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2/88

REPORT ON
GEOCHEMICAL SOIL SAMPLING,
TRENCHING AND DRILLING

SNOWBIRD GROUP
FORT ST. JAMES, B.C.
OMINECA MINING ~~DISTRICT~~ DIVISION

(54°27' 55" N, 124°31' 25" W)

N.T.S. 93K/7E-8W

for

Operator:

X-CAL RESOURCES LTD.
General Delivery
Goldbridge, B.C.
V0K 1P0

*Owner(s): Pipawa Exploration Ltd.
X-Cal Resources Ltd.*

by

BRIAN D. GAME, B.Sc.
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15,853

GEOLOGICAL BRANCH
ASSESSMENT REPORT

FILMED

Vancouver, B. C.

January 1987

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The claims are underlain by argillite, cherty argillite and andesitic volcanics. Drill holes intersected a quartz-ankerite-mariposite alteration zone containing gold and antimony values.

T. K.

SUMMARY AND CONCLUSIONS

Programmes of geochemical soil sampling and trenching with Caterpillar 225 backhoe were carried out on the Snowbird property by X-Cal Resources Ltd. in October 1986. The property is situated 15 kms due west of Fort St. James, B.C. and is held by X-Cal under an option agreement with Pipawa Exploration.

Due to depth of overburden, only 3 trenches reached bedrock, but some elevated values in precious metals were encountered in the limited areas of bedrock basal till exposed. It had been expected that since mercury and antimony are very mobile in the secondary geochemical environment, analysis for these two elements in soil samples might indicate anomalies, but geochemical soil results showed little apart from a concentration of antimony and mercury values around the area disturbed by mining and occasional scattered one station anomalies.

A drilling programme of 3062 ft (933 m) of 10 NQ diamond holes - 18 November - 4 December 1986 - was done to extend areas of gold mineralization originally discovered by Cominco 1943, Westwind 1974 and Prism 1980.

The 1986 drilling, combined with results from previous drilling, outlined two areas of good grade gold mineralization:

a) Around the inclined shaft in holes:

P10	0.167 oz/ton	3.0 ft.	
C-4	0.24 oz/ton	5.0 ft.	C holes by Cominco 1943
W-4	0.12 oz/ton	4.0 ft.	W holes by Westwind 1974
C-3	0.35 oz/ton	5.0 ft.	P holes by Prism 1980
P-7	0.584 oz/ton	8.0 ft.	X holes by X-Cal 1986
X86-2	0.27 oz/ton	13.94 ft.	
(includes	0.637 oz/ton	3.23 ft.)	
C-1	0.27 oz/ton	2.5 ft.	
C-2	0.35 oz/ton	5.0 ft.	

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In particular X-Cal hole X86-2 showed that good grade gold mineralization extends down dip. X86-2 and Prism P-10 are the deepest intersections on the vein system to date at 220 and 180 ft. below surface respectively.

- b) The area approx. 400 ft. grid south of the inclined shaft is shown by holes:

P-6	0.698 oz/ton	3 ft.
X86-6	248.16 oz/ton	0.5 ft.
X86-7	0.715 oz/ton	3.3 ft.

The intersection in hole X86-6 (248.16 oz/t Au, 84.58 oz/t Ag, 0.03% Sb) although narrow (0.5 ft.) is significant as it represents the first intersection of high grade visible gold encountered in exploration programmes on the Snowbird property and indicates that high grade shoots probably occur within the vein system.

RECOMMENDATIONS AND COST ESTIMATES

1. Diamond Drilling

A programme of 15 NQ diameter diamond drill holes totalling 5,400 ft. (1646m) is planned to investigate the two areas of gold mineralization outlined above and further explore the northern end of the grid in the vicinity of the Argillite Vein:

LOCATION OF PROPOSED DRILL HOLES

Section	Location	Dip	Length ft.	Comments
200S	0+100W	60°	250	(A) Cominco C-7 intersected 0.52 oz/t over 4 ft. Westwind Holes W1,2 unreliable due to poor recovery. Prism P-9 and C-7 are sole reliable holes in this area.
400S	0+50W	60°	300	(B) To intersect junction of Argillite and Main vein.

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Section	Location	Dip	Length ft.	Comments	
550S	0+50E	60°	350	(C) } These holes are to explore the area of gold values around the inclined shaft.	
600S					
650S	0+100E	60°	350		(D)
700S	0+200E	60°	400		(E)
750S	0+100E	60°	300		(F)
	0+200E	60°	400		(G)
1000S	0+150°	60°	320	(H) }	
1050S	0+125°	60°	340	(I)	These holes are to explore the area of gold values indicated by Holes P-6, X86-6, X86-7.
	0+200E	60°	450	(J)	
1100S	0+150E	60°	450	(K)	
1150S	0+100E	60°	340	(L)	
	0+200E	60°	450	(M)	
1200S	0+100E	60°	350	(N)	
1250S	0+100E	60°	350	(O)	

15 Holes 5,400 ft. (1,646 m)

Cost estimates are as follows:

	\$
15 holes, 5,400 ft., NQ drilling @ \$21 per foot	113,400
Assays: 15 holes, 20 per hole @ \$20 ea.	6,000
Supervision: field geologist, assistant, 1 month	12,000
Food, Accommodation, Truck Rental	6,000
Report Preparation, Travel	10,000
Contingency	2,000
	\$150,000

2. Geophysical Surveys

The southernmost holes of the 1986 programme (X86-5 through X86-10) were drilled at 100 ft. spacing along the alteration zone and contained quartz veins. Each hole was drilled from the hanging wall argillite through the alteration zone which averages 40-60 ft. thick and into the footwall argillite (with some volcanic, i.e. andesitic sections). The drilling indicated that the alteration zone is a very strong feature with good continuity along strike. The alteration zone is the host for quartz veins and gold mineralization and is the prime exploration target on the Snowbird property.

I.P. programmes are therefore proposed in order to trace the strike extension of the zone and E.M. programmes to locate areas of massive sulphides within the system (sections of massive stibnite occur within the old workings and drill holes).

Cost estimates are as follows:

50 kms. IP survey @ \$400 km.	20,000
50 kms E.M. and Magnetometer @ \$250 km.	12,500
Supervision and Report Preparation	<u>7,500</u>
	40,000

3. Basal Till Sampling

The 1986 trenching programme showed that overburden depths on the Snowbird property are probably no greater than 50' (15m). Three of the ten trenches dug by backhoe reached bedrock (although not over the entire length of the trench). In all trenches, a thick sequence of post glacial lacustrine clay was encountered which is impervious to ground water. In those trenches where the backhoe was able to dig below the clay a basal till approx. 5 ft. thick was encountered immediately above bedrock. This consists of blocks (up to 2 ft. diameter) of locally derived material in a sand-gravel matrix. The till is quite permeable - water circulates freely through the sandy matrix. Many of the contained boulders are intensely weathered & rusty (resulting from oxidation of contained pyrite). Geochemical values well above background were obtained from till samples collected from the trenches that reached bedrock.

A programme of basal till sampling, using a reverse circulation rotary rig to both sample the till and top 20 ft. of bedrock is therefore proposed. The location of the alteration zone should be indicated by the geophysical programmes - thus reducing footage to be drilled with the rotary rig.

Cost estimates are as follows:

	<u>\$</u>
20 kms, strike length, 100 m. spaced lines holes @ 50 m. spacing, i.e. 10 per line, i.e. 200 holes @ 50 ft. ea. @ \$9/ft.	90,000
Analyses: \$3 per ft.	30,000
Supervision: Geologist, Assistant 1 month	12,000
Food and Accommodation, Truck Rental	6,000
Report Preparation, Travel	10,000
Contingency	<u>2,000</u>
	<u>150,000</u>
TOTAL PROPOSED BUDGET SNOWBIRD PROPERTY:	\$340,000

INTRODUCTION

During October 1986 X-Cal Resources Ltd. carried out a programme of trenching on the company's Snowbird property located 15 kms due west of Ft. St. James, B.C. Using a Caterpillar 225 backhoe, 10 trenches were dug to explore geophysical anomalies which have been outlined by a VLF geophysical survey done in May 1986. Most of the trenches did not reach bedrock and were completely in lacustrine clay. The three trenches which did reach bedrock exposed a 1-2 m. thick well weathered, rusty basal till containing circulating ground water above highly weathered fractured rusty bedrock. One metre chip samples were taken from bedrock and grab samples from mineralized boulders encountered in the basal till.

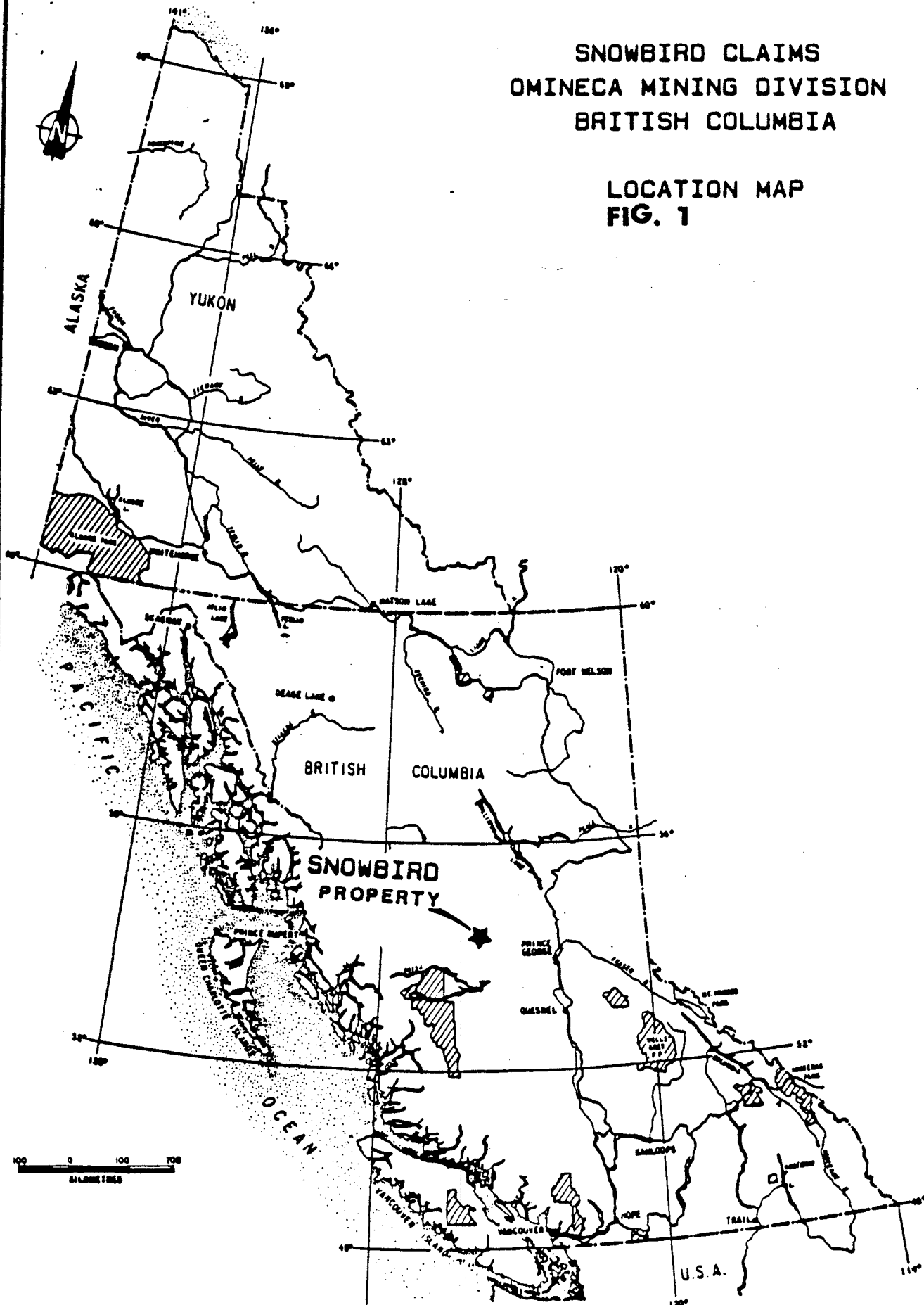
During the course of the trenching programme, a programme of geochemical soil sampling was also carried out. Long handled shovels were used to dig down to the reasonably well developed B horizon from which a 10 gram sample of soil was collected. Samples were analyzed for mercury and antimony but apart from the area disturbed by mining the few anomalous values are scattered indicating that the lacustrine clay effectively seals any mineralization in bedrock.

In November and December 1986 drilling contractors J.T. Thomas Ltd. of Smithers, B.C. carried out a programme of NQ diamond drilling totalling 933 m (3060 ft) in 10 holes ranging from 71.47 m (230 ft) to 130.52 m (420 ft). The old mine office building was rehabilitated to serve as a core shack and all core from the drilling programme is currently stored on the site in this building.

The drilling programme was designed to extend (both along strike to grid south and down dip) the areas of gold mineralization which had been indicated by programmes of drilling principally by Cominco 1943 and Prism 1980. The gold occurs mostly in two veins, the Main vein and the Pegleg vein, which are situated on the hanging wall and footwall sides respectively of a strongly developed quartz-ankerite-mariposite zone approx. 40-60 ft. thick which strikes NW/SE and dips 40-50°NE.

SNOWBIRD CLAIMS
OMINECA MINING DIVISION
BRITISH COLUMBIA

LOCATION MAP
FIG. 1



X-CAL RESOURCES LTD. (TSE-XCL)

LOCATION AND ACCESS

The Snowbird group of claims which X-Cal Resources hold under option from Pipawā Explorations consists of 100 mining claims, situated in the Omineca Mining Division 15 kms due west of Ft.St. James, B.C. (Fig. 1). The claims straddle the boundary of Maps NTS 93K7E-93K8W near $54^{\circ}27'N$ and $124^{\circ}31'W$. Access to the property is easily gained by taking the public highway west from Ft.St. James, 17 kms to the Sowchea Bay public campground on the western shore of Stuart Lake. The remaining 7 kms of access road to the property is a rough dirt road which for most of the year requires the use of 4 wheel drive vehicles, but during the winter months, once the road has been plowed, is accessible by ordinary 2 wheel drive vehicle as there are no steep grades.

The centre of the grid constructed on the property is situated approx. 500 m. west of the shore of Stuart Lake at Kasaan Bay and generally straddles the access road.

TOPOGRAPHY AND VEGETATION

The Snowbird group of claims is situated on the south-west side of Stuart Lake. The lake shore thus represents the lowest elevation of the property at 680 m (2230 ft) ASL. The ground rises on the western side at moderate slope towards the broad ridge which contains Mount Nielsp (4313 ft). Thus highest elevation on the claim group is in the SW corner of Snowbird No. 4 claim at 1067 m (3500 ft) elevation. Apart from the westernmost portion of Snowbird 1, 2 and 4 claims the majority of the claim group is underlain by a broad NW-SE trending valley of moderate to gentle relief. Immediately east of the old mine area a low ridge of about 200-300 ft. elevation above the broad valley floor trends NW-SE.

The westernmost part of Snowbird 1, 2 and 4 claims on the slopes of the ridge containing Mount Nielsp is covered by mature stands of pine and some spruce, but most of the rest of the claim group, particularly the flat lying areas around the old mine buildings, is covered by poorly developed stands of poplars with some birch and thin underbrush mostly composed of wild roses.

LAND STATUS

The Snowbird Group, owned by Pipawa Explorations Ltd., consists of 11 mineral claims totalling 100 metric units (Fig. 2).

Claim details are as follows:

<u>Name</u>	<u>Record #</u>	<u>Units</u>	<u>Expiry</u>
Snowbird	1900	1	Nov. 5, 1990
Campsite	1896	1	Nov. 5, 1990
Shaft Fraction	8723	1	Oct.20, 1990
Boarchea	3008	6	May 15, 1988
Snowbird #1	7537	18	Mar.24, 1987
Snowbird #2	7538	9	Mar.24, 1987
Snowbird #3	7539	20	Mar.24, 1987
Snowbird #4	7540	12	Mar.24, 1987
Snowbird #5	7541	20	Mar.24, 1987
Snowbird #6	7542	8	Mar.24, 1987
Snowbird #7	7543	4	Mar.24, 1987

HISTORY (From Report by D. Dunn 1986)

The property was first staked in 1920 and some development work was done on the Snowbird, Campsite and Shaft Fraction Claims, and then the property was allowed to lapse. The showing area was restaked by T.E. Neilson in November 1937. Some work was done, with about 54 tons of antimony ore hand cobbled and sold.

In 1939, Dr. V. Dolmage and R.H. Stewart examined the surface showings and secured an option on the property for Pioneer Gold Mines Ltd.

Pioneer sank an inclined shaft on the "Main Vein" in a quartz stringer zone to a depth of 45 m. They also drove an adit and drifted on the massive stibnite "Cross Vein" for a distance of 45 m. They shipped 36 tons of crude ore and later permitted their option to lapse.

In 1942 C. M. & S. held an option on the property and drilled seven holes on the quartz stringer zones of the Shaft Fraction. They were unable to secure extensions of their option and it was terminated.

In 1943 Leta Explorations Ltd. held the property under option and drilled 308 m of diamond drilling on the quartz stringer zones.

About 1947, Inland Mining Co. Ltd. of Los Angeles stoped out additional ore from the "Cross Vein". Records for their shipments are 13.22 tons of 55% Sb; 17.88 tons of 58.8% Sb; and 35 tons of 60% Sb.

During this period, October 28th to December 5th of 1970, Consolidated Shunsky Mines Ltd. of Ontario contracted a geochemical survey of an 8 claim portion of the property to E.L.C. Geophysics of Vancouver, B.C.

In 1974, Westwind Mines Ltd. carried out 280 m of diamond drilling on the quartz stringer zones.

In 1980, Prism Resources Ltd. carried out 612 m of diamond drilling in the area of the stringer zones.

TRENCHING RESULTS

During a 2-1/2 week period in October 1986, a Caterpillar 225 backhoe was used to excavate 10 trenches. A Caterpillar D6 bulldozer was subsequently employed to backfill the trenches. The trenches ranged in length from 32 m. to 104 m. and all were approx. 1 m. in width. Depth varied depending on depth of overburden, but in general they were from 3-5 m. deep. Figure 3 shows the plan of the grid and trenches.

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STUART

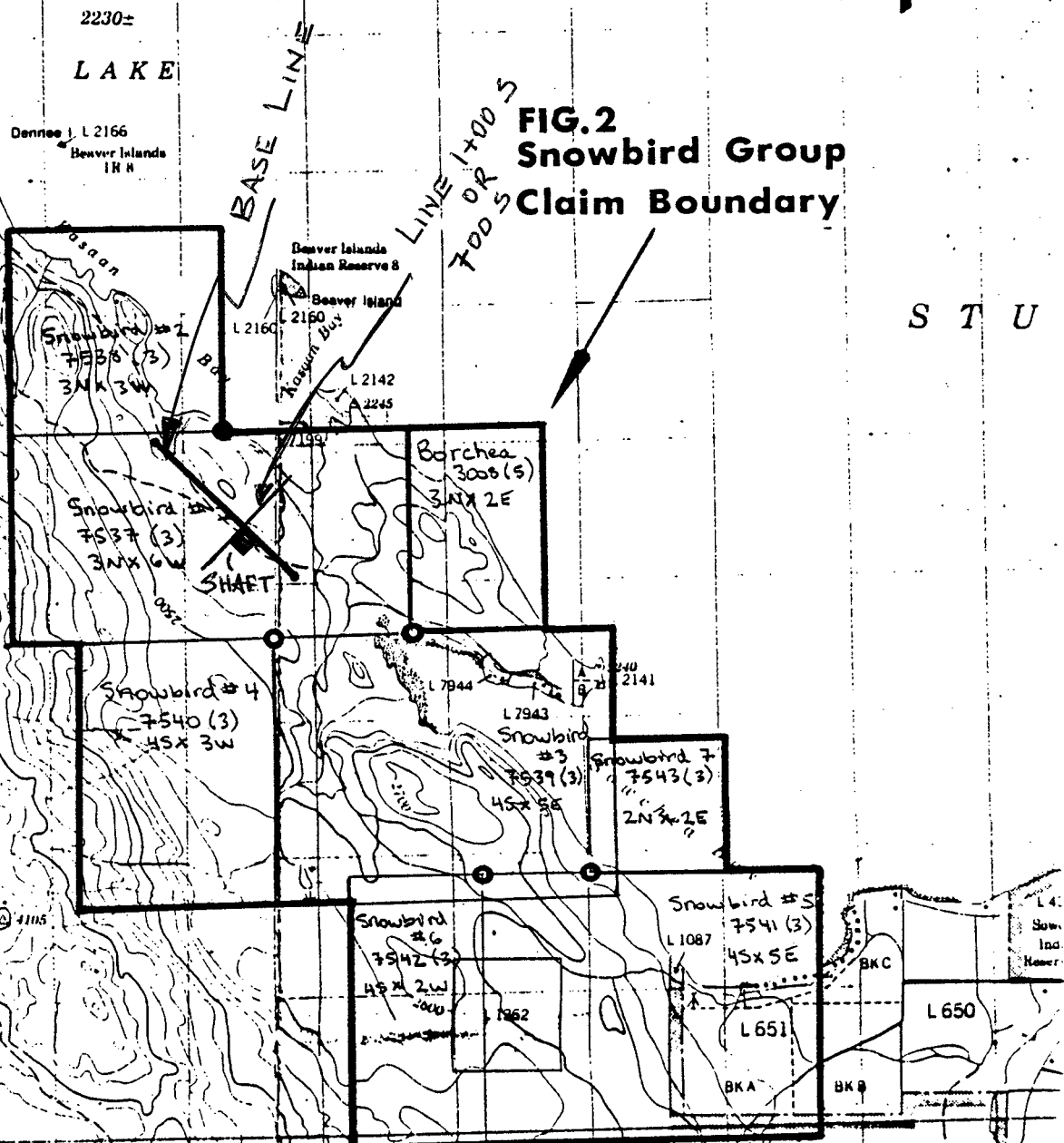
2230±

LAKE

Denville J. L 2166
Beaver Islands
I.R.N.

**FIG. 2
Snowbird Group
Claim Boundary**

S T U



Depth of overburden proved to be substantial and only 3 of the 10 trenches managed to reach bedrock. In all 10 trenches, beneath the initial approx. 0.5 metres of developed soils, a thick layer of impermeable lacustrine clay was encountered. In the 3 trenches which reached bedrock, the clay layer did not exceed 4 metres in thickness but elsewhere is probably considerably thicker. Beneath the lacustrine clay a 1-2 metre thick hardpan layer, consisting of 30-50 cm diameter boulders in a sand-gravel matrix was encountered above bedrock. Most of this material is a glacial till but some maybe of local alluvial origin. The boulders are mostly composed of local rock types principally argillite, cherty argillite, andesite and quartz-ankerite-mariposite alteration zone. They thus appear to be locally derived. Many of the boulders have been extensively weathered, are very friable and easily crumbled with the geological hammer. Many contain disseminated pyrite now weathered to rust. Grab samples were taken from the more significantly mineralized boulders particularly those showing quartz-ankerite-mariposite alteration.

Even the trenches which exposed bedrock were not successful in exposing bedrock over the complete length of the trench. Trenches 2 and 6 exposed bedrock at their eastern ends close to outcrops which occur on the ridge of this vicinity. The bedrock surface drops off at very steep grade and the western ends of the trenches did not even expose the basal till and were completely in lacustrine clay. In those areas where bedrock was exposed 1 metre chip samples were collected and sent to Min-En Laboratories, North Vancouver, for assay for gold, silver and antimony. In all cases, bedrock geology, exposed consisted of well altered cherty argillite with some fine grained to medium grained disseminated pyrite. Iron and arsenic staining was prevalent throughout the units. In addition in Trench 6 the quartz-ankerite-mariposite unit was exposed over a short distance. The mineralized boulders sampled consisted of float from these two rock units and were assumed to be of local origin.

Although Trench 9 did not expose bedrock, the basal till was exposed over a few metres and grab samples were collected from rusty boulders.

Assay results from both bedrock and till samples are tabulated in Appendix 1. Although no ore grade material was encountered, silver and gold values are considerably above background levels, particularly sample 39026 from Trench 9 which assayed 0.03 oz/ton Ag and 0.038 oz/ton Au.

Due to the pervasive and generally thick clay overburden, trenching even with a very large backhoe with long reach was not considered an effective method of exploring the Snowbird property.

GEOCHEMICAL SOIL SAMPLING

A programme of geochemical soil sampling with analyses for antimony and gold was carried out on the Snowbird property by Consolidated Shunsby Mines Ltd. in 1970. The programme of backhoe trenching done by X-Cal Resources personnel in October 1986 was partially designed to explore anomalies originally located by the Consolidated Shunsby work. The 1970 geochemical surveys had shown gold values particularly in the disturbed area around the old workings as high as 2.8 ppm. Antimony results revealed an 800 ft. long anomaly with values as high as 694 ppm antimony, again associated with the main showings and old workings. The remainder of the grid showed only low values of up to 2 ppm. The backhoe trenching programme in October 1986 indicated that the layer of lacustrine clay which covers most parts of the property, which is in excess of five metres thick, is almost completely impermeable and thus little water penetrates through it to concentrate metals from baserock in the soils. Since antimony and mercury are very mobile geochemically in the secondary environment, i.e. overburden and soils, X-Cal Resources decided to carry out a programme of geochemical soil sampling while its personnel were on the property supervising the backhoe trenching programme, as it was felt that Sb, Hg being highly mobile might penetrate the clay layer.

Soils are reasonably well developed on the Snowbird property and shovels were used to dig down through the overlying humus rich A horizon and obtain 10-15 gms. of material from the well developed and readily

recognizable B horizon. Soils were packed in numbered Kraft bags, air dried and shipped to Min-En Laboratories in North Vancouver for analyses for Sb and Hg.

Figure 3 shows the results of geochemical sampling surveys. As with the earlier 1970 survey of Consolidated Shunsby, anomalous values are confined to the area immediately around the showings and old workings and are related to surface disturbances from mining. The highest mercury values are similarly centred around the area of the old workings, but a few other single station mercury highs occur along the probable trend of the alteration zone. Careful attention will be paid to these localities during any overburden/till sampling programmes, etc.

DIAMOND DRILLING

10 NQ holes, totalling 933.15 m. (3061.66 ft.) were drilled during the 2-1/2 week period 18 November - 4 December 1986. Contractor was J.T. Thomas of Smithers, B.C. who used a skid mounted Acker 44 drill with International TD-15C tractor to prepare drill sites, access roads and move the rig.

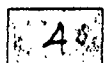
Purpose of the 1986 diamond drilling programme was to extend the main vein both along strike and down dip and in particular follow up the intersections obtained by the 1980 drilling programme of Prism Resources Ltd. The programme was also designed to test for down dip extensions of the smaller Pegleg vein situated on the footwall side of the alteration zone. Figure 4 shows the location of the X-Cal 1986 drill holes.

Apart from the two vertical holes, 86-1 and 86-5, all holes were inclined at either 45° or 60° and drilled from the hanging wall argillite, cherty argillite completely through the alteration zone into the footwall which in most cases is also argillite or cherty argillite but in some places shows andesite volcanic material. The cross sections show that all the holes

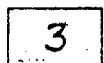
LEGEND - DRILL HOLE CROSS-SECTIONS



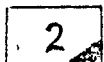
overburden and/or triconed intervals



argillite - dark to grey, cherty, pyritic minor
intraformational breccias; shale - dark, fractured,
rust stained on fractures



andesite, andesite and tuff breccias, serpentized
volcanics



quartz-mariposite zone: silica flooded zone with
associated mariposite + pyrite, generally brecciated,
banded; includes quartz veins, veinlets - some
stibnite-bearing, quartz stringers + pyrite
crosscutting and/or parallel to banding; narrow shear
gouge intervals at zone margins (not always present)



sandstone - grey, arkosic



assay interval

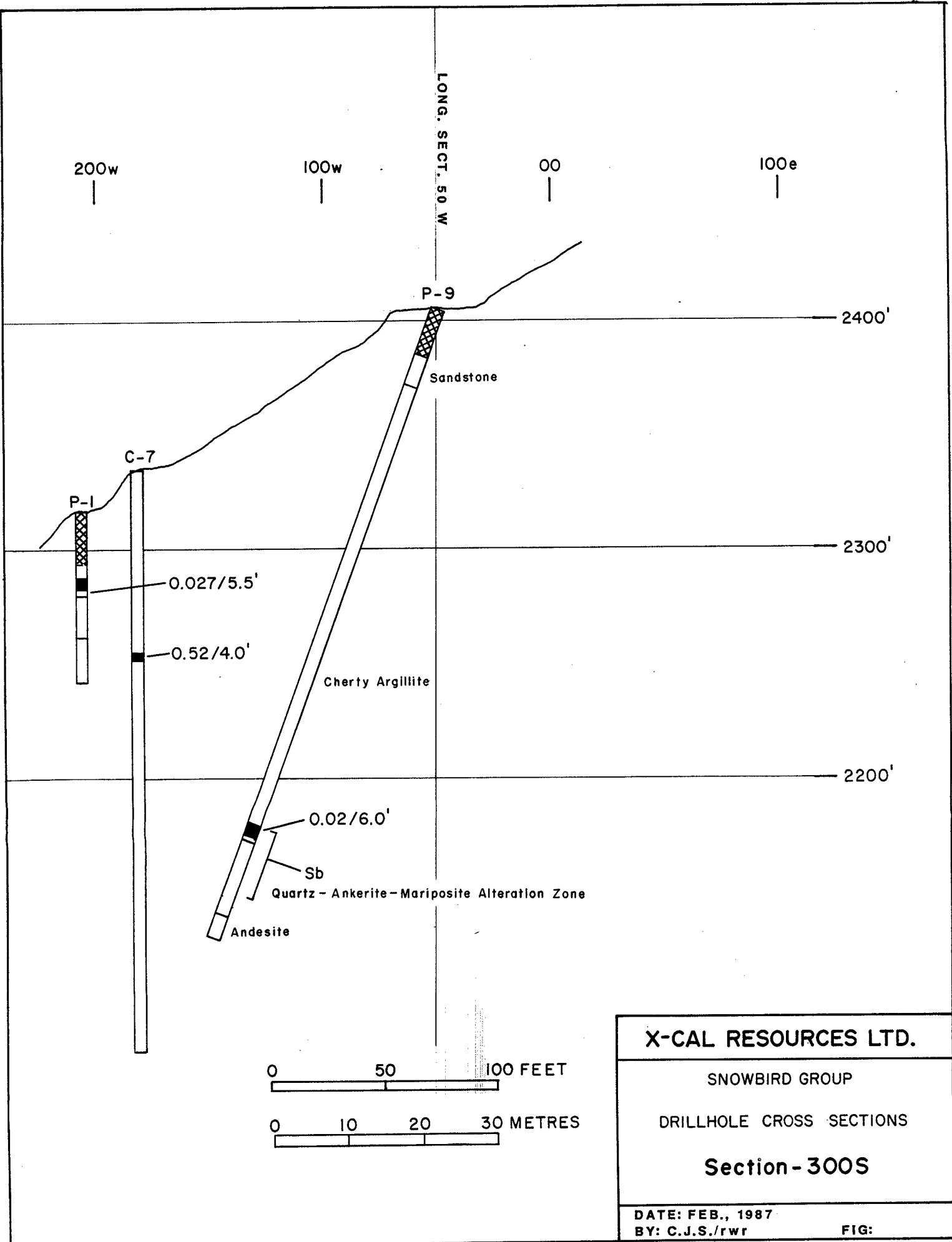


surface trace, actual and projected - Main Vein



surface trace, actual and projected - Peg Leg Vein

- N.B. 1. Elevations based on assumed elevation of Stuart Lake
of 2230' on May 7, 1980.
2. All sections are NE-SW, looking NW.



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DRILLHOLE CROSS SECTIONS

Section - 300S

DATE: FEB., 1987
 BY: C.J.S./rwr
 FIG:

LONG. SECT. 50 W

200w

100w

00

100e

P-8

2400'

Cherty Argillite

Cherty Argillite

2300'

Andesite

Cherty Argillite

Quartz-Ankerite-
-Mariposite Alteration Zone

0.015/4.0'

Andesite

2200'

0 50 100 FEET

0 10 20 30 METRES

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SNOWBIRD GROUP

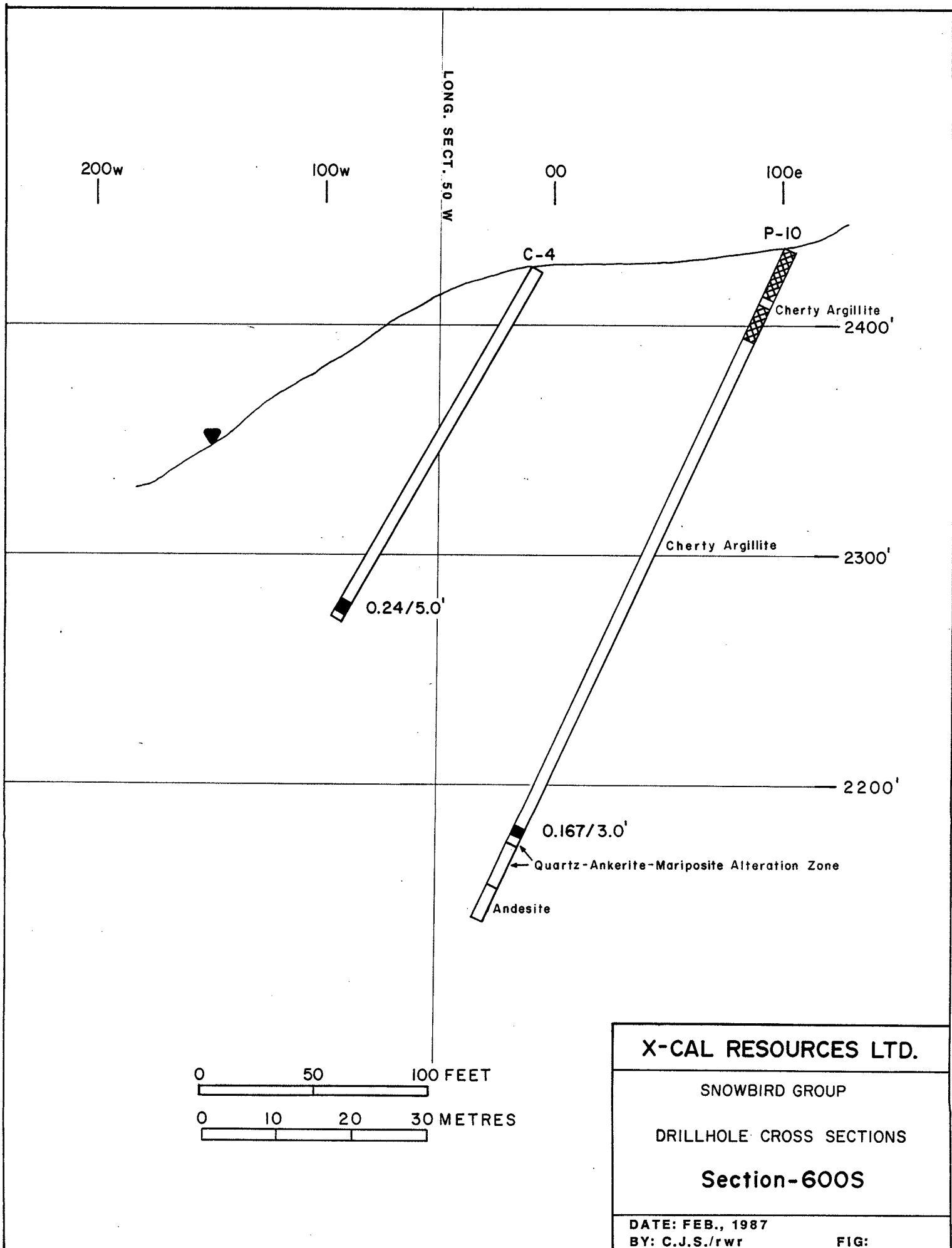
DRILLHOLE CROSS SECTIONS

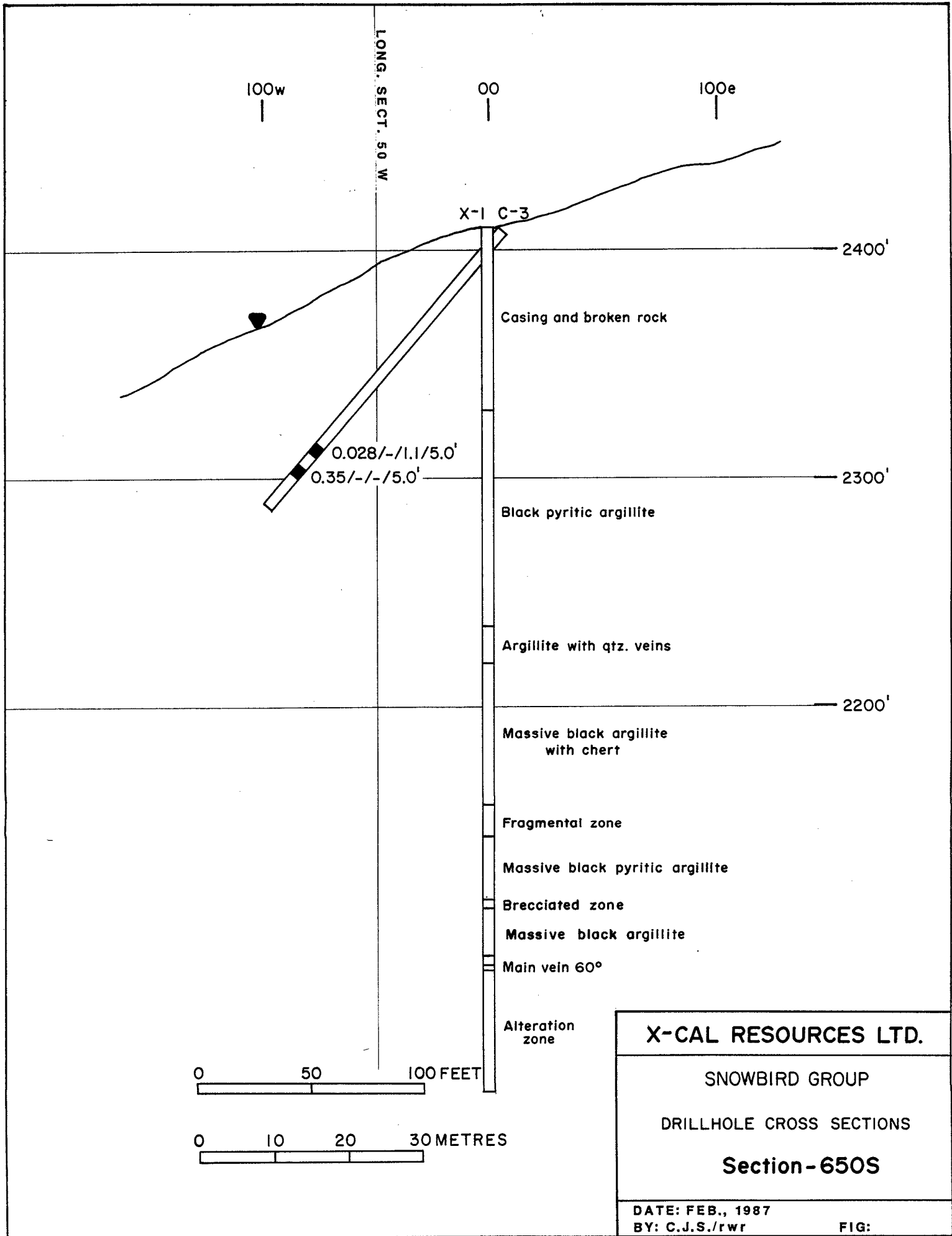
Section-500S

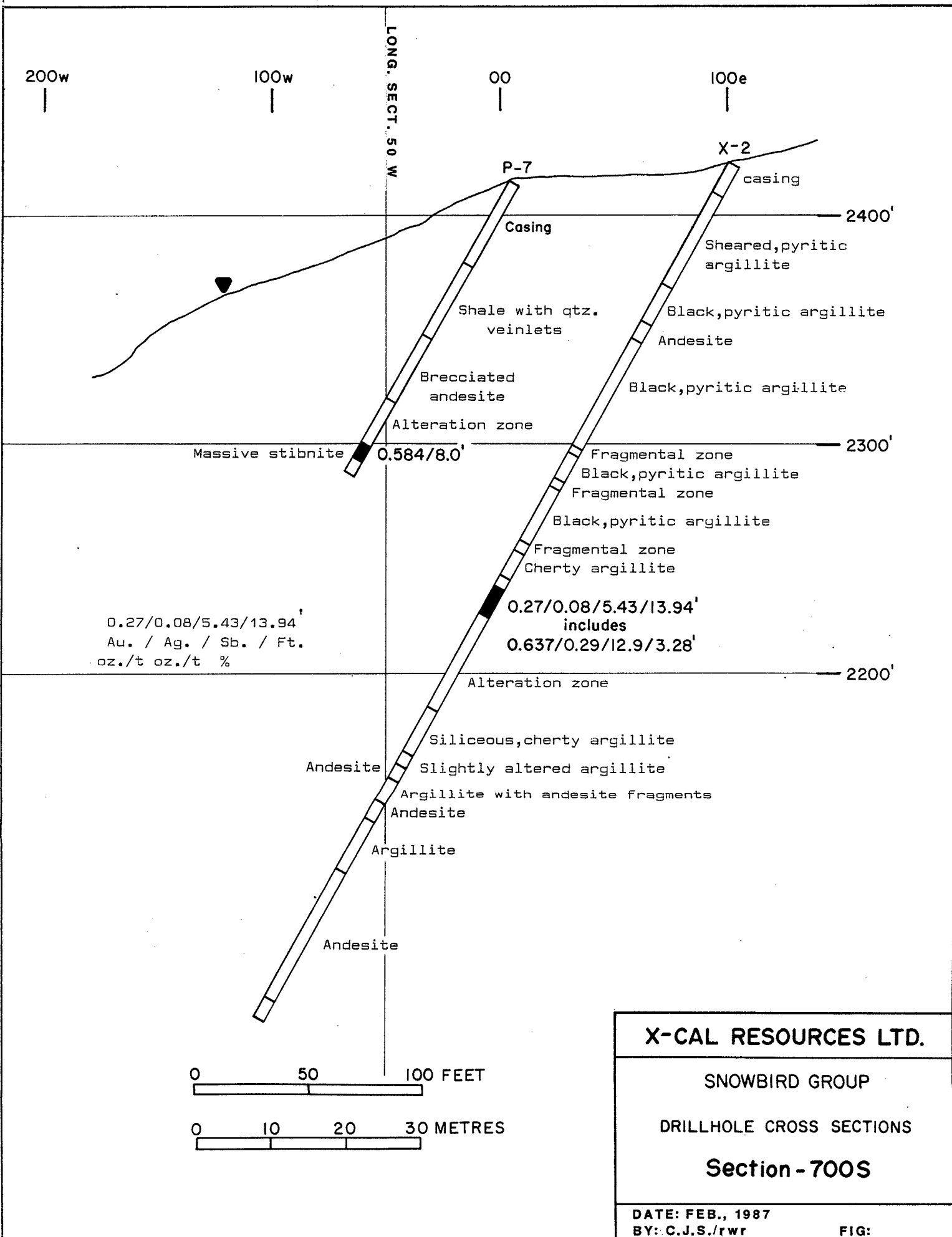
DATE: FEB., 1987

BY: C.J.S./rwr

FIG:







200w

100w

00

100e

LONG. SECT. 50 W

P-7

X-2

casing

2400'

Casing

Sheared, pyritic argillite

Shale with qtz. veinlets

Black, pyritic argillite

Andesite

Brecciated andesite

Black, pyritic argillite

Alteration zone

Massive stibnite

0.584/8.0'

Fragmental zone

2300'

Black, pyritic argillite

Fragmental zone

Black, pyritic argillite

Fragmental zone

Cherty argillite

0.27/0.08/5.43/13.94'
Au. / Ag. / Sb. / Ft.
oz./t oz./t %

0.27/0.08/5.43/13.94'
includes

0.637/0.29/12.9/3.28'

2200'

Alteration zone

Siliceous, cherty argillite

Andesite

Slightly altered argillite

Argillite with andesite fragments

Andesite

Argillite

Andesite

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SNOWBIRD GROUP

DRILLHOLE CROSS SECTIONS

Section - 700S

DATE: FEB., 1987

BY: C.J.S./rwr

FIG:

0 50 100 FEET

0 10 20 30 METRES

LONG. SECT. 50 W

200w

100w

00

100e

X-3 C-1

2400'

Inclined shaft

0.07/-/1.8/2.5'
0.27/-/0.3/2.5'

Casing

Sheared argillite

Black, pyritic argillite

Argillite with qtz. flooding

Cherty argillite

2300'

0.029/0.01/1.56/3.28'

0.027/0.01/0.31/6.6'

Black, pyritic argillite

0.045/1.45'

Alteration zone

Cherty argillite

2200'

Andesite

0 50 100 FEET

0 10 20 30 METRES

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DRILLHOLE CROSS SECTIONS

Section - 750S

DATE: FEB., 1987

BY: C.J.S./rwr

FIG:

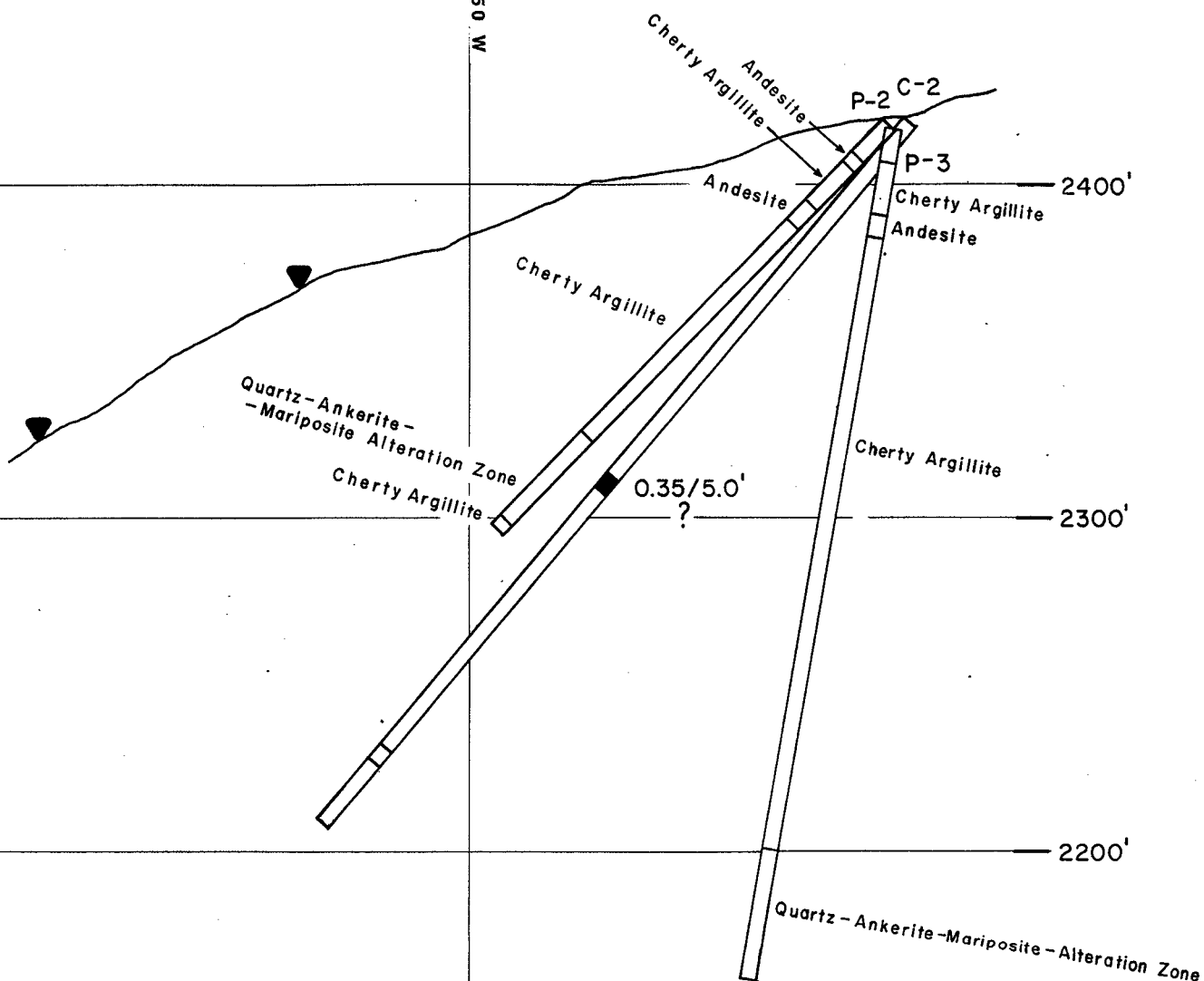
200w

100w

00

100e

LONG. SECT. 50 W



0 50 100 FEET

0 10 20 30 METRES

X-CAL RESOURCES LTD.

SNOWBIRD GROUP

DRILLHOLE CROSS SECTIONS

Section - 800S

DATE: FEB., 1987

BY: C.J.S./rwr

FIG:

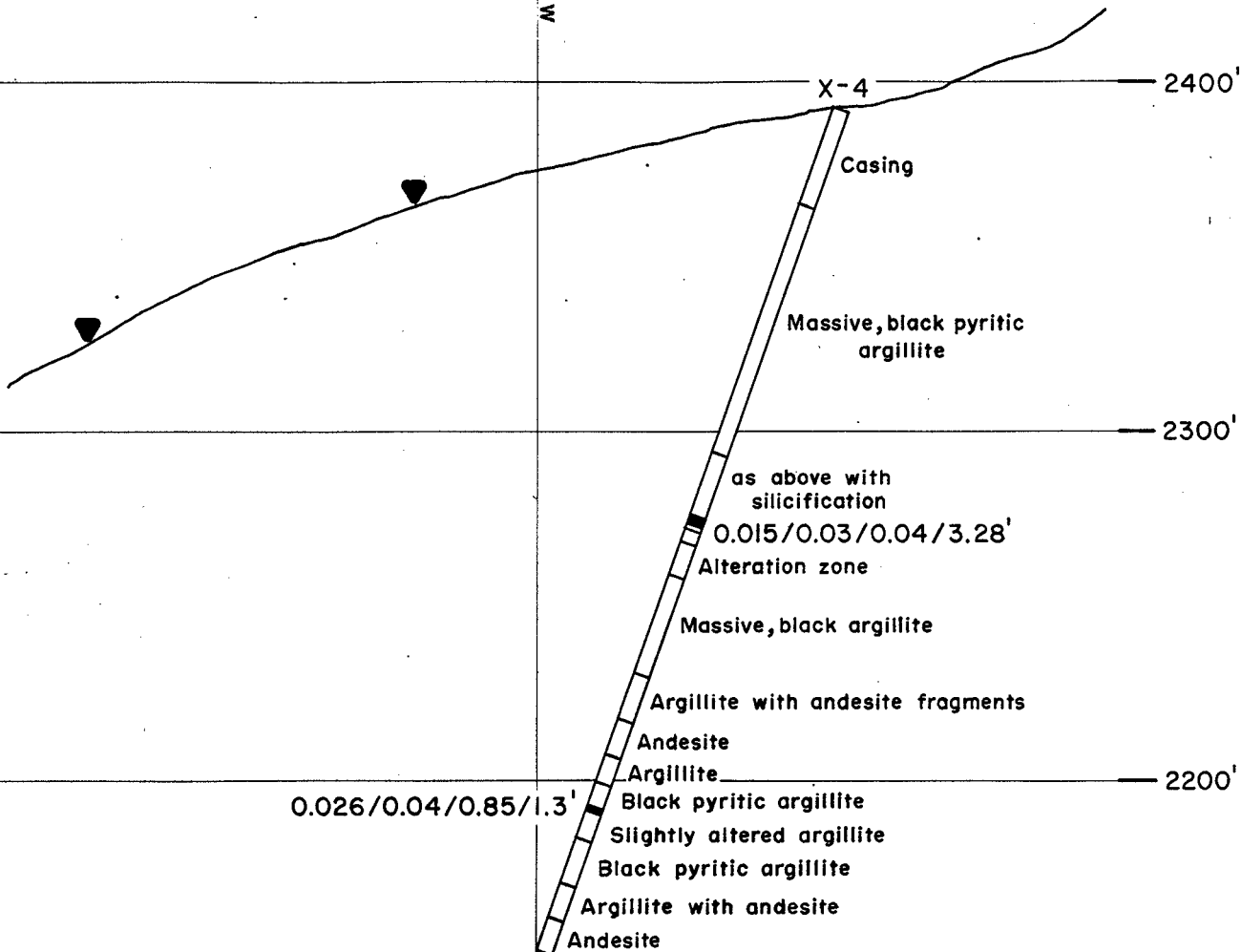
200w

100w

LONG. SECT. 50 W

00

100e



X-CAL RESOURCES LTD.

SNOWBIRD GROUP

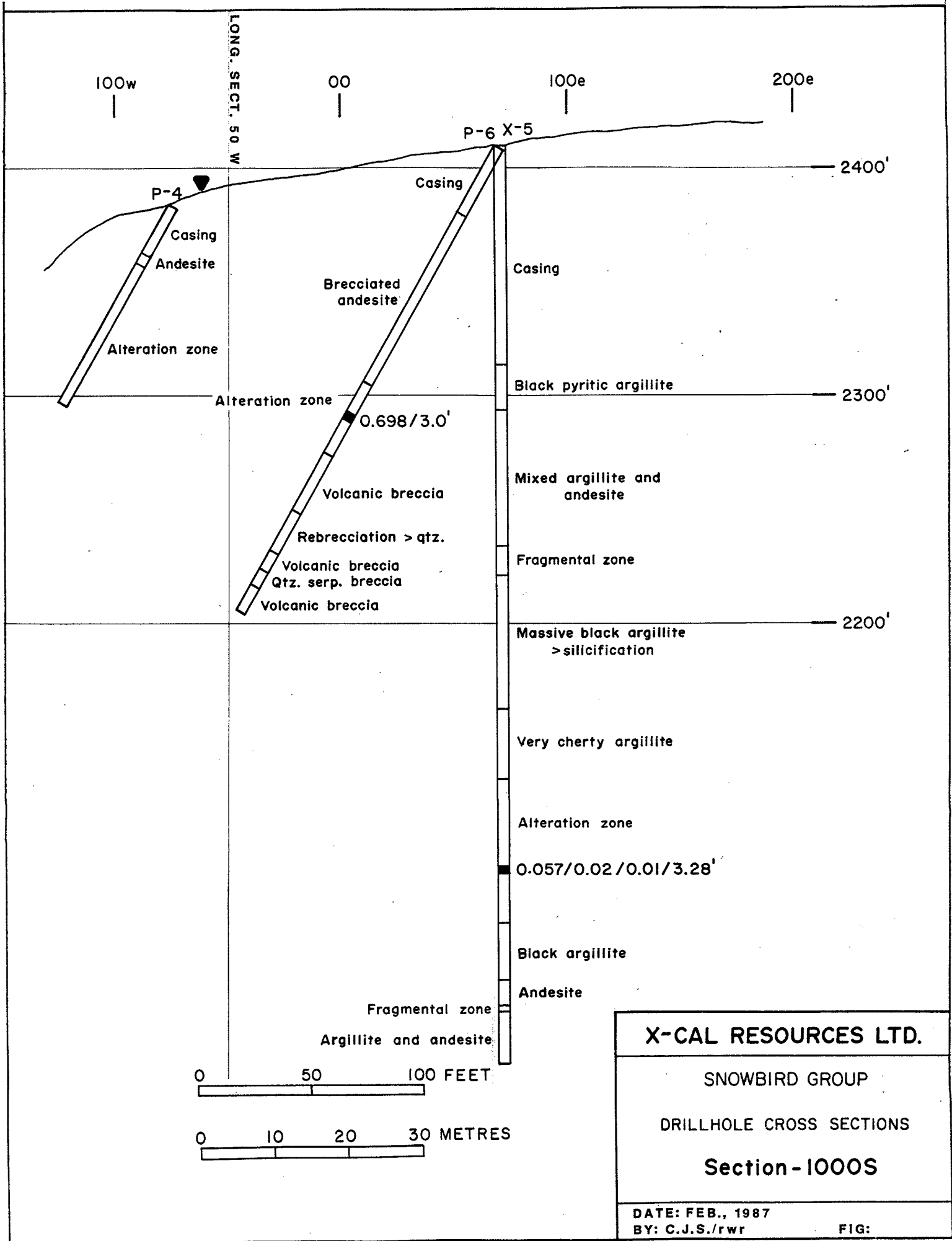
DRILLHOLE CROSS SECTIONS

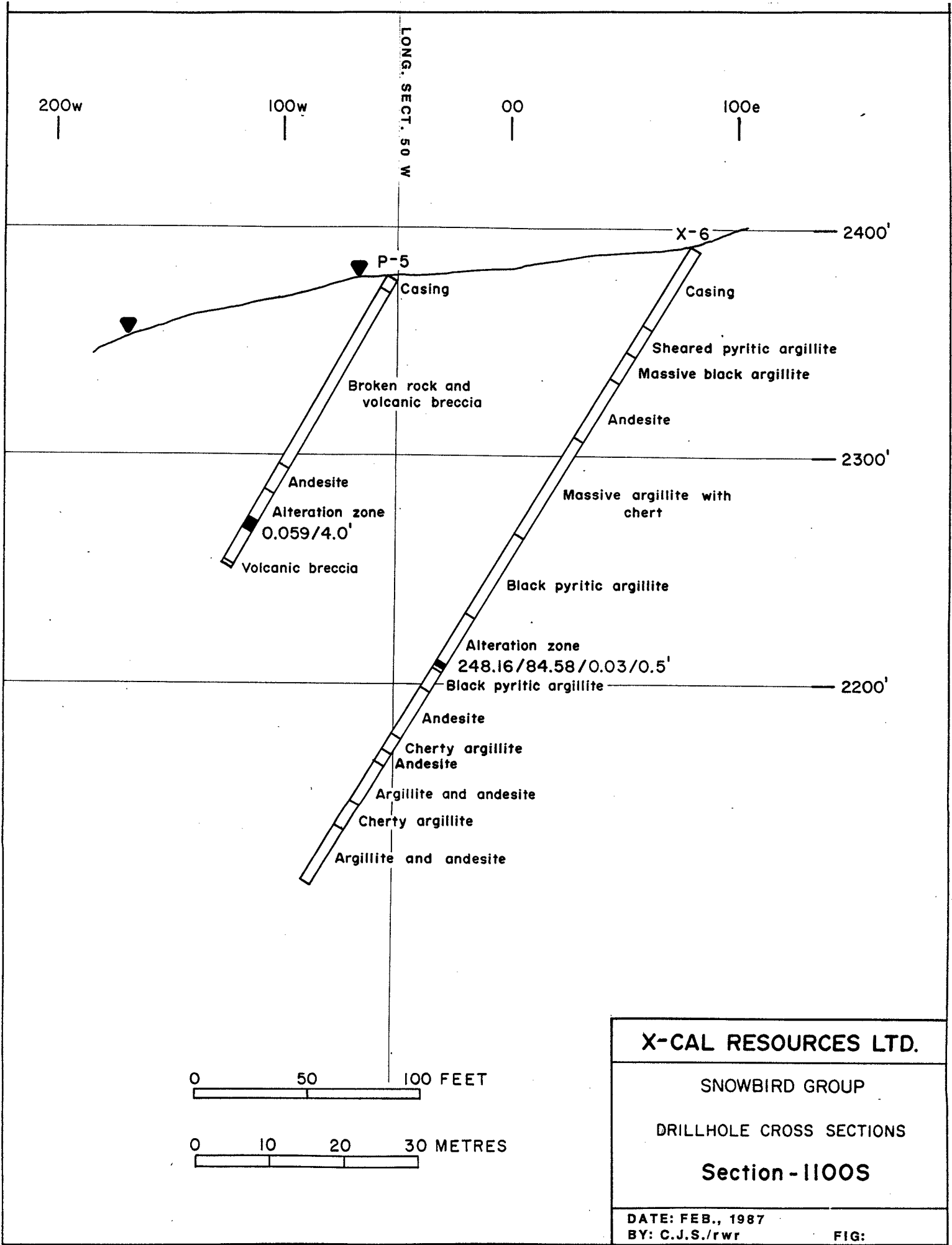
Section - 900S

DATE: FEB., 1987

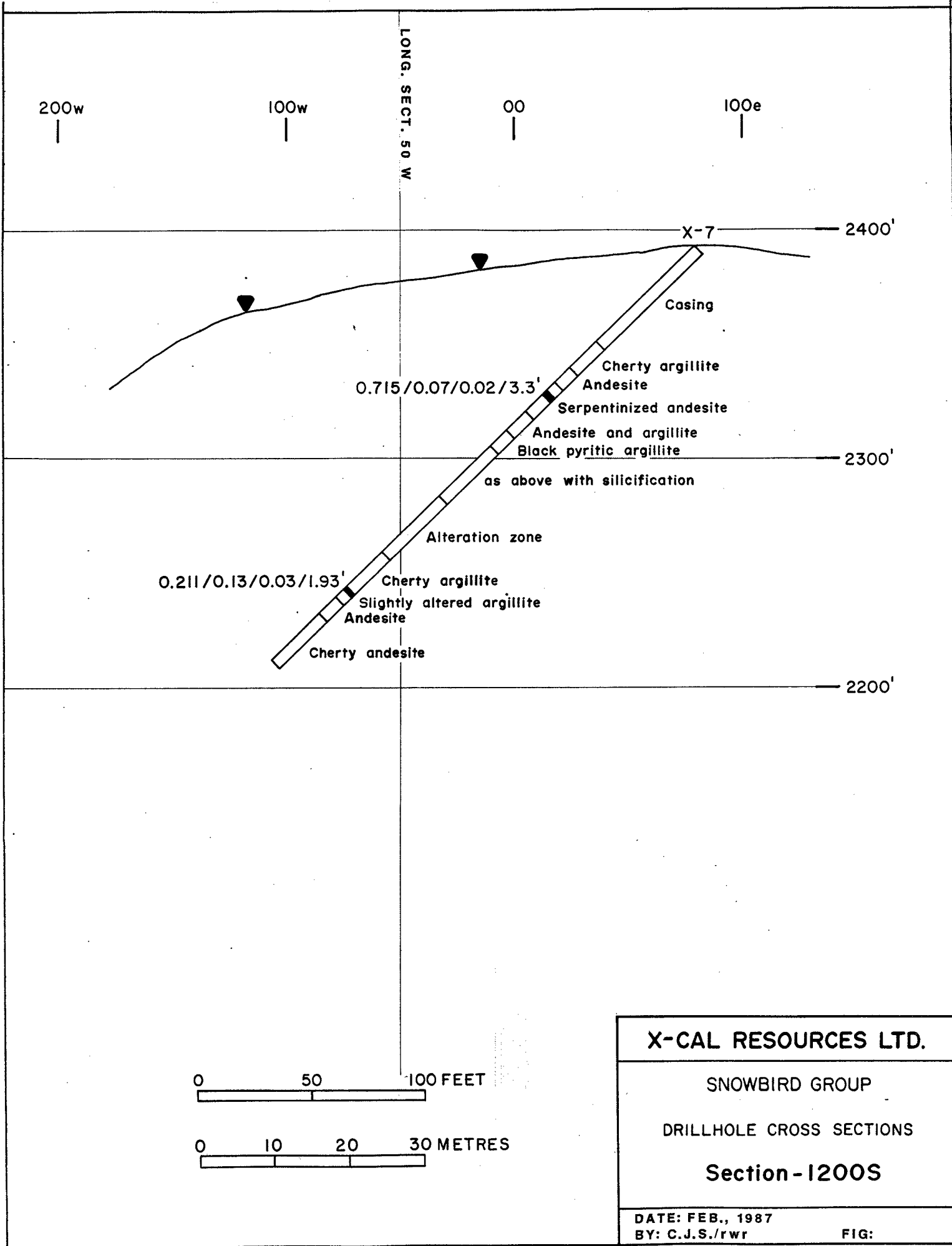
BY: C.J.S./rwr

FIG:





X-CAL RESOURCES LTD.
SNOWBIRD GROUP
DRILLHOLE CROSS SECTIONS
Section - 1100S
DATE: FEB., 1987
BY: C.J.S./rwr
FIG:



200w

100w

LONG. SECT. 50 W

00

100e

X-7

2400'

Casing

0.715/0.07/0.02/3.3'

Cherty argillite
Andesite

Serpentinized andesite

Andesite and argillite
Black pyritic argillite

2300'

as above with silicification

Alteration zone

0.211/0.13/0.03/1.93'

Cherty argillite
Slightly altered argillite
Andesite

Cherty andesite

2200'

0 50 100 FEET

0 10 20 30 METRES

X-CAL RESOURCES LTD.

SNOWBIRD GROUP

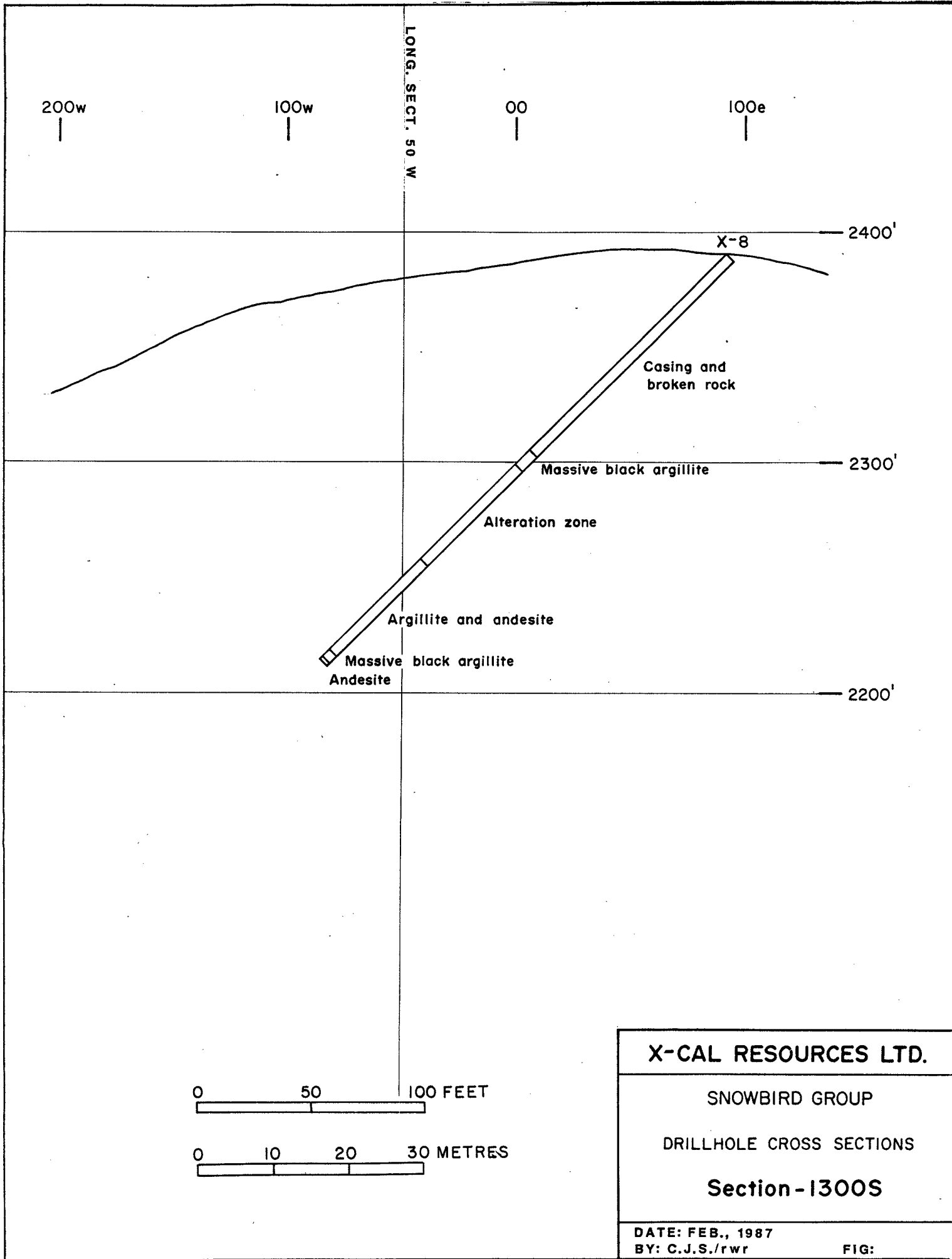
DRILLHOLE CROSS SECTIONS

Section - 1200S

DATE: FEB., 1987

BY: C.J.S./rwr

FIG:



200w

100w

LONG. SECT. 50 W

00

100e

2400'

X-8

Casing and broken rock

2300'

Massive black argillite

Alteration zone

Argillite and andesite

2200'

Massive black argillite
Andesite

0 50 100 FEET

0 10 20 30 METRES

X-CAL RESOURCES LTD.

SNOWBIRD GROUP

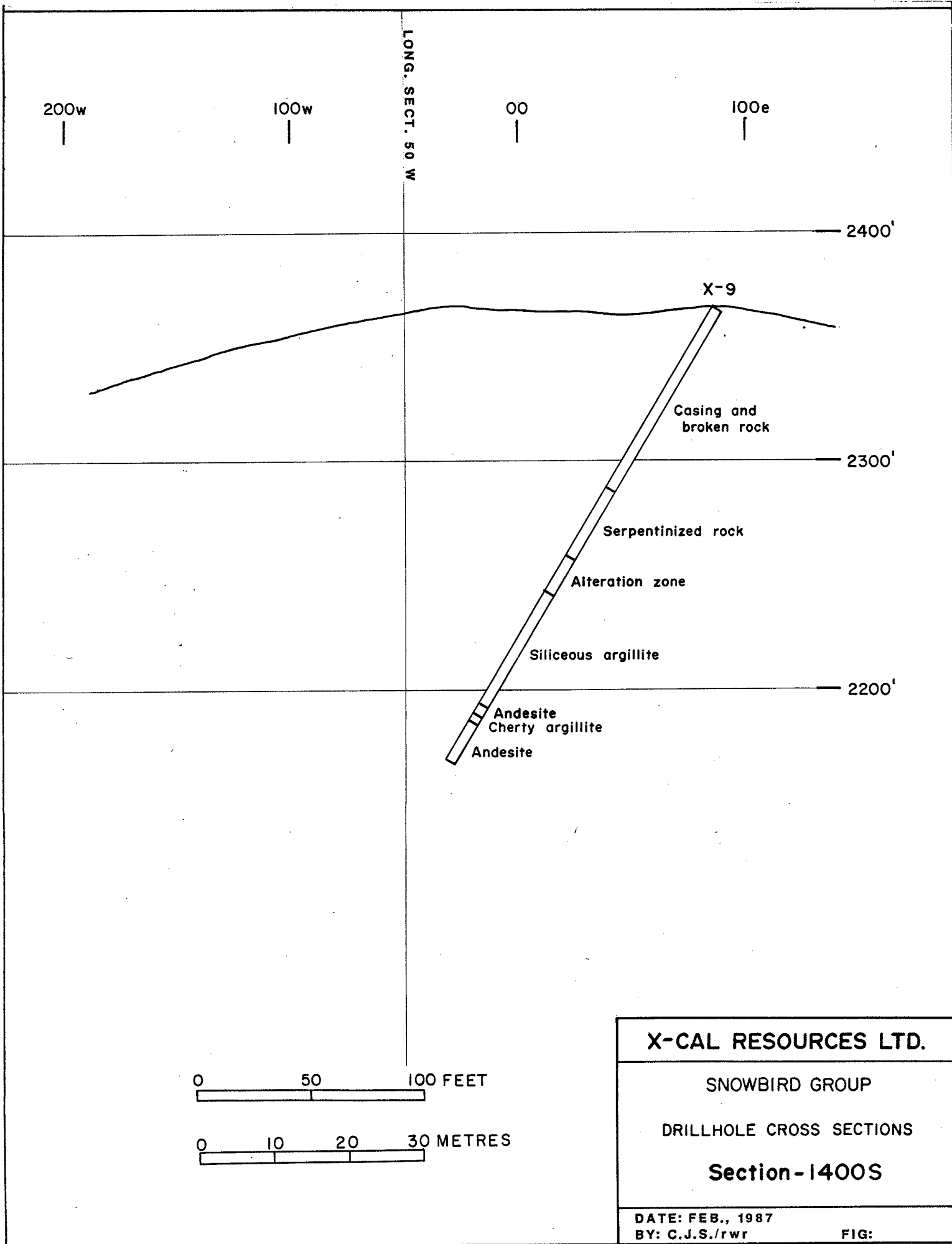
DRILLHOLE CROSS SECTIONS

Section-1300S

DATE: FEB., 1987

BY: C.J.S./rwr

FIG:



X-CAL RESOURCES LTD.

SNOWBIRD GROUP

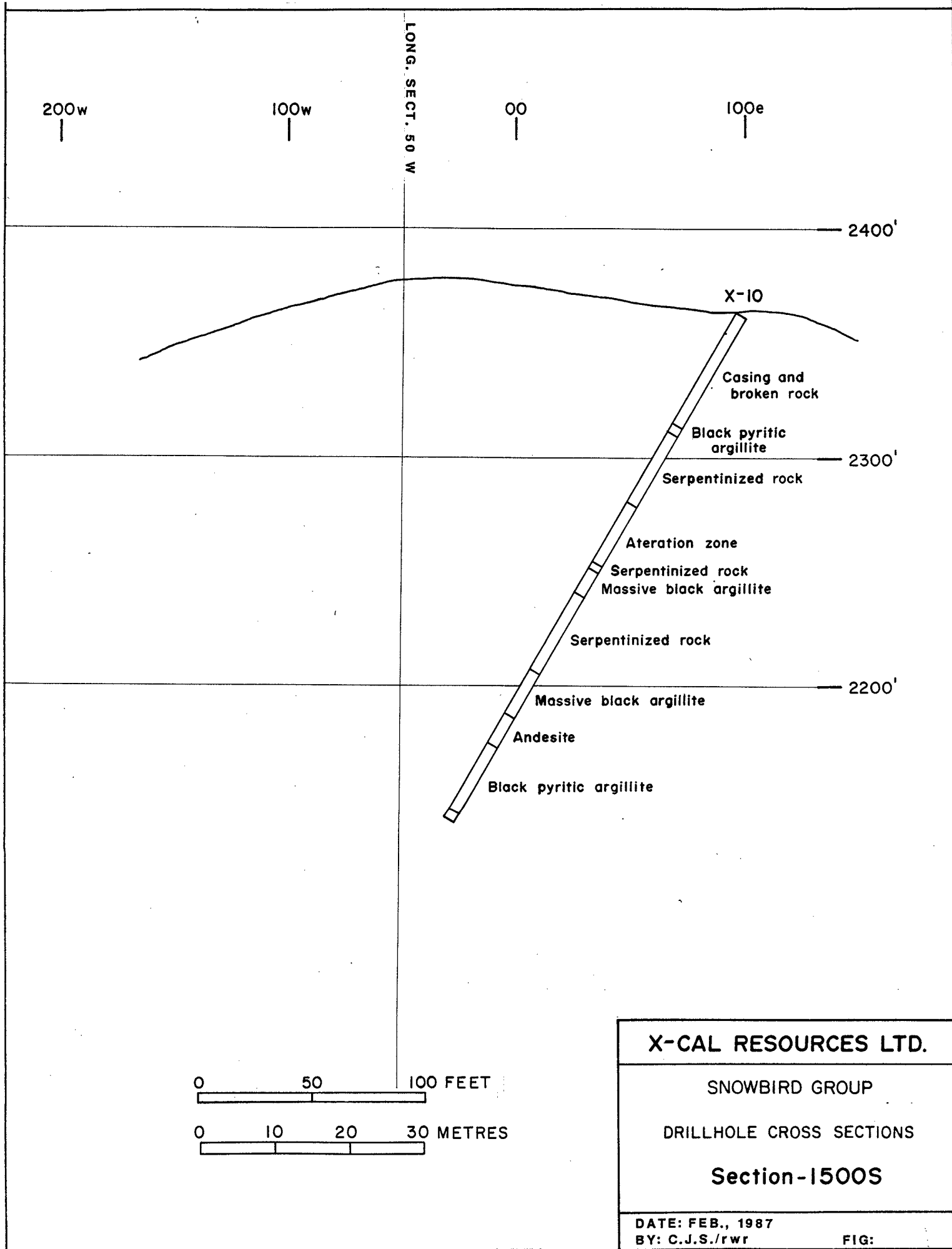
DRILLHOLE CROSS SECTIONS

Section-1400S

DATE: FEB., 1987

BY: C.J.S./rwr

FIG:



intersected the alteration zone and the Main vein. Some of the holes intersected the Pegleg vein but this vein is much less continuous than the Main vein. Hole 86-3 intersected the inclined shaft but was able to continue through the open space and the mineralization in the wall rocks around the excavated material.

Core recovery was excellent, in most cases 100%. The core was logged and stored in the former mine office building.

Significant intersections were as follows:

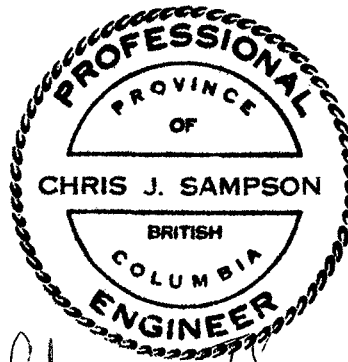
Hole #	Depth from(ft/m) to (ft/m)		Footage (ft/m)	Au oz/t	Assay Ag oz/t	Sb %
X86-2	215.46(65.67)	229.4(69.92)	13.94(4.25m)	0.27	0.08	5.43
	215.46(65.67)	218.74(66.67)	3.28(1.0m)	0.637	0.29	12.90
	228.58(69.67)	229.4(69.92)	0.82(0.25)	0.605	0.01	0.88
X86-6	214.97(65.52)	215.47(65.67)	0.5(0.15)	248.16	84.58	0.03
X86-7	91.99(28.04)	95.28(29.04)	3.28(1.0)	0.715	0.07	0.02
	217.62(66.33)	219.59(66.93)	1.97(0.6)	0.211	0.13	0.03

As stated above, the drill holes all successfully intersected the quartz-ankerite-mariposite alteration zone which has thus been extended along strike to grid south by in excess of 400 ft.

The significant intersection in X86-2 on the Main Vein consists of massive quartz vein carrying fracture filling massive stibnite. The highest values, 0.637 oz/ton gold, 215.46-218.74ft., and 0.605 oz/ton gold, 228.58-229.4ft. occur in an area of massive fracture filling stibnite.

The gold bearing interval in hole X86-6 occurs within a 0.5 ft. wide quartz vein which is situated on the footwall contact of the main quartz-ankerite-mariposite alteration zone. The intersection contains spectacular visible disseminated gold, assaying 248.16 oz/t Au, 84.58 oz/t Ag and 0.03% Sb.

Of the two intersections in Hole 86-7, the upper intersection (0.715 oz/ton Au) is in serpentinized material with minor quartz flooding weak mariposite, and minor disseminated pyrite. The lower intersection (0.21 oz/t Au) is in serpentinized material with quartz flooding and veining with weak mariposite, and disseminated pyrite.



Chris J. Sampson

Chris J. Sampson, P.Eng.
Consulting Geologist

Vancouver, B. C.
January 1987

REFERENCES

- Dewonck, Bernard Drilling Report, Snowbird Group, November 1980.
(Assessment Report 8613)
- Dunn, David Geophysical Survey Report, VLF Survey, Snowbird Group,
May 8th, 1986.
- Heshka, William Geological Report, Snowbird Group, October 23rd, 1971.
(Assessment Report 3520)
- Hinge, D.L. ELC Geophysical Report on the Soil Sampling Geochemical
Survey over the Bay Claims Group, Stuart Lake, B.C., (December 5,
1970) (Assessment Report 2764).
- Kidd, D.F. Final Report on Stuart Lake Antimony Diamond Drilling Program
(December 13, 1943).
- Logan, James Geological Report, Sowchea and Boarchea Group (May 24,
1980).

LIST OF EXPENDITURES FOR ASSESSMENT WORK CREDITS

Assays	9,311
Field Expenses	1,105
Travel & Transportation	1,349
Field Supplies	3,272
Accomodation	3,726
Drilling	64,163
Consulting	11,662
Project Administration	18,245
Equipment Rental (Backhoe, D6 Cat)	17,160
Other	573
Wages	<u>20,124</u>
	<u>150,690</u>

CERTIFICATE

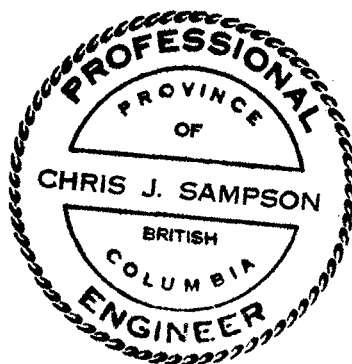
I, B.D. Came, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

- (1) I am a Geologist residing at #205-1334 West 73rd Avenue, Vancouver, B.C. and with office at #715-475 Howe Street, Vancouver, B.C.
- (2) I am a graduate of the University of British Columbia with a Bachelor of Science in Geological Sciences (1985).
- (3) I have practised mining exploration for three years, most of which was based in the Province of British Columbia.
- (4) This report is based on the supervision of a trenching program from October 4 to October 22, 1986 and drilling from November 18 to December 2, 1986, and study of published reports and from pertinent data.
- (5) I have not received, nor do I expect to receive any interest, direct or indirect, in the properties or securities of X-Cal Resources Ltd.
- (6) I have no interest in any other property or company holding property within 10 kms of the Snowbird Group.

CERTIFICATE

I, Christopher J. Sampson, of 2696 West 11th Avenue, Vancouver, B.C. V6K 2L6, hereby certify that:

1. I am a graduate (1966) of the Royal School of Mines, London University, England with a Bachelor of Science degree (Honours) in Economic Geology.
2. I have practised my profession of mining exploration for the past 20 years in Canada, Europe, United States and Central America. For the past 10 years I have been based in British Columbia.
3. I am a consulting geologist. I am a registered member in good standing of the Association of Professional Engineers of British Columbia.
4. I have written no previous reports on the Snowbird claims or other claims in that area.
5. The present report is based on knowledge gained from visits to the property and supervision of work programmes on the property in October, November, December 1986.
6. I have not received, nor do I expect to receive, any interest, direct or indirect, in the properties or securities of X-Cal Resources Ltd. or in those of its associated companies.
7. X-Cal Resources Ltd. and its affiliates are hereby authorized to use this report in, or in conjunction with, any prospectus or statement of material facts.
8. I have no interest in any other property or company holding property within 10 kilometres of the Snowbird claims.



Vancouver, B.C.
January 1987

Chris J. Sampson

Christopher J. Sampson, P.Eng.
Consulting Geologist

SAMPSON ENGINEERING INC.

2696 West 11th Avenue
Vancouver, B.C. V6K 2L6

APPENDIX 1

TRENCHING ASSAYS

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: X-CAL RESOURCES
 Project: SNOWBIRD
 Attention: C. SAMPSON

File: 6-1073/P1
 Date: OCT 29/86
 Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU-FIRE PPB	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON	SB %	
39001	14	1.8	0.05	0.02	0.001	0.01	} TRENCH 2.
39002	32	1.6	0.05	0.04	0.001	0.02	
39003	46	0.5	0.01	0.05	0.001	0.01	
39004	62	0.9	0.03	0.07	0.002	0.03	
39005	7	0.8	0.02	0.01	0.001	0.02	
39007	5	1.4	0.04	0.01	0.001	0.01	} TRENCH 6.
39008	4	2.0	0.06	0.01	0.001	0.02	
39009	13	1.7	0.05	0.02	0.001	0.01	
29010	24	1.8	0.05	0.03	0.001	0.02	
39011	19	1.2	0.04	0.02	0.001	0.02	
39012	7	1.4	0.04	0.01	0.001	0.01	} FROM SHOWINGS
39013	190	1.3	0.04	0.20	0.006	0.04	
39014		6.6	0.19	1.62	0.047	55.10	
39015	171	3.2	0.09	0.18	0.005	0.09	
39016	18	1.6	0.05	0.02	0.001	0.04	
39018	7	0.7	0.02	0.01	0.001	0.02	} TRENCH 10 'BGDROCK
39019	15	0.2	0.01	0.02	0.001	0.02	
39020	12	0.2	0.01	0.01	0.001	0.01	} TRENCH 10, BOULDERS
39021	14	0.9	0.03	0.02	0.001	0.02	
39022	8	1.4	0.04	0.01	0.001	0.02	
39023	9	1.7	0.05	0.01	0.001	0.01	} TRENCH 9
39024	6	1.9	0.06	0.01	0.001	0.03	
39025	11	0.6	0.02	0.01	0.001	0.01	
39026		0.9	0.03	1.29	0.038	0.02	
39027	14	0.8	0.02	0.02	0.001	0.01	
39028	4	0.2	0.01	0.01	0.001	0.01	- TRENCH 6 (BOULDER)

Certified by

MIN-EN LABORATORIES LTD.

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: 04-352828

SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSIS CERTIFICATE

TO: X-CAL RESOURCES
ATTN: C.SAMPSON/S.KENNEDY

FILE No: 6-1073
DATE: OCT 28/86

We hereby certify that the following are the results of the semi-quantitative spectrographic analysis made on 4 samples submitted.

SAMPLE NUMBER:		39013	36014	39015	39016
Aluminum	Al	.60	.03	3.51	.34
Antimony	Sb	.04	55.00	.09	.04
Arsenic	As	.02	<.01	.04	.01
Barium	Ba	.02	<.01	.09	.01
Beryllium	Be	<.01	<.01	<.01	<.01
Bismuth	Bi	<.001	<.001	<.001	<.001
Boron	B	<.01	<.01	<.01	<.01
Cadmium	Cd	<.001	<.001	.001	<.001
Calcium	Ca	2.32	.11	5.19	4.99
Chromium	Cr	.19	<.01	.38	.07
Cobalt	Co	.002	.001	.004	.001
Copper	Cu	.001	.006	.002	.001
Gold	Au	<.001	<.001	<.001	<.001
Iron	Fe	3.13	.07	4.61	2.13
Germanium	Ge	<.02	<.02	<.02	<.02
Lead	Pb	.010	.001	.013	.008
Lithium	Li	<.01	<.01	<.01	<.01
Magnesium	Mg	10.68	.04	9.71	5.34
Manganese	Mn	.04	<.01	.16	.06
Molybdenum	Mo	<.001	<.001	<.001	<.001
Nickel	Ni	.062	.029	.114	.026
Niobium	Nb	<.02	<.02	<.02	<.02
Potassium	K	.26	<.01	1.57	.17
Phosphorous	P	.03	<.01	.04	.03
Palladium	Pd	<.001	<.001	<.001	<.001
Platinum	Pt	<.001	<.001	<.001	<.001
Rubidium	Rb	<.05	<.05	<.05	<.05
Selenium	Se	<.02	<.02	<.02	<.02
Silicon	Si	23.04	5.77	16.84	27.40
Silver	Ag	<.001	<.001	<.001	<.001
Sodium	Na	<.01	<.01	<.01	<.01
Strontium	Sr	.03	<.01	.08	.18
Thorium	Th	<.001	<.001	<.001	<.001
Tin	Sn	<.01	<.01	<.01	<.01
Titanium	Ti	.02	<.01	.07	<.01
Tungsten	W	.01	<.01	.02	<.01
Uranium	U	<.001	<.001	<.001	<.001
Vanadium	V	.001	<.001	.002	.001
Zinc	Zn	.003	.001	.006	.003
Zirconium	Zr	<.02	<.02	<.02	<.02

THESE ARE GRAB
SAMPLES FROM
SHOWINGS

(ALL RESULTS ARE EXPRESSED AS PERCENT)

Certified by



APPENDIX 2

DIAMOND DRILL LOGS

SAMPSON ENGINEERING INC.

2696 West 11th Avenue
Vancouver, B.C. V6K 2L6

Recovery is 100% unless otherwise noted

MICROLOG

DIAMOND DRILL RECORD

PROPERTY SNOWBIRD

HOLE No. 86-1

DIP TEST		
Footage	Angle	
	Reading	Corrected
0	-90°	-90°

Hole No. 86-1 Sheet No. 01
 Section _____
 Date Begun Nov 19, 1986
 Date Finished Nov 21, 1986
 Date Logged Nov 21, 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar 2412 FT

Total Depth 115.8m (379.9 ft)
 Logged By Brian Game
 Claim Snowbird
 Core Size NQ

meters

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb.
FROM	TO									
0.0	24.5		- Casing and broken rock							
24.5	53.36		- massive black pyritic argillite with occasional cherty sections, consisting of sharp bounded angular fragments up to 10cm in size. Pyrite consists of cubic dissemination of 1mm to 1cm and as fracture fillings, at all angles to core. Very occasional qtz veinlets up to 1cm in width at all angles to drill core.							
53.36	57.95		- Zone of argillite with 1 to 2 cm wide planar qtz veins at 55° to 60° with core axis. Veins are sharply bounded with country rock.							
			- 5cm wide qtz vein at 55.76m	(83408	55.76	55.92		119	2.8	20)
			massive white qtz vein at 55° to core axis							
			- 57.14m - 57.24m brecciated zone with angular fragments of argillite							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-1 Sheet No. 02
 Section _____
 Date Begun Nov 19/86
 Date Finished Nov 21/86
 Date Logged Nov 21/86

Lat. _____
 Dep. _____
 Bearing —
 Elev. Collar _____

Total Depth 115.8m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
			up to 3cm in width within massive white qtz							
			- 57.60m - 57.95m zone of brecciation, angular black argillite fragments in massive white qtz matrix with abundant disseminated pyrite (up to 30%)	39201	56.67	57.67	1.0m	0.013	0.06	0.02
				39202	57.67	58.67	1.0m	0.014	0.07	0.01
57.95	77.26		Massive black pyritic argillite with occasional cherty sections occasional veinlets of qtz and calcite at all angles to core axis							
77.26	81.79		Fragmental zone, probable turbidite flow - fragments predominantly angular, 1mm to 1cm cherty fragments in black argillite matrix - disseminated pyrite in matrix and in some of the fragments (up to 10%) - occasional larger chert fragments up to 15cm.							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-1 Sheet No. 03 Lat. _____ Total Depth 115.8m
 Section _____ Dep. _____ Logged By B. Game
 Date Begun Nov 19/86 Bearing - Claim Snowbird
 Date Finished Nov 21/86 Elev. Collar _____ Core Size NQ
 Date Logged Nov 21/86

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
			- 79.69m ; 5cm wide zone of brecciation, 1 to 3cm wide angular fragments of black argillite in qtz-calcite matrix.							
			- 79.89m ; as above.							
81.79	90.42		Massive black pyritic argillite. Marked increase in silicification. Introduction of very minor mariposite							
90.42	91.22	80%	Brecciated zone. Angular argillite fragments in qtz-calcite matrix. Abundant pyrite. Blocky ground; poorer recovery.	39203	90.42	91.22	0.80m	0.011	0.01	0.01
				(33409	92.54	93.11	0.65m	101	0.8	7)
91.22	97.02		Massive black argillite. Increase in silicification. Probable silicification of fine-grained turbidite sequence. Increase in pyrite content (25-30%)	39204	92.02	93.02	1.0m	0.016	0.05	0.02
				39205	93.02	94.02	1.0m	0.011	0.01	0.02
				39206	94.02	95.02	1.0m	0.023	0.13	0.02
				39207	95.02	96.02	1.0m	0.015	0.12	0.02
			- 93.14m ; 1cm wide qtz vein at 40° to core axis.	39208	96.02	97.02	1.0m	0.006	0.03	0.07

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-1 Sheet No. 04
 Section _____
 Date Begun Nov 19/86
 Date Finished NOV 21/86
 Date Logged NOV 21/86

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 115.8m
 Logged By B game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
			- sheared graphitic argillite at altered contact.							
97.82	115.8	90%	Alteration zone; comprising of fractured	39209	97.02	98.02	1.0m	0.014	0.01	0.07
(320-84)			dark grey to black country rock infilled	39210	98.02	98.83	0.81m	0.012	0.01	0.05
			by irregular, swirling areas of white	(33418)	111.67	112.77	1.10m	16	0.9	383)
			qtz and green mariposite.							
			Several qtz veins noted as follows:	(33419)	114.6	115.6	1.0m.	1	0.8	52)
			- Main vein 98.83 - 99.46m massive	39211	98.83	99.46	0.63m	0.001	0.01	0.05
			white qtz with minor mariposite							
			and some disseminated pyrite.	(33413)	106.67	107.67	1.0m.	17	0.7	55)
			Hanging wall contact slickensided	(33414)	107.67	108.67	1.0m	4	0.9	92)
			40° to core axis (broken)	(33415)	108.67	109.67	1.0m	2	0.9	450)
			Footwall contact (broken) at 30°	(33416)	109.67	110.67	1.0m.	9	0.8	410)
			to core axis.	(33417)	110.67	111.67	1.0m	23	0.9	180)
			- 100.23m - 2cm massive qtz vein	39212	99.46	100.46	1.0m	0.001	0.01	0.04
			at 40° to core axis.	39213	100.46	101.46	1.0m	0.001	0.01	0.07
			- 102.43m - irregular 1 to 2cm nuggy	39214	101.46	102.46	1.0m	0.001	0.01	0.07
			qtz vein at 5° to core axis	39215	102.46	103.46	1.0m	0.001	0.01	0.06
			- 99.38m - 1 to 2cm massive qtz vein	39216	103.46	104.46	1.0m	0.001	0.01	0.07
			at 30° to core axis.	(33420)	105.0	105.0	0.54m	10	1.2	752)
			- 108.72m - 1cm qtz vein with some	(33411)	105.0	105.8	0.86m	15	0.9	848)
			mariposite at 30° to core axis.	(33412)	105.8	106.8	0.8m	14	1.0	105)

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-2

DIP TEST		
Footage	Angle	
	Reading	Corrected
0	-60°	-60°

Hole No. 86-2 Sheet No. 01
 Section _____
 Date Begun Nov 22, 1986
 Date Finished NOV 23, 1986
 Date Logged NOV 23 1986

Lat. _____
 Dep. _____
 Bearing 225
 Elev. Collar 2421 FT

Total Depth 130.52m (428.2ft)
 Logged By Brian Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
0.0	4.72		Casing								
4.72	18.93	70%	Blocky, 'sheared' pyritic argillite - iron staining very predominant throughout the argillite - very minor angular chert clasts of 1 to 3 cm occur sharply bounded within argillite. - Pyrite occurs as 1 to 3mm cubic disseminations throughout the sequence.								
18.93	24.37	90%	Massive, black, pyritic argillite with occasional chert fragments up to 10cm in size. - chert fragments are sharply bounded with the argillite. - pyrite occurs predominantly as 1 to 5mm cubic disseminations, and less commonly as 1mm fracture fillings.								
24.37	27.03		Massive, green andesite with occasional chert clasts, 1 to 5 cm in size. - sharply bounded contact btwn argillite								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-2 Sheet No. 02
 Section _____
 Date Begun Nov 22 186
 Date Finished Nov 23 186
 Date Logged Nov 23 186

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 130.52m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
			and andesite approx 40° to core axis.								
27.03	43.51		Massive, black pyritic argillite with occasional chert fragments. - chert fragments vary up to 10cm in size and tend to be sharply bounded with the host argillite. - Pyrite occurs as 1mm - 5mm cubic disseminations, and less commonly as 1mm fracture fillings. - Various minor qtz and calcite veinlets and fracture fillings throughout, with variable angles to core axis. veinlets are sharply bounded with country rock.								
43.51	44.51		Fragmental zone - Probable turbidite flow - fragments of angular chert, 1 to 3cm, within black argillite matrix. - Pyrite content slightly increased and								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-2 Sheet No. 03
 Section _____
 Date Begun Nov 22 186
 Date Finished Nov 23 186
 Date Logged Nov 23 186

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 130.52m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO									
		Occurs as disseminations within both the argillite and the cherty fragments								
44.51	48.45	Massive, black pyritic argillite with occasional chert fragments - gradual increase in silicification - 45.34m 1cm wide qtz vein 50° to core axis								
48.45	50.12	Fragmental zone, probable turbidite flow - 1 to 3 cm, angular fragments of chert within argillite matrix - pyritic content (disseminations) increases to ~ 10%								
50.12	58.32	Massive, black, pyritic argillite with occasional chert fragments to 10cm. - marked increase in silicification - very minor mariposite - 51.53m 1cm qtz vein \approx \perp to core axis								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-2 Sheet No. 04
 Section _____
 Date Begun NOV 22/86
 Date Finished NOV 23/86
 Date Logged NOV 24/86

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 130.52 m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
58.32	59.92		Fragmental zone, probable turbidite flow - Fine grained, angular to sub angular fragments of chert within argillite matrix							
59.92	64.0		Massive, cherty argillite. - somewhat altered - chert clasts up to 5cm, angular and sharply bounded. - some sheared, graphitic argillite at contact.							
64.0	64.52	90%	Alteration zone; consists of green to dark grey country rock surrounded by swirling areas of white qtz and green mariposite. Quartz veins present are noted as follows:	39217	64.0	65.0	1.0m	0.001	0.01	0.10
				39218	65.0	65.67	0.67m	0.023	0.01	0.03
			Main vein 65.67m - 69.92m	39219	65.67	66.67	1.0m	0.637	0.29	12.90
			massive white qtz with areas of swirling mariposite and qtz. Some disseminated pyrite throughout, and local sections of massive stibnite.	39220	66.67	67.67	1.0m	0.173	0.01	0.19
				39221	67.67	68.67	1.0m	0.159	0.01	2.39
				39222	68.67	69.67	1.0m	0.010	0.01	2.13
				93223	69.67	69.92	0.25m	0.605	0.01	0.88
			Hanging wall contact (broken) 45° to core axis.				4.25m. (13.94 ft)	0.27	0.08	5.43

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-2 Sheet No. 05
 Section _____
 Date Begun NOV 22 /86
 Date Finished NOV 23 /86
 Date Logged NOV 24 /86

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 130.52m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %	
FROM	TO										
			Footwall contact (broken) 30° to core axis								
			- Quartz and calcite veinlets throughout are oriented at all angles to core axis.	39224	69.92	70.92	1.0m	0.001	0.01	0.04	
				39225	70.92	71.92	1.0m	0.002	0.01	0.05	
				39226	71.92	72.92	1.0m	0.001	0.01	0.01	
			- 73.32m - 73.52m crushed 'soft' rock, possible fault gouge	(33420)	72.92	73.6	0.7m	3	0.7	17)	
				(33421)	73.6	74.3	0.7m	1	0.8	44)	
			- 76.46m 2cm qtz vein 60° to core axis	(33422)	74.3	75.0	0.7m	4	0.6	9)	
			- 79.50m 5cm white (pure) qtz vein at 20° to core axis	(33423)	75.0	75.7	0.7m	4	0.6	3)	
				(33424)	75.7	76.5	0.8m	49	0.7	17)	
				(33425)	76.5	77.4	0.9m	12	0.9	10)	
84.52	91.42		Very Siliceous, cherty argillite.	(33426)	77.4	78.4	1.0m	49	0.6	14)	
			- chert occurs as large, 10-15cm fragments within argillite, and as recognizable bands.	(33427)	78.4	79.4	1.0m	3	0.6	10)	
				(33428)	79.4	80.4	1.0m	12	0.8	8)	
				(33429)	80.4	81.4	1.0m	5	0.7	12)	
			- 86.65m two parallel qtz veins (2cm width) at 20° to core axis	(33430)	81.4	82.4	1.0m	27	0.6	10)	
				(33431)	82.4	83.4	1.0m	3	0.6	2)	
			- minor pyrite content occurs as disseminations and 'smears' along fracture surfaces.								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-2

DIP TEST		
Angle		
Footage	Reading	Corrected

Hole No. 86-2 Sheet No. 06
 Section _____
 Date Begun NOV 22 186
 Date Finished NOV 23 186
 Date Logged NOV 24 186

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 130.52m
 Logged By B. Game
 Claim Snowbird
 Core Size N@

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
91.42	93.23	20%	Altered zone; Green to dark grey country rock surrounded by swirling areas of white qtz and mariposite. 91.45m; 2cm white qtz vein \approx \perp to core axis - some pyrite disseminated throughout.	39227	90.95	91.95	1.0m	0.001	0.01	0.02
				(33432)	87.9	88.9	1.0m	53	1.0	40
93.33	95.42		Andesite; green, fine grained andesite with some intermingled argillite 93.98m; 1cm qtz vein 25° to core axis							
95.42	99.42		Dark grey argillite (siliceous) with considerable andesite (green) fragments 97.57m 3cm ^{PINKISH} qtz vein 55° to core axis with crystals of cubic pyrite in the qtz.	39228	97.42	97.92	0.50m	0.001	0.01	0.01
99.42	102.32		Andesite, green, fine grained andesite with variable fragments of argillite.							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-2 Sheet No. 07 Lat. _____ Total Depth 130.52m
 Section _____ Dep. _____ Logged By B. Game
 Date Begun Nov 22 1986 Bearing _____ Claim Snowbird
 Date Finished Nov 23 1986 Elev. Collar _____ Core Size NQ
 Date Logged NOV 24 1986

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE			
FROM	TO									
102.32	110.09		Dark grey argillite with areas of swirling green andesite.							
110.09	130.52		(Andesite, green, fine grained volcanic with occasional angular fragments of chert (siliceous argillite?) up to 2cm and angular to sub angular. - various veinlets and fracture fillings of calcite at all angles to core axis.							
			END OF HOLE							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-3

DIP TEST		
Footage	Angle	
	Reading	Corrected
0		-68°

Hole No. 86-3 Sheet No. 01
 Section _____
 Date Begun Nov 23, 1986
 Date Finished Nov 24, 1986
 Date Logged Nov 25, 1986

Lat. _____
 Dep. _____
 Bearing 225
 Elev. Collar 2400 FT

Total Depth 77.38m (253.88 Ft)
 Logged By Brian Game
 Claim Snowbird
 Core Size NQ

meters

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE						
FROM	TO												
0	18.65		Casing and Broken rock										
18.65	19.27	70%	Blocky, "sheared" pyritic argillite - iron staining throughout - some chert fragments 1 to 3cm in size; angular to sub angular - pyrite occurs as 1 to 3mm disseminations throughout.										
19.27	27.91		Massive, black, pyritic argillite with occasional cherty fragments up to 5cm - chert fragments are sharply bounded with argillite country rock - pyrite occurs predominantly as 1 to 3mm cubic disseminations throughout unit, and less commonly as 1mm fracture fillings. - Several small qty veins (1cm width) all trend $\approx 40^\circ$ to core axis, for instance at 24.30m, at 27.65m, and at 26.79m										

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-3

DIP TEST		
Footage	Angle	
	Reading	Corrected
0	-60°	-60°

Hole No. 86-3 Sheet No. 02 Lat. _____
 Section _____ Dep. _____
 Date Begun Nov 23 /86 Bearing 225°
 Date Finished Nov 24 /86 Elev. Collar _____
 Date Logged Nov 25 /86

Total Depth 77.38m (254 ft)
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH FROM TO		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/t	Ag oz/t	Sb %	
27.91	34.39	90%	Black, pyritic argillite with intense quartz flooding - argillite surrounded by swirling areas of white qty. Extent of qty flooding is variable throughout unit. - quite probable that this unit represents the silicification of a fine-grained turbidite flow. - pyrite occurs as 1mm disseminations and as occasional 5mm "smears" - introduction of very minor mariposite								
34.39	43.09	80%	Cherty Argillite ; very cherty and hard, black argillite ; minor silicification Some pyrite occurs as 1mm disseminations - hole appears to have cut through slope and stibnite vein has been mined out. - "hole" appears at 37.70m, and is approx. 2 m wide. Some qty vein material	39229	35.70	36.70	1.0m	0.001	0.02	0.02	
				39230	36.70	37.70	1.0m	0.029	0.01	1.56	*
				39231	39.78	40.78	1.0m	0.039	0.01	0.54	
				39232	40.78	41.78	1.0m	0.015	0.01	0.08	
				39233	41.78	42.78	1.0m	[0.027 0.001	0.01 0.01	0.31 0.01	2m.

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-3 Sheet No. 03
 Section _____
 Date Begun Nov 23/86
 Date Finished Nov 24/86
 Date Logged Nov 25/86

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.38m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
			and massive stibnite occur on either side of hole.								
43.09	45.77		Very cherty argillite. More chert than argillite; very hard - contains minor disseminated pyrite.								
45.77	58.40	90%	Massive, black, pyritic argillite with occasional cherty sections consisting of sharply bounded angular fragments up to 15cm in size and the occasional distinct "band" up to 3cm in width - pyrite consists of 1mm to 3mm cubic disseminations, and the occasional 1mm fracture filling - a few small qtz veins (1cm width) occur throughout the section at all angles to core axis.								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-3 Sheet No. 04
 Section _____
 Date Begun Nov 23/86
 Date Finished Nov 24/86
 Date Logged Nov 25/86

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.38m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/t	Ag oz/t	Sb %
58.40	60.61	90%	Alteration Zone; composed of green to grey country rock in filled by ^{swirling} areas of white qtz, and some green malposite.	39234	57.40	58.40	1.0m	0.001	0.02	0.02
			- One main qtz vein in this section at 58.40 - 58.85m - Main Vein?	39235	58.40	58.85	0.45m	0.045	0.13	0.01
			white qtz vein with disseminations and fracture fillings of pyrite. Hanging wall contact broken and disrupted. Footwall contact (broken) ~ 30°	39236	58.85	59.85	1.0m	0.006	0.02	0.04
				39237	59.85	60.85	1.0m	0.001	0.01	0.02
				39238	60.85	61.85	1.0m	0.001	0.01	0.01
				(39233)	61.85	62.85	1.0m	2	1.4	1
60.64	67.0		Very cherty argillite. Dark grey argillite with angular to subangular fragments of chert up to 10cm in size. - very minor disseminated pyrite. - occasional small (0.5cm) qtz veins at all angles to core axis.							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-3 Sheet No. 05 Lat. _____ Total Depth 77.38m
 Section _____ Dep. _____ Logged By B. Game
 Date Begun NOV 23 1986 Bearing _____ Claim Snowbird
 Date Finished NOV 24 1986 Elev. Collar _____ Core Size NQ
 Date Logged Nov 25 1986

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
67.0	73.27		Dark grey argillite with approx. equal amounts of green andesite intermixed. - some minor chert fragments within both argillite and andesite, angular approx 1-3cm. - several calcite stringers at all angles to core axis								
73.27	77.38		Fine-grained green andesite with some argillite intermixed and the occasional chert fragment, 1 to 3 cm in size - minor calcite stringers at all angles to core axis.								
			END OF HOLE								

Recovery is 100% unless otherwise noted

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-4

DIP TEST		
Footage	Angle	
	Reading	Corrected
0	-60°	-60°

Hole No. 86-4 Sheet No. 01
 Section _____
 Date Begun Nov 24, 1986
 Date Finished Nov 25, 1986
 Date Logged Nov 26, 1986

Lat. _____
 Dep. _____
 Bearing 225°
 Elev. Collar 2389 FT

Total Depth 77.69m (254.9ft)
 Logged By Brian Game
 Claim Snowbird
 Core Size NA

me lens

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/k	Ag oz/k	Sb %
FROM	TO									
0.00	9.44		Casing and Broken rock							
9.44	32.54		Massive, black, pyritic argillite with occasional cherty sections. Chert fragments range up to 15cm in size, and are angular and sharply bounded with encompassing argillite. - pyrite consists of 1 to 3mm cubic disseminations throughout the section, and less commonly as 1mm fracture fillings - occasional qtz veinlets and stringers at all angles to core axis. - section from 15.54m to 21.75m was triconed, as it was not possible to drill.							
32.54	40.25	80%	Black, pyritic argillite. Marked increase in silicification. Core becomes more "blocky" - many qtz veins and stringers at all angles to core axis. - pyrite occurs as 1mm disseminations	39239	33.16	34.18	1.0m	0.001	0.01	0.01

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-4 Sheet No. 02 Lat. _____ Total Depth 77.69m
 Section _____ Dep. _____ Logged By B. Game
 Date Begun NOV 24 /86 Bearing _____ Claim Snowbird
 Date Finished NOV 25 /86 Elev. Collar _____ Core Size N (2)
 Date Logged NOV 26 /86

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/t	Ag oz/t	Sb %	
FROM	TO										
			throughout section.	39240	34.18	35.74	1.55m	0.001	0.01	0.02	
			- introduction of minor mariposite.	39241	35.74	37.29	1.55m	0.003	0.01	0.03	} Sludge
			- section from 34.18m to 38.84m triconed, as it was not possible to drill.	39242	37.29	38.84	1.55m	0.005	0.04	0.01	
				39243	38.84	39.84	1.0m	0.015	0.03	0.04	
				39244	39.84	40.84	1.0m	0.003	0.01	0.02	
40.25	44.01		Altered zone; comprised of dark grey to green country rock surrounded and infilled by irregular, swirling areas of white qtz and green mariposite. Several small, (0.5-1.0cm) qtz veins at all angles to core axis.								
(32.06)				(33432)	40.8	41.8	1.0m	3	0.5	15)	
				(33435)	41.8	42.8	1.0m	3	0.7	13)	
44.01	53.14	90%	Massive, black argillite with increased chert content, and increased silicification - chert fragments are angular and range up to 15cm in size; well bounded with surrounding argillite - qtz veins and stringers are commonplace at all angles to core axis; but with a general overall trend of 30° to core axis								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-4 Sheet No. 03
 Section _____
 Date Begun Nov 24 196
 Date Finished Nov 25 196
 Date Logged Nov 26 196

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.69 m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
53.14	57.56	90%	Dark grey to green argillite with fragments of chert and green andesite. - stringers and "specks" of calcite within the andesite fragments - chert fragments are angular to subangular 1 to 3cm in size.								
57.56	60.61		Andesite; green andesite with occasional fragments of dark grey argillite and chert. - stringers of calcite and "speckles" of calcite throughout andesite.								
60.61	63.01	90%	Dark grey argillite with occasional andesite sections. - andesite fragments up to 1cm in size are angular within argillite matrix - occasional qtz veinlets at all angles to core axis								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-4 Sheet No. 04
 Section _____
 Date Begun NOV 24 /86
 Date Finished NOV 25 /86
 Date Logged NOV 26 /86

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.69m
 Logged By B. Carne
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/t	Ag oz/t	Cu %	
FROM	TO										
				(33436)	63.3	63.9	0.6m	2	1.2	50)	
63.01	65.68		Massive black, pyritic argillite. Increase in silicification; probable silicification of fine-grained turbidite sequence. - increase in pyrite content (15-20%)	(33437)	63.9	64.64	0.74m	3	0.8	1)	
				39245	64.64	65.64	1.0m	0.001	0.01	0.03	
65.68	68.76		Zone of slight alteration, consisting of dark grey country rock infilled by irregular, swirling areas of white quartz and green mariposite. Several quartz veins are present and are noted as follows.	39246	65.64	66.64	1.0m	0.001	0.03	0.09	
(218.65)				39247	66.64	67.06	0.40m	0.026	0.04	0.85	*
			- 66.64m - 67.06 m - qtz rubble; hanging wall and footwall contacts have been disrupted; consists of white qtz with disseminated pyrite and stibnite.	39248	67.06	68.06	1.0m	0.001	0.01	0.04	
				39249	68.06	69.06	1.0m	0.001	0.01	0.02	
			- 68.44m - 4cm wide qtz vein (white) $\approx 30^\circ$ to core axis								
			- 68.63 - 2cm wide qtz vein (whitish-pink) $\approx 30^\circ$ to core axis.								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-4 Sheet No. 05
 Section _____
 Date Begun NOV 24 196
 Date Finished NOV 25 196
 Date Logged NOV 26 196

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.69m
 Logged By B. Gane
 Claim Snowbird
 Core Size NQ

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	ANALYSIS		
								Am.	Ag.	Sb.
68.76	72.66		Massive, black pyritic argillite with occasional chert fragments. - very heavy silicification; several small (1-3cm) qtz veins at all angles to core axis - pyrite occurs generally as 1mm cubic disseminations throughout section							
72.66	76.39		Massive argillite with occasional fragments of chert and green andesite - still very siliceous with qtz veinlets at all angles to core axis. <i>Some manganese Fe.</i>	(33302)	73.4	74.4	1.0m	7	2.1	70)
				(33303)	74.4	75.7	1.3m	4	1.1	51)
				(33304)	75.7	76.7	1.0m	23	1.2	68)
				(33305)	76.7	77.7	1.0m	28	1.4	28)
76.39	77.69		Andesite; fine-grained green volcanic with some fragments of grey argillite. - variable silicification, with some qtz veins at all angles to core axis.							
			END OF HOLE							

Recovery is 100% unless otherwise noted

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-5

DIP TEST		
Footage	Angle	
	Reading	Corrected
0		-90°

Hole No. 86-5 Sheet No. 07

Lat. _____

Total Depth 124.30 m (407.8')

Section _____

Dep. _____

Logged By B. Game

Date Begun NOV 25 186

Bearing -

Claim Snowbird

Date Finished NOV 27 186

Elev. Collar 2402 FT

Core Size NQ

Date Logged NOV 27 186

meters

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE							
FROM	TO													
0.00	29.68		Casing and Broken rock											
29.68	35.68		Massive, black pyritic argillite with occasional cherty sections - chert fragments are angular and range up to 10cm in size. - minor pyrite occurs as 1mm disseminations - numerous qtz and calcite stringers at all angles to core axis.											
35.68	54.06	90%	Mixed rock; argillite with sections and fragments of green andesite - overall color of unit: green - slightly serpentinized in places - very occasional clasts of chert - occasional stringers of qtz and calcite at all angles to core axis - core is less competent through somewhat serpentinized sections; becomes soft and somewhat friable.											

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-5

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-5 Sheet No. 02
 Section _____
 Date Begun Nov 25 186
 Date Finished Nov 27 186
 Date Logged Nov 28 186

Lat. _____
 Dep. _____
 Bearing 090°
 Elev. Collar _____

Total Depth 124.30m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
54.06	58.18	90%	Fragmental zone, probable turbidite flow - fragments predominantly angular, 1mm to 1cm cherty fragments in black argillite matrix - some "swirly" stringers of qtz - 57.68m - 57.83cm zone of brecciation, angular black argillite in massive white qtz matrix with some disseminated pyrite	39250	57.50	58.50	1.0m	0.003	0.02	0.01
58.18	76.50	90%	Massive black argillite, Increase in silicification - introduction of very minor mariposite - slight serpentinization - 68.15m - 69.48m - very siliceous section, soft and crumbly "friable" - disseminations and "smears" of pyrite 15-20% - section contains occasional 1-5cm angular fragments of andesite. - occasional small qtz veins (1cm) at all angles to core axis	39251	67.70	68.70	1.0m	0.001	0.01	0.01
				39252	68.70	69.70	1.0m	0.007	0.01	0.01
				(55501)	76.5	77.1	0.8m	52	1.3	48)

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-5

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. <u>86-5</u>	Sheet No. <u>03</u>	Lat. _____	Total Depth <u>124.30m</u>
Section _____	Dep. _____	Bearing <u>090°</u>	Logged By <u>B. Game</u>
Date Begun <u>NOV 25 186</u>	Date Finished <u>NOV 27 186</u>	Elev. Collar _____	Claim <u>Snowbird</u>
Date Logged <u>NOV 28 186</u>			Core Size <u>NQ</u>

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %		
76.50	86.19		Very Cherty argillite; more chert than argillite in sections - increase in pyrite content (15-20%) pyrite occurs as 1mm disseminations and as 1mm fracture fillings	39253	83.19	84.19	1.0m	0.002	0.01	0.01		
			- several small qtz veins (1-3cm wide) at all angles to core axis.	39254	84.19	85.19	1.0m	0.001	0.01	0.01		
				39255	85.19	86.19	1.0m	0.006	0.01	0.01		
				(33307)	86.2	87.2	1.0m	5	1.2	42)		
86.19	106.73	90%	Altered Zone; comprising of fractured dark grey to black country rock infilled by irregular, swirling areas of white quartz and green mariposite	(33308)	87.2	88.3	1.1m	47	1.7	20)		
(282.8)			Several qtz veins and brecciated areas	39256	89.98	90.98	1.0m	0.001	0.01	0.02		
				39257	90.98	91.98	1.0m	0.001	0.01	0.03		
			Noted as follows:	(33309)	89.3	89.1	0.8m	21	1.3	28)		
			→ 91.98m: 25cm wide, white qtz vein with minor disseminated pyrite and mariposite	(35510)	89.1	90.0	0.9m	2	0.9	9)		
			Hanging wall contact disrupted; Footwall Contact 40°	39258	91.98	92.23	0.25m	0.001	0.01	0.01		
				39259	92.23	93.23	1.0m	0.001	0.05	0.04		
				39260	93.23	94.23	1.0m	0.007	0.02	0.02		
			→ 94.70m: 35cm wide zone of brecciation, angular black argillite fragments in	39261	94.23	95.23	1.0m	0.001	0.01	0.01		

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-5

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-5 Sheet No. 04
 Section _____
 Date Begun Nov 25/86
 Date Finished Nov 27/86
 Date Logged Nov 28/86

Lat. _____
 Dep. _____
 Bearing 090°
 Elev. Collar _____

Total Depth 124.30 m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %	
FROM	TO										
			massive white qtz matrix, with minor disseminated pyrite in qtz and in matrix.								
			→ 95.85m: 10cm wide white qtz vein exhibiting large hexagonal crystals. Hanging wall and footwall contact $\approx 40^\circ$	39262	95.23	96.23	1.0m	0.001	0.01	0.01	
			→ 96.06m: 10cm wide zone of brecciation, angular black argillite fragments in massive white qtz matrix, with disseminated pyrite and stibnite in matrix	39263	96.23	97.23	1.0m	0.004	0.01	0.01	
				39264	97.23	98.23	1.0m	0.001	0.01	0.01	
			→ 100.90m: 20cm wide qtz vein with some disseminated pyrite. Hanging wall contact 35° ; foot wall contact 40°	39265	98.82	99.82	1.0m	0.057	0.02	0.01	
				39266	99.82	100.82	1.0m	0.007	0.01	0.01	
				39267	100.82	101.82	1.0m	0.002	0.01	0.03	
			→ 101.57m: 20cm wide white qtz vein with hanging wall and footwall contact 50°	39268	101.82	102.82	1.0m	0.001	0.01	0.02	
			→ 103.37m: 7cm wide qtz vein. Hanging wall contact 35° ; footwall contact 50°	39269	102.82	103.82	1.0m	0.003	0.01	0.01	

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-5

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-5 Sheet No. 05

Lat. _____

Total Depth 124.30 m

Section _____

Dep. _____

Logged By B. Game

Date Begun NOV 25 186

Bearing 090°

Claim Snowbird

Date Finished NOV 27 186

Elev. Collar _____

Core Size NQ

Date Logged NOV 28 186

DEPTH	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO									
106.73	114.50	Massive, black argillite with occasional cherty sections. - chert fragments are angular and well bounded with country rock; range in size from 1cm to 10cm - occasional angular fragment (1 to 3cm) of green andesite = unit is still fairly siliceous - very minor pyrite occurs as 1mm disseminations.								
114.50	117.12	Massive, green andesite with occasional fragments of dark grey argillite. Fragments are angular to subangular 1 to 3cm - occasional stringers and veinlets of quartz and calcite at all angles to core axis.								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-5

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-5 Sheet No. 06
 Section _____
 Date Begun NOV 25 186
 Date Finished NOV 27 186
 Date Logged NOV 28 186

Lat. _____
 Dep. _____
 Bearing 090°
 Elev. Collar _____

Total Depth 124.30m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE							
FROM	TO													
117.17	119.48		Fragmental zone; probable turbidite flow, - predominantly angular fragments of chert 1mm to 1cm in black argillite matrix.											
119.48	124.30		Mixed rock; green andesite with occasional argillite sections. Overall rock unit is very soft. - pyrite occurs as fracture fillings and as "smears"											
			END OF HOLE											

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-6

DIP TEST		
Footage	Angle	
	Reading	Corrected
0		-60°

Hole No. 86-6 Sheet No. 01 Lat. _____
 Section _____ Dep. _____
 Date Begun NOV 27, 1986 Bearing 225
 Date Finished Nov 28, 1986 Elev. Collar 2393 FT.
 Date Logged NOV 29, 1986

Total Depth 101.17m (331.9 ft)
 Logged By Brian Game
 Claim Snowbird
 Core Size NQ

meters

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
0.00	12.60		Casing and Broken rock								
12.60	16.73	80%	Blocks, "sheared" pyritic argillite core is very broken up - iron staining very common - pyrite occurs as 1mm disseminations								
16.73	20.88		Massive, black argillite with occasional cherty sections - chert fragments are angular and range up to 5cm in size - occasional small (1cm) fragments of light green andesite								
20.88	29.91		Andesite; fine-grained, light green volcanic with occasional fragments of argillite - occasional fragments of angular chert as well, up to 10cm in size - minor pyrite occurs as 1mm disseminations throughout unit.								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-6

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-6 Sheet No. 02
 Section _____
 Date Begun NOV 27 186
 Date Finished NOV 28 186
 Date Logged NOV 29 186

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 101.17m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
29.91	45.79		Massive, argillite with occasional cherty sections. - chert fragments are angular and range up to 10cm in size - marked increase in silicification of this section - introduction of very minor mariposite. - very occasional fragment of light-green andesite.							
			32.54m - 32.70m Zone of brecciation; massive white quartz infilled by angular fragments of black argillite, minor mariposite. - numerous small atz stringers and veinlets at all angles to core axis - unit becomes more siliceous down through the section.	39270	32.0	33.0	1.0m	0.001	0.02	0.02
45.79	58.34		Massive, black pyritic argillite with occasional cherty sections. - chert fragments are angular and range							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-6

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-6 Sheet No. 03
 Section _____
 Date Begun Nov 27 186
 Date Finished Nov 28 186
 Date Logged Nov 29 186

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 101.17m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb	
								oz/ton	oz/ton	%	
			up to 15cm in size - numerous small (1cm) qtz veins at all angles to core axis.								
			→ one significant white qtz vein 0.25m wide occurs at 48.73m to 48.98m, contains very minor disseminated pyrite. 45° to C.A.	39271	48.0	49.0	1.0m	0.001	0.01	0.01	
			→ second significant white qtz vein 0.17m wide occurs at 54.71m - 54.88m 40° to C.A.	39272	54.0	55.0	1.0m	0.001	0.01	0.01	
58.34	65.70		Altered zone; consists of dark grey to black fractured country rock infilled by swirling areas of white qtz and green malpaisite. Several significant qtz veins are present and are noted as follows:								
(191.4)			→ 60.02m: 15cm wide white qtz vein with hanging wall contact 55° and footwall contact 40°	39273	59.50	60.50	1.0m	0.001	0.05	0.02	
				39274	60.50	61.50	1.0m	0.001	0.06	0.02	
				39275	61.50	62.50	1.0m	0.004	0.11	0.01	
			→ 64.64m: 20cm wide white qtz vein with hanging wall contact and footwall contact approx ⊥	39276	62.50	63.50	1.0m	0.001	0.04	0.03	
				39277	63.50	64.50	1.0m	0.001	0.02	0.02	
				39278	64.50	65.50	1.02m	0.001	0.05	0.01	

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-6

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-6 Sheet No. 04
 Section _____
 Date Begun NOV 27 1986
 Date Finished NOV 28 1986
 Date Logged NOV 29 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 101.17m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb	
								oz/ton	oz/ton	%	
			→ 65.52m; 15cm wide white qtz vein with significant visible gold.	39279	65.52	65.67	0.15m	248.16	84.58	0.03	
			occurring as "smears" and fracture fillings. Hanging wall contact (broken)	39280	65.67	66.67	1.0m	0.001	0.06	0.02	
			30°; Footwall contact is disrupted and broken	(33311	66.7	67.7	1.0m	2	1.3	60)	
				(33312	67.7	68.7	1.0m	4	1.4	355)	
				(33313	68.7	69.7	1.0m	1	1.4	30)	
65.70	70.31	90%	Massive, black pyritic argillite with occasional chert sections. Brecciated with 1-2mm open fractures at various L's to CIA. - chert fragments are angular and range up to 10cm in size	(33314	69.7	70.7	1.0m	6	1.9	16)	
			- occasional angular fragments of light green andesite within this section	(33315	70.7	71.7	1.0m	3	1.7	3)	
			- numerous stringers of quartz at all angles to core axis.	(33316	71.7	72.7	1.0m	3	1.6	7)	
				(33317	72.7	73.7	1.0m	2	1.8	3)	
				(33318	73.7	74.7	1.0m	54	1.4	8)	
				(33319	74.7	75.7	1.0m	5	1.6	2)	
70.31	77.35		Massive, green andesite with occasional argillite fragments.								
			- argillite fragments are dark-grey in color and range up to 3cm in size.								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-6

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-6 Sheet No. 05
 Section _____
 Date Begun Nov 27 1986
 Date Finished Nov 28 1986
 Date Logged Nov 29 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 101.17m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
			- occasional cherty clasts are angular and range up to 1cm in size							
77.35	80.05		Very Cherty argillite; more chert than argillite in sections - occasional fragments of light green andesite. - several small qtz veins at all angles to core axis. 79.68m: 5cm wide white qtz vein with abundant disseminated pyrite	39281	79.0	80.0	1.0m	0.015	0.01	0.01
80.05	81.45		Massive, green andesite with occasional fragments of dark grey argillite and occasional cherty sections. 81.35m - 81.45m: 10cm white qtz vein with abundant disseminated pyrite, and pyrite as fracture fillings	39282	81.0	82.0	1.0m	0.001	0.02	0.01

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-6

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-6 Sheet No. 06

Lat. _____

Total Depth 101.17m

Section _____

Dep. _____

Logged By B. Game

Date Begun NOV 27 186

Bearing _____

Claim Snowbird

Date Finished NOV 28 186

Elev. Collar _____

Core Size NQ

Date Logged NOV 29 186

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb.
FROM	TO									
81.45	88.73		Mixed rock; equal parts dark-grey argillite and light-green andesite. Locally some sections contain more of one than the other - occasional cherty fragments are angular and range up to 5cm.	(35320)	99.4	99.4	1.0m	3	0.9	13)
88.73	92.40	90%	Siliceous and cherty argillite exhibiting slight alteration (minor sericite and swirling qtz) - occasional fragments of light-green andesite.							
92.40	93.71		Massive, green andesite with fragments of dark-grey argillite - occasional minor fragments of angular chert. - occasional qtz and calcite veinlets at all angles to core axis.							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-6

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-6 Sheet No. 07 Lat. _____
 Section _____ Dep. _____
 Date Begun NOV 27 186 Bearing _____
 Date Finished NOV 28 186 Elev. Collar _____
 Date Logged NOV 29 186

Total Depth 101.17m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
93.71	101.17	90%	Mixed rock; equal parts dark-gray argillite and light-green andesite. Locally some sections contain more of one than the other. - occasional angular fragments of chert. - core recovery is poorer near the end; rock is "blocky".								
			END OF HOLE.								

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-7

DIP TEST		
Footage	Angle	
	Reading	Corrected
0		-45°

Hole No. 86-7 Sheet No. 01
 Section _____
 Date Begun NOV 28, 1986
 Date Finished NOV 29, 1986
 Date Logged NOV 30, 1986

Lat. _____
 Dep. _____
 Bearing 225
 Elev. Collar 2380 FT

Total Depth 80.06m (262.7ft)
 Logged By Brian Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE						
FROM	TO												
0.00	18.51		Casing and Broken rock										
18.51	22.39	90%	Very cherty argillite; more chert than argillite in sections. - contains fragments and sections of light green andesite. - includes minor quartz and calcite veinlets at all angles to core axis. - becomes darker, and argillite content increases down thru the section.										
22.39	22.57		Fault gouge; soft, crumbly friable material; contact approx ⊥ to core axis.										
22.57	25.95		Massive, light green andesite with occasional cherty sections. - chert fragments are angular and range up to 5cm in size. - occasional fragments of dark-grey argillite.										

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-7

DIP TEST		
	Angle	
Footage	Reading	Corrected

Hole No. 86-7 Sheet No. 02 Lat. _____ Total Depth 80.06m
 Section _____ Dep. _____ Logged By B. Game
 Date Begun NOV 28 186 Bearing _____ Claim Snowbird
 Date Finished NOV 29 186 Elev. Collar _____ Core Size NQ
 Date Logged Nov 30 186

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
25.95	31.95		Altered and serpentinized andesite. - light green to dark green altered volcanic surrounded and infilled by swirling white qtz and very minor malpaisite in places. - some pyrite present occurs as disseminations throughout section. 31.4-31.7 unshamed with much graphite fault.	(33321)	26.0	27.0	1.0m	32	1.2	20)
				39283	27.04	28.04	1.0m	0.001	0.01	0.02
				39284	28.04	29.04	1.0m	0.715	0.07	0.02
				(33322)	29.0	30.0	1.0m	6	0.9	2)
				(33323)	30.0	31.0	1.0m	1	0.5	7)
				(33324)	31.0	32.0	1.0m	2	1.6	1)
				(33325)	32.0	33.0	1.0m	5	1.2	1)
31.95	35.93		Mixed rock; green andesite and dark grey argillite in more or less equal parts - occasional chert, sections with angular chert fragments up to 5cm in size.	(33326)	35.7	36.7	1.0m	7	0.9	4)
35.93	38.93		Massive, black pyritic argillite with occasional chert, sections. - chert fragments are angular and range up to 10cm in size. - occasional stringers of qtz at all angles to core axis - minor pyrite occurs as disseminations.							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-7

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-7 Sheet No. 03
 Section _____
 Date Begun Nov 28 1986
 Date Finished NOV 29 1986
 Date Logged NOV 30 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 80.06m
 Logged By B. Gamm
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
38.83	48.22		Massive, black argillite with a marked increase in silicification - many cherty sections - numerous small qtz veins at all angles to core axis - introduction of very minor mariposite. - 45.70m : 15cm wide brecciated zone with massive white qtz infilled by angular fragments of dark grey argillite; contains a 5cm section of massive pyrite.	(33327	44.5	45.5	1.0m	13	1.3	51)
				39285	45.50	46.00	0.50m	0.001	0.05	0.03
				(33328	46.0	47.0	1.0m	15	1.0	30)
				(33329	47.0	48.0	1.0m	31	1.4	130)
48.22	58.81		Altered zone ; consisting of fractured dark grey to black country rock infilled by irregular swirling areas of white qtz and green mariposite. Several significant qtz veins within the zone are noted as follows: → 50.96m : 35cm wide white qtz vein infilled with minor argillite fragments and mariposite hanging wall and footwall contact	39286	48.96	49.96	1.0m	0.001	0.01	0.02
				39287	49.96	50.96	1.0m	0.001	0.06	0.06
				39288	50.96	51.31	0.35m	0.001	0.01	0.02

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-7

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-7 Sheet No. 04
 Section _____
 Date Begun NOV 28/86
 Date Finished NOV 29/86
 Date Logged NOV 30/86

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 80.06m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
			approx 45°	39289	51.31	52.04	0.73m	0.001	0.02	0.01
			→ 52.04m; 0.43m wide white qtz vein infilled	39290	52.04	52.47	0.43m	0.001	0.01	0.01
			by swirling dark grey argillite and green mariposite. Hanging wall contact approx 50°; footwall contact disrupted	39291	52.47	53.47	1.0m	0.001	0.04	0.02
			→ 56.31 qtz rubble with some disseminated pyrite	39292	56.31	56.81	0.50m	0.004	0.05	0.03
				(33331)	53.5	54.5	1.0m	25	1.3	148)
58.81	66.04		Very cherty argillite with occasional sections of light green andesite.	(33332)	54.5	55.5	1.0m	23	1.1	128)
			- overall color of unit - green	(33333)	55.5	56.3	0.8m	26	1.2	174)
			- numerous stringers of quartz and calcite at all angles to core axis.	(33334)	56.8	57.8	1.0m	12	0.9	350)
				(33335)	57.8	58.8	1.0m	17	1.4	188)
66.04	67.94		Slightly altered argillite. Dark green to grey argillite, surrounded by areas of swirling white qtz, and lenses of white qtz.							
			- very minor mariposite.							
			- 66.43: qtz rubble with fragments of							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-7

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-7 Sheet No. 05
 Section _____
 Date Begun Nov 28 /86
 Date Finished Nov 29 /86
 Date Logged Nov 30 /86

Lat. _____ Total Depth 80.06m
 Dep. _____ Logged By B. Game
 Bearing _____ Claim Snowbird
 Elev. Collar _____ Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb
FROM	TO							oz/Ton	oz/Ton	%
				(33336)	65.3	66.0	1.0m	38	1.6	55)
			dark grey argillite and disseminated to massive pyrite in sections.	39293	66.33	66.93	0.60m	0.211	0.13	0.03
				(33337)	66.8	67.8	1.0m	390	1.5	90)
67.94	71.54		Light green andesite with fragments and sections of dark grey argillite and chert. - occasional veinlets of qtz and calcite at all angles to core axis.							
71.54	80.06		Cherty Andesite. Light green andesite with many fragments of angular chert up to 10cm in size. - includes the occasional fragment or 'band' of dark grey argillite. - occasional stringers of qtz and calcite at all angles to core axis							
			END OF HOLE							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-8

DIP TEST		
Footage	Angle	
	Reading	Corrected
0		-45°

Hole No. 86-8 Sheet No. 01
 Section _____
 Date Begun NOV 29, 1986
 Date Finished NOV 30, 1986
 Date Logged Dec 1, 1986

Lat. _____
 Dep. _____
 Bearing 225°
 Elev. Collar 2377 FT.

Total Depth 77.07m (252.87 ft)
 Logged By Brian Game
 Claim Snowbird
 Core Size NQ

DEPTH FROM TO		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
0.00	37.48		Casing and Broken rock							
37.48	40.48		Massive, black argillite with occasional cherty sections. - chert occurs as angular fragments that range up to 5cm in size - several stringers and veinlets of quartz at all angles to core axis - very minor amounts of green mariposite present.							
40.48	58.50		Altered Zone; comprising of fractured grey to dark grey country rock, infilled by irregular areas of swirling white quartz and green mariposite. - several small qtz veins are present, and are noted as follows: 40.76m: 5cm wide white qtz vein approx ⊥ to core axis. 40.90m: 2cm wide white qtz vein at approx 20° to core axis.	39294	40.48	41.48	1.0m	0.001	0.07	0.01

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-8

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-8 Sheet No. 02
 Section _____
 Date Begun NOV 29 1986
 Date Finished NOV 30 1986
 Date Logged DEC 1 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.07m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
			40.94m : 4cm wide white qtz vein at approx 20° to core axis							
			- several other very minor veins at all angles to core axis	39295	41.48	42.48	1.0m	0.001	0.03	0.01
			- some minor pyrite within altered zone occurs as 1mm disseminations and 1mm fracture fillings.	33338	42.5	43.3	0.8m	18	0.9	46)
			- 55.45 : increased alteration, greater mariposite content, pyrite content increases	39296	55.35	56.35	1.0m	0.001	0.01	0.01
				33339	43.3	44.3	1.0m	5	0.8	3)
58.50	75.70		Mixed rock; equal parts light green andesite and dark grey argillite. In sections there may be more of one than the other.	33340	44.3	45.3	1.0m	10	0.8	15)
				33341	45.3	46.3	1.0m	6	0.7	9)
				33342	46.3	47.3	1.0m	17	0.6	6)
				33343	47.3	48.3	1.0m	5	0.6	3)
			- occasional angular chert fragments 1 to 3cm in size	33344	48.3	49.3	1.0m	13	0.9	4)
				33345	49.3	50.2	0.9m	20	0.8	2)
			- occasional quartz and calcite veinlets at all angles to core axis.	33346	50.2	51.1	0.9m	12	0.8	1)
				33347	51.1	52.0	0.9m	3	0.9	1)
				33348	52.0	52.9	0.9m	11	1.2	11)
				33349	52.9	53.8	0.9m	2	1.1	5)

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-8

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-8 Sheet No. 03
 Section _____
 Date Begun Nov 29 186
 Date Finished Nov 30 186
 Date Logged Dec 1 186

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.07m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	An	Ag	Sb.
FROM	TO									
75.70	76.67		Massive, black argillite with occasional cherty sections.	(33150)	53.8	54.7	0.9m	9	0.9	3)
			- chert fragments are angular and range up to 5cm in size	(33153)	54.7	55.7	0.7m	4	0.7	1)
			- occasional angular fragments of light green andesite	(33156)	56.4	57.4	1.0m	7	0.8	1)
			- 75.60m: Sem white qtz vein at 30° to core axis	(33151)	58.4	59.4	1.0m	860	5.4	124)
				33157	58.4	59.4	1.0m	0.043		
76.67	77.07		Massive andesite. Light green fine-grained volcanic with occasional fragments of argillite and chert.							
			END OF HOLE							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-9

DIP TEST		
Footage	Angle	
	Reading	Corrected
0		-60°

Hole No. 86-9 Sheet No. 01 Lat. _____
 Section _____ Dep. _____
 Date Begun NOV 30, 1986 Bearing 225°
 Date Finished Dec 1, 1986 Elev. Collar 2366 FT
 Date Logged Dec 1, 1986

Total Depth 71.47m (234.5ft)
 Logged By Brian Gagne
 Claim Snowbird
 Core Size NQ

meters

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb.
FROM	TO									
0.00	31.38		Casing and Broken rock							
31.38	31.78	80%	Mixed rock; equal parts dark gray argillite and light green andesite.							
			- occasional sections of angular chert fragments.	(33158)	38.5	37.5	1.0m	6	0.8	5)
				(33159)	40.5	40.5	1.0m	18	0.9	1)
			- very minor disseminated pyrite	(33160)	40.5	41.5	1.0m	12	0.9	8)
			- core is very 'blocky'	(33161)	41.5	42.0	0.5m	6	1.2	9)
31.78	39.24		Serpentinized unit.							
			- dark green, soft, rock with numerous small stringers and 'speckles' of quartz throughout; rock is very soft and friable	(33310)	31.9	32.9	1.0m	15	1.0	1)
				(33311)	32.9	33.9	1.0m	11	0.9	1)
				(33312)	33.9	34.9	1.0m	13	1.3	1)
			- unit becomes less serpentinized and more silicified down through the section.	(333197)	34.9	35.0	0.9m	4	0.7	1)
				(333198)	35.0	36.7	0.9m	6	0.6	3)
				(333199)	36.7	37.6	0.9m	3	0.8	2)
			24.58 - 39.98m : fault gouge.	(33394)	37.6	38.5	0.9m	8	0.6	1)

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-9

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-9 Sheet No. 02
 Section _____
 Date Begun Nov 30 186
 Date Finished Dec 1 186
 Date Logged Dec 1 186

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 71.47m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb %
FROM	TO									
39.24	44.78		Altered zone; consists of fractured dark grey country rock surrounded and infilled by areas of swirling white quartz and green mariposite. Several minor qtz veins are present in this zone; the two significant ones are noted as follows: 44.18m: 25cm wide white quartz vein with inclusions of dark grey argillite and green mariposite. "Smears of pyrite (10%) on the face of sections of the quartz. Vein contact is broken, but appears to be approx 50° to core axis. 44.58m: 20cm wide white quartz vein with inclusions of dark grey argillite. Very minor disseminated pyrite within argillite fragments. No discernable contact as vein is very broken up.							
				39297	42.08	43.08		0.001	0.04	0.01
				39298	43.08	44.18		0.001	0.01	0.01
				39299	44.18	44.78		0.005	0.01	0.01
				39300	44.78	45.78		0.001	0.01	0.01
				(33162)	45.8	46.6	0.8m	3	1.0	3)
				(33163)	46.6	47.6	1.0m	2	0.8	73)
				(33164)	47.6	48.6	1.0m	2	0.8	66)
				(33165)	48.6	49.6	1.0m	3	0.7	1)
				(33166)	49.6	50.3	0.7m	23	0.8	2)
				(33167)	50.3	51.3	1.0m	24	0.9	2)
				(33168)	51.3	52.3	1.0m	109	0.9	1)
				(33169)	52.3	53.3	1.0m	35	0.8	3)
				(33170)	53.3	54.3	1.0m	4	0.8	1)

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-9

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-9 Sheet No. 03 Lat. _____ Total Depth 71.47m
 Section _____ Dep. _____ Logged By B. Game
 Date Begun Nov 30 1986 Bearing _____ Claim Snowbird
 Date Finished Dec 1 1986 Elev. Collar _____ Core Size WQ
 Date Logged Dec 1 1986

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb.
FROM	TO									
44.78	62.15		Very siliceous argillite; rock is still slightly altered at the top of the section.	(33171	54.3	55.3	1.0m	66	1.5	1)
			- occasional cherty sections	(33172	55.3	56.3	1.0m	19	1.1	1)
			- rock is still very siliceous with stringers and swirling areas of white quartz.	(33173	56.3	57.3	1.0m	13	0.8	11)
			- still a very minor mariposite content.							
			- occasional small veins of quartz at all angles to core axis.							
			- 56.14m: 8cm wide, white quartz vein, with occasional fragments and fracture fillings of dark grey argillite. Vein at approx. 30° to core axis.							
			- minor pyrite appears as 1mm disseminations and less commonly as 1mm fracture fillings							
62.15	63.15		Massive, light green andesite with occasional sections of chert and dark grey argillite.							

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-9

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-9 Sheet No. 04
 Section _____
 Date Begun NOV 30 1986
 Date Finished Dec 1 1986
 Date Logged Dec 1 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 71.47m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE				
FROM	TO										
			- Occasional stringers of quartz at all angles to core axis.								
63.65	65.40		Very cherty argillite. Dark green to grey country rock with numerous angular fragments of 1-10cm chert clasts. - occasional qtz veinlets at all angles to core axis								
65.40	71.47		Massive, light green andesite with occasional chert and argillite sections - numerous qtz and calcite veinlets at all angles to core axis								
			END OF HOLE								

Recovery is 100% unless otherwise noted

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-10

DIP TEST		
Footage	Angle	
	Reading	Corrected
0		-60°

Hole No. 86-10 Sheet No. 01

Lat. _____

Total Depth 77.69 m (254.98c)

Section _____

Dep. _____

Logged By Brian Game

Date Begun Dec 1, 1986

Bearing 225

Claim Snowbird

Date Finished Dec 2, 1986

Elev. Collar 2360 FT

Core Size N/D

Date Logged Dec 2, 1986

metres

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	Ag	Sb.
FROM	TO									
2.00	17.49		Casing and Broken rock							
17.49	18.59		Massive, black pyritic argillite with occasional cherty sections. - chert fragments are angular and range up to 10cm in size - pyrite occurs as 1 to 3mm disseminations and less commonly as 1mm fracture fillings - occasional qtz veinlets at all angles to core axis	(33174)	19.0	20.0	1.0m	2	0.6	1)
				(33175)	20.0	21.0	1.0m	7	0.7	1)
				(33176)	21.0	22.0	1.0m	20	0.8	2)
				(33177)	22.0	23.0	1.0m	5	0.7	2)
				(33178)	23.0	24.0	1.0m	4	0.7	1)
				(33179)	24.0	25.0	1.0m	8	0.7	3)
18.59	29.49		Slightly altered and serpentinized rock. - dark grey to dark green country rock surrounded and infilled by areas of swirling white qtz and minor scapolite. - some sections somewhat serpentinized. - numerous small qtz veins at all angles to core axis. - sections contains minor disseminations	(33180)	25.0	26.0	1.0m	4	1.2	2)
				(33181)	26.0	27.0	1.0m	3	1.0	1)
				(33182)	27.5	30.5	1.0m	2	0.6	3)

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-10

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-10 Sheet No. 02
 Section _____
 Date Begun Dec 1/86
 Date Finished Dec 2 1986
 Date Logged Dec 3 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.69m
 Logged By B Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au g/t ton	Ag g/t ton	Sb %
FROM	TO									
			of fine-grained pyrite.							
29.49	39.02		Altered zone; consisting of light to dark grey, fractured country rock, surrounded and infilled by areas of swirling white quartz and green malpaisite.							
			Pyrite occurs throughout unit as fine disseminations and fracture fillings.	39301	30.50	31.50	1.0m	0.001	0.01	0.01
				39302	31.50	32.50	1.0m	0.001	0.01	0.01
			Several noteworthy quartz veins are present and are described as follows:	39303	32.50	33.50	1.0m	0.001	0.01	0.01
			33.51m: 10cm wide white quartz vein at approx 30° to core axis	39304	33.50	34.50	1.0m	0.001	0.01	0.01
			34.41m: 10cm wide white quartz vein at approx 30° to core axis							
			34.70m: Two parallel 3cm wide white qtz veins at approx 25° to core axis.	39305	34.50	35.50	1.0m	0.001	0.01	0.01
				39306	35.50	36.50	1.0m	0.001	0.01	0.01
				39307	36.50	37.50	1.0m	0.001	0.01	0.01
				(39308)	37.50	38.50	1.0m	26	0.8	15)
				(39309)	38.50	39.50	1.0m	5	0.6	1)

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-10

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-10 Sheet No. 03
 Section _____
 Date Begun Dec 1 1986
 Date Finished Dec 2 1986
 Date Logged Dec 3 1986

Lat. _____
 Dep. _____
 Bearing _____
 Elev. Collar _____

Total Depth 77.6m
 Logged By B Game
 Claim Snowbird
 Core Size NA

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE					
39.02	40.63		Slightly altered and serpentinized rock - dark grey, to dark green country rock surrounded and infilled by areas of swirling white quartz - pyrite occurs as 1mm disseminations and 1mm fracture fillings - minor qtz veinlets and stringers at all angles to core axis.									
40.63	43.55		Black, massive argillite - some very minor chert - occasional qtz stringers at all angles to core axis. slight serpentinization.									
43.55	55.72		Serpentinized unit; dark green country rock infilled by areas of swirling white qtz. - occasional small qtz vein at all angles to core axis.									

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-10

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-10 Sheet No. 04
 Section _____
 Date Begun Dec 1 1986
 Date Finished Dec 2 1986
 Date Logged Dec 3 1986

Lat. _____ Total Depth 77.69
 Dep. _____ Logged By R Game
 Bearing _____ Claim Snowbird
 Elev. Collar _____ Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE							
FROM	TO													
			- 53.47m; 25cm wide fault gouge											
55.72	62.91		- Massive, black argillite; very silicified. Very occasional cherty sections. - occasional qtz stringers at all angles to core axis. - very slight serpentinization at the top of unit - occasional small light green andesite fragment											
62.91	67.71		Massive, light green andesite with occasional fragments of dark grey argillite, and occasional cherty sections. - chert fragments are angular and range in size from 1 to 3cm - occasional small qtz veinlets at all angles to core axis.											

DIAMOND DRILL RECORD

PROPERTY Snowbird

HOLE No. 86-10

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 86-10 Sheet No. 05 Lat. _____
 Section _____ Dep. _____
 Date Begun Dec 1 1986 Bearing _____
 Date Finished Dec 2 1986 Elev. Collar _____
 Date Logged Dec 3 1986

Total Depth 77.69m
 Logged By B. Game
 Claim Snowbird
 Core Size NQ

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au oz/ton	Ag oz/ton	Sb % %
FROM	TO									
69.71	77.69		Massive, black pyritic argillite with occasional cherty sections. - chert fragments are angular, well rounded with surrounding country rock and range up to 15cm in size - Occasional fragment of light green andesite. - pyrite content increases and occurs as disseminations, and more commonly as fracture fillings.	39308	72.80	73.80	1.0m	0.001	0.01	0.01
				39309	73.80	74.80	1.0m	0.001	0.01	0.01
			END OF HOLE							

APPENDIX 3

DIAMOND DRILL ASSAYS

(Sample No's 33153 - 33200,
33302 - 33350,
33408 - 33437

results are given in parts per billion for Au and parts per million for Ag and Sb. All other sample results are given in ounces per ton for Au, Ag and percent for Sb.)

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: X-CAL RESOURCES
 Project: SNOWBIRD
 Attention: S. KENNEDY

File: 6-1223
 Date: NOV 28/86
 Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON	SB %
39201	2.1	0.06	0.46	0.013	0.02
39202	2.3	0.07	0.47	0.014	0.01
39203	0.2	0.01	0.36	0.011	0.01
39204	1.6	0.05	0.56	0.016	0.02
39205	0.2	0.01	0.37	0.011	0.02
39206	4.3	0.13	0.79	0.023	0.02
39207	4.2	0.12	0.50	0.015	0.02
39208	1.0	0.03	0.22	0.006	0.07
39209	0.2	0.01	0.48	0.014	0.07
39210	0.2	0.01	0.41	0.012	0.05
39211	0.1	0.01	0.01	0.001	0.05
39212	0.1	0.01	0.01	0.001	0.04
39213	0.2	0.01	0.03	0.001	0.07
39214	0.1	0.01	0.02	0.001	0.07
39215	0.2	0.01	0.01	0.001	0.06
39216	0.2	0.01	0.02	0.001	0.07
39217	0.1	0.01	0.01	0.001	0.10
39218	0.2	0.01	0.80	0.023	0.03
39219	10.0	0.29	21.85	0.637 *	12.90
39220	0.2	0.01	5.94	0.173 *	0.19
39221	0.2	0.01	5.45	0.159 *	2.39
39222	0.2	0.01	0.33	0.010 *	2.13
39223	0.1	0.01	20.75	0.605 *	0.88
39224	0.1	0.01	0.02	0.001	0.04
39225	0.1	0.01	0.06	0.002	0.05
39226	0.2	0.01	0.01	0.001	0.01
39227	0.2	0.01	0.01	0.001	0.02
39228	0.1	0.01	0.01	0.001	0.01

DRILL HOLES :-

86-1.

86-2

Certified by



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MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: X-CAL RESOURCES
 Project:
 Attention: C. J. SAMPSON

File: 6-1233
 Date: DEC 3/86
 Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON	SB %
39229	0.6	0.02	0.02	0.001	0.02
39230	0.4	0.01	1.01	0.029 *	1.56
39231	0.4	0.01	1.35	0.039 *	0.54
39232	0.1	0.01	0.51	0.015	0.08
39233	0.2	0.01	0.01	0.001	0.01
39234	0.7	0.02	0.02	0.001	0.02
39235	4.3	0.13	1.54	0.045	0.01
39236	0.8	0.02	0.22	0.006	0.04
39237	0.3	0.01	0.01	0.001	0.02
39238	0.2	0.01	0.01	0.001	0.01
39239	0.4	0.01	0.02	0.001	0.01
39240	0.3	0.01	0.04	0.001	0.02
39241	0.3	0.01	0.10	0.003	0.03
39242	1.4	0.04	0.16	0.005	0.01
39243	1.1	0.03	0.50	0.015	0.04
39244	0.2	0.01	0.10	0.003	0.02
39245	0.2	0.01	0.01	0.001	0.03
39246	0.9	0.03	0.01	0.001	0.09
39247	1.5	0.04	0.90	0.026 *	0.85
39248	0.3	0.01	0.05	0.001	0.04
39249	0.5	0.01	0.01	0.001	0.02

86-3

86-4

Certified by _____



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Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: X-CAL RESOURCES
 Project: SNOWBIRD
 Attention: S. KENNEDY/C. SAMPSON

File: 6-1243/P1
 Date: DEC 5/86
 Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON	SB %
39250	0.6	0.02	.10	0.003	.01
39251	0.2	0.01	.02	0.001	.01
39252	0.1	0.01	.23	0.007	.01
39253	0.1	0.01	.08	0.002	.01
39254	0.2	0.01	.02	0.001	.01
39255	0.5	0.01	.20	0.006	.01
39256	0.3	0.01	.01	0.001	.02
39257	2.1	0.06	.01	0.001	.03
39258	0.2	0.01	.01	0.001	.01
39259	1.7	0.05	.01	0.001	.04
39260	0.8	0.02	.25	0.007	.02
39261	0.4	0.01	.01	0.001	.01
39262	0.5	0.01	.01	0.001	.01
39263	0.3	0.01	.15	0.004	.01
39264	0.4	0.01	.02	0.001	.01
39265	0.6	0.02	1.94	0.057	.01
39266	0.2	0.01	.24	0.007	.01
39267	0.5	0.01	.08	0.002	.03
39268	0.3	0.01	.01	0.001	.02
39269	0.2	0.01	.10	0.003	.01
39270	0.7	0.02	.02	0.001	.02
39271	0.1	0.01	.05	0.001	.01
39272	0.2	0.01	.04	0.001	.01
39273	1.6	0.05	.02	0.001	.02
39274	2.0	0.06	.04	0.001	.02
39275	3.8	0.11	.14	0.004	.01
39276	1.5	0.04	.01	0.001	.03
39277	0.6	0.02	.01	0.001	.02
39278	1.7	0.05	.04	0.001	.01
39279	2900.0	84.58*	5050.00	147.292 *	.03

} 86-5.

} 86-6.

(RE-ASSAYED)

*METALLIC GOLD ASSAY TO FOLLOW.

Certified by _____



MIN-EN LABORATORIES LTD.

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705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: X-CAL RESOURCES
 Project: SNOWBIRD
 Attention: S. KENNEDY/C. SAMPSON

File: 6-1243/P2
 Date: DEC 5/86
 Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON	SB %	
39280	2.2	0.06	.03	0.001	.02	} 86-6
39281	0.3	0.01	.51	0.015 *	.01	
39282	0.6	0.02	.01	0.001	.01	
39283	0.2	0.01	.04	0.001	.02	
39284	2.4	0.07	*24.50	0.715 *	.02	
39285	1.8	0.05	.02	0.001	.03	} 86-7
39286	0.3	0.01	.05	0.001	.02	
39287	1.9	0.06	.01	0.001	.06	
39288	0.5	0.01	.01	0.001	.02	
39289	0.7	0.02	.02	0.001	.01	
39290	0.3	0.01	.01	0.001	.01	} 86-7
39291	1.2	0.04	.01	0.001	.02	
39292	1.7	0.05	.14	0.004	.03	
39293	4.3	0.13	*7.25	0.211 *	.03	

*METALLIC GOLD ASSAY TO FOLLOW.

Certified by

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)990-5914 OR (604)999-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: X-CAL RESOURCES LTD.
 Project: SNOWBIRD
 Attention: C. SAMPSON/S. KENNEDY

File: 6-1259
 Date: DEC 8/86
 Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON	SB %	
86-8 39294	2.3	0.07	0.05	0.001	0.01	} 86-8
86-8 39295	1.0	0.03	0.03	0.001	0.01	
86-8 39296	0.2	0.01	0.03	0.001	0.01	
86-9 39297	1.2	0.04	0.03	0.001	0.01	
86-9 39298	0.2	0.01	0.01	0.001	0.01	} 86-9
86-9 39299	0.3	0.01	0.16	0.005	0.01	} 86-10
86-9 39300	0.2	0.01	0.04	0.001	0.01	
86-10 39301	0.2	0.01	0.04	0.001	0.01	
86-10 39302	0.1	0.01	0.02	0.001	0.01	
86-10 39303	0.1	0.01	0.03	0.001	0.01	
86-10 39304	0.3	0.01	0.04	0.001	0.01	} 86-10
86-10 39305	0.2	0.01	0.02	0.001	0.01	
86-10 39306	0.1	0.01	0.01	0.001	0.01	
86-10 39307	0.2	0.01	0.02	0.001	0.01	
86-10 39308	0.2	0.01	0.02	0.001	0.01	
86-10 39309	0.1	0.01	0.02	0.001	0.01	

Certified by _____



MIN-EN LABORATORIES LTD.

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
 705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: 04-352628

CERTIFICATE OF ASSAY

COMPANY: X-CAL RESOURCES
 PROJECT: SNOWBIRD
 ATTENTION: S. KENNEDY

FILE: 6-1243
 DATE: DECEMBER 9/86
 TYPE: METALLIC GOLD ASSAY

We hereby certify that the following are assay results for samples submitted.

SAMPLE	* TOTAL	+120 M	* ASSAY VAL	ASSAY VAL	* +120 M	-120 M	* METALLIC GOLD	* NET	GOLD		
NAME	* WT (G)	WT (G)	* MET AU	B/T-120AUG/T	* AU (MG)	AU (MG)	* (OZ/T)	(GM/T)	* (OZ/T)	(GM/T)	

39279	* 485.86	97.81	* 33496.92	2210.00	* 3276.333	857.591	* 196.682	6743.37	* 248.164	8508.46	
39284	* 1557.00	110.00	* 108.65	6.08	* 11.952	8.798	* 0.224	7.68	* 0.389	13.33	
39293	* 774.25	72.25	* 7.96	7.75	* 0.575	5.441	* 0.022	0.74	* 0.227	7.77	

Certified by
 MIN-EN LABORATORIES LTD.

MIN-EN Laboratories Ltd.
 Specialists in Mineral Environments
 705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: 04-352828

CERTIFICATE OF ASSAY

COMPANY: X-CAL RESOURCES
 PROJECT: SNOWBIRD
 ATTENTION: S.KENNEDY

FILE: 6-1223R
 DATE: DECEMBER 11/86
 TYPE: METALLIC GOLD ASSAY

We hereby certify that the following are assay results for samples submitted.

SAMPLE NAME	* TOTAL WT (G)	+120 M WT (G)	* ASSAY VAL MET AU 6/T-120AUS/T	ASSAY VAL	* +120 M AU (MG)	-120 M AU (MG)	* METALLIC GOLD (OZ/T)	NET GOLD (GM/T)
39219	2199.81	64.81	89.35	18.20	5.726	35.857	0.076	2.60
39220	1506.58	39.58	6.44	6.12	0.255	8.978	0.005	0.17
39221	1821.80	36.80	6.15	5.31	0.226	9.478	0.004	0.12
39223	662.05	21.05	22.00	21.79	0.463	9.609	0.029	1.00

Certified by

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MIN-EN LABORATORIES LTD.
Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY


Company: X-CAL RESOURCES LTD.
Project: SNOWBIRD
Attention: S. KENNEDY

File: 7-046
Date: JAN 30/87
Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON	
33 157	1.48	0.043	DRILL HOLE 86-8

Certified by _____


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MIN-EN LABORATORIES LTD.
 Specialists in Mineral Environments
 705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

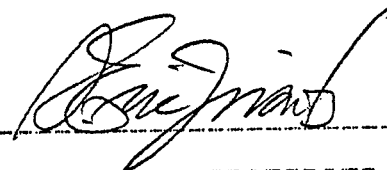
Company: X-CAL RESOURCES LTD.
 Project: SNOWBIRD
 ATTENTION: S. KENNEDY

File: 7-046/P1
 DATE: JAN 30/87
 TYPE: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB	SB PPM	
33 153	0.7	4	1	} DRILL HOLE :- 86-8
33 156	0.8	7	1	
33 157	5.4	860	124	
33 158	0.8	6	5	} 86-9
33 159	0.9	18	1	
33 160	0.9	12	8	} 86-9
33 161	1.2	6	9	
33 162	1.0	3	3	
33 163	0.8	2	73	
33 164	0.8	2	66	
33 165	0.7	3	1	
33 166	0.8	23	2	} 86-9
33 167	0.9	24	2	
33 168	0.9	109	1	
33 169	0.8	35	3	
33 170	0.8	4	1	
33 171	1.5	66	1	} 86-10.
33 172	1.1	19	1	
33 173	0.8	13	11	
33 174	0.6	2	1	
33 175	0.7	7	1	} 86-10.
33 176	0.8	20	2	
33 177	0.7	5	2	
33 178	0.7	4	1	
33 179	0.7	8	3	
33 180	1.2	4	2	} 86-10.
33 181	1.0	3	1	
33 182	0.6	2	3	
33 183	0.8	26	15	
33 184	0.6	5	1	

Certified by



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Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: X-CAL RESOURCES LTD.
Project: SNOWBIRD
Attention: S. KENNEDY

File: 7-046/P2
Date: JAN 30/87
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB	SB PPM	
33 194	0.6	8	1	} DRILL HOLE : 86-9
33 195	0.8	3	2	
33 196	0.6	6	3	
33 197	0.7	4	1	
33 198	1.3	13	1	
33 199	0.9	11	1	} 86-4
33 200	1.0	15	1	
33 302	2.1	7	70	
33 303	1.1	4	51	
33 304	1.2	23	68	
33 305	1.4	28	28	} 86-5
33 306	1.3	52	48	
33 307	1.2	5	42	
33 308	1.7	47	20	
33 309	1.3	21	28	
33 310	0.9	2	9	} 86-6
33 311	1.3	2	60	
33 312	1.4	4	355	
33 313	1.4	1	30	
33 314	1.9	6	16	
33 315	1.7	3	3	} 86-7
33 316	1.6	3	7	
33 317	1.8	2	3	
33 318	1.4	54	8	
33 319	1.6	5	2	
33 320	0.9	3	13	} 86-7
33 321	1.2	32	20	
33 322	0.9	6	2	
33 323	0.5	1	7	
33 324	1.6	2	1	

Certified by _____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.
 Specialists in Mineral Environments
 705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: X-CAL RESOURCES LTD.
 Project: SNOWBIRD
 Attention: S. KENNEDY

File: 7-046/P3
 Date: JAN 30/87
 Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB	SB PPM	
33 325	1.2	5	1	} DRILL HOLE 5
33 326	0.9	7	4	
33 327	1.3	13	51	
33 328	1.0	15	30	
33 329	1.4	31	130	
33 331	1.3	25	148	} 86-7
33 332	1.1	23	128	
33 333	1.2	26	174	
33 334	0.9	12	350	
33 335	1.4	17	188	
33 336	1.6	38	55	}
33 337	1.5	390	90	
33 338	0.9	18	46	
33 339	0.8	5	3	
33 340	0.8	10	15	
33 341	0.7	6	9	} 86-8
33 342	0.6	17	6	
33 343	0.6	5	3	
33 344	0.9	13	4	
33 345	0.8	20	2	
33 346	0.8	12	1	}
33 347	0.9	3	1	
33 348	1.2	11	11	
33 349	1.1	2	5	
33 350	0.9	9	3	
33 408	2.8	119	20	} 86-1
33 409	0.8	101	7	
33 410	1.2	10	752	
33 411	0.9	15	848	
33 412	1.0	14	105	

Certified by _____

MIN-EN LABORATORIES LTD.

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 VC

Certificate of GEOCHEM

Company: X-CAL RESOURCES LTD.
 Project: SNOWBIRD
 Attention: S. KENNEDY

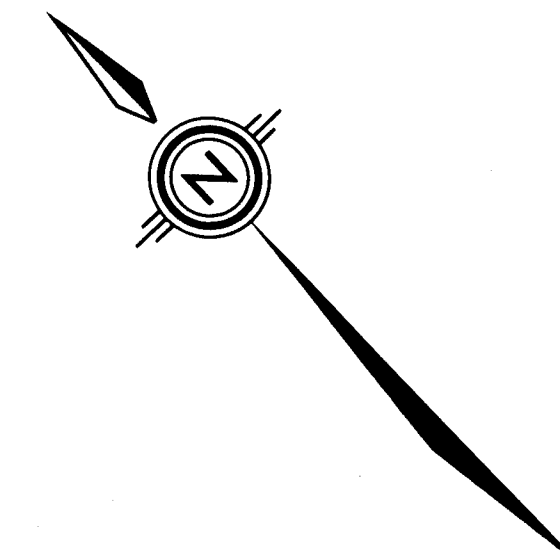
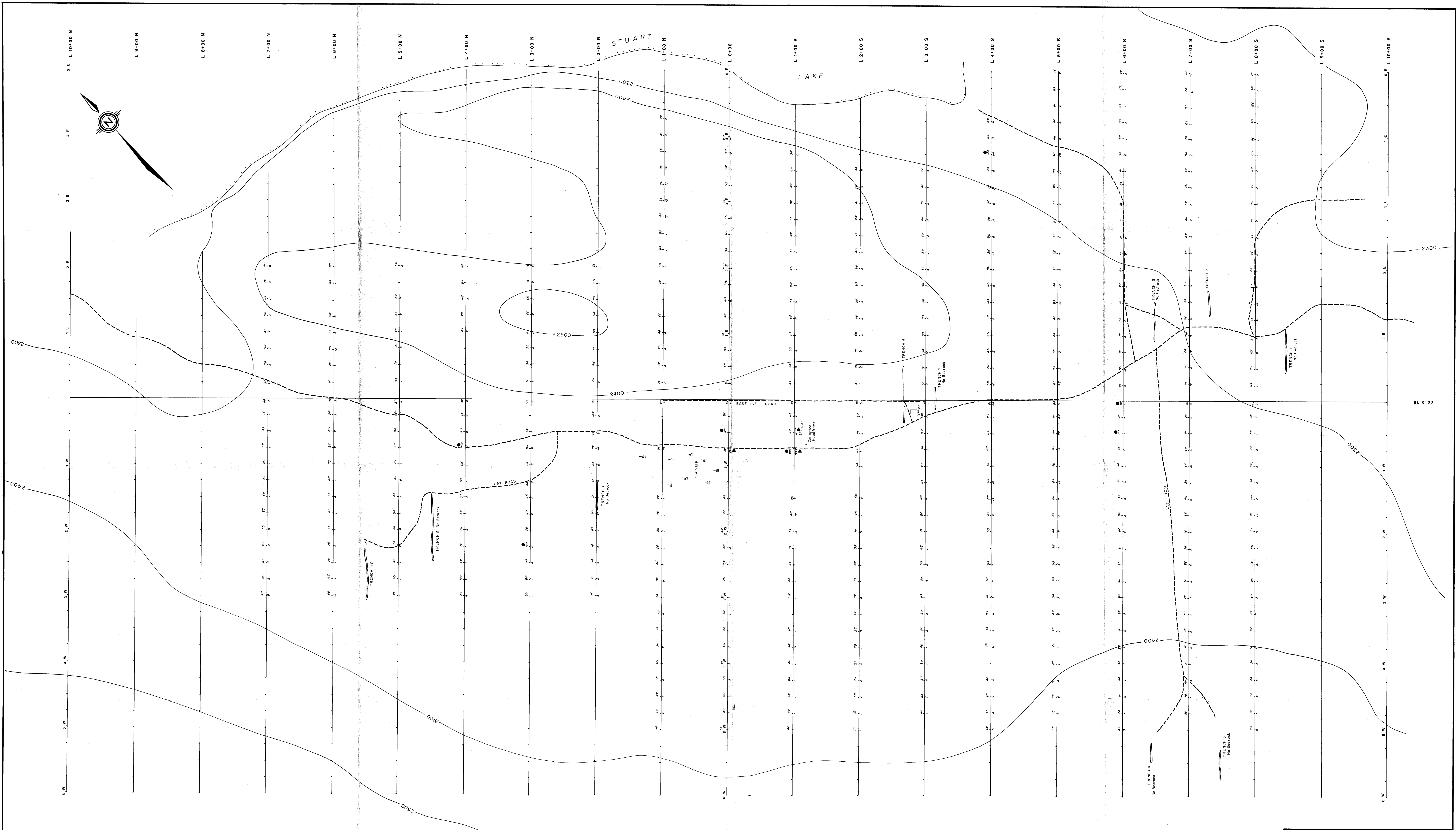
File: 7-046/P4
 Date: JAN 30/87
 Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB	SB PPM	
33 413	0.7	17	55	} DRILL HOLE 1 86-1
33 414	0.9	4	92	
33 415	0.9	2	450	
33 416	0.8	9	410	
33 417	0.9	23	180	
33 418	0.9	16	383	}
33 419	0.8	1	52	
33 420	0.7	3	17	
33 421	0.8	1	44	
33 422	0.6	4	9	
33 423	0.6	4	3	} 86-2
33 424	0.7	49	17	
33 425	0.9	12	10	
33 426	0.6	49	14	
33 427	0.6	3	10	
33 428	0.8	12	8	}
33 429	0.7	5	12	
33 430	0.6	27	10	
33 431	0.6	3	2	
33 432	1.0	53	40	
33 433	1.4	2	1	} 86-3
33 434	0.5	3	15	
33 435	0.7	3	13	} 86-4
33 436	1.2	2	50	
33 437	0.8	3	1	

Certified by

MIN-EM LABORATORIES LTD.



Hg RESULT IN ppb ● ▲ Sb RESULT IN ppm

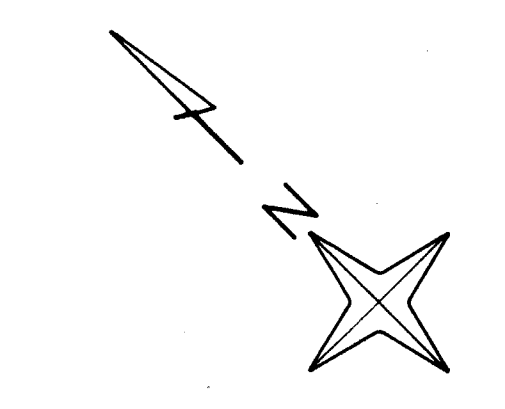
- ANOMALOUS Hg VALUES ≥ 121 ppb
- ▲ ANOMALOUS Sb VALUES ≥ 178 ppm

15,853

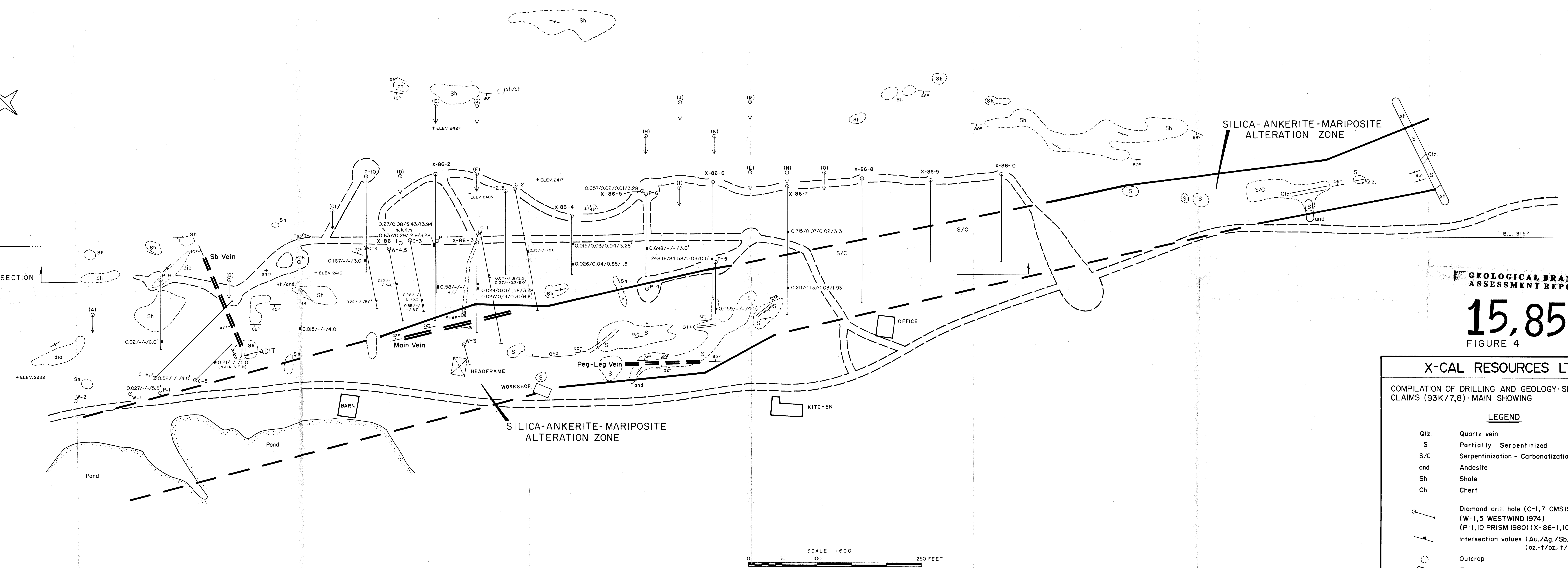
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

X-CAL RESOURCES LTD.	
SNOWBIRD PROPERTY	
OMINECA M.D., B.C.	NTS: 93 K/7E, 8W
GEOCHEMICAL SURVEY	
MERCURY & ANTIMONY RESULTS	
0 100 200 1:2000	
DATE: DEC. 1986	
BY: CJS/rwr	FIGURE: 3

200S 300S 400S 500S 600S 700S 800S 900S 1000S 1100S 1200S 1300S 1400S 1500S



LONGITUDINAL SECTION
0+50 S



GEOLOGICAL BRANCH
ASSESSMENT REPORT

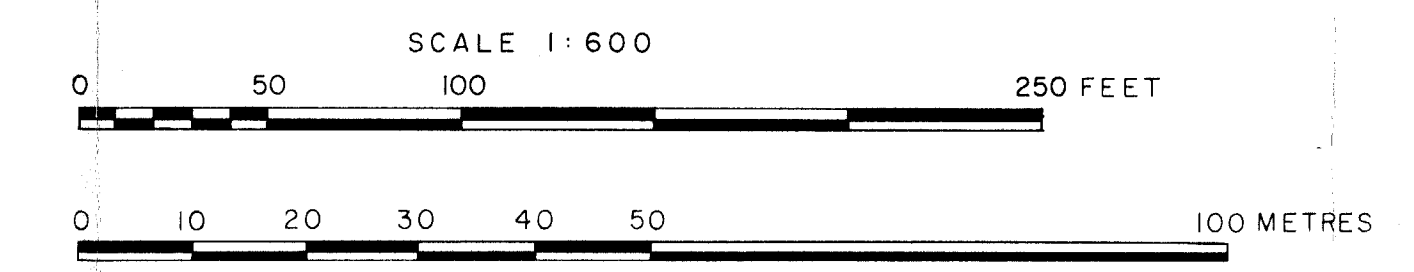
15,853
FIGURE 4

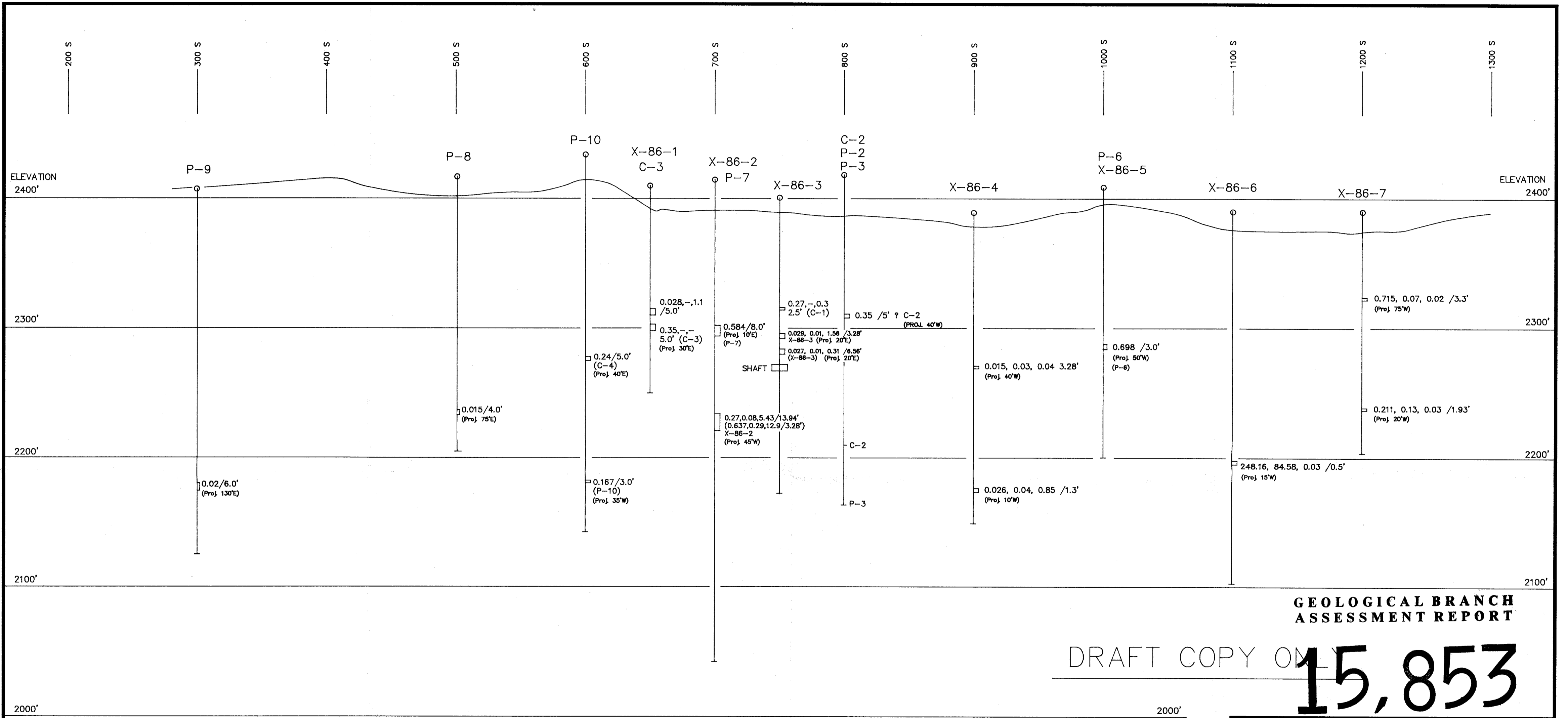
X-CAL RESOURCES LTD.

COMPILATION OF DRILLING AND GEOLOGY - SNOWBIRD
CLAIMS (93K/7,8) - MAIN SHOWING

LEGEND

- Qtz. Quartz vein
- S Partially Serpentinized
- S/C Serpentinization - Carbonatization
- and Andesite
- Sh Shale
- Ch Chert
- Diamond drill hole (C-1,7 CMS1941)
(W-1,5 WESTWIND 1974)
(P-1,10 PRISM 1980) (X-86-1,10 X-CAL 1986)
- Intersection values (Au./Ag./Sb.)
(oz.-1/oz.-1%)
- Outcrop
- Trench
- Quartz vein
- Road
- Proposed drill holes

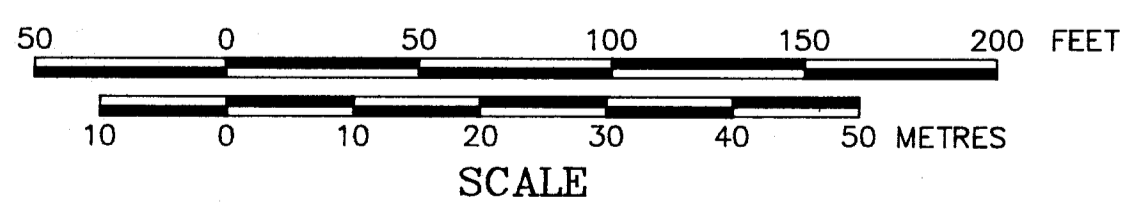




**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

DRAFT COPY ONLY **15,853**

LEGEND:
 DRILL HOLE INTERSECTION
 oz. Au/t, oz. Ag/t, %Sb/WIDTH IN FEET
 0.27, 0.08, 5.43 / 13.94'
 X-86-2



X-CAL RESOURCES LTD.
SNOWBIRD PROPERTY
 OMINECA MINING DIVISION, B.C. NTS 93K/7E & 8W

**LONGITUDINAL SECTION
ALONG 0+50W**
 (LOOKING NE)

DATE: FEBRUARY 1987
 BY: C.J.SAMPSON/rwr

FIGURE: 5