

MAP NO.: ASSESSMENT REPORT X
105 B 1 PROSPECTUS
CONFIDENTIAL X
OPEN FILE

DOCUMENT NO: 092856
MINING DISTRICT: Watson Lake
TYPE OF WORK: TRENCHING

REPORT FILED UNDER: GOLDEX RESOURCES INC.

DATE PERFORMED: OCTOBER 1989

DATE FILED: Dec 15, 1989

LOCATION: LAT.: 60°07'N

AREA: Rancheria

LONG.: 130°26'W

VALUE \$: 3172.80

CLAIM NAME & NO.: A&B 3F, 4F, 7, 8
A&B 21-32
PIGGY 19, 20, 27-38

WORK DONE BY: Max H. Holtby

WORK DONE FOR: Goldex Resources Inc.

DATE TO GOOD STANDING:

REMARKS: Two previously excavated trenches were extended in an attempt to enlarge the exposure of the silver-lead zinc showings already exposed in the trenches. The program was not successful. Some biogeochemical sampling was tried and was found to be a useful exploration tool in the area.

TELEPHONE
736-0426

402 - 1755 WEST BROADWAY
VANCOUVER, B.C. V6J 4S5

December 15th, 1989.

Ms. Patti L. McLeod,
Mining Recorder,
Watson Lake Mining District,
P.O. Box 269,
WATSON LAKE, Yukon,
Y0A 1C0.

Dear Ms. McLeod:

Further to our telephone conversation to-day,
will you please be kind enough to amend the Form C - Application
for a Certificate of Work to conform with the application to
group minerals claims that we have faxed to you to-day.

Also please be advised that the assessment work in
the amount of \$3,714.80 was expended on the border of A and B. #3 and
#4 and should be split evenly between those two claims.

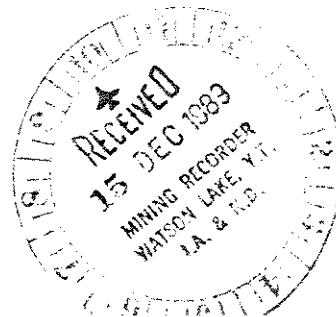
Thank you for your help in this matter.

Yours sincerely,



F. H. FINDLER,
PRESIDENT,
GOLDEX RESOURCE INC.

FHF:DEM





Government of Canada

Gouvernement du Canada

ROUND TRIP MEMORANDUM

NOTE ALLER RETOUR

FROM DE

Drane Emmond

File No. (originator) — Dossier n° (source)

TO A

Patte McLeod

File No. (addressee) — Dossier n° (destinataire)

Subject : Objet

Re: Report by Goldex Resources Inc. on the A + B Property

The report is acceptable, however Vancouver-Watson Lake airfare is not allowable ^(Sched of Exp), thus their total allowable costs are \$3172.80. ~~They may have~~ You may want to check if they have other costs that were not detailed in their cost statement - Otherwise I can approve this report for the \$3172.80. Please let me know. Sorry for the delay on this problem in our mail system.

Signature

Drane Emmond

Date

March 11/90

Telephone

Reply - Réponse

7540-21-029-0717

GC 59a

Signature

Date

Telephone

Intern Affairs Program

X-269

Watson Lake, Yukon

TA 100

Date: 17 July 1990

Time: 10:00

Total number of pages 1
incl. cover page 1

TELECOPIER COVER PAGE

FAX #403-536-7331
PHONE #403-536-7366

DEXED
RECEIVED <i>July 17 1990</i>

From: P.L. McLeod
Mining Recorder, Watson Lake Mining District

Please forward a copy of Teaching/Geoscientific
Report #1114 to B. P. Gray, claims on 105-B-01

Thanks



REPORT OF 1989
TRENCHING AND BIOGEOCHEMICAL SAMPLING
ON THE **092856**
A + B PROPERTY
(A + B, LB, PIGGY, BUG, JA-P, AND BNA CLAIMS)
WATSON LAKE MINING DIVISION

YUKON TERRITORIES

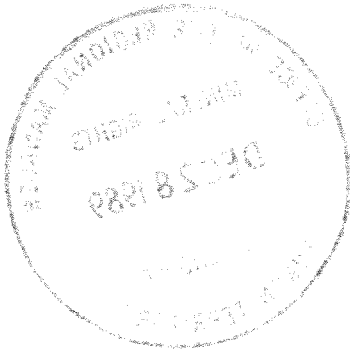
N.T.S. 105B/1
Lat. 60° 07'N
Long. 130° 26'W

CONFIDENTIAL

Goldex Resources Inc.
402 - 1755 West Broadway
Vancouver, B.C.
V6J 4S5

December 1989





085828

085828

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of \$ 3172.80.

[Signature]
Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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Maps

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Appendix

1. Assays, Analyses and Analytical Procedures

1. INTRODUCTION

The A + B Property is a silver-lead-zinc prospect in the southern Yukon 12 km north of the Midway silver-lead-zinc deposit of Regional Resources. The author examined the property on October 7, 1989 with J. Melnychuk of Watson Lake, Yukon. Trenching was carried out by Grant Stewart Construction Ltd. of Watson Lake.

This report is based upon results from the 1989 sampling and includes a summary of previous exploration.

2. LOCATION AND ACCESS (Figure 1)

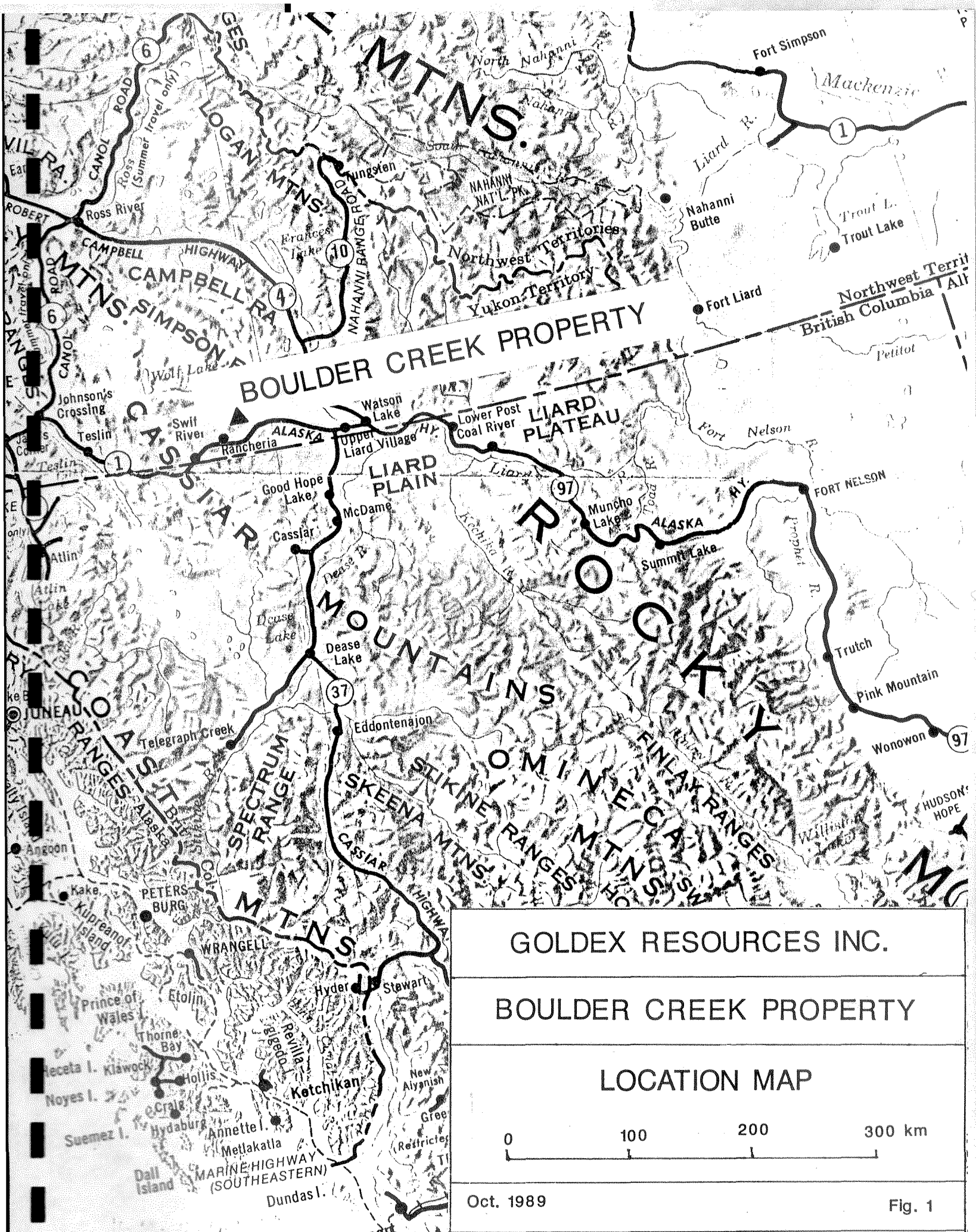
The property is located on Boulder Creek 95 km west of Watson Lake, Y.T. and 14 km east of Rancheria, Y.T. A 4 km four-wheel drive access road extends from km 1,129 on the Alaska Highway to the Luck showing, in the centre of the claims, with a spur road extending to the Pete showing at the north end of the claims.

The claims straddle Boulder Creek and extend from 1,065 m to 1,375 m elevation. The terrain is gently sloping with low-lying buck brush and conifer stands. Tree line is near the north end of the claims.

3. CLAIMS (Figure 2)

The property consists of 73 Yukon quartz claims.

<u>Claim</u>	<u>Number</u>	<u>Expiry</u>
A+B 1-4	Y74248-Y74251	Dec. 31, 1992
A+B 3-4 Frcs	YA12608-YA12609	Dec. 31, 1989
A+B 7-8	YA12610-YA12611	Dec. 31, 1989
A+B 9-20	YA12612-YA12623	Dec. 31, 1990
A+B 21-32	YA12624-YA12635	Dec. 31, 1989
BNA 1-2	Y11818-Y11819	Dec. 31, 1990
BNA 3-6	Y11820-Y11823	Dec. 31, 1992
BUG 5-8	Y74551-Y74554	Dec. 31, 1991

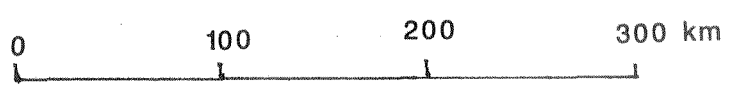


BOULDER CREEK PROPERTY

GOLDEX RESOURCES INC.

BOULDER CREEK PROPERTY

LOCATION MAP



Oct. 1989

Fig. 1

<u>Claim</u>	<u>Number</u>	<u>Expiry</u>
JA-P 1-4	YA36017-YA36020	Dec. 31, 1991
LB 1-9	YA71320-YA71328	July 13, 1991
PIGGY 17	YA35640	Dec. 31, 1991
PIGGY 18	YA35641	Dec. 31, 1990
PIGGY 19-20	YA35642-YA35643	Dec. 31, 1989
PIGGY 27-38	YA35650-YA35661	Dec. 31, 1989
PIGGY 71-72	YA36001-YA36002	Dec. 31, 1991

4. HISTORY

- 1961 Luck 1-15 claims staked by E. Krysko
- 1962 Scurry-Rainbow Oil Company Ltd.
 - SP, EM and geochemical surveys
 - 9 trenches
 - 13 diamond drill holes 2591 ft
- 1967 Scurry-Rainbow - 5 trenches
- 1969 Silver Seven Exploration Ltd.
 - soil sampling survey
 - trench on calcite vein
 - sample Zn-Pb-Ag and WO₃ showings
- 1973 A+B Claims staked by A. Black
- 1974 Delphi Resources Ltd.
 - reconnaissance soil samples
 - one new trench
 - cleaned out two old trenches
- 1977 Serem Ltd.
 - geological survey
 - gravity survey
- 1978 Serem
 - vector EM survey
 - 9 diamond drill holes

1979 - 1981 Amax of Canada Ltd.

- mainly on Fiddler property to north of present claims
- five deep drill holes
- soil samples, etc.

1983 Goldex Resource Inc.

- soil sampling
- VLF-EM

1984 Goldex

- I.P. on 2 lines
- soil geochemical survey

1986 Goldex

- trenching

1987 Goldex

- trenching

5. REGIONAL GEOLOGY (Figure 3)

The area of interest is situated on the east flank of the Jurassic/Cretaceous Cassiar batholith which extends over 300 km southeasterly from the Wolf Lake map-sheet in Yukon to the Kechika map-area in British Columbia. In the Jennings River and Cassiar-McDame map-areas and the south part of Wolf Lake area the eastern flank is underlain by Paleozoic rocks from Cambrian to Carboniferous in age and separable into two or more contrasting assemblages, some of which are believed to be allochthonous.

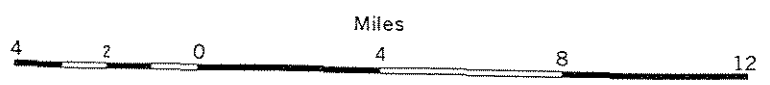
Rocks are described by Poole (Map 10-1960) and by Gabrielse (GSC Paper 68-55, 1968); brief descriptions of the mapped units are summarized below:

Units 1 and 2: (Lower Cambrian)

Units 1 consists of biotite schists, quartzite, marble and skarn, with areas of extensive sills, dykes and irregular bodies of pegmatites, particularly near the contact with the Cassiar batholith.



MAP 10-1960
GEOLOGY
WOLF LAKE
YUKON TERRITORY



COPIES OF THIS MAP MAY BE OBTAINED FROM THE DIRECTOR, GEOLOGICAL SURVEY OF CANADA, OTTAWA

- LEGEND
- Mile post, Alaska Highway 720
 - Trail
 - Cabin
 - Provincial boundary
 - Intermittent stream
 - Marsh
 - Contours (interval 1000 feet) 3000
 - Height in feet above mean sea-level 3260

Cartography by the Geological Survey of Canada, 1960

- LEGEND
- CENOZOIC**
- QUATERNARY
PLEISTOCENE AND RECENT
18 Glacial till, gravel, sand, and silt; lake clay; volcanic ash
 - TERTIARY (?) AND QUATERNARY
17 Vesicular olivine basalt
- MESOZOIC**
- CRETACEOUS OR TERTIARY
UPPERMOST CRETACEOUS OR LOWERMOST TERTIARY
16 SEAGULL AND HAKE BATHOLITHS AND STOCKS: mainly biotite leuco-quartz monzonite and alaskite, in places with quartz-tourmaline concentrations and miarolitic cavities
 - JURASSIC AND/OR CRETACEOUS
15a, CASSIAR BATHOLITH: mainly biotite quartz monzonite and granodiorite, in part sheared and altered;
15b, RAM STOCK: saussuritized biotite-hornblende quartz monzonite and granodiorite, in part sheared;
15c, LOGJAM STOCKS: mainly biotite-hornblende quartz monzonite with basic borders; 15d, mainly biotite-quartz monzonite and granodiorite; 15e, mainly biotite-muscovite granodiorite
 - 14 Dioritic rocks: diorite, granodiorite, quartz diorite; 14a, includes gneiss, hornblende
 - 13 Ultramafic rocks: olivine-bearing clinopyroxenite, dunite; serpentized and metamorphosed equivalents
 - PERMIAN TO JURASSIC (?)
12 12a, pebble and cobble conglomerate, greywacke, limestone; minor quartzite, chert; 12b, andesitic volcanic breccia and tuff; minor lava(?); 12c, feldspathic quartzite, subgreywacke, greywacke, quartzite, grit, argillite; relatively rich in microcline, may be in part equivalent to 12a and 12b
- PALEOZOIC**
- MISSISSIPPIAN**
- LOWER AND MIDDLE MISSISSIPPIAN
11 Upper Division: chert, slate, argillite, hornfels; minor greywacke; 11a, limestone and dolomite, in part with chert nodules, skarn; 11b, sandy and conglomeratic tuff
 - 10 Lower Division: chert and quartzite pebble and cobble conglomerate, chert, quartzite, slate, argillite, hornfels
- DEVONIAN AND MISSISSIPPIAN**
- UPPER DEVONIAN AND LOWER MISSISSIPPIAN
9 Limestone and dolomite, in part with chert nodules, skarn
 - 8 Chert, hornfels, argillite, slate, phyllite, quartzite, limestone, in part with chert nodules; skarn, tremolitic marble, dolomite; 8a, schist and gneiss
 - 7 Greenstone, chlorite schist and quartzite, phyllite, slate, argillite, chert; 7a, greenstone, chlorite schist; 7b, argillite, slate, phyllite, chert, subgreywacke, grit, conglomerate, sericite-biotite schist and quartzite; 7c, limestone and dolomite, in part with chert nodules; 7d, quartz-albite-mica gneiss, albite-actinolite schist
- SILURIAN AND DEVONIAN**
- MIDDLE SILURIAN AND MIDDLE DEVONIAN
6 Upper part: grey and black fetid dolomite and calcitic dolomite;
Lower part: quartzite and dolomitic quartzite
 - MIDDLE SILURIAN
5 Grey-buff dolomite; underlain by thin-bedded shale and limestone, and buff dolomitic siltstone and quartzite
- CAMBRIAN TO SILURIAN**
- MIDDLE CAMBRIAN TO MIDDLE SILURIAN
4 Thin-bedded buff and grey slate, phyllite, and limestone, dark grey slate and limestone; 4a, thin-bedded buff and grey phyllite and limestone; probably Middle and Upper Cambrian; 4b, black slate, argillite, grey dolomite, and dolomitic limestone; probably Ordovician; 4c, hornfels, limestone, skarn
- CAMBRIAN**
- LOWER CAMBRIAN
3 3a, grey limestone; minor dolomite, slate, and phyllite; 3b, unfossiliferous, probably equivalent to 3a; 3c, limestone minor grey and green argillite and slate, dolomite; may be older than 2; 3d, marble, skarn
- PRECAMBRIAN (?) AND PALAEOZOIC**
- CAMBRIAN AND (?) EARLIER
LOWER CAMBRIAN AND (?) EARLIER
2 Quartzite, minor slate and phyllite, quartz grit and fine pebble conglomerate; 2a, phyllite, minor slate; 2b, hornfels
 - 1 Probably metamorphic equivalents of 2; 1a, biotite schist and quartzite; 1b, marble and skarn; 1c, biotite schist and quartzite with sills, dykes, and irregular bodies of pegmatite; 1d, biotite schist and gneiss

Geology by W.H. Poole, 1951-1955
J.A. Roddick and L.H. Green, 1959

Fig. 3

Unit 2 contains quartzite, slate and phyllite, quartz grit and fine pebble conglomerate. Adjacent to the batholith the rocks are hornfelsed.

Unit 3: (Lower Cambrian)

This unit, which is host to numerous lead-zinc-silver showings in the area, contains grey limestone, grey to green argillite and slate, and dolomite. The unit is converted to skarn adjacent to the batholith.

Unit 4: (Middle Cambrian to Silurian)

Slates, phyllites and limestone, buff to dark grey, with dolomite and dolomitic limestone partly converted to skarn forms a unit which is difficult to separate from units 2 and 3.

Cassiar Batholith:

The northwesterly trending elongate Cassiar Batholith underlies the most rugged terrain in the map-area. Much of the batholith consists of massive, homogeneous biotite quartz-monzonite, grey in colour and medium to coarse grained in texture. Other varieties include muscovite quartz-monzonite, augen gneisses, and later pegmatitic dykes. Alteration and shearing are commonly associated features -- sericitization, chloritization and albitization are prevalent in some areas.

Structure:

The Sylvester allocthon is characterized by a broad, northwesterly-trending synclinal feature commonly referred to as the McDame Synclinorium. This feature parallels the contact of the Cassiar batholith in a general way but is modified by smaller scale folds conforming to embayments in the batholith, as is seen near the Marbaco property. Tight folding in Cambrian-Silurian rocks is present near Tootsee Lake. Folding in the

Boulder Creek area is less intense in the thickly bedded carbonate units but the more plastic phyllitic units have undergone several stages of deformation. Strong northwest to northeast faulting has also affected the area. Most faults are steep, normal faults such as the north-trending, easterly dipping fault cutting through the western portion of the Midway property. Faults are marked by depressions, breccia zones and green dykes, some of which are schistose, indicating continued movement.

A strong shear zone trends northwest through the Cassiar batholith west of Tootsee Lake, and along this feature pervasive shearing and mylonization occurs over widths of 2 miles.

The Sylvester allocthon appears to pinch out in the vicinity of the Alaska Highway in Wolf Lake map-area (Figure 3). Major faults mark the northern limit at Spencer Creek. North of this point the predominantly Cambrian sequence exhibits open to overturned folds, and was subjected to regional metamorphism and contact metamorphism near the Cassiar batholith.

5a. Mineral Deposits in the Area

Meister River

The Meister zinc-lead silver property owned by Regional Resources Ltd. is situated about 20 km northeast of the A + B Property. The property is underlain by similar rocks - Cambrian to Ordovician clastics and carbonates. Several distinct showings are present up to 3 miles apart. Geophysical and geochemical anomalies are associated with iron manganese oxide stained areas in calcareous phyllites. The oxide material "exposed in five locations over a strike length of 1200 feet" occasionally reaches 14 feet thick. The zones are believed to resemble those at the Butler Mountain and A + B property in that they represent oxidized surface expressions of manganiferous dolomite/siderite zones with lead-zinc sulphides of replacements origin adjacent to faults and/or diabasic dykes.

Grade of a grab sample from a 500 foot zone was 41.93% zinc, 0.08% lead and 5.2 oz/ton silver while a separate showing assayed 0.23% zinc, 52% lead and 8.5 oz/ton silver (Northern Miner, Sept. 15/83, Dec. 2/82).

Spencer Creek Showings

On the Jack Claims owned by Hardy International Developments Ltd. near Spencer Creek, 9 km north of the A + B property, chip samples from three trenches, over widths 0.2 metres to 1 metre assayed up to 82% lead, 15.8% zinc and up to 74.6 oz/ton silver (GCNL No. 191, Oct. 3/82). The showing were explored by Canex Aerial Exploration Ltd. in 1964 who built an access road, did stripping, trenching and soil geochemistry. The claims were acquired by Pacific Grant Steel Ores Ltd. in 1967 who conducted hand trenching and bulldozing in 1968. Further exploration was done by P.H. Sevensma for Spencer Creek Mines Ltd. in 1969.

Butler Mountain (YP) Showings

Early 1980's exploration by Butler Mountain Minerals Ltd. on their YP and Idaho claims has included Vector EM surveys, soil geochemical surveys and diamond drilling. The EM surveys outlined a conductive zone in Cambrian rocks from 300 to 700 feet deep 15 to 21 feet wide and at least 1000 feet long. The initial drill hole intersected disseminated to massive pyrrhotite, sphalerite and arsenopyrite with one section assaying 0.168 oz/ton gold over 25 feet (Northern Miner, Sept. 15, 1983). A 12 foot section also assayed 1.06 oz/ton silver and 6.2% zinc.

The original target was a zone of altered carbonate with manganese and iron oxides similar to those at the A + B property, the Silvertip zone at Regional Resources Midway deposit and the Spencer Creek and Meister showings. The company reports that a significant tonnage of lead-zinc-silver-gold mineralization had been outlined by drilling in the mid-1980's.

Midway Deposit

The Midway silver-lead-zinc deposit is 10 kilometres south of the British Columbia - Yukon border and about 80 kilometres west-southwest of Watson Lake. Mineralization consists of irregular, pipe-like, open-space filling and replacement massive sulphide bodies in mid-Devonian McDame Group carbonates beneath a major unconformity. Reserves are currently estimated at 1.185 million tonnes grading 410 grams per tonne silver, 9.6 percent zinc and 7.0 percent lead (Exploration in British Columbia, 1986; page A41). Regional mapping shows that the deposit lies near the southern termination of a broad, north-trending extensional fault system (Tootsee River fault zone).

6. PROPERTY GEOLOGY

The A + B property is underlain by a thick series of phyllites, limestones and dolomites. The lower phyllitic unit underlying the valley of Boulder Creek and the adjacent hills to the north includes grey to green chloritic phyllites and schists, limy to dolomitic phyllites, black carbonaceous phyllites and lenses of finely laminated grey limestone.

Overlying more resistant units of grey, thickly bedded limestone and white to buff and rusty - weathering dolomite, dated by Poole, Roddick and Green as Lower Cambrian, on the basis of fossil archaeocyathids.

The superposition of carbonates above phyllites is evident to the northeast of the property and to the southwest and this suggests that an overturned anticline with southerly plunge may be present in the valley.

Foliation seen along the main access road trends from 140° to 170° in orientation with widely varying dips indicating drag folds. Plunges of minor structures are uniformly southerly 10 to 20°. A schematic cross section of the valley, constructed by Ralfs (1978) is shown in Figure 4.



S 35°W ← A

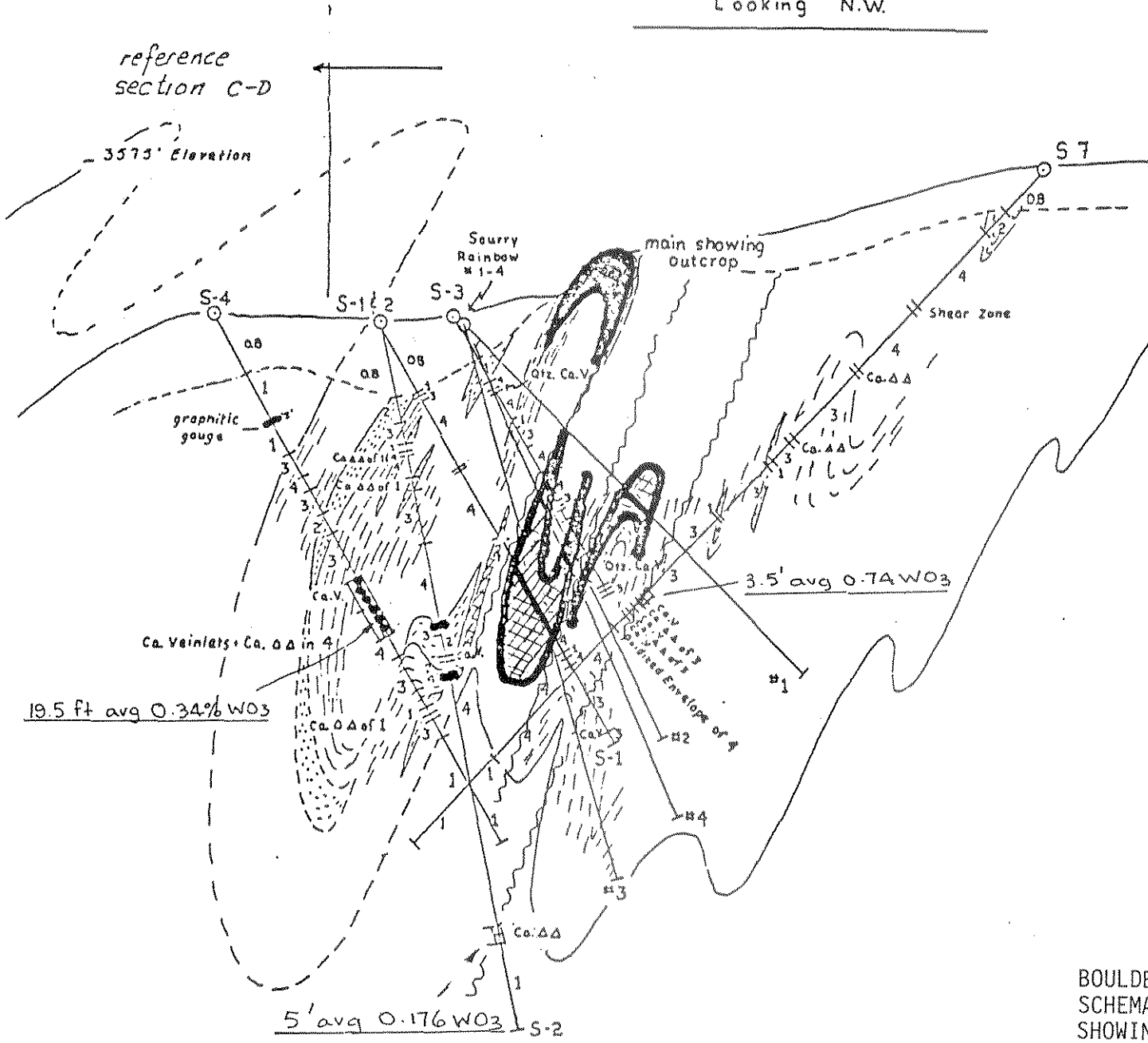
Cross-section A-B
Looking N.W.

→ B N 35°E



reference section C-D

SYMBOLS

-  Pb-Zn intersection
-  Scheelite intersection
- Ca. Calcite
- v. Vein
- △△△ Breccia
- o.B Overburden
- 4 Phyllitic limestone
- 3 Hybrid
- 2 Black phyllite
- 1 Green-gray phyllite



Mineralized Intersections

- Scheelite 
- Zn, Pb, Ag 

Scale
1"=50'

BOULDER CREEK PROPERTY
SCHEMATIC DRILL CROSS SECTION
SHOWING LEAD ZINC SILVER ZONES

modified from sketch by K.Ralfs, 1978

Fig. 4

Several distinct rock types are present on the property:

- (1) Black graphitic phyllite
- (2) Green to grey phyllite - often with limy interbeds
- (3) Limy phyllite, gradational to (4)
- (4) Phyllitic limestone
- (5) Dolomitic limestone
- (6) Quartz-chlorite-sericite schist or phyllite.

Mapping done during previous exploration programmes on the property suggests phyllitic limestone and the quartz-chlorite-sericite schist are the most common rock types. Individual rock units, because of the multi-phase deformation, are lensoid and cannot be traced easily over the property with the limited outcrops and scanty trench exposures.

6a. Mineralization

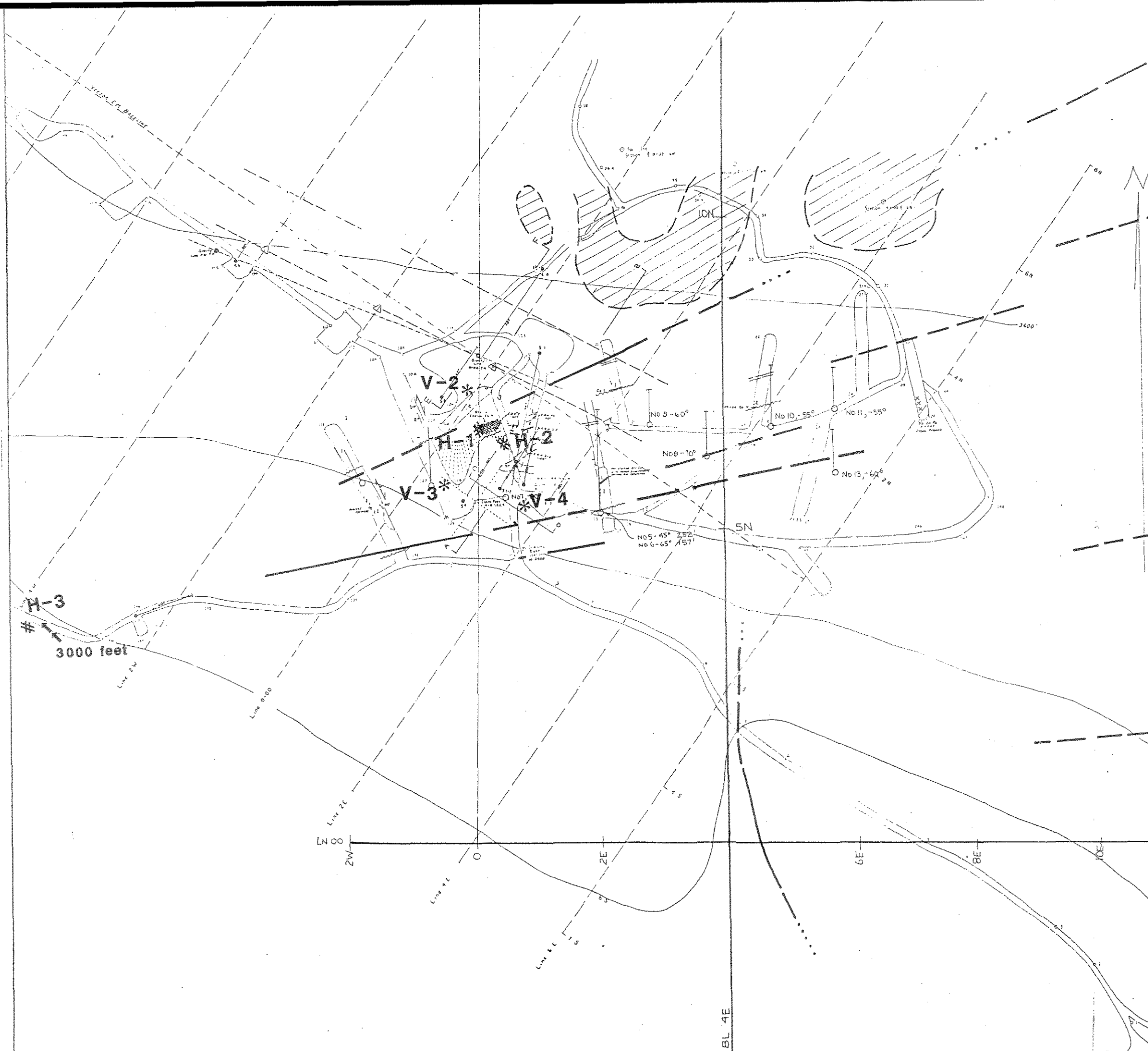
Three modes of mineralization are suggested: one, stratabound silver-lead-zinc at the Luck showing; two, fault related silver-lead-zinc-tungsten trending northeast from the Luck showing; three, tungsten bearing quartz-calcite veinlets at the Pete showing.

i) Luck Showing: (Figure 5)

Zinc-lead-silver mineralization is seen only in the oxidized outcrop near the A + B 1-4 claim posts, in the next trench to the east, and in scattered pieces of float in adjacent trenches.

Two grab samples were collected by the author from the Luck showing. One (89-H-1) from an oxidized outcrop, the original showing, and the second (89-H-2) from a trenched exposure about 15 m east of the oxidized outcrop. Both exposures are micaceous marble (phyllitic limestone) with massive mineralization. Rock sample locations are shown on Figures 5 and 10.

A+B SHOWING GEOLOGY DRILL HOLES and TRENCHES



PLAN MAP OF MAIN SHOWING AREA

1989 SAMPLES

- # Rock
- * Jack Pine Twigs

SYMBOLS

- CAT ROAD
- BRUNTON COMPASS TRIPOD NYLON CHAIN SURVEY STATION
- CAT TRENCH
- SETUP FOR DRILL
- END OF DRILL
- HORIZONTAL PROJECTION OF DRILL HOLE
- LOCATION OF DRILL HOLE COLLAR
- HORIZONTAL PROJECTION OF PZ IN INTERSECTION
- DRILL HOLE DESIGNATION
- SEWELITE BEARING QUARTZ-CARBONATE JEWELRY DUMP
- VECTOR LN GRID
- AREA CONTAINING VEM CONDUCTOR
- HORIZONTAL PROJECTION OF VEM INTERSECTION
- ANOMALOUS GRAVITY READING
- TREND OF GRAVITY ANOMALY
- DELPHI RESOURCE SOIL GRID STATION
- LINE OF CROSS SECTION
- CONTOURS (APPROXIMATE)
- 1962 DDH
- EM Conductor

SCALE
0 50 100 200 feet

1983 GRID

Fig. 5

Alteration and oxidation at the main showing have inhibited exact determination of structure, however Ralfs (Figure 4) suggests that the mineralization occurs in the hinge of an asymmetric fold which has an axial plane dipping southwesterly, and general southeasterly plunge.

The original Luck showing appears to be limited or offset on the north and south by numerous strong northeasterly-trending quartz and calcite-filled fault zones. Nearly all the trenches, which are cut in a southerly direction, expose one or more of these calcite zones. In addition, a major fault roughly 80 feet south of the rusty showing, has been seen in two of the trenches and inferred from the VLF-EM surveys.

Mineralization consists of fine-grained light to chocolate-brown sphalerite, and fine to coarse grained galena, and fine pyrite in a matrix of manganiferous dolomite, chlorite and calcite representing altered phyllitic limestone. Coarser galena and sphalerite is associated with quartz in cross-cutting fractures and seams, but the finer mineralization is banded or disseminated and stratiform in appearance.

Surface showings:

The main showing has been sampled several times, with the following results:

<u>No.</u>	<u>Date</u>	<u>Type</u>	<u>Ag</u> <u>(oz/T)</u>	<u>Pb</u> <u>(%)</u>	<u>Zn</u> <u>(%)</u>
89-H-1	Holtby 1989	grab - original showing	1.23	0.08	2.18
89-H-2	Holtby 1989	grab - trench exposure	2.69	7.05	37.47
AB 5	Liverton 1987	trench exposure	0.80	0.89	15.30
AB 6	Liverton 1987	trench exposure	14.00	21.20	10.20
AB 7	Liverton 1987	original showing	21.90	31.60	18.90
AB 9	Liverton 1987		50.70	53.50	4.57
AB 10	Liverton 1987		14.30	16.20	35.50
ABX 3	Christopher 1983	5' chips. East side	1.46	0.95	10.30
ABX 5	Christopher 1983	15' chip. W-side along limb of fold?	0.86	0.65	3.05
10607	1974 (Price)	10' vertical chip	0.64	0.29	3.06

<u>No.</u>	<u>Date</u>	<u>Type</u>	<u>Ag</u> <u>(oz/T)</u>	<u>Pb</u> <u>(%)</u>	<u>Zn</u> <u>(%)</u>
10608	1974 (Price)	Grab - selected	3.28	5.03	9.48
	Jury	Chip	2.71	4.46	5.38
1026	Jury	Unknown	0.58	0.68	3.96
1027	Jury		0.70	0.60	2.75
1029	Jury		2.74	3.64	3.56
	1963 GSC Chip	4-1/2 ft.	0.58	0.45	4.28

Diamond Drill Results:

The 1962 drill program by Scurry Rainbow comprised 13 drill holes totalling 2,591 feet. A plan of the drill holes is shown in figure 5. Some excellent drill intersections resulted, as shown below:

<u>Hole</u>	<u>Depth</u>	<u>Core Length</u>	<u>Ag oz/T</u>	<u>Pb %</u>	<u>Zn %</u>
62-1	79.8 - 89.8'	10 ft.	4.10	6.08	9.67
62-2	75 - 78'	3 ft.	2.40	2.33	24.02
	100 - 102.5	2.5 ft.	0.52	2.45	6.45
62-3	66 - 105'	39 ft.	2.66	1.47	8.32
62-4	50 - 71'	21 ft.	2.05	3.45	8.47
62-5	36.7 - 40.5'	3.8 ft.	1.3	3.05	2.91

Drilling by Serem Ltd. in 1977 included 9 holes totalling 1,960 feet to test several vector EM anomalies near the main showing. Locations of drill holes are shown in Figure 5. Mineralized intersections are as follows:

<u>Hole</u>	<u>Depth</u>	<u>Core Length</u>	<u>Ag oz/T</u>	<u>Pb %</u>	<u>Zn %</u>
S-1	77 - 78.2	1.2 ft.	4.66	4.78	8.20
	84.5 - 104.5	20 ft.	0.62	0.53	4.69
S2	96.6 - 97.9	1.3 ft.	2.4	3.32	3.35
	111.5 - 112.75	1.25 ft.	0.54	1.05	1.14
S9	62.2 - 64	1.8 ft.	1.07	1.18	1.58
	181 - 182	1 ft.	0.50	2.38	6.35

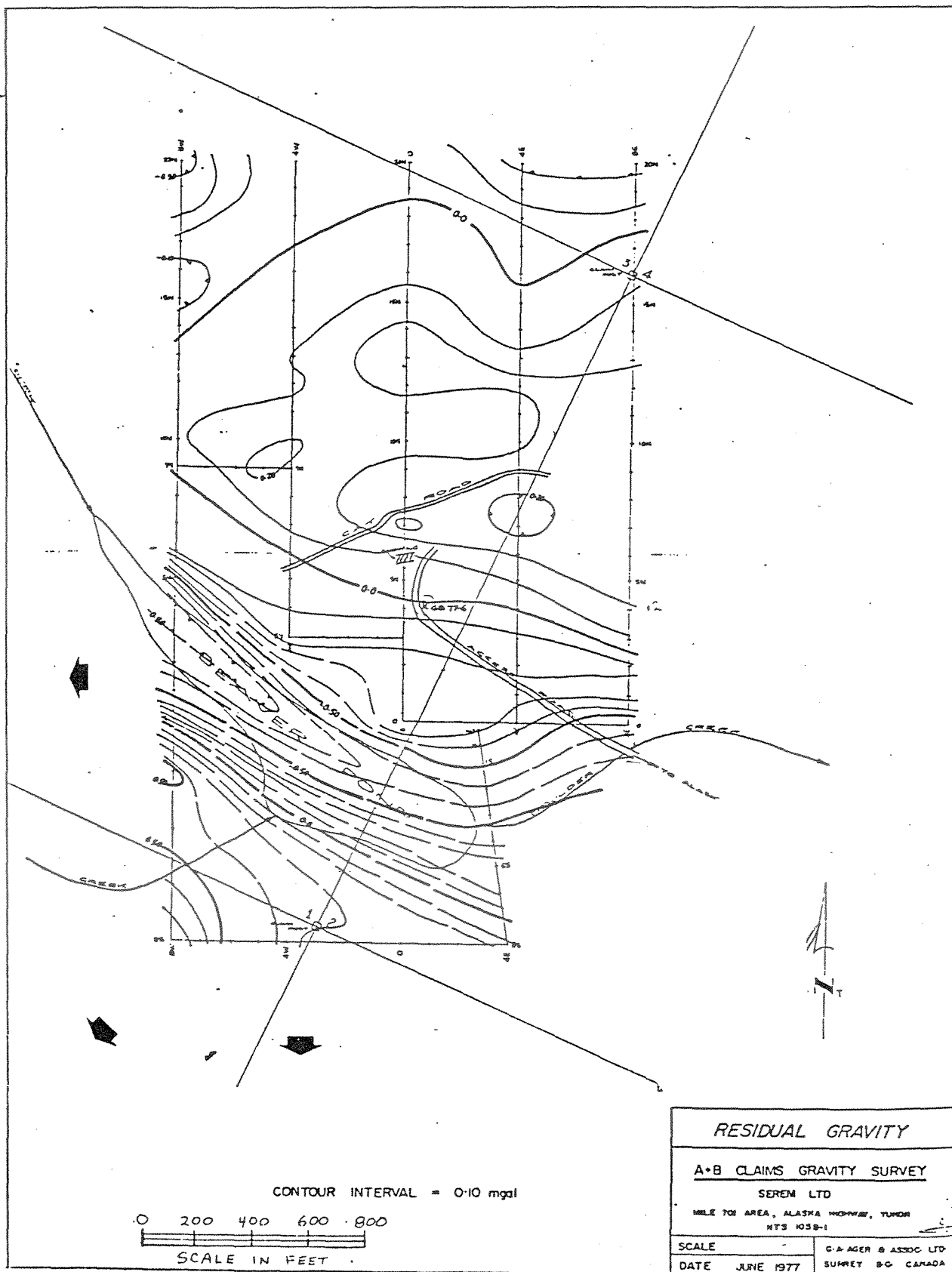
A schematic drill cross-section is shown in Figure 4.

Geophysical surveys on the main showing area have highlighted a gravity anomaly (Figure 6) and northeast trending VLF-EM anomalies (Figures 5 and 10). The gravity survey results filtered for interpretation by C.A. Ager, gave a gravity high response in the valley at Boulder Creek. However, a reinterpretation of the results by Paterson, Grant and Watson Ltd. and Phoenix Geophysics suggests a residual anomaly having a northwesterly strike lying close to the main showing. Also, according to Phoenix Geophysics, a steeply dipping above average mass would be easy to miss using 100 foot station separations of a reconnaissance gravity method.

The .1 to .2 milligal positive anomaly over the main showing is parallel to the northwesterly strike of the foliation in outcrops. This weak positive gravity anomaly would pass in the vicinity of 7N on line 0 (1977 grid) and 9N on line 4W. A further residual anomaly of similar strike is located roughly 500 feet further north. Paterson further suggests that these bodies causing weak anomalies are centred at 150 - 200 feet below surface. A possibility of 500,000 tons of mineralized rock per 1000 feet of strike length could exist according to Paterson.

A two line I.P. survey (Adamson 1984) over the gravity anomaly location as interpreted by Ager showed the area is underlain by rocks of moderate to high chargeability background with no anomalous zones discernible.

One sample (89-H-3) was collected by the author on the road along the north side of Boulder Creek, about 1200 m northwest of the original Luck showing. The outcrop sampled was a pervasively silicified phyllite with weak rusty staining. This sample contained 0.15% zinc and 0.2 oz. silver per ton with no other anomalous metal values.



A+B CLAIMS: Gravity Survey with arrows showing directions of recommended survey. (Fig. 5 from Ager's 1977 report)

Fig. 6

ii) Fault Related Mineralization

Trending northeast from the Luck showing are a trenched exposure and float occurrences of silver-lead-zinc-tungsten mineralization.

In a trench roughly 200 feet east of the main showing an irregular mineralized zone trends northeasterly, at the head of the trench, cutting phyllitic limestones. Samples taken from this zone have been:

		<u>Ag</u>	<u>Pb</u>	<u>Zn</u>
Price 1974	3' chips	0.58 oz/T	0.68 %	3.96 %
Christopher 1983	1' grab	0.30	0.25	2.30
Price 1974		<u>0.24</u>	<u>0.79</u>	<u>2.82</u>
	Average	.37 oz/T	.57 %	3.02 %

Mineralized float is common extending northeast to eastward from these bedrock occurrences. Several samples taken of this material assayed:

		<u>Ag</u>	<u>Pb</u>	<u>Zn</u>
No. 10610	Price 1974 Float	3.44	3.53	2.40
ABX 2	Christopher 1983 Float	0.04	0.05	1.31

Float continues eastward to the most easterly trench, several pieces from which assayed:

		<u>Ag</u>	<u>Pb</u>	<u>Zn</u>
ABX 1	Angular Float	0.40	0.50	3.58
Price 1975	Angular Float	2.74	3.64	3.58

Assay results indicate that silver content is related to the presence of galena, and independent of zinc content. Mineralization is controlled to some extent by

northeast fractures and faults; the fault gouge zone near the south end of one of the trenches assayed 0.41 oz/ton silver, 0.41% lead and 1.88% zinc.

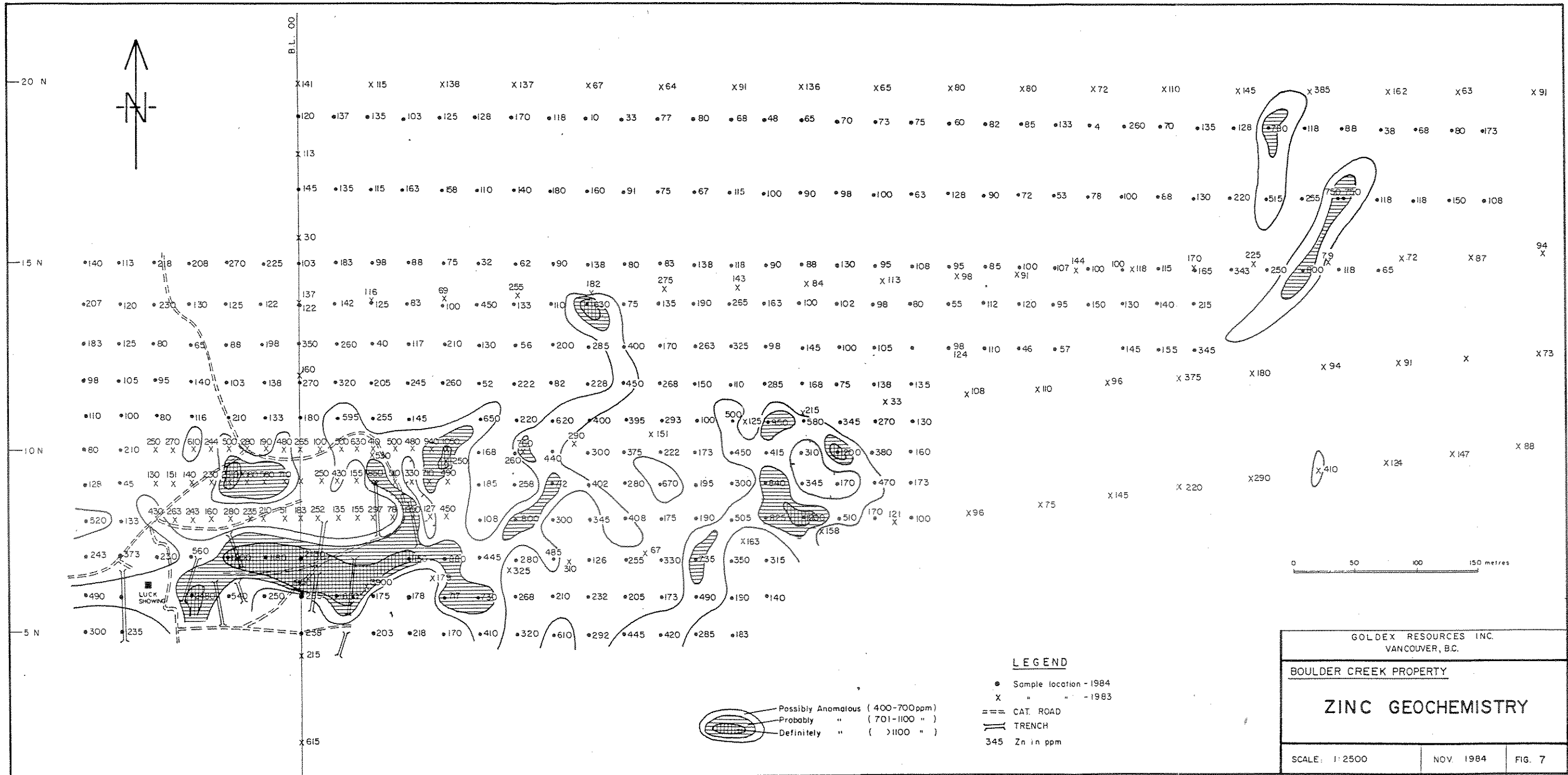
Geochemical anomalies for silver-lead-zinc have been identified in soil samples taken over this area. The most recent sampling (1984) is shown in Figures 7, 8, 9 and 10.

The strongest combined lead-zinc-silver anomaly, when 1974, 1975, 1983 and 1984 data are combined, is centred on the mineralization exposed in the trenches, and extends northeastward.

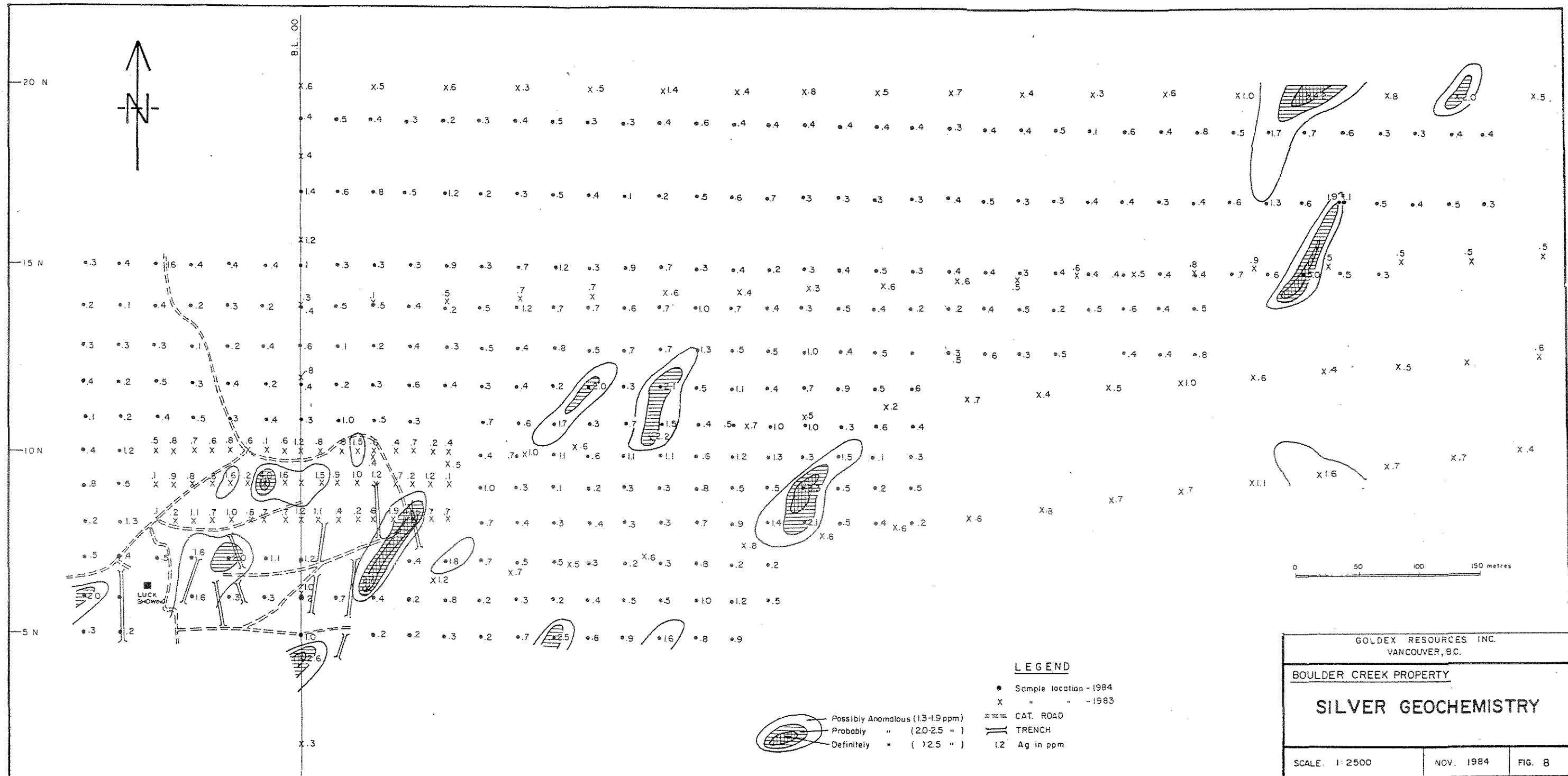
Two other strong silver-lead or silver-lead-zinc anomalies occur 950 metres (3,000 feet) east of the showing on the top and bottom geochem lines which originate at 20N and 6N (Figure 11 - 1983 grid), respectively. Peak values here are 4.2 ppm silver, 80 ppm lead and 410 ppm zinc. A third significant anomaly occurs on line 2 (originating at 10N), at a point 120 m to 240 m west of the Fiddler prospect road.

The strongest anomaly is an area roughly 200 metres by 60 metres with peak values in soils of 2610 ppm lead, 750 ppm zinc and 4 ppm silver. These values compare favourably with those found over the mineralized showing in 1974. The anomalous area lies to the north, well outside the limits of 1962 and 1977 diamond drilling (Figure 5).

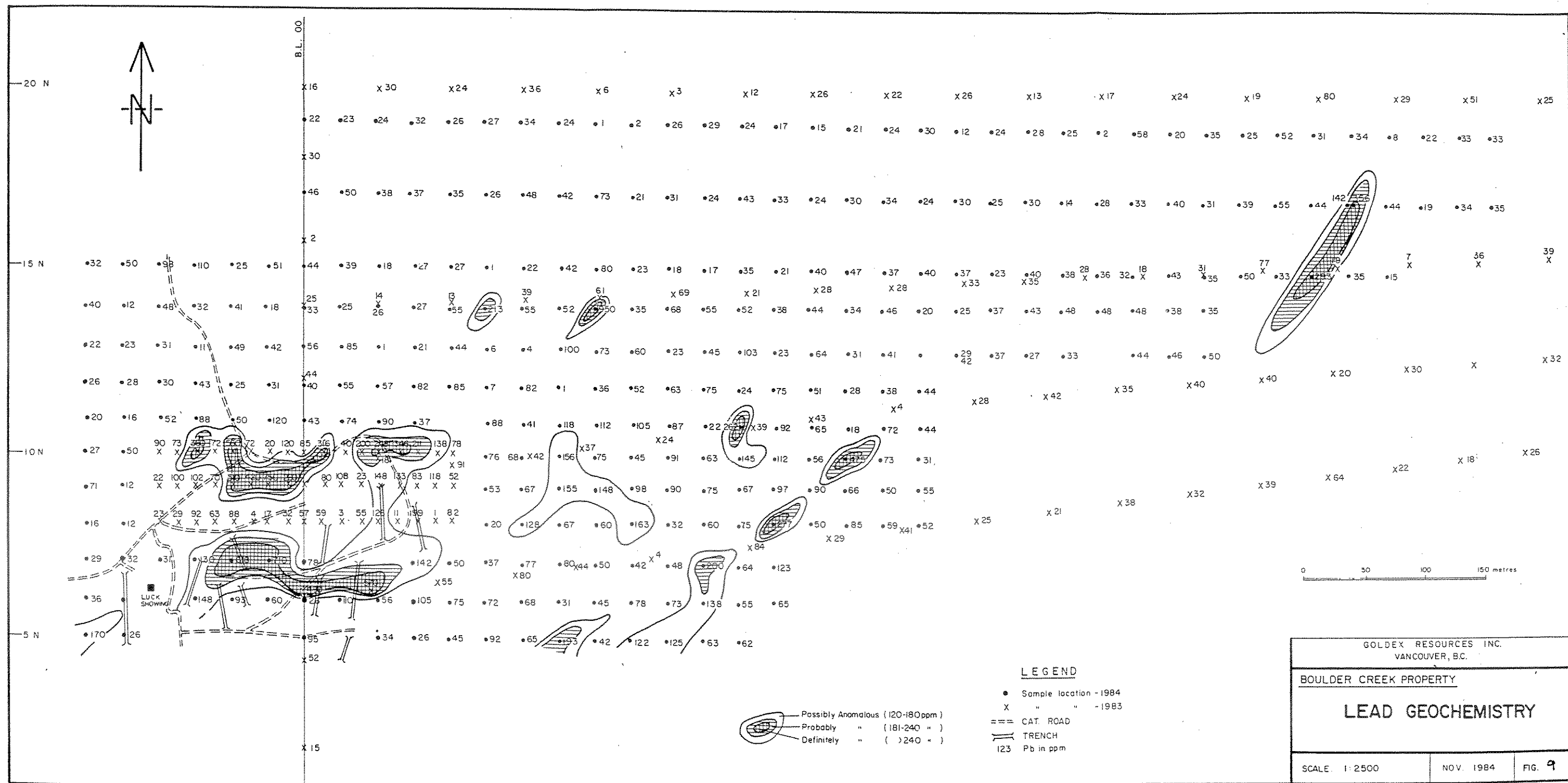
Strong VLF-EM conductors trend northeastward from the main showing (Figure 10). The crossovers indicate a broad zone of conductors which corresponds at least in part with the exposed sulphide zone and with northeast trending black phyllites in fault contact with phyllitic limestones. A second zone of conductors trends eastward from L 10E/150N to 18E/250N (1983 grid). Both conductive zones may be offset slightly along their strikes with offsets corresponding to the direction of foliation (140-160°).

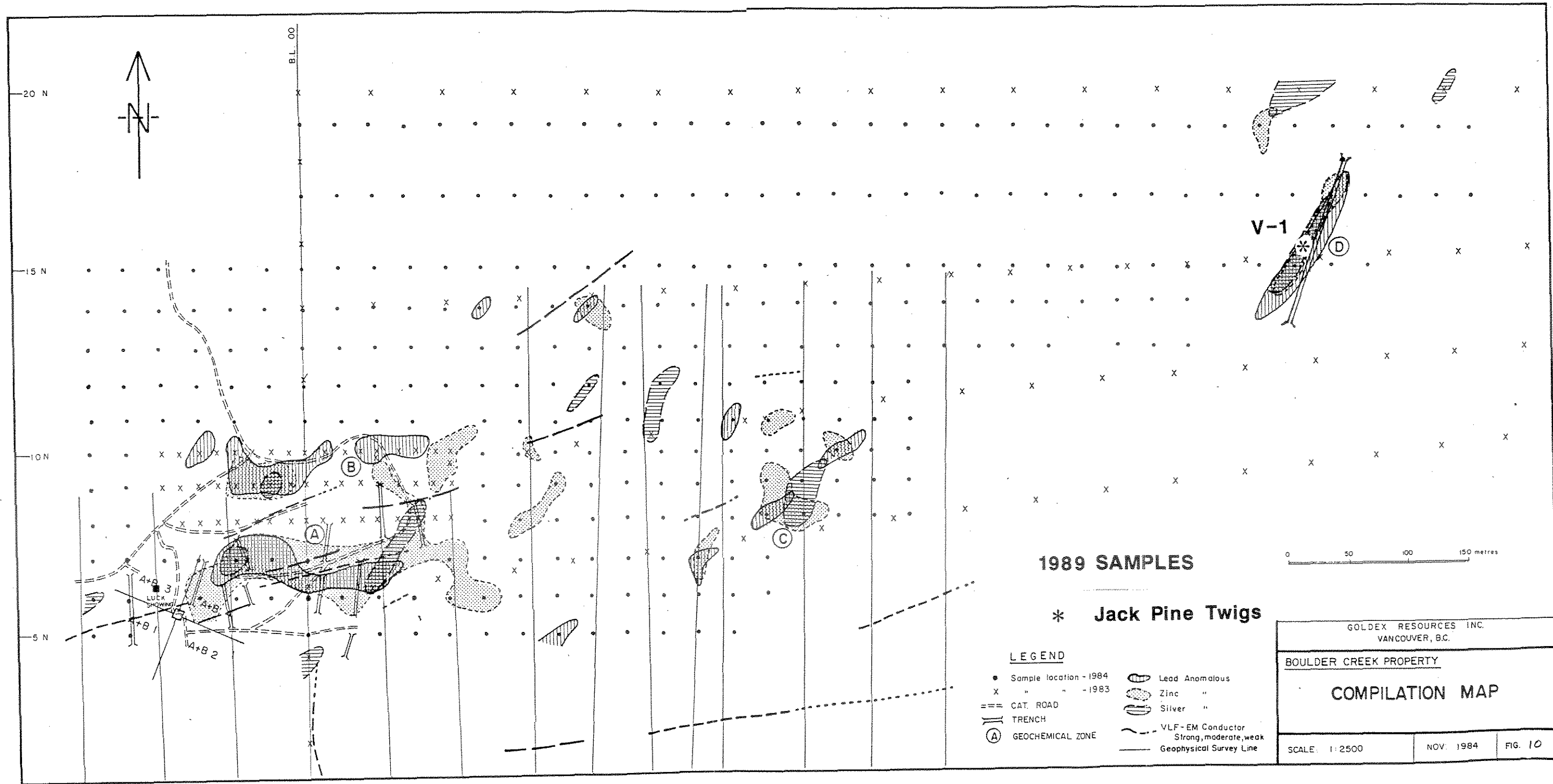


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1989 SAMPLES

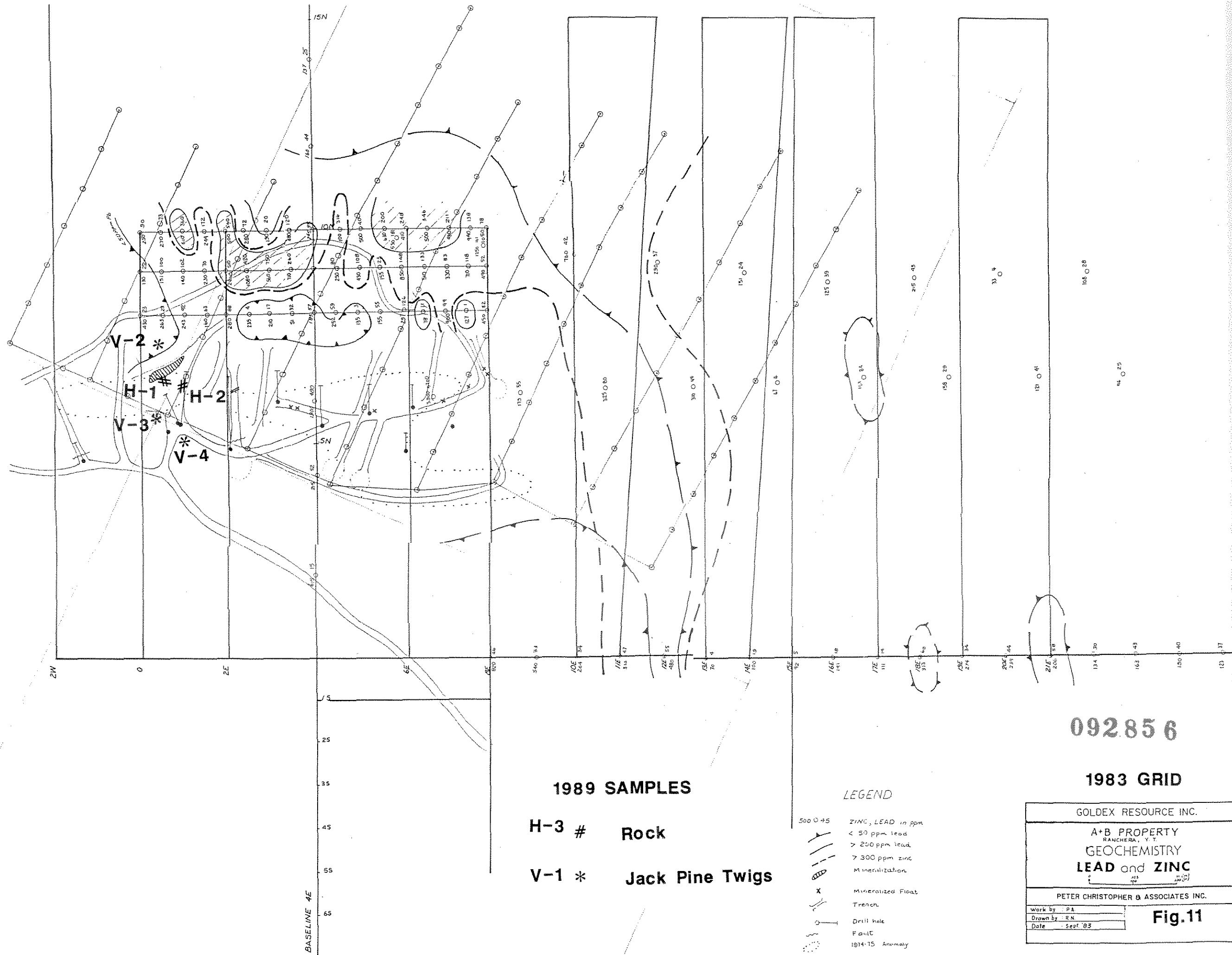
* **Jack Pine Twigs**

LEGEND

- Sample location - 1984
- x " " - 1983
- == CAT. ROAD
- ≡≡ TRENCH
- (A) GEOCHEMICAL ZONE
- Lead Anomalous
- Zinc "
- Silver "
- VLF-EM Conductor
- Strong, moderate, weak
- Geophysical Survey Line

GOLDEX RESOURCES INC. VANCOUVER, B.C.		
BOULDER CREEK PROPERTY		
COMPILATION MAP		
SCALE: 1:2500	NOV. 1984	FIG. 10

092856



092856

1983 GRID

GOLDEX RESOURCE INC.	
A+B PROPERTY RANCHERA, V-T	
GEOCHEMISTRY LEAD and ZINC	
PETER CHRISTOPHER & ASSOCIATES INC.	
Work by: P.A.	Fig.11
Drawn by: R.N.	
Date: Sept. 83	

A strong crossover cuts line 00 at 450E (1983 grid) and was traced for 300 feet uphill by zig-zag EM traverses. The crossover roughly corresponds to the contact of limy phyllites and limestones with non-limy green metavolcanics and may represent one of the cross structures mentioned above.

Trenching has been attempted (Liverton 1987) over soil geochemical anomaly D (Figure 10) but permafrost was encountered at 5 m depth.

Tungsten Mineralization

The rubbly buff crystalline carbonate fault-filling material with occasional quartz contains fine scheelite. Sample taken across 3 feet in 1963 by Sevensma contained 0.99% WO_3 . Sample 10618 taken by Price in 1974 confirmed the presence of tungsten -a grab contained 0.11% WO_3 . Similar zones are common in all the trenches, but few have been tested for tungsten. Drill results confirm that significant widths of scheelite occur at depth. Intersections from 1977 are as follows:

<u>Hole</u>	<u>Depth</u>		<u>No.</u>	<u>Width</u>	<u>WO_3%</u>	<u>Sn</u>
S2	191.5	- 196.5'	504	5 ft.	0.176	4 ppm
S4	96.5	- 105.5'	193	9 ft.	0.441	n.a.
S4	105.5	- 116'	194	10.5 ft.	0.252	n.a.
S7	176.5	- 180'	503	3.5 ft.	0.744	5 ppm

Presence of scheelite in quartz veinlets, pyrrhotite, and strong hornfelsing in the southwest drill hole may indicate that a large, low grade tungsten stockwork or skarn could be found on the property. Further exploration for this type of target should begin by analyzing all samples for molybdenum and tungsten, and assaying all calcite breccia sections of core, which is stored in Whitehorse.

iii) Pete Showing

The Pete showing was found in 1969 during the Silver Seven Explorations program and was followed-up on during the 1979 Amax program. Mineralization consists of scheelite in quartz-calcite veinlets cutting Lower Cambrian phyllite with assays as high as 1% WO₃, 159.1 oz/ton Ag, 34.6% Pb, 1.9% Zn and 0.04 oz/ton Au across four inches.

The author did not find the reported high grade area. One sample (89-H-4) was taken of a weakly-rusty grey quartz vein in phyllite. No anomalous metal values were found in analysis of this sample.

7. BIOGEOCHEMICAL SAMPLING 1989

Dunn (1986) has shown that sampling of plants, particularly alder, pine and spruce trees, is a suitable method of geochemical exploration in areas with extensive glacial till.

Root systems are extensive with corrosive microenvironments that make individual plants geochemical samplers of up to several cubic metres of the substrata. Common element concentrations in ashed vegetation reported by Dunn are:

	<u>Alder twigs</u>	<u>Spruce bark scales</u>	<u>Jack Pine bark scales</u>
Au	10-20 ppb	5-15 ppb	10-20 ppb
Zn	500-1500 ppm	1000-2000 ppm	1000-2000 ppm

To determine if biogeochemical sampling would be a suitable medium for geochemical surveys on this property four sample were taken in 1989. Twig samples were collected from Jack Pine (*Pinus banksiana* Lamb), the most widespread and common conifer on the claims.

One sample (89-V-1) was collected beside the trench cut on silver-lead-zinc soil anomaly D as shown on Figure 10. Three samples (89-V-2 to 4) were collected from trees as close as possible to the Luck showing, see Figure 5. Analysis certificates are in Appendix 1.

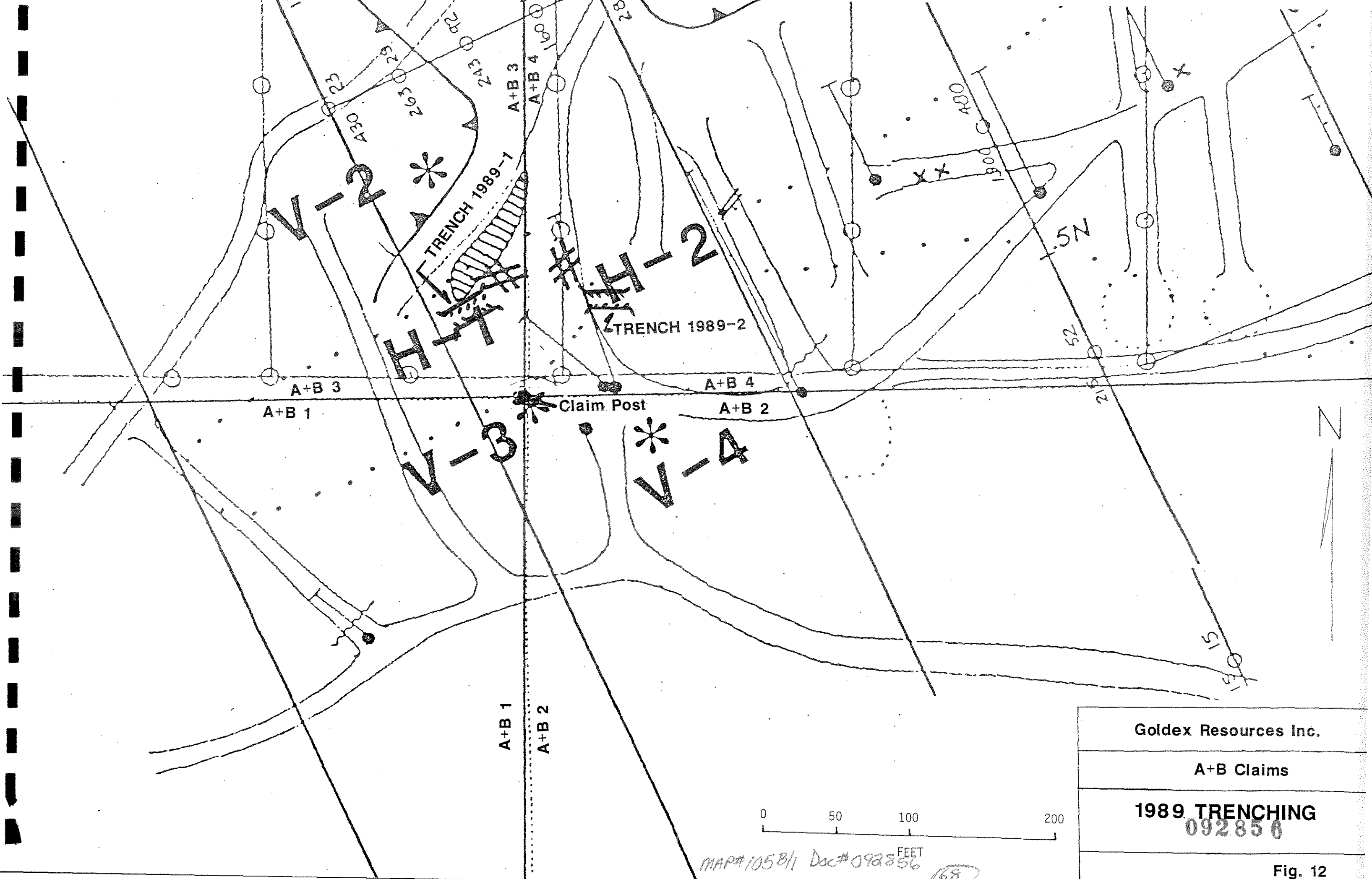
Samples were ashed by Acme Analytical Laboratories Ltd. in Vancouver, B.C. and then analyzed by I.C.P. for 30 elements plus gold by A.A. Significant results are:

<u>Sample No.</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Au ppb</u>
89-V-1	13	1408	111
89-V-2	21	1506	18
89-V-3	289	4174	340
89-V-4	20	1556	202

Zinc levels in samples V-1, 2 and 4 are within the common concentrations in ash reported by Dunn. Zinc and lead in sample 89-V-3 are anomalous compared to the other samples. Of particular interest are the high gold values in samples V-1, 3 and 4. These gold values are an order of magnitude higher than the values found in the lead-zinc-silver mineralized rock samples from the Luck showing (89-H-1 and 2). While ashing does preconcentrate elements before analysis, gold in these three samples is anomalous; as shown by Dunn in his sampling in similar environments in northern Saskatchewan.

8. TRENCHING

Trenching was carried out by Grant Stewart Construction Ltd. of Watson Lake with a D7H bulldozer. Two glacial till covered areas were trenched. The first trench, on claim A + B 3, was cut to enlarge to the west, the original exposure of the Luck showing. The ground at this location was hard ripping.



Goldex Resources Inc.

A+B Claims

1989 TRENCHING
092856

Fig. 12

MAP#105B/1 Doc#092856

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The second trench, on claim A + B 4, was cut to enlarge, to the east, previously trenched exposures of the lead-zinc mineralization.

<u>Trench</u>	<u>Length</u>	<u>Width</u>	<u>Depth</u>	<u>Volume</u>	<u>% of Total</u>
1	30 ft.	12 ft.	4 ft.	1440 cu.ft.	60%
2	20 ft.	12 ft.	4 ft.	960 cu.ft.	40%

No new mineralization was uncovered.

9. CONCLUSIONS

It is concluded by the author that biogeochemical sampling could be used on this property to outline other areas of lead-zinc-silver mineralization. While soil sampling has been carried out over portions of the claims, the thick and extensive glacial till suggests that tree sampling may be a more appropriate geochemical medium due to the widespread influence of plant root systems.

The original Luck showing has been drilled to a degree that suggests that showing is limited to its known bounds. Potential for lead-zinc-silver mineralization exists elsewhere on the property.

10. POTENTIAL TARGETS

Potential targets for further exploration on the property lie both to the northwest and northeast of the Luck showing.

The gravity anomaly associated with the Luck mineralization is open to the northwest, an area that has only been explored by reconnaissance soil sampling. Potential on strike stratabound silver-lead-zinc mineralization would lie in this direction.

To the northeast, potential exists for stratabound mineralization as replacement of favourable phyllitic limestones adjacent to strong northeast-trending fault zones marked by shearing/quartz and carbonate filling and brecciation. Soil geochemical anomalies for silver-lead-zinc remain untested in this area.

A second stage of mineralization along these faults involving open space and fracture filling with scheelite (at the A + B showing and elsewhere on the mountain) may indicate that potential exists for moderate to high grade tungsten vein or skarn deposits at depth below the base metal mineralization. This type of target could be evaluated if the price of tungsten recovers.

11. REFERENCES

- Adamson, R.S. (1986) 1985 Diamond Drill Program, Luck Zone, A + B Claims, Report for Goldex Resources Inc.
- Adamson, R.S. (1984) Geophysical-Geochemical Report on the Boulder Creek Property, for Goldex Resources Inc.
- Christopher, P.A. (1983) Final Report, 1983 Exploration Program, A + B Property, for Goldex Resources Inc.
- Dunn, C.E. (1986) Gold Exploration in Northern Saskatchewan By Biogeochemical Methods, in Gold In The Western Shield, C.I.M.M. Special Volume 38, edited by L.A. Clark.
- Gabrielse, H., (1969) Geology of the Jennings River Map-Area. GSC Paper 68-55, 37pp.
- Gordey, S.P. et al, (1982) Stratigraphy and Structure of Sylvester Allocthon, Southwest McDame Map-Area, Northern British Columbia.
- Parry, S.E. (1980) 1980 Diamond Drilling Report for Amax of Canada Ltd.
- Phillips, M.P. (1986) Report on Trenching Program, Luck Property for Goldex Resources Inc.
- McIntyre, D.G., (1982) Midway Occurrence Geological Fieldwork, 1982. BCDM Paper 1982-1, pp.162-166.
- Mineral Industry Reports, D.I.A.N.D., Yukon Territory, 1973-1977.
- Price, B.J., (1975) Brief Report of the A + B claims near Rancheria, Y.T. Private report for Delphi Resources Ltd.
- Poole, W.H. et al (1960) Wolfe Lake Map Area, Yukon Territory, G.S.C. Map 10-1960.
- Tegart, P. (1977) Summary of Data on the A + B Property and Recommendations for Future Work, Report for Serem Ltd.
- Gregory, D.J., Le,Bel, J.L. and Noble, S.R. (1981) Boulder Creek Property (1981 Diamond Drilling Report) for AMAX of Canada Ltd. Sept. 1981.
- Parry, S.E. (1980) Boulder Creek Property (1980 Diamond Drilling Report) for Amax of Canada Ltd. December.

Green, L. and Goodwin, C.I.
(1963)

Mineral Industry of the Yukon G.S.C. Paper 63-38, p. 31-33.

Ralfs, Ken (1978)

Year End Report, A & B Property (and Piggy Claims), South-Central Yukon, Watson Lake Mining Division for Serem Ltd.

Ager, C.A. (1977)

A & B Claims Gravity Survey for Serem.

12. COST STATEMENT

M. Holtby 103 - 1026 Queens Ave. New Westminster, B.C. V3M 6B2	October 6-8, 1989 Field (incl. travel) 3 days @ 231.50 December 5-6, 1989 Report Preparation 2 days @ 231.50	694.50 473.00
J. Melnychuk General Delivery Watson Lake, Yukon	October 7, 1989 1 day @ 150.00	150.00
Room & Board (M. Holtby - October 6 to 8)		128.30
Truck rental (incl. fuel)	October 7, 1989 1 day @ 100.00	100.00
Airfare Vancouver - Watson Lake return (M. Holtby)		542.00
Assays and geochemical analysis Acme Analytical Laboratories File #89-4154		137.00
Bulldozer (G. Stewart Construction)		1,500.00
	Total	<u>3,714.80</u>

Assessment Costs Apportionment (Actual Costs)

Trenching

M. Holtby Supervision - 1/2 Field Costs		\$ 732.40
Time	347.25	
Room and Board	64.15	
Travel - Truck and fuel	50.00	
- Airfare	271.00	
Bulldozer		<u>1,500.00</u>
	Total	\$2,232.40

Trenching costs to be divided:

60% to Claim A + B 3	\$1,339.44
40% to Claim A + B 4	\$ 892.96

based upon percentages of the total volume removed by each trench.

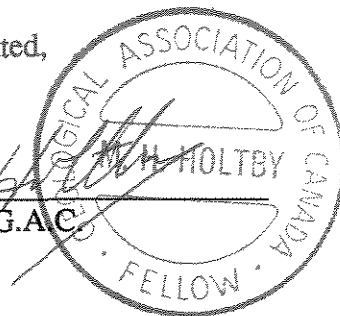
13. STATEMENT OF QUALIFICATIONS

I, Max H. Holtby, residing at 103 - 1026 Queens Avenue, New Westminster, B.C. hereby certify that:

1. I graduated from the University of British Columbia in 1972 with a B.Sc. in Honours Geology.
2. I am Geological Association of Canada Fellow and Geological Society of Malaysia Member in good standing.
3. The work described herein was done under my direct supervision.
4. I have worked since graduation as an exploration geologist and in mine management in Canada, Malaysia and Liberia, West Africa.
5. I have not received, directly or indirectly, nor do I expect to receive any interest, direct or indirect, in the property of Goldex Resources Inc. or of any affiliate thereof, nor do I beneficially own, directly or indirectly, any securities of Golden Resources Inc. or any affiliate thereof.

Respectfully submitted,


Max H. Holtby, F.G.A.C.



APPENDIX 1

Assays, Analyses and Analytical Procedures

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL/ASSAY CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1 ROCK P2 VEGETATION AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 10 1989 DATE REPORT MAILED: *Oct 16/89* SIGNED BY: *C. Leong* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Goldex Resource Inc. PROJECT A+B CLAIMS File # 89-4154 Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	Pb	Zn	Ag
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPB	%	%	OZ/T
89-H-1	1	99	344	14838	36.6	6	5	51144	28.47	8	7	ND	6	13	43	39	3	1	.46	.027	5	15	.49	8	.01	2	.29	.01	.07	2	16	.08	2.18	1.23
89-H-2	5	446	21664	99999	93.3	7	4	1162	2.43	39	5	ND	3	16	1085	46	3	1	.08	.024	5	1	.01	8	.01	11	.11	.01	.07	3	19	7.05	37.47	2.69
89-H-3	4	89	572	1465	6.2	7	1	718	1.21	60	5	ND	3	15	5	9	3	2	.15	.039	5	45	.01	9	.01	5	.10	.01	.05	4	13	-	-	-
89-H-4	3	10	759	1785	1.2	10	1	105	1.10	6	5	ND	1	2	5	2	5	4	.03	.014	2	9	.34	2	.01	2	.44	.01	.01	1	1	-	-	-

Goldex Resource Inc. PROJECT A+B CLAIMS FILE # 89-4154

Page 2

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	Pb	Zn	Ag
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPB	%	%	OZ/T
89-V-1	1	216	13	1408	4.3	9	3	3316	.18	12	5	ND	1	505	4	2	2	1	18.54	3.417	2	1	3.14	24	.01	512	.63	.01	10.15	1	111			
89-V-2	1	162	21	1506	2.6	10	4	3428	.29	22	5	ND	1	496	3	2	2	2	16.14	3.420	2	2	2.91	30	.01	464	.59	.02	11.69	1	18			
89-V-3	1	187	289	4174	3.7	3	1	2237	.30	32	5	ND	1	598	6	2	3	1	21.48	2.280	2	1	2.10	41	.01	445	.29	.01	9.58	1	340			
89-V-4	1	255	20	1556	1.9	7	2	2711	.12	36	5	ND	1	559	3	2	2	1	20.47	2.949	2	1	2.78	30	.01	459	.27	.02	9.44	1	202			