MAR 19770002: ANDREW LAKE

Received date: Jul 15, 1977

Public release date: Jul 16, 1978

**DISCLAIMER**

By accessing and using the Alberta Energy website to download or otherwise obtain a scanned mineral assessment report, you (“User”) agree to be bound by the following terms and conditions:

a) Each scanned mineral assessment report that is downloaded or otherwise obtained from Alberta Energy is provided “AS IS”, with no warranties or representations of any kind whatsoever from Her Majesty the Queen in Right of Alberta, as represented by the Minister of Energy (“Minister”), expressed or implied, including, but not limited to, no warranties or other representations from the Minister, regarding the content, accuracy, reliability, use or results from the use of or the integrity, completeness, quality or legibility of each such scanned mineral assessment report;

b) To the fullest extent permitted by applicable laws, the Minister hereby expressly disclaims, and is released from, liability and responsibility for all warranties and conditions, expressed or implied, in relation to each scanned mineral assessment report shown or displayed on the Alberta Energy website including but not limited to warranties as to the satisfactory quality of or the fitness of the scanned mineral assessment report for a particular purpose and warranties as to the non-infringement or other non-violation of the proprietary rights held by any third party in respect of the scanned mineral assessment report;

c) To the fullest extent permitted by applicable law, the Minister, and the Minister’s employees and agents, exclude and disclaim liability to the User for losses and damages of whatsoever nature and howsoever arising including, without limitation, any direct, indirect, special, consequential, punitive or incidental damages, loss of use, loss of data, loss caused by a virus, loss of income or profit, claims of third parties, even if Alberta Energy have been advised of the possibility of such damages or losses, arising out of or in connection with the use of the Alberta Energy website, including the accessing or downloading of the scanned mineral assessment report and the use for any purpose of the scanned mineral assessment report so downloaded or retrieved.

d) User agrees to indemnify and hold harmless the Minister, and the Minister’s employees and agents against and from any and all third party claims, losses, liabilities, demands, actions or proceedings related to the downloading, distribution, transmissions, storage, redistribution, reproduction or exploitation of each scanned mineral assessment report obtained by the User from Alberta Energy.
Dear Mr. Fulford:

RE: Quartz Mineral Exploration Permits 182, 183, 184 and 247
TACHYON VENTURE MANAGEMENT LTD. - Operator

On behalf of Tachyon Venture Management, and further to Tachyon's submission of April 22, 1977 for a "plan of examination" for Permit No. 247, this is to advise that such program has been completed and that a final report will be forwarded to your office in approximately two weeks time. However, in order to assist your Department in assessing our application at this time for land reduction and permit renewal, I have enclosed two brief progress reports covering this season's work (final reports covering the 1976 program were mailed to your Department on April 22, 1977).

Estimated expenditures for the 1977 program are $35,000.00, an unaudited statement of which is appended to this letter.

As I briefly mentioned to you during our telephone conversation of July 12th, exploration results obtained to-date do not warrant bringing the entirety of Permits 182, 183 and 184 (now in their fourth year) to lease. However, sufficient encouragement has been obtained to retain a small portion of Permit 182 and most of Permit 247. The area of interest is briefly described below:

A WNW-trending radioactive pegmatite, contained within a broad, poorly-defined mylonite zone, is intermittently exposed at four locations over a strike length of approximately four miles. From north to south respectively the showings are briefly described below:
1) South shore of Andrew Lake (RI-W4M, Twp. 124, s½ Section 32)
Two parallel N-S-trending pegmatitic granite gneiss bands exhibit
radioactivity of up to 5 times background. Trench 76-1 (c.f.
Map 76-5) yielded one assay of 0.2 pounds uranium over a width
of 3'.

2) Carrot Lake Zone (RI-W4M, Twp. 124, east boundary of Section 20)
A WNW-trending pegmatitic zone, moderately well exposed, with
a strike length of approximately one mile. Hudson Bay Oil &
Gas Ltd. (1968-71) examined the zone with a detailed scintil-
ometer survey and 33 trenches. Assay values were generally in
the order of 0.2 to 0.3 pounds uranium over a width of 3 to 4'.
The best assays (c.f. Map 76-7) were 0.8 pounds over 15' in
Trench 27+25N; 2.8 pounds over 2' in Trench 22+00N; and 3.2
pounds over 4' in Trench 21+00N.

3) Small Lake Occurrence (RI-W4M Twp. 124; centre, W¼ Section 16)
A WNW-trending, 20' wide pegmatitic zone is exposed over a
strike length of approximately 400'. McIntyre Mines Ltd.
(1968-69) examined this occurrence with 10 trenches and three
diamond drill holes. The best reported assay is one pound
uranium over a width of 5' in D.D.H. 69-1.

4) Cherry Lake Occurrence (RI-W4M, Twp. 124, centre of Sections 9 & 16)
A WNW-trending band of pegmatite, from 5' to 103''wide, with an
exposed strike length of 3,000. McIntyre Mines placed 5 trenches
and 4 diamond drill holes to test this zone. In June of 1977,
Tachyon placed an additional 3 trenches across the northern portion
of this zone. The best assays were 0.55 pounds uranium over 20'
and 0.34 pounds uranium over 40'.

In view of the exceptionally low grades encountered to-date, as well as
the erratic nature of the radioactivity, I have recommended that Tachyon
Venture Management undertake only a limited program of ground geophysics,
over the zone above described, commencing May, 1978. Tentatively, the
recommended 1978 program is as follows:

<table>
<thead>
<tr>
<th>Suggested Program</th>
<th>Estimated Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 27 line miles - electromagnetic survey @ $225/mi.</td>
<td>$ 6,075</td>
</tr>
</tbody>
</table>
| b) 27 line miles - proton-precession magnetometer survey 50' station intervals; 400'
  line spacing, base station recorder; @ $150/mi.                                  | 4,050            |
| c) 7 line miles - cut & picket grid @ $200/mi.                                   | 1,400            |
| d) 20 line miles - re-establishing & re-chaining the McIntyre & HBOG grids @ $75/mi. | 1,500            |
| e) - mobilization & demobilization                                                | 3,000            |
| f) - supervision, administration, interpretation of geophysical data             | 3,000            |
| TOTAL                                                                           | $ 19,025         |
On behalf of Mr. J.M. Brady, President of Tachyon Venture Management, this is to advise that Tachyon will allow Permits 183 and 184 to lapse on their respective anniversary dates of July 18th and August 23rd, 1977. Further, Tachyon wishes to bring to lease 2,400 acres from the area of Quartz Mineral Exploration Permit No. 182; namely:

- North half, Section 20, Twp 124, R1-W4M
- Northwest quarter, Section 21, Twp 124, R1-W4M
- West half, Section 28, Twp 124, R1-W4M
- All of Section 29, Twp 124, R1-W4M
- All of Section 32, Twp 124, R1-W4M
- West half, Section 33, Twp 124, R1-W4M

Total of 3.75 sections (2,400 acres)

Tachyon also wishes to renew Permit 247 and to reduce the area of this Permit to now consist of the following:

- All of Section 8, Twp. 124, R1-W4M
- All of Section 9, " " 
- All of Section 10, " " 
- All of Section 15, " " 
- All of Section 16, " " 
- All of Section 17, " " 
- South ½, section 20," " 
- South ½, section 21," " 

Total of 7 sections (4,480 acres).

A sketch map is appended for reference.

Please find enclosed a cheque in the amount of $1,048.00 as per the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit No. 247 - Renewal, 4,480 acres @ 10¢/acre</td>
<td>$ 448.00</td>
</tr>
<tr>
<td>Lease application, 2,400 acres @ 25¢/acre</td>
<td>$ 600.00</td>
</tr>
</tbody>
</table>

$ 1,048.00
If you require any further details, please contact Mr. Jim Brady as I will be out of the province until August 12th.

Mr. J.M. Brady
Calgary, Alberta, T2P 0Z1

Yours very truly,

J.R. Allan, P.Geo.

c.c. Mr. J. M. Brady
Encl.
TACHYON VENTURE MANAGEMENT LTD.

<table>
<thead>
<tr>
<th>N.E. ALBERTA PROJ.</th>
<th>QUARTZ MINERAL PERMIT</th>
<th>GENERAL OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>JULY 12, 1977</td>
<td>JULY 12, 1977</td>
<td>FIGURE 2.</td>
</tr>
</tbody>
</table>

1" = 2 miles

LEASE APPLICATION
PERMIT RENEWAL
JULY 12, 1977
ANDREW LAKE PROJECT
ESTIMATE OF EXPENDITURES
MAY 20 - JUNE 16, 1977

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SALARIES &amp; CONSULTING FEES</td>
<td>$9,150.00</td>
</tr>
<tr>
<td>2</td>
<td>EQUIPMENT RENTALS</td>
<td>1,792.49</td>
</tr>
<tr>
<td>3</td>
<td>FOOD</td>
<td>1,280.00</td>
</tr>
<tr>
<td>4</td>
<td>DISPOSABLE SUPPLIES</td>
<td>659.46</td>
</tr>
<tr>
<td>5</td>
<td>ASSAYS 271 geochem samples</td>
<td>1,800.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 rock samples</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>including sample preparation &amp; handling</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>FREIGHT</td>
<td>235.00</td>
</tr>
<tr>
<td>7</td>
<td>MOBILIZATION &amp; DEMOB., SERVICE FLIGHTS</td>
<td>2,534.00</td>
</tr>
<tr>
<td>8</td>
<td>OFFICE EXPENSES</td>
<td>600.00</td>
</tr>
<tr>
<td>9</td>
<td>EXPEDITING SERVICE CHARGE @ 5% of THIRD PARTY INVOICING</td>
<td>950.00</td>
</tr>
<tr>
<td>10</td>
<td>PHONE &amp; RADIO CALLS</td>
<td>550.00</td>
</tr>
<tr>
<td>11</td>
<td>FINAL REPORT, DRAFTING &amp; REPRODUCTION</td>
<td>1,500.00</td>
</tr>
</tbody>
</table>

**SUB-TOTAL** $21,050.95

INVOICE NO. 060, May 16, 1977 - office preparation $448.67

**TOTAL** $21,499.62

12.) T. GLEDHILL CONSULTANTS LTD.: TORONTO

Two-man overburden drilling crew; drilling equipment rental and disposable supplies; camp equipment rental; mobilization and demobilization from Toronto - invoice supported $13,000.00

**TOTAL** $34,499.62
The overburden drilling crew (G. Beier and D. LaClaire) mobilized from Toronto with the camp and drilling equipment, via truck, on May 16th and arrived in Fort Smith, N.W.T., May 21st. The senior prospector (C. Runham) and the geology student (A. Burnett) flew from Calgary to Fort Smith, via scheduled airline, May 21st. The crew and equipment were flown from Fort Smith to Andrew Lake, May 22nd, and the camp constructed May 23rd. The writer flew from Calgary to Fort Smith via scheduled airline, thence to Andrew Lake, May 23rd.

1. During the period May 24th to May 30th, 41 overburden drill holes, for a total of 1,476 feet were completed over Track Etch anomaly T-1 (lines 52 to 92, inclusive). An additional 50 holes are scheduled to be drilled; 30 on anomaly T-1 and 20 on T-2 (Andrew Lake South Grid, Map 76-5).

Thus far, considerable difficulty has been encountered penetrating a 4 foot thick frost zone, located at a depth of 3 to 10 feet, and a gravel and boulder horizon, located at depths of 15 feet to 40 feet.
Depth to bedrock appears to vary from 40 feet to greater than 80 feet.

2. Approximately 3 line miles of detailed radon emanometry (soil gas radon 222 measurements) have been completed over Track Etch anomalies T-1 and T-2. Results are ambiguous because of the variable presence of the shallow-lying frost zone.

This aspect of the program has been temporarily postponed because of instrument malfunction - a replacement is expected June 2nd or 3rd.

3. The soil geochemical survey coverage undertaken in 1976 is presently being expanded southward from Carrot Lake to the vicinity of drill holes 69-1, 69-2 and 69-3 north of Small Lake. Sampling will be at 100 foot intervals on 400 foot spaced lines for a total of approximately 250.

4. The drill core from the 1969 McIntyre Mines program (holes 69-1, 69-2, and 69-3) has been located and previously split portions will be re-sampled for assay.

5. Geochemical anomalies, H, I, J, and L (Map 76-5) and the northern portions of anomaly B (Map 76-7) have been prospected in detail.
No significant radioactivity was encountered and no further work is planned for these areas.

6. Prospecting in the vicinity of McIntyre's drilling and trenching west of Twin Lakes (northwest of Cherry Lake) has thus far indicated 3 narrow (10' to 12') discontinuous or en echelon zones that may warrant trenching. Yellow secondary uranium staining is prevalent throughout - scintillometer readings vary from 1,000 to 3,000 counts per second. Expected grade could be in the order of 0.02% to 0.10% over widths of 1' to 15' and lengths of 20' to 300'.

The grid lines in this area are 9 years old; hence remapping will require approximately 3 more days.

We expect to move the camp from Andrew Lake to the northwest shore of Cherry Lake about June 6th. Trenching, mapping and prospecting of the entire Cherry Lake area would be effected from this new camp location.

7. A planned two-day lake sediment geochemical survey and ground follow-up of the remaining un-examined airborne radiometric anomalies is temporarily being postponed. Thus far we have been unsuccessful in obtaining a float-equipped helicopter on a casual charter basis.

J. RUPERT ALLAN
The field crew was demobilized from Andrew Lake June 15, 1977.

1.) During the period May 30th to June 7th an additional 43 overburden holes were completed for a total of 84 (3,656' of drilling, 84 geochemical samples).

Depth to the apparent subcrop interface averaged 43.5' with the deepest hole being 123'. As previously mentioned, because of the nature of the light portable rods, the termination of the holes may be in either permafrost or a heavy boulder layer on the subcrop surface.

2.) Detailed radon emanometry was completed over Track Etch anomalies T-1 and T-2 from line 68N to 96N with apparently negative results. A replacement instrument yielded similar results and it is tentatively suggested that this technique is invalid in this locale as a consequence of the depth of overburden, ground frost, and probable layers of clay in the overburden profile.

3.) Additional prospecting & ground scintillometer traverses in the vicinity of the Andrew Lake South grid, Ilo and Carrot Lake, and immediately north of Cherry Lake did not yield any radioactive occurrences warranting further investigation.

4.) Lake sediment sampling in the vicinity of Charles Lake and ground prospecting of the remaining un-examined airborne radiometric anomalies were not undertaken because of the unavailability of a float-equipped helicopter. If a helicopter had been located and ferried in from Edmonton or LaRonge the cost over-run, including field salaries, would have been in the order of $10,000. Such expenditure did not appear warranted until the results of Permit 247 examination were available.

5.) On June 8th the camp was moved from the south end of Andrew Lake to the old McIntyre-Porcupine Mines campsite on the northwest shore of Cherry Lake.

A weakly radioactive pegmatite in highly metamorphosed sediments is almost continuously exposed for a strike length of 3,000' and varies in width from 5' to 105' (average width approx. 50'). The zone strikes WNW and is sub-parallel to a granite gneiss/metasediment contact approximately 100' to the west (similar setting to the Carrot Lake Zone).

In 1968 McIntyre drilled 4 holes intersecting this zone. Drill holes 68-9 and 68-10 are located at 19 + 00 S at the southern most end of the zone where anomalous radioactivity is only 5 to 6' wide (no significant assays were obtained in 68-9. The best assay in 68-10 was 0.12% over 1.4').

DDH 68-8, at approximately 2 + 00 S, was placed under trench #2. Two samples in the trench (which is 105' long) assayed 0.05%; however, no significant radioactivity was detected in the core.
DDH 68-7, located at approximately 1 + 00 N, was placed under trench #1. The best trench assay was 0.05% over 5'. Again, however, no significant radioactivity was detected in the core.

This season three trenches were placed north of DDH 68-7 at approximately 3 + 00 N, 5 + 00 N and 7 + 00 N (177 lineal feet), and trenches #1 and #2 were resampled. Detailed scintillometer surveys indicate that several 5' to 10' wide sections should exceed those assay values obtained by McIntyre.

6.) Geochemical and assay values are expected June 29th or 30th.

7.) Renewal dates for the permits are as follows:

   PERMIT 247       July 13th
   PERMIT 182       July 18th
   PERMIT 183       July 18th
   PERMIT 184       Aug. 23rd

   A map incorporating suggested land reduction will be available by June 30th.

J. R. ALLAN, P. GEOL.
July 12, 1977

Mr. George Fulford
Mineral Division
Petroleum Plaza, South Tower
9915 - 108 Street
Edmonton, Alberta T5K 2C9

Dear Mr. Fulford:

RE: Quartz Mineral Exploration Permits 182, 183, 184 and 247
TACHYON VENTURE MANAGEMENT LTD. - Operator

On behalf of Tachyon Venture Management, and further to Tachyon's submission of April 22, 1977 for a "plan of examination" for Permit No. 247, this is to advise that such program has been completed and that a final report will be forwarded to your office in approximately two weeks time. However, in order to assist your Department in assessing our application at this time for land reduction and permit renewal, I have enclosed two brief progress reports covering this season's work (final reports covering the 1976 program were mailed to your Department on April 22, 1977).

Estimated expenditures for the 1977 program are $35,000.00, an unaudited statement of which is appended to this letter.

As I briefly mentioned to you during our telephone conversation of July 12th, exploration results obtained to-date do not warrant bringing the entirety of Permits 182, 183 and 184 (now in their fourth year) to lease. However, sufficient encouragement has been obtained to retain a small portion of Permit 182 and most of Permit 247. The area of interest is briefly described below:

A WNW-trending radioactive pegmatite, contained within a broad, poorly-defined mylonite zone, is intermittently exposed at four locations over a strike length of approximately four miles. From north to south respectively the showings are briefly described below:

...
1) South shore of Andrew Lake (R1-W4M, Twp. 124, s½ Section 32)
Two parallel N-S-trending pegmatitic granite gneiss bands exhibit radioactivity of up to 5 times background. Trench 76-1 (c.f. Map 76-5) yielded one assay of 0.2 pounds uranium over a width of 3'.

2) Carrot Lake Zone (R1-W4M, Twp. 124, east boundary of Section 20)
A WNW-trending pegmatitic zone, moderately well exposed, with a strike length of approximately one mile. Hudson Bay Oil & Gas Ltd. (1968-71) examined the zone with a detailed scintilometer survey and 33 trenches. Assay values were generally in the order of 0.2 to 0.3 pounds uranium over a width of 3 to 4'. The best assays (c.f. Map 76-7) were 0.8 pounds over 15' in Trench 27+25N; 2.8 pounds over 2' in Trench 22+00N; and 3.2 pounds over 4' in Trench 21+00N.

3) Small Lake Occurrence (R1-W4M Twp. 124; centre, W¼ Section 16)
A WNW-trending, 20' wide pegmatitic zone is exposed over a strike length of approximately 400'. McIntyre Mines Ltd. (1968-69) examined this occurrence with 10 trenches and three diamond drill holes. The best reported assay is one pound uranium over a width of 5' in D.D.H. 69-1.

4) Cherry Lake Occurrence (R1-W4M, Twp. 124, centre of Sections 9 & 16)
A WNW-trending band of pegmatite, from 5' to 103' wide, with an exposed strike length of 3,000. McIntyre Mines placed 5 trenches and 4 diamond drill holes to test this zone. In June of 1977, Tachyon placed an additional 3 trenches across the northern portion of this zone. The best assays were 0.55 pounds uranium over 20' and 0.34 pounds uranium over 40'.

In view of the exceptionally low grades encountered to-date, as well as the erratic nature of the radioactivity, I have recommended that Tachyon Venture Management undertake only a limited program of ground geophysics, over the zone above described, commencing May, 1978. Tentatively, the recommended 1978 program is as follows:

<table>
<thead>
<tr>
<th>Suggested Program</th>
<th>Estimated Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 27 line miles - electromagnetic survey @ $225/mi.</td>
<td>$ 6,075</td>
</tr>
<tr>
<td>b) 27 line miles - proton-precession magnetometer</td>
<td></td>
</tr>
<tr>
<td>survey 50' station intervals; 400' line spacing, base station recorder; @ $150/mi.</td>
<td></td>
</tr>
<tr>
<td>c) 7 line miles - cut &amp; picket grid @ $200/mi.</td>
<td>4,050</td>
</tr>
<tr>
<td>d) 20 line miles - re-establishing &amp; re-chaining the McIntyre &amp; HBOG grids @ $75/mi.</td>
<td>1,500</td>
</tr>
<tr>
<td>e) - mobilization &amp; demobilization</td>
<td>3,000</td>
</tr>
<tr>
<td>f) - supervision, administration, interpretation of geophysical data</td>
<td>3,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$ 19,025</td>
</tr>
</tbody>
</table>
On behalf of Mr. J.M. Brady, President of Tachyon Venture Management, this is to advise that Tachyon will allow Permits 183 and 184 to lapse on their respective anniversary dates of July 18th and August 23rd, 1977. Further, Tachyon wishes to bring to lease 2,400 acres from the area of Quartz Mineral Exploration Permit No. 182; namely:

- North half, Section 20, Twp 124, R1-W4M
- Northwest quarter, Section 21, Twp 124, R1-W4M
- West half, Section 28, Twp 124, R1-W4M
- All of Section 29, Twp 124, R1-W4M
- All of Section 32, Twp 124, R1-W4M
- West half, Section 33, Twp 124, R1-W4M
Total of 3.75 sections (2,400 acres)

Tachyon also wishes to renew Permit 247 and to reduce the area of this Permit to now consist of the following:

- All of Section 8, Twp. 124, R1-W4M
- All of Section 9, "  "  "
- All of Section 10, "  "  "
- All of Section 15, "  "  "
- All of Section 16, "  "  "
- All of Section 17, "  "  "
- South ½, section 20,"  "  "
- South ½, section 21,"  "  "
Total of 7 sections (4,480 acres).

A sketch map is appended for reference.

Please find enclosed a cheque in the amount of $1,048.00 as per the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit No. 247 - Renewal, 4,480 acres @ 10¢/acre</td>
<td>$ 448.00</td>
</tr>
<tr>
<td>Lease application, 2,400 acres @ 25¢/acre</td>
<td>$ 600.00</td>
</tr>
<tr>
<td>Total</td>
<td>$ 1,048.00</td>
</tr>
</tbody>
</table>
If you require any further details, please contact Mr. Jim Brady as I will be out of the province until August 12th.

Mr. J.M. Brady
Calgary, Alberta, T2P 0Z1

Yours very truly,

J.R./Allan, P.Geol.

c.c. Mr. J. M. Brady
Encl.
**ANDREW LAKE PROJECT**

**ESTIMATE OF EXPENDITURES**

**MAY 20 - JUNE 16, 1977**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SALARIES &amp; CONSULTING FEES</td>
<td>$9,150.00</td>
</tr>
<tr>
<td>2. EQUIPMENT RENTALS</td>
<td>1,792.49</td>
</tr>
<tr>
<td>3. FOOD</td>
<td>1,280.00</td>
</tr>
<tr>
<td>4. DISPOSABLE SUPPLIES</td>
<td>659.46</td>
</tr>
<tr>
<td>5. ASSAYS 271 geochem samples</td>
<td></td>
</tr>
<tr>
<td>60 rock samples including sample preparation &amp; handling</td>
<td>1,800.00</td>
</tr>
<tr>
<td>6. FREIGHT</td>
<td>235.00</td>
</tr>
<tr>
<td>7. MOBILIZATION &amp; DEMOB., SERVICE FLIGHTS</td>
<td>2,534.00</td>
</tr>
<tr>
<td>8. OFFICE EXPENSES</td>
<td>600.00</td>
</tr>
<tr>
<td>9. EXPEDITING SERVICE CHARGE @ 5% of THIRD PARTY INVOICING</td>
<td>950.00</td>
</tr>
<tr>
<td>10. PHONE &amp; RADIO CALLS</td>
<td>550.00</td>
</tr>
<tr>
<td>11. FINAL REPORT, DRAFTING &amp; REPRODUCTION</td>
<td>1,500.00</td>
</tr>
</tbody>
</table>

| SUB-TOTAL                                                           | 21,050.95 |

| INVOICE NO. 060, May 16, 1977 - office preparation                 | 448.67   |

| TOTAL                                                               | 21,499.62 |

| 12. T. GLEDHILL CONSULTANTS LTD.: TORONTO                           |         |
| Two-man overburden drilling crew; drilling equipment rental and disposable supplies; camp equipment rental; mobilization and demobilization from Toronto - invoice supported | $13,000.00 |

| TOTAL                                                               | $34,499.62 |
The overburden drilling crew (G. Beier and D. LaClaire) mobilized from Toronto with the camp and drilling equipment, via truck, on May 16th and arrived in Fort Smith, N.W.T., May 21st. The senior prospector (C. Runham) and the geology student (A. Burnett) flew from Calgary to Fort Smith, via scheduled airline, May 21st. The crew and equipment were flown from Fort Smith to Andrew Lake, May 22nd, and the camp constructed May 23rd. The writer flew from Calgary to Fort Smith via scheduled airline, thence to Andrew Lake, May 23rd.

1. During the period May 24th to May 30th, 41 overburden drill holes, for a total of 1,476 feet were completed over Track Etch anomaly T-1 (lines 52 to 92, inclusive). An additional 50 holes are scheduled to be drilled; 30 on anomaly T-1 and 20 on T-2 (Andrew Lake South Grid, Map 76-5).

Thus far, considerable difficulty has been encountered penetrating a 4 foot thick frost zone, located at a depth of 3 to 10 feet, and a gravel and boulder horizon, located at depths of 15 feet to 40 feet.
Depth to bedrock appears to vary from 40 feet to greater than 80 feet.

2. Approximately 3 line miles of detailed radon emanometry (soil gas radon 222 measurements) have been completed over Track Etch anomalies T-1 and T-2. Results are ambiguous because of the variable presence of the shallow-lying frost zone.

This aspect of the program has been temporarily postponed because of instrument malfunction - a replacement is expected June 2nd or 3rd.

3. The soil geochemical survey coverage undertaken in 1976 is presently being expanded southward from Carrot Lake to the vicinity of drill holes 69-1, 69-2 and 69-3 north of Small Lake. Sampling will be at 100 foot intervals on 400 foot spaced lines for a total of approximately 250.

4. The drill core from the 1969 McIntyre Mines program (holes 69-1, 69-2, and 69-3) has been located and previously split portions will be re-sampled for assay.

5. Geochemical anomalies, H, I, J, and L (Map 76-5) and the northern portions of anomaly B (Map 76-7) have been prospected in detail.
No significant radioactivity was encountered and no further work is planned for these areas.

6. Prospecting in the vicinity of McIntyre's drilling and trenching west of Twin Lakes (northwest of Cherry Lake) has thus far indicated 3 narrow (10' to 12') discontinuous or enechelon zones that may warrant trenching. Yellow secondary uranium staining is prevalent throughout - scintillometer readings vary from 1,000 to 3,000 counts per second. Expected grade could be in the order of 0.02% to 0.10% over widths of 1' to 15' and lengths of 20' to 300'.

The grid lines in this area are 9 years old; hence remapping will require approximately 3 more days.

We expect to move the camp from Andrew Lake to the northwest shore of Cherry Lake about June 6th. Trenching, mapping and prospecting of the entire Cherry Lake area would be effected from this new camp location.

7. A planned two-day lake sediment geochemical survey and ground follow-up of the remaining un-examined airborne radiometric anomalies is temporarily being postponed. Thus far we have been unsuccessful in obtaining a float-equipped helicopter on a casual charter basis.

J. RUPERT ALLAN
The field crew was demobilized from Andrew Lake June 15, 1977.

1.) During the period May 30th to June 7th an additional 43 overburden holes were completed for a total of 84 (3,656' of drilling, 84 geochemical samples).

Depth to the apparent subcrop interface averaged 43.5' with the deepest hole being 123'. As previously mentioned, because of the nature of the light portable rods, the termination of the holes may be in either permafrost or a heavy boulder layer on the subcrop surface.

2.) Detailed radon emanometry was completed over Track Etch anomalies T-1 and T-2 from line 68N to 96N with apparently negative results.

A replacement instrument yielded similar results and it is tentatively suggested that this technique is invalid in this locale as a consequence of the depth of overburden, ground frost, and probable layers of clay in the overburden profile.

3.) Additional prospecting & ground scintillometer traverses in the vicinity of the Andrew Lake South grid, Ilo and Carrot Lake, and immediately north of Cherry Lake did not yield any radioactive occurrences warranting further investigation.

4.) Lake sediment sampling in the vicinity of Charles Lake and ground prospecting of the remaining un-examined airborne radiometric anomalies were not undertaken because of the unavailability of a float-equipped helicopter. If a helicopter had been located and ferried in from Edmonton or LaRonge the cost over-run, including field salaries, would have been in the order of $10,000. Such expenditure did not appear warranted until the results of Permit 247 examination were available.

5.) On June 8th the camp was moved from the south end of Andrew Lake to the old McIntyre-Porcupine Mines campsite on the northwest shore of Cherry Lake.

A weakly radioactive pegmatite in highly metamorphosed sediments is almost continuously exposed for a strike length of 3,000' and varies in width from 5' to 105' (average width approx. 50'). The zone strikes WNW and is sub-parallel to a granite gneiss/metasediment contact approximately 100' to the west (similar setting to the Carrot Lake Zone).

In 1968 McIntyre drilled 4 holes intersecting this zone. Drill holes 68-9 and 68-10 are located at 19 + 00 S at the southern most end of the zone where anomalous radioactivity is only 5 to 6' wide (no significant assays were obtained in 68-9. The best assay in 68-10 was 0.12% over 1.4').

DDH 68-8, at approximately 2 + 00 S, was placed under trench #2. Two samples in the trench (which is 105' long) assayed 0.05%; however, no significant radioactivity was detected in the core.
DDH 68-7, located at approximately 1 + 00 N, was placed under trench #1. The best trench assay was 0.05% over 5'. Again, however, no significant radioactivity was detected in the core.

This season three trenches were placed north of DDH 68-7 at approximately 3 + 00 N, 5 + 00 N and 7 + 00 N (177 lineal feet), and trenches #1 and #2 were resampled. Detailed scintillometer surveys indicate that several 5' to 10' wide sections should exceed those assay values obtained by McIntyre.

6.) Geochemical and assay values are expected June 29th or 30th.

7.) Renewal dates for the permits are as follows:

- PERMIT 247    July 13th
- PERMIT 182    July 18th
- PERMIT 183    July 18th
- PERMIT 184    Aug. 23rd

A map incorporating suggested land reduction will be available by June 30th.

J. R. ALLAN, P. GEOL.