

MAP No.

ASSESSMENT REPORT
N. M. E. A. P.
CONFIDENTIAL
OPEN FILETYPE OF
WORK:

GEOLOGICAL, TREN

116 B 2

REPORT FILED UNDER	Archer, Cathro and Associates (1981) Ltd. DOCUMENT NO. 091632		
DATE PERFORMED	July, 1984	June, 1985	DATE FILED: July 11, 1985
LOCATION - LAT. LONG.	64°02'N		AREA:
	138°55'W		
CLAIM NO.	ACRETE 1-6 YA84082-YA84087		
	7-14 YA84351-YA84358		
VALUE \$			
WORK DONE BY	R.J. Cathro		
WORK DONE FOR	Archer, Cathro and Associates (1981) Ltd.		
REMARKS	<p>Hills on both sides of Germaine Creek are covered by a Tertiary quartz-feldspar porphyry pluton and related volcanic rock. The pluton intrudes metavolcanic and metasedimentary rocks and is presumed to be the source of nearby placer tin, topaz and fluorite.</p> <p style="text-align: right;">85 4ex p. 254</p>		

091632

In July, 1984 the placer miner's bulldozer trenches were examined and were found to expose a breccia in bedrock. It consisted of an assemblage of silicified, multicoloured (dark and light green, amber and red) fragments in a black matrix and was interpreted to be lithic volcanic breccia (glassy, brecciated equivalents of the porphyry). Nine samples returned low values in gold (less than 219 ppb) and tin (less than 9 ppm), but very high fluorine (seven samples assayed 820-1700 ppm, and two gave 6000 ppm and greater than 10,000 ppm).

In June, 1985 a trench was constructed on the east side of Germaine Creek, between the breccia zone and the topaz and tin-in-soil anomaly reported by Chevron.

ARCHER, CATHRO

& ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

Box 4127, 3125 THIRD AVENUE
WHITEHORSE, Y.T. Y1A 3S9

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CONFIDENTIAL

Preliminary Geological Report

Acrete 1-14 Claims

Germaine Creek

NTS 116B/2

Dawson M.D.

June 27, 1985

091632



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 \$ 2100.00 .

DSEmond

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

Introduction

The Acrete 1-14 claims of Nordac Mining Corporation cover the presumed source of "wood tin" (colloform cassiterite) found by placer miners in Germaine Creek in the early 1960's (GSC Paper 65-19, pp64-65). The wood tin was found in the gold placer at the point where Germaine Creek enters the broad valley of Klondike River and is associated with fluorite and topaz (GSC Bulletin 173, pp8-9, 31,38-39, 46, 48; GSC Economic Geology Report 28, pp67-70). The target was staked as the Surprise claim group and explored for uranium by Chevron Minerals Ltd. in 1979-80. Limited trenching was performed on the west side of the creek by placer miners about 1981-83.

Geology

Previous exploration by Chevron and GSC mapping has shown that the hills on both sides of the mouth of Germaine Creek are underlain by quartz-feldspar porphyry of Tertiary age and related volcanic equivalents. The porphyry pluton, which is intruded into metasediments of the Klondike Schist unit, is interpreted to be the host rock for the wood tin, fluorite and topaz.

Bedrock exposure is very poor on the property, which lies on the edge of Pleistocene glaciation. The Klondike River valley to the northeast is floored by glacial till which has been derived from the Tombstone Range and Ogilvie Mountains to the north. This till is also present along the lower parts of the Germaine Creek valley for up to 30 m above the creek. This till is characterized by coarse siliceous cobbles in a heavy grey clay matrix. It is well exposed at the gravel pit on Germaine Creek, which is a source of fill for the Klondike Highway.

The portions of the property lying above the till layer in the creek are covered by a widespread but thin vegetation cover which makes bedrock mapping difficult. Most of the scanty local bedrock talus that occurs on the hills and in the creek

consists of porphyry. An exception occurs in the bulldozer trenches immediately south of the gravel pit, on the west side of Germaine Creek, which were probably cut by placer miners between 1981-83. These trenches expose bedrock float beneath a till layer less than 2 m thick. Bedrock at this location consists of an unusual assemblage of silicified, multicoloured (dark and light green, amber and red) fragments in a black matrix. Nine specimens were assayed at Chemex Labs Ltd. and returned low values in gold (up to 219 ppb) and tin (less than 9 ppm). Seven of these assayed 820 to 1700 ppm F while the other two gave 6000 and greater than 10,000 ppm. A petrographic examination by J.A. McLeod of Cominco described two specimens as lithic volcanic breccia and another as perlite or pitchstone breccia and interpreted them as glassy, brecciated equivalents of the porphyry (perhaps a vent?). Assays of five specimens gave values of less than 10 ppb Au, less than 18 ppb Hg, less than 4 ppm Sb and less than 34 ppm As. Copies of the assay certificates and McLeod's report are appended.

On June 24, 1985, Chris Weinert of Dawson was contracted to construct a trench on the east side of Germaine Creek, between the breccia zone described above and a locality on the hill east of Germaine Creek, where Chevron reported that topaz and wood tin could be panned from the soil horizon. The new trenches have not yet been mapped or sampled.

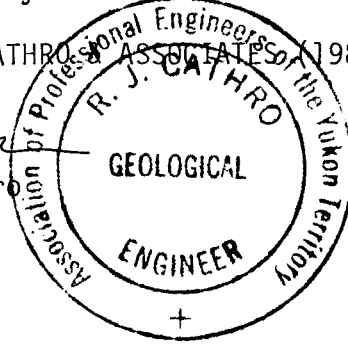
Conclusions and Recommendations

The Germaine Creek target is a favourable setting for a bedrock tin occurrence and further exploration is warranted to determine if a tin granite or topaz rhyolite is present with similarities to those present in Alaska, the southwest U.S. and central Mexico. Initial exploration should consist of bedrock mapping by means of trenching or pitting and soil and rock assays.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED


R.J. Cathro

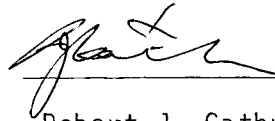


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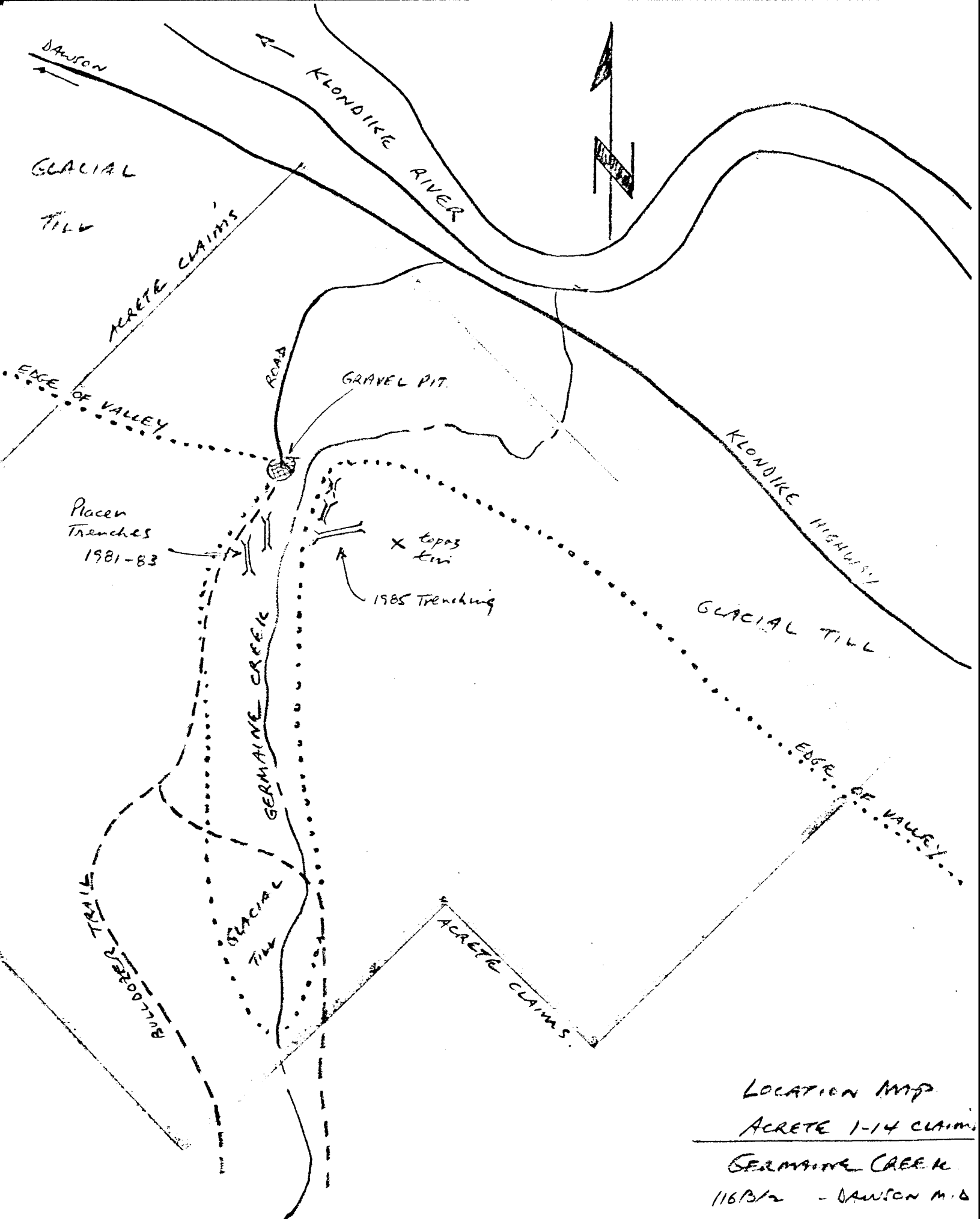
STATEMENT OF QUALIFICATIONS

I, Robert J. Cathro, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in West Vancouver, British Columbia, do hereby declare:

1. I am a 1959 graduate of the University of British Columbia in geological engineering.
2. I have been engaged in geological engineering for over twenty years, the past seventeen of which have been as a consultant.
3. I am a registered professional engineer in British Columbia and in Yukon Territory.
4. I have supervised the work described in this report.



Robert J. Cathro, B.A.Sc., P.Eng.

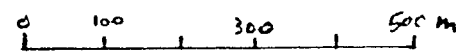


LOCATION MAP

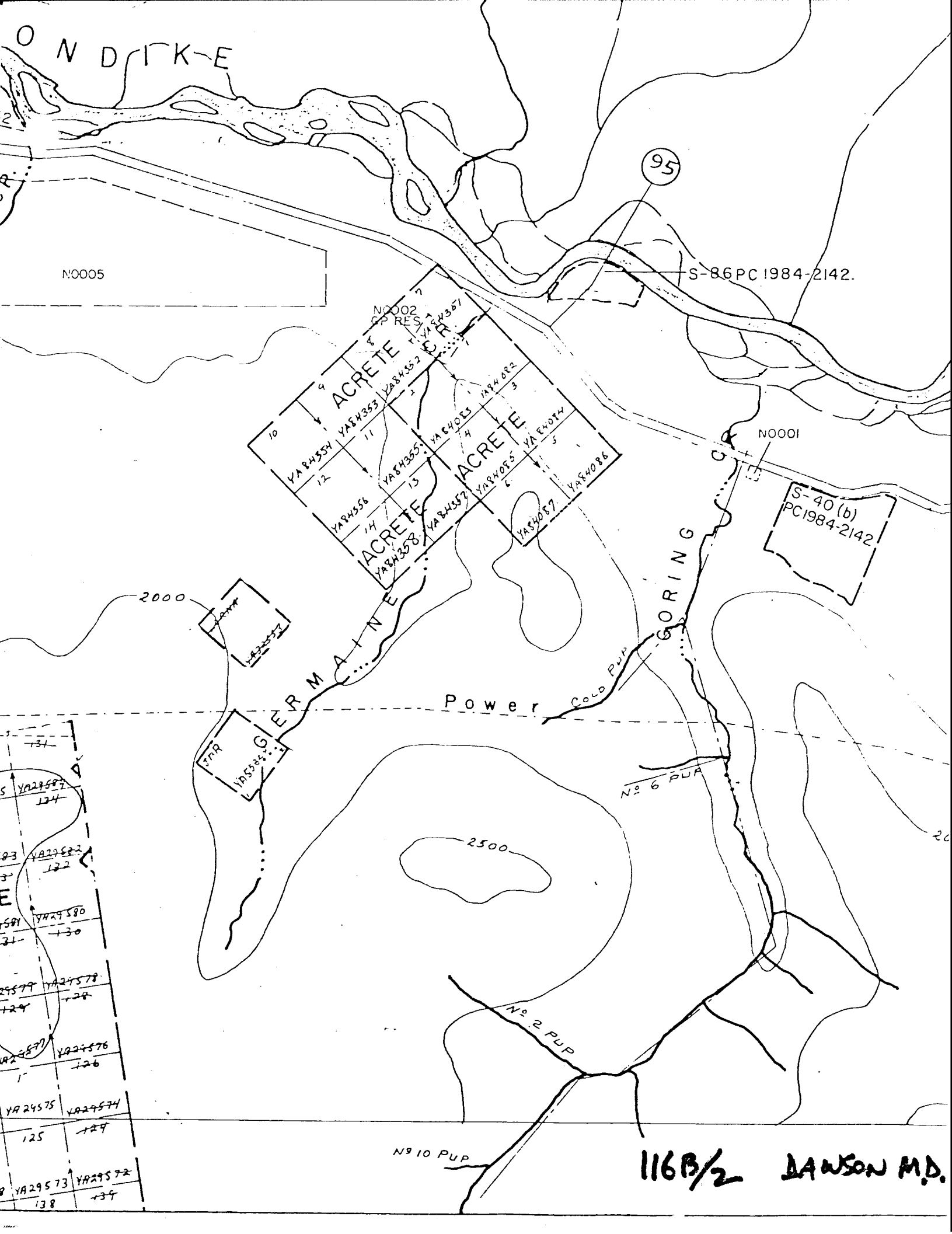
ACRETE 1-14 CLAIMS

GERMAINE CREEK

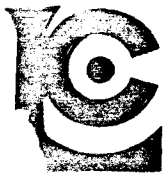
116 1/2 - DAWSON M.D.



SCALE 1:10,000



116B/2 DAWSON MD.



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

CERT. # : A8414027-001-A
INVOICE # : 18414027
DATE : 8-AUG-84
P.O. # : NONE
NORDAC ACRETE

Sample description	Prep code	Sn ppm	F ppm	Au NAA ppb			
3859	205	4	1700	37	--	--	--
3860	205	5	1000	219	--	--	--
3861	205	9	1100	2	--	--	--
3862	205	5	820	18	--	--	--
3863	205	1	1500	2	--	--	--
3864	205	4	840	6	--	--	--
3865	205	1	>10000	5	--	--	--
3866	205	3	6000	2	--	--	--
3867	205	1	820	<1	--	--	--



Certified by Haut Bichler

MEMO TO: Project Geologist, Western District (IA Paterson)
FROM: Supervisor, Vancouver Lab (JA McLeod) DATE: 22/04/85
SUBJECT: ACCRETE CLAIM PETROGRAPHY REF: V85:55R

RECEIVED
APR 29 1985
VANCOUVER

Three samples were submitted for slabbing, geochemistry and thin sectioning. Microscopic study of the sections is reported herein. The samples involved bear the following numbers:

<u>Field No.</u>	<u>Lab No.</u>
AC 60	R85-2841
AC 61	R85-2842
AC 62	R85-2843

Sample R85-2841. In thin section angular to subangular glassy fragments to 5mm in size form the bulk of the section. These glassy fragments often exhibit perlitic cracks. These fragments are cemented by a milled mixture of glass, corroded quartz (0.25-0.5mm), minor iron-oxides, minor spherulitic material and rare plagioclase grains.

The rock has been fractured and rehealed by near massive (vein) fluorite. This vein is 5-7mm wide and cuts across the entire section.

This rock is classified as a perlite or pitchstone breccia.

Sample R85-2842. In thin section, one-half consists of quartz, quartzite, pitchstone glass, microlitic felsite, plagioclase and laminated siliceous-sericite fragments. These fragments range from 0.25 to 2.5mm in size and are set in a groundmass of milled, finely ground volcanic material (glass, fragment material).

The other one-half of the section is a much finer phase with few fragments, rarely exceeding 0.5mm, set in abundant glass (pitchstone).

This rock is a lithic volcanic breccia cut by a more glass rich phase.

Sample R85-2843. In thin section about 40% of the area is occupied by the following (approximate ranking in abundance) fragments:

1. Perlitic glass/perlitic glass with quartz or plagioclase phenocrysts
2. Quartz, quartzite
3. Felsite/spherulitic felsite
4. Laminated or foliated siliceous-sericite rock
5. Plagioclase

These fragments range from 0.5 to 10mm in size and are generally subangular. The fragments are in turn hosted or frozen in a glass and milled fragment rich groundmass.

The rock is again termed a lithic volcanic breccia.

DISCUSSION

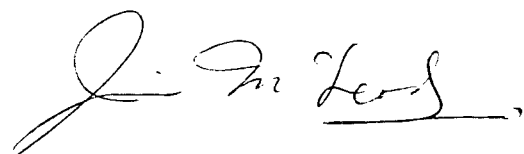
These rocks are not altered quartz-feldspar porphyrys but are possibly their glassy, brecciated equivalents. Implicit in their name, they are very quickly chilled and thus might be submarine. Also, the brecciation and cross-cutting of phases might suggest multiple intrusions.

The first sample (R85-2841) contains significant later fluorite mineralization. There is no evidence of other minerals such as topaz or tourmaline in the sections studied.

My impression is that these rocks lack the sulfotatic suite and other alteration minerals associated with epithermal gold deposits. These samples may come from too low in the volcanic chamber or might even be distal submarine flows.

I have taken a few photomicrographs of the minerals/glasses and textures in this suite and these are appended to this note.

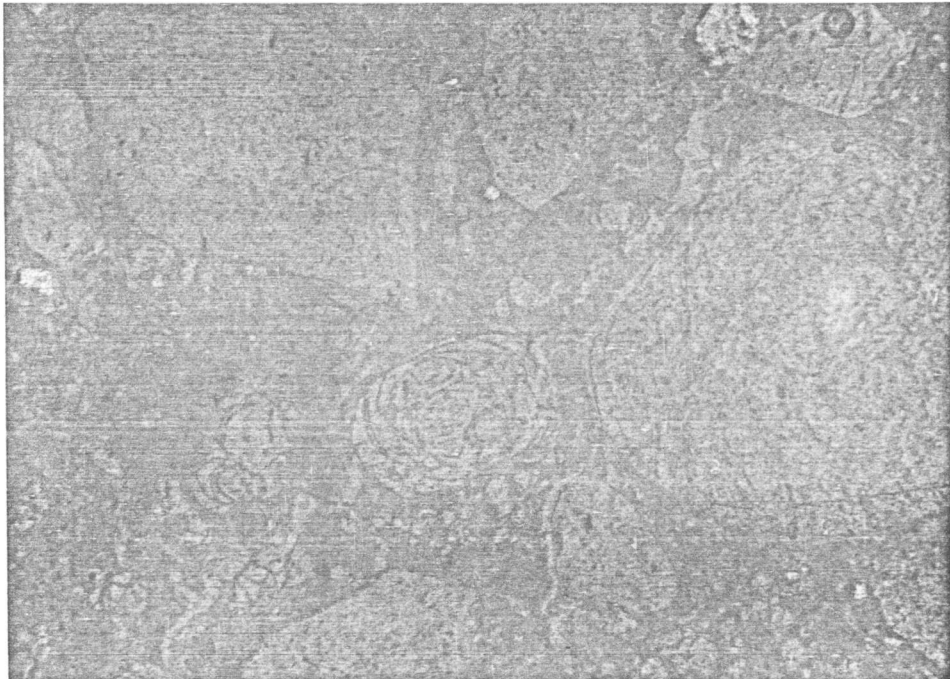
Regards,

A handwritten signature in cursive script that reads "Jim McLeod". The signature is written in dark ink and is positioned above the typed name.

Jim McLeod

JAM/cll

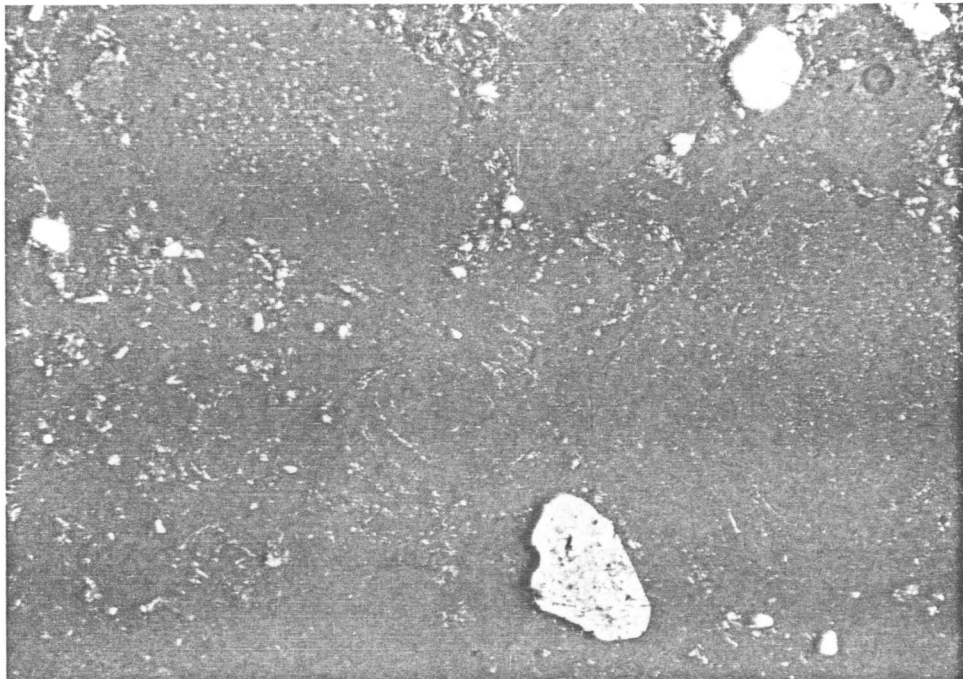
SEARCHEX - PHOTOMICROGRAPHS



.32mm

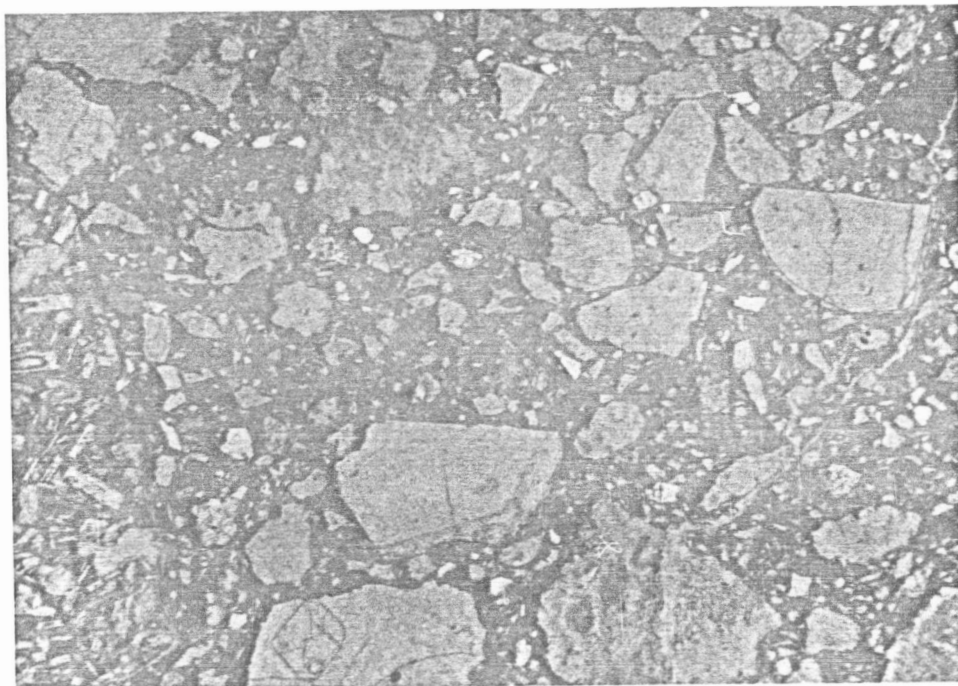
R85-2841. Perlitic glass fragments set in a glass dominated matrix.
Transmitted light, magnification 25x.

AC 60



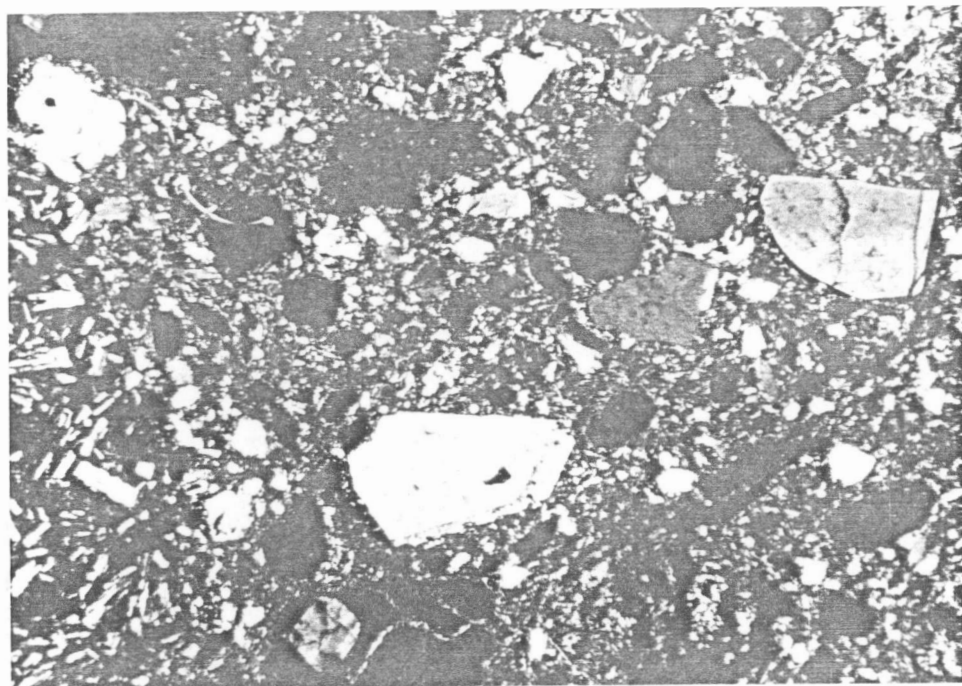
.32mm

R85-2841. As above but in partly crossed nicols. See quartz in matix.



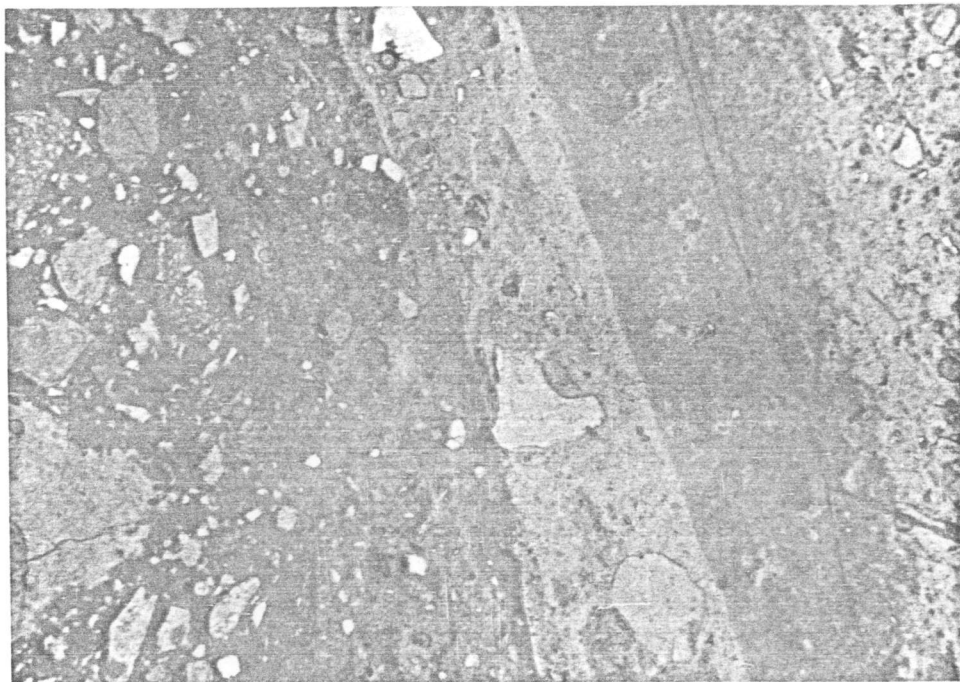
.32 mm

R85-2842. Variety of crystal and rock fragments in an opaque rich glass. Transmitted light, magnification 25x.

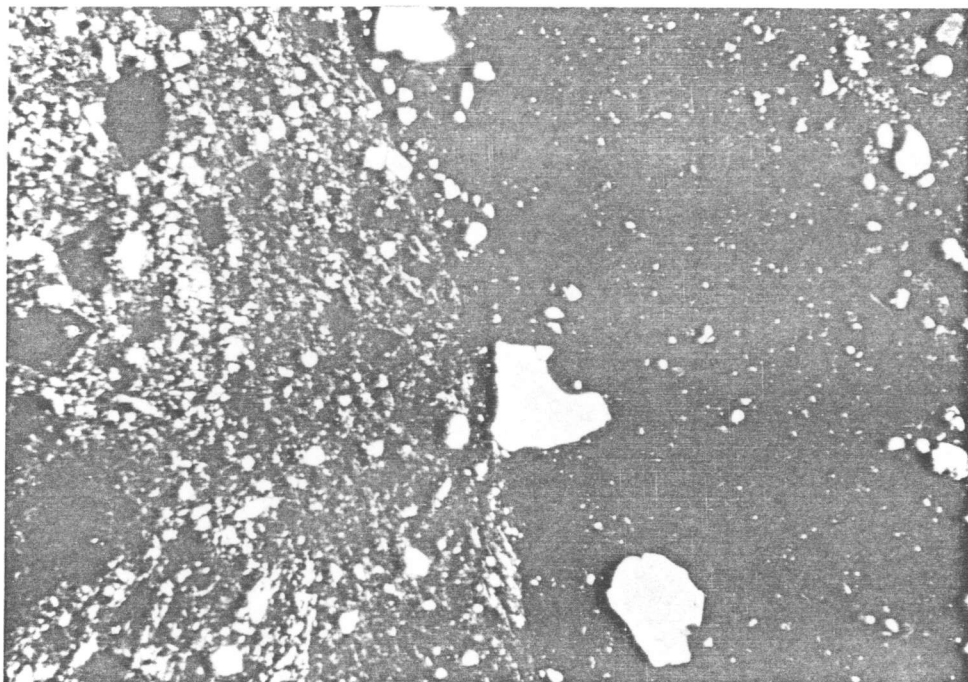


.32 mm

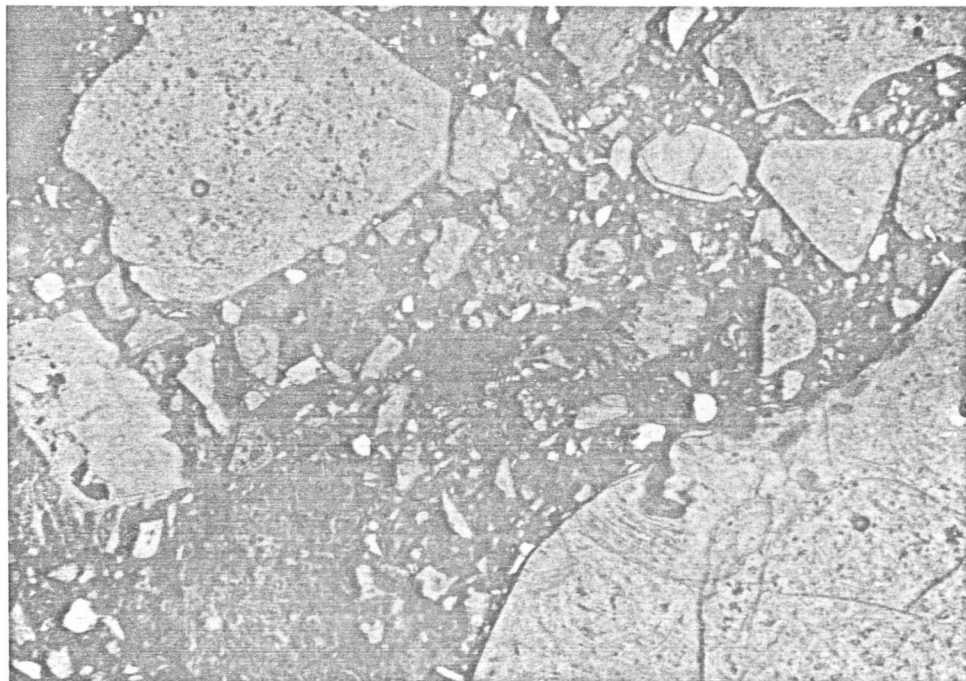
R85-2842. As above but in x-nicols. Note lithic volcanic fragment quartz, plagioclase in glass fragment and glass only fragments.



R85-2842. Contact between opaque-glass matrix hosting volcanic fragments and opaque free glass with smaller and fewer fragments. Transmitted light, magnification 25x.

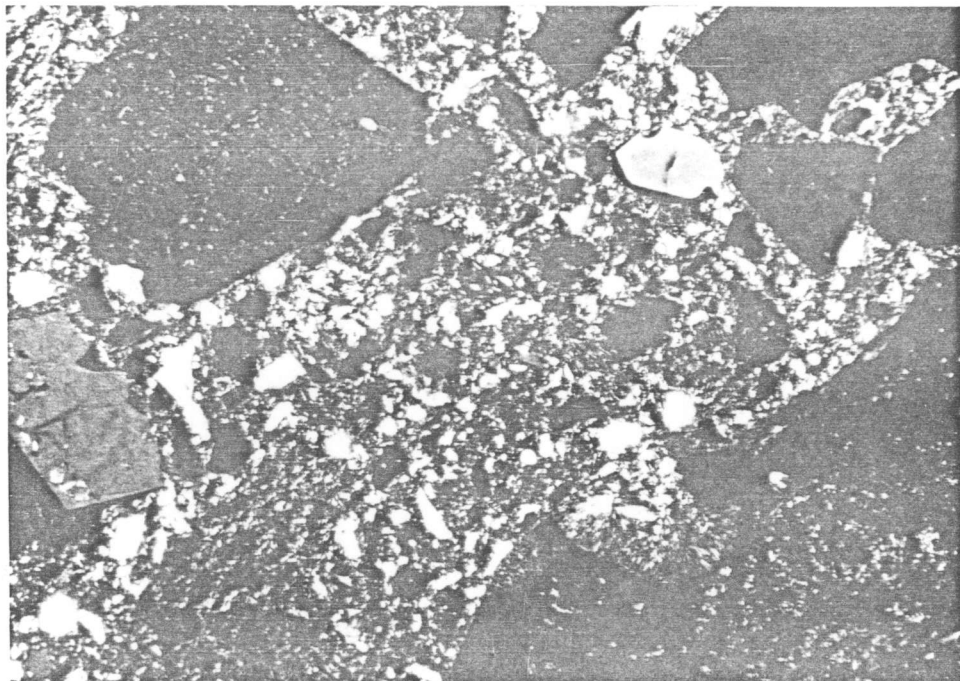


R85-2842. As above but in crossed nicols.



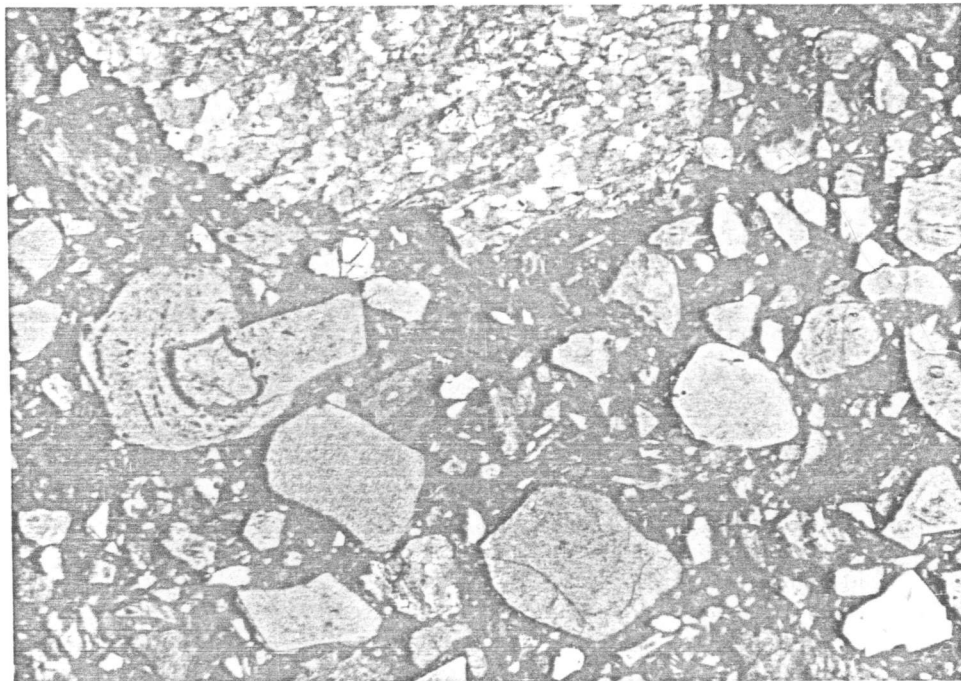
.32 mm

R85-2843. Perlitic glass fragments, quartz fragments, spherulitic fragments in an opaque rich groundmass. Transmitted light, magnification 25x.



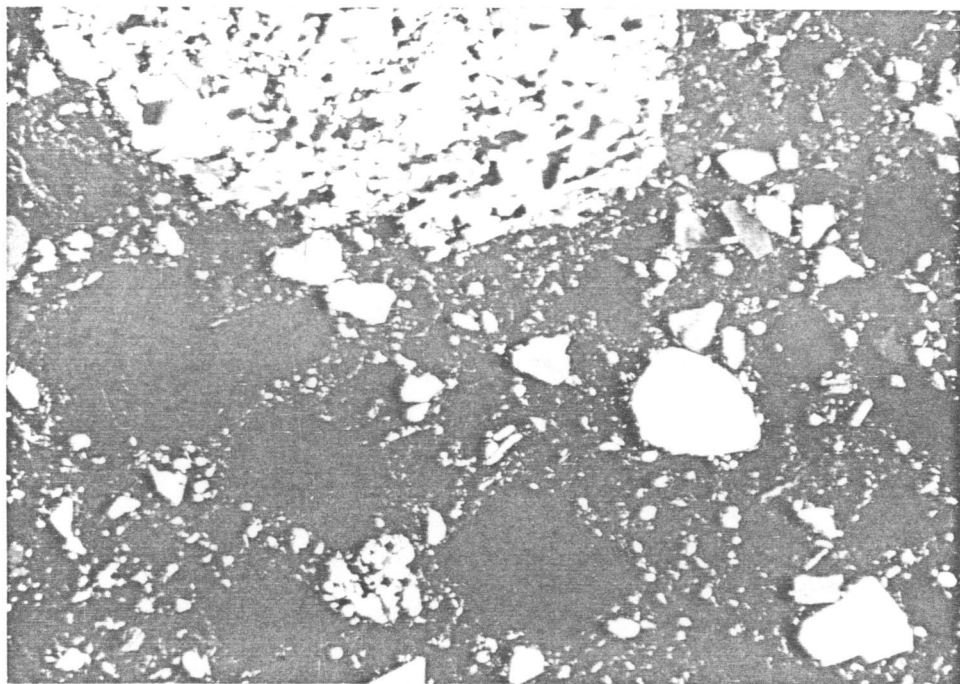
.32 mm

R85-2843. As above but crossed nicols.



.32 mm

R85-2843. Glass, quartz, quartzite fragments in an opaque rich glassy groundmass. Transmitted light, magnification 25x.



.32 mm

R85-2843. As above but in crossed nicols.



SEARCHEX

ACCRETE CLAIMS

JOB U 85-0055R
REPORT DATE 10 APR 1985

LAB NO	FIELD NUMBER	AU PPB	WT AU GRAM	Hg PPB	Sb PPM	As PPM
RB502841	AC60	<10	5	10	<4	33
RB502842	AC61	<10	5	17	<4	18
RB502843	AC62	<10	5	<10	<4	14
RB502844	AC63	<10	5	10	<4	21
RB502845	AC64	<10	5	<10	<4	17

I=INSUFFICIENT SAMPLE X=SMALL SAMPLE E=EXCEEDS CALIBRATION C=BEING CHECKED R=REVISED
IF REQUESTED ANALYSES ARE NOT SHOWN /RESULTS ARE TO FOLLOW

ANALYTICAL METHODS

- AU AQUA REGIA DECOMPOSITION / SOLVENT EXTRACTION / AAS
- WT AU THE WEIGHT OF SAMPLE TAKEN TO ANALYSE FOR GOLD (GEOCHEM)
- Hg FLAMELESS AAS
- Sb AQUA REGIA DECOMPOSITION / AAS (SEMI - QUANTITATIVE)
- As PYROSULPHATE FUSION / COLORIMETRIC