MAP NO.			
	ASSESSMENT REPORT	X	DOCUMENT NO.: 092685
	PROSPECTUS		MINING DISTRICT: Watson Lake
105 F 7,8,9,10	CONFIDENTIAL	X	TYPE OF WORK: Geological, Geochemical
	OPEN FILE		

REPORT FILED UNDER: Cascade Pacific Resources Ltd.

DATE PERFORMED: Aug. 30 to Sept. 13, 1988 DATE FILED: 27 February 1989

LOCATION: LAT.: 61°30'N AREA: Ketza River

LONG.: 132°30'W VALUE $: 20,800.00

CLAIM NAME & NO.: MATHEW 1-62,65-146

WORK DONE BY: M.J. Burson (Brian V. Hall Consulting)

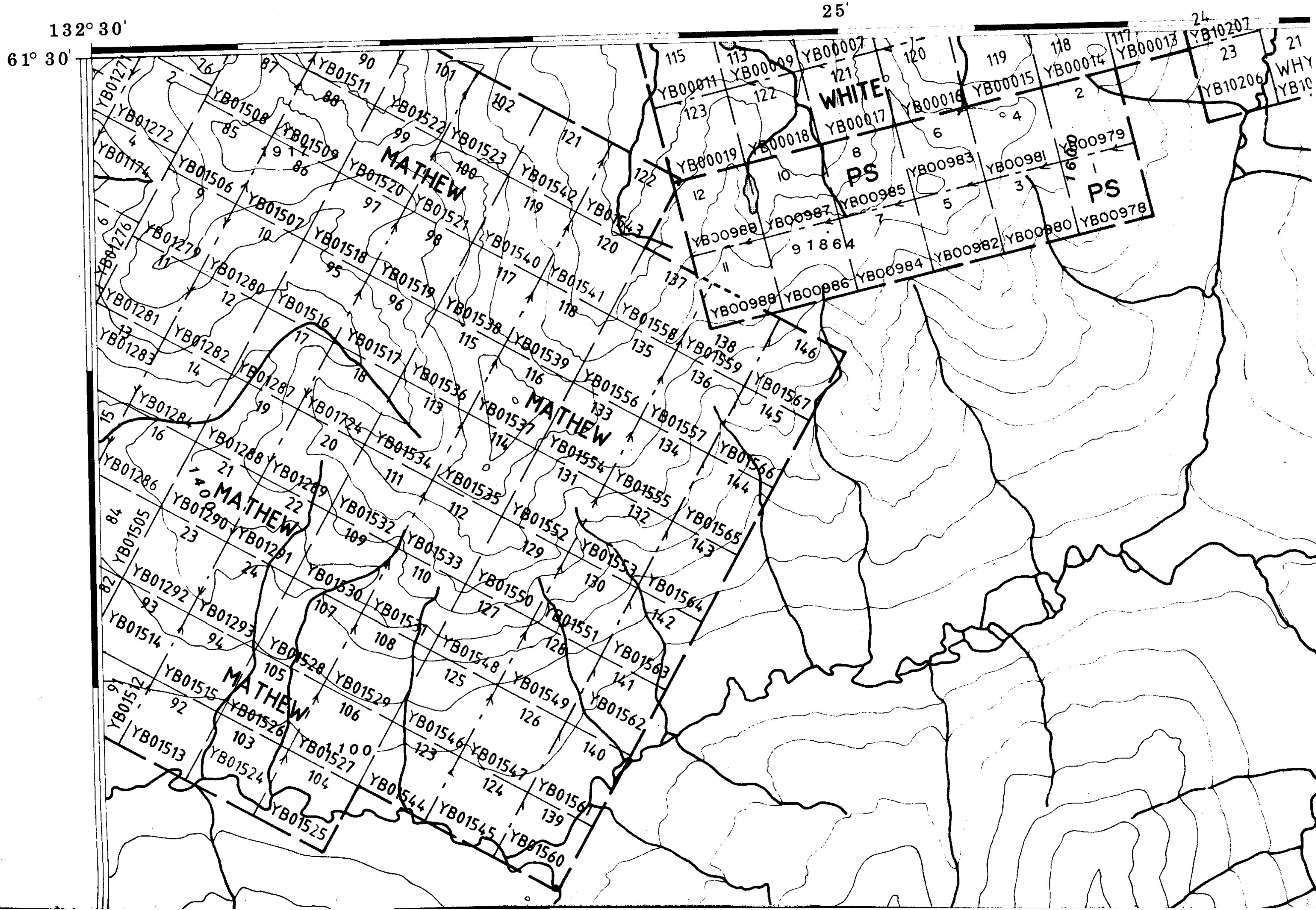
WORK DONE FOR: Cascade Pacific Resources Ltd.

DATE TO GOOD STANDING

REMARKS: #145 MATHEW An 11.5 km grid was emplaced and 420 soil and 63 rock samples were taken and 1:2000 scale mapping was done. A 600 X 275 m soil anomaly outlined, with up to 18.36% Fe, 12 889 ppm Zn, 4464 ppm Pb, 5.4 ppm Ag and 57 ppm Cu.

Canada

WATSON LAKE 20 MAY 1987



1988 PROGRAM OF GEOLOGICAL MAPPING, GEOCHEMISTRY AND PROSPECTING

ON THE

MATHEW CLAIM GROUP

KETZA RIVER AREA

WATSON LAKE MINING DISTRICT

N.T.S.:105F/7,8,9,10

Latitude:61° 30' 00"
Longitude:132° 30' 00"

FOR

CASCADE PACIFIC RESOURCES LTD.
3872 Garden Grove
Burnaby, B.C.

092685

JANUARY, 1989

M.J. BURSON, B.Sc,FGAC
Brian V. Hall Consulting
R.R. #1 - L9
Bowen Island, B.C.
VON 1GO

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 $ ~~20,800.00~~ $32,000.00

D.S. Emond D.S. Emond

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

Updated 19 Oct/89

TABLE OF CONTENTS

INTRODUCTION

A total of 53 man-days were spent on the Mathew claims (August 30 - September 13) in order to evaluate certain mineralized zones discovered during 1987, as well as to prospect other areas of the property. In conjunction with this the claim tags were emplaced on their respective posts pursuant to Section 45(1) of the Yukon Quartz Mining Act.

The Mathew group consists of 144 mineral claims (7500 acres) located in the Pelly Mountains of south-central Yukon, approximately 54 kilometers south of Ross River, Y.T. They were staked during the months of August-September, 1987 to cover a large area of Devonian-Mississippian strata known to contain massive sulphide deposits (Morin, J.A., 1977). During the course of staking, three showings were discovered. Two of these appear to represent "Kuroko-type" volcanogenic massive sulphide mineralization, while the third consists of a series of lead-silver veins. In addition, several zones of ferricrete (iron-oxide) were found and numerous gossans were observed from the helicopter.

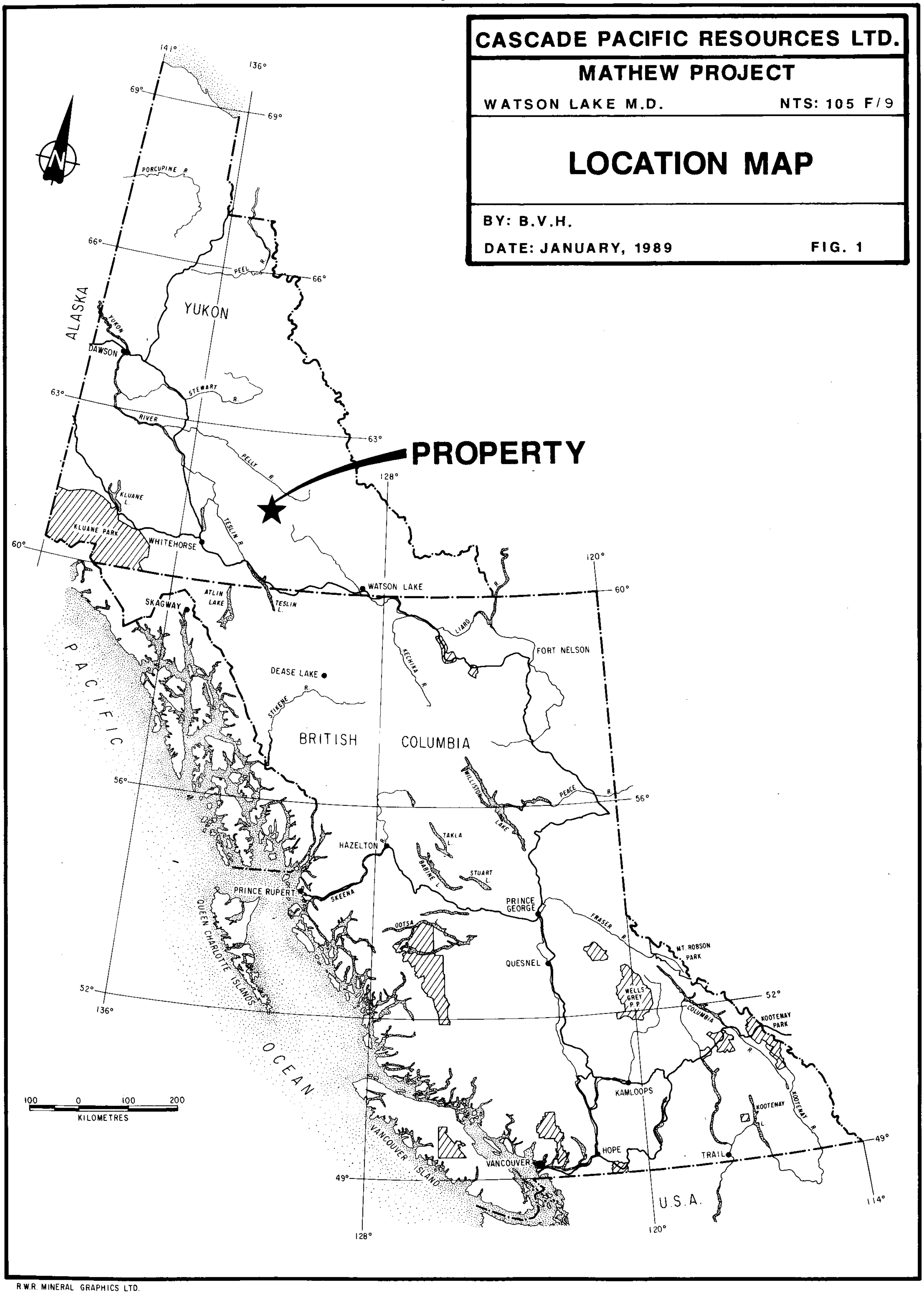
No previous assessment work on these showings is known to exist; however, a portion of the Mathew group had previously been staked, at least as early as 1970, as the CPA claims on which a limited amount of geophysical and geochemical investigations were undertaken. In addition, two claim posts containing the name of A. Kulan, July 1977, were found but the claims appear never to have been recorded.

The 1988 program consisted of geological mapping, soil and rock geochemistry and prospecting. The main investigations focused on the area of the massive sulphide and ferricrete showings (Mathew 3, 5, 30, 32) although other portions of the group were prospected. A total of 11.8 line-kilometers of grid was emplaced to facilitate control while mapping and soil sampling. 420 soil samples and 63 rock samples were collected and analyzed for Au, Ag, Cu, Pd, Zn and Fe.

LOCATION AND ACCESS

The Mathew claims (61° 30' 00" N, 132° 30' 00" E) are located in the Watson Lake Mining Division, roughly centered at the junction of four map sheets (105/F 7, 8, 9, 10). The town of Ross River (population 500) is located approximately 54 kilometers north and Whitehorse (population 18,000) is 150 kilometers to the southwest.

Access to the property is by gravel road from Ross River to the vicinity of the Ketza River gold mine (Belmoral Mines Ltd./Pacific Trans-Ocean Resources Ltd.) located approximately



CASCADE PACIFIC RESOURCES LTD.

MATHEW PROJECT

WATSON LAKE M.D. NTS: 105 F/9

LOCATION MAP

BY: B.V.H.

DATE: JANUARY, 1989 FIG. 1

R.W.R. MINERAL GRAPHICS LTD.

five kilometers to the east, and thence by helicopter based out of Ross River. A small lake suitable for float-planes is located 2 kilometers to the west. Some 20 kilometers to the west is the South Canol Highway and 50 kilometers to the north is the Robert Campbell Highway. A cat-road comes within two kilometers of the western boundary of the claims, but to extend this to the known areas of interest would necessitate the crossing of the McConnell River. If a future road to the property is warranted, a more cost-effective route may be to extend the Ketza River mine road onto the property.

TOPOGRAPHY AND CLIMATE

Elevations on the property range from 1000 metres (3300 feet) to 1995 metres (6541 feet). The tree line is relatively abrupt and occurs at approximately 1500 metres (5000 feet). The vegetation below this point consists of mature spruce and generally thin buck-brush (except in the river valleys), and above this level various forms of arctic/alpine tundra occur dominated by shrubs, grasses and lichen. Unvegetated areas occur at the highest elevations and on talus-covered or very steep slopes.

The summer climate is extremely variable ranging from warm, dry weather to cool, wet conditions with occasional snow. Winter snowfall normally exceeds 3 metres at the higher elevations and annual temperatures will range from below -40° C in January to above 20° C in July.

CLAIM STATUS (see Figure 3)

The Mathew claim group consists of 144 units staked during August and September, 1987. These are owned by Brian V. Hall, Bowen Island, B.C. and are held in trust for Cascade Pacific Resources Ltd., Vancouver, B.C. Following is a list of the claims and their status subsequent to the recording of the 1988 assessment.

Name	Grant Number	Expiry Date
Group 1		
Mathew 1	YB 01271	September 4, 1991
Mathew 2	YB 01272	September 4, 1991
Mathew 3	YB 01273	September 4, 1991
Mathew 4	YB 01274	September 4, 1991
Mathew 5	YB 01275	September 4, 1991
Mathew 6	YB 01276	September 4, 1991
Mathew 7	YB 01277	September 4, 1991
Mathew 8	YB 01278	September 4, 1991
Mathew 25	YB 01294	September 4, 1991
Mathew 26	YB 01295	September 4, 1991
Mathew 27	YB 01296	September 4, 1991
Mathew 28	YB 01297	September 4, 1991
Mathew 29	YB 01298	September 4, 1991
Mathew 30	YB 01299	September 4, 1991
Mathew 31	YB 01300	September 4, 1991
Mathew 32	YB 01301	September 4, 1991
Group 2		
Mathew 9	YB 01279	September 4, 1991
Mathew 10	YB 01280	September 4, 1991
Mathew 11	YB 01281	September 4, 1991
Mathew 12	YB 01282	September 4, 1991

Name	Grant Number	Expiry Date
Mathew 13	YB 01283	September 4, 1991
Mathew 14	YB 01284	September 4, 1991
Mathew 15	YB 01285	September 4, 1991
Mathew 16	YB 01286	September 4, 1991
Mathew 17	YB 01287	September 4, 1991
Mathew 18	YB 01724	September 29, 1991
Mathew 20	YB 01289	September 4, 1991
Mathew 21	YB 01290	September 4, 1991
Mathew 22	YB 01291	September 4, 1991
Mathew 23	YB 01292	September 4, 1991
Mathew 24	YB 01293	September 4, 1991

Group 3

Mathew 33	YB 01456	September 21, 1989
Mathew 34	YB 01457	September 21, 1989
Mathew 35	YB 01458	September 21, 1989
Mathew 36	YB 01459	September 21, 1989
Mathew 37	YB 01460	September 21, 1989
Mathew 38	YB 01461	September 21, 1989
Mathew 39	YB 01462	September 21, 1989
Mathew 40	YB 01463	September 21, 1989
Mathew 41	YB 01464	September 21, 1989
Mathew 42	YB 01465	September 21, 1989
Mathew 43	YB 01466	September 21, 1989
Mathew 44	YB 01467	September 21, 1989
Mathew 45	YB 01468	September 21, 1989
Mathew 46	YB 01469	September 21, 1989
Mathew 47	YB 01470	September 21, 1989
Mathew 49	YB 01472	September 21, 1989

Group 4

Mathew 48	YB 01471	September 21, 1989
Mathew 50	YB 01473	September 21, 1989
Mathew 51	YB 01474	September 21, 1989
Mathew 52	YB 01475	September 21, 1989
Mathew 53	YB 01476	September 21, 1989
Mathew 54	YB 01477	September 21. 1989
Mathew 55	YB 01478	September 21, 1989
Mathew 56	YB 01479	September 21, 1989
Mathew 57	YB 01480	September 21, 1989
Mathew 58	YB 01481	September 21, 1989
Mathew 59	YB 01482	September 21, 1989

Name	Grant Number	Expiry Date
Mathew 60	YB 01483	September 21, 1989
Mathew 61	YB 01484	September 21, 1989
Mathew 62	YB 01485	September 21, 1989
Mathew 65	YB 01486	September 21, 1989
Mathew 66	YB 01487	September 21, 1989

Group 5

Mathew 75	YB 01496	September 21, 1989
Mathew 76	YB 01497	September 21, 1989
Mathew 77	YB 01498	September 21, 1989
Mathew 78	YB 01499	September 21, 1989
Mathew 85	YB 01506	September 21, 1989
Mathew 86	YB 01507	September 21, 1989
Mathew 87	YB 01508	September 21, 1989
Mathew 88	YB 01509	September 21, 1989
Mathew 89	YB 01510	September 21, 1989
Mathew 90	YB 01511	September 21, 1989
Mathew 97	YB 01518	September 21, 1989
Mathew 98	YB 01519	September 21, 1989
Mathew 99	YB 01520	September 21, 1989
Mathew 100	YB 01521	September 21, 1989
Mathew 101	YB 01522	September 21, 1989
Mathew 102	YB 01523	September 21, 1989

Group 6

Mathew 67	YB 01488	September 21, 1989
Mathew 68	YB 01489	September 21, 1989
Mathew 69	YB 01490	September 21, 1989
Mathew 70	YB 01491	September 21, 1989
Mathew 71	YB 01492	September 21, 1989
Mathew 72	YB 01493	September 21, 1989
Mathew 73	YB 01494	September 21, 1989
Mathew 74	YB 01495	September 21, 1989
Mathew 79	YB 01500	September 21, 1989
Mathew 80	YB 01501	September 21, 1989
Mathew 81	YB 01502	September 21, 1989
Mathew 82	YB 01503	September 21, 1989
Mathew 83	YB 01504	September 21, 1989
Mathew 84	YB 01505	September 21, 1989
Mathew 91	YB 01512	September 21, 1989
Mathew 92	YB 01513	September 21, 1989

Group 7

Name	Grant Number	Expiry Date
Mathew 95	YB 01516	September 21, 1989
Mathew 96	YB 01517	September 21, 1989
Mathew 115	YB 01536	September 21, 1989
Mathew 116	YB 01537	September 21, 1989
Mathew 117	YB 01538	September 21, 1989
Mathew 118	YB 01539	September 21, 1989
Mathew 119	YB 01540	September 21, 1989
Mathew 120	YB 01541	September 21, 1989
Mathew 121	YB 01542	September 21, 1989
Mathew 122	YB 01543	September 21, 1989
Mathew 135	YB 01556	September 21, 1989
Mathew 136	YB 01557	September 21, 1989
Mathew 137	YB 01558	September 21, 1989
Mathew 138	YB 01559	September 21, 1989
Mathew 145	YB 01566	September 21, 1989
Mathew 146	YB 01567	September 21, 1989

Group 8

Mathew 109	YB 01530	September 21, 1989
Mathew 110	YB 01531	September 21, 1989
Mathew 111	YB 01532	September 21, 1989
Mathew 112	YB 01533	September 21, 1989
Mathew 113	YB 01534	September 21, 1989
Mathew 114	YB 01535	September 21, 1989
Mathew 127	YB 01548	September 21, 1989
Mathew 128	YB 01549	September 21, 1989
Mathew 129	YB 01550	September 21, 1989
Mathew 130	YB 01551	September 21, 1989
Mathew 131	YB 01552	September 21, 1989
Mathew 132	YB 01553	September 21, 1989
Mathew 133	YB 01554	September 21, 1989
Mathew 134	YB 01555	September 21, 1989
Mathew 143	YB 01564	September 21, 1989
Mathew 144	YB 01565	September 21, 1989

Group 9

Mathew 93	YB 01514	September 21, 1989
Mathew 94	YB 01515	September 21, 1989
Mathew 103	YB 01524	September 21, 1989
Mathew 104	YB 01525	September 21, 1989
Mathew 105	YB 01526	September 21, 1989

Name	Grant Number	Expiry Date
Mathew 106	YB 01527	September 21, 1989
Mathew 107	YB 01528	September 21, 1989
Mathew 108	YB 01529	September 21, 1989
Mathew 123	YB 01544	September 21, 1989
Mathew 124	YB 01545	September 21, 1989
Mathew 125	YB 01546	September 21, 1989
Mathew 126	YB 01547	September 21, 1989
Mathew 139	YB 01560	September 21, 1989
Mathew 140	YB 01561	September 21, 1989
Mathew 141	YB 01562	September 21, 1989
Mathew 142	YB 01563	September 21, 1989

REGIONAL GEOLOGY

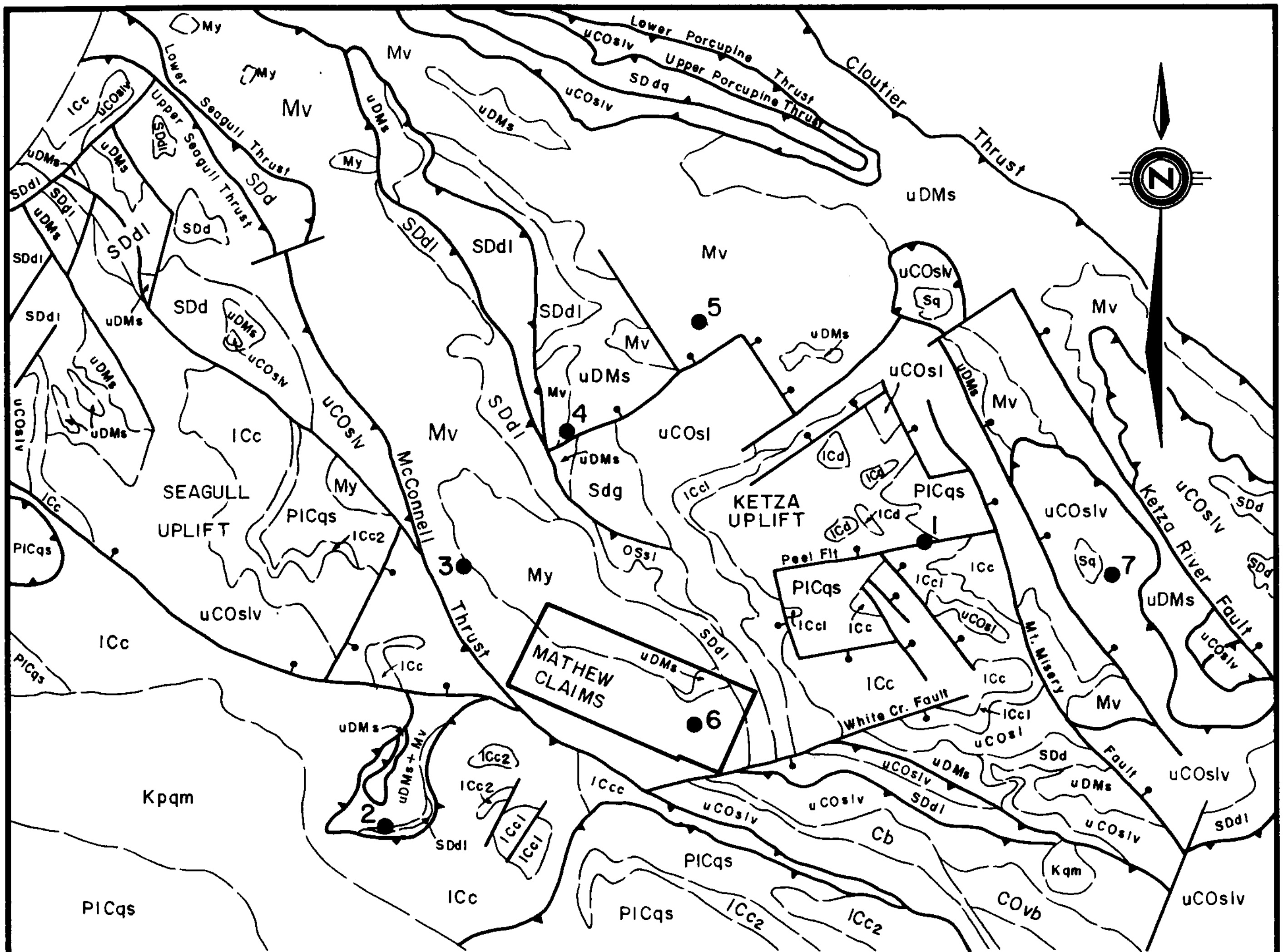
The district consists of a miogeosynclinal sequence of clastic, volcanic and carbonate rocks which are situated immediately to the east of the Ketza-Seagull Arch (Abbott, J.G., 1986). Beginning in the Hadrynian, this stratigraphic package represents a somewhat discontinuous succession of Paleozoic carbonates phyllites and quartzites which are overlain by an allochthonous sequence of upper Devonian to Mississippian volcanics and sediments. Deformation during a Mesozoic arc-continent collision has resulted in the emplacement of the allochthonous rocks, plus the development of most of the major structures (Tempelman-Kluit D., 1979).

Stratigraphy and Lithology

The Hadrynian to lower Cambrian stratigraphy begins with a sequence of thin banded slates and shaley quartzites (PlCqs).

Elsewhere in the Cordillera, this unit is considered to be equivalent to the Windermere Group (Tempelman - Kluit, D., et al., 1976). Overlying this is a lower Cambrian series of limestones (lCcl) calcareous argillites (lCc) and dolomites (lCd) which comprise in part the Pelly-Cassiar Platform. This in turn represents a portion of a carbonate facies belt which occurred along the western edge of the North American craton, and is estimated to be up to 700 m thick (Read, B.C., 1980). Within the immediate Ketza River area the thickness of this segment (the reef-forming archaeocyathid build-ups) is estimated by Canamax Resources Inc. to be up to 180 metres. Dolomitization, possibly related to the unconformity which overlies this unit is most prevalent along its upper contact.

According to Tempelman-Kluit (1977) an upper Cambro/Ordovician phyllite (uCOsl) unconformably overlies the lower Cambrian strata. This unit consists predominately of a medium grey, chlorite-muscovite quartz phyllite. To the south, within the McDame Mapsheet, the equivalent unit is considered to be represented by the Kechika Group of Gabrielse (1963). Interspersed are minor lenses of mafic tuff, represented by chloritic phyllites and metabasites. A total thickness for the unit is estimated to be about 1,000 metres (Tempelman-Kluit D., et al., 1976).



LEGEND:

THRUST FAULT

NORMAL FAULT

● PROPERTIES

1. KETZA RIVER MINE
2. MM DEPOSIT
3. MATT CREEK
4. BNOB
5. CHZERPNOUGH
6. CPA
7. STUMP MINE

AFTER TEMPELMAN-KLUIT, D.J., 1977 AND ABBOTT, J.G., 1986

CASCADE PACIFIC RESOURCES LTD.

MATHEW PROJECT

WATSON LAKE M.D., Y.T. NTS: 105 F/9

REGIONAL GEOLOGY

0 5 10 15

SCALE: 1:250 000 (metres)

DRAWN BY: M.B./rwr

DATE: FEBRUARY, 1989 FIGURE: 2

LEGEND - REGIONAL GEOLOGY

CRETACEOUS	
Kqm	QUARTZ MONZONITE
Kpqm	PORPHYRITIC QUARTZ MONZONITE
MISSISSIPPIAN	
My	SYENITE
Mv	MAFIC VOLCANICS
DEVONIAN/MISSISSIPPIAN	
uDMs	GRAPHITIC SHALES
SILURIAN/DEVONIAN	
SDd	DOLOMITE, MUDSTONE, DOLOMITIC SILTSTONE
SDdl	SUCROSE, SANDY DOLOMITE
SDdq	DOLOMITE, DOLOMITIC SANDSTONE
SILURIAN	
Sq	ORTHOQUARTZITE
ORDOVICIAN/SILURIAN	
OSsl	SLATE
CAMBRO-ORDOVICIAN	
COrb	BASALT
uCOslv	PHYLLITE AND "GREENSTONE"
uCOsl	PHYLLITE
CAMBRIAN	
Cb	DIABASE/DIORITE
lCc2	MARBLE
lCd	DOLOMITE
lCc	CALCAREOUS ARGILLITE
lCcl	LIMESTONE
PROTEROZOIC AND/OR LOWER CAMBRIAN	
PlCqs	SHALE, SANDSTONE

Conformably overlying the calcareous phyllites are a series of mafic volcanic breccias which grade upward from the mafic volcanics of the upper Cambrian strata. Overlying this is up to 1,000 m of recessive weathering, fissile, black graptolitic slate ranging in age from early to late Ordovician. Elsewhere in the Yukon this unit represents the Road River Formation of the Kechika Group, and is used to define the lateral extent of the Selwyn Basin.

Lower to middle Silurian orthoquartzites (Sq) and Silurian to lower Devonian dolomitic siltstones (SDd) conformably overlie the Kechika Group. The well-sorted nature of these sediments suggest deposition in a beach environment. To the south in the McDame mapsheet this unit is equivalent to the Sandpile Group (Gabrielse, H., 1963).

Between the middle Silurian and lower Devonian an angular unconformity separates the middle to lower Devonian dolomites and Silurian orthoquartzites from the underlying strata. Above the lower Devonian dolomites and orthoquartzites are a series of upper Devonian to Mississippian graphitic clastics which can be considered to be equivalent to the lower Sylvestor Group on the McDame Mapsheet to the south (Gabrielse, H., 1963).

An allochthonous package of mafic volcanics, pyroclastics, cherts and argillites overlies the Hadrynian to lower Paleozoic strata.

Some confusion exists over the precise age relationships of this somewhat chaotic package, but it is generally considered to be Mississippian to Permian. Possible equivalents would be the upper Sylvestor Formation in the McDame map area (Gabrielse, H., 1963) or the Anvil Range Group to the northwest of the Tintina Trench (Tempelman-Kluit, D.J., 1972).

Immediately to the south and west of the area represented by Figure 3 is a northwest trending series of Mississippian syenites and Cretaceous quartz monzonites (Tempelman-Kluit, D.J., 1977). In the centre of the district the presence of a buried intrusive is suggested by the hornfelsing of some of the argillites. In addition, the outline of the Ketza-Seagull Arch is northwesterly or roughly the same as the outlying intrusives (Abbott, J.G., 1986a).

A 600 m thick section through the volcanic belt east of McConnell River [which is covered in part by the <u>Mathew</u> claims] shows that it can be sub-divided into the following lithofacies arranged in order of abundance; 1) volcaniclastics, 2) siltstone, 3) lava flows, 4) syenite plugs and 5) exhalites.

The volcaniclastic rocks consist of poorly layered to massive beds of tuff, lapilli tuff and breccia tuff. Lithic fragments are commonly composed of trachyte, tuff, argillite and chert and are usually rounded and lenticular to blocky in shape.

Phenoclasts of K-feldspar and perthite also occur. The matrix is largely made up of fine-grained hematite, feldspar and siderite. The siltstone ranges from grey to black to buff in colour and is usually finely layered. Constituent minerals are feldspar with minor quartz, opaques, sericite, biotite and carbonate.

Trachyte lava flows occur as thin blocky weathering, creamy grey, fine- to coarse-grained rocks up to several metres thick intercalated with the volcaniclastic and sedimentary rocks. They consist of subparallel masses of elongate Carlsbad-twinned K-feldspar grains varying in length from 0.1 mm to greater than 1 cm. Minor conformable lenticles of hematite and siderite and orange-brown siderite amygdules are present. Porphyritic varieties with perthite phenocrysts also occur.

Coarse-grained syenite plugs with rounded outlines occur within the volcanic belt. Locally, the contacts between the trachyte flows and syenite are gradational and indicate that the syenite plugs are hypabyssal in nature and probably represent former volcanic centres. Perthite, biotite, stilpnomelane, magnetite and relict hornblende and clinopyroxene constitute the syenite, along with very minor accessory magnetite and fluorite.

Several types of exhalites occur within the volcanic belt. Pyritic chert is the most common and it forms extensive gossans upon weathering. Much more restricted in extent are the barite horizons and pyritic iron formations. Locally, disseminated, layered and massive sulphide mineralization is associated with the exhalites (Morin, J.A., 1976).

Structure

For the most part the structure of the district is relatively uncomplicated in comparison to the highly deformed strata which occupies much of the Pelly Mountains.

Faulting has played the dominant role in the structural evolution of this district, the earliest of which are a series of northeasterly directed thrust sheets. Accompanying this thrust faulting is some localized drag folding in the hangingwall rocks. Recent mapping has shown the geology of the Ketza River District to comprise of four major thrust blocks. From southwest to northeast these are separated by the McConnell Thrust, upper and lower Seagull Thrusts, upper and lower Porcupine Thrusts, and the Cloutier Thrust (Abbott, J.G., 1986).

Subsequently the area was affected by a series of northwesterly trending normal faults and a set of north to northeasterly striking high-angle faults. Based upon offsetting relationships on the northeasterly striking Peel Fault it appears that the oldest are the northwesterly striking faults. This permits the northwesterly striking normal faults to be related to the thrusting which is also a relatively old event. The mechanism for the formation of these normal faults could be related to relaxation, subsequent to cessation of the thrusting. Somewhat supportive of this interpretation is the fact these faults have a sense of offset which is northeast side down.

Looking at the sense of offset for the east to northeasterly trending faults it is evident that the central portion of the district has the overall structure of a horst. Since the sense of displacement for the thrusts faults is to the northeast, the lowest thrust sheet is therefore the Cloutier Block which occupies much of the Ketza-Seagull Arch. Outward from the centre of this horst the stratigraphy becomes progressively younger from a central block cored by pre-Cambrian sediments. In addition outward from the horst the upper thrust blocks such as the Seagull and Porcupine become exposed. This chronology of events also implies that the Seagull and Porcupine thrusts may be one and the same, but separated only by an area of uplift.

Folding of significance is most prevalent in the upper Cambrian phyllites. Here at least two phases of deformation are present, both of which strike and plunge to the northwest. These folds appear to pre-date the faulting, and possibly represent the inception of an arc-continent collision which began in the late Triassic to early Jurassic (Tempelman-Kluit, D.J., 1979).

Regional Mineralization

Three known types of mineralization are known to occur in this district, namely replacement deposits, stratabound massive sulphides and epithermal veins. To date, only the former type has received any sustained production, and only at the Ketza River gold mine of Belmoral Mines Ltd./Pacific Trans-Ocean Resources Ltd. where the latest reserves for oxide ore stand at 250,000 tons grading 0.350 oz per ton gold (indicated), and for sulphide ore at 550,000 tons grading 0.22 oz per ton gold (geological) (Northern Miner, January 2, 1989).

The replacement deposits are restricted to the horst-like structure known as the Seagull-Ketza arch (Abbott, J.G., 1986). This structure exposes a lower Cambrian limestone unit west of the Ketza River Fault. Deposits which occur in this limestone include: 1) oxide and sulphide mantos, 2) oxide and sulphide chimneys, 3) quartz stockwork zones, and 4) sulphide veins.

The sulphide mantos consist of varying amounts of siderite, pyrrhotite, pyrite, arsenopyrite and galena. Oxidizing these to a mixture of limonite and goethite is found to increase the gold grade substantially.

The chimney deposits are genetically similar to the mantos, but by definition they are roughly perpendicular to bedding. In general these tend to occupy prominent joints or faults within the lower Cambrian limestones and although the sulphide mineralization is roughly similar to the manto deposits, the quartz content appears to be significantly higher.

The stockwork zones appear to be related to the chimney and manto deposits, in that they are usually found in close proximity. Generally these consist of quartz with minor amounts of chalcopyrite and pyrite. In some areas these stockwork zones grade outward into distinct veins which may in turn grade into either a manto or chimney deposit.

The sulphide veins tend to occur in stratigraphy other than the lower Cambrian limestones which sets them aside from the chimney/manto deposits and as a consequence they are not considered to be genetically related to the karsting within the limestone (Hall, B.V., 1988a).

The second most important type of deposit are the stratabound zinc-lead-barite massive sulphides. Six known occurrences are found within the Devonian-Mississippian volcanics and include the MM, Matt Creek, Bnob, Chzerpnough, Joe(?) and **Mathew**. Only the MM Deposit, owned by Curragh Resources Ltd., has been extensively drilled. It occurs in a pyritic quartzite bed that is situated between intermediate and felsic metavolcanic rocks that have suffered extensive deformation and folding. At least three distinct periods of folding have taken place and much of the stratigraphic sequence is isoclinally folded and overturned (Morin, J.A., 1977).

A strike length of over 1,000 feet has been delineated which contains intersections of massive pyrite, sphalerite, galena, chalcopyrite and barite up to 35 feet thick. The best drill intercept consists of 10.4% combined metals over a true thickness of 14 feet. Away from the immediate area of the MM deposit, smaller occurrences of massive sulphides have been traced for over 3,000 feet - all of which appear to occur at the same stratigraphic interval (Mortenson, J.K., 1977).

The third type of occurrence in the area are epithermal veins which occur in and around the Ketza-Seagull Arch and are presumed to be genetically related. Most occurrences are veins of galena, sphalerite, quartz and siderite, pyrite, pyrrhotite, arsenopyrite, chalcopyrite and tetrahedrite. Precious metal content varies widely, but most veins contain silver in association with galena and tetrahedrite. The largest known vein in the area is the A - 1 vein at the Stump mine, located approximately 14 kilometers northeast of the Mathew Claims. Proven reserves for this vein stand at 50,000 tons of 17 oz/ton Ag and 12% Pb with the possibility of an additional 124,000 tons of similar grade material (Morin, J.A. and Downing, D.A., 1984).

Galena, freibergite and arsenopyrite are the main sulphide minerals with the gangue consisting of quartz.

The majority of the veins are pods or lenses (which rarely exceed 1 metre in thickness) along strong, well-defined faults with apparent displacements that are small. In many places vein material is crushed and brecciated, or cut by slickensided faults, suggesting the faulting was periodically active during the mineralizing event (Abbott, J.G., 1986). However, the spatial relationship of other veins with Mississippian syenites or Cretaceous quartz-monzonites suggests a genetic relationship with these intrusives for at least some of the veins.

PROPERTY GEOLOGY

Geological mapping by D. Tempelman-Kluit shows that the area underlain by the Mathew claims is composed of a package of volcaniclastic and sedimentary rocks, cut by a medium-grained syenite, all of Mississippian age. Much of the 1988 program was concentrated on the Mathew 3,5,30 and 32 claims in the vicinity of the massive pyrite and ferricrete (iron oxide) showings, although other areas of the property were prospected and mapped on a less detailed scale.

A grid was emplaced in the vicinity of these showings, and in conjunction with soil sampling the area was mapped at a scale of 1:2000. In a broad sense the base-line separates the geology into two main zones; to the south we encounter primarily mafic to intermediate tuffs with minor rhyolite and diorite, and to the north the dominant rock types are felsic metavolcanics and exhalites (rhyolite and chert) and metasediments (siltstone and quartzite).

The mafic to intermediate volcanics are comprised of fine to medium grained ash and lapilli tuffs, are medium-grey in colour (sometimes with green and maroon overtones), and often contain amygdules filled with siderite or limonite. They frequently contain several percent fine-grained pyrite, and locally have undergone moderate to strong sericite, talc and/or carbonate alteration. The intermediate tuffs are usually more intensively altered and it is suspected that they are were originally mafic in composition.

The felsic tuffs are thin-bedded to massive, very siliceous, and contain several percent pyrite as disseminations, pods and in a number of locations as distinct beds. Quartz eyes and feldspar laths have been observed in some outcrops (e.g. L5+20W/0+32S, L4+65W/1+50N). The unit has undergone moderate to strong sericite alteration and ubiquitous carbonate alteration resulting in a very distinctive orange-colouring on weathered surfaces.
The occurrences of ferricrete, in almost all cases, are found topographically below this unit and it is suspected they are the

result of the leaching and subsequent precipitation of Fe-ions from the pyrite in the rhyolites.

The chert occurs north of the baseline and is a very siliceous (>95% quartz), medium-bedded to massive unit. It generally contains 1-5% disseminated pyrite, and moderate to strong carbonate alteration. In some cases, it is suspected that the 'chert' is a silicified and recrystallized rhyolite. Chert beds have also been mapped south of the grid on Mathew 7, 8, and 73. Here they have minor, thin interbeds of ash tuff, and on Mathew 73 the occurrence contains 3% pods or thin broken-up beds of quartz and pyrite.

The metasediments consist of metasiltstone and quartzite. The metasiltstone is a fine to medium grained, medium grey unit consisting of feldspar, quartz and biotite. The quartzite is a very siliceous unit, consisting of 95% clear quartz grains and 5% biotite. It also contains the occasional pod, up to three metres in length, which has several percent fine grained disseminated pyrite and has undergone bleaching with accompanying carbonate and sericite alteration.

Two intrusive rocks were encountered during the 1988 mapping. South of Camp Creek there are two exposures of a medium grained, dark grey, magnetic diorite. These are relatively narrow (<5.0 m) and exhibit a weak foliation parallel to the country rock. North of the grid is a relatively large syenite intrusive. It is fine to medium grained, locally contains up to 90% feldspar laths and 10 - 20% ferromagnesian minerals. Some zones have undergone strong silicification and epidote alteration.

The structure in the area of the grid appears to be relatively simple. No major faults were observed although the spatial distribution of alteration, stratigraphy and geochemical analyses (especially silver and iron, Figures 10 and 11) suggest a cross-fault in the north-central portion of the grid. Many faults do exist regionally (see Regional Geology, Figure 2), the most proximal of which is a normal fault with a sense of displacement of south side down, which has been traced along White Creek at the southern boundary of the claims.

The cleavage and bedding attitudes both display a trend roughly southeast, although there are extreme variations to this. No folding was observed, but an anticline with an axial plane along Camp Creek is suspected as dips south of the creek are consistently to the south and those north of the creek are consistently to the north. In addition the trend of the siliceous exhalite at the head of the cirque (roughly north-south, see Figure 3) and the curvilinear nature of the various soil anomalies suggest a fold closure in this area.

Mineralization

At least five mineralized occurrences are currently known on the property, of which four are indicative of Kuroko-style massive sulphide deposits with the fifth representing a series of narrow silver-bearing quartz + galena + sphalerite veins. In addition, a number of large gossans occur throughout the property (Hall, B.V., 1988b) as shown on Figure 3. Indications of massive sulphide mineralization occur throughout the property with two showings located along the southeastern boundary of the claims and the remaining two in the central portion of the property.

The first occurrence to be discovered is located near the top of the cirque which is drained by Camp Creek. It consists of a 5-14 metre thick zone of siliceous exhalite comprised almost entirely of quartz with minor amounts of pyrite (2-10%) and fluorite (0-2%) and can be traced along strike for 300+ metres. In appearance, this unit closely resembles the cherty exhalite which hosts most of the massive sulphide deposits of the Noranda District in Quebec. Three samples were collected in 1987, two of which returned values of almost 0.5 oz/ton Ag (15.8 and 14.8 ppm) and up to 4.94% Fe. The other elements analysed (Cu, Pb, Zn, and Au) were, as expected, at background levels. Sampling by Canamax Resources Ltd. in this area during a 1988 property examination revealed values of lead and zinc up to 1000 ppm and 940 ppm, respectively.

Crosscutting the stratigraphy in this area is one, and possibly two zones of intense sericite alteration both of which are 5 to 20 metres wide and are roughly perpendicular to the general stratigraphic trend. Within these zones the original rock is altered to such a degree that the minerals present consist almost entirely of sericite and/or talc.

Two other zones of pyritic exhalite are present in the extreme southeastern portion of the property and consist of 5 to 15 metre wide sericite-altered volcanic rocks containing 1-10% pyrite as disseminations and veins, the latter containing 5-25% quartz. These zones are approximately 150 metres apart, are trending north-northeast and dip steeply to the east. One rock sample from this area returned values of 408 ppm Cu and 36.23% Fe, with other values at background levels only. Within this area are a number of other mineralized zones which have resulted in the formation of numerous gossan zones. Several rock samples were collected from these areas, but the values were all at background levels.

Perhaps the most significant zone is an occurrence of massive pyrite located 100 metres downstream of the claim posts for Mathew 3,4,5 and 6 in the vicinity of L 1+00W/0+50S (Figure 4). The mineralization consists of massive pyrite beds which are intercalated with a quartz-rich rhyolite and it is not inconceivable that both may contain some barite. The pyrite beds vary in thickness from several mm. to several cm., although one poorly exposed bed is at least 0.5 metres thick; it is felt that this thickness would increase with better exposure through trenching. The trend of the mineralization is 110/75S with the stratigraphic footwall facing south. Sericite alteration varies from moderate on the footwall of this thick pyrite bed to strong on the hangingwall. The latter is also strongly foliated and contains much less pyrite than the footwall. Rock samples from this zone were high in iron and below background for all other elements; soil samples returned values below background only.

Several small (1 - 3 cm) galena-sphalerite veins were noted in the vicinity of the Mathew 75 and 76 claims during the claim staking. The 1987 sampling returned values of 0.64 - 23.60% Pb, 2.89 - 6.82% Zn and 6.93 - 14.96 oz/ton Ag. This showing was not examined during the 1988 program and little is known about the mode of occurrence, but their location suggests they are within or spatial to the syenite intrusive.

In addition to these mineralized zones, a number of other parameters indicate the potential of the property. As previously mentioned, several large gossans exist which have received little or no work and these should be examined in the future. Secondly, a sample of felsenmeer from the area L2+00E/4+00N contained a 2 cm. x 5 cm. fragment of massive pyrite within a sericite-rich rhyolite, suggesting at least one more horizon of bedded pyrite could be present. In addition, the soil sampling west of this is beginning to delineate an area with anomalous base metal values. Finally, the southeastern area of the claims were once covered by the CPA claims on which were found copper and lead anomalies in soil cover over sheared acid volcaniclastic rocks (Wilker, R.G. and Carlson, G.G., 1971).

GEOCHEMISTRY

The preliminary work during 1987 discovered a pronounced zone of ferricrete approximately 400 metres northwest of the bedded pyrite mineralization but several rock samples collected from this area failed to return any significant base or precious metal values, although they were understandably high in iron.

The preliminary interpretation of the structure indicated that these two zones represented the same stratigraphic interval. Consequently, it was determined that a program of soil sampling, in conjunction with geological mapping, would offer the best method of determining this structural hypothesis as well as evaluating the potential of the grid for base and precious metal mineralization.

Method

A total of 420 soil samples and 63 rock samples were collected during the 1988 program. An 11.5 kilometer grid was emplaced in the vicinity of the bedded pyrite/ferricrete showings (Figure 6), which had a line spacing of 50 metres along which soil samples were collected every 25 metres. Samples were acquired from the B-horizon and placed in Kraft paper envelopes which were field dried for two weeks. These were sent to Acme Analytical Laboratories at 852 East Hastings Street, Vancouver, B.C. and after drying overnight were sieved to minus 80 mesh.

Cu, Pb, Zn, Ag, and Fe were analysed by taking a 0.500 gram portion of the minus 80 mesh fraction and dissolving in 3 ml of aqua-regia solution (3:1:2 HCl:HNO3:H2O) for one hour at 95°C. The resulting solution was diluted to a volume of 10 ml with distilled water and analysed using Inductivity Coupled Argon Plasma. The results were then compared to prepared standards for the determination of the absolute amounts.

For the Au analysis, a 10.0 gram aliquot of the minus 80 mesh portion was used. After concentrating the Au through standard fire assay methods, the resulting bead was dissolved in 1 ml of aqua-regia at 95°C for one hour. The resulting solution was analysed by atomic absorption using a graphite furnace unit.

Table 1

Statistical Results

	Mean ($\overline{X}$)	Standard Deviation (σ_n)	Anomalous ($\overline{X} + \sigma_n$)	Highly Anomalous ($\overline{X} + 2\sigma_n$)
Cu	16	11	27	38
Pb	110	252	362	504
Zn	478	980	1458	2438
Fe	5.07	3.19	8.26	11.45

Table 2

Summary of Statistical Populations

for the Soil Sample Data

Element	Above Background		Possibly Anomalous		Anomalous		Definitely Anomalous	
	A	B	A	B	A	B	A	B
Cu	17	68	27	87	38	95	49	98
Pb	70	58	322	91	574	97.5	826	99
Zn	210	48	650	84	1630	96	2610	99
Ag	-	-	0.6	85	0.7	90	1.0	95
Fe*	4.5	55	7.7	94.2	10.9	98	14.1	99
Au*	2	63	3	85	4	92	5	95

A = Threshold Value

B = Percentage of data below threshold value

* Au and Fe values quoted in ppb and weight percent respectively, all others are in ppm.

The absolute amounts were then determined by comparing the results to those of prepared standards.

To determine the existence of threshold values for the anomalous values, a series of cumulative-frequency plots were constructed (Appendix C). Using this approach statistically normal populations will plot as straight lines and any boundaries or thresholds between more than one population will be defined as a point of inflection (Sinclair, A.J., 1975). Depending upon what percentage of the total population the inflection point occurs, the data can then be classified as 1) definitely anomalous, 2) anomalous, 3) possibly anomalous and 4) above background. In addition to this method, the means ($\overline{x}$) and standard deviations (σn) of the populations were calculated and anomalous values calculated by normal statistical methods (Till, R., 1974), which were then compared to the cumulative frequency graphs. It was found that certain elements had good agreement between the two methods, but for other elements this was not the case. Therefore, a combination of the two was employed to determine the various populations. All data below the first inflection point on the cumulative frequency plots were defined as background values. If there was a definitive second inflection point (as in the case of Cu and Zn), the data between the two were classified as "above background". In the case of Fe and Pb the "above background" population was defined as being the population between the first inflection point value plus one standard deviation. Other populations (possibly anomalous, anomalous, etc.) were determined by taking the first or second inflection point and adding one standard deviation, two standard deviations, etc.

A disproportionate percentage of the data for Au and Ag were at the lower detection limit and did not submit to the statistical methods described above. It was decided to choose the anomalous populations through inspection of the data and to define the "possibly anomalous", "anomalous" and "definitelyanomalous" values as 85%, 90%, and 95%,respectively, of the total sample population. This appears to be valid for the silver values as they do form distinct clusters (see Figure 11); however the "anomalous" gold values are widely scattered suggesting a population at background levels only (see Figure 12).

Results

The analytical results from the soil sampling has revealed the presence of three distinct concentrations of anomalous values, two of which appear to be indicative of sulphide mineralization (see Figures 7 - 12).

The largest and most significant occurs along the north and northeast portion of the grid where coincident "anomalous" to "definitely anomalous" Cu, Pb, Zn and Ag values occur in a zone

600 metres long by 250 metres wide. This zone is curvilinear in nature and extends the entire length of the grid from L 0+00W/1+50 N to L 6+00W/4+25N. Individual values within this anomaly range up to 57 ppm Cu, 4,464 ppm Pb, 12,889 ppm Zn, 5.4 ppm Ag and 18.36% Fe. Included in this zone are two areas which contain concentrations of metal values higher than most. The first is in the vicinity of L 0+00W/2+00N (the eastern limit of the grid) where three of the four highest Zn values occur (12,889 ppm, 10,505 ppm and 5,536 ppm). A second concentration of values occurs in the vicinity of 4+50N, between L 3+00W and L 4+00W. The highest Pb (4,464 ppm) and Fe (18.36%) values of the anomaly occur here, as well as three of the six highest Zn values. The interpretation of this anomaly, based upon the coincident metal values and the geological environment, is that the signature is consistent with that of base metal volcanogenic massive sulphide mineralization.

It is unfortunate that the 1988 geological mapping was concentrated in the vicinity of the bedded pyrite/ferricrete zone and little work has been done in the region of the anomalous results; however, prospecting indicates the area is underlain by felsic tuffs which have undergone strong sericite alteration. Indeed, float of felsenmeer found east of the grid contained a fragment of pyrite 2 cm. by 5 cm. suggesting a zone of bedded pyrite at this stratigraphic level.

A second concentration of anomalous values occurs in the vicinity of the ferricrete zones located near L 5+00W/1+00S. A number of anomalous Fe and to a lessor degree Zn and Ag values define an north-northeasterly trend which can be traced for up to 600 metres. The iron analyses best delineate this anomaly with over 10 samples containing values greater than 10% Fe, and ranging up to 33.88% at L 5+00W/0+75S. The highest Zn values (910 - 1,532 ppm) in the area are associated with the three highest Fe values. The anomalous Ag values also trend north-northeast, but appear to be offset approximately 100 metres to the northwest from the anomalous Fe values. Values range up to 3.2 ppm with an average in this zone approximating 1.0 ppm. It is obvious that the ferricrete in this area has produced the elevated Fe and Zn values but the source of the silver remains unknown. The north-northeast trend may be the result of a cross-fault in the area, parallel to an interpreted fault to the east, between Lines 3+50W and 4+00W (see Figure 4), but this is largely conjecture at this stage.

The third zone of anomalous values occurs at the extreme southeast corner of the grid and is delineated by a small concentration of Ag, Cu and to a lessor degree, Au values. In addition, there are several "above background" values for Pb, Zn and Fe. The cause of this anomaly is unknown at present, but the geochemical signature does not appear to reflect a volcanogenic massive sulphide origin. Further sampling is warranted in this area in order to ascertain the true dimensions of this zone.

Several "above background" values for Pb, Zn, Fe and Ag occur within and proximal to the flood plain of Camp Creek, which bisects the area of the grid. The source of this mineralization is unknown, but is presumed to have come from either the bedded pyrite zone at L 1+00W/0+50S or the siliceous exhalite located at the head of the cirque.

Also of interest is a white coating on the sediment of a small creek which flows through the camp site. Similar material occurs in the creek which drains the area containing the MM massive sulphide deposit of Curragh Resources, located 15 kilometers to the southwest. It was suspected this material may have been the result of precipitation of hydrozincite or a Pb-oxide, but subsequent analysis failed to produce any significant Pb or Zn values (Mortenson, J.K. and Jilson, G., pers. comm.).

In general, the results from the lithogeochemical samples were low and need not be discussed (see Appendix A). However, note should be made of sample 88BR-295 which was obtained from the extreme southeast corner of the claim group. The sample was taken from a zone of very strong gossan and returned values of 408 ppm Cu and 36.23 % Fe. It is obvious that this area needs further investigation and an extension of the claim group should be considered.

CONCLUSIONS AND RECOMMENDATIONS

The results of the 1988 soil sampling program are very exciting in that they are beginning to delineate a previously unknown area of anomalous values consistent with massive sulphide deposition. Coincident Cu, Pb, Zn, and to a lessor degree Fe anomalies have outlined a zone at least 600 metres long by 275 metres wide which is open to the north, east and west. Geologic mapping has indicated the area is underlain by felsic metavolcanics and cherts which contain fragments of broken-up pyrite beds, again leading one to believe in a massive sulphide environment. Galena/sphalerite veins found to the north may represent a different mineralized zone, which may or may not be genetically related to the syenite intrusive which is found in the area.

Several other large gossans occur on the property which to date have had little or no inspection. Some work had been conducted in the southeastern area of the Mathew Claims previously covered by the CPA claims, which resulted in the discovery of a relatively large Cu - Pb soil anomaly, and some follow-up work is warranted in this region.

It is obvious from the above that a mineralizing event of some shape or form (but probably volcanogenic in origin) has taken place on the Mathew Claims and that the property has considerable potential. It is recommended that an airborne electromagnetic and magnetic survey be completed over the property prior to the 1989 field season, in order to delineate ground conductors and magnetic signatures. Optimistically, this will outline conductors suggesting the presence of massive sulphides and enable the prioritization of ground follow-up.

Obviously, the present grid needs to be extended with suggestions being 1000 metres in the direction grid west, grid north to the syenite contact and grid east to the ridgetop. Gossan zones and electromagnetic conductors should be prospected and mini-grids emplaced over each to facilitate soil sampling, mapping and ground geophysical follow-up. Finally, diamond drilling should be considered if the results of the initial surveys are encouraging.

A Phase 1 Program consisting of airborne and ground geophysics, geological mapping, soil sampling, prospecting and limited diamond drilling would cost in the order of $500,000.00 (see Appendix E) and ideally would be staged over two to three years. Assuming encouraging results, a more extensive diamond drilling program would be warranted.

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STATEMENT OF QUALIFICATIONS

I, MICHAEL J. BURSON, of 7357 Celista Drive, Vancouver, British Columbia, V5S 4A1, do hereby certify that:

1. I am a graduate of the University of Waterloo (1975), with a B.Sc. in Honours Science (Earth Science Major).

2. I have practiced my profession continuously since graduation and currently am an associate of Brian V. Hall Consulting with offices at R.R. #1 - L9, Bowen Island, British Columbia, VON 1GO.

3. I am a Fellow of the Geological Association of Canada (F5220).

4. I performed and caused to be performed the work described in this report between the dates August 30, 1988 and September 13, 1988. Fieldwork was supplemented by a review of geological literature on the property and region.

5. I have not received directly or indirectly, nor do I expect to receive any interest, direct or indirect, in the Mathew Property, nor do I own or expect to receive, either directly or indirectly, any securities of Cascade Pacific Resources Ltd.

Dated this 31st day of January, 1989 at Vancouver, British Columbia.

Respectfully submitted,

M.J. Burson, B.Sc., FGAC

LEGEND:

MISSISSIPPIAN

Mva	HETEROGENOUS, RUSTY, BLACK, WHITE AND ORANGE WEATHERING LAPILLI AND SAND SIZED TUFF, VOLCANIC BRECCIA AND FLOW ROCKS RANGING IN COMPOSITION FROM TRACHYTE TO ANDESITE. BLACK ARGILLACEOUS SLATE, SILICEOUS PALE GREY TO GREEN CHERT AND FELSIC TUFFS ARE LOCALLY ABUNDANT. WEAKLY TO STRONGLY SERICITIZED AND CHLORITIZED. COMMONLY STRONGLY FOLIATED SO THAT PRIMARY TEXTURES ARE MASKED.
My	RESISTANT, MASSIVE, MEDIUM TO FINE GRAINED EQUIGRANULAR SYENITE. CONTAINS UP TO 90% K-FELDSPAR (PERTHITE) AND 10-20% FERROMAGNESIAN MINERALS. LOCALLY HAS UNDERGONE STRONG SILICIFICATION AND EPIDOTE ALTERATION.

UPPER DEVONIAN AND MISSISSIPPIAN

uDMs	BLACK RECESSIVE WEATHERING, WITH RUSTY STREAKS, THIN BEDDED BLACK SILICEOUS SLATE WITH MINOR INTERBEDDED CHERT GRAIN GREYWACKE AND CHERT GRANULE GRIT; INCLUDES LENSES OF INTERMEDIATE TO ACID VOLCANIC ROCKS AND BARITE, UNDIFFERENTIATED.

MIDDLE AND UPPER DEVONIAN

SDdl	RESISTANT, THICK BEDDED TO MASSIVE, RED WEATHERING, COARSELY SUCROSE DOLOMITE; MINOR SANDY DOLOMITE.

ROCK SAMPLE LOCATION
NORMAL FAULT
THRUST FAULT
GOSSAN ZONE

0 500 1000 m
SCALE 1:10,000

CASCADE PACIFIC RESOURCES LTD.

MATHEW PROJECT

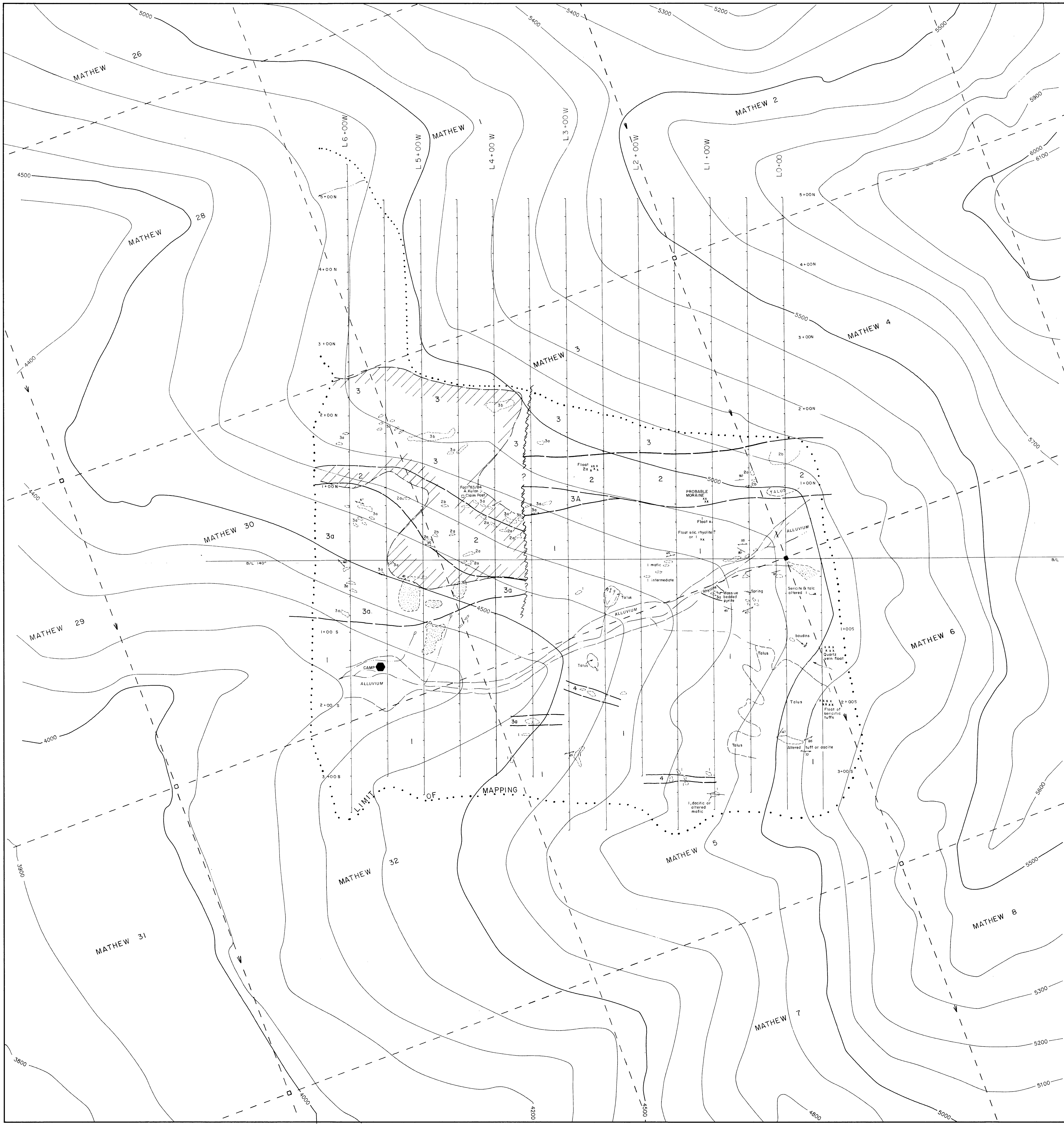
WATSON LAKE M.D., Y.T. NTS: 105 F/9

GEOLOGY MAP

BRIAN V. HALL CONSULTING

DATE: JANUARY 1989
BY: M.J.B.
278
FIGURE: 3

092685



LEGEND:

1	MAFIC TO INTERMEDIATE TUFF; FINE TO MEDIUM GRAINED ASH AND LAPILLI TUFF, OFTEN CONTAINING SIDERITE OR LIMONITE FILLED AMYGDULES. FREQUENTLY CONTAINS SEVERAL PERCENT FINE GRAINED PYRITE AND LOCALLY HAS UNDERGONE MODERATE TO STRONG SERICITE, TALC AND/OR CARBONATE ALTERATION.
2	METASEDIMENTS; 2a METASILTSTONE CONSISTING OF FINE TO MEDIUM GRAINED, THIN BEDDED UNITS WITH FELDSPAR, QUARTZ AND BIOTITE GRAINS AND; 2b QUARTZITE CONSISTING OF 95% CLEAR QUARTZ GRAINS AND 5% BIOTITE.
3	INTERBEDDED FELSIC TUFF AND CHERT; 3a FELSIC TUFF, THIN BEDDED TO MASSIVE, OFTEN CONTAINS QUARTZ EYES, FELDSPAR LATHS AND SEVERAL PERCENT PYRITE AS DISSEMINATIONS, PODS AND DISTINCT BEDS. 3b MEDIUM BEDDED TO MASSIVE CHERT CONTAINING 1-5% DISSEMINATED PYRITE AND MODERATE TO STRONG CARBONATE ALTERATION. IN SOME INSTANCES MAY BE A RECRYSTALLIZED RHYOLITE.
4	DIORITE. MEDIUM GRAINED, DARK GREY AND MAGNETIC; EXHIBITS A WEAK FOLIATION PARALLEL TO THE COUNTRY ROCK.

- BEDDING
- FOLIATION
- OUTCROP
- FAULT (ASSUMED)
- GEOLOGIC CONTACT
- FERROCRETE ZONE
- BEDDED PYRITE
- ZONE OF STRONG ORANGE-WEATHERING TALUS AND OUTCROP
- LIMIT OF MAPPING
- CLAIM POST (FOUND)
- CLAIM POST (NOT FOUND)

0 50 100 150 200 metres

SCALE 1:2000

CASCADE PACIFIC RESOURCES LTD.

MATHEW PROJECT

WATSON LAKE M.D., Y.T. **NTS: 105 F/9**

DETAILED GEOLOGY MAP

BRIAN V. HALL CONSULTING

DATE: JANUARY, 1989
BY: M.J.B.

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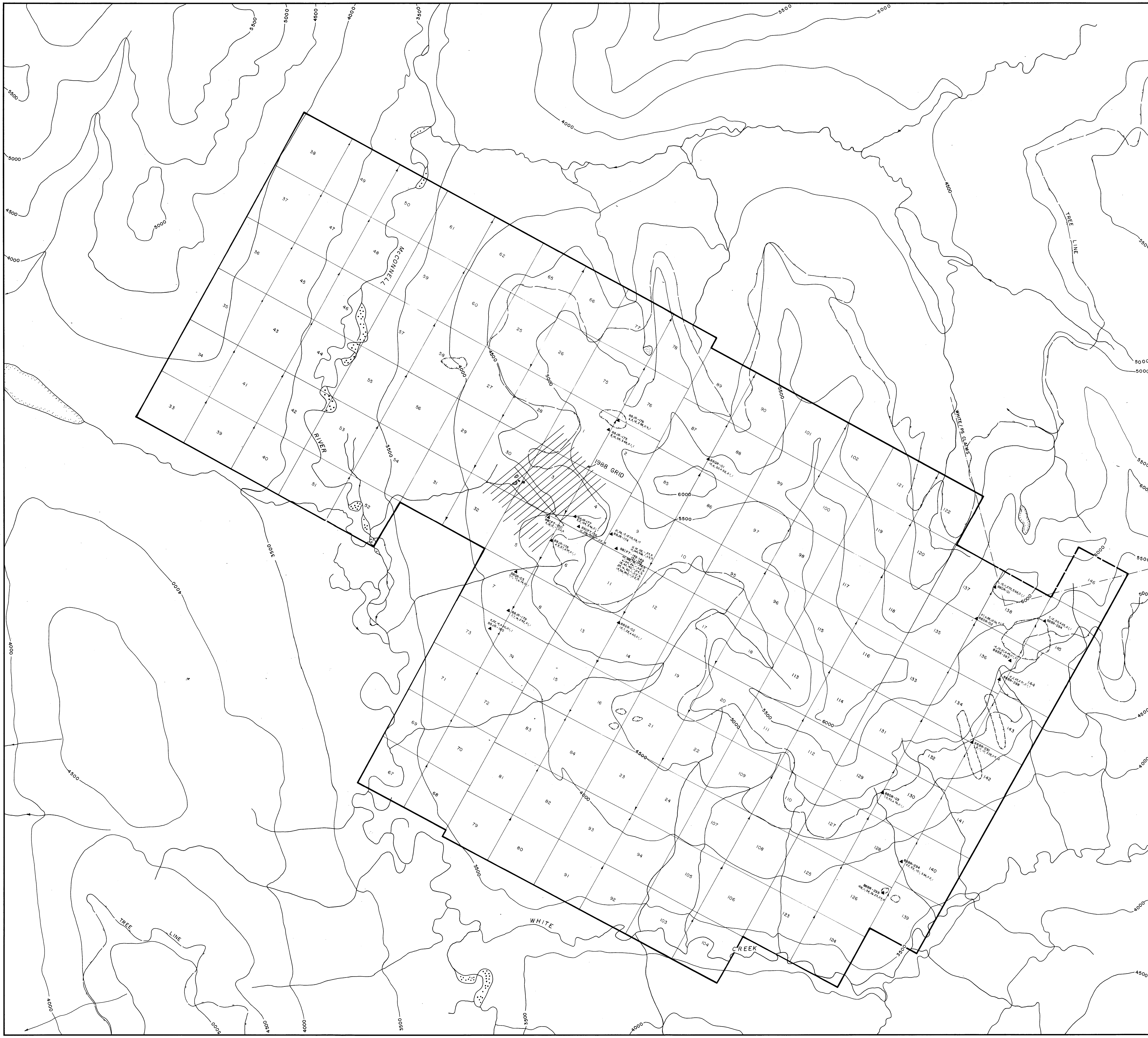
FIGURE No. 4

092685



LEGEND:

▲ 88DR-03 — SAMPLE LOCATION AND NUMBER

7,5,45,6.96,0.1,1 — SAMPLE RESULTS: Cu, Pb, Zn, (p.p.m); Fe, (weight %); Ag, (p.p.m.); Au (p.p.b.)

0 500 1000 m

SCALE 1:10,000

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MATHEW PROJECT

LITHOGEOCHEMICAL RESULTS

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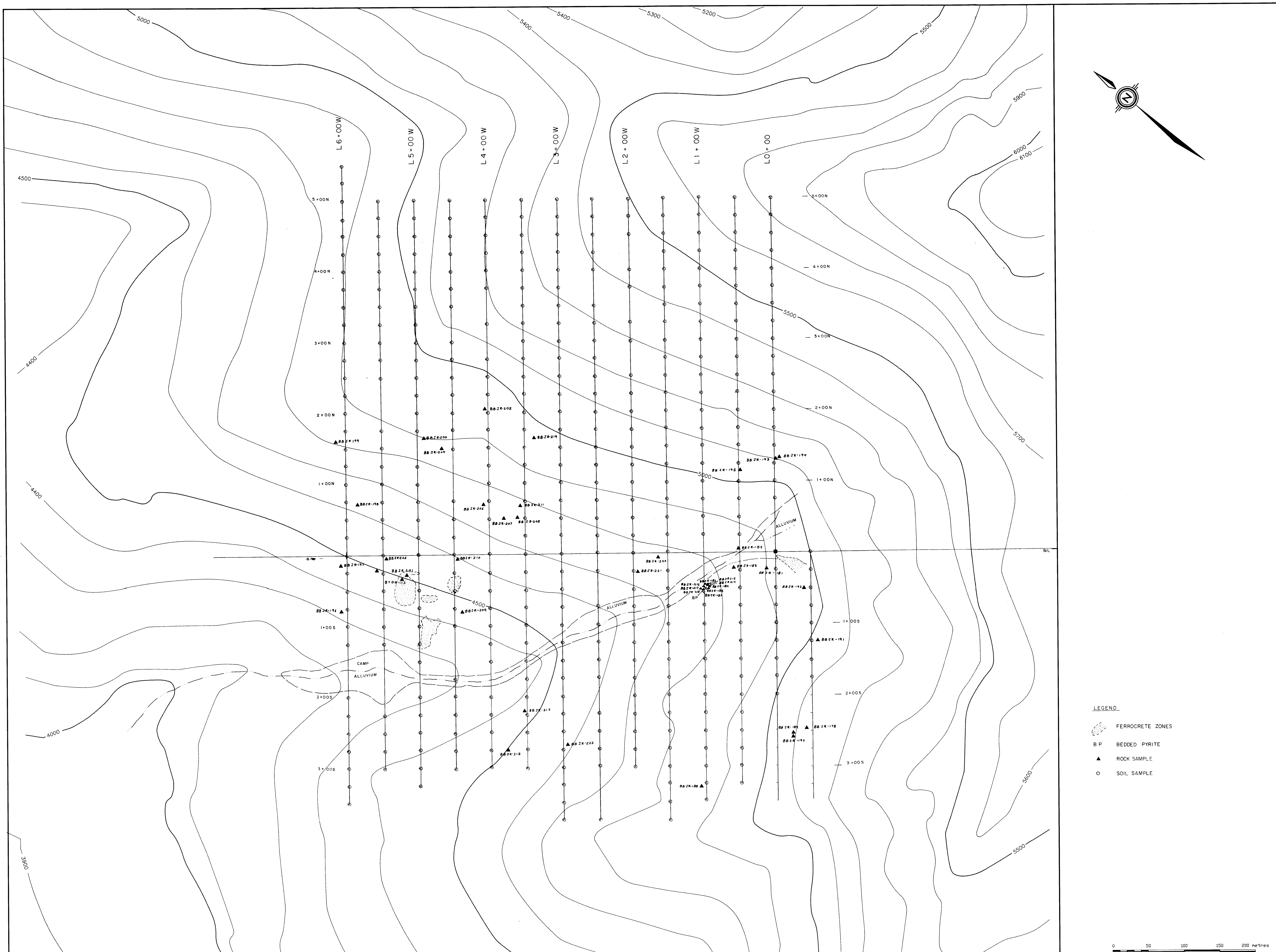
DATE: JANUARY 1989
BY: M.J.B.

280

FIGURE: 5

092685



CASCADE PACIFIC RESOURCES LTD.

MATHEW PROJECT
WATSON LAKE M.D., Y.T.

ROCK SAMPLE LOCATION MAP

BRIAN V. HALL CONSULTING

DATE: JANUARY, 1989
BY: M.B.

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FIGURE No. 6

092685

LEGEND

	FERROCRETE ZONES	
BP	BEDDED PYRITE	
▲	ROCK SAMPLE	
○	SOIL SAMPLE	
○	BACKGROUND	≤ 16 p.p.m.
●	ABOVE BACKGROUND	17 – 36 p.p.m.
●	POSSIBLY ANOMALOUS	27 – 37 p.p.m.
●	ANOMALOUS	38 – 48 p.p.m.
●	DEFINITELY ANOMALOUS	≥ 49 p.p.m.

0 50 100 150 200 metres

SCALE 1:2000

CASCADE PACIFIC RESOURCES LTD.

MATHEW PROJECT

WATSON LAKE M.D., Y.T.

GEOCHEMISTRY SURVEY

Cu

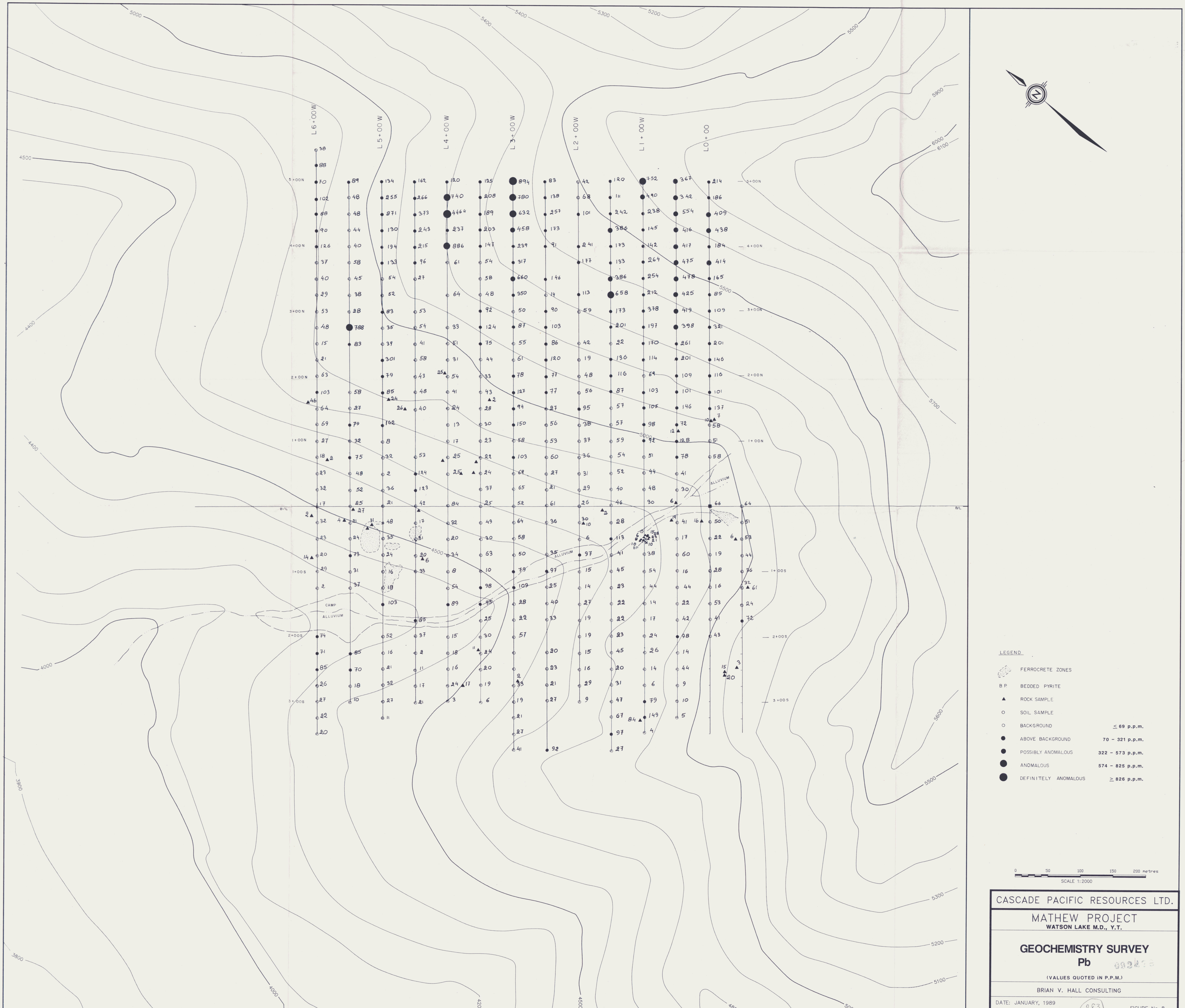
(VALUES QUOTED IN P.P.M.)

BRIAN V. HALL CONSULTING

DATE: JANUARY, 1989
BY: M.B.

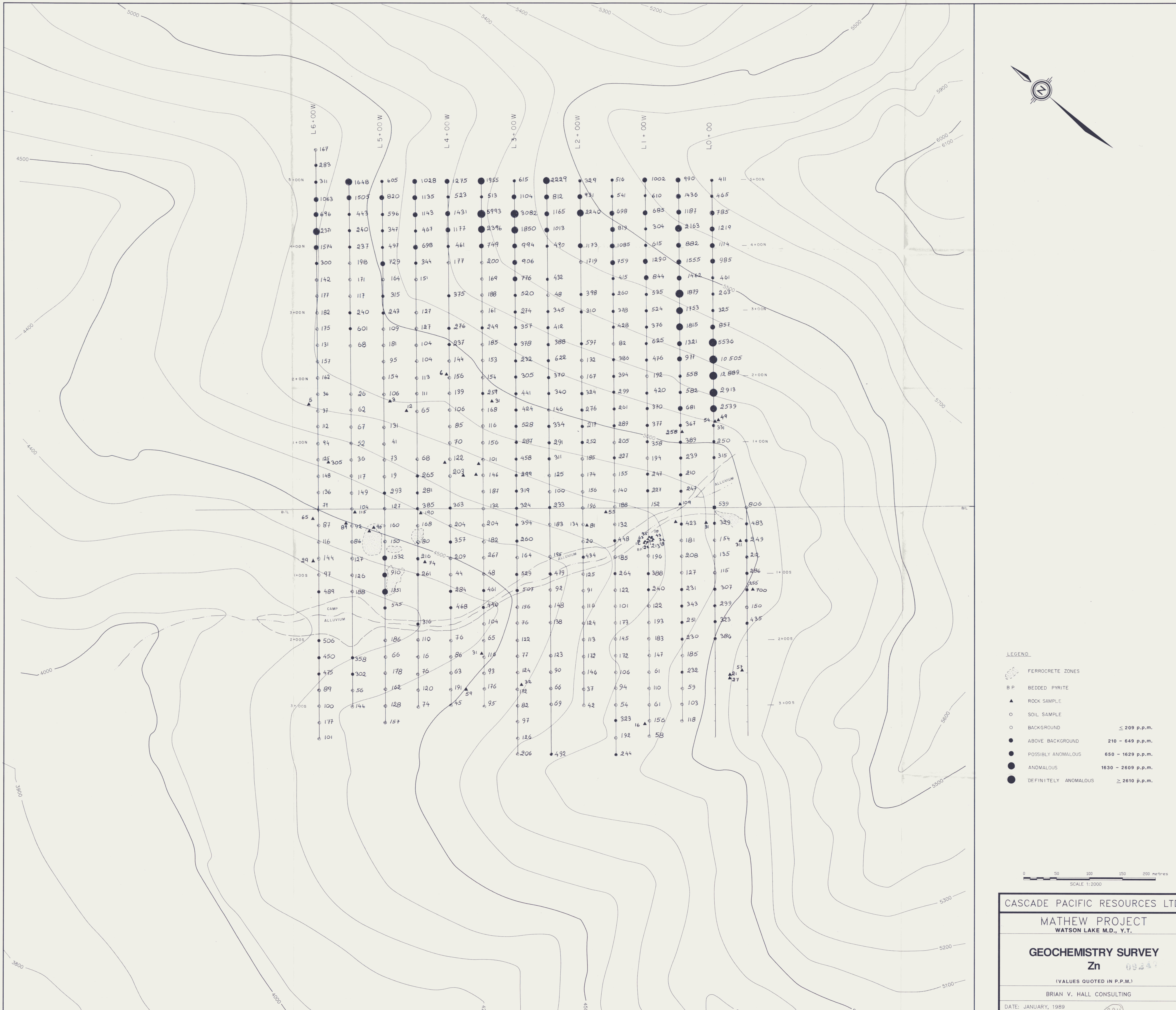
FIGURE No. 7

092685



LEGEND
FERROCRETE ZONES
B P BEDDED PYRITE
ROCK SAMPLE
SOIL SAMPLE
BACKGROUND ≤ 69 p.p.m.
ABOVE BACKGROUND 70 - 321 p.p.m.
POSSIBLY ANOMALOUS 322 - 573 p.p.m.
ANOMALOUS 574 - 825 p.p.m.
DEFINITELY ANOMALOUS ≥ 826 p.p.m.
0 50 100 150 200 metres
SCALE 1:2000
CASCADE PACIFIC RESOURCES LTD.
MATHEW PROJECT
WATSON LAKE M.D., Y.T.
GEOCHEMISTRY SURVEY
Pb
(VALUES QUOTED IN P.P.M.)
BRIAN V. HALL CONSULTING
DATE: JANUARY, 1989
BY: M.B.
FIGURE No. 8
L 6+00W
L 5+00W
L 4+00W
L 3+00W
L 2+00W
L 1+00W
L 0+00
ALLUVIUM
CAMP

092685



LEGEND
FERROCRETE ZONES
B P BEDDED PYRITE
ROCK SAMPLE
SOIL SAMPLE
BACKGROUND ≤ 209 p.p.m.
ABOVE BACKGROUND 210 - 649 p.p.m.
POSSIBLY ANOMALOUS 650 - 1629 p.p.m.
ANOMALOUS 1630 - 2609 p.p.m.
DEFINITELY ANOMALOUS ≥ 2610 p.p.m.
0 50 100 150 200 metres
SCALE 1:2000
CASCADE PACIFIC RESOURCES LTD.
MATHEW PROJECT
WATSON LAKE M.D., Y.T.
GEOCHEMISTRY SURVEY
Zn
(VALUES QUOTED IN P.P.M.)
BRIAN V. HALL CONSULTING
DATE: JANUARY, 1989
BY: M.B
FIGURE No. 9

092685

LEGEND

	FERROCRETE ZONES	
BP	BEDDED PYRITE	
▲	ROCK SAMPLE	
○	SOIL SAMPLE	
○	BACKGROUND	≤ 4.4 %
•	ABOVE BACKGROUND	4.5 – 7.6 %
●	POSSIBLY ANOMALOUS	7.7 – 10.8 %
●	ANOMALOUS	10.9 – 14.0 %
●	DEFINITELY ANOMALOUS	≥ 14.1 %

0 50 100 150 200 metres

SCALE 1:2000

CASCADE PACIFIC RESOURCES LTD.

MATHEW PROJECT

WATSON LAKE M.D., Y.T.

GEOCHEMISTRY SURVEY Fe

(VALUES QUOTED IN WEIGHT %)

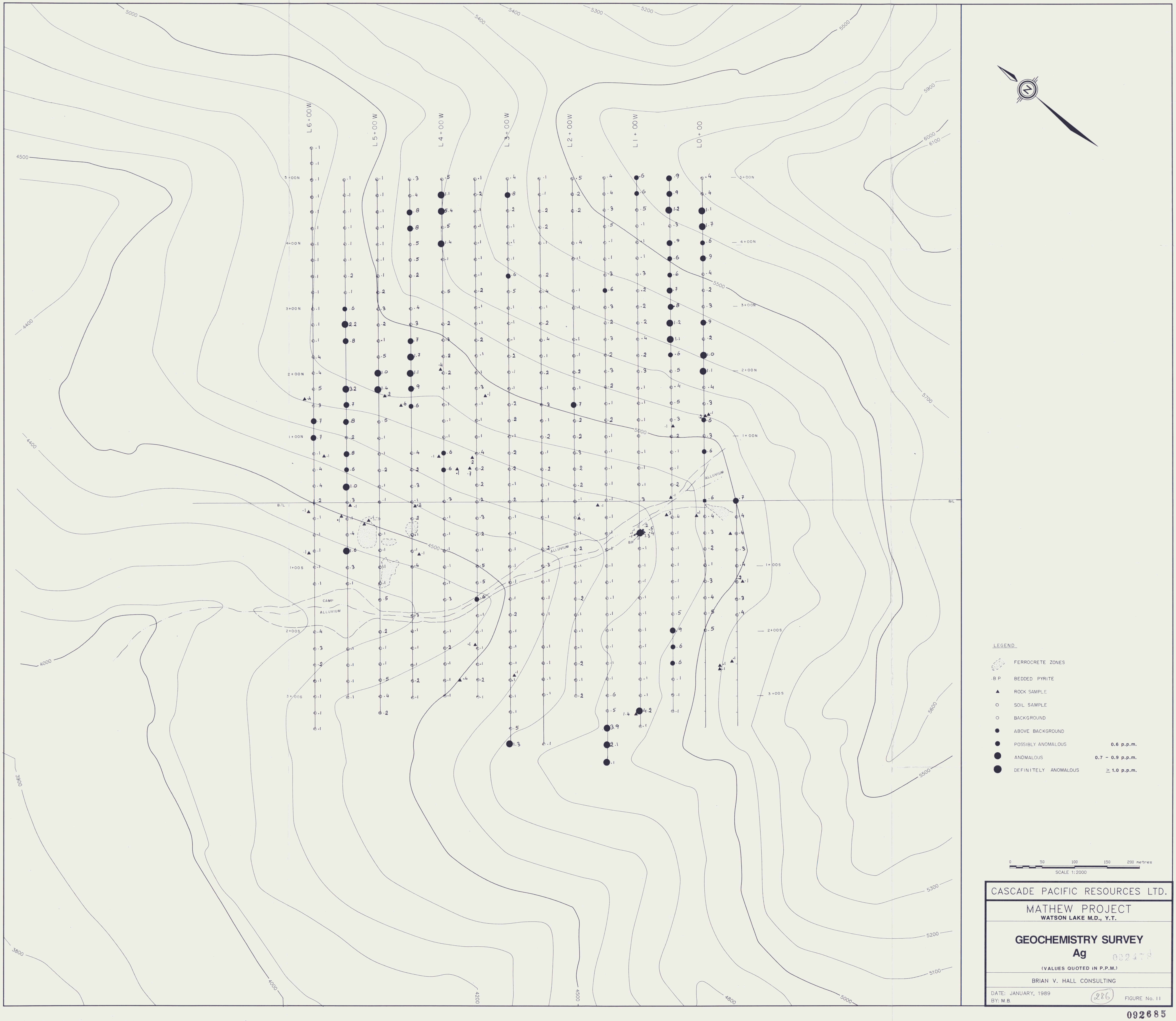
BRIAN V. HALL CONSULTING

DATE: JANUARY, 1989
BY: M.B.

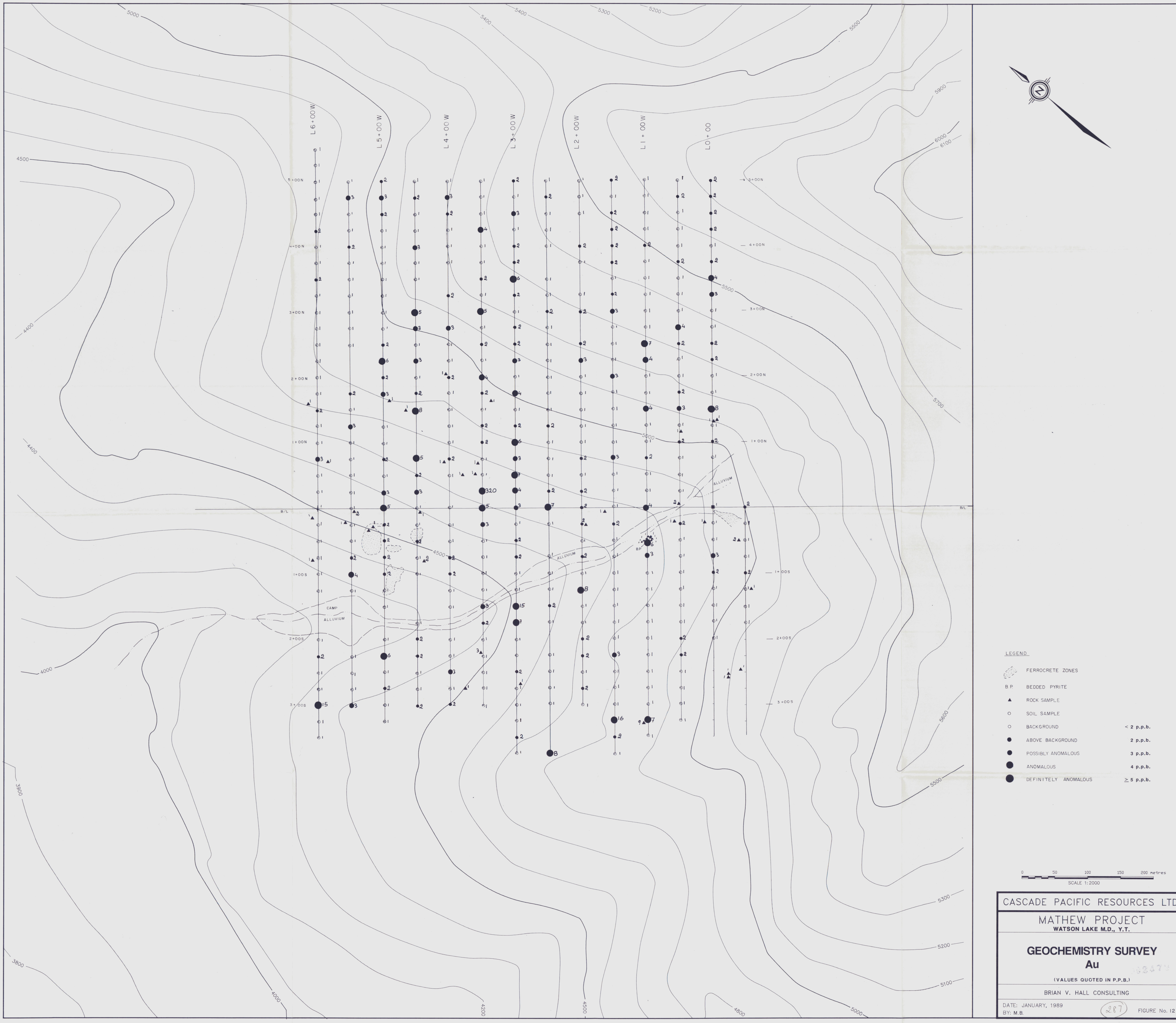
285

FIGURE No. 10

092685


L6+00W
L5+00W
L4+00W
L3+00W
L2+00W
L1+00W
L0+00
CAMP
ALLUVIUM
LEGEND
FERROCRETE ZONES
B.P. BEDDED PYRITE
ROCK SAMPLE
SOIL SAMPLE
BACKGROUND
ABOVE BACKGROUND
POSSIBLY ANOMALOUS 0.6 p.p.m.
ANOMALOUS 0.7 - 0.9 p.p.m.
DEFINITELY ANOMALOUS ≥ 1.0 p.p.m.
0 50 100 150 200 metres
SCALE 1:2000
CASCADE PACIFIC RESOURCES LTD.
MATHEW PROJECT
WATSON LAKE M.D., Y.T.
GEOCHEMISTRY SURVEY
Ag
(VALUES QUOTED IN P.P.M.)
BRIAN V. HALL CONSULTING
DATE: JANUARY, 1989
BY: M.B.
286
FIGURE No. 11

092685


L6+00W
L5+00W
L4+00W
L3+00W
L2+00W
L1+00W
L0+00
B/L
ALLUVIUM
CAMP
LEGEND
FERROCRETE ZONES
B.P. BEDDED PYRITE
ROCK SAMPLE
SOIL SAMPLE
BACKGROUND < 2 p.p.b.
ABOVE BACKGROUND 2 p.p.b.
POSSIBLY ANOMALOUS 3 p.p.b.
ANOMALOUS 4 p.p.b.
DEFINITELY ANOMALOUS ≥ 5 p.p.b.
0 50 100 150 200 metres
SCALE 1:2000
CASCADE PACIFIC RESOURCES LTD.
MATHEW PROJECT
WATSON LAKE M.D., Y.T.
GEOCHEMISTRY SURVEY
Au
(VALUES QUOTED IN P.P.B.)
BRIAN V. HALL CONSULTING
DATE: JANUARY, 1989
BY: M.B.
287
FIGURE No. 12

092685

APPENDIX A

ROCK DESCRIPTIONS

88JR-174 — On Mathew #9. A narrow (probably boudined) bed of pyrite in siliceous and sericitic exhalite. Contains probable fragments of pyrite. This or similar beds continue up the hill along strike. S_0 = 120/70S.

88JR-175 — (406 m. "north" of Post 1, Mathew 3 & 4. 25 metres east of line). Strongly silicified felsic intrusive, probably a syenite. Euhedral feldspar crystals 1 - 2 mm long. Moderate to strong epidote alteration. Numerous quartz veinlets containing occasional specks of sphalerite (?) or siderite.

88JR-176 — (Vicinity of Post 1, Mathew 75/76). Sheared intrusive, very siliceous. Contains 5 - 7% fine-grained pyrite. Occasional quartz veinlets are present. The weathering of the pyrite produces a very prominent orange to brown gossan on the ridgetop.

88JR-177 — (Approximately 100 m. east of Post 2, Mat 3 & 4 (in creek)). Exhalite or rhyolite tuff containing 3 - 5% pyrite. Often contains very strong sericite. Ferrocrete is present in the area.

88JR-178 (Approximately 350 m. "south" of Post 1, Mathew 5 & 6). Fine-grained to medium-grained mafic to intermediate tuff, often with strong sericite alteration. The sample was taken 1/2 way up a north facing slope from an area containing several episodes of quartz+/-muscovite veining.

S_o = 140/70W.

88JR-179 (417 m. "south" of Post 1, Mathew 7 & 8. Chert horizon: Generally massive but some strain is evident. Contains <1% very fine grained pyrite cubes. Interbedded with a thin-bedded ash tuff. S_o = 030/45E.

88JR-180 On Mathew 73, approximately 125 metres west of the claim line. Chert or felsic tuff. Very hard and "clinky". Contains 3% pods or thin broken-up beds of quartz + pyrite. S_o(?) = 170/90.

88JR-181 L 0+05W/0+05N. Intermediate lapilli tuff. Medium grained. Generally light grey in colour with green and maroon overtones. Contains numerous <1mm to 3cm long nodules of Fe or Fe-carbonate, often with tiny crystals of quartz or barite(?). Occasional quartz or quartz/carbonate veins.

S_o = 125/70S

88JR-182 L 0+50W/0+05N. Lapilli tuff as above, but in general more schistose. Very strong sericite alteration and <1% disseminated pyrite. Small steep to vertical crenulation folds. Fe-carbonate nodules are present but are generally small and stretched-out. S_0-170/80W; S_1-140/55E.

88JR-183 L0+54W/0+25S. Buff weathering lapilli tuff. Very strong carbonate, sericite and talc alteration. Fe-carbonate nodules present as before. Trace pyrite observed.

L1+00W/0+50S. Rhyolite exhalitive with beds of massive pyrite. Very silica-rich with occasional feldspar crystals. Pyrite beds vary from several mm. to several cm. in thickness although one poorly exposed bed is at least 0.5 metres thick. (S_0 = 160/45W, possibly slumped). Sericite alteration varies from moderate on the footwall of the thick pyrite bed to strong on the hangingwall. The latter is also strongly foliated and contains much less pyrite than the footwall.

88JR-184 Footwall exhalitive.

88JR-185 Massive pyrite.

88JR-186 Footwall exhalitive. S_o = 100/85S.

88JR-187 Hangingwall exhalitive. S_o = 110/85S.
(Also see 88JR-214 to 88JR-218)

88JR-188 L1+00W/3+25S. Contact between a mafic tuff and a dacitic(?) tuff, or strongly altered mafic. The sample is from this altered zone which is very siliceous and contains <1% pyrite as small blebs and disseminations. Weathers a distinctive orange-brown.

88JR-189 L0+25E/2+50S. Quartz vein, approximately 10 cm. wide. Slightly rusty, with good manganese stain, and possible sphalerite or siderite.

88JR-190 L0+25E/2+52S. Very thin-bedded tuff. Probably dacitic in composition, but could be an altered equivalent of the surrounding mafic tuff. Strong sericite and talc alteration. 1 - 2% disseminated pyrite. This unit does <u>not</u> extend to the east.
S_1 = 112/85S.

88JR-191 L0+50E/1+27S. This area contains a large amount of quartz float with brown to red-brown material on internal fracture surfaces. Also observed were tiny specks of a black metallic mineral.

88JR-192 L0+45E/0+52S. Altered tuff; strong sericite and talc alteration and minor pyrite. Buff to brown weathering.

L0+00/1+25N. Metaquartzite; very siliceous with clear quartz grains but no remnant bedding. Not a recrystallized chert or rhyolite. Cut by numerous 1 cm. quartz veins which contain a tiny black metallic mineral. Occasional pods, several metres long, containing several percent fine-grained disseminated pyrite and which have undergone bleaching with accompanying carbonate and sericite alteration.

88JR-193 Metaquartzite containing quartz veins.

88JR-194 Altered metaquartzite.

88JR-195 L0+50W/1+20N. The sample is from a representative quartz vein containing tiny black and red-brown crystals of sphalerite (?) or hematite (?). Very strong but sporadic quartz veining in this area <u>within</u> a medium to dark grey, fine-grained metasiltstone. S_0 = 135/30N.

88JR-196 L6+05W/0+72S. Rhyodacitic tuff. Very siliceous but it is difficult to determine how much of the silica is secondary. Strong quartz and quartz-carbonate veining and flooding. 1% pyrite as disseminations and tiny veinlets or pods. Also contains a tiny black metallic mineral.

88JR-197 L6+02W/0+05S. Felsic tuff(?) or strongly foliated intrusive. Looks similar in composition to a felsic intrusive present at L6=00W/0+42S, but the texture indicates a layered or stretched-out fabric parallel to the foliation. S_1 = 010/60E.

88JR-198 L5+82W/0+77N. Thin-banded felsic tuff with strong carbonate alteration throughout. Contains approximately 3% biotite. S_1 = 160/87E.

88JR-199 L6+15W/1+60N. Felsic tuff. Silica-rich with minor biotite. Generally thin-bedded. Cut by strong quartz veining which usually contains pyrite. Pyrite also occurs as drusy crystals within vugs in the veins. Light brown to orange weathering.

88JR-200 L4+90W/1+62N. Identical to 88JR-199 and outcrop at L6+05W/1+75N. Very siliceous unit, probably recrystallized chert or rhyolite. Often contains very fine grained disseminated pyrite. Also very strong, but barren quartz veining. Weathers light brown to orange.

88JR-201 L5+20W/0+32S. Felsic tuff(?). Very siliceous and thin-bedded to massive. Occasionally can discern what appears to be remnant quartz eyes. No feldspar observed. Contains 1 -2% disseminated pyrite and has undergone minor to moderate sericite and talc alteration. Well foliated to massive. Intercalated with, and overlying consolidated and unconsolidated ferrocrete.
S_1 = 160/40N.

88JR-202 L5+45W/0+05S. Felsic tuff. Difficult to get a fresh surface, but it appears to be very siliceous. Orange weathering - contains strong Fe-carbonate alteration throughout. Occasional

1 cm. long pod which contain what appears to be tiny pyrite molds.

88JR-203 L5+53W/0+20S. Felsic tuff(?). Very siliceous. No relict textures visible. Approaching a chert in composition. 1 - 3% disseminated pyrite and the occasional quartz vein. Quite massive, but breaks easily.

88JR-204 L4+65W/1+50N. Rhyolite. Contains many small feldspar crystals. Good quartz veining and strong carbonate alteration throughout. Very orange weathering. Trace pyrite.

88JR-205 L4+03W/2+05N. Recrystallized chert(?) or rhyolite. 95% silica with occasional quartz eyes. No feldspar observed. Trace - 1% pyrite. Orange weathering. Moderate quartz veining throughout. Very brittle and contains the occasional foliated tuff bed.

88JR-206 L4+05W/0+70N. Rhyodacite. Intermediate to felsic tuff. Good sericite and minor chlorite alteration. Trace pyrite. S_1 = 110/64N.

88JR-207 L3+80W/0+55N. Rhyodacite(?). Along strike from 88JR-206 but very altered. Cross-cut by numerous quartz veins containing < 1% pyrite.

88JR-208 L3+60W/0+52N. As 88JR-207, but even stronger quartz and pyrite veining. Originally a chert.

88JR-209 L4+48W/0+75S. Mafic tuff. Fine-grained, medium green and well foliated. Contains stretched-out vugs of red-brown, earthy material, occasionally with minor pyrite(?) on the edges of the vugs. This is the same unit as seen in the vicinity of the bedded pyrite (L1+00W/0+50S).

88JR-210 L4+45W/0+02S. Intercalated mafic tuff and metasiltstone. Fine-grained, green-grey unit. The metasiltstone contains 5% biotite and both have trace pyrite. S_1 = 120/70N.

88JR-211 L3+55W/0+70N. Intermediate to felsic tuff. Strong feldspar (going to clay) in a dark green matrix. Strong manganese stain.

88JR-212 L3+50W/2+25S. Felsic tuff. Thin-bedded, with alternating light and medium grey layers. Stretched out pods of orange weathering material. No sulphides observed.

88JR-213 L4+20W/2+75S. Intermediate volcanic tuff. Light grey to brown. Contains the ubiquitous orange-brown vugs. Cut by minor, barren quartz veins.
S_1 = 130/54S

(Massive pyrite showing at L1+00W/0+50S)
(See also 88JR-184 to 88JR-187)

88JR-214 Boulder of massive bedded pyrite.

88JR-215 Boulder of massive pyrite and rhyolite.

88JR-216 Footwall rhyolite.

88JR-217 Hangingwall rhyolite.

88JR-218 Hangingwall rhyolite.

88JR-219 L3+40W/1+60N. Subcrop of thin-bedded intermediate tuff. Good sericite and talc alteration. No sulphides observed.

88JR-220	BL/1+60W. Mafic tuff. Slightly rusty with orange-brown nodules. Moderate sericite alteration and minor quartz veining. S_1 = 125/65N.
88JR-221	L1+95W/0+25S. Intermediate tuff(?) or more probably an altered mafic. Good sericite and ankerite alteration. Minor quartz veining.
88JR-222	L2+90W/2+75S. Mafic tuff. Medium grained and well foliated. Strong carbonate and epidote alteration. S_1 = 123/65N.
88JR-223	Fine-grained mafic tuff. Strong carbonate alteration especially along cleavage planes and as vugs.
88BR-284	Located 120 metres 'south' of Post 1, Mathew 146. Rhyolite tuff (sericite schist). Very fine-grained, light grey in colour with a strong foliation. Contains 7% fine-grained disseminated pyrite. Weathers to an orange-brown colour forming a very strong gossan.

88BR-287 Located 160 metres south of Post 2, Mathew 145. Fine-grained, medium grey, intermediate tuff containing 3 - 5% fine-grained disseminated pyrite. It also contains a yellow-brown stain which may be a weathering product of arsenopyrite.

88BR-288 Located 213 metres 'north' of Post 1, Mathew 145. A white quartz vein containing minor manganese stain and siderite.

88BR-291 Located at Post 1, Mathew 144. Rhyolite tuff. Very fine grained, medium grey, containing 10-15% very fine grained pyrite.

88BR-294 Located 300 metres 'north' of Post 1, Mathew 141. Felsic intrusive(?). 30% quartz. Minor epidote and moderate carbonate alteration. Contains 5-7% very fine grained pyrite.

88BR-295 Located 315 metres 'north' of Post 1, Mathew 139. Very strong gossan zone containing 10 - 20% quartz, 10% fine-grained pyrite and the remainder limonite. It is impossible to ascertain the original rock type.

88DR-01	100 metres 'south' of Post #2, Mathew 137/138 (on claim line). Quartz vein containing <1 cm. crystals of siderite and 5% blebs of fine-grained pyrite.
88DR-02	Located at Post #2, Mathew 129/130. Generally barren quartz vein containing the occasional large siderite crystal.
88DR-03	Located at Post #2, Mathew 127/128. Quartz vein containing 10% muscovite and 5% fine-grained siderite.
88QR-01	100 metres 'north' (on claim line) from Post #1, Mathew 87/88. Intermediate to felsic lapilli tuff. Trace to 1% very fine grained pyrite and minor chlorite alteration.
88QR-02	10 metres 'south' (on claim line) from Post #1, Mathew 15/16. Intermediate to felsic tuff with trace pyrite and strong sericite alteration.
88QR-03	Located on a small creek south of 'camp creek' within Mathew 7. Rhyolite tuff. Very fine grained, light grey volcaniclastic. Contains several generations of 4 - 5 mm quartz veins and trace pyrite.

Canamax Sampling

88CFT 148	At head of creek (exhalite:MJB). Pyrite-sericite schist, locally with quartz stringers. 5 - 10% pyrite, trace purple fluorite.
88CFT 149	Same location. Trace pyrite.
88CFT 151	Grab samples of pieces of oxide in float.
88CFT 152- 88CFT 155	Grab samples of quartz-sericite schist; tr. pyrite.
88CFT 156	To the west, below outcrop at head of creek. Ferrocrete boulders.
88CFT 150	In outcrop/subcrop on south side of creek. Semi-massive to massive, locally banded pyrite, in a sericite schist host (?). (Bedded pyrite;MJB).

APPENDIX B

ANALYSES

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: SEP 19 1988
DATE REPORT MAILED: Jan. 13/89.

GEOCHEMICAL ANALYSIS 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: Soil -80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

SIGNED BY C. Leong D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

CASCADE PACIFIC EXPLORATION PROJECT P FILE # 89-0078 Page 1

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L6+00W 5+50N	24	38	167	.1	5.91	1
L6+00W 5+25N	8	88	283	.1	4.12	1
L6+00W 5+00N	10	70	311	.1	2.81	1
L6+00W 4+75N	23	102	1068	.1	5.30	1
L6+00W 4+50N	20	88	696	.1	4.13	1
L6+00W 4+25N	22	90	2371	.1	5.78	2
L6+00W 4+00N	31	126	1574	.1	7.42	1
L6+00W 3+75N	13	37	300	.1	3.52	1
L6+00W 3+50N	14	40	142	.1	2.74	2
L6+00W 3+25N	8	29	177	.1	3.14	1
L6+00W 3+00N	13	53	182	.1	2.62	1
L6+00W 2+75N	20	48	175	.1	4.02	1
L6+00W 2+50N	12	15	131	.1	4.90	1
L6+00W 2+25N	19	21	157	.4	6.87	1
L6+00W 2+00N	11	63	162	.4	4.72	1
L6+00W 1+75N	9	103	36	.5	5.60	1
L6+00W 1+50N	3	64	37	.3	5.11	2
L6+00W 1+25N	14	69	112	.7	7.45	1
L6+00W 1+00N	9	27	94	.7	5.54	1
L6+00W 0+75N	5	18	125	.1	3.65	3
L6+00W 0+50N	6	23	148	.4	4.14	1
L6+00W 0+25N	8	32	136	.4	5.11	1
L6+00W 0+00N	6	17	79	.2	3.95	1
L6+00W 0+25S	14	32	87	.1	4.38	1
L6+00W 0+50S	19	23	116	.1	3.78	1
L6+00W 0+75S	15	20	144	.1	4.22	1
L6+00W 1+00S	11	29	97	.1	3.95	1
L6+00W 1+25S	16	2	489	.1	29.04	1
L6+00W 2+00S	13	74	506	.4	5.23	1
L6+00W 2+25S	15	71	450	.3	5.69	2
L6+00W 2+50S	14	85	473	.2	5.70	1
L6+00W 2+75S	16	26	89	.1	3.84	1
L6+00W 3+00S	8	27	100	.1	3.16	15
L6+00W 3+25S	11	22	177	.1	3.48	1
L6+00W 3+50S	15	20	101	.1	2.79	1
L5+50W 5+00N	27	89	1648	.1	6.22	1
STD C/AU-S	62	42	134	7.3	4.21	53

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L5+50W 4+75N	19	48	1505	.1	4.35	3
L5+50W 4+50N	22	48	443	.1	6.57	1
L5+50W 4+25N	17	44	240	.1	5.31	1
L5+50W 4+00N	13	40	237	.1	3.79	2
L5+50W 3+75N	17	58	198	.1	4.19	1
L5+50W 3+50N	16	45	171	.2	3.46	1
L5+50W 3+25N	15	38	117	.1	2.85	1
L5+50W 3+00N	16	28	240	.6	6.19	1
L5+50W 2+75N	29	788	601	2.2	7.06	1
L5+50W 2+50N	17	83	68	.8	6.60	1
L5+50W 1+75N	9	58	26	3.2	5.99	2
L5+50W 1+50N	11	27	63	.7	6.93	1
L5+50W 1+25N	6	79	67	.8	4.12	3
L5+50W 1+00N	8	32	52	.2	5.33	1
L5+50W 0+75N	11	75	36	.8	5.82	1
L5+50W 0+50N	9	48	117	.6	5.53	1
L5+50W 0+25N	8	52	149	1.0	5.34	1
L5+50W 0+00N	10	25	104	.3	4.80	1
L5+50W 0+25S	10	21	92	.1	4.04	1
L5+50W 0+50S	10	24	86	.4	5.01	1
L5+50W 0+75S	23	73	127	1.6	11.67	2
L5+50W 1+00S	17	31	126	.3	7.57	4
L5+50W 1+25S	25	37	188	.1	9.93	1
L5+50W 2+25S	14	83	358	.1	5.00	1
L5+50W 2+50S	13	70	302	.1	5.07	1
L5+50W 2+75S	10	18	56	.1	3.04	1
L5+50W 3+00S	6	10	144	.1	3.83	3
L5+00W 5+00N	24	134	605	.1	4.68	2
L5+00W 4+75N	21	255	820	.1	5.47	3
L5+00W 4+50N	19	271	596	.1	5.44	2
L5+00W 4+25N	12	130	347	.1	4.38	1
L5+00W 4+00N	19	194	497	.1	5.54	1
L5+00W 3+75N	21	133	729	.1	5.14	1
L5+00W 3+50N	10	54	164	.1	3.82	1
L5+00W 3+25N	39	52	315	.2	5.50	1
L5+00W 3+00N	21	83	243	.3	5.96	1
STD C/AU-S	63	42	133	7.1	4.18	52

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	SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
	L5+00W 2+75N	14	35	109	.2	5.25	1
	L5+00W 2+50N	10	39	181	.1	4.95	2
	L5+00W 2+25N	18	301	95	.5	4.60	6
	L5+00W 2+00N	16	79	154	1.0	5.27	2
	L5+00W 1+75N	20	85	106	1.4	7.39	3
Soil	L5+00W 1+25N	22	162	131	.5	11.98	1
	L5+00W 1+00N	6	8	41	.1	5.50	1
	L5+00W 0+75N	10	32	73	.1	6.80	2
	L5+00W 0+50N	2	2	19	.2	1.06	1
	L5+00W 0+25N	7	36	293	.1	7.44	3
	L5+00W 0+00N	6	21	127	.1	5.13	5
	L5+00W 0+25S	15	48	160	.1	8.99	2
	L5+00W 0+50S	18	35	150	.1	9.05	2
	L5+00W 0+75S	7	24	1532	.1	33.88	2
	L5+00W 1+00S	10	16	910	.1	31.50	2
	L5+00W 1+25S	10	18	1251	.1	28.48	1
	L5+00W 1+50S	16	103	545	.5	5.88	1
	L5+00W 2+00S	11	52	186	.2	4.08	1
	L5+00W 2+25S	8	16	66	.1	2.50	6
	L5+00W 2+50S	11	21	178	.1	4.43	1
	L5+00W 2+75S	8	32	162	.5	4.54	2
	L5+00W 3+00S	8	27	128	.4	3.71	1
	L5+00W 3+25S	6	11	157	.2	2.33	1
	L4+50W 5+00N	33	162	1028	.3	6.31	1
	L4+50W 4+75N	33	266	1155	.4	7.43	2
	L4+50W 4+50N	24	373	1143	.8	5.99	1
	L4+50W 4+25N	19	243	467	.8	5.26	1
	L4+50W 4+00N	22	215	698	.5	6.64	3
	L4+50W 3+75N	15	96	344	.5	4.52	1
	L4+50W 3+50N	52	27	151	.2	6.48	1
	L4+50W 3+00N	16	53	127	.4	4.61	5
	L4+50W 2+75N	17	54	127	.3	4.50	3
	L4+50W 2+50N	12	41	104	.7	4.11	1
	L4+50W 2+25N	22	58	104	1.7	8.20	3
	L4+50W 2+00N	12	43	113	1.1	4.61	1
	L4+50W 1+75N	23	48	111	.9	11.46	2
	STD C/AU-S	63	44	132	7.1	4.27	48

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L4+50W 1+50N	17	40	65	.6	15.49	8
L4+50W 0+75N	10	53	68	.4	8.45	5
L4+50W 0+50N	12	124	265	.2	10.77	2
L4+50W 0+25N	14	123	281	.3	10.96	3
L4+50W 0+00N	6	42	385	.1	7.56	1
L4+50W 0+25S	4	17	168	.2	4.24	1
L4+50W 0+50S	17	31	180	.1	4.15	2
L4+50W 0+75S	9	20	216	.1	6.66	1
L4+50W 1+00S	15	33	261	.4	5.09	1
L4+50W 1+75S	13	85	316	.3	4.66	1
L4+50W 2+00S	17	37	110	.1	3.48	2
L4+50W 2+25S	3	2	16	.1	.68	2
L4+50W 2+50S	7	11	76	.1	2.81	1
L4+50W 2+75S	11	17	120	.2	5.12	1
L4+50W 3+00S	3	21	74	.1	3.08	2
L4+00W 5+00N	23	120	1275	.5	5.24	1
L4+00W 4+75N	18	740	523	1.1	5.68	3
L4+00W 4+50N	47	4464	1431	5.4	8.58	2
L4+00W 4+25N	22	237	1177	.5	5.59	1
L4+00W 4+00N	25	886	461	1.4	7.04	1
L4+00W 3+75N	5	61	177	.1	4.53	1
L4+00W 3+25N	13	64	375	.5	4.64	2
L4+00W 2+75N	12	33	276	.2	3.87	3
L4+00W 2+50N	17	51	237	.3	3.71	1
L4+00W 2+25N	14	31	144	.2	3.85	1
L4+00W 2+00N	25	54	156	.2	7.50	2
L4+00W 1+75N	14	41	139	.1	4.21	1
L4+00W 1+50N	10	24	106	.1	3.24	1
L4+00W 1+25N	9	13	85	.1	3.23	1
L4+00W 1+00N	5	17	70	.1	1.75	1
L4+00W 0+75N	9	25	122	.6	9.13	2
L4+00W 0+50N	13	25	203	.6	6.34	1
L4+00W 0+00N	10	84	363	.3	9.26	1
L4+00W 0+25S	6	32	204	.1	5.66	1
L4+00W 0+50S	15	20	357	.1	5.45	1
L4+00W 0+75S	9	34	209	.1	4.46	2
STD C/AU-S	63	45	132	7.3	4.25	48

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L4+00W 1+00S	1	8	44	.1	1.17	2
L4+00W 1+25S	7	54	284	.1	4.45	1
L4+00W 1+50S	8	89	468	.3	3.71	1
L4+00W 2+00S	5	15	76	.1	2.40	1
L4+00W 2+25S	1	18	56	.2	2.61	1
L4+00W 2+50S	5	16	63	.1	2.44	3
L4+00W 2+75S	7	24	191	.1	4.59	1
L4+00W 3+00S	1	3	45	.1	2.32	2
L3+50W 5+00N	32	125	1953	.1	6.43	1
L3+50W 4+75N	13	208	513	.2	4.36	1
L3+50W 4+50N	53	189	5993	.1	10.47	1
L3+50W 4+25N	33	203	2396	.1	9.24	4
L3+50W 4+00N	20	147	749	.1	6.75	1
L3+50W 3+75N	6	54	260	.1	7.51	1
L3+50W 3+50N	9	58	169	.1	4.94	2
L3+50W 3+25N	10	48	188	.2	4.79	1
L3+50W 3+00N	6	92	161	.1	4.00	5
L3+50W 2+75N	12	124	249	.1	4.88	1
L3+50W 2+50N	11	75	185	.2	4.02	2
L3+50W 2+25N	11	44	153	.1	3.58	1
L3+50W 2+00N	12	33	154	.1	3.59	4
L3+50W 1+75N	13	43	259	.3	4.93	2
L3+50W 1+50N	11	28	168	.1	3.86	1
L3+50W 1+25N	9	30	116	.1	3.39	2
L3+50W 1+00N	12	23	156	.1	4.31	2
L3+50W 0+75N	12	22	101	.4	2.90	1
L3+50W 0+50N	12	24	146	.2	4.73	1
L3+50W 0+25N	13	37	187	.2	5.18	320
L3+50W 0+00N	9	25	132	.2	3.72	5
L3+50W 0+25S	11	49	204	.3	4.41	3
L3+50W 0+50S	8	30	182	.2	3.58	1
L3+50W 0+75S	14	63	267	.1	4.52	1
L3+50W 1+00S	5	10	48	.5	.98	1
L3+50W 1+25S	17	98	461	.5	5.81	1
L3+50W 1+50S	16	95	470	.6	6.34	3
L3+50W 1+75S	7	25	104	.1	4.08	2
STD C/AU-S	63	44	132	7.1	4.30	47

	SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
	L3+50W 2+00S	5	30	65	.1	2.68	1
	L3+50W 2+25S	12	24	116	.1	5.94	1
	L3+50W 2+50S	6	20	93	.1	4.29	1
	L3+50W 2+75S	11	19	176	.2	6.16	1
	L3+50W 3+00S	3	6	95	.1	3.50	1
	L3+00W 5+00N	32	894	615	.4	5.72	2
Soil	L3+00W 4+75N	13	780	1104	.8	6.52	1
	L3+00W 4+50N	30	632	3082	.2	10.09	3
	L3+00W 4+25N	46	458	1850	.1	18.36	1
	L3+00W 4+00N	33	239	994	.1	7.54	2
	L3+00W 3+75N	35	317	906	.1	8.08	2
	L3+00W 3+50N	46	660	776	.6	7.68	6
	L3+00W 3+25N	25	350	520	.5	5.66	2
	L3+00W 3+00N	15	50	274	.1	4.28	1
	L3+00W 2+75N	23	87	357	.1	3.54	2
	* L3+00W 2+50S	8	37	124	.1	5.03	2
	L3+00W 2+50N	15	55	378	.1	4.70	2
	L3+00W 2+25N	16	61	238	.2	3.03	3
	* L3+00W 2+25S	6	17	77	.1	3.36	1
	L3+00W 2+00N	12	78	305	.1	4.60	1
	L3+00W 1+75N	21	127	441	.1	4.98	4
	L3+00W 1+50N	14	94	424	.2	4.03	1
	L3+00W 1+25N	19	150	528	.2	4.83	2
	L3+00W 1+00N	11	58	287	.1	3.87	6
	L3+00W 0+75N	17	103	458	.2	4.43	3
	L3+00W 0+50N	11	69	299	.2	3.94	7
	L3+00W 0+25N	12	65	319	.1	3.97	4
	L3+00W 0+00N	14	52	324	.2	4.05	3
	L3+00W 0+25S	13	64	394	.1	4.51	1
	L3+00W 0+50S	13	58	260	.1	4.49	2
	L3+00W 0+75S	9	50	164	.1	3.41	2
	L3+00W 1+00S	13	79	529	.1	5.34	1
	L3+00W 1+25S	13	107	507	.1	5.83	1
	L3+00W 1+50S	12	28	156	.1	3.94	15
	L3+00W 1+75S	9	22	76	.2	2.78	7
	L3+00W 2+00S	26	57	122	.1	2.55	1
	STD C/AU-S	63	42	132	7.1	4.25	52

	SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
	L3+00W 2+75S	13	33	172	.1	3.74	1
	L3+00W 3+00S	10	19	82	.1	5.79	1
	L3+00W 3+25S	9	21	97	.1	3.86	1
	L3+00W 3+50S	16	27	126	.5	3.67	2
	L3+00W 3+75S	19	41	200	1.3	3.97	1
Soil	L2+50W 5+00N	16	83	2229	.1	7.25	1
	L2+50W 4+75N	35	138	812	.1	6.57	2
	L2+50W 4+50N	22	257	1165	.2	6.49	1
	L2+50W 4+25N	25	173	1013	.2	6.09	1
	L2+50W 4+00N	22	91	490	.1	4.47	1
	L2+50W 3+50N	29	146	432	.2	3.92	1
	L2+50W 3+25N	8	14	48	.4	.90	1
	L2+50W 3+00N	21	90	345	.1	3.97	2
	L2+50W 2+75N	21	103	412	.2	4.22	1
	L2+50W 2+50N	20	86	388	.4	4.03	1
	L2+50W 2+25N	24	120	622	.1	4.27	1
	L2+50W 2+00N	20	77	370	.2	3.96	1
	L2+50W 1+75N	18	77	340	.1	4.23	1
	L2+50W 1+50N	12	27	146	.3	2.18	1
	L2+50W 1+25N	17	56	334	.1	4.00	2
	L2+50W 1+00N	14	53	291	.2	3.85	1
	L2+50W 0+75N	13	60	311	.1	3.91	1
	L2+50W 0+50N	6	27	125	.2	2.49	1
	L2+50W 0+25N	8	21	100	.1	2.23	2
	L2+50W 0+00N	11	61	233	.1	4.35	7
	L2+50W 0+25S	15	36	183	.1	4.38	1
	L2+50W 0+75S	14	35	195	.2	2.32	1
	L2+50W 1+00S	16	97	479	.3	6.03	1
	L2+50W 1+25S	11	25	92	.1	2.84	1
	L2+50W 1+50S	14	40	148	.1	4.14	2
	L2+50W 1+75S	13	33	138	.1	3.60	1
	L2+50W 2+25S	8	20	123	.1	4.44	1
	L2+50W 2+50S	10	23	90	.1	4.56	1
	L2+50W 2+75S	12	21	66	.1	3.86	1
	L2+50W 3+00S	13	27	69	.1	6.60	1
	L2+50W 3+75S	16	92	492	.1	4.30	8
	STD C/AU-S	62	41	132	7.1	4.36	48

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L2+00W 5+00N	60	42	329	.5	9.40	1
L2+00W 4+75N	50	68	931	.2	6.80	1
L2+00W 4+50N	48	101	2240	.2	6.64	1
L2+00W 4+00N	38	241	1173	.4	6.61	2
L2+00W 3+75N	36	177	1719	.1	5.37	1
L2+00W 3+25N	18	113	398	.1	4.15	1
L2+00W 3+00N	14	59	310	.1	3.88	2
L2+00W 2+50N	13	42	597	.1	4.25	2
L2+00W 2+25N	15	19	132	.1	1.20	3
L2+00W 2+00N	11	48	167	.2	1.54	1
L2+00W 1+75N	13	56	324	.1	4.19	1
L2+00W 1+50N	21	95	276	.7	3.32	1
L2+00W 1+25N	14	38	217	.2	3.78	1
L2+00W 1+00N	8	37	252	.2	3.49	1
L2+00W 0+75N	14	36	185	.3	3.48	2
L2+00W 0+50N	7	31	174	.2	3.33	1
L2+00W 0+25N	7	29	156	.2	3.13	2
L2+00W 0+00N	10	26	196	.1	4.03	2
L2+00W 0+25S	9	30	134	.1	3.05	2
L2+00W 0+50S	1	6	20	.1	.51	1
L2+00W 0+75S	16	97	434	.2	5.48	2
L2+00W 1+00S	5	15	125	.1	3.01	1
L2+00W 1+25S	7	14	91	.1	2.63	8
L2+00W 1+50S	6	27	116	.2	3.17	1
L2+00W 1+75S	6	19	124	.1	2.68	1
L2+00W 2+00S	9	19	113	.1	2.66	2
L2+00W 2+25S	14	15	172	.1	2.89	2
L2+00W 2+50S	8	16	146	.2	2.65	1
L2+00W 2+75S	4	29	37	.1	2.56	2
L2+00W 3+00S	6	9	42	.2	1.27	1
L1+50W 5+00N	25	120	516	.4	4.10	2
L1+50W 4+75N	24	111	541	.4	3.85	1
L1+50W 4+50N	40	242	698	.3	6.59	2
L1+50W 4+25N	36	386	819	.5	7.36	2
L1+50W 4+00N	30	173	1085	.1	5.41	2
L1+50W 3+75N	30	153	759	.1	4.40	2
STD C/AU-S	61	41	132	7.1	4.18	47

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L1+50W 3+50N	20	386	415	.3	4.33	1
L1+50W 3+25N	18	658	260	.6	3.41	2
L1+50W 3+00N	18	173	378	.3	4.49	3
L1+50W 2+75N	14	201	428	.2	4.38	1
L1+50W 2+50N	9	22	82	.3	1.32	1
L1+50W 2+25N	19	136	386	.2	4.42	1
L1+50W 2+00N	12	116	394	.3	4.40	3
L1+50W 1+75N	20	87	299	.2	4.20	1
L1+50W 1+50N	12	57	261	.1	3.93	1
L1+50W 1+25N	11	57	289	.2	4.06	1
L1+50W 1+00N	11	59	205	.1	3.78	1
L1+50W 0+75N	11	54	227	.1	3.71	3
L1+50W 0+50N	12	52	155	.1	3.97	1
L1+50W 0+25N	11	40	140	.1	4.08	1
L1+50W 0+00N	13	46	188	.1	3.79	1
L1+50W 0+25S	10	28	132	.1	3.23	2
L1+50W 0+50S	14	115	498	.1	5.67	1
L1+50W 0+75S	5	41	185	.1	2.82	1
L1+50W 1+00S	9	45	264	.1	4.51	1
L1+50W 1+25S	4	23	122	.1	2.97	1
L1+50W 1+50S	10	22	101	.1	3.23	1
L1+50W 1+75S	12	22	173	.1	4.25	1
L1+50W 2+00S	7	23	145	.1	3.87	1
L1+50W 2+25S	13	45	172	.1	4.65	3
L1+50W 2+50S	5	20	106	.1	3.75	1
L1+50W 2+75S	6	31	94	.6	3.16	1
L1+50W 3+00S	2	47	54	.5	2.05	1
L1+50W 3+25S	55	67	323	3.9	4.03	16
L1+50W 3+50S	30	97	192	2.1	3.34	2
L1+50W 3+75S	10	27	244	.1	6.56	1
L1+00W 5+00N	57	752	1002	.6	7.67	1
L1+00W 4+75N	48	490	610	.6	8.65	1
L1+00W 4+50N	27	238	685	.5	6.42	1
L1+00W 4+25N	26	145	304	.1	3.78	1
L1+00W 4+00N	24	142	615	.1	4.95	2
L1+00W 3+75N	22	264	1290	.1	6.04	1
STD C/AU-S	62	45	132	7.3	4.30	50

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L1+00W 3+50N	35	254	844	.3	5.05	1
L1+00W 3+25N	26	212	535	.2	4.53	1
L1+00W 3+00N	24	378	524	.2	4.74	1
L1+00W 2+75N	22	197	376	.2	4.29	1
Soil L1+00W 2+50N	23	170	625	.4	4.48	7
L1+00W 2+25N	17	114	476	.2	3.56	4
L1+00W 2+00N	15	69	192	.3	2.26	1
L1+00W 1+75N	20	103	420	.1	3.82	1
L1+00W 1+50N	18	105	370	.1	4.09	4
L1+00W 1+25N	16	98	377	.1	4.33	1
L1+00W 1+00N	15	92	358	.1	4.25	1
L1+00W 0+75N	7	51	194	.1	3.40	2
L1+00W 0+50N	11	44	247	.1	4.50	1
L1+00W 0+25N	13	48	227	.1	4.52	1
L1+00W 0+00N	9	30	152	.3	2.79	4
L1+00W 0+50S	10	31	213	.1	2.98	6
L1+00W 0+75S	16	38	196	.1	4.16	3
L1+00W 1+00S	15	54	388	.1	6.13	1
L1+00W 1+25S	7	44	240	.1	4.54	1
L1+00W 1+50S	5	14	122	.1	2.42	1
L1+00W 1+75S	5	17	193	.1	4.90	1
L1+00W 2+00S	9	24	183	.1	4.00	1
L1+00W 2+25S	6	26	147	.1	4.43	1
L1+00W 2+50S	5	14	61	.1	2.78	1
L1+00W 2+75S	5	6	110	.1	3.64	1
L1+00W 3+00S	5	79	61	.1	4.07	1
L1+00W 3+25S	73	149	156	4.2	6.42	7
L1+00W 3+50S	4	4	58	.1	2.73	1
L0+50W 5+00N	46	367	990	.9	5.86	1
L0+50W 4+75N	41	342	1436	.9	5.98	2
L0+50W 4+50N	40	554	1187	1.2	6.67	1
L0+50W 4+25N	37	416	2163	.3	6.66	1
L0+50W 4+00N	42	417	882	.9	7.55	1
L0+50W 3+75N	40	475	1555	.6	7.58	2
L0+50W 3+50N	42	478	1462	.6	7.45	1
L0+50W 3+25N	39	425	1879	.7	6.82	1
STD C/AU-S	62	36	132	7.2	4.30	49

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L0+50W 3+00N	41	419	1753	.8	6.49	1
L0+50W 2+75N	42	398	1815	1.2	6.23	4
L0+50W 2+50N	35	261	1321	1.1	6.09	2
L0+50W 2+25N	25	201	977	.6	6.07	1
L0+50W 2+00N	20	109	558	.5	4.37	1
L0+50W 1+75N	13	101	582	.4	3.63	2
L0+50W 1+50N	19	146	681	.5	3.86	3
L0+50W 1+25N	16	72	367	.3	3.20	1
L0+50W 1+00N	20	128	389	.2	3.95	2
L0+50W 0+75N	11	78	239	.1	3.55	1
L0+50W 0+50N	10	41	210	.1	3.90	1
L0+50W 0+25N	14	30	247	.2	3.83	1
L0+50W 0+25S	15	41	423	.4	5.83	2
L0+50W 0+50S	11	17	181	.1	4.17	1
L0+50W 0+75S	11	60	208	.1	4.73	1
L0+50W 1+00S	8	16	127	.1	3.35	1
L0+50W 1+25S	8	44	231	.1	4.91	1
L0+50W 1+50S	7	22	343	.1	5.98	1
L0+50W 1+75S	12	42	251	.5	4.73	1
L0+50W 2+00S	12	78	230	.9	5.56	2
L0+50W 2+25S	7	14	185	.6	4.50	2
L0+50W 2+50S	9	44	232	.6	4.77	1
L0+50W 2+75S	6	9	59	.1	2.35	1
L0+50W 3+00S	11	10	103	.1	4.63	1
L0+50W 3+25S	7	5	118	.1	4.49	1
L0+00 5+00N	24	214	411	.4	4.24	2
L0+00 4+75N	28	186	465	.4	5.84	2
L0+00 4+50N	29	409	785	1.1	6.23	2
L0+00 4+25N	35	438	1219	1.7	7.03	2
L0+00 4+00N	37	184	1114	.6	6.44	1
L0+00 3+75N	36	414	985	.9	7.03	2
L0+00 3+50N	21	165	461	.4	3.69	4
L0+00 3+25N	20	85	263	.2	2.83	3
L0+00 3+00N	21	109	325	.3	3.12	1
L0+00 2+75N	31	321	857	.9	5.52	1
L0+00 2+50N	23	201	5536	.2	5.40	2
STD C/AU-S	63	38	132	7.4	4.18	51

Soil

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
L0+00 2+25N	25	146	10505	1.0	5.48	2
L0+00 2+00N	27	116	12889	1.1	5.37	1
L0+00 1+75N	24	101	2913	.4	3.95	1
L0+00 1+50N	21	137	2539	.3	4.06	8
L0+00 1+25N	15	58	331	.6	6.66	1
L0+00 1+00N	12	51	250	.3	2.75	2
L0+00 0+75N	20	58	315	.6	5.97	1
L0+00 0+00S	17	66	539	.6	5.89	1
L0+00 0+25S	11	50	329	.4	5.02	1
L0+00 0+50S	7	22	154	.3	3.23	1
L0+00 0+75S	7	19	135	.2	2.68	3
L0+00 1+00S	8	28	115	.1	3.08	2
L0+00 1+25S	10	56	307	.3	4.53	1
L0+00 1+50S	12	53	299	.4	4.90	1
L0+00 1+75S	8	41	323	.5	5.37	1
L0+00 2+00S	8	43	386	.5	5.90	1
L0+50E 0+00S	20	64	806	.7	5.80	2
L0+50E 0+25S	18	51	483	.4	4.88	1
L0+50E 0+50S	11	53	349	.4	5.37	1
L0+50E 0+75S	11	44	212	.3	4.64	1
L0+50E 1+00S	13	36	286	.4	5.55	2
L0+50E 1+25S	8	32	255	.2	4.33	1
L0+50E 1+50S	7	24	150	.3	3.20	1
L0+50E 1+75S	13	72	435	.4	5.67	1
STD C/AU-S	62	42	134	7.2	4.13	52

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: SEP 19 1988
DATE REPORT MAILED: Jan.17/89.

GEOCHEMICAL ANALYSIS 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: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

SIGNED BY. C. Leong . D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

CASCADE PACIFIC EXPLORATION FILE # 89-0090 Page 1

Rock

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
88-BR-284	7	12	20	.1	4.23	1
88-BR-287	14	24	47	.1	5.49	5
88-BR-288	2	2	49	.1	2.91	1
88-BR-291	8	17	10	.4	3.28	2
88-BR-294	22	53	151	.2	3.86	1
88-BR-295	408	11	38	.9	36.23	10
88-DR-1	13	11	270	.1	5.54	1
88-DR-2	37	6	88	.1	12.06	5
88-DR-3	7	5	45	.1	6.96	1
88-JR-174	21	36	19	.8	12.05	17
88-JR-175	8	15	39	.1	3.48	1
88-JR-176	6	3	18	.3	2.88	1
88-JR-177	3	2	104	.1	3.46	1
88-JR-178	4	3	57	.1	4.99	1
88-JR-179	7	7	16	.1	2.42	1
88-JR-180	2	22	14	.1	4.00	1
88-JR-181	5	16	31	.1	2.47	1
88-JR-182	7	6	109	.1	5.97	2
88-JR-183	12	19	69	.3	2.87	1
88-JR-184	13	23	32	.4	11.09	1
88-JR-185	16	21	18	1.3	17.10	1
88-JR-186	7	15	35	.1	6.25	1
88-JR-187	4	10	22	.1	2.33	1
88-JR-188	9	84	16	1.4	1.35	9
88-JR-189	8	15	21	.1	2.93	1
88-JR-190	6	20	27	.1	3.75	1
88-JR-191	10	61	700	.1	2.28	1
88-JR-192	14	9	311	.1	8.95	2
88-JR-193	7	10	54	.2	5.84	1
88-JR-194	10	7	49	.1	7.27	1
88-JR-195	5	12	258	.1	5.06	1
88-JR-196	9	14	29	.1	3.51	1
88-JR-197	5	2	65	.1	5.28	1
88-JR-198	13	2	305	.1	4.79	1
88-JR-199	3	46	5	.4	2.07	1
88-JR-200	7	24	3	.2	1.86	1
STD C/AU-R	63	41	133	7.2	4.24	530

CASCADE PACIFIC EXPLORATION FILE # 89-0090 Page 2

Rock

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Fe %	Au* PPB
88-JR-201	3	11	90	.1	5.30	1
88-JR-202	14	27	115	.1	9.61	2
88-JR-203	7	4	89	.1	5.60	1
88-JR-204	11	26	12	.6	6.48	1
88-JR-205	4	25	6	.4	1.42	1
88-JR-206	3	3	59	.1	3.93	1
88-JR-207	1	24	3	.1	.77	1
88-JR-208	4	62	2	.7	.69	1
88-JR-209	5	6	74	.1	5.61	2
88-JR-210	17	25	190	.2	5.87	1
88-JR-211	8	17	285	.2	8.32	1
88-JR-212	5	11	31	.1	5.51	3
88-JR-213	6	17	59	.4	4.85	1
88-JR-214	16	28	15	.5	10.03	1
88-JR-215	4	15	10	.2	7.04	1
88-JR-216	3	6	43	.1	3.46	1
88-JR-217	1	8	8	.1	2.27	1
88-JR-218	3	10	12	.1	2.29	1
88-JR-219	7	2	31	.1	4.60	1
88-JR-220	9	2	55	.1	5.22	1
88-JR-221	5	10	81	.1	4.29	1
88-JR-222	4	2	32	.1	4.66	1
88-JR-223	2	4	30	.1	5.12	3
88-QR-1	15	6	30	.1	4.55	1
88-QR-2	13	7	28	.1	6.60	1
88-QR-3	7	11	77	.1	6.74	1
88-QR-4	7	15	53	.1	3.98	1
STD C/AU-R	63	38	132	7.3	4.21	480

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

TO : CANAMAX RESOURCES INC.
601-535 THURLOW ST.
VANCOUVER, B.C.

PROJECT : 7070
TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 88250
INVOICE # : 80654
DATE ENTERED : 88-09-28
FILE NAME : CY88250.G
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au	PPM As
A	NO NAME		42	1.0	1660	110	5	38
A	88 CFT 143		134	>100.0	>10000	>10000	80	378
A	88 CFT 144		100	9.8	>10000	>10000	360	1240
A	88 CFT 145		136	9.4	2080	>10000	550	1740
A	88 CFT 146		1340	>100.0	>10000	>10000	660	3040
A	88 CFT 147		442	17.6	>10000	4460	310	680
A	88 CFT 148	7	12	2.4	128	92	5	48
A	88 CFT 149	3	14	2.2	338	1000	5	28
A	88 CFT 150	19	6	0.4	12	18	5	64
A	88 CFT 151	48	40	0.8	176	388	5	356
A	88 CFT 152	5	6	0.2	26	120	5	36
A	88 CFT 153	62	18	0.4	140	40	5	66
A	88 CFT 154	64	24	0.2	40	16	5	132
A	88 CFT 155	17	14	0.2	940	56	5	70
A	88 CFT 156	8	12	0.2	3220	298	5	60

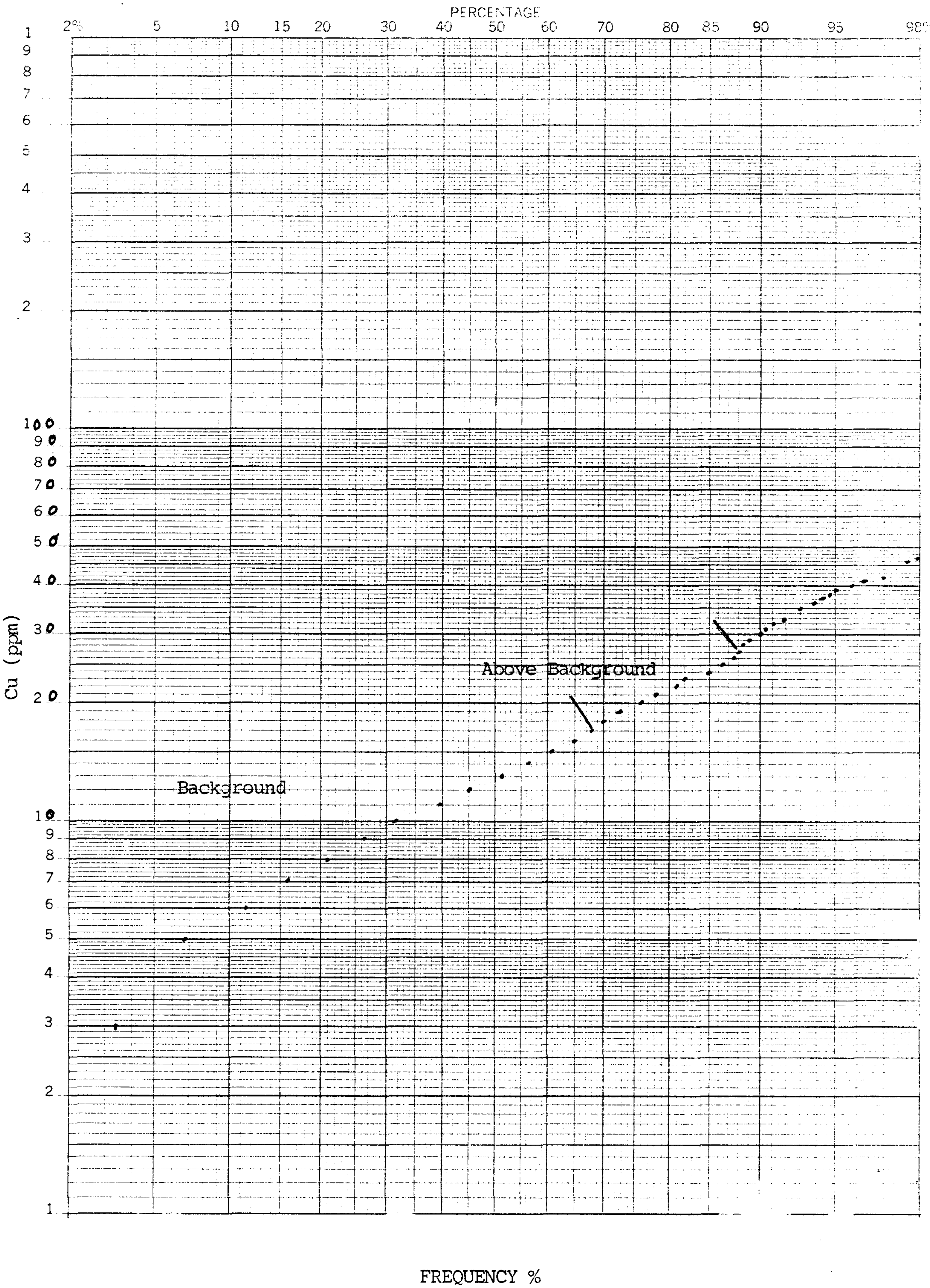
MATHEW CLAIMS
105F/10

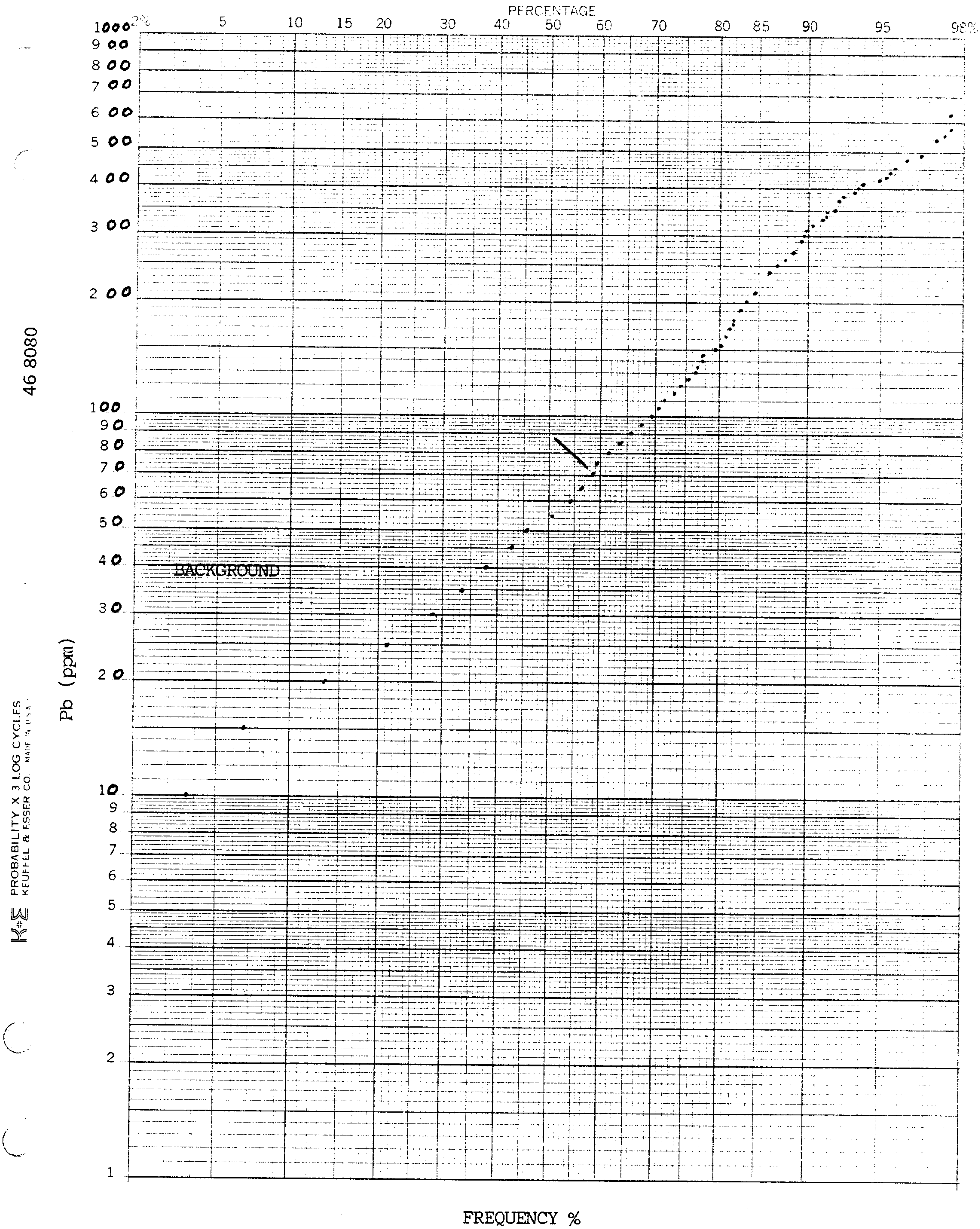
Rock

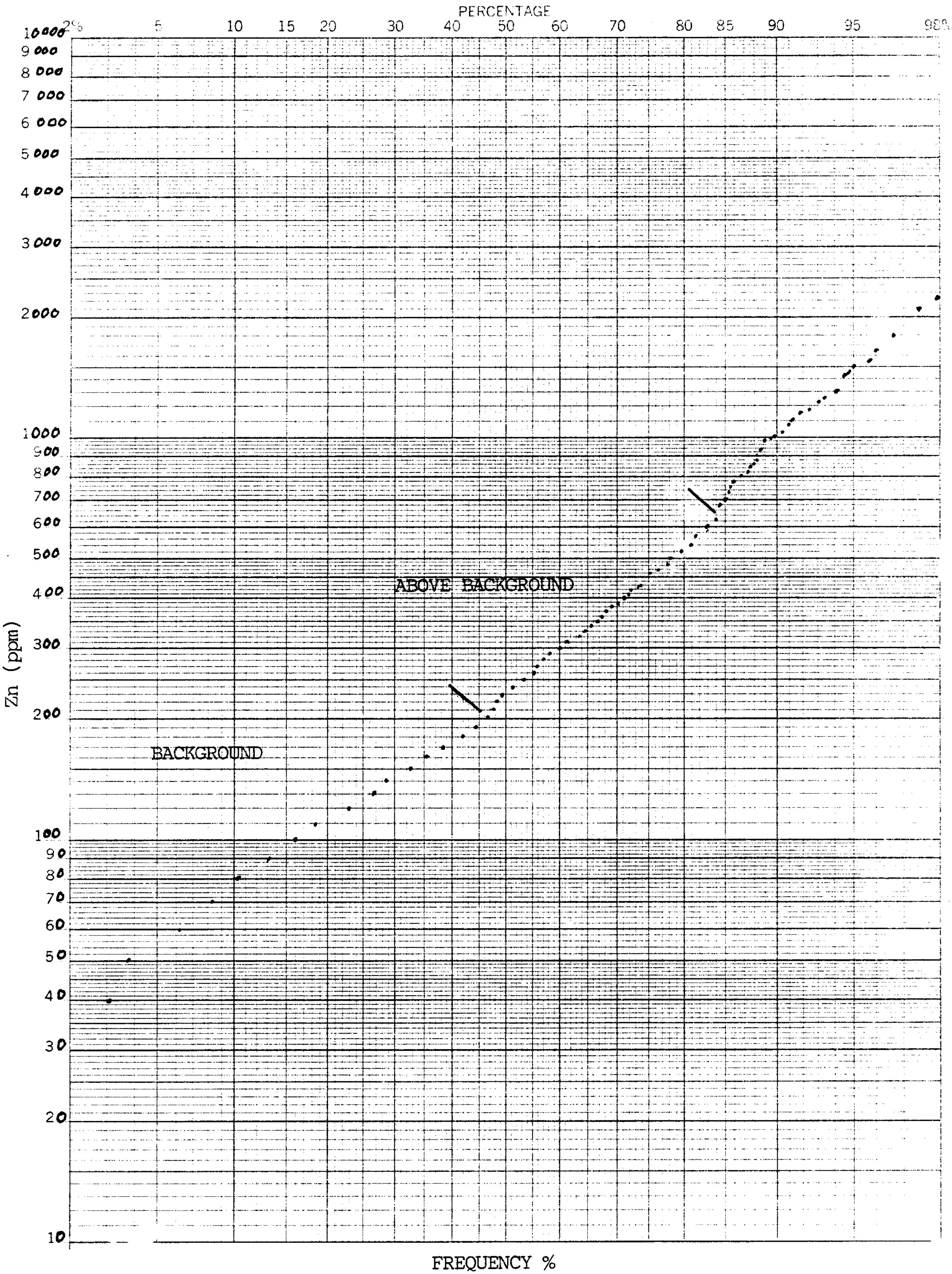
CERTIFIED BY : J. Rossbacher

APPENDIX C

CUMULATIVE-FREQUENCY PLOTS FOR THE SOIL SAMPLE DATA

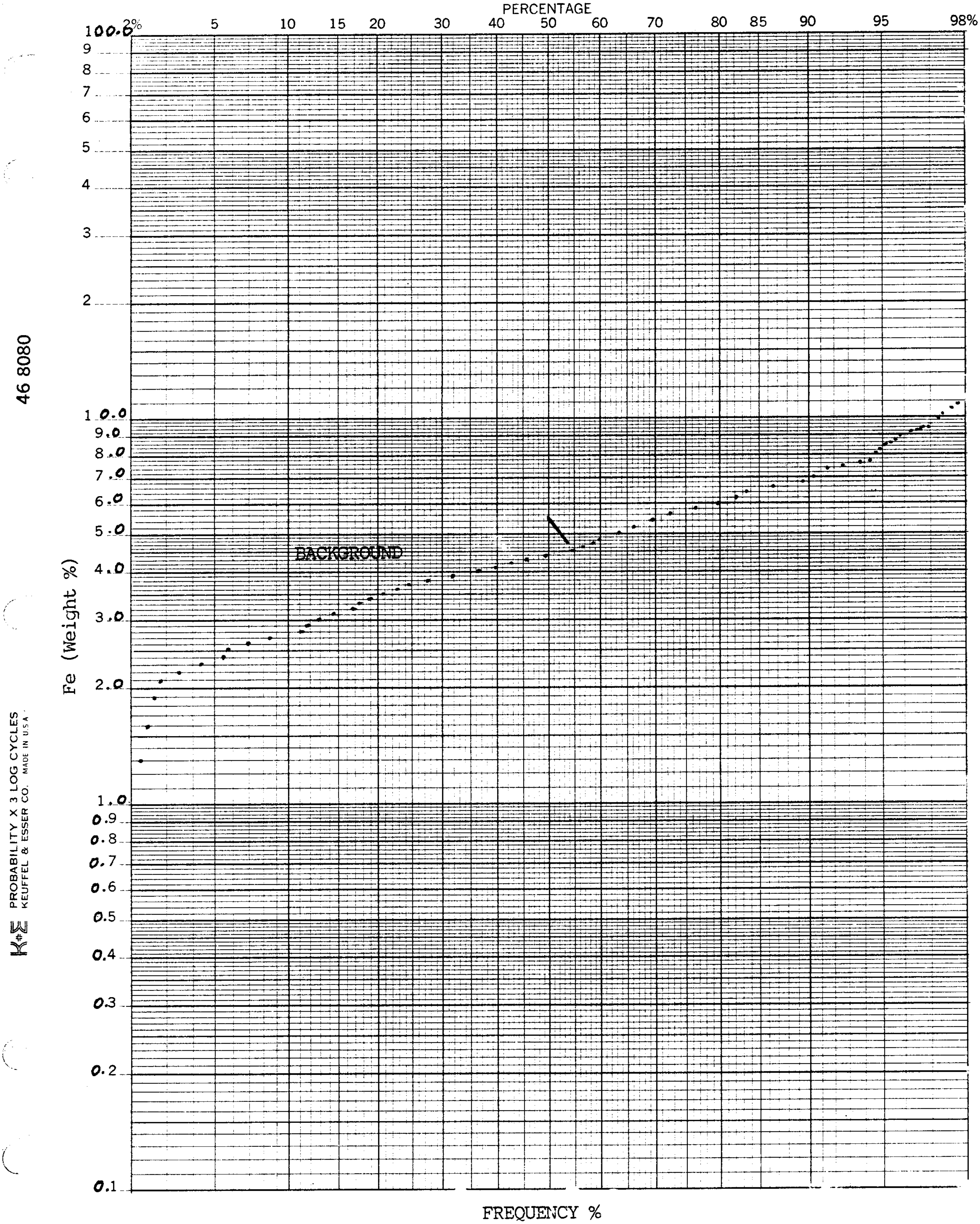

PERCENTAGE
2% 5 10 15 20 30 40 50 60 70 80 85 90 95 98%
Cu (ppm)
1 9 8 7 6 5 4 3 2
100 90 80 70 60 50 40 30 20
10 9 8 7 6 5 4 3 2 1
Above Background
Background
FREQUENCY %


PERCENTAGE
BACKGROUND
Pb (ppm)
FREQUENCY %
46 8080
PROBABILITY X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



46 8080

K+E PROBABILITY X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.


PERCENTAGE
2%
5
10
15
20
30
40
50
60
70
80
85
90
95
98%
100.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
BACKGROUND
Fe (Weight %)
FREQUENCY %
46 8080
K+E PROBABILITY X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

APPENDIX D

COST STATEMENT

COST STATEMENT - MATHEW CLAIMS

Salaries	
B.V. Hall, Supervision (2 days at $300.00)	$ 600.00
M.J. Burson, Geologist (43.3 Days at $290.00)	12,557.00
M. Carson, Assistant (19 days at $175.00)	3,325.00
J. Swartz, Assistant (15 days at $160.00)	2,400.00
S. McKenzie, Assistant (10 days at $140.00)	1,400.00
A. Lange, Prospector (1 day at $170.00)	170.00
L. Brault. Prospector (1 day at $170.00)	170.00
Mobilization and Demobilization	2,888.02
Camp Costs (food, expediting, gear, etc.)	3,567.41
Office Supplies (maps, telephone, stationery)	621.98
Legal (assessment)	1,157.50
Analyses: 63 rocks at $12.00	736.00
420 soils at $9.85	4,137.00
(Cu, Pb, Zn, Fe, Ag, and Au)	
Helicopter (8.3 hours at $613.00)	5,087.90
Report (drafting, typing, copying, etc.)	1,323.17
	$ 40,140.00

APPENDIX E

PROPOSED EXPENDITURES

PROPOSED EXPENDITURES

Airborne Geophysics, Geological Mapping, Geochemical Surveys, Ground Geophysics and Diamond Drilling

Project Geologist: 60 days at $300.00/day	$ 18,000.00
Geologist; 60 days at $225.00/day	13,500.00
Assistants (2): 120 days at $170.00	20,400.00
Mobilization and Demobilization	6,000.00
Camp Costs (food, expediting, gear, etc.)	21,600.00
Airborne Geophysics (E-M, Magnetometer)	50,000.00
Ground Geophysics: 3 weeks at $600.00/day including equipment.	12,600.00
Analyses: 6000 soil and rock samples at $11.00 each.	66,000.00
Helicopter Support: 30 hours at $650.00/hour	19,500.00
Office Supplies (maps, stationery, telephone, etc.)	4,000.00
Report	8,000.00
TOTAL	$ 239,600.00
Diamond Drilling: 2600 metres at $100.00/metre, all inclusive.	260,000.00
TOTAL	$ 499,666.00
ie:	$ 500,000.00