1990

COMINCO LTD.

EXPLORATION

FILE NO: WESTERN DISTRICT

NTS: 103P5

ASSESSMENT REPORT

GEOLOGY

DIAMOND DRILLING

ANYOX PROPERTY

SKEENA MINING DIVISION

LATITUDE 55°25'N LONGITUDE 129°50'W

NOVEMBER, 1988

R.J. AULIS

ASSESSMENT REPORT
ANYOX PROPERTY
SKEENA MINING DIVISION

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COMINCO LTD.

EXPLORATION WESTERN DISTRICT

ASSESSMENT REPORT

ANYOX PROPERTY

1. INTRODUCTION

i. LOCATION AND ACCESS

The property is located at 55°25'N and 129°50'W about 130 kilometers north of Prince Rupert, British Columbia (Plate 1). Access is by fixed wing aircraft, boat or helicopter from either Prince Rupert or Stewart. Most areas of the claim group are within 5 miles of tidewater at Granby Bay.

The claims are situated in rugged terrain (sea level to 1300 metres). However, mapping is greatly facilitated by the lack of dense primary forest cover. This is due to a number of forest fires that have passed through the area and to the effects of smelter smoke from the early operation.

Mobilization and demobilization of equipment and materials in the 1988 program was by barge (Wainwright Marine) from Prince Rupert. Personnel were moved to the property by float plane (Beaver - single Otter of Trans Provincial Airways) from Prince Rupert. Vancouver Island Helicopter was used to aid with moving material off the barges and with mobilization of the drill.

A VIH Bell 206B helicopter was based in the camp to provide transport for the various crews (drillers, line cutters, geologists) to and from the camp at the mouth of Falls Creek.

ii. PROPERTY AND OWNERSHIP

The Anyox property is 100 percent owned by Cominco and consists of 65 crown granted and 56 located claims. These are listed in Table 1 below with the boundary of the property shown in Plate 2. Those claims on which work was undertaken have a number coded reference to the kind of work done beside them. Of the claims listed in Table 1 all of those up to and including Anyox Town were staked prior to signing of the agreement, the remaining claims were staked subsequently to encompass the area of interest as defined in the agreement.

The terms of the joint venture agreement permit Prospector's Airways to acquire a 40 percent beneficial interest in the property by funding an aggregate of 3,000,000 in expenditures to be incurred by Cominco on the property. The required expenditures are tabulated below:

On or Before	Aggregated Expenditures
December 31, 1987	$300,000 (firm)
December 31, 1988	$1,000,000 (optional)
December 31, 1989	$2,000,000 (optional)
December 31, 1990	$3,000,000 (optional)

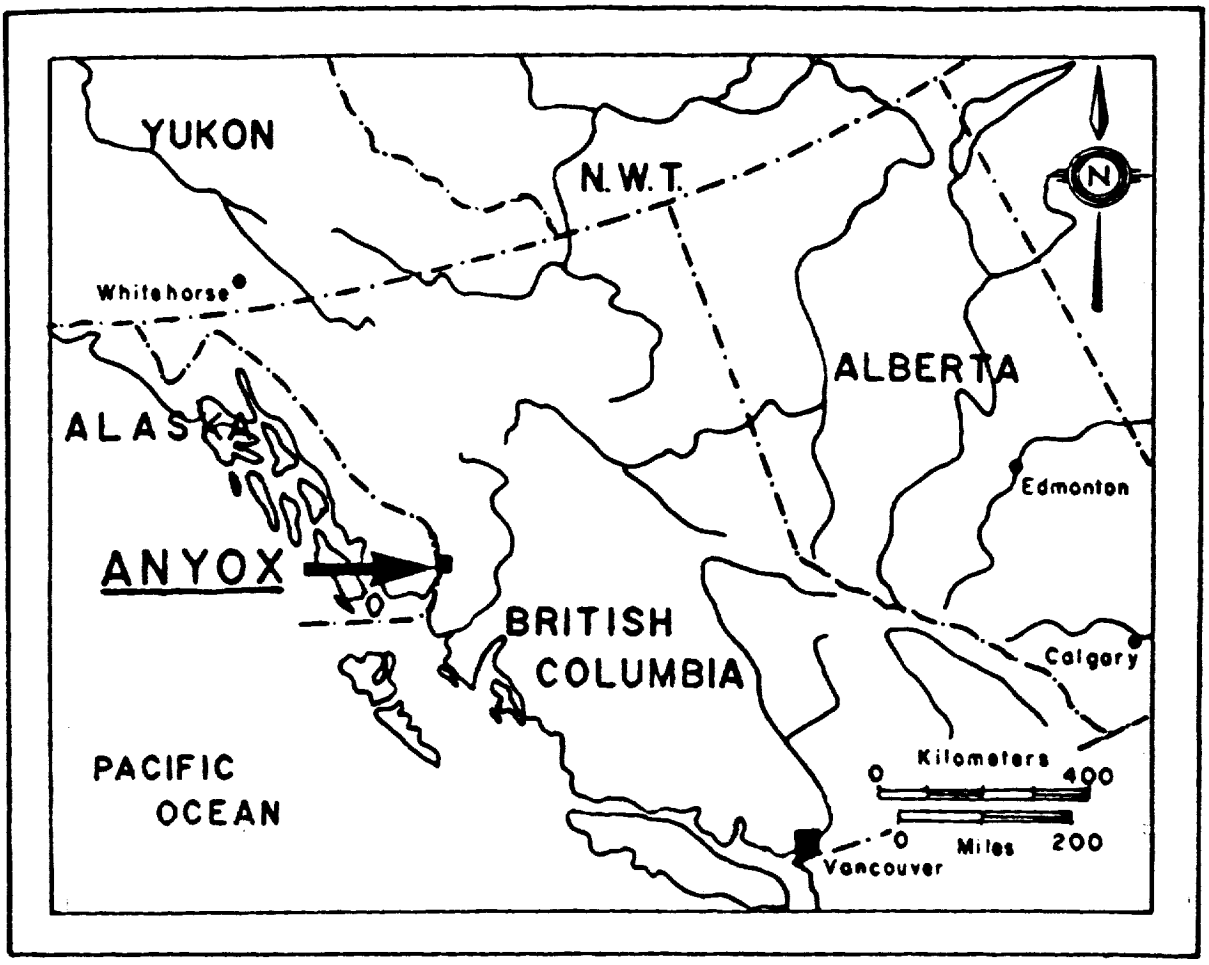


Figure 1. Location of the Anyox area, British Columbia.

TABLE I
LISTINGS OF PROPERTY HOLDINGS

Crown Grants

Name	Lot Nos.
Alpha	486
Amur Fr.	3350
Aria	1986
Balsam	768
Balsam	2221
Blue Bird	3342
Blue Jay	3874
Bonanza	1667
Bonanza Fr	3348
Boulder	2338
Brenau Fr.	1674
Buffalo	2230
Bunker	2222
Cayuse	2229
Cedar	764
Clark	3869
Commodore	3588
Crystal	1972-A
Cypress	765
Dolly Fr.	1513
Donald	483
Drum Lummon Fr.	3879
Dolly Fr.	1513
Donald	483
Drum Lummon Fr.	3879
Emma	1669
Emma Fr.	1673
Emerald	1672
Gamma	480
Hemlock Fr.	1511
Homestake No.1	1529
Hooter	2224
Iron Bug	3875

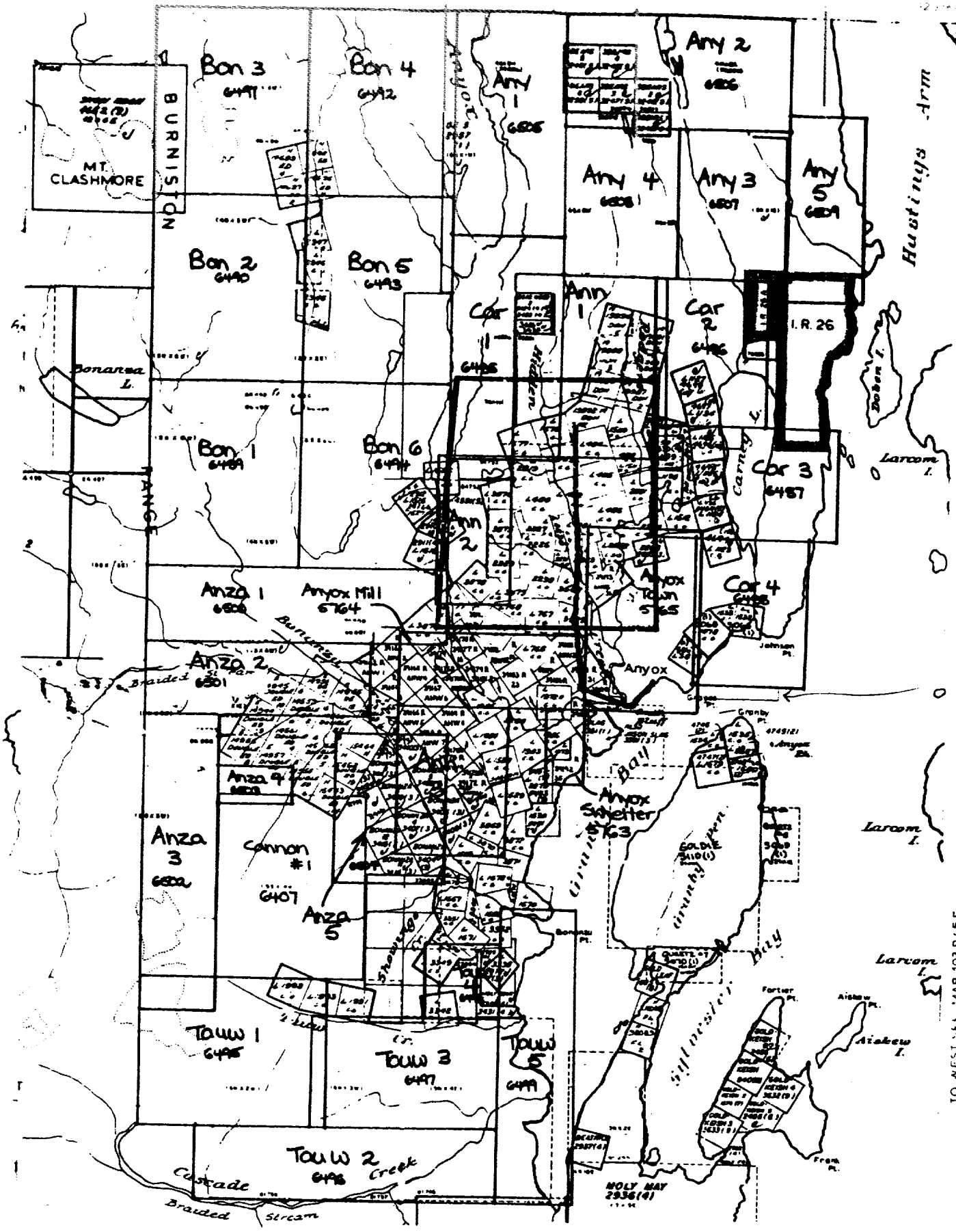
Crown Grants cont'd

Name	Lot Nos.
Jimm Fr.	3870
John Bull	3876
John Bull No. 1	3877
John Bull No.3	3878
Kaien	2226
Kaien fr.	2231
Kenneth	488
Lakanian Fr.	1512
Long Shot	3352
Manson	485
Maple Leaf	2223
May Day	1677
May Flower Fr.	2219
Maypole	1676
McKinley	484
Missing Link	1138
Moana	1670
Monarch	1526
Nabob Fr.	3589
Nephin Fr.	3872
North Star	1668
Ottawa	1509
Princess Louise	1671
Quince	1984
Regina	1985
Revenge	482
Rex	1983
Rob Roy	3871
Rudge	481
Rupert	2227
Spruce	767
St. Denis	3349
Starlight	1528
Sunset	2228
Vadso Fr.	3351

Located Claims (55-467 units)

Claim	Record Nos.	Recorded	Assessment Work Due
Don 1	19986	September 13, 1961	September 13, 1998
Don 2	19987	"	"
Don 3	19988	"	"
Don 4	19989	"	"
Don 5	19990	"	"
Don 6	19991	"	"
Don 7	19992	"	"
AHW:			
1-6	39162-167	December 16, 1974	December 16, 1998
13-20	39174-181		
22(Fr)	39182, 39191		
34(Fr)	39193		
36(Fr)			

Claims	Record Nos.	Recorded	Assessment Work Due
ANYOX SMELTER (2 units)	5763	Jan. 26/87	Jan 26/98
ANYOX MILL (10 units)	5764	Jan. 26/87	Jan. 26/98
ANYOX TOWN (15 units)	5765	Jan. 26/87	Jan. 26/98
ANN 1 (20 units)	6243	June 25/87	June 25/98
ANN 2 (8 units)	6244	June 25/87	June 25/98
ANN 3 (12 units)	6245	June 25/87	June 25/98



Area of 1987 work (see Plate 2 for details)

Road repaired and worked on in 1987.

FIGURE 2: PROPERTY CLAIM MAP

Claim	Record No.	Units	Date Staked	Date Recorded	Due Date
Car 1	6485	18	Oct. 4/87	Oct. 20/87	Oct. 20/98
Car 2	6486	12	Oct. 5.87	"	"
Car 3	6487	15	Oct. 6/87	"	"
Car 4	6488	12	Oct. 7/87	"	Oct. 20/91
Bon 1	6489	20	Oct. 4/87	"	"
Bon 2	6490	20	Oct. 1/87	"	"
Bon 3	6491	20	Oct. 1/87	"	"
Bon 4	6492	20	Oct. 4/87	"	"
Bon 5	6493	20	Oct. 4/87	"	"
Bon 6	6494	20	Oct. 4/87	"	"
Tauw 1	6495	20	Oct. 9/87	"	"
Tauw 2	6496	16	Oct. 6/87	"	"
Tauw 3	6497	15	Oct. 6/87	"	"
Tauw 4	6498	4	Oct. 6/87	"	Oct. 20/98
Tauw 5	6499	16	Oct. 6/87	"	"
Anza 1	6500	16	Oct. 4/87	"	"
Anza 2	6501	12	Oct. 4/87	"	"
Anza 3	6502	16	Oct. 5/87	"	Oct. 20/91
Anza 4	6503	2	Oct. 9/87	"	Oct. 20/98
Anza 5	6504	12	Oct/ 9/87	"	Oct. 20/91
Any 1	6505	18	Oct. 1/87	"	"
Any 2	6506	18	Oct. 5/87	"	"
Any 3	6507	12	Oct. 6/87	"	Oct. 20/98
Any 4	6508	12	Oct. 6/87	"	"
Any 5	6509	10	Oct. 5/87	"	"
Cannon	6407			Oct. 8/87	"

iii. HISTORY

The Anyox property was acquired by Cominco in 1936 shortly after the mine was closed by Granby. Production by Granby from 1914 to 1935 came from two areas. The bulk of production, 24.0 million tons at 1.6% copper, came from multiple zones at the Hidden Creek mine, while 0.72 million tons at 2.2% copper came from the Bonanza mine.

Since acquisition numerous programs of drilling, mapping, geophysics and geochemistry have been conducted by Cominco on the property. These programs resulted in the 1950's in discovery and definition of the Double Ed deposit (2.2 million tons of 1.3% Cu and 0.5% Zn) and the Eden deposit (195,000 tons of 1.3% Cu and 1.9% Zn). A joint venture program between Mitsui and Cominco Ltd. in 1981, 1982 drilled about the Hidden Creek mine glory holes with the aim of proving up lower grade open pittable reserves.

iv. OBJECTIVES

The 1988 exploration program at ANYOX is the result of a joint venture agreement between Cominco Ltd. and Prospectors Airways Ltd. It was a drill intensive

program with most of the focus and the Hidden Creek area, at and to the North of the Hidden Creek Mine. Mapping of various areas along the major basalt/sediment contact was performed to learn about the geology and modure further exploration targets. The primary objective of the 1988 program was to discover massive sulphide deposits with high copper values and/or significant zinc and precious metals content.

2. EXPLORATION AND DEVELOPMENT - 1988

(i) Camp

The camp used for the 1988 exploration program was 20-man Atco trailer camp installed by Pacific GeoRoc in early 1988. Cominco rented this camp from them beginning July 26 and ending August 17. Also rented from Pacific GeoRoc were: 1 diesel generator, 1 office storage trailer, 1 Bombardier and 1 base station radio. The camp is located at the mouth of Falls Creek across, slightly downstream from the old powerhouse.

(ii) Road Construction and Drill Pad Construction

A D6 Cat contracted by Pacific GeoRoc was used to construct a bridge across the mouth of Hidden Creek to allow access to the barge ramp from the camp.

Of the seven drill hole sites, only two required pad clearing/construction. These two were on the Bonanza Creek and Redlight anomaly areas and were cleared by geologists. The remaining holes were located either on old drill hole sites or upon the road built in 1987, all in the Hidden Creek area.

(iii) Linecutting

Gordon Clark and Associates were contracted for the line cutting. 14 km of line were cut in the period between July 22 and August 5. The grid lines were chained, slope corrected and picketed at 25 m intervals. An 8 km grid was cut north of last year's North Hidden Creek grid as well as 6 km of loops cut about the Bonanza Creek and Redlight Anomaly DDH's.

(iv) Field Mapping

Geological field mapping carried out in this program concentrated on 4 main areas:
- Bonanza Mine Area (1:1000)
- Bonanza Creek South (1:5000)
- Upper Dam Lake Area (1:1000)
- Rambler Quartz Vein (1:500)

Maps for each are included with this report. The mapping was carried out by Chris Schultze and an assistant with daily transportation by helicopter to and from the camp.

(v) Drilling

The 1988 drilling at Anyox was contracted out to Tonto Drilling Ltd. Two Longyear 38's were brought to and from Anyox by a Wainwright Marine barge out of Prince Rupert. Seven holes of NQ/BQ totalling 3,656 m (11,992 ft) were drilled between June 30 and August 14. Tonto performed professionally and efficiently, drilling at an average overall cost of $86.87/m compared to $97.70/m by Connors in 1987.

Drill moves were accomplished using a Bell 205 helicopter contracted from Vancouver Island Helicopters.

In the future, should any hole deeper than 2,500-3,000 feet be drilled, a larger drill, say a Longyear 44, would be more suitable to the task.

Drill core logging was undertaken at the site of the 1982 (and 1987) tent camp where a core logging tent was upgraded to a core shack and where new core racks were added to the 1982 and 1987 ones.

(vi) Geophysics

Originally planned downhole geophysics (Induced Polarization) for this program was cancelled due to budgetary constraints. With possible future geophysics in mind however, PVC piping was installed by hand in holes A88-1, A88-4 and most of A88-6. Hole A88-2 was found blocked at the overburden/bedrock contact and DDH A88-5 was found blocked some 100 m downhole.

(vii) Transportation

Supplies from Prince Rupert and personnel changes were accomplished by fixed wing aircraft contracted from Trans-Provincial Airlines of Prince Rupert.

Drill crew changes, drill core transportation and field crew parties were all accomplished with a Bell 206B helicopter based in camp on a 3.5 hour daily minimum contract. Drill moves were done using a Bell 205 based out of Stewart. Delays due to poor weather conditions were common.

Large scale supply transport was accomplished using a barge contracted from Wainwright Marine out of Prince Rupert.

3. ANYOX GEOLOGY

Regional Geology

The Anyox area is underlain by an assemblage of northerly trending basalts and sedimentary rocks which form a large roof pendant (9x6 miles) in the Coast Range batholith. A Triassic age for the pendant rocks is suggested with the granitic rocks of probable late Mesozoic to early Tertiary age. The Anyox property lies on the east side of the pendant.

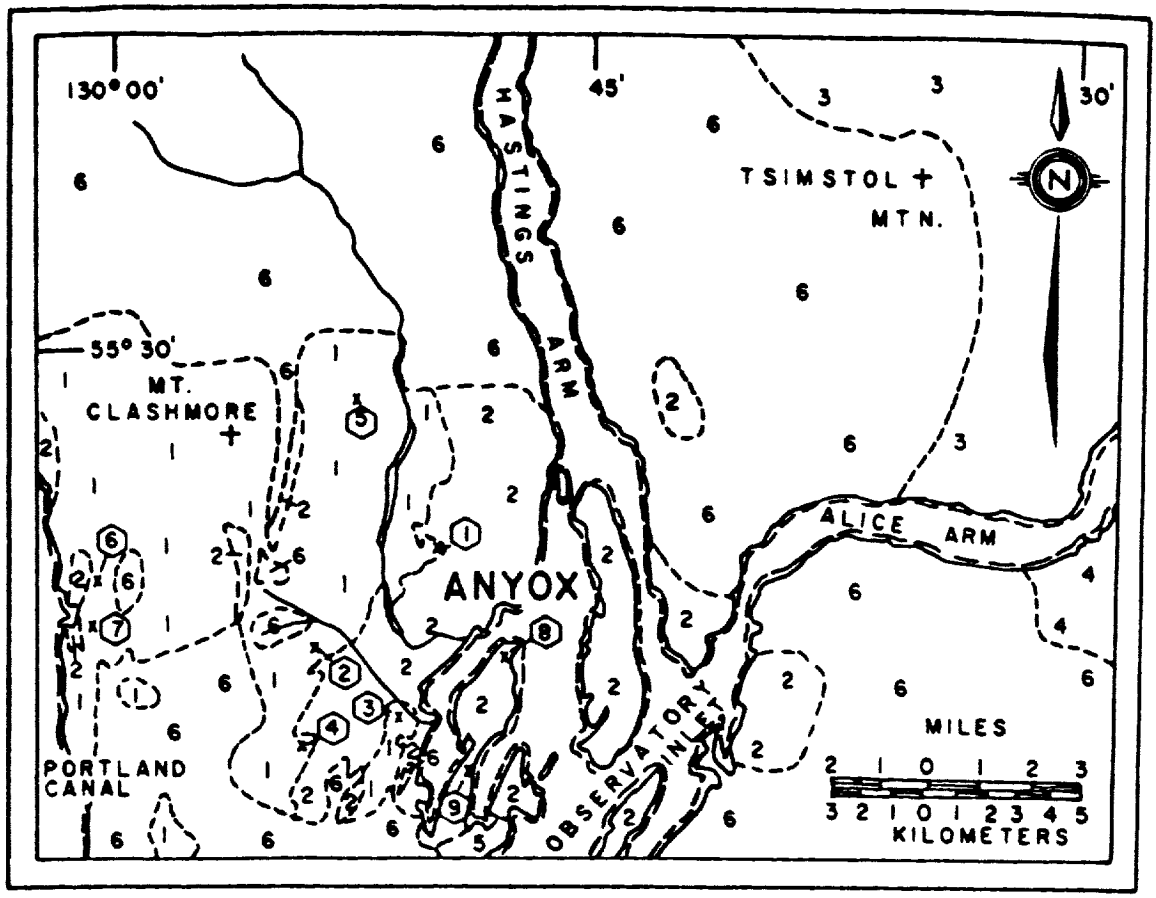


Figure 3. Geology of the Anyox Area, British Columbia (modified after Carter and Grove, 1972).

SYMBOLS

Geological Contact ----------

Coastline

Mineral Deposit ⬡

MINERAL DEPOSITS

1	Hidden Creek	Cu, Zn	6	Outsider	Cu
2	Double Ed	Cu, Zn	7	Eagle	Cu
3	Bonanza	Cu, Zn	8	Granby Bay	Au
4	Redwing	Cu, Zn	9	Nabob	Au
5	Eden	Cu, Zn			

LEGEND

TERTIARY

6 COAST PLUTONIC COMPLEX: Quartz diorite, granodiorite, quartz monzonite

5 ALICE ARM INTRUSIONS: Porphyritic quartz monzonite

MIDDLE TO UPPER JURASSIC

4 BOWSER LAKE GROUP: Siltstone, sandstone, greywacke, shale, conglomerate and coal

LOWER TO MIDDLE JURASSIC

3 HAZELTON GROUP: Varicolored basaltic to rhyolitic volcanic rocks and sediments

TRIASSIC TO LOWER JURASSIC

2 Metasedimentary Rocks. Argillite: impure quartzite, shale. Calcareous siltstone, sandstone.

1 Metabasalt. Pillowed lava flows, basaltic dikes and sills. Minor tuffs and intercalated metasedimentary rocks.

The mineralization in the area occurs at or near an extensive pillow basalt/sediment contact. Most of the known sulphide deposits including the Hidden Creek ore zones, the Bonanza deposit, and the Double Ed zones are interpreted as being of volcanogenic-exhalative origin. The massive sulphides are typical of those associated with basaltic volcanism i.e. "Besshi-type". The sulphides consist of massive iron sulphides (both pyrrhotite and pyrite) hosting chalcopyrite with lesser sphalerite. Grades of copper range from 0.5% to plus 5% while zinc grades average about 0.5%. Precious metal grades are in general low (.003 oz/ton Au, 0.3 oz/ton Ag) but can locally be higher.

Lithologies

The stratigraphy at Anyox is relatively simple. It consists of a thick succession of basaltic rocks overlain by a thick succession of sedimentary rocks. At or close to the contact between these two successions a variable thickness of rocks of mixed origin occur including probable exhalative cherts and probable volcaniclastic to pyroclastic rocks. All of these rocks are cut by a large number of intrusive dykes and sills of widely varying composition. The mapping has subdivided the rocks into six major units which are described in ascending stratigraphic order below.

Basalts

The basalts away from the contact (i.e. on the western side of the map area) are composed of flow units in which pillow basalts and pillow breccias are dominant with lesser more massive flows. The basalts form rounded relatively resistant outcrops weathering a medium brown colour but are often black stained with lichens.

Pillow outlines range from 30 cm to 1 metre in size and exhibit a distinct 1-2 cm selvage. The pillow shapes vary from a near normal bulbous form to ellipses having lengths 4 to 5 times their width suggesting a variable structural attenuation of the pillows. Bedding is not readily definable in the basalts. Many of the outcrops show smaller 5 to 30 cm plastically deformed blocks and fragments on which selvage edges can be seen but no distinct pillows. These are interpreted as pillow flow breccias. In some instances, due to the attenuation and deformation and relatively poor exposure it is not easy to distinguish between breccias and pillows only to identify pillow selvages.

On fresh surfaces the basalts appear as dark green finely crystalline rock probably composed of a mix of plagioclase chlorite and amphibole. Locally the basalts become chlorite schists usually in areas close to pronounced linears where strong shearing is speculated along faults. Toward the western edge of the mapping some of the basalts (both massive and pillowed) are speckled with fine white plagioclase phenocrysts.

Within a couple of hundred metres of the basalt/sediment contact distinct 0.5 to 3 mm acicular crystals of what appears to be actinolite become a distinct component of the basalts. To a lesser extent red brown biotite also becomes common. The actinolite occurs both disseminated as crystals and fine rosettes in the basalt and seeimingly preferentially developing in the selvages of the basalt. Biotite occurs in both and results in an irregular purplish mottling on fresh surfaces. It is presently speculated that the presence of these minerals may relate to hydrothermal alteration (Mg and K enrichment) of the upper part of the basaltic pile associated with the mineralizing events.

Actinolite Schist

This lithology is composed dominantly of green acicular actinolite crystals 0.5 to 5 mm in length oriented in a distinctly schistose fabric. Variable amounts of silica and silica banding occur within the rock and it is probable that petrography will show a plagioclase content. This rock type is mappable as a distinct unit in the footwall basalts in the core of the Hidden Creek anticline. This unit is most likely a reflection of basaltic pyroclastics that have responded more readily to alteration, metamorphism and shearing. The unit is particularly rich in disseminations wisps and seams of pyrrhotite with some chalcopyrite. The lithology weathers rusty and is relatively hard. In the rounded outcrops it is not easily sampled.

"Cherty" Actinolite/Sericite/Biotite/Chlorite Schists

These rock types are developed in the basalt/sediment contact zone and occur as footwall rocks along the western side of the 2-3, 1 and 5 glory holes. The rocks exhibit variable proportions of actinolite, sericite, biotite and chlorite with variable bands, wisps and ribbons of fine grained silica. The lithologies are presently interpreted to be highly sheared and altered cherts, basaltic tuffs and volcaniclastic muds. These rocks interbed with and are transitional into Unit 4 cherts. Pyrrhotite, pyrite and lesser chalcopyrite are common within these rocks. These lithologies are best seen in the footwall area of the Hidden Creek glory holes in the mapped area.

Cherts

These rocks occur as a relatively thick (100 metre) assemblage in the immediate footwall of and within the Hidden Creek glory holes. To the north and south the chert unit thins to only 2 to 3 metres at the immediate sediment/basalt contact. The cherts are white to light grey, commonly orange weathering, finely crystalline to granular textured, dominantly silica rocks. They are often finely laminated and banded "ribboned". In other instances they are more massive with increased granularity and strong fracturing. To some extent the cherts interbed with the Unit 3 schists. The contact with the sediments in outcrop SE of the #6 glory hole appears to be transitional with beds of chert present within the first 10 metres of sediments. A thin zone of chert was also mapped on the north end of the 1988 Upper Dam Lake grid.

Variegated Siliceous Well Bedded Coarse Siltstone to Coarse Mudstones

Mapping of the sedimentary rocks delineated two thick (300 metre plus) packages of strata. Unit 5 is the older and stratigraphically lower of these two units. These rocks have in the past been somewhat misleadingly labelled argillites. While somewhat metamorphosed they are well bedded rocks composed of varying proportions of fine siliciclastic sandstones through siltstones to mudstones with occasional thin limestone beds. These rocks range from light grey to black and weather rusty grey. They do not exhibit the "poker-chip" bedding plane cleavage often associated with argillites. Their strongly bedded character is evidenced by differential weathering of beds on the weathered outcrop surface. In general the finer grained mudstone beds are more siliceous (almost chert-like), fracture conchoidally and weather in relief while the thicker coarser silt to sand beds weather more recessively. The number and ratio of coarser siltstone to sandstone beds to finer mudstone beds varies throughout the section. Generally the higher the proportion of coarse lithologies, the thicker and the more prominent the bedding is. Conversely, the higher the proportion of mudstones the thinner and less prominent the bedding is. While the proportion of mudstones to siltstones to sandstones varies throughout the unit the 1987 mapping failed to delineate any stratigraphic marker units or systematic variations.

In the sediment outcrops immediately north of the 2-3 glory hole prominent 2 to 10 mm ovoid forms are developed within the beds. These forms are referred to as "knots" and are of uncertain origin but are not believed to be primary. It is thought that they may be of metamorphic and/or alteration origin.

Dark "Carbonaceous" Soft Indistinctly Bedded Fine Siltstones/Mudstones

This unit comprises an upper package of finer grained sediments. This finer grained succession is mapped all along the eastern side of the map area. It is characterized by dark grey to black, rusty silvery grey weathering, fine grained, relatively soft, sedimentary rocks. The rocks have thin and indistinct bedding such that cleavage often becomes the dominant fabric. The fine "mudstones" are often spotted with 0.1 to 1 mm quartz, biotite, pyrite aggregates. Thin 0.1 to 1 metre limestone beds occur very sporadically in this unit as in the underlying coarser sediments. The contact between the upper and lower packages is transitional with 10 to 30 metre intervals of the finer sediments interbedding with the variegated siltstone/mudstone unit.

INTRUSIVES:

Numerous igneous dykes and/or sills intrude both the basalts and sediments in the map area. Most common are dark green, brown weathering diabase intrusions ranging from less than a metre to plus 20 metres in width. At least two types of diabase dyke appear to be present. One type of diabase which is presumed younger is remarkably fresh composed of interlocked amphibole and plagioclase crystals with little alteration. The other diabase dykes are often characterized by considerable chloritic alteration.

Less common are more felsic intrusives ranging from andesite-diorite dykes through to rhyolite dykes. These andesite/diorite dykes commonly are lighter in colour with increasing plagioclase and quartz contents. Feldspar and quartz eye phenocrysts are not uncommon. Yellow-white weathering rhyolite dykes composed of very fine grained light green grey silica are occasionally observed. Also occasionally mapped are lamprophyre dykes with up to 40% biotite/phlogopite content. Almost all of these intrusives are too small to be delineated on the 1:5000 scale map though their presence is indicated by a letter symbol beside the outcrop.

In the northwest corner of the map area a long thick intrusive body is mappable at and apparently concordant with the contact between the basalts and the sediments. This intrusive which is probably a sill ranges from a diabase or gabbro in texture to a rock composed exclusively of spectacularly coarse (thumbnail size) pyroxene (possible amphibole) crystals. Large quartzite xenoliths up to 3 x 3 metres are mappable within this unit.

Structure

The structure within the map area is complex. In the vicinity of the Hidden Creek deposits the generally north to NNE trending basalt/sediment contact is folded into a steeply north plunging anticline syncline pair. The Hidden Creek ore zones lie along the east limb of the anticline which is overturned and steeply west dipping. The west limb is steep west dipping as is the opposing limb of the syncline (i.e. overturned).

The impression is of a tight near isoclinal anticline/syncline couplet tilted to the west. In detail from subsurface drilling and underground development the geometry is more complex and there are indications of several shear structures offsetting strata.

Several well defined linears cut in a north to NNW pattern through the map area and probably mark faults or shears perhaps with significant displacements. Lack of marker stratigraphy in basalts and sediments does not allow definition of displacement in most instances. Only one linear along Hidden Creek north of the mine area clearly offsets the basalt/sediment contact. In the Hidden Creek valley south of the glory holes a north-south extension of the chert horizon along with distinct shear texture suggests an extension of some structure down Hidden Creek.

Bedding in most of the map units is not readily definable. The basalts except in the very rare bedded tuff horizons do not provide good bedding indications. Similarily in the schistose rocks it is not possible to separate bedding from the dominant schistosity. The chert horizon does in places allow good bedding attitudes. The variegated bedded sediments of Unit 5 are the exception and provide superb bedding readings, while the finer grained Unit 8 sediments provide moderate bedding readings.

Within the sediments it is obvious that complex multi-phase folding has occurred. This folding ranges from larger moderately tight concentric folds to almost plastic, tight isoclinal axial plane folding with considerable axial plane shear. In these areas it is not unusual to see numerous closed fold "canoe" patterns in outcrop.

It is probable that the basalt pile behaved in a much more competent fashion than the sediments, however given the style of folding evident in the sediments it is probable that relatively complex folding is present within the basalts. The relatively incompetent mica schists and sulphide rocks in and about the ore horizon have likely been folded in very complex patterns although this is not immediately evident from mapping.

It should be made clear that the present belief is that any structures such as the overturned anticline in the Hidden Creek area can and should be used as exploration tools. It is understood that most such deformations, multiple and complex as they are, occurred after deposition of the sulphides, which are understood to be of a syngenetic nature. These deformations however, are most likely to occur in areas of structural weakness. In the Anyox area, areas of structured weakness are best represented by the highly altered cherts, basaltic tuffs, volcanoclastic muds or massive sulphides all associated ore deposits.

Alteration

The mineralogy of the actinolite schist unit, actinolite-biotite-chlorite-sericite schists and cherts is such as to suggest significant potassium and magnesium enrichment. A correlation between increased K_2O content and proximity to sulphides has been demonstrated by past Cominco work. Petrographic and whole rock analysis of the stratigraphy about the ore horizon will be studied in more detail in 1988.

Unit 5 variegated sediments east of the Hidden Creek glory holes and in a wide zone north of the glory holes exhibit abundant quartz veining with associated bleaching and silicification. Accompanying this veining and silica is often 1 to 5 volume percent sulphides - dominantly pyrrhotite and pyrite but in places with sphalerite, galena and chalcopyrite. This alteration has been interpreted in the past as possibly being a "leakage" phenomena from underlying sulphide orebodies.

4. RESULTS FOR 1988

(i) Surface Geology

Geological field mapping carried out by Chris Schultze has resulted in the following 4 maps:

(a) Bonanza Mine Area (1:1,000)
(b) Bonanza Creek South (1:5,000
(c) Upper Dam Lake Area (1:1,000)
(d) Rambler Quartz Vein (1:500)

Where samples were taken for assaying (Cu, Zn, Ag, Au) the values are indicated on the maps.

(a) Bonanza Mine Area

Mapping in this area was done in order to become familiarized with the mineralized setting and the nature of the rock types associated with the Bonanza Mine. This would aid in the understanding of the geology from DDH A88-7 on the north side of the Bonanza Creek (had it revealed the sed-basalt contact). Chris Schultz reports ".... the mineralized zone, consisting of pyrrhotite, pyrite and chalcopyrite (minor magnetite and sphalerite) is hosted within a shallow plunging biotite-chlorite schist unit of cylindrical form, lineated along a local plane of schistosity. Massive, basaltic, broken pillow breccias and flows, in both the footwall and hanging wall are moderately to strongly foliated; felsic-mafic mineral segregation is ubiquitous and quartz veining pervasive. Quartz veins situated above the former orebody contain blebs and disseminations of pyrite, pyrrhotite, chalcopyrite and minor sphalerite.

(b) Bonanza Creek South

To the south of Bonanza Creek lies the Bonanza anticline, a non-cylindrical, asymmetrical open anticline plunging 14° to the NNE. The centre of this structure is comprised of massive actinolite rich pillow basalts while the limbs are of thin to medium bedded siltstone.

Highlights of this area are:

° small discontinuous biotite-chlorite schistose "rinds" up to 10 cm thick between pillowed basalts, 150 to 200 feet stratigraphically below the sediment-basalt contact; these contain 0-5% po>py>cpy.

° numerous quartz veins, devoid of sulphides.

(c) Upper Dam Lake Area

The Upper Dam Lake area was mapped in order to prospect and cover the geology over an area of numerous airborne EM geophysical anomalies. About 8 km of grid lines were cut over the area approximately 3 km north of the Hidden Creek glory holes. A detailed 1:1,000 scale geology map has been produced the highlights of which are:

- basalt/sediment contact running approximately 345° and dipping 45°-60° to the east.
- a thin zone (up to 10 m wide) of chert along said contact over 300 m length and open to the north of the grid.
- several thin basaltic pyroclastic units also striking parallel to the contact.
- abundant quartz veining of the medium bedded greywacke and siltstones.
- ubiquitous disseminated po (minor py) often associated with quartz veined outcrops.
- several large faults running through grid area, subparallel to stratigraphy (north).

(d) Rambler Quartz Vein

The Rambler Quartz vein in the Redlight area was sampled and mapped at 1:500 scale by Chris Schultz. This vein was quarried for use as smelter flux at some time during the life of the mine. It was hoped to find significant gold/silver associated with the vein as has been reported on Granby Peninsula. The highest rare metals content was 72 ppb Au and 0.8 ppm Ag in sample RV-2. Samples RV-2 and RV-3 on the southern half of the quarry, produced elevated zinc values of 0.3% and 1.7% respectively with disseminated sphalerite reported in the latter.

(ii) Drilling

Drilling at Anyox in 1988 saw the completion of 7 holes for a total of 3656 metres (11,992 feet). Logging was done at the site of the old 1981-82 tent camp immediately west of glory holes 105. Core from 1982, 1987 and 1988 is stored here. A detailed description of DDH A88-6 is included in this report. The cost of this hole was calculated by prorating camp, helicopter and drilling costs (see Expenditure Summary, Appendix A).

DRILL RESULTS

DDH A88-6 Summary

Location:	deepening of 1622' DDH A87-02, 3+20E, 0+10S (1987 grid)
Depth:	494.5 m
Az/Dip:	210°/-85°
Objective:	To test old #7 zone and establish sediment/basalt contact.
	189.9-336.8 m - metabasalt; silica, actinolite, chlorite ± biotite altered with 1-3% po and trace cpy.
	278.8-300.4 - increased sulphide, 2-5% po, trace to 1% cpy.
	336.8-494.5 m - massive basalt; chlorite altered, siliceous.

Diamond drill hole A88-6, drilled at 85 SSW was designed to test the #7 zone near surface and the basalt/sediment contact for sulphides and was then extended for over 150 m into the basalts. This hole displays none of the contact zone mineralization seen in the early Granby holes in the area (average grade 0.4% over 40-70 m). The contact zone in this hole displays spotty intervals of anomalous Cu mineralization near its base.

A88-6 anomalous Cu values beginning @ 275 m 500-1000 ppm Cu
-285.0 - 286.2 (isolated) 1.35% Cu/1.2 m
-323.5 - 324.5 1.11% Cu/1.0 m
-290.8 - 301.7 0.26% Cu/10.9 m
- quartz veined, hydrothermally altered zone within the altered basaltic tuffs

5. CONCLUSIONS:

Conclusion from the 1988 program are as follows:

1. The plunging anticlinal strutural nature of the Hidden Creek area is confirmed by hole A-88-6.

2. Anomalous to significant Cu values within the altered basaltic tuff horizon show that the #7 mineralization does continue weakly at depth.

3. Geology favorable to known ore deposits has been found on the Upper Dam Lake grid in the form of a thin chert horizon and severel thin basaltic tuff horizons. Surface geophysics with possible follow up drilling is recommended.

Reported by _____
R.J. Aulis
Geologist

Approved for release by _____
W.J. Wolfe
Manager, Exploration
Western Canada

RJA/jd

APPENDIX "A"

STATEMENT OF EXPENDITURES

Line Cutting			
Contractors charges = $460/day			
Camp and helicopter charges prorated to daily line cutting			
Bonanza Creek area	5.4 days	$ 7,288.73	
North Hidden Creek area	7.9 days	10,440.61	
			$17,729.34
Drilling			
DDH A88-6 depth of 494.5 m = 0.14 of total drilling cost of $319,414.00		$44,717.96	
Camp, helicopter and geology costs prorated to drilling		31,127.75	
			$75,845.71
Mapping			
1 geologist + 1 assistant for 53 days @ $333/day		$17,649.00	
Helicopter charges		28,195.00	
Camp costs		40,069.59	
			$85,913.59
TOTAL CHARGES			$179,488.64

APPENDIX B

AFFIDAVIT

I, Randal Aulis, of the City of Vancouver, in the province of British Columbia, make oath and say:

1. That I am employed as a geologist by Cominco Ltd., and as such have a personal knowledge of the facts to which I hereinafter depose;

2. That annexed here to and marked as Appendix A to this my affidavit is a true copy of expenditures incurred in connection with a geological program carried out on the Anyox claims;

3. That said expenditures were incurred between the 26th day of June and the 17th day of August 1988, for the purpose of mineral exploration on the above noted claims.

Signed _____
Randal Aulis
Geologist

APPENDIX C

STATEMENT OF QUALIFICATIONS

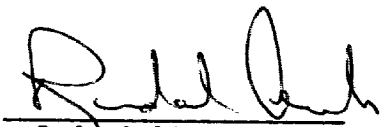
I, RANDAL J. AULIS, GEOLOGIST, with a business address at 700-409 Granville Street, Vancouver, British Columbia and residential address at Apt. 101-1361 Robson St., Vancouver, B.C.

1. THAT I am a graduate in Geological Sciences with a B.Sc. in 1986 from the University of Waterloo.

2. THAT from 1985 tok the present I have been enployed by Cominco Ltd. as a geologist and have been actively engaged in mineral exploration.

3. THAT I personally participated in the field work on the Anyox Property and have interpreted all the data resulting from this work.

December, 1988

Signed: 

R.J. Aulis
Geologist

DRILL HOLE RECORD

COMINCO LTD.

Property:	ANYOX	District:	Skeena	Hole No.	A88-06		
Commenced:	July 27, 1988	Location:	North Hidden Creek	Tests at:	0,275,366	Hor. Comp:	
Completed:	August 5, 1988	Core Size:	NQ	Corr. Dip:	85°83°82°	Vert. Comp:	
Co-ordinates:	switchback 1+00S, 2+75E	Claim:		True Brg:	210°216°226°	Logged by:	R.J. Aulis
Objective:	to test old #7 zone and establish sed/basalt contact at depth	Collar Dip:	-85°	% Recov:		Date:	July 29, 1988
		Length:	494.5				

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE	FROM	TO	ANALYSIS (in ppm except Au in ppb) Au	Ag	Cu	Zn
0	3.0	Overburden, not cored.							
		3.0-142.5 - Increasingly altered metasediment, generally a veined and fractured silicified, poorly bedded siltstone/mudstone, changing to a tuffaceous? sediment with intense chlorite/biotite alteration ± actinolite, weakly schistose.							
3.0	99.9	3.0-19.8 - Poorly bedded, black pyritic mudstone/siltstone foliated and siliceous - a dark grey to black, very fine grained sediment with moderate to strong S1 foliation at 40-50° to core axis; extremely siliceous; sulphides approximately 1-2% overall as widespread, finely disseminated py/po blebs; locally some finely bedded, highly folded siltstone/mudstone on cm scale; cut by subvertical 1-3 mm thick white quartz healed fractures.	66419	15.8	17.3	<10	<0.4	60	623
		12.1-13.7 - chilled basaltic dyke, fine grained, light to medium green with numerous tiny plagioclase crystals.							
		14.3-14.6 - sheared weakly graphitic friable interval, so shallower than S1, Sa at 16.5 = approximately 30° to core axis.							
		19.8-42.6 - basaltic dyke - light to medium green homogeneous, fine grained, basaltic dyke, occasional xenolith of dark grey, mudstone incorporated; rare tiny hematite, reddish specks within dyke along with occasional white mm scale quartz phenocrysts; contact with sediment is at high angle to core axis (approximately 10°).							
		42.6-99.9 - as above dyke - a poorly (thin-moderate) bedded dark grey/black mudstone/siltstone with the mudstone predominating; highly siliceous with occasiona intervals being silica blooded - fine smooth rock slightly bleached; weak to moderate S1 foliation best observed through alignment of abundant tiny sulphide blebs - po + py; bedding at low angles to core axis, folded, So=10-20° to core axis where discernable; S1 foliation varies, generally 40-50° to core axis; occasional light green, fine grained dyke at low angle to core axis with chilled margins.	66420	48.5	50.0	<10	1	60	300
		56.1-58.5 - highly fractured, weakly sheared, locally graphitic, fractures healed with white calcite, core locally loose or friable.	66421	60.0	61.5	<10	0.9	59	169

FOOTAGE FROM	TO	DESCRIPTION
3.0 - 99.9 continued		63.6-65.0 - approximately 50% quartz veining, the remainder silica flooded, bleached, cherty sediment, minor chlorite, biotite. 66.0-72.0 - semi-massive, metasediment with incipient porphyroblastic knotty texture, thin bedding, faintly apparent over top metre. 73.0-74.0 - highly quartz veined and fractured, extremely silicified siltstone. 76.0 - S1-45° to core axis (weak, fairly carbonaceous). 75.0 - So=20° to core axis (thin, faint bedding). 78.9-79.3 - limey interval. 82.9-86.4 - weakly sheared, weakly graphitic; So at 10° to core axis. 86.6-87.2 - highly silicified, bleached siltstone, fracture controlled silicification again but weaker at 88.2-88.4. 91.5 - well developed thin bedding at 30° to core axis, alteration black carbonaceous mudstone with <1mm thin beds of biotitic siltstone (possibly tuffaceous); S1 foliation weak to nonexistent; variably silicified moderate-intense. 96.0- So at 10-15° to core axis; consistent for at least 10 m, dark grey, fine siltstone with <1mm thin lighter, coarser, weakly biotitic lamellae (tuff?) approximately 1% tiny py blebs; overall increase in biotite alteration lending core a weak red-brown colour.
99.9 - 142.5		Biotite, Silica-Chlorite ± Actinolite Altered Basaltic Tuff with Interbedded Cherty Bands - a variably altered package of metasediments, generally a streaky reddish brown (grey-greenish where chlorite more prominent than biotite). Pervasive silicification along with occasional intervals of intense silica flooding or chert bands - lighter creamy, extremely siliceous; frequent 1mm to 1cm wide white quartz veins cross cutting; bedding generally at low angles to core axis though generally totally obscured by alteration; knotty porphyroblastic texture most prominent above 113 m, so occasiona dm scale intervals of 2-10 mm ovoid biotite (like fat rice); generally lacking any preferred sense of orientation; actinolite content stronly variable, locally it is the most common mineral over dm scale intervals; growing in felted texture - 1-2 mm acicular crystals; sulphides present as 1-2% finely disseminated po (minor py) with frequent intervals of stringer type po, parallel to vague bedding with up to 5% over dm-scale intervals with trace cpy. 99.9-101.0 - knotty porphyroblastic growths.

			ANALYSIS (in ppm except Au in ppb)				
SAMPLE	FROM	TO	Au	Ag	Cu	Zn	
66422	77.3	78.8	<10	0.4	35	200	
66423	78.8	80.3	<10	<0.4	15	87	
66424	92.0	93.5	<10	<0.4	20	231	
66425	102.7	104.2	<10	0.4	49	108	

FOOTAGE FROM	TO	DESCRIPTION
99.9 - 142.5	continued	104.5 - thin bedding at 5-10° to core axis; undulatory, gentle, folding. 105.9-106.6 - approximately 4% po stringers parallel to bedding approximately 20° to core axis. 107.0-109.0 - weak-moderate knotty porphyroblastic texture, dark 3-8mm (chlorite + ?) knots in biotitic matrix. 109.0-112.8 - actinolite rich interval, locally semi-schistose. 112.0-115.8 - approximately 1-5% po with trace cpy in highly siliceous interval with reduced biotite content, more chloritic; sulphides as stringers and disseminated parallel to moderate So/S1 at approximately 10° to core axis. 117.5-117.9 - quartz veined with approximately 6% po. 117.5-125.9 - alteration primarily intense silicification - frequent bands of light grey cherty sediment recrystallized with minor biotite and <2% po; bedding very faint at 10-20° to core axis. 126.1-134.9 - intense biotite alteration alternating with grey, heavily silicified siltstone/quartz vein patches = tuff/chert bedding; biotite is red-brown and frequently medium-coarse grained. 134.9-142.5 - same as 117.5-125.9 with gradual decreasing biotite alteration, bands of biotite give striped appearance; bottom contact gradual, a decrease in biotite alteration until we have primarily grey silicified basalt of more massive nature.
142.5 - 189.9		Basalt, Silicified, Biotite, Silica, Banded Locally, Chloritic - fine grained grey-green chloritic basalt with overall moderate to locally intrusive silicification; silica-biotite banding possibly related to flow margins, banding oriented at low angle to core axis, about 10-20°. The coarse red-brown biotite frequently rims the bands of silca (alteration halo). Occasional thin quartz veinlets or quartz healed fractures, hairline fractures common

ANALYSIS (in ppm except Au in ppb)

SAMPLE	FROM	TO	Au	Ag	Cu	Zn
66426	110.9	112.3	<10	0.4	26	66
66427	112.3	112.9	44	2.2	420	83
66428	112.9	114.4	<10	1.5	311	48
66429	114.4	115.5	<10	1.4	248	30
66430	115.5	116.2	<10	1	146	65
66921	116.2	117.5	100	0.6	84	51
66432	117.5	118.5	<10	0.6	95	59
66433	118.5	120.0	<10	0.6	52	26
66434	120.0	121.5	<10	<0.4	63	43
66435	127.4	128.9	<10	1.2	87	93
66436	136.5	138.0	<10	0.6	121	40
66437	147.2	148.7	<10	<0.4	87	59
66438	156.5	158.0	<10	<0.4	116	21

FOOTAGE FROM	TO	DESCRIPTION
142.5	189.9	throughout; sulphides rarely over 7% po as submm patches/blebs associated with quartz veins or silica bands. 169.6-169.8 - quartz veined brecciated and peppered with approximately 5% disseminated po/py. 172.8-175.6 - weakly sheared-chloritic slip planes, actinolite alteration proximal to silica bands, highly broken, fissile. 177.7-177.9 - large calcite quartz milky white vein with about 0.6 m of sheared basalt on either side. 179.9-180.2 - fault gouge-shear zone; friable loose and clayey gouge material, highly chloritic. 186.3-189.9 - increase in alteration, especially biotite - core over last 1 m reddish brown with medium grained biotite pervasive alteration; numerous quartz veins with biotite and/or silica-bleaching alteration rims; approximately 1% sulphides, po and py disseminated, associated with quartz veins or fractures.
189.9	191.6	Basaltic Dyke - fine grained, medium green, chilled basaltic dyke with homogeneous texture and chilled margins at low angles to core axis.
191.6	244.5	Metabasalt - higher degrees of alteration than preceding basalts; alteration includes chlorite silica actinolite and minor sulphide impregnation; generally a highly silicified actinolite rich, dark grey-green unit with strong subvertical sense of lineation giving striped appearance - especially where creamy grey-green silica bands exist; biotite rare, just a minor component; increase in overall sulphides to average 1-2% po with trace cpy as disseminated patches or stringers. 191.6-195.0 - sheared locally faulted interval - highly fractured broken fissile interval with minor brecciation. 205.0-217.0 - marks notable increase in actinolite content, orientation of mm acicular crystals apparently random although sense of banding remains subvertical to vertical. 206.4-206.6 - chloritic fault gouge. 211.0-217.6 - S1 banding at 0-5° to core axis; prominent 1-10mm wide light silica bands with poor to moderate lateral continuity.

ANALYSIS (in ppm except Au in ppb)

SAMPLE	FROM	TO	Au	Ag	Cu	Zn
66439	175.8	177.3	<10	<0.4	84	76
66440	199.3	200.8	<10	<0.4	61	59
66441	200.8	202.3	<10	<0.4	37	56
66442	202.3	203.5	<10	<0.4	128	81
66443	203.5	205.3	<10	<0.4	182	87
66444	210.5	212.0	<10	0.6	352	123
66445	212.0	213.5	<10	<0.4	132	45
66446	213.5	215.0	<10	<0.4	41	36

FOOTAGE FROM	TO	DESCRIPTION
191.6-	244.5 continued	217.6-231.9 - weak-moderately altered basalt - silicified, chlorite actinolite - dark grey-green, fine grained, massive basalt with significantly decreased alteration compared to above unit; minor silica (± biotite rims) bands at approximately 10° to core axis over top 10 m with associated 2-3% po, trace cpy; below 226 m only in 1% po disseminated + stringers; arbitrary, gradual upper and lower contacts with more altered banded sections. 231.9-241.6 - biotite, silica, actinolite, altered basalt - very similar to 191.6-217.6 interval perhaps with slightly more intense alteration, no original basaltic textures remaining; strong striping of laterally discontinuous biotite bands alternating with actinolite-chlorite altered basalt or lighter creamy silica bands; orientation of banding still consistent at 0-10° to core axis; estimated 2% po, trace py, cpy. 241.6-244.5 - basaltic dyke - fine grained, homogeneous medium green basaltic dyke with layered chilled margins and submm crystals of epidotized plagioclase.
244.5 -	336.8	224.5-278.8 - actinolite-silica altered metabasalt (with minor chlorite biotite) extensive intensive alteration and/or replacement of basalt by silica and actinolite and chlorite with occasional band or patch of coarse reddish brown biotite. Again similar to 231.9-241.6 interval but with more pervasive actinolite and less biotite, slightly bleached to light-medium grey; original textures not discernable - possibly thin basaltic flows as before, thin subvertical striping/banding of core; individual bands represent minor mineral segregation or silica bands; S1=0-10° to core axis. 257.1-257.3 and 257.8-258.1 - faulted zones broken and friable core, highly chloritic, sheared, minor gouge; lighter bleached colour. 261.5-261.8 - approximately 2% po with trace cpy stringers or disseminated bands. 265.8-270.1 - lamprophyre dyke - dark green, fine grained mafic dyke with submm plagioclase and amphibole? clasts. 270.1-278.8 - weakly striped, relatively actinolite poor interval with gradually increasing sulphides - po and minor cpy (<1% cpy); increasing occurrence of irregular quartz veins and patches with which sulphides frequently associated; lower contact of interval simply subtle gradation with only minimal difference between two units. 278.8-300.4 - quartz veined metabasalt with sulphide impregnation - mineralogically similar to above silica-actinolite altered metabasalt. Significant difference however is presence

ANALYSIS (in ppm except Au in ppb)

SAMPLE	FROM	TO	Au	Ag	Cu	Zn
66447	224.0	225.5	<10	<0.4	205	49
66448	225.0	227.0	<10	<0.4	102	35
66449	238.5	240.0	<10	<0.4	208	60
66450	240.0	241.5	<10	1.1	235	57
64110	246.4	247.9	<10	1	326	121
64111	258.9	260.4	<10	<0.4	82	51
64112	260.4	261.7	<10	1.3	592	161
64113	261.7	263.2	<10	0.7	381	175
64114	270.1	271.6	<10	<0.4	44	91
64115	271.6	273.2	<10	0.4	297	147
64116	273.2	274.6	<10	<0.4	57	59
64117	274.6	276.1	<10	<0.4	404	137
64118	276.1	277.6	<10	0.4	529	81
64119	277.6	279.1	<10	<0.4	667	154
64120	279.1	280.6	<10	<0.4	267	84

FOOTAGE FROM	TO	DESCRIPTION
244.5 - 336.8 continued		of irregular quartz veins and 2-5% po and trace to 1% cpy; basalt darker - dark grey, little bleaching; banding present but faint, still with biotite altered thin bands; frequent white to grey translucent quartz veins 2-10 cm wide containing up to 30-40% sulphides (po with trace to 3% cpy within the vein); veins generally oriented similar to bading at 0-10° to core axis; overall estimate of 3-4% po, 1% cpy; lower contact simply a gradational decrease in quartz veining and alteration. 300.4-336.8 - metabasalt with chlorite, actinolite and silica alteration - fine to medium grained, medium grey altered basalt; homogeneous massive to finely faintly striped texture S1? at 5-15° to core axis; 2-3% sulphide stringers po and cpy intimately intermingled in a 2:1 ratio; local sulphide enrichment over 1m scale to 5-6% (3:1 po-cpy) associated with increased silica content (rarely with quartz vein); major components of rock are actinolite silica and chlorite; actinolite as submm scale felted textured crystals in varying concentrations. 308.315.0 - relatively barren of sulphides (trace po). 317.0-318.9 - slightly bleached, chloritic interval with 1% po, trace cpy. 318.9-319.0 - small basaltic dykelets - chilled fine grained, dark green. 319.1-319.2 - fault breccia chloritic gouge - friable material. 322.6-324.0 - intensely quartz veined and silica altered interval with increase in sulphides especially over 323.7-324.0; approximately 3% cpy, 8% po; <1% sulphides over final 10 m; bottom contact simply gradational decrease in silica bleaching and content, decrease in degree of alteration from silica flooding and actinolite to chlorite biotite (± actinolite) alteration.
336.8 - 494.5		Massive Chlorite (+ Biotite) Altered Basalt, Siliceous - weaker alteration than above intervals with more massive appearance; homogeneous even textured fine grained, dark green basalt with occasional irregular band or lense of coarser red brown biotite over the top 10 m of interval, possibly representing flow margins or pillow selvages; silicified throughout though no longer any bleached light silica banding; locally minor actinolite alteration; vague sense of orientation at 30° to core axis; weak S1 texture or flow related mineral orientation? 348.2-349.0 - coarser lighter basalt with notable actinolite alteration.

ANALYSIS (in ppm except Au in ppb)

SAMPLE	FROM	TO	Au	Ag	Cu	Zn
64121	280.6	282.0	<10	<0.4	519	105
64122	282.0	283.3	<10	0.7	861	56
64123	283.3	285.0	<10	<0.4	191	79
64124	285.0	286.2	<10	14.5		160
64125	286.2	287.7	<10	0.8	317	53
64126	287.7	289.2	<10	0.4	449	47
64127	289.2	290.8	<10	0.9	841	74
64128	290.8	292.0	<10	5.0	3270	44
64129	292.0	293.5	<10	1.7	1410	60
64130	293.5	295.0	<10	2.5	1880	47
64131	295.0	296.5	<10	10	7380	98
64132	296.5	298.3	<10	1	739	26
64133	298.3	298.9	<10	5.6	2820	45
64134	298.9	300.1	<10	6.9	3620	84
64135	300.1	301.7	<10	3/9	2090	66
64136	301.7	303.2	<10	0.4	216	21
64137	303.2	304.7	<10	1.6	304	47
64138	304.7	306.1	<10	1.1	640	35
64139	306.1	307.7	<10	2.1	1190	65
64140	307.7	309.1	<10	0.8	661	61
64141	309.1	310.9	<10	0.5	250	45
64142	315.5	317.0	20	0.5	448	59
64143	317.0	318.1	<10	<0.4	318	57
64144	318.1	319.6	<10	<0.4	55	106
64145	319.6	321.3	<10	<0.4	4	47
64146	321.3	322.5	<10	0.4	493	36
64147	322.5	323.5	34	1.4	1510	49
64148	323.5	324.5	<10	7.9		87
64149	324.5	326.0	<10	<0.4	627	30
64150	326.0	327.5	<10	<0.4	184	25
66902	327.5	330.5	<10	<0.4	53	18

FOOTAGE FROM	TO	DESCRIPTION
336.8 - 494.5 continued		345.5-346.6 - sheared, highly chloritic slip planes, very fractured and broken. 355.8-356.6 - quartz veined - disrupted interval with approximately 3% po, <1% cpy. 366.5-367.1 - a 10 cm wide quartz vein with disseminated po within surrounding chloritic siliceous green basalts. 369.5-369.9 - as above, accompanied by brittle fracturing of basalt and patchy quartz veining. 374.1 - thin 2 cm quartz vein with pinkish alteration product about rim - albite. This vein alteration seen occasionally in similar scale in unit below. 376.6 - small 1 cm quartz vein with disseminated cpy along rim. 380.0-384.9 - numerous thin, faint hairline fractures probably related to nearby dyke. 383.5-383.7 - white crackled quartz vein with bleached chloritic alteration in immediately surrounding basalt. 384.5-384.9 - approximately 2-3% po, trace py associated with patchy quartz vein. 384.9-392.9 - lamprophyre dyke - green, medium grained mica rich chloritic intrusive with approximately 3-5% mm scale; quartz-feldspar phenocrysts; occasional dm scale basalt block. 389.4-390.5 - block of basalt with 10 cm quartz vein + po.py within quartz. 392.1-392.3 - partially albitized quartz vein with minor po/py mineralization. 392.9-395.0 - estimated 4% po as irregular stringers (interlocking) with trace cpy, associated with patchy quartz veining over entire interval, minor albitization. 400.5-400.8 - faint silica banding - lighter andulose bands of creamy colour and exceptional silica content at low angle to core axis; core overall still extremely hard and silicified. 401.8-402.0 - semi-massive patch of po with up to 2% py, trace cpy over 10 cm interval, again associated with patchy quartz vein; unit still very homogeneous silicified dark green, fine grained massive, near textureless basalt, occasional band of coarser biotite material, possible pillow selvage, flow boundary? 409.0-409.1, 410.7-410.9 - same occurrence as 401.8-402.0, po and py, minor cpy vein associated mineralization. 415.2-415.4 - disseminated py within quartz patchy vein. 417.8-419.2 - moderately schistose silica enriched interval with approximately 3% po/py.

ANALYSIS (in ppm except Au in ppb)

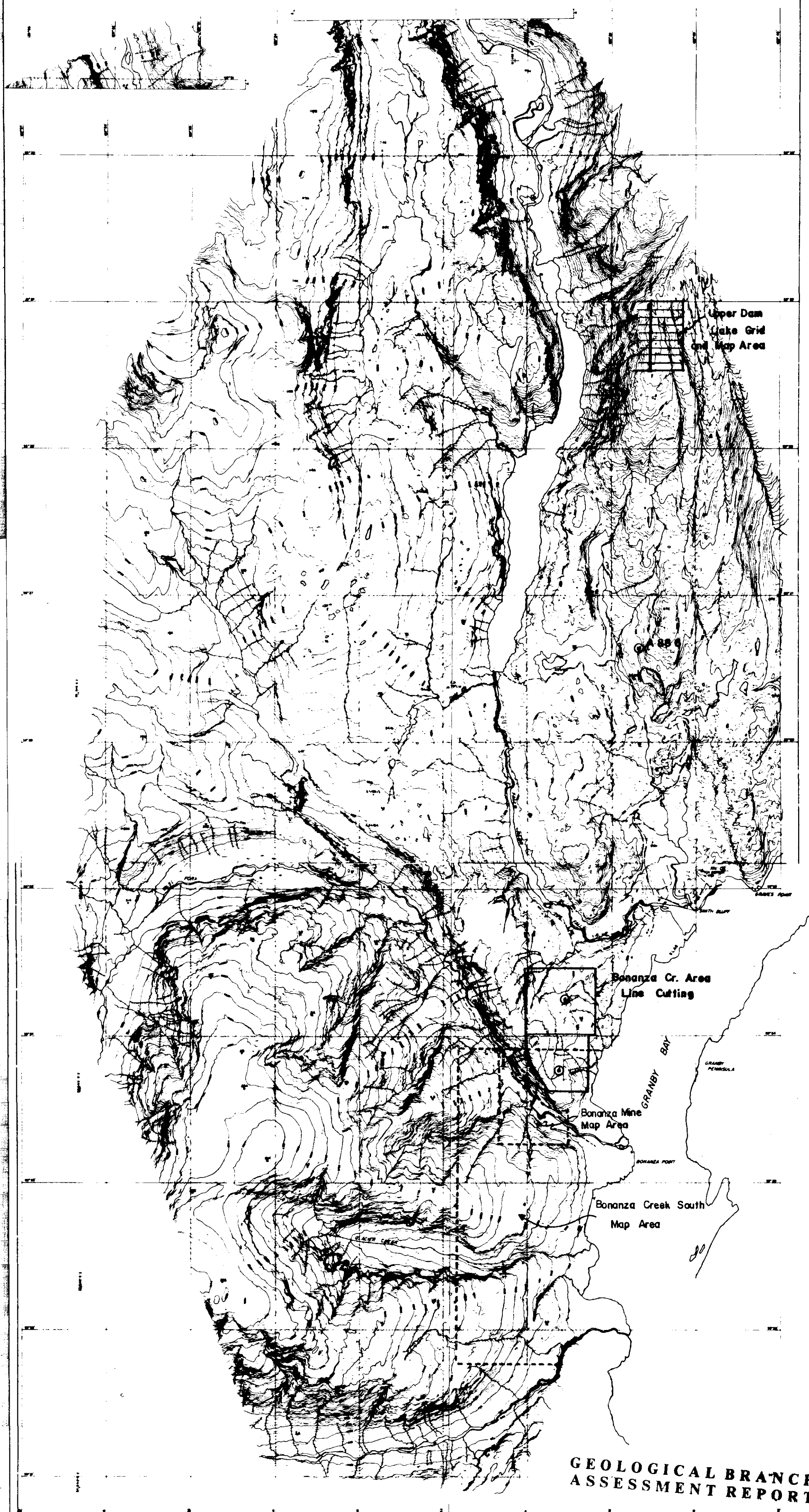
SAMPLE	FROM	TO	Au	Ag	Cu	Zn
66922	330.5	332.0	<10	0.5	581	25
66903	332.0	333.5	<10	<0.4	76	16
66904	340.5	342.0	<10	<0.4	188	43
66905	354.0	355.7	<10	<0.4	148	21
66906	355.7	356.8	<10	0.9	2980	77
66907	365.2	365.8	<10	>0.4	1780	95
66908	365.8	367.0	<10	<0.4	265	60
66909	367.0	368.4	<10	<0.4	473	82
66910	368.4	369.9	<10	<0.4	263	54
66911	392.0	393.4	<10	0.5	585	81
66912	393.4	395.0	<10	1	1770	127
66913	395.0	396.5	<10	0.5	614	135
66914	407.5	409.0	<10	<0.4	34	20
66915	409.0	410.0	<10	1.3	2430	61
66916	418.0	419.5	<10	0.7	2600	72
66917	440.2	441.7	<10	<0.4	157	48

FOOTAGE FROM	TO	DESCRIPTION
336.8 - 494.5 continued		433.3 - beginning of moderate to intense fracturing - quartz healed, core generally broken to <5" sections, blocky. 435.5-436.3 - sheared interval, highly chloritic quartz rich strongly sheared interval; continued green siliceous, massive, very homogeneous fine grained basalt with only occasional interruption by quartz veining ± sulphide (po/py with trace cpy) and occasional red brown biotite seam every 5-10 metres (possible flow boundary?). 461.4 - 5 cm white quartz veins, minor po. 465.4-466.2 - subvertical micaceous band 1 cm wide separating two separate basalt flows of weakly differing mineralogy (are darker green and a bit coarser grained). 467.0-467.4 - basaltic dyke at 25° to core axis, chilled margins. 479.2-481.0 - very siliceous with abundant hairline fractures. 491.5-492.0 - as at 465.4, a micaceous (biotite rich) band approximately 1 cm wide at 0-5° to core axis. 493.2-494.5 - weak fractured highly chloritic interval, broken up to cm scale shards.
494.5		END OF HOLE.

ANALYSIS (in ppm except Au in ppb)

SAMPLE	FROM	TO	Au	Ag	Cu	Zn
66918	452.6	454.1	20	0.5	942	50
66919	454.1	455.6	20	0.4	428	21
66920	493.0	494.5	<10	<0.4	34	44

From	To	Recovered
0	5.2	OB
5.2	8.2	3.0
8.2	11.3	3.1
11.3	14.3	3.0
14.3	17.4	3.1
17.4	19.8	2.4
19.8	21.3	1.5
21.3	23.5	2.2
23.5	24.7	1.2
24.7	26.5	1.8
26.5	27.7	1.2
27.7	29.6	1.8
29.6	32.6	3.0
32.6	35.7	3.1
35.7	38.1	2.4
38.1	41.2	3.1
41.2	44.2	3.0
44.2	47.3	3.1
47.3	50.3	3.0
50.3	53.4	3.1
53.4	56.4	3.0
56.4	57.0	0.6
57.0	60.1	3.0
60.1	63.1	3.0
63.1	65.9	2.8
65.9	68.9	3.0
68.9	70.1	1.2
70.1	72.3	2.2
72.3	75.3	3.0
75.3	77.3	2.0
77.3	80.5	3.2
80.5	82.9	2.4
82.9	84.5	1.6
84.5	86.3	1.8
86.3	88.7	2.3
88.7	89.2	1.5
89.2	91.2	1.5
91.2	93.6	2.2
93.6	96.6	3.0
96.6	98.8	2.2
98.8	101.2	2.4
101.2	102.7	1.5
102.7	105.8	3.1
105.8	108.8	3.0
108.8	111.9	3.1
111.9	112.8	0.9
112.8	114.9	2.1
114.9	117.4	2.5
117.4	120.4	3.0
120.4	122.2	1.8
122.2	124.1	1.7
124.1	127.1	3.0
127.1	130.2	3.1
130.2	133.2	3.0
133.2	135.4	2.2
135.4	138.1	2.7
138.1	140.9	2.8
140.9	142.7	1.6
142.7	144.5	1.8
144.5	147.6	3.1
147.6	150.6	3.0
150.6	153.7	3.1
153.7	154.6	0.9
154.6	157.6	3.0
157.6	160.7	3.0
160.7	162.5	1.8
162.5	163.7	1.2
163.7	166.8	3.1
166.8	169.8	3.0
169.8	170.4	0.8
170.4	172.6	2.2
172.6	173.5	0.9
173.5	174.4	0.9
174.4	175.9	1.3
175.9	177.1	1.2
177.1	179.0	1.7
179.0	180.2	1.2
180.2	181.4	1.2
181.4	184.5	3.1
184.5	186.3	1.8
186.3	188.1	1.8
188.1	191.2	3.1
191.2	192.7	1.5
192.7	194.5	1.8
194.5	197.3	2.8
197.3	200.3	3.0
200.3	203.3	3.0
203.3	206.4	3.1
206.4	208.4	1.8
208.4	210.4	1.9
210.4	212.5	2.1
212.5	215.6	3.1
215.6	217.8	2.2
217.8	218.6	0.8
218.6	219.8	1.2
219.8	221.3	1.5
221.3	222.6	1.3
222.6	224.1	1.5
224.1	226.5	2.4
226.5	229.3	2.8
229.3	231.7	2.4
231.7	233.8	2.1
233.8	236.9	3.1
236.9	239.4	3.0
239.9	243.0	3.1
243.0	246.0	3.0
246.0	249.1	3.1
249.1	250.6	1.4
250.6	252.4	1.8
252.4	255.2	2.8
255.2	257.3	2.1
257.3	263.4	6.1
263.4	266.0	2.4
266.0	269.1	3.1
269.1	270.7	1.6
270.7	273.5	2.7
273.5	275.4	1.9
275.4	278.4	3.0
278.4	281.4	3.0
281.4	282.9	1.5
282.9	285.7	2.4
285.7	288.1	2.4
288.1	291.2	3.1
291.2	294.2	3.0
294.2	297.3	3.1
297.3	300.3	3.0
300.3	303.4	3.1
303.4	306.4	3.0
306.4	309.5	3.1
309.5	311.9	2.4
311.9	314.6	2.7
314.6	317.1	2.4
317.1	318.6	1.5
318.6	321.3	2.7
321.3	325.3	4.0
325.3	327.4	2.1



GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,135

ANYOX 1988 WORK

1" = 3000'

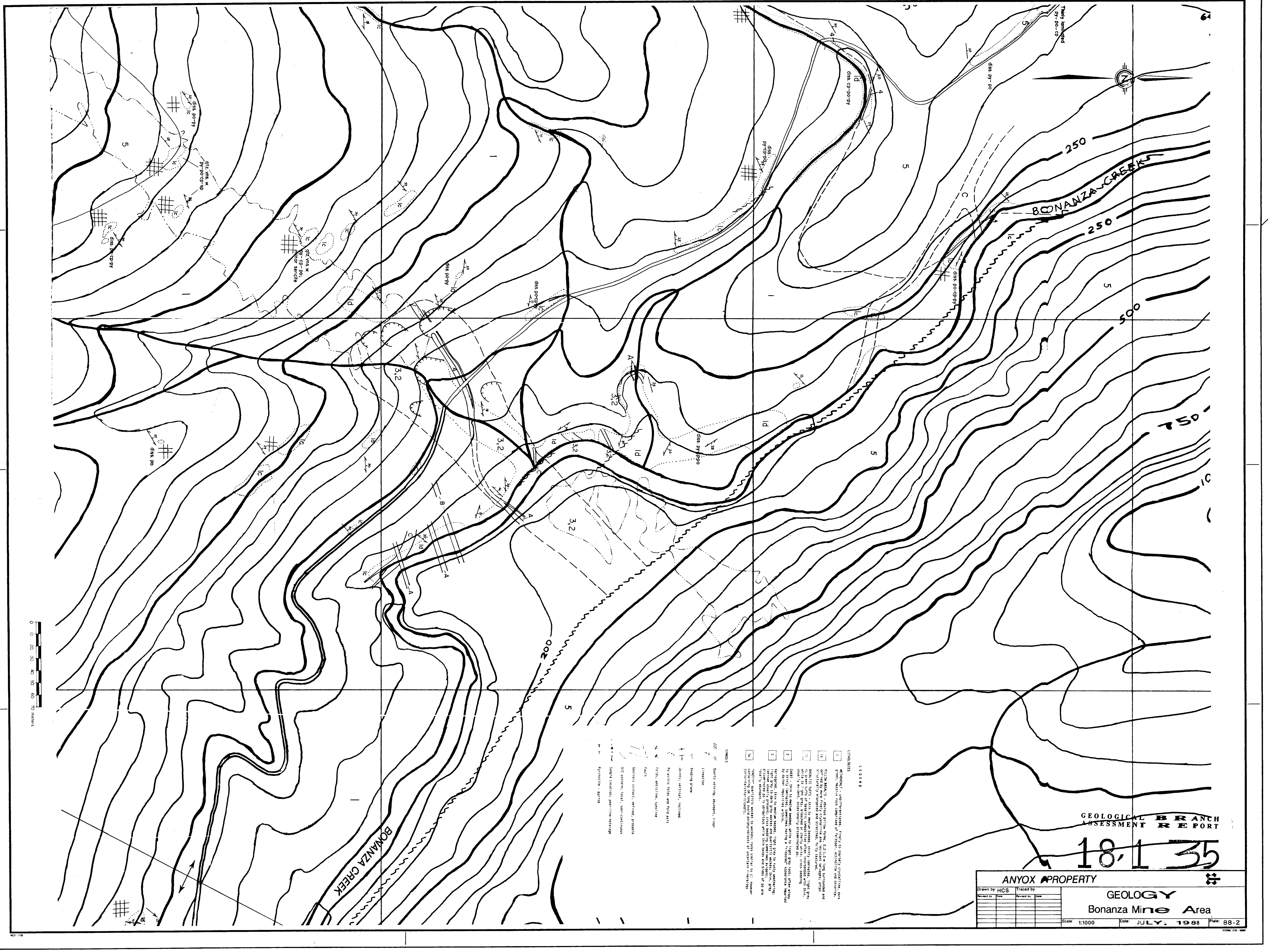
THE CONSOLIDATED MINING & SMELTING CO OF CANADA LTD

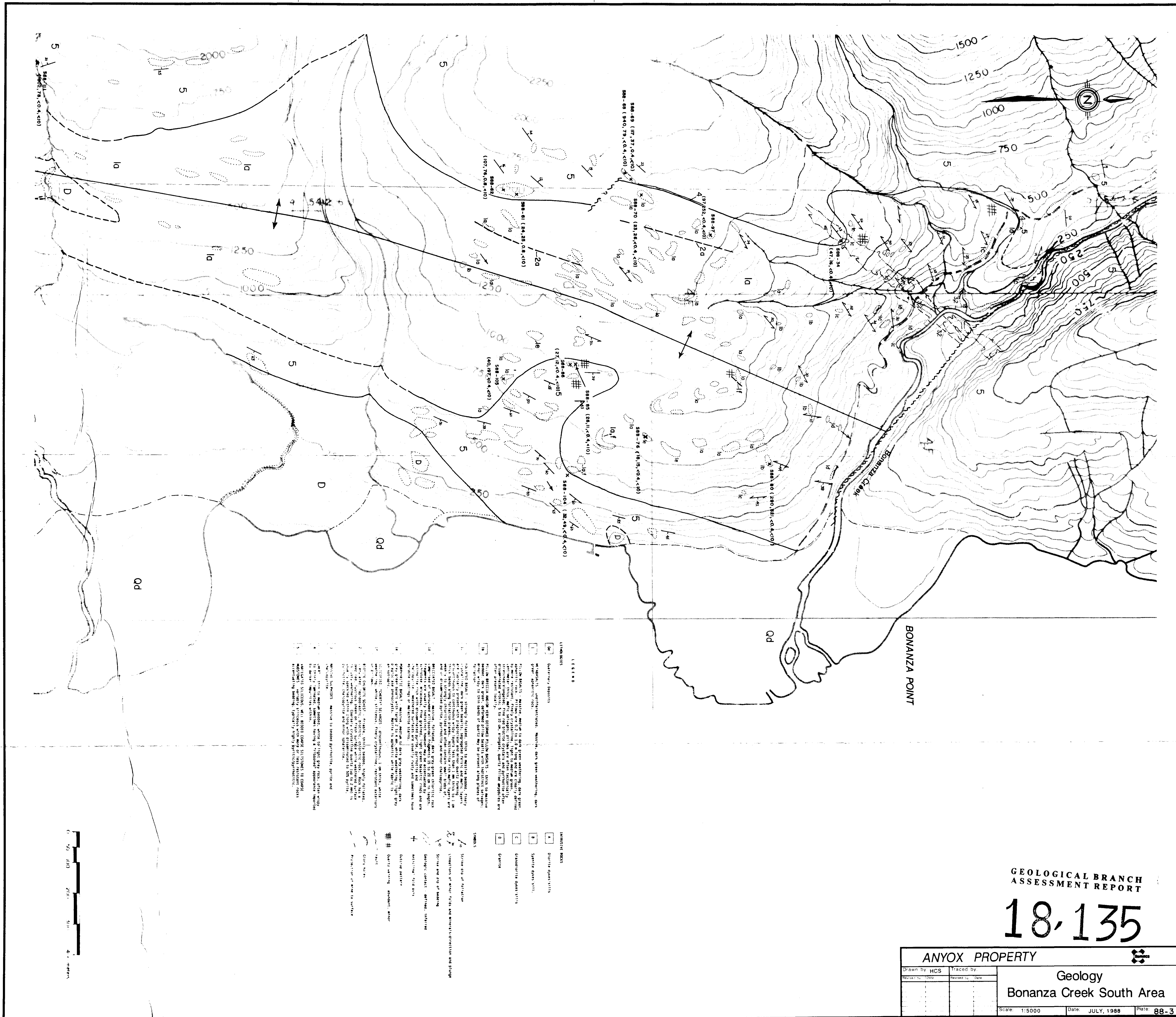
ANYOX B.C.

1" = 1000'

SCALE 1000 FEET TO 1 INCH
CONTOUR INTERVAL 50 FEET
GRID - POLYCONIC PROJECTION
CONTROL SUPPLIED BY "M.B.S. SURVEY RECORD

NTS 103 P 5
SAE-LIN NOV. 89


BONANZA CREEK
BONANZA CREEK
250
250
500
750
200
0 10 20 30 40 50 60 70 meters
GEOLOGICAL BRANCH
ASSESSMENT REPORT
18,135
ANYOX PROPERTY
Drawn by: HCS
Traced by:
Revised by
Date
GEOLOGY
Bonanza Mine Area
Scale: 1:1000
Date: JULY. 1988
Plate: 88-2
FORM 210 - 0680



GEOLOGICAL BRANCH
ASSESSMENT REPORT

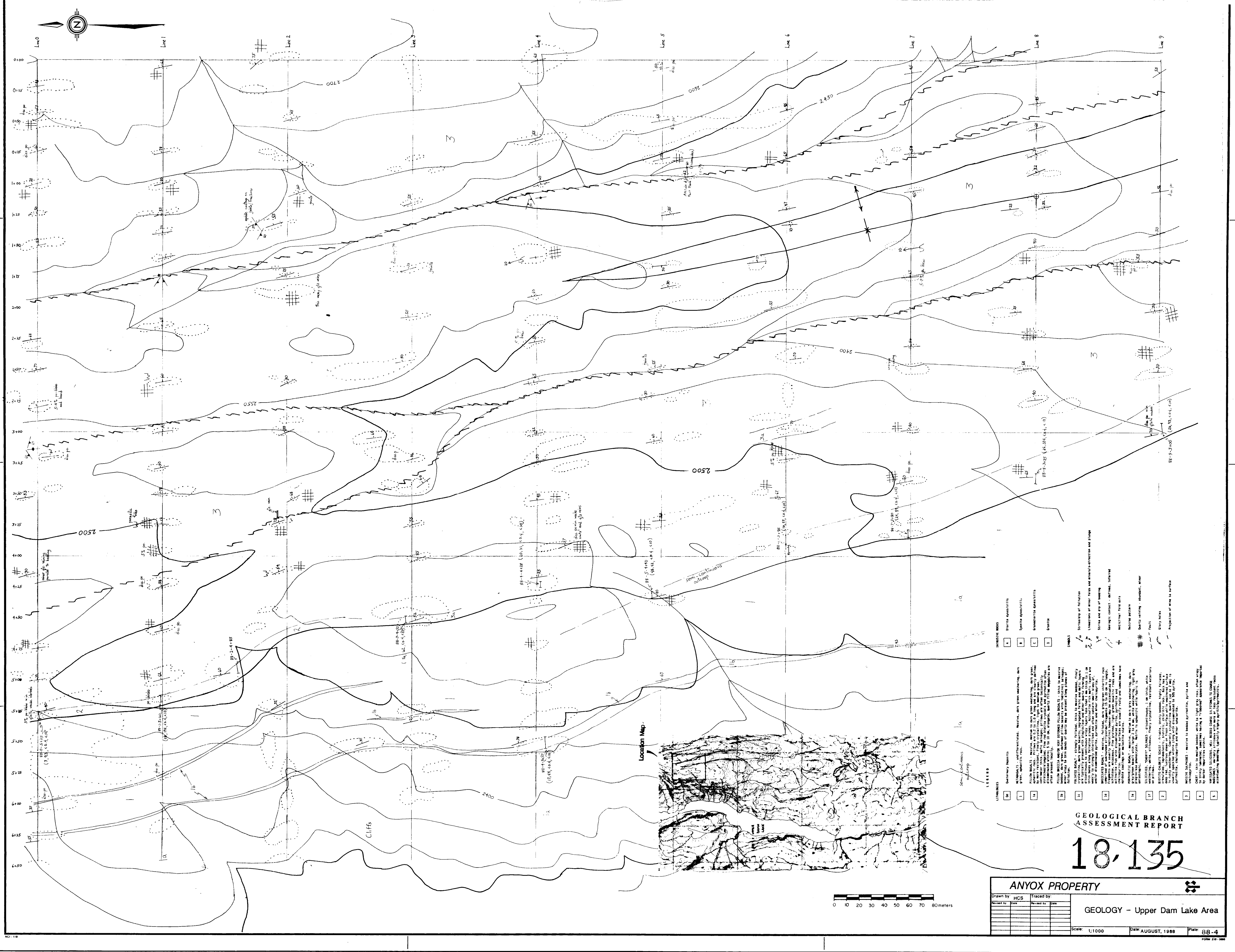
18,135

ANYOX PROPERTY

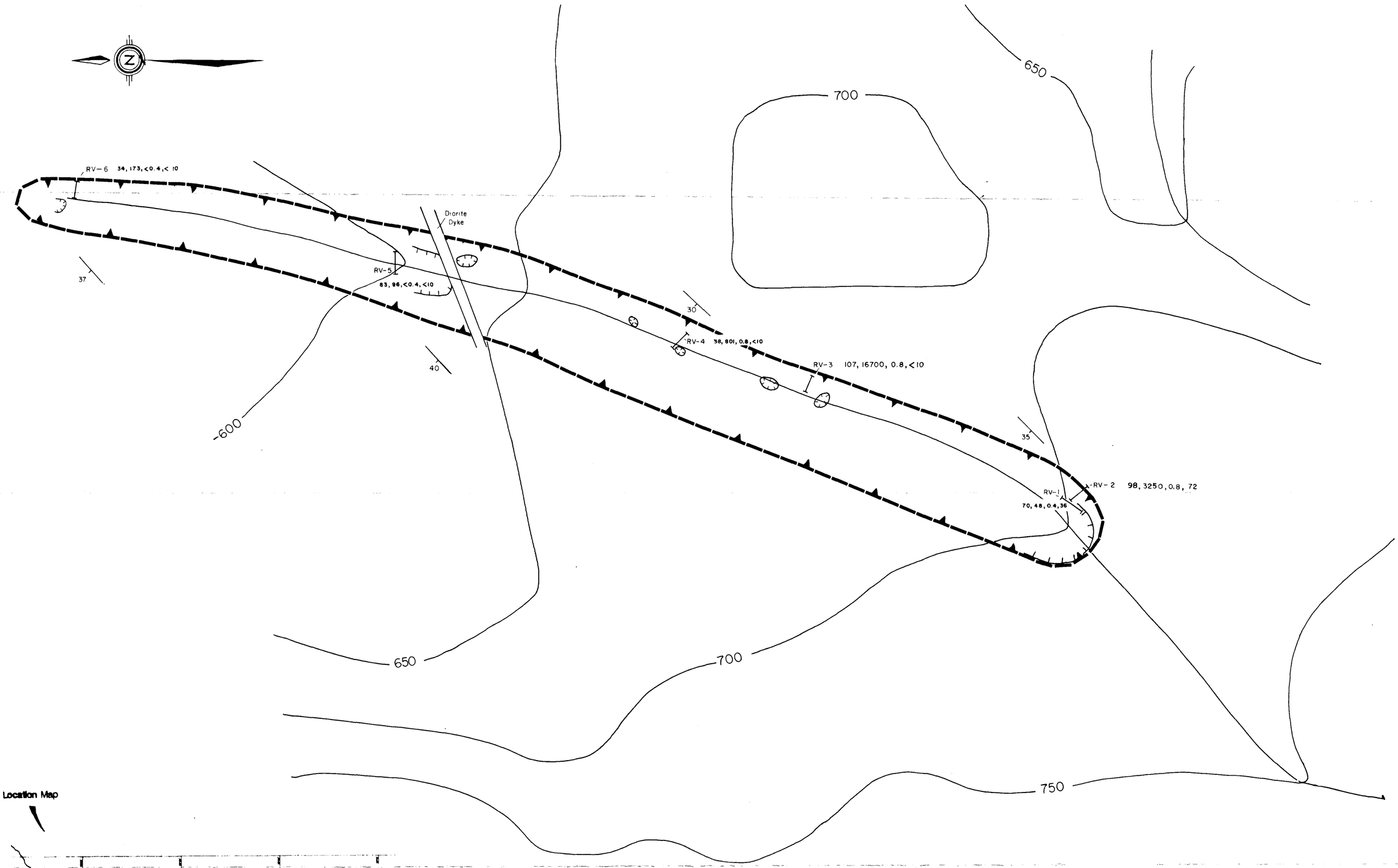
Drawn by HCS | Traced by

Geology
Bonanza Creek South Area

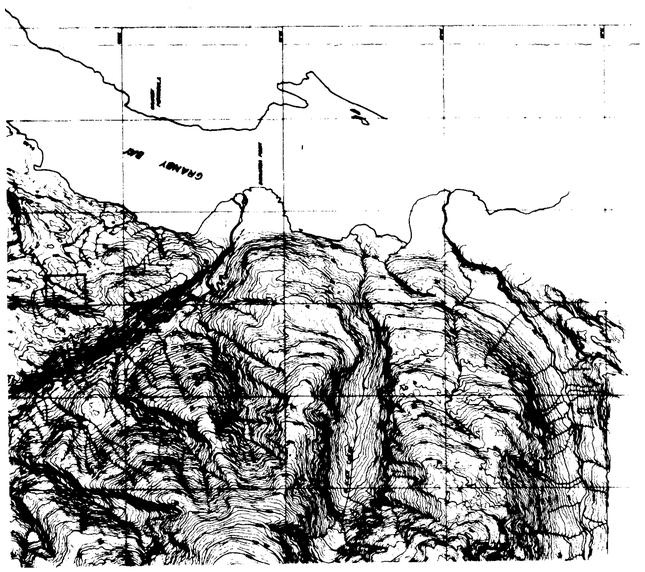
Scale: 1:5000 | Date: JULY, 1988 | Plate: 88-3



Line 0
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
2700
2600
2450
2400
2550
2500
Cliffs
Semi-continuous outcrop
Location Map
LEGEND
LITHOLOGIES
GEOLOGICAL BRANCH
ASSESSMENT REPORT
18,135
ANYOX PROPERTY
Drawn by: HCS
Traced by:
Revised by
Date
GEOLOGY - Upper Dam Lake Area
Scale: 1:1000
Date: AUGUST, 1988
Plate: 88-4
0 10 20 30 40 50 60 70 80meters
FORM 210-0880



Location Map



Symbols:

- Quarry
- Drifts
- RV-2 32, 62, .8, 12 — Sample location, number, ppm Cu, Zn, Ag, ppb Au
- 20 — Bedding

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,135

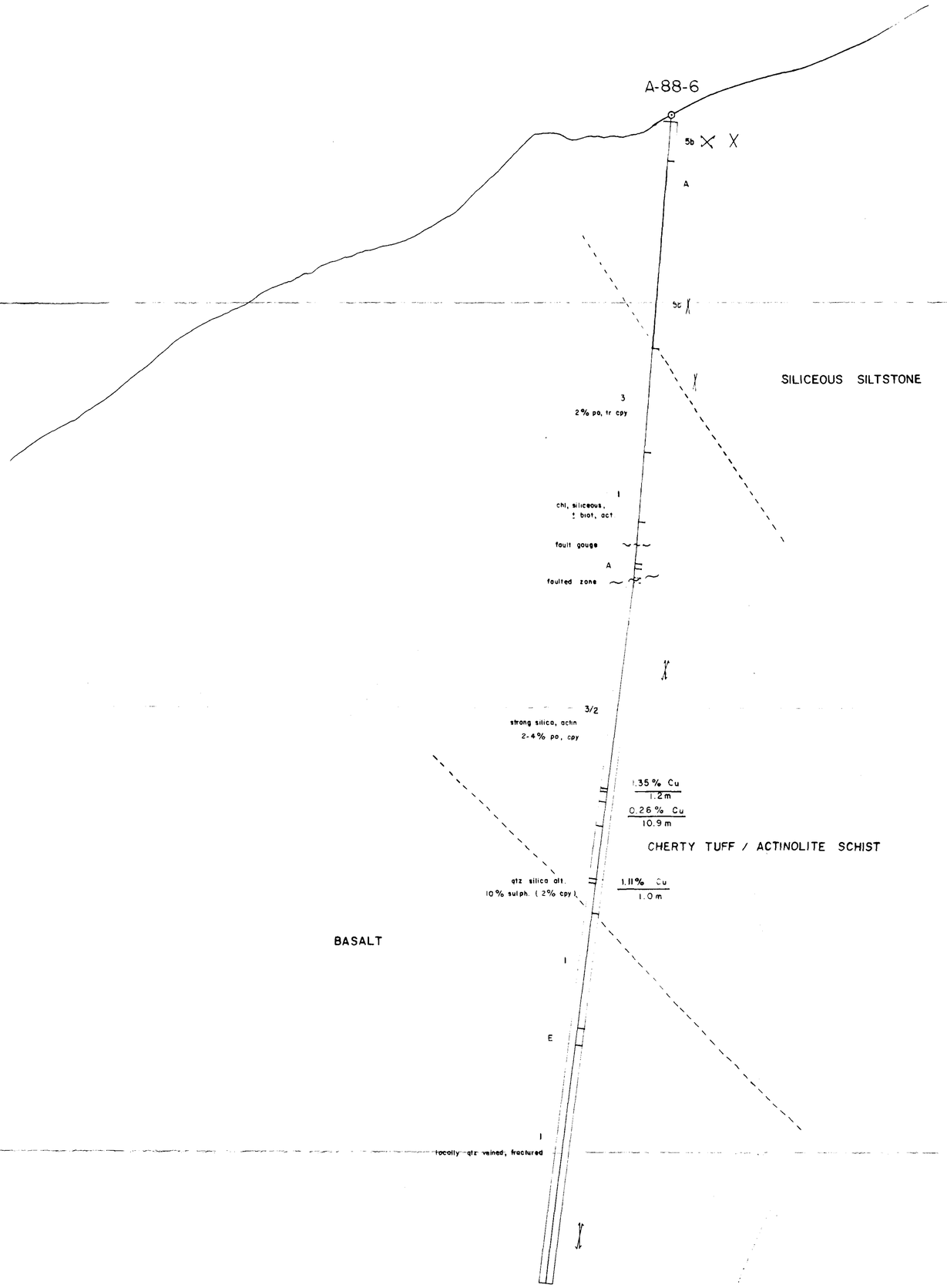
0 5 10 20 30 40 meters

ANYOX PROPERTY

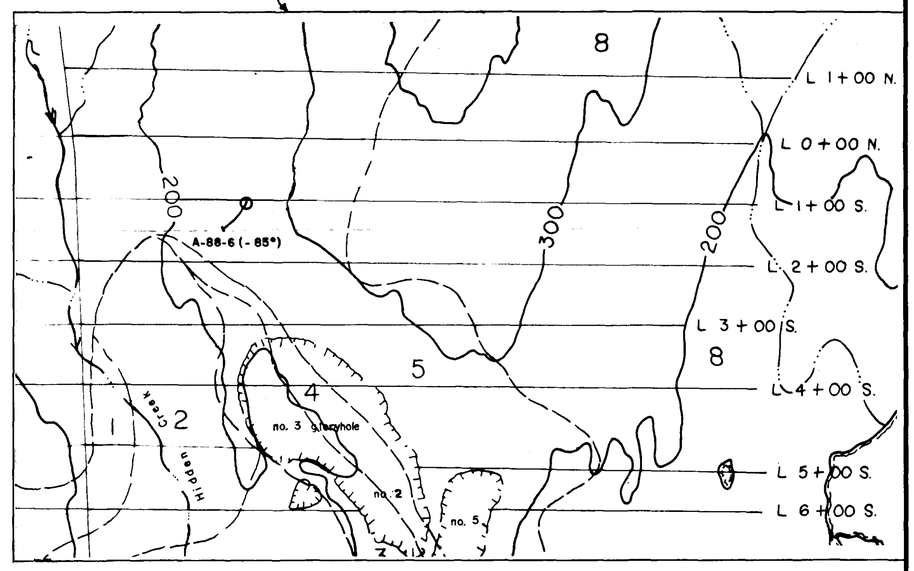
Drawn by: HCS	Traced by:
Revised by: Date	Revised by: Date

RAMBLER QUARRY:
Rock Geochemistry
Cu, Pb, Zn, Ag, Au

Scale: 1:500 | Date: JULY, 1988 | Plate: 88-5



Location Map



LEGEND

LITHOLOGIES

- LIMESTONE - Isolates 0.3 to 1.0 metre beds of dark grey to black, medium crystalline calcite rock. Often structurally contorted, boudinec
- S — VARIEGATED SILICEOUS, WELL BEDDED COARSE SILTSTONES TO COARSE MUDSTONES - variably siliceous with more and less resistant rocks accentuating bedding
  - 5a "KNOTTY" SILICEOUS SILTSTONES TO MUDSTONES TO CHLORITE SCHISTS - Rocks as in (5) but showing ovoid "porphyroblastic" knots of uncertain mineralogy (chlorite/chloritoid?) developed along cleavage. Softer more phyllositicate rich rocks are chlorite schists
  - 5b SILICEOUS MASSIVE FINELY LAMINATED MUDSTONE TO FINE SILTSTONE (1-5 cm) - Thinly bedded dominated by dark black mudstones with less well defined bedding due to less variegated character and finer grain size
  - 5c SILICEOUS MEDIUM BEDDED FINE MUDSTONE TO COARSE SILTSTONE - More distinctly bedded 5-10 CM beds, coarser grain size evident
  - 5d SILICEOUS THICK BEDDED FINE MUDSTONE TO FINE SANDSTONE - Prominently bedded succession with 5 to 50 cm beds siltstones to sandstones are quite common
- 4 — CHERT - White to light grey, finely crystalline to granular textured rock. Often finely laminated and banded "ribbonee" and appearing definitely synsedimentary. In other instances more massive, fractured and granular in texture.
- 3 — "CHERTY" ACTINOLITE/SERICITE/BIOTITE CHLORITE SCHISTS - Dominantly fine silica and phyllosilicate rock, well foliated and composed of variable proportions of actinolite sericite, biotite and chlorite with variable bands, wisps and ribbons of fine grained silica. Origin uncertain but likely altered and sheared cherts and basaltic tuffs and volcaniclastic muds
  - 3a "KNOTTY" BIOTITE/CHLORITE SCHISTS (at present refers to lithology encountered in hole A87-2) - Distinctive rock composed of variable ratios of red brown biotite and dark green chlorite (some silica) with schistose character surrounding numerous ovoid forms of in part chlorite, part biotite but possibly other minerals (metamorphic? - chloritoid) origin, nature and mineralogy of rock is uncertain (petrography to be undertaken in winter of 87-88). May possibly be altered volcaniclastic mud close to sediment/basalt contact
- 2 — ACTINOLITE SCHIST - Well foliated rock composed of felted acicular actinolite crystals with variable amounts of silica sometimes as bands or beds. Uncertain origin but perhaps hydrothermally altered and sheared basalts
  - 2a SILICA - "TREMOLITE" ROCK (at present - refers to lithology encountered in hole of A87-2) - Light grey, green-gray, hard rock composed of silica and abundant 1-3 mm acicular light grey-green crystals. Thought to be tremolite/actinolite (petrography to be undertaken in winter of 87-88). Nature and origin uncertain but seems likely be rock with higher volcanic component - siliceous basaltic tuffs?

INTRUSIVE ROCKS

- A — Diabase dykes/sills
- B — Andesite (intermediate) dykes/sills
- C — Felsic (quartz, quartz plagioclase phenocrystic) dykes/sills
- D — GABBRO/PYROXENITE SILL - Spectacular very coarsely crystalline sill located north of Hidden Creek
- E — Lamprophyre dykes/sills

ALTERATION SYMBOLS

Silica Alteration - silica flooding of sediments produces variable silica replacement. Where intense diffuse bleaching of sediments is common. Where weakest only limestone beds readily evidence replacement at their margins.

- Strong
- Moderate
- Weak

SYMBOLS

- 1.35% Cu / 1.2m — Assay interval - Cu, Zn, Au, Ag expressed in ppm for Cu, Zn and Ag, ppb for Au except where wet chemical assays have been done. Where values are expressed in % for base metals and gm/tonne for Au, Ag
- Bedding to core axis attitude with two possible attitudes shown
- Area of shattered to brecciated rock - related to faulting
- Area of strong folding evident in core
- Fracturing of rock common
- Limestone beds

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,135

ANYOX PROPERTY 103 P5

Drawn by: RJA | Traced by:

Revised by | Date | Revised by | Date

Section North Hidden Creek with DDH A-88-6

Scale: 1:1000 | Date: Nov. 88 | Plate:

NCI-117-C.L.

FORM 210 0660