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# **GEOLOGY AND ROCK SAMPLE LOCATIONS IN THE SOUTH REGION OF THE TUDOR PROPERTY TUDOR TOWNSHIP, ONTARIO**

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**JANUARY 20, 1999** 

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# GEOLOGY AND ROCK SAMPLE LOCATIONS IN THE SOUTH REGION OF THE TUDOR PROPERTY TUDOR TOWNSHIP, ONTARIO

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# **I. INTRODUCTION**

# **SCOPE**

This report describes the geology and results of rock samples collected on a grid covering the south extension of the felsite rock unit hosting the gold deposit known as the Main Prospect. Geology and rock sample locations have been plotted on maps included with this report. The maps are at the scale of 1:2,500.

# LOCATION, ACCESS, OWNERSHIP

The Tudor Property is located in Tudor Township (Figure 1). The area is centered on latitude 44° 47' N, longitude 77° 34' E and is covered by the topographic sheet: 31C\13 Coe Hill (Figure 2).

The property is consists of 14 mining claims containing 43 units. Claim ownership is equally divided by Robert Dillman of Mount Brydges, Ontario and Jim Chard of Marmora, Ontario. Figure 3 summarizes the claim group. The claim numbers and locations are listed as:

Claim Number	Lots	Conce	essions
1195172	1 to 4	XV	
1195188	5 to 6	XV	
1195192	3 to 6	XIV	N. 1\2
1195189	4	XIII	N. 1\2
	4	XIV	S. 1\2
820718	5	XIV	S. 1\2
1195173	6	XIV	S. 1\2
1195190	7	XIII	N. 1\2
	7	XIV	
820719	5	XIII	N. 1\2
820720	6	XIII	N. 1\2
1195191	4 to 5	XIII	S. 1\2
820721	6	XIII	S. 1\2
1195170	8 to 10	XIII	S. 1\2
1195171	10 to 12	XII	N. 1\2
1076809	7 to 8	XII	
	7 to 8	XI	

The property is seasonably road accessible. It can be reached from the town of Gilmour located on Highway 62 by traveling northeast towards Wadsworth Lake on the paved County road running through the town. 3 km northeast from Gilmour is the Pine Ridge road. Continue







CLAIM DISTRIBUTION TUDOR GOLD PROSPECT south on the Pine Ridge road for 5.5 km to the Hydro access road. The property begins at the power line. Both roads give good access to different areas of the property. Central and east regions are best accessed by four wheel drive. The south area of the property can be reached by a new logging road constructed east from the Pine Ridge road south of the power line.

## **REGIONAL GEOLOGY**

The Tudor property is located within the central metasedimentary belt of the Elzevir Terrain of the Grenville Province. The age of the rocks in the area are Proterozoic. Figure 4 summarizes local geology

The property is underlain by mafic metavolcanic flows, metasedimentary schists and felsic tuff. The entire sequence has been deposited within a marine environment. The metasedimentary rocks consist of clastic rocks, carbonates and fine-grained argillaceous units. Much of the clastic material has been eroded from a nearby volcanic terrain. The metavolcanic rocks occur as flows and sills of basaltic and gabbroic material. Tuffaceous felsite units trend northeast-southwest and east-west through the central area of the property. The felsic units are variably sheared and moderately foliated.

Units have been intruded by fine-grained felsic and matic dikes and sills. The intrusions are though to be associated with the formation of the Lingham Lake Intrusive Complex, a large differentiated plutonic body located east and southeast of the property.

A trondhjemite body outcrops on the northeast boundary of the property. The unit is believed to precede the formation of the Lingham Lake Complex.

Most geological formations on the property have been tilted vertically or dip steeply towards the east or west. The general trend of schistosity is northeast to southwest.

Rocks within the township have been metamorphosed to the degree of high greenschist. Local areas exist where the maximum grade has reached the low to moderate amphibolite facies. Metamorphic grade appears to increases towards the east. It is largely controlled by the proximity to the Lingham Lake Complex and smaller granitic intrusions. Contact metamorphic aureoles exist around some of the larger intrusions in the township.

The property overlies a section of the Moira River Shear Zone. The structure generally follows the Moira River for approximately 30 km. Rock units within the fault zone are variably sheared and deformed. There are local areas of quartz veining and stringer systems of Fe-Mg carbonate mineralization and alteration associated with shearing. In the north region of the property, rock units immediately east of the river have strong planar schistosity.

Younger structures, possibly of Paleozoic age, trend west and northwest throughout Tudor Township. Two faults of this orientation cross the north and central region of the property and possibly a third fault may cut across the south area of the property. Tension fractures or gashes appear in outcrops close to the fault zones.



# 15 Potassic Granitiod Intrusives

Quartz veining and quartz-ankerite stringer stockwork systems with associated pyrite and arsenopyrite mineralization occur in structures within the Moira River Shear Zone and marginal to the Lingham Lake Complex. Gold is commonly found with the sulphide mineralization and has been mined in the past at several localities along strike from the property. Gold mineralization on the property is either associated with arsenopyrite and pyrite mineralization with veining and shearing in felsite rocks or with quartz veins and Fe-Mg carbonate alteration in sheared metavolcanics.

The Main Prospect is located along a 1400 m section of felsite rock striking north through the southern and central area of the property. The felsite unit dips steeply towards the west and ranges 50 to 125 m wide. Block-faulting of the unit on breaks orientated almost perpendicular to the strike accounts for the variable width of the unit. Continuous shearing is exposed by trenching along the east side of the unit for 1400 m. Subparallel shear zones feather away from the east contact forming 1 to 10 'en echelon' shoots. The shoots average 1 to 8 m wide and continue along strike for 200 to 800 m.

Gold mineralization occurs with arsenopyrite and pyrite in sheared felsite. Gold also occurs with silicification and carbonate alteration occurring in and marginal to the shearing. Gold values of sheared felsite range 0.5 to 79.5 g/t. Native gold has been observed at one location within the Main Prospect. Based on geological evidenced gained from trenching and limited diamond drill testing it is apparent several shoots and areas within the felsite contain economic values of gold. Conservative figures based on previous surveys suggest possible resources of 4.8 million tonnes grading 2.2 g/t and an addition 1.1 million tonnes grading 5.0 g. New discoveries of gold made in 1997, in the south extension of the felsite unit hosting the Main Prospect suggests the deposit may extend for an additional 1600 to 2000 m.

The Vardy Prospect, discovered in 1997 is located in the north central area of the property. Gold mineralization occurs with arsenopyrite and pyrite mineralization in sugary quartz-carbonate veins and stockwork in a zone of sheared and carbonated mafic metavolcanic rocks. The zone is up to 125 m wide and traceable over 1000 m along strike. The alteration-deformation occurs in mafic metavolcanic rocks contacting metasedimentary rocks and magnetite iron formation. The size of the zone remains open along strike. Quartz veins assaying up to 18 g/t gold and associated mineralized fractures have widths exceeding 2.5 m. Native gold occurs with arsenopyrite-bearing sugary quartz at one location. Carbonated-arsenopyrite schists associated with the shearing have returned assays of 22.1 g/t gold. The shearing and alteration is thought to be associated with the Moira River Shear Zone.

# **PREVIOUS WORK**

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Tudor Township has a fairly extensive history of mineral exploration and mining activities throughout most of the township. Minerals exploited include: gold, silver, lead, zinc, iron and marble. Other occurrences include: copper, nickel, palladium and titanium. Gold has been produced in the last 100 years at the Craig mine located 10 km south of the property and at the Gilmour mine in Grimsthorpe Township located 5 km northeast of the property (Figure 4). Recently, the Madoc Mining Company has constructed underground developments and stock-

piled ore from a gold deposit located at Bannockburn in Madoc Township 17 km south of the property.

In 1949, the Geophysical Section of the Geological Survey of Canada flew an aeromagnetic survey over the proposed area. The survey suggests two trends exist that represent rock units orientated at N-S and NE-SW. The intersection of the different trends occurs in the area of the Moira River coinciding with the Moira River Shear Zone.

In 1961, the area of the property was included in a geological map of Tudor Township produced by S.B. Lumbers on behalf of the Ontario Geological Survey.

The claims 820718 to 820721 inclusive, have seen extensive prospecting activities. There are no records of work prior to 1969 although evidence has been found of early prospecting activities. Several debris-filled and overgrown pits have been found throughout the property for which there are no records.

In 1969, Lumbers writes that while carrying out a regional mapping program for the Ontario Department of Mines, he located and sampled an open cut on the property (SO 820719). The open cut contains a 50-60 cm wide quartz vein hosted in potassic rhyolite (felsic unit). The vein and wallrock assayed 0.01 oz/ton and 0.03 oz/ton Au respectively.

In 1970, Toronto based prospector R.B. England staked the south half of lot 5, concession XIV (currently 820718). He reported assays of 0.06 oz/ton Au from a pit he blasted in the felsic unit. He reports a second gold occurrence on the claim located in the metavolcanic rocks and metasedimentary schists under the power line. This occurrence has not been relocated. England eventually allowed the claim to lapse.

In 1985, Dillman and Chard staked the four claims: 820718 to 820721 inclusive covering the north half of the felsite body and the reported gold occurrences. Between 1985 and 1989, work on the claims included: line cutting, magnetic and VLF electromagnetic geophysical surveys, rock sampling and soil geochemistry. The majority of this work was concentrated on the felsite unit. Results of the magnetometer survey defined the felsite body as a distinct "low" magnetic response in relation to surrounding country rock. The VLF survey outlined a weak conductor along most of the east side of the felsic unit. The soil survey showed a continuous gold-arsenic anomaly along 1300 m of strike length of the felsic unit tested. Prospecting lead to several spot occurrences of gold in the felsite with values of 0.24 oz/ton Au.

During the spring of 1989, Hol-Lac Gold Mines Limited optioned the property from Dillman and Chard. Through an operating agreement with Homestake Minerals, Hol-Lac gave exploration rights to Homestake.

During the fall of 1989 until 1991, Homestake completed line cutting, geological mapping and trenching of the felsite unit, additional soil sampling, an IP survey and 335 m of diamond drilling in 5 drill holes. Results of the IP survey showed weak responses coinciding with soil anomalies over the felsic unit. A second soil-IP anomaly was located east of the felsic unit. Results of the diamond drilling showed gold values in all holes drilled on the felsic unit. The most significant results included a 5 m interval in drill hole DT-90-2 which assayed 6.3 g/t over 2.5 m and included 11.7 g/t over 1.0 m. DT-90-5 intersected 33.5 m averaging 0.59 g/t and contained several sections assaying 2.5 - 2.6 g/t over 0.5 m and a lower interval of 1.86 g/t over 2.0 m. Homestake allowed the option to lapse in the spring of 1991.

In the fall of 1993, Chard with the aid of a grant through the Ontario Prospectors Assistance Program (file: OP93-631), recut the grid, cleaned and sampled old pits and various mineralized zones, collected addition soil samples and relocated previous drill sites.

In March of 1994, the property was optioned to 1053825 Ontario Inc. In an operating agreement with Romfield Building Corporation, 18 trenches were completed across the felsic unit over a strike length of 1300 m. The trenching revealed 6-10 mineralized shears with related silicification and quartz-ankerite stringer systems with pyrite and arsenopyrite. The trenches were systematically channel sampled using a diamond blade saw. Channel samples of the shears averaged 1.0-19.1 g/t over widths of 0.5-5.0 m.

Romfield completed 499 m of diamond drilling in 7 holes during February and March of 1995. During the program, drill hole DT-95-12 intersected 2.68 g/t Au across 1.8 m and a lower section of 2.42 g/t over 22.6 m. This hole included separate intervals assaying 7.59 g/t over 1.8 m and 3.93 g/t across 5.6 m. DT-95-11, drilled above DT-95-12 intersected 1.8 g/t across 3.1 m including a 1.1 m interval assaying 3.0 g/t Au. A second zone lower in the hole returned 1.7 g/t across 8.5 m and included a 1.1 m section of 5.3 g/t Au. Holes DT-95-8 and DT-95-9 drilled 350 m south returned 7.6 g/t across 2.3 m and 6.47 g/t over 1.4 m respectively. Hole DT-95-6 drilled an additional 68 m south returned 2.44 g/t across 1.1 m. A second hole at this location returned 1.3 g/t across 1.5 m and a lower interval of 1.2 g/t across 1.0 m. Hole DT-95-10 located 50 m south returned 1.5 g/t over 3 m.

In the spring of 1996, Dillman and Chard terminated the option agreement with Romfield. Currently, the property is not under any option agreement with any party.

Elsewhere on the property, in 1994, local prospector J. Laidlaw completed magnetic and VLF surveys over part of XV, concession 1. He attributes several magnetic and VLF responses as local concentrations of iron formation.

In 1997, an OPAP grant to Dillman(OP97-170) provided funding for geological and prospecting surveys on new claims staked in the spring by Chard. The surveys led to the discovery of new zones of gold mineralization in the north area of the property. An EM-VLF survey was completed over the new prospects. Additional gold mineralization was discovered in the felsite unit south of the Main Prospect. The new discoveries were staked by Dillman in the fall of 1997.

Currently, diamond exploration is occurring south of the Tudor Property. The exploration is preformed on behalf of Lydia Consolidated Diamond Corporation.

## II. PROPERTY GEOLOGY

# LOGISTICS

Between October 19, 1998 and November 3, 1998, 4 days were devoted towards mapping the geology and prospecting the felsite unit south of the Main Prospect. For control over the survey, a baseline was extended 1.7 km on a bearing of S.195° SW. The baseline begins at line 14+00s, 1+25w, SO 820721 and extends through SO 1076809 to 31+00s. A total of 3.7 km of flagged grid lines were traversed to complete the geological survey. Results have been compiled on maps included with this report. All fundamentals of the survey including work, reports and maps have been completed by R. Dillman of Mount Brydges, Ontario. Prospecting and sampling were assisted by Jim Chard of Marmora, Ontario.

During the survey, 19 rock samples were collected from the south area of the property and analyzed for gold at Lakefield Research located in Lakefield, Ontario. 3 samples were analyzed for silver. The lab used a standard fire assay method to complete the gold and silver analyses. After pulverizing the samples to -100 mesh, the lab used a 30 gram split of each sample for analysis. A description of each rock and environment where the samples were collected are included with this report. Assay certificates for each gold and silver analysis preformed by Lakefield, also are included with this report.

# **GEOLOGY OF THE SOUTH AREA OF THE CLAIM BLOCK**

The geology of the Tudor Property is summarized in Figure 5. A table of geological formations is presented in Table 1.

The main felsite unit striking through the central area of the claims is well-exposed by trenching from line 1+00s to 14+00s. From this point and south to the river, the felsite is reasonably well-exposed by outcrop. Beyond the river at line 17+50s, the felsite unit is poorly exposed as a result of a substantial increase in overburden.

The felsite unit in the south area of the property is between 35 and 135 m wide. The unit generally strikes northward and is slightly bent towards the east before it narrows at the south boundary of the property. The unit dips vertically or steeply towards the east which is in contrast to the steep, westerly dip of the unit north of the river. The transition to an easterly dip occurs between lines 19+00s and 21+00s.

The felsite unit is massive and well-foliated but not schistose. The foliation usually parallels the over-all trend of the unit although it is common for foliations to be slightly discordant to the trend of the unit. Evidence of folding was not observed in the south area of the unit.

The felsite rock is pinkish brown on a fresh surface reflecting various quantities of quartz, plagioclase and mica. The rock is characteristically white on a weathered surface. Darker horizons across the unit result from an increase in fine biotite-chlorite and give the felsite unit a crudely zoned- gneissic appearance. This phenomena is characteristic of the unit along the entire length.



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# TABLE 1.

# TABLE OF FORMATIONSTUDOR GOLD PROSPECTTUDOR TWP., ONTARIO

# CENOZOIC

RECENT swamp, lake and stream deposits PLEISTOCENE clay, sandy and silty boulder clay, sand, gravel, boulders

Unconformity

# PROTEROZOIC

# **INTRUSIVE ROCKS**

Mafic intrusive sills, dikes and plutonic stocks Trondhjemite dikes and plutonic stocks

Intrusive contact

# METASEDIMENTARY ROCKS

Greywacke, phyllite, marble, rusty schists

FELSIC METAVOLCANIC ROCKS Felsite tuff, rhyolite

# MAFIC METAVOLCANIC ROCKS

Metavolcanic flows, schists, chlorite schist, rusty metavolcanic schists Chlorite-ankerite schists Local zones of alteration exist where the felsite is faulted. White crystalline quartz stringers trend parallel to the foliation and are common with zones of alteration. Strong sericite alteration and quartz stringers occur on the west side of the felsite unit in the vicinity of line 18+00s. Potassic alteration, Fe-Mg carbonate alteration and silicification occur where the felsite unit is locally sheared. Sheared felsite rock is characteristically pinkish in colour, fine-grained and mylonitized. Quartz stockwork frequently occurs with the shearing. Arsenopyrite-bearing shears contain gold mineralization. Shearing with associated gold is continuous on the east side of the felsite unit from Trench 14+00s to 20+50s. Several parallel gold-bearing shears occur between 24+75s to 28+00s.

The felsite unit is surrounded by mafic metavolcanic flows. Mafic rocks on the east contact of the felsite unit are sheared. The shearing has caused strong schistosity and chlorite alteration. A gabbro dyke follows the east contact northward from line 24+00s to the hydro power line at 0+00. The gabbro dyke is coarse-grained and crystalline. At several localities along the strike, the dyke has been strongly altered by solutions most likely associated with faulting. At 23+50s, the dyke south of the river is strongly carbonated and chloritized. At 26+50s, the gabbro has been altered to chlorite-ankerite schist. Altered gabbro can be seen in Trench 14S and between 5+00s and 7+00s.

The contact angles of the felsite unit with surrounding rock units were recorded at several localities. In Trench 14S, the west contact dips 84<sup>o</sup> east. Minor shearing has occurred in the mafic rocks at the contact. The east contact of the felsite unit in the trench is vertical. Shearing also occurs in the mafic rocks at the contact. On the baseline at 19+50s, the west contact is conformable with the mafic metavolcanics and dips at 84<sup>o</sup> east. Shearing is present in the mafic metavolcanics along the east contact on line 28+00s. Here, the contact was measured to dip at 84<sup>o</sup> west. The various dip angles recorded along the felsite unit suggest the felsite unit is thinning with depth. An estimate of depth continuity is 120 to 700 m depending on the width of the unit.

Several orientations of faulting cut the south extension of the felsite unit. The faults may be sympathetic to larger, regional structures in the area. In addition to the shears zones striking parallel to the felsite unit, north orientated structures possibly associated with the Moira River Shear Zone cut the felsite and displace the unit by left-handed movement. Faulting in this direction is believed responsible for the development of tension fractures in the mafic metavolcanic rock proximal to the faults. Several north orientated faults cross the felsite unit between 22+00s and 31+00s. Shearing within the felsite is more prevalent through this area. More recent block faulting cutting across the felsite causes the variations in thickness of the unit along strike. This is due to the contact angles of the felsite and also displaces gold-bearing shears in a similar fashion. The orientation of the faults coincides with a large east-west structure of Paleozoic age, located in the southeast corner of Tudor Twp.

## **III. DESCRIPTIONS OF GOLD OCCURRENCES**

During the survey, the south extension of the felsite unit was prospected in detail. Three new occurrences of gold were discovered bringing the total of new occurrences to seven. Descriptions of rock samples, locations and the results of the analyses are appended to this report. Locations of the samples are plotted on the accompanying maps and figures. Several old historic trenches were located in the felsic unit in the vicinity of 16+00s on the claim line between lot 6 concessions XII and XIII. The location suggests mineralization is continuous from Trench 14S to 17+50s where gold was discovered 1997 just south of the river. The best assay result of five samples collected in one of the trenches is 2.23 g/t across 1.0 m. Float consisting of massive arsenopyrite found north of the site assayed 8.46 g/t. The float is believed to be from a parallel shear not exposed in the trench.

A shear measuring 40 cm was located close to the east contact of the felsite at 20+25s. The shear is thought to be the continuation of mineralization found at 17+50s. One sample taken of the shear assayed 3.37 g/t Au over 0.30 m.

In the area of 24+75s to 27+75s, four areas of shearing have been located in the felsite, two of which were located by this survey. In the vicinity of line 24+00s, low gold values were detected in outcrop and float of sheared felsite with small quartz stringers and patchy arsenopyrite. The mineralization occurs close to the west contact. At 25+60s, another shear was found close to the west contact. The shear is 0.40 cm wide and contains a 0.10 m vein of massive arsenopyrite and pyrite. Two samples taken along strike assayed 12.9 g/t and 17.0 g/t Au. Several smaller shears mineralized with arsenopyrite were noted in the outcrop.

Two samples were collected in the pit located at 26+65s. The samples were taken 2 m on strike of mineralization sampled in 1997. The samples collected during this program, each of a parallel shear assayed 2.48 g/t and 0.59 g/t. Previous samples taken of the shears assayed 8.39 g/t and 0.45 g/t. The shears contain quartz stringers and arsenopyrite stringers measuring 3 cm wide.

At 26+85s, a small shear was located on strike from the mineralization discovered in 1997. A sample of the shear assayed 0.82 g/t gold across 0.25 metres.

Fine native gold was observed in a shear with arsenopyrite in Trench 12S (Figure ). The gold occurs in seams of arsenopyrite in strongly mylonitized felsite. A sample of the mineralization assayed 72.9 g/t gold across 0.20 m. Multiple shears occur between the sample site and the west contact of the felsite unit which have not been sampled. Similar seams of arsenopyrite occur 35 m north along the trail to Trench 11+50s. A previous assay of this material returned 12.0 g/t.

# **IV. CONCLUSIONS AND RECOMMENDATIONS**

The recent program of prospecting and geological mapping on the south extension of the felsite unit hosting the Main Prospect has been successful in locating new gold occurrences. Results of the surveys have shown continuous gold mineralization exists in sheared felsite close to the east contact between Trench 14S to 20+25s. A second area of gold mineralization occurs between 23+00s to 28+00s. Four separate shear zones have been found in the felsite. Samples of the shears have assayed up 17.0 g/t. The area appears to be a focal point of higher grade mineralization. A second area of higher mineralization occurs in Trench 12S as a result of the discovery of visible gold in a shear exposed in the trench. Presence of high grade shoots enhances the economic potential of the Main Prospect.



Figure 7 L.8, CON.XII S.<sup>1</sup>/<sub>2</sub> SO 1076809



### LEGEND

	6	CHLORI	FE-ANKE	RITE SCI	HST
	4	GABBRO			
	2	FELSITE	TUFF		
	1	MAFIC METAVOLCANIC ROCK			OCKS
		a	metavolca	nic flows	
		b	metavolca	nic schist	S .
		c	chlorite se	chist	
-		SYMBO	LS		
	foliation/	schistosity	5122	2.12 g/t	gold assay
	strike & o	dip		QV	quartz vein
	jointing s	trike & dip		As	arsenopyrite
	quartz ve	in strike & di	5	ру	pyrite
	shear zon	NC		Au	gold
Q×	outcrop			فللو	hilltop, ridge
Rc	rubblecro	γ <b>p</b>		۰.	boulder





Based on the results, additional work is warranted along the south extension of the felsite. To define continuity between the gold occurrences, a humus survey is recommended. Overburden thickness prevented an accurate assessment of the felsite using a 'B' horizon soil survey. Humus is more favorable for gold detection in deep overburden conditions. A series of trenches also is recommended across several of the new occurrences. A trenching program will make detailed sampling of the shoots possible and possibly discover parallel zones of shearing. The results of the recommended programs will be the base of defining drill targets in the felsite unit. An estimated budget for such programs is:

Humus	250 samples collection	\$1,000
Analysis	250 samples \$18/sample	4,000
Backhoe		3,500
Washing &	Sampling	3,000
Analysis	100 samples \$18/sample	1,800
Reports and	i Maps	2,500
-	•	\$15,800

Respectfully submitted,

Robert J. Dillman B.Sc Geologist

January 20, 1999

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# CERTIFICATE

I, ROBERT JAMES DILLMAN, do hereby certify as follows:

1

- [1.] I am a Mining Exploration Geologist and that I reside and carry on business at 8901 Reily Drive, in the town of Mount Brydges, Ontario.
- [2.] I am a Graduate of the University of Western Ontario, and hold a Bachelor of Science Degree and majored in Geology.
- [3.] I have been practicing my profession as a Geologist since 1992.
- [4.] I am a Licenced Prospector in Ontario and have been actively engaged as a Professional Prospector since 1978.
- [5.] My report, dated January 9, 1999, titled: "GEOLOGY AND ROCK SAMPLING IN THE SOUTH REGION OF THE TUDOR PROPERTY, TUDOR TOWNSHIP, ONTARIO" is based on information collected by myself between October 19, 1998 and January 20, 1999. Any other information gathered from other sources has been cited in this report.
- [6.] The information given in this report is as accurate as to the best of my knowledge and I have not stated false information for personal gain.
- [7.] I **authorize** the use of this report or any part of **only if** credit is given to the author or his sources.
- [8.] I have 50% ownership in the Tudor Property.
- [9.] I am a member of the Geological Association of Canada.

ROBERT JAMES DILLMAN, B.Sc. GEOLOGIST

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Dated at Mount Brydges, Ontario This 20<sup>th</sup> day of January, 1999

#### MAP ASSAY SAMPLE CLAIM LOT AND GRID TYPE WIDTH DESCRIPTION NUMBER NUMBER CONCESSION COORDINATE REFERENCE (m) Au G/T 1076809 20+25S, O+80E REP. 0.3 Sheared felsite with quartz 5226 L. 7, CONC. XII, N.1/2 99-1B 3.37 CHIPS stringers and arsenopyrite. 0.25 5227 1076809 L. 7, CONC. XII, S.1/2 24+90S, O+67E 99-1B REP. Contorted quartz stringers in 0.33 CHIPS sheared felsite. <5% patchy As marginal to the stringers. GRAB 1076809 24+95S, O+70E 99-1B 1.0 x 0.4 Talused felsite, loose, sheared 0.52 5228 L. 7, CONC. XIL, S.<sup>1</sup>/<sub>2</sub> and mineralized by arsenopyrite, x 1.2 similar to 5227. 99-1B REP. 1076809 25+62S, O+75E 0.35 Massive to semi-massive 12.9 5229 L. 8, CONC. XII, S.1/2 CHIPS 2.2 g/t Ag arsenopyrite in shear. L. 8. CONC. XII. 25+63S, O+75E 99-1B REP. 0.35 5230 1076809 Massive to semi-massive 17.0 CHIPS arsenopyrite in shear. S.1/2 820721 L. 4, CONC. 16+30S. O+70E 99-1B GRAB 0.5 x 0.3 Reid trench. Well-mineralized 1.21 5231 Figure 6 sheared felsite, mostly pyrite, XIII. S.1/2 x 0.3 lesser arsenopyrite. Loose piece in trench. L. 8. CONC. XI. 5232 1076809 29+75S. 1+70E 99-1B GRAB 1.0 Potassic altered felsite, no < 0.02 sulfides. N.1/2 L. 8, CONC. XI. 2 parallel shears in felsite. 0.25-1076809 27+80S, 1+52E 99-1B GRAB 0.65 0.82 5233 0.40, on strike from pits on hill, N.½ 2.5 cm seam of arsenopyrite.

# ROCK SAMPLE DESCRIPTIONS: SOUTH PART OF FELSITE, TUDOR PROPERTY

SAMPLE NUMBER	CLAIM NUMBER	LOT AND CONCESSION	GRID COORDINATE	MAP REFERENCE	TYPE	WIDTH (m)	DESCRIPTION	ASSAY Au G/T
5234	1076809	L. 8, CONC. XII, S.½	26+65S, 0+98E	99-1B Figure 7	REP. CHIPS	1.0	1.0m on strike from 97 sample 5150: 8.39 g/t, trench, sheared felsite with arseno stringers and quartz stringers. 10% As	2.48 0.8 g/t Ag
5235	1076809	L. 8, CONC. XII, S.½	26+65S, 0+96E	99-1B Figure 7	REP. CHIPS	0.5	1.0m on strike from 97 sample 5151: 0.45 g/t, trench, sheared felsite with arseno stringers and quartz stringers. 10% As	0.59
5236	1076809	L. 7, CONC. XII, S.½	23+50S, 1+15E	99-1B	REP. CHIPS	2.0	Fe-Mg carbonated-recrystalized gabbro, no sulphides	<0.02
5239	820721	L. 4, CONC. XIII, S.½	16+30S. O+70E	99-1B Figure 6	REP. CHIPS	0.3	Reid trench. Quartz vein in sheared felsite, well-mineralized with arsenopyrite.	0.37
5240	820721	L. 4, CONC. XIII, S. <sup>3</sup> 2	16+30 <b>S. O+</b> 69E	99-1B Figure 6	REP. CHIPS	0.2	Reid trench. West side of quartz vein in sheared felsite, well- mineralized with arsenopyrite.	2.23
5241	820721	L. 4. CONC. XIII. S. <sup>1</sup> 2	16+29S. O+70E	99-1B Figure 6	REP. CHIPS	1.5	Reid trench. 1 m north of 5239- 40. Silicified felsite with quartz and arsenopyrite 5%. On footwall against chlorite schist.	0.47
5242	820721	L. 4. CONC. MIII. S. <sup>3</sup> :	16+34S. O+70E	99-1B Figure 6	REP. CHIPS	1.5	Reid trench. 1 m north of 5239- 40. Silicified felsite with quartz and arsenopyrite 5%. On footwall against chlorite schist.	1.09

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SAMPLE NUMBER	CLAIM NUMBER	LOT AND CONCESSION	GRID COORDINATE	MAP REFERENCE	TYPE	WIDTH (m)	DESCRIPTION	ASSAY Au G/T
5243	820721	L. 4, CONC. XIII, S.½	16+33 <b>S</b> , O+71E	99-1B Figure 6	REP. CHIPS	0.4	Reid trench. Selected sample on contact of felsite with FeC-chlorite shear. 5% As.	1.33
5244	820721	L. 4, CONC. XIII, S.½	16+03S, O+65E	99-1B Figure 6	REP. CHIPS	0.5	30 m north of Reid trench. Possibly parallel shear. Siliceous, quartz stringers, mylonitized, patchy As 10%.	1.74
5245	820721	L. 4, CONC. XIII, S.½	16+03S, O+66E	99-1B Figure 6	GRAB	0.2 x 0.2 x 0.2	30 m north of Reid trench. Possibly parallel shear. Loose piece of sheared felsite with semimassive As.	. 8.46
5261	820721	L. 4, CONC. XIII, S.½	11+99S, 1+17W	95-DD1 Figure 8	REP. CHIPS	0.2	TRENCH 12S. Selected sample of sheared felsite with several 2.0 cm As stringers. Fine free gold with sulfides and marginal to stringers	72.9

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F.O. Box 4300, 185 Concession St., Lakefield Ontario. KOL 2HO Phone: : 705-652-2038 - FAX : 705-652-6441

OCT9148.R98

No.	Sample	ID	Au
			g/t

5226	3 37
5227	0.33
5220	0.52
5229	12.9
5230	1,7.0
5231	1.21
heck	
SC-19	0.60
	5226 5227 5228 5229 5230 5231 heck SC-19

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Postel Beg 4300, 185 Cuncession St., Lakefield, Onterio, KOL 2HO Phone : 705 652-2038 FAX : 705-652-6441

NOV9006.R98

No.	Sample	ID	Au
			g/t

156	5232	< 0.02
157	5233	0.92
158	5234	2.48
159	5235	0.59
160	5236	< 0.02
163	5239	0.37
164	5240	2.23
165	5241	0.47
166	5242	1.09
167	5243	1.33
169	5244	1.74
169	5245	8,46

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page 4/5

P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO Phone : 705-652-2038 FAX : 705-652-6441

R. Dillman 8901 Reily Drive RR5 Mount Brydges, Ont, NOL 1W0 - CANADA

Attn : R. Dillman Fax : 519-264-9278 Lakefield, December 9, 1998

Date Rec.	:	December 4, 1998
LR. Ref.	:	DEC9018.R98
Reference	:	N/A
Project	:	9803290

# **CERTIFICATE OF ANALYSIS**

No.	Sample	ID	Au g/t
7	5261		79.5
C	heck		
8	5261		79.2

Roch Marion, B.Sc., C.Chem. Assistant Manager, Analytical Services

## A MEMBER OF IAETL CANADA

Accredited by the Standards Council of Canada in partnership with CAEAL to the ISO/IEC Guide 25 standard for specific registered tests. The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior written approval.

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P.O. Box 4300, 185 Concession St., Lukefield, Ontario, KOL 240 Phone : 705-652-2038 FAX : 705-652-6441

R. Dillman 8901 Reily Drive

RR5 Mount Brydges. Ont. NOL 1W0 - CANADA

Attn : R. Dillman Fax : 519-264-9278 Lakefield, November 27, 1998

Date Rec.	;	November 24, 1998
LF Ref.	:	NOV9105.R98
Reference	;	N/A
Project	•	98083002/9802953

# **CERTIFICATE OF ANALYSIS**

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No .	Sample ID	λg g/t
1	5226	0. <del>3</del>
2	5229	2.2
3	5234	0.8

Roch Marion, B.Sc., C.Chem Assistant Manager, Analytical Services

## A MEMBER OF IAETL CANADA

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N.T.S. 31C/13

# RESULTS OF 'B' HORIZON SOIL SURVEY TUDOR GOLD PROPERTY TUDOR TOWNSHIP, ONTARIO

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PREPARED BY: ROBERT J. DILLMAN 8901 REILY DRIVE MOUNT BRYDGES, ONTARIO NOL 1W0 (519) 264-9278

**JANUARY 18, 1999** 

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# RESULTS OF 'B' HORIZON SOIL SURVEY TUDOR PROPERTY TUDOR TOWNSHIP, ONTARIO

# I. INTRODUCTION

## SCOPE

This report describes the methods and results of a soil sampling survey on various areas of the Tudor Property. Locations and results of the soil survey are plotted on maps included with this report. The maps are at the scale of 1:2,500.

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# LOCATION, ACCESS, OWNERSHIP

The Tudor Property is located in Tudor Township (Figure 1). The area is centered on latitude 44° 47' N, longitude 77° 34' E and is covered by the topographic sheet: 31C\13 Coe Hill (Figure 2).

The property is consists of 14 mining claims containing 43 units. Claim ownership is equally divided by Robert Dillman of Mount Brydges, Ontario and Jim Chard of Marmora, Ontario. Figure 3 summarizes the claim group. The claim numbers and locations are listed as:

Claim Number	Lots	Conce	Concessions	
1195172	1 to 4	XV		
1195188	5 to 6	XV		
1195192	3 to 6	XIV	N. 1\2	
1195189	4	XIII	N. 1\2	
	4	XIV	S. 1\2	
820718	5	XIV	S. 1\2	
1195173	6	XIV	S. 1\2	
1195190	7	XIII	N. 1\2	
	7	XIV		
820719	5	XIII	N. I\2	
820720	6	XIII	N. 1\2	
1195191	4 to 5	XIII	S. 1\2	
820721	6	XIII	S. 1\2	
1195170	8 to 10	XIII	S. 1\2	
1195171	10 to 12	XII	N. 1\2	
1076809	7 to 8	XII		
	7 to 8	XI		

The property is seasonably road accessible. It can be reached from the town of Gilmour located on Highway 62 by traveling northeast towards Wadsworth Lake on the paved County road running through the town. 3 km northeast from Gilmour is the Pine Ridge road. Continue south on the Pine Ridge road for 5.5 km to the Hydro access road. The property begins at the







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FIGURE 3. CLAIM DISTRIBUTION TUDOR GOLD PROSPECT power line. Both roads give good access to different areas of the property. Central and east regions are best accessed by four wheel drive. The south area of the property can be reached by a new logging road constructed east from the Pine Ridge road south of the power line.

## **REGIONAL GEOLOGY**

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The Tudor property is located within the central metasedimentary belt of the Elzevir Terrain of the Grenville Province. The age of the rocks in the area are Proterozoic. Figure 4 summarizes local geology (S.B. Lumbers and Assistants, 1961).

The property is underlain by mafic metavolcanic flows, metasedimentary schists and felsic tuff. The entire sequence has been deposited within a marine environment. The metasedimentary rocks consist of clastic rocks, carbonates and fine-grained argillaceous units. Much of the clastic material has been eroded from a nearby volcanic terrain. The metavolcanic rocks occur as flows and sills of basaltic and gabbroic material. Tuffaceous felsite units trend northeast-southwest and east-west through the central area of the property. The felsic units are variably sheared and moderately foliated.

Units have been intruded by fine-grained felsic and mafic dikes and sills. The intrusions are though to be associated with the formation of the Lingham Lake Intrusive Complex, a large differentiated plutonic body located east boundary of the township.

A trondhjemite body outcrops on the east boundary of the township. The unit is believed to precede the formation of the Lingham Lake Complex.

Most geological formations have been tilted vertically or dip steeply towards the east or west. The general trend of schistosity is northeast to southwest.

Rocks within the township have been metamorphosed to the degree of high greenschist. Local areas exist where the maximum grade has reached the low to moderate amphibolite facies. Metamorphic grade appears to increases towards the east. It is largely controlled by the proximity to the Lingham Lake Complex and smaller granitic intrusions. Contact metamorphic aureoles exist around some of the larger intrusions in the township.

The property overlies a section of the Moira River Shear Zone. The structure generally follows the Moira River for approximately 30 km. Rock units within the fault zone are variably sheared and deformed. There are local areas of quartz veining and stringer systems of Fe-Mg carbonate mineralization and alteration associated with shearing. In the north region of the property, rock units immediately east of the river have strong planar schistosity.

Younger structures, possibly of Paleozoic age, trend west and northwest throughout Tudor Township. Two faults of this orientation cross the north and central region of the property and possibly a third fault may cut across the south area of the property. Tension fractures or gashes appear in outcrops close to the fault zones.


Quartz veining and quartz-ankerite stringer stockwork systems with associated pyrite and arsenopyrite mineralization occur in structures within the Moira River Shear Zone and marginal to the Lingham Lake Complex. Gold is commonly found with the sulphide mineralization and has been mined in the past at several localities along strike from the property. Gold mineralization on the property is either associated with arsenopyrite and pyrite mineralization with veining and shearing in felsite rocks or with quartz veins and Fe-Mg carbonate alteration in sheared metavolcanics.

The Main Prospect is located along a 1400 m section of felsite rock striking north through the southern and central area of the property. The felsite unit dips steeply towards the west and ranges 50 to 125 m wide. Block-faulting of the unit on breaks orientated almost perpendicular to the strike accounts for the variable width of the unit. Continuous shearing is exposed by trenching along the east side of the unit for 1400 m. Subparallel shear zones feather away from the east contact forming 1 to 10 'en echelon' shoots. The shoots average 1 to 8 m wide and continue along strike for 200 to 800 m.

Gold mineralization occurs with arsenopyrite and pyrite in sheared felsite. Gold also occurs with silicification and carbonate alteration occurring in and marginal to the shearing. Gold values of sheared felsite range 0.5 to 79.5 g/t. Native gold has been observed at one location within the Main Prospect. Based on geological evidenced gained from trenching and limited diamond drill testing it is apparent several shoots and areas within the felsite contain economic values of gold. Conservative figures based on previous surveys suggest possible resources of 4.8 million tonnes grading 2.2 g/t and an addition 1.1 million tonnes grading 5.0 g. New discoveries of gold made in 1997, in the south extension of the felsite unit hosting the Main Prospect suggests the deposit may extend for an additional 1600 to 2000 m.

The Vardy Prospect, discovered in 1997 is located in the north central area of the property. Gold mineralization occurs with arsenopyrite and pyrite mineralization in sugary quartz-carbonate veins and stockwork in a zone of sheared and carbonated mafic metavolcanic rocks. The zone is up to 125 m wide and traceable over 1000 m along strike. The alteration-deformation occurs in mafic metavolcanic rocks contacting metasedimentary rocks and magnetite iron formation. The size of the zone remains open along strike. Quartz veins assaying up to 18 g/t gold and associated mineralized fractures have widths exceeding 2.5 m. Native gold occurs with arsenopyrite-bearing sugary quartz at one location. Carbonated-arsenopyrite schists associated with the shearing have returned assays of 22.1 g/t gold. The shearing and alteration is thought to be associated with the Moira River Shear Zone.

#### **PREVIOUS WORK**

Tudor Township has a fairly extensive history of mineral exploration and mining activities throughout most of the township. Minerals exploited include: gold, silver, lead, zinc, iron and marble. Other occurrences include: copper, nickel, palladium and titanium. Gold has been produced in the last 100 years at the Craig mine located 10 km south of the property and at the Gilmour mine in Grimsthorpe Township located 5 km northeast of the property. Recently, the Madoc Mining Company has constructed underground developments on a gold deposit located at Bannockburn in Madoc Township 17 km south of the property.

In 1949, the Geophysical Section of the Geological Survey of Canada flew an aeromagnetic survey over the proposed area. The survey suggests two trends exist that represent rock units orientated at N-S and NE-SW. The intersection of the different trends occurs in the area of the Moira River coinciding with the Moira River Shear Zone.

In 1961, the area of the property was included in a geological map of Tudor Township produced by S.B. Lumbers on behalf of the Ontario Geological Survey.

The claims 820718 to 820721 inclusive, have seen extensive prospecting activities. There are no records of work prior to 1969 although evidence has been found of early prospecting activities. Several debris-filled and overgrown pits have been found throughout the property for which there are no records.

In 1969, Lumbers writes that while carrying out a regional mapping program for the Ontario Department of Mines, he located and sampled an open cut on the property (SO 820719). The open cut contains a 50-60 cm wide quartz vein hosted in potassic rhyolite (felsic unit). The vein and wallrock assayed 0.01 oz/ton and 0.03 oz/ton Au respectively.

In 1970, Toronto based prospector R.B. England staked the south half of lot 5, concession XIV (currently 820718). He reported assays of 0.06 oz/ton Au from a pit he blasted in the felsic unit. He reports a second gold occurrence on the claim located in the metavolcanic rocks and metasedimentary schists under the power line. This occurrence has not been relocated. England eventually allowed the claim to lapse.

In 1985, Dillman and Chard staked the four claims: 820718 to 820721 inclusive covering the north half of the felsite body and the reported gold occurrences. Between 1985 and 1989, work on the claims included: line cutting, magnetic and VLF electromagnetic geophysical surveys, rock sampling and soil geochemistry. The majority of this work was concentrated on the felsite unit. Results of the magnetometer survey defined the felsite body as a distinct "low" magnetic response in relation to surrounding country rock. The VLF survey outlined a weak conductor along most of the east side of the felsic unit. The soil survey showed a continuous gold-arsenic anomaly along 1300 m of strike length of the felsic unit tested. Prospecting lead to several spot occurrences of gold in the felsite with values of 0.24 oz/ton Au.

During the spring of 1989, Hol-Lac Gold Mines Limited optioned the property from Dillman and Chard. Through an operating agreement with Homestake Minerals, Hol-Lac gave exploration rights to Homestake.

During the fall of 1989 until 1991, Homestake completed line cutting, geological mapping and trenching of the felsite unit, additional soil sampling, an IP survey and 335 m of diamond drilling in 5 drill holes. Results of the IP survey showed weak responses coinciding with soil anomalies over the felsic unit. A second soil-IP anomaly was located east of the felsic unit. Results of the diamond drilling showed gold values in all holes drilled on the felsic unit. The most significant results included a 5 m interval in drill hole DT-90-2 which assayed 6.3 g/t over 2.5 m and included 11.7 g/t over 1.0 m. DT-90-5 intersected 33.5 m averaging 0.59 g/t and contained several sections assaying 2.5 - 2.6 g/t over 0.5 m and a lower interval of 1.86 g/t over 2.0 m. Homestake allowed the option to lapse in the spring of 1991. In the fall of 1993, Chard with the aid of a grant through the Ontario Prospectors Assistance Program (file: OP93-631), recut the grid, cleaned and sampled old pits and various mineralized zones, collected addition soil samples and relocated previous drill sites.

In March of 1994, the property was optioned to 1053825 Ontario Inc. In an operating agreement with Romfield Building Corporation, 18 trenches were completed across the felsic unit over a strike length of 1300 m. The trenching revealed 6-10 mineralized shears with related silicification and quartz-ankerite stringer systems with pyrite and arsenopyrite. The trenches were systematically channel sampled using a diamond blade saw. Channel samples of the shears averaged 1.0-19.1 g/t over widths of 0.5-5.0 m.

Romfield completed 499 m of diamond drilling in 7 holes during February and March of 1995. During the program, drill hole DT-95-12 intersected 2.68 g/t Au across 1.8 m and a lower section of 2.42 g/t over 22.6 m. This hole included separate intervals assaying 7.59 g/t over 1.8 m and 3.93 g/t across 5.6 m. DT-95-11, drilled above DT-95-12 intersected 1.8 g/t across 3.1 m including a 1.1 m interval assaying 3.0 g/t Au. A second zone lower in the hole returned 1.7 g/t across 8.5 m and included a 1.1 m section of 5.3 g/t Au. Holes DT-95-8 and DT-95-9 drilled 350 m south returned 7.6 g/t across 2.3 m and 6.47 g/t over 1.4 m respectively. Hole DT-95-6 drilled an additional 68 m south returned 2.44 g/t across 1.1 m. A second hole at this location returned 1.3 g/t across 1.5 m and a lower interval of 1.2 g/t across 1.0 m. Hole DT-95-10 located 50 m south returned 1.5 g/t over 3 m.

In the spring of 1996, Dillman and Chard terminated the option agreement with Romfield. Currently, the property is not under any option agreement with any party.

Elsewhere on the property, in 1994, local prospector J. Laidlaw completed magnetic and VLF surveys over part of XV, concession 1. He attributes several magnetic and VLF responses as local concentrations of iron formation.

In 1997, an OPAP grant to Dillman (OP97-170) provided funding for geological and prospecting surveys on new claims staked in the spring by Chard. The surveys led to the discovery of new zones of gold mineralization in the north area of the property. An EM-VLF survey was completed over the new prospects. Additional gold mineralization was discovered in the felsite unit south of the Main Prospect. The new discoveries were staked by Dillman in the fall of 1997.

Currently, diamond exploration is occurring south of the Tudor Property. The exploration is preformed on behalf of Lydia Consolidated Diamond Corporation.

#### **II. SOIL SURVEY**

#### LOGISTICS

Field work for the soil survey was completed between October 19, 1998 to November 3, 1998. 7 days were devoted during this time towards collecting 'B' horizon soil samples. A total of 374 samples were collected from the property.

The survey was completed by R. Dillman of Mount Brydges, Ontario and Jim Chard of Marmora, Ontario. Samples were collected at 12.5m intervals on flagged grid lines spaced 50m apart.

The soil samples were sent to Lakefield Research located in Lakefield, Ontario and analyzed for gold by standard fire assay methods. At the lab, 250g was selected from each sample to be prepared for analysis. Each sample was pulverized and screen to -150 mesh. A 30g fraction was removed for fire assay. Assay certificates provided from the lab for each analysis are included with this report.

## RESULTS

The survey focused on five areas on the property with the purpose of establishing strike extensions and continuity of the gold occurrences on the property.

## South Extension of the Felsite Unit

Most of the survey covered the felsite unit south of the Main Prospect. 252 soil samples were collected on 50m spaced lines across the unit between 15+00S and 31+00S.

Relative to the north area of the unit, the south extension is poorly exposed due to thicker soil accumulation. The survey suggests background gold content in the soils over felsite is <0.02 g/t (<20 ppb). Due to the increase in overburden, assays of 0.04 g/t or more are considered anomalous.

The survey defined a 300m anomaly extending on the east side of the felsite unit between 15+00S and 18+00S. The anomaly has gold values over 35x background (0.71 g/t). The location coincides with outcrop mineralization located at 16+00S and 17+50S. The anomaly represents the extension of mineralization exposed in Trench 14S, on the east side of the felsite unit.

The soil survey detected an anomaly with gold values 6x background extending 50m between 20+00S and 20+50S. The anomaly coincides with a gold occurrence on the east side of the unit at 20+25S. The soil anomaly and bedrock occurrence of gold are believed to be the extension of the soil anomaly and bedrock occurrences detected between 14+00S to 18+00S.

Two single station gold anomalies were detected in the felsite at 27+00S and 27+50S. The second location was taken within several metres of a gold occurrence discovered in 1997. The sample assayed over 31x background (0.63 g/t). The second anomaly was detected in a broad-low area between the pits at 27+50S and 26+75S. The anomaly is 2x background.

## North of the Felsite Unit

Three lines of soil samples were collected between 2+00N and 4+00N. It was hoped the survey in this area would provide some evidence to suggest gold mineralization exposed and the felsite continue northward to the gold occurrence found in 1997 in felsite located on 4+00N. Outcrops of felsite exposed at the hydro power line show evidence of the unit being cut off by

shearing or faulting along north orientated breaks. It is possible the unit is merely displaced although this can not be confirmed due to overburden north of the power line.

A multi-station anomaly was detected on 2+00N. The anomaly shows gold values 2x to 6x background (0.12 g/t). The anomaly is slightly west of the projected trend of the felsite north of the power line but coincides with the expected location of the felsite if the unit was displaced faulting.

Soil samples taken along 3+50N and 4+00N did not locate anomalous areas of gold mineralization. Line 4+00N crossed mineralized felsite.

#### 9+00N

A single line of soil samples were collected south of an area of gold bearing felsite. The sampling did not detect anomalous gold mineralization across the line. A sample 25m west of the baseline showed only a slight increase in gold mineralization (0.03 g/t). Fe-carbonated matic metavolcanic outcrops were noted close to the sample site.

#### 15+00N to 15+50N

Two lines of soil samples were collected along 15+00N and 15+50N to test for the extension of two mineralized felsite units found in the vicinity of 14+50 to 14+75N. Some prospecting in the area found the felsite to continue northward to 15+25N.

A single station gold anomaly was detected 12m west of the west felsite unit. The soils at the sample site show over 29x (0.59 g/t) the average background gold content. A weak anomaly was located 25m west of the east felsite unit. A single station assayed 0.03 g/t, only slightly above background.

Rock samples of arsenopyrite in felsite units have assayed only low gold values. The sample location west of the west felsite body could be detecting some stronger undiscovered gold mineralization.

## Vardy Prospect

Seven lines of soil samples were collected between 11+00N and 14+00N. The survey covers a section sheared and carbonated metavolcanics hosting the various gold occurrences defining the Vardy Prospect (Figure 5). The results of the sampling outlined 4 multi-lined gold anomalies within confines of the shear. The soil anomalies are superimposed over local zones of intense deformation and alteration within the shears. Soil anomalies occur over several gold showings within the shear. The most consistent anomaly extends for the entire 300m of the shear tested by the survey. The anomaly contains gold values 16x (0.32 g/t) background. Outcrops along the trend are very sheared and contorted. Rock samples of fine sulphides and alteration



## VARDY GOLD PROSPECT; Tudor Twp., Ontario

Gold mineralization has been discovered in intensely sheared and carbonated mafic metavolcanic rock. The zone has been traced for 350m and remains open along strike. Significant alteration extends across strike for a distance of 175m and is bounded by magnetite iron formation and pyritic metasediments. Soil samples taken at 12.5m intervals on lines 50m apart define a continuous anomaly 300m long and several parallel anomalies with gold values ranging to 0.59 g/t. Bedrock and float material discovered along the zone consists of arsenopyrite bearing quartz veins and quartz-carbonate veins up to 2.5m wide, pyritic chlorite-carbonate material and native gold bearing quartz-carbonate alteration and recrvstallization.

01

have shown moderate gold values ranging 2.3 to 6.8 g/t. Native gold occurs in a quartz vein at the north end of the soil anomaly. The strike extent of this anomaly remains open in each direction.

A soil anomaly occurs along the west boundary of the shear zone between 11+00N and 13+50N. The anomaly contains gold values 12x background. Outcrops along the anomaly are strongly altered and the schistosity of the sheared metavolcanic is very contorted. A grab sample of Fe-carbonated-chloritic schistose material with fine pyrite returned low gold values, assaying 0.19 g/t. The north end of the anomaly is coincident with a weak VLF conductor detected by a survey in 1997.

On the eastern margin of the shear, a soil anomaly occurs between 12+50N and 13+00N. The anomaly follows the contact of the shear zone with pyritic metasedimentary schists and iron formation. The anomaly contains a gold content 25x (0.5 g/t) background. A quartz vein on the contact of the shear is coincide with the soil anomaly at 13+00N. Assays of rock samples taken from the quartz vein average 4 to 5.7 g/t gold.

## **III. CONCLUSIONS AND RECOMMENDATIONS**

The results of the soil survey over various areas of the Tudor Property are encouraging and provides evidence additional gold mineralization occurs along strike from the known gold occurrences. Based on the results, additional work is recommended in some areas.

On the south extension of the felsite, the thickness of overburden over the unit may have masked accurate detection of gold mineralization in the felsite by 'B' horizon sampling. It is believed humus sampling would be more appropriate from deeper overburden conditions. Humus sampling should be preformed on lines south of 22+00S. Trenching several of the anomalies detected in this area is also recommended. Targets included gold mineralization on 16+00s, 17+50S, 20+25S and on the small anomaly on 27+00s between the gold occurrences located to the north and south.

Humus sampling is recommended in the area north of the power line. Results of this survey suggest gold mineralization continues north of the power line. Overburden conditions prevented accurate mineral detection north of line 2+00N.

Additional soil sampling is recommended on the south area of the Vardy Prospect. Overburden thickness is thin and 'B' horizon sampling has proven very effective in delineated gold-bearing horizons within the shear. Trenching is recommended over some of the bedrock occurrences of gold within the shear and between some of the occurrences if warranted. The soil survey should be used to locate targets during this phase of the program.

Page -14-

A budget to complete the various surveys include:

Humus Sampling		
Sample Collectio	n	\$2,500
Sample analysis 3	350 samples @ \$17/sample	7,000
Trenching		4,000
Washing and sam	ple collection	3,000
Sample analysis	50 samples @ \$17/sample	850
Supervision		3,500
Maps and reports	<u>1,500</u>	
		\$22,350

Respectfully submitted,

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Robert J. Dillman B.Sc Geologist

January 18, 1999

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## CERTIFICATE

I, ROBERT JAMES DILLMAN, do hereby certify as follows:

- [1.] I am a Mining Exploration Geologist and that I reside and carry on business at 8901 Reily Drive, in the town of Mount Brydges, Ontario.
- [2.] I am a Graduate of the University of Western Ontario, and hold a Bachelor of Science Degree and majored in Geology.
- [3.] I have been practicing my profession as a Geologist since 1992.
- [4.] I am a Licenced Prospector in Ontario and have been actively engaged as a **Professional Prospector since 1978.**
- [5.] My report, dated January 9, 1999, titled: "RESULTS OF 'B' HORIZON SOIL SURVEY, TUDOR GOLD PROPERTY, TUDOR TOWNSHIP, ONTARIO" is based on information collected by myself between October 19, 1998 and January 18, 1999. Any other information gathered from other sources has been cited in this report.
- [6.] The information given in this report is as accurate as to the best of my knowledge and I have not stated false information for personal gain.
- [7.] I **authorize** the use of this report or any part of **only if** credit is given to the author or his sources.
- [8.] I have 50% ownership in the Tudor Property.
- [9.] I am a member of the Geological Association of Canada.

ROBERT JAMES DILLMAN, B.Sc. GEOLOGIST

Dated at Mount Brydges, Ontario This 18<sup>th</sup> day of January, 1999 .

## LAKEFIELD RESEARCH LIMITED

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R. Dillman

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> 8901 Reily Drive RR5 Mount Brydges, Ont, NOL 1W0 - CANADA

Fax : 519-264-9278

Lakefield, November 16, 1998

Date Rec. : October 30, 1998 LR. Ref. : OCT9148.R98 Reference : N/A Project : 9802953

## CERTIFICATE OF ANALYSIS

No.	Sample	ID		Au
				g/t
1	\$C-1			0.06
2	SC-2		<	0.02
3	SC-3		<	0,02
4	SC - 4		<	0.02
5	SC-5			0.02
7	SC-6		<	0.02
8	SC - 7		~	0.02
9	SC-8			0.02
10	SC-9		<	0.02
11	SC-10		<	0.02
12	SC-11		<	0.32
13	SC-12		<	0.02
14	SC-13		<	0.02
15	SC-14		۲	0.02
16	SC-15		<	0.02
17	\$C-16		<	0.02
10	SC-17		<	0.02
19	SC-10		<	0.02
20	SC-19			0.71
21	SC-20		۲	0.02
22	\$C-21		ح	0.02
23	SC-22		<	0.02
24	SC-23		<	0.02
25	SC-24		ų,	0.02
27	SC-25			0.05
28	SC-26			0.06
29	SC-27			0.02
30	SC-28		<	0.02
31	SC-29		<	0.02
32	90-30		<	0.02
33	SC-31			0.03
34	SC-32		<	0.02
35	SC-33			0.33
36	SC-34			0.09
37	SC-35		<	C.02
38	SC-36		<	C.02
39	SC-37		<	0.02
40	SC-38*			0.12
41	SC-39		<	9.02

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No.	Sample 1D	Au
	-	g/t
42	SC-40	0.02
43	SC-41	< 0.02
44	SC-42	< 0.02
45	SC-43	< 0.02
47	SC-44	0.02
48	SC-45	< 0.02
49	SC-46	< 0.02
5C	SC-47	< 0.02
51	SC-48	< 0.02
52	SC-49	< 0.02
53	SC-50	< 0.02
54	\$C-51	< 0.02
55	\$C-52	< 0.02
56	\$C-53	< 0.02
57	SC-54	< 0.02
58	SC-55	< 0.02
59	SC-56	< 0.02
60	SC-57	< 0.02
61	SC-58	< 0.02
62	SC-59	< 0.02
63	SC-60	< 0.02
64	SC-61	< 0.02
55	SC-62	0.02
57	SC-63	< 0.02
68	SC-64	< 0.02
69	SC-65	0.02
70	SC-66	< 0.02
71	SC-67	< 0.02
72	SC-68	< 0.02
73	SC-69	< 0.02
74	SC-70	< 0.02
75	SC-71	< 0.02
76	SC-72	< 0.02
77	SC-73	< 0.02
78	SC-74	0.02
79	SC-75	< 0.02
80	SC-75	< 0.02
81	SC-77	< 0.02
82	50-78	< 0.02
04 04	5C-/9	< 0.02
04 02	34-84 80-81	
03 87	3C-01 50-82	
88	SC-83	
90 90	SC-64	2 0 05
9n	50-85	< 0.VE
Q1	50.96	2 0 02
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page 2/6

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OCT9148.R98

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No.	Sample ID	Au
		g/t
92	SC-07	< 0.02
93	SC-88	< 0.02
94	SC-89	< 0.02
95	SC-90	< 0.02
96	SC-91	< 0.02
97	SC-92	< 0.02
98	SC-93	< 0.02
99	SC-94	< 0.02
100	SC-95	< 0.02
101	SC-96	< 0.02
102	SC-97	< 0.02
103	SC-95	0.63
104	SC-99	< 0.02
105	90-100	< 0.02
107	\$C-101	< 0.02
108	SC-102	0.02
109	SC-103	< 0.02
110	SC-104	< 0.02
111	SC-105	< 0.02
112	\$2-106	< 0.02
113	SC-107	< 0.02
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125	50-119	< 0.02
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128	SC-121 67-122	< 0.02
129		< 0.02
130	SC~223	< 0.02
132	SC-124	< 0.02
132	20-102 20-102	< C 02
134	80-127	× 0.02
135	SC-128	2 0.02
136	SC-129	< 0.02
137	SC-130	< 0.02
138	SC-131	< 0.02
139	SC-132	0.04
140	SC-133	< 0.02

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No.	Sample ID	Au
	-	g/t
141	50-134	< 0 02
142	SC-135	< 0.02
143	SC-136	< 0.02
144	SC-137	< 0.02
145	SC-138	< 0.02
147	SC-139	< 0.02
148	SC-140	< 0.02
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150	SC-142	< 0.02
151	SC-143	< 0.02
152	SC-144	< 0.02
153	SC-145	< 0.02
154	SC-146	< 0.02
155	SC-147	< 3.02
156	SC-148	< 0.02
157	5 <b>C-149</b>	< 0.02
158	SC-150	< 0.03
159	SC-151	< 0.02
160	3C-152	< 0.02
161	SC-153	< 0.02
162	SC-154	< 0.02
163	SC-155	< 0.02
164	SC-156	< 0.02
165	\$C-157	< 0.02
167	\$C-158	< 0.02
158	SC-159	< 0.02
169	SC-160	< 0.02
170	SC-161	< 0.02
171	SC-162	< 0.02
172	SC-163	< 0.C2
173	SC-164	< 0.02
174	SC-165	< 0 02
175	9C-166	< 0.02
176	SC-167	< 0.02
177	SC-168	< 0.02
178	SC-169	< 0.02
179	SC-170	< 0.02
190	SC-171	< 0.52
181	SC-172	< 0.32
197	SC-173	< 0.02
103	20-1/4	< 0.02
104	36-113	< 0.02
107	SC-177	< 0.02 > 0.05
100	50-17B	× 0.02
100	85-175 86-175	V.V2
107	50-179 50-180	€ U.V∠ ~ 0.02
190	00-190	< U.Ų∠

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No.	Sample	ID	Au
			g/t
191	SC-101	•	< 0.02
192	SC-182	*	< 0.02
193	SC-163		< 0.02
194	SC-184		< 0.02
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210	SC-199		< 0,C2
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217	SC-206		0.04
218	SC-207		< 0.02
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220	SC-209		< 0.02
221	SC-210		< 0.02
222	SC-211		< 0.02
223	SC-212		0 13
224	SC-213		< 0.02
225	SC-214		< 0.02
227	\$C-215		< 0.02
228	90-216		< 0.02
229	SC-217		< 0.02
230	SC-218		< 0.02
231	SC-219		< 0.02

-- Check --238 SC-19 0.80

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R. Dillman 8901 Reily Drive

RR5 Mount Brydges, Ont, NOL 1W0 - CANADA

Attn : R. Dillman Fax : 519-264-9278 Lakefield, November 16, 1998

Date Rec.	:	November 3, 1998
LP. Ref.	÷	NOV9006.R98
Reference	:	N/A
Project	:	98083002

## **CERTIFICATE OF ANALYSIS**

No.	Sample ID	Au g/t
1	SC 220	< 0.02
2	SC 221	< 0.02
3	SC 222	0.23
4	SC 223	< 0.02
5	SC 224	< 0.02
ę	SC 225	< 0.02
7	SC 226	< 0.02
9	SC 227	< 0.02
9	SC 228	< 0.02
10	SC 229	< 0.02
11	SC 230	< 0.02
12	SC 231	< 0.02
13	SC 232	< 0.02
14	SC 233	< 0.02
13	SC 234	< 0.02
16	SC 235	< 0.02
17	SC 236	0.02
18	SC 237	< 0.02
19	SC 238	< 0.02
20	SC 239	< 0.02
21	SC 240	< 0.02
22	SC 241	< 0.02
23	SC 242	< 0.02
24	SC 243	< 0.02
25	SC 244	< 0.03
26	SC 245	< 0.02
27	SC 246	< 0.02
28	SC 247	< 0.03
29	SC 248	• 0.02
30	SC 249	< 0.02
31	SC 250	0.02
32	SC 251	0.04
33	SC 252	5.03
34	SC 253	0.21
35	SC 254	0.15
	SC 235	< 0.02

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FAX: 705-652-6441

NOV9006.R98

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No.	Sa	mple	ID		Au
					g/t
37	۶C	256			0.03
38	ŞÇ	257			0.35
39	SC	258			0.03
40	SC	259			0.27
41	SC	260			0.05
42	50	261		<	0.02
43	SC	262			0.03
44	50	263			0.50
45	SC	264			0.02
46	SC	265			0.02
47	ŞC	266		<	0.02
4.8	SC	267			0.04
49	SC	268		<	0.02
50	SC	269			0.04
51	SC	270			0.03
52	ŞC	271			0.03
53	SG.	272		<	0.02
54	ŞC Ga	275			0.22
55	90 60	274			0.02
50 57	ac ac	213		~	0.02
5/	50	270		5	0.02
50	50	2779		~	0.02
52	50	270		-	0.02
	80	220		•	0.02
67	er	200			c 02
62	30	282		`	0 04
64	sc	202			0 02
65	SC	284		č	0.02
66	SC	285		•	0.02
67	SC	286		<	0.02
68	SC	287			0.04
69	SC	288		<	0.02
70	SC	289			0.09
71	SC	290			0.06
72	SC	291		<	0.02
73	SC	292		<	0.02
74	SC	293		<	0.02
75	SC	294		<	0.02
76	SC	2 <b>95</b>		<	0.02
77	SC	296		<	0.02
78	\$C	297		<	0.02
79	SC	298		۲	0.02
80	sc	299		<	0.02
81	SC	300		4	0.02
82	SC	301			0.02
63	sc,	302			0.12

page 2/4

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Phone : 705 652-2038

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NOV9006.R98

No.	Sau	nple	ID		Au
					g/t
84	SC	303			C.05
85	\$C	304		¢	0.02
86	SC	305			0.02
67	SC	306		4	0.02
88	SC	307		¢	0.02
89	SC	368		۲.	0.02
90	ŞC	309		<	0.02
91	SC	310		<	0.02
92	ŞC	311		<	0.02
93	SC	312		<	0.02
94	SÇ	313		~	0.02
95	SC	314		<	0 02
96	SC	315		<	0.02
97	SQ	316			0.03
<b>9</b> 2	SC	317		<	0.0 <b>2</b>
99	SC	310		<	0.02
100	SC	319		<	0.02
101	SC	320		<	0.02
102	SC	321		<	0.02
103	SC	322		<	Ú.02
104	sc	323		4	0.02
105	SC	324		~	0.02
106	SĆ	325		<	C.02
107	SC	326		•<	0.02
108	SC	327		<	0.02
109	SC	328			0.02
110	SC	329		<	0.02
111	SC	330		<	0.02
112	SC	331			0.02
113	SC	332		ج.	0,02
114	SC	333		<	0.02
115	SĊ	334		<	0.02
116	SČ	335			0.59
117	SC	336		۲.	0.02
119	SC	337		<	0.02
119	SC	338		<	0.02
120	SC	339			0.03
121	SC	340		~	0.02
122	se	341		<	0.02
123	SC	342		*	0.02
124	SC	343		<	0.62
125	SC	344		<	0.02
26	90	345		<	0.02
127	50	546		<	0.02
120	50	347		۰. ب	0.02
116 116	30 97	240			0.02
	<b>.</b>			-	~

page 3/4

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NOV9006.R98

No.	8a	mple	ID		Au
					g/t
131	sc	350		<	0.02
132	SC	351		<	0.02
133	SC	352		<	6.02
134	SC	353			C.13
135	SC	254			0.02
135	SC	355		<	0.02
137	SC	356			0.04
130	SC	357			0.03
139	ŞÇ	358		<	0.02
140	SC	359		<	0.02
141	SC	360		<	0.02
142	SC	361			0.24
143	SC	362		<	0.02
144	se	363		<	0.02
145	SC	364			0.32
146	SÇ	365			0.02
147	SC	366		<	0.02
148	\$C	367			0.10
149	SC	368		<	C.02
150	SC	369		¢	0.02
151	SC	370			0.04
152	\$C	371			0.07
153	SC	372			0.06
154	SC	373		<	0.02
155	\$C	374		<	0.02

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NOV9005.R98

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No.	Sa	mple ID	)	Au g/t
C	hec	<b>k</b>		
179	SC	239	<	0.32
100	SC	259		0.27
191	SC	279	<	0.02
182	SÇ	299	<	0.02
183	SC	319	<	C.02
184	SC	339		0.03
185	SÇ	359	۲	0.02

Marin

Roch Marion, B.Sc., C.Chem. Assistant Manager, Analytical Services

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## A MEMBER OF IAETL CANADA

Accredited by the Standards Council of Canada in partnership with CAEA), to the ISO/IBC Guide 25 standard for specific registered tests. The analytical results reported herein refer to the samples as received. Reproduction of this analytical report is full or in part is prohibited without prior written approval.



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N.T.S. 31C/13

## RESULTS OF PROSPECTING AND ROCK SAMPLING TUDOR GOLD PROPERTY TUDOR TOWNSHIP, ONTARIO

\$



## 2.19375

PREPARED BY: ROBERT J. DILLMAN 8901 REILY DRIVE MOUNT BRYDGES, ONTARIO NOL 1W0 (519) 264-9278

**JANUARY 16, 1999** 

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FIGURE 4: REGIONAL GEOLOGY



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## RESULTS OF PROSPECTING AND ROCK SAMPLING TUDOR PROPERTY TUDOR TOWNSHIP, ONTARIO

#### **I. INTRODUCTION**

## **SCOPE**

This report describes the results of prospecting and rock sampling in various areas in the north region of the Tudor Property. Locations and results of the rock samples collected during survey are plotted on maps included with this report. The maps are at the scale of 1:2,500.

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## LOCATION, ACCESS, OWNERSHIP

The Tudor Property is located in Tudor Township (Figure 1). The area is centered on latitude 44° 47' N, longitude 77° 34' E and is covered by the topographic sheet: 31C\13 Coe Hill (Figure 2).

The property is consists of 14 mining claims containing 43 units. Claim ownership is equally divided by Robert Dillman of Mount Brydges, Ontario and Jim Chard of Marmora, Ontario. Figure 3 summarizes the claim group. The claim numbers and locations are listed as:

Claim Number	Lots	Conce	Concessions	
1195172	1 to 4	XV		
1195188	5 to 6	XV		
1195192	3 to 6	XIV	N. 1\2	
1195189	4	XIII	N. 1\2	
	4	XIV	S. 1\2	
820718	5	XIV	S. 1\2	
1195173	6	XIV	S. 1\2	
1195190	7.	XIII	N. 1\2	
	7	XIV		
820719	5	XIII	N. 1\2	
820720	6	XIII	N. 1\2	
1195191	4 to 5	XIII	S. 1\2	
820721	6	XIII	S. 1\2	
1195170	8 to 10	XIII	S. 1\2	
1195171	10 to 12	XII	N. 1\2	
1076809	7 to 8	XII		
	7 to 8	XI		

The property is seasonably road accessible. It can be reached from the town of Gilmour located on Highway 62 by traveling northeast towards Wadsworth Lake on the paved County road running through the town. 3 km northeast from Gilmour is the Pine Ridge road. Continue south on the Pine Ridge road for 5.5 km to the Hydro access road. The property begins at the power line. Both roads give good access to different areas of the property. Central and east regions are best accessed by four wheel drive. The south area of the property can be reached by a new logging road constructed east from the Pine Ridge road south of the power line.





FIGURE 3
CLAIM DISTRIBUTION
TUDOR GOLD PROSPECT



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## **REGIONAL GEOLOGY**

The Tudor property is located within the central metasedimentary belt of the Elzevir Terrain of the Grenville Province. The age of the rocks in the area are Proterozoic. Figure 4 summarizes local geology (S.B. Lumbers and Assistants, 1961).

The property is underlain by mafic metavolcanic flows, metasedimentary schists and felsic tuff. The entire sequence has been deposited within a marine environment. The metasedimentary rocks consist of clastic rocks, carbonates and fine-grained argillaceous units. Much of the clastic material has been eroded from a nearby volcanic terrain. The metavolcanic rocks occur as flows and sills of basaltic and gabbroic material. Tuffaceous felsite units trend northeast-southwest and east-west through the central area of the property. The felsic units are variably sheared and moderately foliated.

Units have been intruded by fine-grained felsic and mafic dikes and sills. The intrusions are though to be associated with the formation of the Lingham Lake Intrusive Complex, a large differentiated plutonic body located east boundary of the township.

A trondhjemite body outcrops on the east boundary of the township. The unit is believed to precede the formation of the Lingham Lake Complex.

Most geological formations have been tilted vertically or dip steeply towards the east or west. The general trend of schistosity is northeast to southwest.

Rocks within the township have been metamorphosed to the degree of high greenschist. Local areas exist where the maximum grade has reached the low to moderate amphibolite facies. Metamorphic grade appears to increases towards the east. It is largely controlled by the proximity to the Lingham Lake Complex and smaller granitic intrusions. Contact metamorphic aureoles exist around some of the larger intrusions in the township.

The property overlies a section of the Moira River Shear Zone. The structure generally follows the Moira River for approximately 30 km. Rock units within the fault zone are variably sheared and deformed. There are local areas of quartz veining and stringer systems of Fe-Mg carbonate mineralization and alteration associated with shearing. In the north region of the property, rock units immediately east of the river have strong planar schistosity.

Younger structures, possibly of Paleozoic age, trend west and northwest throughout Tudor Township. Two faults of this orientation cross the north and central region of the property and possibly a third fault may cut across the south area of the property. Tension fractures or gashes appear in outcrops close to the fault zones.

Quartz veining and quartz-ankerite stringer stockwork systems with associated pyrite and arsenopyrite mineralization occur in structures within the Moira River Shear Zone and marginal to the Lingham Lake Complex. Gold is commonly found with the sulphide mineralization and has been mined in the past at several localities along strike from the property. Gold mineralization on the property is either associated with arsenopyrite and pyrite mineralization with veining and shearing in felsite rocks or with quartz veins and Fe-Mg carbonate alteration in sheared metavolcanics.



The Main Prospect is located along a 1400 m section of felsite rock striking north through the southern and central area of the property. The felsite unit dips steeply towards the west and ranges 50 to 125 m wide. Block-faulting of the unit on breaks orientated almost perpendicular to the strike accounts for the variable width of the unit. Continuous shearing is exposed by trenching along the east side of the unit for 1400 m. Subparallel shear zones feather away from the east contact forming 1 to 10 'en echelon' shoots. The shoots average 1 to 8 m wide and continue along strike for 200 to 800 m.

Gold mineralization occurs with arsenopyrite and pyrite in sheared felsite. Gold also occurs with silicification and carbonate alteration occurring in and marginal to the shearing. Gold values of sheared felsite range 0.5 to 79.5 g/t. Native gold has been observed at one location within the Main Prospect. Based on geological evidenced gained from trenching and limited diamond drill testing it is apparent several shoots and areas within the felsite contain economic values of gold. Conservative figures based on previous surveys suggest possible resources of 4.8 million tonnes grading 2.2 g/t and an addition 1.1 million tonnes grading 5.0 g. New discoveries of gold made in 1997, in the south extension of the felsite unit hosting the Main Prospect suggests the deposit may extend for an additional 1600 to 2000 m.

The Vardy Prospect, discovered in 1997 is located in the north central area of the property. Gold mineralization occurs with arsenopyrite and pyrite mineralization in sugary quartz-carbonate veins and stockwork in a zone of sheared and carbonated mafic metavolcanic rocks. The zone is up to 125 m wide and traceable over 1000 m along strike. The alteration-deformation occurs in mafic metavolcanic rocks contacting metasedimentary rocks and magnetite iron formation. The size of the zone remains open along strike. Quartz veins assaying up to 18 g/t gold and associated mineralized fractures have widths exceeding 2.5 m. Native gold occurs with arsenopyrite-bearing sugary quartz at one location. Carbonated-arsenopyrite schists associated with the shearing have returned assays of 22.1 g/t gold. The shearing and alteration is thought to be associated with the Moira River Shear Zone.

## **PREVIOUS WORK**

Tudor Township has a fairly extensive history of mineral exploration and mining activities throughout most of the township. Minerals exploited include: gold, silver, lead, zinc, iron and marble. Other occurrences include: copper, nickel, palladium and titanium. Gold has been produced in the last 100 years at the Craig mine located 10 km south of the property and at the Gilmour mine in Grimsthorpe Township located 5 km northeast of the property. Recently, the Madoc Mining Company has constructed underground developments on a gold deposit located at Bannockburn in Madoc Township 17 km south of the property.

In 1949, the Geophysical Section of the Geological Survey of Canada flew an aeromagnetic survey over the proposed area. The survey suggests two trends exist that represent rock units orientated at N-S and NE-SW. The intersection of the different trends occurs in the area of the Moira River coinciding with the Moira River Shear Zone.

In 1961, the area of the property was included in a geological map of Tudor Township produced by S.B. Lumbers on behalf of the Ontario Geological Survey.

The claims 820718 to 820721 inclusive, have seen extensive prospecting activities. There are no records of work prior to 1969 although evidence has been found of early prospecting activities. Several debris-filled and overgrown pits have been found throughout the property for which there are no records.

In 1969, Lumbers writes that while carrying out a regional mapping program for the Ontario Department of Mines, he located and sampled an open cut on the property (SO 820719). The open cut contains a 50-60 cm wide quartz vein hosted in potassic rhyolite (felsic unit). The vein and wallrock assayed 0.01 oz/ton and 0.03 oz/ton Au respectively.

In 1970, Toronto based prospector R.B. England staked the south half of lot 5, concession XIV (currently 820718). He reported assays of 0.06 oz/ton Au from a pit he blasted in the felsic unit. He reports a second gold occurrence on the claim located in the metavolcanic rocks and metasedimentary schists under the power line. This occurrence has not been relocated. England eventually allowed the claim to lapse.

In 1985, Dillman and Chard staked the four claims: 820718 to 820721 inclusive covering the north half of the felsite body and the reported gold occurrences. Between 1985 and 1989, work on the claims included: line cutting, magnetic and VLF electromagnetic geophysical surveys, rock sampling and soil geochemistry. The majority of this work was concentrated on the felsite unit. Results of the magnetometer survey defined the felsite body as a distinct "low" magnetic response in relation to surrounding country rock. The VLF survey outlined a weak conductor along most of the east side of the felsic unit. The soil survey showed a continuous gold-arsenic anomaly along 1300 m of strike length of the felsic unit tested. Prospecting lead to several spot occurrences of gold in the felsite with values of 0.24 oz/ton Au.

During the spring of 1989, Hol-Lac Gold Mines Limited optioned the property from Dillman and Chard. Through an operating agreement with Homestake Minerals, Hol-Lac gave exploration rights to Homestake.

During the fall of 1989 until 1991, Homestake completed line cutting, geological mapping and trenching of the felsite unit, additional soil sampling, an IP survey and 335 m of diamond drilling in 5 drill holes. Results of the IP survey showed weak responses coinciding with soil anomalies over the felsic unit. A second soil-IP anomaly was located east of the felsic unit. Results of the diamond drilling showed gold values in all holes drilled on the felsic unit. The most significant results included a 5 m interval in drill hole DT-90-2 which assayed 6.3 g/t over 2.5 m and included 11.7 g/t over 1.0 m. DT-90-5 intersected 33.5 m averaging 0.59 g/t and contained several sections assaying 2.5 - 2.6 g/t over 0.5 m and a lower interval of 1.86 g/t over 2.0 m. Homestake allowed the option to lapse in the spring of 1991.

In the fall of 1993, Chard with the aid of a grant through the Ontario Prospectors Assistance Program (file: OP93-631), recut the grid, cleaned and sampled old pits and various mineralized zones, collected addition soil samples and relocated previous drill sites.

In March of 1994, the property was optioned to 1053825 Ontario Inc. In an operating agreement with Romfield Building Corporation, 18 trenches were completed across the felsic unit over a strike length of 1300 m. The trenching revealed 6-10 mineralized shears with related silicification and

quartz-ankerite stringer systems with pyrite and arsenopyrite. The trenches were systematically channel sampled using a diamond blade saw. Channel samples of the shears averaged 1.0-19.1 g/t over widths of 0.5-5.0 m.

Romfield completed 499 m of diamond drilling in 7 holes during February and March of 1995. During the program, drill hole DT-95-12 intersected 2.68 g/t Au across 1.8 m and a lower section of 2.42 g/t over 22.6 m. This hole included separate intervals assaying 7.59 g/t over 1.8 m and 3.93 g/t across 5.6 m. DT-95-11, drilled above DT-95-12 intersected 1.8 g/t across 3.1 m including a 1.1 m interval assaying 3.0 g/t Au. A second zone lower in the hole returned 1.7 g/t across 8.5 m and included a 1.1 m section of 5.3 g/t Au. Holes DT-95-8 and DT-95-9 drilled 350 m south returned 7.6 g/t across 2.3 m and 6.47 g/t over 1.4 m respectively. Hole DT-95-6 drilled an additional 68 m south returned 2.44 g/t across 1.1 m. A second hole at this location returned 1.3 g/t across 1.5 m and a lower interval of 1.2 g/t across 1.0 m. Hole DT-95-10 located 50 m south returned 1.5 g/t over 3 m.

In the spring of 1996, Dillman and Chard terminated the option agreement with Romfield. Currently, the property is not under any option agreement with any party.

Elsewhere on the property, in 1994, local prospector J. Laidlaw completed magnetic and VLF surveys over part of XV, concession 1. He attributes several magnetic and VLF responses as local concentrations of iron formation.

In 1997, an OPAP grant to Dillman (OP97-170) provided funding for geological and prospecting surveys on new claims staked in the spring by Chard. The surveys led to the discovery of new zones of gold mineralization in the north area of the property. An EM-VLF survey was completed over the new prospects. Additional gold mineralization was discovered in the felsite unit south of the Main Prospect. The new discoveries were staked by Dillman in the fall of 1997.

Currently, diamond exploration is occurring south of the Tudor Property. The exploration is preformed on behalf of Lydia Consolidated Diamond Corporation.

## **II. PROSPECTING AND ROCK SAMPLING RESULTS.**

## LOGISTICS

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Between October 18 to December 3, 1998, 4 days were devoted to prospecting in the north area of the Tudor Property. Prospecting and rock sampling were preformed by Robert Dillman of Mount Brydges, Ontario and Jim Chard of Marmora, Ontario.

During the survey, 16 rock samples were collected of various mineralized outcrops. The samples were sent to Lakefield Research Limited in Lakefield, Ontario and assayed for gold by standard fire assay methods. In addition to gold, two samples were assayed for silver using a fire assay and two samples had a multi-element ICP scan.

Rock descriptions, locations and results of analysis are appended to this report. Maps with sample locations have been plotted at 1:2,500.

## **RESULTS AND DISCUSSION**

During the survey, particular interested was given to the Vardy Prospect, located in an area of intensely sheared and carbonated mafic metavolcanics in the central area of lot 3, concession XV. Gold has been detected in quartz veins and float found within the shear. At one locality, gold occurs in native-form with quartz.

The shear is fairly well exposed. Detailed prospecting over the shear zone established widespread fine pyrite mineralization and local areas of fine arsenopyrite mineralization. In places, the sulfides are associated with small quartz-carbonate stringers. The stringers parallel the schistosity of the metavolcanics.

Between 11+00N and 15+00N, 3 to 4 parallel areas of intense deformation and alteration occur across strike and trend in a northeast direction through the shear. The areas are characterized by contorted schistosity, intense chlorite-carbonate alteration, recrystallization and quartz-ankerite stringer systems. The areas probably represent fracture zones within the shear.

Sampling throughout the shear has shown the parallel fracture zones to be focal points of gold mineralization. The two gold bearing quartz veins occur were the fractures zones intersect the east contact of the shear and pyritic metasedimentary schists. The veins strike parallel to the direction of shearing instead of following the contact.

The strongest mineralization follows the trend between 11+00N and 15+00N at approximately 3+75W. Samples taken along the zone consisted of fine arsenopyrite and pyrite bearing carbonated schists and assayed between 0.2 and 2.3 g/t over widths less than a metre. At 11+10N, 3+60W, a sample of recyrstallized-carbonate material assayed 6.8 g/t. The sample contained small fractures filled with quartz similar in appearance to the native gold bearing quartz vein found in 1997, at 14+75N, 3+75W. Similar mineralization occurs along the trend at 14+30N, 3+50W and 13+25N, 3+70W. Assays at these sites returned 2.19 g/t and 2.33 g/t, respectively.

A soil survey, preformed in sequence with the prospecting survey outlined anomalous gold concentrations in several trends over the shear. The gold-soil anomalies coincide with areas of intense deformation and alteration within the shear where strong assays result have been achieved with rock sampling. The soil sample program suggested continuous gold mineralization occurring along the strike of the shear along the entire area tested by the survey.

Elsewhere, within the north area of the property, two small felsite units occurring between the baseline and 1+25W on line 14+00N where traced over 100 m north. Samples taken of arsenopyrite and small quartz stringers returned 0.11 g/t and 0.4 g/t. The results are consistent with several samples previously collected at line 14+00N. The units are believed to be the continuation of the mineralized felsite units found between 10+00N and 13+00N.

Further to the south, a sample was taken at 2+35S, 0+55W on the south side of the power line clearing. The sample consisted of several pieces of grey-smokey quartz with fine arsenopyrite. The float was found close to outcrops of mafic metavolcanics rocks. The sample location is situated close to a As anomaly located in 1990 during the soil survey by Homestake Minerals.

## III. CONCLUSIONS AND RECOMMENDATIONS

The results of the prospecting and rock sampling in the area of the Vardy Prospect are encouraging and suggest several areas of high-grade mineralization extend along the strike length of the alteration/deformation shear zone. Additional work is recommended on the prospect.

Additional rock sampling of the shear is recommended to decipher the association of gold mineralization to the other minerals and alteration observed in the shear. Presently, rock sampling suggests higher gold mineralization occurs in the presence of small quartz stringers with very little sulfides. There is also an association with arsenopyrite. Quartz stringers and fine sulphides are common throughout shear.

Overburden trenching is suggested on several locations within the shear. New outcrop occurrences of gold mineralization and float found in the area of 14+00N, 3+75W warrants investigation by trenching. Additional areas to be trenched include: north of line 11+00N, 3+75W and along the east contact of the shear, south of the quartz vein at 13+00N, 1+75W.

Prospecting is recommended in the vicinity of a gold-soil anomaly detected on line 15N at 1+35W. The gold content of the soil is 0.59 g/t and is situated west of arsenopyrite-bearing felsite. The felsite has only returned low gold values upon assay.

A budget to complete the various surveys include:

Prospecting	
Sample Collection	\$2,500
Sample analysis 50 samples @ \$17/sample	850
Trenching	2,000
Washing and sample collection	2,000
Sample analysis 50 samples @ \$17/sample	850
Supervision	2,500
Maps and reports	1,000
	\$11,700

Respectfully submitted,

Robert J. Dillman B.Sc Geologist

January 16, 1999

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## CERTIFICATE

I, ROBERT JAMES DILLMAN, do hereby certify as follows:

- [1.] I am a Mining Exploration Geologist and that I reside and carry on business at 8901 Reily Drive, in the town of Mount Brydges, Ontario.
- [2.] I am a Graduate of the University of Western Ontario, and hold a Bachelor of Science Degree and majored in Geology.
- [3.] I have been practicing my profession as a Geologist since 1992.
- [4.] I am a Licenced Prospector in Ontario and have been actively engaged as a **Professional Prospector** since 1978.
- [5.] My report, dated January 9, 1999, titled: "RESULTS OF PROSPECTING AND ROCK SAMPLING, TUDOR TOWNSHIP, ONTARIO" is based on information collected by myself between October 19, 1998 and January 16, 1999. Any other information gathered from other sources has been cited in this report.
- [6.] The information given in this report is as accurate as to the best of my knowledge and I have not stated false information for personal gain.
- [7.] I authorize the use of this report or any part of only if credit is given to the author or his sources.
- [8.] I have 50% ownership in the Tudor Property.
- [9.] I am a member of the Geological Association of Canada.

ROBERT JAMES DILLMAN, B.Sc. GEOLOGIST

Dated at Mount Brydges, Ontario This 16<sup>th</sup> day of January, 1999
SAMPLE NUMBER	CLAIM NUMBER	LOT AND CONCESSION	GRID COORDINATE	MAP REFERENCE	TYPE	WIDTH (m)	DESCRIPTION	ASSAY Au G/T
5237	1195172	L. 3, CONC. XV, N.½	13+20N, 1+75W	99-1A	REP. CHIPS	1.0	Very fine-grained magnetite iron formation at contact of sheared metavolcanic and pyritic metasedimentary schists. Multi- element ICP assay	0.03
5238	1195172	L. 3, CONC. XV, N.½	13+00N, 1+75W	99-1A	REP.	1.0	Resample of trench. Grab of represent mineralization from trench debris. Multi-element ICP assay + Ag	5.36 Au 0.7 g/t Ag
5246	820718	L. 5, CONC. XIV N.½	2+35S, 0+55W	99-1A	GRAB	0.4 x 0.4 x 0.3	Float on south side of powering clearing. Fine-grained smokey quartz with 5% As. Sample on As soil anomaly defined by Homestake. Several pieces.	1.28
5247	1195172	L. 3, CONC. XV, N. <sup>1</sup> / <sub>2</sub>	15+30N, 1+00W	99-1A	REP.	2.5	2.5 m wide felsite unit. Patchy As with lensy qtz stringers.	0.11
5248	1195172	L. 3, CONC. XV, N.½	15+25N, 1+40W	99-1A	REP.	2.0	2.0 m wide felsite unit. Patchy As with lensy qtz stringers.	0.40
5249	1195172	L. 3, CONC. XV, N.35	15+00N, 1+90W	99-1A	GRAB	0.5 x 0.5 x 0.5	White quartz float with vugs of ankerite. Quartz float follows draw north for 35 m. big vein. FeC in metavolcanics on marginal outcrops.	0.03
5250	1195172	L. 4, CONC. XV, N. <sup>1</sup> 2	12+25N, 3+75W	99-1A	REP.	0.75	Sheared and carbonated mafic metavolc, qtz stringers. 1%As	1.07

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SAMPLE NUMBER	CLAIM NUMBER	LOT AND CONCESSION	GRID COORDINATE	MAP REFERENCE	TYPE	WIDTH (m)	DESCRIPTION	ASSAY Au G/T
5251	1195172	L. 4, CONC. XV, N.½	12+25N, 3+76W	99-1A	REP.	0.5	Sheared and carbonated mafic metavolc, qtz stringers. 1%As	0.21
5252	1195172	L. 4, CONC. XV, N.½	11+10N, 3+ <del>6</del> 0W	99-1A	REP.	0.5	Recyrstallized metavolcanic strong Fe-Mg carb. Some quartz stringers, trace pyrite.	6.80 0.9 g/t Ag
5253	1195172	L. 4, CONC. XV, N.½	11+25N, 3+59W	99-1A	REP.	1.5	Sheared and carbonated mafic metavolcanics with qtz-carbonate stringers. 1% py +As	0.26
5254	1195172	L. 3, CONC. XV, N.½	13+10N, 1+80W	99-1A	GRAB	1.0	Sheared and carbonated mafic rock, possibly gabbro, trace pyrite.	<0.02
5255	1195172	L. 3, CONC. XV, N.½	13+25N, 3+70W	99-1A	REP.	2.0	Sheared and carbonated mafic metavolcanic, some quartz-carb stringers, traces of pyrite throughout rock. In draw, possible fault.	2.33
5256	1195172	L. 3, CONC. XV, N.32	14+30N, 3+50W	99-1A	GRAB	2.0	Sheared and carbonated mafic metavolcanic with sugary quartz stringers similar to Vardy Prospect 50N. 5% As.	2.19
5257	1195172	L. 4. CONC. XV. N.35	12+83N, 4+00W	99-1A	GRAB	5.0	Sheared metavolcanic, areas of quartz stringers and traces of pyrite.	0.19

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SAMPLE NUMBER	CLAIM NUMBER	LOT AND CONCESSION	GRID COORDINATE	MAP REFERENCE	TYPE	WIDTH (m)	DESCRIPTION	ASSAY Au G/T
5258	1195172	L. 4, CONC. XV, N.½	10+90N, 3+25W	99-1A	BEST	1.0	Sheared and recyrstallized metavolcanic strong Fe-Mg carb trace py + As	0.19
5259	1195172	L. 4, CONC. XV, N.½	11+10N, 3+59W	99-1A	BEST	0.3	Sheared and recyrstallized metavolcanic strong Fe-Mg carb on margin of quartz-carb vein? sample 5252. Patchy As.	<0.02
5260	1195172	L. 4, CONC. XV, N.½	11+10N, 3+59W	99-1A	REP.	0.3	Same as 5259. Sheared and recyrstallized metavolcanic strong Fe-Mg carb on margin of quartz-carb vein? sample 5252.	. 0.03

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Postal Bag 4300, 185 Concession St., Laketield, Ontario, KOL 2HC Phone : 705-652-2038 FAX : 705-652-6441

#### NOV9006.R98

No.	Sample	ID	Au
			g/t

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161	5237	0.03
162	5238	5.36
	<u> </u>	

270	5245	1.28
171	5247	0.11
172	5248	0.40
173	5249	0.03
174	5250	1.07
175	5251	0.21
176	5252	6.80
177	5253	0.26

page 4/5

Postol Bag 4300, 185 Concession St., Lakefield, Ontario KOL 2HO Phone : 105-652 2038 FAX : 705-652 6441

NOV9035.R98

No.	Sample II	)	Au
<del></del>			g/t
178	5254	<	0.02
C	heck		

Marin

Roch Marion, B.Sc., C.Chem. Assistant Manager, Analytical Services

A MEMBER OF JAETL CANADA

Accredited by the Standards Council of Canada in partnership with CABA), to the ISO/IBC Guide 25 standard for specific registered tests. The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior written approval.

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P.O. Box 4300, 185 Concession St., Lakelield, Ontario, KOL 2HO Phone : 705 652-2038 FAX : 705-652-6441

R. Dillman 8901 Reily Drive RR5 Mount Brydges, Ont, NOL 1W0 - CANADA

Attn : R. Dillman Fax : 519-264-9278 Lakefield, December 9, 1998

Date Rec.	:	December 4, 1998
LR. Ref.	:	DEC9018.R98
Reference	:	N/A
Project	:	9803290

## **CERTIFICATE OF ANALYSIS**

No.	Sample ID	Au g/t
נ	5255	2.33
2	5256	2.19
3	5257	0.06
4	5258	0.19
5	5259	< 0.02
6	5260 ,	0.03
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Roch Marion, B.Sc., C.Chem. Assistant Manager, Analytical Services

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### A MEMBER OF IAETL CANADA

Accredited by the Standards Council of Canada in partnership with CAEAL to the ISO/IEC Guide 25 standard for specific registered tests. The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior written approval.

Postal Bag 4300, 185 Concession St., Lakeliaid, Ontario, KOL 2HO Phone : 705-652-2038 FAX : 705 652-6441

R. Dillman 8901 Reily Drive RR5 Mount Brydges, Ont, NOL 1W0 - CANADA

Attn : R. Dillman Fax : 519-264-9278

## **CERTIFICATE OF ANALYSIS**

ICP-OES Aqua Regia Digest 4.1 Package

	No .	Sample	ID	*A] g/t	•	<b>As</b> g/t	g	•Ba g/t		Ð g/s	e t	*Ca g/t		g/	d 't	¢م g/1	<b>)</b> :	*Cr g/t	Cu g/t	ו <u>ב</u>	Pe 3/t	ç	+K g∕t	, I	*La g/t	
	161 162	5237 5238		15000 3500	68	24 000	8 8	8.8 8.8	د د	2.( 2.(	0 2	4000 430	<	5. 5.	7 ว	48	)	30 16	150	) 990 780	000	1 3	.10	V V V	50 50	
No	. Sa	mple ID		*Mg g/t	*Mn g/t	g	Mo /t	!	*N¢ g/1	A ;	N g/	li 't g	+1 g∕t	7	9/ 9/	РЪ (t	*Sb g/t	۲ و	Se /t	*5n g/t	۹ g	י <b>דם</b> 1/ד	ŗ	+¥ g/t		Zn g/t
16: 16:	52 52	37 38	14 1	000 <b>4</b> 1.00	900 190	۲ ۲	10 10		310	) )	4 8 -	6 10 5 :	000	)	3	9 4 2 4	: 20 : 20	<	50 < 50 <	20 20	< < <	10 10	ا < !	5.0 5.0	:	100 20

Roch Marion, B.Sc., C.Chem. Assistant Manager, Analytical Services

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Lakefield, November 16, 1998

Date Rec.	:	November 3, 1998
LR. Ref.	:	NOV9006.R98
Reference	:	N/A
Project	:	98083002

P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 240 Phone : 705-652-2038 FAX : 705-652-6441

R. Dillman 8901 Reily Drive RR5 Mount Brydges, Ont, NOL 1W0 - CANADA

Attn : R. Dillman Fax : 519-264-9278 Lakefield, November 27, 1998

Date Rec		November 24, 1998
LF. Ref.	:	NOV9105.R98
Reference	÷	N/A
Project	;	98083002/9802953

## **CERTIFICATE OF ANALYSIS**

\*

No.	Sample ID	λg g/t
,		
2		
:		
4	5238	0.7
5	5252	C.9
C	heck	
б	5252	0.8

Roch Marion, B.Sc., C.Chem. Assistant Manager. Analytical Services

#### A MEMBER OF IAETL CANADA

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## Declaration of Assessment Work Performed on Mining Land

Transaction Number (office use)

W9990. OOOII Assessment Files Research Imaging

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990



sections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this nt work and correspond with the mining land holder. Questions about this collection ent and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 685.

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240. - Please type or print in ink.

1. Recorded holder(s) (Attach a list if necessary)

R, J. DILLMAN	Client Number 125989
Address 8901 REILY DRIVE	Telephone Number 519 264 - 92.78
MOUNT BRYDGES ONTARIO NOLIWO	Fax Number (519) 264-92 TR
TAMES M. CHARD	Client Number 117090
RR#1 HAVELOCK	Telephone Number (613) 472-5063
ONTARIO KOL 120	Fax Number

2. Type of work performed: Check (1) and report on only ONE of the following groups for this declaration.

Geotechnical: prospecting, s assays and work under section	urveys, Physic on 18 (regs) trench	cal: drilling stripping, Ining and associated assays	Rehabilitation
Nork Type (INF. CUTTING	GENINGICAL MAG	Office Us	e
SOLL GEORHEMISTO	Commodity	1	
MANUAL TRENCH	SAYS Total \$ Value of Work Claimed 14.7	73	
Dates Work From Partormed BUT Day (R   Month 10	veer (998 Day 3   Month	12 Year 1998 NTS Reference	
Gobel Positioning System Data (If svailable)	TOWNSHIP/Ares TUDOR -	TWP. Mining Division South	In Outario
	Mor G-Plan Number M. 156	Resident Geologist District	1.

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;

- provide proper notice to surface rights holders before starting work;

- complete and attach a Statement of Costs, form 0212;

- provide a map showing contiguous mining lands that are linked for assigning work;

- include two copies of your technical report.

3. Person or companies who prepared the te	chnical report (Attach a li	ist if necessary)	_
ROBERT J. DILLMAN	 	Telephone Numb	519 264-9278
8901 REILY DRIVE.	MT. BRYDGES. 01	UT Fax Number	519 264 -9279
-ame		Telephone Numb	ăr
ddrees		Fax Number	· · · · · · · · · · · · · · · · · · ·
łame	<u> </u>	Telephone Numb	)
kdress	····	Fax Number	
(Prot Name) his Declaration of Assessment Work having cause completion and, to the best of my knowledge, the	ed the work to be performe annexed report is true.	d or witnessed the	same during or after its
Signature of Recorded Holder or Agent			Date Ma 12 / Man
igent's Address BOOL REILT DR. MT. BR	YDGESONT (519)	umber 264-9278	Fax Number (519) 264 - 927
Deened on	RECEIV	ED	
June 15/99	MAR 17 12 GEOSCIENCE ASSE	SSMENT	

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining and where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

	W9996.CC01							
Minin Norie w minin colum ndica	g Claim Number. Or If rea done on other aligible g land, show in this n the location number ted on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank, Value of work to be distributed at a future date		
•9	TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825		
•9	1234567	12	0	\$24,000	0	0		
•9	1234568	2	\$ 8,892	\$ 4,000	0	\$4,892		
1	1076809	Bunits 160kg	8.333		-	8333		
2	1195172	Bunits 160 he	3.866			3860		
3	1195192	Hunts 80 ha	439	-		439		
+	820721	lunit 20ha	2045		-	2045		
5	820718	1 units 20 he	90			90		
5								
7								
3								
9		<u> </u>						
10								
11					1	· · ·		
·2				1				
13				1				
14					1			
15								
	Column Totals	2.2 units 440 ha	14773			14,773		

1. KOBERT J. DILLMAN , do hereby certify that the above work credits are eligible under

subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done

Signature of Bacorded Holder or Agent Authorized	in Writing	Date MARCH	12.	1999	 
			,		

### 6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check ( $\checkmark$ ) in the boxes below to show how you wish to prioritize the dejetion of credits:

- 2, 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

Received Stamp		Deemed Approved Date	Date Notification Sent
		Date Approved	Total Value of Credit Approved
2241 <b>(03/67</b> )	RECEIVED	Approved for Recording by Mining Recorder (Signature)	
	MAR 17 1000 GEOSCIENCE ASSESSMENT OFFICE	2. 19	

Ministry of Northern Development and Mines

( Ontario

# Statement of Costs for Assessment Credit

W9990.00011

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 685.

Work Type	Units of Work Depending on the type of work, list the num of hours/days worked, metres of drilling, kile metres of grid line, number of samples, etc	Cost Per Unit of work	Total Cost
LINECUTTING	1.7 km 4 DAYS	\$200/DAY	800
GEOLOGICAL MAPPINY	6DAYS INCLUDES	- \$200/DAY	1200
SOIL GEOCHEMICAL SURVE	12 DAY INCLUDES	\$ 200/DAY	2400
PROSPECTING	10 DAYS INCLUDES	\$200/DAY	2000
MANUAL TREAKANG	2 DAYS	\$ 200/DAY	400
ROCK ASSAYS	36 ROCK SAMPLE	5 \$ 18.50/ SAMPLES	666
SOIL SAMPLE ASSAYS	374 SOIL SAMPLE	5 15.52 SAMPLE	5806
Associated Costs (e.g. supplies,	mobilization and demobilization	•	
SUPPLIES Flagging to	pe, thread, simple bags, prin	hier	159
Transp	ortation Costs		
ROAD	15974	m # 0.30/km	479
Food a	nd Lodging Costs		
FOOD	RECEIVED		400
LODGING			463
	MAR 17 1350 77 673 GEOSCIENCE ASSESSMENT OFFICE OFFICE	e of Assessment Work	14,773
Optimizations of Filler Discounts			

#### Calculations of Filing Discounts:

- 1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work. 2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total
- Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK	× 0.50 =	Total \$ value of worked claimed.

#### Note:

- Work older than 5 years is not eligible for credit.

- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:	
I, <u>ROBERT J. DILLMAN</u> , do	o hereby certify, that the amounts shown are as accurate as may
reasonably be determined and the costs were in	ncurred while conducting assessment work on the lands indicated on
the accompanying Declaration of Work form as	s <u>RECORDED HOLDER &amp; AGENT</u> I am authorized (recorded holder, agent, or state company position with signing authority)
to make this certification.	
	Signeture AAA

MAR. 12, 1999

Ministry of Northern Development and Mines Ministère du Développement du Nord et des Mines

May 12, 1999

ROBERT JAMES DILLMAN 8901 REILY DRIVE R R #5 MT BRYDGES, Ontario N0L-1W0



Geoscience Assessment Office 933 Ramsey Lake Road 6th Floor Sudbury, Ontario P3E 6B5

Telephone: (888) 415-9846 Fax: (877) 670-1555

Visit our website at: www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Dear Sir or Madam:

Submission Number: 2.19375

Status
Subject: Transaction Number(s): W9990.00011 Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,

110

ORIGINAL SIGNED BY Blair Kite Supervisor, Geoscience Assessment Office Mining Lands Section

# **Work Report Assessment Results**

Submission Num	ber: 2.19375			
Date Correspondence Sent: May 12, 1999		, 1999	Assessor:Lucille Jerc	ome
Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9990.00011	1076809	TUDOR	Deemed Approval	April 28, 1999
Section: 17 Assays ASSAY 12 Geological GEC 9 Prospecting PRC	, DL DSP			
<b>Correspondence</b> Resident Geologis Tweed, ON	to: .t		<b>Recorded Holder(s)</b> ROBERT JAMES D MT BRYDGES, Onta	) and/or Agent(s): DILLMAN ario
Assessment Files Sudbury, ON	Library		JAMES MORLEY O HAVELOCK, Ontario	





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31C135E2004 2.19375 GRIMSTHORPE 200







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inting strike & dip	QC	quartz calcite vein	ру	pyrite	
uartz vein strike & dip 👡 🔔		swamp	сру	chalcopyrite	
icar zone	bd	beaver dam	mag	magnetite	
different contract in the section	_	411	<b>A</b> .1		





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