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**Assessment Report**

**on the**

**1992 Diamond Drilling Program**

**Tam 93 Group**

**Greenwood Mining Division**

**NTS 82E/2E,2W**

**Latitude: 49° 05' 00" N**

**Longitude: 118° 44' 00" W**

**Owner:**

**Dentonia Resources Ltd. and Kettle River Resources Ltd.**

**Operator:**

**Minnova Inc.**

**3rd Floor - 311 Water Street**

**Vancouver, B.C.**

**V6B 1B8**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**D.R. Heberlein (P. Geo.)**

**May, 1993**

**22,914**

## SUMMARY

The Tam 93 Group consists of 19 contiguous MGS mineral claims totalling 95 units. It lies in the Greenwood Mining Division (NTS 82E/2E,2W) of south central B.C. approximately 6 km west of Greenwood.

Permo-Triassic chert, cherty argillite and greenstone underlie much of the claim area. They are imbricated by several east and northeast dipping thrust faults. A number of extensional faults related to Tertiary graben formation also traverse the area. Tertiary rocks underlie the western part of the property. They consist of arkosic sandstones of the Kettle River Formation and Intermediate to felsic volcanics of the overlying Marron Formation.

Several styles of mineralization occur on the property. They include porphyry style copper, copper-magnetite skarn, Tertiary epithermal Au-Ag and shear hosted gold related to the thrust faults. The Deadwood zone is representative of the latter style and was the target for Minnova's 1992 exploration program.

A diamond drilling program carried out by Minnova in the fall of 1992 tested the potential for vein and stockwork gold mineralization at the Deadwood Zone. Results from one of the diamond drill holes, TAM92-32 are the subject of this report.

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## 1.0 INTRODUCTION

### 1.1 General:

This report describes the results of three drill holes (TAM92-32, 33 and 34) that were drilled on the Buck claim of the Tam 93 Group in 1992. These holes were part of a twelve hole program carried out on the Tam O' Shanter and adjacent Wild Rose properties between October 15 and November 2, 1992. Drilling was done to assess the potential of a large zone of low grade gold mineralization, the Deadwood Zone, discovered in the fall of 1991.

### 1.2 Property Location and Access:

The Tam 93 Group is in the Greenwood Mining Division at Latitude 49°05' 00" North, and Longitude 118° 44' 00" West on NTS Map Sheet 82E/2E (Figures 1 and 2). It lies approximately 6 km west of Greenwood, B.C. Access to the claims is via the Motherlode mine road that leaves the main street near the old smelter site. As the road is the principal access to the local garbage dump, it is maintained in excellent condition. An old logging provides access to the Tam O'Shanter property. It branches from the Motherload road about 2km from town. At kilometre four the logging road forks; the left fork goes to the southern part of the claim group and the right fork the north. A well-maintained network of old logging roads and skid trails provides access to much of the claim area. (Figure 3).

### 1.3 Topography, Vegetation, and Climate:

Topography is quite variable in the claim area. Rolling hills characterize the northern part of the property. In the South, the terrain is much more exaggerated with about 600m of relief. Here, elevations range from 900m in the valley floors to over 1,500m on the ridge tops. Much of the area is forested. Typical tree cover consists of stands of larch, lodgepole

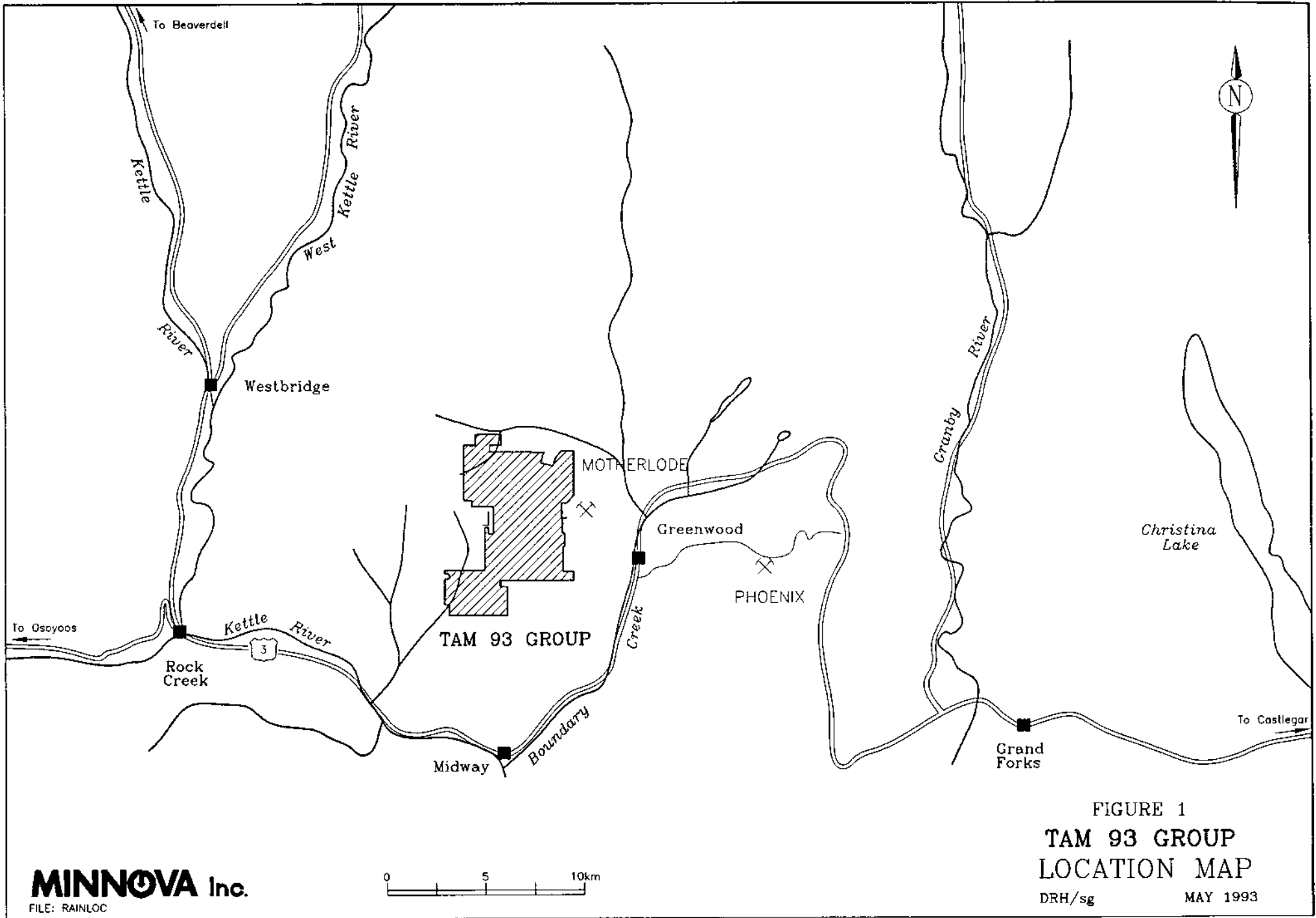
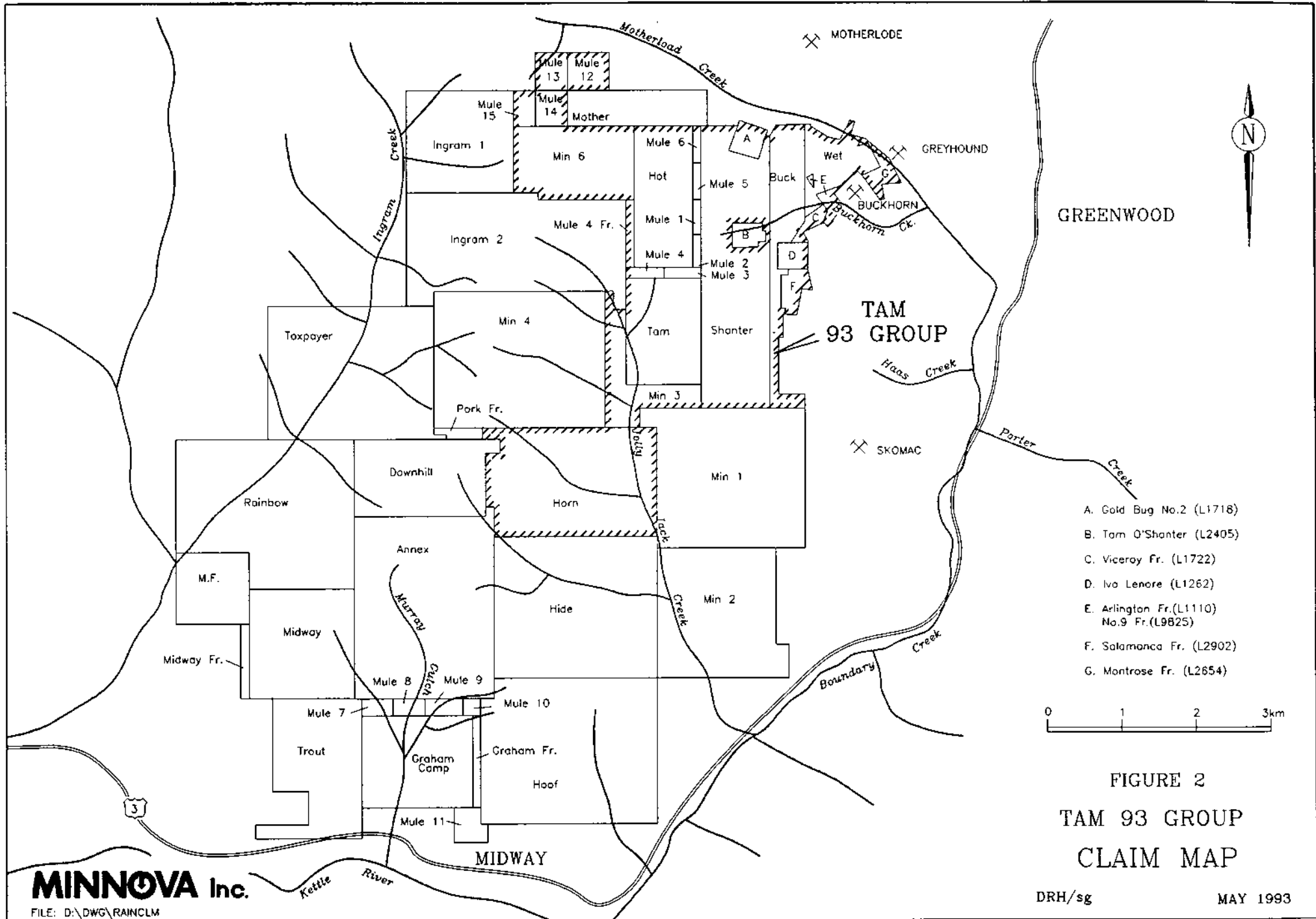


FIGURE 1  
**TAM 93 GROUP**  
**LOCATION MAP**  
 DRH/sg      MAY 1993



pine and Douglas fir. Much of the forest has been selectively logged. In the active drainages the conifers give way to dense thickets of alder and willow.

Climate is moderate with temperatures ranging between  $-15^{\circ}\text{C}$  in winter and  $+30^{\circ}\text{C}$  in summer. Precipitation is light between April and October and many drainages dry up completely in late summer. In the winter, the claim area accumulates a snow pack of about 50cm.

#### 1.4 Property and Ownership:

The Tam 93 Group of claims consists of 19 contiguous MGS mineral claims comprising a total of 95 units. The claims are owned by Dentonia Resources Ltd. and Kettle River Resources Ltd. and were under option to Minnova Inc. at the time the work was carried out. Claim information is summarized in the following table:

**TABLE 1. CLAIM INFORMATION - TAM 93 GROUP**

CLAIM NAME	RECORD NUMBER	UNITS	EXPIRY DATE	NEW DATE*
Viceroy Fr.	214246	1	06/11/94	06/11/95
Arlington Fr. No. 9	214247	1	06/11/94	06/11/95
Salamanca Fr.	214248	1	06/11/94	06/11/95
Montrose Fr.	214288	1	07/09/94	07/09/95
Mother	214463	8	04/29/93	04/29/95
Wet	214465	6	04/29/93	04/29/95
Mule 12	215550	1	03/14/94	03/14/95
Min 6	215551	6	03/15/93	03/15/95
Mule 13	215552	1	03/14/94	03/14/95
Mule 14	215553	1	03/14/94	03/14/95
Mule 15	215554	1	03/14/94	03/14/95
Mule 4 Fr.	215555	1	03/15/94	03/15/95
Shanter	214168	16	07/07/95	
Buck	214277	8	06/28/95	
Tam	214278	12	06/28/95	
Gold Bug No. 2 Fr.	214482	1	06/05/95	
Horn	215221	15	03/04/95	
Hot	214315	8	08/29/95	
Min 3	215481	12	12/23/95	

\*Upon acceptance of this report.



### 1.5 Property History:

The area has seen fairly extensive exploration in the past, particularly on the Buck and Shanter claims. As a result, several showings are known within the boundaries of the Tam 93 Group. Exploration in the immediate area dates to the late 1800's with the discovery of the Motherlode skarn deposit approximately 1 km north of the Buck claim. The first recorded work is at the mine, just east of the Buck claim.

Linda Lee (1990) presents an excellent summary of previous work on part of the claim group and in the immediate area. A portion of her description is reproduced below. Much of the work pertains to the Tam O'Shanter Crown Grant which, although not contained in the TAM 93 Grouping, is located within the Shanter claim boundary and is therefore a relevant part of the property history.

- "...1904 Bengal Crown Grant issued, L2375 (BCDM Annual Report - 1904*
- 1921 Work was recorded on the Tam O'Shanter. Two old shafts (from the turn of the century?) and a recent cross-cut tunnel and an inclined shaft are documented. Work in 1921 included 300 feet of drifting and a 75 foot raise. (BCDM Annual Report - 1921)*
- 1922 Work continued on Tam O'Shanter. 208 feet of tunnel is driven as well as a 25 foot raise. The 'lead' is soft gangue and crushed country rock containing lenses of galena, chalcopyrite, and pyrite, with gold and silver values, in a quartz gangue. 3 tons were shipped averaging 0.4 oz/t Au and 0.66 oz/t Ag. (BCDM Annual Report - 1922)*

- 1964 *Silver Dome Mines did extensive work on claims in the Iva Lenore and Tam O'Shanter area. Ten miles of road were built, 13,000 feet of stripping and 6,118 feet of diamond drilling done. Line cutting, magnetometry and soil sampling were also done. Assessment Report 562 covers the soil and magnetometer surveys. There is no record of drilling or trenching although a later report shows the locations.*
- 1966-67 *Utah did a geophysical survey (IP, resistivity). Assessment Report 1067.*
- 1966-67 *San Jacinto Exploration did an IP survey (see Assessment Report 881).*
- 1969 *Consortium of companies including Silver dome did an aeromagnetic survey (Assessment Report 1878).*
- 1972 *Sun Oil did percussion drilling (Sun Oil, 1972).*
- 1972 *Phelps Dodge did minor geological mapping and data compilation (Assessment Report 4125).*
- 1973 *Mapletree Exploration had a topographic base of the area surveyed and completed a geological mapping and percussion drilling program in the area (Dickinson and Simpson, 1973).*
- 1973-74 *Mascot Mines drilled 27 percussion drill holes. Drill logs are available but no analytical results (Assessment Report 5023).*
- 1975 *Oneida Resources acquired property.*
- 1979 *Oneida drilled 3 diamond drill holes (1560 feet). Target was porphyry Cu-Mo mineralization.*

- Discovered new zone of intense hydrothermal alteration (Assessment Report 8795).*
- 1981 *G. Rayner completed detailed mapping around the Bengal Shaft area. Several old trenches elsewhere on the property were re-exposed using a backhoe (Rayner, 1982).*
- 1982 *Oneida Resources amalgamated with three other companies to form New Frontier Petroleum.*
- 1983 *200 feet of backhoe trenching was done near the Bengal shaft and about 100 feet of trenching was done about 1.5 km north of this to test copper staining exposed by a recent logging road. New Frontier Petroleum went into receivership, giving the Receiver an interest in the property. The remaining interest was transferred to a subsidiary of New Frontier Petroleum, Bulkley Silver Resources Inc.*
- 1984 *H. Shear prepared a compilation of data on the Tam O'Shanter property for Bulkley Silver Resources (Shear, 1984).*
- 1984-85 *Geological mapping and interpretation was done in the Tam O'Shanter area for Kettle River Resources Ltd. by J. Fyles (Fyles, 1984-85).*
- 1985-87 *--Bulkley Silver Resources merged with several other companies to form Houston Metals. Houston Metals was rolled back to form Pacific Houston.*
- 1987 *The property was examined by Echo Bay Mines and BP Selco. The 1979 drill core was relogged and a brief report was prepared (Fraser, 1987; Wong, 1987).*

1988 *Pacific Houston had the present Tam grid established an IP survey completed (Arnold, 1989a). Three diamond drill holes (2,645 feet) were drilled to test anomalies resulting from the above program (Arnold, 1989b)..."*

In 1990 Minnova Inc. re-established the pre-existing Tam grid and completed geological mapping, rock sampling, soil sampling, magnetometry, and VLF-EM geophysics on the Tam 90 Group. This claim group contained several of the claims now included with the Tam 93 Group (Min #1, Shanter, and Buck claims). In 1991 the Tam grid was expanded to the north, south and east. Geological mapping, soil sampling, IP geophysics, and magnetometry were done over the grid extension and a drill program was begun in October of 1991. This program resulted in the discovery of the Deadwood Zone.

In 1992, a new northwest oriented grid was cut over the Deadwood Zone and more soil sampling, geological mapping and IP were carried out to evaluate mineralization. This work culminated the drilling program, part of which is the subject of this assessment report.

## 2.0 SUMMARY OF ASSESSMENT WORK

Diamond Drill Hole TM 91-32 (150.00 metres)

Samples for geochemical analysis - 74

Assays -- 5

### 3.0 GEOLOGY

#### 3.1 Regional Geology:

Oldest rocks exposed in the property area consist of volcanic and sedimentary rocks of the Permian Knob Hill Group. They are intruded by Cretaceous hornblende diorites (Fyles, 1990) and unconformably overlain by Tertiary volcanoclastic and flow rocks that were deposited in the Eocene Toroda Creek graben.

The Knob Hill Group in the property area consists of a monotonous sequence of interbedded chert and greenstone. These rocks are intruded by numerous diorite and hornblende diorite bodies that are dated as Permian (258 Ma) by Church (1986). At some localities, the relatively coarse grained diorite bodies grade into and become indistinguishable with the Knob Hill greenstones. Serpentinite bodies occupy thrust faults in the Knob Hill Group. They occur as lenticular, discontinuous masses that are often altered to a listwanite assemblage.

Attwood Group clastic sedimentary rocks structurally overlie the Knob Hill Gp. They consist of interlayered cherty argillite, sandstone, chert and chert pebble conglomerate. In the Tam O'Shanter area they are separated from the Knob Hill Group by the east dipping Wild Rose thrust fault.

Triassic Brooklyn Formation rocks overlie the Paleozoic strata. These are well exposed to the northeast of the property near the Motherload, Buckhorn and Greyhound deposits. They consist of a sequence chert, chert breccia (sharpstone conglomerate), limestones and mafic volcanics.

Tertiary rocks are exposed on the west side of the Tam 93 Group in the Toroda Creek Graben. Two formations outcrop; the lower Kettle River Formation and the upper Marron Formation that together comprise the Princeton Group. The Kettle River succession consists of pale grey to cream coloured arkosic sandstones overlying a basal conglomerate member. The Marron formation consists of a thick sequence of andesite, trachyte and phonolite lava flows and breccias.

#### 4.0 DIAMOND DRILL PROGRAM

Twelve drill holes, totalling 2,239.7m were drilled on the Deadwood Zone between October 15 and November 2, 1992. Drilling was done by Atlas Drilling Ltd. of Kamloops, B.C., using a skid mounted Longyear Super 38 drill and NQ rods. Drill core was logged by Steve Blower at Minnova's core storage facility in Greenwood.

Drill core was routinely split in two metre intervals (or less if dictated by lithology) and half of the core was shipped to Minen Labs in North Vancouver for geochemical analysis. Gold was determined by fire assay with an AA finish and Ag, As, Cu, Ba, Pb, Sb and Zn by ICP after an aqua regia digestion. Samples with gold values exceeding 500 ppb gold were routinely fire assayed.

Drill hole locations are shown in Figure 3 and summarized in the table below.

HOLE	EAST	NORTH	ELEV.	DIP	AZ.	LENGTH
TAM92-32	-7+50	-0+20	1,375m	-68°	230°	150.0m
TAM92-33	-9+67	-0+70	1,335m	-45°	220°	71.3m
TAM92-34	-10+80	-0+75	1,300m	-45°	220°	71.0m

#### 4.1 Results:

##### TAM92-32:

This hole was drilled to test the mineralized Wild Rose fault 50m down-dip from TAM92-28 that intersected 4.57 g/t Au over 2.94m.

The hole collared in a fine grained diorite containing micro veins of pyrite (to 2%). From 8.9 to 106.0m the hole penetrated an alternating sequence of cherty sediments and diorite intrusions (sills) showing varying degrees of alteration. Narrow zones of moderate silicification with variable amounts of iron carbonate occur from 17.5 to 19.0m, 45.3 to 50.9m, 63.1 to 65.8m, 70.7 to 73.9m and 99.3 to 101.2m. These zones occur in both the sediments and the diorites, but tend to be strongest near the intrusive contacts. Traces of chalcopyrite and up to 5% pyrite occur in quartz calcite veins within the silicified zones.

A one metre wide fault zone at 106.0m marks the Wild Rose fault. It separates the chert-diorite sequence from a clastic sediment package that persists to the end of the hole at 150.0m. The fault contains a 2m wide serpentine body containing a strong stockwork of quartz stringers. Disseminated pyrite (<2%) and traces of arsenopyrite are present in this interval.

Attwood Group sediments occur below the fault. They consist of poorly bedded siltstones and sandstones with infrequent chert pebble conglomerate intervals. Argillic alteration (principally kaolinite), silicification (weak to intense) and oxidation was noted throughout this package, however only small amounts (to 2%) of fine grained pyrite occur.

No significant mineralization is present in this drill hole. Weak to moderately anomalous gold values (>100 <500 ppb) occur sporadically throughout the chert diorite section, particularly close to silicified zones. Best gold values are 1.62 g/t (42.4 to 44.4m), 3.33 g/t (61.6 to 64.0m) and 0.82g/t (75.2 to 76.8m). These correspond with zones of moderate to strong quartz-carbonate alteration and quartz stockworking. A value of 3.36 g/t Au was obtained from the Wild Rose fault from 105.1 to 106.0m. Values in the sediments below the fault are generally lower than in the overlying chert-diorite sequence. The only significant value obtained was 0.79 g/t from 129.7 to 132.7m, where no obvious alteration of sulphide

mineralization is seen.

#### **TAM92-33:**

This hole was drilled 175m northwest of TAM92-33 to test the Wild Rose fault for economic gold mineralization. The hole collared in a relatively unaltered diorite intrusive that continued to a depth of 40m. A two metre wide quartz vein from 40.0 to 42.0m marks the Wild Rose fault. The vein consists of about 50% bull quartz and 50% silicified wall rock. Abundant fuchsite in the wall rock indicates that the protolith may have been ultramafic in composition; perhaps a serpentinite sliver. The core of the vein is extremely pyritic with aggregates and disseminations pyrite reaching 80% over a 20m interval. On either side of the pyritic interval, total sulphide content averages 0.5%. Quartz veins also occur between 43.6 and 45.4m, 48.1 and 48.4m. Traces to 2% chalcopyrite and up to 5% disseminated pyrite are present in these veins. They are separated by highly silicified diorite.

Attwood Group siltstones and conglomerates occur from 49.3 to the end of the hole at 71.3m. Besides from weak argillic alteration they are unaltered and unmineralized.

Moderate to highly anomalous gold values occur in the top 49.3m of the hole. A composite of the top 30.0m averages 281 ppb with a maximum value of 1.06 g/t occurring in the interval 25.0 to 28.0m. Higher values are present in the silicified and quartz veined diorites at the Wild Rose fault. The interval from 37.9 to 42.0m returned a gold value of 3.16 g/t over a true sample length of 4.1m. Anomalous values are also present in the Attwood Group beneath the fault. Values ranging from 109 to 324 ppb occur in the weakly argillized siltstones and conglomerates between 48.4 and 60.3m.

#### **TAM92-34:**

Hole TAM92-34 also tested the Wild Rose fault. It collared in intensely silicified diorite that persists to 45.8m. Intensity of silicification diminishes down the interval and argillic alteration (mainly



kaolinite) increases to the lower contact. Trace to 5% disseminated pyrite occurs throughout the diorite.

A fault at 42.8 to 45.8m separates the diorite from talc altered ultramafic rock. This unit occurs from 45.8 to 61.2m. It consists of an intensely foliated serpentine containing significant amounts (though unestimatable) of magnetite. The upper part of the interval, from 45.8 to 57.1m is strongly silicified and contains traces to 1% of finely disseminated pyrite. A gougy fault zone cuts the serpentinite at 59.0 to 61.2m. This is interpreted to be the main plane of the Wild Rose fault.

Relatively unaltered Attwood Group siltstones occur in the footwall of the fault and remain to the end of the hole at 71.0m.

Weak to moderate gold values occur in the top 45.8m of the hole. Over a composite of 42.8m gold values average 241 ppb. The highest value of 555 ppb occurs in the interval 35.8 to 38.8m.

## **5.0 DISCUSSION AND CONCLUSIONS**

Drill holes TAM92-32, 33 and 34 were drilled to test the Wild Rose fault for potential vein and disseminated gold mineralization. Despite intersecting extensive, but patchy silicification and quartz veins, no ore grade material over significant widths was encountered. Vein style mineralization is narrow and difficult to trace along strike. Broad haloes of anomalous gold values, particularly in the hanging wall diorites show that there is significant size to the system. Unfortunately none of these occurrences contain gold values high enough to be considered economically significant.

Based on the results of these holes and others drilled during the 1992 program, no further work is recommended on the Deadwood Zone.

## 6.0 REFERENCES

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**APPENDIX 1**  
**STATEMENT OF COSTS**

## Statement of Costs

### Diamond Drilling:

Atlas Drilling Ltd.

292.3m at \$58.84 per .metre.....\$17,198.00

### Salaries:

Dave Heberlein (Senior Project Geologist)

1 Days at \$ 250.00 per day.....\$ 250.00

Steve Blower (Project Geologist)

20 days at \$ 150 per day.....\$ 3,000.00

Logan Kelly (Field Assistant)

5 days at \$ 115 per day.....\$ 575.00

### Analyses:

Minen Labs, North Vancouver.

132 geochemical analyses at \$23.50 each.....\$ 3,102.00

### Logistics:

Meals and Accomodation

25 mandays at \$25.00 per day.....\$ 625.00

Vehicle Rental

25 days at \$50.00 per day.....\$ 1,250.00

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Total           \$26,000.00

**APPENDIX 2**  
**STATEMENT OF QUALIFICATIONS**

## STATEMENT OF QUALIFICATIONS

I, David Heberlein of 12221 Makinson Street, Maple Ridge, B.C. certify that:

1. I graduated from the University of Southampton, England with a B.Sc. (Honours) Degree in Geology in 1980.
2. I graduated from the University of British Columbia with an M.Sc Degree in Geology in 1985.
3. I have practiced my profession continuously since my graduation.
4. I am a Registered Professional Geoscientist of the Province of British Columbia
5. I am currently employed by Metall Mining Corporation. as a Senior Project Geologist.
6. When the work described in this report was carried out I was employed by Minnova Inc. as a Senior Project Geologist.
7. Work described in this report was carried out under my direct supervision.

Date: May 27, 1993

Signature: 



**APPENDIX 3**

**DRILL LOGS**





HOLE NUMBER: TM92-32

MINNOVA INC.  
DRILL HOLE RECORD

DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 3.70	«CASING»					
3.70 TO 8.90	«DIORITE»	Colour: dark green/black Grain Size: f.gr. -rusty fractures -intrusive FW contact	40		«2% med. py» as narrow stringers and disseminations	
8.90 TO 9.30	«CHERT»	Colour: light grey Grain Size: -moderately fractured -1-2 mm qtz-chl? veinlets, approx 1 per 2 cm	70			
9.30 TO 17.50	«DIORITE»	Colour: dark green/black Grain Size: f.gr. -weakly fractured (commonly rusty) -qtz veinlets 1-3 mm wide approx 1 per 15 cm @ 30-60 deg TCA  -narrow chert intervals <10 cm wide approx 1 per 2 meters  -intrusive FW contact @	50	{13.4-14.7} «mod carb.»	«3% med. py» -as disseminations, stringers (with or w/o qtz) and clusters up to 5 mm	
17.50 TO 19.00	«CHERT»	Colour: light to dark grey Grain Size: -rusty fractures, moderate, fine fracture network		{17.5-18.6} «wk silica» {18.6-19.0} «i silica»	«2% med. py»	
19.00 TO 19.50	«DIORITE»	Colour: light green Grain Size: f.gr. -intrusive HW contact -net texture of fine (<1 mm wide) veinlets (filled by qtz?) approx 1 per 1 cm	50	«mod carb»	«3% med. py»	
19.50 TO 20.60	«CHERT»	Colour: dark green Grain Size: -intense fine fracture network -qtz and py stringers 2-12 mm wide, 1 per 20 cm @ 30-90 deg TCA			«3% med. py» -as disseminations with qtz in stringers	

HOLE NUMBER: TM92-32

DRILL HOLE RECORD

LOGGED BY: S. BLOWER

PAGE: 2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
20.60 TO 59.30	«DIORITE»	Colour: light to dark green Grain Size: f.gr. -qtz stringers, 1-5 mm wide, approx 1 per 50 cm @ 10-90 deg TCA  Fault: †22.3-32.4 † «wk. flt» †34.5-35.7 † «wk. flt» -this fault is exploited by a 1 cm wide Qstr with 20% py  -one 4 cm Qstr @ 37.2 m contains 1% pyrite  †45.3-48.0 † «i broken» †47.4-47.7 † «mod. flt» -with a 3 cm Qstr containing 1% py	75 0  75	†33.3-35.7 † «wk carb»  †37.0-38.4 † «mod. carb» †38.4-50.9 † «i carb, mod. silica» †50.9-52.6 † «wk. carb»	†20.6-38.4 † «2% py»  †38.4-50.9 † «4% py» †50.9-59.3 † «3% py»	
59.30 TO 65.80	«CHERTY TUF F»	Colour: med. grey Grain Size: Local, moderate foliation, intensely fractured (filled by qtz, chl, pyrite)  †65.6-65.8 † «mod flt» -intensely broken		†63.1-63.4 † «i silica» †63.4-65.3 † «wk. silica» †65.3-65.6 † «i. silica» †65.6-65.8 † «mod. silica»	†59.3-65.3 † «4% py»  †65.3-65.6 † «4% py, 0.5% chalc» -pyrite occurs as disseminations and clusters, fine chalc. occurs in some of the clusters  †65.6-65.8 † «3% py»	Possible specks of native Cu on frags @ 64.7 m
65.80 TO 69.70	«FSP PORPH. DIORITE»	Colour: med. green Grain Size: m.gr. -porphyritic, grades from coarse @ the HW contact to fine @ the FW contact -10-30% plag phenocrysts decrease away from the HW contact -fine (<1 mm wide) silica/chlorite partings may be a cleavage @ 40-60 deg. TCA -FW contact is gradational		«local wk. argillica» -local yellowish intervals may be sericite alteration	«1% fine py» -as disseminations	
69.70 TO 70.70	«DIORITE»	Colour: dark green Grain Size: f.gr. -occasional hairline fractures @ -moderate foliation @ the FW contact (+ parallel to it)	60		«2% fine py» -as disseminations	

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DRILL HOLE RECORD

DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
70.70 TO 73.90	«TUFACEOUS CHERT»	Colour: med. grey Grain Size:  70.7-72.7 MOD. SILICA ALTERED -moderately fractured -tuff layers (yellowish), 1-3 cm thick @  72.7-73.9 INTENSELY SILICA ALTERED -intense fine fracture network, pyrite hairline fractures may be stylolites/solution cleavage	70	{70.7-72.7} «mod. silica»  {72.7-73.9} «i. silica»	«1% fine py»  {72.7-73.9} «3% fine py, tr, chalco»	
73.90 TO 87.80	«DIORITE»	Colour: light grey Grain Size: f.gr.  73.9-75.2 MODERATE ARGILLIC ALTERED -chalcedony + fluorite(?) stringers, 1-3 cm wide, approx 1 per 15 cm with comb textures -mod foliation @ 40-50 TCA  75.2-87.8 UNALTERED DIORITE -dark green, fine -calcite and qtz/calcite stringers 2-15 mm wide, approx 1 per 30 cm @ 20-70 deg TCA		{73.9-75.2} «mod. argillic»	{73.9-75.2} «2% fine py» -trace pyrite in the chalcedony stringers along with a black sulphide (?) (<0.5%)  {75.2-87.8} «1% py» -as stringers (with or without qtz and calcite) and disseminations	
87.80 TO 91.00	«FSP PORPH. DIORITE»	Colour: med. grey Grain Size: med.gr. -10-30% m.gr. plag. phenocrysts oriented in no preferred direction -qtz and qtz/calcite stringers, 2-8 mm wide, approx 1 per 30 cm @ 20-40 TCA		«weak argillic»	«1% py» -as fine disseminations and in the qtz/ calcite stringers	
91.00 TO 92.30	«CHERTY TUF F»	Colour: buff/light green Grain Size: -moderate foliation @ -qtz/calcite stringers, 1-5 mm wide approx. 1 per 15 cm, parallel and crosscutting the foliation @ 20-70 deg TCA	70		«1% py»	

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MINNOVA INC.  
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DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
92.30 TO 99.30	«DIORITE»	Colour: med. green Grain Size: f.gr. to m.gr. Several short intervals of cherty tuff and fsp porph. diorite -qtz and qtz/calcite stringers, 2-8 mm wide, approx 1 per 30 cm @ 20-70 deg TCA			«2% py» -occasionally forms 30% of qtz stringers	
99.30 TO 101.20	«TUFF?»	Colour: light green/grey Grain Size: v.f.gr. «qtz stringer zone» -qtz stringers 1-8 mm wide approx 1 per 3cm, commonly parallel to an intense foliation @ 40-60 deg TCA		«mod. sil»	«4% py» -pyrite occurs as disseminations and clusters in an out of Qstrs.	
101.20 TO 103.20	«SERPENTINITE»	Colour: dark green/black Grain Size: v.f.gr. Massive texture, totally aphanitic «qtz stringer zone» @ 60-80 deg TCA -qtz stringers, 2-15 cm wide approx 1 per 10 cm (35% of the core is qtz)		«i serpentine?»	«2% py, tr arseno.» -py most commonly within the Qstrs, along with one speck of arsenopyrite(?)	
103.20 TO 106.00	«DIORITE?»	Colour: light grey Grain Size: f.gr.  103.2-105.1 -massive, locally porphyritic -intense network of fine (1-3 mm wide) qtz stringers approx. 1 per cm @ all orientations  {105.1-106.0} «i broken major flt» -local siliceous clasts in a clay and pyrite rich gouge		«i. arg»	{103.2-105.1} «1% pyrite»  «20% fine, submassive py»	
106.00 TO 109.00	«SILTSTONE»	Colour: med. grey Grain Size: f.gr. -moderately fractured and fractures are often rusty -qtz stringers 2-10 mm wide, approx 1 per 10 cm @ 10-50 deg TCA -one qtz stringer @ 107.8 m inhabits a moderate fault  {107.8-108.0} «mod flt»  -massive, no bedding	20			

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
109.00 TO 115.00	«SILTSTONE & SANDSTONE»	Colour: med. grey Grain Size: Moderately fractured, seds 2-8 mm wide @ 60-80 deg TCA, very fine network of dark fracturing (may be a cleavage?)		Local, minor silicification	«2% fine pyrite»	
115.00 TO 115.60	«QTZ VEIN»	Colour: yellow Grain Size: f.gr. -qtz vein breccia with 30% subangular well rock (siltstone) clasts supported in rusty yellow qtz clasts are 0.5-3 cm in diameter, vuggy	25		«<0.5% py» -as fine, disseminations within the qtz	
115.60 TO 129.50	«SILTSTONE & SANDSTONE»	Colour: Grain Size:  115.6-119.2 -RUSTY AND FRACTURED -moderately fractured, rusty and locally vuggy -bedding (layers 2-20 mm thick) with approx 70/30 siltstone/sandstone, @ 10-60 deg TCA -is locally folded  119.2-127.4 -not as rusty or fractured as the above interval  123.7-123.8 «wk. flt»		{115.6-119.2} «oxidized»	{115.6-129.5} «1% fine py»	
129.50 TO 129.80	«CHERT PEBBLE CONGLON.»	Colour: grey Grain Size: med. -massive, polymict conglomerate			«2% py»	
129.80 TO 144.70	«SILTSTONE & SANDSTONE»	Colour: med. grey Grain Size: fine -small intervals of chert pebble conglomerate -beds commonly 3-10 mm wide @ 20-70 deg TCA			«0.5% py»	
144.70 TO 147.90	«CHERT PEBBLE CONGLON.»	Colour: light grey Grain Size: m.gr. to c.gr. -polymict conglomerate with clasts up to 1 cm in diameter -dark grey qtz stringers approx 1 per 10 cm	50		«0.5% py»	Trace Fuchsite?

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MINNOVA INC.  
DRILL HOLE RECORD

DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
147.90 TO 150.00	«SILTSTONE & SANDSTONE »	Colour: med. grey Grain Size: f.gr. Beds 2-10 mm wide @	25		«0.5% py»	

HOLE NUMBER: 1M92-32

## ASSAY SHEET

DATE: 16-March-1993

Sample	From (m)	To (m)	Length (m)	ASSAYS		GEOCHEMICAL										Aug/t g/t	Auo/t oz/t	COMMENTS
				Ag ppm	As ppm	Ba ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Au ppb	Hg ppb	Fe %	S %			
17367	3.70	6.70	3.00	0.1	100	272	172	.	23	14	28	18	5	5.51	1.27	.	.	
17368	6.70	8.30	1.60	1.1	67	146	110	.	10	7	31	73	15	7.07	2.35	.	.	
15176	8.30	8.90	0.60	4.4	1	65	374	1	1	1	31	208	35	9.72	.	.		
15177	8.90	9.30	0.40	0.1	1	150	113	1	17	3	28	155	25	5.08	.	.		
15178	9.30	9.90	0.60	1.1	1	128	93	1	12	1	30	445	35	10.08	.	.		
17369	9.90	12.90	3.00	0.8	70	86	220	.	14	7	35	33	10	7.98	2.43	.	.	
17370	12.90	15.90	3.00	0.1	78	79	158	.	13	9	37	48	5	7.47	2.96	.	.	
17371	15.90	18.60	2.70	0.1	64	183	50	.	20	8	41	382	20	6.55	3.08	.	.	
15179	18.60	19.00	0.40	0.1	2	92	97	4	18	5	17	59	45	3.57	.	.		
15180	19.00	19.50	0.50	0.3	1	66	129	1	11	1	26	34	10	7.86	.	.		
15181	19.50	20.60	1.10	0.1	1	134	86	1	14	1	20	189	30	4.8	2.15	.	.	
17372	20.60	23.60	3.00	0.1	76	153	140	.	17	10	46	221	5	7.03	2.78	.	.	
17373	23.60	26.60	3.00	0.2	116	390	195	.	184	135	46	33	10	5	3.47	.	.	
17374	26.60	29.60	3.00	0.1	73	112	263	.	19	12	43	24	10	7.19	3.04	.	.	
17375	29.60	32.60	3.00	0.1	136	46	314	.	22	17	65	43	5	8.33	3.25	.	.	
17376	32.60	34.50	1.90	0.1	135	54	403	.	25	19	75	130	10	8.45	3.02	.	.	
15182	34.50	35.70	1.20	0.1	57	30	366	42	20	4	82	121	25	9.54	3.59	.	.	
17377	35.70	37.00	1.30	0.1	149	48	494	.	19	17	42	69	25	9.21	5.64	.	.	
15183	37.00	37.30	0.30	0.1	1	51	105	12	18	6	23	155	20	3.73	0.8	.	.	
17378	37.30	38.40	1.10	0.1	141	50	574	.	33	20	61	73	10	9.01	3.82	.	.	
15184	38.40	40.40	2.00	0.1	1	75	409	5	23	8	32	84	20	5.11	1.98	.	.	
15185	40.40	42.40	2.00	0.1	23	115	227	5	10	4	13	122	10	1.47	0.44	.	.	
15186	42.40	44.40	2.00	0.1	11	135	219	3	11	4	20	1710	25	2.29	0.7	1.62	0.047	
15187	44.40	46.40	2.00	0.1	26	120	331	4	16	6	35	351	10	3.41	1.26	.	.	
15188	46.40	48.40	2.00	0.8	69	155	634	10	13	4	39	126	15	3.16	1.94	.	.	
15189	48.40	50.40	2.00	1.9	73	117	836	17	10	2	40	104	15	4.38	2.91	.	.	
15190	50.40	52.60	2.20	0.8	92	112	755	5	17	5	32	108	25	5.96	3.98	.	.	
17379	52.60	55.60	3.00	0.4	83	96	739	.	17	9	16	68	40	6.6	5.21	.	.	
17380	55.60	58.60	3.00	0.1	82	73	732	.	16	9	31	61	20	4.7	3.52	.	.	
17381	58.60	61.60	3.00	0.1	59	105	496	.	18	9	26	55	15	3.4	2.30	.	.	
17382	61.60	64.00	2.40	1	64	174	242	.	16	9	31	4000	10	2.92	1.87	3.33	0.097	
15191	64.00	65.00	1.00	0.1	25	134	569	7	23	5	32	296	20	4.11	2.54	.	.	
15192	65.00	65.30	0.30	0.1	20	118	424	5	20	4	33	480	20	5.61	3.36	.	.	
15193	65.30	65.60	0.30	0.1	31	90	505	4	32	6	29	398	15	7.11	4	.	.	
15194	65.60	66.40	0.80	0.1	1	88	640	1	18	4	46	128	10	6.38	2.87	.	.	
15195	66.40	68.00	1.60	0.1	1	93	549	1	27	5	52	212	10	7.94	4.03	.	.	
15196	68.00	69.70	1.70	0.1	1	79	239	1	16	3	66	54	25	8.11	3.41	.	.	
15197	69.70	70.70	1.00	0.1	1	121	290	1	11	2	50	121	15	8.59	3.36	.	.	

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HOLE NUMBER: TH92-33

MINNOVA INC.  
DRILL HOLE RECORD

DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
47.00 TO 48.10	«DIORITE»	Colour: dark grey Grain Size: f.gr. -intensely sheared @ 60-70 deg to c.a. -15% qtz as lenses and stringers up to 1 cm wide @ 60-70 deg to c.a.		«mod silica»	«3% py»	
48.10 TO 48.40	«QTZ VEIN»	Colour: white and grey Grain Size: f.gr. -moderately broken, maybe a weak fault -common stylolites @ 60 deg TCA (probably parallel to the contacts)			«0.5% pyrite» -as fine disseminations and along stylolites	
48.40 TO 48.80	«DIORITE»	Colour: dark grey Grain Size: f.gr. -intensely foliated, 1 cm wide qtz stringers @	60	«mod silica»	«1% pyrite» -as medium disseminated	
48.80 TO 49.30	«QUARTZ VN»	Colour: white and grey Grain Size: f.gr. -20% white, quartz crosscuts, older grey and white qtz. No sulphides in the late quartz, stylolites and color banding @ 60 deg TCA			«5% py, <0.5% chalco» -as fine bands and lenses up to 6 mm wide	
49.30 TO 59.40	«SILTSTONE»	Colour: light grey Grain Size: v.f.gr. -the first 0.3 meters is intensely foliated and may be a sliver of ultramafics -occasional sandstone intervals <0.3 m wide, that are weakly argillized  {49.3-49.6} «i foliation» -qtz stringers <1 cm wide, approx 1 per 0.5 m (decrease away from the NW contact)  {50.7-50.8} «wk flt»		«local weak argillic»	«0.5% pyrite» -as fine disseminations and minor stringers	
59.40 TO 60.70	«CHERT PEBBLE CONGLOM»	Colour: light grey Grain Size: Monomict (white chert) pebble conglomerate. Moderately fractured  FW contact @	60			

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MINNOVA INC.  
DRILL HOLE RECORD

DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
60.70 TO 71.30	«SILTSTONE»	<p>Colour: light green Grain Size: fine -5% chert pebble conglomerate as thin beds up to 20 cm thick</p> <p>-the siltstone is finely interbedded with slightly coarser sediments -local weak chloritic crackle breccia</p>	50	«weak argillic»	<p>↓60.7-71.3↓ «0.5% py» -as fine dissem</p> <p>-one 5 cm band of 30% fine, submassive pyrite @ 68.0 m</p> <p>↓68.0-68.1↓ «30% pyrite»</p>	
	E.O.H.					

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HOLE NUMBER: TM92-33

## ASSAY SHEET

DATE: 24-March-1993

Sample	From (m)	To (m)	Length (m)	ASSAYS		GEOCHEMICAL										Aug/t g/t	Auopt oz/t	COMMENTS
				Ag ppm	As ppm	Ba ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Au ppb	Hg ppb	Fe %	S %			
14967	7.90	10.90	3.00	0.1	1	132	312	1	17	5	32	174	40	5.48	0.29			
17551	10.90	13.90	3.00	0.1	84	181	489	.	24	14	46	470	5	7.54	0.67			
17552	13.90	16.00	2.10	0.1	86	125	394	.	26	15	64	36	5	8.35	1.50			
14968	16.00	19.00	3.00	0.1	1	199	403	1	9	3	44	223	35	8.33	2.17			
17553	19.00	22.00	3.00	0.1	76	185	427	.	27	14	61	66	15	8.12	2.43			
17554	22.00	25.00	3.00	0.1	71	131	501	.	25	14	42	264	10	7.8	2.50			
17555	25.00	28.00	3.00	0.1	69	174	563	.	24	13	40	998	10	7.65	2.67	1.06	0.031	
17556	28.00	29.20	1.20	0.1	61	180	302	.	20	12	44	110	5	7.94	2.34			
14969	29.20	30.70	1.50	0.1	1	1195	319	1	17	7	45	53	45	7.96	2.26			
17557	30.70	33.70	3.00	0.1	74	130	295	.	24	14	49	43	10	7.56	1.71			
17558	33.70	36.70	3.00	0.1	76	128	325	.	24	13	42	383	35	6.88	2.03			
17559	36.70	37.90	1.20	0.1	91	125	464	.	31	16	50	82	10	7.32	2.12			
14970	37.90	38.90	1.00	0.1	1	416	343	1	15	10	53	3005	25	6.45	1.22	3.15	0.092	
14971	38.90	40.00	1.10	0.1	73	36	451	1	13	1	55	2370	15	10.01	3.23	2.42	0.071	
14972	40.00	42.00	2.00	2.8	591	21	1310	2	38	3	48	3850	30	5.49	3.6	3.58	0.104	
14973	42.00	43.60	1.60	0.4	4	210	943	2	30	11	47	147	25	6.39	2.09			
14974	43.60	45.40	1.80	18.3	569	19	10000	1	34	20	285	429	45	5.66	7.16			
14975	45.40	47.00	1.60	2.6	76	2304	1716	1	40	10	84	93	15	10.99	2.38			
14976	47.00	48.10	1.10	0.8	405	154	613	2	17	1	37	77	40	5.17	1.87			
14977	48.10	48.40	0.30	1.7	1075	63	589	8	22	6	42	987	15	4.22	2.35	0.92	0.027	
14978	48.40	48.80	0.40	0.1	593	28	343	1	8	1	59	104	10	5.78	3.77			
14979	48.80	49.30	0.50	2.1	230	31	900	1	21	1	32	300	30	6.02	.			
14980	49.30	51.30	2.00	0.1	1	920	411	1	10	8	25	324	15	5.48	1.9			
17560	51.30	54.30	3.00	0.1	89	1318	313	.	28	17	37	302	5	5.49	1.46			
17561	54.30	57.30	3.00	0.1	70	60	300	.	20	11	23	244	10	4.56	1.86			
17562	57.30	60.30	3.00	0.1	74	110	398	.	27	12	22	109	15	5.07	2.46			
17563	60.30	63.30	3.00	0.1	97	318	249	.	21	14	30	34	10	4.85	0.93			
17564	63.30	66.30	3.00	0.1	51	62	270	.	14	6	15	100	5	2.84	0.92			
17565	66.30	67.70	1.40	0.1	87	58	110	.	19	13	24	26	5	4.6	0.52			
14981	67.70	68.70	1.00	0.1	32	956	294	21	15	6	18	77	35	6.21	2.39			
17566	68.70	71.30	2.60	0.1	82	68	154	.	21	13	25	33	10	5.04	0.99			

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ASSAY SHEET

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HOLE NUMBER: TM92-34

MINNOVA INC.  
DRILL HOLE RECORD

DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 3.00	«CASING»					
3.00 TO 45.80	«DIORITE»	<p>3.0-4.8: Possible Boulders? -moderately broken core, mixed lithologies (black, f.gr., aphanitic and light grey light grey intensely, silicified pyritic diorite) -light grey, f.gr.</p> <p>4.8-7.9: Intense Silicification -light grey, f.gr. -weak, broken core, weak fine fracture network filled by qtz and pyrite</p> <p>7.9-31.6: fine, black, Diorite -dark grey/black -local weak foliation -calcite and qtz stringers 2-6 mm wide, approx 1 per 30 cm -gradational contact with the porphyritic diorite below</p> <p>31.6-32.8: Porphyritic Diorite -light grey, m.gr. -20% medium grained plagioclase phenocrysts that appear to be randomly oriented. Local narrow shears (mylonites) @ -qtz stringers 1-8 mm wide, approx 1 per 10 cm</p> <p>32.8-42.8: Weakly Argillic -moderately broken -occasional clay rich slips @ 20-40 deg TCA (may be wk. faults, but no slickensides) -one 2 cm Qstr @ 60 deg TCA inhabits a moderate fault</p> <p>40.5-40.7: «mod fit» 40.5-40.7: Intensely Argillic -this whole interval is a major fault zone</p> <p>42.8-45.8: «major fit»</p>	30	<p>{3.0-4.8} «i silic, wk ox»</p> <p>{4.8-7.9} «i silica»</p> <p>{31.6-32.8} «wk. arg»</p> <p>{32.8-42.8} «mod arg»</p> <p>{42.8-45.8} «i arg»</p>	<p>«0.5% py» -med. grain, disseminated</p> <p>«2% py» -as fine to med. clusters and stringers up to 3 mm wide</p> <p>{7.9-31.6} «2% pyrite» -as fine to med. disseminations, clusters and stringers (with and without qtz and calcite)</p> <p>«2% py» -as med. grained stringers (with and without qtz, up to 3 mm wide)</p> <p>{32.8-42.8} «2% pyrite» -as disseminations and stringers up to 4 mm wide</p> <p>The Qstr contains 2% pyrite</p> <p>{42.8-45.8} «8% fine pyrite» -as fine disseminations</p>	

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MINNOVA INC.  
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DATE: 16-March-1993

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
45.80 TO 61.20	«ULTRAMAFIC»	Colour: dark green Grain Size: 45.8-57.1: mod talc alt'd Serpentinite -intense foliation @ 70-80 deg -locally magnetic -hairline qtz stringers 1-2 mm wide, approx 1 per 20 cm †48.8-50.6‡ «mod flt» 57.1-59.0: Weakly siliceous serpentinite -light grey -intense foliation @ 59.0-61.2: Fault Zone -med. grey -intensely broken, clay gouge, intense foliation -one 6 cm qtz stringer contain 2% pyrite and 25 chalcopryrite @ 61.2 m	80   80	«i serpentine, mod talc» -the talc is pervasive and in narrow massive lenses †57.1-59.0‡ «wk silica, wk talc, wk serp» †59.0-61.2‡ «wk sil, wk talc, wk serp, i arg»	«0.5% py» -as fine dissem. «1% py» -as fine disseminations †59.0-61.1‡ «1% py» †61.1-61.2‡ «2% py, 2% chalco»	59.7-62.2: 60% recovery
61.20 TO 71.00	«SILTSTONE»  E.O.H.	Colour: light green Grain Size: -finely bedded siltstones with minor (<1%) sandstone intervals (<1%) sandstone intervals <10 cm wide -occasional chloritic crackle breccia -minor qtz stringers 1-10 mm wide approx. 1 per 0.5 m			†61.2-71.0‡ «<0.5% py» -as fine disseminations	

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## ASSAY SHEET

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Sample	From (m)	To (m)	Length (m)	ASSAYS		GEOCHEMICAL										Aug/t g/t	Auopt oz/t	COMMENTS
				Ag ppm	As ppm	Ba ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Au ppb	Hg ppb	Fe %	S %			
14982	3.00	4.80	1.80	0.1	25	1137	116	1	13	3	21	210	35	4.39	0.73			
14983	4.80	7.90	3.10	0.1	18	108	146	1	10	3	15	84	30	3.57	2.09			
14984	7.90	9.90	2.00	0.5	1	135	276	1	6	1	18	212	25	6.62	1.65			
17567	9.90	12.90	3.00	0.1	64	102	306		17	11	32	304	5	6.5	1.68			
17568	12.90	15.90	3.00	0.6	54	317	218		17	8	21	178	5	5.97	2.49			
17569	15.90	18.90	3.00	0.1	79	45	728		185	14	415	190	5	7.69	2.52			
17570	18.90	21.90	3.00	0.1	77	85	322		26	13	32	359	10	7.44	2.75			
17571	21.90	24.90	3.00	0.5	52	76	135		18	8	26	126	10	4.94	1.88			
17572	24.90	26.80	1.90	0.2	53	251	125		19	6	26	32	15	4.57	1.58			
17573	26.80	28.60	1.80	0.1	59	378	193		17	8	32	41	5	5.21	1.61			
14985	28.60	31.60	3.00	0.1	1	165	345	1	13	1	28	471	15	6	2.23			
14986	31.60	32.80	1.20	0.1	1	161	542	1	16	7	47	319	20	5.68	0.91			
14987	32.80	35.80	3.00	0.1	1	60	888	1	18	6	51	128	20	6.6	1.58			
14988	35.80	38.80	3.00	0.1	1	444	592	1	18	7	46	555	20	7.35	2.11	0.54	0.016	
14989	38.80	40.80	2.00	0.1	28	585	984	1	20	7	52	225	15	8.53	2.61			
14990	40.80	42.80	2.00	0.1	24	194	548	1	16	9	52	222	30	8.02	2.18			
14991	42.80	45.80	3.00	2.4	191	59	4290	4	25	1	127	301	5	8.32	4.48			
14992	45.80	48.80	3.00	0.1	52	319	421	1	14	1	36	59	25	5.59	1.29			
14993	48.80	50.60	1.80	0.1	67	22	120	1	20	1	33	21	25	4.1	1.71			
14994	50.60	53.60	3.00	0.1	22	2093	50	1	10	1	19	9	20	3.99	1.43			
14995	53.60	57.10	3.50	0.6	50	240	971	1	17	1	19	33	20	4.37	2.23			
14996	57.10	59.00	1.90	0.1	6	21	90	1	17	1	19	8	80	5.43	0.84			
14997	59.00	61.20	2.20	0.1	45	12	832	2	20	1	22	128	55	5.58	2.24			
14998	61.20	64.20	3.00	0.1	1	94	244	3	14	4	21	23	40	4.64	1.18			
17574	64.20	67.20	3.00	0.1	75	495	266		25	10	32	16	10	4.64	1.13			
17575	67.20	69.10	1.90	0.1	73	1003	165		31	10	58	13	30	4.63	1.16			
17400	69.10	71.00	1.90	0.1	68	898	142		17	9	24	13	10	3.98	1.14			

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