REPORT OF WORK PERFORMED

1986

ON THE PROPERTY OF

DIEPDAUME MINES LIMITED

## TISDALE AND DELORO TOWNSHIPS <br> PORCUPINE MINING DIVISION OF ONTARIO

JANUARY 1 - DECEMBER 31, 1986

JUNE 10, 1987
C.F. DESSON, P. ENG.

OM86-5-C-092

Figure 1
Property Map 1 in. $=2000$ ft.
Figure 2
Geophysical (Electromagnetic) Map lin. = 200 ft.
Figure 3, 3a, 3b, 3c, 3d, 3e
Drill Hole Plans and Sections 1 in. $=20$ ft.
Figure 4, 4a, 4b, 4c, 4d
Samples Location Plans Surface Showings

## SUMMARY

Exploration work was carried out in selected areas underground and on surface in the search for readily accessible ore to feed the nearly completed 500 ton per day mill. The proceeds from the first ore treated will be used to finance a major rehabilitation and mining program underground.

Underground

Dewatering to the 750 foot level was maintained on a continuing basis.

An exceptionally high volume of water below the 750 foot flooded level is compounded by the high influx of water from the adjoining flooded Paymaster Mine which is connected via open stopes on the 22nd level. This plus seepage from the flooded Buffola Ankerite farther west and normal natural inflows creates abnormal pumping problems, slow progress and excessive power costs.

Maintainance of the shaft, shaft guides, pumping stations and pumps, dams, safety doors, electrical systems etc. was carried out on a continuing basis with constant checkups.

A program of diamond drilling was carried out in physically safe areas (not necessarily the highest priority places) utilizing three drills. A number of gold intersections were obtained which require additional drilling to assess the grades and tonnage.

Surface

A group of five claims with surface gold showings was acquired. These claims adjoin the east side of the Deloro section of the mine property.

Two pits were drilled and blasted on the Deloro section. A number of samples were taken from the new showings. A zone of carbonate rocks extending from Paymaster No. 4 Shaft zone was also sampled - allfor gold.

A geophysical survey was carried out on the Deloro Section.

## PROPERTY

The property is comprised of one group of contiguous patented and unpatented mining claims situated in the southeast quadrant of Tisdale Township and the north-east quadrant of Deloro Township.

It includes the former property of Preston Mines Limited which produced $6,284,405$ tons of ore grading 0.245 oz. gold per ton.

The mine during the closing period in 1968 was left in a highly unsafe condition due to retreat mining methods.

Accessible work areas to the dewatered 750 foot level are limited. The rehabilitation of the mine to safe working condition after total dewatering will be very extensive and very costly.

## PROGRAMS

## Underground

Mine maintenance and dewatering were carried out on a continuing basis to the 750 foot level.

The still flooded major portion of the 4100 foot deep mine has two shafts (one internal) over 80 miles of drifts, open stopes etc.

Diamond drilling was carried out on the $2 n d, 4 t h$ and 5th levels of the mine in close proximity to the main No. 2 shaft.

Areas selected for possible accessible ore were chosen in safe working areas and not necessarily the highest priorities. Most of the drill targets originally chosen were found to be in highly unsafe and/or unaccessible areas conditions which were left by the former producer from retreat mining methods used while the mine was flooding on its way to final shutdown.

Surface

Three surface showings were examined and sampled on the Deloro section of the property.

A geophysical survey was carried out over one claim also on the Deloro section.

## OBJECTIVES

Underground
A high influx of water comes from the adjoining abandoned flooded Paymaster Mine which is linked by open stopes on the $22 n d$ level under Simpson Lake. This plus additional seepage from the abandoned flooded Buffalo Ankerite Mine forced the former owner of this property Preston Mines Limited to shut down prematurely leaving a considerable tonnage of ore in situ. The cut-off grade for mineable ore in the Preston was 0.14 oz. gold per ton which is mineable ore at current prices.

The objectives of this operation is to totally dewater the mine and to rehabilitate the workings in order to develop and mine the following areas:
(i) Some 50,000 tons of ore with a grade of 0.5 remains on the Preston 14 th level where rising waters of the flooding mine when the pumps were pulled in 1968 forced abandonment of this newly developed ore zone.
(ii) 350,000 tons of high sulphide ore grading 0.15 oz. gold per ton remains between the 10 th and 18 th level of the Midcamp Section of the mine. This ore was not amenable to treatment in the cyanide mill at the time. This ore is perfect for our new nearly completed flotation mill.
(iii) There is a considerable tonnage of viable ore left: in the walls and pillars of shrinkage stopes in the preston Porphyry.
(iv) Porphyry ore being mined on the Dome Mines Property on their 20 th level (Preston $19 t h$ ) dips up into the Preston Property and was partially developed but abandoned when the mine was allowed to flood prior to shutdown.
(v) An estimated 100,000 ounces of gold is contained in the No. 2 shaft pillar between the 4 th and the 7 th level but is not available for mining at present.
(vi) A large area of the West Porphyry in the Midcamp section was drilled in low grade ore on the $12 t h$ level. This section requires some development to assess the true grade.

Surface

Discover and develop surface and/or near surface orefor rapid exploitation to provide mill feed for the new mill. Subsequent profits will be used to help finance the mine rehabilitation and development and mining of underground ore.

## EXPLORATION

## Underground

Diamond drilling was carried out in safe accessible areas on three levels. Extensive rehabilitation of unsafe areas is required to access higher priority areas of potential ore for further diamond drilling, sampling and mining.

A total of sixteen holes were drilled on three levels as follows:
(i) 2nd Level

Four holes numbered U2-9, U2-10, U2-11 and U2-12 were drilled for a total of 257 feet. Twenty-four intersections were sampled for gold. Nothing of economic importance was intersected.
(ii) 4th Level

Five holes numbered U4-1, U4-2, U4-3, U4-4, U4-5 were drilled for a total of 670 feet. Fortyfour intersections were sampled for gold. Only one sample of economic grade but non economic width was cut in hole U4-2.
(iii) 5th Level

Seven holes numbered U5-1, U5-2, U5-3, U5-4, U5-5, U5-6. and U5-7 were drilled for a total of 500 feet. Forty-eight intersections were sampled for gold. The best intersections are as follows:

| Hole | U5-1 | 0.234 | oz. Au/ton | over 2.3' |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0.097 | oz. $A u / t$ on | over 2.3' |  |
| Hole | U5-2 | 0.109 | oz. Au/ton | over 3.0' | with Visible gold |
| Hole | U5-3 | 0.066 | oz. Au/ton | over 5.0' |  |
|  |  | 0.083 | oz. Au/ton | over 5.0' |  |
| Hole | U5-4 | 0.156 | oz. Au/ton | over 3.0' |  |
| Hole | U5-5 | 0.071 | oz. Au/ton | over 1.2' |  |

## Surface

Three surface showings were sampled for gold. One of the showings was drilled and blasted. for fresh samples. 3
An electromagnetic survey was carried out over one claim.

Showings
(i) Showing No. 1 (Deloro Section-Claim P688665)

Two pits were drilled and blasted in a silicified banded Iron Formation which carries sporadic gold. A total of seventeen samples were taken which yielded negligible gold values.
(ii) Showing No. 2 (Deloro Section-Claim P949060)

A number of samples were taken from an erosion remnant of banded Iron Formation and from the carbonatized volcanic rocks with quartz stringers which underlie the shallow dipping Iron Formation. A short water filled inclined "adit" exists from previous operations.

All of the Iron formation carried gold values albeit low grade. Best sample returned an assay of 0.163 oz . Au/ton from a narrow quartz vein in a cross fracture in the Iron Formation.

The quartz veins and carbonatized rocks underlying the Iron Formation yielded negligible gold.

A total of 21 samples were taken.
(iii) Showing No. 3 (Deloro Section-Claim L.0.327)

This is a wide zone of rusty weathering carbonatized lava which represents the north side of the wider zone of these volcanics which hosts the Paymaster No. 4 Shaft Ore Zone where a substantial tonnage of marginal ore was developed.

Thirteen samples were taken which were all negligible.

Geophysics (Deloro Section-Claim P634559)
An Electromagnetic Survey was carried out on the one claim using a Geonics EM-16 Receiver.

No conductors were deleted and hence no drill targets.

## COST INCURRED

A total of
was expended on the property during the period.

A breakdown of the apportioned costs accompanies the Application for the Ontario Mineral Exploation Grant.

June 10, 1987


TIMMINS TESTING LABORATORIES (T.T.L.) LIMITED
A-AY REPORT
SAMPLES: Diepdaume Deloro Twp.
DATE: $\qquad$

SHONING No. 1

62 Norton Avenue Willowdale, Ontario M2N 4A3
(416) 225-3981
P.O. Box 1392

Timmins, Ontario P4N 7N2
(705) 235-5450


TIMMINS TESTING LABORATORIES (T.T.L.) LIMITED
ASSAY REPORT
SMMPLES: Diepdaume Exploration

DATE: $\qquad$ November 1986
SHOWING No: 2 (1n /ron Formation)
Delaro TP Claim No 94s060 Adit Area in lron Formation

62 Norton Avenue Willowdale, Ontario M2N 4A3
(416) 225-3981
P.O. Box 1392 Timmins, Ontario P4N 7N2
(705) 235-5450


TIMMINS TESTING LABORATORIES (T.T.L.) LIMITED
ASSAY REPORT
SAMPLES:
DATE: $\qquad$ P.O. Box 1392

SHOWING NO 2 (urideríyes -ís if)
Delore Tp. C/ 9490:0 Samples all below the l.F. in carbitad Vol.



TIMMINS TESTING LABORATORIES (T.T.L.) LIMITED
AgSAY REPORT
$\qquad$
DATE: November 1986
$\frac{\text { SHOWING NO. } 3}{\text { CARBONATE ZONE-EASterley Extension of Paymaster No. } 4}$ shaff Zane

62 Norton Avenue Willowdale, Ontario M2N 4A3
(416) 225-3981
P.O. Box 1392

Timmins, Ontario P4N 7N2
(705) 235-5450





|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| HınWizV | da | 3071004 | Hanwuzv | da | 30v1003 |











促







# SHERIDAN GEOPHYSICS LIMITED <br> Rock Trenching Program <br> Deloro Township <br> Porcupine Mining Division <br> ontario 



## SUMMARY

A band of Iron Formation (mapped previously) which carries sporadic low gold values in grab samples was samfled by rock trenching.

The values occur in quartz in tension fractures in the Iron Formation.

One old small pit was found in an area of abundant quartz. This pit was enlarged and another one excavated some 400 feet farther west on strike in an area of quartz stringers.

PREVIOUS WORK
One small rock pit was excavated by previous operatorsnot on record. The area was geologically mapped and geophysically surveyed by the present owners.

PROPERTY AND LOCATION

The property consists of 12 unpatented claims situated in the NE quadrant of Deloro Township. The present work was carried out on claim number P688665.

## WORE PERFORMED

Pit No.l: A rock trench was excavated in a swarm of white quartz veins. Dimensions $5^{\circ} \mathrm{X} 3^{\circ} \mathrm{X} 3^{\circ}$. Six muck samples were taken.

WORK PERFORMED (con'd)
Pit Ho. 2: A rock trench (at site of old small pit) was excavated in a swarm of white quartz veins in Iron Formation. Dimensions (irregular) 15' X 8' $X 4^{\prime}$ deep. Five grab samples and six muck samples were taken.

ASSAYS
Assays were all low and uneconomic.
See attached assays sheet.

## CONCLUSIONS

Nothing of economic importance was found in these areas of abundant primary and secondary quartz.

Respectfully submitted,


> C. F. Desson

## APPENDICES

A Pits Location Plan
B Detailed Sketch Assay Plans (2)
C Assay Sheet
D Paid Invoice for Assays


GEOPHYSICAL SURVEY SHERIDAN CLAIM
DELORO TOWNSHIP
PORCUPINE MINING DIVISION OF ONTARIO

A single claim in Deloro $T$. was covered by an Electromagnetic Survey with VLF-EM.

No conductivity was detected.

## PREVIOUS WORE

Geophysical surveys were previously carried out with a variety of instruments in this area straddling the Porcupine Destor Fault.

PROPERTY
The one claim numbered P634559 is situated in the $N W$ quadrant of Deloro Pp, Porcupine Mining Division of Ontario.

## ACCESSIBILITY

Access is made cross country in winter one mile southwest of Diepdaume Mine.

Summer access is made via bush trail one mile southwest from the Dome Tailings Pond (Private) Road which enters the northeast corner of Deloro Ip.

## GEOLOGY

The property straddles the Porcupine Destor Fault and is underlain by the Deloro Group of Archean Rocks consisting of mafic serpentinized schist Felice tuff s and schist, felsic metavolcanics and metasediments (extrapolated from drilling and surface rocks-none on the claim).

## GEOPHYSICAL SURVEY

The claim was surveyed with a Geonics VLF-EM16 using Cutler Maine Transmitting station on a frequency of 17.8 KHz . The old grid was rechained.

No conductivity of importance was detected. Extremely weak responses are due to noise effect probably caused by electrolytic clay ardor serpentinite in the buried fault valley.

## CONCLUSIONS

No conductivity detected.

Respectfully submitted

C. F. Desson



SHOWING NO. 1
SHERIDAN CLAIMS
ROCK TRENCHING PLAN DELORO TOWNSHIP
PORCUPINE MINING DIVNION
ONTARIO
SCALE:IIM = 200FT JULY 1986



SHOWING No. 1.

SYMBOLS
GtoK-Grab Samples
$\angle$ to $Q$-Muck Samples
Gets - Prefix to Sample Number
Note: See 200'scale Location Plan

SHERIDAN CLAIMS SAMPLES LOCATION PIT \#2
DELORO TOWNSHIP PORCUPINE MINING DIVISION ONTARIO
SCALE:IIN=20FT JULY 1986
$\frac{C L A I M \text { NO. P6836(5)5 }}{7}$












$$
\text { on } 86-5-c-092
$$

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME Of which have been culled from this file. the culled MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (TIE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

REPORTS WERE NOT CULLED - THE FOLLOWING COMPARISONS WERE ALLOWED TO REMAIN IN THIS FILE BECAUSE OF THEIR INCLUSION AS APPENDICES.
(1) APPEND IX "c"

Sheridan Geophysics Ltd., Rock $\rightarrow$ Toronto file *2.9344, Reports Trenching Program, C.F. Desson,_ of Work *250 \& 251 for 1986. No Date.
(2) APPENDIX "D"

Geophysical Survey, Sheridan $\rightarrow$ Toronto fill ${ }^{\#} 2.9029$, Report of Claim, C.F. Lesson, April 2/86. work * 107 for 1986.

