

WATSON BAR PROJECT 1989

DIAMOND DRILLING

Clinton Mining Division

NTS 920/1E

ILLUSTRATIONS

MAP	3B	GEOLOGICAL PLAN (1:5,000)	CENTRAL	In pocket
MAP	3F	GEOLOGICAL PLAN (1:500)	ZONE V	" "
MAP	3F1	ASSAY PLAN GOLD (1:500)	ZONE V	" "
MAP	3J	DIAMOND DRILL SECTION 92+00E (1:500)	ZONE V	" "
MAP	3K	DIAMOND DRILL SECTION 92+75E (1:500)	ZONE V	" "
MAP	3L	DIAMOND DRILL SECTION 93+00E (1:500)	ZONE V	" "
MAP	3M	DIAMOND DRILL SECTION 93+25E (1:500)	ZONE V	" "
MAP	3N	DIAMOND DRILL SECTION 88+00E (1:500)	ZONE II	" "
MAP	3O	DIAMOND DRILL SECTION 93+50E (1:500)	ZONE VI	" "

ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 90.01.13

ASSESSMENT REPORT 19777

MINING DIVISION: Clinton

PROPERTY: Watson Bar
LOCATION: LAT 51 03 00 LONG 122 03 00
UTM 10 5655595 566591
NTS 092001E

CAMP: 035 Taseko - Blackdome Area

CLAIM(S): Ulcer
OPERATOR(S): Cyprus Gold
AUTHOR(S): Durfeld, R.M.
REPORT YEAR: 1990, 127 Pages
COMMODITIES
SEARCHED FOR: Gold, Silver
KEYWORDS: Cretaceous, Jackass Mountain Group, Arkoses, Greywackes, Sandstones
Andesites, Spences Bridge Group, Argillic alteration, Silicification
Pyrite, Arsenopyrite, Galena, Chalcopyrite, Sphalerite, Stibnite
Cinnibar, Gold

WORK
DONE: Drilling, Geochemical
DIAD 1770.6 m 13 hole(s); HQ
Map(s) - 9; Scale(s) - 1:500, 1:5000
SAMP 935 sample(s); AU, AG

RELATED
REPORTS: 16666, 17473
MINFILE: 0920

REPORT

ON

DIAMOND DRILLING

WATSON BAR PROJECT

LOG NO: 0312	RD.
ACTION:	
FILE NO:	

CLINTON MINING DIVISION, BRITISH COLUMBIA

Latitude 51° 03' North

Longitude 122° 03' West

FOR

CYPRUS GOLD (CANADA) LTD.

BY

RUDOLF M. DURFELD, B.Sc.
DURFELD GEOLOGICAL MANAGEMENT LTD

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19.777

February 1990

Williams Lake, B.C.

TABLE OF CONTENTS

	<u>Page No.</u>
1. INTRODUCTION	1
1.1 Location	1
1.2 Access and Physiography	2
1.3 Ownership	2
1.4 History and Previous Work	3
1.5 Purpose of Program	4
2. GEOLOGY	5
2.1 Regional Geology	5
2.2 Watson Bar Property Geology	6
2.3 Alteration	10
2.4 Mineralization	12
2.5 Zones of Interest	13
3. GEOCHEMISTRY	15
3.1 Sample Collection	15
3.2 Sample Preparation and Analysis	16
4. ROCK AND TRENCH SAMPLING	16
5. DIAMOND DRILLING	18
5.1 Diamond Drill Results	19
6. DISCUSSION	23
7. REFERENCES	24
8. CERTIFICATE	25
9. COST STATEMENT	26
APPENDIX I:	Diamond Drill Logs
APPENDIX II:	Detailed Description of Geochemical Procedures

ILLUSTRATIONS

MAP	1	WATSON BAR PROPERTY LOCATION MAP	After Page 1
MAP	2	WATSON BAR PROPERTY CLAIM MAP (1:100,000)	After Page 2
MAP	3B	GEOLOGICAL PLAN (1:5,000) CENTRAL	In pocket
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Cyprus Gold (Canada) Ltd.
An Affiliate of Cyprus Minerals Company

1810-1055 West Hastings Street
Vancouver, British Columbia V6E 2E9
Gold Exploration
604-685-6867
Facsimile No: 685-3635

Mr. Talis Kalnins
Room 121
525 Superior Street,
Victoria, B.C.
V8V 1X4

8 March 1990

Dear Mr. Kalnins:

As discussed earlier today this letter is being written to request for any excess work credit, which may arise from the attached assessment reports, to be applied to Cyprus' Gold PAC account. As indicated during our conversation the totals for the value of work on the statement of work forms, recorded on December 13, 1989, are a bit lower than the actual total cost of the work program, which is indicate on the title page and summary form of each report.

Yours truly,

David B. Stevenson
Project Geologist

CYPRUS

1. INTRODUCTION

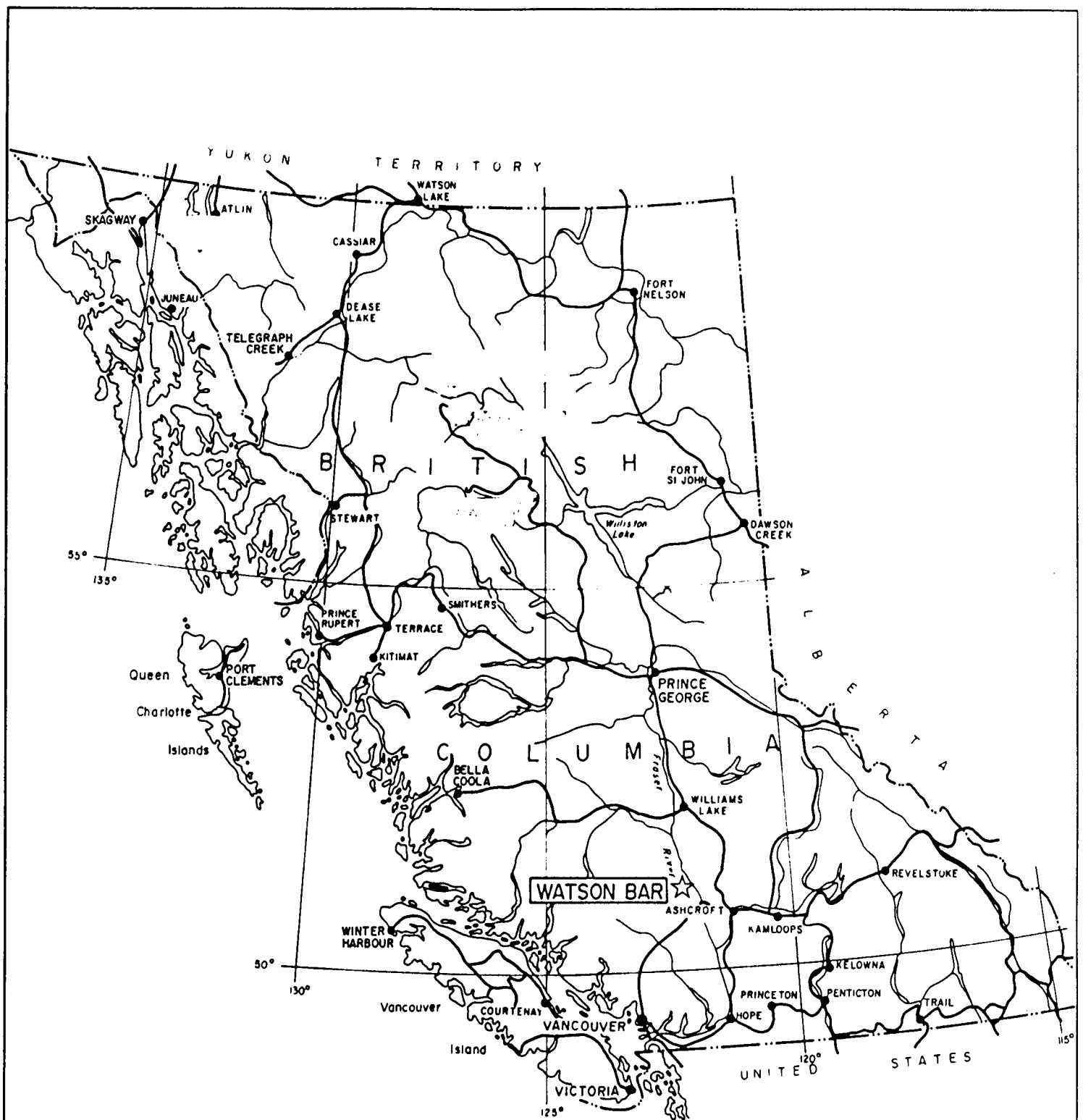
In October 1987 Cyprus Gold (Canada) Ltd. acquired by option the Second Mineral Claim Group from R. M. Durfeld and J. A. McClintock. Subsequently, Cyprus Gold carried out 1:5,000 scale geological mapping and grid soil sampling during October and November 1987 which was filed for assessment credit.

Limited follow-up work by way of prospecting and trenching defined three targets warranting evaluation by diamond drilling.

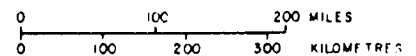
The results of the diamond drilling conducted on the Watson Bar Property during the 1989 field season are described herein.

1.1 Location

The Watson Bar Project covers the Second, AJ, and DS Mineral Claims (444 units) situated in the Clinton Mining Division 33 kilometres due west of the village of Clinton and 7 kilometres west of the Fraser River (Map No. 1). More precisely, it is centred at 51 degrees 3 minutes north latitude and 122 degrees 3 minutes west longitude. (NTS Map 92 0/1E)



CYPRUS GOLD CANADA LTD.
PROJECT LOCATION MAP



DRAWN
J.W.

DATE
3-4-88

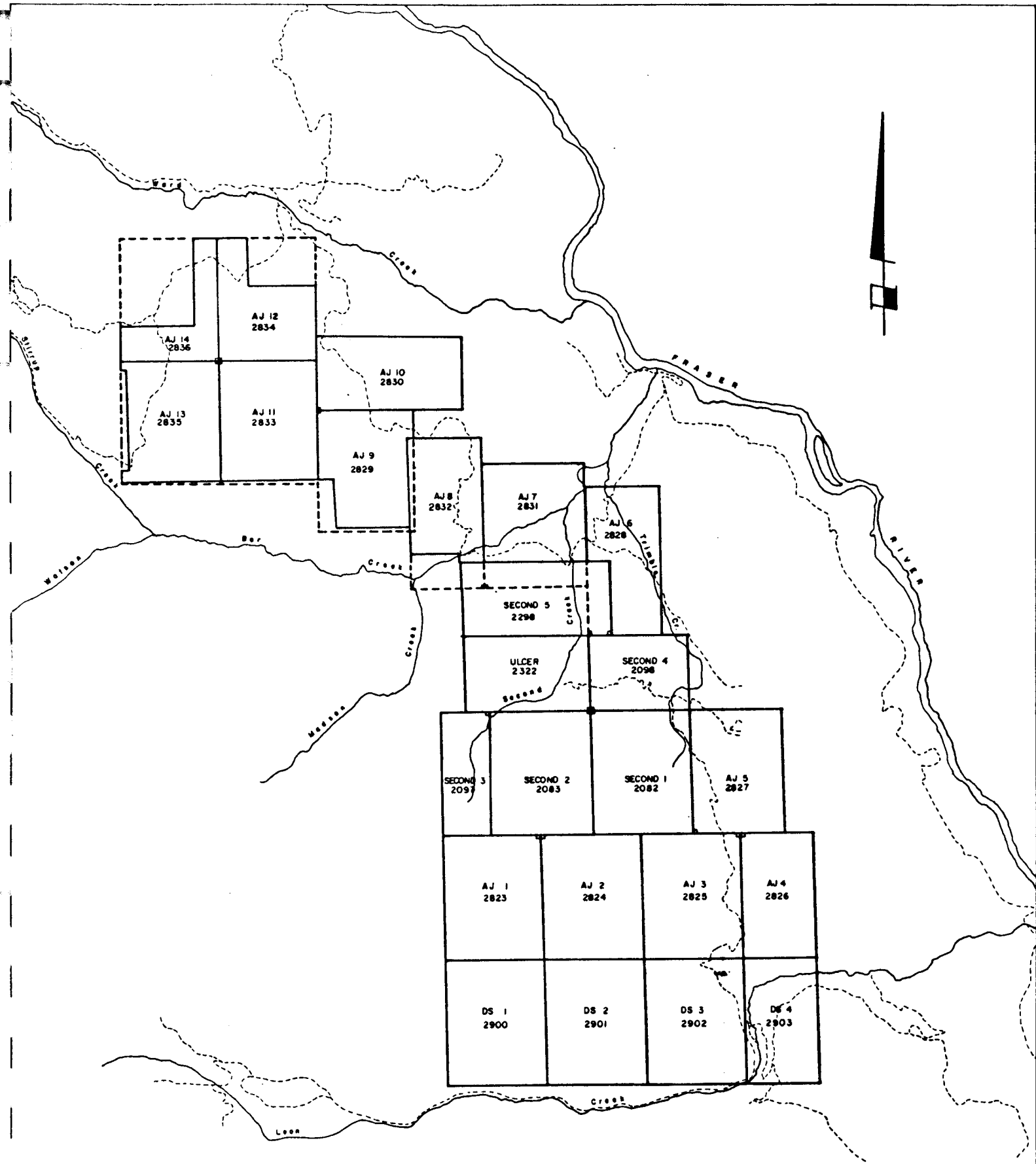
FIG.

1.2 Access and Physiography

The property is readily accessible from the village of Lillooet via the all-weather Slok Creek logging road, a distance of 71 kilometres, or by helicopter from either Williams Lake or Lillooet. The Slok Creek logging road bisects the property and in conjunction with secondary cat trails provides good access to much of the property.

The property is bisected by the broad and steep Watson Bar Creek Valley and the immature and narrow "V" shaped valleys of Second Creek and its tributaries. The elevation on the property varies from 400 metres in Watson Bar Creek in the central part of the property, to summits of 2,000 metres near Hogback Mountain in the south.

Vegetation on the Watson Bar Property is characterized by open forests of mature fir and pine, with undergrowth of grasses that are typical of the dry climate (mean annual precipitation of less than 30 centimetres) in this area. In the lower elevations toward Watson Bar Creek the trees give way to sage brush, tumbleweed and grasses. Locally, in areas of recent forest fires, the forest cover consists of closely spaced immature fir and pine.



CYPRUS GOLD
(Canada) Ltd.

**WATSON BAR PROPERTY
CLAIM MAP**

DRAWN BY	SCALE 1:100,000
DATE	MAP No. 2

1.3 Ownership

The Watson Bar Property is comprised of 24 contiguous modified grid mineral claims for a total of 444 units. The status of these claims is summarized below and the relative claim locations are plotted as Map No. 2. The year of expiry reflects the work that was applied to the claims in December 1989.

Claim Name	Record Number	Number of Units	Date of Record	Year of expiry
Second 1	2082	20	19/09/86	1993
Second 2	2083	20	19/09/86	1993
Second 3	2097	10	16/10/86	1993
Second 4	2098	12	16/10/86	1993
Second 5	2298	18	29/06/87	1996
Ulcer	2322	15	12/08/87	1996
AJ 1	2823	20	19/12/88	1992
AJ 2	2824	20	19/12/88	1992
AJ 3	2825	20	19/12/88	1992
AJ 4	2826	15	19/12/88	1992
AJ 5	2827	20	19/12/88	1992
AJ 6	2828	18	20/12/88	1992
AJ 7	2831	20	22/12/88	1992
AJ 8	2832	18	22/12/88	1992
AJ 9	2829	20	22/12/88	1992
AJ 10	2830	18	22/12/88	1992
AJ 11	2833	20	07/01/89	1993
AJ 12	2834	20	08/01/89	1993
AJ 13	2835	20	08/01/89	1993
AJ 14	2836	20	08/01/89	1993
DS 1	2900	20	20/02/89	1993
DS 2	2901	20	20/02/89	1993
DS 3	2902	20	20/02/89	1993
DS 4	2903	20	20/02/89	1993

1.4 History

Early exploration in this area would have coincided with the Gold Rush on the Fraser River and subsequent placer mining in Watson Bar Creek just to the north of the Watson Bar Property during the period 1860 to 1900. The adit on the adjoining Mad claims and old open cuts on the Watson Bar property would have been excavated during this period.

In June 1980, E and B Explorations Inc. staked much of what is now the Watson Bar Property as the Carolyn 1 to 8 claims. E and B Explorations Inc. staked the ground to acquire several large alteration zones hosted by Jackass Mountain Group sedimentary rocks.

Subsequent exploration by E and B consisted of prospecting, contour soil sampling and rock geochemistry. Dome Mines also staked claims in 1980 over what is now the southern part of the Watson Bar Property. These claims, called the Leon 1 to 5, were prospected and grid-soil sampled by Dome.

Work by E and B Explorations Inc. on the Carolyn claims, identified a northwesterly trending zone of silicification, kaolinization and carbonate alteration that is coincidentally anomalous for mercury, arsenic and gold. E

and B subsequently allowed the claims to lapse, and they were restaked by Durfeld-McClintock in 1986 and 1987. Cyprus optioned the property in late 1987.

1.5 Purpose of Program

The purpose of the diamond drilling was to evaluate the downdip extension of the mineralization on zone V and to test two additional targets defined by geology and geochemistry as targets II and VI.

2. GEOLOGY

2.1 Regional Geology

The Watson Bar Property area was mapped by H. W. Tipper of the Geological Survey of Canada in 1978 (92/0, Open File 534). Tipper shows the claim area to cover a northerly trending splay of the Fraser River Fault that brings rhyolite to dacitic pyroclastic rocks of Eocene-age in contact with clastic sedimentary rocks of the Lower Cretaceous Jackass Mountain Group to the southwest. More recent regional mapping by Dr. P. B. Read 1987 (B. C. Department of Mines Open File 1988-29) has shown the intermediate to mafic volcanic rocks to the northeast of the Jackass Mountain Group

in the south central property area as the Lower Cretaceous Spences Bridge Group rather than the Eocene volcanics.

The Jackass Mountain Group is divisible into three distinct units (Duffell & McTaggard, 1950). These are: a lower unit comprised of up to 600 metres of non marine arkose, greywacke and lesser conglomerate and shale; a middle unit which is up to 500 metres thick and comprised of coarse conglomerate with minor beds of greywacke and argillite; and an upper unit of greywacke with thinly interbedded conglomerate and argillite that is at least 1,500 metres thick. Faulting is the dominant structural feature, with minor local folding.

Dr. Read maps the Spences Bridge Group as a Middle Cretaceous Age section of intermediate volcanics and intercalated sediments.

The Eocene volcanic rocks are comprised of tuffs, breccia, agglomerates and flows. Most of these volcanic rocks are dacites with subordinate rhyolite. Although these rocks are not folded, near major faults they are intensely sheared.

2.2 Watson Bar Property Geology

In 1987, the central area of the claim block was mapped at a scale of 1:5,000 using a photographic enlargement of a government published 1:50,000 topographic map for control (Map No. 3). The current program expanded the area of interest and routine geological grid mapping was conducted in areas where outcrop was noted by the soil survey, while detailed mapping was confined to areas of alteration or mineralization. All the drill core was logged and backhoe trenches were mapped. Geological mapping during the current program showed minor modifications of the 1987 geological map. No new lithologies were noted; however, the positioning of some geological contacts were more precisely defined.

Lithology

The oldest rocks on the property are a thick north-north westerly trending sequence of clastic sedimentary rocks of the Lower Cretaceous Jackass Mountain Group (Units Ss, Sd, Cng Arg). Within the mapped portion of the claims, the Jackass Mountain rocks are predominantly medium to thick bedded arkose and greywacke. Siltstone (Ss) occurs locally as thin interbeds in the predominantly sandstone (Sd) units, while conglomerate (Cng) and argillite (Arg) form thicker beds.

Greywacke and arkose typically consist of 1 mm grains of feldspar, with lesser amounts of lithic fragments in a matrix of feldspar, calcite, muscovite, and chlorite. Conglomerates, which were mapped near the western claim boundary and in the upper drainage of East Second Creek, are poly-mictic with granite, sedimentary, and volcanic clasts to 10 cm. The clasts are matrix supported. In the property area the sediments generally show a coarsening up section from sandstone in the northeast to conglomerate in the southwest.

In the central property area a northwesterly trending splay of the Fraser River Fault brings sandstones of the Lower Cretaceous Jackass Mountain Group in contact with brown to maroon plagiophyric andesites of the Middle Cretaceous Spences Bridge Group to the northeast. The Spences Bridge Group pinches out on another splay of the Fraser River Fault to the northwest which then brings the Jackass Mountain Group in contact with the Eocene Age volcanics.

In the south central grid area an elliptical-shaped stock of granodiorite (Unit Gd) measuring about 700 metres by 500 metres intrudes the Jackass Mountain Group rocks. The stock has a hypidiomorphic granular core and a porphyritic border phase (Unit Fp). The recent geological mapping and trenching in the area of the baseline at 87+00E east and as drill core from WB 89-6 has shown what had been mapped as altered sediments to actually be a strong sericitic altered

intrusive that is locally intruded by younger granodiorite dykes. Elsewhere on the claims, the sedimentary rocks are cut by dykes and sills of feldspar and/or hornblende porphyry which are compositionally similar to the border phases of the stock. The dykes and sills range in thickness from less than 1 metre to over 10 metres. Dykes are preferentially oriented between 090° and 120° with steep dips to the southwest and northeast. The dykes which are generally thicker than the sills, repeatedly splay and coalesce along strike. Sills are rarely more than 3 metres thick and maintain relatively consistent thickness along strike. In the hangingwall area of the Main Showing there are numerous hornblende to amphibole granite sills mapped parallel to bedding and truncated by local faulting. Both the granodiorite and feldspar porphyry are probably late Cretaceous or early Tertiary in age. A third type of intrusive are the quartz porphyry dykes (Unit QP) that occur in the eastern property area. The quartz porphyry and granite may be young phases of the granodiorite or may represent intrusions related to the younger Eocene volcanic rocks. The fine-grained, dark green andesite dykes (Unit An) and Tertiary Volcanics (Unit TV) that occur in the upper drainage area of East Second Creek are either subvolcanic equivalents of the Spences Bridge Group or the younger mafic volcanic flows.

The Eocene Age volcanics (Ev) are rhyolite to andesite

tuffs, breccias, and flows and are the youngest rocks in the property area. These volcanic rocks occur mainly northeast of the main splay of the Fraser River Fault and in the central property area to the northeast of the Spences Bridge Group, while in the northwest they are in direct contact with the Jackass Mountain Group. The Eocene volcanics underlie much of the northwestern property area.

Structure

The structure in the Watson Bar Property area is dominated by the north-northwesterly trending Fraser River Fault and related subsidiary faults. The main splay of the Fraser River fault has juxtaposed Jackass Mountain Group sediments, Lower Cretaceous Spences Bridge Group volcanics and Eocene volcanic rocks. A conjugate set of subsidiary faults and shears believed related to the Fraser River Fault splay, occur in the property area. The two prominent trends are northwesterly and northeasterly. These structures dip moderately to steeply southwesterly and northwesterly, respectively. Offsets across most faults appear to be minor. A major fault is postulated in the west Second Creek area however, based on abrupt changes in bedding attitudes. The absence of distinctive marker beds in the Jackass Group makes determination of relative movement difficult.

Throughout most of the grid area, the Jackass Mountain strata strike northwesterly to northerly with moderate westerly dips. Variations in the strike of the strata suggest the rocks are gently folded. Local folding documented by fold axes on an east to northeast trend thicken siltstone and graphitic horizons associated with the silicification in the Main Showing area.

2.3 Alteration

Large regions of the grid area are hydrothermally altered. The type and intensity of alteration is variable but can be divided into five distinct types: propylitic, carbonate, phyllic/argillic, and intense silicification.

Propylitic alteration was mapped in a small area of siltstone in upper West Second Creek. Here alteration consists of chloritization, pyritization, epidote and calcite veining. Petrographic and field descriptions of diamond drill core and outcrop in the Main Showing Area showed chlorite as the matrix in several sandstone sections.

Carbonate alteration is ubiquitous throughout the central grid area. The intensity of carbonate alteration is variable ranging from calcite veining and fracture filling to pervasive replacement of the rock by calcite, dolomite and/or

ankerite. Because it is so widespread, the zone of carbonate alteration is not outlined on Map 3.

Phyllic/argillic alteration consists primarily of sericitization with small areas of localized argillic alteration. This alteration type is widespread throughout the central area of the grid. Phyllic alteration as secondary sericite ranges from clouding to complete replacement of feldspar matrix and phenocrysts in all the sedimentary and intrusive lithologies. Argillic alteration consists of kaolonization and clay alteration of the feldspar in both intrusive and sedimentary rocks. Argillic alteration is not widespread being localized in areas of well fractured or sheared rock and appears to be a later alteration overprint within a more widespread zone of sericitization. Carbonate as veining and flooding of matrix accompanies the phyllic/argillic alteration and is generally more intense within the phyllic/argillic zone.

Silicification consists of both fracture fillings and pervasive replacement of the rock. Quartz veins are characteristic of open space fillings, with both drusy and banded textures. Prominent vein directions are northeast and northwest. Vein dips are variable. Both phyllic/argillic and carbonate alteration accompany the silicification. Within the intensely silicified zones, feldspars are completely transformed to assemblages of sericite or clay.

Chalcedonic quartz and calcite are often interbanded in veins and quartz pseudomorphs after calcite are present. Locally, silicification and accompanying sericitization are so intense as to make recognition of the host rock impossible (unit UN).

Bands and lenses of carbonaceous to graphitic material have been noted concentrated in shear zones and often associated with quartz veining. It is probable that the carbonaceous material has been altered to form graphitic horizons by the hydrothermal activity associated with the introduction of the quartz veining.

The andesitic rocks of the Spences Bridge Group and the rhyolitic Eocene volcanic section also have areas of extensive gypsum and carbonate alteration associated with quartz veining.

2.4 Mineralization

Sulphide mineralization noted in order of abundance occurs as pyrite, arsenopyrite, galena, chalcopyrite, sphalerite, stibnite and cinnibar. Pyrite typically occurs as disseminations, while the other sulphides are restricted to quartz veins and fractures. Visible gold has been noted as distinct rounded grains and flakes in quartz-sulphide veins. Pyrite content of the sediments is typically 1-2%, but in zones of mineralization overall sulfide content increases

to 10-15%. Arsenopyrite, Galena, chalcopyrite, and sphalerite are typically found associated with the gold bearing quartz veins.

2.5 Zones of Interest

In 1987 geological mapping located 6 zones of intense silicification denoted by I to VI (Map 3B). Zones II, V and VI were subjected to diamond drilling and can be described as:

Zone II

Zone II is a northwesterly trending 1,000 metre by 150 metre zone of sericitic alteration and silicification (Map 3B). Throughout its length, the zone is poorly exposed as rubble patches and a few outcrops. During mapping numerous hand pits were found in this altered zone. It is speculated that these diggings may document prospecting dating from the turn of the century. Other evidence of previous exploration of this zone is a short adit situated at grid coordinate 88+00 E and 98+75 N.

The rock in Zone II is mainly greywacke with lesser feldspar porphyry which has been intensely sericitized, silicified and carbonate altered. Mapping this zone

indicated strong sericitic altered granodiorite feldspar porphyry and sandstone locally intruded by younger granodiorite dykes. Areas of chalcedony veining and breccia were noted. Much of the chalcedony shows fine grey streaks caused by fine disseminated pyrite and arsenopyrite. Gold values were low in this zone.

Zone V

Zone V, the Switchback Zone, was discovered late in 1988 current program while following up a gold-arsenic-copper-soil anomaly defined by the 1987 survey in an area devoid of outcrop. A series of hand pits were initially dug across the anomaly in an effort to evaluate it. Several of the soil samples from the bottom of the pits yielded highly anomalous values for gold, up to 10,000 ppb. A grab sample of weathered quartz from one pit assayed 1.42 gpt gold. These encouraging results prompted a limited trenching program late in 1988 that discovered several banded quartz-sulphide (pyrite, arsenopyrite, galena, sphalerite) veins, hosted by a graphitic siltstone. These veins have been traced for a strike length in excess of 200 metres and are conformable to the regional northwesterly bedding with shallow southwesterly dips of the sandstone-siltstone section. Subsequent trenching and drilling in this area indicated the gold bearing vein mineralization to vary from

centimetres to in excess of 5 metres in thickness. Trench sampling has returned assays of up to 159,000 ppb (4.65 oz/t) over 1 metre, while the diamond drilling returned an assay in WB 89-1 of 38.99 G/T (1.14 oz/t) gold over 1 metre in a section that averaged 20.01 G/T (.58 oz/t) gold over 5 metres. The gold mineralization shows a strong association with arsenopyrite and galena. Nine diamond drill holes and seventeen trenches tested this zone.

Zone VI

Zone VI represents a gold-arsenic soil anomaly in the area of 94+00E and 92+00N. Mapping of this area indicated a thick section of argillite overlain by conglomerate showing pervasive phyllic and argillic alteration.

3. GEOCHEMISTRY

A total of 1370 core samples were split and analysed for gold and silver.

3.1 Sample Collection

Drill core was halved with mechanical or hydraulic splitters. All core samples were placed in plastic bags and labelled with pre-numbered assay tags before shipping to Min

En Laboratories in North Vancouver for analysis.

3.2 Sample Preparation and Analysis

Core samples were crushed by jaw crusher and pulverized by ceramic plated pulverizer.

Gold analysis was carried out on a 10 gram subsample of -80 mesh material after a hot aqua regia digestion and a M.I.B.K extraction. A 5 gram subsample was digested as necessary for analysis of copper, lead, zinc, silver, arsenic antimony and mercury by standard atomic absorption methods. The detailed description of geochemical procedures employed by Min-En are given as Appendix II. The results of sampling is given in Appendices I and II.

4. Rock and Trench Sampling

The auriferous quartz sulphide veins as zone V were discovered by hand pitting up slope from a coincident gold-mercury-arsenic in soil anomaly in an area of overburden cover. Quartz arsenopyrite rubble from these pits showed 1.42 gpt gold. To evaluate these results a small trenching program (four trenches-64 metres) was initiated in November 1988. This survey showed an area of bladed quartz-

arsenopyrite veins to be hosted by a graphitic siltstone to sandstone. A sample section in trench I of this survey returned .27oz/ton gold over 15 metres in a broader 37 metre section of .13 oz/ton gold. On the basis of these results the backhoe trenching program was expanded in 1989. The results of this trenching are compiled as the 1:500 scale Geological Plan for Zone V (Map 3F).

The geological mapping of the trenches showed banded and folded quartz veins with blended crystals perpendicular to the vein to be folded and locally faulted. Mineralization as distinct rounded gold grains in open quartz vugs was also noted. Accessory sulphide mineralization in order of abundance as pyrite, arsenopyrite, galena, chalcopyrite and sphalerite was noted. The occurrence of the mineralized quartz vein is best described as a quartz vein zone. This vein zone is hosted by a dark grey siltstone that shows concentration of carbonaceous matter as a graphitic hangingwall. Mapping of vein zone showings located by trenching implies a northwesterly trend with shallow southwesterly dips. A strike length in excess of 230 meters can be implied from the vein zone outcroppings. The trenching within this length shows significant thickening in the central portion and thinning on strike, suggesting a lensoid shape to this vein zone. The geological mapping also shows the graphitic siltstone to be thickened with the quartz vein zone. Selective replacement of structures are a

possible explanation for the thickening of the mineralized quartz vein zone.

5. DIAMOND DRILLING

During the period June and September 1989 J. T. Thomas Diamond Drilling cored 1,771.8 metres (5,813 feet) of HQ core with a Longyear 44 drill on the Watson Bar Property. Holes 1 to 12 were completed from June 1st to 30th, while hole 13 was completed during the period September 12th to 18th. The general location of the completed diamond drill holes is given on plan Map 3C (1:5000). Plan Map 3F shows the location for diamond drill holes collared in zone V at a scale of 1:500. The Diamond Drill Sections (Map 3J to 3O) show the geological information in conjunction with the gold and silver assays for all the diamond drill holes. Appendix II of this report gives the Diamond Drill logs for WB 89-1 to WB 89-13. The location and relative information for the completed diamond drill holes on the Watson Bar Property can be summarized as:

HOLE #	ELEVATION	LOCATION	DIP/AZIMUTH	DEPTH	ZONE
	(metres)	EAST : NORTH		Feet : Metres	Number
Wb-89-1	1017	9300 : 10527	-70° /040	402 : 122.5	V
" 2	1017	9275 : 10523	-70° /040	385 : 117.3	V
" 3	1028	9185 : 10518	-70° /040	507 : 154.5	V
" 4	1017	9327 : 10532	-70° /040	326 : 99.4	V
" 5	1035	9300 : 10468	-70° /040	448 : 136.6	V
" 6	1524	8800 : 9573	vertical	897 : 273.6	II
" 7	1345	9390 : 9129	-60° /220	397 : 121.1	VI
" 8	1415	9331 : 9306	-60° /220	321 : 97.1	VI
" 9	1412	9369 : 9461	-60° /220	385 : 117.4	VI
" 10	1032	9336 : 10477	-70° /040	324 : 98.8	V
" 11	1035	9275 : 10468	-70° /040	351 : 106.0	V
" 12	1064	9274 : 10412	-70° /040	445 : 135.6	V
<u>WB-89-13</u>	<u>1088</u>	<u>9248 : 10367</u>	<u>-70° /040</u>	<u>625 : 190.5</u>	<u>V</u>
TOTAL FOOTAGE COMPLETED				5813 1771.8	

All of the diamond drill core is stored in racks at the campsite at kilometre 71 on the main logging road.

5.1 Diamond Drill Results

Zone II

Diamond drill hole Wb-89-6 was a vertical hole collared

at 88+00E 95+73N to evaluate a coincident weak gold-mercury-arsenic in soil anomaly on the southern edge of Zone II. This hole showed a thick section of sandstone, siltstone and conglomerate being intruded by numerous granite to granodiorite dykes and sills. Silicification as flooding of matrix and fine quartz veins was noted throughout. Approximately 1% pyrite and minor chalcopyrite also occur. The only significant assay (.013 oz/T gold) over a 1 metre interval occurred in a section of silicified and quartz healed breccia.

Zone V

The objective of the diamond drilling in zone V was to define the downdip and strike extensions of the auriferous quartz veins that were defined from the surface trenching (Map 3F).

Diamond drill section 92+00E (Map 3J) shows the most westerly diamond drill hole WB-89-3. The hole was collared to evaluate the downdip extension of the inferred surface trace of the vein zone at a point half way between the most westerly vein showing and the western extent of the main vein zone. As expected from surface mapping this hole cut several granite dykes and/or sills near the surface followed by a thick section of intercalated sandstone, siltstone and minor

conglomerate. These sediments were weakly to moderately calcareous throughout and showed graphitic sections. Although isolated thin quartz sulphide veins were encountered no significant silicified and/or veined sections with associated gold silver mineralization was observed.

Diamond drill section 92+75 (Map 3K) shows downdip evaluations of the quartz vein zone as diamond drill holes WB 89-2, 89-11, 89-12 and 89-13. This section as does section 92+00E shows granite sills and/or dykes cutting a sandstone siltstone section in the upper portion. This section shows a sheared graphitic section as the hangingwall to the banded graphitic quartz sulphide vein zone in all the holes. Although variable quartz sulphide mineralization is encountered in all the holes, the only significant assay intersection on this section is in hole 89-12 as .18 oz/T gold over 5 metres which included a one metre section which showed visible gold in a quartz-arsenopyrite-pyrite-galena-sphalerite vein and assayed .47 oz/T gold. Although quartz sulphide veining was noted in the other three holes, only a one metre section in hole 89-2 showed a significant assay (.37 oz/T over 1 metre).

Diamond Drill Section 93+00E shows diamond drill holes WB-89-1 and 89-5 as evaluating the downdip extensions of the auriferous quartz veins that in the surface trenching showed a sampled interval of 40 meters assaying .18 oz/T gold and

including a 2 metre section assaying 1.2 oz/T gold. The cross section suggests that this assay would represent a true thickness of 24 metres. Diamond drill hole 89-1 suggests a similar thickness of silicification and in the first 5 metres below the hangingwall showed visible gold and a corresponding assay of .58 oz/t gold over 5 metres in a graphitic quartz sulphide (arsenopyrite, pyrite, chalcopyrite, galena, sphalerite) vein. Diamond drill hole 89-5 intersects the graphitic hangingwall to the quartz sulphide shear zone, 45 metres downdip from hole 89-1. All the quartz sulphide (pyrite, arsenopyrite, galena) mineralization in this hole occurs within the first 3 metres of the graphitic hangingwall and showed an average of .032 oz/T gold. This would suggest that the mineralized zone pinches out downdip on this section.

Diamond drill section 93+25E shows WB 89-4 intersecting the graphitic hangingwall to the quartz sulphide mineralization 20 metres downdip from surface. The quartz sulphide (pyrite, arsenopyrite, galena) vein was extremely fractured and showed poor core recovery and low gold values (.09 oz/t over .6 m). This section suggests banded vein structure pinches out toward grid east.

Looking at the significant diamond drill intersections WB 89-1, 89-11 and 89-12 in conjunction with the surface showings in plan suggests thickening of the banded quartz

vein and associated gold mineralization on a 55 degree trend.

Zone VI

Diamond drill holes 89-7, 89-8 and 89-9 were collared to test a zone of IP resistivity high and chargeability high anomalies in conjunction with gold, mercury and arsenic in soil anomalies. This drilling showed a thick section of argillite and sandstone to be overlain by conglomerate. The conglomerate showed strong argillic alteration and minor quartz-calcite veins occur throughout. A one metre section in WB 89-9 showed anomalous gold (.014 oz/T).

6. DISCUSSION

The diamond drilling in Zones 11 and VI did not show any significant results.

The surface trenching and diamond drilling in zone V identify banded quartz sulphide mineralization with a graphitic hangingwall. It is suggested that the lensoid nature of the mineralization in this zone is controlled by the selective replacement of a northwest-southeast compression-extension structure that is documented by the

fold axis at 50 degrees. Detailed structural mapping in the area of zone V would assist in the definition of possible structural controls on the emplacement of the mineralizing fluids. Additional trenching and diamond drilling would then be necessary to evaluate the full economic potential of this zone.

7. REFERENCES

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Livingstone, K.W., 1982, Geological and Geochemical Report on
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Mining Division,
BCDM Assessment Report

Tipper, H.W. Geological Survey of Canada Open File 534

8. CERTIFICATE

I RUDOLF M. DURFELD, do hereby certify that:

- 1.) That I am a consulting geologist with offices at 180 Yorston Street, Williams Lake, B.C.
- 2.) That I am a graduate of the University of British Columbia, B.Sc. Geology 1972, and have practiced my profession with various mining and/or exploration companies and as an independent geological consultant since graduation.
- 3.) That I am a Fellow of the Geological Association of Canada (Member No: F3025), am a member of The British Columbia and Yukon Chamber of Mines and the Canadian Institute of Mining and Metallurgy.
- 4.) That I am the author of this report which is based on:
 - my personal knowledge of the property and surrounding area.
 - a compilation of the geological mapping and geochemical sampling that was conducted under my supervision.

Dated at Williams Lake, British Columbia, this 28 day of February 1990.

R.M. DURFELD, B.SC.

A handwritten signature in black ink, appearing to read 'R.M. Durfeld', written in a cursive style.

9. COST STATEMENT

June 1 to June 30

DIAMOND DRILLING

J.T. THOMAS DIAMOND DRILLING		
Invoice 89-1	3012 feet	\$ 83,168.00
Invoice 89-2	2172 feet	59,833.85

GEOCHEMICAL ANALYSES

MIN EN LABS - core analysis		
gold and silver		
831 samples @ \$18.75		15581.25

TECHNICAL STAFF

PROJECT MANAGER - R. Durfeld		
15 days @ \$350/day		5,250.00
GEOLOGIST - M. Terry		
25 days @ \$175/day		4,375.00
CORE SPLITTER - N. St Clair,		
T.Wozniak 30 days @ \$140		4,200.00

CAMP COSTS

Including room and board to		
subcontractor 170 mandays @ \$35		
		5,950.00

TRUCK RENTAL

Including fuel 60 days @ \$50		
		<u>3,000.00</u>

TOTAL COSTS JUNE 1ST TO 30TH	<u>\$181,358.10</u>	\$181,358.10
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September 5th to September 22nd

DIAMOND DRILLING

J.T. THOMAS DIAMOND DRILLING		
Invoice 89-5	625 feet	\$ 19,944.20
Invoice 89-6	cat rental and	
demob		8,687.46

GEOCHEMICAL ANALYSES

MIN EN LABS - core analysis		
gold and silver		
104 samples @ \$18.75		1,950.00

TECHNICAL STAFF

PROJECT MANAGER - R. Durfeld		
7 days @ \$350/day		2,450.00
GEOLOGIST - M. Terry		
10 days @ \$175/day		1,750.00

9. COST STATEMENT (Continued)

CORE SPLITTER - N. St Clair 10 days @ \$140	1,400.00	
<u>CAMP COSTS</u>		
Including room and board to subcontractor 67 mandays @\$35	2,345.00	
<u>TRUCK RENTAL</u>		
Including fuel 20 days @\$50	<u>1,000.00</u>	
TOTAL COSTS SEPTEMBER 5TH TO 22ND	<u>\$ 39,526.66</u>	<u>\$ 39,526.66</u>
TOTAL COST OF DRILL PROGRAMS		<u>\$ 220,884.76</u>

Dated at Williams Lake, British Columbia, this 28 day of
February 1990.

R.M. DURFELD, B.S.C.



APPENDIX I

DIAMOND DRILL LOGS

TABLE OF CONTENTS

DIAMOND DRILL HOLE LOCATIONS

Diamond Drill Logs and Gold and Silver Assay Report.

WB-89-1
WB-89-2
WB-89-4
WB-89-5
WB-89-6
WB-89-7
WB-89-8
WB-89-9
WB-89-10
WB-89-11
WB-89-12

Sampled Intervals - With Percent Core Recovery (Recov %)
- Rock Quality Definition (RQD %)

WB-89-1
WB-89-2
WB-89-4
WB-89-5
WB-89-6
WB-89-7
WB-89-8
WB-89-9
WB-89-10
WB-89-11
WB-89-12

DIAMOND DRILLING

During June and September 1989 J.T. Thomas Diamond Drilling of Smithers cored 1,771.8 metres (5,813 feet) of HQ core with a Longyear 44 Drill on the Watson Property. The elevation, location, azimuths and total depths of the holes are listed in the table below.

SUMMARY OF COMPLETED DIAMOND DRILL HOLES

HOLE #	ELEVATION	LOCATION		DIP/AZIMUTH	DEPTH	
	(metres)	EAST	NORTH		Feet	Metres
1	1017	9300	10527	-70° /040	402	122.5
2	1017	9275	10523	-70° /040	385	117.3
3	1028	9185	10518	-70° /040	507	154.5
4	1017	9327	10532	-70° /040	326	99.4
5	1035	9300	10468	-70° /040	448	136.6
6	1524	8800	9573	vertical	897	273.6
7	1345	9390	9129	-60° /220	397	121.1
8	1415	9331	9306	-60° /220	321	97.9
9	1412	9369	9461	-60° /220	385	117.4
10	1032	9336	10477	-70° /040	324	98.8
11	1035	9275	10468	-70° /040	351	106.0
12	1064	9274	10412	-70° /040	445	135.6
13	1088 (elev)	9248	10367	-70° /040	625	190.5
TOTAL FOOTAGE COMPLETED					5813	1771.8

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment				
89 1	9300	10527	1017	122.6	ZONE V				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
0 - 3.7 OVERBURDEN - cased broken rock, no core			3.7						
3.7 - 21 SANDSTONE	11001	3.7	6	.01	.001	1.6	.05		
- predominantly a grey to green medium grained sandstone.	11002	6	8	.02	.001	.3	.01		
comprised of subrounded qtz 50%, fsp 20%, mafic 20% in a	11003	8	10	.01	.001	.6	.02		
leucocratic matrix.	11004	10	12	.01	.001	.2	.01		
- minor 2ndary calcite as veinlets and cement	11005	12	14	.03	.001	.4	.01		
- bdg 75 to CA, frac 40 to CA, 11 CA and 11 bdg	11006	14	16	.01	.001	.3	.01		
- massive sections interbanded with fractured sections show-	11007	16	18	.01	.001	.3	.01		
gravelly nature in core	11008	18	20	.01	.001	.2	.01		
- trace pyrite on fractures.	11009	20	22	.02	.001	.3	.01		
21.0 -28.4 SILTSTONE sheared and graphitic.	11010	22	24	.01	.001	.3	.01		
- generally lt grey faint banded siltstone becoming black in	11011	24	26	.02	.001	.8	.02		
in graphitic sections - hanging wall shows cleavage.	11012	26	28	.06	.002	1.1	.03		
- 25M minor qtz - carbonate veins at 70 to CA									
28.4 - 29.8 MASSIVE SANDSTONE strong calcite on frac & mtx	11013	28	30	.07	.002	1.7	.05		
28.4 - 34.5 VEIN AND VEIN BRECCIA ZONE	11014	30	31	31.86	.929	35.8	1.04		
- Host rock is a graphitic siltstone with qtz, cpy, sph, gn	11015	31	32	13.47	.393	55.6	1.62		
asp, electrum, py. Vein comprised predominantly of crystal-	11016	32	33	13.5	.394	135.5	3.95		
line qtz and calcite in part showing vuggy nature. Sulphide	11017	33	34	38.99	1.137	41.1	1.2		
and gold mineralization as discrete blebs. The larger sulphi	11018	34	35	2.23	.065	1.8	.05		
de grains show well developed crystals and the gold where									
visible as isolated grains was smeared on the core as grains									
less than .5mm.									
34.5 to 37M Fine Grained Sandstone With Argillite bands	11019	35	36	.03	.001	1.7	.05		
- bdg 80 to CA, minor frac 11 and 90 to CA	11020	36	38	.01	.001	.4	.01		
- fine green grey sandstone with argillite bands									
37 to 43 M Coarse Grained Sandstone	11021	38	40	.02	.001	.3	.01		
- massive grey, comprised of subrounded qtz, fsp and biotite	11022	40	42	.01	.001	.3	.01		
grains in a finer part calcareous matrix.	11023	42	43	.07	.002	.7	.02		
- fining upwards.									
43 to 47M Vein and Shear Zone	11024	43	44	1	.029	1.6	.05		
- siltstone with fine grained sandstone	11025	44	45	2.59	.076	1.9	.06		
- fault gouge in contact @ 60 to CA, main shear @ 44.8M	11026	45	46	.44	.013	3.8	.11		
	11027	46	47	.54	.016	2.4	.07		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment						
89 1	9300	10527	1017	122.6	ZONE V						
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
47 to 51.3 M Fine to Medium Grained Sandstone					11028	47	49	.01	.005	2	.06
- massive light grey bdg @ 80 to CA					11029	49	51	.01	.001	2.1	.06
- fracture @ 50 and 11 CA, broken & sheared core 50 to 51M											
51.3 to 55.2M Siltstone with Quartz Vein & Shear Zones					11030	51	52	.42	.012	2.6	.08
- 52 to 53 sheared siltstone					11031	52	53	.82	.024	4.9	.14
- 53 to 55 quartz vein with graphite and coarse pyrite					11032	53	54	1.19	.035	4.1	.12
					11033	54	55	.86	.025	4	.12
55.2 to 67.1 Fine to Medium Grained Sandstone					11034	55	56	.3	.009	2.2	.06
- thin beds of dk grey siltstone bdg 80 to CA					11035	56	58	.01	.001	1.8	.05
					11036	58	60	.02	.001	.7	.02
					11037	60	62	.01	.001	.4	.01
					11038	62	64	.01	.001	.9	.03
					11039	64	65	.01	.001	.2	.01
					11040	65	66	.05	.001	2.3	.07
					11041	66	68	.02	.001	.2	.01
67.1 to 69.4 Massive Coarse Grained Sandstone					11042	68	69	.03	.001	.6	.02
- calcite as matrix and veinlets											
- 68.3 .2 M shear zone											
- bdg 60 to CA frac 11 to CA											
69.4 to 69.7 Quartz-Carbonate vein with py and asp					11043	69	70	.46	.013	1	.03
69.7 to 74.3M Massive Coarse Grained Sandstone					11044	70	71	.01	.001	1.7	.05
- lt to med grey with finer dk grey bands					11045	71	72	.01	.001	1.2	.04
- carbonate veinlets throughout					11046	72	73	.01	.001	.9	.03
- bdg 45 to 60 to CA					11047	73	74	.02	.001	.3	.01
74.3 to 75.8M Graphitic Sheared Siltstone					11048	74	75	.01	.001	.3	.01
- bdg 70 to CA dk grey to black					11049	75	76	.01	.001	.4	.01
75.8 to 95M Interbedded Fine and Coarse Sandstone					11050	76	77	.02	.001	.2	.01
- minor thin beds of siltstone bdg 75 to CA					11051	77	79	.01	.001	.4	.01
- 87.2 fault with lcm of gouge					11052	79	81	.05	.001	.2	.01
- 94.5 10 cm graphitic section					11053	81	83	.01	.001	.3	.01

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment							
89 2	9275	10523	1014	116.1	ZONE V							
Geo. Desc.						Smpl Nmbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
Overburden, no core								5.2				
5.2 - 26 INTERBEDDED SILTSTONE AND SANDSTONE						11074	5.2	7.2	.04	.001	1.4	.04
- light green grey fine banded siltstone with fine irregular dark graphitic bands.												
- sandstone as subrounded qtz and fsp grains in a fine grey minor mafic matrix.						11075	7.2	9.2	.18	.005	.9	.03
- graded bedding suggests tops to top of hole.												
- sheared sections throughout, strongest 17 to 23M						11076	9.2	11.2	.04	.001	.7	.02
- fractures @ 38 and 56 to CA												
- carbonate on fractures and matrix						11077	11.2	13.2	.05	.001	.4	.01
- fractures 38 and 56 to CA												
- bedding 67 to CA						11078	13.2	15.2	.02	.001	1.6	.05
- sulphide mineralization < 1%												
- no core recovered 15.2 to 15.8 and 17.4 to 18.6 due to						11079	15.9	17.4	.11	.003	1.7	.05
						11080	18.8	19.8	.03	.001	1.8	.05
						11081	19.8	20.7	.08	.002	.9	.03
						11082	21.3	23.3	.02	.001	1	.03
						11083	23.3	25.3	.03	.001	.6	.02
						11084	25.3	26.3	.06	.002	.9	.03
26 - 56.4 M INTERBEDDED SILTSTONE AND SANDSTONE AS ABOVE						11085	26.3	27.3	.04	.001	1.7	.05
- LOCALLY QUARTZ VEINED AND SULPHIDE MINERALIZED						11086	27.3	28.3	.03	.001	1.8	.05
- graphitic sheared sections 26-31, 48-49, 51-52						11087	28.3	29.3	.62	.018	.7	.02
- silicification as 3mm quartz stockworks throughout						11088	29.3	30.3	.04	.001	.9	.03
- massive quartz veins with associated arsenopyrite and pyrite 38.3-42, 45.3-47.5, 49-49.5 metres.						11089	30.3	31.3	12.7	.37	8.2	.24
						11090	31.3	32.3	.59	.017	2.1	.06
- minor galena also noted, sulphides as distinct grains in quartz veins suggesting several stages of deposition.						11091	32.3	33.3	.21	.006	1.9	.06
						11092	33.3	34.3	.06	.002	1.9	.06
- pyrite throughout as euhedral grains up to 3mm. comprising up to 5% of the rock.						11093	34.3	35.3	.17	.005	1.9	.06
						11094	35.3	36.3	.19	.006	1.8	.05
- quartz vein contacts @ 62 and 75 to CA						11095	36.3	37.3	.05	.001	1.8	.05
- fractures @ 45 & 60 to CA						11096	37.3	38.3	.4	.012	1.9	.06
- sulphided and graphite more concentrated in lower portions of individual veins.						11097	38.3	39.3	3.39	.099	2	.06
						11098	39.3	40.3	.89	.026	1.9	.06
						11099	40.3	41.3	.63	.018	1.8	.05
						11100	41.3	42.3	1.78	.052	1.8	.05

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment						
89 2	9275	10523	1014	116.1	ZONE V						
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
					11101	42.3	43.3	1.12	.033	1.6	.05
					11102	43.3	44.3	.92	.027	1.7	.05
					11103	44.3	45.8	.77	.022	1.9	.06
					11104	45.8	46.3	4.33	.126	1.8	.05
					11105	46.3	46.8	3.74	.109	3.7	.11
					11106	46.8	48.3	.9	.026	1.8	.05
					11107	48.3	49.3	.33	.01	1.4	.04
					11108	49.3	50.3	.03	.001	1.6	.05
					11109	50.3	51.3	.02	.001	1.8	.05
					11110	51.3	52.3	.22	.006	1.7	.05
					11111	52.3	53.3	.39	.011	1.9	.06
					11112	53.3	54.3	.04	.001	1.1	.03
					11113	54.3	56.3	.02	.001	1	.03
56.4 - 86M INTERBEDDED SANDSTONE AND SILTSTONE AS 5.2 TO					11114	56.3	58.3	.01	.001	.8	.02
26M IN UPPER SECTION					11115	58.3	59.3	.02	.001	1.3	.04
- strong graphitic sections in siltstone 78-79, 63-64					11116	59.3	60.3	.01	.001	1.5	.04
- fractures @ 40, 60, 90 to CA					11117	60.3	61.3	.01	.001	1.9	.06
- bedding @ 70 to CA					11118	61.3	63.3	.04	.001	1.8	.05
- carbonate as matrix throughout, strongest in sheared					11119	63.3	65.3	.02	.001	.9	.03
sections.					11120	65.3	67.3	.04	.001	.7	.02
					11121	67.3	69.3	.05	.001	1.7	.05
					11122	69.3	71.3	.04	.001	2.3	.07
					11123	71.3	73.3	.03	.001	1.8	.05
					11124	73.3	75.3	.04	.001	1.1	.03
					11125	75.3	77.3	.01	.001	.9	.03
					11126	77.3	79.3	.03	.001	.8	.02
					11127	79.3	81.3	.01	.001	1	.03
					11128	81.3	83.3	.01	.001	1.7	.05
					11129	83.3	85.3	.02	.001	1.9	.06
86 - 117.3M LIGHT GREY BANDED SILTSTONE WITH DARKER					11130	85.3	87.3	.01	.001	1.3	.04
GRAPHITIC SECTIONS.					11131	87.3	89.3	.01	.001	1.7	.05
- massive graphite 89-90, 93-99, 100-102, 107-108, 112-113					11132	89.3	91.3	.02	.001	1.2	.04
- fractures @ 30, 40, 65 to core axis					11133	91.3	93.3	.01	.001	.9	.03
- carbonate on fractures and matrix throughout					11134	93.3	94.3	.01	.001	1	.03
- 93.5M - 2 cm calcite veinlet with 10% py and tr cpy					11135	94.3	96.3	.02	.001	1.1	.03
- bedding @ 70 to CA					11136	96.3	98.3	.01	.001	1.6	.05
- sheared throughout 100, 107, 112					11137	98.3	100.3	.03	.001	.9	.03
					11138	100.3	102.3	.02	.001	.8	.02

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment						
89 2	9275	10523	1014	116.1	ZONE V						
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
					11139	102.3	104.3	.01	.001	1.7	.05
					11140	104.3	106.3	.02	.001	1.4	.04
					11141	106.3	108.3	.03	.001	1.2	.04
					11142	108.3	110.3	.02	.001	1.9	.06
					11143	110.3	112.3	.01	.001	1.8	.05
					11144	112.3	114.3	.03	.001	1.8	.05
116.1 END OF HOLE					11145	114.3	116.1	.02	.001	1.9	.06

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 3	9185	10518	1030	154.5	ZONE V

Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
------------	----------	------	----	----------	-----------	----------	-----------

0 - 3M OVERBURDEN (cased bedrock no core recovered)			3				
3-7.8M FELDSPAR HORNBLENDE GRANITE	11146	3	5	.01	.001	.3	.01
Light green-grey colored dyke; 10% mafics (mainly hornblende showing subhedral to euhedral crystals	11147	5	7	.02	.001	.2	.01
	11148	7	9	.01	.001	.5	.01

, some phenocrysts up to 1cm; 50% - 60% white feldspars showing subhedral phenocrysts up to 5mm, feldspars show weak alteration (argillic), mafics show some alteration to chlorite; Quartz eyes up to 3mm present; pyrite is present as fine

disseminated grains in trace amounts.

7.8 - 8.2M DYKE BRECCIA
Fragments of above dyke in a medium to dark grey fine grained sandstone; dyke fragments range in size from 1mm to 5-6cm.

8.2 - 15.5M SANDSTONE
Interbedded light to medium grey fine to coarse

grained sandstone, subrounded to rounded grains,	11149	9	11	.04	.001	2.3	.07
fining up hole, carbonate on fractured surfaces,	11150	11	13	.01	.001	1.1	.03
thin (1mm) discontinuous bands of black siltstone throughout @ 70 to C.A	11151	13	15	.02	.001	.4	.01

- 15.2-15.5M sheared core

15.5 - 17.5M FELDSPAR HORNBLENDE GRANODIORITE	11152	15	17	.03	.001	.2	.01
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- Light green-grey color with black (mafic) phenocrysts, 25% mafics, mainly subhedral hornblende crystals with biotite; both hornblende and biotite show alteration to chlorite, hornblende crystals up to 5mm ; 40% - 50% white

feldspars, subhedral to anhedral crystals up to 5mm, quartz eyes present up to 2mm.

-17.5M contact between granodiorite and sandstone @ 70.

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment						
89 3	9185	10518	1030	154.5	ZONE V						
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
17.5 - 22.2M SANDSTONE					11153	17	19	.02	.001	.6	.02
					11154	19	21	.01	.001	.2	.01
-Interbedded light to medium grey fine to coarse grained sandstone with thin (1mm) bands of black siltstone, fining up hole, carbonate on fractured surfaces , bedding at 70 to 80 to C.A.											
- 18.6 - 19.0M Fault ; broken core and gouge											
- 22.2M contact between sandstone and dyke @ 80 to C.A.											
22.2-23.2M FELDSPAR HORHLENDE GRANODIORITE					11155	21	23	.06	.002	1.5	.04
- 30% mafics, mainly hornblende and biotite, subhedral crystals up to 5mm, some chlorite alteration; 40% white feldspars, subhedral, crystals up to 5mm, some alteration (weak) of feldspars to clays.											
23.2 - 33.4M SANDSTONE					11156	23	25	.01	.001	.4	.01
					11157	25	27	.02	.001	.3	.01
- Interbedded light grey fine to coarse grained sandstone with dark grey siltstone beds (up to 15cm) throughout;					11158	27	29	.01	.001	.3	.01
					11159	29	31	.02	.001	.4	.01
weakly calcareous, carbonate on fractured surfaces; minor amounts of sericite, fractures at 10 , 30 ,70 to C.A.					11160	31	33	.01	.001	.4	.01
- 32.8-33.4M shear zone; broken core and gouge											
33.4 - 34.6M ALTERED SANDSTONE					11161	33	35	.01	.001	.2	.01
- Medium grey coarse grained sandstone. 20% mafics, 40% white feldspars, 40% quartz; grains up to 1mm ; grains are subhedral to anhedral with some euhedral mafics (hornblende). Some weak argillic alteration with the feldspars and some chlorite alteration with the mafics.											

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 3	9185	10518	1030	154.5	ZONE V

Geo. Desc.	Smpl Nubr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
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- 34.6M contact @ 75 to C.A.

34.6 - 40.8M SANDSTONE

- Interbedded light to medium grey fine to medium grained sandstone with dark grey bands of siltstone up to 1cm wide.	11162	35	37	.01	.001	.3	.01
Weak to moderately calcareous throughout; fractures at 10 , 40 , and 80 to C.A. ; bedding @ 75 to 80 to C.A.	11163	37	39	.01	.001	.2	.01
	11164	39	41	.01	.001	.4	.01

- 35.6M bedding @ 75 to C.A.
- 38-38.8M broken core
- 40.8M contact @ 75 to C.A.

40.8M - 41.9M ALTERED SANDSTONE

- Medium grey medium to coarse grained sandstone with 20% mafics (mainly hornblende), 40% feldspars, and 40% quartz. Hornblendes up to 5mm, anhedral to subhedral , and show chlorite alteration. Feldspars are white, anhedral to subhedral, and appear cloudy (altered). Feldspars are up to 5mm. Quartz constitutes 40% of rock.	11165	41	43	.02	.001	.2	.01
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- 41.9M contact at 80 to C.A.

41.9 - 49.2M SANDSTONE

- Light grey fine grained sandstone with bands of siltstone	11166	43	45	.01	.001	.2	.01
	11167	45	47	.02	.001	.3	.01
	11168	47	49	.03	.001	.2	.01

up to 2cm wide. Some Fe staining on fractured surfaces.
Core is broken up and rounded by drill bit.

49.2 - 50.6M GRAPHITIC SHEAR ZONE

	11169	49	51	.02	.001	.4	.01
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50.6 - 56.4M SANDSTONE

	11170	51	52.7	.03	.001	.3	.01
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DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

Hole ID	Easting	Northing	Elev	Length	Comment						
89 3	9185	10518	1030	154.5	ZONE V						
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
- Interbedded fine to medium grained light to dark grey sandstone; weakly calcareous throughout; Fe carbonate on fractured surfaces; weak silicification on fractured surfaces. Bedding at 75 to 80 to C.A. Fining up hole.					11171	52.7	53.6	.01	.001	.4	.01
					11172	53.6	55	.01	.001	.6	.02
-52.7 - 53.6M Very fine grained dark grey sandstone with siltstone partings throughout. Thin discontinuous calcite veinlets throughout, 2% fine disseminated pyrite in streaks at 65 to C.A.											
-53.2M bedding at 80 to C.A.											
-55.5-56.4M Shear zone with broken, rounded core and gouge.											
56.4 - 59M GRAPHITIC SHEAR ZONE					11173	55	57	.01	.001	.4	.01
					11174	57	59	.02	.001	.2	.01
-Dark grey to black siltstone with graphitic sections throughout; discontinuous carbonate veins (sheared) and veinlets throughout; no visible sulphides											
59 - 101.5M SANDSTONE					11175	59	61	.01	.001	1.6	.05
					11176	61	63	.01	.001	.4	.01
-Interbedded light to medium gre fine to coarse grained sandstone with thin dark grey siltstone beds and graphitic sections. Less than 1% fine disseminated pyrite throughout, locally up to 2%. Carbonate veinlets throughout; bedding at 60 - 70 to C.A.					11177	63	65	.01	.001	.3	.01
					11178	65	67	.01	.001	.8	.02
					11179	67	69	.01	.001	.4	.01
					11180	69	71.6	.02	.001	.3	.01
					11181	71.6	72.6	.21	.006	.5	.01
					11182	72.6	74	.02	.001	.2	.01
					11183	74	76	.02	.001	.3	.01
- 64.1-64.4M graphitic section, contacts at 70 to C.A.					11184	76	78	.01	.001	.4	.01
- 72.0-72.4M graphitic shear, <1% pyrite, at 70 to C.A.					11185	78	80	.01	.001	.2	.01
-76.1-78.5M very coarse grained silicious (weak) sandstone					11186	80	82	.01	.001	.4	.01
- 78.5-80.6M shear zone at 60 to C.A.					11187	82	84	.02	.001	1.7	.05
- 82.8-83.1M graphitic section, contacts at 70 to C.A.					11188	84	86	.01	.001	.6	.02
- 86.8-87.2M carbonate vein stockwork; discontinuos veins at widths up to 3cm, no sulphides					11189	86	88	.01	.001	.8	.02
					11190	88	90	.03	.001	1.4	.04
- 88.4M 6cm milky white quartz-carbonate vein (mainly carbonate), argillite partings, 2 - 3% euhedral pyrite					11191	90	92	.01	.001	.2	.01
					11192	92	94	.02	.001	.7	.02

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 5

Hole ID	Easting	Northing	Elev	Length	Comment								
89 3	9185	10518	1030	154.5	ZONE V								
Geo. Desc.				Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)			
located in contact with partings, host is a fine grained sandstone, contacts at 80 to 90 to C.A.				11193	94	96	.01	.001	.6	.02			
				11194	96	98	.01	.001	.3	.01			
				11195	98	100	.01	.001	.3	.01			
- 89 -90M shear zone				11196	100	102	.01	.001	.2	.01			
- 90.9M 2cm discontinuous carbonate vein, no sulphides													
101.5 - 103M SANDSTONE				11197	102	104	.01	.001	.5	.01			
- Massive medium grey very coarse grained sandstone; 20% mafics, weak to moderate silicification throughout.													
- 103M bedding (contact) at 70 to C.A.													
103 - 125M SANDSTONE				11198	104	106	.02	.001	.4	.01			
				11199	106	108	.01	.001	.2	.01			
-Interbedded light to medium grey fine to medium grained sandstone with dark grey siltstone and graphitic sections; moderately calcareous from 106 to 107.5M.				11200	108	110	.01	.001	.3	.01			
				11201	110	112	.03	.001	.6	.02			
				11202	112	114	.01	.001	.3	.01			
				11203	114	116	.02	.001	.4	.01			
				11204	116	118	.01	.001	.9	.03			
-103.7-103.9M graphitic shear at 90 to C.A.				11205	118	120	.01	.001	1.6	.05			
-104.1M bedding at 70 to C.A.				11206	120	122	.01	.001	.2	.01			
-104.2M fracture at 40 to C.A.				11207	122	124	.03	.001	.7	.02			
-105.8M bedding at 60 to C.A.				11208	124	126	.01	.001	.6	.02			
-106.4-106.8M shear at 70 to C.A.													
-109M bedding at 55 to C.A.													
-109.4m 2cm gouge at 60 to C.A.													
-115M bedding at 70 to C.A.													
-116.2-117.3M graphitic shear													
-118.2-18.3M graphitic shear													
-122-124.2M shear zone at 60 to C.A. with moderately graphitic section from 122 to 122.8M													
-124.8-125.3M shear zone													
125.3 - 132.0M CONGLOMERATE				11209	126	128	.02	.001	.3	.01			

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 6

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Hole ID	Easting	Northing	Elev	Length	Comment
89 3	9185	10518	1030	154.5	ZONE V

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Geo. Desc.	Smpl Nbr	From	To	Au	Au	Ag	Ag
				(G/T)	(OZ/T)	(G/T)	(OZ/T)

	11210	128	130	.01	.001	.2	.01
-Light colored pebble conglomerate with clasts up to 2cm in a coarse grained sandy matrix. Pebbles elongated at 75 to C.A ; weak to moderately calcareous throughout; matrix supported	11211	130	132	.01	.001	.4	.01
	11212	132	134	.01	.001	.3	.01

132.0 - 135.2M SANDSTONE	11213	134	136	.02	.001	.2	.01
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-light grey fine to medium grained sandstone; quartz - rich with < 10% mafics; grains rounded to well rounded; fining sequence indicates tops up hole; carbonate on some fracture surfaces; bedding at 70 to 80 to C.A.

-135.2M contact at 75 to C.A.

135.2 - 137.2M SILTSTONE	11214	136	138	.01	.001	.3	.01
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-Dark grey siltstone with minor graphitic sections; weak to moderately calcareous throughout; bedding @ 70 - 80 to C.A.

137.2 - 154.5M SANDSTONE	11215	138	140	.01	.001	1	.03
	11216	140	142	.01	.001	.2	.01
	11217	142	144	.01	.001	.2	.01

-Interbedded light grey fine to coarse grained sandstone

with beds of dark grey siltstone and some graphitic sections up to 30cm wide; thin (<1mm) carbonate veinlets throughout; bedding at 70 to 90 to C.A.	11218	144	146	.02	.001	.3	.01
	11219	146	148	.01	.001	.2	.01
	11220	148	150	.03	.001	.2	.01
	11221	150	152	.02	.001	.2	.01

-139.2M bedding at 70 to C.A.	11222	152	154.5	.01	.001	.3	.01
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-140.6M gouge at 30 to C.A.

-141.9 - 142M shear at 70 to C.A.

-151.4 - 151.7M graphitic shear at 20 to C.A.

-154.5 End of Hole

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment							
89 4	9328	10532	1014	99.4	ZONE V							
Geo. Desc.						Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
								4.6				
4.6 - 29.2M INTERBEDDED FINE AND COARSE GRAINED SANDSTONE						11223	4.6	7	.02	.001	.4	.01
- argillite partings in fine grained sandstone						11224	7	9	.03	.001	.2	.01
- carbonate on fracture surfaces						11225	9	11	.04	.001	.4	.01
- light to medium gray						11226	11	13	.06	.002	.3	.01
- bdg 60 - 70 to CA						11227	13	15	.01	.001	.3	.01
- fracture @ 70 & 11 CA						11228	15	17	.02	.001	.4	.01
- X-bedding suggests tops to top of hole						11229	17	19	.01	.001	1.9	.06
- broken and ground core throughout in part reflected by poor core recovery.						11230	19	21	.01	.001	.3	.01
						11231	21	23	.05	.001	.4	.01
- 27.2 to 29.2 shear zone						11232	23	25	.01	.001	.3	.01
						11233	25	27	.02	.001	.2	.01
						11234	27	29	.04	.001	.2	.01
29.2 - 31.7 HANGINGWALL GRAPHITIC SHEAR ZONE						11235	29	31	.03	.001	1.6	.05
- dark grey siltstone with graphitic sections , carbonate veinlets and fracture fills throughout						11236	31	32	.01	.001	1.4	.04
- fractures 70 to 80 to CA												
- graphitic lower contact at 65 to CA												
31.7 - 32.6 VEIN ZONE						11237	32	32.6	3.08	.09	6	.18
- partly not recovered												
- 40 to 50% vein material, balance alt'd siltstone.												
- 31.7 to 31.8 light green grey clay gouge with reddish brown patches and carbonate alteration.												
- 31.8 2cm greenish gouge												
- 31.9 to 32.6 quartz carbonate vein greyish white in colour with dark argillite partings and iron stained.												
- pyrite, arsenopyrite and galena present												
- irregular upper contact at 80 to CA												
- lower contact - shear zone												
32.6 - 63.2M GREY TO GREEN GREY INTERBEDDED MEDIUM TO COARSE GRAINED SANDSTONE.						11238	32.6	34	.06	.002	.3	.01
						11239	34	35	.28	.008	.5	.01
- 32.6 to 34.6 coarse sandstone with thin >1mm bands						11240	35	37	.01	.001	.2	.01
argillite						11241	37	39	.01	.001	.3	.01

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment							
89 4	9328	10532	1014	99.4	ZONE V							
Geo. Desc.						Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
- bdg 33.2 @80, 42 @65, 45 @ 80 to CA						11242	39	41	.01	.001	.3	.01
- faults @ 30 and 60 to CA						11243	41	43	.04	.001	.2	.01
- 34.6 to 44.2 coarse grained massive grey sandstone						11244	43	45	.04	.001	.2	.01
- weak to moderate carbonate throughout.						11245	45	47	.01	.001	.8	.02
- 44.2 to 65.5 fine sandstone with dark thin siltstone lam-						11246	47	49	.01	.001	.6	.02
inations - bands carbonaceous to graphitic @ 50M, 53M						11247	49	51	.01	.001	.7	.02
						11248	51	53	.01	.001	1	.03
						11249	53	55	.05	.001	.4	.01
						11250	55	57	.01	.001	.5	.01
						11251	57	59	.01	.001	.4	.01
						11252	59	61	.02	.001	.2	.01
62.5 - 63.2M SHORT SECTION OF COARSE SANDSTONE WITH CARBONACEOUS MATRIX						11253	61	63	.01	.001	.2	.01
- secondary muscovite and biotite as distinct grains.												
63.2 - 77.8M MEDIUM AND COARSE GRAINED SANDSTONE WITH GRAPHITIC SECTIONS						11254	63	65	.01	.001	.3	.01
- 63.2 - 74M calcite veins to 5cm thick						11255	65	67	.03	.001	.4	.01
						11256	67	69	.02	.001	.4	.01
- 69M flame structure - tops to top of hole						11257	69	71	.01	.001	.5	.01
- weakly calcareous throughout						11258	71	73	.02	.001	.2	.01
- bdg @ 65 to 11 to CA						11259	73	75	.01	.001	.6	.02
- 71M graphitic section.						11260	75	77	.01	.001	.3	.01
- shears @ 40 to CA												
- 74-77.8M coarse grained massive sandstone												
77.8 - 90.5M INTERBEDDED SANDSTONE SILTSTONE AND ARGILLITE						11261	77	79	.01	.001	.2	.01
- 78 to 89 light to medium grey sandstone with dark grey bands of siltstone - moderate calcareous						11262	79	81	.01	.001	.2	.01
						11263	81	83	.02	.001	.4	.01
- bdg @ 80 to CA						11264	83	85	.01	.001	.2	.01
- 89 to 90 dark grey to black graphitic argillite						11265	85	87	.01	.001	.2	.01
						11266	87	89	.01	.001	.4	.01
						11267	89	91	.02	.001	.3	.01
90.5 - 96.8 FELDSPAR PORPHYRY DYKE						11268	91	93	.01	.001	.3	.01
- light grey						11269	93	95	.01	.001	.4	.01
- needs compositional description						11270	95	97	.01	.001	.2	.01

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

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Hole ID      Easting   Northing   Elev   Length  Comment
89 4         9328      10532     1014   99.4    ZONE V
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Geo.                               Smpl      Au      Au      Ag      Ag
Desc.                             Nbr  From   To (G/T) (OZ/T) (G/T) (OZ/T)
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96.8 - 99.4M INTERBEDDED SANDSTONE AND SILTSTONE      11271   97 99.4   .02   .001   .3   .01
- grey sandstone and dark grey siltstone interbanded
- bdg 75 to CA tops to top of hole
    
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99.4M END OF HOLE

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment							
89 5	9302	10467	1041	137	ZONE V							
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)	
3.4 - 30.0m INTERBEDDED SANDSTONE					11272	3.4	6	.04	.001	.2	.01	
- interbedded light to medium grey, f.g. to c.g. sandstone					11273	6	8	.01	.001	.2	.01	
- carbonate on fracture surfaces					11274	8	10	.02	.001	.5	.01	
- some shearing					11275	10	12	.02	.001	.2	.01	
- 5.5m bedding @ 80 to CA					11276	12	14	.01	.001	.3	.01	
- 7.7m bedding perpendicular to CA					11277	14	16	.02	.001	.4	.01	
- 10.4 - 10.6m fault gouge @ 65 to CA					11278	16	18	.01	.001	.2	.01	
- 11.2m fracture @ 30 to CA					11279	18	20	.01	.001	.5	.01	
- 13.8m bedding @ 80 to CA					11280	20	22	.01	.001	.6	.02	
- 14.3 - 14.5m fault gouge with hematite staining					11281	22	24	.01	.001	.4	.01	
- 17.5 - 18.5m shear zone, gouge @ 70 to CA					11282	24	26	.02	.001	.2	.01	
- 21.8m bedding @ 70 to CA					11283	26	28	.01	.001	.4	.01	
- 23.5m 3cm of clay gouge @ 70 to CA					11284	28	30	.02	.001	.2	.01	
- 25.0m bedding @ 75 to CA												
- 26.6m bedding @ 70 to CA												
- 29.2 - 29.6m broken, rounded core												
- 30.0m contact between Sd/Dyke @ 40 to CA												
30.0 - 39.0 FELDSPAR DYKE					11285	30	32	.01	.001	.2	.01	
- Light blue-grey with feldspars up to 5mm					11286	32	34	.02	.001	.2	.01	
- weak argillic alteration in some sections					11287	34	36	.01	.001	.2	.01	
- moderate to strongly silicified					11288	36	38	.03	.001	.3	.01	
- fractures @ 30 and 40 to CA					11289	38	40	.02	.001	.2	.01	
39.0 - 41.3m SANDSTONE					11290	40	41.3	.02	.001	.2	.01	
- medium grey to reddish-brown												
- medium to course grained, weakly silicified												
- badly broken core												
41.3 - 42.3m DYKE BRECCIA					11291	41.3	42.3	.01	.001	.4	.01	
- rusty-white												
- strongly silicified, moderately argillic altered												
- 41.3 bedding(contact) @ 70 to CA												
- 42.3 bedding(contact) @ 60 to CA												
42.3 - 43.0m SHEAR ZONE					11292	42.3	43	.01	.001	.5	.01	
- light brown-grey clay with large(<3cm) clasts of fine to medium grained, light to medium grey sandstone												
43.0 - 45.0m COURSE GRAINED SANDSTONE					11293	43	45	.01	.001	.2	.01	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment						
89 5	9302	10467	1041	137	ZONE V						
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
- light to medium grey - weakly silicified, carbonate along fractures - some rip up clasts of grey fine grained sandstone - fractures range from 30 to 90 to CA											
45.0 - 63.5 INTERBEDDED SANDSTONE AND SILTSTONE					11294	45	47	.01	.001	.2	.01
- interbedded fine to medium grained, light to medium grey sandstone with thin interbeds of dark grey siltstone					11295	47	49	.01	.001	.6	.02
					11296	49	51	.02	.001	.2	.01
- fining upward sequence shows tops up hole					11297	51	53	.01	.001	.4	.01
- 45.6 - 45.7m gouge					11298	53	55	.03	.001	.2	.01
- 45.7 - 49.4m broken, rounded core					11299	55	57	.01	.001	.4	.01
- 51.2m bedding @ 80 to CA					11300	57	59	.01	.001	.4	.01
- 52.0m bedding @ 70 to CA					11301	59	61	.04	.001	.4	.01
- 53.8m bedding @ 70 to CA					11302	61	63	.02	.001	.3	.01
- 54.0m bedding @ 65 to CA											
- 56.3m bedding @ 70 to CA fining sequence shows tops up hole											
- 57.7m bedding @ 70 to CA											
- 61.5m bedding @ 80 to CA											
- 62.3m bedding @ 70 to CA											
63.5 - 67.1m SHEAR ZONE, INTERBEDDED SANDSTONE AND SILTSTONE					11303	63	65	.02	.001	.5	.01
- interbedded dark grey to black graphitic siltstone and light grey to light brown medium grained sandstone					11304	65	67	.06	.002	.6	.02
- most of section is sheared											
- bedding @ 70 to CA											
- shears @ 70 - 90 to CA											
67.1 - 68.0m GRAPHITIC ZONE					11305	67	68	.19	.006	2.2	.06
- <1% pyrite throughout											
- micaceous fractures											
- bedding @ 80 to CA											
68.0 - 69.7m SHEARED SANDSTONE					11306	68	69	.02	.001	.4	.01
- sheared light grey medium grained sandstone with carbonate veins and 10cm graphitic bed					11307	69	70	.37	.011	.3	.01
- <1% fine pyrite throughout											
- bedding @ 70 - 80 to CA											
69.7 - 71.3m VEIN AND SHEAR ZONE (20% is vein material)					11308	70	70.7	1.41	.041	1	.03

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment							
89 5	9302	10467	1041	137	ZONE V							
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)	
- medium to course grained, light grey, soft altered sandstone with graphitic sections and quartz-carbonate veins (up to 4cm wide) throughout					11309	70.7	71.3	2.19	.064	2.3	.07	
- up to 1% pyrite throughout with greater concentrations occurring in veins												
- small (<1cm) shears												
- quartz veins appear to be composed of several different stages (generations)												
- banded in appearance with a crack/seal texture												
- fine pyrite streaks (up to 8cm) also appear to be banded												
- veins contain pyrite with some arsenopyrite, and trace galena												
- 71.0 - 71.2 - vein breccia												
- vein perpendicular CA												
71.3 - 86.0m INTERBEDDED SANDSTONE					11310	71.3	73	.6	.018	.2	.01	
- fine to course grained, light grey medium grey, calcareous sections					11311	73	75	.15	.004	.4	.01	
					11312	75	77	.07	.002	.2	.01	
- carbonate veinlets and some shear zones (up to 50cm)					11313	77	79	.05	.001	.4	.01	
- fining sequence indicates tops up hole					11314	79	80	.19	.006	.5	.01	
- 71.9m - bedding @ 80 to CA					11315	80	81	.25	.007	.5	.01	
- 73m - bedding @ 70 to CA					11316	81	82	.26	.008	.3	.01	
- 74m - bedding @ 70 to CA					11317	82	84	.32	.009	.2	.01	
- 75m - 3-4cm clay gouge perpendicular to CA					11318	84	86	.03	.001	.4	.01	
- 76.2m - bedding @ 70 to CA												
- 77.8m - 78.0m - broken core with sandy gouge												
- 80m - bedding @ 80 to CA												
- 80.4m - 3cm quartz carbonate vein												
- banded stylonitic texture												
- 2% fine pyrite, <1% arsenopyrite												
- contact perpendicular to CA												
- 81 - 82m course grained sandstone with fine pyrite (1%) throughout												
- 81.2m bedding @ 60 to CA												
- 82m bedding @ 75 to CA												
- 83.2 - 84m broken, sheared core												
- 84.9 - 85.6m bedding 20 - parallel to CA												
- 86.0m bedding @ 50 to CA												
86 - 88.4 SHEAR ZONE					11319	86	88	.56	.016	1.5	.04	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

Hole ID	Easting	Northing	Elev	Length	Comment							
89 5	9302	10467	1041	137	ZONE V							
Geo. Desc.						Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)

- medium grey siltstone, with graphitic sections												
- course pyrite throughout												
88.4 - 134.2 INTERBEDDED SANDSTONE						11320	88	90	.66	.019	.4	.01
- interbedded fine to very course grained sandstone						11321	90	92	.03	.001	.4	.01
(light to medium grey), with some dark grey siltstone beds						11322	92	94	.02	.001	.2	.01
						11323	94	96	.01	.001	.2	.01
- pyrite in some sections						11324	96	98	.02	.001	.4	.01
- 90.4m - bedding @ 60 to CA						11325	98	100	.01	.001	.2	.01
- 90.8m - bedding @ 55 to CA						11326	100	102	.02	.001	.4	.01
- 93.0m - bedding @ 50 to CA						11327	102	104	.06	.002	.3	.01
- 94.3m - bedding @ 60 to CA						11328	104	106	.02	.001	1.2	.04
- 96.2 - 96.4m graphitic zone						11329	106	108	.1	.003	.4	.01
- 98.0m - 2cm shear @ 70 to CA						11330	108	110	.06	.002	.5	.01
- 98.4 - 101.2m - very course grained clean sandstone						11331	110	112	.03	.001	.3	.01
- 101.5m - bedding @ 60 to CA						11332	112	114	.02	.001	.2	.01
- 101.6 - 101.8m - graphitic sections, contact @ 50 to CA						11333	114	116	.02	.001	.5	.01
- 102m - bedding @ 70 to CA						11334	116	118	.04	.001	.4	.01
- 106m - bedding @ 60 to CA						11335	118	120	.03	.001	.3	.01
- 106.5m - bedding @ 45 to CA						11336	120	122	.01	.001	.4	.01
- 107m - bedding @ 40 to CA						11337	122	124	.01	.001	.4	.01
- 107.5m - bedding parallel to CA						11338	124	126	.02	.001	.2	.01
- 108.4 - 111.8m - very course grained clean sandstone						11339	126	128	.01	.001	.5	.01
- 115.7 - 115.9m - graphitic sections, contacts @ 70 to CA						11340	128	130	.02	.001	.6	.02
- 116.2m - bedding @ 65 to CA						11341	130	132	.01	.001	.3	.01
- 117m - bedding @ 70 to CA						11342	132	134	.01	.001	.2	.01
- 119.5 - 124m - course grained, light grey clean sandstone												
- 124.8 - 125.5m - sheared sandstone, strongly altered, friable												
- 126.6 - 126.8m - carbonate veins and veinlets												
- 126.9m - bedding @ 60 to CA												
- 127.6m - bedding @ 70 to CA												
- 129.8m - 2cm gouge @ 65 to CA												
- 132.3m - bedding @ 75 to CA												
- 132.9 - 133.2m - graphitic sections @ 70 to CA												
- 134 - 134.2m - shear zone (graphitic)												
134.2 - 137.0 DYKE						11343	134	136	.02	.001	.4	.01
						11344	136	137	.03	.001	.3	.01

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 5

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Hole ID      Easting   Northing   Elev   Length  Comment
89 5         9302     10467     1041   137     ZONE V
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Geo.                               Smp1      Au      Au      Ag      Ag
Desc.                               Nbr From   To (G/T) (OZ/T) (G/T) (OZ/T)
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136.6m - END OF HOLE

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment				
89 6	8800	9573	1524	273.6	ZONE II				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
3.6 - 18m CONGLOMERATE	11345	3.7	6	.02	.001	.2	.01		
- matrix supported conglomerate	11346	6	8	.01	.001	.4	.01		
- light blue to greenish grey(Cu carbonate) and medium grey	11347	8	10	.03	.001	.3	.01		
- fine to course grained matrix with rounded clasts <10cm	11348	10	12	.02	.001	.2	.01		
- majority of clasts are moderately to strongly silicified,	11349	12	14	.01	.001	.2	.01		
some with abundant malachite	11350	14	16	.01	.001	.3	.01		
- matrix contains 1% pyrite throughout, locally up to 5% in streaks @ 40 - 50 to CA	11885	16	18	.01	.001	.2	.01		
- 3.7 - 10.5m core is rusty colored (Fe3+)									
18 - 35.3m INTERBEDDED SANDSTONE	11886	18	20	.05	.001	.3	.01		
- interbedded fine to course grained, light to dark grey Sd	11887	20	22	.02	.001	.2	.01		
- some fine pyrite (<1%) throughout	11888	22	24	.01	.001	.3	.01		
- 18.5m bedding @ 60 to CA	11889	24	26	.14	.004	.1	.01		
- 19.5m bedding @ 50 to CA	11890	26	28	.03	.001	.2	.01		
- 23.6m bedding @ 50 to CA	11891	28	30	.02	.001	.1	.01		
- 26.0m bedding @ 55 to CA	11892	30	32	.01	.001	.3	.01		
- 29.0m bedding @ 55 to CA	11893	32	34	.01	.001	.2	.01		
	11894	34	36	.01	.001	.1	.01		
35.3 - 37.3m FELDSPAR HORNBLLENDE DACITE	11895	36	37.3	.01	.001	.3	.01		
- [
- DYKE DESCRIPTION									
-]									
- weak to moderate argillic alteration									
- moderate to strong silicification, some quartz veinlets									
37.3 - 41.8m INTERBEDDED SANDSTONE	11896	37.3	39	.02	.001	.3	.01		
- interbedded light to med grey, fine to course grained Sd	11897	39	41	.01	.001	.7	.02		
- weak to moderate silicification									
- 38.0m bedding @ 55 to CA									
- 40.0m bedding @ 60 to CA									
- 41.8m contact between Sd and F.P. @ 30 to CA									
41.8 - 44.6m FELDSPAR PORPHYRY	11898	41	43	.02	.001	.9	.03		
- strong argillic alteration	11899	43	45	.01	.001	.4	.01		
44.6 - 122.6m CONGLOMERATE	11900	45	47	.01	.001	.6	.02		
- same as from 3.6 to 18.0m ,but stronger silicificatiion.	11617	47	49	.02	.001	.3	.01		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment								
89 6	8800	9573	1524	273.6	ZONE II								
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)						
- 67.0 - 67.8m Quartz Vein Breccia - banded quartz ,5% fine pyrite ,2% chalcopryrite.	11618	49	51	.02	.001	.3	.01						
	11619	51	53	.01	.001	.2	.01						
- 69.4 - 69.8m Quartz Vein Breccia - 5% fine pyrite ,2-3% pink feldspar.	11620	53	55	.01	.001	.5	.01						
	11621	55	57	.02	.001	.3	.01						
- well developed calcite crystals.	11622	57	59	.02	.001	.2	.01						
- 83.9 - 84.1 -chert clast.	11623	59	61	.02	.001	.3	.01						
- 109.8 - 110.0m Quartz Vein Breccia - 5% fine pyrite,1% malachite.	11624	61	63	.01	.001	.4	.01						
	11625	63	65	.01	.001	.6	.02						
- 115.2 - 115.4 medium green,soft (argillic alt.).	11626	65	67	.01	.001	.3	.01						
	11627	67	68	.44	.013	2.8	.08						
	11628	68	69	.02	.001	.2	.01						
	11629	69	70	.01	.001	.2	.01						
	11630	70	72	.02	.001	.5	.01						
	11631	72	74	.03	.001	.4	.01						
	11632	74	76	.01	.001	.4	.01						
	11633	76	78	.02	.001	.3	.01						
	11634	78	80	.02	.001	.7	.02						
	11635	80	82	.01	.001	.4	.01						
	11636	82	84	.01	.001	.2	.01						
	11637	84	86	.01	.001	.2	.01						
	11638	86	88	.02	.001	.4	.01						
	11639	88	90	.02	.001	1.4	.04						
	11640	90	92	.01	.001	1.8	.05						
	11641	92	94	.03	.001	1.6	.05						
	11642	94	96	.01	.001	.6	.02						
	11643	96	98	.01	.001	.6	.02						
	11644	98	100	.03	.001	.3	.01						
	11645	100	102	.01	.001	.2	.01						
	11646	102	104	.02	.001	.4	.01						
	11647	104	106	.01	.001	.3	.01						
	11648	106	108	.01	.001	.5	.01						
	11649	108	110	.02	.001	.3	.01						
	11650	110	112	.01	.001	.2	.01						
	11351	112	114	.04	.001	.4	.01						
	11352	114	116	.02	.001	.5	.01						
	11353	116	118	.01	.001	.3	.01						
	11354	118	120	.01	.001	.4	.01						
	11355	120	122	.02	.001	.4	.01						
122.6 - 129.2m SANDSTONE	11356	122	124	.01	.001	.6	.02						

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment							
89 6	8800	9573	1524	273.6	ZONE II							
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)					
- fine grained ,med. grey sandstone ,<1% pyrite ,narrow (1mm) carbonate veinlets throughout.	11357	124	126	.02	.001	.3	.01					
	11358	126	128	.01	.001	.4	.01					
- 122.6m -bedding @ 50 to CA.	11359	128	130	.03	.001	.3	.01					
- 125m -bedding @ 50 to CA.												
- 126m -bedding @ 45 to CA.												
- 129.2m -bedding @ 45 to CA.												
129.2 - 137.5m CONGLOMERATE	11360	130	132	.02	.001	.2	.01					
-large pebble conglomerate with clasts up to 15 cm long	11361	132	134	.01	.001	.3	.01					
-clasts are both sediments and intrusive ,matrix is a	11362	134	136	.01	.001	.4	.01					
light grey medium grained sandstone.Both matrix and clasts are strongly silicified ;about 1% pyrite throughout , mainly fine granular streaks ,<1% chalcopryrite ;long axis of majority of clasts are perpendicular toCA.	11363	136	138	.03	.001	1.3	.04					
137.5 - 144.5m CONGLOMERATE	11364	138	140	.01	.001	.7	.02					
-pebble conglomerate with clasts up to 2cm.	11365	140	142	.03	.001	1	.03					
-black argillaceous matrix (80% of rock is matrix) ,<<1% pyrite.	11366	142	144	.02	.001	.5	.01					
-138.7m -bedding @ 25 toCA.	11367	144	146	.01	.001	.7	.02					
-140.7 - 144.5m -same as above but strongly altered (argillic),light olive green to beige color.												
144.5 - 204.6m QUARTZ EYE GRANITE	11368	146	148	.01	.001	.3	.01					
- light colored ,strong argillic alteration ,>60% feldspar	11369	148	150	.01	.001	.8	.02					
(most white ,some pink),weak tomoderate silicification , quartz veins and veinlets in some sections ,<1% pyrite throughout section ,>1% pyrite in veins.	11370	150	152	.04	.001	.8	.02					
	11371	152	154	.01	.001	.4	.01					
	11372	154	156	.02	.001	.4	.01					
- 155.3 - 158.5m Quartz Vein Breccia - 70% vein material ,1-2% pyrite ,graphite argillite bands (1-3mm wide).	11373	156	157	.03	.001	.5	.01					
	11374	157	158	.01	.001	1.4	.04					
- 163.5m -1cm quartz vein ,2-3% fine pyrite, <1% arsenopyrite ,argillite bands (<1mm), contact @ 45.	11375	158	159	.02	.001	.8	.02					
	11376	159	161	.02	.001	.2	.01					
	11377	161	163	.01	.001	.4	.01					
	11378	163	165	.02	.001	.5	.01					
	11379	165	167	.03	.001	.7	.02					
	11380	167	169	.02	.001	.5	.01					
	11381	169	171	.02	.001	1.1	.03					
	11382	171	173	.02	.001	.3	.01					
	11383	173	175	.02	.001	.3	.01					
	11384	175	177	.03	.001	.4	.01					

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

Hole ID	Easting	Northing	Elev	Length	Comment						
89 6	8800	9573	1524	273.6	ZONE II						
Geo. Desc.					Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
					11385	177	179	.01	.001	.2	.01
					11386	179	181	.01	.001	.4	.01
					11387	181	183	.02	.001	.3	.01
					11388	183	185	.02	.001	.3	.01
					11389	185	187	.02	.001	.3	.01
					11390	187	189	.01	.001	.2	.01
					11391	189	191	.03	.001	.2	.01
					11392	191	193	.01	.001	.3	.01
					11393	193	195	.02	.001	.4	.01
					11394	195	197	.02	.001	.6	.02
					11395	197	199	.01	.001	.4	.01
					11396	199	201	.01	.001	.2	.01
					11397	201	203	.01	.001	.2	.01
					11398	203	205	.03	.001	.5	.01
204.6 - 207.0m HBL-BIO GRANODIORITE					11399	205	207	.04	.001	.4	.01
-dark green color ,40% mafics ,green to black elongate hornblende crystals with biotite ;clear to slightly cloudy feldspars (anhedral) and quartz grains in a fine matrix.											
-207.0m shear @20 to CA.											
207 - 213.5M HORNFEELS					11400	207	209	.02	.001	.3	.01
- med.to dark grey ,finely banded ,very fine grained ,											
green biotite (5%) , <1% pyrite throughout ,locally up to											
5% m											
- 213 - 213.5 Shear zone ,pale green clay material with quartz fragments ,possible shear angle @ 20 to CA.											
- 213.5m 1cm milky white ,finely banded quartz vein ,2% pyrite ,trace arsenopyrite ,vein @ 140 to CA											
with respect to above shear angle).											
213.5 - 215m QUARTZ EYE GRANITE					11403	213	215	.02	.001	.2	.01
-60 -70%+ white cloudy feldspar ,similar to granite @ 144.5 - 204.6m except degree of argillic alteration											
is extreme.											
215 - 215.8m SHEAR ZONE											
-pale green clay with cloudy feldspars ,<1% pyrite ,possibly hornblende with strong chlorite alt.											

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 5

Hole ID	Easting	Northing	Elev	Length	Comment				
89 6	8800	9573	1524	273.6	ZONE II				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		

-215.2m shear angle @2o to CA.									
215.8 - 219m HORNFEELS	11404	215	217	.01	.001	.3	.01		
-med. to dark green , fine grained ,10% biotite ,some hornblende crystals elongated up to 5mm with no preferred direction.	11405	217	219	.01	.001	.2	.01		
-216.2m 1cm milky white quartz-feldspar vein ,5% fine pyrite ,1-2% biotite ,contacts sharp and even @30 to CA ,pale green clay for 2cm on both sides of vein -altered hornfels									
-216.6 - 216.8m Hbl-Bio Granodiorite ,contact @ 80 to CA.									
-217.3 - 217.6m Hbl-Bio Granodiorite ,contact @ 65 to CA.									
-217.8 - 5mm quartz veinlet ,20% fine pyrite ,5-10% chlorite ,contact @ 150 to CA.									
-218.7 - 219m shear zone (or altered hornfels) @ 60 to CA.									
219 - 221.5m QUARTZ EYE GRANITE	11406	219	221	.02	.001	.4	.01		
-mod, to strong argillic alteration.									
221.5 - 224.7m QUARTZ BRECCIA	11407	221	223	.01	.001	.7	.02		
-50-60% vein material ,2-3% pyrite throughout ,trace arsenopyrite.	11408	223	225	.02	.001	.8	.02		
224.7 - 231m HORNFEELS	11409	225	227	.02	.001	1.9	.06		
-fractures @80 to CA.	11410	227	229	.01	.001	1	.03		
-contact (bdg) @80 to CA.	11411	229	231	.03	.001	1.2	.04		
231 - 241m QUARTZ EYE GRANITE	11412	231	233	.01	.001	.4	.01		
-232.8m fracture and shear @30 to CA.	11413	233	235	.01	.001	.5	.01		
-234m fracture @ 40 to CA.	11414	235	237	.03	.001	.4	.01		
-contact (bdg) @15 to CA.	11415	237	239	.01	.001	.2	.01		
	11416	239	241	.02	.001	.4	.01		
241 - 248.2m HORNFEELS	11417	241	243	.01	.001	.8	.02		
-2% pyrite ,trace arsenopyrite ,10% biotite ,moderate chlorite alteration.	11418	243	245	.01	.001	.9	.03		
	11419	245	247	.01	.001	1.1	.03		
-243.1 -243.2m biotite-feldspar dyke ,contacts @ 40 to CA.	11420	247	249	.02	.001	1	.03		
-248.2m contact @ 25 to CA.									
248.2 - 256m INTRUSIVE	11421	249	251	.02	.001	.4	.01		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 6

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Hole ID Easting Northing Elev Length Comment
89 6 8800 9573 1524 273.6 ZONE II
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Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
-20% quartz ,30% mafics ,50% clouded feldspars.	11422	251	253	.01	.001	.2	.01
-256m contact @ 40 to CA.	11423	253	255	.03	.001	.2	.01
256 - 263.3m HORNFEELS	11424	255	257	.02	.001	.3	.01
-med. green ,fine grained ,lightly banded ,quartz veinlets	11425	257	259	.01	.001	.2	.01
(1-2mm) throughout ,2% fine pyrite ,up to 10% in veins.	11426	259	261	.04	.001	.2	.01
-256.6 - 257.2m strong clay alt. ,pale grey-green color	11427	261	263	.02	.001	.3	.01
-258.2m fracture @40 to CA.							
-263.3m bedding @40 to CA.							
263.3 - 273.4m INTRUSIVE	11428	263	265	.02	.001	.3	.01
-20-30% quartz ,30% mafics ,weak to mod. alt. of feldspars.	11429	265	267	.01	.001	.9	.03
	11430	267	269	.03	.001	.3	.01
	11431	269	271	.01	.001	.3	.01
	11432	271	273.4	.01	.001	.4	.01

273.4m END OF HOLE.

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

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Hole ID      Easting   Northing   Elev   Length  Comment
89 7         9390      9129     1345   121.1   ZONE VI
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Geo.                               Smpl      Au      Au      Ag      Ag
Desc.                               Nbr  From   To (G/T) (OZ/T) (G/T) (OZ/T)
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114.2 - 120.5m INTERBEDDED ARGILLITE & SANDSTONE      11467  112  115   .03   .001   1.8   .05
-interbedded dark grey argillite (60%) and fine to coarse 11468  115  118   .02   .001   1.9   .06
grained light grey sandstone (40%); sandstone beds to 11469  118 120.5 .01   .001   1.8   .05
40cm (grading up hole), majority of sandstone beds
    
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1-5cm wide.

-115.8m bedding @ 55 to CA.

-116.2m bedding @ 50 to CA.

-117.0m 2cm shear @ 75 to CA.

-117.2 - 117.6m sandstone bed with graded bedding that

indicates tops up hole.

-117.6m bedding @ 65 to CA.

-120.5m bedding @ 60 to CA.

120.5m END OF HOLE.

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment							
89 8	9331	9306	1415	97.9	ZONE VI							
Geo. Desc.						Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
0 - 3.5m OVERBURDEN								3.5				
3.4 - 52.9m CONGLOMERATE						11470	3.5	5	.01	.001	.9	.03
-pebble conglomerate with clasts up to 10cm in diameter ;						11471	5	7	.01	.001	.6	.02
matrix is light reddish brown to pale greyish green med.						11472	7	9	.02	.001	.5	.01
to coarse grained sand which displays weak to moderate						11473	9	11	.08	.002	.4	.01
argillic alteration in places ; clasts appear to be both						11474	11	13	.02	.001	1.4	.04
sedimentary and intrusive ;carbonate veinlets throughout ,						11475	13	15	.03	.001	1	.03
some sections show weak silicification ,conglomerate is						11476	15	16	.01	.001	.4	.01
matrix supported ,<<1% pyrite throughout ,bedding 70-80						11477	16	17	.02	.001	.3	.01
to CA.						11478	17	18	.01	.001	.3	.01
-18.0m fracture @ 75 to CA.						11479	18	19	.02	.001	.4	.01
-21.2m bedding @ 70 to CA.						11480	19	20	.02	.001	.3	.01
-22.6 - 26.5m badly broken core.						11481	20	22	.03	.001	.4	.01
-40.1 - 41.5m badly broken core with Fe staining.						11482	22	24	.03	.001	.2	.01
-43.8 - 46.5m badly broken core.						11483	24	25	.04	.001	.4	.01
-46.9m 1cm carbonate vein @ 55 to CA.						11484	25	26	.01	.001	.4	.01
-49.0m shear @ 60 to CA.						11485	26	28	.02	.001	.9	.03
-52.9m 1cm shear @ 65 to CA.						11486	28	30	.01	.001	.8	.02
						11487	30	32	.02	.001	.4	.01
						11488	32	34	.01	.001	.2	.01
						11489	34	36	.01	.001	.2	.01
						11490	36	38	.02	.001	.3	.01
						11491	38	40	.03	.001	.2	.01
						11492	40	41	.02	.001	.2	.01
						11493	41	43	.02	.001	.4	.01
						11494	43	45	.02	.001	.5	.01
						11495	45	47	.01	.001	.3	.01
						11496	47	49	.01	.001	.4	.01
						11497	49	51	.02	.001	.2	.01
						11498	51	53	.02	.001	.7	.02
52.9 - 97.8m ARGILLACEOUS SILTSTONE						11499	53	55	.01	.001	.8	.02
-banded med. to dark grey siltstone ,<1% pyrite						11500	55	57	.02	.001	.4	.01
throughout ,locally up to 2% (in thin streaks and fine						11801	57	59	.03	.001	.3	.01
grains) ,occasional thin (10-20cm) light grey sandstone						11802	59	61	.01	.001	.4	.01
bed ,fining up hole.						11803	61	63	.02	.001	.3	.01
-55.5m bedding @ 65 to CA.						11804	63	65	.02	.001	.3	.01
-56.8m bedding @ 45 to CA.						11805	65	67	.01	.001	.2	.01
-58.0m bedding @ 60 to CA.						11806	67	69	.02	.001	.3	.01

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

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=====
Hole ID      Easting   Northing   Elev   Length  Comment
89 8         9331      9306      1415   97.9    ZONE VI
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Geo. Desc.	Smpl Nbr	From	To	Au		Ag	
				(G/T)	(OZ/T)	(G/T)	(OZ/T)
-60.0m bedding @ 55 to CA.	11807	69	71	.02	.001	.2	.01
-60.5m bedding @ 60 to CA.	11808	71	73	.01	.001	.4	.01
-63.0m bedding @ 55 to CA.	11809	73	75	.03	.001	.3	.01
-70.8m bedding @ 65 to CA.	11810	75	77	.02	.001	.2	.01
-72.2m bedding @ 70 to CA.	11811	77	78	.01	.001	.3	.01
-78.0m 2cm quartz-carbonate vein (30% quartz),20% fine pyrite ,2% arsenopyrite ,argillite bands ,contacts @ 75 to CA.	11812	78	80	.02	.001	.2	.01
	11813	80	82	.02	.001	.2	.01
	11814	82	84	.02	.001	.4	.01
-80.6m bedding @ 70 to CA.	11815	84	86	.01	.001	.3	.01
-81.1m bedding @ 70 to CA.	11816	86	88	.02	.001	.4	.01
-90.0m bedding @ 65 to CA.	11817	88	90	.01	.001	.3	.01
-95.3m bedding @ 65 to CA.	11818	90	92	.01	.001	.3	.01
	11819	92	94	.02	.001	.4	.01
	11820	94	96	.01	.001	.4	.01
			96	97.8			

97.8m END OF HOLE

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment				
89 9	9369	9461	1412	117.4	ZONE VI				
Geo. Desc.	Smpl Nmbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
0.0 - 4.0m OVERBURDEN			4						
4.0 - 117.3m SANDSTONE	11821	4	6	.01	.001	.3	.01		
-interbedded light to med. grey ,fine to med. grained	11822	6	8	.03	.001	.4	.01		
sandstone ,well banded ,carbonate veinlets throughout ,	11823	8	10	.07	.002	.3	.01		
<1% fine pyrite throughout ,trace arsenopyrite ,	11824	10	12	.01	.001	.2	.01		
locally up to 3% in silicified sections.	11825	12	13	.03	.001	.2	.01		
-4.5m bedding @ 45 to CA.	11826	13	14	.01	.001	.2	.01		
-4.7 - 5.1m Fe stained section (alteration?),contact @	11827	14	15	.01	.001	.2	.01		
140 to CA with respect to bedding.	11828	15	17	.02	.001	.3	.01		
-11.8m 2-5mm quartz veinlet ,milky white to smokey grey ,	11829	17	19	.02	.001	.2	.01		
banded ,no bisible sulphides ,contacts @ 150 to CA.	11830	19	21	.01	.001	.3	.01		
-12.5m bedding @ 45 to CA.	11831	21	23	.06	.002	.6	.02		
-13.3m 5mm quartz veinlet ,smokey grey ,3-5% pyrite ,	11832	23	25	.02	.001	.4	.01		
2% carbonate ,wall rock fragments ,contacts @ 85 to CA.	11833	25	27	.01	.001	.3	.01		
-13.3 - 14.6m weakly silicified.	11834	27	29	.01	.001	.4	.01		
-16.2m bedding @ 45 to CA.	11835	29	31	.01	.001	.2	.01		
-17.4m bedding @ 50 to CA.	11836	31	33	.03	.001	.4	.01		
-17.6m flame structure indicates tops up hole.	11837	33	35	.01	.001	.3	.01		
-21.0m bedding @ 45 to CA.	11838	35	37	.02	.001	.3	.01		
-22.0m bedding @ 50 to CA.	11839	37	39	.01	.001	.7	.02		
-25.5m bedding @ 55 to CA.	11840	39	41	.01	.001	.3	.01		
-31.5m bedding @ 60 to CA.	11841	41	43	.01	.001	.1	.01		
-40.2m bedding @ 45 to CA.	11842	43	45	.02	.001	.4	.01		
-43.7m bedding @ 55 to CA.	11843	45	47	.01	.001	.2	.01		
-45.1m bedding @ 45 to CA.	11844	47	49	.03	.001	.5	.01		
-47.3m bedding @ 40 to CA.	11845	49	51	.02	.001	.3	.01		
-48.8m 5cm carbonate vein with 1% fine pyrite ,	11846	51	53	.01	.001	.3	.01		
perpendicular to CA.	11847	53	55	.04	.001	.4	.01		
-50.5m bedding @ 35 to CA.	11848	55	57	.03	.001	.3	.01		
-53.2m bedding @ 30 to CA.	11849	57	59	.02	.001	.3	.01		
-55.6m 1cm quartz vein (70% carbonate) ,banded ,3-5%	11850	59	61	.01	.001	.3	.01		
pyrite ,contacts parallel to bedding @ 30 to CA.	11851	61	63	.01	.001	.2	.01		
-60.5m bedding @ 30 to CA.	11852	63	65	.01	.001	.3	.01		
-63.0m bedding @ 20 to CA.	11853	65	67	.01	.001	.5	.01		
-63.1m carbonate vein ,10% pyrite ,40 toCA in plane	11854	67	69	.03	.001	.4	.01		
perpendicular to bedding.	11855	69	71	.01	.001	.6	.02		
-64.0m bedding parallel to CA.	11856	71	73	.02	.001	.3	.01		
-64.8m bedding @ 10 to CA.	11857	73	75	.01	.001	.2	.01		
-66.6 - 66.8m shear zone ,15% carbonate ,contacts @ 45	11858	75	76	.02	.001	.3	.01		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment				
89 9	9369	9461	1412	117.4	ZONE VI				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
to CA (parallel to bedding).	11859	76	77	.48	.014	.4	.01		
-76.7 - 76.8m shear ,graphitic ,20% carbonate ,quartz	11860	77	78	.02	.001	.2	.01		
fragments ,10% fine pyrite ,1% arsenopyrite ,contacts	11861	78	79	.01	.001	.2	.01		
perpendicular to CA.	11862	79	81	.01	.001	.2	.01		
-83.0m bedding @ 50 to CA.	11863	81	83	.01	.001	.3	.01		
-84.6m bedding @ 45 to CA.	11864	83	85	.02	.001	.3	.01		
-85.0 - 85.1m massive (8cm wide) pyrite layer with 3%	11865	85	85.3	.01	.001	1.6	.05		
chalcopyrite ,1% arsenopyrite ,10% carbonate ,vuggy ,	11866	85.3	86	.01	.001	.8	.02		
has wall rock fragments ,contacts irregular @ 45 to CA.	11867	86	87	.12	.004	.3	.01		
-85.7m 1cm quartz-carbonate vein (20% quartz) ,40% pyrite ,	11868	87	88	.02	.001	.2	.01		
<1% chalcopyrite ,contacts @ 45 to CA.	11869	88	89	.02	.001	.2	.01		
-86.8 - 88.7m carbonate veins and veinlets throughout ,	11870	89	90	.01	.001	.3	.01		
2-3% fine pyrite ,<1% arsenopyrite ,vuggy ,Fe stained	11871	90	92	.02	.001	.4	.01		
on fractures.	11872	92	94	.01	.001	.2	.01		
-99.1 - 99.3m shear zone @ 45 to CA.	11873	94	96	.01	.001	.3	.01		
-100.3 - 100.5m shear perpendicular to CA.	11874	96	98	.06	.002	.8	.02		
-112.5m bedding @ 55 to CA.	11875	98	100	.01	.001	.4	.01		
	11876	100	102	.01	.001	.3	.01		
	11877	102	104	.01	.001	.3	.01		
	11878	104	106	.01	.001	.2	.01		
	11879	106	108	.02	.001	.4	.01		
	11880	108	110	.02	.001	.3	.01		
	11881	110	112	.01	.001	.2	.01		
	11882	112	114	.01	.001	.2	.01		
	11883	114	116	.01	.001	.4	.01		
	11879	106	108	.02	.001	.4	.01		
	11880	108	110	.02	.001	.3	.01		
	11881	110	112	.01	.001	.2	.01		
	11882	112	114	.01	.001	.2	.01		
	11883	114	116	.01	.001	.4	.01		
	11878	104	106	.01	.001	.2	.01		
	11879	106	108	.02	.001	.4	.01		
	11880	108	110	.02	.001	.3	.01		
	11881	110	112	.01	.001	.2	.01		
	11882	112	114	.01	.001	.2	.01		
	11883	114	116	.01	.001	.4	.01		

117.3m END OF HOLE.

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment				
89 10	9336	10477	1038	98.8	ZONE V				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
0.0 - 3.7m OVERBURDEN			3.7						
3.7 - 22.4m INTERBEDDED SANDSTONE	11901	3.7	6	.02	.001	.6	.02		
-interbedded fine to very coarse grained ,light to med. grey sandstone ,some graphitic shears ,grading sequence	11902	6	8	.01	.001	.7	.02		
	11903	8	12	.01	.001	.5	.01		
indicates tops up hole .	11904	12	14	.01	.001	.2	.01		
-6.1 - 7.5m graphitic shear with carbonate (40% recovery).	11905	14	18	.02	.001	.5	.01		
-8.0 - 12.0m 35% core recovery.	11906	18	20	.01	.001	.6	.02		
-14.0 - 18.0m 40% core recovery.	11907	20	22	.01	.001	.4	.01		
-19.8 - 21.3m very coarse grained sandstone.									
-22.4m bedding (contact) @ 75 to CA.									
22.4 - 30.9m FELDSPAR-BIOTITE GRANITE	11908	22	24	.02	.001	.3	.01		
-light greyish green ,10-20% mafics (mainly biotite) , 60% feldspars (both pink and white) ,cloudy ,weak	11909	24	26	.01	.001	.2	.01		
	11910	26	28	.01	.001	.3	.01		
argillic alteration ,some weak carbonate alteration .	11911	28	30	.02	.001	.5	.01		
30.9 - 32.1m SANDSTONE	11912	30	32	.01	.001	.4	.01		
-med. to coarse grained ,med. grey sandstone.									
-32.1m shear.									
32.1 - 37.2m FELDSPAR-BIOTITE GRANITE	11913	32	34	.01	.001	.2	.01		
-as for 22.4 - 30.9m.	11914	34	36	.02	.001	.2	.01		
	11915	36	37.2	.04	.001	.4	.01		
37.2 - 44.2m SANDSTONE	11916	37.2	39	.02	.001	.3	.01		
-light to med. grey ,fine to coarse grained sandstone with some conglomerate (clasts <10cm) sections up to 20cm wide ,conglomerate is matrix supported ,fining sequence indicates tops up hole.	11917	39	41	.02	.001	1	.03		
	11918	41	44.2	.01	.001	.4	.01		
-37.8m bedding @75 to CA.									
-40.0 - 41.2m conglomerate.									
-41.9 - 42.1m conglomerate.									
-note:from 43.0 - 45.0m 30% core recovery.									
44.2 - 46.3m FELDSPAR-BIOTITE GRANITE	11919	44.2	46.3	.01	.001	.8	.02		
-same as above.									
-45.0 - 46.0m 30% core recovery.									
46.3 - 48.8m SANDSTONE	11920	46.3	48.8	.02	.001	.5	.01		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment				
89 10	9336	10477	1038	98.8	ZONE V				
Geo. Desc.			Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
-med. to coarse grained ,light grey sandstone.									
-40-50% core recovery over section.									
44.8 - 50.9m	FAULT ZONE		11921	48.8	50.9	.01	.001	.4	.01
-graphitic siltstone with clay ,no solid core ,50% core recovery.									
50.9 - 57.0m	SANDSTONE		11922	50.9	57	.02	.001	.2	.01
-med. to coarse grained ,light grey sandstone.									
-51.0 - 55.0m 40% recovery.									
-55.0 - 57.0m 5% recovery.									
57.0 - 59.4m	SHEAR (FAULT) ZONE		11923	57	58	.01	.001	.8	.02
-med. to coarse grained ,light to dark grey (graphite) sandstone ,sand and clay gouge ,quartz fragments ,									
some pyrite and arsenopyrite.									
59.4 - 98.8m	SANDSTONE		11926	60	62	.01	.001	.4	.01
-light to med. grey ,fine to coarse grained sandstone ,									
1% fine pyrite throughout ,locally up to 5%,carbonate									
veinlets ,graphitic sections up to 50cm ,some thin (<1cm) graphitic siltstone lenses .									
62.3 - 62.5m	coarse pyrite crystals in light grey coarse grained sandstone (5% pyrite).		11931	67	69	.01	.001	1.9	.06
62.5 - 62.6m	black graphitic clay gouge with 5%+ fine pyrite grains.		11933	71	73	.02	.001	.6	.02
64.2m	bedding @ 45 to CA.		11934	73	75	.03	.001	.8	.02
65.2 - 65.7	graphitic section .		11935	75	77	.22	.006	.4	.01
65.7	bedding @ 45 to CA.		11936	77	78	.03	.001	.3	.01
66.6 - 66.7m	gouge with 5cm carbonate vein .		11937	78	80	.03	.001	.7	.02
66.6 - 66.7m	gouge with 5cm carbonate vein .		11938	80	81	.02	.001	.2	.01
66.9m	3cm graphitic gouge @ 60 to CA.		11939	81	82	.01	.001	.5	.01
74.2 - 74.6m	andesite		11940	82	83	.36	.011	.4	.01
75.0 - 75.3m	shear zone ,graphitic gouge		11941	83	84	.61	.018	2.3	.07
77.6m	1cm milky white quartz-carbonate vein ,3-5% fine pyrite (grains) ,trace arsenopyrite ,20% carbonate ,		11942	84	86	.01	.001	1	.03
77.6m	1cm milky white quartz-carbonate vein ,3-5% fine pyrite (grains) ,trace arsenopyrite ,20% carbonate ,		11943	86	88	.01	.001	.4	.01
80.0m	1cm of gouge @ 75 to CA		11944	88	90	.05	.001	.4	.01
80.2m	bedding @ 45 to CA.		11945	90	92	.01	.001	.3	.01
80.2m	bedding @ 45 to CA.		11946	92	94	.03	.001	.2	.01
80.3 - 80.5m	15-20cm milky white quartz-carbonate vein ,5%+ fine pyrite ,<1% arsenopyrite ,host is sheared		11947	94	96	.02	.001	.2	.01
80.3 - 80.5m	15-20cm milky white quartz-carbonate vein ,5%+ fine pyrite ,<1% arsenopyrite ,host is sheared		11948	96	97.5	.01	.001	.5	.01

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 10	9336	10477	1038	98.8	ZONE V

Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
sandstone (with gouge) ,contacts have been sheared , minor core loss.	11949	97.5	98.8	.04	.001	.4	.01
-82.2 - 82.5m shear gouge with quartz fragments ,1-2% fine pyrite ,moderate carbonate alteration .							
-82.8 - 83.8m graphitic section with quartz-carbonate veinlets throughout (10-15% quartz in section) ,3% pyrite.							
-86.2m bedding @ 45 to CA.							
-87.3 - 87.4m gouge.							
-87.7m shear parallel to CA.							
-88.4 - 91.2m very coarse grained sandstone.							
-90.6m bedding @ 10 to CA.							
-96.2m bedding @ 50 to CA.							
-97.0 - 98.8m shear zone ,<1% pyrite ,coarse sandstone, carbonate.							
98.8m END OF HOLE.							

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment							
89 11	9275	10468	1043	107	ZONE V							
Geo. Desc.				Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
0.0 - 3.0m OVERBURDEN						3						
3.0 - 9.0m INTERBEDDED SANDSTONE						11950	3	6	.02	.001	.3	.01
-interbedded light to dark grey ,fine to coarse grained sandstone ,core is broken and powdered up ,bedding @						11951	6	8	.01	.001	.4	.01
60-70 to CA.												
9.0 - 12.9m CONGLOMERATE						11952	8	10	.02	.001	.5	.01
-med. greenish grey pebble conglomerate ,clasts up to 2cm						11953	10	12	.05	.001	2	.06
,matrix supported ,weakly silicious ,clasts orientated						11954	12	14	.02	.001	1.7	.05
65-70 to CA.												
-12.9 contact (bedding) @ 70 to CA.												
12.9 - 14.8 SILTSTONE												
-dark grey siltstone ,bedding @ 65-70 to CA.												
14.8 - 16.8m CONGLOMERATE						11955	14	16	.01	.001	.4	.01
-as for 9.0 - 12.9m.												
16.8 - 28.6m INTERBEDDED SANDSTONE						11956	16	18	.04	.001	.3	.01
-interbedded light to dark grey ,coarse to fine grained sandstone ,rip-ups ,flame structures indicating tops up hole ,grading sequence also shows tops up hole .						11957	18	20	.02	.001	.2	.01
						11958	20	22	.01	.001	.5	.01
						11959	22	24	.01	.001	.5	.01
						11960	24	26	.03	.001	.6	.02
						11961	26	28	.01	.001	.2	.01
28.6 - 33.4m FELDSPAR-BIOTITE GRANITE						11962	28	30	.02	.001	.2	.01
-light grey ,60% clouded feldspar ,10-15% mafics (biotite and hornblende) ,some chlorite alteration of the biotite ,						11963	30	32	.01	.001	.2	.01
weak argillic alteration of the feldspars.						11964	32	34	.02	.001	.2	.01
-33.4m contact (bedding) @70 to CA.												
33.4 - 67.0m INTERBEDDED SANDSTONE						11965	34	36	.01	.001	.4	.01
-interbedded light to med. grey ,fine to coarse grained sandstone ,bedding 70-80 to CA ,fining up hole ,some						11966	36	38	.01	.001	.4	.01
						11967	38	40	.01	.001	.3	.01
graphitic shears ,1%+ pyrite ,calcareous .						11968	40	42	.01	.001	.5	.01
-48.6 - 48.8m Fe stained gouge .						11969	42	44	.02	.001	.2	.01
-49.3 - 50.4m gouge.						11970	44	46	.02	.001	.3	.01
-51.5m bedding @ 60 to CA.						11971	46	48	.01	.001	.4	.01
-52.3m bedding @ 65 to CA.						11972	48	50	.01	.001	.3	.01

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment				
89 11	9275	10468	1043	107	ZONE V				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
-56.2m bedding @ 70 to CA.	11973	50	52	.01	.001	.4	.01		
-note:no core recovery from 60.0 - 61.7m.	11974	52	54	.01	.001	.7	.02		
-* from approx. 59.0 - 64.7m fault zone ,broken core ,gouge.	11975	54	56	.02	.001	.4	.01		
	11976	56	58	.01	.001	.3	.01		
	11977	58	62	.01	.001	.3	.01		
	11978	62	64	.02	.001	.2	.01		
	11979	64	66	.01	.001	.3	.01		
	11980	66	67	.01	.001	.4	.01		
67.0 - 75.8m MINERALIZED ZONE	11981	67	68	.02	.001	.5	.01		
-67.0 - 67.8m graphitic section with some carbonate ,2% pyrite.	11994	68	69	.02	.001	1.7	.05		
	11995	69	70	.07	.002	1.8	.05		
-67.8 - 68.5m dark grey carbonate rich sandstone ,2% pyrite ,locally up to 5%.	11982	70	71	1.18	.034	6.2	.18		
	11983	71	72	.03	.001	1.9	.06		
-68.5m bedding @ 70 to CA.	11984	72	73	.41	.012	2.1	.06		
-68.5 - 69.2m light grey ,coarse grained Sd ,strong carbonate alteration .	11985	73	74	.35	.01	2	.06		
	11986	74	75	.68	.02	4.3	.13		
-69.2 - 75.8m interbedded light grey ,fine to med. grained sandstone with dark grey siltstone ,some graphitic sections up to 10cm thick ,2-3% pyrite throughout ,up to 1% arsenopyrite ,approx. 25% vein material.	11987	75	76	1.33	.039	2.1	.06		
-71.5 - 71.6m graphitic section.									
-71.6 - 71.7m quartz-carbonate vein ,5% pyrite ,10% arsenopyrite ,20% carbonate ,graphitic inclusions , contacts @ 30 to CA.									
-72.1m 3cm graphitic gouge.									
-72.2 - 72.9m siltstone with 1-2cm quartz-carbonate vein , 1% pyrite ,2% arsenopyrite (pyrite in wall rock ,arseno in quartz) ,contacts @75 to CA.									
-74.3m 1cm quartz-carbonate vein ,2-3% galena ,5% chalco- -pyrite ,contacts @ 80 to CA.									
-74.9m 3cm graphitic section .									
-75.0 - 75.5m quartz-carbonate vein ,5% pyrite ,2% arsenopyrite ,40% carbonate ,wall rock inclusions .									
75.8 - 94.3m ALTERED SANDSTONE	11988	76	77	.05	.001	.6	.02		
-fine to coarse grained ,light to med. grey ,mod. to strong carbonate alteration ,some phylic alteration (fine muscovite/serecite development)	11989	77	79	.06	.002	1.7	.05		
	11990	79	81	.01	.001	1.4	.04		
	11991	81	83	.02	.001	1.2	.04		
-78.6 - 80.8m shear zone ,broken core ,gouge.	11992	83	85	.45	.013	1	.03		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

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Hole ID	Easting	Northing	Elev	Length	Comment
89 11	9275	10468	1043	107	ZONE V

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Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
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-106.2m shear @ 70 to CA.

107.0m END OF HOLE.

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment				
89 12	9274	10411	1070	135.6	ZONE V				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
0.0 - 3.0 OVERBURDEN -cased bedrock ,no recovery.			3						
3.0 - 14.0 ANDESITE HORNBLENDE PORPHYRY	11761	3	5	.02	.001	.3	.01		
-strongly altered ,med. grey with reddish clay particles	11762	5	7	.01	.001	.4	.01		
up to 8mm ,quartz-carbonate stringers throughout(75 to	11763	7	9	.02	.001	.3	.01		
CA) ,50%+ mafics ,some well developed hornblende crystals (euhedral).	11764	9	11	.01	.001	.3	.01		
-13.7 - 14.7m stained core.	11765	11	13	.01	.001	.3	.01		
-14.0m 5cm Of clay gouge ,75 to CA.	11766	13	15	.02	.001	.3	.01		
14.0 - 26.8 INTERBEDDED SANDSTONE	11767	15	17	.01	.001	.2	.01		
-interbedded fine to very coarse grained sandstone with	11768	17	19	.01	.001	.4	.01		
some dark grey sandstone beds up to 30cm ,carbonate on	11769	19	21	.02	.001	.4	.01		
fracture and as veinlets.	11770	21	23	.01	.001	.3	.01		
-15.2 - 15.4m intrusive ,core broken and rounded ,	11771	23	25	.02	.001	.4	.01		
possible loss of core ,rock same as at top of hole.	11772	25	27	.02	.001	.2	.01		
-17.5m bedding @ 80 to CA.									
-23.4 - 24.5m coarse grained sandstone fining up hole.									
-24.8m bedding @ 75 to CA.									
-contacts @ 75 to CA.									
26.8 - 28.1m DYKE	11773	27	29	.01	.001	.3	.01		
-60%+ feldspars , clay altered ,quartz rich matrix ,									
<10% mafics (mainly biotite) ,some biotite has been									
chlorite altered ,weakly calcareous.									
-28.1m contact @ 55 to CA.									
28.1 - 64.5m INTERBEDDED SANDSTONE	11774	29	31	.01	.001	.4	.01		
-interbedded light to med. grey ,fine to coarse grained	11775	31	33	.01	.001	.3	.01		
sandstone with some dark grey to black graphitic	11776	33	35	.02	.001	.5	.01		
siltstone ,sandstone is finely laminated ,carbonate	11777	35	37	.01	.001	.7	.02		
veinlets throughout .	11778	37	39	.02	.001	.8	.02		
-31.4 - 31.9 fault/shear zone with quartz-carbonate	11779	39	41	.01	.001	1.2	.04		
fragments ,shear contact (lower) @ 80 to CA.	11780	41	43	.01	.001	.7	.02		
-33.6 - 34.0m siltstone ,broken up.	11781	43	45	.01	.001	.6	.02		
-36.5 - 39.3m several bedding attitudes @ 60-65 to CA.	11782	45	47	.01	.001	1	.03		
-40.3 - 40.7m graphitic shear section ,moderately	11783	47	49	.02	.001	.8	.02		
carbonaceous ,contacts @70 to CA.	11784	49	51	.02	.001	.7	.02		
-44.6m shear @ 70 to CA.	11785	51	53	.01	.001	.8	.02		
-52.0 - 52.2m shear ,gouge ,80 to CA.	11786	53	55	.01	.001	.4	.01		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment				
89 12	9274	10411	1070	135.6	ZONE V				
Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)		
-56.5 - 56.8m sandy gouge ,moderately carbonaceous.	11787	55	57	.01	.001	.3	.01		
-58.5m bedding @ 65 to CA.	11788	57	59	.01	.001	.4	.01		
-60.0 - 62.0m broken ,rounded core ,45-50% core loss.	11789	59	61	.02	.001	.4	.01		
-63.1 - 64.5m shear ,gouge ,30% core loss.	11790	61	63	.01	.001	.3	.01		
64.5 - 69.5m INTRUSIVE	11791	63	65	.01	.001	.5	.01		
-bluish-grey to green matrix with cloudy anhedral to euhedral feldspar phenocrysts up to 5mm ,approx. 10% mafics (hornblende) with phenos up to 5mm ,some argillic alteration ,quartz eyes.	11792	65	67	.01	.001	.4	.01		
	11793	67	69	.01	.001	.2	.01		
-69.5m broken ,rounded core with some core loss (5%) , unable to determine contact angle .									
69.5 - 74.5m INTERBEDDED SANDSTONE	11794	69	71	.02	.001	.6	.02		
-interbedded light to med. grey ,fine to med. grained	11795	71	73	.01	.001	.4	.01		
sandstone with dark grey to black weakly graphitic siltstone fractures @ 10 ,45 ,& 70 to CA.	11796	73	75	.01	.001	.3	.01		
-72.8 - 73.5m broken ,rounded core.									
-74.5m contact @ 45 to CA.									
74.5- 78.8m FELDSPAR PORPHYRY GRANODIORITE	11797	75	77	.02	.001	.2	.01		
-reddish-brown with phenocrysts up to 3mm (altered feldspar?) ,color due to phenocrysts ,matrix is light grey ,silica rich ,<10% mafics ,phenos are subhedral to anhedral ,some quartz eyes present ,porphyritic texture.	11798	77	79	.01	.001	.4	.01		
-note:76.2 - 77.6m alteration contact ,light greyish - green with cream colored phenocrysts (argillic altered feldspars).									
-contact @ 60 to CA.									
78.8 - 102.4m INTERBEDDED SANDSTONE	11799	79	81	.01	.001	.5	.01		
-interbedded fine to coarse grained sandstone with dark grey to black siltstone ,fractures throughout @ 70 ,40 ,	11800	81	83	.02	.001	.2	.01		
30 ,and parallel to CA ,sandstone is weakly calcareous ,	13422	83	84.4	.01	.001	.4	.01		
composed mainly of feldspars and quartz with 30% mafics ,	13423	85.3	87	.01	.001	.5	.01		
	13424	87	89	.02	.001	1.8	.05		
minor muscovite (sericite) ,some carbonate veinlets at various angles to CA.	13425	89	91	.01	.001	.5	.01		
	13426	91	93	.02	.001	.2	.01		
-82.9 - 83.1m shear with clay gouge ,upper contact @ 75 to CA.	13427	93	95	.01	.001	.3	.01		
	13428	95	97	.01	.001	.2	.01		
-84.1 - 86.2m shear ,broken core with dark grey clay gouge ,	13429	97	99	.02	.001	.5	.01		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment				
89 12	9274	10411	1070	135.6	ZONE V				
Geo. Desc.			Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
(graphitic) @ 84 to CA .from 84.4m to 85.3m no core recovery.			13430	99	101	.03	.001	.3	.01
			13401	101	102	.02	.001		
-89.6 - 90.2m coarse grained sandstone ,contacts @ 70 to CA.									
-90.7 - 91.1m dark grey to black siltstone ,upper contact gradational over 10cm ,fining sequence down hole .									
-93.0m 10cm of dark grey to black weakly calcareous siltstone .									
-93.1 - 95.3m coarse grained sandstone with grains to 2mm , 40% mafics ,35% quartz ,25% feldspars ,mod. silicious , carbonate veinlets @ 10 & 70 to CA (contacts also at 70).									
-98.0m flame structure indicates tops up hole .									
-99.3 - 100.4m brecciated and smeared sandstone ,weakly calcareous .									
102.4 - 105.3 BLACK SILTSTONE (GRAPHITIC)			13402	102	103	.07	.002		
-massive ,strongly sheared from 102.4 to 103.6 , weakly calcareous ,very graphitic throughout .			13403	103	104	.02	.001		
			13404	104	105	.04	.001		
-sulphide mineralization:discontinuous bands of fine grained massive pyrite comprising up to 5% of rock , pyrite bands parallel to bedding .									
105.3 - 108.6m INTERBEDDED SANDSTONE & SILTSTONE			13405	105	106	.01	.001		
-fine to coarse grained sandstone interbedded with dark grey calcareous siltstone .			13406	106	107	.05	.001		
			13407	107	108	.02	.001		
-alteration:mod. carbonate ,fine grained muscovite on fracture ,mostly quartz and feldspar with 5% muscovite , 10% mafics .									
-mineralization: 2% pyrite throughout ,increasing with depth ,pyrite as massive bands or as euhedral grains .									
108.6 - 113.3 GRAPHITIC SILTSTONE			13408	108	109	1.87	.055	31.2	.91
-predominately graphitic siltstone with conformable sandstone bed from 109.7 to 110.7m .			13409	109	110	7.15	.209	7.9	.23
			13410	110	111	.78	.023	2.4	.07
-graphitic shear zones:108.8 - 109.5			13411	111	112	4.95	.144	8.3	.24
110.7 - 113.4 (very graphitic)			13412	112	113	16.2	.473	28.2	.82
-sulphide mineralization: 2% euhedral pyrite throughout.									
-vein mineralization:									
108.7m 5cm quartz vein with arsenopyrite ,galena vein salvages ,sphalerite ,minor breccia above and below vein .									

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

Hole ID Easting Northing Elev Length Comment
 89 12 9274 10411 1070 135.6 ZONE V

Geo. Desc. Smpl Nbr From To Au (G/T) Au (OZ/T) Ag (G/T) Ag (OZ/T)

108.7 - 109.0m	arsenopyrite and pyrite veins in graphitic shear .							
109.0 - 109.2m	banded quartz-arsenopyrite vein & vein breccia ,predominately arsenopyrite parallel to bedding .							
109.2 - 109.7m	very graphitic sheared section with bands of quartz , pyrite & chalcopryrite . Quartz is sheared and discontinuous .							
109.2 - 110.7m	sandstone							
110.7 - 113.5m	extremely graphitic sheared siltstone ,pyrite as veins and disseminated throughout (5-10%),chalcopryrite as disseminations and one isolated vein @ 111.7m .Brecciated quartz veins throughout .							
112.5 - 112.9m	Quartz vein (sheared and massive) with arsenopyrite ,minor pyrite ,galena ,sphalerite ,moly(?), visible gold or electrum (one grain noted) free in vein ,chalcopryrite ,graphitic shears throughout.							
112.9 - 113.5m	strongly graphitic siltstone with minor quartz .							
113.5 - 121.7m	SANDSTONE	13413	113	114	1.08	.032	2.1	.06
-light to dark grey ,fine to med. grained sandstone with thin bands of dark grey to black siltstone ,grain		13414	114	115	.83	.024	1.6	.05
		13415	115	116	.64	.019	1.5	.04
supported ,3-5% fine euhedral pyrite throughout ,quartz-carbonate (stockwork) throughout ,younger veins are white and barren of sulphides ,predominate fracture @ 130 with respect to bedding .		13416	116	117	1.18	.034	1.4	.04
		13417	117	118	1.1	.032	1.6	.05
		13418	118	119	.24	.007	.4	.01
		13419	119	120	.1	.003	.7	.02
-114.3 - 114.9m	clay shear ,light grey ,15% quartz vein	13420	120	121	.15	.004	.4	.01
material ,3-5% euhedral pyrite throughout ,2% fine pyrite with 1% arsenopyrite in quartz.Contact @ 114.9m @ 45 to CA.		13421	121	122	.22	.006	1.3	.04
-115.7 - 116.2m	sheared ,broken core with silty gouge ,dark grey ,2-3% euhedral pyrite ,20% quartz vein material .							
-116.8m	5cm bullish vein .							
-117.2 - 119.3m	bedding 30-65 to CA.							
-120.1 - 121.7m	very coarse sandstone ,mainly quartz and feldspar ,some sercite (beige platy mineral) .							

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 5

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Hole ID      Easting   Northing   Elev   Length  Comment
89 12        9274      10411     1070   135.6   ZONE V
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Geo.          Smpl      Au      Au      Ag      Ag
Desc.         Nbr      From    To    (G/T)  (OZ/T)  (G/T)  (OZ/T)
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121.7 - 135.6m SANDSTONE          13431  122  124   .25   .007   .4   .01
                                   13432  124  126   .17   .005   .5   .01
-DESCRIPTION NEEDS TO BE ADDED    13433  126  128   .3    .009   .6   .02
                                   13434  128  130   .04   .001   .4   .01
                                   13435  130  132   .02   .001   .7   .02

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-121.9m 5cm bullish quartz vein ,devoid of sulphides ,          13436  132  134   .05   .001   .3   .01
  some wall rock inclusions ,hosted in graphitic shear          13437  134 135.6 .01   .001   .4   .01
  (gouge) ,vein contacts @ 20 to CA.

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-126.3m 1cm quartz vein ,discontinuous ,2% fine disseminated
pyrite ,<1% arsenopyrite ,host is a med. grained sandstone

with 3% pyrite and 1% arsenopyrite ,vein contacts @ 40 to
CA.

-128.2m beddding @60 to CA.

-130.2 - 130.7m black siltstone ,weakly graphitic .

-130.4m 1-2cm quartz-carbonate vein ,smokey grey in color ,

banded ,5% disseminated euhedral pyrite ,10% carbonate ,
hosted by a thin graphitic shear ,contacts @ 50 to CA.

135.6m END OF HOLE .

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment				
89 13	9248	10365	1096	190.5	ZONE V				
Geo. Desc.			Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
3.7 - 9.0 Sandstone			34051	3.7	5	.01	.001	1	
-green grey sandstone with minor quartz - iron carbonate veining; moderate alteration			34052	5	7	.01	.001	.9	
			34053	7	8	.01	.001	.8	
9.0 - 16.7 Sandstone									
- Dark grey to black poorly sorted sandstone with pebbles up to 1cm. Also sands of siltstone - medium to fine grained sands of carbonaceous material.									
16.7 - 17.5 Siltstone			34054	16	17	.01	.001	1	
- Gouge of grey to dark brown clay material with broken quartz ankeritic vein material parallel to relic bedding at 80 degrees to CA									
			34055	17	18	.01	.001	.8	
			34056	18	19	.01	.001	.7	
			34057	19	20	.01	.001	.7	
			34058	20	21	.01	.001	.9	
17.5 - 24.0 Sandstone			34059	21	22	.01	.001	1	
- Dark green grey sandstone with quartz on fractures									
			34060	23	24	.01	.001	.9	
24 - 25 Sandstone			34061	24	25	.01	.001	.7	
- sheared sandstone with sheared quartz iron carbonate veining at 80 degrees to core axis - parallel to relic bedding.									
			34062	25	26	.01	.001	.8	
			34063	27	28	.01	.001	.9	
25 - 37.6 Interlaminated sandstone and siltstone showing flame structures; carbonaceous sections of siltstone with quartz - ankeritic veining.			34064	33	34	.01	.001	.6	
37.6 Chilled contact at 70 degrees to core axis.			34065	36	37	.01	.001	.8	
37.6 - 43.8 Feldspar Porphyry Rhyolite (?)			34066	37	38	.02	.001	1	
- Irregular sub-rounded feldspar grains set in a silicious felsic matrix. Feldspars are generally milky due to argillic alteration and where oxidized have gone to iron carbonate. Relic elongated mafic grains also altered. Lower contact lost in grounded core.									
			34067	38	39	.01	.001	.3	
			34068	39	40	.01	.001	.5	
			34069	40	41	.01	.001	.5	
			34070	41	42	.01	.001	.4	
			34071	42	43	.01	.001	.4	
			34072	43	44	.01	.001	.5	
43.8 - 68 Interlaminated sandstone with siltstone lenses			34073	44	45	.01	.001	.8	
- Coarse to fine grained sandstone with siltstone lenses			34074	45	46	.01	.001	.8	
At 47.5 , erosional surface shows clasts of siltstone in sandstone, indicating tops up hole. Small argillaceous and siltstone fragments throughout. Short sections of angular			34075	46	47	.01	.001	.7	
			34076	47	48	.01	.001	.9	
			34077	48	49	.01	.001	.8	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

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Hole ID      Easting   Northing   Elev   Length  Comment
89 13        9248      10365     1096   190.5   ZONE V
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Geo.                               Smpl      Au      Au      Ag      Ag
Desc.                              Nbr  From  To (G/T) (OZ/T) (G/T) (OZ/T)
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siltstone fragments in overlying sandstone suggests tops up hole.

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34078  54  55  .01  .001  .8
34079  55  56  .01  .001  .9
34080  56  57  .01  .001  .8
34081  57  58  .01  .001  .9
34082  58  59  .01  .001  1
    
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64 - 65 Clay gouge with quartz fragments.  34083  64  65  .01  .001  .8
                                           34084  66  67  .01  .001  .7
    
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68 - 70 Dacite Dyke

- Stubby mafic (amphibole) grains in a fine felsic matrix. Feldspars present are have a milky apperance (argillic). At 69.6 metres there is a chalcedonic quartz vein with pyrite and sphalerite. Vein is multi staged (composed of several generations of fluids.

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                                           34085  69  70  .01  .001  1.1
70 Contact is sheared                    34086  70  71  .01  .001  .7
                                           34087  71  72  .01  .001  .7
70 - 86 Sandstone                        34088  72  73  .31  .009  .7
- grey, fine to coarse grained sandstone with sheared 34089  73  74  .01  .001  .9
chloritic and/or graphitic sections with clay gouge.  34090  74  75  .01  .001  .5
Also sections with carbonate veining.
                                           34091  77  78  .01  .001  .5
    
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                                           34092  80  81  .01  .001  .7
                                           34093  81  82  .01  .001  .8
                                           34094  82  83  .01  .001  .7
84.5 lcm quartz carbonate vein with wall rock inclusions. 34095  83  84  .01  .001  .6
    
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DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment							
89 13	9248	10365	1096	190.5	ZONE V							
Geo. Desc.						Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
Vein is laminated and hosted in a 0.9m thick bed of graphitic siltstone with carbonate veining throughout.						34096	84	85	.01	.001	.6	
86 - 90 Conglomerate - Light grey matrix supported pebble conglomerate with clasts up to 3cm. Some clasts show weak argillic and chloritic alteration.						34097	89	90	.01	.001	.8	
90 - 104 Sandstone - Light grey fine grained sandstone with dark grey siltstone partings. Load structures indicate tops up hole. Carbonate veinlets but no carbonate alteration (some chlorite).						34098	101	102	.01	.001	.8	
104 - 107 Feldspar Quartz Granitic (?) Dyke - > 60% quartz, < 5% mafics. Silicious felsic matrix with milky feldspars, thin carbonate veinlets, and 1% pyrite. From 106 to 107m there is strong argillic alteration.						34099	104	105	.01	.001	.5	
						34100	105	106	.01	.001	.3	
						34101	106	107	.01	.001	.3	
						34102	107	108	.01	.001	.6	
						34103	108	109	.01	.001	.8	
107 - 111.6 Sandstone - Light grey fine grained sandstone with sections of carbonate veinlets.						34104	111	112	.01	.001	.5	
111.6 - 115.5 Feldspar Quartz Granite Dyke - 50% quartz, 45% feldspars, and <5% mafics; 1% pyrite. Feldspars are milky due to argillic alteration.						34105	112	113	.01	.001	.4	
						34106	113	114	.01	.001	.3	
						34107	114	115	.01	.001	.2	
						34108	115	116	.01	.001	.5	
115.5 - 123.2 Sandstone Interlaminated fine grained sandstone with beds of dark grey siltstone, finely laminated. Graded bedding indicates tops up hole. Moderate carbonate and chloritic alteration throughout with some graphitic sections.						34109	120	121	.01	.001	.8	
						34110	121	122	.01	.001	.6	
						34111	122	123	.01	.001	.7	
123.2 - 127.9 Sandstone						34112	123	124	.01	.001	.6	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

Hole ID	Easting	Northing	Elev	Length	Comment
89 13	9248	10365	1096	190.5	ZONE V

Geo. Desc.	Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
------------	----------	------	----	----------	-----------	----------	-----------

- Coarse grained strongly silicified sandstone with sub-angular grains (felsic and mafic); moderate argillic alteration, and pyrite up to 1% in places.	34113	124	125	.01	.001	.7	
	34114	125	126	.01	.001	.6	
127.9 - 129 Interbedded sandstone and siltstone with some	34115	127	128	.01	.001	.7	
	34116	128	129	.01	.001	.8	

graphitic sections.

129 - 130.6 Sandstone

- Strongly silicified coarse grained sandstone with sub-angular (immature) grains, moderate argillic alteration,

and up to 1% pyrite.

130.6 - 151.2 Sandstone and siltstone

- Interbedded medium to coarse grained sandstone with thin

(up to 20cm) beds of siltstone. Some sections up to 2% pyrite (in bands at 40 to 50 degrees to CA).

	34117	141	142	.01	.001	.8	
	34118	142	143	.01	.001	1	
	34119	143	144	.01	.001	2.3	

150 - 151 Sandstone with 2% to 3% pyrite

	34120	150	151	.01	.001	.9	
	34121	151	152	.01	.001	1.3	
	34122	152	153	.01	.001	1.2	
	34123	153	154	.01	.001	.6	

153.6 - 190.5 Sandstone

- Medium to coarse grained sandstone with graphitic sections up to 30cm thick; <1% pyrite throughout.

	34124	154	155	.01	.001	1.5	
	34125	155	156	.24	.007	1.8	
	34126	156	157	.16	.005	1.2	
	34127	157	158	.05	.001	.9	

155.2m - 2-3cm quartz vein with pyrite, arsenopyrite, and

sphalerite. Vein is hosted in a graphitic clay (gouge) bed 30cm thick.

	34128	158	159	.08	.001	1.6	
	34129	159	160	.1	.003	1.9	
	34130	160	161	1.78	.052	1.8	
	34131	161	162	.01	.001	.9	

158.8 - 159.7 Sandstone with carbonate vein stockwork and pyrite (<1%). Same type of section from

	34132	162	163	.01	.001	1.2	
	34133	163	164	.01	.001	1.3	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 5

Hole ID	Easting	Northing	Elev	Length	Comment					
89 13	9248	10365	1096	190.5	ZONE V					
Geo. Desc.				Smpl Nbr	From	To	Au (G/T)	Au (OZ/T)	Ag (G/T)	Ag (OZ/T)
	160 to 160.5m.			34134	164	165	.08	.001	1.3	
				34135	165	166	.83	.025	1.5	
165.0m	2cm quartz carbonate vein; host is a black graphitic siltstone. Vein contains 5% disseminated pyrite, <1% arsenopyrite, trace chalcopryrite. Vein contacts are			34136	166	167	.22	.006	1.4	
				34137	167	168	.01	.001	1.5	
				34138	168	169	.08	.002	1.4	
	sharp, even at 75 degrees to CA.			34139	169	170	.1	.003	1.6	
				34140	170	171	.01	.001	1.4	
				34141	171	172	.01	.001	1.1	
172.4m	- 1cm banded quartz vein hosted in a sandstone. Vein contains 1% pyrite, <1% arsenopyrite, <1% galena,			34142	172	173	.1	.003	1.7	
				34143	173	174	.06	.002	1.6	
	<1% chalcopryrite, <1% sphalerite. Contacts are sharp, uneven at 80 degrees to CA.			34144	174	175	.08	.002	1.7	
				34145	175	176	.13	.004	1.5	
172.6m	- 2-4cm milky white quartz carbonate vein, banded. Host is a black fine grained sandstone. Vein has 1-2% pyrite, <1% chalcopryrite, <1% sphalerite, and wall									
	rock inclusions. Vein contacts are sharp, very irregular at 55 to 75 degrees to CA.									
173m	- 1cm quartz carbonate vein hosted in a thin graphitic siltstone bed. Vein contains 1% pyrite, <1% chalcopryrite, <1% sphalerite. Contacts are sharp, even at 65 degrees to CA.									
174.8m	- 1.5cm quartz vein with 1% pyrite. Host is a dark grey sandstone. Contacts are sharp and even at 80 degrees to CA.									
176.7m	- 4.5cm milky white quartz carbonate vein, <1% pyrite and wall rock inclusions. Host is a grey sandstone. Vein contacts are sharp and even at 70 degrees to CA			34146	176	177	.38	.011	1.6	
				34147	177	178	.01	.001	1.1	
				34148	178	179	.2	.006	1.8	
				34149	179	180	.76	.022	2	
				34150	180	181	.24	.007	1.2	
				34151	181	182	1.48	.043	1.6	
				34152	182	183	.65	.019	2.3	
183 - 183.5m	Graphitic section with carbonate stockwork and up to 5% pyrite.									
				34153	183	184	.38	.011	1.7	
190.5M	END OF HOLE			34154	184	185	.01	.001	1	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 1	9300	10527	1017	122.6	ZONE V
Smpl Nmbr	From	To	Recov %	RQD %	
		3.7			
11001	3.7	6	90	5	
11002	6	8	75	5	
11003	8	10	75	20	
11004	10	12	100	5	
11005	12	14	70		
11006	14	16	80		
11007	16	18	55	5	
11008	18	20	60	5	
11009	20	22	85		
11010	22	24	70	5	
11011	24	26	100		
11012	26	28	80	5	
11013	28	30	100	20	
11014	30	31	100	80	
11015	31	32	100	40	
11016	32	33	100	65	
11017	33	34	100	75	
11018	34	35	100	95	
11019	35	36	100	20	
11020	36	38	100	70	
11021	38	40	100	90	
11022	40	42	100	70	
11023	42	43	100	45	
11024	43	44	100	60	
11025	44	45	100	80	
11026	45	46	100	85	
11027	46	47	100	65	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 1	9300	10527	1017	122.6	ZONE V
Smpl Nmbr	From	To	Recov %	RQD %	
11028	47	49	95	80	
11029	49	51	100	70	
11030	51	52	100	20	
11031	52	53	100	5	
11032	53	54	100	10	
11033	54	55	100	35	
11034	55	56	100		
11035	56	58	100	15	
11036	58	60	100	20	
11037	60	62	100	15	
11038	62	64	100	50	
11039	64	65	100	50	
11040	65	66	95	20	
11041	66	68	100	40	
11042	68	69	100	75	
11043	69	70	100	80	
11044	70	71	100	35	
11045	71	72	100	70	
11046	72	73	100	25	
11047	73	74	100		
11048	74	75	100	70	
11049	75	76	100	75	
11050	76	77	100	40	
11051	77	79	100		
11052	79	81	95	20	
11053	81	83	100	35	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 1	9300	10527	1017	122.6	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11054	83	85	100	45
11055	85	87	95	45
11056	87	89	100	25
11057	89	91	100	30
11058	91	93	100	60
11059	93	95	100	30
11060	95	97	100	80
11061	97	99	100	10
11062	99	101	100	25
11063	101	102.3	100	50
11064	102.3	104	90	10
11065	104	106	95	20
11066	106	108	100	55
11067	108	110	100	20
11068	110	112	100	50
11069	112	114	100	30
11070	114	116	100	30
11071	116	118	100	30
11072	118	120	100	75
11073	120	122.5	100	30

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 2	9275	10523	1014	116.1	ZONE V
Smpl Nmbr	From	To	Recov %	RQD %	
		5.2			
11074	5.2	7.2	90		
11075	7.2	9.2	100	20	
11076	9.2	11.2	100	30	
11077	11.2	13.2	100		
11078	13.2	15.2	90		
11079	15.9	17.4	90		
11080	18.8	19.8	100		
11081	19.8	20.7	80	30	
11082	21.3	23.3	95	10	
11083	23.3	25.3	100	20	
11084	25.3	26.3	100		
11085	26.3	27.3	100	40	
11086	27.3	28.3	100	50	
11087	28.3	29.3	100		
11088	29.3	30.3	95	45	
11089	30.3	31.3	100		
11090	31.3	32.3	100		
11091	32.3	33.3	100	70	
11092	33.3	34.3	100		
11093	34.3	35.3	100	10	
11094	35.3	36.3	100	80	
11095	36.3	37.3	100	80	
11096	37.3	38.3	100	50	
11097	38.3	39.3	100	80	
11098	39.3	40.3	100	70	
11099	40.3	41.3	100	90	
11100	41.3	42.3	100	90	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 2	9275	10523	1014	116.1	ZONE V

Smpl Nmbr	From	To	Recov %	RQD %
11101	42.3	43.3	100	80
11102	43.3	44.3	100	90
11103	44.3	45.8	100	95
11104	45.8	46.3	100	90
11105	46.3	46.8	100	75
11106	46.8	48.3	100	60
11107	48.3	49.3	100	95
11108	49.3	50.3	100	70
11109	50.3	51.3	100	20
11110	51.3	52.3	100	90
11111	52.3	53.3	100	70
11112	53.3	54.3	100	10
11113	54.3	56.3	100	70
11114	56.3	58.3	100	20
11115	58.3	59.3	100	15
11116	59.3	60.3	100	20
11117	60.3	61.3	100	60
11118	61.3	63.3	100	15
11119	63.3	65.3	100	30
11120	65.3	67.3	100	40
11121	67.3	69.3	100	
11122	69.3	71.3	100	75
11123	71.3	73.3	100	55
11124	73.3	75.3	100	10
11125	75.3	77.3	100	10
11126	77.3	79.3	100	40
11127	79.3	81.3	100	60
11128	81.3	83.3	100	30
11129	83.3	85.3	95	30
11130	85.3	87.3	100	70
11131	87.3	89.3	100	50
11132	89.3	91.3	100	
11133	91.3	93.3	100	35
11134	93.3	94.3	100	70
11135	94.3	96.3	100	45
11136	96.3	98.3	100	40
11137	98.3	100.3	100	40
11138	100.3	102.3	100	20

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 2	9275	10523	1014	116.1	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11139	102.3	104.3	100	25
11140	104.3	106.3	100	25
11141	106.3	108.3	100	20
11142	108.3	110.3	100	15
11143	110.3	112.3	100	
11144	112.3	114.3	100	30
11145	114.3	116.3	100	20
11145	114.3	116.1		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 4	9328	10532	1014	99.4	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
		4.6		
11223	4.6	7	80	10
11224	7	9	90	5
11225	9	11	90	
11226	11	13	80	35
11227	13	15	80	
11228	15	17	50	15
11229	17	19	95	25
11230	19	21	100	45
11231	21	23	45	
11232	23	25	45	
11233	25	27	60	10
11234	27	29	50	
11235	29	31	95	45
11236	31	32	90	40
11237	32	32.6	50	50
11238	32.6	34	80	35
11239	34	35	95	40
11240	35	37	100	55
11241	37	39	100	50

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 4	9328	10532	1014	99.4	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11242	39	41	95	55
11243	41	43	95	55
11244	43	45	90	40
11245	45	47	95	40
11246	47	49	90	10
11247	49	51	100	20
11248	51	53	85	50
11249	53	55	90	10
11250	55	57	95	50
11251	57	59	85	25
11252	59	61	85	45
11253	61	63	95	40
11254	63	65	100	45
11255	65	67	95	40
11256	67	69	100	60
11257	69	71	80	30
11258	71	73	90	45
11259	73	75	95	75
11260	75	77	100	30
11261	77	79	100	30
11262	79	81	95	5
11263	81	83	100	45
11264	83	85	100	45
11265	85	87	100	50
11266	87	89	100	20
11267	89	91	100	35
11268	91	93	95	10
11269	93	95	100	10
11270	95	97	100	10

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 4	9328	10532	1014	99.4	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11271	97	99.4	90	45

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 5	9302	10467	1041	137	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11272	3.4	6	80	10
11273	6	8	80	25
11274	8	10	70	10
11275	10	12	65	5
11276	12	14	70	
11277	14	16	90	10
11278	16	18	40	
11279	18	20	70	10
11280	20	22	95	10
11281	22	24	85	
11282	24	26	95	5
11283	26	28	100	25
11284	28	30	100	15
11285	30	32	100	15
11286	32	34	95	50
11287	34	36	100	30
11288	36	38	100	5
11289	38	40	100	15
11290	40	41.3	90	
11291	41.3	42.3	100	60
11292	42.3	43	100	60
11293	43	45	90	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 5	9302	10467	1041	137	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
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11294	45	47	90	
11295	47	49	60	
11296	49	51	95	5
11297	51	53	80	30
11298	53	55	85	10
11299	55	57	95	5
11300	57	59	100	5
11301	59	61	100	
11302	61	63	95	5

11303	63	65	100	35
11304	65	67	95	5

11305	67	68	75	5
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11306	68	69	95	
11307	69	70	95	40

11308	70	70.7	100	35
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DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 5	9302	10467	1041	137	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11309	70.7	71.3	100	30

11310	71.3	73	100	40
11311	73	75	95	10
11312	75	77	100	60
11313	77	79	100	40
11314	79	80	95	30
11315	80	81	100	10
11316	81	82	100	30
11317	82	84	95	30
11318	84	86	100	10

11319	86	88	100	15
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DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

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Hole ID	Easting	Northing	Elev	Length	Comment
89 5	9302	10467	1041	137	ZONE V

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Smpl Nmbr	From	To	Recov %	RQD %
11320	88	90	95	25
11321	90	92	100	35
11322	92	94	95	10
11323	94	96	95	35
11324	96	98	100	15
11325	98	100	100	45
11326	100	102	100	45
11327	102	104	100	20
11328	104	106	95	20
11329	106	108	100	20
11330	108	110	100	55
11331	110	112	100	30
11332	112	114	95	20
11333	114	116	100	15
11334	116	118	100	40
11335	118	120	100	30
11336	120	122	100	65
11337	122	124	100	35
11338	124	126	85	20
11339	126	128	100	35
11340	128	130	90	20
11341	130	132	90	25
11342	132	134	95	10
11343	134	136	90	10
11344	136	137	70	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 6	8800	9573	1524	273.6	ZONE II
Smpl Nbr	From	To	Recov %	RQD %	
11618	49	51	100	75	
11619	51	53	100	80	
11620	53	55	100	80	
11621	55	57	100	90	
11622	57	59	100	75	
11623	59	61	100	70	
11624	61	63	100	75	
11625	63	65	100	65	
11626	65	67	90	45	
11627	67	68	100	70	
11628	68	69	100	60	
11629	69	70	100	45	
11630	70	72	100	65	
11631	72	74	100	70	
11632	74	76	100	60	
11633	76	78	100	50	
11634	78	80	100	45	
11635	80	82	100	75	
11636	82	84	100	65	
11637	84	86	100	70	
11638	86	88	100	10	
11639	88	90	100	50	
11640	90	92	100	60	
11641	92	94	100	80	
11642	94	96	100	40	
11643	96	98	100	50	
11644	98	100	100	60	
11645	100	102	100	50	
11646	102	104	100	75	
11647	104	106	100	65	
11648	106	108	100	80	
11649	108	110	100	90	
11650	110	112	100	70	
11351	112	114	90	75	
11352	114	116	100	60	
11353	116	118	100	75	
11354	118	120	100	85	
11355	120	122	100	10	
11356	122	124	100	10	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 6	8800	9573	1524	273.6	ZONE II

Smpl Nbr	From	To	Recov %	RQD %
11357	124	126	100	5
11358	126	128	100	60
11359	128	130	100	90
11360	130	132	95	90
11361	132	134	100	70
11362	134	136	100	75
11363	136	138	100	90
11364	138	140	100	80
11365	140	142	100	70
11366	142	144	100	50
11367	144	146	100	60
11368	146	148	100	90
11369	148	150	100	95
11370	150	152	100	90
11371	152	154	100	80
11372	154	156	100	75
11373	156	157	100	35
11374	157	158	100	60
11375	158	159	100	90
11376	159	161	100	75
11377	161	163	100	80
11378	163	165	100	90
11379	165	167	100	85
11380	167	169	100	95
11381	169	171	100	85
11382	171	173	100	85
11383	173	175	100	70
11384	175	177	100	65

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

Hole ID	Easting	Northing	Elev	Length	Comment
89 6	8800	9573	1524	273.6	ZONE II

Smpl Nbr	From	To	Recov %	RQD %
11385	177	179	100	85
11386	179	181	100	95
11387	181	183	100	80
11388	183	185	100	85
11389	185	187	100	75
11390	187	189	100	70
11391	189	191	100	100
11392	191	193	100	85
11393	193	195	100	95
11394	195	197	100	95
11395	197	199	100	95
11396	199	201	100	100
11397	201	203	100	85
11398	203	205	100	70
11399	205	207	100	80
11400	207	209	100	60
11401	209	211	100	45
11402	211	213	100	55
11403	213	215	100	65

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 5

Hole ID	Easting	Northing	Elev	Length	Comment
89 6	8800	9573	1524	273.6	ZONE II

Smpl Nbr	From	To	Recov %	RQD %
11404	215	217	100	25
11405	217	219	100	25
11406	219	221	100	20
11407	221	223	100	70
11408	223	225	100	65
11409	225	227	100	75
11410	227	229	100	30
11411	229	231	100	60
11412	231	233	100	70
11413	233	235	100	60
11414	235	237	100	55
11415	237	239	100	45
11416	239	241	100	70
11417	241	243	100	45
11418	243	245	100	85
11419	245	247	100	90
11420	247	249	100	90
11421	249	251	100	80

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 6

Hole ID	Easting		Northing	Elev	Length	Comment
89 6	8800		9573	1524	273.6	ZONE II

Smpl Nbr	From	To	Recov %	RQD %
11422	251	253	100	45
11423	253	255	100	60
11424	255	257	100	50
11425	257	259	95	75
11426	259	261	100	70
11427	261	263	90	75
11428	263	265	100	65
11429	265	267	100	55
11430	267	269	100	45
11431	269	271	100	40
11432	271	273.4	100	75

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 7	9390	9129	1345	121.1	ZONE VI
Smpl Nbr	From	To	Recov %	RQD %	
11.2					
11433	11.2	14	40	10	
11434	14	17	75	70	
11435	17	20	100	80	
11436	20	23	100	70	
11437	23	26	100	75	
11438	26	29	100	75	
11439	29	31	100	35	
11440	31	34	100	10	
11441	34	37	100	50	
11442	37	40	100	60	
11443	40	43	45	10	
11444	43	46	100	45	
11445	46	49	100	70	
11446	49	52	100	30	
11447	52	55	100	55	
11448	55	58	80	40	
11449	58	61	75	10	
11450	61	64	90	50	
11451	64	67	100	50	
11452	67	70	90	90	
11453	70	73	100	80	
11454	73	76	100	90	
11455	76	79	100	75	
11456	79	82	100	55	
11457	82	85	100	90	
11458	85	88	100	95	
11459	88	91	100	80	
11460	91	94	100	70	
11461	94	97	100	90	
11462	97	100	100	65	
11463	100	103	100	40	
11464	103	106	90	40	
11465	106	109	100	60	
11466	109	112	100	30	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 7	9390	9129	1345	121.1	ZONE VI

Smpl Nbr	From	To	Recov %	RQD %
11467	112	115	100	55
11468	115	118	100	30
11469	118	120.5	100	60

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 8	9331	9306	1415	97.9	ZONE VI
Smpl Nmbr	From	To	Recov %	RQD %	
	3.5				
11470	3.5	5	100	40	
11471	5	7	100	20	
11472	7	9	100	30	
11473	9	11	100	65	
11474	11	13	100	55	
11475	13	15	100	50	
11476	15	16	100	75	
11477	16	17	90	70	
11478	17	18	95	30	
11479	18	19	95		
11480	19	20	100	45	
11481	20	22	100	20	
11482	22	24	100		
11483	24	25	100		
11484	25	26	100	10	
11485	26	28	100	50	
11486	28	30	100	35	
11487	30	32	100	70	
11488	32	34	100	90	
11489	34	36	100	65	
11490	36	38	100	70	
11491	38	40	100	100	
11492	40	41	100		
11493	41	43	100	25	
11494	43	45	85	10	
11495	45	47	100	30	
11496	47	49	95	45	
11497	49	51	100	45	
11498	51	53	100	65	
11499	53	55	100	60	
11500	55	57	100	45	
11801	57	59	100	90	
11802	59	61	100	90	
11803	61	63	90	25	
11804	63	65	100	60	
11805	65	67	100	25	
11806	67	69	100	60	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 8	9331	9306	1415	97.9	ZONE VI

Smpl Nbr	From	To	Recov %	RQD %
11807	69	71	100	85
11808	71	73	100	55
11809	73	75	100	70
11810	75	77	100	90
11811	77	78	100	35
11812	78	80	100	70
11813	80	82	100	50
11814	82	84	100	55
11815	84	86	100	60
11816	86	88	100	70
11817	88	90	100	85
11818	90	92	100	60
11819	92	94	100	50
11820	94	96	100	60
	96	97.8	100	10

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 9	9369	9461	1412	117.4	ZONE VI
Smpl Nbr	From	To	Recov %	RQD %	
		4			
11821	4	6	100	75	
11822	6	8	100	90	
11823	8	10	100	25	
11824	10	12	100	95	
11825	12	13	100	65	
11826	13	14	100	100	
11827	14	15	100	60	
11828	15	17	100	70	
11829	17	19	100	100	
11830	19	21	100	90	
11831	21	23	100	95	
11832	23	25	100	50	
11833	25	27	100	90	
11834	27	29	100	75	
11835	29	31	100	90	
11836	31	33	100	70	
11837	33	35	100	75	
11838	35	37	100	65	
11839	37	39	100	70	
11840	39	41	100	60	
11841	41	43	100	70	
11842	43	45	100	70	
11843	45	47	100	75	
11844	47	49	100	45	
11845	49	51	100	65	
11846	51	53	100	85	
11847	53	55	100	80	
11848	55	57	100	70	
11849	57	59	100	65	
11850	59	61	100	90	
11851	61	63	100	90	
11852	63	65	100	45	
11853	65	67	100	50	
11854	67	69	100	35	
11855	69	71	100	45	
11856	71	73	100	65	
11857	73	75	100	45	
11858	75	76	100	65	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting		Northing	Elev	Length	Comment
89 9	9369		9461	1412	117.4	ZONE VI
Smpl Nnbr	From	To	Recov %	RQD %		
11859	76	77	100	50		
11860	77	78	100	40		
11861	78	79	100	35		
11862	79	81	100	50		
11863	81	83	100	70		
11864	83	85	100	70		
11865	85	85.3	100			
11866	85.3	86	100	70		
11867	86	87	100	70		
11868	87	88	100	45		
11869	88	89	100	75		
11870	89	90	100	80		
11871	90	92	60	90		
11872	92	94	40	75		
11873	94	96	50	80		
11874	96	98	100	55		
11875	98	100	100	60		
11876	100	102	100	45		
11877	102	104	100	5		
11878	104	106	100	50		
11879	106	108	100	65		
11880	108	110	100	40		
11881	110	112	100	60		
11882	112	114	100	60		
11883	114	116	100	45		
11879	106	108	100	65		
11880	108	110	100	40		
11881	110	112	100	60		
11882	112	114	100	60		
11883	114	116	100	45		
11878	104	106	100	50		
11879	106	108	100	65		
11880	108	110	100	40		
11881	110	112	100	60		
11882	112	114	100	60		
11883	114	116	100	45		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 10	9336	10477	1038	98.8	ZONE V
Smpl Nbr	From	To	Recov %	RQD %	
		3.7			
11901	3.7	6	50	40	
11902	6	8	40		
11903	8	12	35		
11904	12	14	50		
11905	14	18	40	5	
11906	18	20	65	10	
11907	20	22	80	20	
11908	22	24	100	10	
11909	24	26	100	15	
11910	26	28	100	40	
11911	28	30	100	10	
11912	30	32	100		
11913	32	34	100	10	
11914	34	36	100		
11915	36	37.2	100		
11916	37.2	39	100	30	
11917	39	41	100	55	
11918	41	44.2	30		
11919	44.2	46.3	30		
11920	46.3	48.8	45	5	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting		Northing	Elev	Length	Comment
89 10	9336		10477	1038	98.8	ZONE V
Smpl Nbr	From	To	Recov %	RQD %		
11921	48.8	50.9	50			
11922	50.9	57	20	5		
11923	57	58	85	40		
11924	58	59	90			
11925	59	60	85	10		
11926	60	62	85	5		
11927	62	64	95	20		
11928	64	65	100	70		
11929	65	66	100	50		
11930	66	67	100	20		
11931	67	69	100	15		
11932	69	71	100	50		
11933	71	73	100	50		
11934	73	75	95			
11935	75	77	95	15		
11936	77	78	100	35		
11937	78	80	100	30		
11938	80	81	95	40		
11939	81	82	95	65		
11940	82	83	100			
11941	83	84	100	80		
11942	84	86	100	35		
11943	86	88	100	30		
11944	88	90	100	30		
11945	90	92	100	35		
11946	92	94	100	50		
11947	94	96	100	40		
11948	96	97.5	100	35		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting		Northing	Elev	Length	Comment
89 10	9336		10477	1038	98.8	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11949	97.5	98.8	100	55

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 11	9275	10468	1043	107	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
		3		
11950	3	6		
11951	6	8		
11952	8	10		
11953	10	12		
11954	12	14		
11955	14	16		
11956	16	18		
11957	18	20		
11958	20	22		
11959	22	24		
11960	24	26		
11961	26	28		
11962	28	30		
11963	30	32		
11964	32	34		
11965	34	36	100	
11966	36	38	100	20
11967	38	40	100	50
11968	40	42	100	20
11969	42	44	100	10
11970	44	46	100	
11971	46	48	100	
11972	48	50	100	

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

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=====
Hole ID      Easting    Northing    Elev    Length  Comment
89 11        9275      10468      1043    107     ZONE V
=====
```

```
=====
  Smpl      From    To    Recov    RQD
  Nbr                      %      %
-----
11973      50     52     100
11974      52     54     85     35
11975      54     56     100     25
11976      56     58     80
11977      58     62     45

11978      62     64     85     10
11979      64     66     90     30
11980      66     67     95     20

11981      67     68     100     30

11994      68     69     100     40
11995      69     70     100     30
11982      70     71     100     60
11983      71     72     100     75
11984      72     73     100     90

11985      73     74     100     40
11986      74     75     100     50
11987      75     76     100     50
=====
```

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11988      76     77     100     70
11989      77     79     100     70
11990      79     81     100
11991      81     83     100     20
11992      83     85     100     65
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DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 11	9275	10468	1043	107	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11993	85	86	100	40
11996	86	87	100	
11997	87	88	100	40
11998	88	89	100	90
11999	89	90	100	35
12000	90	91	100	60
11751	91	93	100	50
11752	93	94	100	25

11753	94	95	100	40
11754	95	96	100	40

11755	96	98	100	25
11756	98	100	100	10
11757	100	102	100	45
11758	102	104	100	35

11759	104	106	100	40
11760	106	107	100	15

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 1

Hole ID	Easting	Northing	Elev	Length	Comment
89 12	9274	10411	1070	135.6	ZONE V
Smpl Nbr	From	To	Recov %	RQD %	
		3			
11761	3	5	100	15	
11762	5	7	100	20	
11763	7	9	100	45	
11764	9	11	100	70	
11765	11	13	100	70	
11766	13	15	100	45	
11767	15	17	90	30	
11768	17	19	100	50	
11769	19	21	100	20	
11770	21	23	100		
11771	23	25	95	20	
11772	25	27	100	55	
11773	27	29	100	65	
11774	29	31	90	10	
11775	31	33	100	40	
11776	33	35	100	20	
11777	35	37	100	15	
11778	37	39	100	10	
11779	39	41	100	30	
11780	41	43	100	35	
11781	43	45	100		
11782	45	47	100		
11783	47	49	100	5	
11784	49	51	100	5	
11785	51	53	70		
11786	53	55	90		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 2

Hole ID	Easting	Northing	Elev	Length	Comment
89 12	9274	10411	1070	135.6	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
11787	55	57	100	
11788	57	59	100	15
11789	59	61	70	15
11790	61	63	65	
11791	63	65	65	
11792	65	67	90	5
11793	67	69	100	30
11794	69	71	95	30
11795	71	73	90	20
11796	73	75	100	30
11797	75	77	100	50
11798	77	79	100	60
11799	79	81	90	20
11800	81	83	100	15
13422	83	84.4	60	15
13423	85.3	87	90	15
13424	87	89	100	10
13425	89	91	100	60
13426	91	93	100	
13427	93	95	100	45
13428	95	97	100	65
13429	97	99	100	30

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 3

Hole ID	Easting	Northing	Elev	Length	Comment
89 12	9274	10411	1070	135.6	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
13430	99	101	95	30
13401	101	102		

13402	102	103		
-------	-----	-----	--	--

13403	103	104		
13404	104	105		

13405	105	106		
13406	106	107		
13407	107	108		

13408	108	109		
13409	109	110		
13410	110	111		
13411	111	112		
13412	112	113		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 4

Hole ID	Easting	Northing	Elev	Length	Comment
89 12	9274	10411	1070	135.6	ZONE V

Smpl Nbr	From	To	Recov %	RQD %
----------	------	----	---------	-------

13413	113	114		
13414	114	115		
13415	115	116		
13416	116	117		
13417	117	118		
13418	118	119		
13419	119	120		
13420	120	121		
13421	121	122		

DRILL HOLE ASSAY REPORT

7-Dec-89

Page: 5

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=====
Hole ID      Easting    Northing    Elev    Length  Comment
89 12        9274       10411       1070    135.6   ZONE V
=====
    
```

```

=====
      Smpl      Recov  RQD
      Nmbr      From   To      %    %
-----
13431      122    124      85    5
13432      124    126      90   30
13433      126    128     100   40
13434      128    130     100   35
13435      130    132     100   45

13436      132    134     100   50
13437      134   135.6     100   35
    
```

APPENDIX II

DETAILED DESCRIPTION OF GEOCHEMICAL PROCEDURES



**MINERAL
• ENVIRONMENTS
LABORATORIES**

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR ARSENIC:

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the sample is digested for 6 hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. A suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzeit method using $\text{Ag CS}_2\text{N} (\text{C}_2\text{H}_5)_2$ as a reagent. The detection limit obtained is 1. ppm.



**MINERAL
• ENVIRONMENTS
LABORATORIES LTD.**

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK

PROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories., at 705 West 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers.

Copper, lead, zinc, silver, cadmium, cobalt, nickel and manganese are analysed using the CH_2H_2 -Air Flame combination but the molybdenum determination is carried out by C_2H_2 - N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

Background corrections for Pb, Ag, Cd upon request are completed.

FOR ARSENIC analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzeit method using $\text{Ag Cs}_2\text{N} (\text{C}_2\text{H}_5)_2$ as a reagent. The detection limit obtained is 1. ppm.

FOR FLUORINE analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific



**MINERAL
• ENVIRONMENTS
LABORATORIES**

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR FIRE GOLD GEOCHEM:

Geochemical samples for Fire Gold processed by Min-En Laboratories., at 705 West 15th Street, North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams are fire assayed preconcentrated.

After pretreatments the samples are digested with aqua regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bawicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

Geochemical Samples for Antimony Processed
By Min-En Laboratories Ltd., At The
Above Address Employing The Following Procedure.

Sample Preparation: After drying the samples at 120° F soils and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

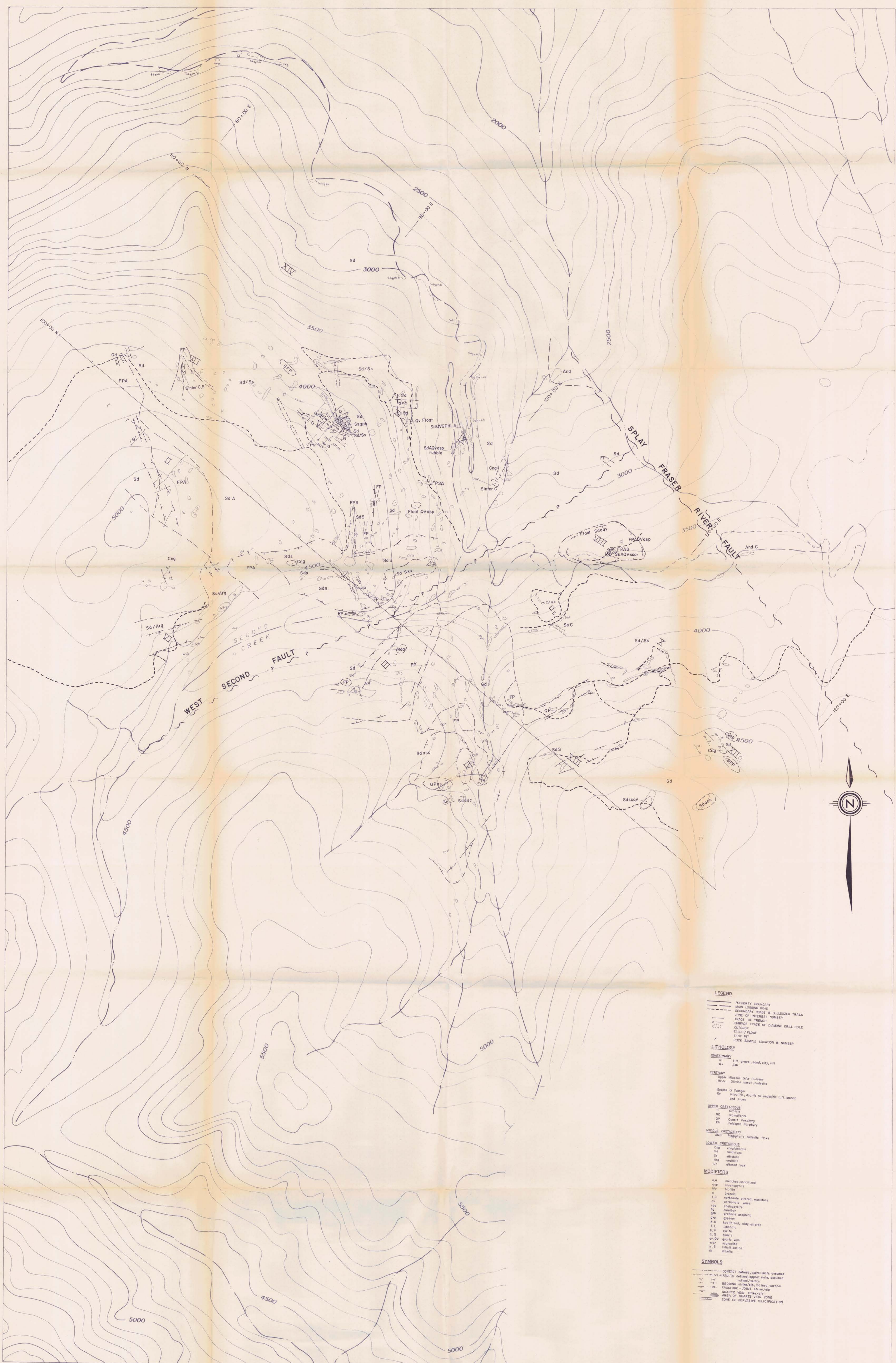
Analysis: 1.000 gram of the prepared samples are weighed into 25x200 mm pyrex test tubes.

Add 2 ml of conc HNO₃ and 5 ml of conc HCl and heat it at low temperature and slowly increase it to 150° F and let it digest for 30 minutes.

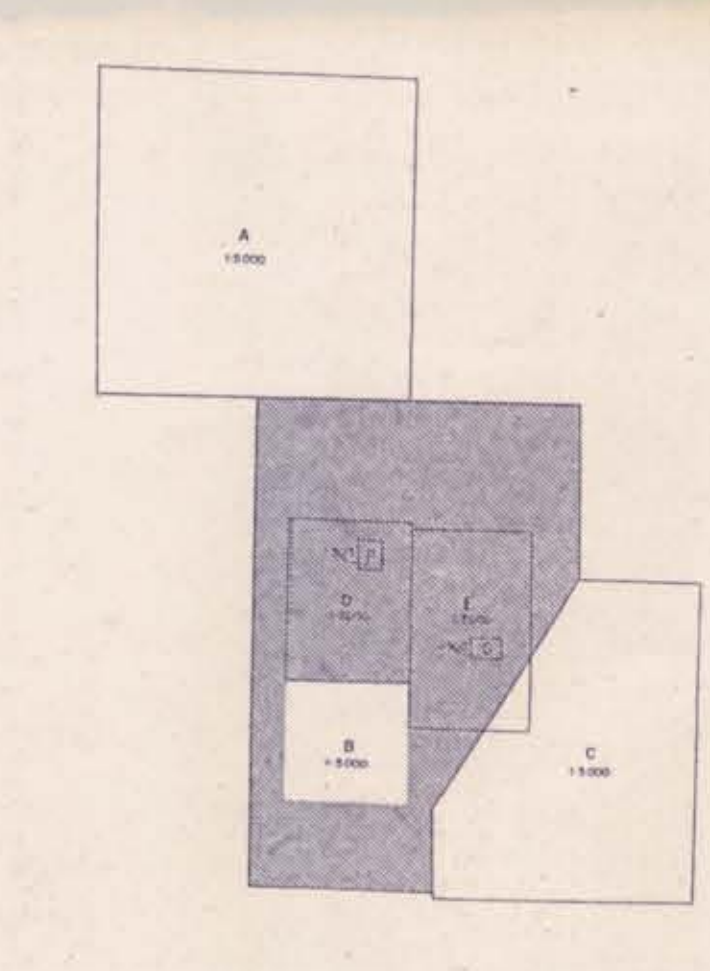
After the initial digestion increase temperature to 250° F for 3 hours. After digestion dilute to suitable volume and take a 5 ml aliquote for extraction into a clean test tube.

Add 5 ml H₂O and 10 ml of Methyl-Isobutyl-Ketone, cap it and shake it for 30 seconds. Read organic phase on Atomic Absorption Spectrophotometric against a suitably prepared standards.

ppm can be obtained from digest reading or graph can be prepared from the set of standards.



- LEGEND**
- PROPERTY BOUNDARY
 - MAIN LIGNING ROAD
 - SECONDARY ROADS & BULLDOZER TRAILS
 - ZONE OF INTEREST BOUNDARY
 - TRACE OF TRENCH
 - SURFACE TRACE OF DIAMOND DRILL HOLE
 - OUTCROP
 - TRAIL/FLOAT
 - TEST PIT
 - ROCK SAMPLE LOCATION & NUMBER
- LITHOLOGY**
- Quaternary: Tilt, gravel, sand, clay, silt, etc.
 - Tertiary: Upper Miocene &/or Pliocene, etc.
 - Essex & Younger: etc.
 - Upper Cretaceous: etc.
 - Middle Cretaceous: etc.
 - Lower Cretaceous: etc.
- MODIFIERS**
- c.d. brecciated, brecciated
 - etc. etc.
- SYMBOLS**
- CONTOUR defined, open lines, shaded
 - Faults defined, open lines, shaded
 - etc. etc.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

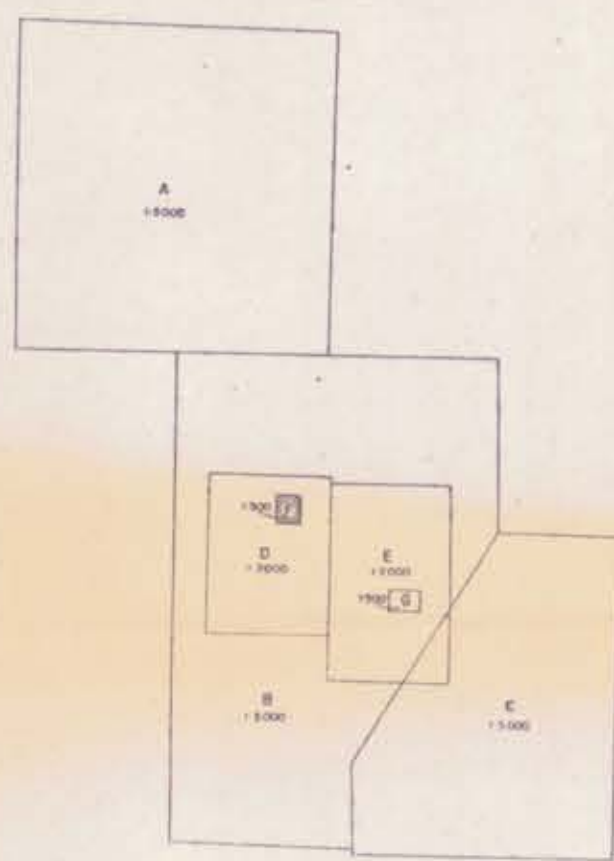
19,777

0 100 200 300 400 METRES

CYPRUS GOLD (Canada) Ltd.

WATSON BAR PROJECT
GEOLOGICAL PLAN

DRAWN BY	SCALE 1:2000
DATE DEC. 1989	MAP No. 3 B



- LEGEND**
- PROPERTY BOUNDARY
 - MAIN LOGGING ROAD
 - - - SECONDARY ROADS & BULLDOZER TRAILS
 - ZONE OF INTEREST NUMBER
 - TRACE OF TRENCH
 - SURFACE TRACE OF DIAMOND DRILL HOLE
 - OUTCROP
 - TALUS / FLOAT
 - TEST PIT
 - x ROCK SAMPLE LOCATION & NUMBER

- LITHOLOGY**
- QUATERNARY**
- Q Till, gravel, sand, clay, silt
 - Qv Ash
- TERTIARY**
- Upper Miocene B/or Pliocene
 - MPcv Olivine basalt, andesite
- Eocene & Younger**
- Ev Rhyolitic, dacitic to andesitic tuff, breccia and flows
- UPPER CRETACEOUS**
- G Granite
 - GD Granodiorite
 - QP Quartz Porphyry
 - FP Feldspar Porphyry
- MIDDLE CRETACEOUS AND**
- Flagphyric andesite flows
- LOWER CRETACEOUS**
- Cng conglomerate
 - Sd sandstone
 - Ss siltstone
 - Arg argillite
 - Un altered rock
- MODIFIERS**
- a,A bleached, sericitized
 - asp arsenopyrite
 - bio biotite
 - x breccia
 - c,C carbonate altered, marlstone
 - cv carbonate veins
 - cpy chalcopyrite
 - hg cinnabar
 - gph graphite, graphitic
 - gyp gypsum
 - k,K kaolinized, clay altered
 - l,L limonitic
 - P,P pyritic
 - q,Q quartz
 - qv,QV quartz vein
 - scor scorodite
 - s,S silicification
 - stibite

- SYMBOLS**
- CONTACT defined, approximate, assumed
 - - - FAULTS defined, approximate, assumed
 - inclined / vertical
 - BEDDING strike/dip, inclined, vertical
 - FRACTURE - JOINT strike/dip
 - QUARTZ VEIN strike/dip
 - AREA OF QUARTZ VEIN ZONE
 - ZONE OF PERSASIVE SILICIFICATION

GEOLOGICAL BRANCH ASSESSMENT REPORT

19.777

0 10 20 30 40 50 METRES

89 7
○ Surface trace of diamond drill hole. Analysis not shown.

II - G
— Trench with sample intervals.

38oz/T
1m
38 ounces / ton gold
11 metres.

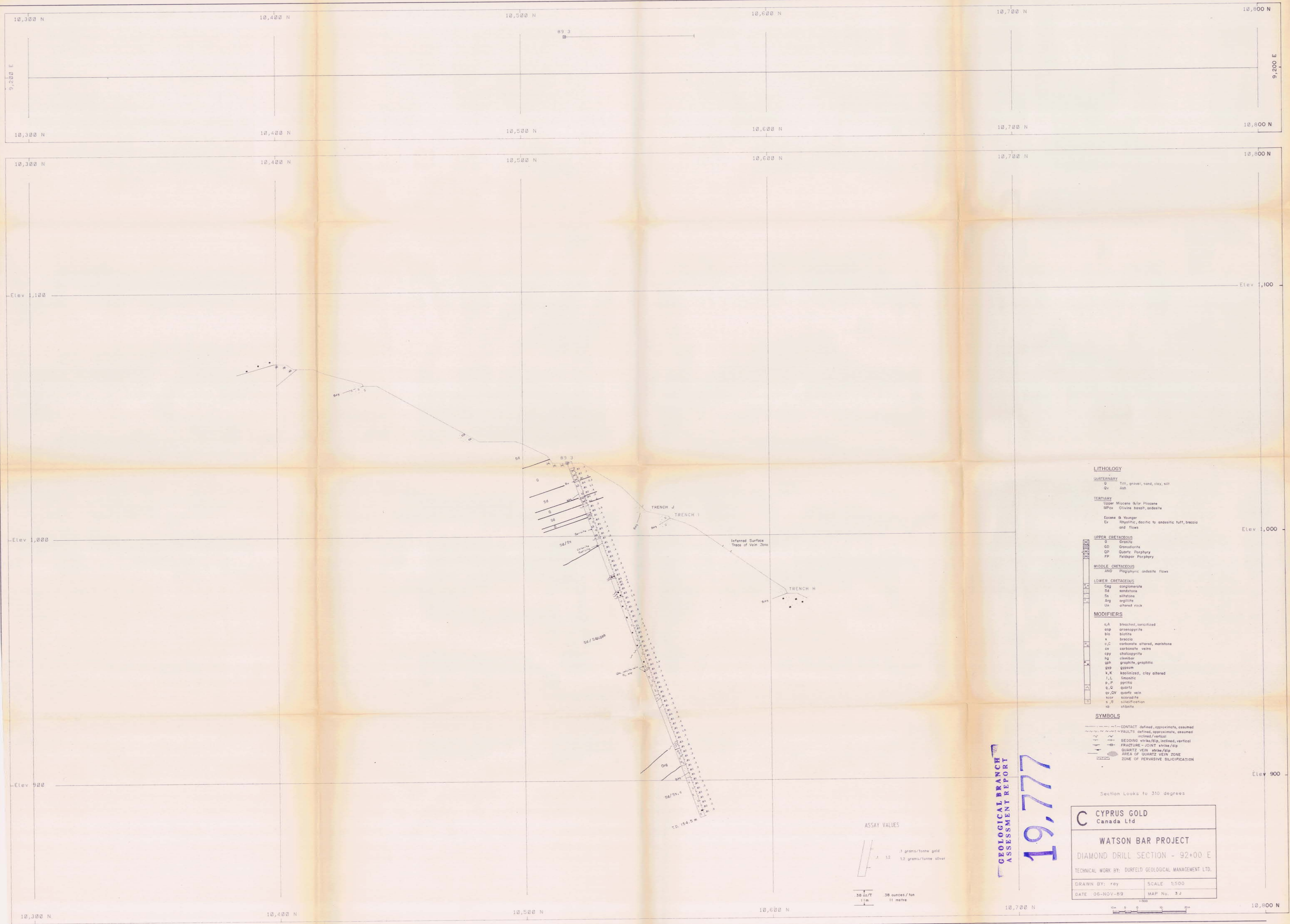
C CYPRUS GOLD Canada Ltd

WATSON BAR PROJECT

GEOLOGICAL PLAN

TECHNICAL WORK BY: DURELD GEOLOGICAL MANAGEMENT LTD.

DRAWN BY: ray	SCALE 1:500
DATE 02-Jan-90	MAP No. 3F



LITHOLOGY

QUATERNARY	
Q	Fill, gravel, sand, clay, silt, loam
Qv	clay
TERTIARY	
Upper Miocene &/or Pliocene	
MPCv	Olivine basalt, andesite
Eocene & Younger	
Ev	Rhyolitic, dacitic to andesitic tuff, breccia and flows
UPPER CRETACEOUS	
G	Granite
GO	Granodiorite
QP	Quartz Porphyry
FP	Feldspar Porphyry
MIDDLE CRETACEOUS	
JND	Plagiophytic andesite flows
LOWER CRETACEOUS	
Cag	conglomerate
Sd	sandstone
Ss	siltstone
Ag	argillite
Ua	altered rock
MODIFIERS	
oA	bleached, sericitized
asp	arsenopyrite
bio	biotite
b	breccia
c	carbonate altered, marlstone
c	carbonate altered, marlstone
cv	carbonate veins
cpy	chalcopyrite
cl	clenobolite
gp	graphite, graphitic
gyp	gypsum
ka	kaolinized, clay altered
l	limonitic
p	pyritic
q	quartz
qv	quartz vein
sc	scapolite
s	silicification
st	stibnite

SYMBOLS

---	CONTACT defined, approximate, assumed
---	FAULTS defined, approximate, assumed
---	inclined/vertical
---	BEDDING strike/dip, inclined, vertical
---	FRACTURE - JOINT strike/dip
---	QUARTZ VEIN strike/dip
---	AREA OF QUARTZ VEIN ZONE
---	ZONE OF PERSASIVE SILICIFICATION

ASSAY VALUES

1	.1 grams/tonne gold
12	1.2 grams/tonne silver
38 oz/T	38 ounces/ton
1 m	1 metre

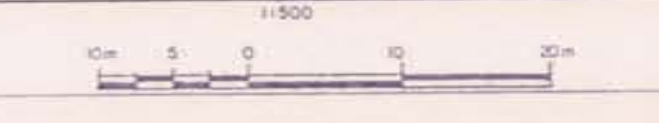
Section Looks to 310 degrees

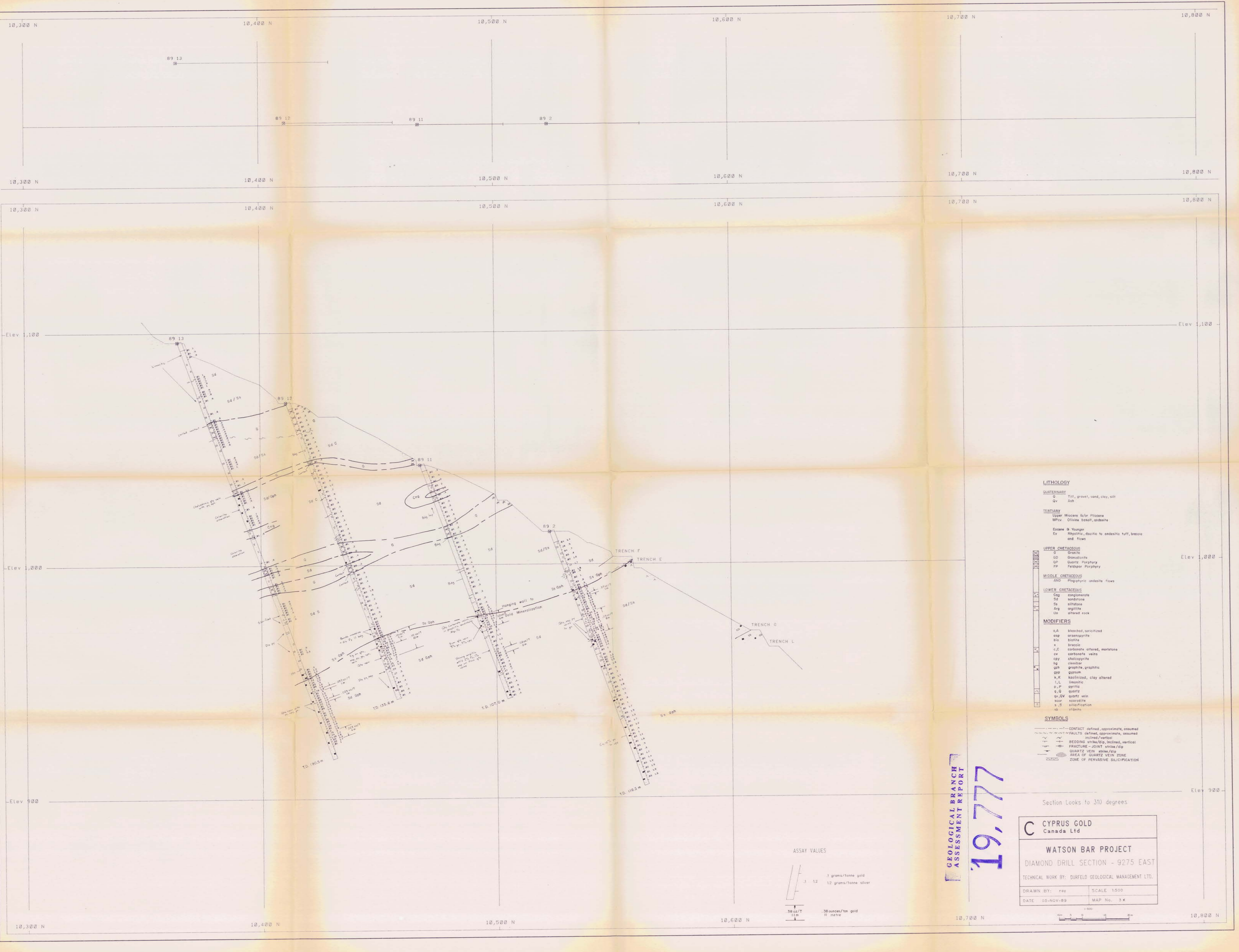
CYPRUS GOLD
Canada Ltd

WATSON BAR PROJECT
DIAMOND DRILL SECTION - 92+00 E
TECHNICAL WORK BY: DURELD GEOLOGICAL MANAGEMENT LTD.

DRAWN BY: ray SCALE 1:500
DATE 06-NOV-89 MAP No. 3J

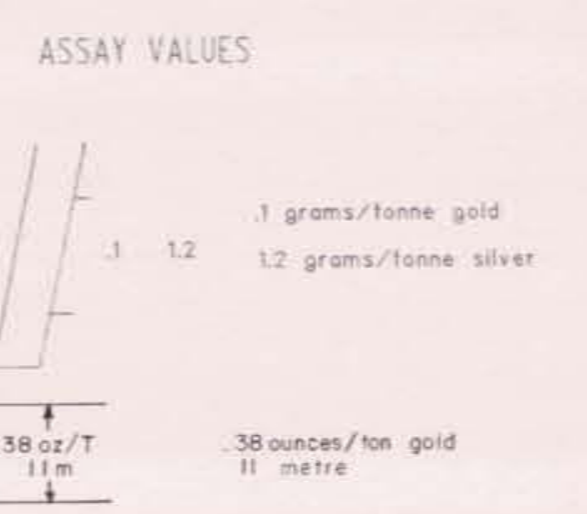
GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,777





- LITHOLOGY**
- QUATERNARY**
 Q Till, gravel, sand, clay, silt
 Qv Ash
- TERTIARY**
 Upper Miocene B/or Pliocene
 MPcv Olivine basalt, andesite
 Eocene B Younger
 Ev Elyptic, dacitic to andesitic tuff, breccia and flows
- UPPER CRETACEOUS**
 G Granite
 GD Granodiorite
 GP Quartz Porphyry
 FP Feldspar Porphyry
- MIDDLE CRETACEOUS**
 AND Plagiophytic andesite flows
- LOWER CRETACEOUS**
 Cag conglomerate
 Sd sandstone
 Ss siltstone
 Arg argillite
 Lta altered rock
- MODIFIERS**
 s,A bleached, sericitized
 asp arsenopyrite
 bio biotite
 x breccia
 c,c carbonate altered, marlstone
 cv carbonate veins
 cpy chloritopyrite
 hg chert
 gph graphite, graphitic
 gsp gypsum
 k,K kaolinized, clay altered
 l,L limonitic
 s,p sericite
 q,Q quartz
 qv,QV quartz vein
 scs scapolite
 s,S silicification
 st stibnite
- SYMBOLS**
 --- CONTACT defined, approximate, assumed
 --- FAULTS defined, approximate, assumed
 --- FAULTS defined, approximate, assumed
 --- inclined, vertical
 --- BEDDING strike/dip, inclined, vertical
 --- FRACTURE - JOINT strike/dip
 --- QUARTZ VEIN strike/dip
 --- AREA OF QUARTZ VEIN ZONE
 --- ZONE OF PERVASIVE SILICIFICATION

GEOLOGICAL BRANCH
 ASSESSMENT REPORT
 19,777



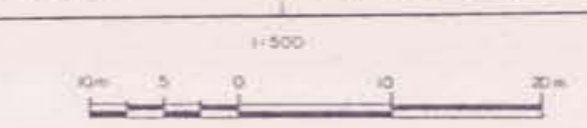
Section Looks to 310 degrees

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WATSON BAR PROJECT
 DIAMOND DRILL SECTION - 9275 EAST

TECHNICAL WORK BY: DUFFIELD GEOLOGICAL MANAGEMENT LTD.

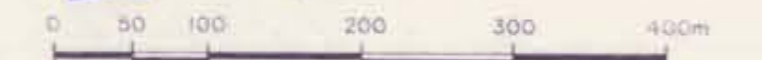
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DATE: 05-NOV-89	MAP No.: 3 K





**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,777



- 89 7
○ Surface trace of diamond drill hole. Analysis not shown.
- II - G
┆ Trench with sample intervals, and average assay for Au/Ag.
- + Rock sample location.
- + 430
430 ppb Gold. Gold values under 100 ppb not shown.

C CYPRUS GOLD Canada Ltd	
WATSON BAR PROJECT ROCK GEOCHEMICAL PLAN (GOLD)	
TECHNICAL WORK BY: DURFELD GEOLOGICAL MANAGEMENT LTD.	
DRAWN BY: ray	SCALE 1:500
DATE 02-Jan-90	MAP No. 3F 1



LITHOLOGY

QUATERNARY

Q Till, gravel, sand, clay, silt
 Qv Ash

TERTIARY

Upper Miocene N/Sr Pliocene
 MPcv Olivine basalt, andesite

Eocene N Younger
 Ev Rhyolite, dacite to andesitic tuff, breccia and flow

UPPER CRETACEOUS

G Granite
 GD Granodiorite
 GP Quartz Porphyry
 FP Feldspar Porphyry

MIDDLE CRETACEOUS

AND Plagiophytic andesite flows

LOWER CRETACEOUS

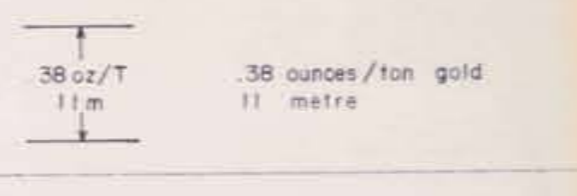
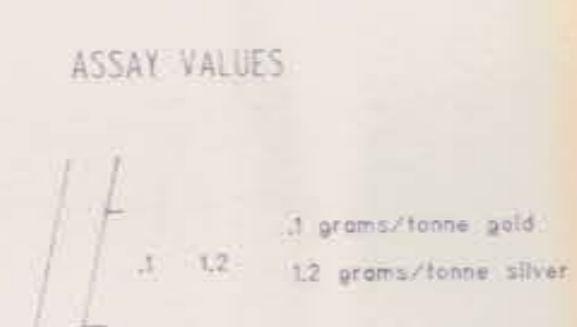
Cgg conglomerate
 Ss sandstone
 Ss siltstone
 Arg argillite
 Un altered rock

MODIFIERS

a,A bleached, sericitized
 asp arsenopyrite
 bio biotite
 x breccia
 c,C carbonate altered, marlstone
 cv carbonate veins
 cpy chloropyrite
 cln cliner
 gph graphite, graphitic
 QP Pyroxene
 k,K kaolinized, clay altered
 i,L limonitic
 p,P pyritic
 s,Q quartz
 qv,QV quartz vein
 scd scorodite
 s,S silicification
 stb stibnite

SYMBOLS

--- CONTACT defined, approximate, assumed
 --- FAULTS defined, approximate, assumed
 --- BEDDING strike/dip, inclined, vertical
 --- FRACTURE - JOINT strike/dip
 --- QUARTZ VEIN strike/dip
 --- AREA OF QUARTZ VEIN ZONE
 --- ZONE OF PERSVASIVE SILICIFICATION



Section Looks to 310 degrees

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 Canada Ltd

WATSON BAR PROJECT

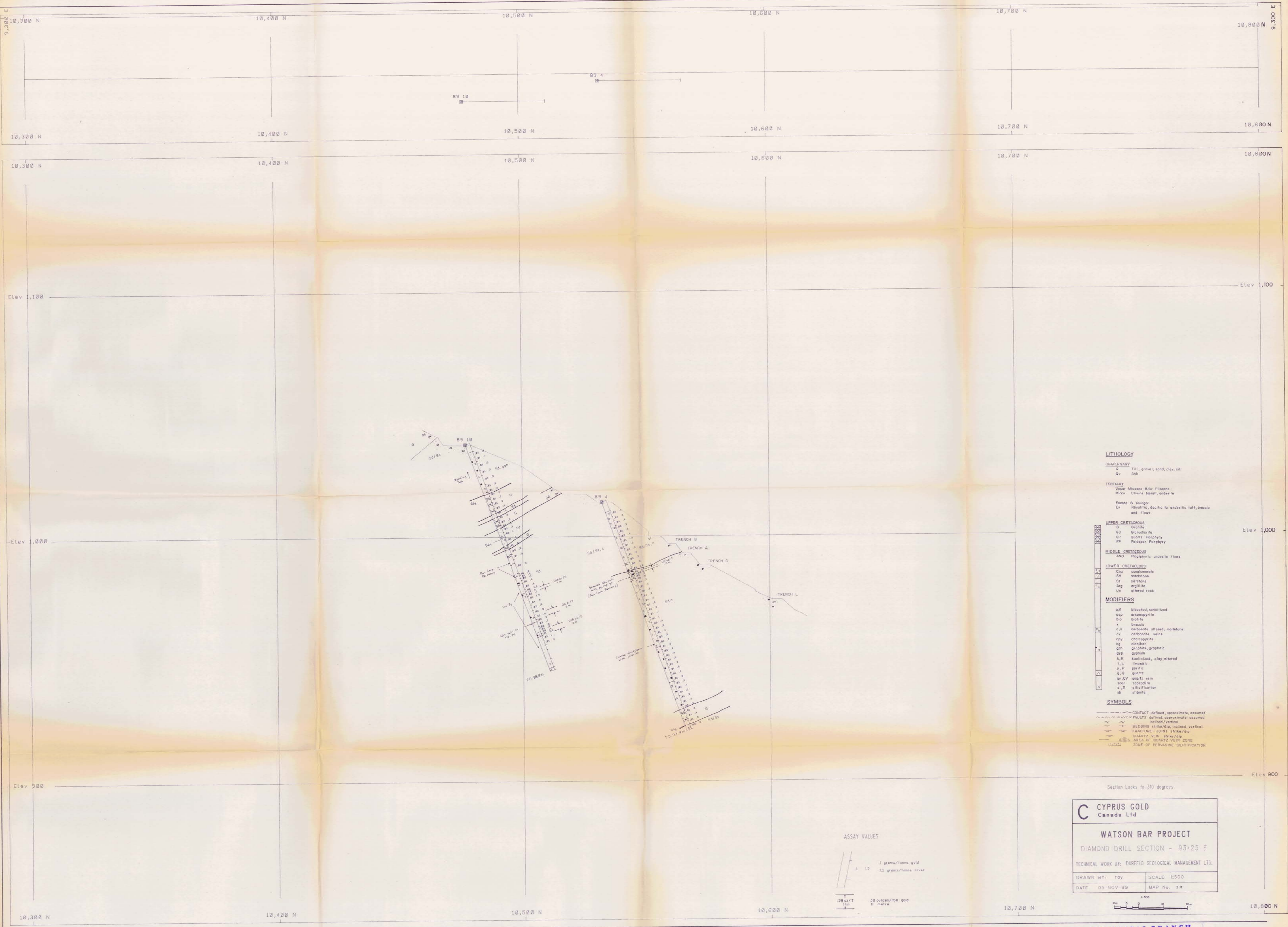
DIAMOND DRILL SECTION - 93+00 E

TECHNICAL WORK BY: DUFFELD GEOLOGICAL MANAGEMENT LTD.

DRAWN BY: ray	SCALE 1:500
DATE 05-NOV-89	MAP No. 5L

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,777



LITHOLOGY

QUATERNARY

- Q Till, gravel, sand, clay, silt
- Qv Ash

TERTIARY

- Upper Miocene &/or Pliocene
- MPov Olivine basalt, andesite
- Eocene & Younger
- Ev Rhyolite, dacitic to andesitic tuff, breccia and flows

UPPER CRETACEOUS

- G Granite
- GD Gneiss/diorite
- QP Quartz Porphyry
- FP Feldspar Porphyry

MIDDLE CRETACEOUS AND

- AND Plagiophytic andesite flows

LOWER CRETACEOUS

- Cag conglomerate
- SS sandstone
- Ss siltstone
- Arg argillite
- UR altered rock

MODIFIERS

- a.A bleached, sericitized
- asp arsenopyrite
- bio biotite
- x breccia
- c.C carbonate altered, marlstone
- cv carbonate veins
- cpy chalcopyrite
- ng gangue
- gsh graphite, graphitic
- gyp gypsum
- k.K kaolinized, clay altered
- L.L limonite
- p.P pyritic
- q.Q quartz
- qv,QV quartz vein
- scar scapolite
- s.S silicification
- sb stibnite

SYMBOLS

- CONTACT defined, approximate, assumed
- CONTACT defined, approximate, assumed
- FRACTURE - JOINT, strike/dip
- BEDDING strike/dip, inclined, vertical
- FRACTURE - JOINT, strike/dip
- QUARTZ VEIN strike/dip
- AREAS OF QUARTZ VEIN ZONE
- ZONE OF PERVASIVE SILICIFICATION

CYPRUS GOLD
Canada Ltd

WATSON BAR PROJECT
DIAMOND DRILL SECTION - 93+25 E

TECHNICAL WORK BY: DUFFIELD GEOLOGICAL MANAGEMENT LTD.

DRAWN BY: ray SCALE 1:500
DATE 05-NOV-89 MAP No. 3 M

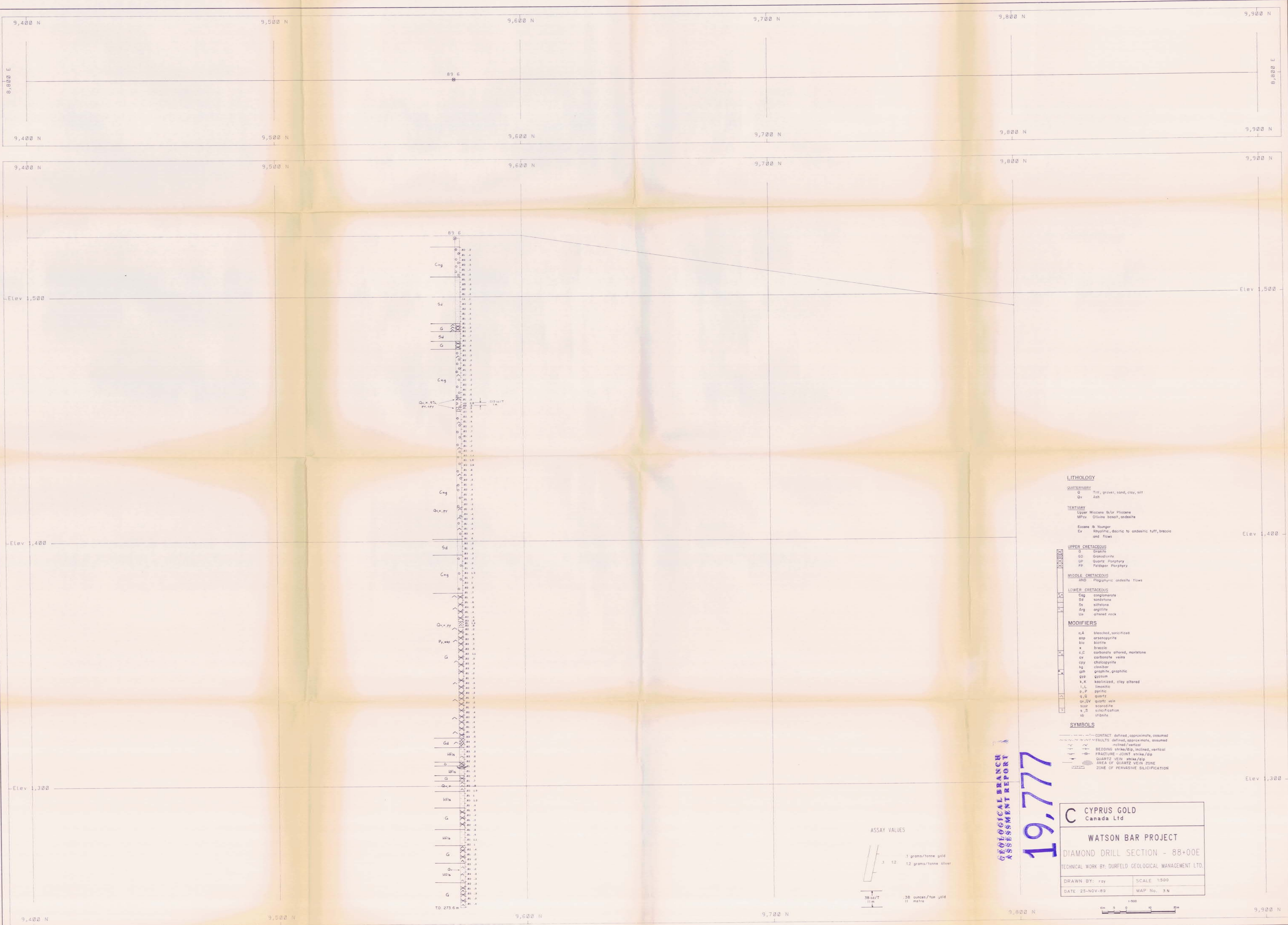
ASSAY VALUES

1.1 1.2
1.1 grams/tonne gold
1.2 grams/tonne silver

38.02/T 11.00
38.02 g/tonne gold
11.00 g/tonne silver

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,777



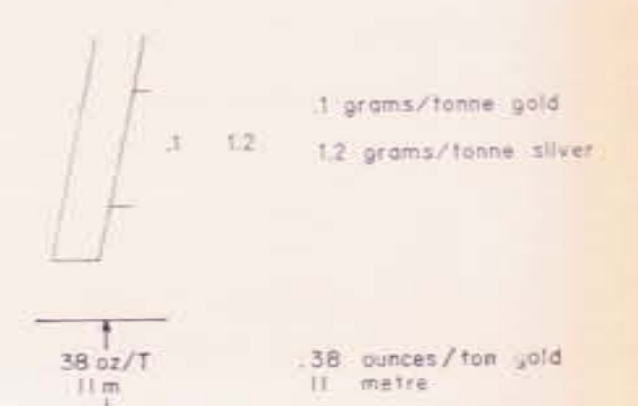
LITHOLOGY

- QUATERNARY**
 Q Till, gravel, sand, clay, silt
 Qv Ash
- TERTIARY**
 Upper Miocene B/or Pliocene
 MPov Olivine basalt, andesite
 Eocene B Younger
 Ev Rhyolitic, dacitic to andesitic tuff, breccia and flows
- UPPER CRETACEOUS**
 G Granite
 GO Granodiorite
 GP Quartz Porphyry
 FP Feldspar Porphyry
- MIDDLE CRETACEOUS**
 AND Plagiophytic andesite flows
- LOWER CRETACEOUS**
 Cng conglomerate
 Sd sandstone
 Ss siltstone
 Arg argillite
 Un altered rock
- MODIFIERS**
 nA bleached, varnished
 asp arsenopyrite
 bio biotite
 x breccia
 cC carbonate altered, marlstone
 cv carbonate veins
 cpy chalcopyrite
 hg hematite
 sph sphalerite, graphitic
 gyp gypsum
 K,K kaolinitized, clay altered
 L,L limonitic
 p,P pyritic
 q,Q quartz
 qv,QV quartz vein
 scsr scorodite
 s,S silicification
 stb stibnite

SYMBOLS

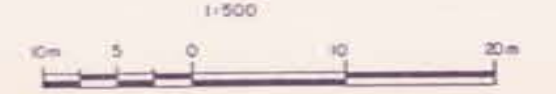
- CONTACT defined, approximate, assumed
 - - - - - FAULTS defined, approximate, assumed
 ~~~~~ BEDDING strike/dip, inclined, vertical  
 - - - - - FRACTURE - JOINT strike/dip  
 - - - - - QUARTZ VEIN strike/dip  
 [ ] AREA OF QUARTZ VEIN ZONE  
 [ ] ZONE OF PERSISIVE SILICIFICATION

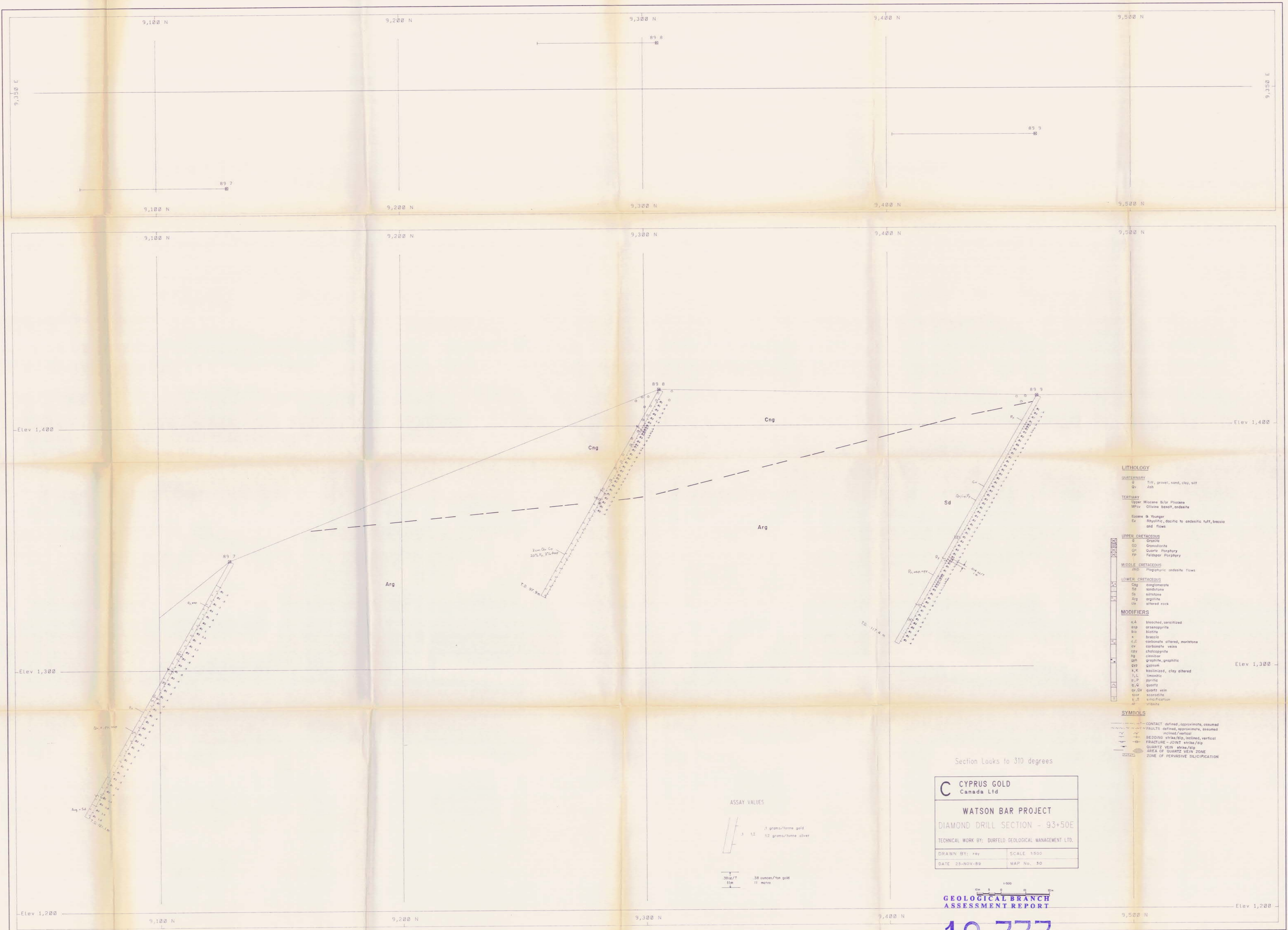
**ASSAY VALUES**



**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT  
 19,777**

|                                                        |             |
|--------------------------------------------------------|-------------|
| <b>C CYPRUS GOLD<br/>Canada Ltd</b>                    |             |
| <b>WATSON BAR PROJECT</b>                              |             |
| DIAMOND DRILL SECTION - 88+00E                         |             |
| TECHNICAL WORK BY: DUFFIELD GEOLOGICAL MANAGEMENT LTD. |             |
| DRAWN BY: ray                                          | SCALE 1:500 |
| DATE 25-NOV-89                                         | MAP No. 3N  |





**LITHOLOGY**

**QUATERNARY**

- Q Till, gravel, sand, clay, silt
- Qv Ash

**TERTIARY**

- TuMi Miocene B/Cr Pliocene
- MPv Olivine basalt, andesite
- Eocene B Younger
- Ev Rhyolitic, dacitic to andesitic tuff, breccia and flows

**UPPER CRETACEOUS**

- G Granite
- GD Gneiss
- QP Quartz Porphyry
- PP Porphyry

**MIDDLE CRETACEOUS**

- MO Pliogabbro andesite flows

**LOWER CRETACEOUS**

- Cng Conglomerate
- Sd sandstone
- Sl siltstone
- Arg argillite
- Us altered rock

**MODIFIERS**

- a.A bleached, sericitized
- asp arsenopyrite
- ba barite
- b breccia
- c.C carbonate altered, marlstone
- cv carbonate veins
- cpy chalcopyrite
- ch chert
- gph graphite, graphitic
- gyp gypsum
- k.K kaolinized, clay altered
- LL limonite
- p.P pyrite
- q.Q quartz
- qv CV quartz vein
- scor scordite
- s.s silicification
- st stibnite

**SYMBOLS**

- CONTACT defined, approximate, assumed
- - - - - FAULTS defined, approximate, assumed
- - - - - FAULTS defined, vertical
- - - - - BEDDING STRIKE/DIP, inclined, vertical
- - - - - FRACTURE - JOINT strike/dip
- - - - - QUARTZ VEIN strike/dip
- - - - - AREA OF QUARTZ VEIN ZONE
- - - - - ZONE OF PERVASIVE SILICIFICATION

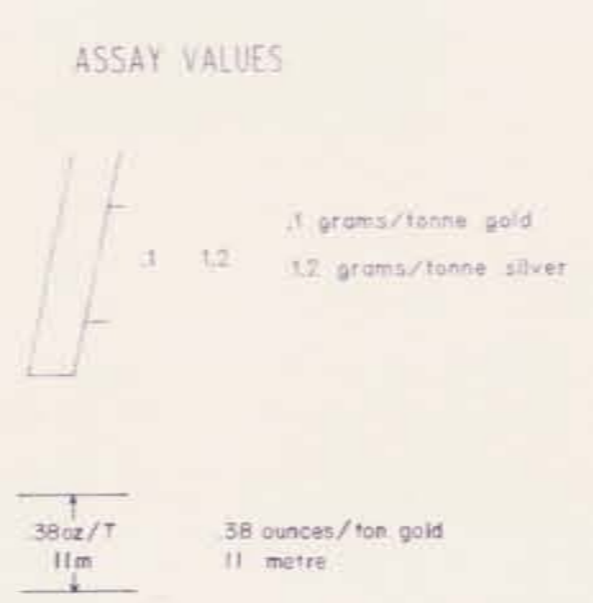
Section Looks to 310 degrees

**CYPRUS GOLD**  
Canada Ltd

**WATSON BAR PROJECT**  
DIAMOND DRILL SECTION - 93+50E

TECHNICAL WORK BY: DUFFIELD GEOLOGICAL MANAGEMENT LTD.

DRAWN BY: ray      SCALE 1:500  
DATE 25-NOV-89      MAP No. 30



1:500

**GEOLOGICAL BRANCH**  
ASSESSMENT REPORT

**19,777**