved nature of its host rocks. The geology and geochemistry of the Bell Creek property suggest an evolved igneous setting which is characteristic of Kuroko-style Zn-Pb-Cu or Zn-Cu massive sulphide bodies. Silica, magnesium and barium enrichment, in conjunction with sodium and calcium depletion, are all alteration features commonly found associated with Kuroko and other felsic volcanic hosted VMS deposits (Franklin and Duke, 1991). As this report has shown, these are characteristics of the mineralized zones on the Bell Creek property, indicating significant deposits of this type may be present.

The rock and soil geochemical surveys, in conjunction with detailed geological mapping, has outlined areas of strong alteration presumably related to mineralizing hydrothermal systems. The strongest alteration is in the vicinity of the Red Star showing on the Red Star Grid. Here, the factors of geologic setting, anomalous Zn-Cu values, Ca and Na depletion, Ba enrichment and high A.I. coincide. However, in this area there are two centres of mineralization as indicated by the plugger survey results (Anomalies A and B). The horizon hosting the Red Star horizon is strongly mineralized, but so is the horizon at the contact of Units 10 and 11, about 100 metres east of the Red Star. Both of these horizons present attractive exploration targets. It is possible, given the abundant evidence of folding in this area and the spatial distribution of the alteration zones (particularly the

"footwall" alteration shown by Ca, Na and the A.I.), that these two horizons represent opposing limbs of a (antiformal?) fold. The alteration zone in the northwest part of the plugger sampling survey (Anomaly E) appears to represent a distal part of the Red Star zones.

Other targets are presented by the geological and geochemical surveys, in particular the Knob Hill showing. Soil sampling and mapping have shown that the alteration and mineralization associated with the Knob Hill zone extend at least 500 metres south of the main showing. A lack of outcrop limits conclusions about the geology to the north and this part of the grid has not yet been covered by soil sampling. Magnetic and electromagnetic (VLF) evidence suggest that the Knob Hill horizon projects beyond the north edge of the grid. A coincident VLF and magnetic high anomaly, very similar to the geophysical signature at the showing, extends from about 15+00 N to 19+00 N at around 11+00 W. Additional alteration zones have been identified in the course of the 1993 fieldwork but these are of lower priority at present.

Deformation, both shearing and folding, are important aspects of the mineralized felsic horizons on the Bell Creek property. The dominant foliation seems to be an axial planar feature related to tight isoclinal folding within the stratigraphy. These folds can be seen on both the microscopic and outcrop scale. Lineations indicate a relatively flat plunging elongation fabric in the plane of the foliation. These structural features likely exert strong control on the distribution and orientation of any mineralized bodies. Resolution of the structural complexity at Bell Creek is paramount to directing further exploration for additional massive sulphide bodies of the type observed at the Red Star showing.

9.0 RECOMMENDATIONS

Based on the results of the 1993 exploration program, the potential for a significant volcanic hosted massive sulphide deposit on the Bell Creek property has been substantiated. The area of highest potential is felt to be in the area of the Red Star main showing and on the east limb of the hypothesized antiformal fold. Additional work should focus on developing this potential. The old adits should be located and rehabilitated for re-examination where possible. A detailed structural study of the Red Star showing area should be completed to allow projection of mineralized zones and soil anomalies to depth for drilling. Connecting mineralized zones from surface to underground, if it is possible, will go a long way to solving the structural complexities apparent at surface. Further soil sampling may be done to try to close off several of the plugger sample anomalies prior to determination of drill targets. In particular, further evaluation of the anomaly in the northwest part of the plugger sampling survey (soil Anomaly E) could produce another drill target. As a final

phase, diamond drilling should be done to test the known mineralized and altered horizons at depth. This may involve step-by-step intersections of a target horizon.

In the Knob Hill area, it is advisable to extend the grid in the north to reach beyond the contact with the overlying Princeton Group rocks. Geophysical coverage should also be extended to cover the new grid areas. Additional soil sampling should be done to cover the projection of the Knob Hill horizon to the north and south, especially in the area of the coincident magnetic high and VLF anomaly in the north part of the grid. It is likely that a drill-ready target will emerge from this work.

The area between the Similkameen and Pasayten rivers should also be covered, though in less detail, by geochemistry and geophysics. In this area, the surveys should definitely cover the southerly projection of the Red Star horizon across the Similkameen River. Wide-spaced survey lines (200 metres) should be sufficient as a first pass. Biogeochemical sampling may be the best way to obtain a sample representative of a large volume of ground thereby increasing the chances of discovery. This is especially true in drift covered areas such as the ridge between the Similkameen and Pasayten rivers.

10.0 REFERENCES

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11.0 STATEMENT OF EXPENDITURES

Analytical Work		
Whole rock analyses		
Whole rock and trace, 41 at $25.80	1057.80	
Trace package, 15 at $4.50	67.50	1,125.30
Geochemical analyses, rock		
ICP 32 + Au, Ba, 8 at $18.30	146.40	
ICP 24, 4 at $11.33	45.32	191.72
Geochemical analyses, soil and silt		
Plugger, ICP 24, 193 at $9.04	1744.72	
Soils and silts, ICP 24, 111 at $8.70	965.70	2,710.42
Petrography		
3 samples, 5 thin sections plus report	317.25	317.25
Total analytical work		**4,344.69**
Contractors		
Geophysical		
Delta Geoscience Ltd., September 26 to October 5, 1993	10,087.50	10,087.50
Geochemical		
Pamicon Developments Ltd., September 8 to October 3, 1993	8,883.31	8,883.31
Linecutting		
Hendex Exploration Services Ltd.	9,310.00	9,310.00
Total contractors		**28,280.81**
Personnel		
Murray Jones, Project Geologist, $271 per day		
Preparation, contractor supervision, liaison (7 days)	1,897.00	
Fieldwork, August 18 to October 5 (29.5 days)	7,994.50	
Data management, map drafting interpretation (16 days)	4,336.00	
Report preparation (10 days)	2,710.00	16,937.50

Colin Russell, Field Geologist, $175 per day August 30 to October 8 (33 days)	5,775.00	5,775.00
Total personnel		**22,712.50**
General Costs		
Camp expense	2,019.00	
Materials and supplies	683.00	
Equipment rentals	161.00	
Shipping costs	126.00	
Travel and accommodation	1,054.00	
Auto		
Gas	696.00	
Rental	1,697.00	
Telephone/telecopier	143.00	
Maps and reports	142.00	
Computer costs	190.00	
Drafting	4,081.00	
Total general costs		**10,992.00**
Total		**66,330.00**

12.0 STATEMENT OF QUALIFICATIONS

I, Murray I. Jones, of the District of North Vancouver, in the Province of British Columbia, hereby certify that:

1. I am registered as a professional geologist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (registration #20063), residing at 8606 - 144A Street, Surrey, British Columbia, V3S 2Y2 with a business address at #904 - 1055 Dunsmuir Street, P.O. Box 49066, The Bentall Centre, Vancouver, British Columbia, V7X 1C4.

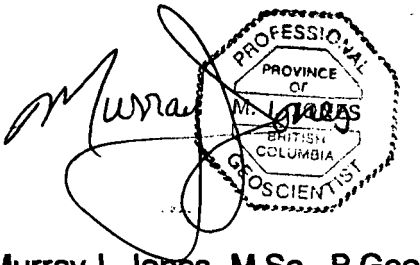
2. I graduated with a B.Sc. (Honours) in Geology from the University of British Columbia, Vancouver, B.C. in 1982 and with a M.Sc. in Geology from the University of Ottawa, Ottawa, Ontario in 1992.

3. I am an associate member of the Geological Association of Canada.

4. I have practised geology in Canada from 1979 to 1994.

5. I directly performed or supervised the work which is described in this report.

DATED this 25 day of March, 1994 at Vancouver, British Columbia.



Murray I. Jones, M.Sc., P.Geo.

APPENDIX A

ROCK SAMPLE DESCRIPTIONS

APPENDIX A

ROCK SAMPLE DESCRIPTIONS

Sample No.	Location	Description	Analyses *
443201	16+87 N 0+55 E	Siliceous, sericite talc schist, tr-1% quartz eyes, gossanous.	w
443202	16+77 N 0+30 E	Dark green chlorite schist with biotite, feldspar phenos, strongly magnetic.	w
443203	17+15 N 10+20 E	Chlorite-sericite schist, 3-5% quartz eyes, 1-2% feldspar phenos, strongly foliated.	w
443204	16+85 N 0+35 W	Sericite-chlorite schist, medium to dark green, strongly foliated, gossanous.	w
443205	8+38 N 11+62 W	Sericitic feldspathic schist, homogeneous, 1% quartz and 1% feldpsar phenos to 1 millimetre.	w
443206	12+00 N 4+05 W	Biotitic felsic schist-rhyolite(?)-homogeneous, light pink to tan.	w
560479	10+72 N 2+60 E	Light grey to yellowish green, felsic volcanic rock, 1-2% reddish quartz eyes, sugary textured groundmass (hornfels(?)).	w
560480	13+20 N 2+45 E	Sericitic phyllite, blocky fracture, minor disseminated magnetite, relatively homogeneous rock.	w
560481	13+50 N 2+75 E	Red and green coloured sericitic schist, 1% quartz eyes, flattened lithic clasts noted.	w
560482	12+75 N 1+73 W	Chlorite schist, soapy feel, strongly deformed.	w
560483	13+15 N 1+30 E	Chlorite (weak sericite) papery schist, friable rock, darkly coloured, kink folds.	w
560484	10+55 N 2+90 E	Quartz-sericite schist, lensy appearance, adjacent to shear, ferricrete zone.	w

APPENDIX A

ROCK SAMPLE DESCRIPTIONS

Sample No.	Location	Description	Analyses *
560485	10+55 N 2+95 E	Siliceous, aphanitic volcanic rock, light bluish grey, weak laminations visible, trace bluish quartz eyes.	w
560486	10+80 N 3+65 E	Sericite-biotite-chlorite schist, abundant feldspar-quartz phenos, 1% disseminated magnetite.	w, ts
560487	10+90 N 4+10 E	Quartz-feldspar porphyritic, sericite-biotite schist, well foliated, intrusive(?).	w
560488	10+60 N 2+55 E	Sericite schist with 1-2% quartz eyes, tiny biotite speckles throughout.	w
560489	10+57 N 2+35 E	Chlorite schist, dark green, sheared locally.	w
560490	10+35 N 2+07 E	Sericite-chlorite schist, weak quartz veining, very well foliated.	w
560491	10+20 N 1+73 E	Sericite-quartz schist, soapy (talcose) feel, relatively homogeneous groundmass (dominantly quartz), disseminated pyrite.	w, ts
560492	10+17 N 1+60 E	Sericite (minor chlorite) phyllite-schist, fairly homogeneous rock, strongly deformed.	w
560493	12+00 N 2+46 E	Quartz-sericite-pyrite (boxwork) schist, strongly weathered, possibly relict quartz eyes.	w
560494	12+85 N 1+85 E	Sericite-chlorite schist, 1% quartz, 2-3% feldspar phenos.	w
560495	12+93 N 1+90 E	Quartz-feldspar porphyritic, crystal tuff, well foliated, rhyolite(?).	w
560496	11+58 N 2+05 E	Chlorite-sericite papery schist, locally with minor disseminated pyrite, shears.	w

APPENDIX A

ROCK SAMPLE DESCRIPTIONS

Sample No.	Location	Description	Analyses *
560497	11+50 N 1+90 E	Chlorite-sericite schist, talcose feel, darkly coloured.	w
560498	11+55 N 1+85 E	Sericite schist, strong shearing, light grey colour.	w
560499	13+59 N 4+85 E	Quartz-feldspar porphyry, dyke(?), 3% feldspar, 1% quartz phenos.	w
560500	8+76 N 1+68 E	Chlorite-sericite schist, talcose feel, shearing in outcrop.	w
560501	11+12 N 4+65 E	Medium green, chlorite-sericite schist, pervasive biotite, trace pyrite.	w
560502	10+97 N 5+45 E	Light green, sericite schist, pervasive biotite.	w
560503	12+80 N 2+65 W	Sericite-chlorite schist, strongly altered.	w
560504	15+30 N 4+80 W	Sericite-chlorite-biotite schist, silicified(?), malachite staining along foliation.	w
560505	7+70 N 9+80 W	Felsic schist, tr-1% quartz eyes, feldspar(?), tr-1% pyrite.	w
560506	7+68 N 9+95 W	Chlorite schist, gossanous, in mixed section (felsic/mafic).	w
560507	8+80 N 10+60 W	Chlorite schist.	w
560508	7+85 N 10+55 W	Quartz-feldspar porphyry, sericitic alteration.	w
560509	8+15 N 9+20 W	Felsic volcanic rock, hard, strongly silicified or albitized(?), minor pyrite and magnetite (from adit dump).	w
560510	6+50 N 9+25 W	Quartz-sericite schist, with minor pyrite disseminations, talcose feel.	w

APPENDIX A

ROCK SAMPLE DESCRIPTIONS

Sample No.	Location	Description	Analyses *
560511	7+45 N 9+40 W	Quartz-sericite schist, talcose feel, minor disseminated pyrite, on strike from Knob Hill mineralized zone.	w
560512	0+10 N 6+30 W	Quartz eye rhyolite dyke, not foliated, aphanitic feldspathic groundmass.	w
560513	5+85 N 7+50 W	Felsic schist, with magnetite, relatively homogeneous, biotite and chlorite on foliation planes.	w, ts
487075	14+80 N 18+80 E	Argillite, possibly graphitic, associated with whitish precipitate on outcrop.	g
487076	14+80 N 18+80 E	Sand and gravel cemented by whitish precipitate.	g
487077	14+80 N 18+80 E	Argillite in shear/fault zone, graphitic material, whitish precipitate common.	g
487078	11+45 N 1+25 E	Hydrothermally altered(?), graphitic sheared rock, vuggy and limonitic locally.	g
487079	11+50 N 2+01 E	Yellowish green precipitate, from pyritic chlorite-sericite schist (560496).	g
487080	11+52 N 1+98 E	Massive pyrite, with quartz, lens, strongly weathered, friable.	g
487081	13+17 N 2+40 E	Quartz-pyrite (boxwork)-sericite schist, extremely leached, only minor pyrite left.	g
487082	16+42 N 0+53 E	Shear/fault zone in pyritic sericite schist, no other sulphides visible, from North Area adit.	g
487083	12+35 N 2+55 E	Sericite schist, quite bleached appearance, sample is of patchy magnetite mineralization.	g

APPENDIX A

ROCK SAMPLE DESCRIPTIONS

Sample No.	Location	Description	Analyses *
487084	8+35 N 9+92 W	Quartz-sericite schist, gossanous, related to siliceous, pyritic cap(?).	g
487085	8+35 N 9+95 W	Rubble and soil related to very gossanous quartz-sericite schist.	g
487086	8+05 N 9+35 W	0.60 metre chip in 2 metre long adit across pyritic sericite-chlorite schist.	g

* = Symbol legend on the following page.
w = Whole rock analysis (total oxides, LOI, trace elements including base metals).
ts = Thin section and petrographic description.
g = 24 element (complete digestion) ICP analysis.

ROCK UNIT SYMBOLS FOR GEOCHEMICAL PLOTS

- ○ Unit 1
- Unit 2
- Unit 3
- ● Unit4
- □ Unit5
- ◪ Unit 6
- Unit 7
- ■ Unit 8
- △ Unit 9
- ▲ Unit 10
- ▽ Unit 11
- ▼ Unit 12
- Unit 13
- ✳ Unit 14
- × Unit 15
- \+ Unit 16
- ◇ Unit 17
- Unit 18
- Unit 19
- Unit 20
- ◆ Unit 21

Plot symbols used for various geological units in Figures 10 through 14b. The unit numbers correspond to the geological units described in the text. As not all units were sampled for whole rock analysis, several of the units do not have corresponding symbols.

APPENDIX B

PETROGRAPHY

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Report for: Murray Jones,
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Job 930715
November 1993

Samples: 560486-V-1, -V-2, -H-1; (7+50W, 5+85N), 560491

Summary:

Sample 560486-V-1 (and **560486-V-2**) is of a metamorphosed dacite crystal tuff containing phenocrysts of plagioclase in a foliated groundmass dominated by plagioclase with less abundant quartz and much less actinolite, biotite/chlorite, and epidote. Accessory minerals include sphene, opaque (pyrite), and apatite. Quartz is concentrated moderately in lenses parallel to foliation.

Sample 560486-H-1 is similar to 560486-V-1 and -V-2, but the groundmass has a stronger foliation. Foliation is defined by elongation of plagioclase grains in the groundmass, and by orientation of tremolite/actinolite prismatic to acicular grains and biotite/chlorite flakes. A few quartz-rich segregation lenses also are parallel to foliation. Chlorite is concentrated in a few lenses up to 1 mm wide parallel to foliation.

Sample (7+50W, 5+85N) is a **metamorphosed dacite flow or subvolcanic intrusion**, which is similar in some respects to Sample 560486. It contains plagioclase phenocrysts in a weakly foliated groundmass dominated by plagioclase, with less abundant quartz and chlorite. The relatively massive texture suggests that it may be a metamorphosed flow or subvolcanic intrusion rather than a tuff. Pyrite forms disseminated grains and lenses, some of which are replaced by hematite, limonite, and jarosite.

Sample 560491 is a well foliated quartz-muscovite-chlorite schist, probably formed from a very fine grained dacite tuff. Muscovite and opaque are concentrated slightly in a few seams parallel to foliation. The texture suggests that the original foliation, defined by muscovite and chlorite, was folded tightly, and that muscovite was recrystallized strongly in the axial planes of the folds.

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Sample 560486-V-1, -V-2 **Metamorphosed Dacite Crystal Tuff**

Phenocrysts of plagioclase are set in a foliated groundmass dominated by plagioclase with less abundant quartz and much less actinolite, biotite/chlorite, and epidote. Accessory minerals include sphene, opaque (pyrite), and apatite. Quartz is concentrated moderately in lenses parallel to foliation. The description is for Sample 560486-V-1; Sample -V-2 is similar.

phenocrysts			
plagioclase	17-20%	quartz	0.3%
groundmass			
plagioclase	50-55	epidote	2- 3
quartz	10-12	sphene	0.7
biotite/chlorite	5- 7	opaque (pyrite?)	0.5
actinolite	3- 4	apatite	0.2

Plagioclase forms subhedral to anhedral phenocrysts averaging 0.7-2 mm in size, and a few up to 3 mm long. Some contain a few acicular grains of tremolite/actinolite, commonly oriented parallel to foliation. A few were recrystallized slightly during metamorphism along seams and in patches to extremely fine grained plagioclase.

Quartz forms a few ragged phenocrysts(?) averaging 0.5-1.2 mm in size. Most are recrystallized slightly to moderately to much finer grained aggregates of quartz.

The groundmass is dominated by strongly interlocking grains of plagioclase and much less quartz averaging 0.02-0.03 mm in grain size.

Biotite and chlorite form flakes averaging 0.1-0.2 mm in length; these are in part subhedral and in part irregular. Biotite is pleochroic from pale to medium brown and chlorite is pleochroic from pale to light green. Biotite flakes are altered slightly to completely to chlorite.

Tremolite/actinolite forms acicular to prismatic grains averaging 0.1-0.4 mm in length, mainly oriented parallel to foliation. It also forms prismatic phenocrysts averaging 0.2-0.3 mm long and locally up to 0.7 mm long, also parallel to foliation. Some of these are poikilitic with patches of abundant inclusions of extremely fine grained plagioclase. Pleochroism of tremolite/actinolite is from pale to light green.

Epidote forms single grains and clusters of equant, anhedral grains averaging 0.05-0.1 mm in size and a few up to 0.7 mm across. It has a medium yellow color, indicating a high iron content. A few lenses and patches of groundmass plagioclase contain moderately abundant disseminated epidote grains 0.02-0.03 mm in size.

Sphene forms clusters and single grains averaging 0.03-0.05 mm in size. It also forms elongate clusters of grains averaging 0.01-0.02 mm in size intergrown with less abundant plagioclase. Opaque (pyrite?) forms disseminated grains and clusters of grains averaging 0.05-0.2 mm in size, and a few up to 0.4 mm across. Apatite forms equant, ragged grains averaging 0.1-0.3 mm in size.

Quartz is concentrated in lenses parallel to foliation. Some lenses up to 1.5 mm wide are of grains averaging 0.05-0.07 mm in size. Other lenses averaging 0.2-0.5 mm in width are of grains averaging 0.07-0.3 mm. A few quartz grains are up to 1 mm long. Some lenses contain patches of fine grained biotite flakes.

Sample 560486-H-1 **Metamorphosed Dacite Crystal Tuff**

This section is similar to 560486-V-1 and -V-2, but the groundmass has a stronger foliation. Foliation is defined by elongation of plagioclase grains in the groundmass, and by orientation of tremolite/actinolite prismatic to acicular grains and biotite/chlorite flakes. A few quartz-rich segregation lenses also are parallel to foliation. Chlorite is concentrated in a few lenses up to 1 mm wide parallel to foliation.

Mineral abundances vary slightly among the three sections from this hand sample.

Sample 560491 **Quartz-Muscovite-Chlorite Schist; Metamorphosed Dacite Tuff**

The sample is a well foliated schist dominated by quartz with less abundant muscovite and much less chlorite. Muscovite and opaque are concentrated slightly in a few seams parallel to foliation. The texture suggests that the original foliation, defined by muscovite and chlorite, was folded tightly, and that muscovite was recrystallized strongly in the axial planes of the folds.

quartz	83-85%
muscovite	10-12
chlorite	4- 5
opaque, Ti-oxide	0.1
pyrite	minor

Quartz forms equant, submosaic grains averaging 0.07-0.2 mm in size, and a few grains up to 0.3 mm across.

Muscovite is concentrated in seams averaging 0.05-0.3 mm wide, which define the foliation. It also forms disseminated flakes interstitial to quartz; many of these are oriented at a moderate to high angle to the foliation. The distribution of finer grained muscovite suggests that the rock was folded tightly about the foliation plane.

Chlorite forms flakes averaging 0.1-0.15 mm in length, mainly intergrown with muscovite which is oriented at a moderate to high angle to the foliation.

Pyrite forms a few disseminated grains averaging 0.07-0.15 mm in size. They were removed from the rock, and all that remains are casts of subhedral to euhedral grains.

Ti-oxide and opaque form disseminated grains averaging 0.03-0.07 mm in size, mainly intergrown with muscovite in muscovite-rich lenses.

Sample (7+50W, 5+85N) **Metamorphosed Dacite Flow or Subvolcanic Intrusion**

The sample is similar in some respects to Sample 560486. It contains plagioclase phenocrysts in a weakly foliated groundmass dominated by plagioclase, with less abundant quartz and chlorite. The relatively massive texture suggests that it may be a metamorphosed flow rather than a tuff. Pyrite forms disseminated grains and lenses, some of which are replaced by hematite, limonite, and jarosite.

phenocrysts			
plagioclase	10-12%		
groundmass			
plagioclase	65-70	epidote	0.2%
quartz	12-15	biotite	0.1
chlorite	4- 5		
amphibole	1		
pyrite	1		
limonite/hematite/jarosite	1- 2		

Plagioclase forms anhedral to subhedral, prismatic phenocrysts averaging 0.5-1 mm in size, and a few up to 2 mm long. A few grains contain minor to moderately abundant, irregular patches and disseminated, extremely fine to very fine grains of epidote.

A few patches up to 1.5 mm across consist of a few slightly interlocking plagioclase grains containing abundant myrmekitic inclusions of quartz.

The groundmass is a slightly to moderately interlocking aggregate of plagioclase grains averaging 0.02-0.05 mm in grain size, and less abundant quartz grains averaging 0.05-0.1 mm across. A few patches of groundmass up to 1 mm in size contain moderately abundant, equant, cryptocrystalline epidote inclusions.

Chlorite forms disseminated flakes averaging 0.05-0.1 mm long, commonly oriented slightly to moderately to produce a very weak foliation. It is concentrated in patches up to 2 mm in size as flakes averaging 0.1-0.4 mm in size.

Biotite forms a few flakes up to 0.5 mm in size. Pleochroism is from pale to medium, slightly greenish brown.

Sericite forms a few wispy flakes averaging 0.2-0.4 mm long; it is secondary after biotite or chlorite.

Actinolite forms a few anhedral grains averaging 0.2-0.3 mm min size. Pleochroism is from light to medium green. Some grains are altered strongly to fibrous tremolite and abundant limonite. One ragged patch 2 mm long may represent an original, skeletal actinolite megacryst; it is replaced by fibrous tremolite and moderately abundant limonite/hematite. One cluster 1.8 mm long is of slightly radiating, fibrous tremolite with moderately abundant limonite.

Pyrite forms anhedral to euhedral grains averaging 0.2-0.5 mm in size. Many are altered slightly to strongly to hematite/limonite and jarosite(?), some of which was removed from the rock during weathering. One lens 5 mm long parallel to foliation is of cryptocrystalline limonite/jarosite.

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Report for: Murray Jones,
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Job 930715b
December 1993

Samples: 560486-V-1, -V-2, -H-1; 560491
Notes re: structure in 560486, and
possible talc content of 560491

Orientation Study (Sample 560486)

The sample has a moderate to well developed foliation, defined by orientation of groundmass plagioclase and elongation of chlorite flakes and acicular to prismatic grains of actinolite. In the hand sample, a moderate lineation on the H-1 surface is defined by elongation of mineral grains and lenses. Recrystallization of phenocrysts is minor; most quartz grains are strained slightly but only locally recrystallized to finer subgrain aggregates.

The H-1 section is oriented subperpendicular to the foliation plane and subparallel to a metamorphic lineation.

In thin section, some plagioclase phenocrysts are oriented parallel to foliation. These commonly have overgrowths of chlorite extending outwards from the ends of the grains. Other plagioclase phenocrysts appear to have been rotated during deformation, with chlorite, quartz, and minor actinolite overgrowths oriented parallel to foliation.

Much of the groundmass shows a good foliation defined by orientation of elongate plagioclase grains. The average aspect ratio of groundmass plagioclase in these zones is 1.5/1 to 2/1 and the maximum aspect ratio is about 3/1.
Also oriented in the foliation plane are chlorite and actinolite. The latter has an aspect ratio of 5/1 to 20/1. Although quartz lenses are oriented in the foliation plane, textures in them are submosaic with no preferred elongation.

The V-1 section is oriented at about 20 degrees to the foliation plane and the lineation. Textures are somewhat similar to those in Sample H-1. Foliation is moderately weaker, with a maximum aspect ratio of 2/1 for groundmass plagioclase and 5/1 for actinolite. Plagioclase phenocrysts show no preferred orientation.

(continued)

The V-2 section is oriented at about 70 degrees to the lineation and the foliation plane. Foliation is much weaker than in Sample H-1, indicating that elongation along the lineation was an important part of the deformation. Groundmass plagioclase grains are more equant than in Sectiuons H-1 and V-1, and only locally show a preferred orientation. Actinolite grains have aspect ratios up to 5/1, and are elongate in the foliation plane.

If further oriented studies are contemplated, it would be most useful to orient the three orthogonal sections as follows:

1) in the foliation plane,
2) perpendicular to the foliation plane,
3) perpendicular to the other two sections, i.e., containing a line in the foliation plane and a line perpendicular to it.

Sample 560491

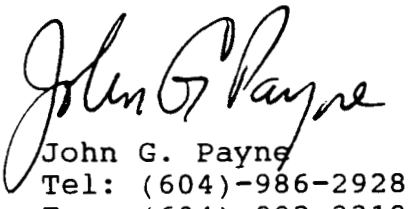
Is talc present?

The sample contains seams rich in muscovite, which give the rock a talcose feel. Although muscovite and talc have similar optical properties, the mineral is identified as muscovite based on the following features:

1) the high quartz content of the rock is typical of a metamorphosed felsic tuff or siliceous mudstone. It is not typical of a talc-bearing rock.

2) muscovite grains commonly are slender, subhedral flakes oriented in the foliation plane. This texture is consistent with a quartz-muscovite schist formed from a felsic tuff or micaceous quartzite. It is not consistent with the hypothesis that the micaceous mineral was formed by replacement.

Commonly, talc occurs in fibrous to feathery aggregates.



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APPENDIX C

WHOLE ROCK ANALYSES

File Name	C:\NEWPET\DATA\BC93WR.ROC			Anhydrous						
Sample	443201	443202	443203	443204	443205	443206	560479	560480	560481	560482
Anhyd Coeff	1.02187	1.04210	1.01440	1.02218	1.00301	1.00200	1.00908	1.01833	1.00918	1.07377
SiO2	75.98	56.18	71.78	77.35	78.84	69.24	75.89	64.45	75.77	54.35
TiO2	0.30	1.43	0.45	0.21	0.18	0.73	0.20	0.82	0.14	1.06
Al2O3	13.01	16.42	13.63	11.68	10.33	14.88	13.06	19.01	13.19	19.31
Fe2O3*	3.24	13.55	4.37	3.34	3.55	4.28	2.52	5.30	2.57	11.77
MnO	0.06	0.15	0.10	0.03	0.03	0.11	0.06	0.03	0.08	0.16
MgO	3.90	4.71	2.09	4.63	2.38	2.17	2.47	0.60	2.13	9.70
CaO	0.20	1.85	1.38	0.16	0.39	3.21	0.21	1.08	1.34	0.34
Na2O	0.36	5.37	4.48	0.20	4.21	2.82	4.53	5.25	2.74	1.83
K2O	2.91	0.07	1.63	2.36	0.03	2.40	1.02	3.35	2.02	1.44
P2O5	0.04	0.27	0.08	0.02	0.06	0.16	0.03	0.10	0.01	0.04
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
LOI	2.87	3.20	2.05	3.11	1.57	1.49	1.68	3.10	2.00	5.82
Mg #	70.47	40.78	48.63	73.29	57.01	50.16	66.00	18.35	62.10	62.00
Cr	280	71	-	70	206	69	69	-	69	-
Ni	3	13	3	2	18	17	1	1	2	11
Co	1	29	6	2	6	3	2	-	1	25
Cu	3	44	9	2	9	8	4	16	1	21
Pb	2	-	-	2	-	-	2	86	2	-
Zn	43	85	65	29	34	88	42	10	99	217
Rb	26	-	15	10	-	25	10	46	20	11
Ba	399	21	558	521	10	511	161	988	363	129
Sr	10	63	142	10	10	220	10	132	81	-
Zr	174	63	51	174	191	230	161	163	222	75
Y	31	42	20	31	30	40	30	20	71	11

File Name	C:\NEWPET\DATA\BC93WR.ROC			Anhydrous						
Sample	560483	560484	560485	560486	560487	560488	560489	560490	560491	560492
Anhyd Coeff	1.11198	1.01906	1.00120	1.00898	1.00080	1.01895	1.04822	1.03445	1.01616	1.02659
SiO2	51.71	86.49	82.87	63.08	72.78	73.51	61.18	77.77	80.97	74.39
TiO2	0.98	0.13	0.08	0.53	0.52	0.22	0.92	0.19	0.14	0.26
Al2O3	17.97	5.97	9.28	16.36	13.66	14.35	16.60	11.90	10.46	14.55
Fe2O3*	15.19	3.38	1.80	6.70	3.72	2.73	9.75	3.87	2.63	3.61
MnO	0.14	0.03	0.01	0.13	0.06	0.04	0.16	0.03	0.03	0.04
MgO	13.11	2.80	0.45	3.19	0.94	4.71	6.86	3.57	3.32	3.74
CaO	0.19	0.31	0.26	2.07	1.08	0.16	0.48	0.17	0.08	0.10
Na2O	0.27	0.22	5.17	7.74	5.79	2.09	3.70	0.52	0.30	0.47
K2O	0.31	0.62	0.04	0.12	1.30	2.16	0.31	1.96	2.04	2.82
P2O5	0.13	0.04	0.04	0.08	0.14	0.03	0.03	0.04	0.02	0.02
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
LOI	7.53	2.15	0.24	1.51	0.83	3.06	4.12	2.81	2.45	3.18
Mg #	63.09	62.13	33.11	48.52	33.35	77.34	58.21	64.62	71.43	67.19
Cr	-	279	206	-	68	209	-	142	209	140
Ni	10	2	2	8	3	2	8	1	2	-
Co	20	2	1	15	6	1	14	3	3	1
Cu	9	18	4	18	6	4	7	2	2	-
Pb	-	8	-	-	-	-	-	-	-	-
Zn	96	300	90	63	52	51	84	56	161	82
Rb	-	10	-	-	15	20	-	16	10	24
Ba	56	1264	30	40	280	153	52	621	2286	554
Sr	11	31	10	30	40	10	10	21	10	10
Zr	78	71	160	61	70	173	73	124	152	164
Y	22	10	40	20	30	20	21	31	30	41

File Name	C:\NEWPET\DATA\BC93WR.ROC			Anhydrous						
Sample	560493	560494	560495	560496	560497	560498	560499	560500	560501	560502
Anhyd Coeff	1.01750	1.01163	1.01502	1.07980	1.04069	1.03648	1.00959	1.02543	1.01554	1.04844
SiO2	84.79	76.88	76.51	57.22	68.32	79.20	69.27	79.66	66.35	50.65
TiO2	0.15	0.19	0.20	0.92	0.68	0.13	0.41	0.14	0.43	1.40
Al2O3	10.13	12.93	13.06	17.01	14.27	9.89	15.85	11.00	14.80	16.65
Fe2O3*	1.32	2.66	2.71	11.72	7.30	3.63	3.86	2.77	6.19	11.10
MnO	-	0.03	0.06	0.16	0.05	0.03	0.07	0.01	0.10	0.26
MgO	0.36	2.81	3.76	11.33	6.85	5.14	2.30	3.68	2.81	6.96
CaO	-	0.11	0.14	-	-	-	4.32	-	5.75	7.31
Na2O	0.24	2.61	2.49	0.30	0.34	0.28	1.68	0.39	2.81	5.28
K2O	2.98	1.74	1.04	1.21	2.10	1.59	2.09	2.26	0.72	0.28
P2O5	0.02	0.03	0.03	0.14	0.09	0.11	0.15	0.09	0.04	0.09
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
LOI	1.58	2.09	2.34	6.16	4.20	2.87	2.22	2.59	2.08	5.30
Mg #	34.78	67.67	73.29	65.69	65.02	73.73	54.17	72.48	47.35	55.39
Cr	-	-	-	148	427	496	345	421	-	-
Ni	3	1	-	6	21	6	1	2	4	21
Co	-	2	1	4	9	4	3	3	10	19
Cu	4	1	-	83	2	-	2	4	20	27
Pb	-	-	-	6	4	-	-	2	2	-
Zn	88	47	32	93	44	29	69	158	67	80
Rb	-	20	10	-	10	5	15	15	5	-
Ba	600	202	112	227	676	591	868	954	284	63
Sr	-	10	20	-	-	-	151	10	173	147
Zr	112	152	173	65	114	176	81	144	61	84
Y	20	20	20	11	42	52	30	31	20	52

File Name	C:\NEWPET\DATA\BC93WR.ROC			Anhydrous						
Sample	560503	560504	560505	560506	560507	560508	560509	560510	560511	560512
Anhyd Coeff	1.01916	1.06281	1.00746	1.05119	1.04998	1.01071	1.00140	1.02480	1.03018	1.01523
SiO2	67.26	49.63	76.67	54.87	57.43	78.53	75.71	81.98	87.98	75.13
TiO2	0.76	1.13	0.17	1.17	1.14	0.19	0.21	0.16	0.07	0.08
Al2O3	15.27	20.11	12.61	19.65	17.87	12.17	12.37	8.50	4.22	15.04
Fe2O3*	5.15	12.33	2.78	8.28	8.37	2.14	3.43	3.98	4.18	1.06
MnO	0.07	0.18	0.06	0.26	0.25	0.03	0.05	0.08	0.04	0.07
MgO	4.26	9.77	1.41	9.22	9.52	1.15	0.92	3.37	2.77	0.27
CaO	2.44	1.97	0.51	0.88	0.57	0.27	1.94	0.14	0.12	1.26
Na2O	0.93	0.91	5.68	5.40	4.68	4.44	5.24	0.20	0.07	4.61
K2O	3.77	3.95	0.08	0.19	0.03	1.02	0.08	1.54	0.46	2.42
P2O5	0.09	0.02	0.02	0.07	0.13	0.05	0.05	0.04	0.07	0.07
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
LOI	2.78	4.96	1.16	5.15	4.96	1.40	0.95	3.04	2.33	2.50
Mg #	62.11	61.07	50.11	68.79	69.27	51.57	34.69	62.68	56.75	33.96
Cr	139	-	-	-	-	138	137	210	282	208
Ni	7	13	6	19	16	6	2	6	5	1
Co	4	22	2	6	8	4	2	-	-	2
Cu	2	613	69	54	6	4	22	10	22	35
Pb	-	-	-	-	-	-	-	-	-	8
Zn	88	132	155	338	220	36	20	94	43	20
Rb	41	32	-	-	-	-	-	-	-	46
Ba	520	478	10	84	10	172	10	512	155	832
Sr	82	74	40	32	21	20	120	-	-	234
Zr	204	43	282	63	105	152	260	154	93	51
Y	51	21	30	11	21	30	50	20	10	10

File Name	C:\NEWPET\DATA\BC93WR.ROC	Anhydrous
Sample	560513	
Anhyd Coeff	1.00908	
SiO2	75.46	
TiO2	0.26	
Al2O3	12.80	
Fe2O3*	3.25	
MnO	0.03	
MgO	1.60	
CaO	1.01	
Na2O	5.38	
K2O	0.17	
P2O5	0.04	
Total	100.00	
LOI	1.77	
Mg #	49.44	
Cr	69	
Ni	1	
Co	1	
Cu	32	
Pb	-	
Zn	24	
Rb	-	
Ba	50	
Sr	71	
Zr	252	
Y	20	

Chemex Labs Ltd.

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PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

A9320794

Comments: ATTN: MURRAY JONES

CERTIFICATE A9320794

WESTMIN RESOURCES LTD.

Project: BELL CK.
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 6-OCT-93.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	5	Assay ring to approx 150 mesh
274	5	0-15 lb crush and split
200	5	Whole rock fusion
238	5	Nitric-aqua-regia digestion

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
594	5	Al2O3 %: Whole rock	ICP-AES	0.01	99.99
588	5	CaO %: Whole rock	ICP-AES	0.01	99.99
590	5	Cr2O3 %: Whole Rock	ICP-AES	0.01	100.00
586	5	Fe2O3(total) %: Whole rock	ICP-AES	0.01	100.00
821	5	K2O %: Whole rock	ICP-AES	0.01	99.99
593	5	MgO %: Whole rock	ICP-AES	0.01	99.99
596	5	MnO %: Whole rock	ICP-AES	0.01	99.99
599	5	Na2O %: Whole rock	ICP-AES	0.01	99.99
597	5	P2O5 %: Whole rock	ICP-AES	0.01	99.99
592	5	SiO2 %: Whole rock	ICP-AES	0.01	99.99
595	5	TiO2 %: Whole rock	ICP-AES	0.01	99.99
475	5	L.O.I. %: Loss on ignition	FURNACE	0.01	99.99
540	5	Total %	CALCULATION	0.01	105.00
891	5	Ba ppm		10	10000
973	5	Nb ppm	ICP	10	10000
1067	5	Rb ppm		5	10000
898	5	Sr ppm		10	10000
974	5	Y ppm	ICP	10	10000
978	5	Zr ppm	ICP	10	10000
1929	5	Co ppm: 9 element, soil & rock	ICP-AES	1	10000
1931	5	Cu ppm: 9 element, soil & rock	ICP-AES	1	10000
1938	5	Mo ppm: 9 element, soil & rock	ICP-AES	1	10000
1940	5	Ni ppm: 9 element, soil & rock	ICP-AES	1	10000
1004	5	Pb ppm: 9 element,soil and rock	ICP-AES	5	10000
1950	5	Zn ppm: 9 element, soil & rock	ICP-AES	2	10000

SAMPLE

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Project : 6107
Comments: ATTN: MURRAY JONES

Page Number : 1-A
Total Pages : 1
Certificate Date: 28-JUL-93
Invoice No. : 19317426
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9317426

SAMPLE	PREP CODE		Al2O3 %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Ba ppm
560479	208	274	12.94	0.21	0.01	2.50	1.01	2.45	0.06	4.49	0.03	75.21	0.20	1.68	100.80	160
560480	208	274	18.67	1.06	< 0.01	5.20	3.29	0.59	0.03	5.16	0.10	63.29	0.81	3.10	101.30	970
560481	208	274	13.07	1.33	0.01	2.55	2.00	2.11	0.08	2.72	0.01	75.08	0.14	2.00	101.10	360
560482	208	274	17.98	0.32	< 0.01	10.96	1.34	9.03	0.15	1.70	0.04	50.62	0.99	5.82	98.96	120
560483	208	274	16.16	0.17	< 0.01	13.66	0.28	11.79	0.13	0.24	0.12	46.50	0.88	7.53	97.47	50
560484	208	274	5.86	0.30	0.04	3.32	0.61	2.75	0.03	0.22	0.04	84.87	0.13	2.15	100.30	1240
560485	208	274	9.27	0.26	0.03	1.80	0.04	0.45	0.01	5.16	0.04	82.77	0.08	0.24	100.15	30
560486	208	274	16.21	2.05	< 0.01	6.64	0.12	3.16	0.13	7.67	0.08	62.52	0.53	1.51	100.65	40
560487	208	274	13.65	1.08	0.01	3.72	1.30	0.94	0.06	5.79	0.14	72.72	0.52	0.83	100.75	280
560488	208	274	14.08	0.16	0.03	2.68	2.12	4.62	0.04	2.05	0.03	72.14	0.22	3.06	101.25	150
560489	208	274	15.84	0.46	< 0.01	9.30	0.30	6.54	0.15	3.53	0.03	58.37	0.88	4.12	99.53	50
560490	208	274	11.50	0.16	0.02	3.74	1.89	3.45	0.03	0.50	0.04	75.18	0.18	2.81	99.50	600
560491	208	274	10.29	0.08	0.03	2.59	2.01	3.27	0.03	0.30	0.02	79.68	0.14	2.45	100.90	2250
560492	208	274	14.17	0.10	0.02	3.52	2.75	3.64	0.04	0.46	0.02	72.46	0.25	3.18	100.60	540
560493	208	274	9.96	< 0.01	< 0.01	1.30	2.93	0.35	< 0.01	0.24	0.02	83.33	0.15	1.58	99.89	590
560494	208	274	12.78	0.11	< 0.01	2.63	1.72	2.78	0.03	2.58	0.03	76.00	0.19	2.09	100.95	200
560495	208	274	12.87	0.14	< 0.01	2.67	1.02	3.70	0.06	2.45	0.03	75.38	0.20	2.34	100.85	110

CERTIFICATION: Stuart Bichler

Chemex Labs Ltd.

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To: WESTMIN RESOURCES LTD.

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Project : 6107
Comments: ATTN: MURRAY JONES

Page Number : 1-B
Total Pages : 1
Certificate Date: 28-JUL-93
Invoice No. : I9317426
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9317426

SAMPLE	PREP CODE		Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
560479	208	274	< 10	10	10	30	160	2	4	< 1	1	2	42
560480	208	274	< 10	45	130	20	160	< 1	16	< 1	1	84	10
560481	208	274	< 10	20	80	70	220	1	1	< 1	2	2	98
560482	208	274	< 10	10	< 10	10	70	23	20	< 1	10	< 2	202
560483	208	274	< 10	< 5	10	20	70	18	8	< 1	9	< 2	86
560484	208	274	< 10	10	30	10	70	2	18	< 1	2	8	294
560485	208	274	< 10	< 5	10	40	160	1	4	< 1	2	< 2	90
560486	208	274	< 10	< 5	30	20	60	15	18	< 1	8	< 2	62
560487	208	274	< 10	15	40	30	70	6	6	< 1	3	< 2	52
560488	208	274	< 10	20	10	20	170	1	4	< 1	2	< 2	50
560489	208	274	< 10	< 5	10	20	70	13	7	< 1	8	< 2	80
560490	208	274	< 10	15	20	30	120	3	2	< 1	1	< 2	54
560491	208	274	< 10	10	10	30	150	3	2	< 1	2	< 2	158
560492	208	274	< 10	23	10	40	160	1	< 1	< 1	< 1	< 2	80
560493	208	274	< 10	< 5	< 10	20	110	< 1	4	< 1	3	< 2	86
560494	208	274	< 10	20	10	20	150	2	1	< 1	1	< 2	46
560495	208	274	< 10	10	20	20	170	1	< 1	< 1	< 1	< 2	32

CERTIFICATION: Ian Bickler

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Project : BELL CK
Comments: ATTN: MURRAY JONES

Page Number : 1-A
Total Pages : 1
Certificate Date: 19-SEP-93
Invoice No. : 19320794
P.O. Number :
Account : GP

*CORRECTED COPY

CERTIFICATE OF ANALYSIS A9320794

SAMPLE	PREP CODE		Al2O3 %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Ba ppm
560496	208	274	15.75	< 0.01	0.02	10.85	1.12	10.49	0.15	0.28	0.13	52.99	0.85	6.16	98.80	210
560497	208	274	13.71	< 0.01	0.06	7.01	2.02	6.58	0.05	0.33	0.09	65.65	0.65	4.20	100.35	650
560498	208	274	9.54	< 0.01	0.07	3.50	1.53	4.96	0.03	0.27	0.11	76.41	0.13	2.87	99.43	570
560499	208	274	15.70	4.28	0.05	3.82	2.07	2.28	0.07	1.66	0.15	68.61	0.41	2.22	101.30	860
560500	208	274	10.73	< 0.01	0.06	2.70	2.20	3.59	0.01	0.38	0.09	77.68	0.14	2.59	100.20	930

CERTIFICATION: Stuart Bichler

*FOR SiO2 SAMPLE DESCRIPTION:560498 AND 560499.

Chemex Labs Ltd.

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Project : BELL CK.
Comments: ATTN: MURRAY JONES

Page Number : 1-B
Total Pages : 1
Certificate Date: 19-SEP-93
Invoice No. : I9320794
P.O. Number :
Account : GP

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CERTIFICATE OF ANALYSIS A9320794

SAMPLE	PREP CODE		Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm			
560496	208	274	< 10	< 5	< 10	10	60	4	77	< 1	6	6	86			
560497	208	274	< 10	10	< 10	40	110	9	2	< 1	20	4	42			
560498	208	274	< 10	5	< 10	50	170	4	< 1	< 1	6	< 2	28			
560499	208	274	< 10	15	150	30	80	3	2	< 1	1	< 2	68			
560500	208	274	< 10	15	10	30	140	3	4	< 1	2	2	154			

CERTIFICATION: Jan Buchler

*FOR SiO2 SAMPLE DESCRIPTION:560498 AND 560499.

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Project :
Comments: ATTN: MURRAY I. JONES

Page Number : 1-A
Total Pages : 1
Certificate Date: 04-OCT-93
Invoice No. : 19321701
P.O. Number : 6107
Account : GP

CERTIFICATE OF ANALYSIS A9321701

SAMPLE	PREP CODE		Al2O3 %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Ba ppm
443201	208	274	12.73	0.20	0.04	3.17	2.85	3.82	0.06	0.35	0.04	74.35	0.29	2.87	100.75	390
443202	208	274	15.76	1.78	0.01	13.00	0.07	4.52	0.14	5.15	0.26	53.91	1.37	3.20	99.17	20
443203	208	274	13.44	1.36	< 0.01	4.31	1.61	2.06	0.10	4.42	0.08	70.76	0.44	2.05	100.65	550
443204	208	274	11.43	0.16	0.01	3.27	2.31	4.53	0.03	0.20	0.02	75.67	0.21	3.11	100.95	510
560501	208	274	14.57	5.66	< 0.01	6.10	0.71	2.77	0.10	2.77	0.04	65.33	0.42	2.08	100.55	280
560502	208	274	15.88	6.97	< 0.01	10.59	0.27	6.64	0.25	5.04	0.09	48.31	1.34	5.30	100.70	60

CERTIFICATION: Hans Bichler

Chemex Labs Ltd.

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To: WESTMIN RESOURCES LTD.

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V7X 1C4

Project :
Comments: ATTN: MURRAY I. JONES

Page Number :1-B
Total Pages :1
Certificate Date: 04-OCT-93
Invoice No. :I9321701
P.O. Number :6107
Account :GP

CERTIFICATE OF ANALYSIS A9321701

SAMPLE	PREP CODE		Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm			
443201	208	274	< 10	25	10	30	170	1	3	< 1	3	2	42			
443202	208	274	< 10	< 5	60	40	60	28	42	1	12	< 2	82			
443203	208	274	< 10	15	140	20	50	6	9	< 1	3	< 2	64			
443204	208	274	< 10	10	10	30	170	2	2	1	2	2	28			
560501	208	274	< 10	5	170	20	60	10	20	1	4	2	66			
560502	208	274	< 10	< 5	140	50	80	18	26	< 1	20	< 2	76			

CERTIFICATION: David Bichler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

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VANCOUVER, BC
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Project :
Comments: ATTN: MURRAY JONES

Page Number : 1-A
Total Pages : 1
Certificate Date: 24-OCT-93
Invoice No. : I9322634
P.O. Number : 6107
Account : GP

CERTIFICATE OF ANALYSIS A9322634

SAMPLE	PREP CODE		Al2O3 %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Ba ppm
443205	208	274	10.30	0.39	0.03	3.54	0.03	2.37	0.03	4.20	0.06	78.60	0.18	1.57	101.30	10
443206	208	274	14.85	3.20	0.01	4.27	2.40	2.17	0.11	2.81	0.16	69.10	0.73	1.49	101.30	510
560503	208	274	14.98	2.39	0.02	5.05	3.70	4.18	0.07	0.91	0.09	66.00	0.75	2.78	100.90	510
560504	208	274	18.92	1.85	< 0.01	11.60	3.72	9.19	0.17	0.86	0.02	46.70	1.06	4.96	99.06	450
560505	208	274	12.52	0.51	< 0.01	2.76	0.08	1.40	0.06	5.64	0.02	76.10	0.17	1.16	100.45	10
560506	208	274	18.69	0.84	< 0.01	7.88	0.18	8.77	0.25	5.14	0.07	52.20	1.11	5.15	100.30	80
560507	208	274	17.02	0.54	< 0.01	7.97	0.03	9.07	0.24	4.46	0.12	54.70	1.09	4.96	100.20	10
560508	208	274	12.04	0.27	0.02	2.12	1.01	1.14	0.03	4.39	0.05	77.70	0.19	1.40	100.35	170
560509	208	274	12.35	1.94	0.02	3.43	0.08	0.92	0.05	5.23	0.05	75.60	0.21	0.95	100.85	10
560510	208	274	8.29	0.14	0.03	3.88	1.50	3.29	0.08	0.20	0.04	80.00	0.16	3.04	100.65	500
560511	208	274	4.10	0.12	0.04	4.06	0.45	2.69	0.04	0.07	0.07	85.40	0.07	2.33	99.44	150

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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PHONE: 604-984-0221

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Project :
Comments: ATTN: MURRAY JONES

Page Number :1-B
Total Pages :1
Certificate Date: 24-OCT-93
Invoice No. :19322634
P.O. Number :6107
Account :GP

CERTIFICATE OF ANALYSIS A9322634

SAMPLE	PREP CODE		Rb ppm	Sr ppm	Nb ppm	Zr ppm	Y ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
443205	208	274	< 5	10	< 10	190	30	6	9	< 1	18	< 2	34
443206	208	274	25	220	< 10	230	40	3	8	< 1	17	< 2	88
560503	208	274	40	80	< 10	200	50	4	2	< 1	7	< 2	86
560504	208	274	30	70	< 10	40	20	21	577	< 1	12	< 2	124
560505	208	274	< 5	40	< 10	280	30	2	68	< 1	6	< 2	154
560506	208	274	< 5	30	< 10	60	10	6	51	< 1	18	< 2	322
560507	208	274	< 5	20	< 10	100	20	8	6	< 1	15	< 2	210
560508	208	274	< 5	20	< 10	150	30	4	4	< 1	6	< 2	36
560509	208	274	< 5	120	< 10	260	50	2	22	< 1	2	< 2	20
560510	208	274	< 5	< 10	< 10	150	20	< 1	10	69	6	< 2	92
560511	208	274	< 5	< 10	< 10	90	10	< 1	21	30	5	< 2	42

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Project : 6107
Comments: ATTN: MURRAY JONES.

Page Number : 1-A
Total Pages : 1
Certificate Date: 17-NOV-93
Invoice No. : I9324371
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9324371

SAMPLE	PREP CODE		Al2O3 %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Ba ppm
560512	208	274	14.81	1.24	0.03	1.04	2.38	0.27	0.07	4.54	0.07	74.00	0.08	2.50	101.05	820
560513	208	274	12.68	1.00	0.01	3.22	0.17	1.59	0.03	5.33	0.04	74.78	0.26	1.77	100.90	50

CERTIFICATION: Stuart Bichler

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Comments: ATTN: MURRAY JONES.

Page Number : 1-B
Total Pages : 1
Certificate Date: 17-NOV-93
Invoice No. : I9324371
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9324371

SAMPLE	PREP CODE		Rb ppm	Sr ppm	Nb ppm	Zr ppm	Y ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm			
560512	208	274	45	230	< 10	50	10	2	34	6	1	8	20			
560513	208	274	< 5	70	< 10	250	20	1	32	4	1	< 2	24			

CERTIFICATION: Ivan Bruchlos

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Project : 6107
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Page Number : 1
Total Pages : 1
Certificate Date: 01-JUN-93
Invoice No. : I9314698
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9314698

SAMPLE	PREP CODE		Ba ppm	Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm				
MP-01	244	--	480	< 10	47	10	40	140				

CERTIFICATION: Stuart Buchler

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Project : BILL CREEK
Comments: ATTN: MURRAY JONES CC: R.L. WRIGHT

Page Number : 1
Total Pages : 1
Certificate Date: 01-JUN-93
Invoice No. : 19314699
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9314699

SAMPLE	PREP CODE	Ba ppm	Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm				
BC-92-17	244 --	10	< 10	< 5	30	40	230				
BC-92-18	244 --	420	< 10	8	1000	20	140				
BC-92-25	244 --	50	< 10	< 5	200	20	110				
BC-92-29	244 --	1150	< 10	10	290	20	70				
BC-92-30	244 --	1420	< 10	18	300	20	60				
BC-92-31	244 --	370	< 10	24	110	10	50				
BC-92-34	244 --	250	< 10	16	520	10	50				
BC-92-35	244 --	780	< 10	18	120	10	80				
BC-92-36	244 --	620	< 10	10	40	20	40				
BC-92-37	244 --	1840	< 10	15	160	30	50				
BC-92-38	244 --	1250	< 10	14	160	20	50				
BC-92-45	244 --	410	< 10	6	240	30	30				
BC-92-46	244 --	430	< 10	10	180	10	10				
BC-92-50	244 --	110	< 10	8	100	20	30				

CERTIFICATION:

APPENDIX D

GEOCHEMICAL RESULTS, ROCK SAMPLES

Chemex Labs Ltd.

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A9317425

Comments: ATTN: MURRAY JONES

CERTIFICATE A9317425

WESTMIN RESOURCES LTD.

Project: 6107
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 27-JUL-93.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	8	Geochem ring to approx 150 mesh
274	8	0-15 lb crush and split
229	8	ICP - AQ Digestion charge
232	8	Perchloric-nitric-HF digestion

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	8	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	8	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	8	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	8	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	8	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	8	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	8	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	8	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	8	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	8	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	8	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	8	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	8	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	8	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	8	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	8	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	8	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	8	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	8	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	8	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	8	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	8	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	8	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	8	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	8	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	8	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	8	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	8	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	8	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	8	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	8	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	8	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	8	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000
25	8	Ba ppm: HClO4-HNO3-HF digestion	AAS	10	10000

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Project : 6107
Comments: ATTN: MURRAY JONES

Page Number : 1-A
Total Pages : 1
Certificate Date: 27-JUL-93
Invoice No. : I9317425
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9317425

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
487075	205	274	< 5	< 0.2	3.15	12	30	< 0.5	< 2	4.72	< 0.5	20	150	58	5.00	10	< 1	0.07	< 10	2.39	1335
487076	205	274	< 5	< 0.2	0.71	14	80	< 0.5	< 2	8.13	1.5	8	103	37	2.45	< 10	< 1	0.12	< 10	0.72	505
487077	205	274	< 5	0.4	0.94	14	50	< 0.5	< 2	5.78	8.0	8	140	59	2.99	< 10	< 1	0.14	< 10	1.44	765
487078	205	274	< 5	0.2	0.59	< 2	90	< 0.5	< 2	0.08	< 0.5	< 1	112	17	2.88	< 10	< 1	0.09	< 10	0.39	105
487079	205	274	55	1.6	0.86	< 2	< 10	< 0.5	< 2	0.03	< 0.5	14	125	24	>15.00	< 10	< 1	0.14	< 10	0.20	35
487080	205	274	55	1.6	0.58	< 2	< 10	< 0.5	< 2	0.02	< 0.5	13	96	19	>15.00	< 10	< 1	0.06	< 10	0.14	20
487081	205	274	< 5	0.6	0.32	2	200	< 0.5	< 2	< 0.01	< 0.5	< 1	171	6	2.19	< 10	< 1	0.20	< 10	0.01	5
487082	205	274	< 5	< 0.2	2.43	< 2	130	< 0.5	< 2	0.08	< 0.5	2	65	26	3.82	< 10	< 1	0.09	< 10	2.27	255

CERTIFICATION: Ian Bichler

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Page Number : 1-B
Total Pages : 1
Certificate Date: 27-JUL-93
Invoice No. : I9317425
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9317425

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Ba ppm
487075	205	274	< 1	0.01	42	440	4	< 2	8	117	< 0.01	< 10	< 10	77	< 10	114	700
487076	205	274	4	0.19	17	610	4	< 2	4	79	0.05	< 10	< 10	54	< 10	138	760
487077	205	274	33	0.04	54	720	10	< 2	3	154	< 0.01	< 10	< 10	54	< 10	546	840
487078	205	274	42	0.03	2	140	4	< 2	1	6	0.13	< 10	< 10	37	< 10	38	1600
487079	205	274	12	0.02	1	< 10	12	< 2	2	1	< 0.01	< 10	< 10	< 1	< 10	24	580
487080	205	274	9	0.01	< 1	< 10	6	< 2	2	1	< 0.01	< 10	< 10	< 1	< 10	22	580
487081	205	274	1	0.02	1	< 10	10	< 2	< 1	3	< 0.01	< 10	< 10	< 1	< 10	8	930
487082	205	274	6	0.01	6	220	10	< 2	3	2	< 0.01	< 10	< 10	36	< 10	40	580

CERTIFICATION: Stuart Bichler

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A9320793

Comments: ATTN: MURRAY JONES

CERTIFICATE A9320793

WESTMIN RESOURCES LTD.

Project: BELL CK.
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 16-SEP-93.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	1	Geochem ring to approx 150 mesh
274	1	0-15 lb crush and split
285	1	ICP - HF digestion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
578	1	Ag ppm: 24 element, rock & core	AAS	0.2	100.0
573	1	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	1	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	1	Be ppm: 24 element, rock & core	ICP-AES	0.5	10000
561	1	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	1	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	1	Cd ppm: 24 element, rock & core	ICP-AES	0.5	10000
563	1	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	1	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	1	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	1	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	1	K %: 24 element, rock & core	ICP-AES	0.01	20.0
570	1	Mg %: 24 element, rock & core	ICP-AES	0.01	20.0
568	1	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	1	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	1	Na %: 24 element, rock & core	ICP-AES	0.01	5.00
564	1	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	1	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	1	Pb ppm: 24 element, rock & core	AAS	2	10000
582	1	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	1	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	1	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	1	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	1	Zn ppm: 24 element, rock & core	ICP-AES	2	10000

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Project : BELL CK.
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Page Number : 1-A
Total Pages : 1
Certificate Date: 16-SEP-93
Invoice No. : I9320793
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9320793

SAMPLE	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
487083	205	274	< 0.2	2.37	820	< 0.5	6	0.23	0.5	< 1	43	4	4.10	1.04	0.08	45

CERTIFICATION: Ian Bichler

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Page Number : 1-B
Total Pages : 1
Certificate Date: 16-SEP-93
Invoice No. : I9320793
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9320793

SAMPLE	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
487083	205	274	1	0.09	1	60	52	12	0.03	52	< 10	84				

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A9322633

Comments: ATTN: MURRAY JONES

CERTIFICATE A9322633

WESTMIN RESOURCES LTD.

Project:
P.O. # : 6107

Samples submitted to our lab in Vancouver, BC.
This report was printed on 20-OCT-93.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	3	Geochem ring to approx 150 mesh
274	3	0-15 lb crush and split
285	3	ICP - HF digestion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
578	3	Ag ppm: 24 element, rock & core	AAS	0.2	100.0
573	3	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	3	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	3	Be ppm: 24 element, rock & core	ICP-AES	0.5	10000
561	3	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	3	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	3	Cd ppm: 24 element, rock & core	ICP-AES	0.5	10000
563	3	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	3	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	3	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	3	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	3	K %: 24 element, rock & core	ICP-AES	0.01	20.0
570	3	Mg %: 24 element, rock & core	ICP-AES	0.01	20.0
568	3	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	3	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	3	Na %: 24 element, rock & core	ICP-AES	0.01	5.00
564	3	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	3	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	3	Pb ppm: 24 element, rock & core	AAS	2	10000
582	3	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	3	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	3	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	3	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	3	Zn ppm: 24 element, rock & core	ICP-AES	2	10000

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Total Pages :1
Certificate Date: 20-OCT-93
Invoice No. :I9322633
P.O. Number :6107
Account :GP

CERTIFICATE OF ANALYSIS A9322633

SAMPLE	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
487084	205	274	< 0.2	5.77	1080	< 0.5	< 2	0.13	< 0.5	1	332	47	1.85	0.56	0.65	195
487085	205	274	6.2	6.46	2600	0.5	< 2	0.26	< 0.5	1	358	31	1.16	1.80	0.37	75
487086	205	274	< 0.2	7.07	160	< 0.5	< 2	0.37	< 0.5	8	168	53	5.99	0.58	4.88	1230

CERTIFICATION: Stan Bichler

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PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

Project :
Comments: ATTN: MURRAY JONES

Page Number : 1-B
Total Pages : 1
Certificate Date: 20-OCT-93
Invoice No. : 19322633
P.O. Number : 6107
Account : GP

CERTIFICATE OF ANALYSIS A9322633

SAMPLE	PREP CODE	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)
487084	205 274	2	3.35	4	10	4	34	0.05	11	< 10	104
487085	205 274	10	1.76	8	70	26	28	0.16	177	< 10	36
487086	205 274	12	1.79	23	160	12	34	0.12	175	< 10	672

CERTIFICATION: Stuart Buchler

APPENDIX E

GEOCHEMICAL RESULTS, SOIL AND SILT SAMPLES

PLUGGER SOIL SAMPLES

RED STAR GRID

RPT/94-004

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

A9321704

Comments: ATTN: MURRAY JONES

CERTIFICATE A9321704

WESTMIN RESOURCES LTD.

Project: BELL CREEK
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 29-SEP-93.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
217	159	Geochem ring entire sample
285	159	ICP - HF digestion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
578	159	Ag ppm: 24 element, rock & core	AAS	0.2	100.0
573	159	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	159	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	159	Be ppm: 24 element, rock & core	ICP-AES	0.5	10000
561	159	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	159	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	159	Cd ppm: 24 element, rock & core	ICP-AES	0.5	10000
563	159	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	159	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	159	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	159	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	159	K %: 24 element, rock & core	ICP-AES	0.01	20.0
570	159	Mg %: 24 element, rock & core	ICP-AES	0.01	20.0
568	159	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	159	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	159	Na %: 24 element, rock & core	ICP-AES	0.01	5.00
564	159	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	159	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	159	Pb ppm: 24 element, rock & core	AAS	2	10000
582	159	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	159	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	159	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	159	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	159	Zn ppm: 24 element, rock & core	ICP-AES	2	10000

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Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Page Number : 1-A
Total Pages : 4
Certificate Date: 29-SEP-93
Invoice No. : I9321704
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9321704

SAMPLE	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
L11+00N 0+00E	217	285	0.2	6.41	560	< 0.5	< 2	1.66	< 0.5	11	161	25	3.13	0.76	1.24	1105
L11+00N 0+25E	217	285	< 0.2	7.10	320	< 0.5	< 2	2.04	< 0.5	20	96	97	6.35	0.64	2.36	1170
L11+00N 0+50E	217	285	< 0.2	6.91	410	< 0.5	< 2	1.68	< 0.5	23	71	106	6.74	0.65	2.72	1285
L11+00N 0+75E	217	285	< 0.2	5.68	460	< 0.5	< 2	1.45	< 0.5	10	272	31	3.02	0.77	1.20	710
L11+00N 1+00E	217	285	< 0.2	6.35	510	< 0.5	2	1.64	< 0.5	11	109	29	3.37	0.78	1.22	930
L11+00N 1+25E	217	285	< 0.2	4.89	420	< 0.5	< 2	0.86	< 0.5	14	465	52	3.24	0.61	1.24	1075
L11+00N 1+50E	217	285	< 0.2	7.01	330	< 0.5	< 2	1.95	< 0.5	13	157	35	4.00	0.55	1.53	1390
L11+00N 2+00E	217	285	< 0.2	5.97	570	< 0.5	< 2	0.68	< 0.5	9	352	22	3.03	1.15	1.99	435
L11+00N 2+25E	217	285	< 0.2	7.23	560	< 0.5	< 2	0.19	< 0.5	15	220	5	4.82	1.19	3.87	475
L11+00N 2+50E	217	285	< 0.2	6.96	450	< 0.5	< 2	0.26	< 0.5	13	230	22	4.01	1.32	2.94	540
L11+00N 2+75E	217	285	0.8	6.61	520	< 0.5	< 2	0.36	< 0.5	7	140	94	3.95	0.99	1.34	450
L11+00N 3+00E	217	285	0.2	7.37	1790	< 0.5	4	1.65	0.5	9	190	235	3.39	1.20	1.59	685
L11+00N 3+25E	217	285	< 0.2	7.73	620	< 0.5	6	2.21	< 0.5	12	227	38	3.60	1.02	1.35	935
L11+00N 3+50E	217	285	< 0.2	6.02	580	< 0.5	< 2	0.62	< 0.5	3	344	23	1.70	1.43	1.53	595
L11+00N 3+75E	217	285	< 0.2	6.73	60	< 0.5	< 2	0.39	< 0.5	12	118	10	3.78	0.16	1.57	720
L11+00N 4+00E	217	285	< 0.2	8.50	390	< 0.5	< 2	0.77	< 0.5	9	79	7	3.05	1.63	1.84	570
L11+00N 4+25E	217	285	< 0.2	7.32	410	< 0.5	< 2	0.99	< 0.5	14	196	49	4.67	1.08	1.94	840
L11+00N 4+50E	217	285	< 0.2	7.40	60	< 0.5	< 2	1.48	< 0.5	20	92	86	5.83	0.20	3.10	800
L11+00N 4+75E	217	285	< 0.2	6.69	230	< 0.5	< 2	2.50	< 0.5	23	227	162	6.74	0.62	2.78	760
L11+00N 5+00E	217	285	< 0.2	7.57	280	< 0.5	< 2	2.43	< 0.5	20	169	69	4.70	1.47	2.48	540
L11+00N 5+25E	217	285	0.6	7.04	970	< 0.5	< 2	1.39	1.5	19	317	75	4.91	1.14	2.28	1135
L11+00N 5+50E	217	285	0.2	7.65	110	< 0.5	< 2	6.42	< 0.5	24	88	86	6.28	0.41	2.54	1405
L11+00N 5+75E	217	285	< 0.2	6.66	1170	< 0.5	< 2	1.75	< 0.5	10	345	56	3.28	1.69	1.01	1240
L11+00N 6+00E	217	285	0.2	7.72	1600	< 0.5	< 2	2.14	< 0.5	24	205	134	4.75	1.64	1.74	1000
L11+00N 6+25E	217	285	0.4	6.37	730	< 0.5	2	2.29	< 0.5	12	420	49	3.56	1.14	1.23	910
L11+00N 6+50E	217	285	0.4	8.06	660	0.5	2	2.56	< 0.5	19	158	91	4.50	1.25	1.62	935
L11+00N 6+75E	217	285	0.2	6.92	700	< 0.5	< 2	2.01	< 0.5	13	245	44	3.43	1.06	1.16	1035
L11+00N 7+00E	217	285	< 0.2	7.32	670	< 0.5	< 2	2.56	< 0.5	18	161	73	4.45	1.16	1.55	865
L11+00N 7+25E	217	285	< 0.2	8.61	670	< 0.5	4	3.42	< 0.5	19	239	53	4.97	1.25	1.60	1285
L11+00N 7+50E	217	285	< 0.2	7.51	640	< 0.5	< 2	2.64	< 0.5	17	97	71	4.54	1.23	1.45	930
L11+00N 7+75E	217	285	0.6	7.74	720	< 0.5	< 2	2.47	< 0.5	22	232	98	5.52	1.18	1.87	1120
L11+00N 8+00E	217	285	0.4	7.01	460	< 0.5	2	0.87	< 0.5	10	202	41	3.16	0.71	0.93	885
L11+00N 8+25E	217	285	0.2	6.39	730	< 0.5	2	1.10	< 0.5	10	375	37	3.04	1.19	0.93	840
L11+00N 8+50E	217	285	< 0.2	7.03	580	< 0.5	< 2	1.32	< 0.5	15	162	52	3.85	1.25	1.44	1265
L11+00N 8+75E	217	285	< 0.2	7.98	560	< 0.5	2	1.92	< 0.5	14	152	45	3.64	0.97	1.22	765
L11+00N 9+00E	217	285	< 0.2	7.48	530	< 0.5	4	1.80	< 0.5	10	111	28	3.17	0.89	1.06	650
L12+00N 0+00E	217	285	< 0.2	7.11	470	< 0.5	< 2	1.98	< 0.5	19	288	71	5.79	0.87	2.44	1050
L12+00N 0+25E	217	285	< 0.2	6.42	620	< 0.5	< 2	1.77	< 0.5	17	165	45	4.57	0.68	1.90	1265
L12+00N 0+50E	217	285	< 0.2	6.85	500	< 0.5	< 2	1.36	< 0.5	11	314	33	3.40	1.04	1.65	705
L12+00N 0+75E	217	285	0.2	6.08	560	< 0.5	< 2	1.32	< 0.5	7	261	23	3.11	0.90	1.63	650

CERTIFICATION:

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Analytical Chemists * Geochemists * Registered Assayers
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British Columbia, Canada V7J 2C1
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P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Certificate Date: 29-SEP-93
Invoice No. : I9321704
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9321704

SAMPLE	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
L11+00N 0+00E	217	285	1	1.73	15	700	4	214	0.25	83	< 10	78				
L11+00N 0+25E	217	285	1	1.78	11	790	< 2	143	0.43	218	< 10	96				
L11+00N 0+50E	217	285	< 1	1.69	10	620	< 2	137	0.42	263	< 10	80				
L11+00N 0+75E	217	285	< 1	1.65	15	380	< 2	220	0.24	88	< 10	44				
L11+00N 1+00E	217	285	1	1.83	13	490	< 2	215	0.26	96	< 10	68				
L11+00N 1+25E	217	285	2	0.75	33	340	4	45	0.22	88	< 10	66				
L11+00N 1+50E	217	285	2	1.71	9	420	4	89	0.30	105	< 10	72				
L11+00N 2+00E	217	285	2	0.88	13	290	< 2	121	0.15	58	< 10	48				
L11+00N 2+25E	217	285	3	0.37	24	480	< 2	25	0.11	110	< 10	30				
L11+00N 2+50E	217	285	2	0.67	12	250	< 2	43	0.11	99	< 10	160				
L11+00N 2+75E	217	285	3	2.28	4	360	8	73	0.17	48	< 10	134				
L11+00N 3+00E	217	285	< 1	1.14	10	320	26	188	0.16	103	< 10	478				
L11+00N 3+25E	217	285	< 1	2.72	16	450	< 2	294	0.31	116	< 10	54				
L11+00N 3+50E	217	285	< 1	0.73	7	140	2	64	0.15	8	< 10	84				
L11+00N 3+75E	217	285	1	3.92	6	400	< 2	24	0.33	125	< 10	52				
L11+00N 4+00E	217	285	< 1	3.22	4	490	< 2	68	0.23	72	< 10	50				
L11+00N 4+25E	217	285	< 1	2.25	9	280	< 2	96	0.33	164	< 10	66				
L11+00N 4+50E	217	285	< 1	2.71	9	160	< 2	56	0.37	149	< 10	72				
L11+00N 4+75E	217	285	2	1.02	11	270	< 2	115	0.39	182	10	154				
L11+00N 5+00E	217	285	< 1	1.22	20	360	< 2	178	0.31	130	< 10	72				
L11+00N 5+25E	217	285	9	1.43	36	550	< 2	255	0.37	231	< 10	258				
L11+00N 5+50E	217	285	< 1	2.81	24	620	< 2	316	0.81	274	10	74				
L11+00N 5+75E	217	285	1	1.04	31	440	4	190	0.32	84	< 10	90				
L11+00N 6+00E	217	285	1	1.25	45	600	2	256	0.42	169	< 10	142				
L11+00N 6+25E	217	285	< 1	1.39	25	470	4	250	0.30	113	< 10	86				
L11+00N 6+50E	217	285	1	1.87	30	560	4	303	0.38	170	< 10	70				
L11+00N 6+75E	217	285	1	1.98	21	600	4	213	0.31	112	< 10	80				
L11+00N 7+00E	217	285	1	2.19	26	610	2	166	0.38	174	< 10	68				
L11+00N 7+25E	217	285	< 1	2.36	21	600	4	237	0.44	165	< 10	86				
L11+00N 7+50E	217	285	< 1	2.13	20	570	2	172	0.40	143	< 10	72				
L11+00N 7+75E	217	285	< 1	2.39	27	690	4	123	0.44	181	< 10	90				
L11+00N 8+00E	217	285	1	3.38	15	390	4	84	0.29	84	< 10	62				
L11+00N 8+25E	217	285	2	2.05	19	460	4	105	0.28	86	< 10	60				
L11+00N 8+50E	217	285	< 1	1.99	27	550	4	228	0.37	128	< 10	88				
L11+00N 8+75E	217	285	1	2.38	21	840	4	401	0.37	118	< 10	74				
L11+00N 9+00E	217	285	< 1	2.47	16	600	4	392	0.31	100	< 10	46				
L12+00N 0+00E	217	285	2	1.58	11	350	8	134	0.36	191	< 10	74				
L12+00N 0+25E	217	285	1	1.53	21	320	4	150	0.28	145	< 10	66				
L12+00N 0+50E	217	285	2	1.55	13	310	2	182	0.23	93	< 10	76				
L12+00N 0+75E	217	285	< 1	1.09	8	400	< 2	109	0.18	29	< 10	80				

CERTIFICATION: Yhai D'Ma

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L12+00N 1+00E	217	285	< 0.2	7.77	1110	< 0.5	< 2	1.05	< 0.5	24	123	71	5.11	1.04	1.93	980
L12+00N 1+25E	217	285	0.2	4.55	400	< 0.5	< 2	0.36	< 0.5	5	560	14	3.59	0.68	1.00	160
L12+00N 1+50E	217	285	< 0.2	6.35	540	< 0.5	< 2	0.57	< 0.5	10	272	15	3.45	1.16	2.34	445
L12+00N 1+75E	217	285	< 0.2	5.70	400	0.5	< 2	0.04	< 0.5	7	443	3	2.32	1.34	2.37	145
L12+00N 2+00E	217	285	< 0.2	7.23	60	0.5	< 2	0.14	< 0.5	26	160	38	2.70	0.43	3.71	440
L12+00N 2+25E	217	285	< 0.2	6.36	460	1.0	< 2	0.43	< 0.5	5	414	34	2.09	1.41	1.40	580
L12+00N 2+50E	217	285	0.4	6.63	1110	1.0	2	< 0.01	< 0.5	1	225	4	0.71	2.47	0.20	30
L12+00N 2+75E	217	285	0.4	6.21	720	< 0.5	< 2	1.66	< 0.5	10	259	202	7.15	1.01	1.32	610
L12+00N 3+00E	217	285	< 0.2	7.18	550	< 0.5	< 2	1.58	< 0.5	9	211	53	2.88	1.11	1.35	685
L12+00N 3+25E	217	285	< 0.2	6.98	510	< 0.5	2	1.81	< 0.5	12	278	47	3.57	0.99	1.33	840
L12+00N 3+50E	217	285	< 0.2	6.49	1170	0.5	< 2	0.72	< 0.5	4	171	33	1.89	1.32	0.97	895
L12+00N 3+75E	217	285	< 0.2	7.40	370	< 0.5	< 2	1.73	< 0.5	10	235	14	3.38	1.23	1.41	650
L12+00N 4+00E	217	285	< 0.2	8.32	610	< 0.5	< 2	0.71	< 0.5	10	93	36	3.59	1.04	1.53	620
L12+00N 4+25E	217	285	< 0.2	6.52	410	< 0.5	< 2	0.63	< 0.5	7	311	25	2.60	0.71	0.87	475
L12+00N 4+50E	217	285	0.4	7.32	550	< 0.5	< 2	2.06	< 0.5	12	160	135	3.76	0.90	1.53	840
L12+00N 4+75E	217	285	< 0.2	7.76	430	< 0.5	< 2	2.85	< 0.5	15	215	47	4.30	0.64	1.44	780
L12+00N 5+00E	217	285	< 0.2	8.43	290	< 0.5	< 2	5.08	< 0.5	20	171	49	4.33	0.45	2.06	1140
L12+00N 5+25E	217	285	< 0.2	8.09	680	< 0.5	< 2	2.37	< 0.5	16	205	41	5.50	0.89	2.26	920
L12+00N 5+50E	217	285	< 0.2	8.26	160	< 0.5	< 2	2.79	< 0.5	28	142	61	5.84	0.54	2.75	1160
L12+00N 5+75E	217	285	0.2	7.59	620	< 0.5	< 2	2.80	< 0.5	22	201	72	5.67	0.72	2.38	1265
L12+00N 6+00E	217	285	0.4	6.81	490	< 0.5	6	4.12	< 0.5	14	185	53	3.82	0.91	1.44	845
L12+00N 6+25E	217	285	0.4	7.45	520	< 0.5	< 2	1.59	< 0.5	18	230	65	5.06	0.88	1.95	1035
L12+00N 6+50E	217	285	0.2	7.15	520	< 0.5	< 2	2.28	< 0.5	19	205	82	4.69	0.67	1.74	1060
L12+00N 6+75E	217	285	< 0.2	6.88	820	< 0.5	6	2.04	< 0.5	13	328	41	3.29	1.31	1.02	975
L12+00N 7+00E	217	285	< 0.2	7.46	470	< 0.5	4	3.20	< 0.5	16	198	76	4.31	0.99	1.43	915
L12+00N 7+25E	217	285	0.4	7.19	530	< 0.5	2	2.86	< 0.5	17	307	63	4.37	0.94	1.46	950
L12+00N 7+50E	217	285	0.2	7.34	670	< 0.5	< 2	2.88	< 0.5	17	227	79	4.54	1.30	1.60	1045
L12+00N 7+75E	217	285	< 0.2	8.10	440	< 0.5	< 2	4.07	< 0.5	26	178	104	6.04	1.18	2.00	1025
L12+00N 8+00E	217	285	< 0.2	8.52	1280	< 0.5	2	3.07	< 0.5	20	98	70	5.56	1.62	1.62	1025
L12+00N 8+25E	217	285	0.2	7.04	400	< 0.5	< 2	2.28	< 0.5	18	277	153	4.45	0.81	1.82	1060
L12+00N 8+50E	217	285	0.2	6.07	730	0.5	2	0.45	< 0.5	10	152	44	2.39	1.43	0.73	950
L12+00N 8+75E	217	285	< 0.2	6.42	790	< 0.5	4	2.63	< 0.5	13	262	51	3.69	1.62	1.14	1510
L12+00N 9+00E	217	285	< 0.2	7.92	760	0.5	< 2	3.29	< 0.5	16	124	65	3.62	1.41	1.42	710
L14+00N 00+00E	217	285	< 0.2	6.84	890	< 0.5	2	2.33	< 0.5	13	325	41	3.62	1.03	1.34	970
L14+00N 00+25E	217	285	< 0.2	7.47	620	< 0.5	8	2.25	< 0.5	13	252	34	3.57	1.00	1.30	795
L14+00N 00+50E	217	285	< 0.2	7.38	410	< 0.5	< 2	2.71	< 0.5	14	233	37	4.10	0.70	1.69	1120
L14+00N 00+75E	217	285	< 0.2	6.20	700	< 0.5	< 2	2.07	< 0.5	13	236	36	3.89	0.93	1.21	7140
L14+00N 01+00E	217	285	< 0.2	7.01	600	< 0.5	2	2.36	< 0.5	12	197	33	3.19	1.17	1.26	1265
L14+00N 01+25E	217	285	< 0.2	6.80	670	< 0.5	< 2	2.25	< 0.5	11	234	29	2.96	1.14	1.30	1960
L14+00N 01+50E	217	285	< 0.2	7.20	620	< 0.5	< 2	2.69	< 0.5	13	258	29	3.39	1.06	1.44	955

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Certificate Date: 29-SEP-93
Invoice No. : I9321704
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9321704

SAMPLE	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
L12+00N 1+00E	217	285	11	1.19	18	420	< 2	75	0.20	192	< 10	88				
L12+00N 1+25E	217	285	108	1.47	7	170	< 2	36	0.10	49	< 10	6				
L12+00N 1+50E	217	285	4	0.66	9	610	< 2	91	0.14	70	< 10	36				
L12+00N 1+75E	217	285	4	0.28	6	100	< 2	15	0.06	21	< 10	8				
L12+00N 2+00E	217	285	1	1.54	18	200	< 2	24	0.08	72	< 10	66				
L12+00N 2+25E	217	285	< 1	1.06	8	150	8	61	0.10	23	< 10	146				
L12+00N 2+50E	217	285	1	0.37	3	40	16	11	0.07	1	< 10	< 2				
L12+00N 2+75E	217	285	1	1.80	16	780	4	278	0.35	128	< 10	100				
L12+00N 3+00E	217	285	1	1.83	12	280	4	206	0.21	69	< 10	100				
L12+00N 3+25E	217	285	< 1	2.20	16	520	2	247	0.30	111	< 10	62				
L12+00N 3+50E	217	285	< 1	1.97	6	220	8	67	0.14	22	< 10	74				
L12+00N 3+75E	217	285	< 1	2.58	4	490	< 2	111	0.22	81	< 10	52				
L12+00N 4+00E	217	285	1	3.68	4	510	< 2	75	0.30	87	< 10	56				
L12+00N 4+25E	217	285	< 1	3.41	4	410	< 2	73	0.27	55	< 10	44				
L12+00N 4+50E	217	285	< 1	1.89	14	390	< 2	163	0.26	96	< 10	64				
L12+00N 4+75E	217	285	1	2.73	11	500	< 2	327	0.32	147	< 10	48				
L12+00N 5+00E	217	285	1	1.90	19	390	< 2	145	0.31	195	10	50				
L12+00N 5+25E	217	285	1	1.86	6	280	< 2	129	0.38	158	10	68				
L12+00N 5+50E	217	285	1	1.70	24	310	< 2	330	0.39	287	10	84				
L12+00N 5+75E	217	285	2	1.84	39	420	< 2	301	0.36	241	< 10	106				
L12+00N 6+00E	217	285	1	2.23	25	460	< 2	278	0.34	150	10	56				
L12+00N 6+25E	217	285	< 1	2.96	29	550	< 2	104	0.42	171	10	98				
L12+00N 6+50E	217	285	1	2.57	27	730	< 2	135	0.42	150	< 10	76				
L12+00N 6+75E	217	285	1	1.93	22	520	4	175	0.29	104	< 10	58				
L12+00N 7+00E	217	285	2	2.07	21	560	< 2	219	0.37	145	10	60				
L12+00N 7+25E	217	285	< 1	2.27	23	650	< 2	250	0.37	160	10	56				
L12+00N 7+50E	217	285	1	1.75	24	530	2	190	0.34	177	10	64				
L12+00N 7+75E	217	285	< 1	1.99	21	700	< 2	182	0.46	238	10	76				
L12+00N 8+00E	217	285	< 1	2.43	15	610	< 2	167	0.41	210	10	76				
L12+00N 8+25E	217	285	2	2.64	27	710	< 2	190	0.36	176	< 10	64				
L12+00N 8+50E	217	285	1	2.26	23	520	2	55	0.26	57	< 10	60				
L12+00N 8+75E	217	285	1	2.35	19	670	12	63	0.32	92	< 10	80				
L12+00N 9+00E	217	285	2	2.33	29	1050	6	624	0.41	137	< 10	56				
L14+00N 00+00E	217	285	1	2.21	21	670	8	404	0.33	112	< 10	54				
L14+00N 00+25E	217	285	1	2.24	18	500	4	353	0.32	100	< 10	56				
L14+00N 00+50E	217	285	1	2.71	14	530	4	231	0.31	152	< 10	64				
L14+00N 00+75E	217	285	6	1.93	19	1610	2	395	0.30	104	10	40				
L14+00N 01+00E	217	285	1	2.16	18	780	4	478	0.34	99	< 10	42				
L14+00N 01+25E	217	285	1	2.16	17	630	4	432	0.27	92	< 10	68				
L14+00N 01+50E	217	285	1	2.40	20	710	6	496	0.31	111	< 10	62				

CERTIFICATION: Jhai D'Ma

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To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Certificate Date: 29-SEP-93
Invoice No. :19321704
P.O. Number :
Account :GP

CERTIFICATE OF ANALYSIS A9321704

SAMPLE	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
L14+00N 01+75E	217	285	< 0.2	5.92	130	< 0.5	< 2	0.42	< 0.5	3	385	22	2.21	0.75	2.10	445
L14+00N 02+00E	217	285	< 0.2	6.97	470	0.5	< 2	0.73	< 0.5	3	254	37	2.42	1.61	1.31	590
L14+00N 02+25E	217	285	< 0.2	6.96	400	0.5	< 2	1.04	< 0.5	4	270	57	2.72	1.35	1.54	575
L14+00N 02+50E	217	285	< 0.2	6.01	310	0.5	< 2	0.46	< 0.5	< 1	289	16	1.59	1.46	0.92	390
L14+00N 02+75E	217	285	< 0.2	7.73	490	1.0	< 2	0.92	< 0.5	< 1	180	1	2.18	2.55	1.58	615
L14+00N 03+00E	217	285	< 0.2	7.70	440	< 0.5	< 2	2.27	< 0.5	15	154	60	4.66	0.81	1.76	1045
L14+00N 03+25E	217	285	< 0.2	7.91	660	0.5	< 2	2.28	< 0.5	12	131	37	3.62	1.26	1.39	775
L14+00N 03+50E	217	285	< 0.2	7.45	540	1.0	< 2	1.84	< 0.5	10	163	26	3.46	1.24	1.52	695
L14+00N 03+75E	217	285	< 0.2	7.33	560	1.5	< 2	2.61	< 0.5	11	146	34	3.56	0.94	1.50	885
L14+00N 04+00E	217	285	< 0.2	6.75	230	0.5	< 2	0.57	< 0.5	3	111	12	2.86	0.40	0.56	635
L14+00N 04+25E	217	285	< 0.2	8.03	120	< 0.5	< 2	0.65	< 0.5	25	64	110	7.51	0.35	3.31	1665
L14+00N 04+50E	217	285	< 0.2	7.98	560	< 0.5	< 2	2.58	< 0.5	15	85	56	4.47	0.97	1.68	880
L14+00N 04+75E	217	285	< 0.2	7.89	540	0.5	< 2	1.86	< 0.5	13	84	59	4.07	1.18	1.34	700
L14+00N 05+00E	217	285	< 0.2	7.87	160	0.5	< 2	2.21	< 0.5	34	40	42	7.72	0.32	2.96	2590
L14+00N 05+25E	217	285	< 0.2	8.96	630	1.5	< 2	3.85	< 0.5	26	70	138	7.00	1.10	2.68	1455
L14+00N 05+50E	217	285	< 0.2	6.86	1290	< 0.5	< 2	1.24	< 0.5	10	76	48	3.34	1.82	1.25	585
L14+00N 05+75E	217	285	< 0.2	7.71	990	< 0.5	< 2	2.64	< 0.5	14	115	83	4.69	1.34	1.83	920
L14+00N 06+00E	217	285	< 0.2	7.97	850	0.5	< 2	2.71	< 0.5	25	190	158	6.37	1.19	2.88	1240
L14+00N 06+25E	217	285	< 0.2	7.39	430	< 0.5	< 2	3.20	< 0.5	15	75	81	4.91	0.86	1.60	975
L14+00N 06+50E	217	285	< 0.2	7.99	240	1.0	< 2	5.57	< 0.5	26	216	103	6.64	0.70	3.53	1310
L14+00N 06+75E	217	285	< 0.2	7.69	540	< 0.5	< 2	2.58	< 0.5	16	91	81	4.51	1.08	1.59	995
L14+00N 07+00E	217	285	< 0.2	8.94	730	< 0.5	< 2	3.89	< 0.5	21	99	92	5.92	1.24	2.19	1535
L14+00N 07+25E	217	285	0.2	7.44	500	< 0.5	< 2	4.06	< 0.5	18	165	99	4.53	0.81	1.59	940
L14+00N 07+50E	217	285	< 0.2	8.01	410	< 0.5	< 2	4.04	< 0.5	17	110	82	5.12	0.97	1.90	960
L14+00N 07+75E	217	285	< 0.2	7.40	570	< 0.5	< 2	2.74	< 0.5	14	107	94	4.47	0.97	1.58	1000
L14+00N 08+00E	217	285	< 0.2	7.87	440	< 0.5	< 2	4.20	< 0.5	20	172	106	5.30	0.81	2.54	975
L14+00N 08+25E	217	285	< 0.2	7.44	450	< 0.5	< 2	3.28	< 0.5	10	113	43	3.71	0.92	1.26	825
L14+00N 08+50E	217	285	< 0.2	7.70	890	< 0.5	< 2	3.17	< 0.5	19	116	103	4.86	1.21	1.75	1070
L14+00N 08+75E	217	285	< 0.2	8.16	380	< 0.5	< 2	3.96	< 0.5	20	127	136	5.77	0.93	2.20	1040
L14+00N 09+00E	217	285	< 0.2	8.18	480	< 0.5	< 2	3.16	< 0.5	18	99	84	5.02	0.91	2.42	1005
L14+00N 09+25E	217	285	< 0.2	7.82	680	< 0.5	< 2	2.28	< 0.5	13	111	48	3.78	1.26	1.33	930
L14+00N 09+50E	217	285	< 0.2	7.61	690	< 0.5	< 2	1.38	< 0.5	12	69	44	4.47	1.07	1.60	1225
L14+00N 09+75E	217	285	< 0.2	6.58	290	< 0.5	< 2	3.06	< 0.5	15	72	61	5.17	0.51	2.09	1150
L14+00N 10+00E	217	285	< 0.2	8.86	700	< 0.5	< 2	1.95	< 0.5	18	79	84	4.81	1.64	1.65	905
L16+00N 0+00E	217	285	< 0.2	6.23	390	< 0.5	< 2	0.13	< 0.5	4	87	59	4.48	1.27	1.80	150
L16+00N 0+25E	217	285	< 0.2	7.67	60	< 0.5	< 2	0.37	< 0.5	26	33	49	7.75	0.11	2.62	1105
L16+00N 0+50E	217	285	< 0.2	7.06	270	< 0.5	< 2	1.88	< 0.5	19	99	29	6.10	0.53	2.30	950
L16+00N 0+75E	217	285	< 0.2	7.83	890	< 0.5	2	2.15	< 0.5	11	59	33	3.08	1.60	1.77	550
L16+00N 1+00E	217	285	< 0.2	6.30	450	< 0.5	< 2	1.22	< 0.5	7	122	24	3.04	0.89	1.37	800
L16+00N 1+25E	217	285	< 0.2	6.52	440	< 0.5	< 2	1.47	< 0.5	7	86	24	2.74	0.87	1.29	755

CERTIFICATION: Jhai D Ma

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To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
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V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Page Number :3-B
Total Pages :4
Certificate Date: 29-SEP-93
Invoice No. : I9321704
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CERTIFICATE OF ANALYSIS A9321704

SAMPLE	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)
L14+00N 01+75E	217	285	1	1.17	7	210	< 2	52	0.10	32	< 10	76
L14+00N 02+00E	217	285	2	1.59	6	220	6	121	0.15	38	< 10	118
L14+00N 02+25E	217	285	1	1.86	8	190	2	157	0.15	42	< 10	146
L14+00N 02+50E	217	285	< 1	2.02	3	70	< 2	57	0.06	8	< 10	100
L14+00N 02+75E	217	285	< 1	1.61	3	90	< 2	114	0.09	10	< 10	136
L14+00N 03+00E	217	285	< 1	2.52	18	450	2	201	0.38	170	< 10	84
L14+00N 03+25E	217	285	< 1	2.62	17	510	4	490	0.35	125	< 10	72
L14+00N 03+50E	217	285	< 1	2.12	15	440	4	310	0.32	119	< 10	68
L14+00N 03+75E	217	285	< 1	2.46	19	630	4	426	0.32	121	< 10	70
L14+00N 04+00E	217	285	< 1	4.83	5	620	< 2	68	0.29	76	< 10	50
L14+00N 04+25E	217	285	2	3.44	11	320	< 2	46	0.45	402	< 10	98
L14+00N 04+50E	217	285	< 1	2.11	19	520	4	325	0.33	156	< 10	78
L14+00N 04+75E	217	285	1	1.95	23	490	4	266	0.35	133	< 10	80
L14+00N 05+00E	217	285	< 1	3.08	25	910	< 2	124	1.12	301	< 10	116
L14+00N 05+25E	217	285	1	1.49	30	720	4	304	0.49	308	< 10	124
L14+00N 05+50E	217	285	< 1	1.12	22	440	4	227	0.31	95	< 10	84
L14+00N 05+75E	217	285	< 1	1.75	37	550	6	223	0.38	165	< 10	112
L14+00N 06+00E	217	285	< 1	2.66	49	650	< 2	111	0.49	252	< 10	124
L14+00N 06+25E	217	285	1	2.02	16	520	< 2	151	0.41	189	< 10	88
L14+00N 06+50E	217	285	< 1	2.65	54	780	< 2	235	0.43	268	< 10	84
L14+00N 06+75E	217	285	< 1	2.27	25	450	< 2	197	0.37	166	< 10	86
L14+00N 07+00E	217	285	< 1	1.87	21	940	< 2	209	0.47	223	< 10	128
L14+00N 07+25E	217	285	< 1	1.51	32	590	< 2	137	0.35	182	< 10	86
L14+00N 07+50E	217	285	< 1	1.96	22	460	< 2	173	0.41	197	< 10	90
L14+00N 07+75E	217	285	< 1	2.32	26	580	< 2	172	0.37	166	< 10	92
L14+00N 08+00E	217	285	< 1	2.24	40	600	< 2	321	0.41	222	< 10	78
L14+00N 08+25E	217	285	< 1	2.44	19	720	< 2	165	0.36	99	< 10	82
L14+00N 08+50E	217	285	< 1	1.78	28	540	< 2	362	0.39	179	< 10	100
L14+00N 08+75E	217	285	< 1	2.23	27	630	< 2	246	0.41	240	< 10	92
L14+00N 09+00E	217	285	< 1	2.82	24	800	< 2	430	0.42	205	< 10	78
L14+00N 09+25E	217	285	< 1	2.64	20	470	4	430	0.37	137	< 10	82
L14+00N 09+50E	217	285	< 1	3.07	16	670	4	314	0.35	141	< 10	80
L14+00N 09+75E	217	285	< 1	2.87	9	380	< 2	183	0.27	193	< 10	80
L14+00N 10+00E	217	285	< 1	2.34	28	820	6	431	0.42	167	< 10	92
L16+00N 0+00E	217	285	2	0.83	3	560	< 2	32	0.05	24	< 10	28
L16+00N 0+25E	217	285	1	3.43	10	1100	< 2	28	0.63	364	< 10	94
L16+00N 0+50E	217	285	< 1	2.00	13	470	< 2	205	0.34	246	< 10	92
L16+00N 0+75E	217	285	< 1	2.06	19	900	4	813	0.27	86	< 10	66
L16+00N 1+00E	217	285	1	2.04	9	440	4	230	0.21	83	< 10	80
L16+00N 1+25E	217	285	< 1	2.35	8	470	4	231	0.21	75	< 10	80

CERTIFICATION: Jhai D'Ma

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Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Certificate Date: 29-SEP-93
Invoice No. : I9321704
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CERTIFICATE OF ANALYSIS A9321704

SAMPLE	PREP CODE	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
L16+00N 1+50E	217 285	< 0.2	6.68	450	< 0.5	< 2	1.43	< 0.5	8	126	20	2.79	0.91	1.63	750
L16+00N 1+75E	217 285	< 0.2	7.47	680	< 0.5	< 2	2.35	< 0.5	10	132	28	2.83	1.07	1.68	625
L16+00N 2+00E	217 285	< 0.2	6.82	480	< 0.5	2	1.62	< 0.5	8	132	32	2.58	1.13	1.23	530
L16+00N 2+25E	217 285	< 0.2	7.27	570	< 0.5	2	1.49	< 0.5	10	87	57	3.19	1.50	1.48	975
L16+00N 2+50E	217 285	< 0.2	4.54	1610	< 0.5	6	0.59	< 0.5	8	205	43	3.73	1.29	1.12	1135
L16+00N 2+75E	217 285	< 0.2	6.44	630	< 0.5	4	1.12	< 0.5	10	138	45	3.46	1.24	1.57	1780
L16+00N 3+00E	217 285	< 0.2	12.05	830	< 0.5	< 2	1.78	< 0.5	10	258	13	4.93	2.24	2.65	1215
L16+00N 3+25E	217 285	< 0.2	7.29	240	< 0.5	< 2	0.71	< 0.5	11	79	17	3.39	0.58	1.64	810
L16+00N 3+50E	217 285	< 0.2	8.03	840	< 0.5	2	3.05	< 0.5	12	133	35	3.47	1.24	1.60	665
L16+00N 3+75E	217 285	< 0.2	5.55	260	< 0.5	< 2	3.61	< 0.5	6	108	13	2.33	0.48	0.79	880
L16+00N 4+00E	217 285	< 0.2	8.20	460	< 0.5	< 2	2.31	< 0.5	14	73	60	4.72	0.75	2.08	1150
L16+00N 4+25E	217 285	< 0.2	6.59	1640	< 0.5	2	1.56	5.0	12	100	66	3.95	1.96	1.29	925
L16+00N 4+50E	217 285	0.4	8.39	780	< 0.5	< 2	1.90	0.5	23	57	100	5.88	0.79	2.28	870
L16+00N 4+75E	217 285	< 0.2	6.92	440	< 0.5	< 2	1.73	< 0.5	10	101	34	3.33	0.75	1.37	980
L16+00N 5+00E	217 285	< 0.2	8.53	1280	0.5	< 2	2.02	< 0.5	10	75	58	4.07	1.60	1.55	1400
L16+00N 5+25E	217 285	< 0.2	7.39	760	< 0.5	< 2	1.80	< 0.5	15	115	79	4.02	1.19	1.47	925
L16+00N 5+50E	217 285	< 0.2	8.67	520	< 0.5	< 2	2.65	< 0.5	18	68	84	5.55	1.73	1.79	1055
L16+00N 5+75E	217 285	< 0.2	6.17	350	< 0.5	< 2	1.60	< 0.5	9	114	30	3.32	0.68	1.33	860
L16+00N 6+00E	217 285	< 0.2	7.39	460	0.5	< 2	1.85	< 0.5	13	111	48	4.13	0.85	1.64	1130
L16+00N 6+25E	217 285	< 0.2	7.77	630	< 0.5	< 2	2.24	< 0.5	13	159	55	3.97	1.10	1.44	840
L16+00N 6+50E	217 285	< 0.2	8.00	380	< 0.5	< 2	3.26	< 0.5	15	101	79	4.86	0.86	1.74	1030
L16+00N 6+75E	217 285	< 0.2	8.69	280	< 0.5	< 2	6.53	< 0.5	28	225	89	7.13	0.90	3.46	1310
L16+00N 7+00E	217 285	< 0.2	9.27	210	< 0.5	< 2	8.26	< 0.5	28	232	72	6.73	0.64	3.19	1170
L16+00N 7+25E	217 285	< 0.2	8.29	220	< 0.5	< 2	6.32	< 0.5	25	155	125	6.22	0.58	2.72	1165
L16+00N 7+50E	217 285	< 0.2	8.36	280	< 0.5	< 2	4.85	< 0.5	27	307	105	6.41	0.79	3.51	1190
L16+00N 7+75E	217 285	< 0.2	8.79	720	< 0.5	< 2	2.61	< 0.5	20	76	198	5.61	1.73	2.55	850
L16+00N 8+00E	217 285	< 0.2	10.10	640	< 0.5	< 2	3.30	< 0.5	17	67	232	6.12	1.45	3.13	1020
L16+00N 8+25E	217 285	< 0.2	7.17	400	< 0.5	4	2.35	< 0.5	10	108	28	3.65	0.71	1.22	1205
L16+00N 8+50E	217 285	< 0.2	7.75	780	< 0.5	< 2	3.02	< 0.5	9	95	41	3.24	1.19	1.07	565
L16+00N 8+75E	217 285	< 0.2	8.36	390	< 0.5	< 2	5.21	< 0.5	22	133	91	5.65	0.85	2.43	1055
L16+00N 9+00E	217 285	< 0.2	7.58	350	< 0.5	< 2	4.58	< 0.5	26	262	113	5.59	0.65	3.09	965
L16+00N 9+25E	217 285	< 0.2	7.92	360	< 0.5	< 2	2.02	< 0.5	15	90	57	4.93	0.88	1.61	1085
L16+00N 9+50E	217 285	< 0.2	8.67	800	< 0.5	< 2	2.01	< 0.5	17	97	83	4.41	1.35	1.56	785
L16+00N 0+25W	217 285	< 0.2	5.75	400	< 0.5	< 2	0.41	< 0.5	4	174	15	3.92	1.05	2.40	395
L16+00N 0+50W	217 285	< 0.2	6.04	1010	< 0.5	< 2	1.21	< 0.5	13	108	48	4.01	1.09	1.77	1370
L16+00N 0+75W	217 285	< 0.2	8.13	180	< 0.5	< 2	3.22	< 0.5	25	62	141	8.13	0.33	2.88	1850
L16+00N 1+00W	217 285	< 0.2	6.62	1070	< 0.5	< 2	2.06	< 0.5	5	129	22	3.01	1.19	0.83	1215
DUPLICATE #1	217 285	< 0.2	8.14	440	< 0.5	< 2	4.07	< 0.5	20	162	97	5.24	0.79	2.46	965
DUPLICATE #2	217 285	< 0.2	8.14	810	< 0.5	< 2	2.30	< 0.5	14	108	60	3.87	1.27	1.51	710

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Page Number :4-B
Total Pages :4
Certificate Date: 29-SEP-93
Invoice No. :I9321704
P.O. Number :
Account :GP

CERTIFICATE OF ANALYSIS A9321704

SAMPLE	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
L16+00N 1+50E	217	285	< 1	2.21	11	480	4	261	0.19	73	< 10	74				
L16+00N 1+75E	217	285	< 1	2.07	18	610	4	587	0.24	80	< 10	78				
L16+00N 2+00E	217	285	< 1	2.48	12	400	4	359	0.21	65	< 10	84				
L16+00N 2+25E	217	285	< 1	1.88	15	410	2	327	0.24	87	< 10	134				
L16+00N 2+50E	217	285	< 1	0.59	13	2840	4	35	0.19	72	< 10	64				
L16+00N 2+75E	217	285	< 1	1.61	14	380	8	162	0.17	72	< 10	120				
L16+00N 3+00E	217	285	2	3.83	6	870	2	153	0.45	139	< 10	130				
L16+00N 3+25E	217	285	< 1	3.70	4	360	< 2	67	0.26	97	< 10	82				
L16+00N 3+50E	217	285	< 1	2.72	19	400	4	590	0.35	128	< 10	68				
L16+00N 3+75E	217	285	< 1	2.89	6	430	2	234	0.21	68	< 10	44				
L16+00N 4+00E	217	285	1	2.70	17	550	2	318	0.35	213	< 10	112				
L16+00N 4+25E	217	285	16	1.38	49	690	2	257	0.31	226	< 10	288				
L16+00N 4+50E	217	285	4	2.48	25	430	< 2	476	0.58	319	< 10	202				
L16+00N 4+75E	217	285	< 1	2.74	14	460	4	188	0.25	100	< 10	78				
L16+00N 5+00E	217	285	< 1	2.48	12	850	8	370	0.39	117	< 10	110				
L16+00N 5+25E	217	285	< 1	2.33	32	610	4	358	0.36	136	< 10	96				
L16+00N 5+50E	217	285	< 1	3.07	11	630	< 2	191	0.43	204	< 10	104				
L16+00N 5+75E	217	285	< 1	2.17	12	320	4	110	0.21	96	< 10	76				
L16+00N 6+00E	217	285	< 1	2.14	18	400	2	210	0.31	131	< 10	80				
L16+00N 6+25E	217	285	< 1	2.36	21	600	4	348	0.33	136	< 10	80				
L16+00N 6+50E	217	285	< 1	2.13	22	510	2	186	0.37	186	< 10	84				
L16+00N 6+75E	217	285	< 1	1.68	53	710	< 2	259	0.57	319	< 10	98				
L16+00N 7+00E	217	285	< 1	0.87	52	1210	< 2	311	0.50	322	< 10	82				
L16+00N 7+25E	217	285	< 1	1.42	34	870	< 2	403	0.45	294	< 10	76				
L16+00N 7+50E	217	285	< 1	2.25	64	670	< 2	163	0.43	260	< 10	86				
L16+00N 7+75E	217	285	3	1.94	14	1690	< 2	392	0.52	236	< 10	86				
L16+00N 8+00E	217	285	1	1.80	19	1420	4	521	0.58	255	< 10	86				
L16+00N 8+25E	217	285	< 1	2.61	11	490	2	171	0.30	99	< 10	80				
L16+00N 8+50E	217	285	< 1	2.33	20	740	6	600	0.34	111	< 10	64				
L16+00N 8+75E	217	285	< 1	2.02	34	980	< 2	457	0.49	269	< 10	78				
L16+00N 9+00E	217	285	< 1	1.97	59	660	< 2	243	0.41	232	< 10	74				
L16+00N 9+25E	217	285	1	2.52	22	640	< 2	106	0.41	170	< 10	86				
L16+00N 9+50E	217	285	1	2.21	34	490	6	482	0.40	152	< 10	84				
L16+00N 0+25W	217	285	3	0.65	26	160	< 2	66	0.15	95	< 10	46				
L16+00N 0+50W	217	285	1	1.77	20	370	4	144	0.24	127	< 10	82				
L16+00N 0+75W	217	285	< 1	2.29	11	530	< 2	172	0.49	371	< 10	102				
L16+00N 1+00W	217	285	1	1.85	8	490	2	94	0.24	74	< 10	66				
DUPLICATE #1	217	285	< 1	2.54	40	700	< 2	339	0.41	227	< 10	78				
DUPLICATE #2	217	285	< 1	2.46	29	560	6	555	0.37	134	< 10	74				

CERTIFICATION: Jhai D Ma

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

A9322632

Comments: ATTN: MURRAY JONES

CERTIFICATE A9322632

WESTMIN RESOURCES LTD.

Project:
P.O. # : 6107

Samples submitted to our lab in Vancouver, BC.
This report was printed on 22-OCT-93.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
217	34	Geochem ring entire sample
285	34	ICP - HF digestion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
578	34	Ag ppm: 24 element, rock & core	AAS	0.2	100.0
573	34	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	34	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	34	Be ppm: 24 element, rock & core	ICP-AES	0.5	10000
561	34	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	34	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	34	Cd ppm: 24 element, rock & core	ICP-AES	0.5	10000
563	34	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	34	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	34	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	34	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	34	K %: 24 element, rock & core	ICP-AES	0.01	20.0
570	34	Mg %: 24 element, rock & core	ICP-AES	0.01	20.0
568	34	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	34	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	34	Na %: 24 element, rock & core	ICP-AES	0.01	5.00
564	34	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	34	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	34	Pb ppm: 24 element, rock & core	AAS	2	10000
582	34	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	34	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	34	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	34	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	34	Zn ppm: 24 element, rock & core	ICP-AES	2	10000

Chemex Labs Ltd.

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To: WESTMIN RESOURCES LTD.

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VANCOUVER, BC
V7X 1C4

Project :
Comments: ATTN: MURRAY JONES

Page Number :1-A
Total Pages :1
Certificate Date: 22-OCT-93
Invoice No. :19322632
P.O. Number :6107
Account :GP

CERTIFICATE OF ANALYSIS A9322632

SAMPLE	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
800N 1+75E	217	285	0.2	6.94	490	< 0.5	4	1.83	< 0.5	13	118	66	3.74	0.85	1.50	830
800N 2+00E	217	285	0.2	7.05	560	< 0.5	4	1.18	< 0.5	13	89	52	4.50	0.93	2.40	865
800N 2+25E	217	285	0.2	5.99	430	< 0.5	2	1.65	< 0.5	10	148	46	3.13	0.81	1.31	785
800N 2+50E	217	285	0.2	5.79	540	< 0.5	2	1.19	0.5	10	196	41	3.21	0.91	1.37	590
800N 2+75E	217	285	0.2	5.76	540	< 0.5	2	1.23	< 0.5	11	139	45	3.55	0.89	1.16	720
800N 3+00E	217	285	< 0.2	6.31	560	< 0.5	4	1.23	0.5	10	157	62	3.48	0.95	1.57	595
800N 3+25E	217	285	< 0.2	8.03	950	< 0.5	8	2.00	1.5	18	133	107	4.40	1.19	1.74	1065
800N 3+50E	217	285	< 0.2	7.50	720	< 0.5	4	1.37	0.5	13	133	95	3.73	1.34	1.61	660
900N 1+75E	217	285	< 0.2	6.80	910	< 0.5	2	0.54	< 0.5	9	48	26	2.88	1.64	2.33	360
900N 2+00E	217	285	< 0.2	7.35	1340	< 0.5	6	0.18	0.5	7	57	52	2.84	1.75	2.52	245
900N 2+25E	217	285	< 0.2	7.22	600	< 0.5	4	0.29	1.0	13	94	80	4.60	1.17	3.32	495
900N 2+50E	217	285	< 0.2	7.08	640	< 0.5	4	0.61	4.5	10	74	118	4.71	1.18	2.81	615
900N 2+75E	217	285	< 0.2	6.85	570	< 0.5	8	1.27	3.0	10	68	128	4.21	1.12	1.72	580
900N 3+00E	217	285	< 0.2	5.99	490	< 0.5	6	1.29	< 0.5	9	220	68	3.30	0.84	1.31	790
900N 3+25E	217	285	< 0.2	7.18	440	< 0.5	6	0.62	0.5	12	124	119	4.21	1.04	2.53	875
900N 3+50E	217	285	< 0.2	5.98	490	< 0.5	6	1.17	< 0.5	9	219	21	2.91	0.95	1.37	815
900N 3+75E	217	285	< 0.2	7.51	580	< 0.5	4	1.57	< 0.5	12	112	64	3.74	1.11	1.42	765
900N 4+00E	217	285	< 0.2	7.50	590	< 0.5	6	2.02	1.5	13	150	95	3.79	1.11	1.41	860
900N 4+25E	217	285	< 0.2	7.66	730	< 0.5	12	3.27	< 0.5	14	129	65	3.86	1.32	1.49	815
900N 4+50E	217	285	< 0.2	7.32	400	< 0.5	2	1.08	< 0.5	8	111	37	3.01	0.67	1.01	700
1000N 1+25E	217	285	< 0.2	7.66	780	< 0.5	< 2	1.41	< 0.5	16	89	66	5.94	0.77	1.87	1125
1000N 1+50E	217	285	< 0.2	7.06	680	< 0.5	4	0.76	< 0.5	8	131	33	3.85	1.02	2.01	595
1000N 1+75E	217	285	< 0.2	7.41	230	< 0.5	4	1.36	< 0.5	15	207	58	6.23	0.77	3.21	645
1000N 2+00E	217	285	0.6	6.41	1320	< 0.5	2	0.63	6.5	11	167	725	3.53	1.28	1.79	495
1000N 2+25E	217	285	< 0.2	7.54	1070	< 0.5	< 2	0.13	0.5	1	139	131	5.49	2.06	2.38	300
1000N 2+50E	217	285	< 0.2	6.46	870	< 0.5	< 2	0.28	< 0.5	6	125	67	3.60	1.18	2.51	420
1000N 2+75E	217	285	< 0.2	6.62	340	< 0.5	2	0.47	< 0.5	5	69	28	2.36	1.08	1.84	550
1000N 3+00E	217	285	< 0.2	6.24	820	< 0.5	2	0.66	0.5	5	115	63	2.69	0.83	1.24	465
1000N 3+25E	217	285	< 0.2	5.87	640	< 0.5	2	0.95	< 0.5	4	102	19	2.07	1.03	0.92	1930
1000N 3+50E	217	285	< 0.2	7.38	290	< 0.5	< 2	0.62	< 0.5	5	160	16	2.85	0.42	0.67	705
1000N 3+75E	217	285	< 0.2	7.22	410	< 0.5	< 2	0.79	< 0.5	7	76	25	2.90	0.61	0.99	650
1000N 4+00E	217	285	< 0.2	3.28	240	< 0.5	< 2	1.01	< 0.5	7	274	32	2.15	0.43	0.85	805
1000N 4+25E	217	285	< 0.2	7.64	650	< 0.5	< 2	0.75	< 0.5	13	46	48	5.00	1.02	1.88	1135
1000N 4+50E	217	285	< 0.2	7.71	520	< 0.5	< 2	0.92	< 0.5	9	115	25	3.69	0.55	1.37	825

CERTIFICATION: Stuart Buchler

Chemex Labs Ltd.

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To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
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Project :
Comments: ATTN: MURRAY JONES

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Total Pages : 1
Certificate Date: 22-OCT-93
Invoice No. : I9322632
P.O. Number : 6107
Account : GP

CERTIFICATE OF ANALYSIS A9322632

SAMPLE	PREP CODE	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
800N 1+75E	217 285	< 1	2.47	15	430	2	208	0.32	123	< 10	94				
800N 2+00E	217 285	1	1.79	15	360	< 2	140	0.19	119	< 10	132				
800N 2+25E	217 285	2	2.14	11	380	< 2	207	0.21	84	< 10	160				
800N 2+50E	217 285	2	1.61	13	380	< 2	173	0.20	83	< 10	118				
800N 2+75E	217 285	2	1.73	11	690	< 2	204	0.18	83	< 10	90				
800N 3+00E	217 285	1	1.63	9	310	< 2	142	0.20	96	< 10	106				
800N 3+25E	217 285	2	2.34	21	720	< 2	319	0.31	146	< 10	320				
800N 3+50E	217 285	< 1	1.99	21	500	4	311	0.29	110	< 10	418				
900N 1+75E	217 285	4	0.79	9	170	< 2	39	0.12	61	< 10	86				
900N 2+00E	217 285	2	0.47	4	130	< 2	39	0.08	21	< 10	178				
900N 2+25E	217 285	2	0.96	6	350	< 2	33	0.09	120	< 10	360				
900N 2+50E	217 285	2	1.31	10	320	< 2	132	0.14	115	< 10	678				
900N 2+75E	217 285	3	1.84	40	400	< 2	210	0.21	98	< 10	490				
900N 3+00E	217 285	2	1.78	9	400	2	177	0.21	83	< 10	120				
900N 3+25E	217 285	2	1.35	10	360	< 2	96	0.16	103	< 10	256				
900N 3+50E	217 285	< 1	1.81	11	530	2	189	0.21	71	< 10	110				
900N 3+75E	217 285	< 1	2.78	13	490	< 2	267	0.30	104	< 10	120				
900N 4+00E	217 285	< 1	2.72	18	640	< 2	307	0.33	125	< 10	188				
900N 4+25E	217 285	< 1	2.66	22	670	< 2	424	0.37	142	< 10	96				
900N 4+50E	217 285	2	3.87	9	430	< 2	149	0.27	88	< 10	70				
1000N 1+25E	217 285	6	1.43	14	410	< 2	89	0.14	192	< 10	120				
1000N 1+50E	217 285	2	1.56	7	250	< 2	81	0.13	90	< 10	96				
1000N 1+75E	217 285	3	1.35	46	230	< 2	101	0.18	115	< 10	158				
1000N 2+00E	217 285	10	0.93	8	280	< 2	65	0.12	53	< 10	1640				
1000N 2+25E	217 285	9	0.46	10	110	< 2	31	0.11	139	< 10	174				
1000N 2+50E	217 285	4	0.96	9	160	< 2	52	0.10	68	< 10	158				
1000N 2+75E	217 285	< 1	1.56	7	200	2	89	0.11	43	< 10	130				
1000N 3+00E	217 285	2	2.29	9	150	40	130	0.14	48	< 10	276				
1000N 3+25E	217 285	< 1	2.13	9	200	6	105	0.12	37	< 10	106				
1000N 3+50E	217 285	< 1	4.73	7	510	< 2	68	0.27	77	< 10	52				
1000N 3+75E	217 285	1	4.10	7	400	< 2	109	0.25	84	< 10	60				
1000N 4+00E	217 285	2	1.12	13	420	< 2	129	0.14	76	< 10	44				
1000N 4+25E	217 285	< 1	2.97	10	400	< 2	82	0.39	155	< 10	98				
1000N 4+50E	217 285	1	3.90	8	480	< 2	95	0.33	102	< 10	72				

CERTIFICATION: Ian H Bachlet

SOIL SAMPLES

KNOB HILL GRID

RPT/94-004

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

A9321707

Comments: ATTN: MURRAY JONES

CERTIFICATE A9321707

WESTMIN RESOURCES LTD.

Project: BELL CREEK
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 29-SEP-93.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	111	Dry, sieve to -80 mesh
202	111	save reject
285	111	ICP - HF digestion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
578	111	Ag ppm: 24 element, rock & core	AAS	0.2	100.0
573	111	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	111	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	111	Be ppm: 24 element, rock & core	ICP-AES	0.5	10000
561	111	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	111	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	111	Cd ppm: 24 element, rock & core	ICP-AES	0.5	10000
563	111	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	111	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	111	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	111	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	111	K %: 24 element, rock & core	ICP-AES	0.01	20.0
570	111	Mg %: 24 element, rock & core	ICP-AES	0.01	20.0
568	111	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	111	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	111	Na %: 24 element, rock & core	ICP-AES	0.01	5.00
564	111	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	111	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	111	Pb ppm: 24 element, rock & core	AAS	2	10000
582	111	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	111	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	111	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	111	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	111	Zn ppm: 24 element, rock & core	ICP-AES	2	10000

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P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Page Number : 1-A
Total Pages : 3
Certificate Date: 29-SEP-93
Invoice No. : I9321707
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9321707

SAMPLE	PREP CODE	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
L3+00N 04+00W	201 202	< 0.2	7.50	450	< 0.5	< 2	2.54	< 0.5	14	58	23	3.41	0.91	1.48	845
L3+00N 04+25W	201 202	0.4	7.65	570	< 0.5	2	2.48	< 0.5	14	59	28	3.48	1.02	1.60	835
L3+00N 04+50W	201 202	0.4	7.96	710	< 0.5	< 2	1.83	< 0.5	21	71	111	4.52	0.78	3.11	1245
L3+00N 04+75W	201 202	0.6	7.60	370	< 0.5	< 2	2.08	0.5	20	36	69	4.50	0.61	1.88	1090
L3+00N 05+25W	201 202	0.2	7.22	190	< 0.5	< 2	2.00	0.5	14	26	92	5.43	0.49	2.57	1695
L3+00N 05+50W	201 202	< 0.2	7.35	280	< 0.5	< 2	1.61	< 0.5	12	30	46	4.32	0.61	1.98	975
L3+00N 05+75W	201 202	< 0.2	6.92	290	< 0.5	2	1.44	< 0.5	11	46	30	2.97	0.61	1.20	545
L3+00N 06+00W	201 202	< 0.2	7.92	520	< 0.5	< 2	1.00	< 0.5	11	37	21	3.87	1.37	3.19	905
L3+00N 06+25W	201 202	< 0.2	6.91	290	< 0.5	< 2	1.57	< 0.5	10	44	25	4.22	0.63	2.15	900
L3+00N 06+50W	201 202	< 0.2	7.05	320	< 0.5	< 2	1.12	< 0.5	8	26	21	4.02	0.71	1.87	695
L3+00N 06+75W	201 202	< 0.2	7.26	390	< 0.5	2	1.85	< 0.5	13	44	28	3.59	0.79	1.62	765
L3+00N 07+00W	201 202	< 0.2	7.12	310	< 0.5	< 2	1.53	< 0.5	12	31	21	3.30	0.59	1.49	795
L3+00N 07+25W	201 202	< 0.2	7.83	270	< 0.5	< 2	1.39	< 0.5	10	19	22	3.67	0.59	1.74	640
L3+00N 07+50W	201 202	< 0.2	6.98	260	< 0.5	< 2	1.50	< 0.5	10	29	21	3.21	0.67	1.43	620
L3+00N 07+75W	201 202	< 0.2	6.49	270	< 0.5	< 2	1.75	< 0.5	10	32	19	3.06	0.61	1.35	700
L3+00N 08+00W	201 202	< 0.2	7.23	390	< 0.5	< 2	1.89	< 0.5	12	46	27	3.48	0.81	1.74	710
L3+00N 08+25W	201 202	< 0.2	8.13	400	< 0.5	< 2	1.75	< 0.5	13	50	37	3.95	0.88	1.96	810
L3+00N 08+50W	201 202	< 0.2	6.25	230	< 0.5	< 2	1.49	< 0.5	11	30	27	3.52	0.45	1.52	805
L3+00N 08+75W	201 202	< 0.2	8.46	150	< 0.5	< 2	0.89	< 0.5	18	50	12	5.41	0.42	3.86	1015
L3+00N 09+00W	201 202	< 0.2	8.70	90	< 0.5	< 2	1.00	< 0.5	15	83	19	6.50	0.31	5.39	1390
L3+00N 09+25W	201 202	< 0.2	7.42	240	< 0.5	< 2	1.46	< 0.5	15	50	25	4.02	0.57	2.38	915
L3+00N 09+50W	201 202	< 0.2	7.52	240	< 0.5	< 2	1.10	< 0.5	10	36	16	3.79	0.60	1.81	670
L3+00N 09+75W	201 202	< 0.2	7.97	170	< 0.5	< 2	1.79	< 0.5	18	116	23	6.08	0.49	3.30	1125
L3+00N 10+00W	201 202	< 0.2	7.27	260	< 0.5	< 2	1.68	< 0.5	12	41	30	3.85	0.53	2.12	910
L4+00N 04+25W	201 202	< 0.2	7.09	260	< 0.5	< 2	3.06	< 0.5	14	57	18	3.64	0.54	1.81	835
L4+00N 04+50W	201 202	< 0.2	7.17	320	< 0.5	< 2	2.18	1.0	13	38	33	3.71	0.62	1.83	990
L4+00N 05+00W	201 202	< 0.2	8.13	120	< 0.5	< 2	2.23	0.5	15	16	61	6.03	0.19	3.38	1480
L4+00N 05+25W	201 202	< 0.2	7.43	180	< 0.5	< 2	1.41	0.5	9	21	56	4.92	0.43	2.93	1750
L4+00N 05+50W	201 202	< 0.2	6.70	160	< 0.5	< 2	1.20	0.5	8	20	54	3.90	0.32	1.87	815
L4+00N 05+75W	201 202	< 0.2	7.71	160	< 0.5	< 2	1.90	< 0.5	21	82	29	4.71	0.35	3.82	1270
L4+00N 06+00W	201 202	< 0.2	7.29	330	< 0.5	< 2	1.59	< 0.5	12	52	22	3.75	0.61	1.64	815
L4+00N 06+25W	201 202	< 0.2	8.37	370	< 0.5	4	1.87	< 0.5	16	41	36	4.00	0.85	2.01	1045
L4+00N 06+50W	201 202	< 0.2	7.66	330	< 0.5	< 2	1.64	< 0.5	15	41	27	4.00	0.66	2.18	915
L4+00N 06+75W	201 202	< 0.2	7.47	280	< 0.5	< 2	1.74	< 0.5	10	31	22	3.73	0.63	1.71	860
L4+00N 07+00W	201 202	< 0.2	7.44	310	< 0.5	< 2	1.64	< 0.5	11	33	25	3.96	0.59	1.79	740
L4+00N 07+25W	201 202	< 0.2	7.22	260	1.0	< 2	0.83	< 0.5	9	15	16	3.15	0.84	1.45	465
L4+00N 07+50W	201 202	< 0.2	7.53	260	< 0.5	< 2	2.05	< 0.5	14	35	27	4.41	0.54	2.25	995
L4+00N 07+75W	201 202	< 0.2	7.37	350	< 0.5	< 2	2.08	< 0.5	12	36	24	3.47	0.74	1.61	885
L4+00N 08+00W	201 202	< 0.2	6.30	240	< 0.5	< 2	1.56	< 0.5	11	30	29	3.37	0.53	1.46	745
L4+00N 08+25W	201 202	< 0.2	7.11	270	< 0.5	< 2	1.58	< 0.5	11	33	30	3.38	0.59	1.66	685

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

P.O. Box 49066, The Bentall Centre
VANCOUVER, BC
V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Page Number : 1-B
Total Pages : 3
Certificate Date: 29-SEP-93
Invoice No. : I9321707
P.O. Number :
Account : GP

CERTIFICATE OF ANALYSIS A9321707

SAMPLE	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
L3+00N 04+00W	201	202	< 1	2.40	19	1020	4	407	0.40	99	< 10	150				
L3+00N 04+25W	201	202	1	2.37	22	1300	2	394	0.41	98	< 10	234				
L3+00N 04+50W	201	202	2	2.72	21	400	12	176	0.56	151	< 10	736				
L3+00N 04+75W	201	202	< 1	2.47	15	1510	4	221	0.60	145	< 10	550				
L3+00N 05+25W	201	202	< 1	2.44	12	840	4	143	0.74	206	< 10	910				
L3+00N 05+50W	201	202	< 1	2.37	10	860	4	177	0.56	83	< 10	270				
L3+00N 05+75W	201	202	2	2.52	16	350	4	179	0.34	81	< 10	160				
L3+00N 06+00W	201	202	1	1.19	12	200	< 2	129	0.21	107	< 10	148				
L3+00N 06+25W	201	202	1	2.03	15	460	< 2	194	0.42	123	< 10	114				
L3+00N 06+50W	201	202	5	2.42	9	490	< 2	152	0.29	78	< 10	86				
L3+00N 06+75W	201	202	< 1	2.23	17	530	4	265	0.39	106	< 10	92				
L3+00N 07+00W	201	202	1	2.52	10	520	2	216	0.35	90	< 10	80				
L3+00N 07+25W	201	202	2	2.56	7	550	< 2	156	0.33	93	< 10	74				
L3+00N 07+50W	201	202	< 1	2.43	9	390	< 2	182	0.36	78	< 10	72				
L3+00N 07+75W	201	202	< 1	2.19	10	300	4	225	0.41	88	< 10	242				
L3+00N 08+00W	201	202	< 1	2.25	14	510	2	263	0.36	110	< 10	94				
L3+00N 08+25W	201	202	2	2.56	17	370	4	263	0.47	118	< 10	118				
L3+00N 08+50W	201	202	1	2.13	10	830	< 2	159	0.53	96	< 10	164				
L3+00N 08+75W	201	202	1	2.19	16	450	< 2	87	0.52	146	< 10	178				
L3+00N 09+00W	201	202	< 1	2.19	25	610	< 2	92	0.64	170	< 10	218				
L3+00N 09+25W	201	202	2	2.34	16	360	< 2	168	0.42	107	< 10	136				
L3+00N 09+50W	201	202	1	2.99	10	450	< 2	107	0.31	81	< 10	80				
L3+00N 09+75W	201	202	1	1.73	33	310	< 2	104	0.43	149	< 10	110				
L3+00N 10+00W	201	202	1	2.32	15	310	< 2	189	0.39	107	< 10	116				
L4+00N 04+25W	201	202	< 1	2.26	17	400	2	287	0.36	114	< 10	186				
L4+00N 04+50W	201	202	< 1	2.44	12	850	4	237	0.52	115	< 10	628				
L4+00N 05+00W	201	202	< 1	3.09	7	1490	4	92	0.76	252	< 10	630				
L4+00N 05+25W	201	202	1	2.53	7	700	4	91	0.78	152	< 10	978				
L4+00N 05+50W	201	202	1	2.54	7	490	2	133	0.41	98	< 10	678				
L4+00N 05+75W	201	202	< 1	2.34	27	410	< 2	126	0.46	160	< 10	284				
L4+00N 06+00W	201	202	< 1	2.26	14	470	< 2	196	0.34	110	< 10	202				
L4+00N 06+25W	201	202	< 1	2.48	17	780	4	255	0.45	116	< 10	310				
L4+00N 06+50W	201	202	1	2.20	16	690	< 2	235	0.47	116	< 10	126				
L4+00N 06+75W	201	202	< 1	2.51	10	460	< 2	224	0.50	108	< 10	90				
L4+00N 07+00W	201	202	1	2.46	11	660	< 2	224	0.49	107	< 10	94				
L4+00N 07+25W	201	202	2	2.48	6	450	< 2	95	0.22	59	< 10	40				
L4+00N 07+50W	201	202	< 1	2.26	10	770	< 2	228	0.47	132	< 10	106				
L4+00N 07+75W	201	202	< 1	2.38	13	680	< 2	264	0.39	97	< 10	114				
L4+00N 08+00W	201	202	< 1	2.16	9	470	4	184	0.48	96	< 10	134				
L4+00N 08+25W	201	202	1	2.27	11	340	< 2	222	0.44	96	< 10	448				

CERTIFICATION: Thai D Ma

Chemex Labs Ltd.

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To: WESTMIN RESOURCES LTD.

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V7X 1C4

Project : BELL CREEK
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Page Number :2-A
Total Pages :3
Certificate Date: 29-SEP-93
Invoice No. :19321707
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Account :GP

CERTIFICATE OF ANALYSIS A9321707

SAMPLE	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
L4+00N 08+50W	201	202	< 0.2	8.25	130	< 0.5	< 2	1.10	< 0.5	13	21	41	6.49	0.29	3.76	1085
L4+00N 08+75W	201	202	< 0.2	7.79	210	1.0	< 2	1.34	1.0	16	40	414	3.98	0.43	1.65	1275
L4+00N 09+00W	201	202	< 0.2	7.19	320	1.0	< 2	1.51	< 0.5	10	25	40	3.14	0.76	1.49	795
L4+00N 09+25W	201	202	< 0.2	7.33	310	0.5	< 2	1.48	< 0.5	11	31	28	3.38	0.71	1.71	825
L4+00N 09+50W	201	202	< 0.2	6.68	310	< 0.5	< 2	1.37	< 0.5	10	24	24	3.00	0.60	1.43	730
L4+00N 09+75W	201	202	< 0.2	7.74	800	1.5	2	1.15	< 0.5	7	19	22	3.23	1.21	1.42	585
L4+00N 10+00W	201	202	< 0.2	7.12	310	< 0.5	4	1.66	< 0.5	11	26	24	3.18	0.64	1.47	780
L5+00N 05+25W	201	202	< 0.2	7.96	430	< 0.5	4	2.48	< 0.5	15	49	33	3.81	0.85	1.75	750
L5+00N 05+50W	201	202	< 0.2	7.90	430	< 0.5	2	2.15	< 0.5	13	33	34	3.62	0.92	1.57	755
L5+00N 05+75W	201	202	< 0.2	7.35	380	< 0.5	< 2	3.19	< 0.5	15	63	15	3.51	0.66	1.79	620
L5+00N 06+00W	201	202	< 0.2	7.58	160	< 0.5	< 2	1.73	< 0.5	17	37	41	4.58	0.40	3.07	1030
L5+00N 06+25W	201	202	< 0.2	7.55	180	< 0.5	< 2	1.64	< 0.5	15	38	41	4.31	0.39	2.52	1080
L5+00N 06+50W	201	202	< 0.2	6.85	80	< 0.5	< 2	0.67	0.5	8	18	153	4.01	0.19	2.03	690
L5+00N 06+75W	201	202	0.2	7.79	510	< 0.5	< 2	1.62	< 0.5	11	28	30	3.30	0.91	1.63	815
L5+00N 07+00W	201	202	< 0.2	8.28	80	< 0.5	< 2	0.79	< 0.5	16	27	109	5.51	0.34	4.05	1100
L5+00N 07+25W	201	202	< 0.2	7.09	100	< 0.5	< 2	1.65	< 0.5	11	33	22	4.95	0.31	2.29	830
L5+00N 07+50W	201	202	< 0.2	6.87	260	< 0.5	2	1.90	1.0	11	30	33	3.46	0.59	1.46	725
L5+00N 07+75W	201	202	0.2	6.84	290	< 0.5	2	1.88	0.5	25	33	139	3.49	0.59	1.22	1155
L5+00N 08+00W	201	202	0.2	6.56	320	< 0.5	2	1.69	0.5	12	28	66	3.55	0.56	1.37	875
L5+00N 08+25W	201	202	< 0.2	8.21	310	< 0.5	< 2	2.02	< 0.5	16	32	202	3.94	0.56	1.64	765
L5+00N 08+50W	201	202	0.2	6.87	270	< 0.5	< 2	1.35	< 0.5	11	24	103	3.25	0.50	1.57	755
L5+00N 08+75W	201	202	< 0.2	7.36	300	< 0.5	2	1.14	< 0.5	14	23	290	3.35	0.65	1.84	815
L5+00N 09+00W	201	202	0.2	7.74	430	< 0.5	< 2	0.82	< 0.5	12	13	190	3.26	0.90	1.99	735
L5+00N 09+25W	201	202	< 0.2	9.54	920	2.0	6	0.53	< 0.5	7	16	163	2.86	2.10	1.09	400
L5+00N 09+50W	201	202	< 0.2	8.13	200	< 0.5	< 2	1.16	< 0.5	16	48	52	4.83	0.53	3.69	980
L5+00N 09+75W	201	202	< 0.2	7.45	290	< 0.5	< 2	1.16	0.5	9	26	26	3.34	0.53	1.95	600
L5+00N 10+00W	201	202	< 0.2	7.03	310	< 0.5	< 2	1.59	< 0.5	12	31	30	3.47	0.55	1.74	790
L5+00N 10+25W	201	202	< 0.2	8.12	250	< 0.5	< 2	1.11	< 0.5	15	92	21	4.38	0.58	2.89	975
L5+00N 10+50W	201	202	< 0.2	7.43	340	< 0.5	< 2	1.45	< 0.5	11	32	24	3.64	0.74	1.69	735
L5+00N 10+75W	201	202	< 0.2	8.10	340	< 0.5	2	1.71	< 0.5	11	29	29	3.66	0.86	1.56	855
L5+00N 11+00W	201	202	< 0.2	7.54	400	< 0.5	< 2	1.20	< 0.5	10	26	24	3.36	0.71	1.66	700
L15+00N BL	201	202	< 0.2	6.92	300	< 0.5	< 2	2.85	< 0.5	16	67	15	3.85	0.69	2.31	850
L15+00N 0+25W	201	202	< 0.2	7.13	330	< 0.5	< 2	2.70	< 0.5	17	78	29	3.85	0.71	2.27	830
L15+00N 0+50W	201	202	< 0.2	6.78	460	< 0.5	2	2.26	< 0.5	11	48	24	3.23	0.85	1.52	715
L15+00N 0+75W	201	202	< 0.2	6.93	430	< 0.5	< 2	2.30	< 0.5	12	52	24	3.50	0.78	1.69	760
L15+00N 1+00W	201	202	< 0.2	7.02	440	< 0.5	2	2.11	< 0.5	11	43	18	3.33	0.91	1.60	690
L15+00N 1+25W	201	202	< 0.2	6.35	400	< 0.5	2	1.86	< 0.5	9	32	12	2.71	0.82	1.29	605
L15+00N 1+50W	201	202	< 0.2	6.73	480	< 0.5	< 2	1.67	< 0.5	8	30	14	2.60	0.96	1.43	620
L15+00N 1+75W	201	202	< 0.2	7.73	610	< 0.5	< 2	2.80	< 0.5	12	66	21	3.40	0.88	1.76	635
L15+00N 2+00W	201	202	< 0.2	7.46	380	< 0.5	< 2	2.66	< 0.5	16	63	45	3.98	0.79	2.29	770

CERTIFICATION:

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Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 604-984-0221

To: WESTMIN RESOURCES LTD.

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V7X 1C4

Project : BELL CREEK
Comments: ATTN: MURRAY JONES

Page Number :2-B
Total Pages :3
Certificate Date: 29-SEP-93
Invoice No. :I9321707
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Account :GP

CERTIFICATE OF ANALYSIS A9321707

SAMPLE	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
L4+00N 08+50W	201	202	1	1.98	10	720	< 2	107	0.88	201	< 10	732				
L4+00N 08+75W	201	202	2	2.17	17	620	< 2	151	0.47	99	< 10	712				
L4+00N 09+00W	201	202	2	2.26	11	350	< 2	196	0.38	75	< 10	514				
L4+00N 09+25W	201	202	1	2.27	13	470	< 2	192	0.39	86	< 10	382				
L4+00N 09+50W	201	202	1	2.17	9	380	< 2	168	0.37	74	< 10	168				
L4+00N 09+75W	201	202	< 1	2.49	6	290	< 2	100	0.29	58	< 10	130				
L4+00N 10+00W	201	202	< 1	2.36	10	430	2	194	0.37	81	< 10	164				
L5+00N 05+25W	201	202	< 1	2.44	19	970	4	372	0.46	111	< 10	168				
L5+00N 05+50W	201	202	< 1	2.54	15	1710	4	298	0.46	98	< 10	236				
L5+00N 05+75W	201	202	< 1	2.43	19	320	< 2	449	0.31	111	< 10	46				
L5+00N 06+00W	201	202	< 1	2.38	14	510	< 2	141	0.56	122	< 10	482				
L5+00N 06+25W	201	202	< 1	2.37	14	640	< 2	150	0.59	139	< 10	398				
L5+00N 06+50W	201	202	6	2.44	6	430	< 2	60	0.42	96	< 10	466				
L5+00N 06+75W	201	202	1	2.39	15	1270	4	235	0.42	84	< 10	314				
L5+00N 07+00W	201	202	2	1.83	9	530	< 2	59	0.33	165	< 10	230				
L5+00N 07+25W	201	202	1	2.35	9	470	< 2	119	0.66	145	< 10	136				
L5+00N 07+50W	201	202	< 1	2.22	12	420	< 2	223	0.50	102	< 10	632				
L5+00N 07+75W	201	202	< 1	2.23	14	660	< 2	225	0.51	100	< 10	504				
L5+00N 08+00W	201	202	< 1	2.13	12	840	< 2	190	0.46	95	< 10	382				
L5+00N 08+25W	201	202	1	2.39	14	570	< 2	195	0.33	127	< 10	482				
L5+00N 08+50W	201	202	1	2.09	10	620	< 2	143	0.34	83	< 10	294				
L5+00N 08+75W	201	202	3	1.79	10	520	< 2	133	0.31	78	< 10	258				
L5+00N 09+00W	201	202	2	1.70	8	440	< 2	127	0.23	54	< 10	288				
L5+00N 09+25W	201	202	2	1.62	7	300	< 2	87	0.22	34	< 10	438				
L5+00N 09+50W	201	202	1	2.25	18	370	< 2	116	0.59	157	< 10	614				
L5+00N 09+75W	201	202	< 1	3.06	9	350	< 2	125	0.36	107	< 10	394				
L5+00N 10+00W	201	202	< 1	2.16	12	320	< 2	177	0.33	87	< 10	762				
L5+00N 10+25W	201	202	3	2.44	20	530	< 2	106	0.44	104	< 10	150				
L5+00N 10+50W	201	202	< 1	2.45	11	320	< 2	175	0.40	94	< 10	140				
L5+00N 10+75W	201	202	1	2.58	11	360	< 2	172	0.45	98	< 10	124				
L5+00N 11+00W	201	202	3	2.74	9	250	< 2	106	0.32	71	< 10	84				
L15+00N BL	201	202	< 1	1.95	19	270	< 2	167	0.31	118	< 10	50				
L15+00N 0+25W	201	202	< 1	1.86	23	220	< 2	219	0.32	119	< 10	56				
L15+00N 0+50W	201	202	< 1	1.91	14	230	< 2	258	0.30	105	< 10	54				
L15+00N 0+75W	201	202	< 1	1.95	17	230	< 2	228	0.33	115	< 10	54				
L15+00N 1+00W	201	202	< 1	1.98	14	350	2	239	0.32	101	< 10	56				
L15+00N 1+25W	201	202	< 1	1.94	11	310	2	230	0.24	84	< 10	44				
L15+00N 1+50W	201	202	< 1	1.86	10	380	4	231	0.23	74	< 10	58				
L15+00N 1+75W	201	202	< 1	2.11	21	390	4	553	0.35	102	< 10	42				
L15+00N 2+00W	201	202	1	2.06	21	440	2	291	0.31	116	< 10	58				

CERTIFICATION: Thai D Ma

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CERTIFICATE OF ANALYSIS A9321707

SAMPLE	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
L16+00N BL	201	202	< 0.2	8.66	370	< 0.5	< 2	0.46	< 0.5	11	175	20	6.54	0.87	5.80	640
L16+00N 0+25W	201	202	< 0.2	7.45	560	< 0.5	< 2	1.55	< 0.5	10	57	15	3.47	1.05	2.12	540
L16+00N 0+50W	201	202	< 0.2	6.55	480	< 0.5	< 2	1.28	< 0.5	8	40	21	2.87	0.94	1.64	525
L16+00N 0+75W(A)	201	202	< 0.2	7.14	450	< 0.5	< 2	1.92	< 0.5	19	22	101	5.77	1.03	2.05	940
L16+00N 0+75W(B)	201	202	0.2	7.40	530	0.5	2	1.88	< 0.5	12	18	45	3.60	1.02	1.14	880
L16+00N 1+00W(A)	201	202	< 0.2	7.90	970	< 0.5	< 2	2.09	< 0.5	18	27	113	5.19	1.16	2.05	1455
L16+00N 1+00W(B)	201	202	< 0.2	7.96	700	< 0.5	2	1.99	< 0.5	11	22	55	3.23	1.04	1.02	1160
L16+00N 1+25W(A)	201	202	< 0.2	6.84	360	< 0.5	< 2	1.66	< 0.5	14	40	62	4.39	0.73	2.07	770
L16+00N 1+25W(B)	201	202	< 0.2	8.50	540	< 0.5	< 2	1.80	< 0.5	14	28	66	4.09	0.83	1.53	690
L16+00N 1+50W	201	202	< 0.2	7.16	400	< 0.5	< 2	1.72	< 0.5	10	32	28	3.49	0.79	1.71	750
L16+00N 1+75W	201	202	< 0.2	8.12	540	< 0.5	< 2	2.45	< 0.5	10	12	34	3.52	1.26	1.29	810
L16+00N 2+00W	201	202	< 0.2	7.44	400	< 0.5	< 2	2.02	< 0.5	12	37	19	3.69	0.79	2.14	775
L16+00N 09+50E	201	202	< 0.2	8.34	770	< 0.5	2	2.17	< 0.5	17	83	52	3.85	1.43	1.35	665
L16+00N 09+75E	201	202	< 0.2	7.77	530	< 0.5	4	1.34	< 0.5	9	38	20	3.10	0.94	0.97	370
L16+00N 10+00E	201	202	0.4	7.81	550	< 0.5	< 2	1.92	< 0.5	17	82	57	4.45	1.10	1.69	750
L16+00N 10+25E	201	202	< 0.2	7.80	640	< 0.5	2	2.01	< 0.5	10	38	21	3.41	1.18	1.09	620
L16+00N 10+50E	201	202	< 0.2	7.95	710	< 0.5	4	0.90	< 0.5	9	18	20	3.45	1.20	1.00	705
L16+00N 10+75E	201	202	< 0.2	7.80	610	0.5	4	2.32	< 0.5	11	47	23	3.02	1.10	0.99	575
L16+00N 11+00E	201	202	< 0.2	8.60	710	0.5	2	1.50	< 0.5	18	68	82	4.18	1.54	1.41	625
L17+00N BL	201	202	< 0.2	8.24	140	< 0.5	< 2	0.54	< 0.5	28	12	63	7.18	0.29	3.79	770
L17+00N 0+25W	201	202	< 0.2	7.97	660	< 0.5	< 2	1.29	< 0.5	15	48	25	3.90	1.23	2.67	485
L17+00N 0+50W	201	202	< 0.2	9.19	550	< 0.5	< 2	0.93	< 0.5	12	98	10	5.06	1.26	5.10	650
L17+00N 0+75W	201	202	< 0.2	8.01	840	< 0.5	< 2	1.02	< 0.5	16	113	24	4.70	0.91	3.77	875
L17+00N 1+00W	201	202	< 0.2	7.49	510	< 0.5	< 2	2.96	< 0.5	22	40	94	6.13	0.98	2.28	1050
L17+00N 1+25W	201	202	0.2	7.81	620	< 0.5	< 2	3.00	< 0.5	22	45	67	5.90	0.96	2.18	880
L17+00N 1+50W	201	202	< 0.2	7.40	570	< 0.5	< 2	1.91	< 0.5	15	65	26	4.44	0.87	2.63	710
L17+00N 1+75W	201	202	< 0.2	9.25	960	< 0.5	4	3.63	< 0.5	17	91	43	3.72	1.04	1.83	505
L17+00N 2+00W	201	202	< 0.2	8.14	760	< 0.5	2	3.22	< 0.5	14	90	38	3.50	0.91	1.57	510
DUPLICATE #3	201	202	< 0.2	7.70	540	< 0.5	< 2	1.12	< 0.5	11	35	20	3.64	1.30	2.89	830
SILT 487139	201	202	< 0.2	7.07	500	< 0.5	< 2	3.09	< 0.5	14	95	67	3.65	0.74	1.55	520
SILT 487140	201	202	0.2	8.67	680	< 0.5	2	4.70	< 0.5	16	90	29	3.50	0.92	1.59	470

CERTIFICATION: John D'Mar

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SAMPLE	PREP CODE	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)
L16+00N BL	201 202	3	0.82	74	300	< 2	78	0.17	165	< 10	66
L16+00N 0+25W	201 202	1	1.70	22	220	4	267	0.29	91	< 10	56
L16+00N 0+50W	201 202	1	1.55	14	150	4	187	0.19	83	< 10	48
L16+00N 0+75W(A)	201 202	< 1	1.84	11	330	< 2	188	0.42	221	< 10	82
L16+00N 0+75W(B)	201 202	< 1	1.99	15	600	< 2	283	0.39	108	< 10	74
L16+00N 1+00W(A)	201 202	1	1.21	17	270	< 2	158	0.26	196	< 10	88
L16+00N 1+00W(B)	201 202	< 1	2.10	24	620	4	315	0.39	87	< 10	86
L16+00N 1+25W(A)	201 202	1	1.81	17	280	2	166	0.33	170	< 10	58
L16+00N 1+25W(B)	201 202	1	1.96	16	680	4	252	0.40	126	< 10	74
L16+00N 1+50W	201 202	< 1	1.92	13	370	< 2	145	0.26	111	< 10	56
L16+00N 1+75W	201 202	< 1	1.24	5	290	< 2	116	0.27	101	< 10	66
L16+00N 2+00W	201 202	< 1	1.97	15	340	2	176	0.27	122	< 10	56
L16+00N 09+50E	201 202	1	1.98	32	460	6	460	0.43	131	< 10	72
L16+00N 09+75E	201 202	1	1.85	14	520	6	267	0.36	101	< 10	96
L16+00N 10+00E	201 202	< 1	1.65	28	500	< 2	279	0.45	160	< 10	86
L16+00N 10+25E	201 202	< 1	2.06	14	330	4	369	0.40	99	< 10	68
L16+00N 10+50E	201 202	< 1	3.01	8	520	2	178	0.33	91	< 10	80
L16+00N 10+75E	201 202	< 1	2.28	18	570	4	509	0.40	88	< 10	70
L16+00N 11+00E	201 202	1	1.57	32	660	6	362	0.42	135	< 10	74
L17+00N BL	201 202	1	1.69	12	460	< 2	65	0.33	295	< 10	68
L17+00N 0+25W	201 202	3	1.45	22	350	4	293	0.28	123	< 10	48
L17+00N 0+50W	201 202	< 1	1.13	41	290	< 2	224	0.22	209	< 10	72
L17+00N 0+75W	201 202	< 1	1.56	41	260	< 2	186	0.23	142	< 10	102
L17+00N 1+00W	201 202	1	2.29	16	260	< 2	272	0.37	276	10	70
L17+00N 1+25W	201 202	< 1	2.56	20	380	< 2	486	0.36	267	< 10	78
L17+00N 1+50W	201 202	1	1.88	26	270	< 2	374	0.29	159	< 10	58
L17+00N 1+75W	201 202	< 1	2.55	33	460	4	1065	0.42	115	< 10	44
L17+00N 2+00W	201 202	< 1	2.24	32	490	6	864	0.38	112	< 10	42
DUPLICATE #3	201 202	< 1	1.27	11	160	< 2	143	0.22	104	< 10	138
SILT 487139	201 202	< 1	1.54	41	710	8	623	0.38	107	< 10	58
SILT 487140	201 202	< 1	2.72	27	850	4	1170	0.44	138	< 10	40

CERTIFICATION: Jhai D Ma

APPENDIX F

SOIL SAMPLE STATISTICS

PLUGGER SOIL SAMPLES

RED STAR GRID

RPT/94-004

NORMAL DATA									
ELEMENT	UNITS	MEAN	S.D.	SAMPLES	5%	16%	50%	84%	95%
ALL DATA									
KNR		0.687	0.767	191	0.127	0.276	0.516	0.841	1.772
ALT		0.43	0.141	191	0.269	0.324	0.39	0.526	0.75
IRM		0.702	0.059	191	0.575	0.653	0.714	0.751	0.771
S.G		2.7	0	191	2.7	2.7	2.7	2.7	2.7
AG	PPM	0.315	0.156	33	0.203	0.211	0.235	0.435	0.631
AL	%	7.233	0.964	191	5.824	6.332	7.265	8.049	8.642
BA	PPM	583.037	294.874	191	188.25	342.75	539.732	795.333	1179.375
BE	PPM	1	0	2	1	1	1	1	1
BI	PPM	3.714	2.119	56	1.707	1.833	3.884	5.747	7.92
CA	%	1.975	1.321	190	0.358	0.676	1.817	3.08	4.175
CD	PPM	1.706	1.832	17	0.492	0.586	0.875	4.176	6.367
CO	PPM	13.64	6.217	189	4.035	7.724	12.413	19.96	25.832
CR	PPM	167.785	90.236	191	58.162	83.536	146.875	255.083	337.083
CU	PPM	64.476	62.773	191	11.019	24.083	51.797	97.44	142.25
FE	%	4.157	1.317	191	2.273	2.963	3.879	5.608	6.734
K	%	1.037	0.389	191	0.428	0.674	1.022	1.341	1.695
MG	%	1.772	0.662	191	0.895	1.219	1.584	2.484	3.129
MN	PPM	927.408	564.697	191	359.167	561.143	889.865	1184.64	1483.5
MO	PPM	3.276	10.891	98	0.155	0.496	1.551	3.255	8.417
NA	%	2.055	0.786	191	0.74	1.294	2.042	2.708	3.427
NI	PPM	18.026	11.307	191	4.041	7.173	15.441	26.178	41.175
P	PPM	521.099	296.095	191	153.438	302.471	482.661	694.846	916.876
PB	PPM	4.831	4.934	89	1.185	1.593	3.446	5.595	7.936
SR	PPM	207.016	139.334	191	33.425	69.267	178.804	343.933	472.15
TI	%	0.303	0.136	191	0.094	0.158	0.308	0.407	0.481
V	PPM	134.696	75.112	191	32.333	69.511	116.957	205.76	284.5
W	PPM	10	0	13	10	10	10	10	10
ZN	PPM	108.726	136.563	190	38.632	52.434	85.287	128.739	262.5

BELL CR BEK SOIL DATA ---- NORMAL CORRELATION MATRIX ---- ALL DATA

OCTOBER 1983

	KNR	ALT	IRM	Ag	Al	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	S	Ti	V	W	Zn
KNR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT	0.769	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRM	-0.326	-0.65	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ag	0.056	0.028	0.002	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	33	33	33	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Al	-0.165	-0.24	0.052	0.008	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ba	0.393	0.267	0.139	0.032	0.011	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	2	2	2	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bi	-0.023	0	-0.00	-0.005	0.009	0.002	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	56	56	56	15	56	56	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CA	-0.254	-0.5	0.184	-0.037	0.445	-0.147	0	0.035	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	190	190	190	32	190	190	2	55	190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CD	-0.017	0.01	0.003	0.082	-0.007	0.058	0	-0.065	-0.002	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	17	17	17	5	17	17	0	14	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CO	-0.304	-0.23	0.061	-0.004	0.428	-0.208	0	0.026	0.626	0.003	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	189	189	189	33	189	189	2	56	188	17	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	0.189	0.163	-0.11	-0.001	-0.382	-0.029	0	-0.008	-0.065	-0.009	-0.144	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CU	-0.009	0.062	0.06	0.211	0.189	0.237	0	0.004	0.182	0.356	0.294	-0.118	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FE	-0.244	-0.14	0.204	0.016	0.533	-0.19	0	0.029	0.508	0.001	0.814	-0.257	0.374	1	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0
K	0.591	0.459	-0.14	0.029	0.174	0.644	0	-0.009	-0.148	0.025	-0.257	0.055	0.039	-0.296	1	0	0	0	.	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	0	0	0	.	0	0	0	0	0	0	0	0
MG	0.052	0.349	-0.53	0.006	0.424	-0.264	0	0.034	0.259	-0.006	0.617	-0.136	0.262	0.698	-0.167	1	0	0	0	0	.	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	0	0	0	0	0	0	0	0	0	0	0
MN	-0.269	-0.3	0.261	-0.022	0.114	-0.014	0	0.006	0.272	0.005	0.326	-0.066	0.017	0.289	-0.173	0.051	1	0	0	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	0	0	0	0	0	0	0	0	0	0
MO	0.017	0.03	0.011	-0.046	-0.036	0.015	0	-0.012	-0.059	0.081	-0.05	0.189	0.003	-0.006	-0.01	-0.032	-0.051	1	0	0	0	0	0	0	0	0	0
# PRS	98	98	98	23	98	98	1	33	97	14	98	98	98	98	98	98	98	98	0	0	0	0	0	0	0	0	0
NA	-0.623	-0.74	0.427	0.003	0.344	-0.302	0	0.002	0.099	-0.014	0.079	-0.317	-0.147	0.076	-0.349	-0.229	0.132	-0.039	1	0	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	0	0	0	0	0	0	0	0
NI	-0.131	-0.2	0.12	-0.02	0.302	0.072	0	0.03	0.617	0.059	0.611	0.089	0.205	0.457	-0.031	0.349	0.207	-0.023	-0.089	1	0	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	0	0	0	0	0	0	0
P	-0.161	-0.28	0.336	-0.014	0.257	0.164	0	0.061	0.379	0.019	0.325	-0.134	0.128	0.336	0.006	0.059	0.423	-0.048	0.138	0.298	1	0	0	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	0	0	0	0	0	0
PB	0.118	0.038	-0.00	0.008	-0.011	0.137	0	-0.029	-0.042	-0.135	-0.057	0.008	0.072	-0.035	0.027	-0.022	-0.08	-0.005	-0.029	-0.067	-0.067	1	0	0	0	0	0
# PRS	89	89	89	15	89	89	2	31	88	4	89	89	89	89	89	89	89	44	89	89	89	89	0	0	0	0	0
S	-0.255	-0.42	0.192	-0.014	0.377	0.141	0	0.013	0.485	-0.013	0.204	-0.185	0.057	0.083	0.109	-0.078	0.169	-0.057	0.163	0.346	0.392	-0.067	1	0	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	89	191	0	0	0	0
TI	-0.408	-0.53	0.412	-0.006	0.589	-0.151	0	0.014	0.636	-0.01	0.749	-0.254	0.185	0.705	-0.24	0.288	0.389	-0.059	0.419	0.476	0.485	-0.07	0.38	1	0	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	89	191	191	0	0	0
V	-0.306	-0.31	0.236	0	0.578	-0.187	0	0.021	0.635	0.002	0.876	-0.282	0.298	0.901	-0.32	0.592	0.329	-0.035	0.181	0.543	0.368	-0.058	0.243	0.792	1	0	0
# PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	89	191	191	191	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# PRS	13	13	13	5	13	13	0	4	13	0	13	13	13	13	13	13	13	8	13	13	13	2	13	13	13	13	0
ZN	0.102	0.235	-0.09	0.218	-0.014	0.301	0	0.018	-0.148	0.598	-0.042	-0.109	0.772	0.014	0.134	0.107	-0.098	0.021	-0.191	-0.023	-0.124	0.157	-0.089	-0.154	-0.053	0	1
# PRS	190	190	190	32	190	190	2	55	190	17	188	190	190	190	190	190	190	97	190	190	190	88	190	190	190	13	190
	KNR	ALT	IRM	Ag	Al	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	S	Ti	V	W	Zn

Produced by GEO_LOGIC SYSTEM, LOTUS 123

BELL CREEK SOIL DATA ---- LOG TRANSFORMED CORRELATION MATRIX ---- ALL DATA OCTOBER 1993

	KNR	ALT	IRM	Ag	Al	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	S	Ti	V	W	Zn
KNR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT	0.745	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRM	−0.364	−0.63	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ag	0.042	0.024	0.008	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	33	33	33	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Al	−0.159	−0.22	0.062	0.006	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ba	0.617	0.222	0.2	0.008	0.015	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	2	2	2	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bi	0.002	0.007	−0.01	−0.007	0.004	−0.001	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	56	56	56	15	56	56	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CA	−0.3	−0.64	0.485	−0.046	0.321	0.033	0	0.019	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	190	190	190	32	190	190	2	55	190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CD	0.012	0.004	0.012	0.069	−0.002	0.004	0	−0.026	0.045	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	17	17	17	5	17	17	0	14	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CO	−0.336	−0.25	0.12	−0.007	0.281	−0.141	0	0.024	0.595	0.02	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	189	189	189	33	189	189	2	56	188	17	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	0.275	0.096	−0.09	0.002	−0.365	0.072	0	0.001	−0.032	−0.002	−0.105	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CU	−0.078	−0.08	0.257	0.024	0.307	0.129	0	0.025	0.412	0.022	0.497	−0.195	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FE	−0.29	−0.14	0.238	0.006	0.524	−0.196	0	0.039	0.443	0.008	0.755	−0.282	0.627	1	0	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	0	0	0	0	0	0	0	0	0	0	0	0	0
K	0.811	0.422	−0.11	0.078	0.117	0.789	0	−0.013	−0.047	0.046	−0.266	0.153	−0.029	−0.296	1	0	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	0	0	0	0	0	0	0	0	0	0	0	0
MG	0.008	0.321	−0.5	−0.005	0.428	−0.301	0	0.1	0.047	−0.004	0.073	−0.194	0.383	0.716	−0.17	1	0	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	0	0	0	0	0	0	0	0	0	0	0
MN	−0.452	−0.48	0.347	−0.007	0.268	−0.061	0	0.006	0.565	0.005	0.371	−0.138	0.353	0.512	−0.256	0.224	1	0	0	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	0	0	0	0	0	0	0	0	0	0
MO	0.208	0.127	−0.03	0.052	−0.02	0.02	0	−0.017	−0.253	0.173	−0.04	0.012	0.006	0.02	0.118	0.082	−0.023	1	0	0	0	0	0	0	0	0	0
#PRS	98	98	98	23	98	98	1	33	97	14	98	98	98	98	98	98	98	98	0	0	0	0	0	0	0	0	0
NA	−0.834	−0.79	0.475	−0.009	0.365	−0.241	0	−0.011	0.438	0.01	0.281	−0.294	0.097	0.185	−0.353	−0.165	0.48	−0.201	1	0	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	0	0	0	0	0	0	0	0
NI	−0.024	−0.21	0.218	−0.016	0.285	0.11	0	0.01	0.599	0.077	0.624	0.073	0.508	0.511	0.018	0.302	0.474	−0.013	0.055	1	0	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	0	0	0	0	0	0	0
P	−0.314	−0.49	0.471	−0.005	0.335	0.079	0	0.01	0.521	0.01	0.428	−0.175	0.373	0.518	−0.099	0.125	0.615	−0.021	0.408	0.508	1	0	0	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	0	0	0	0	0	0
PB	0.076	0.043	0.004	0.019	−0.002	0.019	0	−0.009	−0.05	−0.072	−0.041	0.005	0.009	−0.039	0.071	−0.075	−0.021	−0.013	−0.063	−0.031	−0.021	1	0	0	0	0	0
#PRS	89	89	89	15	89	89	2	31	88	4	89	89	89	89	89	89	89	44	89	89	89	89	0	0	0	0	0
S	−0.175	−0.5	0.342	−0.008	0.378	0.232	0	0.008	0.76	0.005	0.344	−0.106	0.341	0.248	0.15	0.011	0.473	−0.041	0.421	0.539	0.562	−0.018	1	0	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	89	191	0	0	0	0
TI	−0.521	−0.62	0.551	−0.002	0.565	−0.106	0	0.011	0.726	0.008	0.622	−0.229	0.455	0.659	−0.26	0.201	0.675	−0.145	0.589	0.594	0.709	−0.067	0.595	1	0	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	89	191	191	0	0	0
V	−0.439	−0.39	0.33	−0.008	0.498	−0.166	0	0.017	0.621	0.006	0.785	−0.285	0.598	0.887	−0.34	0.558	0.661	−0.007	0.381	0.64	0.653	−0.038	0.462	0.787	1	0	0
#PRS	191	191	191	33	191	191	2	56	190	17	189	191	191	191	191	191	191	98	191	191	191	89	191	191	191	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	−1	0
#PRS	13	13	13	5	13	13	0	4	13	0	13	13	13	13	13	13	13	8	13	13	13	2	13	13	13	13	0
ZN	0.147	0.252	−0.09	0.024	0.141	0.185	0	0.018	0.03	0.031	0.055	−0.218	0.507	0.15	0.198	0.225	0.068	0.009	−0.053	0.075	−0.081	0.021	0.081	−0.021	0.068	0	1
#PRS	190	190	190	32	190	190	2	55	190	17	188	190	190	190	190	190	190	97	190	190	190	88	190	190	190	13	190
	KNR	ALT	IRM	Ag	Al	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	S	Ti	V	W	Zn

Produced by GEO_LOGIC SYSTEM, LOTUS 123

SOIL SAMPLES

KNOB HILL GRID

RPT/94-004

BELL CREEK SOIL DATA, KNOB HILL GRID

1/2 DETECTION LIMIIT USED

NORMAL DATA

ELEMENT	UNITS	MEAN	S.D.	SAMPLES	5%	16%	50%	84%	95%
ALL DATA									
KNR		0.29	0.18	71	0.12	0.18	0.26	0.35	0.47
ALT		0.41	0.08	71	0.31	0.34	0.38	0.46	0.59
IRM		0.66	0.04	71	0.57	0.63	0.68	0.7	0.71
S.G		2.7	0	71	2.7	2.7	2.7	2.7	2.7
AG	PPM	0.08	0.09	71	0.03	0.03	0.04	0.05	0.2
AL	%	7.48	0.57	71	6.54	6.95	7.43	8.09	8.35
BA	PPM	307.46	146.86	71	101.06	177.52	287.29	408.1	575.75
BE	PPM	0.14	0.34	71	0	0.01	0.05	0.08	0.98
BI	PPM	0.94	1.03	71	0.27	0.3	0.41	1.82	3.79
CA	%	1.6	0.49	71	0.82	1.14	1.59	2.03	2.47
CD	PPM	0.27	0.18	71	0.18	0.19	0.21	0.5	0.54
CO	PPM	12.76	3.37	71	8.1	9.68	12.34	15.42	19.94
CR	PPM	37.55	18.3	71	16.37	23.11	32.81	51.35	82.01
CU	PPM	53.03	65.87	71	15.57	18.42	27.26	73.2	186.75
FE	%	3.95	0.82	71	3.07	3.29	3.71	4.61	5.77
K	%	0.64	0.27	71	0.3	0.43	0.6	0.85	1.01
MG	%	2.07	0.81	71	1.28	1.46	1.77	2.98	3.79
MN	PPM	880.21	246.4	71	586.81	673.81	817.71	1084.81	1387.21
MO	PPM	1.12	1.01	71	0.28	0.34	0.79	1.86	2.87
NA	%	2.32	0.3	71	1.74	2.13	2.35	2.52	2.75
NI	PPM	13.06	5.05	71	6.16	8.06	11.52	17.41	21.67
P	PPM	577.61	302.22	71	272.81	336.69	484.38	834.6	1308.75
PB	PPM	1.88	1.74	71	0.93	1.01	1.23	3.76	3.98
SR	PPM	183.55	78.26	71	84.43	106.74	173.75	239.35	369
TI	%	0.44	0.13	71	0.24	0.33	0.43	0.56	0.71
V	PPM	109.49	35.72	71	62.47	80.65	100.99	144.41	170.02
W	PPM	4.5	0	71	4.5	4.5	4.5	4.5	4.5
ZN	PPM	295.83	228.37	71	62.1	97.9	206.25	543.4	741.58

BELL CREEK SOIL DATA ---- NORMAL CORRELATION MATRIX ---- ALL DATA
KNOB HILL GRID --- 1/2 DETECTION LIMIT USED

	KNR	ALT	IRM	AG	AL	BA	BE	BI	CA	CD	CO	CR	CU	FE	K	MG	MN	MO	NA	NI	P	PB	SR	TI	V	W	ZN
KNR	1																										
#PRS	71																										
ALT	0.341	1																									
#PRS	71	71																									
IRM	0.053	−0.77	1																								
#PRS	71	71	71																								
AG	0.039	−0.08	0.085	1																							
#PRS	71	71	71	71																							
AL	0.359	0.62	−0.41	0.005	1																						
#PRS	71	71	71	71	71																						
BA	0.748	−0.04	0.268	0.3	0.271	1																					
#PRS	71	71	71	71	71	71																					
BE	0.523	0.163	0.234	−0.09	0.299	0.504	1																				
#PRS	71	71	71	71	71	71	71																				
BI	0.498	−0.02	0.329	0.005	0.299	0.501	0.4	1																			
#PRS	71	71	71	71	71	71	71	71																			
CA	−0.19	−0.59	0.268	0.189	−0.17	0.075	−0.32	0.013	1																		
#PRS	71	71	71	71	71	71	71	71	71																		
CD	−0.18	−0.19	0.192	0.12	−0.17	−0.18	0.063	−0.01	0.074	1																	
#PRS	71	71	71	71	71	71	71	71	71	71																	
CO	−0.23	0.138	−0.31	0.384	0.277	−0.16	−0.29	−0.06	0.365	0.067	1																
#PRS	71	71	71	71	71	71	71	71	71	71	71																
CR	−0.1	0.191	−0.38	0.061	0.245	−0.06	−0.23	−0.12	0.322	−0.16	0.549	1															
#PRS	71	71	71	71	71	71	71	71	71	71	71	71															
CU	0.094	0.11	0.095	0.15	0.162	0.035	0.286	0.13	−0.22	0.385	0.207	−0.2	1														
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71														
FE	−0.36	0.574	−0.57	0.025	0.437	−0.51	−0.25	−0.28	−0.06	0.052	0.441	0.36	−0.02	1													
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71													
K	0.918	0.11	0.237	0.097	0.355	0.898	0.577	0.575	−0.07	−0.23	−0.26	−0.1	0.005	−0.5	1												
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71												
MG	−0.21	0.774	−0.87	−0.04	0.498	−0.43	−0.23	−0.3	−0.21	−0.08	0.434	0.432	−0.06	0.879	−0.4	1											
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71											
MN	−0.34	0.31	−0.43	0.208	0.214	−0.39	−0.25	−0.23	0.145	0.297	0.545	0.264	0.173	0.736	−0.44	0.644	1										
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71										
MO	0.034	0.216	−0.08	−0.05	0.044	−0.03	0.132	−0.06	−0.51	−0.01	−0.22	−0.12	0.335	−0.05	0.002	−0.00	−0.19	1									
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71									
NA	−0.55	−0.53	0.192	0.047	−0.08	−0.1	−0.17	−0.14	0.264	0.129	−0.05	−0.08	−0.26	−0.03	−0.29	−0.14	0.035	−0.05	1								
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71								
NI	−0.07	0.151	−0.33	0.176	0.295	−0.00	−0.22	−0.01	0.407	−0.11	0.655	0.927	−0.08	0.335	−0.06	0.391	0.314	−0.19	−0.11	1							
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71							
P	−0.14	−0.21	0.192	0.442	0.109	0.027	−0.18	0.083	0.398	0.194	0.257	−0.07	0.031	0.196	−0.06	−0.00	0.32	−0.23	0.239	0.089	1						
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71						
PB	−0.03	−0.15	0.019	0.418	0.041	0.307	−0.15	0.089	0.325	0.074	0.247	0.139	−0.01	0.061	0.094	0.011	0.282	−0.1	0.304	0.183	0.342	1					
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71					
SR	0.066	−0.59	0.385	0.166	−0.17	0.324	−0.22	0.162	0.814	−0.06	0.154	0.213	−0.21	−0.38	0.24	−0.44	−0.21	−0.37	0.118	0.328	0.332	0.256	1				
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71				
TI	−0.49	0.097	−0,18	0.154	0.086	−0.44	−0.29	−0.18	0.187	0.279	0.34	0.081	−0.05	0.7	−0.52	0.486	0.736	−0.26	0.228	0.124	0.419	0.292	−0.11	1			
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71			
V	−0.43	0.311	−0.47	0.105	0.286	−0.49	−0.38	−0.29	0.236	0.151	0.51	0.285	−0.06	0.873	−0.54	0.739	0.778	−0.24	0.138	0.307	0.314	0.225	−0.16	0.769	1		
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71		
W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	
ZN	−0.15	0.1	−0.09	0.271	0.059	−0.13	0.079	−0.02	−0.02	0.58	0.194	−0.2	0.395	0.299	−0.23	0.205	0.553	−0.04	0.051	−0.09	0.202	0.284	−0.23	0.536	0.4	0	1
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
	KNR	ALT	IRM	AG	AL	BA	BE	BI	CA	CD	CO	CR	CU	FE	K	MG	MN	MO	NA	NI	P	PB	SR	TI	V	W	ZN

BELL CREEK SOIL DATA ---- LOG TRANSFORMED CORRELATION MATRIX ---- ALL DATA
KNOB HILL GRID --- 1/2 DETECTION LIMIT USED

	KNR	ALT	IRM	AG	AL	BA	BE	BI	CA	CD	CO	CR	CU	FE	K	MG	MN	MO	NA	NI	P	PB	SR	TI	V	W	ZN
KNR	1																										
#PRS	71																										
ALT	0.088	1																									
#PRS	71	71																									
IRM	0.176	−0.78	1																								
#PRS	71	71	71																								
AG	0.126	−0.08	0.094	1																							
#PRS	71	71	71	71																							
AL	0.198	0.605	−0.43	−0.04	1																						
#PRS	71	71	71	71	71																						
BA	0.826	−0.27	0.373	0.28	0.084	1																					
#PRS	71	71	71	71	71	71																					
BE	0.342	0.114	0.213	−0.11	0.2	0.269	1																				
#PRS	71	71	71	71	71	71	71																				
BI	0.41	−0.14	0.357	0.073	0.171	0.404	0.198	1																			
#PRS	71	71	71	71	71	71	71	71																			
CA	−0.08	−0.65	0.282	0.156	−0.23	0.194	−0.36	0.032	1																		
#PRS	71	71	71	71	71	71	71	71	71																		
CD	−0.33	−0.2	0.188	0.192	−0.19	−0.21	0.055	0.031	0.064	1																	
#PRS	71	71	71	71	71	71	71	71	71	71																	
CO	−0.18	0.108	−0.34	0.323	0.284	−0.17	−0.33	−0.05	0.424	0.038	1																
#PRS	71	71	71	71	71	71	71	71	71	71	71																
CR	0.004	0.05	−0.32	0	0.174	−0.01	−0.3	−0.1	0.436	−0.21	0.605	1															
#PRS	71	71	71	71	71	71	71	71	71	71	71	71															
CU	−0.04	0.141	0.072	0.358	0.147	−0.05	0.182	0.167	−0.23	0.402	0.201	−0.33	1														
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71														
FE	−0.54	0.563	−0.57	−0.00	0.431	−0.65	−0.28	−0.32	−0.02	0.105	0.481	0.303	0.054	1													
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71													
K	0.952	−0.09	0.289	0.144	0.188	0.917	0.344	0.436	0.03	−0.32	−0.22	0.003	−0.12	−0.61	1												
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71												
MG	−0.41	0.748	−0.88	−0.06	0.477	−0.58	−0.29	−0.39	−0.16	−0.05	0.455	0.347	−0.02	0.889	−0.52	1											
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71											
MN	−0.44	0.293	−0.45	0.224	0.187	−0.45	−0.31	−0.26	0.258	0.307	0.622	0.314	0.228	0.755	−0.5	0.678	1										
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71										
MO	0.044	0.329	−0.12	−0.02	0.139	−0.06	0.214	−0.12	−0.6	−0.1	−0.23	−0.2	0.299	−0.04	0	0.05	−0.2	1									
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71									
NA	−0.52	−0.54	0.247	0.002	−0.11	−0.06	−0.13	−0.09	0.342	0.17	−0.04	−0.00	−0.23	−0.01	−0.23	−0.13	0.015	−0.14	1								
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71								
NI	0.085	0.055	−0.29	0.165	0.261	0.074	−0.26	0.029	0.479	−0.15	0.718	0.919	−0.14	0.282	0.071	0.313	0.371	−0.21	−0.07	1							
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71							
P	−0.22	−0.21	0.201	0.389	0.067	−0.06	−0.2	0.105	0.38	0.26	0.317	−0.03	0.188	0.246	−0.16	0.029	0.387	−0.27	0.265	0.116	1						
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71						
PB	0.016	−0.25	0.137	0.305	−0.02	0.243	−0.2	0.163	0.414	0.139	0.176	0.12	0.057	0.025	0.127	−0.06	0.233	−0.22	0.303	0.165	0.429	1					
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71					
SR	0.329	−0.68	0.444	0.16	−0.25	0.535	−0.21	0.192	0.801	−0.1	0.197	0.334	−0.24	−0.42	0.431	−0.48	−0.14	−0.45	0.159	0.417	0.281	0.35	1				
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71				
TI	−0.61	0.012	−0.13	0.126	0.022	−0.48	−0.33	−0.15	0.343	0.327	0.408	0.202	0.053	0.656	−0.58	0.45	0.724	−0.31	0.324	0.225	0.492	0.314	−0.00	1			
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71			
V	−0.61	0.209	−0.47	0.054	0.188	−0.58	−0.49	−0.34	0.364	0.198	0.599	0.404	−0.02	0.842	−0.63	0.741	0.788	−0.28	0.159	0.397	0.328	0.205	−0.07	0.748	1		
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71		
W	−0.00	−0.00	−0.00	−0.00	0.016	0.008	−0.00	0	0.001	−0.01	0.007	0.007	0.003	0.003	0	0.001	0.015	0	0.006	0.006	0.005	0	0.007	−0.00	0.012	1	
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	
ZN	−0.26	0.146	−0.12	0.318	0.085	−0.18	0.061	0.049	−0.03	0.563	0.214	−0.17	0.614	0.257	−0.31	0.209	0.472	−0.07	−0.04	−0.01	0.255	0.22	−0.2	0.457	0.289	0.003	1
#PRS	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
	KNR	ALT	IRM	AG	AL	BA	BE	BI	CA	CD	CO	CR	CU	FE	K	MG	MN	MO	NA	NI	P	PB	SR	TI	V	W	ZN

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408

PART 1 OF 2

RED STAR SHOWING (Zn-Cu-Ba)

WASHOUT

ADIT DUMP

HIGHWAY 3

SIMILKAMEEN RIVER

BASE OF SLOPE
EDGE OF SIMILKAMEEN RIVER FLOOD PLAIN

BASELINE 00 E/W

11+00 N
10+00 N
9+00 N
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
3+00 N

2+00 W
2+00 E
4+00 E
6+00 E
8+00 E

UTM NORTH

L.D. Bell 2N,0W

F.P. Star, Star 1

LEGEND

21 Princeton Group Volcanic and Sedimentary Rocks (Eocene)
- 21a volcanic flows, breccias, tuffs, vari-coloured
- 21b conglomerate, minor sandstone
- 21c argillite
- 21d basalt dykes, hornblende porphyry dykes
- 21e quartz eye porphyritic dykes

20 Eagle Plutonic Complex (Upper Jurassic – Lower Cretaceous)
- 20a massive granodiorite, granite
- 20b gneiss, gneissic textures intrusions
- 20c aplite dykes

19 Amphibolite
- 19a chlorite ± biotite schist
- 19b amphibole-bearing ± biotite schist
- 19c amphibolite, ± biotite

Central Facies, Nicola Group (Upper Triassic)

18 Sedimentary Rocks
- 18a argillite
- 18b grey to black siltstone/sandstone

17 Volcanic Rocks (Alkaline, includes Wolf Creek Formation)
- 17a mafic, massive, pillowed, flow brecciated, pyroxene and/or plagioclase porphyritic
- 17b volcanic breccia, agglomerate, lapilli tuff (porphyritic)
- 17c fine grained tuff, cherty tuff
- 17d undifferentiated
- 17e quartz-eye felsic tuff, lapilli/agglomerate

Western Facies, Nicola Group (Upper Triassic, Calc-alkaline)

16 Mafic to Intermediate Volcanic Rocks, Minor Sediments
- 16a quartz eye lapilli tuff
- 16b chlorite schist, locally carbonatized
- 16c interbedded intermediate tuffs, argillaceous sediments

15 Quartz Feldspar Porphyry Intrusive (?)
- 15a moderate foliated, quartz + feldspar phenocrysts to 20%
- 15b as 15a, sill or flow unit ?
- 15c strongly sheared porphyry
- 15d quartz feldspar porphyry dyke

14 Chlorite Schist

13 Argillaceous Sediments
- 13a argillite, siltstone, minor cherty layers
- 13b graphitic argillite
- 13c chlorite–sericite schist

12 Chlorite–Biotite Schist
- 12a chlorite–biotite schist
- 12b chlorite–sericite schist

11 Red–Green Banded Schist
- 11a red/green/cream banded schist
- 11b lapilli tuff, with quartz eyes
- 11c aphanitic, light grey–blue rhyolite

10 Quartz–Sericite, Sericite Schist
- 10a sericite schist, with quartz eyes
- 10b sericite schist, with sediment component
- 10c quartz–sericite–pyrite schist
- 10d homogeneous, aphanitic, chlorite–sericite schist, dyke ?
- 10e felsic lapilli tuff

9 Mafic to Intermediate Volcanic Rocks
- 9a chlorite–sericite schist
- 9b chlorite schist

8 Red Star Horizon
- 8a felsic (sericite–quartz) schist, strongly altered
- 8b quartz sericite–pyrite schist

7 "Hanging Wall" Sediments
- 7a interbedded argillite, siltstone
- 7b graphitic argillite

6 Mixed Intermediate/Felsic Tuff/Flow Unit
- 6a mafic, chlorite (sericite) schist, with biotite, epidote common
- 6b intermediate quartz eye lapilli tuff
- 6c intermediate to felsic, quartz–sericite schist
- 6d gabbro, basalt(?)

5 Mafic Volcanic with Mixed Sedimentary Component
- 5a mafic, massive to pillowed, dark green, with epidote alteration
- 5b lean Fe formation, hematite–rich, laminated, cherty tuff/seds
- 5c mafic lapilli(?) tuff
- 5d light coloured volcanic(?) or sedimentary rock

4 Quartz–Feldspar Porphyritic Rhyolite
- 4a massive or undifferentiated
- 4b banded, sheared(?)

3 Intermediate Schist, Mixed Volcanic/Sedimentary Rock
- 3a chlorite schist, commonly with hornblende
- 3b felsic schist, layered with sediments (cherty)

2 Mafic Volcanic (Hornblende, Biotite Locally)
- 2a chlorite–biotite hornfels
- 2b chlorite–biotite hornfels, porphyroblastic hornblende

1 Intermediate to Felsic, Hornfelsed Volcanic/Sedimentary Rocks
- 1a felsic hornfels, aphanitic, locally sericitic, quartz rich
- 1b quartz–sericite–(chlorite) schist
- 1c chlorite schist
- 1d homogeneous felsic hornfels, grey to cream coloured
- 1e quartz feldspar porphyritic rock

SYMBOLS

- Outcrop
- Geological Contact (Sub–unit)
- Fault
- Bedding (strike and dip)
- Foliation (strike and dip)
- Joints (strike and dip)
- Vein (strike and dip)
- Lineation or Fold Hinge (strike and plunge)
- Trench
- Adit
- Drill Hole
- Test Pit
- Rock Sample Location (e.g. 560446 or B–21)
- Silt Sample Location (e.g. 487124)
- Soil Sample Location (e.g. 487124)
- Claim Post (located, not located)
- Kilometre Marker On Road (from highway)
- Age Date Sample Location

ABBREVIATIONS

agg	–	agglomerate	intr	–	intrusive
amph	–	amphibole	mag	–	magnetite
assoc	–	associated	maf	–	mafic
ba	–	barite	mc	–	malachite
bio	–	biotite	phenos	–	phenocrysts
bo	–	bornite	plag	–	plagioclase
bx	–	brecciated	po	–	pyrrhotite
cpy	–	chalcopyrite	ppv	–	pyroxene porphyritic volcanic
ep	–	epidote	py	–	pyrite
F	–	float (local)	pyx	–	pyroxene
fc	–	ferricrete	qtz	–	quartz
f.g.	–	fine grained	Qvn(s)	–	quartz vein(s)
GF	–	glacial float	sch	–	schist
goss	–	gossan	sph	–	sphalerite
hb	–	hornblende	vns	–	veins

ASSESSOR PROVINCE OF BRITISH COLUMBIA M. I. JONES 17863 ENGINEER

Westmin Resources Limited

Work By	M.I.J. & C.R.
Date Drafted	23/03/94
Drafted By	R.A. Ivany
Date Revised	
Revised By	
N.T.S. Number	90 H/2
File Name	RDSTAR_1

BELL CREEK PROPERTY

GEOLOGY of the RED STAR GRID (South Half)

25 0 25 50 75m

SCALE 1 : 1,250

Figure 6b

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408
PART 1 OF 2

LEGEND

21 Princeton Group Volcanic and Sedimentary Rocks (Eocene)
- 21a volcanic flows, breccias, tuffs, vari-coloured
- 21b conglomerate, minor sandstone
- 21c argillite
- 21d basalt dykes, hornblende porphyry dykes
- 21e quartz eye porphyritic dykes

20 Eagle Plutonic Complex (Upper Jurassic – Lower Cretaceous)
- 20a massive granodiorite, granite
- 20b gneiss, gneissic textures intrusions
- 20c aplite dykes

19 Amphibolite
- 19a chlorite ± biotite schist
- 19b amphibole-bearing ± biotite schist
- 19c amphibolite, ± biotite

Central Facies, Nicola Group (Upper Triassic)

18 Sedimentary Rocks
- 18a argillite
- 18b grey to black siltstone/sandstone

17 Volcanic Rocks (Alkaline, includes Wolf Creek Formation)
- 17a mafic, massive, pillowed, flow brecciated, pyroxene and/or plagioclase porphyritic
- 17b volcanic breccia, agglomerate, lapilli tuff (porphyritic)
- 17c fine grained tuff, cherty tuff
- 17d undifferentiated
- 17e quartz-eye felsic tuff, lapilli/agglomerate

Western Facies, Nicola Group (Upper Triassic, Calc-alkaline)

16 Mafic to Intermediate Volcanic Rocks, Minor Sediments
- 16a quartz eye lapilli tuff
- 16b chlorite schist, locally carbonatized
- 16c interbedded intermediate tuffs, argillaceous sediments

15 Quartz Feldspar Porphyry Intrusive (?)
- 15a moderate foliated, quartz + feldspar phenocrysts to 20%
- 15b as 15a, sill or flow unit ?
- 15c strongly sheared porphyry
- 15d quartz feldspar porphyry dyke

14 Chlorite Schist

13 Argillaceous Sediments
- 13a argillite, siltstone, minor cherty layers
- 13b graphitic argillite
- 13c chlorite-sericite schist

12 Chlorite-Biotite Schist
- 12a chlorite-biotite schist
- 12b chlorite-sericite schist

11 Red-Green Banded Schist
- 11a red/green/cream banded schist
- 11b lapilli tuff, with quartz eyes
- 11c aphanitic, light grey-blue rhyolite

10 Quartz-Sericite, Sericite Schist
- 10a sericite schist, with quartz eyes
- 10b sericite schist, with sediment component
- 10c quartz-sericite-pyrite schist
- 10d homogeneous, aphanitic, chlorite-sericite schist, dyke ?
- 10e felsic lapilli tuff

9 Mafic to Intermediate Volcanic Rocks
- 9a chlorite-sericite schist
- 9b chlorite schist

8 Red Star Horizon
- 8a felsic (sericite-quartz) schist, strongly altered
- 8b quartz sericite-pyrite schist

7 "Hanging Wall" Sediments
- 7a interbedded argillite, siltstone
- 7b graphitic argillite

6 Mixed Intermediate/Felsic Tuff/Flow Unit
- 6a mafic, chlorite (sericite) schist, with biotite, epidote common
- 6b intermediate quartz eye lapilli tuff
- 6c intermediate to felsic, quartz-sericite schist
- 6d gabbro, basalt(?)

5 Mafic Volcanic with Mixed Sedimentary Component
- 5a mafic, massive to pillowed, dark green, with epidote alteration
- 5b iron Fe formation, hematite-rich, laminated, cherty tuff/seds
- 5c mafic lapilli(?) tuff
- 5d light coloured volcanic(?) or sedimentary rock

4 Quartz-Feldspar Porphyritic Rhyolite
- 4a massive or undifferentiated
- 4b banded, sheared(?)

3 Intermediate Schist, Mixed Volcanic/Sedimentary Rock
- 3a chlorite schist, commonly with hornblende
- 3b felsic schist, layered with sediments (cherty)

2 Mafic Volcanic (Hornblende, Biotite Locally)
- 2a chlorite-biotite hornfels
- 2b chlorite-biotite hornfels, porphyroblastic hornblende

1 Intermediate to Felsic, Hornfelsed Volcanic/Sedimentary Rocks
- 1a felsic hornfels, aphanitic, locally sericitic, quartz rich
- 1b quartz-sericite-(chlorite) schist
- 1c chlorite schist
- 1d homogeneous felsic hornfels, grey to cream coloured
- 1e quartz feldspar porphyritic rock

SYMBOLS

Outcrop
Geological Contact (Sub-unit)
Fault
Bedding (strike and dip)
Foliation (strike and dip)
Joints (strike and dip)
Vein (strike and dip)
Lineation or Fold Hinge (strike and plunge)
Trench
Adit
Drill Hole
Test Pit
560464 or B-21 — Rock Sample Location
487124 — Silt Sample Location
487124 — Soil Sample Location
Claim Post (located, not located)
Kilometre Marker On Road (from highway)
Age Date Sample Location

ABBREVIATIONS

agg	agglomerate	intr	intrusive
amph	amphibole	mag	magnetite
assoc	associated	maf	mafic
ba	barite	mc	malachite
bio	biotite	phenos	phenocrysts
bo	bornite	plag	plagioclase
bx	brecciated	po	pyrrhotite
cpy	chalcopyrite	ppv	pyroxene porphyritic volcanic
ep	epidote	py	pyrite
F	float (local)	pyx	pyroxene
fc	ferricrete	qtz	quartz
f.g.	fine grained	Qvn(s)	quartz vein(s)
GF	glacial float	sch	schist
goss	gossan	sph	sphalerite
hb	hornblende	vns	veins

WESTMIN

Westmin Resources Limited

Work By	M.I. Jones
Date Drafted	08/06/93
Drafted By	R.A. Ivany
Date Revised	01/06/94
Revised By	M.I. Jones
N.T.S. Number	92 H/2
File Name	GEOLOGY

BELL CREEK PROPERTY

GEOLOGY

PROFESSIONAL ENGINEERS PROVINCE OF BRITISH COLUMBIA — M. I. JONES — 21481 — LONDON

200 0 200 400 600m
SCALE 1 : 10,000

Figure 4

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408
PART 1 OF 2

LEGEND

21 Princeton Group Volcanic and Sedimentary Rocks (Eocene)
- 21a volcanic flows, breccias, tuffs, vari-coloured
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Outcrop
Geological Contact (Sub-unit)
Fault
Bedding (strike and dip)
Foliation (strike and dip)
Joints (strike and dip)
Vein (strike and dip)
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hb	–	hornblende	vns	–	veins

Westmin Resources Limited

Work By	M.I.J. & C.R.
Date Drafted	31/05/94
Drafted By	R.A. Ivany
Date Revised	
Revised By	
N.T.S. Number	92 H/2
File Name	KNOBHILL

BELL CREEK PROPERTY
GEOLOGY of the KNOB HILL GRID

50 0 50 100 150m
SCALE 1 : 2,500

Figure 5

23,408

PART 1 OF 2

GEOLOGICAL BRANCH
ASSESSMENT REPORT

UTM NORTH

BASELINE 0+00 E/W

2+00 E | 4+00 E | 6+00 E | 8+00 E

20+00 N | 19+00 N | 18+00 N | 17+00 N | 16+00 N | 15+00 N | 14+00 N | 13+00 N | 12+00 N | 11+00 N

Glacial Terrace or Morain

CROWLEY CREEK

Wash

HIGHWAY 3

BASE OF SLOPE
EDGE OF SIMILKAMEEN RIVER FLOOD PLAIN

Blow Down

TRENCH ?

SURVEY PIN
Lot 626 Lot 901

Posts

Post

Placer Post

DDH ?

DDH

Alder

gossanous

axial plane

siliceous

LEGEND

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- 1a felsic hornfels, aphanitic, locally sericitic, quartz rich
- 1b quartz–sericite–(chlorite) schist
- 1c chlorite schist
- 1d homogeneous felsic hornfels, grey to cream coloured
- 1e quartz feldspar porphyritic rock

SYMBOLS

Outcrop
Geological Contact (Sub–unit)
Fault
Bedding (strike and dip)
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Joints (strike and dip)
Vein (strike and dip)
Lineation or Fold Hinge (strike and plunge)
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f.g.	–	fine grained	Qvn(s)	–	quartz vein(s)
GF	–	glacial float	sch	–	schist
goss	–	gossan	sph	–	sphalerite
hb	–	hornblende	vns	–	veins

M. I. JONES
BC LAND SURVEYOR
604

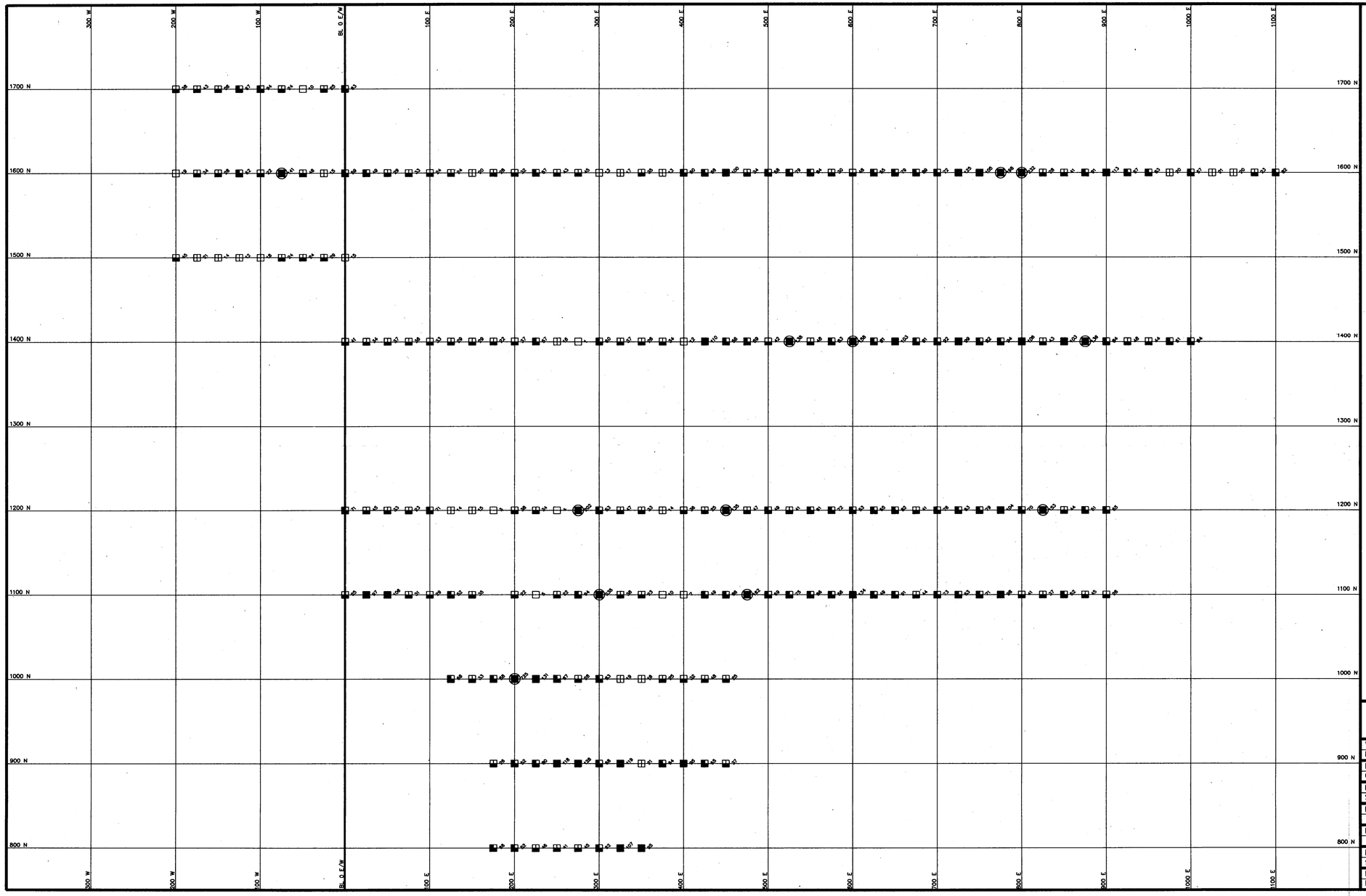
Westmin Resources Limited

Work By	M.I.J. & C.R.
Date Drafted	23/03/94
Drafted By	R.A. Ivany
Date Revised	
Revised By	
N.T.S. Number	90 H/2
File Name	RDSTAR_2

BELL CREEK PROPERTY
GEOLOGY of the RED STAR GRID (North Half)

SCALE 1 : 1,250 (25 0 25 50 75m)

Figure 6a



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408

PART 1 OF 2

Cu Values in PPM

□	<1 –	10
⊞	10 –	21
◪	21 –	48
◩	48 –	94
■	94 –	135
◉	135 >>>>>>>	

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. I. JONES

WESTMIN RESOURCES LTD.

Work By	MIJ/SMD
Date Drafted	02-25-94
Drafted By	S. DYKES
Date Revised	
Revised By	
N.T.S. Number	92H/2E
File Name	BCSOVERO

BELL CREEK SOIL DATA

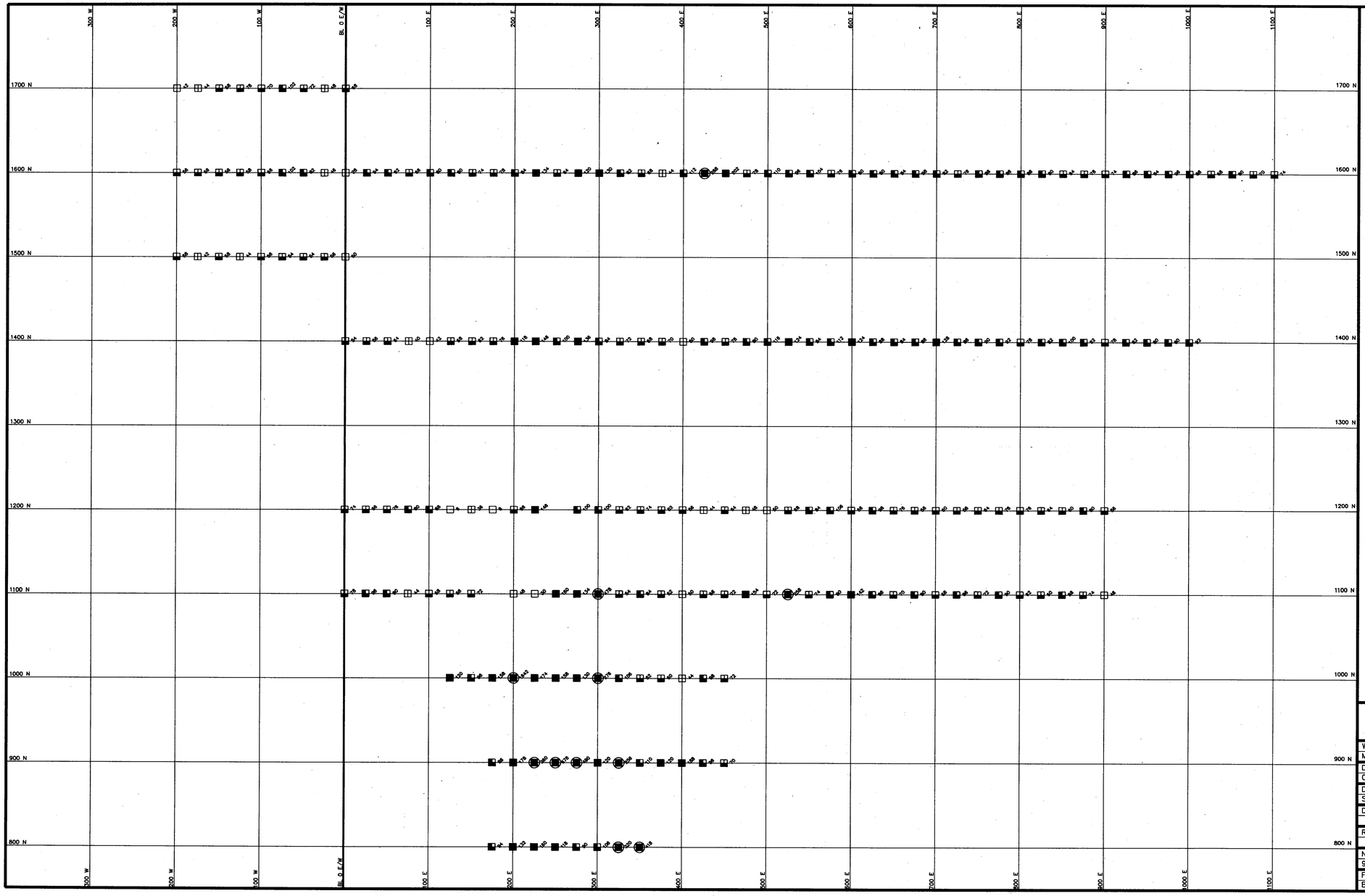
RED STAR AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 15a



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408

PART 1 OF 2

ZN Values in PPM

⊡	<1 –	34
⊞	34 –	50
◪	50 –	78
◪	78 –	117
■	117 –	240
◉	240 >>>>>>>	

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. I. JONES
LICENSED PROFESSIONAL ENGINEER

WESTMIN RESOURCES LTD.

Work By	MIJ/SMD
Date Drafted	02-25-94
Drafted By	S. DYKES
Date Revised	
Revised By	
N.T.S. Number	92H/2E
File Name	BCSOVERO

BELL CREEK SOIL DATA

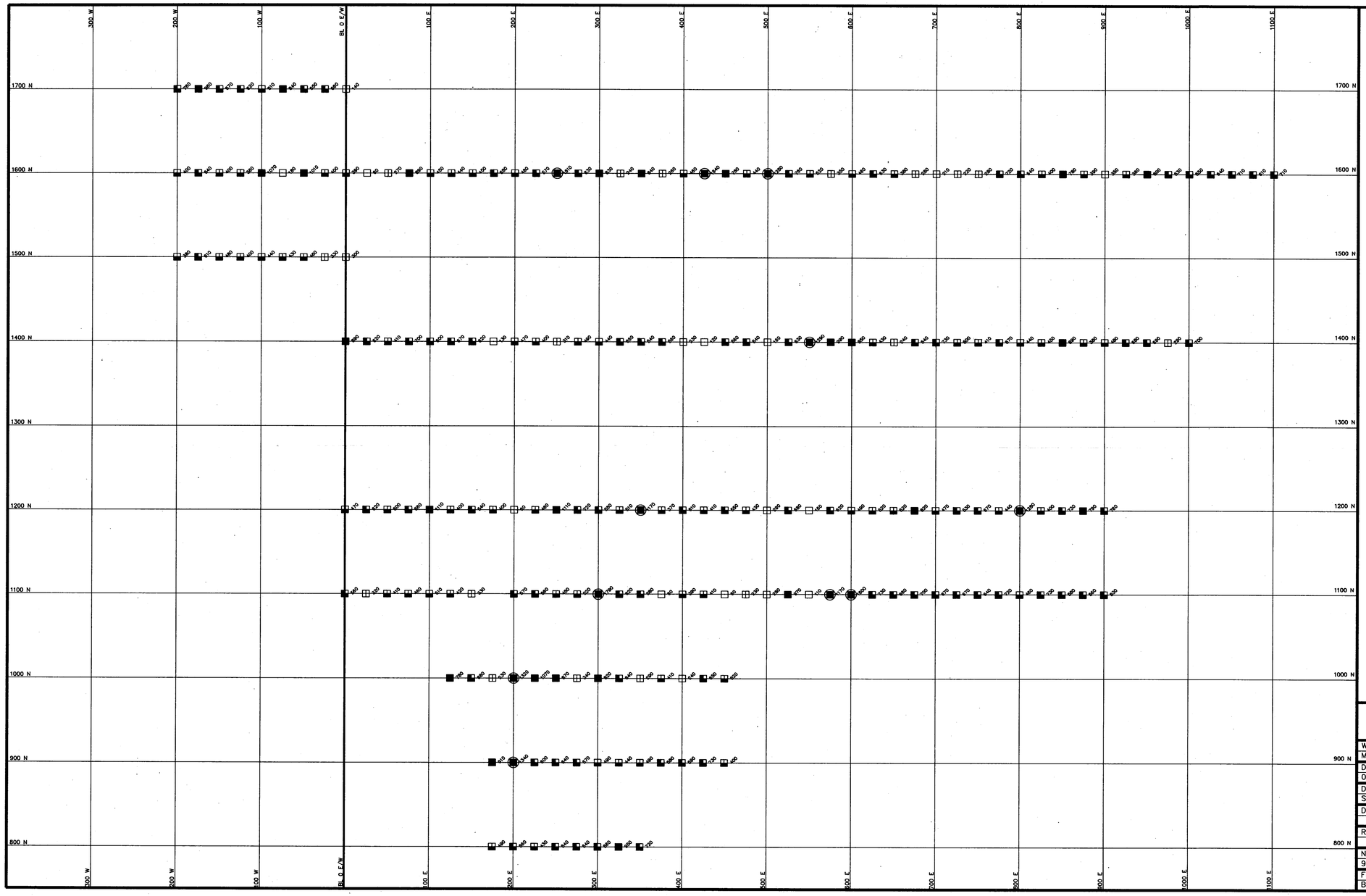
RED STAR AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 15b



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408

PART 1 OF 2

BA Values in PPM

⊡	<1 –	192
⊞	192 –	350
◪	350 –	527
◩	527 –	775
■	775 –	1120
◉	1120 >>>>>>>	

PROFESSIONAL ENGINEER
M. J. JONES
BRITISH COLUMBIA
GEOSCIENTIST

WESTMIN RESOURCES LTD.

Work By	MJ/SMD
Date Drafted	02-25-94
Drafted By	S. DYKES
Date Revised	
Revised By	
N.T.S. Number	92H/2E
File Name	BCSOVERO

BELL CREEK SOIL DATA

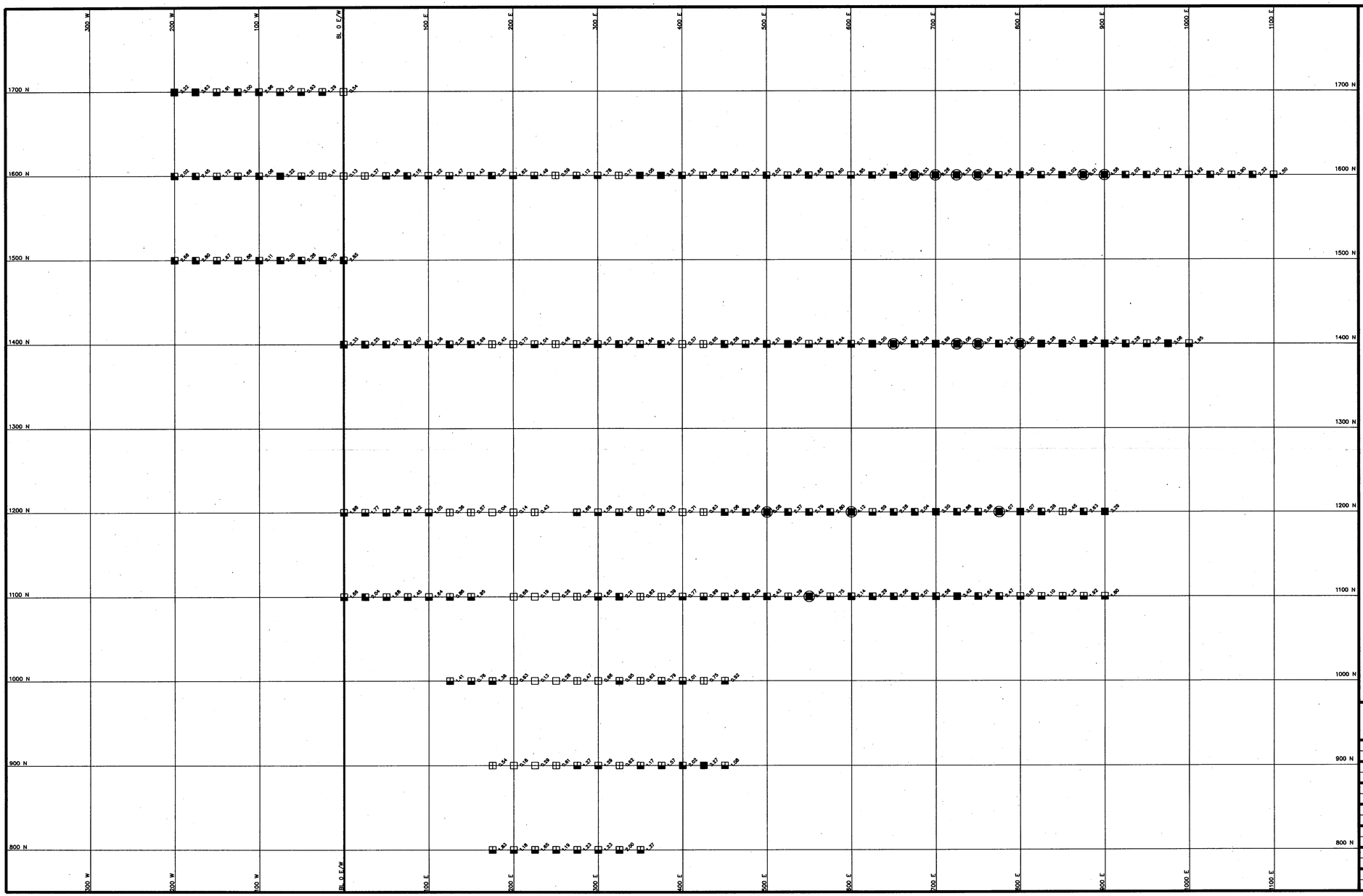
RED STAR AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 15c



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408

PART 1 OF 2

CA Values in Percent (%)

⊡	<0.01 –	0.32
⊞	0.32 –	0.75
◪	0.75 –	2.00
◩	2.00 –	3.00
■	3.00 –	4.00
◉	4.00 >>>>>>>	

PROFESSIONAL ENGINEER
M. J. JAMES
PROVINCE OF BRITISH COLUMBIA

WESTMIN RESOURCES LTD.

Work By	MJ/SMD
Date Drafted	02-25-94
Drafted By	S. DYKES
Date Revised	
Revised By	
N.T.S. Number	92H/2E
File Name	BCSOVER0

BELL CREEK SOIL DATA

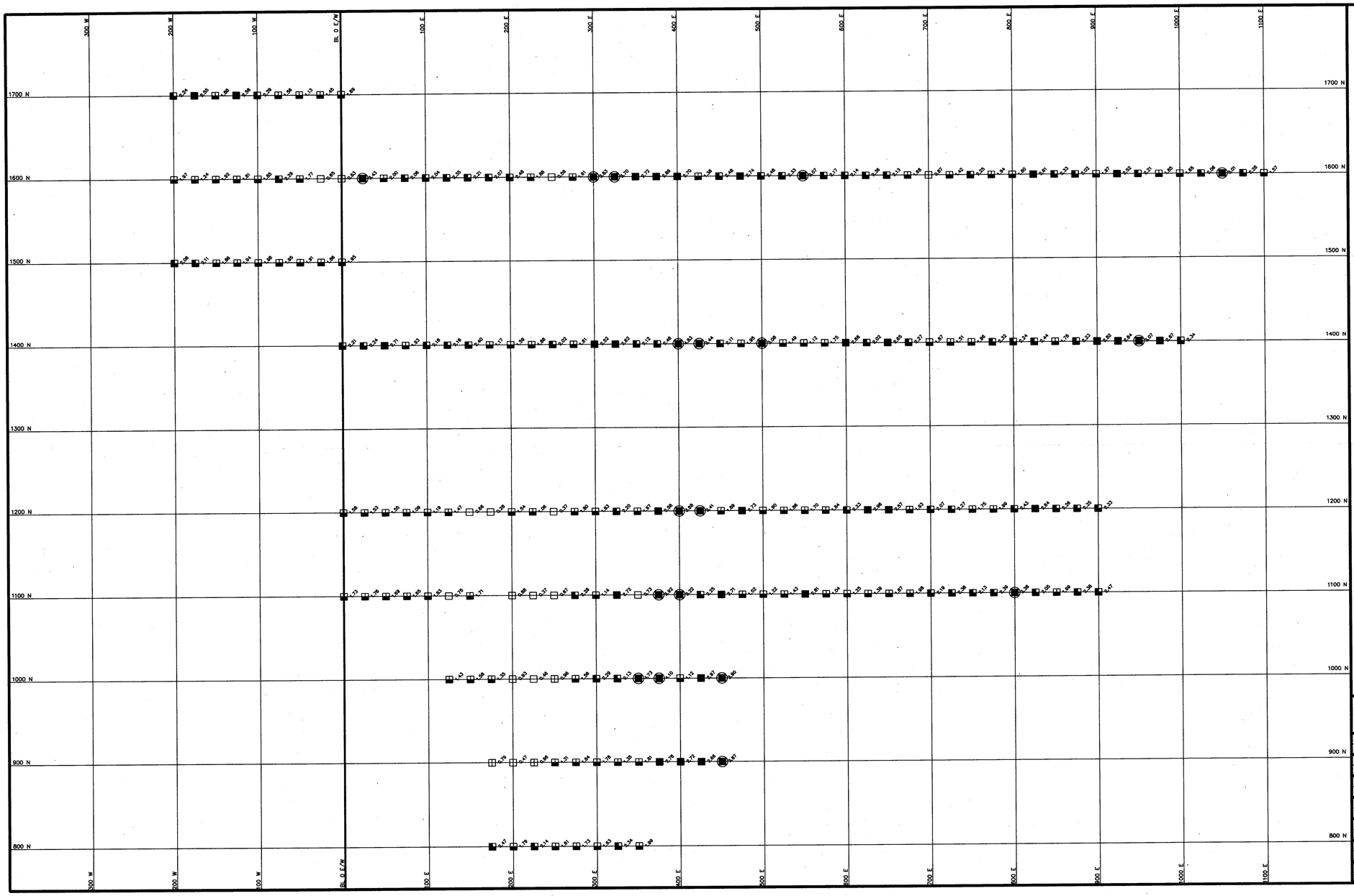
RED STAR AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 15d



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408

PART 1 OF 2

NA Values in Percent (%)

⊡	<0.01 –	0.78
⊞	0.78 –	1.00
◪	1.00 –	2.00
◪	2.00 –	2.50
■	2.50 –	3.00
◉	3.00 >>>>>>>	

PROFESSIONAL ENGINEER
M. I. JONES
ASSESSMENT REPORT

WESTMIN RESOURCES LTD.

Work By	MIJ/SMD
Date Drafted	02-25-94
Drafted By	S. DYKES
Date Revised	
Revised By	
N.T.S. Number	92H/2E
File Name	BCSOVERO

BELL CREEK SOIL DATA

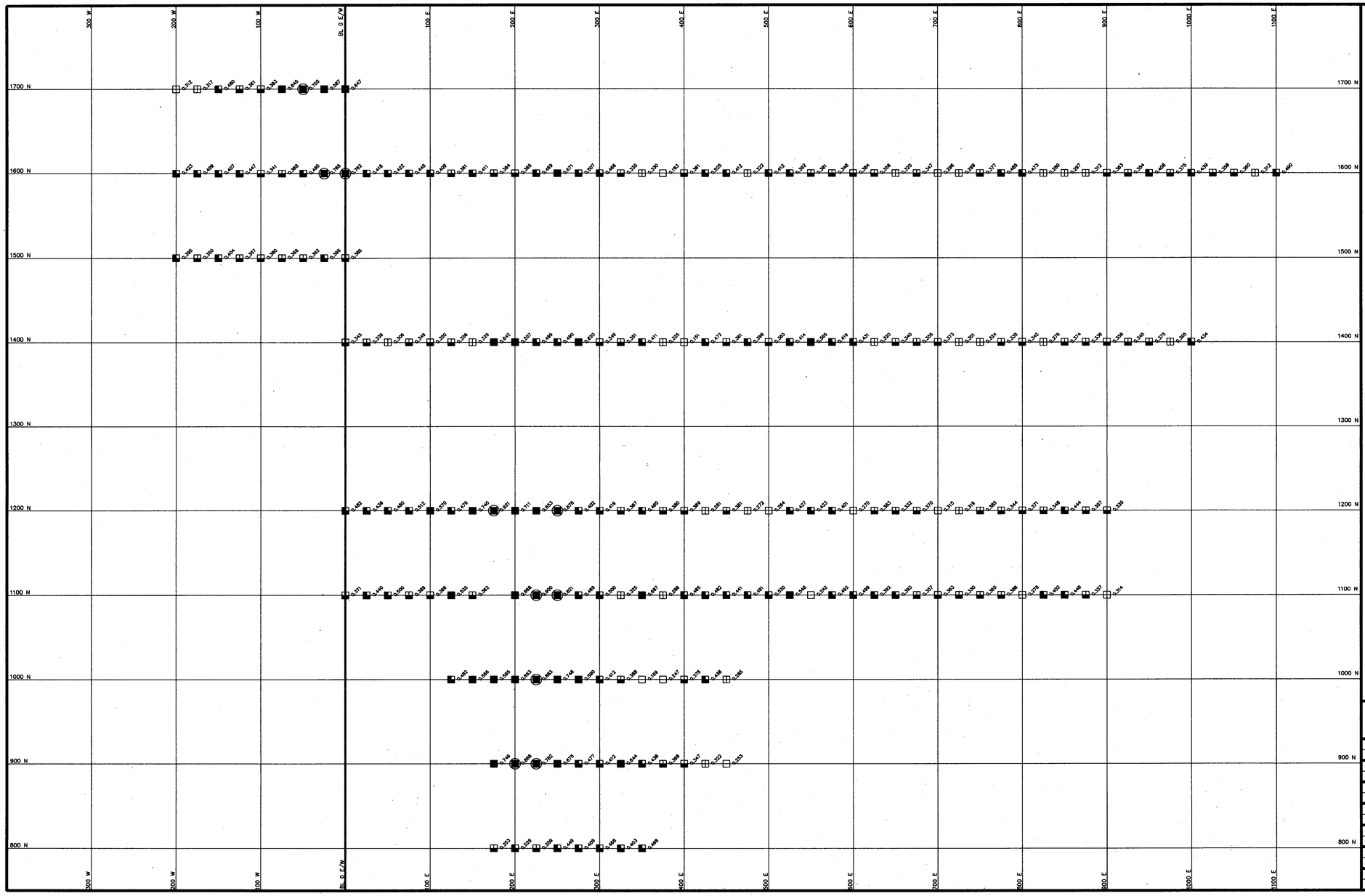
RED STAR AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 15e



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,408

PART 1 OF 2

Alteration Index**

⊡	0.000 –	0.270
⊞	0.270 –	0.330
◪	0.330 –	0.390
◪	0.390 –	0.530
■	0.530 –	0.750
◙	0.750 >>>>>>>	

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** See Section 4.5 of Report

WESTMIN RESOURCES LTD.

Work By	MJ/SMD
Date Drafted	02-25-94
Drafted By	S. DYKES
Date Revised	
Revised By	
N.T.S. Number	92H/2E
File Name	BCSOVERO

BELL CREEK SOIL DATA

RED STAR AREA

Created by GEO-LOGIC system

50.0 0.0 50.0 100.0 150.0

SCALE 1 : 2500

Figure 15f