

**1997 GEOLOGICAL AND GEOCHEMICAL REPORT**  
**On the**

**KAY 1-16 Mineral Claims**  
**and**  
**PRE 1-18 Mineral Claims**

**093 805**

**WATSON LAKE MINING DISTRICT, Y.T.**

**LATITUDE 61 DEGREES 35'N; LONGITUDE 132 DEGREES 35'W**  
**NTS 105/F-10**

**FOR**

**St Cyr Minerals Ltd.**  
**609-475 Howe Street**  
**Vancouver, B.C**  
**V6C 2B3**

**BY**

**V. Addison**  
**Consulting Geologist**



**Date Submitted - October 1997**  
**Work Period - June 17, 1997 to September 20, 1997**

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 \$ 1600.00.

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

093 805

# ST. CYR MINERALS LTD.

609 - 475 Howe Street  
Vancouver BC V6C 2B3  
Tel: (604) 682-1643  
Fax: (604) 682-1666

October 20, 1997

Watson Lake Mining Recorder  
Watson Lake Mining District  
P.O. Box 269  
Watson Lake, YT Y0A 1C0

VIA FACSIMILE (403) 536-7842

Attention: Patti McLeod

RE: Cost Statement - KAY 1-16



Labour Costs:

G. Macdonald	\$ 400.00
J.P. Loiselle	250.00
B. Macdonald	150.00
D. Godwin	<u>150.00</u>

Total Labour Costs \$ 950.00

Room and Board 400.00

Helicopter Charges 700.00

Rental Truck - 4x4 200.00

Total Costs \$ 2,250.00

Prepared by Glen C. Macdonald  
October 20, 1997

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The purpose of this report is to summarize exploration activities performed on the KAY and PRE mineral claims, held by St Cyr Minerals Ltd, during the 1997 exploration season. The KAY and PRE properties consist of 16 and 18 full sized claims respectively, located in the Watson Lake Mining District within the St Cyr Range of the Pelly Mountains. Access to the claims is possible by four-wheel drive vehicle at kilometer post 162 off the Canol highway 45km south of Ross River.

The properties are characterized by fairly rugged mountains that reach elevations of 6000 ft and broad, vegetated valleys beginning at 4200 ft. Exploration work during 1997 was carried out between the months of June to September and included staking, reconnaissance mapping and preliminary sampling.

The properties are situated on an assemblage of rocks known to host volcanogenic massive sulfide (VMS) deposits. Rock types in the area range from Devonian-Mississippian shale and siltstone to Silurian-Devonian carbonates; Mississippian volcanics of andesite to rhyodacite composition and Jurassic syenite intrusives. This package is thought to be a miogeoclinal succession laid down on the edge of a stable continental platform which underwent doming and subsequent thrust faulting from a buried syenite intrusion. Mineralization in the area is commonly thought to be associated with thrust faulting and includes, massive sulfide deposits, disseminated and vein sulfides, skarn zones and barite rich iron-quartz-carbonate veins. The main thrusts enclosing the property are the Upper Ram and Seagull thrusts.

The KAY claim was mapped at 1:10 000 scale and sampling was performed throughout the property. As a result of this 1997 exploration work, target areas were highlighted and will be followed in 1998 with a drill program. This includes a closer look at the skarn zone and associated gossan zones.

The PRE claim was staked during the 1997 field season following prospecting in the area which outlined a massive sulfide deposit. This zone was known to the Silver Arrow Syndicate when it added boulder float from this area to hand sorted galena taken from the nearby Groundhog Creek Mine in 1979. This particular area of the PRE claim warrants further work - trenching followed by a drill program is recommended.

The initial work program on the PRE and KAY claims has outlined some interesting geochemical anomalies in a promising geological environment. There is good potential for developing the known base metal deposits and for locating additional targets. An exploration program comprised of mapping, drilling and trenching is recommended.

## **2.0**

## **RECOMMENDATIONS**

### **KAY**

1. Map and sample in detail (1:1000) the skarn zone
2. Drill two holes in the skarn zone, down slope (south-southeast) of hole 11-S-7 (Cordilleran Engineering 1998), at a distance of 200m and 400m.

### **PRE**

1. Trench, and sample in detail the massive sulfide zone.
2. Depending on results follow this with a drill program.
3. Map the massive sulfide zone and surrounding area at 1:1000 scale

### 3.1 LOCATION AND ACCESS

The KAY and PRE properties are located in the St. Cyr Range of the Pelly Mountains, south central Yukon. (Map reference N.T.S. 105F/10 – Pass Peak). At latitude 61 degrees 40'N; Longitude 132 degrees 35'W. Approximately 45 km south of Ross River (Figure 1)

The claim blocks are accessible via the South Canol Highway at kilometer post 162. Camp during the 1997 field season was located approximately 10 km up the Ground Hog Creek Road. The claim blocks are situated further up this road which is suitable for four-wheel drive vehicles for the first 28 km. However, the final 10 km is accessible only by A.T.V's, due to rock fall and landslides which have narrowed the road.

### 3.2 PHYSIOGRAPHY AND CLIMATE

The St. Cyr range is characterized by moderately rugged mountains, separated by wide glaciated valleys. Elevations on the PRE and KAY properties vary from 4200 ft to 6000 ft and most mountains on the properties are rounded and broad with low vegetation cover.

Vegetation is thick in the valleys with 90% of the outcrop occurring on ridge tops above elevations of 5000 ft. Vegetation includes fir, spruce, willow, juniper and alder.

Wildlife noted in the area includes: grizzly, fox, marmot, moose, caribou, porcupine, wolverine, groundhog and hunters.

The weather is intensely variable (on an hourly basis) with the best working months being from June to mid-September inclusive.

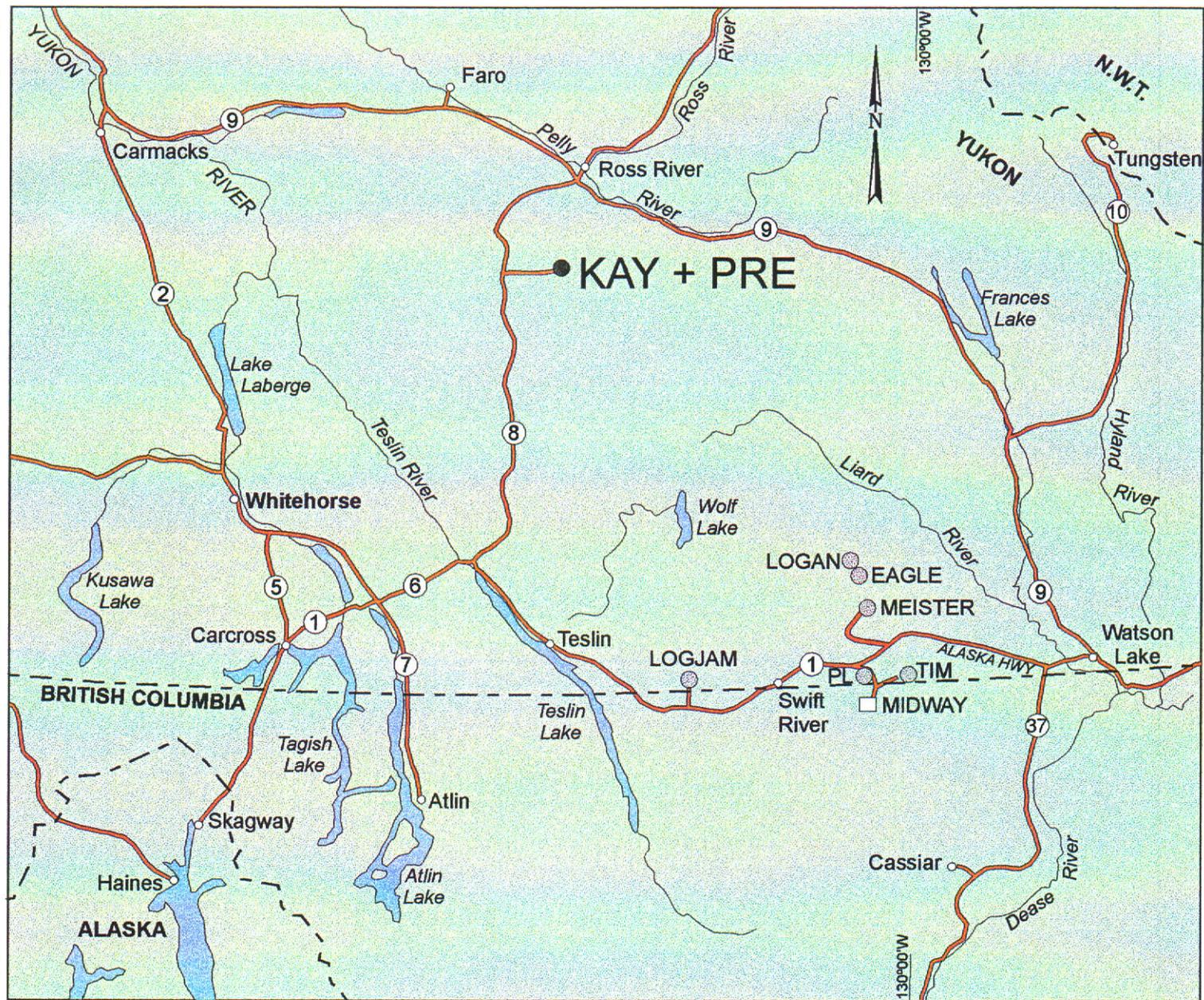
### 3.3 EXPLORATION HISTORY

Previous exploration on and around the PRE and KAY claims has been conducted intermittently by various mining companies since 1955

Specifically in 1979 the Silver Arrow Syndicate added massive sulfide float found on the Pre to 1,090 tons of hand sorted galena from its' Groundhog Creek Mine.

During the years 1987-1988, Cordilleran Engineering for Fairfield Minerals Ltd. conducted mapping, sampling, geochemistry and drilling on the PRE and KAY claims.

The KAY claim was staked for Houdini Gold in 1995 and optioned to St Cyr Minerals in 1997. The PRE was staked for St Cyr Minerals Ltd. in 1997.



ST CYR MINERALS LTD.

# KAY + PRE PROPERTY LOCATION MAP

20 0 10 20 30 40 Miles

30 0 30 60 Kilometres

TerraCAD Drafting Services Ltd.  
405-455 Granville  
Vancouver B.C. V6C 1T1  
97321.cdr

October 1997

Figure 2

### 3.4 1997 EXPLORATION

During the 1997 field season, preliminary sampling and reconnaissance mapping (1:10 000 scale) were carried out around the KAY property, as well as prospecting adjacent to the existing claim block. (See Map 1 for geology, Appendix 'A' for assay results and section 5.0 Mineralization for a discussion of the said results).

The prospecting revealed a promising VMS zone north of the KAY property. As a result 18 claims adjoining the KAY were staked and named the PRE claim block.

Following staking the PRE property was then sampled and mapped at 1:10 000 scale. This work revealed some promising areas (Map 1), requiring further sampling, detailed mapping, trenching and drilling to ascertain their potential.

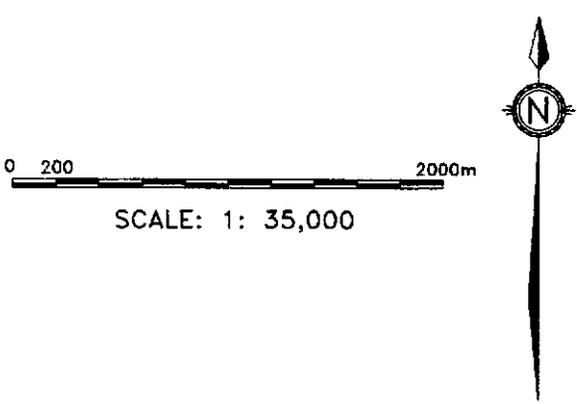
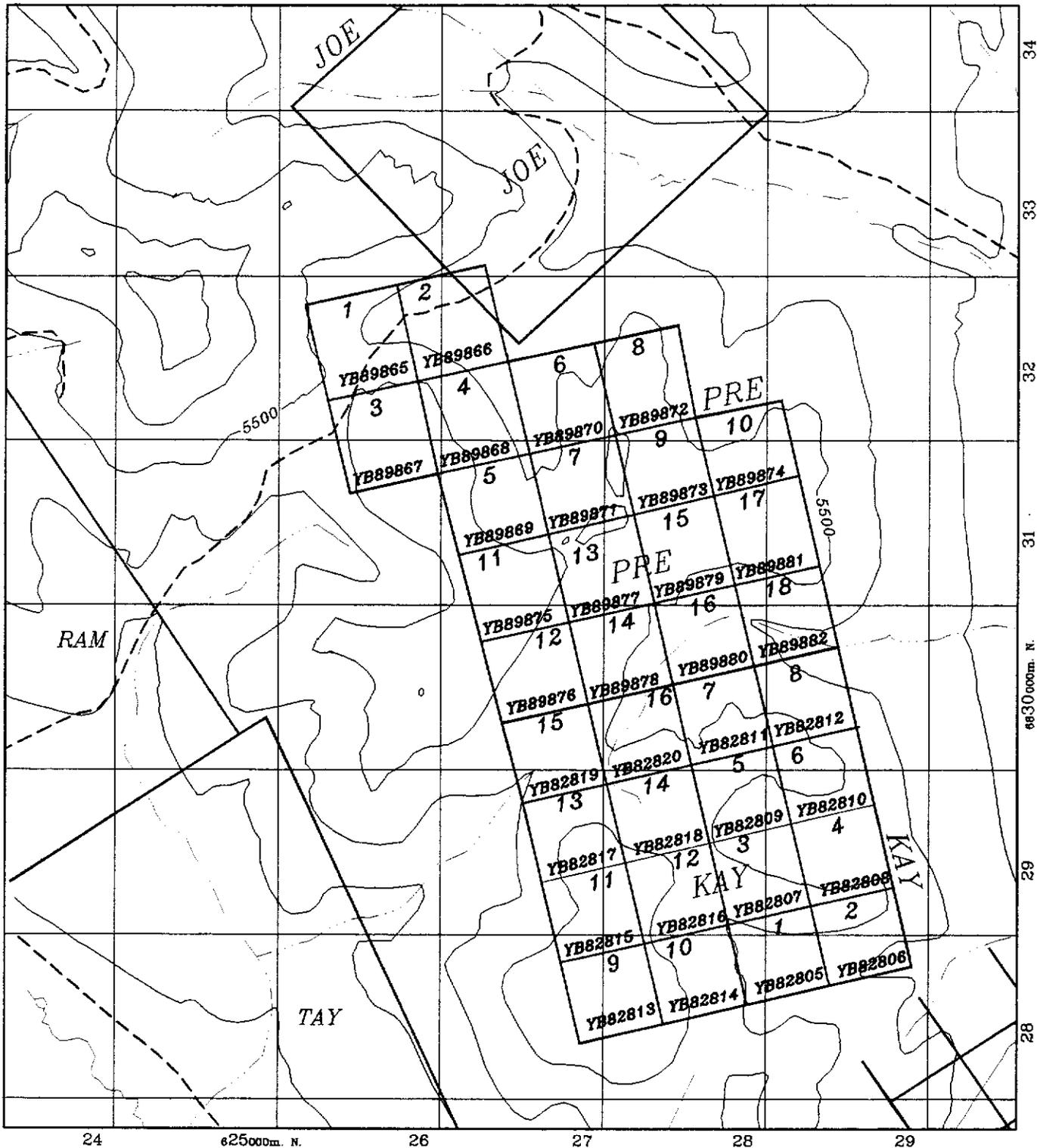
### 3.5 CLAIM DATA

The PRE property consists of 18 full sized claims that were staked for St Cyr Minerals Ltd in August 1997. Claim locations have not yet been surveyed. The KAY property consists of 16 full sized claims, first staked for Houdini Gold in August 1995 and optioned to St Cyr Minerals Ltd in 1997. The properties are located in the Watson Lake Mining District in the south central Yukon.(Map reference 105 f/10).

#### CLAIM STATUS

<u>Claim</u>	<u>Grant Numbers</u>	<u>Expiry Date</u>
PRE # 1-18	YB 89865-YB 89882	4 <sup>th</sup> September 1998
KAY #1-16	YB 82805-YB 82819	18 <sup>th</sup> April 1997*

\*Recent work on the claim will extend the validation date.



COMPANY:		<b>ST CYR MINERALS LTD.</b>	
DRAWING TITLE:		<b>KAY AND PRE CLAIM LOCATION</b>	
LOCATION:		<b>Yukon Territory</b>	
DATE:	OCTOBER 1997	SCALE:	1 : 30,000
DRAWN:	TerraCAD 97352	GEOLOGIST:	V. ADDISON
DATA:	NTS 105 F-10	FIGURE:	<b>2.</b>

## **4.2 PROPERTY GEOLOGY.**

Property geology is summarized on Map 1 at 1:10 000 scale. Property lithologies are listed in Table 3.

### **KAY PROPERTY**

The major unit on the property is the Upper Devonian-Mississippian black shale. This unit is in the main unmineralized; however, it is closely associated with Mississippian felsic and intermediate flows and is highly siliceous in places with minor sulfides, mostly pyrite. The Mississippian flows occur as random outcrops at various locations around the property (Map 1.) and contain pyrite, arsenopyrite, chalcopyrite and calcite veins. The northeast corner contains Devonian carbonates, parts of which have been metamorphosed to skarn, and hosts numerous small gossan zones often with massive sulfides. Previous drilling in the skarn zone has shown that the skarn area stratigraphy consists of unaltered calcareous Mississippian crystal and lapilli tuffs and tuffaceous siltstone. At depth these become more siliceous until they resemble quartzite. Skarn follows this, consisting of siliceous (pink) and chloritic (green) alternating bands with variable mineralization of pyrrhotite, pyrite (>10%) and minor magnetite. Calcareous green skarn typically underlies the mineralization and a marble horizon was intersected beneath the calcareous skarn and has been noted as outcropping on the property but it was not located during the 1997 season. The carbonate and overlying tuffs strike north/northeast to northwest and dip 30-45 degrees to the west. The skarn zones are relatively flat-lying.

In addition, quartz veins are common on the property and often contain additional mineralization such as siderite and barite.

### **PRE PROPERTY**

This property has extensive Mississippian intermediate and felsic flows containing disseminated pyrite and iron-quartz-carbonate veins with barite and galena. North south trending ridges of black shale are closely associated with the Mississippian volcanics and are relatively unmineralized. Undifferentiated Devonian carbonates (limestone and dolomite) outcrop on the northern section of the property and again on the southwestern corner where they have been metamorphosed to skarn zone facies. Some marble (?) occurs in close association with felsic flows in the northwestern corner where felsic flows host a massive sulfide deposit associated with a gossan zone. Evidence for the gossan zone extends 300 m across slope and is thought to dip southwest into the hill.

Figure 3

		<b>PROPERTY LITHOLOGIES</b>	
<b>GSC</b>	<b>map</b>	<b>AGE</b>	<b>LITHOLOGY</b>
	9	<b>Jurassic</b> Latite dykes and sills	Blocky weathering, dark grey-green latite dykes and sills; often bleached and clay altered; local magnetite.
My	8	<b>Jurassic</b> syenite	Resistant, massive, coarse to medium grained equigranular syenite; fine grained trachyte border phase.
Mva	7	<b>Mississippian</b> undifferentiated volcanic rocks	Heterogenous, rusty orange to brown weathering flows, tuffs and local volcanic breccias ranging from andesite to rhyodacite in composition; dark grey argillaceous to phyllitic shale locally abundant,
	7a	Intermediate flows, crystal and lapilli tuffs	Intermediate flows, crystal tuffs and lapilli tuffs, blocky medium to dark green-brown weathering, andescite composition.
	7b	Felsic flows and tuffs	Felsic lows and tuffs, rusty light grey to buff weathering, pyritic and siliceous, rhodacite composition; includes minor crystal lapilli tuff (7c) and flow banded rocks (7d).
	7e	siltstone and shale	Siltstone and shale, locally phyllitic, minor slate, chert and greywacke, grey to green-brown weathering, may include undifferentiated rhyodacite.
uDMS	6	<b>Upper Devonian-Mississippian</b> Shale and slate	Shale and slate, black to dark grey, very fine grained recessive weathering thin bedded siliceous shale and slate with minor "cherty" interbeds, locally phyllitic.
muDc	5a	<b>Middle-Upper Devonian</b> Limestone	Limestone; resistant, dark grey to black, medium to thin bedded limestone, locally fetid, locally rich in bioclastic debris.
SDd	5b	<b>Silurian and (?) Lower Devonian</b>	Dolomite resistant, medium to dark grey weathering fossiliferous black dolomite.
SDdl	4	Dolomite	Dolomite, resistant, thick bedded to massive, buff to tan weathering sucrose silty dolomite, thin reticulated quartz veins
Sq	3	<b>Silurian</b> Orthoquartzlite	Orthoquartzlite resistant, white to light grey weathering, medium to thick bedded, medium grained orthoquartzlite, locally with dolomite cement or interbeds, locally sericitic; locally appears to have a limestone component (3a).
uCOsl	2	<b>Upper Cambrian(?) and Ordovician</b> Phyllite	Phyllite; recessive; medium grey to black, chlorite and slaty phyllite, graphitic schist and minor graptolitic slate, all locally calcareous.
ICcl	1	<b>Lower Cambrian(?)</b> Limestone	Limestone; interbedded, thin to medium dark grey limestone; calcareous phyllite, green-grey tuffs and variably calcareous phyllitic tuffs minor locally calcareous black shale.

Adapted from Cordilleran Engineering report (1987)

## **5.0 MINERALIZATION**

Detailed prospecting of the PRE and KAY revealed mineralization throughout the properties and highlighted known and new target areas. The favourable geology of the area coupled with past exploration and 1997 assay results indicates a possible economic base metals deposit on the PRE. Work planned for 1998 will further delineate target areas. The mineralization found is summarized below. (See Map 1. for sample locations, Table 1. for sample descriptions, Table 2. for property lithologies and Appendix A for analytical results).

### **KAY PROPERTY**

- Black shale, often silicic with weak sulfide mineralization, pyrite and chalcopyrite.
- Intermediate flows, with quartz veins and calcite on joint planes, display sericite/chlorite alteration in bleached silicic zones.
- Quartz-carbonate veins often associated with either barite or siderite.
- Felsic flows with calcite veining, altered and silicified with small gossan zones containing disseminated pyrite and minor chalcopyrite.
- Skarn zones within silty dolomites and limestones. Mineralization includes magnetite, pyrrhotite and pyrite, (>10%) which forms irregular veinlets.
- Gossan zones, purple to black and very heavy with sulfides including pyrrhotite, pyrite, chalcopyrite (> 75%) and bournite.

### **PRE PROPERTY**

- Iron-quartz-carbonate veins variably with barite, magnetite, siderite, magnesite and sulfides – pyrite, pyrrhotite, galena and chalcopyrite
- Gossan zones with massive sulfides (>75%), arsenopyrite, pyrite, chalcopyrite, pyrrhotite and galena and bournite, (VMS).
- Silty dolomite-limestone and /or calcareous felsite with recessive weathering including sulfides, pyrite, (1cm cubes) and galena with minor azurite/malachite.

**TABLE 1.- KAY PROPERTY SAMPLE DESCRIPTION**

<b>SAMPLE</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>
KAY 1.	8 6 281 13 V 68 291 49	Silicic black shale with calcite veins and minor quartz/barite veins.
KAY 1A.	8 6 281 13 V 68 291 49	Gossan zone with chalcopyrite and arsenopyrite
KAY 2.	8 6 268 66 V 68 291 40	Intermediate flow, quartz and barite veins with sericite alteration.
KAY 3.	8 6 269 81 V 68 286 05	Quartz-siderite-carbonate vein,pyrite cubes and disseminated chalcopyrite and pyrite
KAY 4.	8 6 268 90 V 68 283 06	Gossan zone within altered andesitic material.Disseminated pyrite.
KAY 5.	8 6 272 91 V 68 289 06	black shale, limonitic weathering with extensive quartz veins.
KAY 6.	8 6 271 26 V 68 283 46	Within an intermediate flow a silicified bleached zone with quartz veins and minor calcite and chlorite/sericite alteration
KAY 7. KAY 8 KAY 9.	8 6 282 05 V 68 284 80	Composite sample: Taken every 10-20m from UTM coordinate Felsic flow, silicic, calcite veining and chloritic.Small gossan zones with disseminated pyrite and minor chalcopyrite.
KAY 10.	8 6 274 95 V 68 294 65	Gossan zone, purple-black, heavy, limonite and hematite rich Sulfides > 75%, pyrite, chalcopyrite and pyrrhotite.
KAY 11	8 6 275 95 V 68 294 65	Silicified carbonate with zones of recrystallization, pyrite <10% black to white in colour.
KAY 12	8 6 278 40 V 68 296 00	Gossan zone within silicic carbonate with minor pyrite.
KAY 13	8 6 278 40 V 68 296 00	Base of gossan zone from above appears to be silicic black shale.
KAY 14	8 6 278 52 V 68 298 57	Strongly silicified carbonate, broad alteration zone at base of marl.
KAY 15	8 6 279 16 V 68 300 59	Altered carbonate, silicic with < 10 % pyrite.
KAY 16.	8 6 279 10 V 68 289 75	Skarn, bournite and pyrite.

**TABLE 1.-CONT. KAY PROPERTY SAMPLE DESCRIPTION**

<b>SAMPLE</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>
KAY 17.	8 6 278 01 V 68 306 61	Sandy limestone with pyrite.
KAY 18	8 6 279 30 V 68 300 97	Limestone with minor pyrite
KAY 19	8 6 280 12 V 68 302 67	Altered limestone, pyrite < 10%. Gossan weathering.

**NOTE;**All locations in UTM GPS coordinates.

**TABLE 1. CONT. PRE PROPERTY SAMPLE DESCRIPTION**

<b>SAMPLE</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>
PRE 1.	8 6 268 06 V 68 306 60	Weathered granular sulfides in silty dolomite(?) includes pyrite and galena also malachite/azurite.
PRE 2.	8 6 268 06 V 68 306 60	Quartz-carbonate vein with magnetite(?).
PRE 3.	8 6 269 87 V 68 308 14	Quartz - siderite vein with pyrite cubes >5mm disseminated pyrite, chalcopyrite, galena, magnesite.
PRE 4.	8 6 278 82 V 68 310 94	gossan zone in highly altered intermediate flow. Disseminated sulfides >50% pyrite and arsenopyrite
PRE 5.	8 6 266 45 V 68 310 14	Light grey, sucrose texture, disseminated pyrite, calcite. small gossan zone of silicic material with vein pyrite.
PRE 6.	8 6 269 73 V 68 315 63	Felsic flow with iron-quartz veins, magnetite chalcopyrite also barite.
PRE 7.	8 6 268 19 V 68 307 20	Quartz-carbonate-barite vein with galena.
PRE 8.	8 6 274 55 V 68 307 55	Altered felsic flow, limonitic weathering, quartz rich carbonate rich.
PRE 9.	8 6 271 00 V 68 307 10	Silty dolomite.
JAC 6.	8 6 255 99 V 68 316 22	Felsic flow within black shale, disseminated pyrite.
JAC 7.	8 6 258 00 V 68 317 22	Black shale with strong limonitic weathering and pyrite.
JAC 8	8 6 259 83 V 68 317 22	Quartz-carbonate vein float, limonitic weathering.
JAC 9.	8 6 257 50 V 68 318 97	Carbonate (magnesite) vein float sample.
JAC 10	8 6 257 63 V 68 317 58	Massive sulfides, pyrite, arsenopyrite, chalcopyrite in a gossan float boulder- 50x15 cm
JAC 11.		See above.
JAC 12.	8 6 259 00 V 68 318 50	Gossan zone containing massive sulfides closely associated with a magnesite vein.

**TABLE 1. CONTINUED PRE SAMPLE DESCRIPTION**

<b>SAMPLE</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>
JAC 13.	8 6 259 00 V 68 318 50	Magnesite vein
JAC 14.	8 6 263 06 V 68 304 60	Minor pyrite in black shale
JAC 22	8 6 256 11 V 68 315 84	felsite.

**NOTE:**All locations in UTM GPS coordinates.

## CERTIFICATE

I, VICKI ADDISON, of the city of Vancouver in British Columbia , Hereby Certify :

1. That I am a consulting geologist and that I participated in the work program reviewed in this report .
2. That I am a graduate of the University of Canterbury , Christchurch , New Zealand (BSc Geology 1992) .
3. That I have been engaged in mineral exploration for two years both in Western Australia and the Yukon .
4. That I have no interest in St Cyr Minerals Ltd. or any of it subsidiaries.

SIGNED at Vancouver , B.C , This 30<sup>th</sup> day of October 1997 .



V.E Addison , BSc Geol.

ABBOTT, J.G.:

- 1986: Epigenic Mineral Deposits of Ketzá-Seagull District, Yukon; in Yukon Geology, Vol.1, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, pp. 55-66..

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- 1988: Summary Report of Exploration on the Ram Property for Fairfield Minerals Ltd. and Equity Silver Mines Ltd., Vancouver, B.C.

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- 1988: Press Release dated October 12, 1988: Vancouver Stockwatch.

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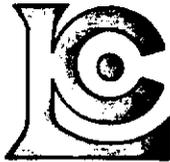
WHEELER J.O., GREEN, L.H., RODDICK, J.A.:

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## **APPENDICES**

### **APPENDIX A**

#### **ANALYTICAL RESULTS**



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

609 - 475 HOWE ST.  
 VANCOUVER, BC  
 V6C 2B3

Project : JOE PROPERTY  
 Comments: ATTN: VICKI ADDISON

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 30-SEP-97  
 Invoice No. : I9743516  
 P.O. Number :  
 Account : OYR

## CERTIFICATE OF ANALYSIS

### A9743516

SAMPLE	PREP CODE	Au g/t FA+AA	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	As ppm				
KAY 1	205 226	0.030	27	< 1	15	< 0.2	18				
KAY 1A	205 226	0.060	790	< 1	10	< 0.2	28				
KAY 2	205 226	< 0.005	35	< 1	48	< 0.2	1				
KAY 3	205 226	< 0.005	13	28	42	< 0.2	2				
KAY 4	205 226	< 0.005	62	5	189	< 0.2	2				
KAY 5	205 226	< 0.005	54	54	192	< 0.2	1				
KAY 6	205 226	< 0.005	22	10	71	< 0.2	6				
KAY 7	205 226	< 0.005	128	6	4	< 0.2	24				
KAY 8	205 226	< 0.005	70	5	11	< 0.2	14				
KAY 9	205 226	< 0.005	28	< 1	20	< 0.2	2				
KAY 10	205 226	< 0.005	800	< 1	20	< 0.2	1				
KAY 11	205 226	< 0.005	16	< 1	11	< 0.2	2				
KAY 12	205 226	< 0.005	42	< 1	18	< 0.2	4				
KAY 13	205 226	< 0.005	32	< 1	6	< 0.2	94				
KAY 14	205 226	< 0.005	330	3	30	< 0.2	1				
KAY 15	205 226	< 0.005	60	4	37	< 0.2	8				
KAY 16	205 226	0.020	1500	31	550	0.5	1				
KAY 17	205 226	< 0.005	17	40	93	< 0.2	14				
KAY 18	205 226	< 0.005	15	2	9	< 0.2	1				
KAY 19	205 226	< 0.005	62	4	24	< 0.2	12				

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To:

609 - 475 HOWE ST.  
 VANCOUVER, BC  
 V6C 2B3

Project : JOE PROPERTY  
 Comments: ATTN: VICKI ADDISON

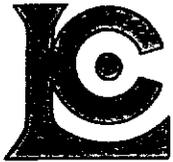
Page Number : 1  
 Total Pages : 1  
 Certificate Date: 29-SEP-97  
 Invoice No. : 19743536  
 P.O. Number :  
 Account : OYR

## CERTIFICATE OF ANALYSIS

A9743536

SAMPLE	PREP CODE	Au g/t FA+AA	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	As ppm				
PRE 1	205 226	< 0.005	56	11	5800	< 0.2	22				
PRE 2	205 226	< 0.005	13	12	36	< 0.2	1				
PRE 3	205 226	< 0.005	2650	495	400	< 2.0	2				
PRE 4	205 226	< 0.005	130	38	104	< 0.2	1				
PRE 5	205 226	< 0.005	50	6	49	< 0.2	6				
PRE 6	205 226	< 0.005	>10000	24	>10000	50.0	1				
PRE 7	205 226	< 0.005	46	>10000	1000	60.0	1				
PRE 8	205 226	< 0.005	146	77	128	0.3	22				
PRE 9	205 226	< 0.005	8	265	42	< 0.2	1				
PRE 20	205 226	0.100	1000	2	16	0.5	>10000				

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221 FAX: 604-984-0218

To:

609 - 475 HOWE ST.  
VANCOUVER, BC  
V6C 2B3

Project : JOE PROPERTY  
Comments: ATTN: VICKI ADDISON

Page Number : 1  
Total Pages : 1  
Certificate Date: 02-OCT-97  
Invoice No. : I9744840  
P.O. Number :  
Account : OYR

## CERTIFICATE OF ANALYSIS

A9744840

SAMPLE	PREP CODE	Cu %	Pb %	Zn %	As %						
PRE 6	244 --	3.57	-----	2.45	-----						
PRE 7	244 --	-----	9.05	-----	-----						
PRE 20	244 --	-----	-----	-----	6.00						

CERTIFICATION:



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To:

609 - 475 HOWE ST.  
 VANCOUVER, BC  
 V6C 2B3

Project :  
 Comments: ATTN: VICKI ADDISON

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 20-AUG-97  
 Invoice No. : 19737244  
 P.O. Number :  
 Account : PFY

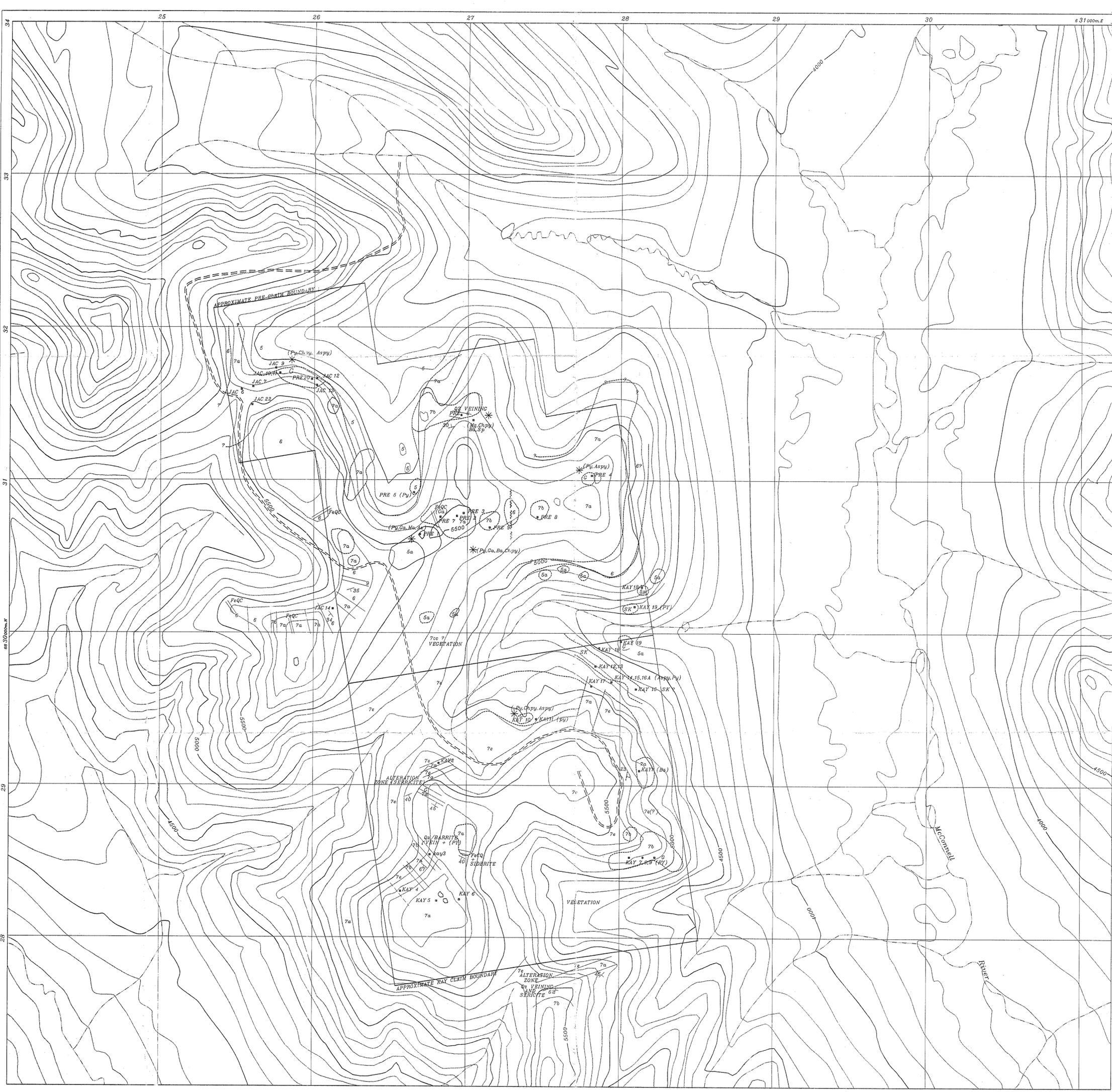
## CERTIFICATE OF ANALYSIS

### A9737244

SAMPLE	PREP CODE	Au ppm FA+AA	Au oz/T calc.	Ag oz/T	Cu %	Pb %	Zn %	As %			
JAC-06	208 226	< 0.005	<0.0005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
JAC-07	208 226	0.010	<0.0005	0.03	0.01	< 0.01	< 0.01	< 0.01			
JAC-08	208 226	0.020	0.0006	0.03	0.02	0.01	0.05	< 0.01			
JAC-09	208 226	< 0.005	<0.0005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
JAC-10	208 226	0.150	0.0044	0.34	0.20	0.20	0.07	3.49			
JAC-11	208 226	0.140	0.0041	0.25	0.20	0.06	0.01	5.41			
JAC-12	208 226	0.390	0.0114	2.22	0.19	0.21	< 0.01	10.35			
JAC-13	208 226	< 0.005	<0.0005	< 0.01	< 0.01	< 0.01	< 0.01	0.03			
JAC-14	208 226	< 0.005	<0.0005	0.01	< 0.01	< 0.01	0.03	0.01			

CERTIFICATION:

*Sard / Letina*



**LEGEND**

**LITHOLOGY**

**JURASSIC + YOUNGER ?**

- 9 LATTITE DYKES and SILLS; Blocky weathering, dark grey - green; often bleached and clay altered; local magnetite.
- 8 SYENITE; resistant, massive, coarse to medium grained, equigranular; fine grained trachyte border phase.

**MISSISSIPPIAN**

- 7 UNDIFFERENTIATED VOLCANIC ROCKS; Heterogeneous, rusty orange to brown weathering flows, tuffs and local volcanic breccias ranging from andesite to rhyodacite; dark grey argillaceous to phyllitic shale locally abundant.
- 7a INTERMEDIATE FLOWS, CRISTAL and LAPILLI TUFFS; Blocky, medium to dark green - brown weathering, andesite composition.
- 7b FELSIC FLOWS and TUFFS; Rusty to light grey to buff weathering, pyritic and siliceous; rhyodacite composition; includes minor crystal lapilli tuff (7d) and flow - bedded rocks (7d)
- 7c SILTSTONE and SHALE; Locally phyllitic; minor silt, chert and greywacke; grey to green - brown weathering; may include undifferentiated rhyodacite.

**DEVONIAN - MISSISSIPPIAN**

- 6 SHALE and SLATE; Black to dark grey, recessive weathering, thin bedded, siliceous; locally phyllitic; minor "cherty" interbeds.

**DEVONIAN**

- 5 LIMESTONE and DOLOMITE, UNDIFFERENTIATED
- 5a LIMESTONE; Resistant, dark grey to black, medium to thin bedded locally fossiliferous, locally rich in bioherm debris

**SILURIAN - DEVONIAN**

- 5b DOLOMITE; Resistant, black, medium to dark grey weathering, fossiliferous.
- 4 DOLOMITE; Resistant, buff to tan weathering, sacroce, silty, thick bedded to massive, commonly with reticulated quartz veins.

**SILURIAN**

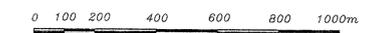
- 3 ORTHOQUARTZITE; Resistant, tan to light grey weathering, medium grained, locally with dolomite interbeds or cement, locally sericitic; locally appears to have a limestone component (3a).
- 2 UPPER CAMBRIAN (?) - ORDOVICIAN PHYLITIC; Recessive, medium grey to black, chloritic and slaty; includes gneissic schist and minor gneissitic slate; all locally calcareous
- 1 LOWER CAMBRIAN (?) LIMESTONE; Dark grey, thin to medium bedded; interbedded with calcareous phyllite, green - grey tuffs and variably calcareous phyllitic tuffs; minor locally calcareous black shale.

**SYMBOLS**

- Geological Contact, known, inferred
- Thrust Fault
- Normal Fault
- Bedding, Foliation, with Dip
- Vein
- Outcrop
- Rock Sample with Tag Number
- Road or Cat trail
- Contour (Interval = 500 feet)
- NAMED SHOWING or MINERAL ZONE
- Grt, Sp, Bt Gelsin, Sphalerite, Barite
- Py, Chp, Asp Pyrite, Chalcopyrite, Arsenopyrite
- Mg Magnetite
- Ag, Au Silver, Gold
- Pb, Zn Lead, Zinc
- FeQC Iron - Quartz - Carbonate - Vein

093 805

**NOTE :**  
Topography from N.T.S. 105F 9/10 1:50,000 map sheets  
Complete results for rock samples in report appendix



COMPANY:	ST CYR MINERALS LTD.		
DRAWING TITLE:	BASE MAP KAY AND PRE PROPERTY GEOLOGY		
LOCATION:	YUKON TERRITORY		
DATE:	OCTOBER 1987	SCALE:	1 : 10000
DRAWN:	TerraCAD 97333	GEOLOGIST:	V. ADDISON
CATA:		DRAWING:	KAY PROPERTY