SUMMARY REPORT

LINECUTTING, GEOPHYSICAL AND GEOLOGICAL
SURVEYS AND DIAMOND DRILLING
ON
THE KELVIN TOWNSHIP PROPERTY
LARDER LAKE MINING DIVISION
OF
J. L. TINDALE 1992

Toronto, Ontario
November 1992

J. L. Tindale
Geologist
O. P. A. P. No. OP92-055

NTS 41 P 11
LONGITUDE 81° 14'  LATITUDE 47° 43'
0. P. A. P. No. OP92-055
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INTRODUCTION

J. L. Tindale, residing at 907 - 110 Erskine Avenue, Toronto, Ontario M4P 1Y4, is the owner of 12 contiguous mining claims in Kelvin Township, Larder Lake Mining Division. During 1991 Tindale established a control grid over the property and carried out geophysical surveys and geological mapping financed by OPAP grant number 91-110. This work, in conjunction with previous work carried out by Amoco Canada Petroleum (1971), Temiskaming Nickel Limited (1967) and Paymaster Consolidated Mines (1957) indicated that the most favourable site for the accumulation of sulphide mineralization would be in the southwest portion of the property where a layered sequence of felsic to intermediate pyroclastics, ultramafic komatiites and metasediments exist. Strong geophysical anomalies are coincident with this stratigraphic section.

The original planned program for 1992 was to rely on a geochemical program to define targets coincident with the existing CEM geophysical anomalies. A Max-Min HLEM test survey was also planned for better definition of existing zones and to look for new anomolous zones under swamp covered areas on the west side of the property. Discussions with Amoco personnel prior to commencement of our program led to the discovery that Amoco in 1971 had in fact carried out an extensive program of geochemical sampling over part of the property obtaining numerous copper and zinc soil anomalies (up to 145 ppm copper and 1100 ppm zinc) related to strong EM conductors. However, upon drilling a number of these zones, Amoco discovered mainly graphite as the anomaly source with the principle sulphide being pyrite. Rather than repeat this type of program the writer decided to concentrate on geological mapping, a HLEM survey and diamond drilling for stratigraphic information in the southwestern portion of the property. Results of this work are discussed in the following.

PROJECT AREA, CLAIM HOLDINGS, ACCESS

The property is located in eastern central Kelvin Township in the Larder Lake Mining Division and consists of 12 contiguous unpatented claims staked by the writer and recorded on February 15, 1991, numbered as follows:
L 1092147 - 1092154 (8)
L 1168989 - 1168992 (4)

Access to the claim group is gained by the Grassy Lake Road which
CLAIM LOCATION MAP
J. L. TINDALE PROPERTY
KELVIN TOWNSHIP

1" = ¼ Mile
reads north from its junction with Highway 560 approximately 7 miles east of
the village of Shining Tree. The property is about 7 miles north of this junction
and lies to the west of the all weather road. A rough secondary road branches
to the southwest from the Grassy Lake Road and leads to the north end of Duck
Lake at the centre of the property.

PREVIOUS EXPLORATION

The property lies central to an area where a number of previous
exploration efforts were mounted based on airborne and ground geophysical
responses. From limited assessment work filings we have been able to piece
together the location and results of some of these programs.

Paymaster Consolidated Mines Ltd. drilled five holes totalling 2,303
feet during 1957. Two of these holes, K-1 and 2, appeared to cross-section
the area under the north end of Duck Lake cutting a sequence of ultramafic
flows, crystal tuffs, sediments and graphitic shears. Hole K-3 was drilled
across the top of the small lake at the south end of the western grid and
returned brecciated tuffs with streaks of graphite and pyrite. Holes 4 and 5
were drilled south of the property.

Temiskaming Nickel Limited drilled four holes in the claim area during
1967 for a total footage of 2,179 feet. Two of these holes were along our north-
west boundary and encountered crystal and fragmental tuffs cut by band of
graphitic schist.

Amoco during 1971 carried out geophysical surveys, some geochemistry
and geology, and drilled five holes totalling 2,561 feet primarily along our
north central boundary. These holes encountered broad sections of choritic-
graphitic fragmentals, with 1 to 5% pyrite with low base metal values.

During 1975 Hudson Bay Oil and Gas drilled four holes totalling 990
feet on geophysical targets north and south of our property. The northern holes
encountered mainly argillaceous to graphitic sediments with up to 70% pyrite
across widths of up to 10 feet. Holes to the south encountered crystal to
fragmental tuffs interbedded with graphitic sediments.

The O.G.S. in December of 1990 released a set of airborne electromag-
Magnetic maps which covered Kelvin Township. A number of strong responses were registered over our property holdings. Flight lines, however appear to be almost parallel to the geology making interpretation of these conductors difficult.

The writer during the summer of 1991 carried out a program of linecutting, geological and geophysical surveying over the property. This work was financed by an OPAP grant, No. OP91-110. This work located strong CEM anomalous trends within a sequence of felsic to intermediate pyroclastics, ultramafic komatiites and metasediments mainly to the west of Duck Lake in the centre of the property. Limited rock geochemistry returned anomalous zinc, copper and nickel values from the sequence.

GENERAL GEOLOGY

The Ontario Geological Survey mapped Kelvin Township during the summer of 1975 and published their results as Report 249, Geology of Cabot and Kelvin Townships by M. W. Carter in 1986. That portion which relates to our portion of the area is taken in part from this report as is the accompanying table of formations.

The Early Precambrian (Archean) metavolcanic-metasedimentary rocks comprise an interlayered sequence of subalkalic metavolcanic rocks and clastic and ferruginous metasediments underlying most of the area. Carter notes that the volcanic rocks in the eastern portion of Kelvin Township are mainly intermediate calcalkalic tuffs interlayered with ultramafic komatiites regarded largely as flows because of spinifex and variolitic textures. Pillowed and amygdaloidal textures in the tholeiites and calcalkalic flows and graded bedding, flame structures and load casts in the tuffs indicate that the volcanic rocks were laid down subaqueously. Interlayered with the volcanic rocks in eastern Kelvin Township are clastic metasediments.

Diabase dikes of two ages occur in the area. The oldest are north trending and cut all formation mentioned above. A second set are easterly trending and are the youngest formation known in the area.

An idealized table of formations are presented below:
**TABLE 1: TABLE OF LITHOLOGIC UNITS FOR KELVIN TOWNSHIP**

**PHANEROZOIC**

**CENOZOIC**

QUATERNARY

PLEISTOCENE AND RECENT

Sand, gravel, swamp and alluvial deposits.

Unconformity

**PRECAMBRIAN**

EARLY TO LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

Alkaline diabase: porphyritic, leucocratic.

Intrusive Contract

Tholeiitic diabase: massive, porphyritic, leucocratic; tholeiitic diabase with pink feldspar.

EARLY PRECAMBRIAN (ARCHEAN)

METAVOLCANICS AND METASEDIMENTS

METASEDIMENTS

Wacke-chert, wacke, chert, argillite-chert, argillite, ironstone.

METAVOLCANICS

FELSIC METAVOLCANICS

Aphanitic, porphyritic, foliated; agglomerate, lapilli tuff.

INTERMEDIATE METAVOLCANICS

Aphanitic, porphyritic, pillowed, amygdaloidal, medium to coarse grained flows; tuff, lapilli tuff, tuff-chert, tuff-breccia, pillow breccia, agglomerate.

MAFIC METAVOLCANICS

Aphanitic, porphyritic, pillowed, medium to coarse grained, amygdaloidal, variolitic, light grey flows; pillow breccia, lapilli tuff, tuff-breccia, tuff, agglomerate.

ULTRAMAFIC METAVOLCANICS

Serpentinite, serpentinite breccia, variolitic serpentinite, green carbonate rock, yellow carbonate rock.

**LINECUTTING 1992**

Working from the west baseline Line 16S was cut to the east and west, L20S and L24S were cut to the east and a tie line was cut between 20S and 24S at 4E. These lines were cut with axe and chainsaw, chained and picketed at 100 foot intervals by Roy Annett of Shining Tree, Mark Tindale of Midland and by
The writer during August 1 and 2. Lines 16S and 20S were previously flagged but required cutting to expedite the planned Max-Min EM survey and geological mapping. In all a total of about one mile of line was cut.

**MAX-MIN HLEM SURVEY**

Tech Terrex Inc. of Oakville, Ontario was contracted to carry out a Max-Min Survey over selected cut lines on our westerly grid to determine if conductors existed below the swamp cover near the west boundary and to verify and define the conductors obtained in our previously run CEM Survey. The survey was carried out on August 14, 1992 with Mike Wilson of Oakville as operator and Harry Claridge of Bracebridge as the helper.

The survey was performed utilizing the Max-Min II Plus Horizontal Loop EM system manufactured by Apex Parametrics Limited of Uxbridge, Ontario. It was operated in the Max I mode with transmitter and receiver coil planes horizontal and coplanar.

Three frequencies at 444 Hz, 1777 Hz and 3555 Hz were used in order to provide as much diagnostic information as possible about the conductors beneath the surface. The lower frequency of 444 Hz was used because of its higher dipole moment which results in greater depth penetration. The higher frequencies resulted in greater sensitivity of the poorer conductors as well as much better resolution between closely spaced conductors.

The coil separation for this survey as provided by the reference cable was 100 metres. This separation results in a theoretical depth penetration of at least one-half the coil separation. Readings were taken every 25 metres along the cut grid lines, ie L0, L16S, L20S and L24S. The position of the EM responses were the mid point between the transmitter and receiver.

Profiled data as well as individual readings for each station are presented on three maps accompanying this report, as Maps 2, 3 and 4, at the various frequencies at a scale of 1:2000.

A very strong response was picked up on Line 0 between 3+50E and 7+50E which correlates to CEM anomaly B from our 1991 survey. This anomaly may be extended to the north where it was previously tested by Amoco holes 1, 4 and 2 near our Line 4N. These Amoco holes intersected bands of graphite
a felsic pyritic agglomerate with low values in zinc averaging 0.1% over 5 foot intervals. A second anomaly was picked up on Line 0 between 2+00W and the baseline. This zone also appears on Line 16S between 4+00W and 1+00E where it is considerably wider. This zone correlates with CEM anomaly "A" and appears to have been tested by Amoco holes No. 3 and 5 near Lines 12S and 4S respectively. Both of these holes logged black graphite interbands with rhyolite agglomerate and tuffaceous breccia.

The Max-Min Survey failed to locate any anomalous responses on Lines 20S or 24S though the CEM survey picked up strong responses on Line 20S east of the baseline. Perhaps the CEM responses are caused by near surface topographic effects or very localized surface pods of sulphide/graphite bands which were not significant to the long cable Max-Min effort.

In any case it appears that the Max-Min features that we found have been adequately tested by the Amoco drilling of 1971. Also our initial suspicion that conductors could lurk below the swamp cover to the west of the baseline at a depth below the CEM vision was in error as nothing was noted across this area on either cut Line 0 or 16S.

**GEOLOGICAL SURVEYING**

The writer spent considerable effort in locating the exact location of the Amoco drill holes vintage 1971 as these holes were critical in evaluating both the CEM and Max-Min responses. Careful tracing of old drill roads enabled us to accurately tie these holes to our grid. The drill sites were characterized by discarded drill rods, crossed timbers for the setup and piles of firewood neatly stacked. We are confident that the drill sites as presented on the revised geological map No. 1 at scale 1" to 200' are accurate to a few feet.

Geological mapping of Lines 16S, 20S and 24S and the tie line between Lines 20S and 24S was carried out by the writer in August 1992. There is a marked increase in ultramafic rocks on Lines 20S and 24S from the stratigraphy further to the north and west. These dark green to black, soft fine grained rocks exhibits blocks of fine grained grey aphanitic rock floating in a black fine grained matrix. The blocks which are up to 2 feet across often show spinifex textures and minute pyrite cubes with occasional pyrrhotite. Sulphide mineralization as streaks and blebs were found on the tie line between Lines
and 24 at 4+00E. Pyrite and pyrrhotite mineralization in sample 156365 returned analysis of 1544 ppm Ni, 1098 ppm Cr and 108 ppm Co. The chromium and cobalt results compare with Carter's analysis of ultramafic komatiite as reported in O.G.S. Report 249 (ibid).

Where the ultramafic does not exhibit blocks or breccia characteristics it is a black basaltic looking rock or where sheared it has a dark green serpentinite character. This serpentine-like rock is particularly prevalent along the base of the hillside above the little lake at the west end of L24S.

There is a definite increase in the thickness of the ultramafic unit at the southend of the property. From relatively narrow exposures along Duck Lake this unit appears to blossom out near our south boundary to a thickness of over 1000 feet. These ultramafics are characterized by blocks showing spinifex texture, are extrusive in character and appear to belong to the komatiitic suite. As such they are comparable to the ultramafics of the Timmins area which host such deposits as the Langmuir, Texmont and Sothman. The implication being that the unit in Kelvin may also host similar deposits. It does appear however that further exploration for this type of deposit should be pursued to the south of our claims under the swamp and lake occupied area of the Big Four chain of lakes.

**DIAMOND DRILLING PROGRAM**

The realization that a thickness of extrusive komatiitic ultramafic rocks was developing at the south of our claim block and the occurrence of pyrrhotite and pyrite with low nickel values at 4E on Line 20S led to the decision to drill a single hole for stratigraphic purposes into the western edge of the ultramafic suite. The hole was designed to pass below the above noted sulphide showing and also would test a strong CEM anomoly even though a correlation with the Max-Min was lacking.

The hole was contracted to Tindale Drilling Limited of Midland, Ontario with the writer and Roy Annett serving as helpers during the mobilization and sixteen hour shifts of actual drilling. The hole was collared at -45°E on Line 20S at 2+75E on November 20 and completed at 298 feet on November 22, 1992. Including mobilization and demobilization the drilling took seven days (Nov. 17 to Nov. 23).
The diamond drill log and assay results from Hole Kl-92 is appended to this report along with a section sketch at a scale of 1"=100'. Assay data is also appended.

The hole encountered spinifex textured blocks of pale grey aphanitic ultramafic floating in a black fine grained matrix of soft serpentinite. The blocks are sharp sided and very irregular in outline giving the core a brecciated appearance. Where shears are apparent the serpentinite is waxy and pale green in colour. Minor pyrite cubes and fine disseminations are noted throughout, usually along slip planes. Graphite was not present. The base of the hole from 243 to 298 feet exhibited a subtle change to a paler green ultramafic matrix while still retaining the spinifex blocks or breccia fragments.

Pyrrhotite disseminations occurred from 226 to 236 feet in the hole in quantities less than 1%. The occurrence of pyrrhotite appears coincident with an increase in black wavy fracture fillings in the ultramafic. Analysis of two contiguous 5 foot intervals returned 740 and 880 ppm Ni and <15 ppb platinum values. These results are anomalous for nickel.

The core is stored at Roy Annett's property in Shining Tree.

CONCLUSIONS AND RECOMMENDATIONS

The appearance of komatiitic spinifex textured ultramafic rocks on the southwestern portion of our Kelvin Township property carrying pyrrhotite and anomalous nickel values bodes well for the existence of a potential massive sulphide deposit similar to the Sothman or Langmuir deposits further to the north.

Exploration along this belt of rocks to the south to determine the areal extent of this extrusive and to search for massive sulphide emplacements is the recommended next phase for the development of this occurrence. This phase will require the acquisition of more ground south of our existing boundary. This area occupies low swampy and lake covered ground conducive to winter geophysical surveys.

Respectfully Submitted,

J. L. Tindale, P. Eng.
Geologist
REFERENCES


Cobalt Resident Geologist Assessment Files.
APPENDIX A

Diamond Drill Log Hole No. Kl-92
## DIAMOND DRILL RECORD

**NAME OF PROPERTY** Kelvin Township - Tindale

**HOLE NO.** K1-92  **LENGTH** 298'  

**LOCATION** Claim 1168991-North end Little Lake on S. Bdry

**LATITUDE** L20S  **DEPARTURE** 2x75E

**ELEVATION**  10' above lake  **AZIMUTH** 90°  **DIP** 45°

**STARTED** Nov. 20, 1992  **FINISHED** Nov. 22, 1992

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<td>Pale green serpentine enriched, slump textured ultramafic with flow texture black mafic volcanic occasional qtz, calcite, occassional bands of breccia with minor traces po; veining is @ 30° to erratic; often the fine grained ultramafic is streaked with &quot;chicken track&quot; (spinifex) texture; traces py.</td>
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**FOOTAGE** | **AZIMUTH** | **FOOTAGE** | **AZIMUTH** |
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**LOGGED BY** J. L. Tindale

**REMARKS** BQ Core

Drilled by Tindale Drilling Limited
Core Storage @ R. Annett of Shining Tree
ASSAY RESULTS
ACCURASSAY LABORATORIES
A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.J.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

Mr. J.L. Tindale
907-110 Erskine Ave.
Toronto, Ontario
M4P 1Y4

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ORIGINAL
# Certificate of Analysis

**Mr. J.L. Tindale**  
907-110 Erskine Ave.  
Toronto, Ontario  
M4P 1Y4

**Work Order #: 920294 + 920294A**

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**Per:**

[Signature]

**ORIGINAL**
Certificate of Analysis

Tindale, Mr. J.L.
907-110 Erskine Ave.
TORONTO, Ontario
M4P 1Y4

December 3, 1992
Work Order #: 920431

SAMPLE NUMBERS
Accurassay Customer

Platinum (ppb)
Nickel (ppm)

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Accurassay Customer</th>
<th>261577</th>
<th>194765</th>
<th>&lt;15</th>
<th>740</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>261578</td>
<td>194766</td>
<td>&lt;15</td>
<td>880</td>
</tr>
</tbody>
</table>

Quickscan results to follow
### Report of Work Conducted

**After Recording Claim**

**Mining Act**

---

#### Personal Information

Personal information collected on this form is obtained under the authority of the Ministry of Natural Resources and Forestry and will be used to determine if the recorded holder is entitled to assessment work credit for the work described on this form. If you have any questions about this collection, please contact the Provincial Manager, Mining Lands, Ministry of Natural Resources and Forestry, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

#### Instructions*

- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

---

#### Recorded Holder(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOHN L. TINDALE</td>
<td>907-110 ERSKINE AVE TORONTO ON M4P1Y4</td>
</tr>
</tbody>
</table>

#### Work Performed (Check One Work Group Only)

<table>
<thead>
<tr>
<th>Work Group</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geotechnical Survey</td>
<td>GEOLOGICAL GEOPHYSICAL</td>
</tr>
</tbody>
</table>

#### Dates Work Performed

From: **Aug 1 1992**

To: **Dec 8 1992**

#### Total Assessment Work Claimed on the Attached Statement of Costs

$ 6640

---

#### Certification of Beneficial Interest

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder’s name or held under a beneficial interest by the current recorded holder.

**Date**: **Dec 8 1992**

**Recorded Holder or Agent (Signature)**: **J. H. Tindale**

---

#### Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

**Name and Address of Person Certifying**: **J. H. Tindale**

**Telephone No.**: **416 481 5781**

**Date**: **Dec 8 1992**

**Certified By (Signature)**: **J. H. Tindale**

---

#### For Office Use Only

**Total Value Cr. Recorded**: **$ 6640**

**Date Recorded**: **Dec 8 1992**

**Mineral Estimator**: **L. W. LAKE**

**Deemed Approval Date**: **Dec 8 1992**

**Date Approved**: **Dec 18 1993**

**Date Notice for Amendments Sent**: **Dec 18 1993**
<table>
<thead>
<tr>
<th>Claim Number (see Note 2)</th>
<th>Number of Claim Units</th>
<th>Value of Assessment Work Done on this Claim</th>
<th>Value Applied to this Claim</th>
<th>Reserve: Work to be Claimed at a Future Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1092147</td>
<td>1</td>
<td>$5,530</td>
<td>$5,530</td>
<td></td>
</tr>
<tr>
<td>1092148</td>
<td>1</td>
<td>$5,530</td>
<td>$5,530</td>
<td></td>
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<tr>
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<td>$5,530</td>
<td>$5,530</td>
<td></td>
</tr>
<tr>
<td>1092150</td>
<td>1</td>
<td>$5,530</td>
<td>$5,530</td>
<td></td>
</tr>
<tr>
<td>1092151</td>
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<tr>
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<tr>
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<tr>
<td>1168992</td>
<td>1</td>
<td>$5,530</td>
<td>$5,530</td>
<td></td>
</tr>
</tbody>
</table>

Total Number of Claims: 12

Total Value of Work Done: $66,410

Total Value of Work Applied: $66,410

Total Assigned From: $66,410

Total Reserve: $66,410

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claim you want to prioritize the deletion of credits. Please mark (✓) one of the following:

1. D Credits are to be cut back starting with the claim listed last, working backwards.
2. S Credits are to be cut back equally over all claims contained in this report of work.
3. O Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Not 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Not 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature

Date
# Statement of Costs for Assessment Credit

**État des coûts aux fins du crédit d'évaluation**

**Mining Act/Lol sur les mines**

Personal Information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6AS, telephone (705) 670-7264.


## 1. Direct Costs/Coûts directs

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Amount</th>
<th>Total global</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages Salaries</td>
<td>Labour</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field Supervision Supervision sur le terrain</td>
<td>4,200</td>
<td>4,800</td>
</tr>
<tr>
<td>Contractor’s fees and Consultant’s Fees</td>
<td>Geophysical</td>
<td>6,65.54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assay</td>
<td>8.51</td>
<td></td>
</tr>
<tr>
<td>Supplies Used</td>
<td>Type</td>
<td>674.05</td>
<td></td>
</tr>
<tr>
<td>Equipment Rental</td>
<td>Location de matériel</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

**Total Direct Costs**

| Total des coûts directs | 6534.05 |

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

### Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.

2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

   **Total Value of Assessment Credit**
   
   \[ \times 0.50 = \]

   **Total Assessment Claimed**

### Certification Verifying Statement of Costs

I hereby certify that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

That as **Recorded Holder** I am authorized (Recorded Holder, Agent, Position in Company) to make this certification

**Remises pour dépôt**

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.

2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

### Attestation de l'état des coûts

J'atteste par la présente que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de (titulaire enregistré, représentant, poste occupé dans la compagnie) à faire cette attestation.

**Signature**

**Date**

Dec 8/92

Note : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.
February 15, 1993

Mining Recorder
Ministry of Northern Development
and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Mr. Kuda:

RE: Approval of Assessment Work on mining claims L 1092147 et al. in Kelvin Township.

The assessment work credits listed on the above mentioned report of work have been approved as of February 9, 1993. The work has been approved under sections 12 and 14 of the Mining Act Regulations.

If you have any questions regarding this matter please contact Dale Messenger at (705) 670-5858.

Yours sincerely,

[Signature]

Mark Hall
(Acting) Senior Manager, Mining Lands Branch
Minerals and Minerals Division

cc: Assessment Files Office
    Toronto, Ontario

Resident Geologist
Cobalt, Ontario
LEGEND

Scale: 1:2000
Profile Scale: 20 S. cm
Profile Base Level: 0 S.
In-Phase Profile: ————
Quadrature Profile: —— —— ——

SURVEY SPECIFICATIONS

Instrument: Apex Parometrics Max Min II Plus
Frequency: 444 Hz.
Coil Separation: 100 m.

J. L. TINDALE & ASSOCIATES INC.
Shining Tree Area Project
Kelvin Township Grid
HORIZONTAL LOOP EM SURVEY
444 Hz. Postings & Profiles
Kelvin Township
Larder Lake Mining Division
Ontario

NTS: 41P/11
Map No.
Survey & Presentation:
Adele Inc.
Bound, Figure
August 1981
LEGEND

Scale: 1:2000
Profile Scale: 25 ft / cm.
Profile Base Level: 0 ft
In-Phase Profile: ————
Quadrature Profile: ————

SURVEY SPECIFICATIONS

J. L. TINDALE & ASSOCIATES INC.
Shining Tree Area Project
Kelvin Township Grid
Horizonal Loop EM Survey
1777 Hz. Postings & Profiles
Kelvin Township
Larder Lake Mining Division
Ontario

Scale 1:2000
(Feet)

<table>
<thead>
<tr>
<th>500 W</th>
<th>700 W</th>
<th>900 W</th>
<th>1000 W</th>
<th>1200 W</th>
<th>1400 W</th>
<th>1600 W</th>
<th>1800 W</th>
<th>2000 W</th>
<th>2200 W</th>
<th>2400 W</th>
</tr>
</thead>
</table>

Declination: 17°