

REPORT ON OPAP GRANTS OP91-261 AND OP91-263

GITCHEE GUMEE GOLD CALM LAKE PROPERTY NTS 52-C-16 FLANDERS, NW ONTARIO

NOVEMBER, 1991



010C

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1.0 SUMMARY AND CONCLUSIONS:

The Calm Lake property, located approximately 40 kilometres west of Atikokan, Ontario underwent a fall program consisting of prospecting, trenching, channel sampling and detail trench mapping.

Previous work conducted by the authors', located a gold showing 200 Metres southwest of Indiaonta Lake at location now designated the Main and West Showings. These showings consist of two parallel narrow 0.5-1M. wide quartz vein/shear zone systems with pyrite-chalcopyrite mineralization within mafic metavolcanic tuffs and flows approximately 25 Metres apart. These systems contain anomalous and ore grade Au and Cu intersections over significant widths from grab and channel sampling up to 3.276 oz/ton Au and 2.41% Cu.

The 1991 fall program is a follow-up of the authors' 1988-1989 programs which consisted of linecutting, geophysics and geological mapping surveys.

The program was successful in locating two new gold-bearing quartz vein-shear zone systems designated the Glider and Boulder Showings from prospecting and extending the strike length of the Main Showing from the trenching program.

The authors' believe that these quartz vein/shear zone systems if located within highly deformed mafic to felsic pyroclastics (deformation zones) have the potential to host major gold deposits. The Glider Showing discovered at the end of the program appears to have this potential, due to the significant width of the shear zone (deformation zone) and was subsequently staked by the author. The

zone is located within intercalated sheared mafic to felsic tuffs and porphyries with abundant quartz-carbonate stringers and containing disseminated pyrite throughout. The gold mineralization appears to be associated with the sulphides, with the highest values being obtained from the quartz veining of up to 0.341 oz/ton, but highly anomalous Au values were obtained from the sheared mafic and felsic tuffs.

The type of exploration programs conducted since 1988 by the authors' should be continued to fully evaluate the potential of the new gold discoveries, especially on the Glider Showing on the newly staked Gitchee Gumee - Calm Lake West Property located approximately 1.5 kilometres to the southwest of the Calm Lake Property.

A total of \$ 11,500.00 was spent on the 1991 program.

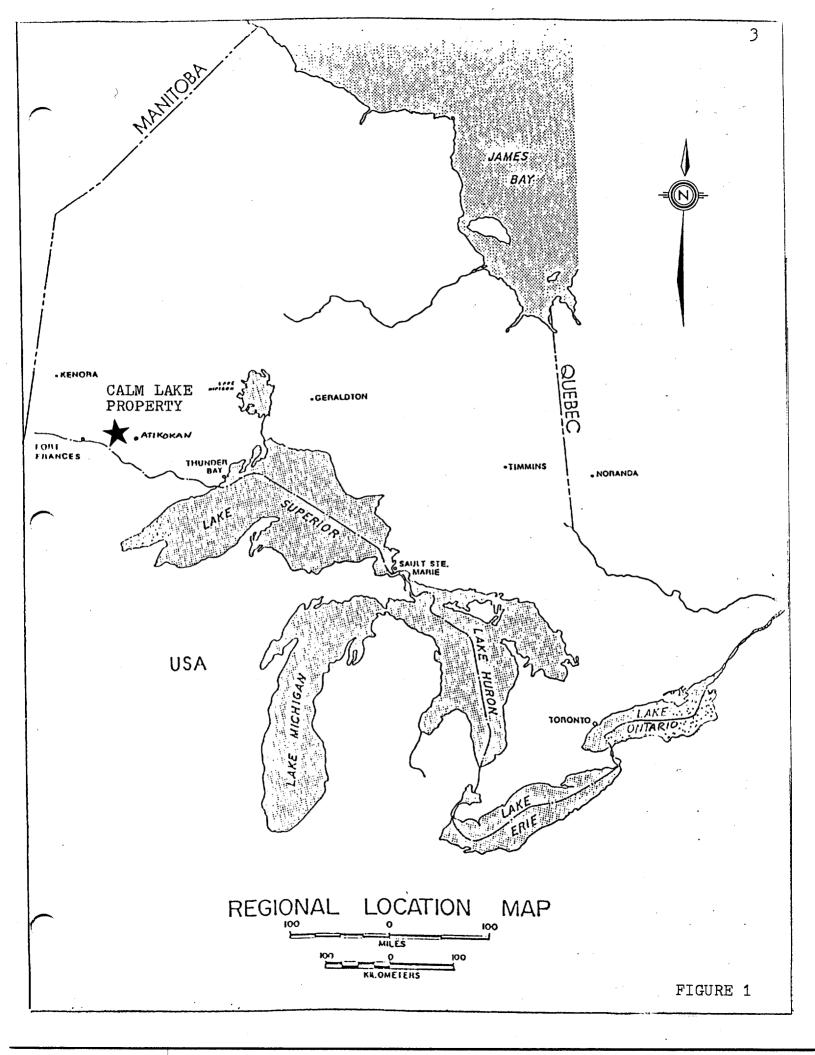
2.0 LOCATION

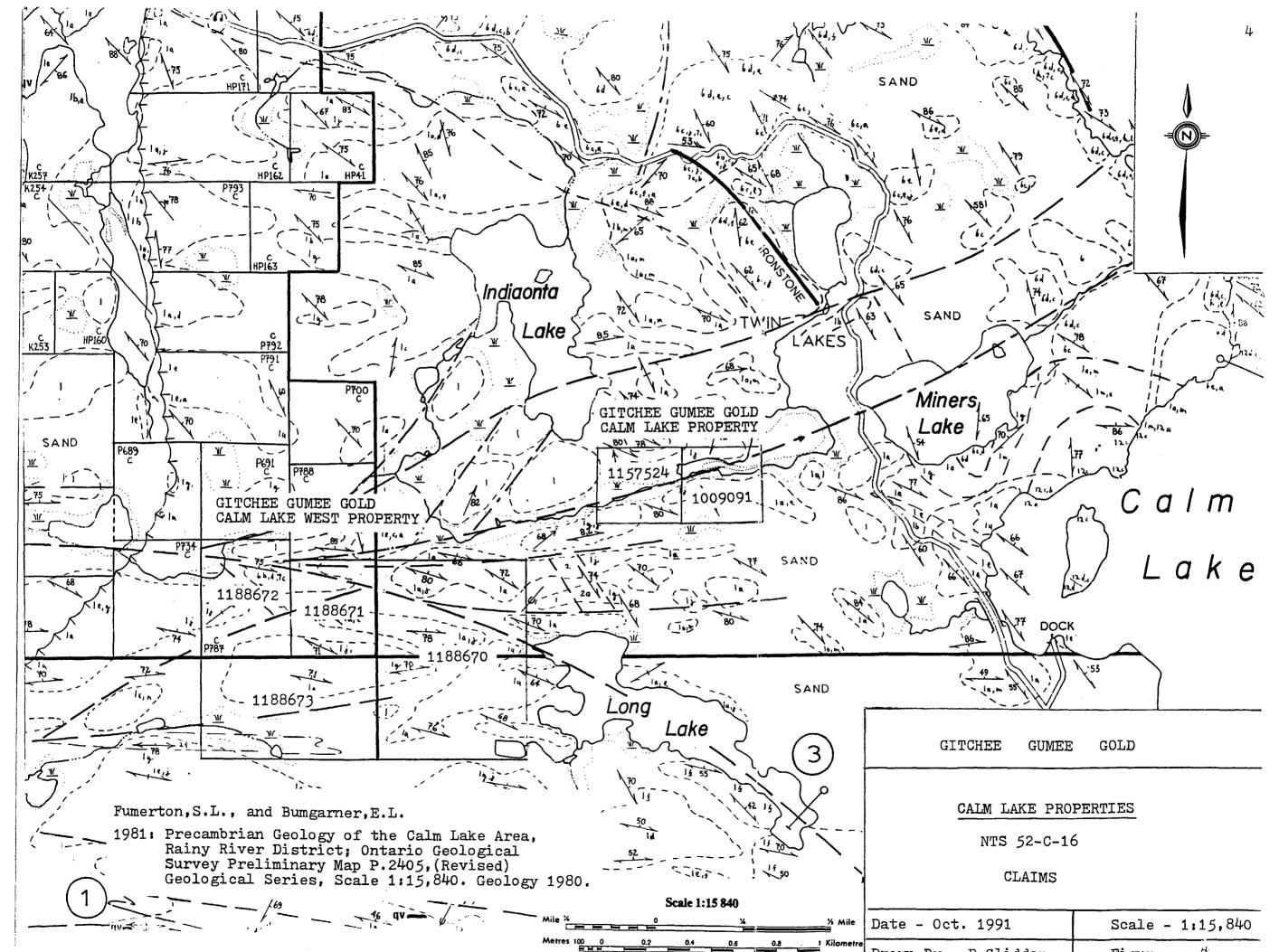
The property is located approximately 40 kilometres west of Atikokan, Ontario and 3 kilometres north of Flanders, a former railway station along the C.P.R.

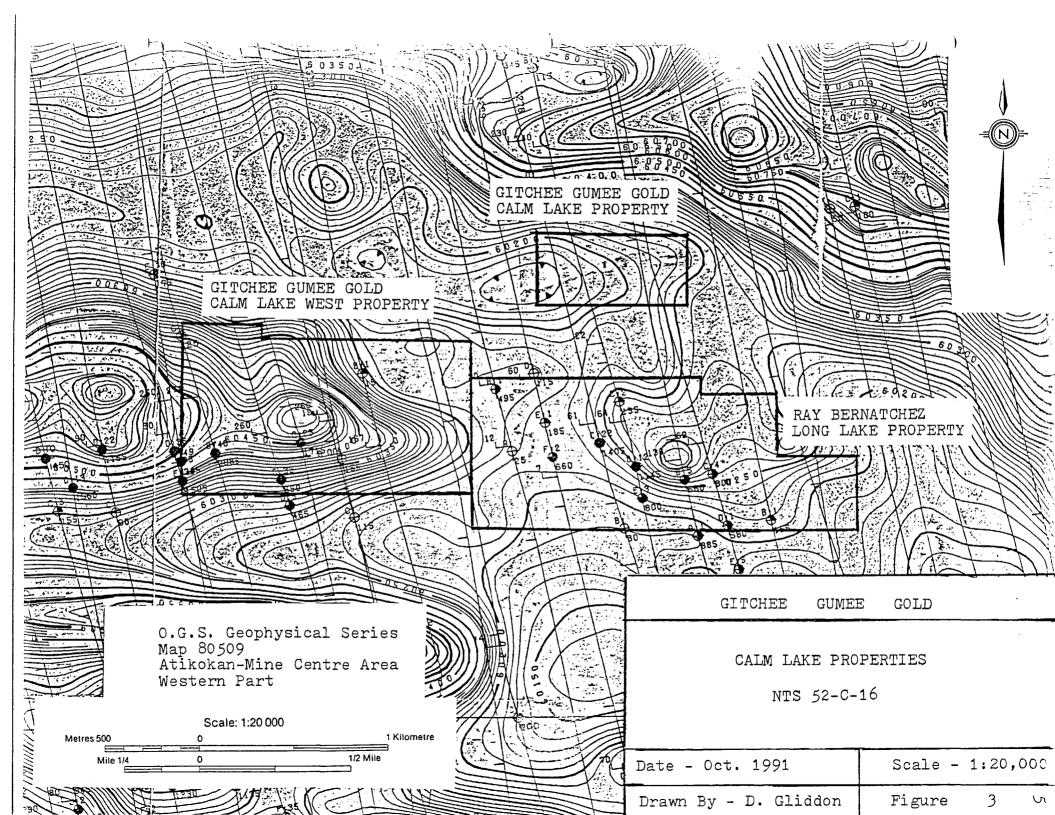
Access to the property from Atikokan is via Highway 11 and north by an all weather road from Flanders to a point 800 metres east of the claim boundary. From this point, a brief hike west along a wide draw brings you to the property. (Figures 1-3)

3.0 PROPERTY DESCRIPTION

The property consists of two (2) unpatented mining claims







1009091 and 1157524, and were recorded on March 9, 1988 and March 1,1991 respectively. The claims are located on the Hepburn Lake claim sheet G-532 in the Thunder Bay Mining Division. (Figure 2)

4.0 HISTORY

Prior to 1985, the only information in the area of the claims is from a brief paragraph in the 1912 Canadian Mining Journal (Vol. 33) which stated: "...by the Calm Lake Gold Mining Company. This company has a shaft down 85 feet. At a depth of 75 feet this shaft cuts a system of veins. At this point a crosscut of 50 feet has been made to intersect the veins and make them workable. A vein known as "Number 2" was also cut through and was found to be 50 feet wide. It showed some free gold, but not entirely a free quartz. A vein dubbed "Number 3" is also expected to be cut through soon. At the surface it is wide and shows up well. Camps were built on the ground owned by this company last summer. A steam hoisting plant is also in operation and everything is in good shape for extensive exploration and developing this summer."

In 1985, Greg Laws staked a group of claims covering the property described as the Calm Lake Occurrence in the O.G.S. Open File Report 5539 "Property Visits and Reports of the Atikokan Economic Geologist 1979-1983.(p.132) He sampled several old pits located on the present claims covering two parallel quartz vein/shear zones and obtained gold values up to 0.59 oz/ton Au, but no further work was conducted and the claims were allowed to lapse.

In 1987, the Calm Lake Occurrence was staked by the present

owners consisting of one claim and subsequently addition claims were staked over the past four years. Between 1987 and 1988 Gitchee Gumee Gold established a grid over two claims covering the old pits and conducted geological mapping, VLF-EM, magnetometer and EM surveys. Gold assays up to 2.7 oz./ton Au were obtained from the resampling of the old pits.

The area was mapped by S.L. Fumerton, E.L. Bumarner and assistants from the O.G.S. in 1980 and released in 1985 as "Geology of the Calm Lake Area" Report 226. The O.G.S. also conducted a combined EM-Mag airborne survey over the area in 1980.

5.0 GEOLOGY

The claim group is located within the Wabigoon Subprovince near the boundary between the Wabigoon and the Quetico Subprovinces. The main part of the Wabigoon Subprovince is composed of a complex assemblage of mafic to felsic metavolcanics which are intercalated with sandstone and iron-rich sediments. A major northwest trending lineament is located through the property and connects with the Turtle River Fault to the west.

The property is underlain for the most part, by mafic volcanic flows and tuffs with thin interbedded felsic pyroclastic units. The pyroclastics are divided on the basis of fragment size: larger than 64 mm a tuff breccia unit, 2-64 mm for a lapilli tuff and < 2 mm for a tuff. The fragments are subrounded to angular and are typically intermediate to felsic in composition with the larger felsic fragments being commonly vesicular. The groundmass of these

PRECAMBRIAN

EARLY PRECAMBRIAN (ARCHEAN)

DIORITE TO TONALITE SUITE ("NIVEN CREEK & MIRANDA CREEK STOCKS")

12

12 Unsubdivided

12a Biotite/hornblende granodiorite to tonalite

12b Hornblende tonalite

12c Hornblende/biotite quartz diorite

12d Diorite

INTRUSIVE CONTACT

METAVOLCANICS AND METASEDIMENTS METASEDIMENTS^b

Chemical Metasediments



7a Chert

7b Iron silicate

7c Magnetite ironstone

7d Hematite ironstone

Medium-Grade Clastic Metasediments

6

6 Unsubdivided

6a Conglomerate

6b Arenite

6c Wacke

6d Biotite gnelss

6e Hornblende gneiss^c

6f Metalexite

6g Muscovite bearing

6h Actinolite bearing

6i Chloritic

6k Garnetiferous

61 Hornblende porphyroblastsc

6m Quartz, feldspar and muscovite nodules

METAVOLCANICS^b

Felsic Metavolcanics

2

2 Unsubdivided

2a Unsubdivided flows

2b Porphyritic flows (quartz phenocrysts)

2c Porphyritic flows (feldspar penocrysts)

2d Tuff

2e Lapilli-tuff

21 Sericite phyllite

2g Garnetiferous

Malic and Intermediate Metavolcanics

1

1 Unsubdivided

1a Unsubdivided flows^c

1b Pillowed flows

1c Porphyritic flows (feldspar, phenocrysts)d

1d Coarse- and medium-grained flowsd

1e Tuff

1f Lapilli-tuff

1g Tuff-breccia

1h Heterolithic debris flow

1j Chlorite phyllite, chlorite schist

1k Amphibolitec,d

1m Hornblende/biotite granoblastic to massive to gneissic rocks

1n Hornblende porphyroblasts

1p Garnetiferous

1q Carbonatized

1s Feldspar porphyroblasts

1t Silicified

SYMBOLS

Ø

Glacial striae



Area of numerous bedrock outcrops



Bedding, top unknown; (inclined, vertical)



Bedding, top (arrow) from grain gradation; (inclined, vertical, overturned)



Bedding, top (arrow) from cross bedding; (inclined, vertical, overturned)



Lava flow; top in direction of arrow



Geophysically interpreted ironstone



Schistosity; (horizontal, inclined, vertical)



*Lineation with plunge



Foliation; (horizontal, inclined, vertical)



Geological boundary, position interpreted



Minor shear zone



Crenulation fold axis



S-shaped crenulation-fold axis, with plunge



S-shaped-fold axis, Z-shaped-fold axis, with plunge



Anticline, syncline, upright fold



Fault; assumed



Lineament



Diamond drillhole; (vertical, inclined)



Diamond drillhole; (projected vertically, projected up dip)



Shaft; depth in feet



Concentration of As (ppm) in lake bottom sediments (all plotted points are higher than the 95% percentile)



Mineral or metal occurrence

fragments is generally fine grained and mafic.

Sulphide mineralization (pyrite, chalcopyrite) is found in northwest/southeast trending shear zones which splay off of the northeast trending lineament. Minor disseminated pyrite mineralization has been observed within the mafic tuffs.

6.0 STRUCTURAL GEOLOGY

The major structure in the Calm Lake area is the Little Turtle Fault system which is a east-trending wrench fault that splits into a number of east-trending splay faults at the Seine River. These faults are typified by intense schistosity along the fault planes, have steep dips and by the extreme elongation of any primary textures in the adjacent rocks. (Fumerton, 1982)

One such splay fault bisects the property and is represented by a narrow valley.

Large folds extend for considerable distances north and west of the property, but only minor folds and kink folds were observed on the property, and appear to predate the faulting in the area.

7.0 PROSPECTING PROGRAM

A total of <u>11</u> man days from October 18th to October 26th, 1991 was spent prospecting on the claims and the surrounding area. The prospecting was initiated to locate the shaft described by Calm Lake Gold Mining Company in 1912 and to locate any new mineralized quartz veins/shear zones. Besides prospecting the two claims thoroughly, the northeast trending lineament was prospecting on

both sides to the east and west of the property. (Figure 4)

The prospecting located two new gold-bearing quartz vein/shear zone systems, now designated the Boulder and Glider Showings.

The Boulder Showing is located off the claim group, approximately 200M. northeast of the #1 Post of 1009091 along the shore of the small lake (Figure 5). Several two cubic metre size quartz boulders was found and this area was subsequently trenched during the program (TRENCH #5) and revealed a 50cm. wide quartz vein within a 1.5M wide shear zone of mafic metavolcanic tuff. Initial grab samples from the quartz vein/shear zone assayed up to 0.061 oz/ton Au.

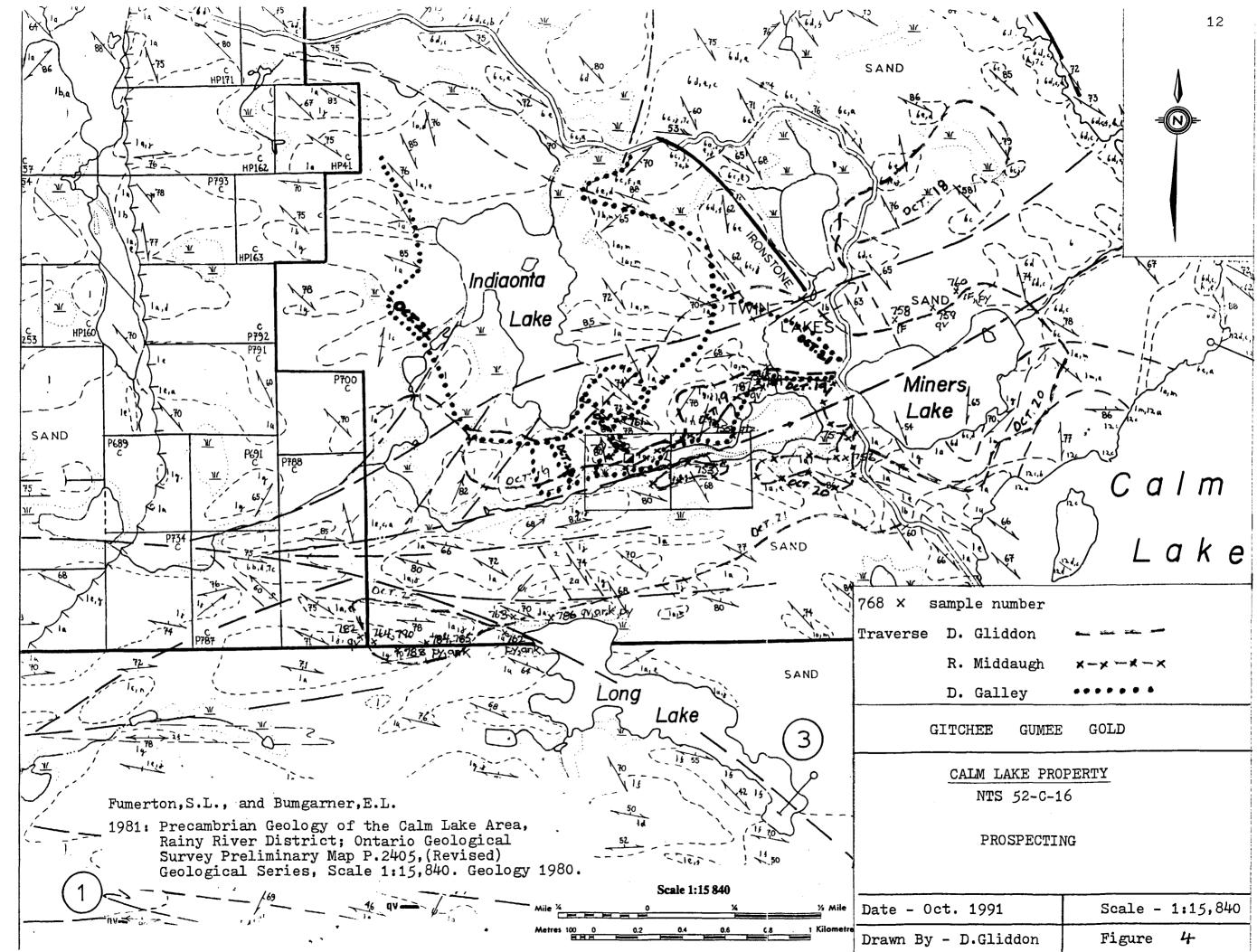
The Glider Showing is located 1.5KM. southwest of the claim group and approximately 730M. due west of the northwest corner of Long Lake. The limited prospecting revealed a wide shear zone system (deformation zone) of highly deformed mafic to felsic pyroclastics with disseminated pyrite, sericite-ankerite-chlorite alteration and numerous quartz-carbonate veining. Initial grab samples from the quartz vein/shear zone system assayed up to 0.341 oz/ton Au.

The Glider Showing was subsequently staked by the authors' and consists of four claim groups covering 128ha.(see Figure 2)

A total of <u>23</u> grab samples were collected from the prospecting program and assayed for Au.

8.0 MECHANICAL TRENCHING PROGRAM

A total of five areas were trenched by Mark Maki Exploration



Services with a skidder/backhoe to remove the overburden and to expose the extensions of quartz vein/shear zones. Trenches #1 to #4 concentrated on extending the Main and West quartz vein/shear zones systems from the old pits located during the 1988 geological mapping program on the claim group, straddling LINE 1+00 W, between 0+50N and 1+50N. Trench #5 was conducted to locate the possible source of the several two cubic metre size mineralized quartz boulders found during the prospecting program.

These trenches were subsequently washed with a wajax water pump to remove loose overburden and the Main Showing quartz vein/shear zone in Trenches #1 and #2 were channel sampled.(Figures 5-6)

Of note, the depth of the overburden encountered during the trenching was deeper than expected and difficulties arose in removing the 2M. thick sand cover with the skidder/backhoe, thereby reducing the initial programs proposed trench sizes.

8.1 Trench #1

This trench which measures approximately 22M by 5M covers the "Main" shear zone and associated quartz vein. The quartz vein which strikes northwest and dips steeply to the east, pinches and swells to a maximum of 1.0M and has sharp contacts with the host volcanic rocks which other than silicification exhibit no chemical alteration. Five channel locations were sampled over the exposed length of the vein and divided into 14 samples based on rock type ie. quartz vein material vs volcanic wall rock. (Figure 7)

8.2 Trench #2

This 4M by 10M trench located 35M southeast of the Trench #1 and also covers the "Main" quartz vein system. Two channel samples were taken from the quartz vein structure which exhibited two separate veins at this location. (Figure 8)

8.3 Trenches #3 & #4

These trenches were dug in an attempt to locate the northern extensions of the "Main" and "West" zones respectively. Due to relatively deep overburden, very little outcrop was exposed in trench #3 and no quartz vein system was seen. Although trench #4 exposed a fair amount of outcrop, no northern extension of the "West" zone was located.

8.4 Trench #5

This trench which is located approximately 200M northeast of the #1 post of claim# TB 1009091, revealed a 0.5M wide quartz vein associated with a shear zone within volcanic host rocks. The quartz vein which is folded at this location has an overall west northwest trend. Three grab samples were taken from this trench.

9.0 CHANNEL SAMPLING

A total of <u>16</u> channel samples were collected totalling <u>7</u> Metres in length. These channels were cut with a Stihl cutoff saw equipped with a diamond blade.

The "Main" quartz vein/shear zone system was the best exposed from the trenching program and was the only showing channel sampled. The results indicated that the gold mineralization is

restricted to the quartz vein/shear zone system, with no significant values in the mafic metavolcanic host. At present, the Main Showing has a 150M. strike length, averaging approximately 0.5M wide and is open to the north. The best results from the channel sampling assayed 0.458 oz/ton over 30cm. and 0.132oz/ton over 95cm.(Figure 7)

A total of 40 grab and channel samples were collected from the program and were assayed by Accurassay Laboratories in Thunder Bay. These samples were assayed for Au using the fire assay method and 2 of these samples were also run for Cu.

After the analysis results, a total of 7 samples were re-run using the cyanide-leach method to see if the high Au values (>0.100) could be increased. The results from the cyanide-leach method compared to the fire assay method are tabled as follows:

| Sample No. | Fire Assay (oz/ton) | Cyanide Leach (oz/ton) |
|------------|---------------------|------------------------|
| 213751 | 0.420 | 0.390 |
| 213752 | 0.887 | 3.276 |
| 213766 | 0.285 | 0.357 |
| 213777 | 0.458 | 0.710 |
| 213778 | 0.132 | 0.096 |
| 213779 | 0.503 | 0.765 |
| 213782 | 0.143 | 0.341 |

10.0 SAMPLE DESCRIPTIONS

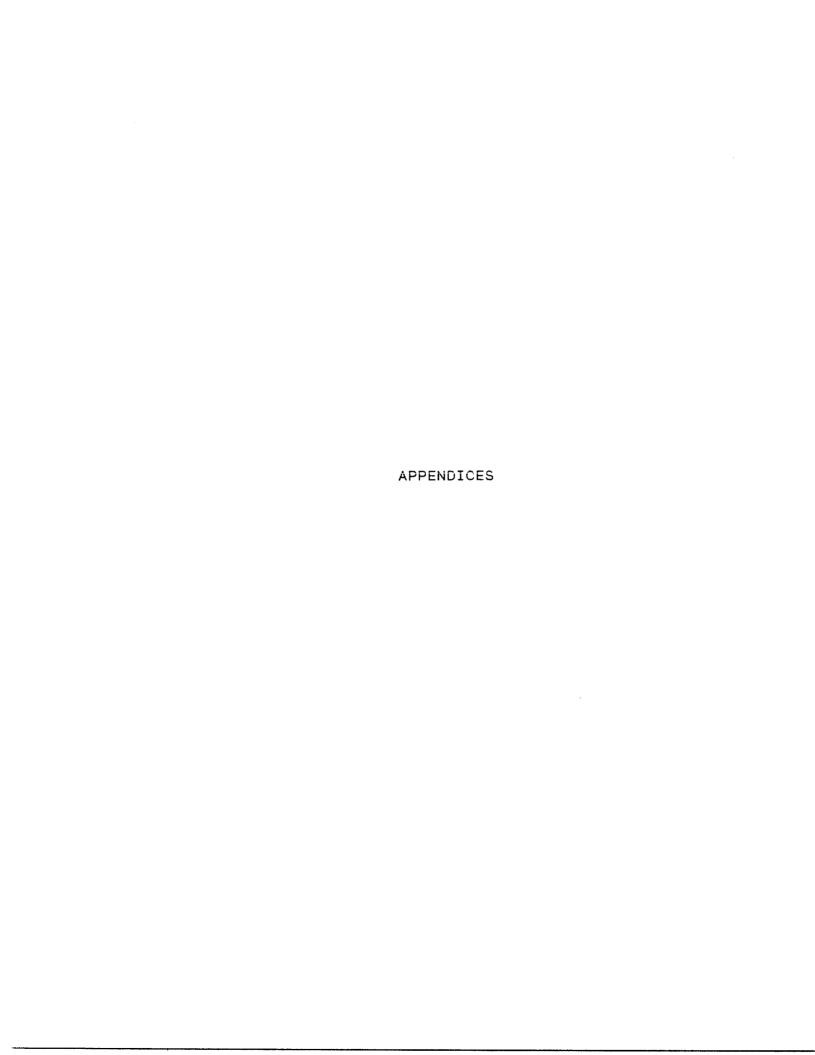
| Sample No. | Location | Туре | Description | Assay Results (oz./ton Au) |
|------------|--|---------|--|-------------------------------|
| 213751 | Cliff Showing | Grab | 20 cm. wide quartz vein with cpy-py | 0.420 |
| 213752 | 30M. west of Cliff Showing | Grab | rediscovered old pit - quartz vein with cpy-py | 0.887 |
| 213753 | south side of small lake and 200M. east of creek | Grab | quartz vein material with py | 0.005 |
| 213754 | 75M. north of small lake and 50M. west of creek | Grab | mafic flow with diss. py | 0.004 |
| 213755 | 10M. SW of WP#1 of 091 | Grab | quartz boulder with diss. py | 0.001 |
| 213756 | southwest of Miners Lake on on west side od access road | Grab | 20 cm. wide quartz vein with cpy | 0.003 |
| 213757 | same as #213756 | Grab | oxide facies iron formation with py, mag | <0.001 |
| 213758 | north side of Miners Lake on old logging road | Grab | oxide facies iron formation band 30 cm. wide with minor py, mag in wacke | <0.001 |
| 213759 | 100M. east of #213758 on old road | Grab | 15 cm. wide qv with py bearing 030 crosscutting wacke | g <0.001 |
| 213760 | 50M. east of #213759 on old road | Grab | oxide facies iron formation with py,po,mag in wacke | <0.001 |
| 213761 | 100M. east and 10M. south of old logging road from trench road | Grab | felsic intrusive sill with diss. py | <0.001 |
| 213762 | 100M. west of the northwest corner of Long Lake | Grab | sheared intermediate to felsic crystal tuff with diss. py and carb. alteration | <0.001 |
| 213763 | 50M. west of the northwest corner of Long Lake | Grab | sheared mafic tuff with quartz-ank. veining and and minor py | d <0.001 |
| 213764 | approx. 730M. west of northwest corner of Long Lake | Grab | quartz vein material from rubble pile of old p | it 0.006 |
| 213765 | Trench #1 (see Figure 7) | Channel | #1 East (30 cm.) | 0.001 |
| 213766 | Trench #1 (see Figure 7) | Channel | #1 Centre (20 cm.) | 0.285 |
| 213767 | Trench #1 (see Figure 7) | Channel | #1 West (30 cm.) | 0.003 |
| 213768 | Trench #1 (see Figure 7) | Channel | #2 East (20 cm.) | 0.002 |
| 213769 | Trench #1 (see Figure 7) | Channel | #2 Centre (40 cm.) | 0.026 |

| 213770 | Trench #1 (see Figure 7) | Channel | #2 West (25 cm.) | <0.001 |
|--------|---|----------|--|--------|
| 213771 | Trench #1 (see Figure 7) | Channe? | #3 East (15 cm.) | <0.001 |
| 213772 | Trench #1 (see Figure 7) | Channel | #3 Centre (30 cm.) | 0.031 |
| 213773 | Trench #1 (see Figure 7) | Channel | #3 West (110 cm.) | 0.006 |
| 213774 | Trench #1 (see Figure 7) | Channel | #4 East (30 cm.) | <0.001 |
| 213775 | Trench #1 (see Figure 7) | Channe ? | #4 Centre (50 cm.) | 0.056 |
| 213776 | Trench #1 (see Figure 7) | Channe! | #4 West (30 cm.) | 0.081 |
| 213777 | Trench #1 (see Figure 7) | Channe 1 | #4 West south 20cm. overlap 15 cm. (30cm.) | 0.458 |
| 213778 | Trench #1 (see Figure 7) | Channel | #5 (95 cm.) | 0.132 |
| 213779 | Trench #1 (see Figure 7) | Chip | #5 south 1.8M. Black rotted material | 0.503 |
| 213780 | Trench #2 (see Figure 8) | Channel | #6 East (75 cm.) | 0.003 |
| 213781 | Trench #2 (see Figure 8) | Channel | #6 20cm. West of #213780 (60 cm.) | 0.001 |
| 213782 | 75-100M. west of #213764 | Grab | quartz-carb vein with diss. py | 0.143 |
| 213783 | same as #213782 | Grab | sheared felsic blue-quartz eye porphyritic tuff with diss. py and ank. alteration (footwall) | 0.011 |
| 213784 | 10M. north of # 213764 | Grab | sheared sericite schist with diss. py and minor carb. alteration | <0.001 |
| 213785 | 150M. east of #213764 | Grab | sericite-quartz-py schist | 0.002 |
| 213786 | northwest corner of Long Lake | Grab | quartz-ankerite vein with diss. py in sheared mafic tuff | <0.001 |
| 213787 | north shore of small lake from boulder showing trench | Grab | 60cm. quartz vein with diss. py in sheared mafic tuff | 0.061 |
| 213788 | same as #213787 | Grab | sheared mafic tuff with diss. py | 0.022 |
| 213789 | same as #213787 | Grab | sheared mafic tuff with diss. py and quartz boudins | 0.013 |
| 213790 | same as #213764 from ledge face in old pit | Grab | quartz vein with fine grained diss. py stringers | 0.016 |

11. RECOMMENDATIONS

The Calm Lake property has been extensively prospected and the results indicate that the gold mineralization is restricted to the Main and West Showings. During the 1991 trenching program, the overburden was deeper than expected and difficulties arose from the type of equipment employed in removing the overburden. Therefore, the proposed trenching of the 1991 program was not fully obtained and further trenching is recommended using bigger equipment. A single phase program of work is put forth for the 1992 field season and briefly includes the following:

- (1) A continued trenching program to trace the Main and West Showings to the north using an excavator, channel sampling and detailed mapping at 1cm.=10M. of the trenches.
- (2) The field season should mainly focus on the new gold discovery to the southwest of the Calm Lake property on the now designated Calm Lake-West property which the author believes has a greater potential to host a major gold deposit with a comprehensive exploration program of linecutting, geophysics, prospecting and geological mapping.





ACCURASSAY LABORATORIES

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48151 Certificate of Analysis

November 18

91

Page:

Dave Gliddon 603-199 Academy Drive THUNDER BAY, ON P7B 5W2

Work Order # : T910874.

Project :

| SAMPLE | NUMBERS | Gold | Gold | | |
|------------------|----------|------------|--------|-------|--|
| Accurassay | Customer | ppb | Oz/T | | |
| 554055 | 213751 | 14433 | 0.420 | | |
| 554056 | 213751 | 30495 | 0.887 | | |
| 554057 | 213752 | 170 | 0.005 | | |
| 554058 | 213754 | 143 | 0.003 | | |
| 554059 | 213755 | 23 | 0.004 | | |
| 554060 | 213756 | 95 | 0.003 | | |
| 554060 554061 | 213757 | 45 | (0.003 | | |
| 4062 | 213758 | (5 | (0.001 | | |
| 554063 | 213759 | 8 | (0.001 | | |
| 554064 | 213760 | (5 | (0.001 | | |
| 554064 | 213760 | (5 | (0.001 | Check | |
| 554065 | 213761 | (5 (5 | (0.001 | CHeck | |
| 554066 | 213762 | 6 | (0.001 | | |
| 554067 | 213762 | 18 | 0.001 | | |
| 554068 | 213763 | 222 | 0.001 | | |
| 554069 | 213765 | 17 | 0.001 | | |
| 554070 | 213766 | 9802 | 0.285 | | |
| 554071 | 213767 | 91 | 0.003 | | |
| 554072 | 213768 | 58 | 0.003 | | |
| 554073 | 213769 | 910 | 0.026 | | |
| 554073 | 213769 | 762 | 0.028 | Check | |
| 554074 | 213770 | 14 | ⟨0.001 | CHeck | |
| 554075 | 213770 | \ 5 | (0.001 | | |
| 554076 | 213771 | 1076 | 0.031 | | |
| 554077 | 213772 | 218 | | | |
| 554078 | 213773 | | 0.006 | | |
| 554079 | | ·(5 | (0.001 | | |
| 554080 554080 | 213775 | 1931 | 0.056 | | |
| 554081 | 213776 | 2782 | 0.081 | | |
| 554082 | 213777 | 15733 | 0.458 | | |
| 554082 554082 | 213778 | 4545 | 0.132 | 01 | |
| 334062 | 213778 | 3327 | 0.097 | Check | |

Per: Blanc With



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Certificate of Analysis

459

0.013

Check

Page:

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November 18

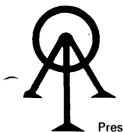
91

Work Order # : T910874

Project

SAMPLE NUMBERS Gold Gold Accurassay Customer ppb Oz/T 554083 17277 0.503 213779 554084 213780 0.003 106 554085 213781 38 0.001 554086 213782 4911 0.143 554087 213783 374 0.011 554088 213784 10 <0.001 ~4089 213785 78 0.002 J4090 213786 (5 (0.001 554091 213787 2079 0.061 554091 213787 1931 0.056 Check 554092 213788 750 0.022 554093 213789 350 0.010 554093 213789

LF-30



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48155

Certificate of Analysis

Page #1

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October 31, 1991

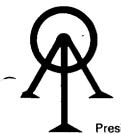
Work Order: T910874

Project:

Results are as follows:

| | SAMPLE NU | JMBER | • |
|---|-----------|----------|---------------|
| Α | ccurassay | Customer | Copper ppm |
| | 554055 | 213751 | >10,000 |
| • | 554060 | 213756 | 1712 |
| | | | |

Per: Blime Jutels



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.I.C., M.R.S.C., A.R.C.S.T.

48153

Certificate of Analysis

Dave Gliddon 603-199 Academy Drive THUNDER BAY, ON P7B 5W2

Page #1

November 08, 1991

WORK ORDER: T910874

SAMPLE NUMBERS WEIGHT GOLD RESIDUE TOTAL ASSAY PERCENT PULP (g) ACCURASSY CUSTOMER Oz/T Oz/T Oz/T **RECOVERY** 0.713 554083 213779 820.0 g 0.0518 0.765

LF-30



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

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Certificate of Analysis

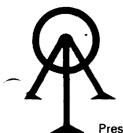
Dave Gliddon 603-199 Academy Drive THUNDER BAY, ON P7B 5W2

November 14, 1991

WORK ORDER: T910874A

| SAMPLI ACCURASSY | E NUMBERS CUSTOMER | WEIGHT PULP (g) | GOLD Oz/T | RESIDUE Oz/T | TOTAL ASSAY Oz/T | PERCENT RECOVERY |
|---------------------|-----------------------|--------------------|--------------|-----------------|---------------------|---------------------|
| 554055 | 213751 | 163.0 g | 0.384 | 0.0062 | 0.390 | 98 |
| 554056 | 213752 | 299.0 g | 3.255 | 0.0218 | 3.276 | 99 |
| 554070 | 213766 | 513.0 g | 0.355 | 0.0025 | 0.357 | 99 |
| 554081 | 213777 | 560.0 g | 0.703 | 0.0067 | 0.710 | 99 |
| 554082 | 213778 | 1035.0 g | 0.094 | 0.0025 | 0.096 | 97 |
| 554086 | 213782 | 1344.0 g | 0.302 | 0.0390 | 0.341 | 89 |

Per: Blame Juth.



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Certificate of Analysis

Dave Gliddon 603-199 Academy Drive THUNDER BAY, ON

November 7

91

P7B 5W2

Work Order # : T910898

Project

| | NUMBERS | Gold | Gold | |
|------------|----------|------|-------|-------|
| Accurassay | Customer | ppp | Oz/T | |
| 554460 | 213790 | 564 | 0.016 | |
| 554460 | 213790 | 383 | 0.011 | Check |

DAILY LOG: D. GLIDDON

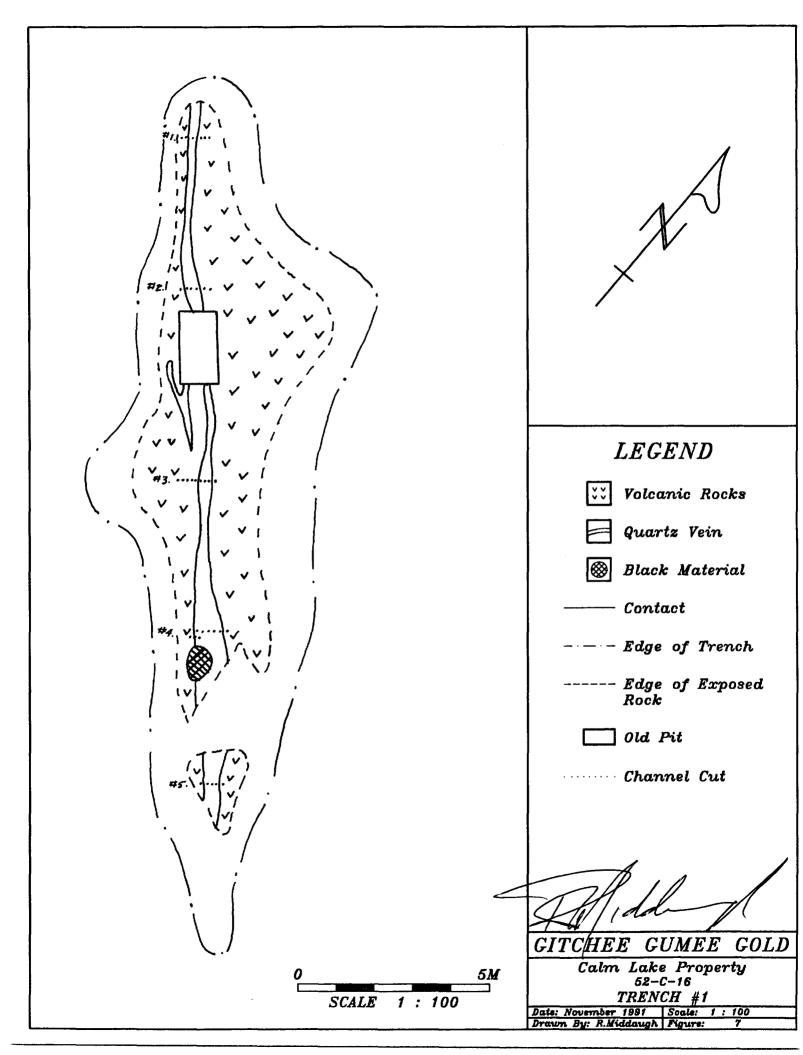
| TYPE | DATE | WORK PERFORMED |
|-------------|---------|---|
| Prospecting | Oct. 18 | Travel to Flanders and prospected along old logging road northeast of claims. |
| Prospecting | Oct. 19 | Prospected along north side of lineament from road to west of claims. |
| Prospecting | Oct. 20 | Prospected around Miners Lake (3 samples taken) |
| Prospecting | Oct. 21 | Prospected south of lineament along new logging road as far as Long Lake. (2 samples taken) |
| Prospecting | Oct. 22 | Prospected west of Long Lake (1 sample taken) |
| Trenching | Oct. 23 | Supervised backhoe and cleaned out trenches. |
| Trenching | Oct. 24 | Supervised backhoe and continued to clean out trenches. |
| Prospecting | Oct. 25 | Prospected west of Long Lake (6 samples taken) |
| Trenching | Oct. 26 | Wajaxing and sampling of trench # 5 and demobilization of equipment from property. |
| Report | Nov. 12 | Writing technical report |
| Report | Nov. 13 | Writing technical report |
| Report | Nov. 14 | Drafting maps |
| Report | Nov. 15 | Drafting maps on AutoCAD |
| Report | Dec. 29 | Finished technical report |

DAILY LOG: DAVID GALLEY

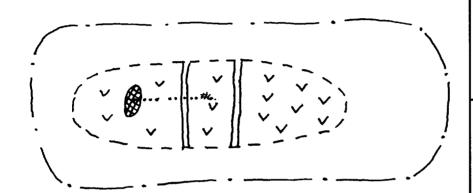
| TYPE | DATE | WORK PERFORMED |
|----------------------------------|---------|--|
| Prospecting | Oct. 18 | Travelled to Flanders and prospected along access road |
| Prospecting | Oct. 19 | Prospected from access road to Main showing and flagged route for backhoe/skidder from old logging road to showing (2 samples taken) |
| Prospecting/ Cutting | Oct. 20 | Cut and cleared new access to showing removing large trees, prospecting along route (1 sample taken) |
| Site Preparation/ Prospecting | Oct. 21 | Cutting trees and logs around trench sites, prospecting to access road south of Indianota Lake |
| Trenching/ Prospecting | Oct. 22 | Supervised trenching and prospected south and west of Indianota Lake |
| Trenching/ Prospecting | Oct. 23 | Supervised trenching and prospected west of Main showing |
| Trenching | Oct. 24 | Wajaxing trench |
| Trenching/ Channel Sampling | Oct. 25 | Wajaxing and channel sampling trench |
| Trenching/ Demobilization | Oct. 26 | Wajaxing and demobilization of equipment |

DAILY LOG: RICHARD MIDDAUGH

| TYPE | DATE | WORK PERFORMED |
|--------------------|---------|--|
| Mobilization | Oct. 18 | Mobilization of equipment and travel to Indianota Lodge |
| Prospecting | Oct. 19 | Flagged out route for skidder from access road to property |
| Prospecting | Oct. 20 | Prospected south of small lake on west side of access road (3 samples taken) |
| Mobilization | Oct. 21 | Travelled to Atikokan for supplies and mobilized equipment to trench area (2 samples taken) |
| Mobilization | Oct. 22 | Skidder arrives and walked it in to trench area and drove to Thunder Bay to pick up quadrunner, pump, etc. |
| Wajaxing | Oct. 24 | Drove back to property and wajaxed Main Showing |
| Mapping/Channeling | Oct. 25 | Geological mapping, cutting channels and collecting samples |
| Mapping/Channeling | Oct. 26 | Finished mapping, cutting channels and collecting samples |
| Report | Dec. 30 | Writing technical report |
| Report | Dec. 31 | Drafting trench maps |







LEGEND

Volcanic Rocks

Quartz Vein

Black Material

---- Contact

---- Edge of Trench

----- Edge of Exposed Rock

Channel Cut

GITCHEE GUMEE GOLD

Calm Lake Property 62-C-16 TRENCH #2

Date: November 1991 | Scale: 1:100 Drawn By: R. Widdaugh | Figure: 8

SCALE 1: 100

