



**Geological Survey Branch  
Assessment Report Indexing System**



[ARIS11A]

**ARIS Summary Report**

Regional Geologist, Smithers

Date Approved: 2005.07.07

Off Confidential: 2005.12.06

**ASSESSMENT REPORT: 27560**

Mining Division(s): Skeena

Property Name: Maple Bay

Location: **NAD 27** Latitude: 55 24 00 Longitude: 130 00 00 UTM: 09 6139545 436668  
**NAD 83** Latitude: 55 23 59 Longitude: 130 00 06 UTM: 09 6139730 436565  
**NTS:** 103O08E  
**BCGS:** 103O050

Camp: 049 Alice Arm - Anyox Area

Claim(s): MB 1-7, Steer 4-6, Helen 1-5, Glacier, Shore, Lake

Operator(s): MAS Capital Inc.  
 Author(s): Montgomery, J.H.

Report Year: 2004

No. of Pages: 37 Pages

Commodities  
 Searched For:

General Work Categories: GEOL, GEOC

Work Done: Geochemical  
           ROCK Rock (15 sample(s);  
           Elements Analyzed For: Multielement  
           SILT Silt (10 sample(s);  
           Elements Analyzed For: Multielement  
           SOIL Soil (16 sample(s);  
           Elements Analyzed For: Multielement  
           Geological  
           PETR Petrographic (15 sample(s);)

Keywords: Coast Plutonic Complex, Andesites, Dacites, Tuffs, Argillites, Chalcopyrite, Pyrite, Pyrrhotite

Statement Nos.:

MINFILE Nos.: 103P 043, 103P 040, 103P 048, 103P 242

Related Reports: 05550, 24681

**REPORT**  
**ON**  
**GEOCHEMICAL AND PETROGRAPHIC**  
**RECONNAISSANCE & ORIENTATION**  
**SURVEY ON MAPLE BAY PROSPECT**  
**SKEENA MINING DIVISION**  
**BRITISH COLUMBIA**

**On behalf of Owner/Operator**  
**1<sup>st</sup> ANYOX RESOURCES LTD.**  
**VANCOUVER, B.C.**

**by**

**J.H. Montgomery, Ph. D., P. Eng. Consultant/Author**

**May 15, 2004**

**CLAIMS: HELEN 4, SHORE, HELEN 1, MB 1, MB 2, MB 3**  
**BC MAP SHEETS- 103P.031,.041,.040,.050**  
**LAT./LONG: 55°26' / 130°00'**

**GEOLOGICAL SURVEY BRANCH**  
**ASSESSMENT REPORT**

**27,560**

## TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	STREAM SEDIMENTS SAMPLING.....	5
2.1	Location.....	5
2.2	Sample Collection.....	5
2.3	Analyses & Results.....	5
2.4	Conclusions.....	8
3.0	ROCK SAMPLES – GEOLOGY.....	9
3.1	Location.....	9
3.2	Sample Collection.....	9
3.3	Analyses & Results.....	9
3.4	Conclusions.....	10
4.0	QUALIFYING EXPENSES.....	11
4.1	Reconnaissance Orientation.....	11
4.2	Report Preparation (R&D Survey).....	11
4.3	Previous Costs.....	11
5.0	CERTIFICATE.....	14

### FIGURES

1.	Maple Bay Project Location Map.....	2
2.	Maple Bay Regional Geochemistry BCGS &GSC .....	4
3.	Maple Bay Project - Sample Sites.....	6

### TABLES

I	Maple Bay Mineral Claims .....	3
II	Copper & Zinc Geochemical Results.....	7
III	Summary Rock Classifications.....	9

### APPENDICES

I	Geochemical Analyses.....	12
II	Petrographic Report.....	13

## **1.0 INTRODUCTION**

A reconnaissance and orientation survey was conducted over the Maple Bay Prospect on behalf of 1<sup>st</sup> Anyox Resources Ltd. of Vancouver, B.C. during the period April 18-21, 2004.

The purpose of the trip and surveys was to make a number of traverses over the property to determine the feasibility of using soil and stream sediment geochemical samples as an exploration tool and to determine the percentage of outcrop on the property with a view to using geological mapping and prospecting in the search for mineral deposits.

A three-man crew with helicopter support was used for the surveys. The geochemical samples collected were delivered to Acme Analytical Laboratories Ltd. for analyses and the geological samples were sent to Teck Cominco's Global Discovery Labs for thin section preparation and petrographic studies. The reports from both of these laboratories are submitted with this report in Appendix I and II respectively.

The claims are located in the Boundary Range of the Coast Mountains. Specifically, the claims are situated on the west side of Granby Peninsula between Observatory Inlet (Hastings Arm) and Portland Canal. The Maple Bay Group of claims occupies part of BC Map Sheets 102P.031, 103P.041, 103p.050, and 103P.040 as shown in Figure 2. Figure 1 shows the general location of the claims.

At present, Granby Peninsula is accessible mainly by helicopter from Prince Rupert, B.C. (125 km) or Stewart, B.C. (57 km). The claims may also be reached from either of those cities.

The original Maple Bay townsite, which no longer has any standing buildings, is located at 55°26' N latitude and 130°00' W longitude.

The Maple Bay Group consists of 16 claims (252 units), all of which lie within the Skeena Mining Division. Relevant information concerning the claims is presented in Table I.

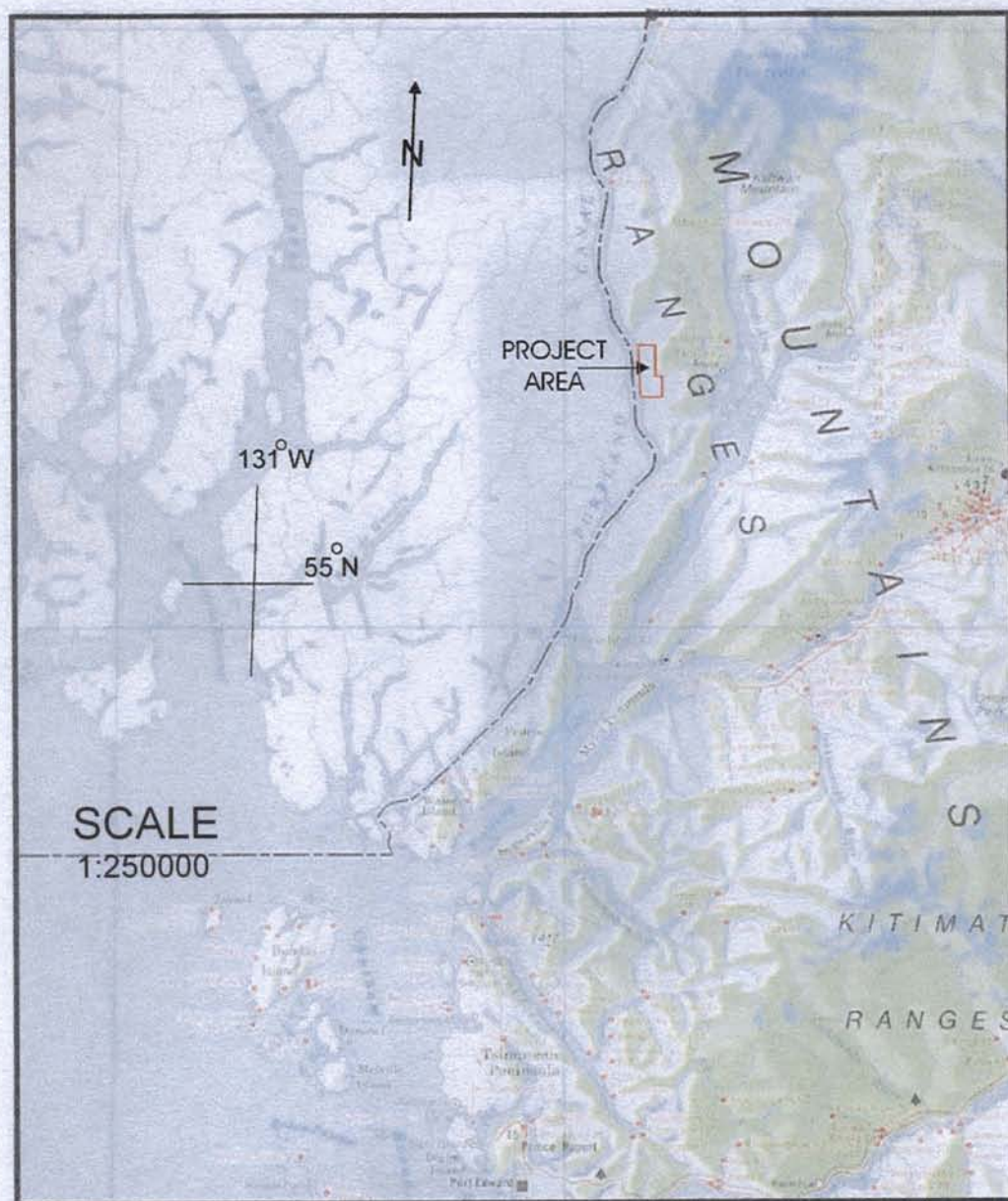


FIGURE 1 - LOCATION MAP

**TABLE I**  
**MAPLE BAY MINERAL CLAIMS**

CLAIM (units)	RECORD NO.	EXPIRY DATE	MAP REF.
MB#1 (18)	366910	11/12/04	103P/41
MB#2 (18)	366911	11/12/04	103P/41
MB#3 (18)	366912	11/12/04	103P/41
MB#6 (18)	367044	11/12/04	103P/41
MB#7 (20)	367045	11/12/04	103P/41
STEER 4 (18)	355329	11/12/04	103P/41
STEER 5 (20)	355330	11/12/04	103P/31
STEER 6 (20)	373864	11/12/04	103P/31
HELEN 1 (18)	383132	11/12/04	103P/41
HELEN 2 (18)	367047	11/12/04	103P/41
HELEN 3 (16)	367048	11/12/04	103P/41
HELEN 4 (16)	363133	11/12/04	103P/31
HELEN 5 (20)	383134	11/12/04	103P/31
GLACIER (4)	371434	11/12/04	103P/31
SHORE (4)	375267	11/12/04	103P/30
LAKE (6)	371435	11/12/04	103P/41

The claims are held by 1<sup>st</sup> Anyox Resources Ltd under purchase agreement with Hidden Creek Resources Ltd. 1<sup>st</sup> Anyox Resources Ltd. Is also the current operator. The Maple Bay Group of claims is located on the Portland Canal side of Granby Peninsula and surrounds a group of Crown Granted claims on which are located three past producers: OUTSIDER, FRIDAY and STAR and three developed prospects: BLUE BELL, PRINCESS AND EAGLE-MAY QUEEN. These are not part of the Maple Bay project but illustrate the type of mineralization sought.

A regional geochemical sampling program was undertaken previously by BCGS and GSC on NTS Map 103P. Figure 2 shows the relation of their sample sites to the Maple Bay claims (red outline). The regional samples were subjected to multi-element analysis, the most relevant elements being copper, zinc, lead, gold, silver, molybdenum and nickel.

The Maple Bay claims are considered eminently prospective because they are on the same sedimentary-volcanic roof pendant in granitic rocks of the Coast Plutonic Complex which host the massive sulphide deposits at Anyox.

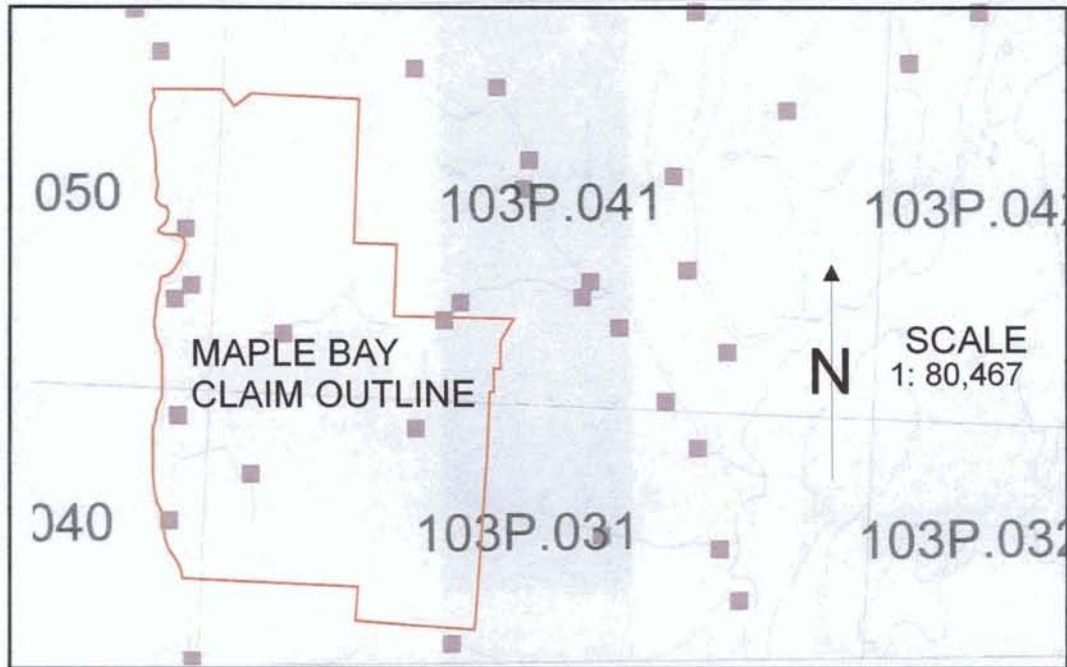


FIGURE 2 - BCGS-GSC GEOCHEMICAL SAMPLE SITES

## **2.0 STREAM SEDIMENT SAMPLING (1st Anyox resources Ltd.)**

### **2.1 Location**

Figure 3 shows the location of the geochemical and petrographic sample sites. The sample type is designated (S) for soil samples, (SS) for stream sediment samples and (R) for rock samples.

### **2.2 Sample Collection**

There are numerous streams with active branches throughout the property and the collection of stream sediment samples was productive. On the other hand, soil samples were very difficult to collect. There is little or no development of a B horizon and, in many instances, there was subcrop immediately under the moss. A few soil samples were available under trees. Outcrop is non-existent in many parts of the property except those parts where cliffs or canyons occur.

### **2.3 Analyses and Results**

The samples were all subjected to 32 element ICP analyses. The full analytical report is presented in Appendix I. Elements which showed some significance are shown in Table I. Copper and Zinc outlined a definite coincident anomaly but none of the other elements were correlative. The following table lists the results of the surveys: Figure 3 shows the locations of the Maple Bay sample sites.

#### Sample Descriptions

CO1- stream sediment	
CO2- stream sediment	55°25.857' Alt. 685'
	130 00.741
CO3- stream sediment (good sample)	
	55° 25.83'
	130° 00.73'
CO4- stream sediment	130° 00.73'
	55° 25.831'
	130° 00.929"
CO5- fast stream	55° 25'
small sample	130° 00'



Figure 3 Maple Bay Sample Sites

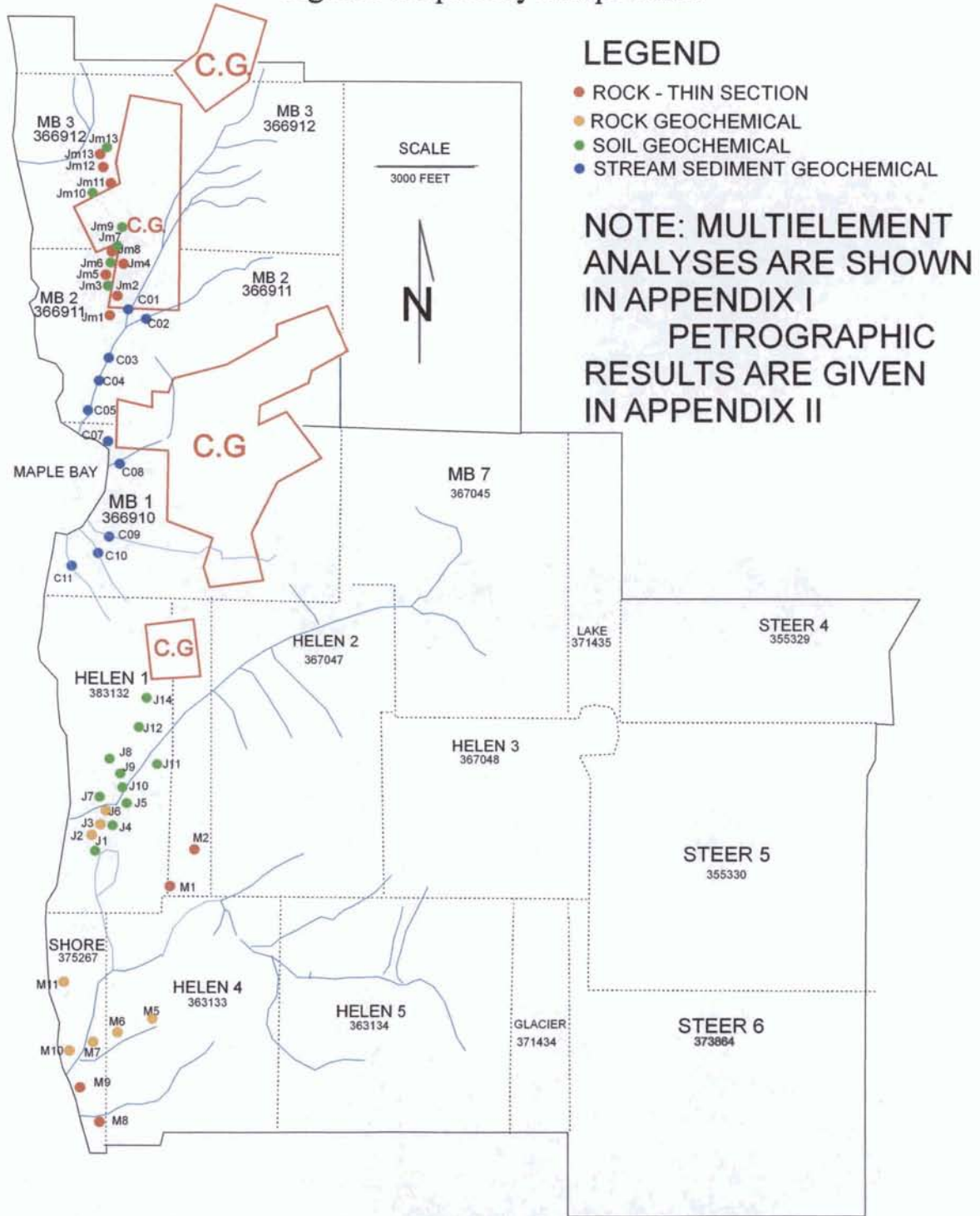


FIGURE 3 - MAPLE BAY PROJECT SAMPLE SITES

**TABLE II**  
Copper and Zinc  
Geochemical Analyses

Sample	Type	Cu	Zn	Sample	Type	Cu	Zn
CO <sub>1</sub>	SS	11	44	J-10	SS	64	16 <sup>th</sup>
CO <sub>2</sub>	SS	20	64	J-11	S	70	115
CO <sub>3</sub>	SS	25	72	J-12	S	70	173
CO <sub>4</sub>	SS	491	259	J-14	S	15	69
CO <sub>5</sub>	SS	166	143	JM-3	S	42	279
CO <sub>7</sub>	SS	322	186	JM-6	S	8	36
CO <sub>8</sub>	SS	140	261	Re-JM6	S	8	9
CO <sub>9</sub>	SS	699	324	JM-7	SS	11	<3
C10	SS	34	95	JM-9	S	15	6
C11	SS	60	143	JM-10	SS	45	271
REC11	SS	59	146	JM-13	SS	33	184
J-1	SS	11	39	M-5	SS	6	75
J-4	SS	12	22	M-6	SS	10	75
J-5	S	53	53	M-7	SS	3	49
J-7	S	34	48	M-10	S	58	42
J-8	SS	26	83	M-11	S	7	3
J-9	SS	64	140				

CO7- stream sediment (good sample)

55° 25.56'

130° 00.557'

CO8- stream sediment

55° 25.440'

130° 00.504'

CO9- stream sediment (medium good)

55° 25.162'

130° 00.658'

C10- stream sediment (small good)

55° 25.103'

130° 00.723'

C11- stream sediment (good)

55° 25.035'

130° 00.850'

J-1 – stream sediment – sandy clay  
J-4 – stream sediment - 1.5 ft. depth  
J-5 – soil – reddish brown – from beneath tree  
J-7 – soil – reddish soil beneath grey clay horizon.  
J-8 – stream sediment – easterly flowing tributary.  
J-9 - stream sediment – northerly flowing creek – crappy sample  
J-10 – stream sediment – 3 meter stream – good sample taken.  
J-11- soil – from washed out bank.  
J-12- soil – sample – south bank of river  
J-14- soil – taken under a tree  
JM-3- soil – red sandy soil from uprooted tree  
JM-6 – soil – from under hollow tree  
JM-7 – stream sediment – small creek  
JM-9 – soil – same as JM-8  
JM-10 – stream sediment – fast running creek – lots of interesting float.  
JM-13 – stream sediment  
M-5 – stream sediment  
M-6 - stream sediment  
M-7 – stream sediment  
M-10- soil  
M-11- soil

## 2.4 Conclusions

Stream sediment sampling provides a better regional coverage than soils because of the large number of active streams covering the area combined with poor soil development.

One good coincident copper-zinc anomaly was detected by stream sediment samples CO4, CO5, CO7, CO8 and CO9. These samples are located on the northwestern part of the property (See Figure 1). This anomaly merits follow-up work, i.e. more detailed sampling of the stream in that area. One moderate zinc anomaly was indicated by stream sediment samples J10, J11 and J12 (See Figure 1). These sample locations are not known. One other weak zinc anomaly is indicated by stream sediment samples JM10 and JM 13.

In general, it is evident that a complete and detailed geochemical stream sediment survey of the Maple Bay prospect is warranted.

### **3.0 ROCK SAMPLES – GEOLOGY**

#### **3.1 Location**

The sample sites for rock specimens which are shown on Figure 3 along with those for stream sediments and soil samples. The area sampled is about 12 km by 4km running in a NS direction along the Portland Canal shoreline on the east side of the property.

#### **3.2 Sample Collection**

A suite of 15 rock specimens were collected from Maple Bay prospect as shown on Figure 3. The rock specimens were submitted to Mr. Jim McLeod, manager of Global Discovery Labs at Teck Cominco for thin section preparation and petrographic studies. His full report is appended to this report in Appendix II.

#### **3.3 Analyses and Results**

The following, Table III, is a summary of the rock types and their characteristics.

Sample	Rock Type	Modifiers	Others
M-1	Granite	Coarse, Leucocratic	
M-2	Granite	Coarse, Leucocratic	
M-8	Felsite	Alkalic, Feldspar crystals	
M-9	Felsite	Mafic, Possible Hornfels	epidote
J-2	Felsite	Mafic, Flow	
J-3	Metavolcanic	Mafic Flow	Biotite—Amph.
J-6	Metavolcanic	Basic rock	
JM-2	Arkose	Possible wacke	
JM-4	Wacke	Arkosic	
JM-5	Granite	Coarse, Leucocratic	Chlorite, Epidote
JM-8	Meta-arkose	Graphitic-Biotitic	
JM-11	Quartz	Bull Quartz/Vein	
JM-12	Siltstone		
JM-13	Metasediment	Phyllite	
JM-1	-	Arkose derived	

TABLE III  
Summary Rock Classifications

The rock types encountered on the Maple Bay prospect, as shown in the above table, include granite, felsite, meta volcanics, arkose, warke, meta-arkose, quartz, siltstone and meta sediment.

The favorable locus for VMS deposits is near the contact between metavolcanics and meta sediments.

### **3.4 Conclusion**

It appears likely that there is sufficient exposed rock on the property to warrant prospecting and geologic mapping. The report also includes a suite of excellent photomicrographs taken from the thin sections under magnification and crossed nicols.

(a) Stream sediment sampling of all drainage areas should be undertaken at the same time that geological mapping and prospecting is undertaken. A preliminary airborne magnetic – electromagnetic survey should precede the ground work.

## **4.0 QUALIFYING EXPENSES**

### **4.1 Reconnaissance & Orientation Survey**

<b><u>April 2004:</u></b> Set-up, outline scope of work, arrange equipment, supplies, flights, crew (7 man-days).	4,200.00
: Debriefing, review of work (3 man-days)	1,800.00
: Field Crew (11 man-days)	6,600.00
: Flights (Van.-P.R. – Van.)	1,530.00
: Helicopter Charges	7,925.66
: Supplies	351.86
: Hotel & Meals	1,327.53
: Equipment Rentals (GPS, VH Radio)	1,000.00
: Miscellaneous	<u>500.00</u>
<b>Sub Total</b>	<b>\$25,235.05</b>

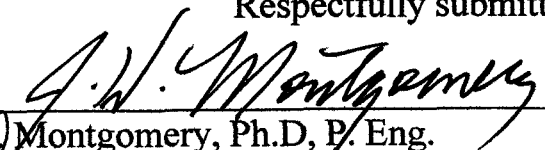
### **4.2 Report Preparation (R&D. Survey)**

Sample Analysis:	304.79
Thin Section Prep, Petrography	1,446.64
Technical Report Preparation	<u>5,340.00</u>
<b>Sub Total</b>	<b>7,091.43</b>

### **4.3 Previous Costs**

Technical Report – 1 <sup>st</sup> Anyox – Maple Bay Report :	
Jan. 2004 J.H. Montgomery 9 days @ 800/day + exp.	7,461.30
Site Inspection – Air Fares, Helicopter	5,300.00
Engineering & Supervision Advisory (Period – Jan. – May, 2004) 5 months @3500/mo (Portion 1.5 months)	5,250.00
<b>Subtotal</b>	<b><u>\$18,011.30</u></b>
<b>GRAND TOTAL</b>	<b><u>\$50,337.78</u></b>

Respectfully submitted,

  
 \_\_\_\_\_  
 J.H. Montgomery, Ph.D, P. Eng.

Note: Cost figures obtained from MAS Capital accountant.

**APPENDIX I**  
**Geochemical Analyses**  
**Acme Analytical Laboratories Ltd.**  
**(May 7, 2004)**

**APPENDIX II**  
**Petrographic Report**  
**J.A. McLeod**  
**(May 11, 2004)**




## 5.0 CERTIFICATE

### Certificate of Qualifications

I, J.H. Montgomery of Vancouver British Columbia hereby certify that:

1. I am a geological engineer and reside at 8606 Fremlin Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia: B.Sc. in 1959; M.Sc. in 1960 and Ph.D. in 1967.
3. I have practiced my profession since 1959. I am a member of the Association of Professional Engineers and Earth Sciences of British Columbia and am on the advisory Board of the Canadian Institute of Gemmology.
4. I have no interest, direct or indirect, in 1<sup>st</sup> Anyox Resources Ltd., the Anyox Project properties, nor do I expect to receive any.
5. I am the author of this assessment report on the Anyox Project for 1<sup>st</sup> Anyox Resources Ltd. The report is based on a study of the field data.

Dated at Vancouver, B.C. this 30<sup>th</sup> day of June, 2005

  
\_\_\_\_\_  
J.H. Montgomery, Ph.D., P. Eng.

APPENDIX I  
Geochemical Analyses  
Acme Analytical Laboratories Ltd.  
(May 7, 2004)



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	
J-1	<1	11	4	39	<.3	23	12	303	3.87	<2	<8	<2	<2	57	<.5	<3	<3	203	1.03	.011	5	57	1.24	9	.53	<3	1.81	.03	.01	<2	<5	1
J-4	<1	12	4	22	<.3	11	4	130	1.79	2	<8	<2	4	6	<.5	<3	<3	41	.13	.027	7	33	.37	22	.10	<3	.73	.01	.04	<2	<5	<1
J-5	<1	53	8	53	.7	22	7	178	3.24	8	<8	<2	5	6	.5	6	<3	88	.15	.026	5	82	.68	26	.24	<3	4.79	.02	.05	<2	<5	<1
J-7	5	34	27	48	<.3	9	3	113	3.51	3	<8	<2	3	6	<.5	<3	<3	115	.10	.026	10	42	.23	30	.25	<3	1.72	.02	.01	<2	<5	<1
J-8	4	26	14	83	.4	31	9	560	3.10	7	<8	<2	5	12	<.5	<3	<3	71	.25	.053	8	82	1.05	55	.10	3	1.50	.03	.07	<2	<5	<1
J-9	3	64	17	140	<.3	37	9	453	3.48	4	<8	<2	3	15	.7	<3	<3	72	.30	.054	8	85	1.02	96	.10	<3	1.45	.04	.13	<2	<5	<1
J-10	5	64	21	162	.3	40	14	597	2.65	2	<8	<2	6	21	.9	<3	<3	67	.38	.051	9	81	1.04	84	.11	<3	1.58	.03	.12	<2	<5	<1
J-11	6	70	33	115	.4	40	7	254	4.73	6	<8	<2	7	9	.9	<3	<3	103	.13	.036	10	112	1.04	43	.15	<3	3.66	.02	.04	<2	<5	<1
J-12	4	70	37	173	.5	47	18	826	3.24	5	<8	<2	7	13	.6	<3	<3	79	.18	.069	14	101	.92	81	.14	4	3.47	.02	.08	<2	<5	<1
J-14	6	15	26	69	<.3	10	4	226	2.55	3	<8	<2	3	5	.5	<3	<3	66	.09	.031	14	37	.46	50	.14	<3	1.25	.02	.07	<2	<5	<1
JM-3	4	42	<3	279	<.3	56	24	538	9.05	24	9	<2	2	2	<.5	<3	<3	161	.05	.021	3	233	1.32	30	.36	<3	4.08	.01	.01	<2	<5	<1
JM-6	9	8	6	36	<.3	13	79	4976	17.05	8	<8	<2	4	21	<.5	<3	<3	126	.36	.041	11	70	.42	113	.03	<3	1.54	.01	.02	<2	<5	<1
RE JM-6	8	8	9	35	<.3	13	78	4928	16.82	8	<8	<2	2	21	<.5	<3	3	125	.36	.041	10	70	.42	112	.03	<3	1.50	.01	.01	<2	<5	<1
JM-7	<1	11	<3	56	<.3	27	13	861	2.35	<2	<8	<2	2	16	.5	<3	<3	54	.23	.021	6	71	.91	138	.11	3	1.44	.02	.08	<2	<5	<1
JM-9	2	15	6	58	<.3	35	14	571	4.05	<2	<8	<2	2	8	<.5	<3	<3	118	.09	.027	5	205	1.04	171	.18	<3	2.08	.01	.22	<2	<5	<1
JM-10	1	45	3	271	<.3	63	19	878	2.93	2	<8	<2	<2	36	1.1	<3	<3	62	.73	.063	7	73	1.37	81	.13	<3	1.97	.07	.10	<2	<5	<1
JM-13	5	33	<3	184	<.3	41	17	787	3.31	8	<8	<2	<2	17	1.4	<3	<3	66	.41	.051	6	92	1.16	96	.11	<3	2.03	.02	.10	<2	<5	<1
STANDARD DS5	13	146	25	139	.3	26	12	747	3.01	18	<8	<2	3	46	5.6	4	6	64	.76	.097	13	189	.70	137	.09	15	2.08	.04	.14	5	<5	<1

Sample type: SOIL SS80 60c. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm
M-5	2	6	14	75	<.3	7	5	449	2.04	2	<8	<2	4	21	<.5	<3	<3	27	.33	.075	22	15	.41	75	.11	<3	.73	.07	.21	<2	<5	<1
M-6	1	10	10	75	<.3	24	6	453	2.20	2	<8	<2	3	29	<.5	<3	<3	37	.45	.081	20	60	.59	136	.12	<3	1.02	.09	.30	<2	<5	<1
M-7	3	3	8	49	<.3	3	1	280	1.48	<2	<8	<2	12	9	<.5	<3	<3	10	.14	.024	55	8	.13	31	.08	<3	.41	.09	.18	<2	<5	<1
M-10	<1	58	<3	42	<.3	40	18	332	2.55	<2	<8	<2	<2	11	<.5	<3	<3	86	.93	.080	<1	88	1.20	27	.15	3	1.61	.11	.05	<2	<5	<1
M-11	<1	7	3	18	<.3	21	5	131	1.34	<2	<8	<2	3	2	<.5	<3	<3	38	.15	.012	9	39	.55	6	.07	<3	.65	.03	.13	<2	<5	<1
STANDARD DS5	12	138	25	130	.3	24	12	732	2.88	17	<8	<2	2	47	5.4	4	6	59	.72	.091	12	177	.68	134	.09	15	1.94	.03	.13	5	<5	<1

Sample type: ROCK SS80 60oC.



GEOCHEMICAL ANALYSIS CERTIFICATE

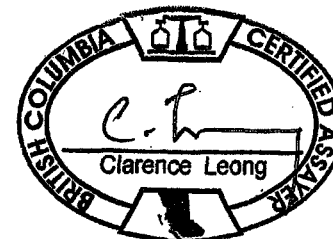


MAS Capital Inc. File # A401735 Page 1  
1500 - 750 W. Pender St., Vancouver BC Submitted by: FORD EANNON

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm
C01	2	11	10	44	<.3	12	5	178	2.20	4	<8	<2	<2	18	.5	<3	<3	48	.16	.059	7	27	.41	100	.07	5	1.46	.01	.09	<2	<5	<1
C02	<1	20	7	64	<.3	19	7	376	4.47	8	<8	<2	3	11	<.5	<3	<3	97	.10	.044	7	52	.67	76	.11	<3	2.29	.01	.08	<2	<5	<1
C03	1	25	17	72	<.3	17	11	529	4.27	13	<8	<2	2	14	.6	<3	<3	95	.11	.048	11	35	.70	115	.10	<3	2.99	.01	.10	<2	<5	<1
C04	2	491	16	259	<.3	64	25	574	3.11	7	<8	<2	<2	25	2.1	<3	<3	81	.72	.069	4	86	1.42	60	.10	<3	1.88	.03	.06	<2	<5	<1
C05	2	166	14	143	<.3	60	18	399	3.03	10	<8	<2	<2	14	.5	<3	<3	105	.49	.038	4	126	1.84	47	.13	<3	2.71	.02	.01	<2	<5	<1
C07	3	322	8	186	<.3	54	23	765	2.53	8	<8	<2	<2	25	2.2	<3	<3	63	.80	.072	5	65	1.07	65	.08	<3	1.93	.02	.03	<2	<5	<1
C08	4	140	<3	261	.3	67	40	1232	4.11	20	<8	<2	<2	29	2.0	<3	<3	106	.97	.051	6	87	1.37	41	.11	<3	3.56	.02	.02	<2	<5	<1
C09	4	699	<3	324	.4	84	34	908	4.45	10	<8	<2	2	49	1.6	<3	<3	111	.87	.086	6	128	1.86	71	.16	<3	2.71	.08	.08	<2	<5	<1
C10	3	34	13	95	<.3	23	10	540	2.73	7	<8	<2	3	26	.6	<3	<3	68	.45	.057	9	38	.88	82	.10	<3	1.54	.03	.11	<2	<5	<1
C11	2	60	12	143	<.3	29	19	1129	3.33	10	<8	<2	3	24	1.0	<3	<3	75	.44	.076	8	55	.99	132	.10	<3	1.77	.03	.16	<2	<5	<1
RE C11	2	59	12	146	<.3	29	19	1159	3.39	12	<8	<2	2	24	.9	<3	<3	78	.45	.078	9	54	1.01	135	.10	<3	1.78	.03	.16	<2	<5	<1
STANDARD DS5	13	146	25	139	.3	26	12	747	3.01	18	<8	<2	3	46	5.6	4	6	64	.76	.097	13	189	.70	137	.09	15	2.08	.04	.14	5	<5	<1

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: SILT SS80 60c Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data 6 FA \_\_\_\_\_ DATE RECEIVED: APR 26 2004 DATE REPORT MAILED: May 7/04...



**APPENDIX II**  
**Petrographic Report**  
**J.A. McLeod**  
**(May 11, 2004)**

Mr. J.H. Montgomery, Ph.D, P.Eng.  
Mas Captial Inc.  
#1500 - 750 West Pender Street  
Vancouver, B.C.  
V6C 2T8

11 May, 2004

Dear Sir:

**RE: Sample series M-,J-,JM- / G.D.L. Job V04-0227R**

A suite consisting of 15 samples were submitted for preparation into thin sections. The samples are labelled as follows:

<u>LAB NO.</u>	<u>FIELD NO.</u>
R04:7281	M-1 ✓
R04:7282	M-2 ✓
R04:7283	M-8 ✓
R04:7284	M-9 ✓
R04:7285	J-2 ) ?
R04:7286	J-3 ) ?
R04:7287	J-6 ) ?
R04:7288	JM-2 ✓
R04:7289	JM-4 ✓
R04:7290	JM-5 ✓
R04:7291	JM-8 ✓
R04:7292	JM-11 ) ?
R04:7293	JM-12 ) ?
R04:7294	JM-13 ) ?
R04:7295	JM-1 ✓

The off cuts of each sample were also stained for feldspars.

One sample, R04:7295 (JM-1) proved to be a mixture of mud and sand sized grains. The sand sized grains were extracted to prepare as a thin section.

Each of the thin sections were observed in transmitted light and the results of the microscopic observations form the body of this report. Following are the section descriptions.

**SAMPLE R04:7281 (M-1).**

In transmitted light the mode is visually estimated to be as follows:

Orthoclase:	45%
Quartz:	35%
Plagioclase:	15%
Biotite:	3-4%
Opaques:	1-2%

Orthoclase feldspar (perthitic) occurs in grains that are in the 3 – 7 mm size range and tend to be tabular and somewhat anhedral. Intergranular to sometimes graphically intergrown with the potash feldspar is quartz in masses to 5 mm. These masses are not individual grains but consists of several 0.5 – 2.0 mm grains sutured together. Plagioclase grains are either equant or slightly tabular in form and may be up to 2 mm in size. They appear corroded and are replaced or engulfed by potash feldspar and/or quartz. These plagioclase grains tend to be slightly zoned and have modest sericitic alteration in their cores. A few intergranular to interstitial patches of biotite as large as 2 mm in size occurs in laths of a mm or more and occur between plagioclase and quartz grains. Minor amounts of opaques are noted and the rock is slightly rusty due to weathering.

In the immediate off cut a “vein” appears along one edge and is seen to be composed of intergrown quartz and potash feldspars. This feature is not as readily noted in section except for the extensive graphitic intergrowth texture. The apparent sharp transition seen in the off cut is not observed readily in the thin section.

The rock is classified as a medium to coarse grained leucocratic granite.



**SAMPLE R04:7282 (M-2).**

In transmitted light the mode is visually estimated to be as follows:

Plagioclase:	45%
Orthoclase:	40%
Quartz:	10-12%
Biotite:	8-9%
Opaques:	1%

Equant to stubby laths of plagioclase and orthoclase are seen to be somewhat rounded to corroded. These grains are usually in the 1 – 3 mm size range and dominate the section mineralogy. Plagioclase is sometimes seen to have a core that has modest sericite alteration developed on it and has obvious reaction rims. Orthoclase feldspar can be granular and has corroded rims. Quartz and biotite are seen to be intergranular to both feldspar types and generally much finer grained. The quartz is up to 0.5 mm and the biotite occurs in flakes and laths that are usually finer. Both quartz and biotite appear later and are possibly as recrystallized phases interstitial to somewhat crushed or modified semi-solid crystal mush.

This rock is probably best described as a granite although it is slightly lacking in quartz.

**SAMPLE R04:7283 (M-8).**

In transmitted light the matrix is seen to consist of microcrystalline felsite dominated by potash feldspar and silica. The felsite is layered or banded. It contains euhedral crystals of orthoclase up to 2 mm in maximum dimension. This orthoclase feldspar accounts for about 2 – 3% by area of the section. Rare, smaller grains of quartz, partly resorbed are also noted. The rock is flecked with 0.05 mm sized Fe-oxides.

This rock is classified as a feldspar crystal bearing alkalic felsic volcanic.

**SAMPLE R04:7284 (M-9).**

In transmitted light the rock is seen to be essentially composed of fine microlitic plagioclase feldspar and even finer granular feldspar. Microlites to 1 mm are needle-shaped and granules in the 0.1 mm size range are typical. These are all intergrown with fresh radiating sheaves of needle-like amphiboles. These patches or sheaf-like material are usually in the 0.5 mm size range. The rock does not appear to have any visible foliation in thin section.

Rare crystals of altered plagioclase from 2 – 3 mm are noted. They are masked by epidote and sericite. These crystals may be tuff related or were caught up in a mafic felsic flow.

The rock is thought to be a mafic flow but could also be a hornfels equivalent. Further, the rock is criss-crossed by at least two and possibly three generations of fracturing which have been healed by epidote.

**SAMPLE R04:7285 (J-2).**

In transmitted light, as in the previous sample, the dominate mineral phase is plagioclase feldspar and amphibole. The groundmass consists of microcrystalline plagioclase and modest amounts of microlitic plagioclase in needle-like forms up to 0.5 mm. Intergrown with plagioclase are needle-like forms, sheaves and irregular patches of needle-form amphibole. These are rarely as large as 0.5 mm. This sample, unlike the previous one, is finer grained but most significantly is apparently banded or layered as indicated by grain size changes and mineralogical concentrations. A few 0.5 mm altered crystals of plagioclase, now saussuritized may reflect tuff crystals or phenocrysts caught up in the flow. A sinuous feature of several mm's in length is seen to have coarser amphibole developed on its rims. Cores are in part feldspar overprinted by sericite. Some porosity does remain. This feature might represent a gas tube.

This rock is believed to be a mafic flow or felsite.

**SAMPLE R04:7286 (J-3).**

In transmitted light the background matrix mineral is identified as plagioclase feldspar. These grains are anhedral and tend to be very fine grained (0.05 – 0.25 mm) sutured material. This matrix contains intergrown prismatic aggregates of grains in seams and sheaves consisting of amphiboles. The individual grains rarely exceed 0.5 mm in length. In some seams or bands of amphibole, cores of biotite in aggregates up to a mm in length are noted. Evenly disseminated throughout the rock and in preferred planes or seams are irregular shaped opaques in the 0.05 – 0.1 mm size range. These opaques are believed to be Fe-oxides after pyrite and pyrite. The overall dominant feature of this rock is the fine grained nature and the obvious foliation or banding. The rock is now believed to be a biotite-amphibole-plagioclase semi-schist. It may have been a basic volcanic flow and likely has a basaltic composition.

This rock may be termed a basic metavolcanic. The rock is considered closely related to the two previously described sections.

**SAMPLE R04:7287 (J-6).**

In transmitted light the mode is visually estimated to be as follows:

Amphibole:	65%
Plagioclase:	25%
Opagues:	7-8%
Biotite:	2-3%

Plagioclase in sutured grains forms matrix material intergrown with amphiboles. Other plagioclase occurs as microlites up to 1 mm but average 0.5 mm in length. Several grains of plagioclase, as microcrysts, are present in the 1 mm size range. Amphiboles are present in grains and sheaves in the 0.5 mm size range. The rock is seemingly foliate as the mineralization is seen to be elongate, aligned and apparently sheared. The opaques definitely developed in oriented seams. These opaques tend to be fine grained with most in the 0.1 – 0.2 mm size range and they are highly irregular in form. Some of the opaques are coarser grained and these are believed to be pyrite while the finer, more sheared out material is Fe-oxide.

This rock is believed derived from a crystal bearing mafic volcanic. The development or recrystallization of amphibole may be evidence of metamorphism and hence the rock is a metavolcanic.

**SAMPLE R04:7288 (JM-2).**

In transmitted light the rock consists of clastic grains that tend to be irregular and have a top size of 0.5 mm. They generally range between 0.1 and 0.5 mm. Clasts are dominated by plagioclase feldspar with lesser quartz. These clasts are set in a matrix of milled silicates (argillaceous components). This argillaceous content also contains grains (laths) and thin discontinuous seams of biotite (some chlorite). The rock is strongly foliate as defined by the seams or argillaceous material and biotite as well as the general orientation of all clasts.

The rock is classified as an arkose or an arkosic wacke.

**SAMPLE R04:7289 (JM-4).**

In transmitted light clasts dominate the rock and consists of plagioclase feldspars, quartz, quartzite, some feldspar-quartz (lithic) fragments and minor felsic fragments. These clasts range from 1.5 mm down to 0.1 mm. The clasts occur in a poorly sorted, unlayered fashion. The clasts are cemented by exceedingly fine, milled quartz and feldspar (classified as argillaceous components) as well as patches of chlorite.

The rock is classified as an arkosic wacke. The rock is little travelled and the result of rapid deposition.

**SAMPLE R04:7290 (JM-5).**

In transmitted light the mode is visually estimated to be as follows:

Plagioclase:	40%	
Orthoclase:	25%	
Quartz:	25%	
Biotite:	5%	(Chlorite)
Epidote:	2-3%	
Sphene:	1%	
Hornblende:	1%	
Opagues:	<1%	

Large orthoclase grains (perthitic) of mm's to a cm engulf and are intergrown with plagioclase. The plagioclase occurs as tabular crystals to several mm's. The plagioclase shows growth zoning and the zoning is defined by sericitic alteration. Slightly later quartz is present in anhedral masses to several mm's in size. Minor hornblende is seen to be engulfed and replaced by the perthitic orthoclase. Flakes and laths of biotite of 1 – 2 mm are developed at quartz-potash feldspar boundaries. Some biotite remains fresh while others are almost totally altered to chlorite. Some sphene is seen developed with altered biotite (to chlorite). On one end of the section the plagioclase feldspars, generally quite fresh have granular to crystalline epidote developed on or in them. Opagues, in the 0.1 – 0.3 mm size range are usually seen to occur with the biotite.

This rock is classified as a medium to coarse grained granite.

**SAMPLE R04:7291 (JM-8).**

In transmitted light crystal fragments of plagioclase and quartz are angular to ovoid in form. These crystal grains range from 0.1 – 0.5 mm in size and are set in a much finer quartzo-feldspathic matrix. This is thought to be recrystallized argillaceous matrix material. The rock is developed with strong foliation having seams and stringers of graphite and biotite. The original rock is believed to have been an arkosic wacke. It has undergone shearing and some metamorphism and is now classified as a graphitic-biotite schist or meta-arkose.

**SAMPLE R04:7292 (JM-11).**

In transmitted light the section consists essentially of 100% quartz with anhedral grains that average 5 mm in size. These quartz grains illustrate deformation and all have distinct pressure shadows. This material is essentially a bull quartz.

**SAMPLE R04:7293 (JM-12).**

In transmitted light the silicate grains, presumably quartz and feldspar are extremely fine grained and highly foliate. The rock contains very fine aligned sericite and stringers and seams parallel to the foliation consisting of quartz, biotite and potash feldspars. The rock contains a few larger clasts of plagioclase feldspar between 0.1 – 0.2 mm that may provide a link to a volcanic source.

The rock is now classified as a siltstone and contains elongate blebs of leucoxene. The rock may have undergone lowest grade dynamothermal metamorphism with the original rock having been derived from an eroding igneous source.

**SAMPLE R04:7294 (JM-13).**

In transmitted light, what is believed to have been a mudstone demonstrates bedding, cross bedding, bed truncation due to slippage and microfolding. Considerable fine biotite and feathery, wispy amphiboles (?) have developed within the foliation plane along with graphitic seams and elongate, disseminated grains and patches of pyrite. The rock has undergone metamorphism sufficient to produce a greenschist and possibly as high as amphibolite grade metamorphism. The rock was likely a mudstone which may have undergone regional, deformational metamorphism. It is now classified as a phyllite or very fine grained schist.

**SAMPLE R04:7295 (JM-1).**

In transmitted light this sample is seen to consist of clastic grains as the original material appeared to be unconsolidated. The angular grains in decreasing order of abundance are as follows:

- (1) Quartz: ~50%
- (2) Plagioclase: ~30%
- (3) Fe-oxides: ~10%
- (4) Amphiboles: ~5%
- (5) Biotite/sericite: 2-3%
- (6) Epidote: 1%

These grains are all subangular to angular and are relatively fresh. They all fall within a typical size range of 0.25 – 0.5 mm. This is in part a function of sample preparation.

These grains would be consistent with those derived from a feldspathic wacke. The freshness of the mafics and feldspars might also suggest an immediate source.

**DISCUSSION:**

A summary rock classification table is presented.

SAMPLE NO.	FIELD NO.	ROCK TYPE	MODIFIERS	OTHERS/ALT.
R04:7281	M-1	Granite	Coarse, Leucocratic	
R04:7282	M-2	Granite	Coarse, Leucocratic	
R04:7283	M-8	Felsite	Alkalic, Feldspar crystals	
R04:7284	M-9	Felsite	Mafic, Possible hornfels	Epidote
R04:7285	J-2	Felsite	Mafic, Flow	
R04:7286	J-3	Metavolcanic	Mafic, Flow	Biotite-Amph.
R04:7287	J-6	Metavolcanic	Basic rock	
R04:7288	JM-2	Arkose	Possible wacke	
R04:7289	JM-4	Wacke	Arkosic	
R04:7290	JM-5	Granite	Coarse, Leucocratic	Chlorite, Epidote
R04:7291	JM-8	Meta-arkose	Graphitic-Biotitic	
R04:7292	JM-11	Quartz	Bull Quartz/Vein	
R04:7293	JM-12	Siltstone		
R04:7294	JM-13	Metasediment	Phyllite	
R04:7295	JM-1	-	Arkose derived	

The rocks are typical of a range of alkalic igneous (granites) and their volcanic derivatives. As well, more basic or mafic volcanics and metavolcanics are identified. These are probably related to the arkosic and fine siltstone-mudstone rocks present in the suite.

Some evidence of a regional dynamothermal metamorphism is noted in this suite with greenschist and possible amphibolite grades being attained.

A series of photomicrographs have been taken to illustrate minerals, textural features, rock types and grain sizes. These are captioned and appended to this memo report.

Yours truly,

J.A. McLeod, M.A.Sc., P.Eng.  
Manager, G.D.L.

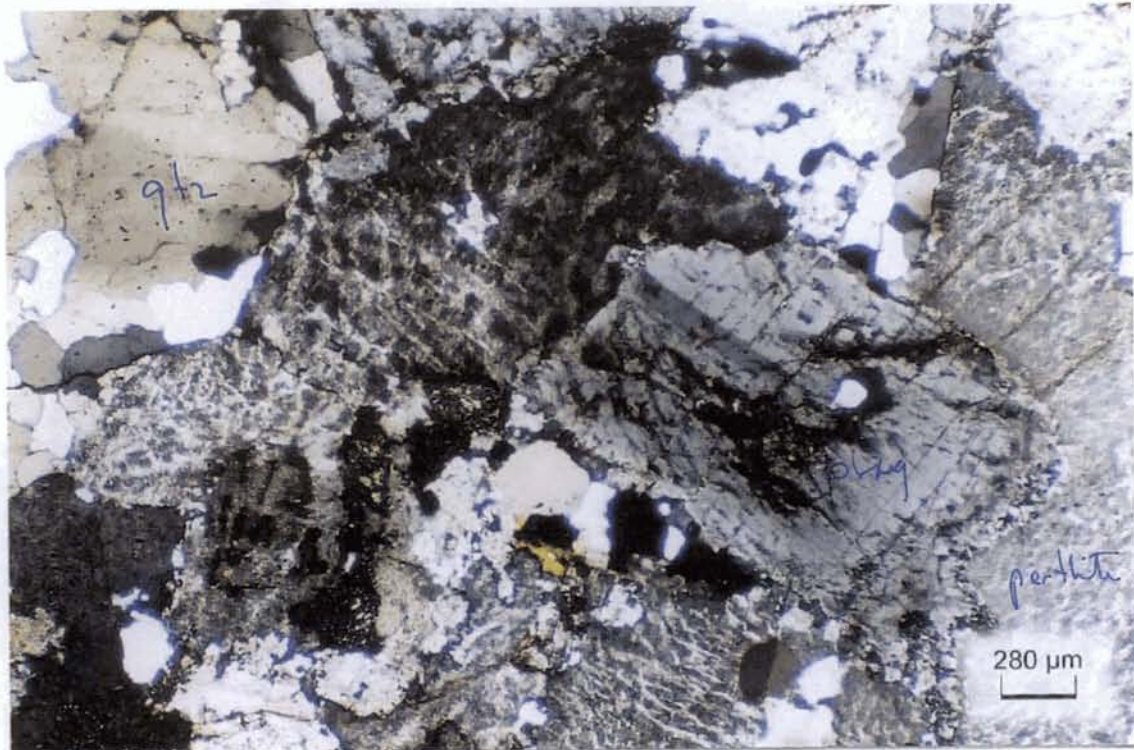
JAM/skw  
App. (photomicrographs)

**PHOTOMICROGRAPHS: MAS CAPITAL INC. (V04-0227R)**



R04:7281.  
(M-1)

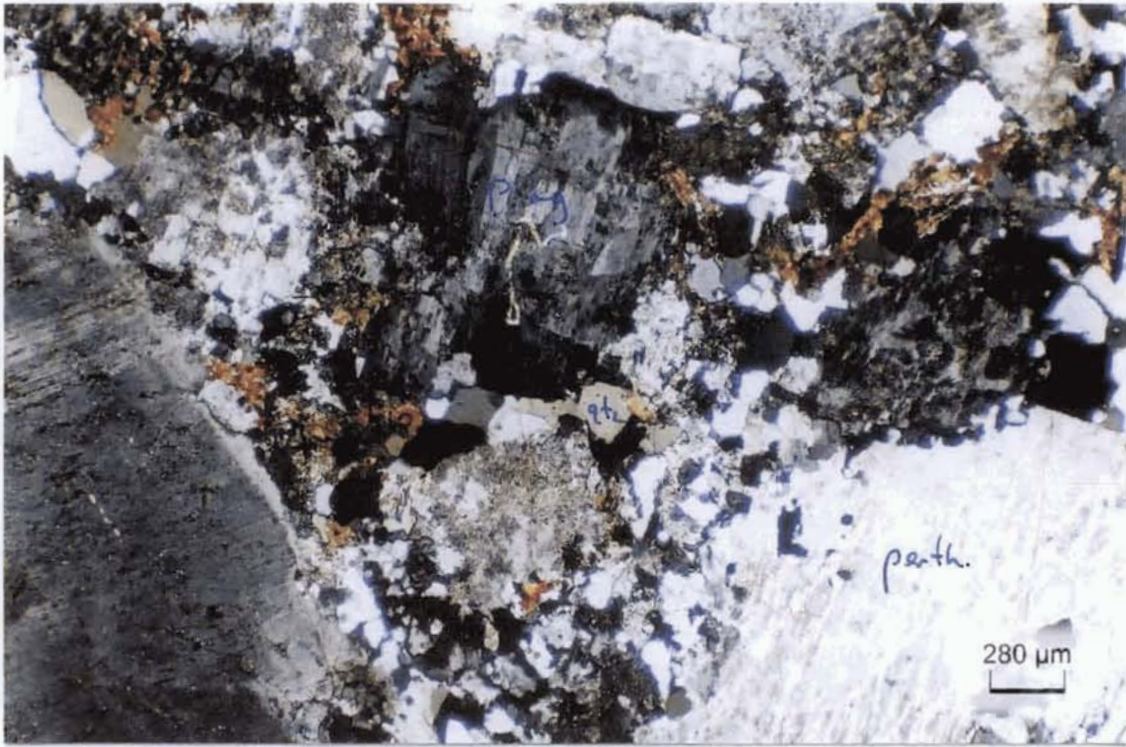
Graphically intergrown quartz and perthite. Transmitted light, crossed nicols, Magnification 25x.



R04:7281.  
(M-1)

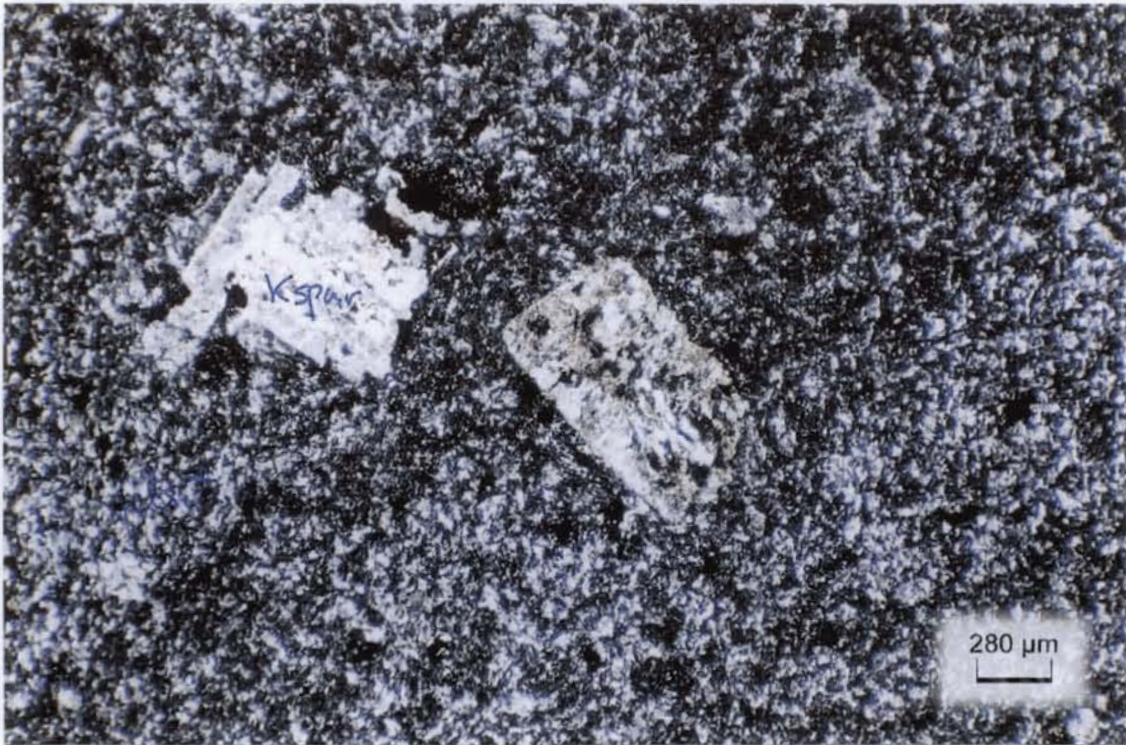
Edge of large quartz mass, perthite with engulfed and reacted plagioclase. Transmitted light, crossed nicols, magnification 25x.





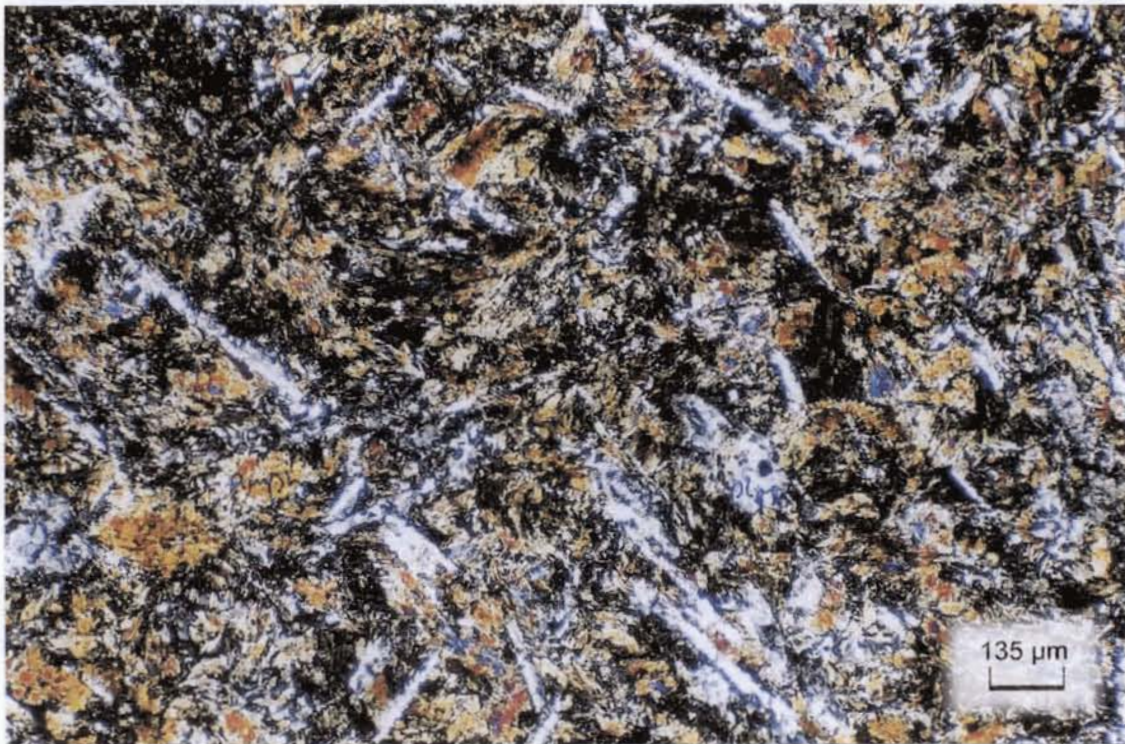
R04:7282.  
(M-2)

Large, reacted perthite and plagioclase grain are cemented by fine grained quartz and biotite. Transmitted light, crossed nicols, magnification 25x.



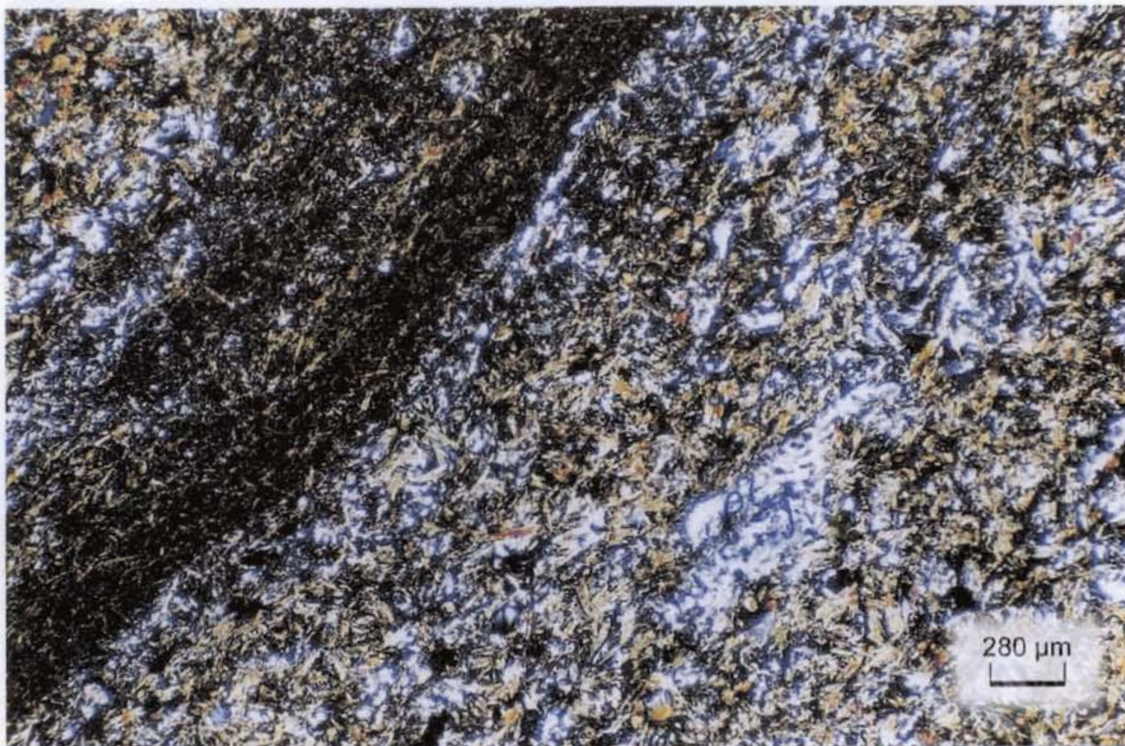
R04:7283.  
(M-8)

Potash feldspar crystals in a potash rich felsic matrix. Transmitted light, crossed nicols, magnification 25x.



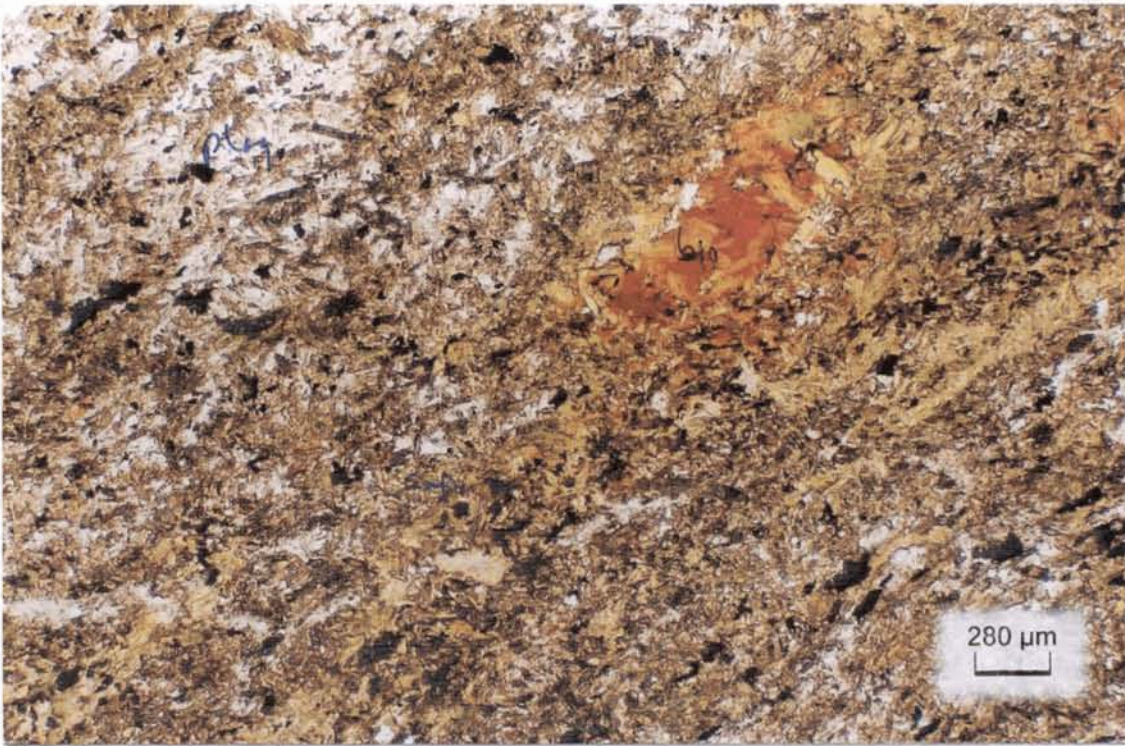
R04:7284.  
(M-9)

Plagioclase microlitic laths and very fine granular matrix plagioclase contains small aggregates of amphiboles. Transmitted light, crossed nicols, magnification 63x.



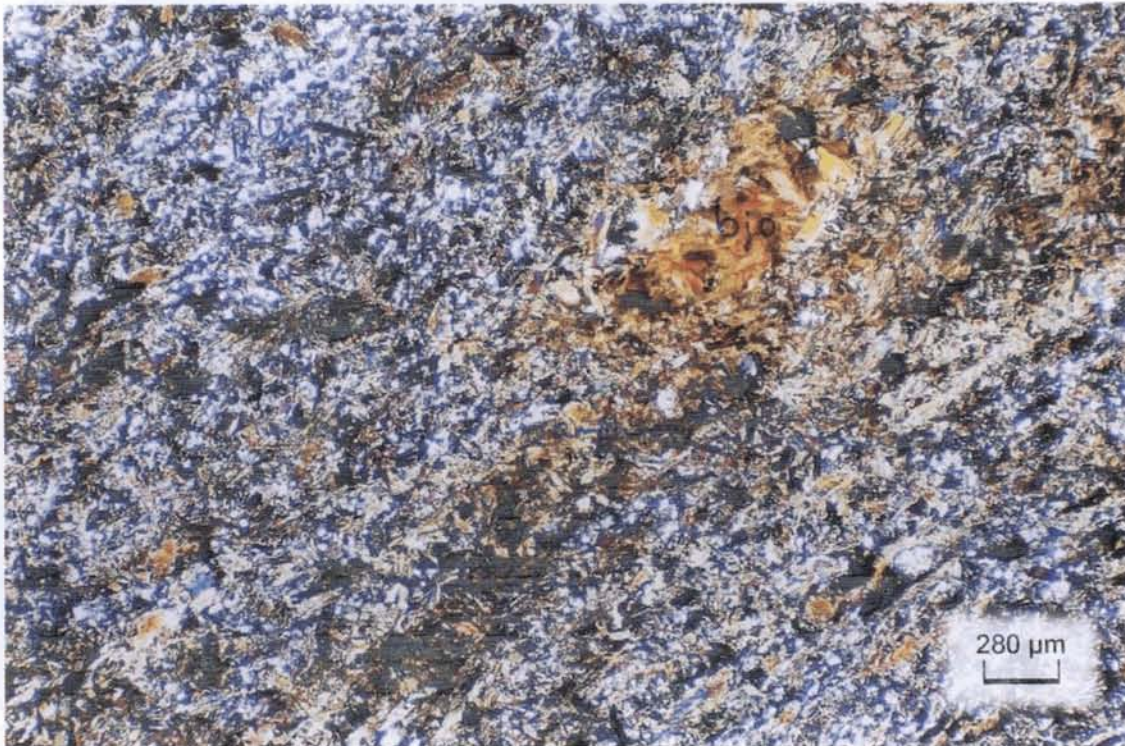
R04:7285.  
(J-2)

Foliated rock comprised of coarse and fine plagioclase and amphibole. As well, altered microcrysts of plagioclase are present. Transmitted light, crossed nicols, magnification 25x.



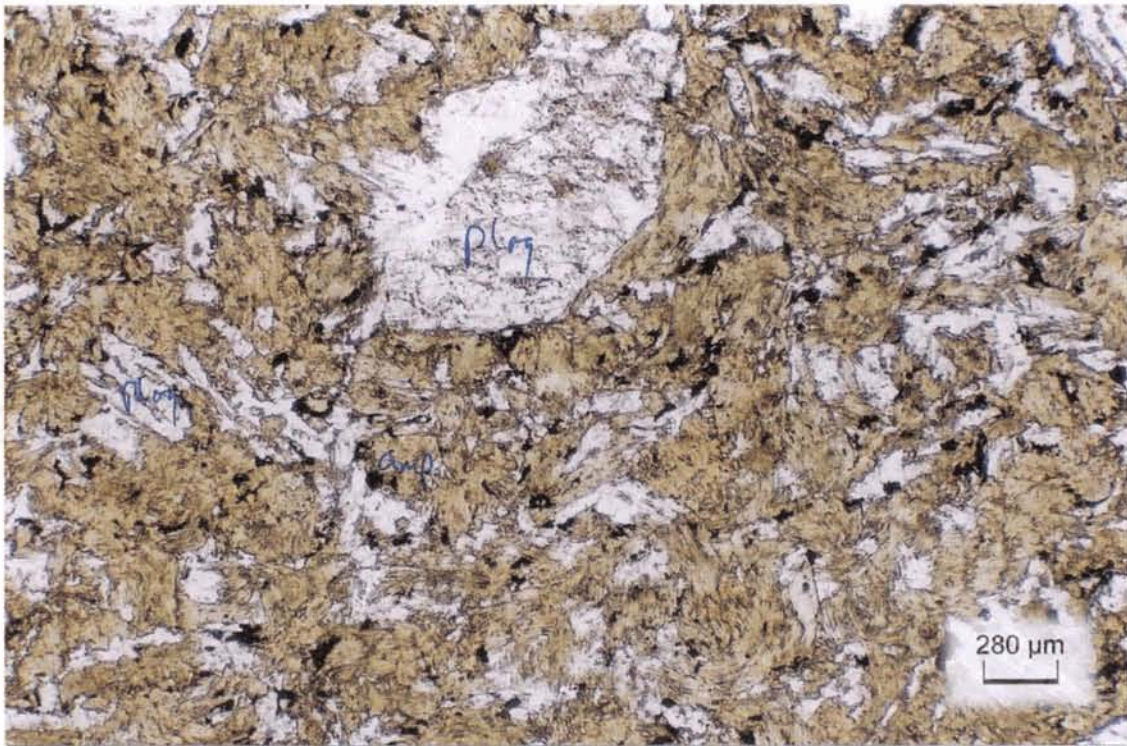
R04:7286.  
(J-3)

Foliated fine grained amphibole and plagioclase with clots and aggregates of coarser biotite enveloped in amphibole. Transmitted light, magnification 25x.



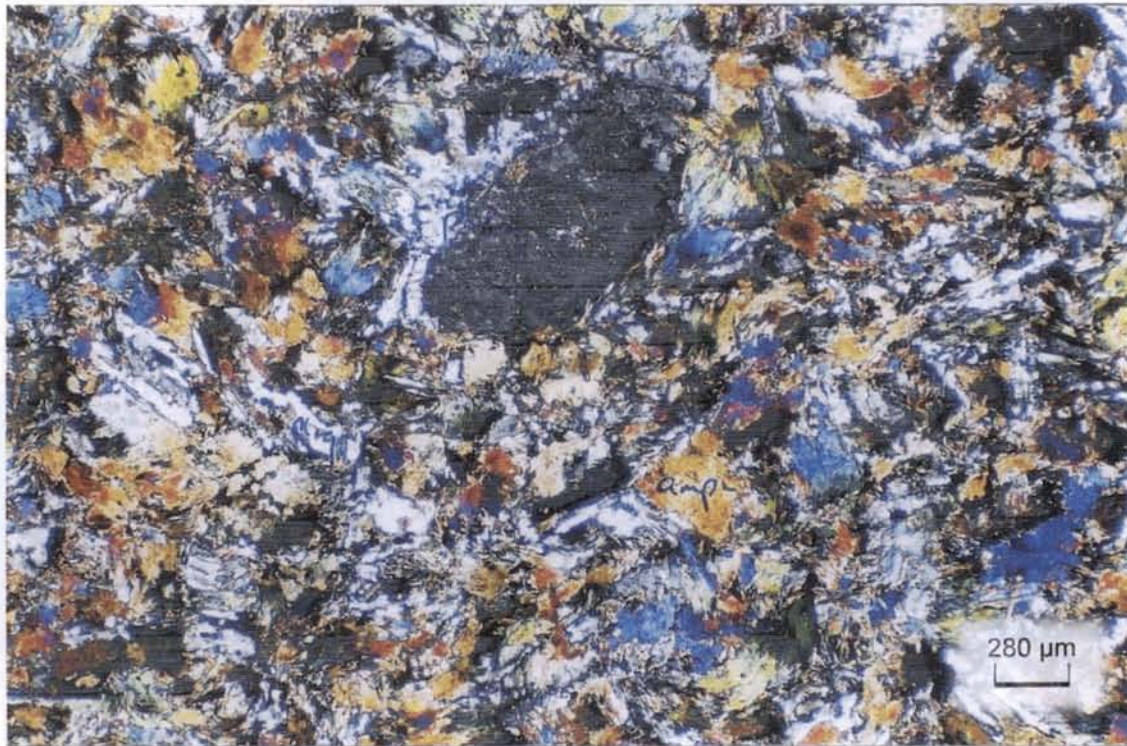
R04:7286.  
(J-3)

As above but in crossed nicols.



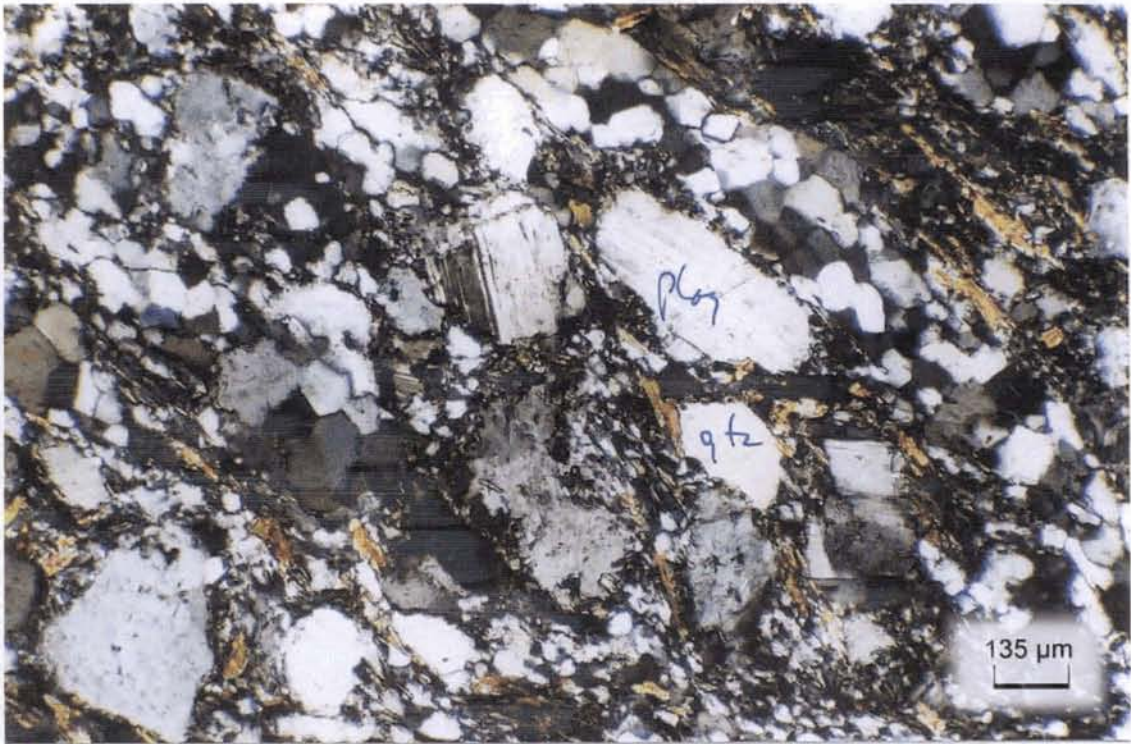
R04:7287.  
(J-6)

Plagioclase crystal fragment in a matrix of microlitic plagioclase and small sheaves of amphibole. Minor disseminated opaques. Transmitted light, magnification 25x.



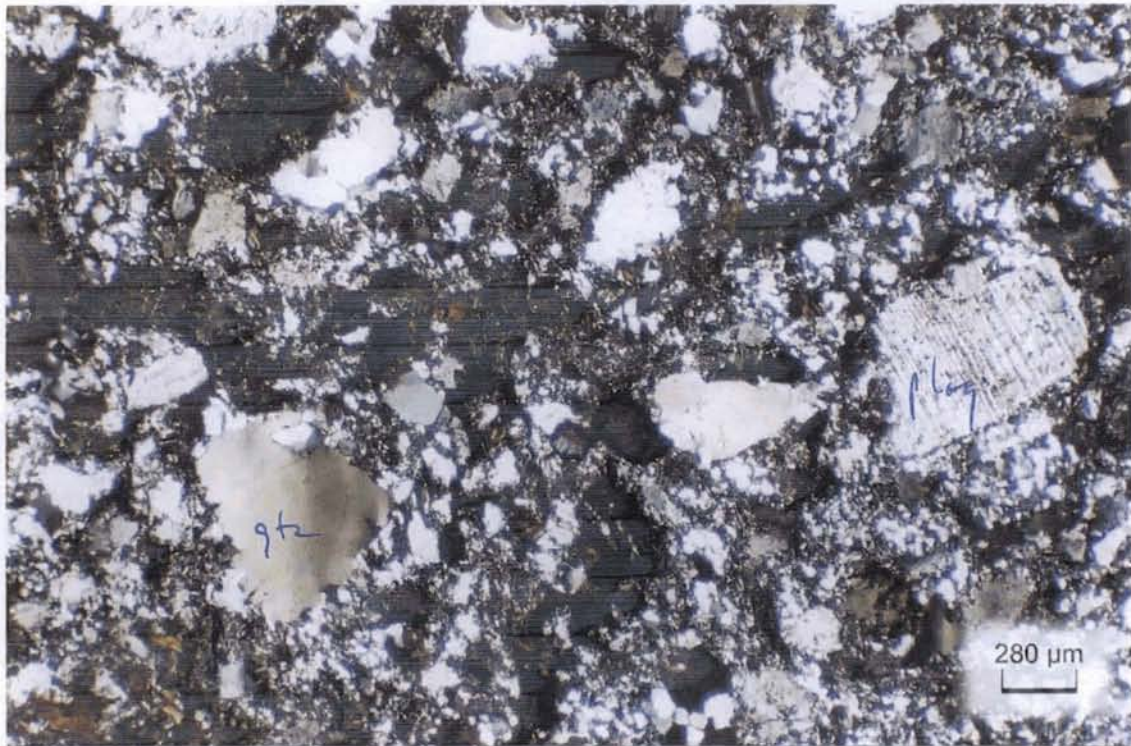
R04:7287.  
(J-6)

As above but in crossed nicols.



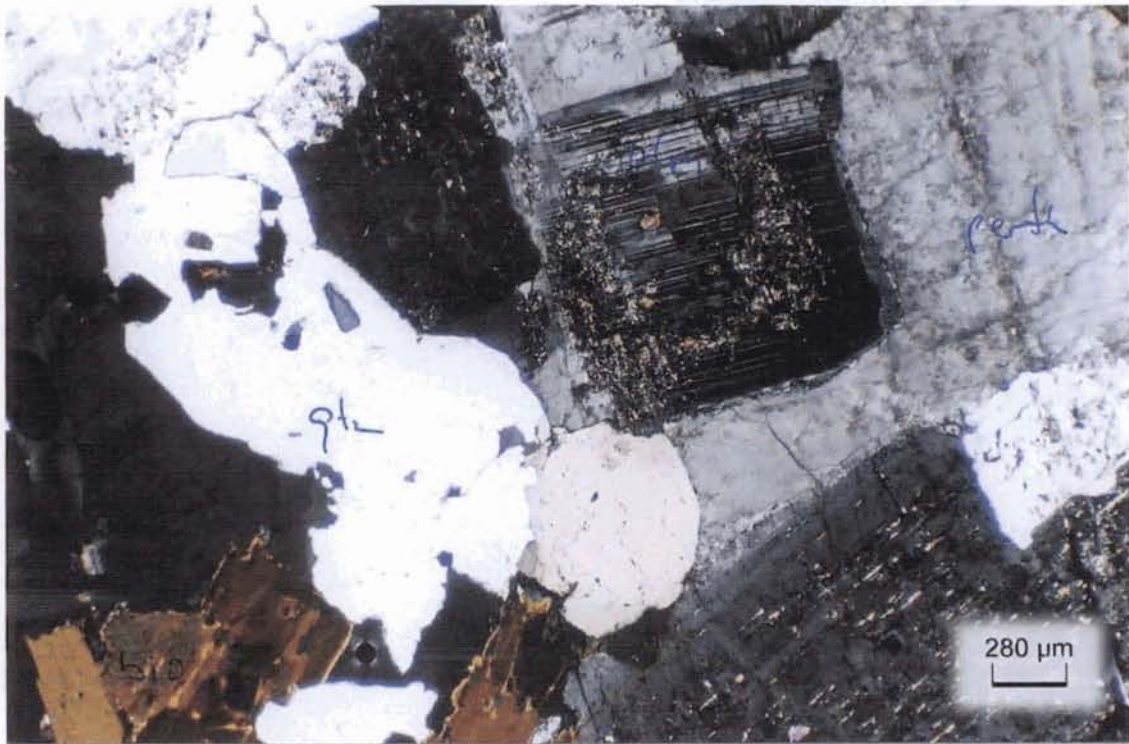
R04:7288.  
(JM-2)

Plagioclase crystal fragments (clasts) and quartz set in a milled quartzo-feldspathic/argillaceous matrix. Minor aligned biotite. Transmitted light, crossed nicols, magnification 63x.



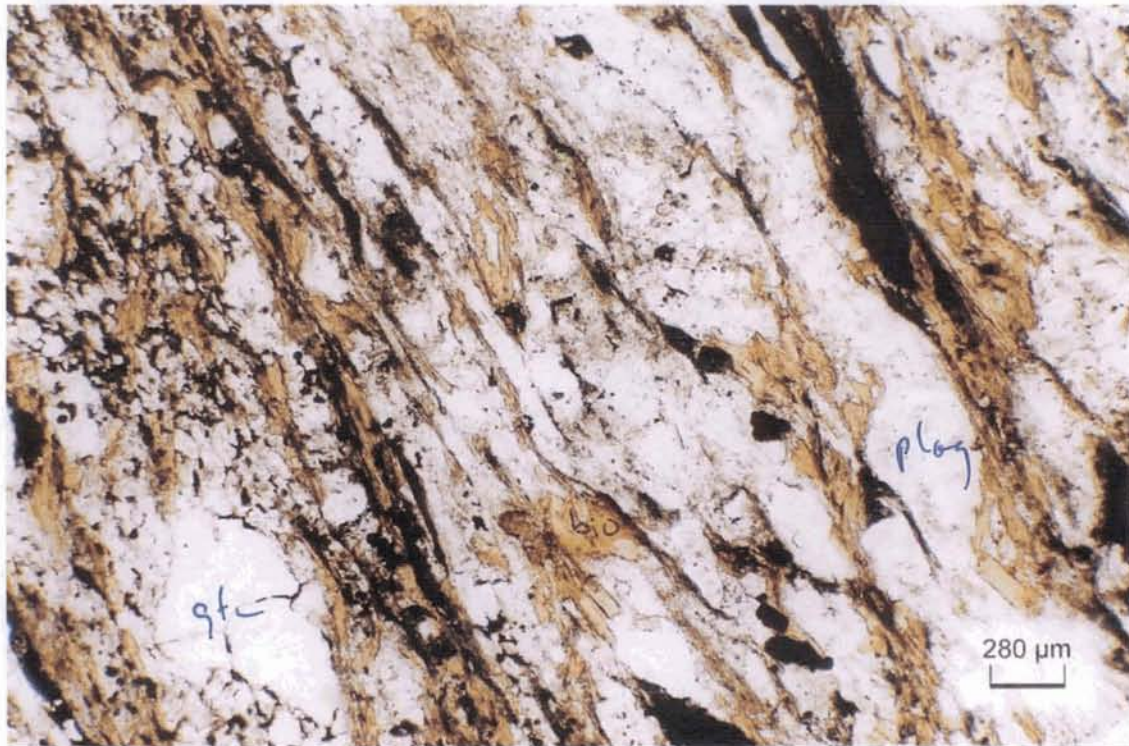
R04:7289.  
(JM-4)

Unsorted clastic plagioclase and quartz arkosic wacke. Transmitted light, crossed nicols, magnification 25x.



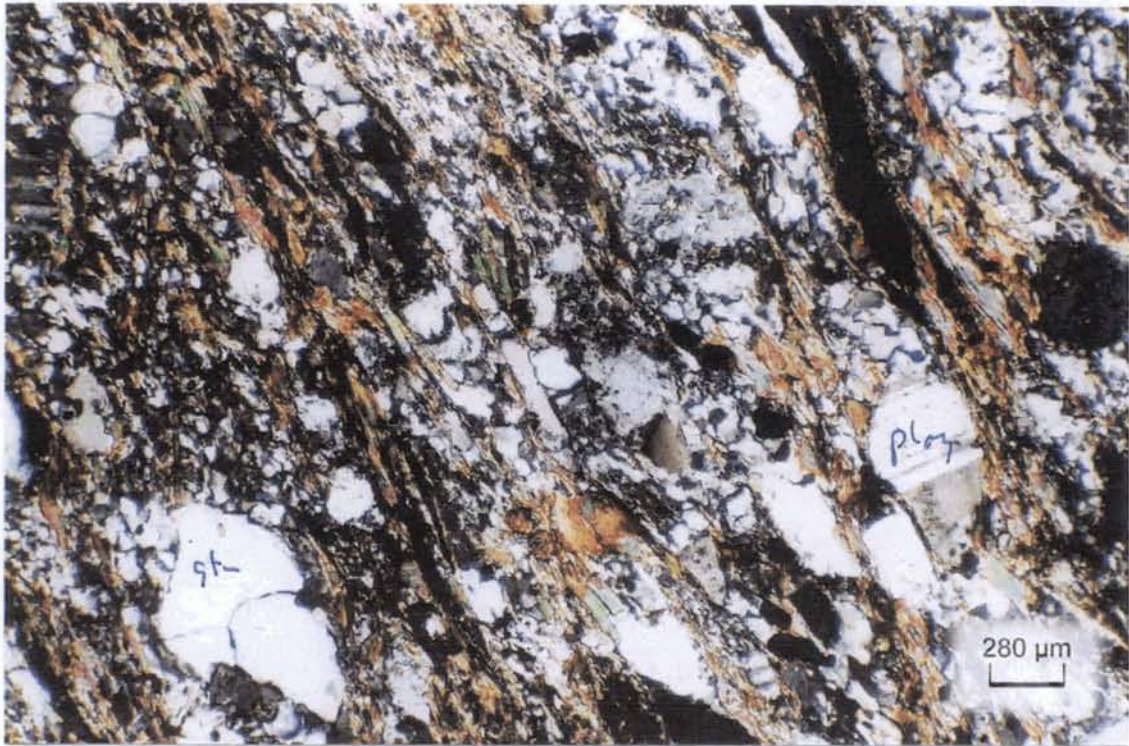
R04:7290.  
(JM-5)

Perthite, engulfed plagioclase, intergranular quartz and biotite. Transmitted light, crossed nicols, magnification 25x.



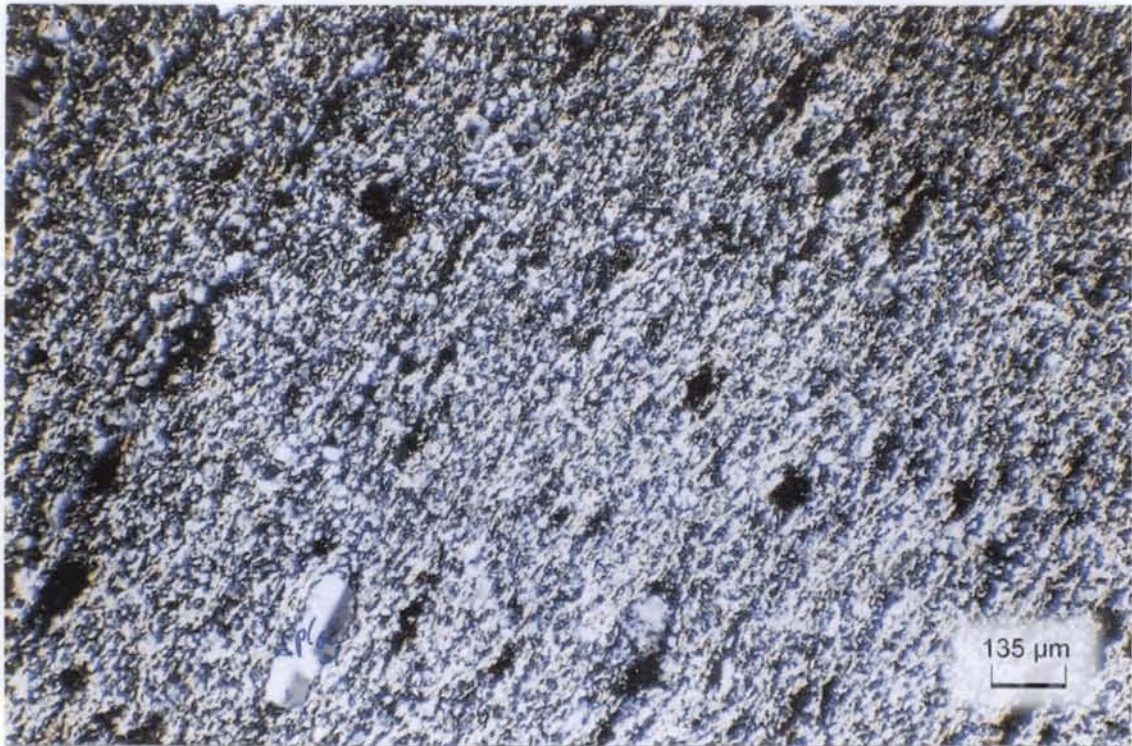
R04:7291.  
(JM-8)

Clasts of quartz and plagioclase in a foliated graphite, biotite delinated rock. Transmitted light, magnification 25x.



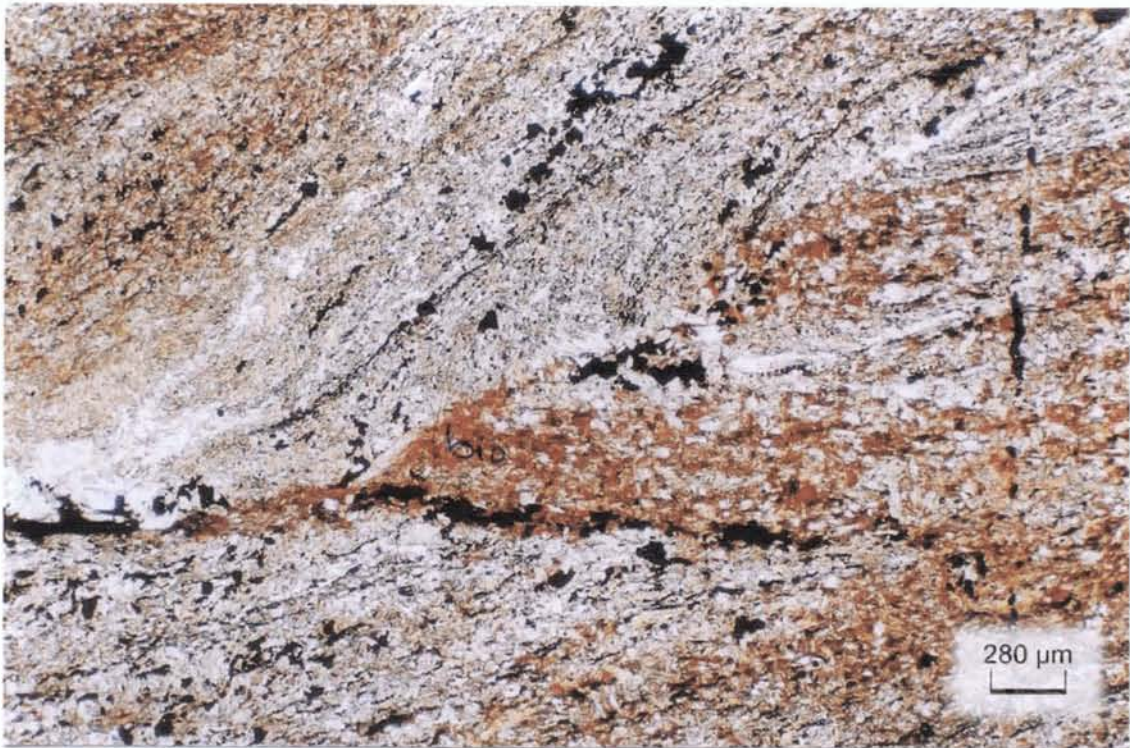
R04:7291.  
(JM-8)

As previous photomicrograph but in crossed nicols.



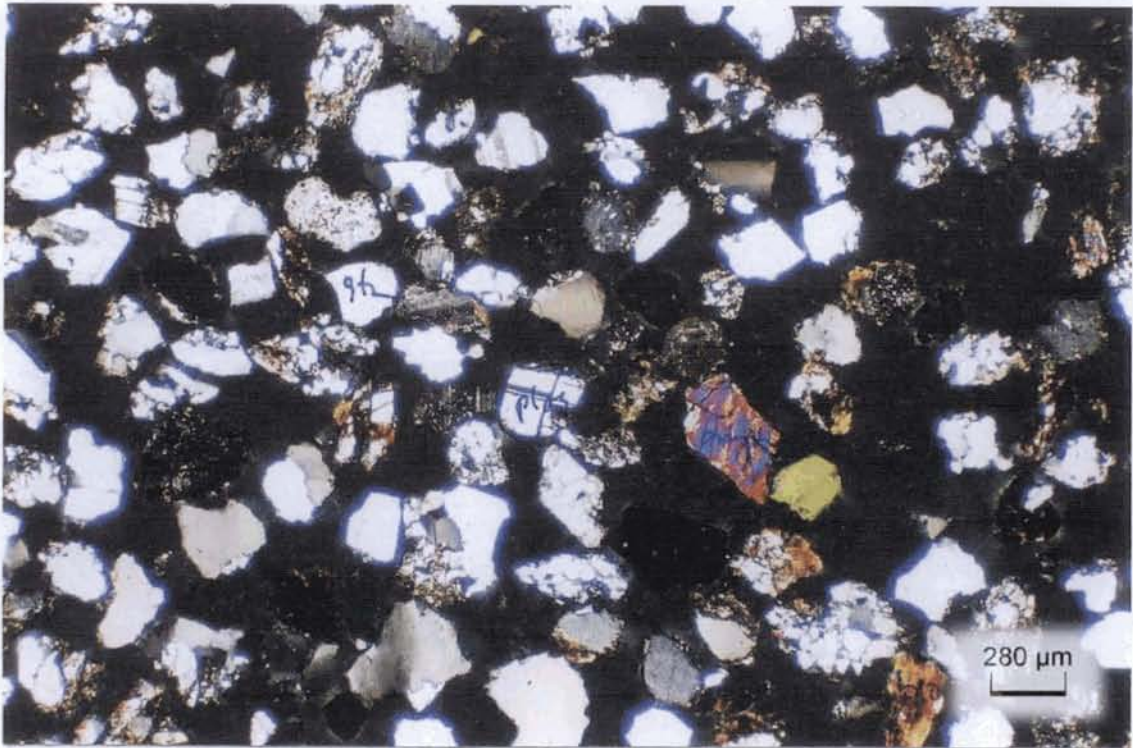
R04:7293.  
(JM-12)

Foliated, sericitized, very fine grained quartzo-feldspathic matrix with the occasional plagioclase microcryst. Transmitted light, crossed nicols, magnification 63x.



R04:7294.  
(JM-13)

A sheared phyllic schist containing biotite, very fine amphibole and quartzo-feldspathic matrix. Opaques distributed along shears. Transmitted light, magnification 25x.



R04:7295.  
(JM-1)

Grain mount with plagioclase, quartz, amphibole, biotite and opaques. Transmitted light, crossed nicols, magnification 25x.