

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORTS

DATE RECEIVED  
NOV 27 1995

**1995 TRENCHING REPORT  
ON THE SWAN MINERAL CLAIMS**

Similkameen Mining Division, B.C.  
Latitude 49° 39'N; Longitude 120° 27'W.  
NTS: 92H/9W,10E

November, 1995 (BC ASSESSMENT REPORT)

REPORT DISTRIBUTION

Government: 2  
Fairfield : 1  
Field : 1  
Original : 1

FILMED

Total : 5 reports

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

24,120

**1995 TRENCHING REPORT  
ON THE SWAN MINERAL CLAIMS**

Similkameen Mining Division, B.C.  
Latitude 49° 39'N; Longitude 120° 27'W.  
NTS: 92H/9W,10E

**By**

**J. D. Rowe, P. Geo.**

**FAIRFIELD MINERALS LTD.  
1980-1055 W. Hastings St.  
Vancouver, B.C. V6E 2E9**

**Date Submitted: November, 1995  
Field Period: June 12 - October 7, 1995**

## TABLE OF CONTENTS

		Page
1.0	<b>SUMMARY AND CONCLUSIONS</b> .....	1
2.0	<b>RECOMMENDATIONS</b> .....	3
3.0	<b>INTRODUCTION</b> .....	4
3.1	Location and Physiography .....	4
3.2	Claim Data .....	4
3.3	History .....	7
3.4	1995 Exploration Program .....	7
4.0	<b>GEOLOGY</b> .....	8
4.1	Regional Geology .....	8
4.2	Property Geology & Mineralization.....	8
5.0	<b>TRENCHING</b> .....	8
5.1	Trench Operations .....	8
5.2	Trench Results .....	9
6.0	<b>PROSPECTING</b> .....	12
7.0	<b>PERSONNEL</b> .....	15
8.0	<b>STATEMENT OF EXPENDITURES</b> .....	16
9.0	<b>REFERENCES</b> .....	17
10.0	<b>STATEMENT OF QUALIFICATIONS</b> .....	18
11.0	<b>ANALYTICAL RESULTS</b> <b>1995 Trenching and Prospecting Samples</b>	

### TABLES

Table 1	Claim Status .....	4
Table 2	1995 Trench Summary .....	9
Table 3	Prospecting Samples .....	14

### FIGURES

Figure 1	Property Location & Regional Geology Map .....	5
Figure 2	Claim and Trench Locations .....	6
Figure 3	Trench SW95-1 .....	10
Figure 4	Rampart Canyon Trenches and Roads .....	13

### PLATES (in pocket)

		<u>Scale</u>
Plate 1	Trench SW95-2 .....	1:50
Plate 2	Trench SW95-3 .....	1:50
Plate 3	Trench SW95-4 .....	1:50

## 1.0 SUMMARY AND CONCLUSIONS

The Swan Property, located 22 kilometres north of Princeton, BC., comprises nine claims (99 units) in the Similkameen Mining Division. The claims, staked during 1989, 1990 and 1991 are owned 100 percent by Fairfield Minerals Ltd.. Exploration in 1995, which targeted gold and copper mineralization, was conducted by Company personnel.

Logging roads provide excellent access to most of the property. The physiographic setting consists of a moderately steep west-dipping slope extending to Rampart creek and a narrow north-trending ridge between Rampart and Summers creeks. The area is extensively covered by a thin sheet of glacial overburden. Steep-sided creek canyons present some difficult terrain on the southwest claims.

Previous exploration by others in the property area included prospecting, mapping, soil sampling, geophysics, trenching, percussion drilling and diamond drilling. At the Axe deposit, 3 km to the west, extensive exploration in the 1970's indicated potential for a large tonnage of low grade copper mineralization.

In 1989 the Company collected grid soil samples on the northwestern part of the property (Swan 1 and 3) which were analyzed for gold, silver, copper and zinc.

In 1990 grid soil sampling of the eastern (Swan 2 and 4) and southern (Swan 5) portions of the property was undertaken followed by detailed fill-in sampling around anomalous sites.

The 1991 program involved wide-spaced soil sampling of the southwestern claims (Swan 6-11) with samples analyzed for copper and gold. This brought the cumulative total to 4,000 samples.

In 1994 a total of 516 soil samples were collected and analyzed for gold only. Most of the samples were from the southwestern claims (Swan 6-11). A few samples were collected in other areas from fill-in grids around previously defined anomalous sites.

In 1995, four trenches and one test pit explored gold geochemical anomalies in the northern and central parts of the property. On the Swan 7 claim, in the southwest, prospecting and sampling of old trenches and roadcuts was undertaken.

The Swan property overlies the contact between a Late Cretaceous granite pluton and an Upper Triassic assemblage of volcanic, sub-volcanic and sedimentary rocks. A short distance to the west, on the Axe property, significant amounts of chalcopyrite, with pyrite and magnetite, are disseminated in strongly fractured and altered volcanic and sub-volcanic rocks.

The 1995 Swan trenches failed to reveal any significant gold mineralization. They predominantly exposed weakly altered intrusive and volcanic rocks cut by abundant thin clay shears and occasional thin quartz-limonite veinlets. In trench SW 95-3 most samples of the limonitic clay and quartz stringers returned anomalous levels of zinc, ranging from 0.1% to 0.3%. In trench SW95-4 similar shears returned values of up to 2.3% zinc and 1.0% lead. Reconnaissance samples from old trenches on the Swan 7 claim revealed some significant copper mineralization with anomalous gold values in highly fractured limonitic volcanics near an intrusive contact. A 3.8 metre chip sample returned 1.0% Cu, 6.1 ppm Ag and 57 ppb Au. A grab sample ran 0.6% Cu and 2260 ppb Au.

The 1995 trenching program indicated little potential for economic gold mineralization in the areas trenched. It is probable that the anomalous gold soil geochemistry is caused by proximity to small quartz-sulfide stringers which have returned gold values of similar magnitude to those in the soil. On the southwest part of the property the old trench area has potential to host a large deposit of low to moderate-grade copper with associated gold values in strongly fractured volcanic and intrusive rocks. The surface exposures are highly oxidized, containing limonite and malachite mineralization. The possibility exists for enrichment at depth below the zone of oxidation. This area, which encompasses anomalous copper, gold geochemistry and alteration in surface exposures, measures over 500 metres in diameter and has the capacity to contain a deposit totalling in excess of 100 million tons. Further exploration for copper and gold mineralization in this area of the property is definitely warranted.

\*\*\*\*

## 2.0 RECOMMENDATIONS

Further detailed evaluation of the copper, gold potential in the old trench area along Rampart canyon on Swan 7 claim is recommended. Fill-in soil geochemical sampling should be conducted at 50m by 50m spacings to better define the extent of the indicated copper, gold anomaly. This would entail collecting approximately 150 samples. Previously collected soils in this area which were analyzed for gold only should be removed from storage and analyzed for copper. This involves approximately 80 samples.

Trench and road cut exposures should be geologically mapped with emphasis on mineralization, alteration and structural control. Rock chip and channel sampling should be undertaken in mineralized areas of the trenches.

Geophysical test surveys may be warranted to determine magnetic or conductive trends which could be associated with mineralization or features controlling mineralization. A north-south survey grid coincident with the geochemical stations is preferable, however if northerly-trending structures are indicated an east-west grid may be more appropriate. Five one-kilometre lines at 100 metre spacings should provide an adequate test of geophysical responses to determine if additional surveying is justified. The steep slopes down to Rampart creek, at angles of up to 50 degrees, may prohibit testing of some areas.

Reverse circulation drilling may be warranted to explore for enriched copper mineralization at depth and to test the hypothesis of northwest-trending structures controlling mineralization. The highly fractured and oxidized nature of the rock makes it more amenable to reverse circulation drilling as opposed to diamond drilling. Drill holes located along the upper (western) trench/road, angled to the northeast and drilled to depths of 200 to 300 metres are recommended. Five holes spaced at approximately 100 metre intervals are proposed for the initial drill test.

Prospecting of soil geochemical anomalies on the property should be continued. Emphasis should be placed on coincident copper and gold anomalous sites which occur predominately on the Swan 6 claim along a contour sample line at the base of a steep rock slope.

Respectfully submitted,

**FAIRFIELD MINERALS LTD.**



J.D. Rowe, P. Geo.

November, 1995

\*\*\*\*

### 3.0 INTRODUCTION

#### 3.1 Location and Physiography (Figures 1 & 2)

The Swan property is located 20 kilometres north of Princeton in south-central British Columbia (Figure 1). The property is centered on latitude 49 degrees 39'N and longitude 120 degrees 27'W within NTS map area 92H/9W,10E. Access is via highway 5A north from Princeton, then north on Summers Creek road and Rampart Creek Forest Service road. Several recent logging roads traverse much of the property (Figure 2).

The claims cover an area of 25 square kilometres on the west slope of a north-south trending ridge between the valleys of Summers Creek and Trehearne Creek. Elevations range from 1150 to 1550m above sea level. Swanson Creek transects the property from northeast to southwest and has several small, swampy ponds in the upper section. Rampart Creek, which crosses the western claims, is a moderate-size drainage 2 to 3m wide. Steep-sided canyons are present along portions of Rampart and Summers Creeks on the southwestern claims. Bedrock exposure varies from very sparse to moderate and glacial till cover is widespread but generally shallow. Mature stands of pine with lesser fir and spruce have been logged from several large plots on the western and central claims. Annual temperatures range from -20° C to +30°C and precipitation is low to moderate. The area is basically snow-free from late May through October.

#### 3.2 Claim Data (Figure 2 & Table 1)

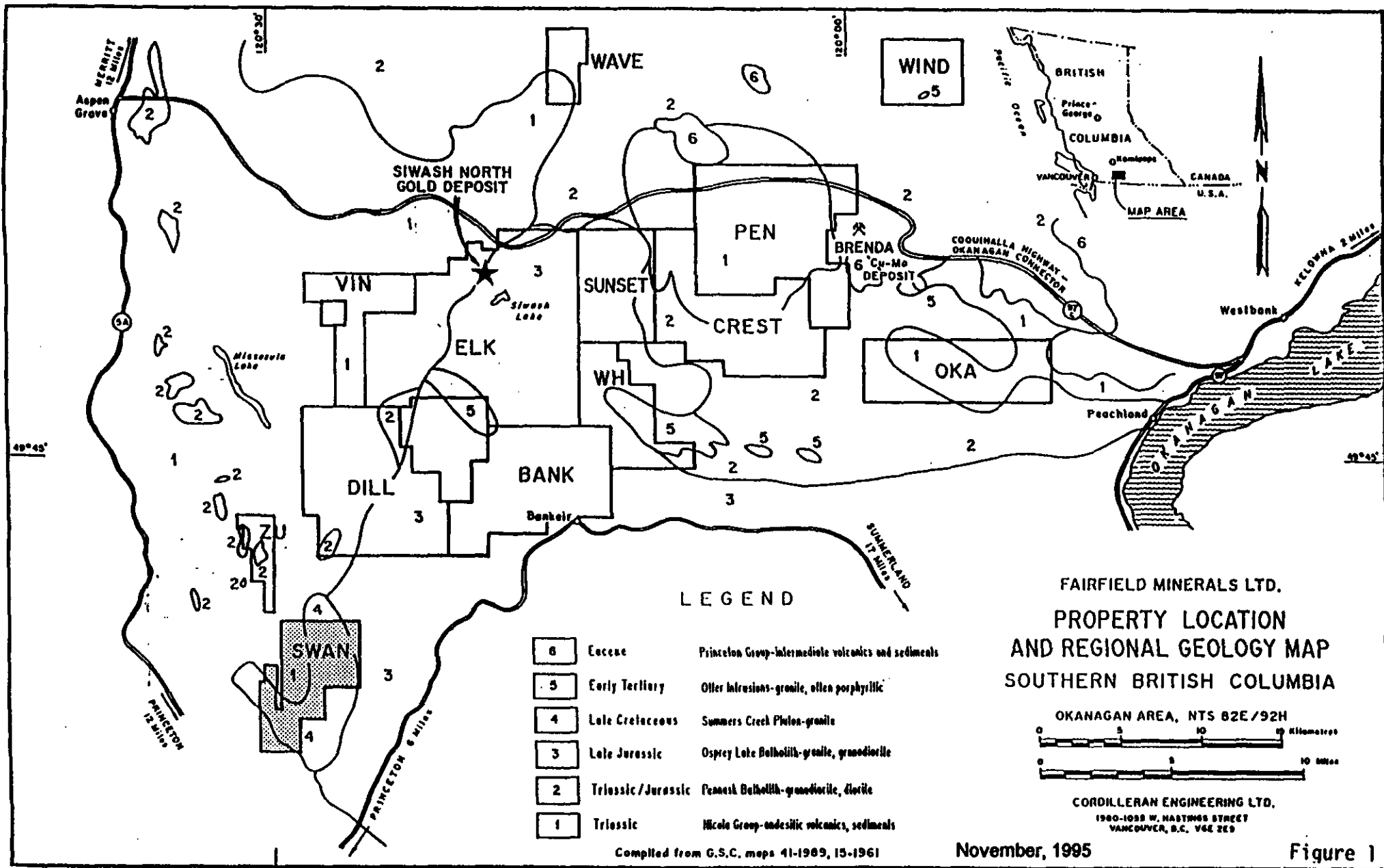
The current status of the Swan claims is indicated in Table 1, and their locations are shown on Figure 2. The claims, located in the Similkameen Mining Division were staked in August 1989, May 1990 and March 1991 and are 100 percent owned by Fairfield Minerals Ltd. The Swan 2 and Swan 4 claims of 20 units each were allowed to lapse in August, 1995.

**Table 1:**

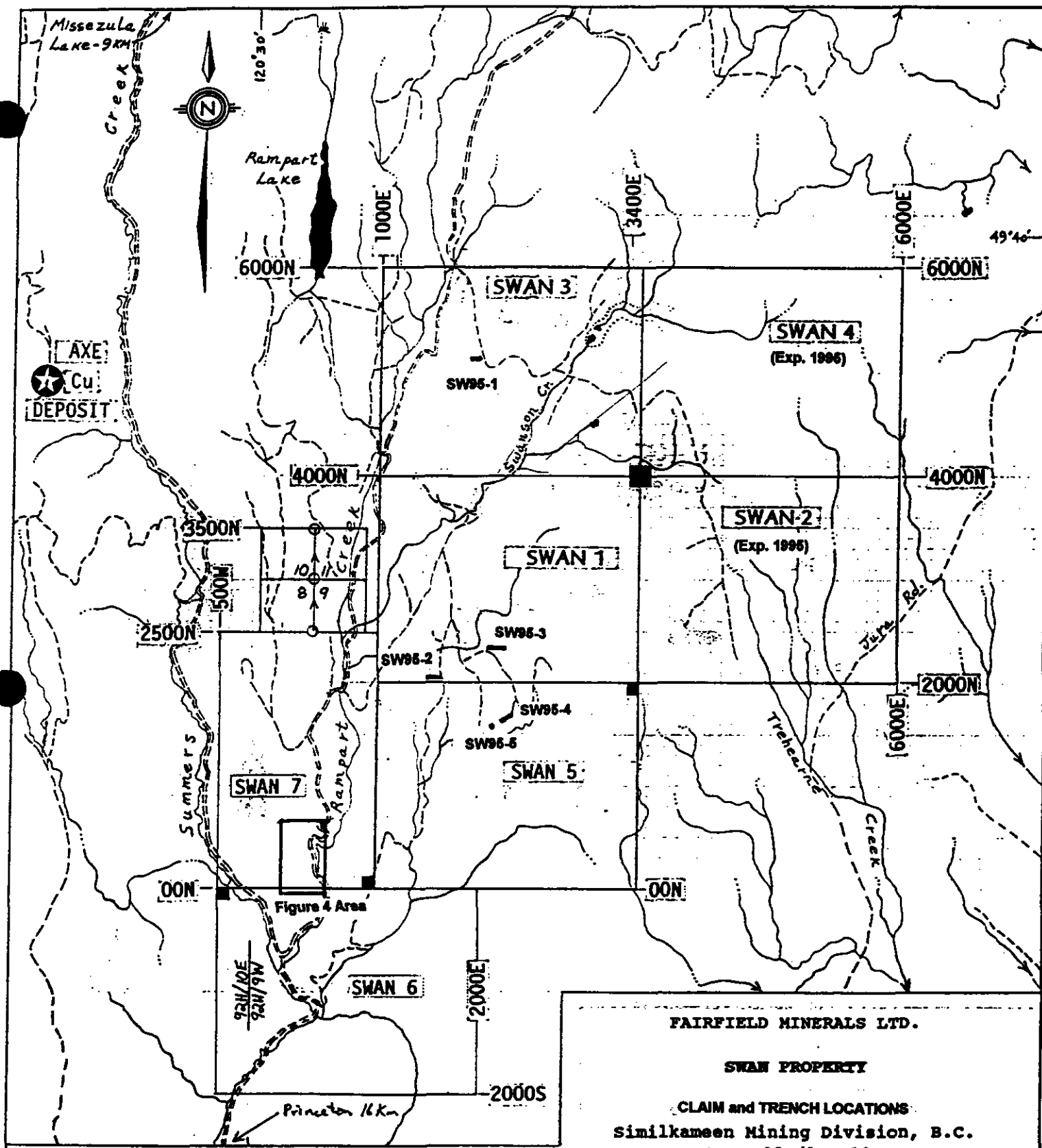
#### **CLAIM STATUS**

NTS: 92H/9W, 10E Similkameen Mining Division, BC

<b><u>CLAIM</u></b>	<b><u>UNITS</u></b>	<b><u>TENURE NO.</u></b>	<b><u>EXPIRY DATE</u></b>
SWAN 1	20	249597	11 AUG. 1997
SWAN 3	20	249599	12 AUG. 1997
SWAN 5	20	249806	18 MAY 1998
SWAN 6	20	250060	1 APR. 1998
SWAN 7	15	250061	1 APR. 1997
SWAN 8	2-post	250062	31 MAR. 1998
SWAN 9	2-post	250063	31 MAR. 1998
SWAN 10	2-post	250064	31 MAR. 1998
SWAN 11	2-post	250065	31 MAR. 1998







AXE  
 Cu  
 DEPOSIT



- LEGEND**
- Legal Corner Post for 4-Post Claim
  - — ○ Initial and/or Final Posts, Location Line Direction for 2-Post Claim
  - SW95-1 Trench Location
  - 800W Grid Line Number
  - - - Access Roads

**FAIRFIELD MINERALS LTD.**

**SWAN PROPERTY**

CLAIM and TRENCH LOCATIONS  
 Similkameen Mining Division, B.C.  
 NTS: 92H/9W, 10E

Scale: 1:50,000

By: FAIRFIELD MINERALS LTD.  
 Vancouver, B.C.

November 1995

Figure 2

### **3.3 History**

Several companies conducted work in the area of the Swan claims from 1966 to 1982 which included prospecting, geological mapping, soil sampling, geophysics, trenching, percussion drilling and diamond drilling. These programs explored for copper mineralization similar to that defined on the Axe property adjoining to the west, where a significant copper reserve, with minor molybdenum, has been outlined by considerable diamond and percussion drilling. Tentative reserve estimates only have been released for the Axe deposit using various factors to adjust for poor core recoveries and erratic distribution of mineralization. Figures published in 1973 indicated a total reserve of about 60 million tons grading roughly 0.45% Cu, 0.012% Mo in three zones.

Previous exploration in the area of the Swan claims failed to discover any significant copper deposits, however, the gold potential was not examined at that time. During 1987, Fairfield Minerals Ltd. undertook a reconnaissance sampling program in the region and obtained a strongly anomalous gold value from the sediment near the mouth of Swanson Creek. Subsequent prospecting of the drainage area revealed favourable geology for gold-bearing vein deposits and so the initial Swan 1-4 claims were staked to cover the area. Grid soil sampling was conducted during 1989 and 1990 with fill-in sampling around areas of anomalous gold. A total of 3542 samples were collected on the Swan 1-5 claims; 1030 samples in 1989 were analyzed for gold, silver, copper and zinc; 2512 samples in 1990 were analyzed for gold only.

In 1991, the Swan 6-11 claims (39 units) were staked and soil sampled on a wide-spaced grid (400m x 50m). A reconnaissance-style contour sampling line was used in one area where steep terrain prohibited regular-spaced grid lines. A total of 458 samples were collected and analyzed for gold and copper.

In 1994, grid soil sampling was continued on the Swan 6-11 claims to tighten the previous wide-spaced reconnaissance grid to 200m by 50m spacings and fill-in sampling was undertaken at 50m by 50m around selected stations which had yielded anomalous gold values. A total of 516 soil samples were collected and analyzed for gold only. Eight rock samples were collected on the property and analyzed for gold and silver.

### **3.4 1995 Exploration Program**

In 1995, four trenches totalling 225 metres and one test pit were excavated in the north (Swan 3) and central (Swan 1, 5) parts of the property, to explore for the sources of anomalous gold values in soil samples. Trenching produced a total of 39 rock samples and 10 soils. As well, a number of old trenches and road cuts within an area of anomalous gold and copper soil geochemistry on the Swan 7 claim were prospected, surveyed and reconnaissance sampled. This consisted of three rock chips and four selected grab samples.

Trenching and reclamation utilized 114 hours of excavator time and 26 mandays for trench layout, cleaning, mapping and sampling. Prospecting, surveying and reconnaissance sampling entailed 7 mandays.

## **4.0 GEOLOGY**

### **4.1 Regional Geology (Figure 1)**

The Swan property regional geology is illustrated on the northeast part of GSC Map 41-1989, Hope, mapped by J.W.H.Monger, 1989 which is condensed on Figure 1. The claims straddle the contact between the Summers Creek Pluton on the east and Nicola volcanic rocks on the west. The pluton comprises reddish, coarse-grained granite to granodiorite of Late Cretaceous age. The Upper Triassic Nicola unit includes massive andesite to basalt flows and breccias with lesser interlayered tuff, volcanic siltstone and impure limestone. Several phases of diorite to monzonite dykes in this area may be part of the Nicola magmatic suite.

### **4.2 Property Geology and Mineralization**

Property-scale geological mapping has not been conducted, however detailed trench mapping was undertaken as part of the 1995 program and results are described in Section 5.2. During the course of work on the property several geological observations have been made. Bedrock exposures are scarce in most areas so geological contacts are not readily traceable. A large fault zone which trends north-south in Summers Creek valley along the west side of the property is part of a regional structure which extends northward from Copper Mountain, 35 kilometres to the south. Swanson Creek follows a very linear southwest trend which may also be caused by a major structural break. On the Axe property to the west, volcanic and intrusive rocks are intensely fractured with variable and irregular zones of alteration and mineralization. At the south end of the Swan 7 claim along Rampart Creek canyon are extensive outcrops of strongly sheared, intensely altered granite and basaltic volcanic rocks near the southern contact of the pluton. Alteration in the intrusive includes abundant sericite and clay minerals with disseminated pyrite which produces bright yellow to orange oxidation zones in outcrop. Volcanic rocks are cut by abundant limonite veinlets and local malachite. Soil sampling in this area returned several anomalous copper and gold values.

## **5.0 TRENCHING**

### **5.1 Trench Operations (Table 2)**

Four trenches, totalling 225 metres, and one test pit were excavated to explore soil geochemical anomalies in two general areas; in the central part of the Swan 3 claim and near the boundary between Swan 1 and Swan 5 claims (Figure 2). A Caterpillar 215 excavator operated by Wiltech Developments Inc. of Westbank, B.C. was used to dig the trenches. Depth of overburden ranged from a few centimetres to over six metres. Maximum depth obtainable with this machine was six metres. Trench 95-1 predominantly failed to reach bedrock, exposing only a short stretch of rock at the upper (east) end of the excavation. The other three trenches reached bedrock over their full lengths with overburden depths ranging from 30 centimetres to 4.5 metres. The test pit, next to an anomalous soil station on the Swan 5 claim, exposed fresh bedrock at about 3 metres, however groundwater quickly filled the pit so excavation was discontinued at this location.

In trenches with bedrock exposure, one wall of the trench was swept clean and the geology was mapped in section view at 1:50 scale. Rock chip samples and grab samples were collected from

prospective mineralized zones on the trench wall. Chip samples ranged from 6 to 12 kg and grab samples averaged about 1 kg. Samples were shipped to Acme Analytical Labs in Vancouver for

analysis. Each sample was dried, crushed to -3/16 inch, split to 1 kg which was pulverized to -100 mesh and 30 grams analyzed for gold by fusion digestion followed by atomic absorption determination. As well, a 0.5 gram portion of the -100 mesh was digested with aqua regia and analyzed for a suite of 30 elements by ICP. Following sampling, all trenches were back-filled, groomed and grass seeded.

Trench geology and sample locations are plotted on Figure 3 and Plates 1 to 3. Gold values are shown on the maps as well as some significant values for Mo, Pb, Zn and Ag. Laboratory certificates containing all the analytical results are included in Section 11.0. Trench location data is summarized in Table 2.

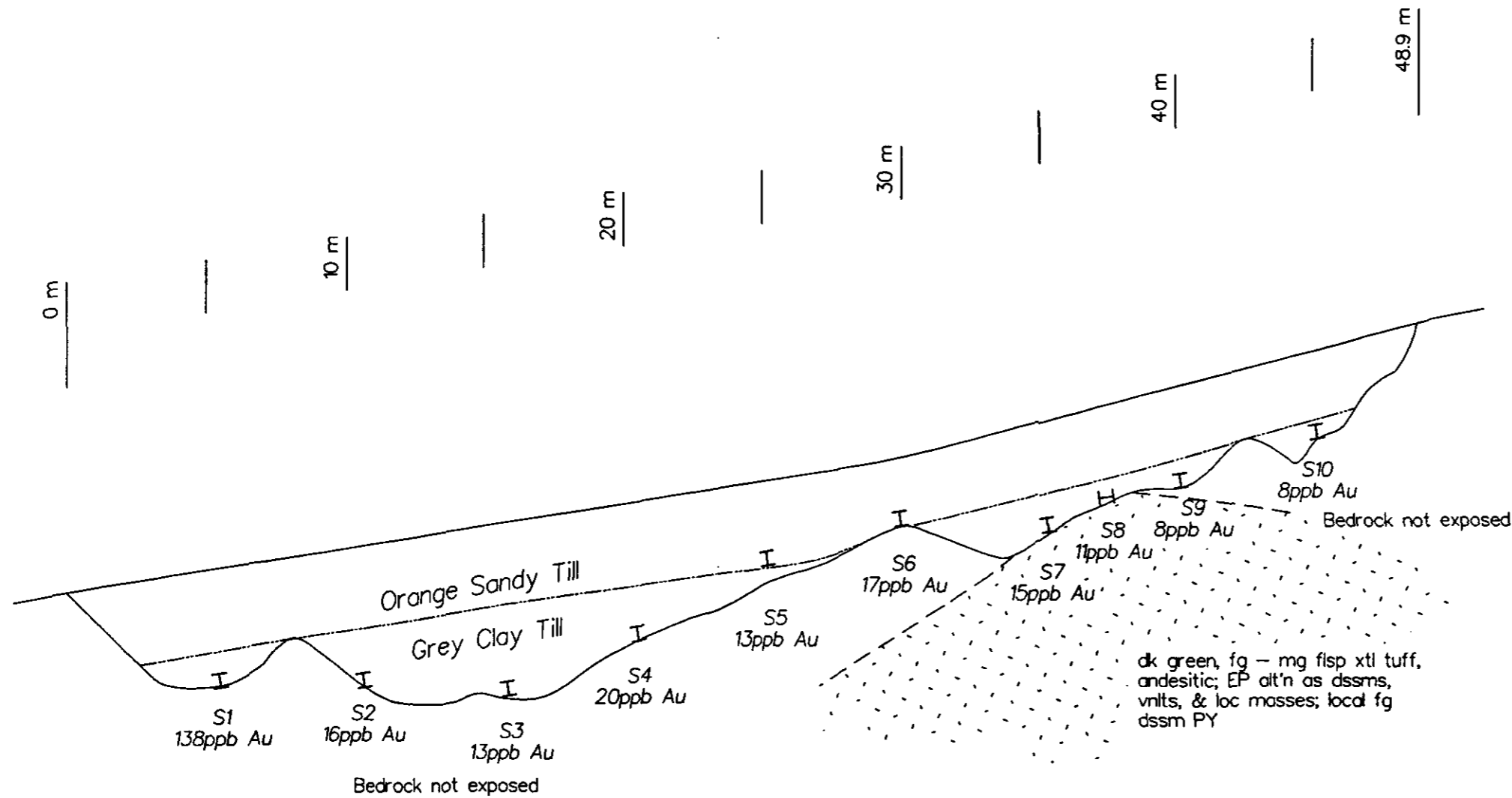
**Table 2: SWAN PROPERTY 1995 TRENCH SUMMARY**

<u>Trench Number</u>	<u>Claim</u>	<u>Grid Coordinates</u>		<u>Length</u>	<u>Number of Samples</u>	
		<u>From</u>	<u>To</u>		<u>Rock</u>	<u>Soil</u>
SW 95-1	Swan 3	5084N 1954E	5108N 1994E	49m	0	10
SW 95-2	Swan 1	2077N 1554E	2072N 1623E	68m	24	0
SW 95-3	Swan 1	2297N 2142E	2297N 2076E	66m	10	0
SW 95-4	Swan 5	1775N 2302E	1739N 2282E	42m	4	0
SW 95-5	Swan 5	1600N 2155E	-	pit	1	0

## 5.2 Trench Results (Figure 3, Plates 1, 2, 3)

Trench SW95-1 (49m) was dug to test a 410 ppb Au soil anomaly at grid station 1950E, 5100N located at a break in slope which trends roughly north-south. The trench extended from a point 17m south of the anomalous station upslope for 49m to the northeast. The first part of the trench did not reach bedrock although it was dug to depths of 2.5m to 6.3m. From 33.5m to 38.2m blocky, fractured volcanic bedrock was exposed. It consisted of dark green, fine to medium grained feldspar crystal andesite tuff with moderately abundant epidote disseminations, veinlets and local masses. Disseminated fine pyrite was also noted locally. From 38.2m to the end of the trench bedrock was not exposed due to very hard, bouldery clay till. Two generations of glacial till were revealed in the trench wall. The upper 2.5 to 3m consists of orange-brown sandy till with few boulders and was relatively easy to dig. Below this horizon lies 1m to over 3m of grey, indurated,

Looking Northwest



I  
S3 Basal soil sample, result (Au ppb)  
13ppb Au

Note: see Figure 2 for trench location

<b>FAIRFIELD MINERALS LTD.</b>	
1980 - 1055 West Hastings Street Vancouver, British Columbia V6E 2E9	
<b>SWAN PROPERTY</b>	
Simikameen M.D. NTS 92H/9W, 10E	
<b>SECTION THROUGH TRENCH SW95-1 LOOKING NORTHWEST SCALE 1 : 200</b>	
Drawn by PWC November, 1995	<b>Figure 3</b>

clay-boulder till. This material was very difficult to excavate resulting in a hummocky trench floor with high points of hard clay till and hollows where digging was slightly easier.

Ten soil samples were collected at 5m intervals from the base of the trench wall over approximately 35 cm of vertical section. Most of the samples comprised grey clay till, with two samples taken from the orange sandy till (S5 and S6). Only S1, at the 5m point in the trench, returned a significant value of 138 ppb Au. This sample is located closest to the original surface anomaly station and confirms that a mineralized source may be present in bedrock near the S1 sample site. Bedrock is speculated to be at a depth of about 10m in this location.

**Trench SW 95-2 (68m)** was dug to test a 29 ppb Au soil anomaly at grid coordinates 1550E, 2050N and a quartz float occurrence which returned 2640 ppb Au at 1600E, 2100N. The trench was dug on a westerly line between these two points. The soil anomaly lies near a break in the westerly dipping slope which may represent a northerly-trending fault structure. A ground water spring was intersected at this point. Overburden depth along the trench ranged from 2m to 4m.

The trench exposure consisted predominantly of medium-grained intrusive of probable granodiorite composition. Fine-grained, siliceous volcanic rocks of probable andesitic composition underlay the easternmost 5 metres of the trench from 63 to 68m. All of the rocks exposed in the trench wall were moderately to strongly fractured and cut by numerous thin clay-limonite shears and less commonly by quartz veinlets. Weak to moderate potassic alteration was relatively pervasive in the intrusive rocks and local zones of decomposition appeared to be associated with clay alteration and shattering. Local zones of blue clay from 30 to 50 cm wide, trending north to northwest may be fault gouge, or possibly strongly altered and sheared andesite dykes. An irregular body of dyke-like material occurs at 18m, near the topographic break in slope, and has associated narrow quartz veinlets. A grab sample of the quartz (SW 952-24G) returned only 13 ppb Au but had an anomalously high Mo value of 1203 ppm. From 45 to 46 m a number of discontinuous, irregular quartz veinlets up to 1 cm wide were encountered. Sample SW 952-14 was a 1.0m chip across two of the veins and the intervening altered intrusive wallrock. It returned 310 ppb Au, the highest gold value from this trench. Clay shears and quartz veinlets are typically parallel to the predominant joint sets and fractures, with strikes mostly ranging between 120° and 180° and dips between 20° and 85° northeast and southwest.

**Trench SW95-3 (66m)** was dug to test a 69 ppb Au soil anomaly at grid station 2100E, 2300N. The trench extended east and west of the station on a gently west-dipping slope. Overburden depth ranged from 0.5m to 3 metres. The excavation revealed mainly granodiorite bedrock with a 5 metre section of andesitic volcanics from 17.5 m to 22.5 m. The eastern half of the trench contained relatively fresh, hard, blocky jointed rocks with occasional clay shears. Toward the west the clay-limonite shearing increased and from 57m to 61m the granodiorite was strongly fractured and partially decomposed, with abundant limonite and clay shears. Samples were predominantly from clay shears cutting the intrusive. All of the samples returned anomalous values in zinc, ranging from 931 ppm to 2841 ppm. A 1 cm quartz vein extending between 45m on the south trench wall and 48m on the north wall bearing 115/82 N is located very close to the anomalous soil station. A grab sample of the quartz (SW 953-7G) returned 31 ppb Au, 6.7 ppm Ag and 1329 ppm Zn. A grab sample (SW953-10G) from clay-limonite shears located between 57m and 59m returned 59 ppb Au, 2841 ppm Zn and 980 ppm Pb.

**Trench SW95-4 (42m)** was dug to test a 25 ppb Au soil anomaly at grid station 2250E, 1750N and a shallow gully trending approximately 020° which had the potential of representing a mineralized structure. The trench was dug southwesterly, following the bottom of the gully. Overburden

depth ranged from 0.8 to 1.5 metres. Bedrock comprised weakly to moderately chloritized granodiorite with blocky jointing and several clay-limonite shears with common orientations of about 090/85S and 130/85NE. Samples of clay-limonite shears returned significant zinc and lead values but low gold. SW954-3 across a shear/alteration zone with a true width of 85 cm contained

19,916 ppm (2.0%) zinc and 3208 ppm lead. SW954-4 was a 45 cm by 8 cm panel along a 6 cm clay-limonite-manganese shear which returned 22,569 ppm (2.3%) zinc and 9557 ppm lead.

Test pit SW95-5 was dug beside a 160 ppb Au soil anomaly at station 2150E, 1600N. Overburden depth was 3.5m and groundwater flow quickly flooded the pit. Fragments of bedrock were scooped from the bottom of the pit with the excavator and brought to surface. The pieces consisted of relatively fresh, medium grained diorite, strongly fractured, with pyrite on fracture surfaces and a few quartz stringers up to 4 mm with disseminated pyrite. A grab sample of this pyritic diorite was analyzed but returned only 4 ppb gold and a moderate zinc value of 1135 ppm (sample SW955-1G).

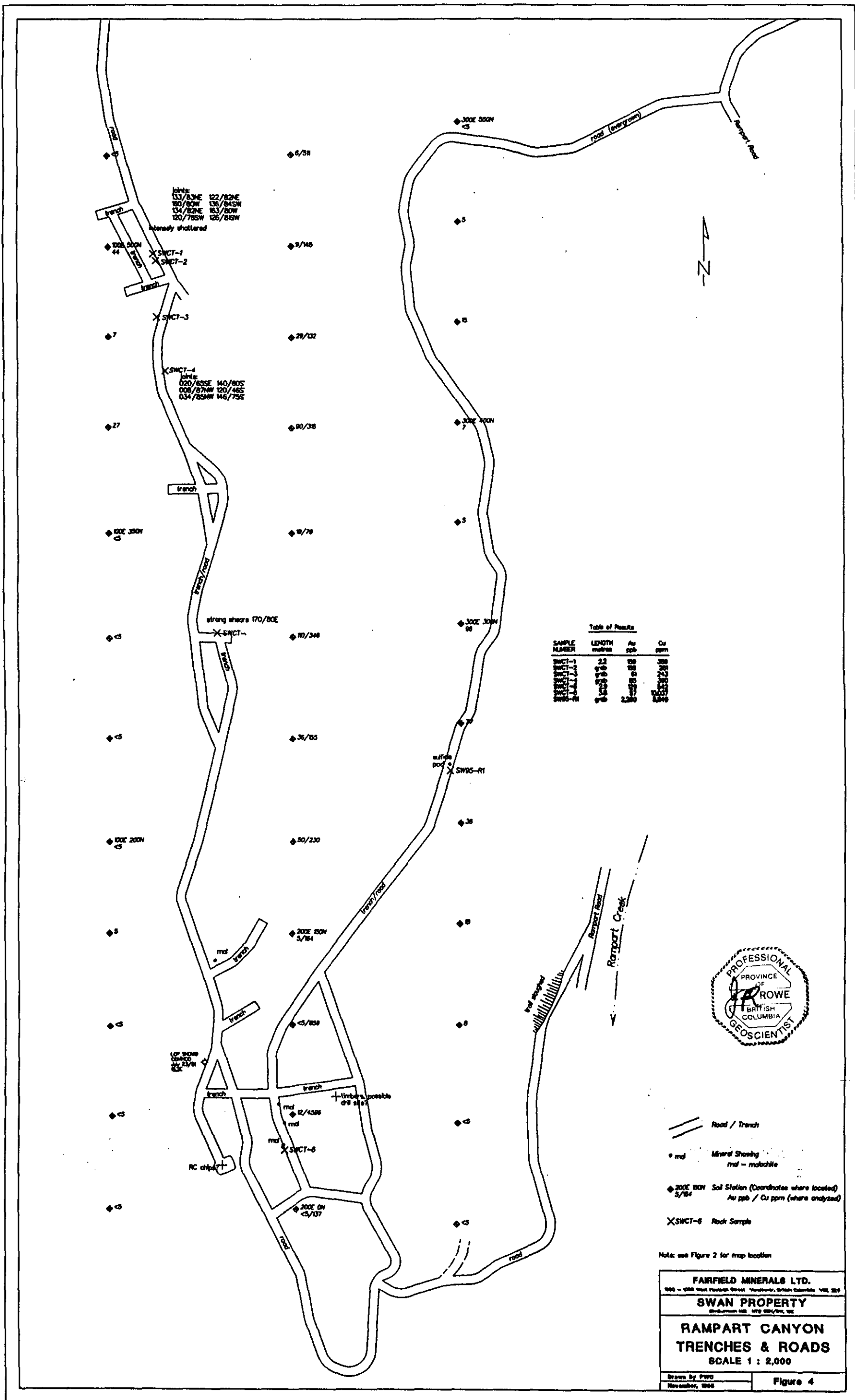
## 6.0 PROSPECTING (Figure 4 & Table 3)

Eight man-days of prospecting were undertaken on the Swan 7 claim in the southwest part of the property. A number of old roads and trenches were prospected and a chain and compass map of the road system was produced (Figure 4). The roads are believed to have been built during the early 1970's and a levelled area with a small pile of fine rock cuttings suggests that at least one reverse circulation hole was drilled although there are no definitive records of this work. Part of this area was mapped in 1981 by Cominco (Assessment Report #9896). It is shown to be underlain by andesite and dacite tuffs in the area of the trench roads, in contact with diorite intrusive to the east and intruded by a small body of potassically altered quartz monzonite near grid coordinates 150E, 150N.

Prospecting along the roads and trenches revealed strongly fractured to intensely shattered volcanics with abundant limonite on fractures and local ferricrete accumulations up to one metre thick overlying bedrock. The volcanic rock is generally oxidized and dark green to rusty coloured throughout, with little evidence of original texture remaining. Locally it is altered to yellow-orange clay along shears. As well, zones of silicification and bleaching are evident. Calcite is common as fracture coatings with limonite. Near the southern end of the road system malachite is relatively abundant as narrow veinlets and fracture coating with limonite.

Measurement of fractures and joint sets near the north end of the road system showed a predominant northwest trend, with less common north and northeast trends, all with relatively steep dips.

Chip samples and grab samples were collected from various areas of strongly fractured volcanic rocks with abundant limonite and, in one area, malachite veinlets. Sample locations are shown on Figure 4 which depicts the network of old roads and trenches. Soil geochemical results for gold and copper are also shown on the map. Table 3 lists descriptions of the rock samples as well as significant analytical results. A complete set of analytical results for gold and 30 elements (ICP) are included on laboratory certificates in Section 11.0.



PROFESSIONAL  
PROVINCE OF  
**ROWE**  
BRITISH COLUMBIA  
GEOSCIENTIST

— / — Road / Trench  
• md Mineral Showing  
md - matchline  
◆ 200E 300W Soil Station (Coordinates where located)  
Au ppb / Cu ppm (where analyzed)  
X SWCT-6 Rock Sample

Note: see Figure 2 for map location

**FAIRFIELD MINERALS LTD.**  
1990 - 9288 West Fawcett Street, Vancouver, British Columbia V6E 2E1

**SWAN PROPERTY**  
2500 Main Street, 1070 800/800, 102

**RAMPART CANYON  
TRENCHES & ROADS**  
SCALE 1 : 2,000

Drawn by PWO  
November, 1995

Figure 4



Geochemically high values for gold and copper from the rock samples may explain the presence of an area of anomalous gold and copper in soils extending approximately 500 metres north-south and 500 metres easterly down the steep slope to Rampart Creek. An apparent northwest trend to the gold anomaly is consistent with a possible northwest-striking shear zone which may cross the map area in the vicinity of samples SWCT-1,2,3 and 4. Sample SWCT-6 returned 1.0% copper over 3.8m from a road cut exposure of strongly fractured, bleached volcanics with networks of fine calcite veinlets containing local abundant malachite and limonite. No prevailing trend for mineralized veinlets was determined. On a lower road to the east a 40 cm pod of massive pyrite and

pyrrhotite was observed within strongly fractured, limonitic volcanic rocks. A small amount of coarse crystalline chalcopyrite was noted intergrown with the sulfide minerals. The adjacent volcanics contain abundant calcite veinlets and fracture coating as well as sparse disseminations and wispy veinlets of chalcopyrite. A grab sample (SW95-R1) of massive sulfide returned 0.58% Cu and 2260 ppb Au.

**Table 3: PROSPECTING SAMPLES**

<u>Sample No.</u>	<u>Length</u>	<u>Description</u>	<u>Significant Results</u>
SWCT-1	2.2m	chip sample trending 150°. Intensely shattered volc., abund. lim., local strong yellow-orange clay alt'n.	159 ppb Au, 386 ppm Cu, 500 ppm As, 10.04% Fe
SWCT-2	Grab	20 cm zone adjacent to CT-1, yellow-brown bleached, silic. volc., abund. lim. on frags.	168 ppb Au, 281 ppm Cu, 8.58% Fe
SWCT-3	Grab	30 cm zone of silic, dark green volc., abund. lim.	61 ppb Au, 243 ppm Cu, 8.37% Fe
SWCT-4	Grab	limonite-cemented dark green volc. fragments <1 to 3 cm from ferricrete cap 1m thick overlying frac. volcs.	85 ppb Au, 390 ppm Cu, 7.87% Fe
SWCT-5	2.9m	chip sample trending 080°, strongly shattered volc., dark green to yellowish bleached, abund. lim., Includes 20 cm silic zone & several orange clay shears	129 ppb Au, 542 ppm Cu, 7.97% Fe
SWCT-6	3.8m	chip sample trending 160°, strongly frac. green to light grey volcs., networks of fine calc. vlt., lim. and mal. vlt.	57 ppb Au, 10037 ppm Cu, 6.1 ppm Ag, 2.96% Fe, 1.60% Ca
SW95-R1	Grab	40 cm pod of massive pyrite-pyrrhotite with sparse coarse chalcopyrite. Shattered volc. host rock with lim. & minor chalcopyrite.	2260 ppb Au, 5849 ppm Cu, 37.87% Fe, 3.1 ppm Ag

\*\*\*\*

**7.0 PERSONNEL**

<b>Personnel:</b>	<b>Period worked - 1995</b>	
E.A. Balon, Technician, Prospector North Vancouver, BC	June 22 - August 4	12 days trenching 3 days prospecting
D. Ritcey, Geologist Vancouver, BC	July 25 - 28	2 days trenching
J.D.Rowe, Geologist North Vancouver, BC	June 12 - October 7	12 days trenching 4 days prospecting
Wiltech Developments Inc. Westbank, B.C.	July 14 - August 4	12 days excavation and reclamation

\*\*\*\*

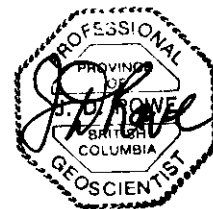
**8.0 STATEMENT OF EXPENDITURES**

**SWAN PROPERTY**

EXPENDITURES FROM JUNE 1 TO AUGUST 8, 1995 WHICH WERE RECORDED FOR ASSESSMENT WORK.

SALARIES AND BENEFITS	\$10,540
EXCAVATOR - TRENCHING & RECLAMATION	14,110
ASSAYS, ANALYSES & FREIGHT	890
ACCOMMODATION AND FOOD (32 MANDAYS)	1,600
VEHICLE AND SUPPLIES	<u>1,460</u>
<b>TOTAL</b>	<b>\$28,600</b>

\*\*\*\*



## 9.0 REFERENCES

### B.C. Ministry of Energy Mines and Petroleum Resources:

Minfile 92H/NE.

### Cormier, J.R.:

1990: 1990 Geochemical (Assessment) report on the Swan 1-5 Mineral Claims.

### Mehner, D.T.:

1981: Geological and Geochemical Assessment Report (No. 9896) on the Axe, Star, Snow and BSM Claims.

### Monger, J.W.H.:

1989: Geology, Hope, British Columbia, GSC Map 41-1989, scale 1:250,000.

### Preto, V.A.:

1979: Geology of the Nicola Group between Merritt and Princeton, B.C.M.M. Bulletin 69.

### Rice, H.M.A.:

1947: Geology and Mineral Deposits of the Princeton Map-Area, B.C., Geol.Surv. Can. Memoir 243.

### Rowe, J.D.:

1989: 1989 Geochemical (Assessment) Report on the Swan 1-4 Mineral Claims.

1992: 1991 Geochemical (Assessment) Report on the Swan 1-11 Mineral Claims.

1995: 1994 Geochemical (Assessment) Report on the Swan 1-11 Mineral Claims.

**10.0 STATEMENT OF QUALIFICATIONS**

I, Jeffrey D. Rowe, of North Vancouver, British Columbia hereby certify that:

I am a geologist residing at 2596 Carnation Street and employed by Fairfield Minerals Ltd. of 1980 - 1055 West Hastings Street, Vancouver, British Columbia V6E 2E9.

I have received a B.Sc. degree in Honours Geology from the University of British Columbia, Vancouver, B.C. in 1975.

I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, registration number 19950.

I have practiced my profession for twenty-one years in British Columbia, Yukon and Quebec.

I am the author of this report and supervisor of the field work conducted on the SWAN claims during the period June 12 to October 7, 1995.

**FAIRFIELD MINERALS LTD.**



**J. D. Rowe, P. Geo.**

November, 1995  
Vancouver, B.C.

\*\*\*\*

**11.0 ANALYTICAL RESULTS**

**1995 Trenching and Prospecting Samples**



GEOCHEMICAL ANALYSIS CERTIFICATE



Fairfield Minerals Ltd. PROJECT SWAN #2 File # 95-2586 Page 1

1980 - 1055 W. Hastings S. Vancouver BC V6E 2E9 Submitted by: E.A. Balon

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	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
SW952-1	11	35	11	29	.4	6	6	274	.81	3	7	<2	14	8	.5	<2	<2	4	.22	.006	32	72	.05	59	<.01	<3	.34	.02	.21	<2	11
SW952-2	10	54	5	27	.5	7	4	326	.87	2	8	<2	14	10	.5	2	<2	4	.27	.008	37	76	.11	67	<.01	<3	.57	.03	.29	<2	19
SW952-3	52	196	5	49	1.0	6	26	290	3.18	10	6	<2	7	11	.7	<2	4	12	.18	.033	15	69	.15	75	.01	<3	.59	.03	.24	2	21
SW952-4	14	150	4	43	.5	6	25	569	2.43	4	6	<2	3	20	.7	<2	2	19	.28	.055	17	51	.40	100	.01	<3	.83	.04	.23	<2	29
SW952-5	9	376	6	110	1.1	5	7	582	2.59	<2	<5	<2	7	21	1.9	<2	2	16	.54	.079	19	35	.33	84	.01	<3	.76	.03	.23	<2	19
SW952-6	23	57	17	305	.6	6	6	626	2.55	4	7	<2	4	52	11.8	<2	<2	23	2.40	.063	17	32	.53	201	<.01	<3	1.17	.02	.21	<2	13
SW952-7	13	42	4	76	.4	3	5	602	2.96	<2	<5	<2	<2	70	.9	<2	<2	41	2.47	.072	11	17	.77	52	.02	<3	1.66	.02	.10	<2	4
SW952-8	17	35	3	48	.3	6	5	458	2.69	<2	<5	<2	2	106	.4	<2	2	39	1.74	.077	9	34	.69	59	.05	<3	1.81	.04	.12	<2	5
SW952-9	20	52	18	83	.8	5	4	543	2.63	<2	6	<2	2	64	.8	<2	4	39	2.01	.077	11	37	.66	83	.04	8	1.47	.03	.15	<2	5
SW952-10	329	120	29	90	3.4	4	5	543	3.34	<2	5	<2	3	41	2.0	<2	12	35	2.72	.077	12	26	.89	41	.02	<3	1.33	.03	.14	<2	9
RE SW952-10	321	118	26	86	3.2	4	5	531	3.30	<2	<5	<2	3	40	1.8	<2	12	34	2.66	.076	11	24	.87	40	.02	<3	1.29	.03	.13	<2	20
RRE SW952-10	315	120	22	91	2.3	4	5	537	3.31	2	<5	<2	3	40	1.9	<2	10	35	2.68	.077	12	26	.87	39	.02	<3	1.30	.03	.14	<2	7
SW952-11	19	46	14	54	1.3	5	3	536	2.60	<2	<5	<2	3	67	.7	<2	7	40	2.15	.075	10	35	.61	50	.06	<3	1.35	.03	.12	<2	46
SW952-12	14	53	6	59	.6	4	4	583	2.74	<2	<5	<2	2	93	.7	<2	4	38	2.35	.075	11	27	.67	62	.03	<3	1.89	.03	.10	<2	4
SW952-13	12	54	4	54	.4	5	4	621	2.88	<2	5	<2	2	79	.4	<2	4	38	2.21	.071	11	36	.72	62	.03	<3	1.76	.03	.11	<2	4
SW952-14	11	60	5	53	.6	6	4	691	3.03	<2	6	<2	2	57	.6	<2	3	45	2.42	.074	10	49	.66	42	.06	<3	1.23	.04	.09	<2	310
SW952-15	43	54	12	51	1.3	5	5	712	3.14	<2	5	<2	2	102	.6	<2	10	46	2.67	.072	11	40	.75	74	.05	<3	2.15	.03	.12	<2	15
SW952-16	23	179	14	56	2.1	5	6	552	3.36	2	8	<2	3	52	.6	<2	12	39	1.68	.076	12	53	.89	56	.02	<3	1.83	.03	.16	<2	6
SW952-17	31	111	8	69	.6	6	7	812	3.92	<2	5	<2	3	110	.7	<2	3	52	2.03	.081	12	39	.95	101	.07	<3	2.79	.04	.12	<2	2
SW952-18	15	39	11	34	.6	5	3	699	2.01	2	6	<2	<2	44	<.2	<2	3	27	1.56	.028	12	71	.50	53	<.01	5	2.17	.01	.07	<2	4
SW952-19	15	32	7	43	.6	5	4	652	2.36	<2	5	<2	<2	60	<.2	<2	2	29	2.42	.044	11	43	.63	66	<.01	<3	2.35	.02	.07	<2	<2
RE SW952-19	15	33	8	45	.6	5	4	660	2.43	<2	5	<2	2	62	<.2	<2	<2	30	2.47	.044	12	48	.65	68	<.01	6	2.43	.02	.07	<2	4
RRE SW952-19	15	32	10	44	.6	4	4	646	2.39	2	7	<2	<2	63	<.2	<2	<2	30	2.48	.043	11	46	.63	68	<.01	<3	2.42	.02	.07	<2	8
SW952-20G	79	364	45	22	14.3	12	37	450	11.44	4	7	<2	3	49	.4	<2	88	7	3.10	.010	6	125	.20	13	<.01	<3	.90	.01	.08	<2	31
SW952-21G	46	20	17	20	2.4	8	3	624	1.26	3	<5	<2	<2	63	<.2	<2	19	10	4.47	.017	9	101	.28	36	<.01	<3	.93	.01	.07	<2	18
SW952-22	12	29	6	49	.3	8	4	512	2.73	<2	<5	<2	2	85	.8	<2	3	38	1.75	.053	6	50	.70	77	.09	<3	1.75	.04	.10	<2	15
SW952-23	110	38	5	67	.4	61	14	747	3.98	<2	<5	<2	<2	110	.7	<2	3	66	3.90	.084	11	86	2.64	65	.10	3	3.17	.02	.07	<2	4
SW952-24G	1203	20	22	14	1.6	12	4	579	1.44	4	<5	<2	3	89	.6	<2	4	11	5.90	.012	5	136	.28	53	<.01	<3	1.48	.01	.07	<2	13
STANDARD C/AU-R	21	58	39	136	7.3	73	30	1047	4.13	41	26	7	37	51	19.3	18	22	61	.53	.096	42	56	.94	188	.08	28	1.94	.06	.16	10	478

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: P1 ROCK P2 SOIL AU\*\* ANALYSIS BY FA/ICP FROM 30 GM SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 27 1995

DATE REPORT MAILED: Aug 9/95

SIGNED BY: *C. Leung* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

AA  
LL

## GEOCHEM PRECISION METALS ANALYSIS

AA  
LL

Fairfield Minerals Ltd. PROJECT SWAN #2 File # 95-2586 Page 2

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: E.A. Balon

SAMPLE#	Au** ppb
SW951-S1	138
SW951-S2	16
SW951-S3	13
SW951-S4	20
SW951-S5	13
SW951-S6	17
RE SW951-S6	5
SW951-S7	15
SW951-S8	11
SW951-S9	8
SW951-S10	8
STANDARD AU-S	48

30 GRAM SAMPLE FIRE ASSAY AND ANALYSIS BY ICP/GRAPHITE FURNACE.

- SAMPLE TYPE: P1 ROCK P2 SOIL

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 27 1995

DATE REPORT MAILED: Aug 9/95

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





GEOCHEMICAL ANALYSIS CERTIFICATE

Fairfield Minerals Ltd. PROJECT SWAN #3 File # 95-2685

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: E.A. Balon

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	Au** ppb
SW953-1	18	47	133	2409	.6	10	17	1052	5.01	3	<5	<2	4	55	1.5	<2	<2	123	.89	.100	13	33	.61	132	.02	<3	2.47	.11	.20	<2	3
SW953-2	15	65	58	1154	<.3	14	16	1720	4.33	<2	<5	<2	<2	28	.8	<2	<2	87	.56	.092	22	34	1.01	285	<.01	<3	2.38	.07	.30	<2	7
SW953-3G	29	43	108	2051	.3	8	16	1369	6.90	<2	<5	<2	5	43	2.2	<2	<2	87	.83	.099	29	20	.35	139	<.01	<3	1.53	.05	.12	<2	2
SW953-4G	14	114	204	1266	.5	7	11	609	5.17	8	<5	<2	7	39	1.4	<2	<2	77	.75	.104	25	40	.31	107	.01	<3	1.60	.05	.16	<2	3
SW953-5	15	77	85	1059	<.3	9	13	716	4.62	2	<5	<2	6	30	1.5	<2	<2	85	.57	.102	23	52	.20	97	.02	<3	1.18	.07	.18	<2	4
SW953-6	17	71	206	1534	.3	7	9	528	4.29	5	<5	<2	8	21	1.5	<2	2	72	.50	.106	21	48	.13	69	.01	<3	.89	.05	.18	<2	7
SW953-7G	25	162	463	1329	6.7	15	16	1388	4.39	11	<5	<2	2	12	3.0	<2	<2	54	.25	.052	17	191	.07	74	.02	<3	.46	.07	.06	<2	31
SW953-8G	11	84	156	931	<.3	5	6	400	3.05	5	<5	<2	8	22	1.2	<2	<2	42	.51	.080	26	54	.14	62	<.01	<3	.93	.06	.17	<2	12
SW953-9	8	44	73	1009	<.3	5	6	578	3.50	3	<5	<2	9	22	2.0	<2	3	45	.46	.068	23	41	.17	59	.01	<3	.83	.05	.08	<2	6
SW953-10G	19	35	948	2761	<.3	8	11	993	5.00	3	<5	<2	9	24	2.9	<2	<2	52	.51	.077	25	63	.17	174	<.01	<3	1.17	.05	.19	<2	3
RE SW953-10G	19	35	928	2763	.3	7	11	970	4.89	5	<5	<2	10	24	3.1	<2	<2	51	.50	.077	24	64	.17	171	<.01	<3	1.15	.05	.20	<2	59
RRE SW953-10G	21	38	1065	2998	<.3	6	12	1095	5.38	6	<5	<2	10	24	3.2	<2	<2	53	.53	.080	27	41	.17	171	<.01	<3	1.07	.04	.16	<2	6
SW954-1	106	105	2697	8202	.7	6	16	673	4.83	<2	<5	<2	6	24	<.2	<2	<2	67	.82	.161	7	31	1.40	59	.09	<3	2.66	.06	.31	<2	7
SW954-2G	48	211	217	433	.4	12	11	462	3.69	<2	<5	<2	<2	45	.8	<2	<2	45	.83	.076	6	148	.58	54	.12	<3	1.63	.14	.13	2	6
SW954-3	98	143	3208	19916	.9	8	23	1062	6.48	2	<5	<2	3	19	.7	<2	<2	126	.62	.053	3	9	1.72	45	.06	<3	3.28	.03	.23	5	3
SW954-4	133	155	9557	22569	1.3	6	31	5884	6.45	2	8	<2	6	17	1.5	<2	<2	81	.59	.039	11	25	1.07	77	.01	<3	3.08	.01	.29	5	5
STANDARD C/AU-R	19	58	38	133	6.8	68	31	1092	3.83	39	22	7	35	52	18.5	18	20	62	.52	.091	39	60	.92	177	.09	28	1.89	.06	.16	11	440

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: ROCK AU\*\* ANALYSIS BY FA/ICP FROM 30 GM SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 3 1995 DATE REPORT MAILED: *Aug 12/95* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

AA  
LL

## GEOCHEMICAL ANALYSIS CERTIFICATE

AA  
LLFairfield Minerals Ltd. PROJECT SWAN #4 File # 95-3081

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: E.A. Balon

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	Au* ppb
SW955-1G	54	147	213	1135	.5	11	21	688	4.95	3	<5	<2	4	54	.3	2	<2	111	1.42	.075	5	23	1.14	34	.22	<3	2.18	.15	.21	3	4

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS &gt; 1%, AG &gt; 30 PPM &amp; AU &gt; 1000 PPB

- SAMPLE TYPE: ROCK AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(30 gm)

DATE RECEIVED: AUG 24 1995

DATE REPORT MAILED:

Sept 1/95

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



## GEOCHEMICAL ANALYSIS CERTIFICATE



Fairfield Minerals Ltd. PROJECT SWAN #5 File # 95-4084

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: J. Rowe

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	Au* ppb
SWCT-1	38	386	38	73	1.7	4	6	196	10.04	500	<5	<2	<2	47	.8	23	2	88	.25	.103	7	12	.32	47	.01	3	1.71	.05	.20	<2	159
SWCT-2	46	281	19	37	1.4	3	3	76	8.58	34	<5	<2	<2	55	.2	2	2	117	.10	.088	5	17	.30	41	.02	3	.93	.15	.29	<2	168
SWCT-3	6	243	14	37	1.1	7	4	477	8.37	18	8	<2	5	48	.3	<2	3	171	.39	.145	10	32	.73	34	.17	<3	1.73	.04	.24	<2	61
SWCT-4	4	390	16	39	1.5	15	8	419	7.87	14	6	<2	4	86	.5	<2	<2	223	1.36	.208	12	49	1.17	20	.24	4	2.62	.05	.19	<2	85
SWCT-5	8	542	18	35	1.2	5	3	263	7.97	18	<5	<2	<2	52	.4	<2	<2	211	.29	.143	8	45	1.17	25	.06	3	1.75	.08	.19	<2	129
SWCT-6	5	10034	65	183	5.8	5	11	542	2.96	48	<5	<2	4	116	1.5	2	5	90	1.57	.139	17	18	.58	147	.01	5	3.03	.03	.29	<2	55
RE SWCT-6	6	10072	66	183	6.2	5	11	545	2.93	47	<5	<2	6	116	1.5	7	10	89	1.58	.140	18	19	.58	147	.01	4	3.02	.03	.29	<2	56
RRE SWCT-6	6	10006	71	184	6.4	6	11	550	2.99	50	<5	<2	8	123	1.5	3	11	93	1.65	.139	18	28	.59	168	.01	5	3.21	.04	.35	<2	59

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: ROCK AU\* - IGNITED, AQUA-REGIA/HIBK EXTRACT, GF/AA FINISHED.(30 gm)

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 12 1995

DATE REPORT MAILED:

Oct 21/95

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



## GEOCHEMICAL ANALYSIS CERTIFICATE



Fairfield Minerals Ltd. PROJECT SWAN File # 95-1970 Page 1

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: E.A. Balon

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	Au* ppb
SWAN 95-R1	10	5849	15	110	3.1	41	59	215	37.87	107	<5	<2	6	8	4.4	9	106	76	.35	.046	2	11	.44	6	.07	<3	.70	.02	.23	<2	2260

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: P1 ROCK P2 SOIL AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. (20 gm)

DATE RECEIVED: JUN 26 1995 DATE REPORT MAILED: *July 7/95* SIGNED BY: *[Signature]* .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

AA  
LL

## GEOCHEMICAL ANALYSIS CERTIFICATE

AA  
LL

Fairfield Minerals Ltd. PROJECT SWAN File # 95-1970 Page 2

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: E.A. Balon

SAMPLE#	Au* ppb
800E 1400N (D)	2
1950E 5100N (D)	170
2000E 5100N (D)	2
RE 2000E 5100N (D)	1

- SAMPLE TYPE: P1 ROCK P2 SOIL AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 26 1995

DATE REPORT MAILED:

July 7/95

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

Looking South

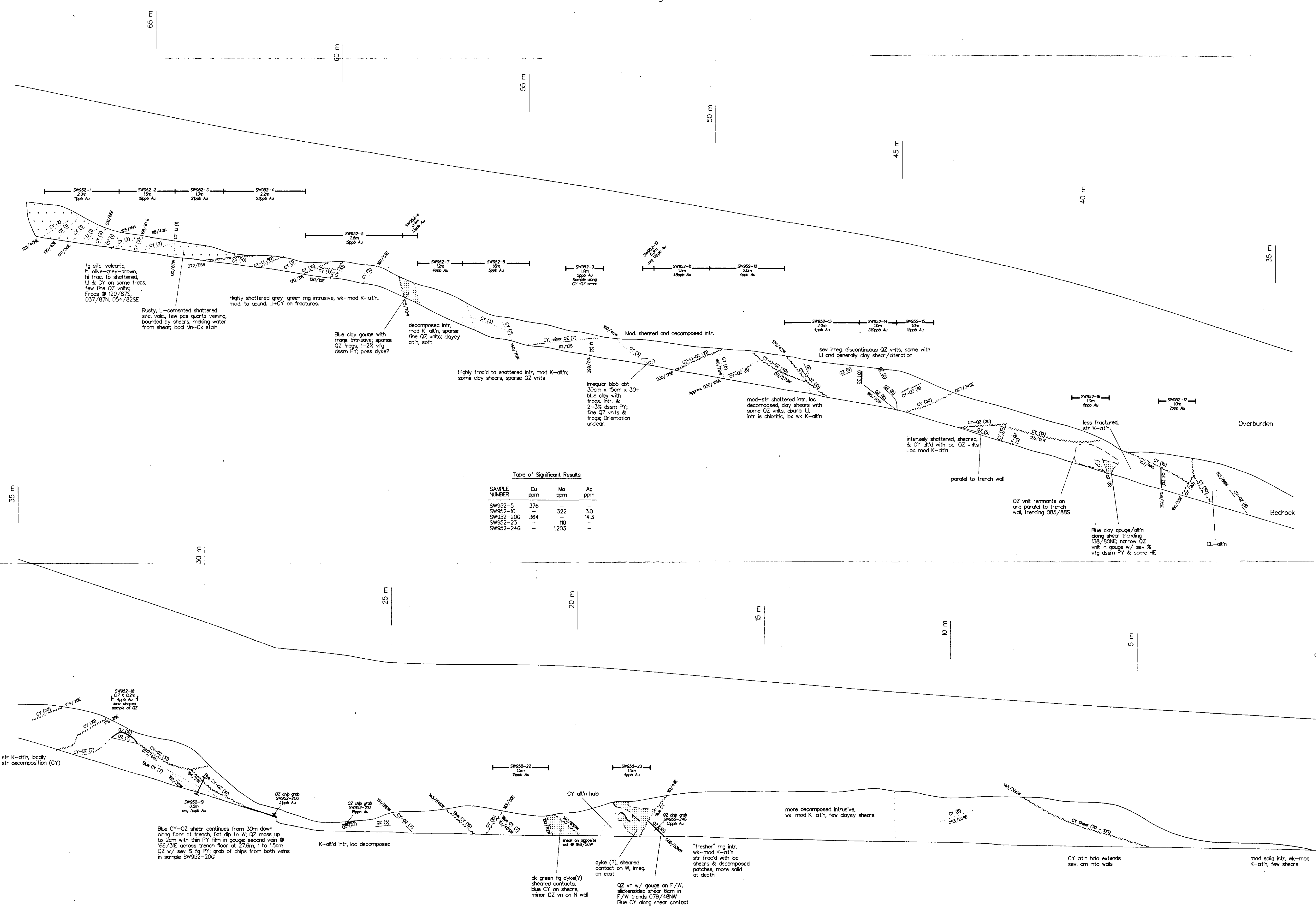


Table of Significant Results

SAMPLE NUMBER	Cu ppm	Mo ppm	Ag ppm
SW952-5	376	322	3.0
SW952-10	364	110	14.3
SW952-23	-	110	-
SW952-24C	-	1,203	-

GEOLOGICAL BRANCH ASSESSMENT REPORT

24,120

LEGEND

**LITHOLOGY**

Tertiary? Andesitic dykes

Cretaceous **SUMMERS CREEK PLUTON** Granodiorite, diorite

Triassic **NOCIA GROUP VOLCANICS** Andesitic volcanics, may be porphyritic

**SYMBOLS**

SW952-D Chip Sample 10m 1500 Au

CY (S) Narrow (20mm) shear or protruding fracture with 1 mm

Shear (>2mm) width in mm

Alteration contact width in mm

QZ (S) Quartz vein width in mm

Lithological contact

Q: albite  
CY: clay  
GZ: glauconite  
IE: hematite

LI: ironite  
ML: manganese oxide  
PY: pyrite  
QZ: quartz

dth: alteration  
d: dark  
g: green  
m: medium  
mg: medium  
f: fine  
fr: fracture  
fr: fracture  
fr: fracture  
K: potassium  
loc: local  
v: vein  
vlg: vuggy  
w: weak  
wk: weak  
w: weak

S: light  
med: medium  
mg: medium  
mod: medium  
m: medium  
f: fine  
fr: fracture  
fr: fracture  
fr: fracture  
K: potassium  
loc: local  
v: vein  
vlg: vuggy  
w: weak  
wk: weak

Note: see Figure 2 for trench location

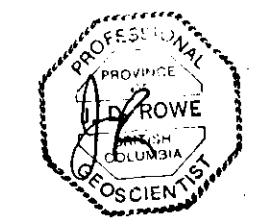
**FAIRFIELD MINERALS LTD.**  
1960 - 1055 West Hastings Street, Vancouver, British Columbia V6E 2E9

**SWAN PROPERTY**  
Simpkinsmen M.D. NTS 524/594, 102

**WALL MAP OF TRENCH SW95-2 LOOKING SOUTH**  
SCALE 1 : 50

Drawn by PWC  
November, 1995

Plate 1



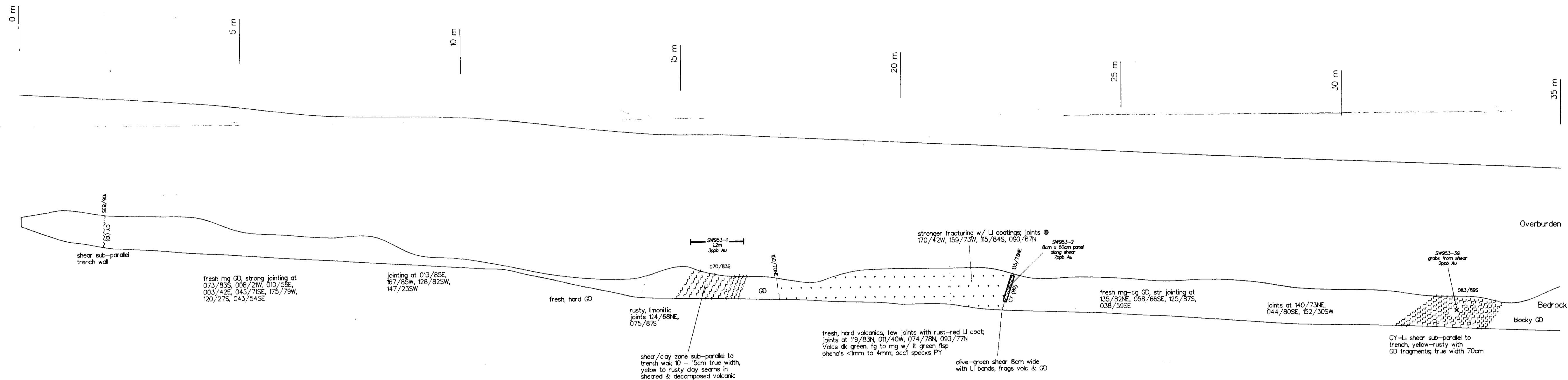
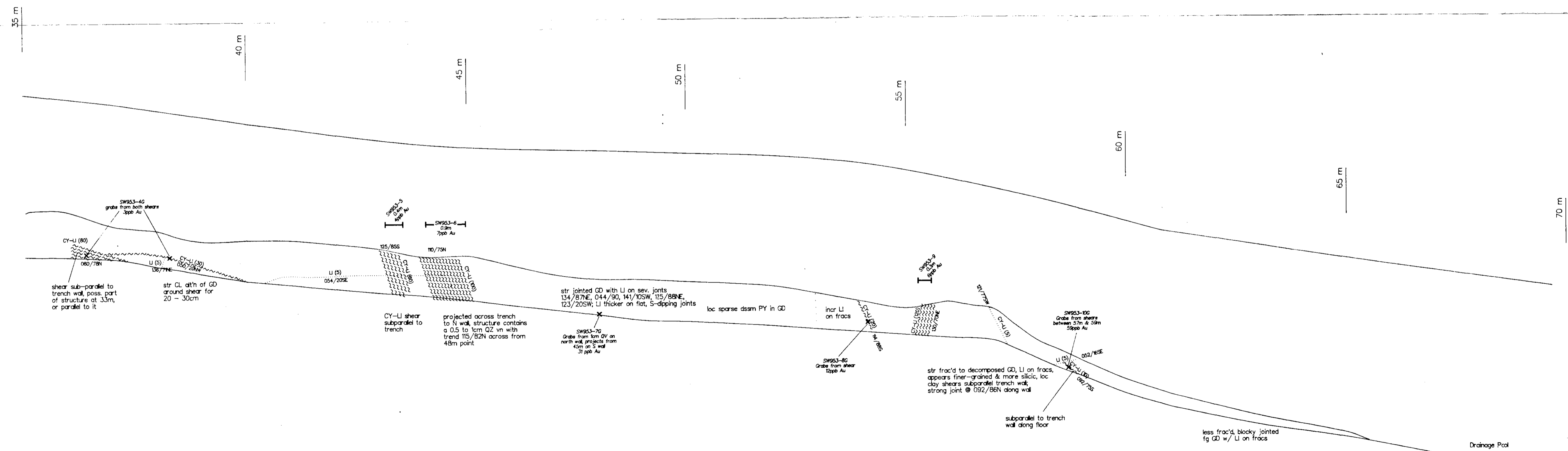


Table of Significant Results

SAMPLE NUMBER	Pb ppm	Zn ppm	Ag ppm
SW953-1	---	2,409	---
SW953-2	---	1,154	---
SW953-3C	---	2,051	---
SW953-4C	---	1,086	---
SW953-5	---	1,059	---
SW953-6	---	1,534	---
SW953-7G	---	1,329	6.7
SW953-8G	---	931	---
SW953-9	---	2,761	---
SW953-10G	980	2,841	---



TOLOGICAL BRANCS  
ASSESSMENT REPORT

24,120

LEGEND

LITHOLOGY

- Tertiary?
  - Andesitic dykes
- Cretaceous
  - SUMMERS CREEK PLUTON
  - Granodiorite, diorite
- Triassic
  - NOOLA GROUP VOLCANICS
  - Andesitic volcanics, may be porphyritic

SYMBOLS

- SW953-12 Old Sample 81m 400 Au
- SW953-13 Old Sample 81m 400 Au
- SW953-14 Old Sample 81m 400 Au
- SW953-15 Old Sample 81m 400 Au
- SW953-16 Old Sample 81m 400 Au
- SW953-17 Old Sample 81m 400 Au
- SW953-18 Old Sample 81m 400 Au
- SW953-19 Old Sample 81m 400 Au
- SW953-20 Old Sample 81m 400 Au
- SW953-21 Old Sample 81m 400 Au
- SW953-22 Old Sample 81m 400 Au
- SW953-23 Old Sample 81m 400 Au
- SW953-24 Old Sample 81m 400 Au
- SW953-25 Old Sample 81m 400 Au
- SW953-26 Old Sample 81m 400 Au
- SW953-27 Old Sample 81m 400 Au
- SW953-28 Old Sample 81m 400 Au
- SW953-29 Old Sample 81m 400 Au
- SW953-30 Old Sample 81m 400 Au
- SW953-31 Old Sample 81m 400 Au
- SW953-32 Old Sample 81m 400 Au
- SW953-33 Old Sample 81m 400 Au
- SW953-34 Old Sample 81m 400 Au
- SW953-35 Old Sample 81m 400 Au
- SW953-36 Old Sample 81m 400 Au
- SW953-37 Old Sample 81m 400 Au
- SW953-38 Old Sample 81m 400 Au
- SW953-39 Old Sample 81m 400 Au
- SW953-40 Old Sample 81m 400 Au
- SW953-41 Old Sample 81m 400 Au
- SW953-42 Old Sample 81m 400 Au
- SW953-43 Old Sample 81m 400 Au
- SW953-44 Old Sample 81m 400 Au
- SW953-45 Old Sample 81m 400 Au
- SW953-46 Old Sample 81m 400 Au
- SW953-47 Old Sample 81m 400 Au
- SW953-48 Old Sample 81m 400 Au
- SW953-49 Old Sample 81m 400 Au
- SW953-50 Old Sample 81m 400 Au
- SW953-51 Old Sample 81m 400 Au
- SW953-52 Old Sample 81m 400 Au
- SW953-53 Old Sample 81m 400 Au
- SW953-54 Old Sample 81m 400 Au
- SW953-55 Old Sample 81m 400 Au
- SW953-56 Old Sample 81m 400 Au
- SW953-57 Old Sample 81m 400 Au
- SW953-58 Old Sample 81m 400 Au
- SW953-59 Old Sample 81m 400 Au
- SW953-60 Old Sample 81m 400 Au
- SW953-61 Old Sample 81m 400 Au
- SW953-62 Old Sample 81m 400 Au
- SW953-63 Old Sample 81m 400 Au
- SW953-64 Old Sample 81m 400 Au
- SW953-65 Old Sample 81m 400 Au
- SW953-66 Old Sample 81m 400 Au
- SW953-67 Old Sample 81m 400 Au
- SW953-68 Old Sample 81m 400 Au
- SW953-69 Old Sample 81m 400 Au
- SW953-70 Old Sample 81m 400 Au
- SW953-71 Old Sample 81m 400 Au
- SW953-72 Old Sample 81m 400 Au
- SW953-73 Old Sample 81m 400 Au
- SW953-74 Old Sample 81m 400 Au
- SW953-75 Old Sample 81m 400 Au
- SW953-76 Old Sample 81m 400 Au
- SW953-77 Old Sample 81m 400 Au
- SW953-78 Old Sample 81m 400 Au
- SW953-79 Old Sample 81m 400 Au
- SW953-80 Old Sample 81m 400 Au
- SW953-81 Old Sample 81m 400 Au
- SW953-82 Old Sample 81m 400 Au
- SW953-83 Old Sample 81m 400 Au
- SW953-84 Old Sample 81m 400 Au
- SW953-85 Old Sample 81m 400 Au
- SW953-86 Old Sample 81m 400 Au
- SW953-87 Old Sample 81m 400 Au
- SW953-88 Old Sample 81m 400 Au
- SW953-89 Old Sample 81m 400 Au
- SW953-90 Old Sample 81m 400 Au
- SW953-91 Old Sample 81m 400 Au
- SW953-92 Old Sample 81m 400 Au
- SW953-93 Old Sample 81m 400 Au
- SW953-94 Old Sample 81m 400 Au
- SW953-95 Old Sample 81m 400 Au
- SW953-96 Old Sample 81m 400 Au
- SW953-97 Old Sample 81m 400 Au
- SW953-98 Old Sample 81m 400 Au
- SW953-99 Old Sample 81m 400 Au
- SW953-100 Old Sample 81m 400 Au

Note: see Figure 2 for trench location



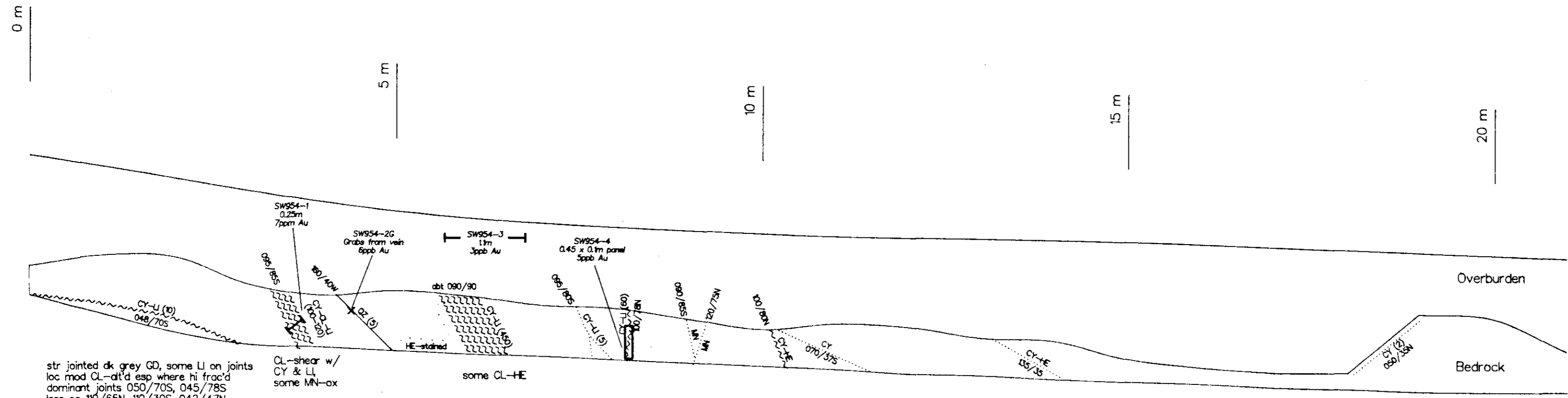
FAIRFIELD MINERALS LTD.  
1860 - 1055 West Hastings Street, Vancouver, British Columbia V6E 2G9

**SWAN PROPERTY**  
Simikameen M.D. NTS 92H/9W, 10E

**WALL MAP OF  
TRENCH SW95-3  
LOOKING SOUTH**

SCALE 1 : 50

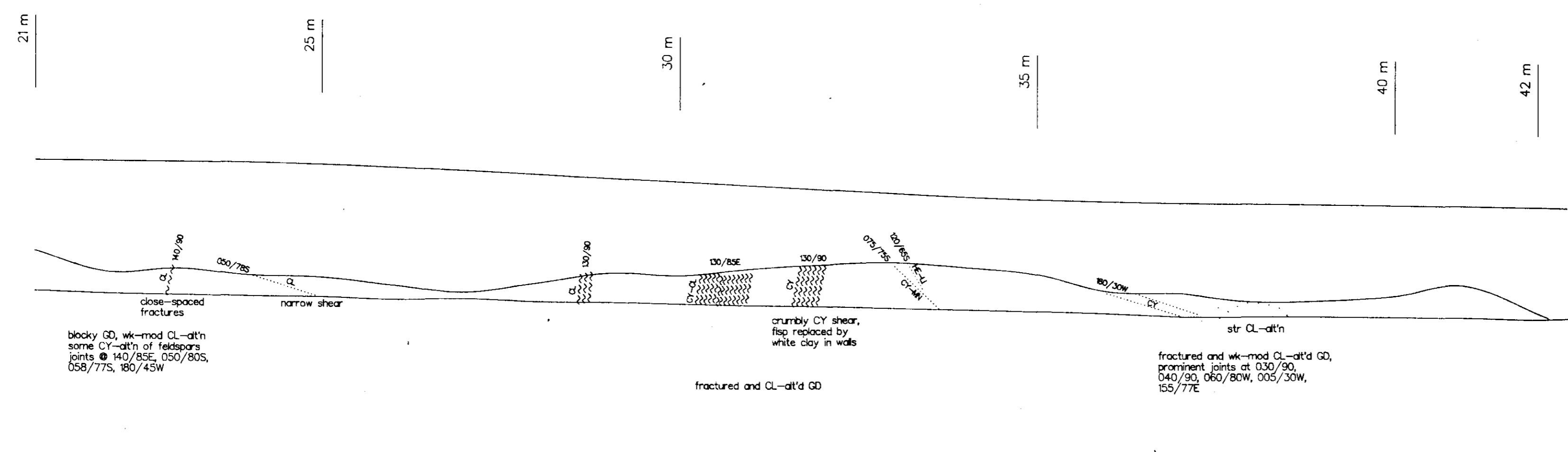
Looking Southeast



v. closely fractured dk grey GD, rext'd or  
silicified w/ tr dsrm PY w/in 50cm  
of shears  
fractures at 060/80S, 050/70S,  
090/85N, 120/85N, 070/80S, 090/80S

Table of Significant Results

SAMPLE NUMBER	Pb ppm	Zn ppm	Mo ppm
SW954-1	2,697	8,202	106
SW954-2G	---	---	---
SW954-3	3,208	19,916	98
SW954-4	9,557	22,569	133



Geological Branch  
ASSESSMENT REPORT  
**24,120**

**LEGEND**

**LITHOLOGY**

Tertiary?  
Andesitic dykes

Cretaceous  
SUMMERS CREEK PLUTON  
Granodiorite, diorite

Triassic  
NICOLA GROUP VOLCANICS  
Andesitic volcanics, may be porphyritic

**SYMBOLS**

SW954-1  
10m  
7ppm Au

CY (S)  
Narrow (<10mm) shear or  
prominent fracture  
(width in mm)

CY (30)  
Shear (>10mm)  
(width in mm)

OZ (S)  
Quartz vein  
(width in mm)

Alteration contact

Lithological contact

CL chlorite  
CY clay  
GD granodiorite  
HE hematite

LI limonite  
MN manganese oxide  
PY pyrite  
QZ quartz

alt alteration  
cg coarse grained  
dk dark  
dm disseminated  
fg fine grained  
flsp feldspar  
frac fracture  
intr intrusive  
pot potassic  
K  
loc local, body

lt light  
md medium  
mg medium grained  
mod moderate  
pca coarse  
sbc silicified  
str strong  
vlt vuggy  
vlt volcanic  
xtl crystal

Note: see Figure 2 for trench location



**FAIRFIELD MINERALS LTD.**  
1980 - 1055 West Hastings Street Vancouver, British Columbia V6E 2E9

**SWAN PROPERTY**  
Simikamien M.D. NTS 92H/9W, 10E

**WALL MAP OF  
TRENCH SW95-4  
LOOKING SOUTHEAST**

SCALE 1 : 50

Drawn by PWC  
November, 1995

Plate 3