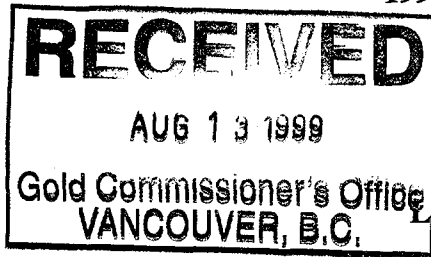


1999 GEOLOGICAL REPORT



on the

ROCK CLAIMS

LAPIN BARITE PROJECT

Greenwood Mining Division
British Columbia

North Latitude 49 01' 45" N and West Longitude 119 07' 00" W
N.T.S. 82E/3E

Prepared for
391290 B.C. Ltd
Matovich Mining
930 12th Avenue
Montrose, B.C.
V0G 1P0

Prepared by
R.E. Miller B.Eng. Sci., P. Geo.
P.O. Box 2941
Grand Forks, B.C.
V0H 1H0

GEOLOGICAL SURVEY BRANCH
MINERAL REPORT

July 1999

25,974

1999 GEOLOGICAL REPORT

on the

ROCK CLAIMS

LAPIN BARITE PROJECT

**Greenwood Mining Division
British Columbia**

RECEIVED

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**GOVERNMENT AGENT
GRAND FORKS**

**North Latitude 49 01' 45" N and West Longitude 119 07' 00" W
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July 1999

**ASSESSMENT REPORT
TITLE PAGE AND SUMMARY**

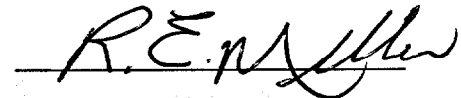
TITLE OF REPORT
GEOLOGIC, GEOPHYSICAL, GEOCHEMICAL
SURVEYS

TOTAL COST
\$1800.00

AUTHORS

R.E. Miller

SIGNATURE(S)



NOTICE OF WORK PERMIT NUMBER(S)/DATE(S)

YEAR OF WORK 1999

STATEMENT OF WORK-CASH PAYMENT EVENT NUMBER(S)/DATE(S)
Transaction I.D. #1000047; May 14, 1999 00063 Grand Forks, B.C.

PROPERTY NAME Lapin Barite Project

CLAIM NAME(S) (on which work was done) Rock 1-9

COMMODITIES SOUGHT Barite, Gold, Silver and Copper

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN

MINING DIVISION Greenwood NTS 082E/03E

LATITUDE 49 01' 45 N **LONGITUDE** 119 05' 00 W

OWNER(S) & OPERATOR 391290 B.C. Ltd
Matovich Mining Company
930 12th Avenue
Montrose, B.C.
VOG 1P0

MAILING ADDRESS 391290 B.C. Ltd
Matovich Mining Company
930 12th Avenue
Montrose, B.C.
VOG 1P0

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude)

Permian, Anarchist (Kobau?) Group primarily greenstone and argillites intruded by Jurassic-Cretaceous granodiorites and feldspar porphyry.

REFERENCE TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS

Type of work in this report	Extent of Work	On which Claims (in metric units)	Project Costs Apportioned (incl support)
GEOLOGICAL MAPPING ROCK CHIP GEOCHEMICAL SAMPLING		Rock 1-9 225 acres	\$800.00
GEOLOGICAL (scale, area) 1:5000 approximately 300 acres covering rock 1-9 and parts of the Hap 1-5 and Ket 28 claims			
GEOPHYSICAL (line-kilometres)			
GEOCHEMICAL (number of samples analyzed for Specific Gravity)			
Rock	6 samples	Rock #1-9	\$300.00
DRILLING (total metres: number of holes, size)	NA		
Core			
Non-core			

RELATED TECHNICAL

Sampling/assaying
Petrographic
Mineralographic
Metallurgical

PROSPECTING (scale, area)		\$250.00
	1:20,000	
	300 acres	Rock #1-9

PREPARATORY/PHYSICAL

Line/grid (kilometres)		
Topographic/Photogrammetric		
(scale, area)		
Location surveys (scale, area)	reconnaissance	
Road, local access (kilometres)/trail		
Trench(metres)		
Underground development		
(metres)		
Other - report preparation, drafting & printing		\$300.00
field expenses		\$ 70.00
vehicle expenses		\$130.00

Total	\$1850.00
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ROCK CLAIMS REPORT 1999

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- 3.0 Property**
- 4.0 Physiography and Climate**
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**SUMMARY REPORT
LAPIN BARITE PROJECT
ROCK CLAIMS**

NEAR ROCK CREEK, B.C.

PART A

SUMMARY and CONCLUSIONS

Previous exploration efforts have identified three areas of significant Barite on the property in south eastern B.C. near the village of Bridesville. The 1999 exploration program was directed towards investigating the Specific Gravity of the more prominent Barite outcrops, including the thin mixed contact zones that contain minor argillite and/or silica with the Barite. The purpose of this effort was to gather information regarding factors involved in possible beneficiation of the Barite.

Initial investigation of the three major Barite occurrences within the Rock claims suggests that the Barite bodies are hosted by Paleozoic graphitic argillites near their contact with a greenstone. Analysis of the Barite has returned assays ranging from 65.92% to 95.94% with the highest grade Barite outcrop returning Specific Gravities of 4.2 and greater to a depth of fourteen metres over a width of five metres.

It is recommended that continuing exploration and development work be conducted on the Rock claims.

**SUMMARY REPORT
LAPIN BARITE PROJECT
ROCK CLAIMS
NEAR ROCK CREEK , B.C.**

PART B

REPORT

1.0 INTRODUCTION

Exploration efforts on the Lapin Barite Project to date have located vein-like? Barite bodies, the most significant of which is located within the Rock #2 claim. Preliminary laboratory work on selected samples has indicated that some of the Barite in outcrop is of sufficient purity to meet petroleum industry specifications for drilling mud. Additional Barite resources are likely to be developed within the Rock claims which will require minimal gravity beneficiation to meet industry specifications. Although bright white Barite has not been noted in outcrop, it is possible that further exploration work could develop Barite of sufficient whiteness for use in the paint and/or plastics industry.

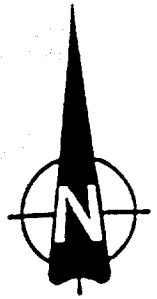
Current and future exploration plans include continuation of mapping and sampling and the initiation of an expanded trenching program. Annual Barite usage in the western oil and gas producing provinces is approximately 50,000 to 60,000 tonnes.

2.0 LOCATION AND ACCESS

The Lapin Barite Project Rock claims cover a ground position of approximately 225 acres within the Similkameen Division of the Yale Land District and the Greenwood Mining Division, British Columbia. All of the project area is within two (2) kilometres of the International boundary.

The mineral holdings are found on map sheets N.T.S. 82 E/3E and more generally, the centre of the claim area is North Latitude 49 01' 45" N and West Longitude 119 07' 00" W near the village of Bridesville, B.C.(Figure #1).

Access to the claims and intervening areas is via interprovincial Highway 3 to the Rock Mountain-Bridesville road at Bridesville. Travel approximately 7 kms east along the Rock Creek-Bridesville road and then southerly 2 km along farm access roads that service farming, ranching, mining, recreation and logging activities.



0 100 200 MILES
0 100 200 300 KILOMETRES

LAPIN BARITE PROJECT			
PROPERTY LOCATION MAP GREENWOOD MINING DIVISION			
Drawn by	NTS 82E/3E	Date June	Figure 1

3.0 PROPERTY

(Figure #2)

Matovich Mining has obtained by agreement, the industrial mineral rights, including Barite, on the Rock #1 thru#9 claims.

The property consists of the following mineral claims:

CLAIM NAME	TENURE NUMBER	UNITS	EXPIRY DATE*
Rock 1	317602	1	May 17, 2000
Rock 2	317603	1	May 17, 2000
Rock 3	317604	1	May 17, 2000
Rock 4	317605	1	May 17, 2000
Rock 5	317606	1	May 17, 2000
Rock 6	317607	1	May 17, 2000
Rock 7	317608	1	May 17, 2000
Rock 8	317609	1	May 17, 2000
Rock 9	317610	1	May 17, 2000

Total Units -----
9

Total 225 acres

*Pending acceptance of this report

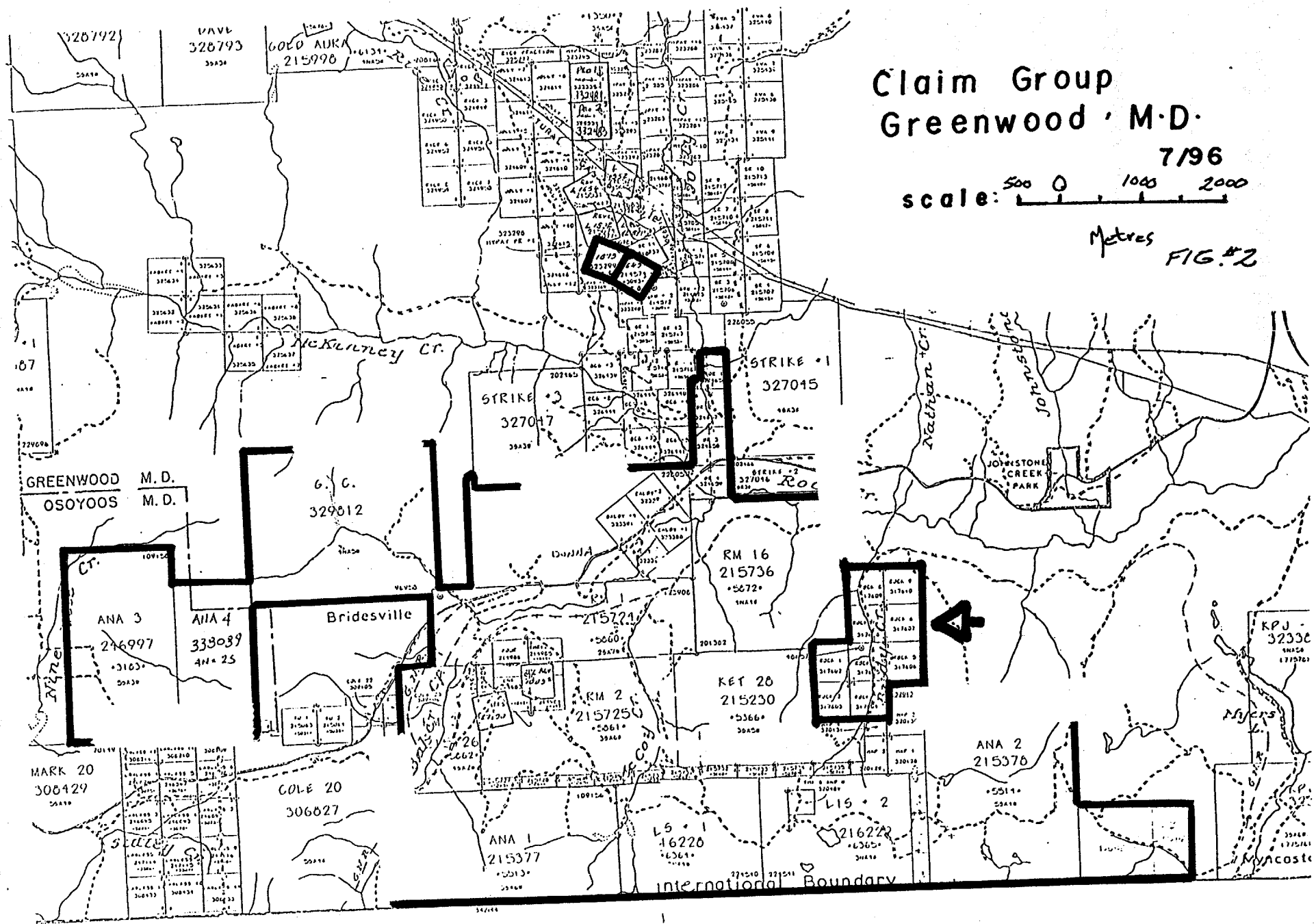
4.0 PHYSIOGRAPHY AND CLIMATE

Local relief is moderate with elevations ranging from 671 metres above sea level in the Kettle River valley to 1362 metres above sea level on Anarchist Mountain. The intervening area consists of grassy, rolling highlands with local steep gradients near the numerous drainages and in particular, along Rock Creek.

Conifers and grassland pasture are found at the higher elevations with grasslands, poplars, willows, and conifers, intermixed with crop and hay lands, at lower elevations.

5.0 WATER and POWER

Adjacent to and within the area of interest, Rock Creek flows southerly to its confluence with the south easterly flowing McKinney Creek. From that point, Rock Creek flows easterly to the Kettle River.



Claim Group
Greenwood · M.D.

7/96

scale: 500 0 1000 2000

Metres
FIG. #2

International Boundary

The north flowing McCoy Creek and its tributaries lie west of the Rock claims. Budy Creek which also flows north cuts through the center of the Rock claims.

Numerous small lakes, ponds, springs and swamps are located within and/or adjacent to the area of interest.

Based on existing water well data, adequate supplies of domestic subsurface water may be obtained from depths generally less than 150 metres and possibly from undeveloped springs in the headwater areas of the many drainages present on the Rock claims.

Water for an envisioned mining and milling operation may be attainable either from a direct source or through completion of holding reservoirs.

A South Kootenay Water Power Company regional electric transmission line crosses to the north of the claims from south east to north west and the power line is paralleled by an Inland National Gas Co. natural gas pipe-line.

6.0 SUPPLIES, TRANSPORTATION and LABOUR

Supplies, manpower and equipment related to mining can be moved by general use vehicles and transport trucks along an excellent network of roads including paved Highway 3 and numerous improved gravel roads. The closest commercial airports are at Penticton 100 km northwest and Castlegar 170 km east.

Limited rail service is available but would involve truck haulage to and/or from the Okanogan, Castlegar or Trail areas. Commercial bus routes service the town of Osoyoos, B.C. 42 km to the west and also services the village of Rock Creek 10 km to the east.

Local supplies are limited generally to food goods and timber industry maintenance parts. The closest sources of major industrial supplies are the Kelowna and Kamloops areas to the north west.

7.0 PROPERTY HISTORY

Mineral exploration and development, within the Project area, commenced around the turn of the century with discovery of the McKinney Creek - Rock Creek placer deposits and mines of Camp McKinney. One of the early lode gold producing areas in British Columbia, Camp McKinney produced 82,000 ounces of gold, with the majority of the production coming in the years 1894-1904. Since 1904 various attempts to revive the camp have been made up until the present time. Camp McKinney lode gold deposits along with the placer gold occurrences of McKinney, Rice, and Rock Creeks are located

along and near the north west boundary of the Lapin Project area.

South of McKinney Camp, minor turn of the century production was attained by direct shipping, hand sorted ore from the Dayton Fraction claim that anchors the copper-gold showings of the Dayton Camp prospects and the Victoria-Old England and Gold Standard mines that produced 560 grams of gold and 1430 grams of silver from 27 metric tons of ore from quartz veins and shear zones during mining activities from 1932 to 1934

In 1955, Mr. Brian Fenwick-Wilson, a prospector, first staked a nickel showing between the Rock Creek bridge and the Rock Creek-Bridesville road and then restaked the ground in 1966. Since that time Newmont Mining Corp., Nickel Ridge Mines Ltd., and Utica Mines Ltd., have carried out extensive exploration programs, including drilling that has outlined a minimum of 30,000,000 tons of 0.22% nickel and 0.015% cobalt that appeared to have sub-economic extraction recoveries.

Other small scale sporadic exploration programs, have continued through to the present time and have included the development of shafts, adits, and prospect pits for gold, chrome, molybdenum, and base metals. In more recent times exploration has centered around geochemistry and geophysics usually followed, where warranted, by small drilling programs.

From 1989 to 1990, Crownex Resources Ltd. conducted fixed wing airborne magnetometre and VLF-EM surveys over the general area from Anarchist Mountain east to the village of Rock Creek and from the International border to 10 km north.

In 1996-1997 Orion International Minerals completed a trenching and core drilling program on the Lapin Barite Project. During this same time period First Point Capital completed a precious metal soil grid over part of the Rock claims. First Point's barium results are shown on Figure #5.

Previous industrial mineral exploitation was limited within the Project area. Mighty-White Dolomite continues to mine and mill a sized product at its Rock Creek operations. Minor exploration and evaluation programs have been directed towards the siliceous meta-chert? outcrops along the Rock Mountain-Bridesville Road near the summit, and the sporadic outcropping of dolomite south of Rock Creek and south of Bridesville. Barite of unknown quality and quantity was discovered to occur within the vicinity of the present Rock claims between Ket 28 and the Ana 2 claims in 1989 and 1990.

Very limited recent placer activity was noted along the Rock Creek and McKinney Creek drainages with no evidence of serious production efforts while windrowed piles of sand and gravel along the shores of the creeks attest to the intense historical placer mining effort.

8.0 REGIONAL GEOLOGY

(Figure #3a, #3b and #3c)

Permo-Triassic Anarchist Group rocks occur throughout most of the area of . The lithologies include amphibolite, greenstone, quartzite, argillite, chert, minor marble, quartz-chlorite schist, quartz-biotite schist, and serpentinite.

Kobau group rocks, similar in age to the Anarchist Group, are found to the west of the area of interest where they are mainly comprised of amphibolite, greenschist, quartzite, chert, greenstone, and minor marble.

Nelson plutonic rocks of Jurassic-Cretaceous age consisting of: massive hornblende-biotite, granodiorite, quartz diorite, and granite, intrude the eugeosynclinal Anarchist Formation within the area of interest.

Smaller plugs, dikes, and sills? of biotite granodiorite, diorite and granite, of Jurassic to Cretaceous age belonging to the Okanogan batholith, are found in the northeast and northwest corner of the claim block area. Additionally, younger intrusive bodies, mainly syenite, of Coryell age, cut Jurassic-Cretaceous intrusions and older metasediments.

Eocene age rocks of the Yellow Lake and Kitley Lake Formation are found trending north-south in the north eastern part of the claim area and can in part, be traced to the south near the International border. These Tertiary rocks are composed of phonolite, trachyandesite, trachyte and a sequence of cobble conglomerate with minor sands.

Generally the Anarchist group rocks strike northwest and dip plus or minus sixty (60) degrees north east. Locally the dip and strike is highly variable due to folding and faulting. Tight folds were noted in the metasediment-metavolcanic sequences of the Anarchist rocks along with strong north east, north west and north trending faults. Within the northerly trending graben-like fault zones, minor east-west faulting was noted. Most of the faulting is attended by phyllitic to mylonitic fabrics, slickensides and/or brecciation.

9.0 1996-1997 TRENCHING and DRILLING (not previously reported)












Two Barite outcroppings are located on the map (Figure #4 located in back pocket) as Area A and Area B were tested by Orion with limited trenching and core drilling in 1996 and by a more extensive core drilling program in 1997. The Orion exploration program on the Lapin Barite project was supported by on going core logging, core splitting, analytical work, surveying and drafting. This data has not been published in any public form however the internal company data is summarized here to aid in clarifying the exploration effort to date.



MAP 1736A

GEOLOGY - PENTITION

Scale 1:250,000
FIG. 3a

	CORVALL SPGITE sh to calcareous, high level, pink and buff sands and quartzites—often and locally with foliation—forming steeply folded, equivalent of the Mariner Group especially the Hilly Lake Formation, gradeless to porphyry and is Shingle Creek Group; probably includes Jg, intermediate-aged in East Half of map area, poorly dated
	SHINGLE CREEK PORPHYRY massive, buff and pink, fine grained (sandy) granite and gneiss with subequal phenocrysts of K-feldspar to 10 cm across (some) as sheet under, and feeding to the volcanic rocks of the Mariner Group, especially the Hilly Lake Formation; a shallow level equivalent of the Crystal System, includes chert, calcareous and related rocks
	"Granodiorite Gneiss" massive, medium gray weathering, resistant hornblende-quartz granitoides (syenitoides), strongly foliated; granite to melanogranite, gneiss and syenitoides, also gneiss and porphyro-mylonite, some schist; much pegmatite and apite, strongly interlayered along Chertown Fault; grades outward (and up the structural isoclinal) to Jg, mg and Pm units of which it is considered as to the shared equivalent probably also includes graded equivalents of the Mariner Group; presumed sheeted and internally foliated during the Tertiary; light-colored microcline and related altered rocks occur to the Chertown Fault
	Massive, light gray weathering, coarse granite gneiss and granitoides, gneiss with pegmatite veins and pits
	Hornblende gneiss, some massive, resistant, gray weathering, coarse grained; some smaller is associated with subequal fresh large hornblende clasts, locally weakly foliated; age poorly constrained
RETACEDOUS AND/OR JURASSIC	
	OKANAGAN DIORITE massive, light gray weathering, medium to coarse grained, light to dark, is calcareous, unfoliated to weakly foliated, fresh basic granitoides and granite, includes unfoliated (granitoides of the Mariner Group) and locally calcareous
	PLATE PLUTON mass to, unfoliated, medium grained, calcic gneiss, granite with weak to strong, subequal hornblende granitoides along the adjacent border; is light to dark, hornblende clasts gneiss and Jg, massive gneiss, diorite (granite), age poorly constrained
	DOCKRIDGE GRANODIORITE massive, dark greenish, hornblende granitoides, calcareous, calcareous, calcareous, calcareous, sheeted and foliated; age unknown
MIDDLE JURASSIC	
	WILSON PLUTONIC PORPHYRY massive, generally medium to coarse grained, medium gray weathering, medium to coarse grained, subequal hornblende-quartz gneiss, quartz gneiss and granite, includes unfoliated (granite) and locally of the Volcanic suite; age poorly constrained
	CLALLA PORPHYRY thick, fresh, massive, medium to coarse grained, porphyry, low diorite, serpentinite and calcareous
	SHALE SPGITE mass to, medium grained, basic hornblende granitoides with a marginal zone of megacrysts, microcline and related hornblende (g) to

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[illegible]

Outcrop boundary	
Probable stratigraphic contact, location approximate	
Geological contact, relations unknown, possibly faulted	
Strike and dip of bedding	↙ ↘
Strike and dip of foliation	↙ ↘
Trend and plunge of lineation and minor folds	↙ ↘
Inferred fault, age and displacement unknown	↕
Inferred normal fault, age unknown, single or downthrown side	↕ ↓
Inferred Eocene normal fault, single or downthrown side	↕ ↓
Note: Inferred fault is metamorphosed rocks, roughly parallel to lineation		

Recommended citation
Timpelmeier-Krügel, D.J.
1999: Geology, Pentstemon, British Columbia Geological Survey of
Canada, Map 1736A, scale 1:250,000.

430

Soil samples collected along First Point Capital's precious metal soil grid were analyzed for barium as part of a larger ICP 32 assay package. The barium results were plotted over the most recent geologic interpretation (Figure #5).

The anomalous barium values as plotted support the northwest trend observed in field mapping as well as the strong association between the Barite and the argillite host rock, noting that at the northern end of the northwest trend the anomalous Barite in soils appears to be associated with the argillite greenstone contact. The soils map also suggests a barium association with greenstones in the southwest part of the grid and support for the continuation of an east west trend that has been identified in trenching near the high grade Barite outcropping trend at 47300E and 31800N.

Four trenches were dug with an excavator; two in Area A and two in Area B. East-west trenching in Area A exposed a north-south contact between the Barite and argillite along the east side of the Barite body and the north 15 degree west poorly defined Barite argillite contact on the west side of the Barite body. A second trench twenty metres south of the first trench in an area of podiform like lenses of Barite, revealed an east-west (90-110 degree) 0.5 metre wide Barite body with possible extensions to the east and west. (Figures #6 and #7).

Trenches in Area B were dug along a north 70 degree east line to cross cut the postulated northwest trending Barite bodies observed in outcrop. The two trenches are separated by 29 metres and both expose Barite systems. Trench number one, the northerly trench, exposed Barite along the east and west ends as well as the middle area of the trench. Trench two to the south, uncovered Barite along the east end and the middle of the trench. The westerly 4.0 metre wide Barite exposure in Trench one does not appear to continue to Trench two. The middle Barite occurrence in both trenches tended to be narrow, measuring one half to one metre in width with steep dips. The easterly Barite occurrence observed in both trenches was the most recessive and appeared to be four metres in width with northeast dips. In all cases the Barite observed was hosted by graphitic argillite which appeared to be highly silicified between occurrences. The strike of the Barite in outcrop and trenches appears to be northwest with steep dips to the northeast.

Trenches in both Area A and Area B were sampled and the samples sent to the laboratory for Trace Element analysis and Specific Gravity determination. The samples for which results exist have shown no detrimental heavy metal content. Results from select samples indicate that the Specific Gravity ranges from 3.7 to 4.3 and the lower Specific Gravities are the result of silica. No metallurgical work was completed to indicate at what mesh size the silica would separate from the Barite.

Fifteen (15) core holes, four of which were BX and eleven of which were NQ, were drilled during the 1996-97 work program totaling 528.39 metres. NQ core hole #10 collared in the same location as 97LAP-9C intersected 0.63 metres of Barite at 32.9 metres. The intersection is not plotted on Figure #4 (map in back pocket). Drill rates were less than ideal and diamond drill bit wear was excessive resulting in a change from

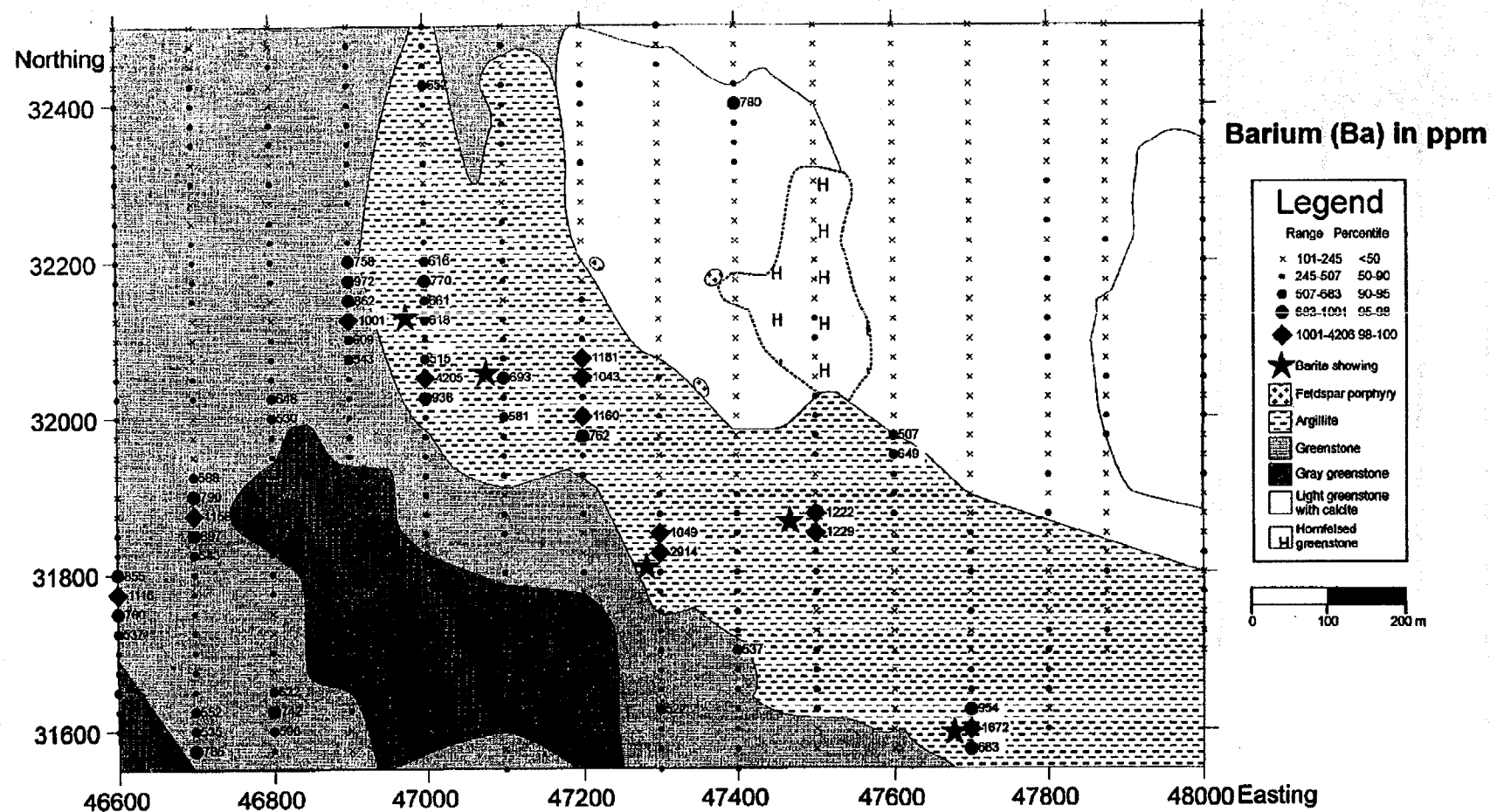


Figure 5 Soil geochemistry for Ba of the Rock Creek grid area, BC.

a top driven hydraulic drill to a Longyear 38. Core recovery rates were acceptable. Poor core recovery was noted when the Barite argillite contacts were intersected.

From the onset of the program analytical data requested from the laboratory has been for specific gravity, percent Barite and ICP 32 geochemistry for trace elements. The percent Barite ranges from 65.92% to 95.94% and the ICP 32 geochemistry for detrimental metals shows that the levels are well within acceptable limits and that silica is the major contaminant observed in core.

The following tables list the assays from in-house data not previously published.

TRENCHING

AREA A Trench #1

Results of chip samples taken from east to west across 5 metres of exposed Barite. May approximate width of body.

SAMPLE #	SPECIFIC GRAVITY
96LA - 100R	4.20
96 LA - 101R	4.31
96LA - 102R	4.16
96LA - 103R	4.07
96LA - 104R	3.87

AREA A Trench #2

Results of chip sample across 0.5 metre wide, 90-110 degrees striking Barite body.

SAMPLE #	SPECIFIC GRAVITY
96LA - 105R	4.04

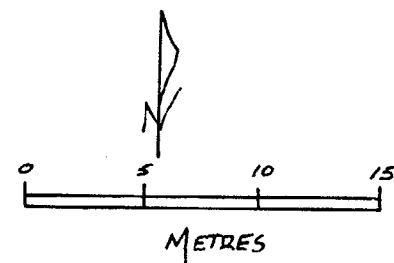
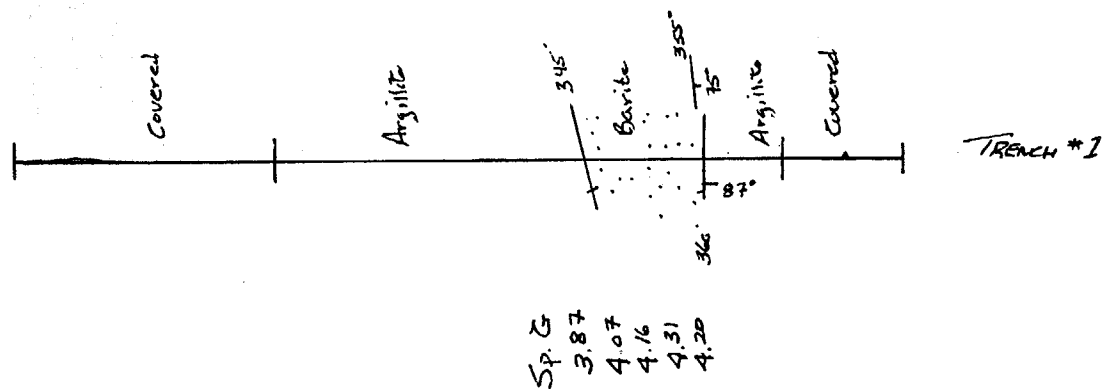
Note:

A surface sample collected from the Trench #2 area prior to trenching, assayed 47.70% barium and 15.28% SiO₂.

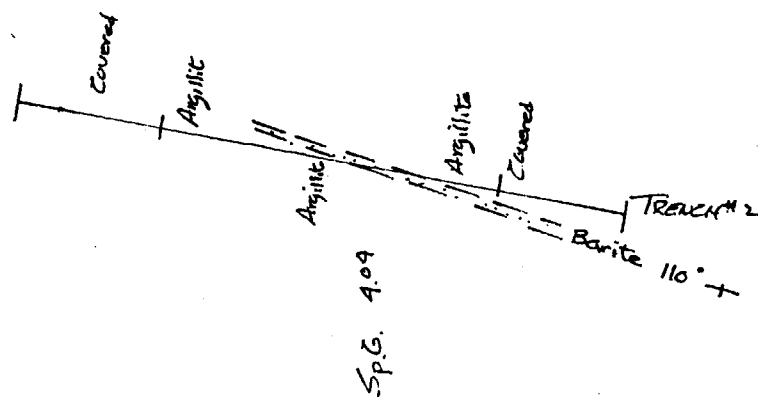
AREA B Trench #1

Chip samples across three separate Barite bodies sampled from west to east.

SAMPLE #	% BARITE
96LA - 1R	90.56
96LA - 2R	84.64
96LA - 4R	77.62



PLAN VIEW



ORION INTERNATIONAL MINERALS

SCALE

APPROVED BY:

DRAWN BY

DATE

12-96

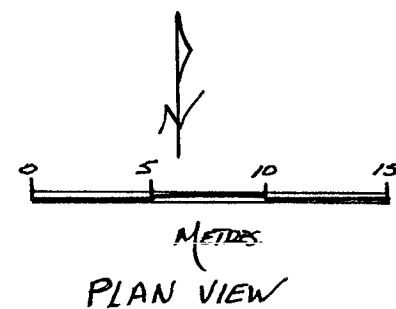
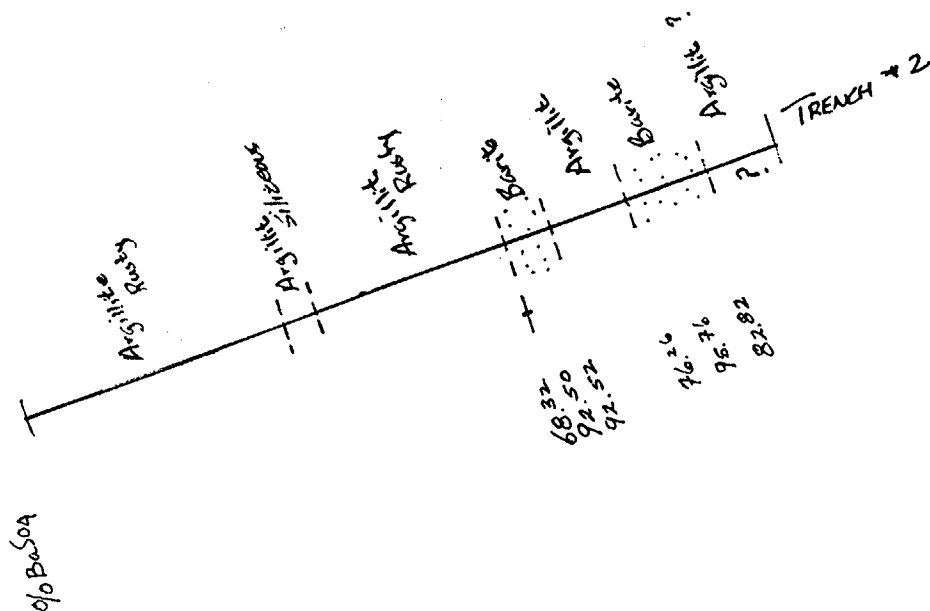
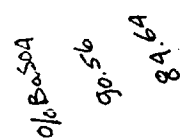
REVISED

LAPIN BARITE PROJECT

AREA "A" TRENCHES

DRAWING N°

FIG. 6



ORION INTERNATIONAL MINERALS			
SCALE	APPROVED BY		DRAWN BY
DATE 12-96			REVISED
LAPIN BARITE PROJECT			
AREA "B" TRENCHES			DRAWING NUM FIG 7

96LA - 10R	73.30
96LA - 12A	91.32
96LA - 13R	92.72

AREA B Trench #2

Grab samples from exposed Barite in trench

SAMPLE #	% BARITE
96LA - 14R	68.32
96LA - 15R	92.50
96LA - 16R	92.52
96LA - 17R	76.26
96LA - 18R	95.76
96LA - 19R	82.82

DRILLING

METRES From-To	DRILL HOLE NUMBER	SPECIFIC GRAVITY G/CC	% BARITE
1.52 - 2.74	96LAP - 1C	4.26	91.72
2.74 - 4.27		4.32	95.94
4.27 - 7.32		4.32	94.34
7.32 - 10.37		4.32	94.16
10.37-13.72		4.29	93.49
	96LAP - 2C	3.99	87.23
0 - 1.21	96LAP - 3C	3.92	86.88
3.05-3.96		3.44	52.80
14.18 - 15.40	97LAP - 1C	4.17	88.22
15.40 - 16.62		4.33	94.08
15.85 - 16.77	97LAP - 2C	3.94	78.46

8.08 - 8.69	97LAP- 5C	3.75	69.06
13.72- 14.18		3.70	65.92
14.94- 16.31		3.92	76.34
26.22 - 27.13	97LAP - 7C	4.05	86.65
27.13 - 28.05	97LAP - 7C	4.13	91.05
24.08 - 25	97LAP - 9C	3.65	69.49
25.0 - 25.91		3.68	70.50
25.91 - 26.83		3.77	75.25
35.37 - 35.98	97LAP - 10C	?	71.22
1.82 -3.05	97LAP - 11C	4.12	94.06
3.05 -4.27		4.38	96.42
4.27 -5.79		4.01	88.35
5.79 -7.31		3.94	86.96
7.31 -8.84		4.16	94.56
8.84 -10.36		4.26	95.66
10.36-11.58		4.36	96.00
11.58-12.80		4.14	94.55

10.0 1999 WORK PROGRAM

10.1 Property Geology and Mineralization Styles (Figure #8 Map located in back pocket)

Within the Project area steeply dipping greenstones, greenstone schists, quartzites, cherts, argillites, and minor limestones of the Anarchist Group are found in outcrops. Locally the metasediment volcanic rock package is intruded by a feldspar porphyry. Propylitic alteration with abundant magnetite is present in the highly foliated greenstone. Chlorite, epidote, calcite, quartz veining and ankerite are also present in minor amounts on Ket 28 near the south west boundary of Rock #2. Overlying rocks of Eocene age Yellow Lake and Kitly Lake Formations occur to the northeast of the property, and consist of clastic sediments.

Mineralization styles within the Project area include weakly mineralized precious and polymetallic quartz veins, pyritic shear zones, breccias and Barite veins. Barite,

where observed in outcrops and core from diamond drill holes, is hosted by graphitic quartz rich argillites. Relationships at the Barite-argillite contact are inconclusive. The contact has been observed to be weakly silicified, subconcordant to concordant and sometimes appears to be controlled by foliation. Core recoveries in the area of the contacts is in some cases less than 70% further adding to the problem of discerning the geologic relationships at that point. Sulphides were not observed in the Barite or at the point of contact with the argillite. Pyrite, megascopically visible in the argillite, was not observed at the contact although iron oxide stain was present near the contact in both the argillite and the Barite.

The Barite itself varies in colour from; light whitish gray to gray and shows relic banding of similar orientation to the enclosing argillites. Silica content varies internally in the Barite and some of the rare country rock fragments appear to show Barite replacement?

10.2 Geochemical Survey Rock Chip Sampling

Six rock samples were collected across the approximate width of the observable Barite and sent to Loring Laboratory Calgary, Alberta for Specific Gravity analysis. The results are as follows:

SAMPLE NUMBER	SPECIFIC GRAVITY	AREA	CHIP SAMPLE WIDTH
99 LAP 1R	3.40	C	0.25 metres
99 LAP 2R	4.00	C	12.0 metres
99 LAP 3R	3.97	B	2.7 metres
99 LAP 4R	3.86	B	3.0 metres
99 LAP 5R	3.94	A	0.25 metres
99 LAP 6R	4.04	A	5.25 metres

AREA C

99LAP - 1R is a select grab sample taken from a 0.25 metre wide argillite hosted Barite vein. The Barite is partially exposed in a road cut and appears to be associated with a northerly trending fault zone possibly the main local fault parallel to Budy Creek. Exposure is insufficient to determine if this Barite is a true vein or just a small block of Barite caught up in the fault.

99LAP - 2R collected as a chip sample over 12 metres sub parallel to the strike of the outcropping. Collection along the east west sample line involved minor hand trenching to follow the zone. The sample was chipped from the southern contact eastward until a mix of silica and Barite was encountered which was taken to be the approximate area of the northerly contact. The Barite strikes 80 degrees and appears to be truncated on the west by a fault that strikes 330 degrees with an apparent steep dip.

AREA B

99LAP - 3R chips were collected from west to east over 2.7 metres approximately perpendicular to the strike. The Barite is light gray to whitish gray and silica appears to be present with the Barite. The Barite outcrop appears to strike 340 degrees west of north and is hosted by argillite.

99LAP - 4R sample was chipped over 3.0 metres approximately perpendicular to the strike from an easterly outcropping that is thought to be the same system as 97LAP - 3R. The Barite strikes northwesterly with steep to moderate dips to the east.

AREA A

99LAP - 5R a select grab sample from an outcropping in a road cut due east of the main showing in Area A. The Barite outcrop measured 0.25 metres striking approximately east-west. The dip could not be determined.

99LAP - 6R a chip sample taken from east to west across 5.25 metres of Barite outcropping. Previous samples taken from this area have returned Specific Gravities averaging 4.2 or greater when the samples collected have not included the thin Barite, argillite, silica contact between the Barite vein and the argillite host rock.

11.0 CONCLUSION

Geologic mapping shows the argillite hosted Barite occurs in close proximity to the argillite-greenstone contacts. The supporting geochemical and specific gravity data indicates that better grades and thicknesses of the Barite outcrop are proximal to structural features such as faults and folds. Continued exploration will likely find more Barite and where accompanied with drilling, may develop commercial Barite deposits.

12.0 RECOMMENDED EXPLORATION PROGRAM

Continuation of the Barite exploration program is recommended. The trenching programs in Area A and Area B should be expanded to evaluate the strike and consistency of the major showings in each area. The new trenching program should involve the separate stockpiling of the waste rock, direct ship Barite and Barite requiring beneficiation. The trenches should be sampled and mapped. Large samples from both the direct ship pile and beneficiation pile should be shipped for milling and beneficiation testing. The trenching program should be followed by a large tonnage bulk sample program to aid in developing information for a feasibility study and mine plan.

13.0 ESTIMATED COST OF THE RECOMMENDED PROGRAM

The following is the proposed budget for the initial trenching program on the Rock Creek Barite project.

STAGE I

Excavator with thumb bucket and hammer	\$280.00/hour x 30 hours	\$8,400.00
Mobilization & de-mobilization (low boy costs)		\$1,400.00
Labour for hand sorting 2 men x 5 days @\$125.00/man		\$1,250.00
Pick-up truck 5 days x \$45.00/day		\$ 225.00
Sample shipping & misc. supplies		\$ 200.00
Assays		\$ 300.00
Road up-grade and user fee		\$ 500.00
Tree removal (may be required to pay for trees that need to be removed)		\$ 500.00

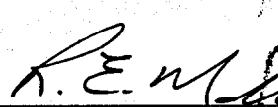
Total	\$12,775.00
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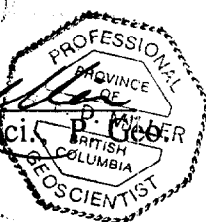
This proposed budget is for three trenches and sorting the Barite into waste, jig material and direct ship material. The costs for the excavator varies between \$350.00/hour and \$170.00/hour depends upon the size of the machine, type of hammer and whether or not there is road building or logging going on in the bush during the time the equipment is needed. The price of \$280.00/hour quoted is the price paid for the machine that was used on the property in a previous trenching program. This budget also assumes minimal commercial assay work with most of the Specific Gravity analysis being done on site.

STAGE II

BULK SAMPLE PERMIT	\$10,000.00
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Respectfully Submitted


R.E. Miller B. Eng Sci.



APPENDIX A
REFERENCES

ROCK CLAIMS

REFERENCES

- Aeromagnetic Map, Osoyoos, B.C. Map 8598 Geological Survey of Canada, Sheet 82E/3, 1973
- Basil, Chris, 1990. Airborne Magnetic and VLF-EM Survey Report on the Ket 1-22 and Ket 24-32 Mineral Claims, Assessment Report for Crown Resources Corp.
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- Sookochoff, Laurence and Miller, R.E.. In-house Company Report on the Barite Occurrence in the Rock Claim Area Prepared for Orion International Minerals. October, 1994.

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Terraquest Ltd., Toronto. Airborne Magnetic and VLF-EM Survey, Flown by Terraquest Ltd. conducted September 26 to October 7, 1989.


APPENDIX C
QUALIFICATIONS

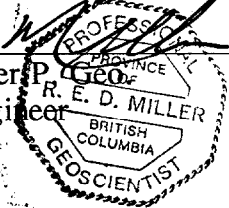
STATEMENT OF QUALIFICATIONS

I ROBERT E. MILLER, of Spokane, Washington U.S.A. DO HEREBY CERTIFY:

1. THAT I am a Geological Engineer with a business address of P.O. Box 2941, Grand Forks, British Columbia. V0H 1H0.
2. THAT I am a graduate from Brigham Young University with a Bachelor of Science in Geological Engineering (1969).
3. THAT I have practiced my profession continuously since graduation.
4. THAT I personally supervised the 1999 exploration program discussed in this report.
5. THAT I do not own or expect to receive any interest in the property described herein, or in any securities of any company rendered in the preparation of this report.

DATED this 4th day of August, 1999


Robert E. Miller, P. Eng.
Geological Engineer



APPENDIX D

ASSAYS

LORING LABORATORIES LTD.

629 Beaverdam Road N.E. Calgary, Alberta T2K 4W7

Tel : (403) 274-2777 Fax : (403) 275-0541

TO : FIRESIDE RESOURCES**ATTN :****PROJECT :****LLL FILE # : 41152****DATE 10 Jun, 1999****REPORT BY : GARY SWABEY****P.O. #****SPECIFIC GRAVITIES**

SAMPLE ID	S.G.
99 LAP 1R	3.49
99 LAP 2R	4.00
99 LAP 3R	3.97
99 LAP 4R	3.86
99 LAP 5R	3.94
99 LAP 6R	4.04

APPENDIX E
EXPENDITURES

99 ROCK
EXPENDITURES

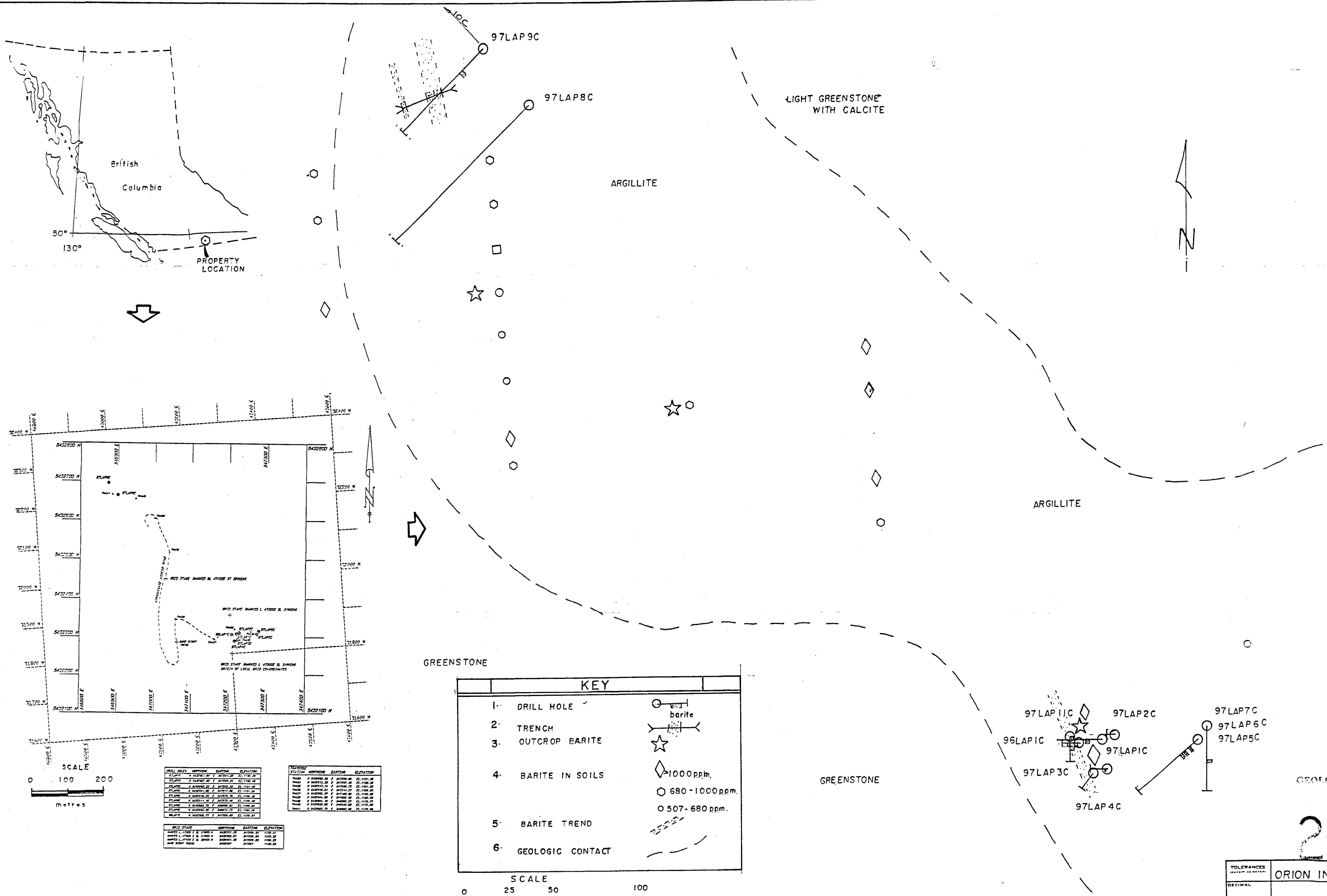
R.E. Miller	
Consulting 4 days @\$250.00/day	\$ 800.00
Kim Anshetz	
1 man x 2 days x \$125.00/day	\$ 250.00
investigating geochemical anomalies	
Field Vehicle	
2 days x \$65.00/day	\$ 130.00
Assays, Shipping & Supplies	\$ 300.00
Report, Printing & Drafting	\$ 300.00
Field Expenses	\$ 70.00

Total

\$1850.00



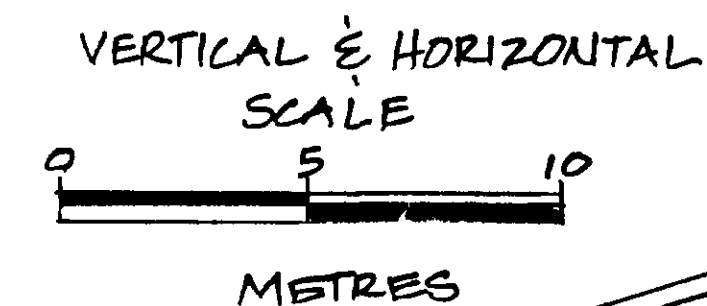
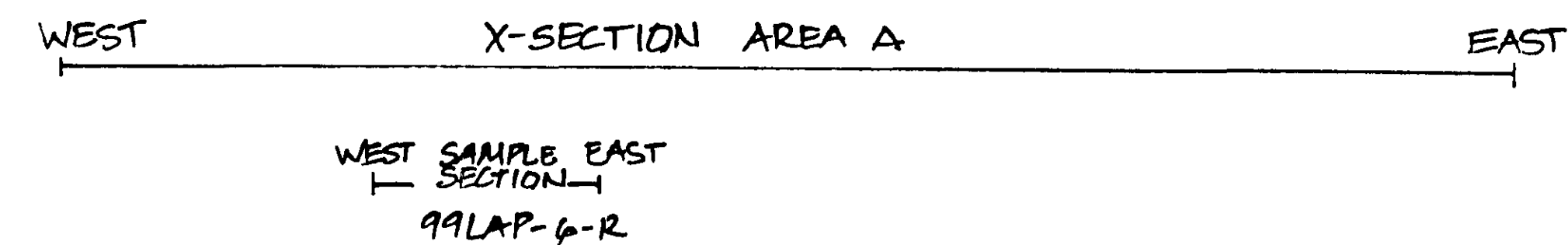
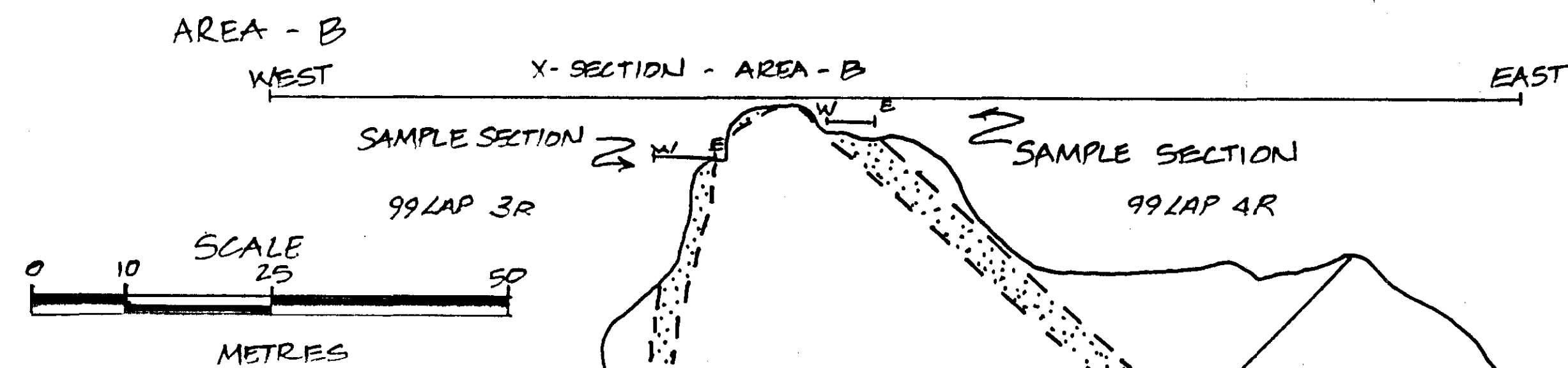
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GEOLOGICAL SURVEY BRANCH
MINERAL REPORT

25,974

TOLERANCES	ORION INTERNATIONAL MIN.
DECIMAL	SCALE
FRACTIONAL	DRAWN BY
ANGULAR	APPROVED BY
DATE	TITLE
DRAWING NUMBER	LAPIN BARITE PROJECT



ROCK CLAIMS 1-9

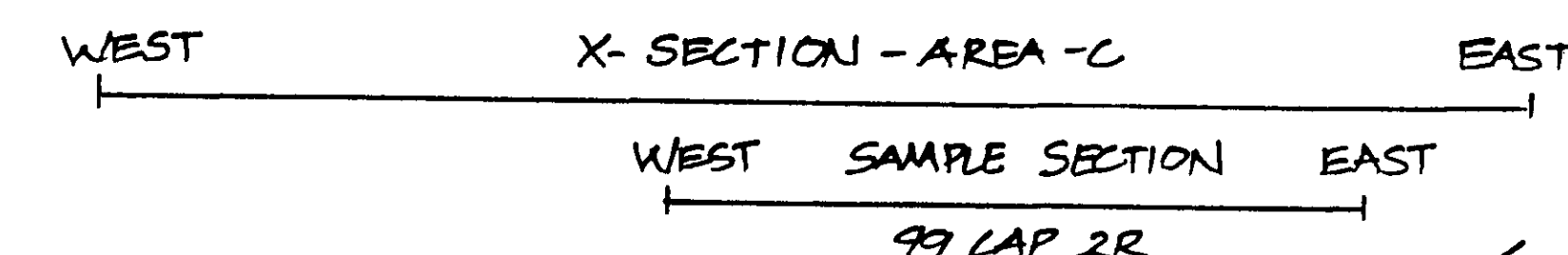
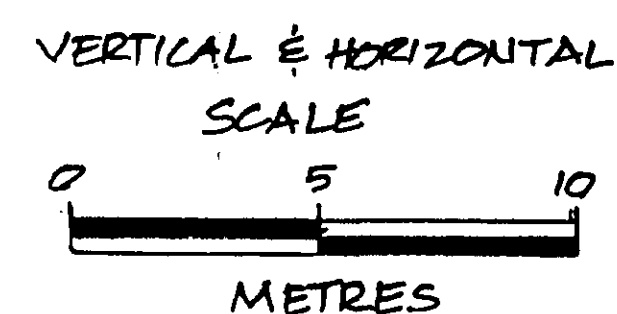
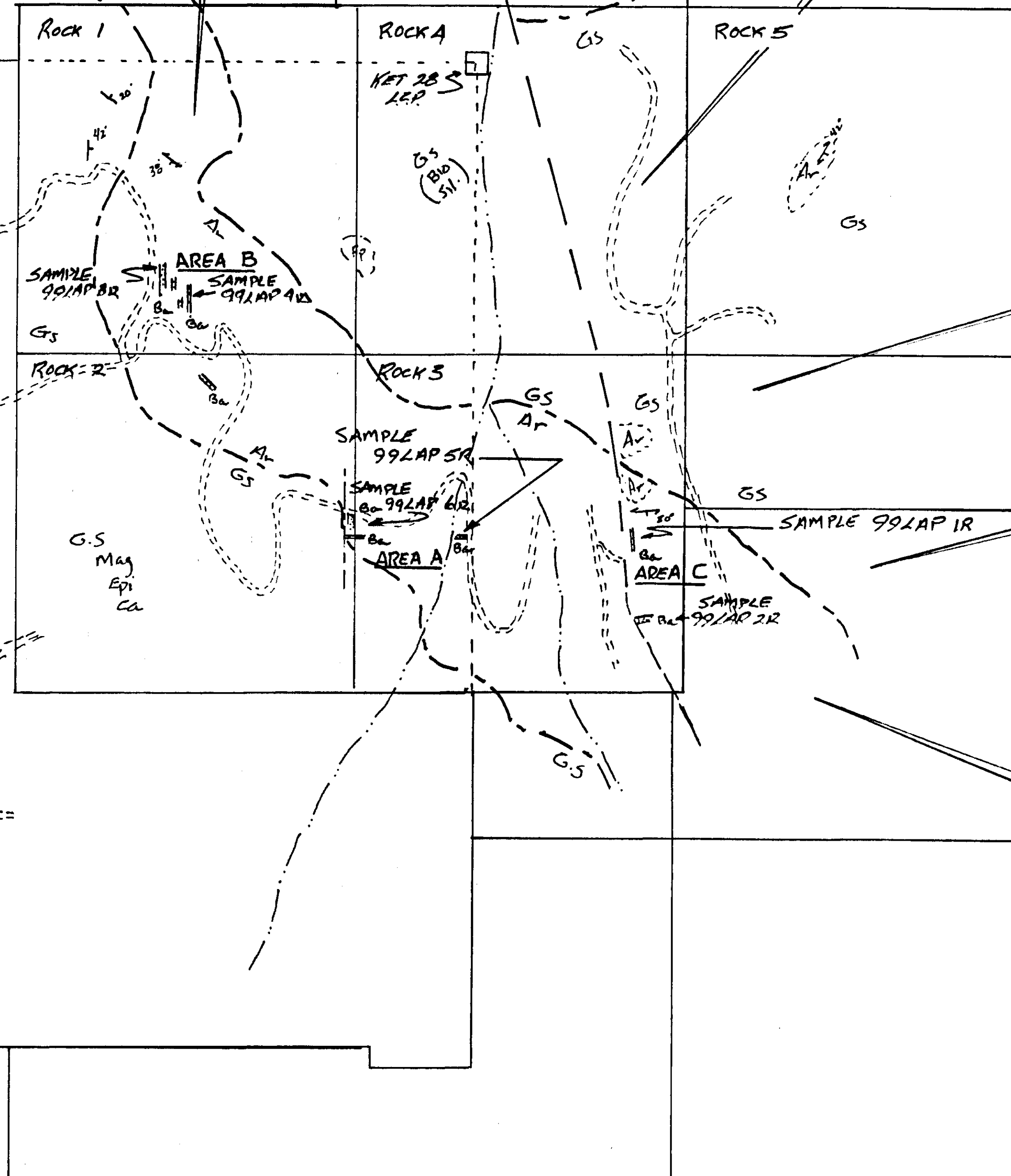


LEGEND

CONGLOMERATE
BARITE
ARGILLITE
GREENSTONE
FELDSPAR PORPHYRY
BIOTITE
SILKIFICATION
CALCITE
EPIDOTE
MAGNETITE
DRILL HOLE
FAULT
GEOLOGIC CONTACT-APPROXIMATE
STRIKE & DIP FORMATION
STRIKE & DIP FOLIATION
CREEK
ROAD

Cg
Ba
Ar
GS
FP
Bio
Sil
Ca
Epi
Mag

1 92
2 95



AREA - C

25,974

LAPIN BARITE - PROJECT

SCALE: 1:50,000	APPROVED BY: [Signature]	DRAWN BY: [Signature]
DATE: Aug 1999	PLAN MAP - 1999 ROCK CHIP SAMPLE LOCATION - WITH GEOLOGY	
Based on R. O'Brien's Geologic Mapping, First Point Chert, 1992		DRAWING NUMBER: FIG. 8