

LOG NO:	DEC 04 1991	RD.
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DRILLING PROGRAM

on the
MOUNT SIDNEY WILLIAMS PROPERTY
OMINECA M. D.

N.T.S. 93-K-14W

Lat.: 54° 54'N Long.: 125° 24'N

SUB-RECORDER RECEIVED	
NOV 29 1991	
M.R. # _____	\$ _____
VANCOUVER, B.C.	

by

U. Mowat, B. Sc.

for

MINNOVA INC.

Third Floor, 311 Water Street
Vancouver, B.C.
V6B 1B8

November, 1991

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,870

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1.0 INTRODUCTION

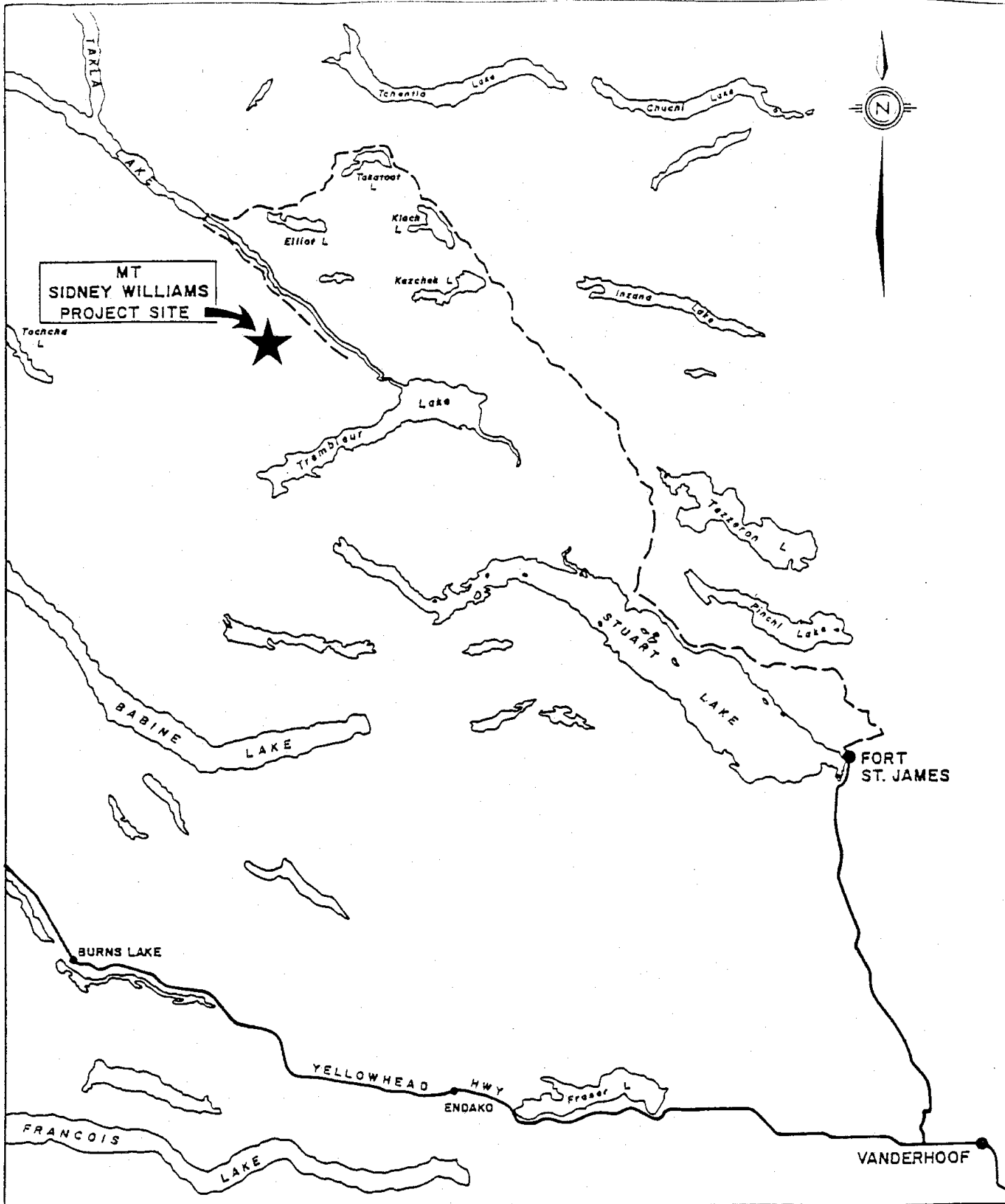
A drill program consisting of 511.4 meters (1677') of thinwall BQ (BQTK) was conducted on the Mount Sidney Williams property from August 13 to August 23, 1991. A total of 5 holes were drilled. All core was split and analysed for Ag, As, Cu, Mo, Ni, Pb, Sb, Ti, Zn and Cr by ICP. Samples were also analysed for Au by geochem fire assay. Gold values over 1000 ppb were re-analysed by fire assaying.

All core is stored at the camp site on Tear Drop Lake.

2.0 LOCATION AND ACCESS

Mount Sidney Williams lies 87 kilometers due northwest of the town of Fort St. James and is located at co-ordinates $54^{\circ} 54' N / 125^{\circ} 24' W$ on map sheet 93-K-14W.

Access to the property is at present by helicopter.



MT
SIDNEY WILLIAMS
PROJECT SITE

LEGEND

- LOGGING ROAD
- PAVED HIGHWAY



PROJECT LOCATION MAP
FIGURE 1

3.0 CLAIM DATA

The Mount Sidney Williams property consists of the following claims:

<u>Claim Name</u>	<u>Record Number</u>	<u>Number of Units</u>	<u>Record Date</u>
Mid	8108	20	Dec. 22/86
Van 1	8127	20	Jan. 15/87
Van 2	8128	20	Jan. 9/87
Klone 1	8593	9	July 28/87
Klone 2	8977	9	Sept. 16/87
Klone 3	9181	20	Nov. 13/87
Klone 4	9182	20	Nov. 13/87
Klone 5	9183	20	Nov. 13/87
Klone 6	9184	20	Nov. 13/87
Klone 7	9185	20	Nov. 13/87
Klone 8	9186	20	Nov. 13/87
One-Eye 1	9070	18	Oct. 30/87
Terannoursus	9642	3	Aug. 9/88
Money	12177	4	July 1/90

There are a total of 223 units. The property is 100% owned by U. Mowat.

4.0 HISTORY

The first known geologic record of the Mount Sidney Williams area was made in 1937 following a brief reconnaissance of the Fort St. James area by J. E. Armstrong of the Geologic Survey of Canada. In 1942, nine chromite deposits were located in the Middle River Range by the G.S.C., plus several asbestos showings of varying quality in the area of Mount Sidney Williams.

Prospectors working in the region reported gold values in carbonate-quartz-mariposite and carbonate-talc rocks in shear zones in altered Trembleur Intrusions (Armstrong, J. E., Fort St. James Map Area, Cassiar and Coast Districts, B. C., G.S.C. Memoir 252, p. 181). One sample of carbonate-quartz-mariposite rock high in quartz (75%) taken on Baptiste Creek contained 0.036 oz/t Au, 0.07 oz/t Ag.

During the late 1930s a small placer operation was located on Van Decar Creek for a brief period. The operation was located below serpentized peridotite and nuggets values at \$0.50 to \$2.00 were found (1935 prices).

Old flagging and numerous camp sites would indicate that Mount Sidney Williams has been examined in the past

for its chrome, nickel and asbestos potential. No mention is made of any exploration, however, until 1962 (MMAR) when the main asbestos showing is described. Blasting caps found at this location indicate an attempt to trench the showing.

Since 1975, various groups have examined the Mount Sidney Williams area for chrome, platinum and gold.

To date (1991), the following work has been completed on the Mount Sidney Williams property:

- 1) silt sampling - 161 samples including 9 heavy mineral samples
- 2) rock sampling - 1127 samples
- 3) flagged grid - 105,790 meters
- 4) soil sampling - 3217 samples
- 5) trenching - 52 meters
- 6) magnetometer survey - 26,150 meters
- 7) IP survey - 11,450 meters
- 8) drilling - 12 holes totalling 816.7 meters (2678')

5.0 REGIONAL GEOLOGY

The area of Mount Sidney Williams is underlain by a 15 km wide belt of northwesterly-trending Pennsylvanian and Permian Cache Creek Group rocks consisting of ribbon chert, argillaceous quartzite, argillite, slate, green-

stone, limestone with minor conglomerate and greywacke. The Cache Creek Group has been intruded by Upper Jurassic or Lower Cretaceous Omineca Intrusions consisting of granodiorite, quartz diorite, diorite with minor granite, syenite, gabbro and pyroxenite. As well, Post-Middle Permian, Pre-Upper Triassic Trembleur Intrusions consisting of peridotite, dunite, minor pyroxenite and gabbro with serpentized and steatized equivalents intrude the Cache Creek Belt.

The northwesterly-trending belt of Cache Creek rocks is bordered on the east by the Pinchi Fault and Upper Triassic Takla Group andesites, basaltic flows, tuffs, breccias and agglomerates with interbedded conglomerate, shale, greywacke and limestone. On the west, the belt is bounded by the Takla Fault, an east-dipping zone, up to 5 km wide which contains a melange of serpentine and greenstone. The melange is adjacent to Triassic metamorphosed pyroclastic rocks, basalt, rhyolite, greywacke and argillite of the Sitlika assemblage.

Between the Pinchi Fault and the Takla Fault, the predominant units of the Cache Creek Group of chert, phyllite, carbonaceous phyllite and argillite with minor greywacke and limestone, are highly deformed. Three deformational periods have been recognized in the Cache Creek Group which has been metamorphosed to lower greenschist facies with local glauc-

plane. The oldest structures are a prominent foliation that parallels compositional layering and trends east-west, marking the axial planes of isoclinal folds. A later structure consists of chevron folds which trend north-south with axial planes dipping moderately westwards. The youngest structures are warps and kinks, probably related to late faulting.

6.0 PROPERTY GEOLOGY

The Mount Sidney Williams property is divided into two separate geological domains by Van Decar Creek, a fault zone with a postulated 1,000 meter horizontal displacement. On the west side of Van Decar Creek, the rock types consist of argillite and andesitic volcanics of the Cache Creek Group. A minor amount of ultramafic rocks have been "intruded" into the Cache Creek and their presence is indicated by serpentine and listwanite. The Cache Creek has also been intruded by felsic dykes and recent volcanics of basaltic and dacitic(?) nature.

Reconnaissance prospecting indicates that the andesitic volcanics are, at least in part, thrust over the argillites. In the vicinity of thrusts, the argillites have been serpentized and/or silicified.

On the east side of Van Decar Creek, the dominant rock type is harzburgite with lesser amounts of dunite, nodular harzburgite and altered equivalents of the harzburgite. The ultramafic massif has been intruded by both norite and plugs of what appears to be a very young, glassy, vuggy volcanic.

A minor amount of argillite and black basalt has been seen on the east side of Van Decar Creek.

7.0 MINERALIZATION

Sulphide mineralization of economic importance consists of acicular arsenopyrite and pyrite which are found in both listwanite and the intensely altered phases of the norite intrusives. Gold values occur with the acicular arsenopyrite and as native gold in highly altered fault zones.

The auriferous arsenopyrite, pyrite and the listwanites of economic importance have a spatial and probably a genetic relationship to the norite intrusives. Additional evidence indicates that there is a genetic relationship of the gold to volcanism. The epithermal imprint is manifested by chalcedonic veining, the replacement of brecciated listwanites by cryptocrystalline silica and the geochemical response of some of the listwanites.

which are anomalous in gold, silver, arsenic and antimony.

Of lesser importance is the minor occurrence of chalcopyrite in the norite, andesitic volcanics and basalt.

Stibnite, which occurs as coarse-grained blades in vuggy quartz veinlets and in some of the listwanites has also been noted.

8.0 ALTERATION

The most significant alteration on the Mount Sidney Williams property is listwanite which weathers to a vivid red-orange and is composed of variable amounts of carbonate, quartz, mariposite and occasionally pyrite and arsenopyrite. Carbonate, which is usually ankerite or ferro-dolomite forms the major component of the listwanite. Quartz occurs as veinlets, chalcedony but most importantly as a pervasive replacement of the carbonate. Mariposite is seen in both the carbonate and the pervasively silicified sections and is generally very fine grained imparting a pale green hue to both rock types.

The listwanite alteration appears to form a halo, which is both vertically and horizontally zoned, around

the norite intrusives. The zonation has been categorized as follows:

- Type 7 - Quartz-carbonate listwanite. This alteration is the most intense, generally closest to the norite and consists of more than 50% quartz. Some of the higher gold values are associated with this alteration package.
- Type 6 - Carbonate-quartz. This alteration package contains less than 50% quartz.
- Type 5 - Carbonate listwanite. This alteration package contains 90% carbonate, usually ankerite or ferro-dolomite. Type 5 is not known to be particularly auriferous.
- Type 4 - Talc-carbonate alteration. This alteration package contains at least 25% talc. No gold values have been obtained from this alteration assemblage.
- Type 3 - Carbonate-serpentine alteration. This alteration assemblage contains more than 10% but less than 90% carbonate. This assemblage is also non-auriferous.
- Type 2 - Serpentinite. This alteration contains 90% serpentine and has no primary intrusive textures remaining. This alteration assemblage is slightly auriferous. This unit is also, generally the furthest away from the norite.

Type 1 - Unaltered ultramafic.

To date, 17 listwanite zones have been discovered on the Mount Sidney Williams property.

In addition to the listwanite alteration surrounding the norite, carbonate alteration of Type 5, usually ankerite, has been found to replace the norite itself. The alteration is occasionally so intense as to make it difficult to distinguish between the intrusive and the listwanite halo.

Other forms of significant alteration include the crypto-crystalline replacement of brecciated listwanite and the alteration of andesitic volcanics to tremolite, epidote, jasper with minor garnet.

9.0 DRILLING

From August 13 to August 23, 1991, 511.4 meters of thinwall BQ (BQTK) were cored. A total of 5 holes were drilled and were located on the Stibnite Zone, Upper Zone and the northeast Stibnite zone projection. All core was split and analysed for Ag, As, Cu, Mo, Ni, Pb, Sb, Ti, Zn and Cr by ICP. Samples were also analysed for Au by geochem fire assay. Gold values over 1000 ppb were

re-analysed by fire assay.

HOLE 91-1

Purpose: Hole 91-1 was drilled to test the depth of known arsenopyrite and pyrite mineralization of the Stibnite Zone.

Bearing: 150°

Angle: -45°

Depth: 91.4 meters

Results: Hole 91-1 failed to encounter significant quartz-carbonate listwanite hosting the arsenopyrite and pyrite on surface. The best gold values were found to be in a norite adjacent to the quartz-carbonate listwanite. The drill hole fails to explain the IP anomalies (resistivity high and chargeability high).

HOLE 91-2

Purpose: Hole 91-2 was drilled to test beneath the surface mineralization of the Stibnite Zone and is located downslope of Hole 91-1.

Bearing: 098°

Angle: -45°

Depth: 121.9 meters

Results: Hole 91-2 encountered 6 meters of quartz-carbonate listwanite with minor arsenopyrite. Only low gold values were obtained from this section. Once again Hole 91-2 fails to explain the geophysical anomalies, in particular the magnetic low. The hole does not reach significant resistivity highs or chargeability highs in excess of 50 millivolts/volt.

HOLE 91-3

Purpose: Hole 91-3 was drilled to test the quartz-carbonate listwanite core of the east portion of the Upper Zone and was drilled from the same location as Hole 90-7.

Bearing: 098°

Angle: -45°

Depth: 81.4 meters

Results: Hole 91-3 encountered 21.9 meters of significant alteration including a minor amount of norite. Gold values were significant for 12 of the 21.9 meters and particularly near the norite. Unfortunately, due to severe magnetism in this location, Hole 91-3 is actually approximately 20° off from the desired bearing. The result of this deviation was that the hole failed to reach the heart of the quartz-carbonate alteration and quickly passed out of the Upper Zone.

HOLE 91-4

Purpose: Hole 91-4 was drilled to test the western portion of the Upper Zone which is covered by overburden.

Bearing: 299°

Angle: -45°

Depth: 109.7 meters

Results: Hole 91-4 encountered quartz-carbonate listwanite at a depth of 81.0 meters. Part of this alteration zone which contained significant gold values is a section of brecciated listwanite, pervasively replaced by cryptocrystalline quartz. This unit is identical to the upper portion of Hole 90-7 which is located immediately down slope from Hole 91-4. It would appear that the Upper Zone has been somewhat dislocated, probably from a northwesterly-

trending fault in the vicinity of Pit 12. Pit 12 contains a large amount of norite rubble. Hole 91-4 contains 12.4 meters of significant gold values.

HOLE 91-5

Purpose: Hole 91-5 was drilled to attempt to test a fairly strong arsenic geochemical anomaly of over 300 ppm, a magnetic low, and a coincident resistivity high and chargeability high.

Bearing: 135°

Angle: -45°

Depth: 106.6 meters

Results: Although Hole 91-5 intersected 3.4 meters of Type 4 listwanite, it did not crosscut the arsenic anomaly. Hole 91-5 passed close to both the magnetic low and the resistivity high but did not intersect either one. The hole was stopped short before reaching the chargeability high in excess of 50 millivolts/volt.

10.0 CONCLUSIONS

Drill results from the 1991 season were somewhat disappointing. Most drill holes failed their objectives or to prove or disprove the continuation of mineralization with depth. More importantly, the drilling has not indicated whether or not the zones are vertical nor established significant trends for the mineralized norites and the quartz-carbonate listwanite.

In the case of 91-1, the main mineralized zone runs approximately east west parallel to a norite dyke. Drill hole 91-1 intersected a cross-cutting quartz-carbonate zone running N 20° E. The mineralization adjacent to the norite is believed to dip steeply to the north.

Hole 91-2, which appears to be on a down-dropped fault block runs parallel to the norite dyke. The alteration encountered in the hole is more than likely a cross-cutting feature that trends N 40° E.

Hole 91-3 missed the intended target as severe magnetic influences in this particular area resulted in the hole being aimed approximately 20° from its intended course. It would appear that the Upper Zone trends approximately 290° and dips moderately to the northwest.

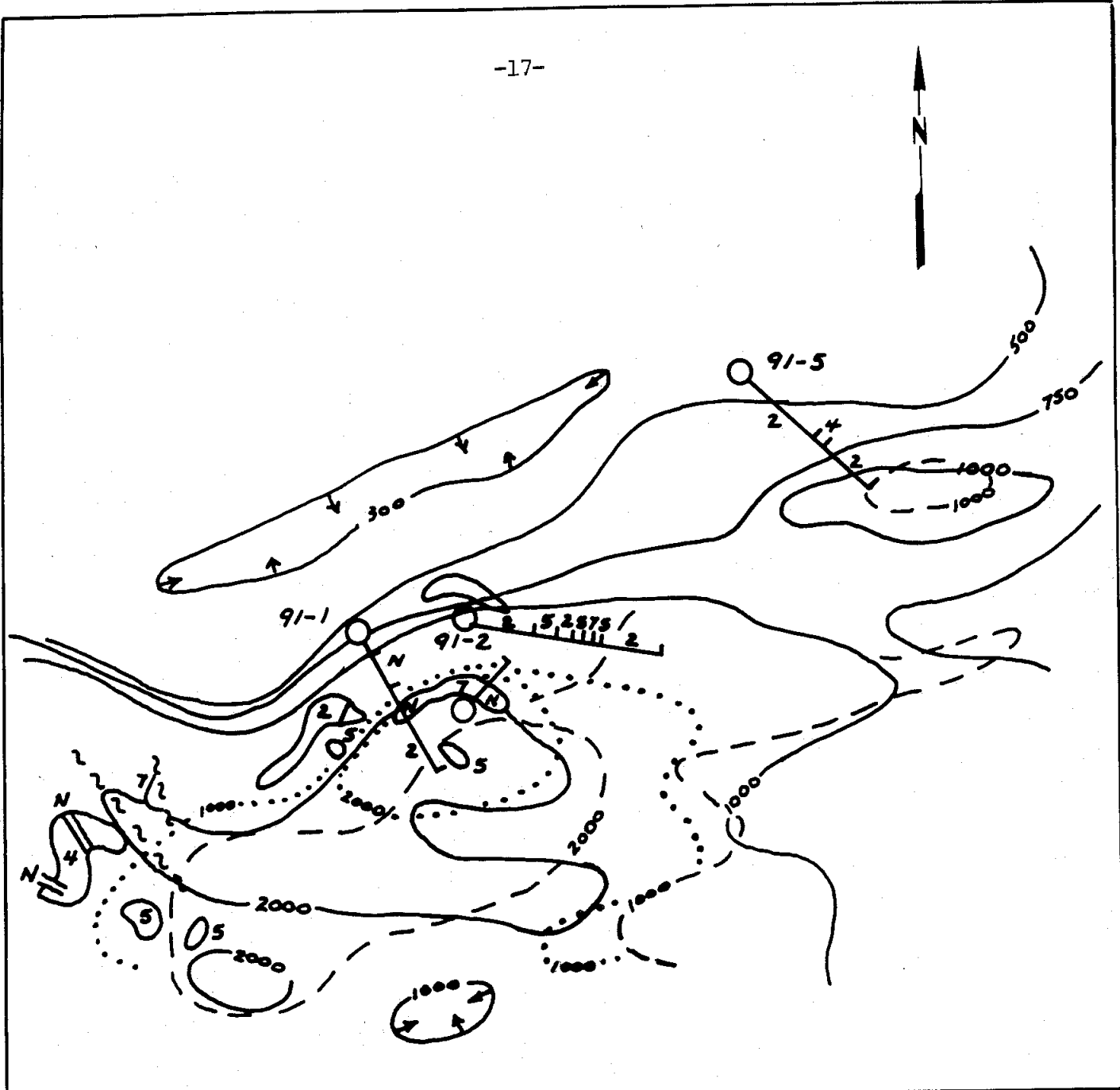
Hole 91-4 showed that the Upper Zone is dislocated by faulting and the magnetic survey shows remarkably good correspondence to outcrop, drill core and gold-arsenic geochemistry.

Hole 91-5 was generally a waste of money in that no geochemical or geophysical targets were reached. The only significant result was a small intersection of a cross-cutting structure and the revelation that the serpentines carry elevated gold

values. It is believed that native gold is the source of the values.

11.0 RECOMMENDATIONS

The norites being very recessive and rarely exposed on surface and also being associated with the best gold values are the primary exploration target. Therefore, a drill program to establish the trend of the norites is highly recommended. In addition, numerous geochemical and geophysical anomalies require testing.



- 7 quartz-carbonate listwanite
- 5 carbonate listwanite
- 4 talc-carbonate alteration
- 2 serpentine
- N norite

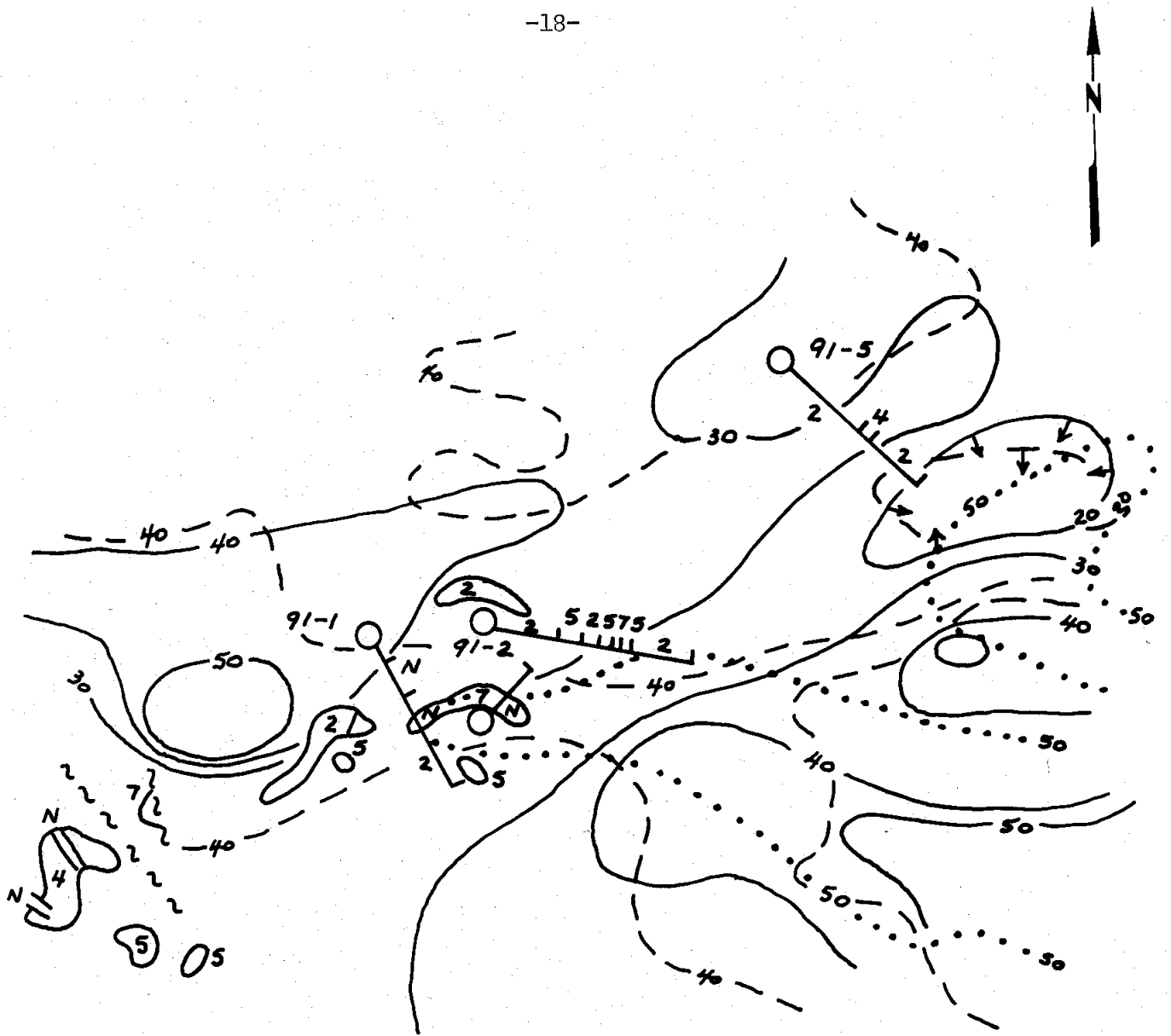
○ 91-2
 ↙ drill hole projected to surface

RESISTIVITY (ohm-m)

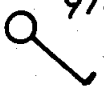
- n=1
- - - n=2
- ... n=3



Figure 2



- 7 quartz-carbonate listwanite
- 5 carbonate listwanite
- 4 talc-carbonate alteration
- 2 serpentine
- N norite

91-2
 drill hole projected to surface

CHARGEABILITY (mv/v)




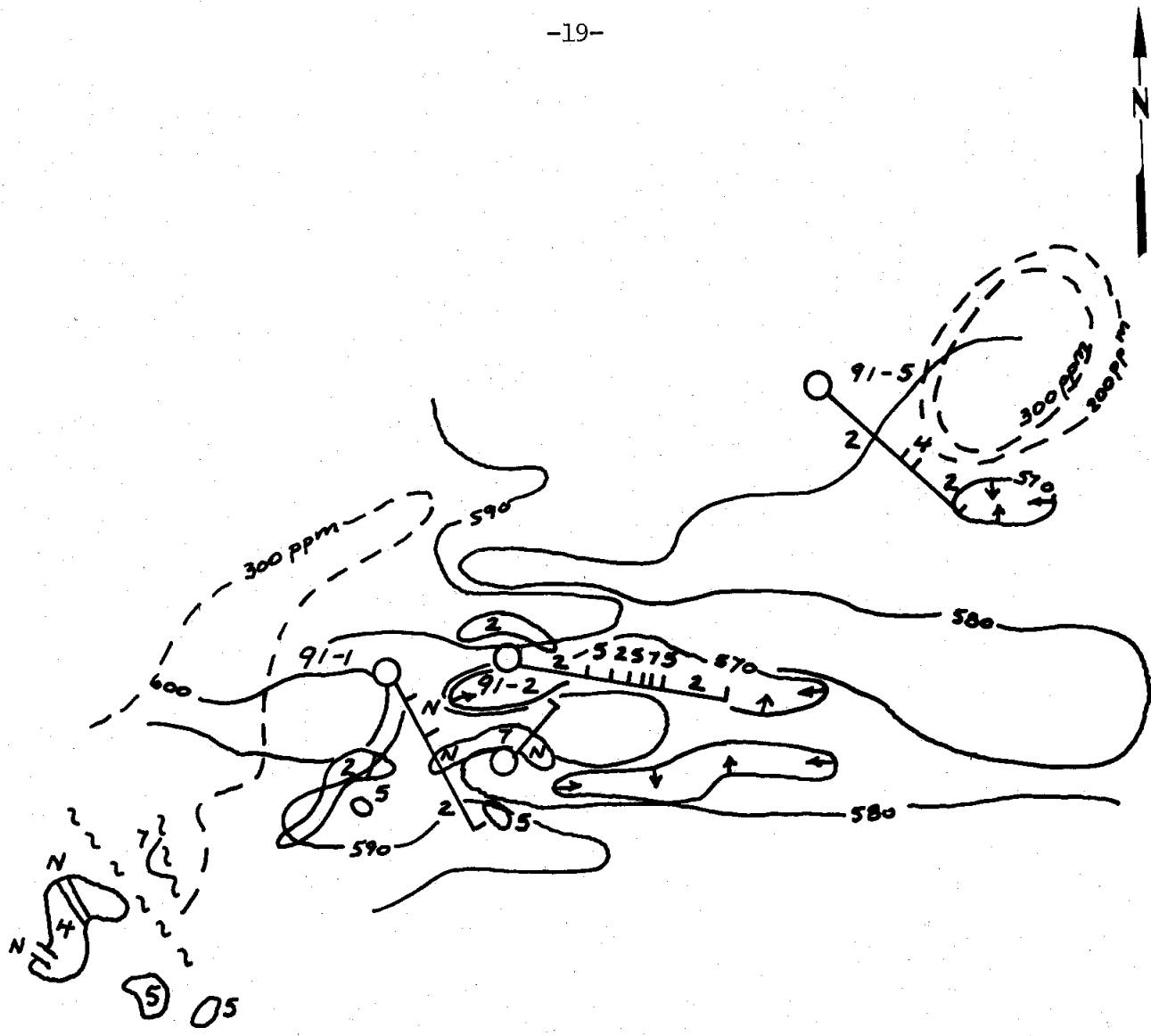

-  n=1
-  n=2
-  n=3



Figure 3



- 7 quartz-carbonate listwanite
- 5 carbonate listwanite
- 4 talc-carbonate alteration
- 2 serpentine
- N norite


 91-2
 drill hole projected
 to surface

MAGNETIC and ARSENIC ANOMALIES

magnetic contours in gammas x 1000



Figure 4

12.0 REFERENCES

- Paper 37-13, West Half of the Fort Fraser Map-Area, B.C.,
by J. E. Armstrong, 1937.
- Paper 38-10, Northwest Quarter of the Fort Fraser Map-
Area, B.C., by J. E. Armstrong, 1938.
- Paper 78-19, Jade in Canada, by S. F. Leaming.
- Paper 74-1, Part B, Geology of the Cache Creek Group and
Mesozoic Rocks at the Northern End of the Stuart
Lake Belt, Central B.C., by Ian A. Paterson, 1975.
- Memoir 252, Fort St. James Map-Area, Cassiar and Coast
Districts, B.C., by J. E. Armstrong, 1949.
- Assessment Report 5648, Rock Sampling and Prospecting on
the Pauline Claims, by D. Stelling, 1975.
- Assessment Report 8135, Prospecting Report on the CR
Claims, by V. Guinet, 1980.
- Assessment Report 10286, Geophysical Report on the
CR 1 - 6 Claims, by T. Pizzot, 1982.
- Assessment Report 11879, Geochemical Survey on the BAP
Claims, by R. R. Culbert, 1984.
- Assessment Report 17173, Geochemical Sampling on the
Van Group, Klone Group, Mid Claim, by U. Mowat,
1988.
- Assessment Report 18089, Geochemical Sampling,
Prospecting and Mapping on the Van Group, Klone
Group and Mid Claim, by U. Mowat, 1988.
- Assessment Report 20541, Mapping and Drilling Program
on the Mount Sidney Williams Property, by U. Mowat,
1990.

STATEMENT OF QUALIFICATIONS

1. I am a graduate of the University of British Columbia having graduated in 1969 with a Bachelor of Science in Geology.
2. I have practiced my profession since 1969 in mineral exploration, oil and gas exploration and coal exploration.
3. I have a direct interest in the Mount Sidney Williams property.

Ursula G. Mowat
Ursula G. Mowat

DATED THIS 29th DAY OF November, 1991 AT VANCOUVER, B.C.

STATEMENT OF COSTS

Drilling Costs

511.4 meters at \$54.70/meter	\$27,973.58
mobilization/demobilization costs	3,900.00
4 rods at \$100.50/rod	402.00
1 shoe at \$160.00	160.00
GST	2,378.03
	<hr/>
	34,813.61

Analysis

235 samples analysed for Ag, As, Cu, Mo, Ni, Pb, Sb, Ti, Zn and Cr by ICP and Au by geochem fire assay at \$11.00/sample	2,585.00
preparation charges for 235 samples at \$3.75/sample	881.25
	<hr/>
	3,466.25

Wages

1 man for 14 days at \$350.00/day	6,000.00
1 man for 14 days at \$250.00/day	3,500.00
2 men for 14 days at \$150.00/day	4,200.00
1 man for 14 days at \$125.00/day	1,750.00
1 man for 14 days at \$100.00/day	1,400.00
	<hr/>
	16,850.00

Food

14 days at \$50.00/day/person for 6 people	4,200.00
7 days at \$50.00/day/person for 4 people	1,400.00
	<hr/>
	5,600.00

Vehicle

2 vehicles at \$690.00/month for 14 days	690.00
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Gas

200.00

Telephone

100.00

Expediting

100.00

Camp demobilization costs

500.00

Helicopter

35.3 hours at \$595.00/hour	20,825.00
4024.2 liters of fuel at \$0.75/liter	3,018.15
35.3 hours at \$2.00/hour for oil	70.60
	<hr/>
	23,913.75

TOTAL \$86,233.61

Appendix A

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 91-1 Sheet No. 1
 Section _____
 Date Begun Aug. 15, 1991
 Date Finished Aug. 16, 1991
 Date Logged Aug. 16, 1991

Lat. 533W/315S
 Dep. _____
 Bearing 150°
 Elev. Collar 1534.0 m
 Angle -45°

Total Depth 91.4 meters
 Logged By A. Hill
 Claim Klone 1
 Core Size BQTK

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
0	4.3		About 0.8 meters of pebbles recovered. Mixed rock types including in decreasing order of abundance: harzburgite, serpentinite, pink granite and basalt. Alteration consists of minor limonite on fractures and minor carbonate veinlets in some ultramafic pebbles								
4.3	10.7		Harzburgite - dark green with 15-20% light green "nodules" with darker unaltered cores. Cut by hairline fracture set at 15-30° to core axis containing limonite and thin ankerite stringers. Core is broken from 5.9 - 6.25 meters. Serpentinization is moderate to intense. Carbonate stringers have no altered envelopes, except from 5.6-6.4 m where pale green and yellow bleaching has occurred with minor talc and fuchsite developed. Only trace very fine grey pyrite developed in a few patches at 6.2 m. Moderately magnetic throughout due to accessory magnetite.	98101	4.3	5.6	1.3 m	10	1		
				98102	5.6	6.3	0.7 m	31	149		
				98103	6.3	9.2	2.9 m	16	1		
				98104	9.2	10.7	1.5 m	3	1		
10.7	13.9		Serpentinite - dark green to dark grey green. Gradational contact with nodules becoming faint and disappearing for the most part. Serpentine	98105	10.7	12.4	1.7 m	7	1		
				98106	12.4	13.9	1.5 m	11	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 91-1 Sheet No. 2 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm
10.7	13.9		comprises 90-95% of the rock. Pervasive serpentine with greener material on fractures. Magnetite is throughout especially at 12.8-12.9 m where there is 5% disseminated magnetite. No visible sulphides.						
(cont'd)									
13.9	14.2		Contact Zone - bleached to light green and grey and badly broken, friable core. Faint angles of foliation, breccia at 15-30 degrees.	98107	13.9	14.2	0.3 m	3	1
14.2	35.2		Norite - distinctive "salt and pepper" textured, medium grained, grey, massive intrusive. Slightly bleached and fractured up to 15 m then fairly monotonous. Slight grain size increase from about 0.5-0.7mm to 1.5-2 mm at 17 m (chilled margin?). Mineralogy consists of dark green pyroxene (possibly some amphibolitized) and white plagioclase in a diabasic texture. Becomes fine grained again at 34.1 m. Lower contact at 25°.	98108	14.2	15.2	1.0 m	1	1
				98109	15.2	18.2	3.0 m	12	1
				98110	18.2	21.2	3.0 m	6	1
				98111	21.2	24.2	3.0 m	2	1
				98112	24.2	27.2	3.0 m	67	1
				98113	27.2	30.2	3.0 m	7	1
				98114	30.2	33.2	3.0 m	4	27
				98115	33.2	35.2	2.0 m	10	1
			Contact is sharp. Fairly fresh. Only minor carbonate and chlorite on rare fractures. Massive unit but fairly soft. After staining the norite appears to be ubiquitously altered pervasively by						

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 3 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
14.2	35.2		ankerite (moderate). No visible sulphides or oxides. Weakly magnetic throughout.								
(cont'd)											
35.2	38.0		Contact Zone - core is only moderately broken but rock is brecciated "chilled margin" norite, cut by irregular white carbonate stringers. Veinlets and fractures at all orientations but most commonly at 30°. Patchy bleached and serpentinitization (possibly wallrock fragments). Weak carbonatization associated with veinlets of ankerite. No sulphides.	98116	35.2	36.5	1.3 m	7	1		
				98117	36.5	38.0	1.5 m	3	1		
38.0	43.1		Talc-Altered Serpentine - sharp contact (broken) with dark green serpentine cut by white, branching hairline fracture system containing talc. Weak spotted relict texture suggests harzburgite protolith. Last 20 cm contains trace mariposite with 30% white quartz-carbonate veinlets. Serpentine varies from glassy to sugary textures. From 41.2-41.9 m limonite staining along fractures and resembles the top of this hole. Talc increases from 10% at top to 30% at end of interval. No sulphies. Magnetite in "spots" up to 5 mm.	98118	38.0	40.0	2.0 m	1	1		
				98119	40.0	42.0	2.0 m	2	1		
				98120	42.0	43.1	1.1 m	2	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 5 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
43.1	52.2		argins at 43.3-43.4 (3% pyrite, tr. arsenopyrite)								
		(cont'd)	49.0-49.1 m (3% pyrite), 50.0-50.5 m (5% pyrite),								
			51.8-52.2 m (0.7% pyrite, 4% arsenopyrite as fine								
			needles with pyrite in vein selvages and altered								
			patches 1-2 cm wide). Acicular arsenopyrite								
			"nests" up to 1 cm across. Pyrite is relatively								
			coarse grained (0.5-1.5mm)								
52.2	54.0		Quartz-carbonate listwanite - sharp contact	98131	52.2	53.0	0.8 m	851	3386		
			(ground) with highly silicified, light grey to	98132	53.0	54.0	1.0 m	6	565		
			limonitic listwanite. Spotty mariposite								
			(pseudomorphs of nodules?) is minor (< 3%).								
			Relict, ghosted nodular harzburgite textures								
			recognizable. Pervasive silicification, rock is								
			also cut by a network of quartz-ankerite string-								
			ers at all angles to core axis. First 15cm is a								
			well-healed breccia of quartz vein clasts (5mm-2								
			cm) in a grey arsenopyrite-rich matrix. Dense,								
			very fine grained arsenopyrite common in matrix.								
			From 52.2-53.0 m - 0.10% arsenopyrite and from								
			53.0-54.0 m - 0.3 to 5% finely disseminated								
			pyrite throughout. Type 7 listwanite.								

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-1

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 6 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH FROM TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
52.2	54.0	Arsenopyrite is amorphous, very very fine grained								
(cont'd)		grey mass in matrix.								
54.0	77.1	Harzburgite - gradational contact marked by	98133	54.0	55.2	1.2 m	11	1		
		decrease in silica, disappearance of mariposite,	98134	55.2	56.9	1.7 m	4	1		
		and appearance of trace hematite staining of	98135	56.9	59.9	3.0 m	2	1		
		nodules (3-10mm). Rock is light green, talc-	98136	59.9	62.9	3.0 m	2	1		
		serpentine with black magnetite spots (5-10%).	98137	62.9	63.9	1.0 m	8	1		
		Patchy, very minor mariposite associated with	98138	63.9	65.1	1.2 m	59	91		
		bleaching around widely spaced quartz-carbonate	98139	65.1	67.1	2.0 m	6	1		
		veinlets. Fracture pattern at 73.2-74.0 m at 45°.	98140	67.1	70.0	2.9 m	2	1		
		Serpentinized with moderate talc on fractures and	98141	70.0	71.0	1.0 m	1	1		
		in patches. From 52.2-56.9 m limonite and carb-	98142	71.0	74.1	3.0 m	27	125		
		onate are present in minor amounts. Staining	98143	74.1	77.1	3.0 m	4	1		
		reveals weak pervasive ankerite throughout inter-	98144	77.1	80.1	3.0 m	2	1		
		val. From 63.9-65.1 m an increase in carbonate	98145	80.1	83.1	3.0 m	3	1		
		with silicification (type 6 and 7) with patchy	98146	83.1	86.1	3.0 m	3	1		
		listwanite related to widely spaced veinlets at	98147	86.1	89.1	3.0 m	8	1		
		25° to core axis. Again at 70.5-70.8 m minor	98148	89.1	91.4	2.3 m	4	1		
		quartz-carbonate listwanite associated with quartz								
		carbonate veinlets 1-3 cm at 65° to core axis.								
		Minor mariposite and bleaching only. Accessory								

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 91-2 Sheet No. 1
 Section _____
 Date Begun Aug. 16, 1991
 Date Finished Aug. 17, 1991
 Date Logged Aug. 17, 1991

Lat. 490W/311S
 Dep. _____
 Bearing 098°
 Elev. Collar 1521.0 m
 Angle -45°

Total Depth 121.9 meters
 Logged By A. Hill
 Claim Klone 1
 Core Size BQTK

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
0.0	3.9		Casing, overburden - about 50 cm of ground serpentinite pebbles and one limonitic carbonate-serpentine cobble.								
3.9	47.8		Harzburgite - dark green to almost black, 80% serpentine rock, with white rounded nodules (3mm-1cm) of anorthite (?). Carbonate stain is negative. Some nodules have green or brown cores probably pyroxene (1%). Weak foliation and widely spaced white hairline fractures at 50-60°.	98150	3.9	6.1	2.2 m	2	1		
				98151	6.1	9.1	3.0 m	12	1		
				98152	9.1	12.1	3.0 m	3	1		
				98153	12.1	15.1	3.0 m	3	1		
				98154	15.1	18.1	3.0 m	2	1		
				98155	18.1	21.1	3.0 m	6	1		
				98156	21.1	24.1	3.0 m	1	1		
				98157	24.1	27.1	3.0 m	4	1		
				98158	27.1	30.1	3.0 m	2	1		
				98159	30.1	33.1	3.0 m	2	1		
				98160	33.1	36.1	3.0 m	3	1		
				98161	36.1	39.1	3.0 m	2	1		
47.8	64.9		Talc-carbonate altered Harzburgite - light green with dark spots. Gradational contact expressed by a bleaching of the groundmass and hematite-staining of the nodules. Fracturing has increased to about every 7 cm at all orientations but most commonly at 45°. From 60.0-60.2 m there are	98162	39.1	42.1	3.0 m	1	1		
				98163	42.1	45.1	3.0 m	2	1		
				98164	45.1	47.8	2.7 m	28	1		
				98165	47.8	50.8	3.0 m	3	1		
				98166	50.8	53.8	3.0 m	2	1		
				98167	53.8	56.8	3.0 m	1	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 2 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH	FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	As		
											ppb	ppm
47.8	64.9			a few flakes of mariposite pseudomorphing	98168	56.8	59.8	3.0 m	53	1		
(cont'd)				nodules, but no sulphides, enveloping	98169	59.8	60.3	0.5 m	17	34		
				quartz-carbonate veinlets. Also at 63.2-	98170	60.3	61.8	1.5 m	12	1		
				63.3 m. These zones have minor pervasive	98171	61.8	62.8	1.0 m	4	1		
				silicification for a few cm either side	98172	62.8	63.5	0.7 m	2	55		
				of these 1 cm veinlets at 40-55°. Carb-	98173	63.5	64.9	1.4 m	1	1		
				onate staining was negative except for	98174	64.9	67.9	3.0 m	4	1		
				fracture fillings. Bleaching attributed								
				to talc alteration of groundmass with								
				very weak carbonatization. Dark nodules								
				still magnetic. No pyrite observed.								
				Type 4 listwanite.								
64.9	70.3			Serpentinized harzburgite-Dunite -	98175	67.9	70.3	2.4 m	3	1		
				Gradational contact with return of dark								
				green serpentine as matrix to grey and								
				hematite-stained nodules. Also fine								
				sugary textured 10-20cm dunite layers								
				from 67.0-70.3 m. Minor relict cumulate								
				olivine textures and "immiscible liquids"								
				textures also present throughout this								
				interval. Intense serpentinization (90%)								

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-2

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 3 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH	FROM TO		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
	FROM	TO										
64.9	70.3			with minor talc on fractures. No sulphides.								
(cont'd)				Very magnetic.								
70.3	76.0			Talc-carbonate harzburgite - gradational contact	98176	70.3	74.0	3.7 m	10	1		
				marked by bleaching of groundmass to light green	98177	74.0	76.0	2.0 m	1	1		
				(limonitic from 70.3-71.3 m) as above. Minor hematite staining of nodules. Pervasive talc-carbonate alteration weak to moderate increasing downhole. No sulphides. Moderately magnetic.								
				Type 4 listwanite.								
76.0	82.2			Quartz-carbonate listwanite - fairly rapid gradation over 10 cm to hard, pervasively silicified,	98178	76.0	77.0	1.0 m	20	355		
				light grey to light green rock. Relict nodular	98179	77.0	77.4	0.4 m	22	568		
				harzburgite textures still intact. Also first	98180	77.4	77.8	0.4 m	40	1211		
				appearance of mariposite marks the extent of	98181	77.8	78.8	1.0 m	21	849		
				silicification. From 77.4-77.8 m silicified	98182	78.8	80.3	1.5 m	71	1072		
				breccia with sharp contacts at 40°, grey arsenical matrix and angular quartz clasts up to 1 cm.	98183	80.3	82.2	1.9 m	334	2024		
				From 79.0-82.2 m there are widely spaced (10-20 cm) white quartz-carbonate veinlets at 55°.								
				Pervasive silicification and fracture controlled quartz-ankerite veinlets at all orientations.								

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-2

DIP TEST		
Angle		
Footage	Reading	Corrected

Hole No. _____ Sheet No. 4 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
76.0	82.2		Mariposite specks replace nodules commonly through-								
(cont'd)			out interval decreasing outwards from the fault.								
			Minor limonite staining on some fractures. Very								
			fine disseminated pyrite and/or arsenopyrite in								
			grey patches throughout interval (1-2% total).								
			Best interval 77.4-77.8 m with 0.3% arsenopyrite								
			and pyrite. Alteration is apparently centered								
			around the fault at 77.4-77.8 m. Type 7								
			listwanite.								
82.2	90.8		Talc-carbonate harzburgite - contact marked by	98184	82.2	85.2	3.0 m	76	243		
			rapid decrease in silica content, disappearance	98185	85.2	88.2	3.0 m	1	1		
			of mariposite, and reappearance of dark and hema-	98186	88.2	90.8	2.6 m	1	1		
			tite stained nodules. A few specks of mariposite	98187	90.8	93.8	3.0 m	3	1		
			occur in bleached envelopes of quartz veinlets at	98188	93.8	96.8	3.0 m	1	1		
			83.3, 83.6 and 84.0 m. Veinlets are distinctly	98189	96.8	99.8	3.0 m	2	1		
			planar and "cockscomb" but contain no sulphides.								
			Moderate to weak carbonatization (pervasive) and								
			fracture-controlled talc decreasing downhole. A								
			few suspect grey patches but only trace pyrite								
			and arsenopyrite.								

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 91-3 Sheet No. 1
 Section _____
 Date Begun Aug. 17, 1991
 Date Finished Aug. 18, 1991
 Date Logged Aug. 19, 1991

Lat. 102E/213S
 Dep. _____
 Bearing 098°
 Elev. Collar 1493.0 m
 Angle -45°

Total Depth 81.4 meters
 Logged By A. Hill
 Claim Klone 1
 Core Size BQTK

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au	As		
								ppb	ppm		
0.0	3.0		Casing and overburden								
3.0	3.5		Silicified harzburgite - light buff to orange-	98198	3.0	3.5	0.5 m	2	1		
			coloured matrix with 15% rusty brown spots (5 mm-	98199	3.5	6.7	3.2 m	1	1		
			1 cm). Spots also hematitic and definitely relict								
			nodules from harzburgite. Core very hard to								
			scratch. Pervasive silicification although it								
			contains no veinlets. Only trace mariposite								
			colouring at 3.4 m. Possible overprinting of								
			silica on carbonate listwanite. Very magnetic								
			spots only. Trace rusty pyrite in spots.								
3.5	6.7		Carbonate-talc alteration - light to dark green								
			matrix with white to hematite-stained spots (5 mm-								
			1.5 cm). Patchy and fracture-controlled limonite								
			also. Pervasive serpentine mostly altered to talc								
			and carbonate. Trace pyrite in uncommon dark								
			spots. Weakly magnetic.								
6.7	16.0		Silicified-carbonate listwanite - strong silicif-	98200	6.7	7.6	0.9 m	23	63		
			ied listwanite interspersed with patchy carbonate-	98201	7.6	9.1	1.5 m	63	227		
			quartz and carbonate-talc alteration. From 6.7-	98202	9.1	10.2	1.1 m	18	24		
			9.1 m silicified carbonate listwanite with 5%	98203	10.2	12.0	1.8 m	11	1		
			mariposite and grey patches. Estimate 3% pyrite,	98204	12.0	13.0	1.0 m	161	215		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 2 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
6.7	16.0		1% arsenopyrite, mostly over first meter. Relict nodules are bleached, mariposite green or orange.	98205	13.0	14.6	1.6 m	192	254		
	(cont'd)		From 9.1-12.0 m predominantly light green matrix with white nodules, talc-carbonate listwanite with hematite-stained nodules. Short 2-3 cm intervals of silicification enveloping fractures at 25°.	98206	14.6	15.5	0.9 m	400	816		
			From 12.0-16.0 m mostly silicified listwanite but with talc-carbonate-limonite on fractures that cause core to be badly broken. Mariposite common, light ghosted nodules. Best sulphides at 15.5-16.0 m (0.3% pyrite, 1% arsenopyrite with minor acicular needles. Silicification, carbonatization and talc alteration of serpentized harzburgite (in decreasing order of abundance) related to anastomising structure expressed as a fracture set at about 25° to core axis. Minor sulphides restricted to most silicified portions.	98207	15.5	16.0	0.5 m	4910	2791		
			Type 7 listwanite with minor type 4 and 6.								
16.0	16.7		Silicified Fault Breccia - sharp contact at 25° Angular clasts of Type 7 listwanite and quartz from .1 mm to 7 mm in a milled up matrix almost	98208	16.0	16.7	0.7 m	341	175		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 3 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH FROM	TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
16.0	16.7		mylonitic. Lower contact is broken. Pervasive silicification. Core is an orange colour throughout. Trace disseminated pyrite only.								
(cont'd)											
16.7	17.6		Altered norite - upper contact broken, lower contact at 20° although slightly irregular. Very well disguised by limonite staining, broken core, pervasive carbonatization and even patchy silicification. Aphanitic chill margin from 17.4-17.6 m is stained olive to rust coloured. Remainder is bleached and stained with relict fine to medium diabasic texture. Pervasive carbonatization and patchy silicification and limonite stained throughout. "Spider-web" fracture filling fine pyrite over first 15 cm (3% pyrite). Only trace disseminated pyrite afterwards. Not magnetic.	98209	16.7	17.6	0.9 m	145	94		
17.6	20.0		Carbonate-talc alteration with silicified harzburgite - predominantly light green carbonate-talc matrix with light to dark grey nodules. Limonite stained from 18.6-20.0m. Pervasive carbonate-talc with thin enveloping silicification around fractures at 20°. Trace mariposite.	98210	17.6	18.1	0.5 m	1	1		
				98211	18.1	19.2	1.1 m	350	332		
				98212	19.2	20.0	0.8 m	286	248		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 4 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
17.6	20.0		Disseminated pyrite (1%) mostly in "spots". A few grey patches in unaltered areas with possible trace very fine-grained arsenopyrite. Type 4 listwanite with minor type 6.								
20.0	21.9		Talc-carbonate listwanite - orange, rust-stained with intense "hairlike" talc, wavy at about 25° occupying fractures. Matrix is pervasively carbonatized. Igneous harzburgite(?) textures all but destroyed with rare mariposite pseudomorphing nodules. Type 4 listwanite. Trace disseminated pyrite now oxidized.	98213	20.0	20.8	0.8 m	482	281		
				98214	20.8	21.9	1.1 m	420	127		
21.9	27.3		Weakly carbonated nodular harzburgite - gradational weakening of above alteration enables recognition of nodular immiscibility textures (all stained orange) in an orange carbonate-talc to serpentine matrix. Patchy talc-carbonate alteration weakening downhole. Black to dark green serpentine proportion increases to 60% by end of hole. Trace accessory pyrite and possible pyrrhotite. Moderately magnetic.	98215	21.9	23.4	1.5 m	6	1		
				98216	23.4	24.9	1.5 m	3	1		
				98217	24.9	26.1	1.2 m	12	1		
				98218	26.1	27.3	1.2 m	2	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 5 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
27.3	81.4		Harzburgite - nodular harzburgite with a black	98219	27.3	29.3	2.0 m	15	1		
			serpentine matrix down to about 47.0 m. Nodules	98220	29.3	32.3	3.0 m	1	1		
			are rounded 'immiscibility' features, light grey	98221	32.3	35.1	2.8 m	2	1		
			to patchy orange (up to 29 m). From 29.0 m down-	98222	35.1	38.3	3.2 m	20	1		
			hole the nodules are more crystal-like and a few	98223	38.3	41.4	3.1 m	19	1		
			pyroxene cores are preserved. Serpentine is	98224	41.4	44.3	2.9 m	1	1		
			strong but associated with fractures mainly to	98225	44.3	45.8	1.5 m	1	1		
			end of hole. Crude mantle layering at 35-55°.	98226	45.8	48.4	2.6 m	1	1		
			Strong serpentine weakening to moderate fracture	98227	48.4	51.8	3.4 m	1	1		
			controlled from about 50 m to end of hole. Minor	98228	51.8	53.8	2.0 m	4	1		
			dunite bands about 30 cm thick are now sugary	98229	53.8	56.8	3.0 m	3	1		
			serpentine with 5-10 mm magnetite patches.	98230	56.8	59.8	3.0 m	1	1		
			Gradational layering expressed by cumulates and	98231	59.8	62.8	3.0 m	7	1		
			concentrations of nodules (5-15 mm). Trace	98232	62.8	65.8	3.0 m	1	1		
			accessory pyrite and minor pyrrhotite and magne-	98233	65.8	68.8	3.0 m	7	1		
			tite. Very magnetic interval. Fault breccia at	98234	68.8	71.8	3.0 m	13	1		
			32.6-33.5 and 45.7-48.8 m.	98235	71.8	74.8	3.0 m	12	1		
				98236	74.8	77.8	3.0 m	2	1		
				98237	77.8	79.6	1.8 m	1	1		
				98238	79.6	81.4	1.8 m	21	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 91-4 Sheet No. 1
 Section _____
 Date Begun Aug. 18, 1991
 Date Finished Aug. 19, 1991
 Date Logged Aug. 20, 1991

Lat. 125E/225S
 Dep. _____
 Bearing 299°
 Elev. Collar 1497.0 m
 Angle -45°

Total Depth 109.7 meters
 Logged By A. Hill
 Claim Klone 1
 Core Size BQTK

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
0.0	3.0		Casing and overburden. 10 cm of serpentine pebbles recovered.								
3.0	32.9		Harzburgite - black and grey. Hole begins in very rubbly, serpentinized harzburgite with poor recovery down to 9.1 m (drilling subparallel to bedrock surface). Lithology comprised of black serpentine matrix with 40-60% light grey porphyroblasts of pyroxene. Some have brown cores and may be bronzite (?). Some light green serpentine on fractures at all orientations. Weak to moderate serpentinization, restricted mainly to matrix and fracture controlled. Very fine grained disseminated magnetite and possibly ilmenite. Very magnetic interval.	98239	3.0	5.5	2.5 m	27	1		
				98240	5.5	9.1	3.6 m	3	1		
				98241	9.1	12.1	3.0 m	1	1		
				98242	12.1	15.1	3.0 m	19	1		
				98243	15.1	18.1	3.0 m	17	1		
				98244	18.1	21.1	3.0 m	3	1		
				98245	21.1	24.1	3.0 m	7	1		
				98246	24.1	27.1	3.0 m	1	1		
				98247	27.1	30.1	3.0 m	19	1		
				98248	30.1	32.9	2.8 m	21	1		
32.9	39.4		Carbonate-talc altered harzburgite - sudden appearance of orange carbonate and talc on hair-line fractures at all orientation. Otherwise harzburgite is similar to that described above. Weak fracture filling carbonate and talc which does not permeate the host rock. Reaches weak to moderate level from 38.3-39.3 m. Trace pyrite	98249	32.9	35.9	3.0 m	3	1		
				98250	35.9	38.3	2.4 m	18	1		
				98251	38.3	39.4	1.1 m	3	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 2 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
32.9	39.4	(cont'd)	and magnetite only. Alteration not strong enough to be termed a listwanite.								
39.4	43.6		Serpentinite - gradational disappearance of carbonate and talc on fractures and strengthening of pervasive serpentine alteration to strong levels increasing downhole. Ghosted, pale porphyroblasts faintly visible until 41.1 m then virtually massive dark green serpentine cut by uncommon thin white fractures. Intense serpentinization increasing slight downhole.	98252	39.4	41.1	1.7 m	3	1		
				98253	41.1	42.3	1.2 m	18	1		
				98254	42.3	43.6	1.3 m	3	1		
43.6	49.7		Norite - very sharp, planar contact with only a 2 cm chilled margin at 35°. Pale green, fine grained diabasic norite, with a slight grain size increase towards the centre to about 2-3 mm. Pyroxene-feldspar intrusive rock is bleached throughout and cut by a gently warped, ribboned calcite-ankerite veinlet, 0.5-2 cm wide which runs down the core axis from 45.2-49.6 m. (Stains mauve and blue). Lower contact broken and ground up by drill. Pervasive ankeritization is strong and core stains dark blue. No sulphides.	98255	43.6	45.2	1.6 m	5	1		
				98256	45.2	48.2	3.0 m	5	1		
				98257	48.2	50.2	2.0 m	3	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 3 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
49.7	52.0		Serpentinite - upper contact expressed by 12 cm of strong talc alteration. Remainder of interval is near massive dark green serpentine, cut by spaced, hairline white fractures that stain violet (calcite) along with trace talc. Gradational contacts. Pervasive intense serpentinization. Minor fracture filling Fe-calcite and talc. Trace very fine grained accessory pyrite. Trace magnetite. Weakly magnetic.	98258	50.2	51.7	1.5 m	1	1		
				98259	51.7	53.2	1.5 m	1	1		
52.0	53.2		Talc/Norite - predominantly intense pale green talc alteration after serpentine and harzburgite. At 52.25 m and 52.5-52.7 m there are fine grained dykelets of norite at 45° to core axis.								
53.2	60.9		Harzburgite - fairly fresh, dense dark green and dark grey rock with minor brown (bronzite?) porphyroblasts. At about 59.2 m the amount of nodules increases rapidly up to about 40%. Moderate serpentinization, fracture controlled, and incomplete with "cores" between fractures apparently fresh. Only trace accessory pyrite and possibly pyrrhotite. Very magnetic.	98260	53.2	56.2	3.0 m	1	1		
				98261	56.2	59.2	3.0 m	1	1		
				98262	59.2	60.9	1.7 m	1	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 4 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
60.9	81.0		Carbonate-talc altered harzburgite - gradational contact with first the rounded "nodules" and then the matrix becoming bleached by carbonatization and talc. General bleaching increasing downhole along with the intensity of hairline talc filling fractures. Carbonate-talc alteration increasing downhole. Hematite-stained nodules at 70.0-80.0m in patches. Only trace to 1% disseminated pyrite. From 71.6-72.7 m silicified listwanite with 2% pyrite, trace arsenopyrite with minor mariposite and seemingly overprints the talc-carbonate textures with pervasive silicification. Minor quartz-carbonate veinlets at 30° in both directions. Host rock is ubiquitously a porphyritic harzburgite as relict textures abound.	98263	60.9	63.9	3.0 m	3	1		
				98264	63.9	66.9	3.0 m	1	1		
				98265	66.9	68.6	1.7 m	1	1		
				98266	68.6	70.6	2.0 m	1	1		
				98267	70.6	71.6	1.0 m	1	1		
				98268	71.6	72.7	1.1 m	33	82		
				98269	72.7	73.7	1.0 m	40	131		
				98270	73.7	75.8	2.1 m	5	1		
				98271	75.8	77.7	1.9 m	10	1		
				98272	77.7	80.0	2.3 m	5	1		
				98273	80.0	81.0	1.0 m	1	1		
81.0	94.9		Quartz-carbonate listwanite - contact is an irregular alteration front of pervasive silicification and the appearance of disseminated mariposite, mostly replacing all or part of relict harzburgite porphyroblasts. At 82.5 m, 0.5-1 cm quartz veinlets with vugs cut the core at 20-30°.	98274	81.0	82.5	1.5 m	138	220		
				98275	82.5	83.5	1.0 m	1260	2054		
				98276	83.5	84.8	1.3 m	313	977		
				98277	84.8	85.8	1.0 m	1060	1210		
				98278	85.8	87.1	1.3 m	195	1254		
				98279	87.1	88.1	1.0 m	1810	3769		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-4

DIP TEST		
		Angle
Footage	Reading	Corrected

Hole No. _____ Sheet No. 5 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
81.0	94.9	(cont'd)	The veins are clearly open space filling with "cockscomb" interval quartz crystalline growths.	98280	88.1	89.1	1.0 m	1280	805		
			Thin hydrobreccia zones (5 cm wide) exist with branching chalcedony veinlets at 85.0 m and 85.7m	98281	89.1	90.1	1.0 m	1105	2329		
			with clear quartz matrix and shards of light grey and mariposite green listwanite. Hair-like talc is common throughout the zone but appears to have been overprinted by silicification. A large breccia (tectonic?) occurs at 88.1-89.1 m with angular clasts up to 2 cm supported in a grey quartz matrix. Good contacts at 30°. General foliation and preferred veinlet direction at 30°.	98282	90.1	91.1	1.0 m	722	1810		
			Pervasive silicification is dominant alteration of pale to bright green (mariposite) altered harzburgite. Relict talc-carbonate textures exist but are apparently overprinted. Generally a very low sulphide system with only minor grey patches (1-10cm) revealing the presence of very fine needle-like arsenopyrite and amorphous pyrite.	98283	91.1	92.1	1.0 m	427	1358		
			From 81.0-94.9 - 0.1% pyrite, <1% arsenopyrite.	98284	92.1	93.1	1.0 m	535	1420		
			Also a black opaque mineral, possibly ilmenite,	98285	93.1	94.0	0.9 m	1000	1643		
				98286	94.0	94.9	0.9 m	1020	1607		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-4

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 6 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH	FROM TO		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
81.0	94.9	(cont'd)		forms trains parallel to foliation locally through-								
				out interval. Grain size < 1 mm and overall very								
				low trace amounts. From 88.1-89.1 m breccia at								
				30°. Type 7 listwanite.								
94.9	105.8			Carbonate-talc alteration - rather sharp contact	98287	94.9	96.3	1.4 m	6	1		
				parallel to the relict layering in the host	98288	96.3	97.6	1.3 m	1	1		
				harzburgite at 40°. Patchy serpentine and bleach-	98289	97.6	99.4	1.8 m	42	46		
				ed carbonate-talc alteration with nodules either	98290	99.4	100.4	1.0 m	1	1		
				white or hematite-stained. A short interval at	98291	100.4	102.4	2.0 m	1	1		
				97.6-99.4 m of silicified listwanite is overprint-	98292	102.4	104.1	1.7 m	2	1		
				ed like the main zone described above. Below this	98293	104.1	105.8	1.7 m	1	1		
				the alteration gradually weakens with the matrix								
				becoming dark green serpentine. Pervasive carbon-								
				atization with associated talc and fracture-fill-								
				ing talc. Hematite stained nodules common. Stain								
				reveals carbonate is Fe-dolomite to ankerite in								
				composition. No sulphides visible except for the								
				silicified zone from 97.6-99.4 m which has trace								
				pyrite, minor arsenopyrite in 1-2 cm grey								
				siliceous patches.								

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-5

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. 91-5 Sheet No. 1
 Section _____
 Date Begun Aug. 19, 1991
 Date Finished Aug. 20, 1991
 Date Logged Aug. 22, 1991

Lat. 362W/200S
 Dep. _____
 Bearing 135°
 Elev. Collar _____
 Angle -45°

Total Depth 106.6 meters
 Logged By A. Hill
 Claim Klone 1
 Core Size BQTK

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
0.0	7.1		Casing and overburden; no recovery								
7.1	14.3		Rubby Serpentinized Harzburgite - does not appear to be a fault zone, rather just rubble serpentinitized harzburgite that has been ground by the drill into balls and crescent-shaped core. Moderate serpentization similar to unit below.	98297	7.0	9.1	2.1 m	3	1		
				98298	9.1	12.1	3.0 m	2	1		
				98299	12.1	15.1	3.0 m	6	1		
14.3	61.0		Harzburgite - dark grey to dark green porphyroblastic (5-8 mm) moderately serpentitized harzburgite peridotite. White, talcose fractures are widely spaced and thin. Rock has faint foliation at 30° and there is no preferred orientation of fractures. Matrix is ubiquitously altered to serpentine, while porphyroblastic pyroxene has common brown crystalline core of bronzite. Overall about 40% porphyroblasts. Only very fine grained accessory pyrite (trace) and magnetite. Rock is magnetic throughout.	98300	15.1	18.1	3.0 m	2	1		
				98301	18.1	21.1	3.0 m	4	1		
				98302	21.1	23.1	2.0 m	3	1		
				98303	23.1	27.1	4.0 m	3	1		
				98304	27.1	30.1	3.0 m	2	1		
				98305	30.1	33.1	3.0 m	9	1		
				98306	33.1	36.1	3.0 m	6	1		
				98307	36.1	39.1	3.0 m	4	1		
				98308	39.1	42.1	3.0 m	2	1		
				98309	42.1	45.1	3.0 m	3	1		
				98310	45.1	48.1	3.0 m	5	1		
61.0	63.7		Carbonate-serpentine alteration - rather sharp colour change to olive brown and grey. Relict harzburgite textures still visible. Porphyroblasts incompletely bleached. Weak carbonate	98311	48.1	51.1	3.0 m	8	1		
				98312	51.1	54.1	3.0 m	5	1		
				98313	54.1	57.1	3.0 m	2	1		
				98314	57.1	60.0	2.9 m	3	1		

DIAMOND DRILL RECORD

PROPERTY MOUNT SIDNEY WILLIAMS

HOLE No. 91-5

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. _____ Sheet No. 2 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____
 Date Logged _____

DEPTH		RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE	Au ppb	As ppm		
FROM	TO										
61.0	63.7	(cont'd)	alteration mostly of porphyroblasts but patchy in in the matrix also. Serpentine colour change to olive green-brown. Trace disseminated pyrite now rusty. Still magnetic. Type 3 alteration.	98315	60.0	61.0	1.0 m	2	1		
				98316	61.0	62.7	1.7 m	4	1		
				98317	62.7	63.7	1.0 m	2	1		
63.7	67.1		Talc-carbonate alteration - gradational bleaching to pale green talc. Interval is cut by numerous wavy ankerite veinlets commonly at 25-30°. There does not seem to be a clearcut structure but rather a weak fracture (veinlet) system centered around 65.7 m. Strong, pervasive talc alteration and veinlet controlled ankerite. There is no mariposite development. No visible sulphides but trace very fine grained black specks possible oxidized pyrite. Type 4 alteration.	98318	63.7	64.7	1.0 m	6	1		
				98319	64.7	65.7	1.0 m	2	1		
				98320	65.7	66.7	1.0 m	65	714		
				98321	66.7	67.7	1.0 m	13	308		
67.1	106.6		Harzburgite - dark green to dark grey, porphyro- blastic harzburgite as in the top of the hole. Very faint "mantle" layering of core, expressed by concentrations of porphyroblasts at 85.0 m. Weak to moderate, incomplete serpentinization. White talc, and minor bright olive green serpentine on fractures, especially from 101.0-106.6 m,	98322	67.7	68.7	1.0 m	21	1		
				98323	68.7	71.7	1.0 m	14	1		
				98324	71.7	74.7	3.0 m	1	1		
				98325	74.7	77.7	3.0 m	38	1		
				98326	77.7	80.7	3.0 m	2	1		
				98327	80.7	83.7	3.0 m	9	1		
				98328	83.7	86.7	3.0 m	116	1		

Appendix B



**MINERAL
• ENVIRONMENTS
LABORATORIES**

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR 31 ELEMENT TRACE ICP

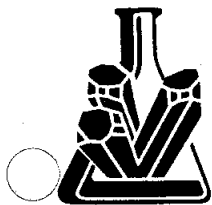
Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu,
Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb,
Sr, Th, Ti, V, Zn, Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, 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 or ring mill pulverizer.

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers. Reports are formatted and printed using a dot-matrix printer.



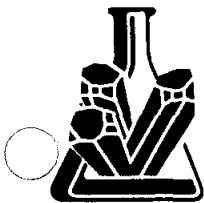
GOLD ASSAY PROCEDURE:

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to - 15 mesh. The whole sample is then riffled on a Jones Riffle down to a statistically representative 500 gram sub-sample (in accordance with Gy's statistical rules.) This sub-sample is then pulverized on a ring pulverizer to 95% minus 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Samples are fire assayed using one assay ton sample weight. The samples are fluxed, a silver inquart added and mixed. The assays are fused in batches of 24 assays along with a natural standard and a blank. This batch of 26 assays is carried through the whole procedure as a set. After cupellation the precious metal beads are transferred into new glassware, dissolved, diluted to volume and mixed.

These aqua regia solutions are analyzed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 2 standard deviations of its known or the whole set is re-assayed. Likewise the blank must be less than 0.015 g/tonne.

The top 10% of all assays per page are rechecked and reported in duplicate along with the standard and blank.



ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK

PROCEDURE FOR AU, PT OR PD FIRE GEOCHEM

Geochemical samples for Au Pt Pd are processed by Min-En Laboratories, at 705 West 15th St., North Vancouver, B.C., 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 or ring mill pulverizer.

A suitable sample weight; 15.00 or 30.00 grams is fire assay preconcentrated. The precious metal beads are taken into solution with aqua regia and made to volume.

For Au only, samples are aspirated on an atomic absorption spectrometer with a suitable set of standard solutions. If samples are for Au plus Pt or Pd, the sample solution is analyzed in an inductively coupled plasma spectrometer with reference to a suitable standard set.



**MINERAL
• ENVIRONMENTS
LABORATORIES**

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR AG, CU, PB, ZN, NI, CO OR CD GEOCHEM

Samples are processed by Min-En Laboratories at 705 West 15th Street, North Vancouver, 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 on a ring mill pulverizer.

0.50 gram of the sample is digested for 2 hours with an aqua regia mixture. After cooling samples are diluted to standard volume.

The solutions are analysed on atomic absorption spectrometers using the appropriate standard sets. A background correction can be applied to Ag, Pb, and Cd if requested.



**MINERAL
ENVIRONMENTS
LABORATORIES**
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9821

SMITHERS LAB.:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

1V-0945-RA1

Company: MINNOVA INC.
Project: 671
Attn: D. HEBERLEIN/U. MOWAT

Date: AUG-30-91
Copy 1. MINNOVA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 8 CORE samples submitted AUG-28-91 by U. MOWAT.

Sample Number	AU g/tonne	AU oz/ton
A98207	5.48	.160
A98275	1.40	.041
A98277	1.21	.035
A98279	2.01	.059
A98280	1.97	.057
A98281	1.36	.040
A98285	.99	.029
A98286	1.08	.032

Certified by

Assay Certificate

1V-0889-RA1

Company: **MINNOVA INC.**
Project: 671
Attn: D. HEBERLEIN / U. MOWAT

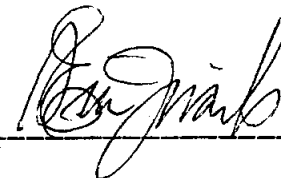
Date: **AUG-29-91**
Copy 1. MINNOVA INC., VANCOUVER, B.C.
2. MINNOVA INC., FORT ST. JAMES, B.C.

**We hereby certify the following Assay of 1 CORE samples
submitted AUG-21-91 by U. MOWAT.**

Sample Number	AU g/tonne	AU oz/ton
A98130	3.11	.091

SEP 9 1991

Certified by _____



COMP: MINNOVA INC.
 PROJ: 671
 ATTN: D.HEBERLEIN/U.MOWAT

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 1V-0901-RD1+2
 DATE: 91/08/29
 * ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	CU PPM	MO PPM	NI PPM	PB PPM	SB PPM	TI PPM	ZN PPM	CR PPM	AU-FIRE PPB
A98134	.5	1	10	1	664	19	1	51	26	1182	4
A98135	.5	1	5	1	426	11	1	47	22	1038	2
A98136	.5	1	7	1	530	17	1	36	22	1005	2
A98137	.5	1	11	1	660	16	1	30	21	1069	8
A98138	.7	91	17	1	1048	20	1	18	19	807	59
A98139	.6	1	15	1	439	17	1	21	18	758	6
A98140	.6	1	13	1	451	11	1	23	17	838	2
A98141	.9	1	37	1	553	13	1	19	15	703	1
A98142	.6	125	12	1	771	18	1	15	15	697	27
A98143	.9	1	19	1	464	13	1	15	13	604	4
A98144	.7	1	6	1	1501	29	1	51	25	1054	2
A98145	.6	1	10	1	1671	26	1	59	27	1201	3
A98146	.5	1	5	1	1765	30	1	32	26	1129	3
A98147	.5	1	9	1	1624	29	1	45	25	1010	8
A98148	.6	1	7	1	1498	25	1	38	23	962	4
A98150	.7	1	15	1	1694	26	1	52	31	1297	2
A98151	.6	1	13	1	1698	26	1	56	34	1410	12
A98152	.5	1	12	1	1687	25	1	52	38	1508	3
A98153	.6	1	10	1	1667	28	1	46	31	1179	3
A98154	.8	1	9	1	1510	27	1	44	30	1376	2
A98155	.7	1	10	1	1600	27	1	41	26	1124	6
A98156	.8	1	8	1	1543	23	1	49	25	1035	1
A98157	.7	1	13	1	1597	21	1	42	24	893	4
A98158	.6	1	10	1	1531	23	1	35	24	883	2
A98159	.6	1	11	1	1582	26	1	53	30	1264	2
A98160	.7	1	15	1	1438	23	1	62	31	1404	3
A98161	.7	1	12	1	1369	27	1	73	33	1537	2
A98162	.7	1	14	1	1241	23	1	51	31	1397	1
A98163	.6	1	13	1	1110	18	1	51	28	1330	2
A98164	.6	1	14	1	1106	22	1	45	27	1248	28
A98165	.3	1	15	1	427	14	1	14	23	978	3
A98166	.4	1	14	1	495	15	1	22	24	1184	2
A98167	.4	1	14	1	426	14	1	21	23	1085	1
A98168	.4	1	18	1	399	18	1	16	23	1133	53
A98169	.4	34	12	1	864	16	1	11	23	1156	17
A98170	.4	1	12	1	494	14	1	11	21	1103	12
A98171	.3	1	10	1	473	16	1	14	25	1286	4
A98172	.4	55	11	1	797	20	1	17	25	1143	2
A98173	.5	1	12	1	456	16	1	10	24	966	1
A98174	.4	1	17	1	1029	22	1	12	22	799	4
A98175	.4	1	14	1	1181	20	1	18	24	993	3
A98176	.3	1	14	1	638	18	1	27	31	1297	10
A98177	.5	1	11	1	454	19	1	24	24	1052	1
A98178	.8	355	12	1	1265	21	43	14	17	582	20
A98179	1.1	568	21	1	1253	27	63	14	19	528	22
A98180	.8	1211	15	1	1208	18	29	4	13	347	40
A98181	.8	849	12	1	1281	18	23	5	16	390	21
A98182	1.0	1072	13	1	1329	22	30	9	15	459	71
A98183	.8	2024	12	1	1424	23	44	14	17	671	334
A98184	.7	243	11	1	832	18	1	25	22	946	76
A98185	.5	1	22	1	394	14	1	28	23	1035	1
A98186	.4	1	6	1	418	11	1	24	22	862	1
A98187	.6	1	11	1	928	17	1	26	27	976	3
A98188	.6	1	14	1	1384	25	1	45	29	1321	1
A98189	.5	1	13	1	1139	21	1	47	29	1287	2
A98190	.4	1	13	1	1069	25	1	43	29	1349	1
A98191	.4	1	17	1	1490	24	1	32	33	1304	1
A98192	.6	1	13	1	1677	28	1	45	34	1446	7
A98193	.6	1	11	1	1472	21	1	33	27	1067	3
A98194	.8	1	12	1	1477	22	1	35	27	1098	42

SEP 9 1991

Ans'd

COMP: MINNOVA INC.
 PROJ: 671
 ATTN: D.HEBERLEIN/U.MOWAT

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 1V-0945-RJ1+2
 DATE: 91/09/04
 * CORE * (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	CU PPM	MO PPM	NI PPM	PB PPM	SB PPM	TI PPM	ZN PPM	CR PPM	AU-FIRE PPB
A98202	.5	24	8	1	1064	3	1	13	19	676	18
A98203	.4	1	9	1	862	3	1	13	20	733	11
A98204	.4	215	5	1	1271	6	16	10	17	705	161
A98205	.8	254	19	1	1452	7	19	9	15	674	192
A98206	.7	816	8	1	1344	10	45	8	15	551	400
A98207	.6	2791	12	1	1310	7	28	7	16	484	4910
A98208	.7	175	5	7	265	1	10	4	6	288	341
A98209	1.9	94	12	1	73	1	4	3293	23	173	145
A98210	.7	1	9	1	861	1	1	56	25	704	1
A98211	.9	332	9	1	1403	9	21	21	14	669	350
A98212	.8	248	9	1	1406	8	21	44	22	957	286
A98213	.8	281	11	1	1445	7	47	23	15	762	482
A98214	.7	127	12	1	1205	7	23	26	22	1030	420
A98215	.3	1	10	1	386	3	1	13	22	943	6
A98216	.4	1	14	1	699	7	1	21	25	1137	3
A98217	.4	1	10	1	1290	11	1	27	34	1393	12
A98218	.6	1	12	1	655	6	1	23	29	1364	2
A98219	.6	1	13	1	675	7	1	24	28	1297	15
A98220	.7	1	10	1	1583	12	1	29	34	1338	1
A98221	.3	1	13	1	1857	15	1	32	39	1383	2
A98222	.4	1	13	1	1894	17	1	29	31	1065	20
A98223	.3	1	10	1	1940	16	1	30	30	1080	19
A98224	.4	1	11	1	1874	17	1	26	33	1154	1
A98225	.5	1	15	1	1875	12	1	24	38	1185	1
A98226	.3	1	18	1	2072	12	1	32	40	1449	1
A98227	.5	1	13	1	1731	14	1	30	33	1287	1
A98228	.5	1	12	1	1632	13	1	33	35	1344	4
A98229	.7	1	14	1	1760	17	1	46	36	1480	3
A98230	.5	1	15	1	1850	18	1	63	33	1357	1
A98231	.6	1	13	1	1666	15	1	22	31	1162	7
A98232	.5	1	16	1	1756	13	1	21	29	1009	1
A98233	.4	1	13	1	1585	9	1	19	27	1031	7
A98234	.5	1	13	1	1670	17	1	28	32	1243	13
A98235	.4	1	13	1	1647	8	1	24	27	912	12
A98236	.6	1	13	1	1606	11	1	25	27	980	2
A98237	.5	1	13	1	1538	12	1	19	27	1063	1
A98238	.6	1	13	1	1652	13	1	17	28	1095	21
A98239	.2	1	13	1	1677	1	1	30	27	1134	27
A98240	.1	1	17	1	1703	2	1	28	27	1197	3
A98241	.8	1	12	1	1485	8	1	32	25	1014	1
A98242	.6	1	12	1	1582	9	1	30	28	1096	19
A98243	.7	1	10	1	1639	14	1	33	32	1208	17
A98244	.5	1	9	1	1577	10	1	33	33	1196	3
A98245	.7	1	9	1	1589	13	1	37	32	1235	7
A98246	.6	1	9	1	1515	8	1	65	26	837	1
A98247	.6	1	9	1	1700	13	1	27	31	1067	19
A98248	.7	1	13	1	1709	15	1	31	31	1141	21
A98249	.6	1	9	1	1646	10	1	33	32	1376	3
A98250	.4	1	10	1	1730	15	1	41	38	1437	18
A98251	.5	1	9	1	1049	16	1	76	30	1215	3
A98252	.3	1	11	1	976	9	1	38	30	1197	3
A98253	.6	1	12	1	1030	3	1	27	29	1118	18
A98254	.7	1	11	1	1073	9	1	44	35	1428	3
A98255	1.8	1	107	1	63	1	1	4376	57	133	5
A98256	1.8	1	71	1	67	1	1	4017	58	181	5
A98257	2.0	1	150	1	278	1	1	4445	52	306	3
A98258	.7	1	8	1	1467	11	1	131	39	1780	1
A98259	1.2	1	17	1	833	1	1	1136	35	870	1
A98260	.7	1	9	1	1215	7	1	49	27	1070	1
A98261	.7	1	15	1	1285	8	1	52	27	1081	1

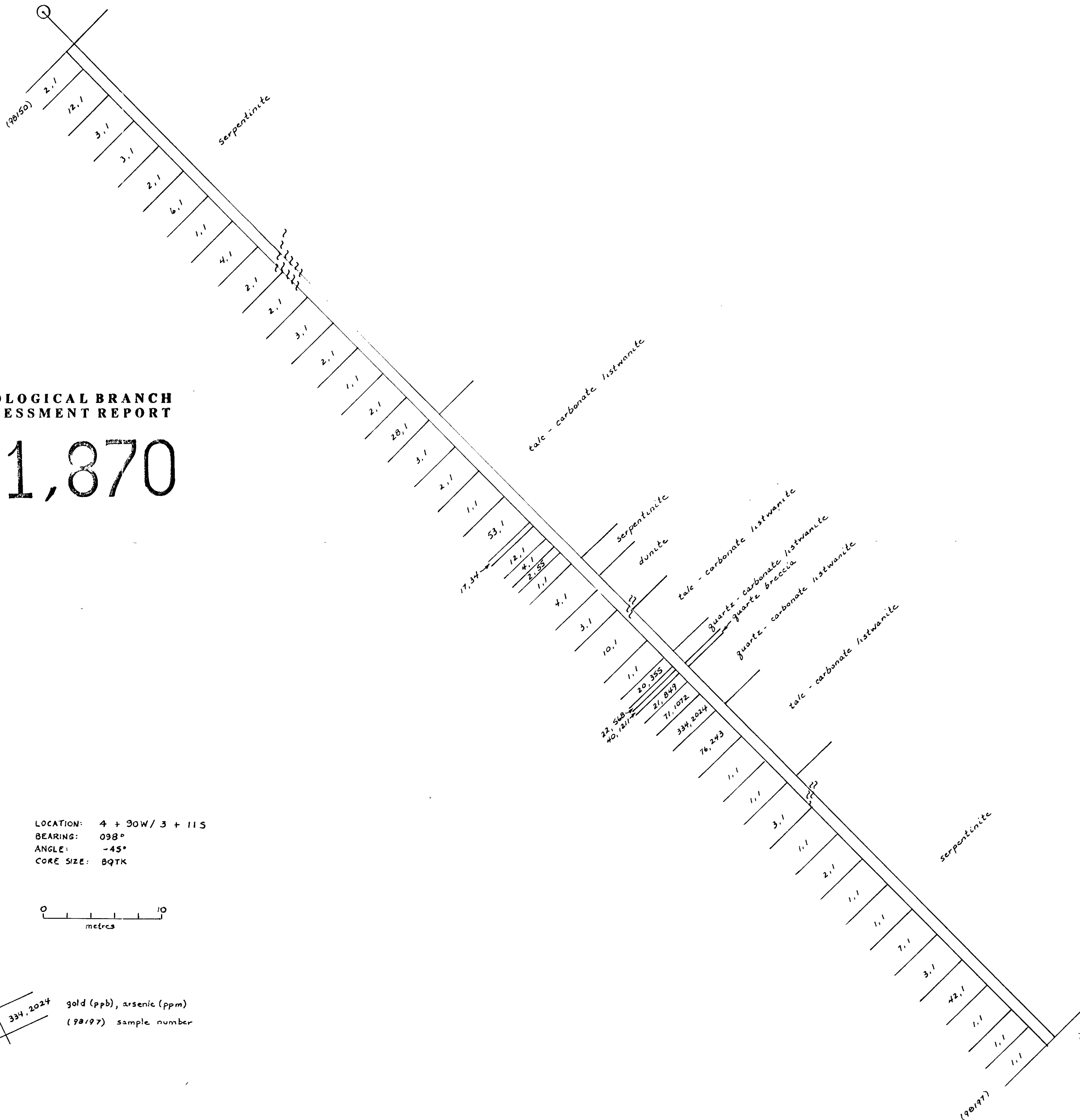
COMP: MINNOVA INC.
 PROJ: 671
 ATTN: D.HEBERLEIN/U.MOWAT

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 1V-0945-RJ3+4
 DATE: 91/09/04
 * CORE * (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	CU PPM	MO PPM	NI PPM	PB PPM	SB PPM	TI PPM	ZN PPM	CR PPM	AU-FIRE PPB
A98262	.2	1	16	1	1277	20	1	35	31	1192	1
A98263	.4	1	15	1	529	10	1	27	25	1141	3
A98264	.6	1	7	1	386	11	1	22	26	1195	1
A98265	.6	1	9	1	433	15	1	15	24	1079	1
A98266	.6	1	5	1	545	11	1	21	27	1246	1
A98267	.6	1	9	1	725	11	1	22	27	1374	1
A98268	.5	82	9	1	1165	19	4	13	21	981	33
A98269	.8	131	13	1	979	15	2	14	20	800	40
A98270	.8	1	11	1	532	10	1	16	20	972	5
A98271	.5	1	11	1	477	9	1	24	27	1243	10
A98272	.6	1	161	1	451	34	1	39	72	1103	5
A98273	.5	1	6	1	515	14	1	14	24	904	1
A98274	.6	220	13	1	1195	18	11	10	18	709	138
A98275	.9	2054	11	1	1277	18	39	9	15	601	1260
A98276	.8	977	12	1	1306	11	16	11	16	531	313
A98277	.8	1210	9	1	918	9	10	8	13	426	1060
A98278	.8	1254	10	1	1452	14	39	9	15	576	195
A98279	.9	3769	12	1	1447	18	42	10	17	693	1810
A98280	1.0	805	6	1	704	1	13	6	9	382	1280
A98281	.8	2329	10	1	1409	18	55	8	14	571	1105
A98282	.9	1810	15	1	1331	17	36	8	15	606	722
A98283	1.3	1358	15	1	1465	23	36	10	16	576	427
A98284	1.1	1420	16	1	1290	16	29	7	15	562	535
A98285	1.2	1643	12	1	1187	18	31	9	14	505	1000
A98286	1.1	1607	13	1	1314	17	36	10	16	580	1020
A98287	.6	1	6	1	632	13	1	16	23	975	6
A98288	.7	1	12	1	828	10	1	21	26	1355	1
A98289	.8	46	10	1	1141	14	1	14	22	1000	42
A98290	.7	1	5	1	562	10	1	18	22	1083	1
A98291	.7	1	9	1	371	8	1	16	22	1030	1
A98292	.1	1	11	1	426	7	1	20	26	942	2
A98293	.2	1	12	1	590	16	1	25	32	1226	1
A98294	.3	1	13	1	752	21	1	35	30	1233	4
A98295	.4	1	14	1	1294	25	1	37	36	1402	1
A98296	.2	1	11	1	1541	22	1	37	35	1236	3
A98297	.5	1	21	1	1711	28	1	389	46	1427	3
A98298	.4	1	20	1	1970	22	1	109	39	1420	2
A98299	.3	1	15	1	1893	29	1	50	42	1510	6
A98300	.2	1	15	1	1729	23	1	42	37	1328	2
A98301	.4	1	13	1	1555	19	1	50	36	1394	4
A98302	.4	1	14	1	1633	21	1	49	37	1343	3
A98303	.3	1	17	1	1932	22	1	50	35	1285	3
A98304	.4	1	16	1	2017	20	1	46	35	1214	2
A98305	.3	1	17	1	2045	25	1	41	36	1297	9
A98306	.4	1	13	1	1647	24	1	50	38	1469	6
A98307	.3	1	15	1	1630	19	1	54	36	1300	4
A98308	.4	1	19	1	1752	24	1	51	38	1323	2
A98309	.4	1	17	1	1742	22	1	48	37	1453	3
A98310	.4	1	18	1	1676	23	1	61	39	1649	5
A98311	.4	1	19	1	1763	23	1	53	37	1579	8
A98312	.3	1	17	1	1813	21	1	38	35	1242	5
A98313	.5	1	18	1	1716	26	1	51	38	1443	2
A98314	.5	1	15	1	1656	22	1	60	38	1520	3
A98315	.5	1	16	1	1701	26	1	64	37	1460	2
A98316	.4	1	21	1	1713	24	1	56	36	1550	4
A98317	.4	1	17	1	1752	26	1	54	39	1693	2
A98318	.3	1	20	1	1312	14	1	56	34	1395	6
A98319	.4	1	17	1	792	13	1	35	30	1345	2
A98320	.5	714	12	1	1312	6	22	19	19	973	65
A98321	.4	308	14	1	1060	9	3	25	24	1191	13

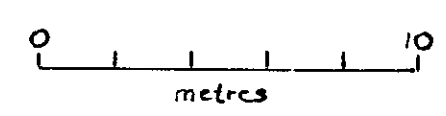
91-2



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,870

LOCATION: 4 + 90W/3 + 11S
 BEARING: 098°
 ANGLE: -45°
 CORE SIZE: BQTK



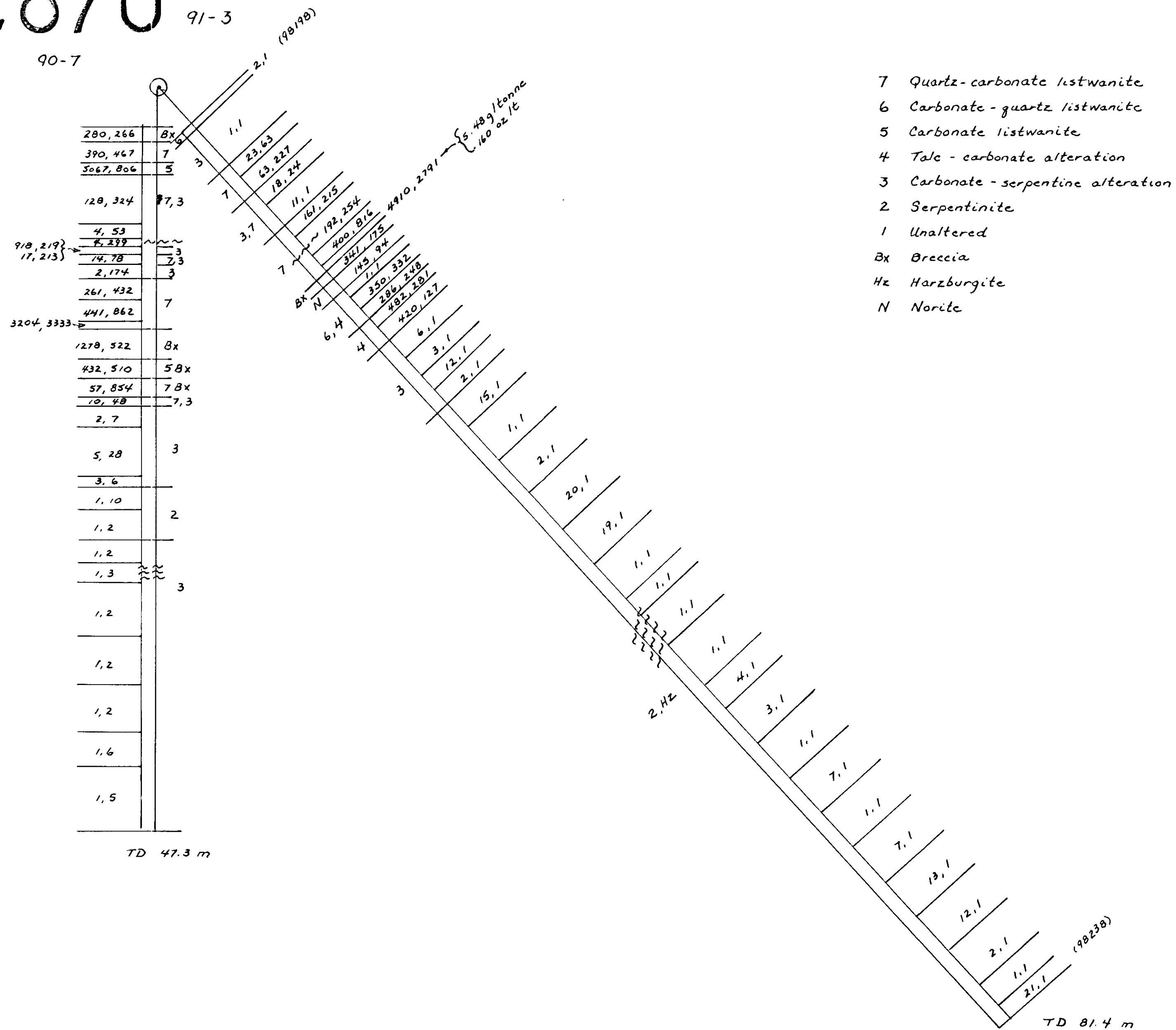
334,2024 gold (ppb), arsenic (ppm)
 (90197) sample number

T.D. 121.9 m

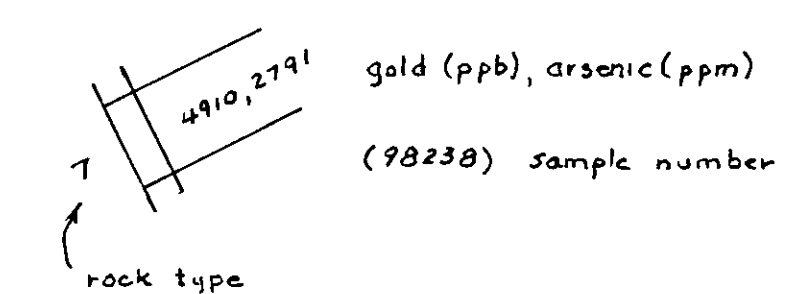
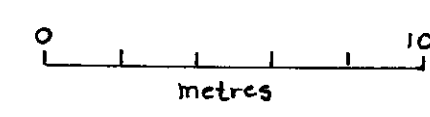
21,870

91-3

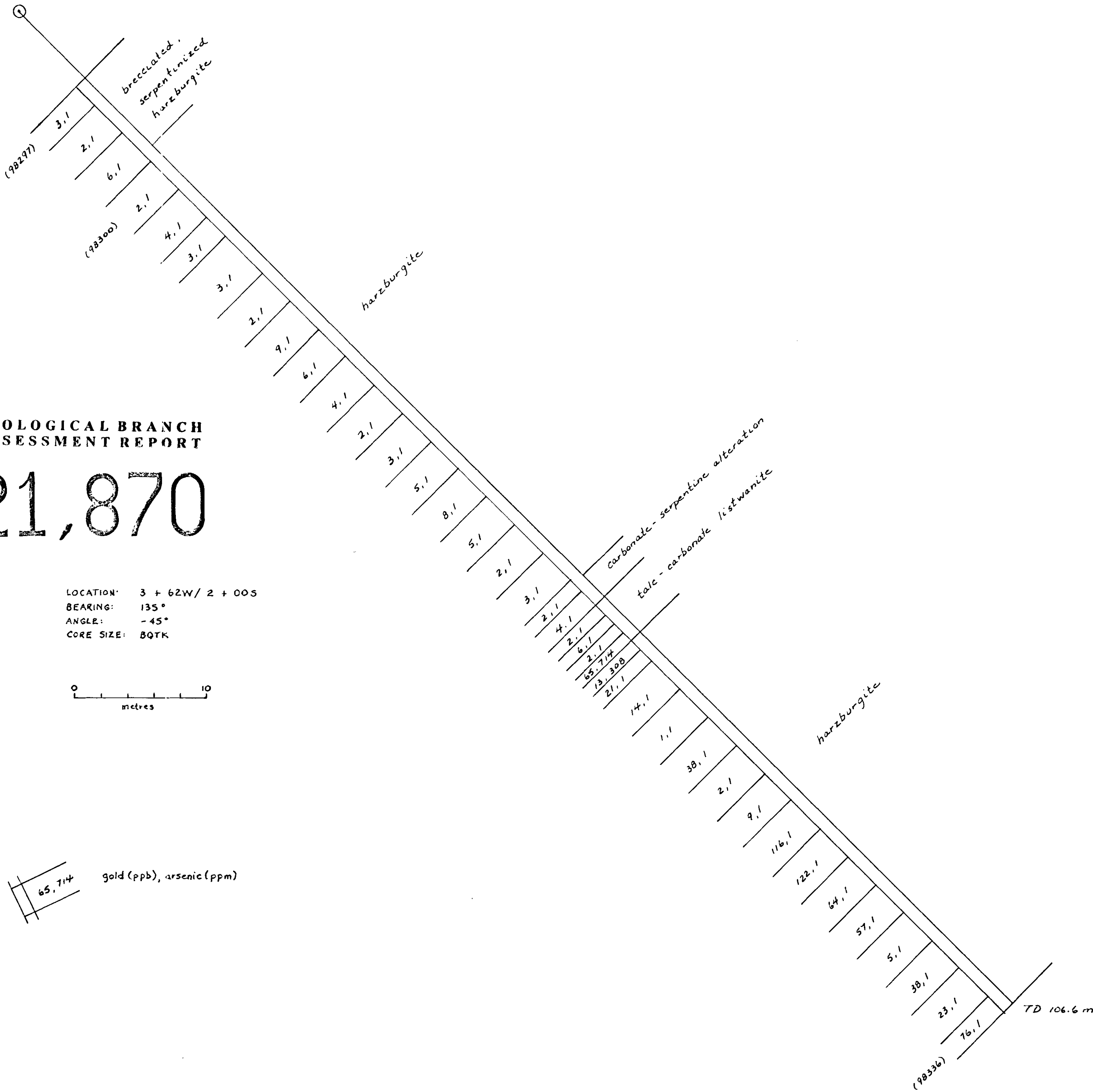
90-7



LOCATION: 1 + 02 E / 2 + 13 S
 BEARING: 098°
 ANGLE: -45°
 CORE SIZE: 89TK



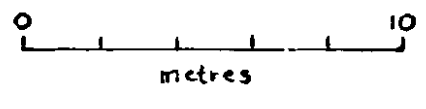
91-5



GEOLOGICAL BRANCH ASSESSMENT REPORT

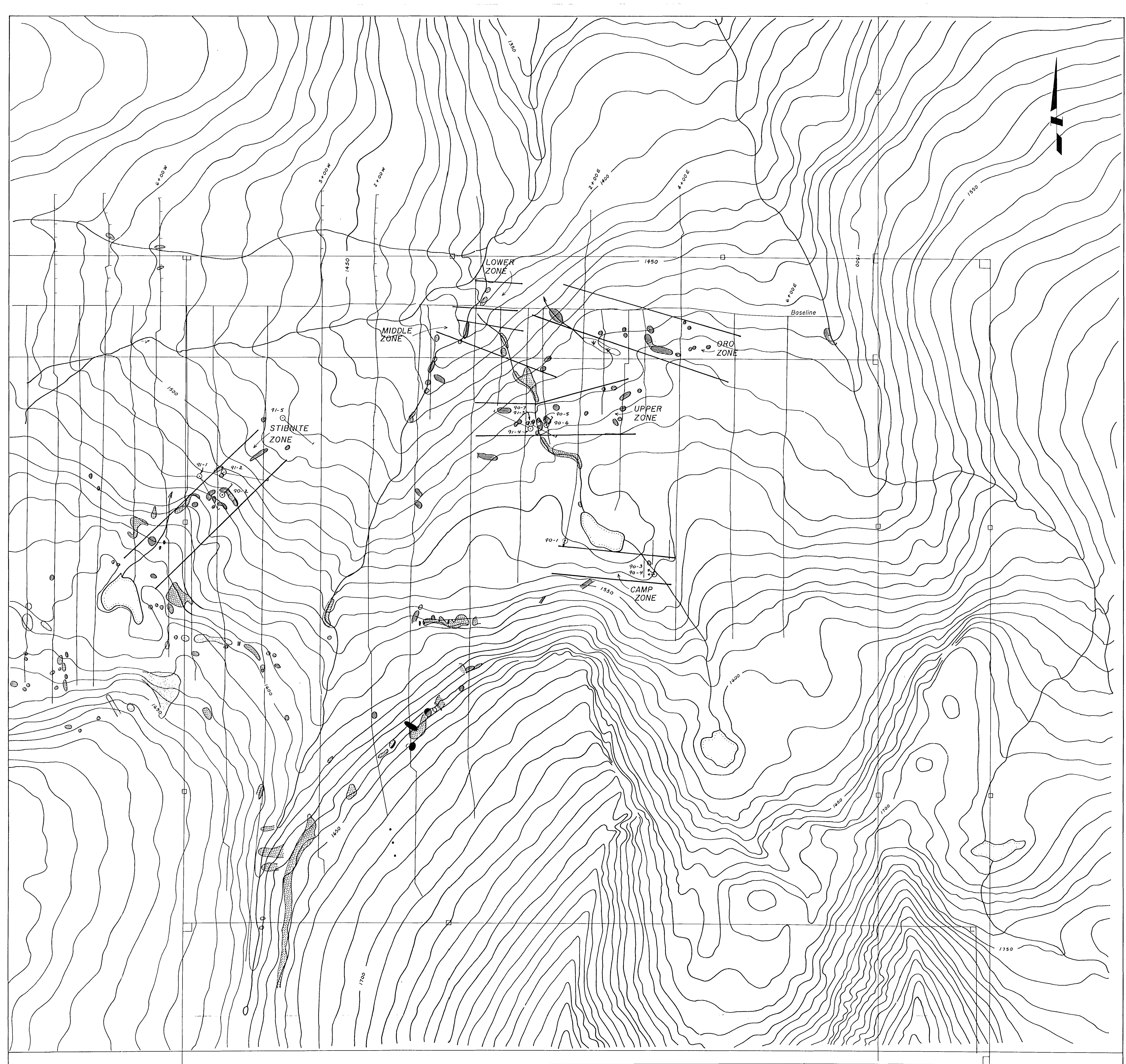
21,870

LOCATION: 3 + 62W/ 2 + 00S
BEARING: 135°
ANGLE: -45°
CORE SIZE: BQTK









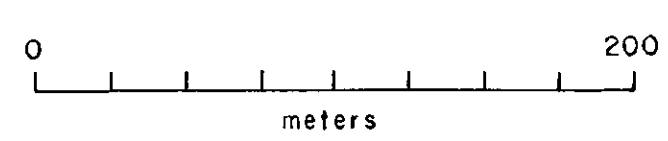
65.714 gold (ppb), arsenic (ppm)

TD 106.6 m



LEGEND

-  listwanite outcrop
-  serpentine / talc outcrop
-  volcanics, argillite, limestone
-  norite
-  grid line
-  claim post



MAP A	MAP B
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**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,870

GRID MAP AND
LISTWANITE ZONES
AND DRILL HOLES