LOG NO:	0727	RD.
ACTION:		
FILE NO:		

ASSESSMENT WORKS

ISASA CLAIMS

1 9 8 9 - 1 9 9 0

LATITUDE - 52° 59' 55"

LONGITUDE - 121° 55'

NTS - 93A/13W

GEOLOGICAL BRANCH ASSESSMENT REPORT

Geochemical Report

July 1990

### ISASA CLAIMS - ASSESSMENT REPORT 1989 - 1990

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#### 1:0 SUMMARY

We executed several geochemical surveys on the claims to know the lithologies and contents of metals. We analyzed at first, the gossans and most of the samples came from them. The values content have pointed out to an extension of the metals found on the Wim-Cal claims. Example: Zn, Pb, Ag, Au and Cu

Zinc, copper, lead, silver and gold have been found persistently in all the surveys. The industrial minerals found to date are extensive - kaolin and montmorillonite.

We found more industrial minerals north of Isasa claims on the KA No 1 claim, in the same presence of kaolin and montmorillonite and more signs of chalcopyrites.

This area deserves extensive works in trenching for the industrial minerals.

More works are also needed in trenching, north of Isasa claims and KA No 1 for base metals.

- 2:0 INTRODUCTION
- Terms of Reference 2:1

The geologies found on the Isasa and KA No 1 claims are closely related, indurated clays (argillic metamorphose) of the environment, also grey, whitish clay, not indurated which is showing very fine kaolin when dried and sieved to minus 200 mesh. The main base metals found are copper and zinc - (chalcopyrite, sphalerite and in one place rubis sphalerites).

The clays found on the surrounding Wim-Cal claims are more white, finer and more kaolinitic, but when processed (dried and sieved to 200 mesh) the kaolins obtained are quite similar.

The main topic of this report is related to the industrial minerals but also to the base metals.

- 2:0 INTRODUCTION (continued)
- 2:2 Property Description and Claims Data

The Isasa claim contains 9 contiguous units with a legal post and three corner ports, each of 500 m  $\times$  500 m or 250,000 square meters in area. (See claim Map # 1).

The staking conforms to the Mineral Regulations of the Province of British Columbia.

Claim Name: Isasa Recorded June 27, 1986

Record # 7729

Owner: Marguerite Trifaux

# 308 - 751 Clarke Road, Coquitlam, B.C. V3J 3Y3

This report has been prepared by Rene Trifaux, as an agent for Marguerite Trifaux at the same address.

Marguerite Trifaux valid FMC is 259501

- 2:0 INTRODUCTION (continued)
- 2:3 Access & Physiography

At the junction of the Barkerville Road with the No 1300 Forestry Road to the Swift River, one drives for 10 kms south eastward to arrive to the Wim-Cal claims which are adjacent to the Isasa (9 units) claim.

The legal post is situated south of the No. 1300 Road and near the junction of the said Forestry Road with the only logging road in the area. The logging road gives access to the Wim-Cal, Isasa and KA No 1 claims. One cannot drive more than 1 km on the logging road because it has not been kept in good order.

The Isasa claim is also situated west of the Mosquito Creek and consists of 3N x 3W units.

The claim is situated on the left bank of the Mosquito Creek between the Mosquito Creek and the Iskal Creeks.

The forest has been logged on the plateau, but the reforestation is well advanced today. The overburden in the areas is extensive.

- 2:0 INTRODUCTION
- Exploration History 2:4

The geochemical survey of 1986 gave the following values in metals:

Ag - threshold .9ppm - 75% of analyses above threshold

Bi - threshold 5 ppm - 100% of analyses above threshold

Mo - threshold 4 ppm - 100% of analyses above threshold

Pb - threshold 20 ppm - 55% of analyses above threshold

Sb - threshold 5 ppm - 75% of analyses above threshold

Zn - threshold 112 ppm - 85% of analyses above threshold

The survey focused on the east part of the Isasa claims and the results have been encouraging.

Bismuth is reported by "Boyle" (1979 - page 147) as a common association of gold in some deposits although it is generally present in only small amounts.

Our attention was attracted by the the presence of clays on the claims, it is ubiquitous in several areas, some are sandy and gravelly. This survey of 1986, showed new targets for the research of clays in the surrounding areas.

#### 2:0 INTRODUCTION

### 2:4 Exploration History (continued)

In 1985, several analyses were done as follows:

AL 203	20.01%	BA	. 120	BE	<0.01
CAO	3.71	СО	.005	CR 203	0.2
CU	<.001	FE 203	<8.14	K20	2.59%
MGO	6.80	MNO	. 21	MO	<.001
Na20	3.95	NB	0.01	NI	.015
P205	. 37%	PB	.005	RB	.05
S102	53.42	SN	.005	SR	<.01
T102	1.63	V	.030	W	.015
ZN	.020				

The rational analyses have not been done, but the content of AL203 is good for kaolin.

#### 2:0 INTRODUCTION

#### 2:5 Current Works Synopsis

The sampling of the claim has been done in the south west part of the units on the top near the creek, the clay (kaolin) is full of water, and a gummy product is seen in the surroundings of the creek.

Lower on the claims, the clay is present in fine grained rocks containing white and grey indurated kaolin and montmorillonite. We consider the rocks as meta volcanics and they permit a possible extension of the clay formations to the west. The response of the analyses of the metals in the samples is not as good as the values obtained in the previous geochemical surveys.

It seems also, that the amount of kaolin (clays in general) is not as high as on the Wim-Cal claims, where an extension of the presence of the clays exists.

Also, the values in minerals on this survey are down. We are in a zone which is less argillic than the previous ones done on the claim.

- 3:0 GEOLOGY
- 3:1 Regional Geology General

Upper Triassic - Slaty argillite, schists, quartzite, geological contact between Upper Triassic and Paleozoic which affects the claim areas. Also sedimentary rock formation and limestone which is ubiquitous in the north-east part.

The Cariboo series with quartz-sericite, schists, several bodies.

Some sandstone and basalt, flow breccia, tuff exists in the

Quesnel River Group series.

The Sovereign Creek from top to bottom in the flats, crossed miscellaneous geological formations from the Cariboo series, through the Quesnel River Group to ultrabasic.

#### 3:2 Local Geology

Phyllites, slaty argillite to the east are seen in several places on the units. A gossan has been discovered south-east of the claim with good values in silver and copper in the survey of 1988 - 1989. The extensive argillic zone containing the kaolins and montmorillonites, which has already been discovered on the Wim-Cal claims exists on the Isasa units but seems to be in a transition zone to the west of these units.

- 4:0 GEOCHEMICAL WORKS
- 4:2 List and Nature of Samples

Sample # 1 - Greyish, fine grained type of rock, porous,
ferruginous oxidation, some sphalerite, some blackish minerals
(chalcocite ?), heavy, streaked greyish.

<u>Sample # 2</u> - Dark grey, fine grained rock, less porous than No 1 sample, some ferruginous oxidation, no sphalerite, some tiny surfaces with blackish minerals, strike greyish, tinted with limonite.

<u>Sample # 3</u> - Dark, brown grained rock, grain up to 2 mm, blackish minerals (chalcocite). Some sphalerite, profound ferruginous oxidations, heavy, streaked brownish. Not fine grained.

<u>Sample # 4</u> - Lighter greyish rock, metamorphosed to clay. More pronounced clay is indurated, whitish surface, streak whites than the samples, porous to some extent, fissured holes which contained pyrites or any type of sulphides, heavy.

<u>Sample # 5</u> - Greyish type of rock, with some oxidations (ferruginous) grained - 1 mm, indurated clay. Some whitish clots, streak whitish, no porosity, some light fissures, brownish in places. No dark element.

<u>Sample # 6</u> - Greyish rock, white elements more numerous and apparent - no ferruginous oxidations, heavy, streak, more whitish than other samples, some illite (scarce), industrial clays, some fissures.

<u>Sample # 7</u> - Indurated clays, contains kaolin and

montmorillonite. When reduced to powder gives some siliceous grain (to be eliminated to obtain the cake of kaolin) streak, greyish, whitish. Fine grained - no ferruginous alterations.

- 4:0 GEOCHEMICAL WORKS
- 4:2 List and Nature of Samples (continued)

Sample # 8 - Greyish rock, metamorphosed to clay, more pronounced in clay than other samples, heavy, streak whitish, slightly porous, (some brownish oxidations, not too pronounced), light fissures. Sample # 9 - Dark grey, fine grained sample, some porosity, small ferruginous oxidations, streak light grey to whitish. black surfaces of black minerals (chalcocite ?). Some holes which contained some sulphides - the sulphides disappeared entirely. Sample # 10 - Dark grey sample, fine grained and porous. White elements well developed. Streak greyish, some illite (micas ?), indurated clay, no fissures, some ferruginous oxidations (sphalerite ? - chalcocite ?).

Sample # 11 - Dark grey sample, medium grained and some places are porous. White elements not too conspicuous. Some mica indurated clay, no fissures, ferruginous oxidations. One surface more whitish than grey.

Sample # 12 - Clay, plasticized with presence of water from the swamp which creates the small creek. White, some brownish

silica grains.

Sample # 13 - Plastic clay, more whitish than sample # 12 beautiful clay.

Sample # 14 - Plastic clay, same area to the east. Water present in clay. Fine material.

Sample # 15 - Plastic soft clay, oxidations of iron, water in the material. Good clay.



212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

TRIFCO MINERALS LTD.

308 - 751 CLARKE RD. COQUITLAM, BC V3J 3Y3

Project : ISA Comments: ATTN: R. TRIFAUX

Page Numba. 1-A Total Pages: 1 Invoice Date: 22-JUN-90 Invoice No.: 1-9016998 P.O. Number: 4

CERTIFICATE OF ANALYSIS A9016998

								CERIII	FICATE	OF AN	AL YOIS	) /	1901699	10	
SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm AAS	Al %	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K %	Mg %
01-1989-ISA 02-1989-ISA 03-1989-ISA 04-1989-ISA 05-1989-ISA	205 294 205 294 205 294 205 294 205 294		< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	0.30 9.26 9.40 8.55 8.95	50 2280 2400 2180 2190	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2	6.40 3.54 3.66 3.25 4.30	< 0.5 0.5 0.5 < 0.5 < 0.5	33 20 20 18 23	1870 282 260 217 251	5 33 35 31 11	3.14 4.49 4.65 4.14 5.11	< 0.01 2.54 2.58 2.46 2.19	16.40 3.52 3.66 3.18 3.11
06-1989-ISA 07-1989-ISA 08-1989-ISA 09-1989-ISA 10-1989-ISA	205 294 205 294 205 294 205 294 205 294		< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	9.14 9.85 9.41 6.38 9.39	1890 1640 1990 710 2170	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2	5.34 6.42 5.26 0.20 4.77	0.5 0.5 1.0 0.5 0.5	22 24 24 3 23	255 269 252 85 250	22 40 21 22 14	4.95 5.19 5.22 4.36 5.20	2.01 1.77 2.07 1.15 2.05	3.04 3.00 3.21 1.25 3.04
11-1989-ISA 16-1990-I <del>SA</del> Live( / Mr	205 294 205 294 Y Cul - M	35	< 0.5	9.65	1580	< 0.5	< 2	5.68	0.5	24	238	13	4.90 	1.72	2.72

**CERTIFICATION:** 



## **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

TRIFCO MINERALS LTD.

308 - 751 CLARKE RD. COQUITLAM, BC V3J 3Y3

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Page Number: 1-B
Total Pages: 1
Invoice Date: 22-JUN-90
Invoice No.: I-9016998
P.O. Number: 4

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	CERTIF	FICATE	OF AN	IALYSIS	A90169	998
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SAMPLE DESCRIPTION	PREP CODE	Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)	Cu ppm	As ppm	Hg ppb
01-1989-ISA 02-1989-ISA 03-1989-ISA 04-1989-ISA 05-1989-ISA	205 294 205 294 205 294 205 294 205 294	715 715 650	< 1	0.02 1.13 1.20 0.98 1.64	1455 102 114 86 121	< 10 1640 1790 1490 1810	< 2 < 2 < 2 < 2 < 2	202 245 267 207 120	< 0.01 0.56 0.60 0.51 0.64	18 203 213 185 239	< 10 < 10 < 10 < 10 < 10	34 40 42 36 52			
06-1989-ISA 07-1989-ISA 08-1989-ISA 09-1989-ISA 10-1989-ISA	205 294 205 294 205 294 205 294 205 294	860 805 195	< 1 < 1 < 1 < 1 3	1.27 1.50 1.41 0.77 1.73	106 102 114 32 109	1820 1940 1990 540 2020	< 2 < 2 < 2 < 2 8 < 2	116 197 119 74 128	0.66 0.66 0.69 0.32 0.68	255 277 262 98 258	< 10 < 10 < 10 < 10 < 10	48 54 52 110 54			
11-1989-ISA 16-1990-ISA	205 294 205 294		< 1	1.85	93	1980	< 2 	161	0.66	264	< 10	52	>10000	< 1	130
					:										



# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

To: TRIFCO MINERALS LTD.

308 - 751 CLARKE RD. COQUITLAM, BC V3J 3Y3

Project: ISA Comments: ATTN: R. TRIFAUX

Page Number : 1-B Total Pages : 1 Invoice Date: 22-JUN-90 Invoice No. : I-9016999 P.O. Number : 4

CERTIFICATE OF ANALYSIS	A9016999
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SAMPLE DESCRIPTION	PREF	Mo ppm (ICP)	Na %	Ni ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm	Zn ppm (ICP)			
12-1989-ISA 13-1989-ISA 14-1989-ISA 15-1989-ISA	201 23 201 23 201 23 201 23	2 2 2 < 1 2 1 2 1	0.96 1.04 1.00 0.98	50 33 26 35	700 510 390 510	8 8 4 4	122 151 139 140	0.46 0.44 0.42 0.43	139 116 93 103	< 10 < 10 < 10 < 10	112 78 54 66			
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													0.	



SAMPLE

DESCRIPTION

12-1989-ISA

13-1989-ISA

14-1989-ISA

15-1989-ISA

# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 212 Brooksbank Ave., North Vancouver

Al &

(ICP)

6.80

6.16

5.44

5.81

Ba ppm

(ICP)

1060

940

790

860

Be ppm

(ICP)

British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

Ag ppm

< 0.5

< 0.5

< 0.5

< 0.5

AAS

PREP

CODE

201 232 201 232

201 232

201 232

To: TRIFCO MINERALS LTD.

308 - 751 CLARKE RD. COQUITLAM, BC

**V3J 3Y3** 

Project: Comments: ATTN: R. TRIFAUX Page Number: 1-A

Total Pages: 1 Invoice Date: 22-JUN-90 Invoice No.: I-9016999

P.O. Number: 4

			CERTI	FICATE	OF AN	ALYSIS	5	A90169	99	
Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe %	K %	Mg % (ICP)	Mn ppm (ICP)
0.5 < 0.5 0.5 < 0.5	< 2 < 2 4 < 2	0.66 0.85 0.71 0.74	0.5 0.5 0.5 0.5	10 8 6 7	157 118 95 111	25 11 8 11	3.29 2.24 1.88 2.34	1.69 1.44 1.31 1.39	1.12 0.94 0.75 0.94	365 360 245 260

CERTIFICATION:

re of 14

ISASA CLAIMS 1989 - 1990 RECAP OF ANALYSES

SAMPLE #	AG AAS	AL %	BA ICP	BE ICP	BI ICP	CA %	CD ICP	CO ICP	CR ICP	CU ICP	FE %	K %	MG %	MN ICP	MO ICP	NA ICP	NI ICP	P ICP	PB ICP	SR ICP	TI	V ICP	W ICP	ZN ICP
01	<0.5	0.30	50	<0.5	< 2	6.40	<0.5	33	1870	5	3.14	<0.01	16.40	590	< 1	0.02	1455	< 10	< 2	202	<0.01	18	< 10	34
02	<0.5	9.26	2280	<0.5	< 2	3.54	0.5	20	282	33	4.49	2.54	<b>3.</b> 52	715	1	1.13	102	1640	< 2	245	0.56	203	< 10	40
03	<0.5	9.40	2400	<0.5	< 2	3.66	0.5	20	260	35	4.65	2.58	3.66	715	< 1	1.20	114	1790	< 2	267	0.60	213	< 10	42
04	<0.5	8 <b>.5</b> 5	2180	<0.5	< 2	3.25	<0.5	18	217	31	4.14	2.46	3.18	650	1	0.98	86	1490	< 2	207	0.51	185	< 10	36
05	<0.5	8 <b>.9</b> 5	2190	<0.5	< 2	4.30	0.5	23	251	11	5.11	2.19	3.11	750	1	1.64	121	1810	< 2	120	0.64	239	< 10	52
06	<0.5	9.14	1890	<0.5	< 2	5.34	0.5	22	255	22	4.95	2.01	3.04	740	< 1	1.27	106	1820	< 2	116	0.66	255	< 10	48
07	<0.5	9.85	1640	<0.5	< 2	6.42	0.5	24	269	<b>4</b> 0	5.19	1.77	3.00	860	< 1	1.50	102	1940	< 2	197	0.66	277	< 10	54
08	<0.5	9.41	1990	<0.5	< 2	5.26	1.0	24	252	21	5.22	2.07	3.21	905	< 1	1.41	114	1990	< 2	119	0.69	262	< 10	52
09	<0.5	6.38	710	<0.5	< 2	0.20	0.5	3	85	22	4.36	1.15	1.25	195	3	0.77	32	<b>54</b> 0	< 2	74	0.32	98	< 10	110
10	<0.5	9.39	2170	<0.5	< 2	4.77	0.5	23	250	14	5.20	2.05	3.04	770	< 1	1.73	109	2020	< 2	128	0.68	258	< 10	54
11	<0.5	9.65	1580	<0.5	< 2	5.68	0.5	24	238	13	4.90	1.72	2.72	865	< 1	1.85	93	1980	< 2	161	0.66	264	< 10	52
12	<0.5	6.80	1060	0.5	2	0.66	0.5	10	157	25	3.29	1.69	1.12	365	2	0.96	50	700	8	122	0.46	139	< 10	112
13	<0.5	6.16	940	<0.5	< 2	0.85	0.5	8	118	11	2.24	1.44	0.94	360	< 1	1.04	33	<b>51</b> 0	8	151	0.44	116	< 10	78
14	<0.5	5.44	790	0.5	4	0.71	0.5	6	95	8	1.88	1.31	0.75	245	1	1.00	26	390	4	139	0.42	93	< 10	54
15	<0.5	5.81	860	<0.5	< 2	0.74	0.5	7	111	11	2.34	1.39	0.94	260	1	0.98	35	510	4	140	0.43	103	< 10	66



# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221



TRIFCO MINERALS LTD.

308 - 751 CLARKE RD. COQUITLAM, BC V3J 3Y3



A9016998

Comments: ATTN: R. TRIFAUX

CERTIFICATE	A9016998

TRIFCO MINERALS LTD.

Project: ISA P.O. #: 4

Samples submitted to our lab in Vancouver, BC. This report was printed on 22-JUN-90.

	SAMPLE PREPARATION								
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION							
205 294 232 238	12 12 11 1	Geochem ring to approx 150 mesh Crush and split (0-10 pounds) PERCHLORIC-NITRIC-HYDROFLUORIC D NITRIC-AQUA REGIA DIGESTION							

ANALYTICAL PROCEDURES					
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100 578 573 575 565 575 562 563 564 576 564 576 568 558 569 577 568 559 572 558 559 572 558 572 573 574 575 576 576 576 576 576 576 576 576 576	111111111111111111111111111111111111111	Au ppb: Fuse 10 g sample Ag ppm: 24 element, rock & core Al %: 24 element, rock & core Ba ppm: 24 element, rock & core Be ppm: 24 element, rock & core Be ppm: 24 element, rock & core Ca %: 24 element, rock & core Cd ppm: 24 element, rock & core Co ppm: 24 element, rock & core Cu ppm: 24 element, rock & core Cu ppm: 24 element, rock & core Cu ppm: 24 element, rock & core K %: 24 element, rock & core Mm ppm: 24 element, rock & core Mn ppm: 24 element, rock & core Na %: 24 element, rock & core Na %: 24 element, rock & core Ni ppm: 24 element, rock & core Pppm: 24 element, rock & core Fppm: 24 element, rock & core Fppm: 24 element, rock & core Ti %: 24 element, rock & core Ti %: 24 element, rock & core Uppm: 24 element, rock & core Ti %: 24 element, rock & core Uppm: 14 Uppm: 24 element, rock & core Uppm: 15 Uppm: 16 Uppm: 17 Uppm: 17 Uppm: 17 Uppm: 17 Uppm: 18	FA-AAS AAS ICP-AES	5 0.01 10 0.5 2 0.01 0.5 1 1 0.01 0.01 0.01 0.01 1 0.01 1 0.01 1 10 2 1 10	10000 200 25.0 10000 10000 10000 10000 10000 10000 25.0 20.0 20.0 10000 10000 10000 10000 10000 10000 10000 10000 10000

- 4:0 GEOCHEMICAL WORKS
- 4:5 Comments on Results

#### <u>Samples # 1 to # 11 - Rocks - (A.A.S.)</u>

Silver - not one rock sample was anomalous in silver

Alumina - (ICP) ten samples are containing more than 9% alumina by ICP - denoting the presence of kaolin.

Barium - (ICP) is highly anomalous with values of 710 ppm to 2,400 ppm.

Beryllium - (ICP) is meaningless

Bismuth - (ICP) is also not representative

Calcium - (ICP) from 0.20 up to 6% 42

Cadmium - (ICP) is not remarkable but coincides with the values present in Zinc, - all over the area.

Chromium - (ICP) 1,870 ppm - anomalous, but this analyses is not concordant with any of the other samples. It seems that the rock is an isolated sample of ultramafic rock and has no context with the survey and is not representative.

Copper - (ICP) the presence of copper is always observed in the samples but is not anomalous.

Iron - (ICP) is always present

Potassium - (ICP)

Manganese - (ICP) is anomalous

Molybdenum - (ICP) is not representative, just one sample above the threshold value of 2 ppm and it is without importance in this survey.

Sodium - (ICP) is represented with values up to 1.85%

- 4:0 GEOCHEMICAL WORKS
- 4:5 Comments on Results (continued)

#### <u>Samples # 1 to # 11 - Rocks - (A.A.S.)</u>

Nickel - (ICP) the high value of 1,455 ppm is without value in

the survey - (some ultramafic isolated rock samples).

Phosphorus - (ICP) is quite high in the clays up to 2,020 ppm.

Lead - (ICP) - no sample anomalous

Strontium - (ICP) is not high

Titanium - (ICP) less than 1% - nothing special

Vanadium - (ICP) less than 500 ppm

Wolfram - (ICP) no anomalous values

Zinc - (ICP) very poorly represented

- 4:0 GEOCHEMICAL WORKS
- 4:5 Comments on Results (continued)

#### Clays

Silver - (AAS) no anomalous value

Alumina - (ICP) up to 6.80%

Bismuth - (ICP) not anomalous

Calcium - (ICP) low in the samples

Cadmium - (ICP) is slightly anomalous - no meaning

Cobalt - (ICP) no meaning here

Chromium - (ICP) no meaning here

Copper - (ICP) no anomalous values, poorly present

Potassium - (ICP) - values up to 1.69%

Molybdenum - (ICP) no meaning

Phosphorus - (ICP) up to 700 ppm

Lead - (ICP) no value anomalous

Strontium - (ICP) is not high

Titanium - (ICP) is not high

Vanadium - (ICP) less than 500 ppm

Wolfram - (ICP) less than 10 ppm

Zinc - only one sample containing the threshold value of 112 ppm

The metals in clays and in rocks are poorly represented in this survey. Sterile zone in Cu, Zn, Mo, Pb and Ag.

- 4:0 GEOCHEMICAL WORKS
- 4:6 Rational Analyses on Clays

The rational analyses for the AL203 content with 17.70 % gave an alumina content of 24.90 % after calculating the % of alumina in the rocks containing potash and sodium feldspar and lime feldspar. The contents of the chemical analyses of this geochemical survey for AL 203 are in order of 6 to 9.41 %. The K20 feldspar is higher in the present survey, but the NA content is lower. The content of AL203 will be low on the southwest side of this research but the presence of AL203 is still worth excavating in the future.

In Cornwall, England 10 % kaolin in the rocks is exploited. Of course, a better processing than the one we do should be done.

The mineral kaolin is making a large spectrum of contribution to the plastic, rubber, paint, paper and ceramic industries. The samples of plastic clay are good for the ceramic industry (elasticity and strength). We believe that the industrial clay will improve lower in the formation. Our processing has been executed on a small scale, to see the possibility of developing small cakes of clays and we have been successful in doing so by:

- 1. Crushing 2. Milling 3. Screening (- 200 mesh)
- 4. Washing 5. Sedimentation 6. Cake

  The color is whitish, it should improve with better preparation and flotation.

- 4:0 GEOCHEMICAL WORKS
- 4:6 Rational Analyses on Clays (continued)

Kaolinization is due to surface weathering by downward percolating waters and is limited to depth and there is a graduation from rock base to the fully weathered product.

A little less than half of the kaolin produced is used for ceramics, the rest being used in textiles, rubber, paper and numerous other industries. Some chemical composition of the clays have been executed in the Vancouver laboratories.

	Typical Kaolinite	Typical Montmorillonite	Deposits in the Cariboo
S102	43.6 - 54.7 %	47.9 - 51.2 %	48.25
AL203	30.0 - 40.2	20.0 - 27.1	17.70
FE203	0.3 - 2.0	0.2 - 1.4	12.05
MGO	0.0 - 1.0	2.1 - 6.6	6.4
CAO	0.03 - 1.5	1.0 - 3.7	9.23
K20	0.0 - 1.5	0.2 - 0.6	1.2
Na20	0.0 - 1.2	0.3 - 0.8	4.1
T102	0.0 - 1.4	that our has now have made and one one one	
H20	11.0 - 14.3	17.1 - 23.7	?

The chemical analyses of the clays in the Cariboo are showing a lot of impurities to be eliminated during their processing. We did some rational analyses of the clay for alumina and they are encouraging.

#### 4:0 GEOCHEMICAL WORKS

#### Rational Analyses on Clays (continued) 4:6

	Molecular Weight
Potash Feldspar (K20)	94.2
A1203	102.2
$S102 (6 \times 60.3)$	<u>361.8</u>
	558.2
Soda Feldspar (Na20)	62.0
A1203	102.2
$S102 (6 \times 60.3)$	<u>361.8</u>
	526.0
(210)	56.1
Lime Feldspar (CAO)	102.2
A1203	
$S103 (2 \times 60.3)$	$\frac{120.6}{278.9}$
	278.9

K20 - 1.20% in laboratory analyses

Alumina content  $-\frac{1.20}{94.2}$ x 102.2 = 1.81 %

Silica -  $\frac{1.18}{94.2}$  x 361.8 = 4.59 %

Na20 - 4.11% in chemical analysis

Alumina content  $-\frac{4.11}{62}$ x 102.2 = 6.74 %

Silica -  $\frac{4.11}{62}$  x 361.8 = 23.87 %

\*\*\*\*

CAO - 9.23% - lime feldspar

Alumina content  $-\frac{9.23}{56.1} \times 102.2 = 16.35 \%$ 

Silica -  $\frac{9.23}{56.1}$  x 120.6 = 19.29 %

4:0 GEOCHEMICAL WORKS

4:6 Rational Analyses on Clays (continued)

Alumina in Rock = 1.81 % 6.74 % 16.35 % 24.90 %

Without rational analyses the alumina content is 17.70 %. rational analyses the distribution analyzed on K20, Na20, CAO gives 24.90 %.

#### Clays

The chemical analyses executed on the samples collected on the Isasa claims are indicating the contents and the presence of clays. This is an extension of the clays found on Wim-Cal and KA No 1 claims.

The fineness and the color vary considerably from one deposit to another and the analyses pin-points the presence of FE203 (iron The powder of the clay is due to eolian action on the surface of the deposits. But the presence of the clay (in gravel, in powder, in rocks) is continuous and extensive.

An observation of the results of the chemical analyses is showing a decrease of the contents of CAO going to the west from 6.40 % to 0.74 %. Also the presence of FE203 is varying considerably from 4.65 % to 1.88 %.

- 4:0 GEOCHEMICAL WORKS
- 4:6 Rational Analyses on Clays (continued)

The K20 feldspars remain nearly the same on all the deposits. Na20 is also remaining approximately to the same value all over. The T102 is mainly in the low percentiles.

The presence of Al203 is diminishing on the Isasa claim, in this last survey. From 17% to 7% average - the grade can improve with depth but the area has to be drilled.

5:0 COST STATEMENTS	
5:1 Recap of Expenses	
R. Trifaux Expenses	
Mileage, meals, lodging & time	\$ 1,523.32
Samples preparation for laboratory	
Microscopic analyses, magnetism, streak type of materials. Drying, crushing clay and sieving. 8 hrs x \$20	160.00
Samples transportation to laboratory and P.O.	
40 km x 0.40	16.00
Chemical analyses - laboratories	
Invoice # 19016998 \$ 48.00 Invoice # 19016999 188.75	236.75
Reports	
Drafts & typing \$800.00 Photocopies, maps and sketches 75.30	875.30

\$ 2,811.37

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#### 5:0 COST STATEMENTS

### 5:2 R. Trifaux Expenses

Date	Description	Time	Kms	Meals
26-04-90	90 Departure for Quesnel - lunch at Yale - lodging at Cache Creek			
27-04-90	Cache Creek to Quesnel		680	5.35
27-04-90	Trip to Isasa Claim - lodging at Good Knight Inn		90	22.50
28-04-90	Trip to Isasa Claim - plotting geochem survey - samples taking		100	22.50
29-04-90	Departure for Coquitlam - Cache Creek. Sandman Inn lodging.			
30-04-90	Cache Creek to Coquitlam	8.0	680	
		32.0	1550	50.35
_ C	ood Knight Inn \$ 132.88 ache Creek (one way) 36.72 ache Creek (one way) 36.72 6.65			
	\$ 212.97			

### Recap of R. Trifaux Expenses:

	32 hours x \$20	\$ 640.00
	1,550 kms x 0.40	620.00
	Meals	50.35
	Lodging and meals	212.97
		~
Total		\$ 1,523.32

#### 6:0 STATEMENT OF QUALIFICATIONS

#### EDUCATION

- 1. Tamines School of Mines, Belgium. 2 years diploma
- 2. Chatelineau School of Mines, Belgium. 2 years diploma
- University of Charleroi, Hainaut, Belgium. 1 year mining,
   geology, mining technologies, reports. 1 certificate.

The copies of diplomas and certificates have been presented to the Cariboo Mining Division in Quesnel, B.C. with my 1977-1978 statement of works.

 In 1978 I successfully passed the test of rocks and minerals identification with a mining engineer from the Department of Mines, Robson Square, Vancouver, B.C.

#### **EXPERIENCE**

I have extensive experience in exploration and mining from Zaire (previously Belgian Congo) and from Ruanda - Berundi in Central Africa.

- "La Compagnie Des Grands Lacs Africains" Brussels from Belgium. Minerals mined were cassiterite, columbite, gold and increase of reserves by exploration of benches in the creeks.
- 2. "La Compagnie Mirudi" affiliated company of the "Grands Lacs Africains Company" Brussels, Belgium. (Cassiterite, Colombo tantalites, gold ores). Localities: Mokoro, Musumba, Mutwe-Niamdo.

#### EXPERIENCE (continued)

- 3. Mr. R. Henrion, Explorations Minieres in Central Africa, Busoro, Ruanda on Kivu Lake. (Cassiterites, wolframites, beryllium ores).
- 4. DeBorchgrave Mines d'Etain, Kigali, Ruanda. Open pit, underground mines of cassiterite, columbites.

I was successful in exploring the granitic massif of Central Ruanda-Burundi. I described my method of exploration in the 1977-1978 report (assessment works) related to the distances between lines and pits, flying prospecting and systematic with calculations of zones of influence and reserves in placers. I opened several mines in gold, cassiterite, columbite, plotting and establishing the hydraulic works, worked in open pit and underground. I established topographical maps showing the locations of my discoveries.

I started prospecting in British Columbia in 1959 for gold placer in the Cariboo Mining Division for a company. Today I have claims containing precious metals, base metals and industrial minerals. I do my geochemical surveys in silt, soils and rocks for my reconnaissance and systematic prospecting and orient my works according to the results of such surveys.

Beneficiation studies of some industrial mineral products have been done by the Ontario Research Foundation.

#### EXPERIENCE (continued)

I am a member of the Canadian Institute of Mining and Metallurgy (CIM) and the Chamber of Mines of British Columbia. I buy my literature from the Department of Mines of B.C. and Ottawa and from the Geological Survey of Canada, in Vancouver. I have subscriptions to the Engineering and Mining Journal, CIM Bulletin, Chemical Week and Northern Miner. I keep informed with different publications from private and government organizations.

I consult with professionals and use the most up to date prospecting equipment available to prospectors (topolite, geiger counter, mineral light, stereoscope, small microscope, altimeters, etc.)

I learned very useful information on the industrial minerals from the Ontario Research Foundation, related to talc, graphite, calcium carbonate, wollastonite etc. I am engaged in the research of miscellaneous industrial minerals which will be needed in the following years and the following century.







