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Sudbury, Ontario

Base Metal and Gold Prospects in Chambers Township Northeast Temagami Area, Ontario

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Prepared by: DTE Exploration & Development, London, Ontario

September 14, 1998

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#### **SUMMARY**

HERITAGE EXPLORATION currently holds a series of unpatented mining claims in Chambers Township, Ontario (Fig. 1). The mining claims encompass 5 claim units with the following distribution:

Property	<u>Claim Number</u>	<u>Claim Units</u>	<u>Area (ha)</u>
Nellem Lake	1223092 1223094, 1223098	1.1 2	17.6 32
Crash Lake	1223093	2	32
		TOTAL:	81.6

Chambers Township, located in the Northeast Temagami area, is underlain by a northeast-trending greenstone belt comprising metavolcanic and metasedimentary rocks of the Archean Superior Province. Numerous dioritic, gabbroic and granitic rocks intrude the metavolcanic rocks as dykes and stocks.

Township	Description	Au (oz/t)	Ag (oz/t)	Pb (%)	Zn (%)	Co (%)	Ni (%)	Cu (%)
*Chamb <b>ers</b>	schistose to brecciated andesite and tuffs intruded by quartz porphyry, diorite and quartz veining	0.13	tr	-	-	-	-	-
*Chambers	schistose to brecciated andesite and tuffs intruded by quartz porphyry, diorite and quartz veining	nil	tr	0.4	4.0	-	-	0.15
*Chambers	schistose to brecciated andesite and tuffs intruded by quartz porphyry, diorite and quartz veining	tr	tr	tr	0.46	-	-	tr

Summary of assays from prospects in Chambers Township

\*located within mining claim 1223094; tr=trace; "-"=not analyzed

The anomalous assay results and geological environment of these prospects warrants further exploration in order to evaluate their potential for hosting economic lead (Pb), silver (Ag), copper (Cu), zinc (Zn) and gold (Au) mineralization.

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It is recommended that an exploration grid be established on both the Nellem and Crash Lake properties and that a program consisting of geological mapping, lithogeochemical sampling and ground geophysical survey be undertaken in order to define the extent of mineralization and to provide future exploration targets. In addition, it is recommended that the old trenches in claim 1223094 be re-excavated (by hand), power washed and sampled in order to get a better understanding of the mineralization and local geology.

CHAMBERS TOWNSHIP	- Nellem Lake property	
Line-Cutting (2.2 km) - claim 1223094	- 400m baseline - 6 x 300m lines at 50m spacing - 25m station intervals	\$660.00
Geophysical Survey	VLF-EM (2.8 km) Self-Potential (2.8 km)	\$225.00 \$225.00
Power Washing	clearing (general labour) pump & hose rental	\$850.00 \$650.00
Geological Mapping	grid/reconnaissance/detail	\$900.00
Assays	20 samples - 32 element + Au	\$700.00
Field Expenses	travel, accommodations etc.	\$800.00
Reports		\$500.00
	ESTIMATED TOTAL:	\$5460.00

	CHAMBERS	<b>TOWNSHIP</b> -	Crash I	Lake	property	1
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Line-Cutting (6.0 km)	- use north claim line as baseline	
- winter grid	- 15 x 400m lines at 50m spacing	\$1800.00
	- 25m station intervals	
Geophysical Survey	VLF-EM (6.8 km)	\$550.00
Geological Mapping	grid/reconnaissance	\$600.00
Assays	20 samples - 32 element + Au	\$700.00
Field Expenses	travel, accommodations etc.	\$450.00
Reports		\$400.00
	ESTIMATED TOTAL:	\$4500.00

#### CHAMBERS TOWNSHIP - Nellem Lake & Crash Lake

Located in Chambers Township, the Nellem Lake property consists of three claims south-southwest of Nellem Lake and the Crash Lake property consist of two claims along the north end of Crash Lake. Both properties are within 13.0 km west of HWY. #11 (Fig. 1).

Access to both properties can be made by following several old roads from HWY. #11, north of the town of Temagami. Travel north on HWY. #11 from Temagami for about 8.5 km then turn west onto Red Squirrel Lake Road. Follow Red Squirrel Road for about 15 km then turn off (left), heading west-southwest. Follow this old road for about 13 km then turn right onto an older access road. Follow this road for about 3 km to the north claim line (crosses the road), just west of the number one post on the Crash Lake claim.

Boat access to the Nellem Lake property can be made by continuing along the same road, from the north claim line of the Crash Lake property, for about 2.6 km to an old road that leads south about 100 m to the north shore of Nellem Lake. The east side of two of the three claim units can be accessed along the west shore of the most southern part of Nellem Lake (toward Tasse Lake).

#### Claim Status

The property consists of 5 unpatented mining claims in Chambers Township, Sudbury Mining Division (claim map G-3416), with the following distribution (Fig. 2):

Claim Number	Number of Claim Units	<u>Area (ha)</u>
Nellem - 1223092	1.1	17.6
Nellem - 1223094	1	16
Nellem - 1223098	1	16
Crash - 1223093	2	32
TOTAL:	5.1	81.6

#### **Exploration History**

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The earliest record of the **Nellem Lake** property is from prospecting by the Consolidated Mining and Smelting Company of Canada in 1934 and F.W. Thomson in 1941 (Bennett, 1978). Surface stripping revealed numerous quartz veins with massive sphalerite, galena and pyrite mineralization.

In 1952, Halkin Mines Ltd. completed three short diamond drill holes, trenching and limited assaying. The best of ten surface samples returned 4.0% zinc (Zn), 0.40% lead (Pb), 0.15% copper (Cu), trace silver and nil gold.

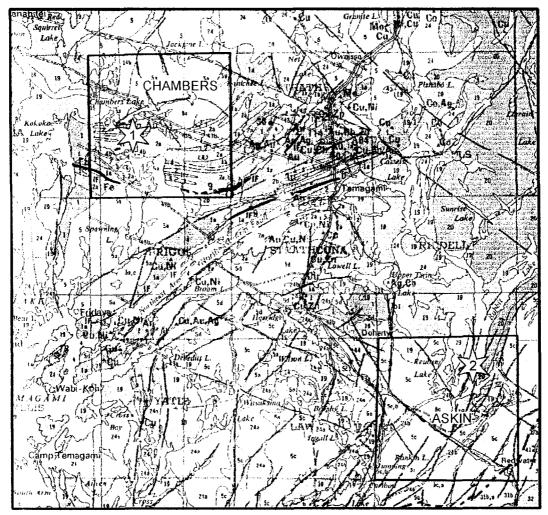


Figure 1. Regional geology and location of the mineral prospects in Chambers and Askin Townships. Showing #1 is a Pb-Ag-Cu-Zn-Au prospect and Showing #2 is a Co-Ni prospect [scale 1:253,440].

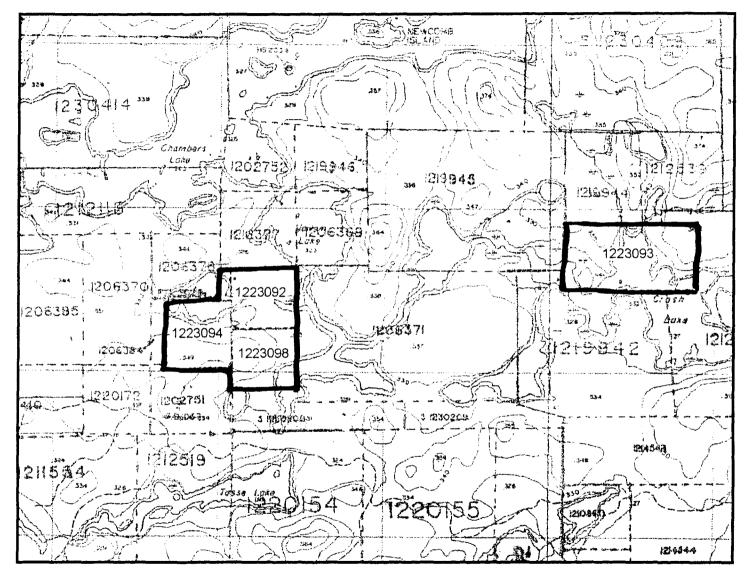


Figure 2. Location of the Nellem Lake (1223094, 1223092, 1223098) and Crash Lake (1223093) mining claims in Chambers Township [scale 1:20,000].

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In 1956, Canadian Astoria Minerals Ltd. (Cam Mines Ltd.) completed a diamond drilling program that consisted of nine holes totaling 610.8 m. The Northern Miner (1956), reported that a mineralized zone had been delineated which had a strike length of 370 m and contained appreciable amounts of sphalerite (Zn) galena (Pb) and chalcopyrite (Cu) - no values or tonnage estimates were given.

In 1963, Goldray Mines Ltd. completed three diamond drill holes, totaling 804 m. Goldray intersected a zone of carbonitized and brecciated metavolcanic rocks, intruded by numerous quartz veins, feldspar porphyry and mafic dykes. Quartz veining and mineralization were also reported to occur within a diabase dyke (*Keweenawan* type). No values were reported.

The region was mapped by the Ontario Geological Survey (Bennett, 1978) in the early 1970s during which time the showing was visited. A grab sample collected from the main showing on the Nellem Lake property returned values of 0.46% Zn but only trace gold, silver and lead.

No previous exploration work or mineralization is reported from the area of the **Crash** Lake claims.

#### **Geology and Mineralization**

Chambers Township, located in the Northeast Temagami area, is underlain by a northeast-trending greenstone belt comprising metavolcanic and metasedimentary rocks of the Archean Superior Province (Fig. 3). Numerous dioritic, gabbroic and granitic rocks intrude the metavolcanic rocks (Bennett, 1978). Major structural features include northwest and northeast trending faults.

Rocks exposed on the Nellem Lake and Crash Lake properties are predominantly intermediate tuffs, agglomerates, andesites, and dioritic (gabbroic) and granitic intrusive rocks. In addition, the Crash Lake property is underlain by olivine diabase dykes and mafic intrusive rocks (gabbroic dykes).

The mineralized zone on the Nellem Lake property is described as striking roughly 35az and has fairly heavy mineralization exposed over a length of about 90m (Bennett, 1978). A vein of quartz, 2.1-4.3 m wide, is mineralized along the south wall (contact with andesite) with pyrite, sphalerite, galena and chalcopyrite. The eastern exposure of the vein is mineralized solely with pyrite. An irregular body of quartz porphyry crops out south of the main quartz vein and quartz porphyry inclusions also occur as sericitized inclusions within the quartz vein itself. The quartz porphyry is cut by numerous quartz stringers and *greenstone* dykes were noted in the main quartz vein. Two smaller quartz veins (<0.3m wide) are exposed at points 9m and 30m north of the main quartz vein - local mineralization

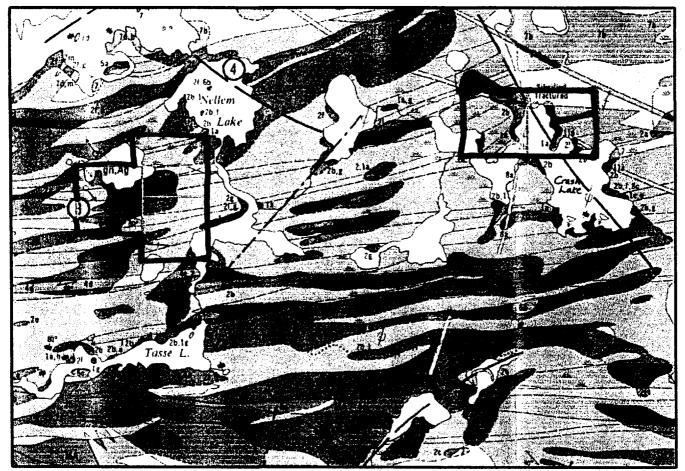


Figure 3. General geology and location of the 5 claim units in Chambers Township. The Pb-Ag-Cu-Zn-Au prospect (number 3) is located southeast of Nellem Lake [scale 1:31,680].

1=mafic-intermediate metavolcanics; 2=felsic-intermediate volcanics; 4=metasediments; 5=maficultramafic intrusives; 6=hypabyssal felsic intrusives; 7=granitic plutonic rocks; 8=mafic intrusives; 11=olivine diabase dyke of massive sphalerite, galena and lead are reported. A grab sample of heavy sulphide mineralization assayed 0.13 oz/t (4.46 g/t) and trace silver. No other values are reported.

#### Current Work

Both the Nellem Lake and Crash Lake properties were visited by the author in order to conduct reconnaissance (grid) bedrock mapping and sampling (see maps in back pocket). Results from the sampling are pending.

At the **Nellem Lake** property, several trenches were visited from which previously described surface mineralization could be confirmed. The mineralization is traceable at surface for a strike length of >60m (~35az) and contains appreciable amounts of sphalerite (Zn) galena (Pb) and chalcopyrite (Cu). The sulphide mineralization is concentrated within several veins of massive quartz but is also present within the contact rocks (sheared metavolcanic rocks). Although metavolcanic rocks appear to host most of the quartz veining, gabbroic rocks are exposed in several of the trenches where they are within metres of the quartz veining. The irregular body of quartz porphyry, reported by earlier exploration work, was not observed. However, quartz porphyry inclusions and sericitized inclusions were observed within the massive quartz vein itself and within the brecciated host rock.

A zone of brecciated and carbonitized metavolcanic rocks is exposed along the northwest end of Trench 1 (see map). This same zone is also exposed along a southwest-trending ridge about 12 m north-northwest of the trenches. Mineralization is concentrated within the quartz veining where it consists of about 5-10% galena + sphalerite and <3% chalcopyrite. The brecciated host metavolcanic rocks contain about 2% galena + sphalerite + chalcopyrite. Quartz porphyry inclusions and sericitized inclusions occur within the thicker parts of the quartz veining and within some of the brecciated metavolcanic rocks.

Several samples, including mineralized quartz veining, mineralized host metavolcanic rocks and mineralized gabbro, were collected for assay - results are still pending.

At the **Crash Lake** property, reconnaissance grid mapping revealed scattered areas of mineralization (see map). Along the north claim line, the contact between a medium-grained pink-weathering granitic rock (quartz monzonite?) and mafic to intermediate metavolcanic rock is exposed. The contact region is strongly sheared over a width of about 0.5 m. The shear zone consists of chlorite schist with fragments of quartz-carbonate veins and fragments of metavolcanic and granitic rocks. Mineralization in the shear is finely disseminated with <1% pyrite. Metavolcanic rocks within about 0.5 m of the contact and/or shear zone have about 1% pyrite with subordinate chalcopyrite. The granitic rock contains <1% pyrite as cubes and occasional blebs.

Several mafic intrusive rocks (gabbro) are found exposed within the middle area of the eastern part of the claim, north of Crash Lake. Although for the most part these rocks are barren, minor sulphide mineralization was noted at one location (see map). The mineralization consisted of bleb and disseminated sulphide with up to 2% pyrite (py), chalcopyrite (cpy) and pyrrhotite (po). Where mineralized, the gabbroic rocks show signs of extensive alteration and metamorphism with numerous patches of epidote and chlorite veining. Occasional quartz-carbonate veins and veinlets also cross-cut the gabbro.

The northwest-trending fault that cuts across Crash Lake, becomes very evident within the northwest inlet on Crash Lake. The fault zone is defined by highly sheared and silicified metavolcanic rocks. Quartz-carbonate veins predominate throughout the fault and mineralization is scattered and typically <1% total sulphide.

TABLE 1. Samples collected for assay - Crash Lake and Nellem Lake properties

Sample No.	Location	Description
CL98-01	Crash Lake - north claim line	m.g. granitoid (quartz monzonite?); <1% sulphide
CL98-02	Crash Lake - north claim line	sheared volcanic; 1% sulphide
CL98-03	Crash Lake - north claim line	chlorite schist from shear zone; <1% sulphide
CL98-04	Crash Lake - north shore	m.g. gabbro; 2% sulphide
CL98-05	Crash Lake - north shore fault	sheared and silicified volcanic; 1% sulphide
CL98-07	Nellem Lake - trench 5	m.g. gabbro; <1% sulphide
CL98-08A	Nellem Lake - trench 4	quartz vein with sericitic inclusions; 10% sulphide
CL98-08B	Nellem Lake - trench 4	silicified volcanic with quartz veins; 15% sulphide
CL98-09A	Nellem Lake - trench 3	quartz vein with volcanic fragments; 10% sulphide
CL98-09B	Nellem Lake - trench 3	quartz vein with sheared volcanics; 5% sulphide
CL98-10A	Nellem Lake - trench 1	quartz vein with sericitic inclusions; 5% sulphide
CL98-10B	Nellem Lake - trench 1	massive quartz vein; 10% sulphide
CL98-10C	Nellem Lake - trench 1	silicified and brecciated volcanics; 10% sulphide
CL98-11	Nellem Lake - north of trenches	silicified and brecciated volcanics; 5% sulphide

m.g. = medium grained

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#### RECOMMENDATIONS

The anomalous assay results and geological environment of these prospects warrants further exploration in order to evaluate their potential for hosting economic Pb-Ag-Cu-Zn and Au mineralization.

It is recommended that an exploration grid be established on both the Nellem and Crash Lake properties and that a program consisting of geological mapping, lithogeochemical sampling, ground geophysical survey and power washing be undertaken in order to define the extent of mineralization and provide future exploration targets.

CHAMBERS TOWNSHIP	- Nellem Lake property	
Line-Cutting (2.2 km)	- 400m baseline	
claim 1223094	- 6 x 300m lines at 50m spacing - 25m station intervals	\$660.00
Geophysical Survey	VLF-EM (2.8 km)	\$225.00
	Self-Potential (2.8 km)	\$225.00
Power Washing	clearing (general labour)	\$850.00
	pump & hose rental	\$650.00
Geological Mapping	grid/reconnaissance/detail	\$900.00
Assays	20 samples - 32 element + Au	\$700.00
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Line-Cutting (6.0 km)	- use north claim line as baseline	
- winter grid	- 15 x 400m lines at 50m spacing	\$1800.00
	- 25m station intervals	
Geophysical Survey	VLF-EM (6.8 km)	\$550.00
Geological Mapping	grid/reconnaissance	\$600.00
Assays	20 samples - 32 element + Au	\$700.00
Field Expenses	travel, accommodations etc.	\$450.00
Reports		\$400.00
	ESTIMATED TOTAL:	\$4500.00

The structure in the area, which consists of cross-cutting and intersecting features such as regional northwest-trending faults, north-west trending olivine gabbro dykes, east-west trending shear zones and north-south trending mafic (gabbroic) dykes, provides a very promising environment for potential mineralization.

Mineralization types to explore for include shear-hosted gold related to the regional fault and shear zones, Au deposits related to contacts between the granitic rocks and the

metavolcanic rocks, Cu-Ni and platinum group element deposits related to the mafic intrusive rocks and Pb-Ag-Zn-Cu + Au deposits related to quartz veins and their associated alteration systems. In addition, there is the possibility for deep-seated volcanogenic massive sulphide deposits comprising Pb-Ag-Zn-Cu and Au.

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### REFERENCES

Bennett, G., 1978. Geology of the Northeast Temagami Area, District of Nipissing. Ontario Geological Survey, Report 163, p. 1-75.

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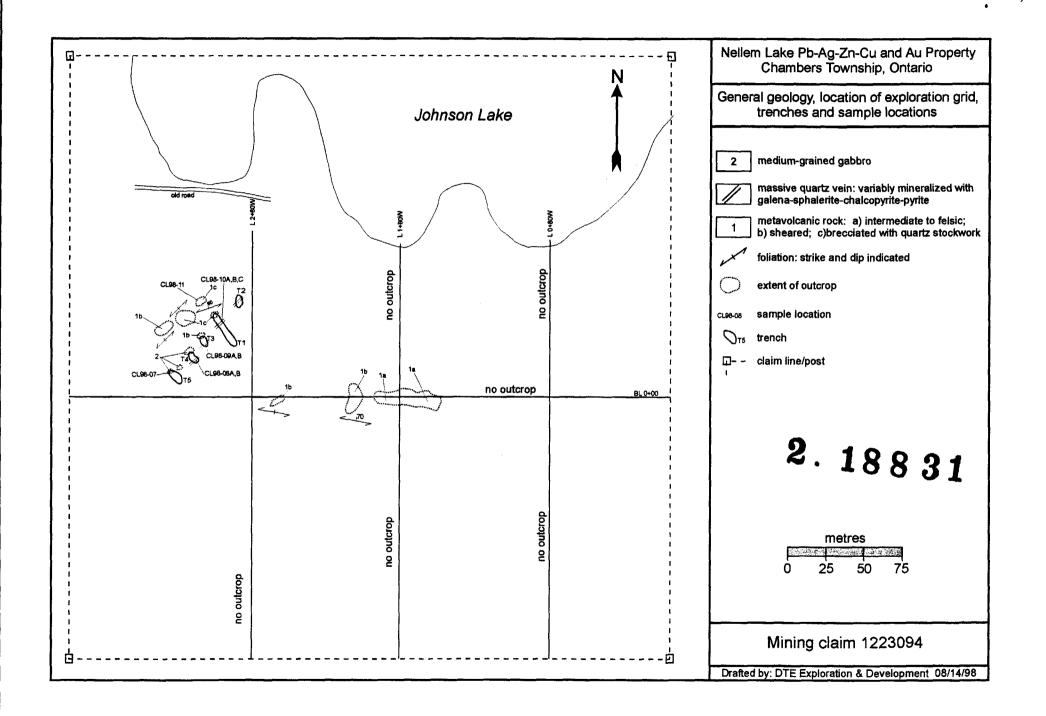
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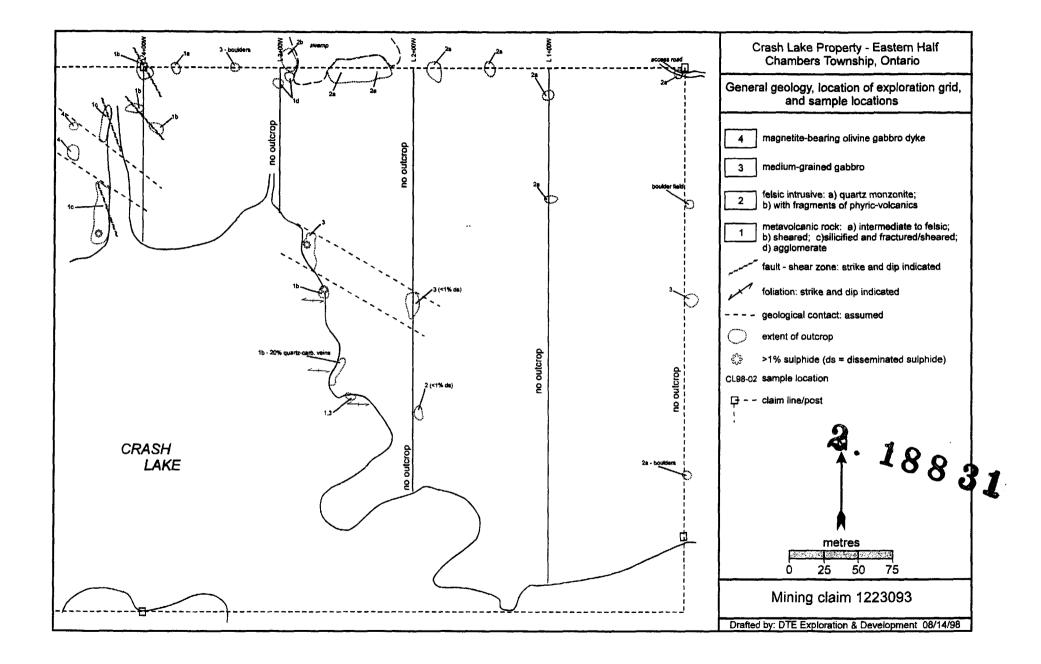
#### **CERTIFICATE OF QUALIFICATION**

- I, Scott Jobin-Bevans of London, Ontario, do hereby certify that:
- 1. I am a consulting geologist with the geological exploration company DTE Exploration & Development of London, Ontario.
- 2. I am a graduate of the University of Manitoba, Winnipeg, Manitoba with a B.Sc. (Hons.) Geology 1995, and an M.Sc. Geology 1997.
- 3. I am a member of the Society of Economic Geologists and the Canadian Institute of Mining, Metallurgy and Petroleum.
- 4. I have been an exploration geologist and prospector for nine years.
- 5. I have an active prospector's license for the province of Ontario (# H14027).
- 6. I have not received any diffect or indirect interest in Heritage Exploration.
- 7. This report is intended to be an overview of the potential of the properties with recommendations and conclusions that are based solely on the available data.

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Scott Jobin-Bevans (B.Sc., M.Sc. Geology) Sept. 18, 1998





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#### SAMPLE ASSAY RESULTS

Addendum to:

Base Metal and Gold Prospects in Chambers Township Northeast Temagami Area, Ontario

Original Report Prepared September 14, 1998 for Richard W. Rintala, Lively, Ontario



Prepared by: DTE Exploration & Development, Sudbury, Ontario

January 11, 1999

#### **SUMMARY**

Richard W. Rintala (Heritage Exploration) currently holds a series of unpatented mining claims in Chambers Township, Ontario (see Fig. 1 - Sept. 14, 1998 Report). The mining claims encompass 5 claim units with the following distribution:

<u>Property</u>	<u>Claim Number</u>	Claim Units	<u>Area (ha)</u>
Nellem Lake	1223092 1223094, 1223098	1.1 2	17.6 32
Crash Lake	1223093	2	32
		TOTAL:	81.6

The following, is a summary of the assay results from the Crash Lake and Nellem Lake properties in Chambers Township. Included are the sample location maps, tabulated results, and assay certificates.

The anomalous assay results and geological environment of these prospects warrants further exploration in order to evaluate their potential, and the potential of the immediate area, for hosting economic lead (Pb), silver (Ag), copper (Cu), zinc (Zn) and gold (Au) mineralization.

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#### SCHEDULE A

### Samples from Crash Lake and Nellem Lake properties Assayed by Accurassay Laboratories, Thunder Bay, Ontario

Sample	Location	Description	Pd	Au	Ρι	Ag	Cu	Zn	РЪ
			(ppb)	(ppb)	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)
CL98-01	Crash Lake - north claim line	m.g. granitoid (quartz monzonite?) <1% sulphide	na	<5	na	tr	15	7	2
CL98-02	Crash Lake - north claim line	sheared volcanic 1% sulphide	na	5	fia	tr	51	60	7
CL98-03	Crash Lake - north claim line	chlorite schist from shear zone <1% sulphide	na	<5	na	tr	35	96	12
CL98-04	Crash Lake - north shore	m.g. gabbro 2% sulphide	<10	<5	<15	tr	134	59	5
CL98-05	Crash Lake - north shore fault	sheared and silicitied volcanic 1% sulphide	na	ý	na	tr	37	115	6
CL98-07	Nellem Lake - trench 5	m.g. gabbro <1% sulphide	<10	<5	<15	tr	140	56	13
CL98-08A	Nellem Lake - trench 4	quartz vein with sericitic inclusions; 10% sulphide	na	12	na	1.7	466	4055	2852
CL98-08B	Nellem Lake - trench 4	silicified volcanic with quartz veins 15% sulphide	na	91	na	0.5	135	179	237
CL98-09A	Nellem Lake - trench 3	quartz vein with volcanic fragments 10% sulphide	na	328	na	5.5	491	13431	6650
CL98-09B	Nellem Lake - trench 3	quartz vein with sheared volcanics 5% sulphide	na	478	na	3.7	525	742	305
CL98-10A	Nellem Lake - trench 1	quartz vein with sericitic inclusions 5% sulphide	па	466	na	22.0	12191	12023	1918
CL98-10B	Nellem Lake - trench 1	massive quartz vein 10% sulphide	เาล	453	na	14.6	8970	10577	1866
CL98-10C	Nellem Lake - trench 1	silicified and breeciated volcanics 10% sulphide	fià	527	ňa	13.9	6647	4216	1020
CL98-11	Nellem Lake - north of trenches	silicified and breeciated volcanics 5% sulphide	na	551	na	5.1	324	1177	2577

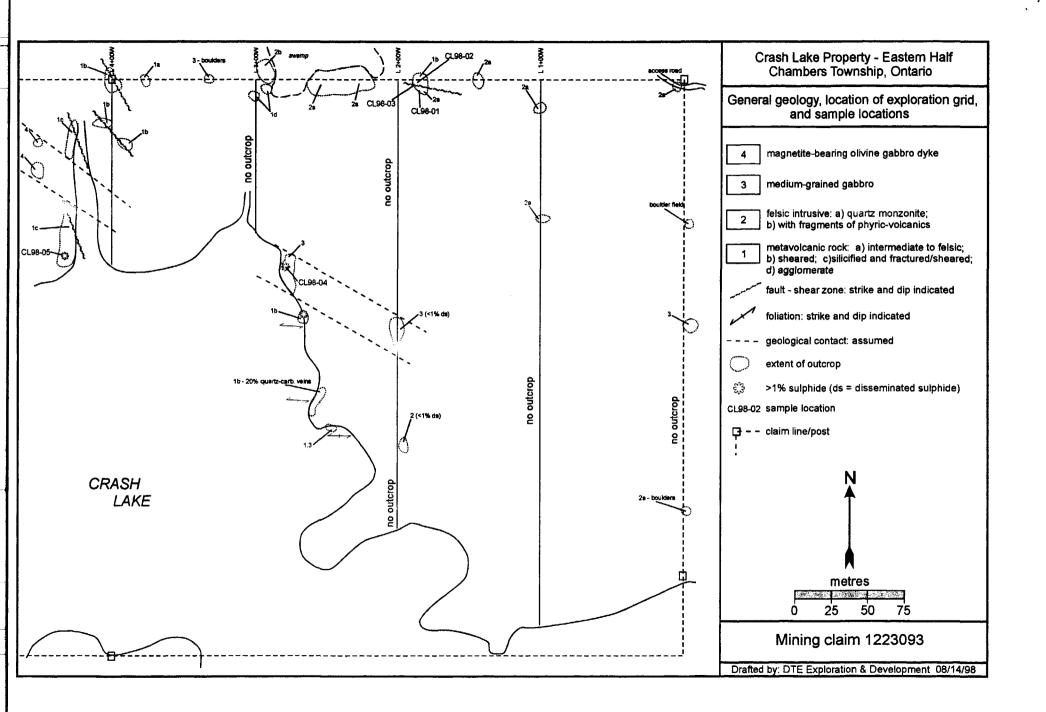
m.g. = medium grained

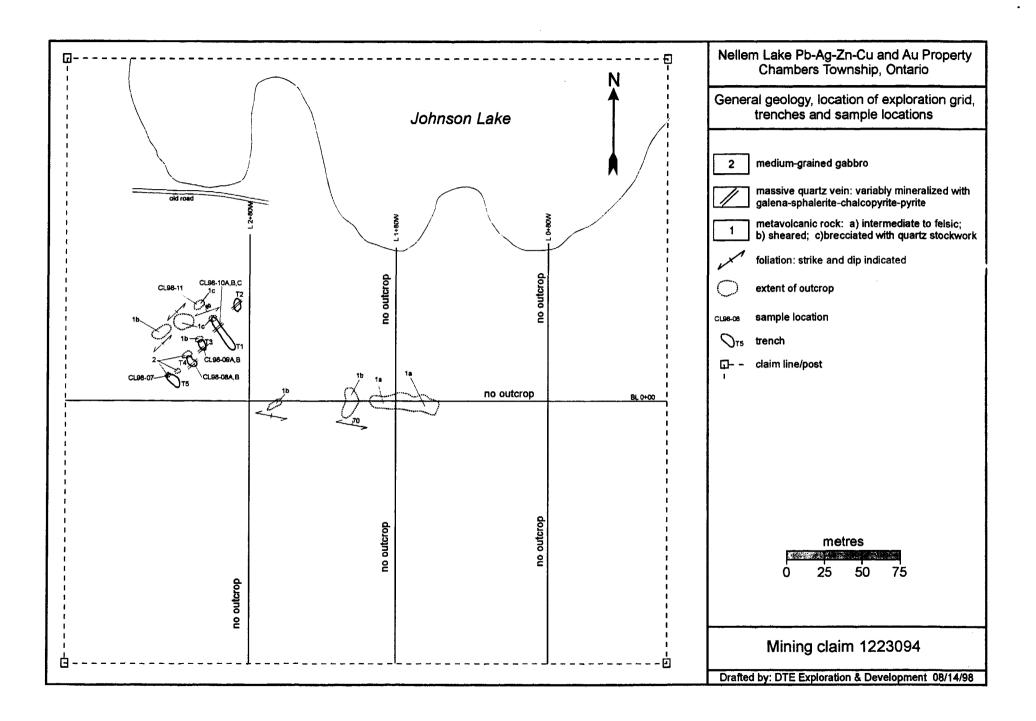
Sample : 1	<u>Tag</u> #
CL98-01	50351
CL98-02	50352
CL98-03	50353
CL98-04	50354
CL98-05	50355
CL98-07	50356
CL98-08A	50357
CL98-08B	50358
CL98-09A	50359
CL98-09B	50365
CL98-10A	50360
CL98-10B	50361
C1=/8-10C	50362
CL98-11	50363

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## ACCURASSAY LABORATORIES A DIVISION OF ASSAY LABORATORY SERVICES INC.

1070 LITHIUM DRIVE, UNIT 2 Page THUNDER BAY, ONTARIO P78 6G3 PHONE (807) 623-6448 FAX (807) 623-6820 **Rick Rintala** c/o Rintala Construction Co. Ltd. 377 Black Lake Rd. Eap 21, 1998 Lively, Ontario P3Y 1H8 Job# 9840680 Fax1 (705) 522-2951 Fax2 (705) 692-5971

SAMPLE #		Palladium	Gold	Platinum	
Accurase	say (	Customer	ррь	ppb	ppb
4		50351		<5	
1					
2		<b>5035</b> 2		5	
3		<b>50353</b>		<5	
4		<b>5035</b> 4	<10	<5	<15
5		50355		9	
6		50356	<10	<5	<15
7		50357		12	
8		50358		91	
9		50359 <sup>°</sup>		328	
10		<b>50</b> 360		466	
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12		50361		453	
13		50362		527	
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16		50365		478	

Certified By:

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ᅻ	50354	<.1	1.68	<2	15	10	0.4	<3	0.91	<.5	25	72	134	3.71	0.05	2	
	20222	<.1	3.95	9	15	45	0.8	9	0.98	<.5	34	58	37	8.28	0.50	4	
	50355	<1	2.29	12	18	7	0.3	<3	1.07	0.6	19	133	140	4.01	0.03	4	
	50357 50358	1.7	0.89	9	18	33	0.3	<3	0.52	16.8	13	243	466	1.96	0.20	<1	
	50358 50359	0.5	1.27	134	20	38	0.3	<3	0.44	<.5	37	178	135	4.85	0.25	<1	
		5.5	0.15	16	20	10	0.1	<3	0.26	90.1	12	314	491	0.74	0.05	<1	
	50360 50361	22.0	0.10	10	22	16	0.2	<3	1.93	73.1	19	285	12191	1.44	0.08	4	
	50362	14.6	0.24	11	22	36	0.2	<3	0.95	62.7	12	185	8970	1.16	0.19	<1	
	50363×	13.9 5.1	0.21	4	20	32	0.3	<3	2.48	24.0	9	219	6647	0.86	6.17	5	
	50365	0.2	0.34 1.26	3 <2	13 17	32 93	0.2	<3	0.02	8.0	<2	187	324	0.50	0.25	<1	
	50365×	3.7	0.53	87	21	93 55	0.7	6	1.37	1.0	35	114	97 505	8.15	0.33	20	
	00000	3.1	0.55	0/	21	- 55	0.2	<3	0.13	4.6	29	174	525	1.90	0.32	<1	
		Mg	Min	Мо	Na	N	Р	øРЬ.	Sb	Se	Si	Sn	Sr	Ti	۷	W	Zn
		%	ppm	ppm	₩	ppm_	ppm	ppm	ppm	ppm	%	ppm	ρpm	%	ppm	ppm	þbŵ
	50351~	0.04	97	2	0.07	3	13	2	<2	<5	0.03	<5	6	<.01	2	<2	7
	50352	0.79	512	4	0.04	15	294	7	7	<5	0.03	<5	31	0.09	12	<2	60
	50353	4.69	976	1	0.02	271	1548	12	1 <del>8</del>	<5	0.03	<5	53	0.12	86	<2	96
	50354	1.27	548	1	0.07	44	423	5	10	<5	0.02	<5	31	0.23	89	<2	59
	50355	3.36	1471	18	0.02	81	404	6	29	<5	0.02	<5	9	0.20	185	<2	115
	50356	1.84	715	3	0.04	75	198	13	14	<5	0.02	<5	20	0.25	91	<2	56
	50357	0.49	321	6	< 01	39	747	2852	11	<5	0.03	<5	5	0.05	18	<2	4055
	50358	0.73	474	3	<.01	90	<10	237	3	<5	0.03	<5	4	0.05	33	<2	179
	50359	0.07	104	18	<.01	17	1875	6650	36	<5	0.03	<5	3	0.01	2	<2	13431
	50360	0.02	499	103	0.01	12	1738	1918	42	<5	0.03	<5	12	<.01	2	<2	12023
	50381	0.02	259	284	0.01	6	1655	1866	37	<5	0.05	<5	8	0.03	3	<2	10577
	50362	0.03	563	28	0.01	10	649	1020	16	<5	0.03	<5	14	<.01	<1	<2	4218
	50363	0.03	36	4	<.01	3	<10	2577	<2	<5	0.04	<5	2	<.01	<†	<2	1177
	50364	1.90	999	5	0.32	57	6057	23	25	<5	0.04	<5	74	0.25	194	<2	123
	50365	0.14	105	$\overline{}^{3}$	<.01	46	461	305	<2	<5	0.04	<5	2	0.09	16	<2	742

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PAGE 02

ACCURASSAY LABS

07:57 18076236820

ACCURASSAY LABORATORIES A DIVISION OF ASSAY LABORATORY SERVICES INC.

Certified By:

03/19/1994 07:57

#### **CERTIFICATE OF QUALIFICATION**

- I, Scott Jobin-Bevans of 225 Ferndale Ave., Sudbury, Ontario, do hereby certify that:
- 1. I am a consulting geologist with the geological exploration company DTE Exploration & Development of Sudbury, Ontario.
- 2. I am a graduate of the University of Manitoba, Winnipeg, Manitoba with a B.Sc. (Hons.) Geology 1995, and an M.Sc. Geology 1997.
- 3. I am a member of the Society of Economic Geologists and the Canadian Institute of Mining, Metallurgy and Petroleum.
- 4. I have been an exploration geologist and prospector for nine years.
- 5. I have an active prospector's license for the province of Ontario (# H14027).
- 6. I have not received any direct or indirect interest in Heritage Exploration.
- 7. This report is intended to be an overview of the potential of the properties with recommendations and conclusions that are based solely on the available data.

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S. Joburboans

يتحد والمحصور المراز

Scott Jobin-Bevans (B.Sc., M.Sc. Geology) Jan. 11, 1999

Protorio Ministry of	Ontario Ministry of Northern Development and Mines Declaration of Assessment Performed on Mining Land		Work Transaction Number (office use)
	Performed on Mining Land		N9870.00538
Mining Act. Subsection 65(2) and 66(3), R.S.O. 1990		Assessment Files Research Imaging 3.0, 1990	
31M04SW2018 2.18831 CHAMB	ers 900	t work and correspond	) of the Mining Act. Under section 8 of the Mining Act, ti with the mining land holder. Questions about this collecti ; 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.
Instructions: - For work performe - Please type or prin 1. Recorded holder(s) (Attach	t in ink.	recording a claim, u	se form 0240. <b>2. 188 31</b>
Name /			Client Number
Address KINT	44		187631 Telephone Number
54 JALOB ST.			Telephone Number       692 - 3645       Fax Number
LIUBLY CNT	P3YIE3	· · · · · ·	692.5971
Name	•		Client Number
Address			Telephone Number
	· · · · · · · · · · · · · · · · · · ·		Fax Number
2. Type of work performed: Cl Geotechnical: prospecting, s assays and work under secti Work Type	surveys,	y ONE of the followin Physical: drilling strip trenching and associa	ping, C Rehabilitation ated assays
			Office Use
PROSPECTING			Total \$ Value of
Dates Work From 0/ 09	48 To 16	09 95	Work Claimed 1068
· · · · ·	48 To 16 Year Day	09 95 V Month Year	NTS Reference
Global Positioning System Data (if available)	Township/Area CHIAMIC	sec s	Mining Division Sudbury
	Mor G-Plan Number	16	Resident Geologist District Kirkland hake
- complete a - provide a r	oper notice to surface right and attach a Statement of nap showing contiguous m copies of your technical r	ts holders before star Costs, form 0212; hining lands that are l report.	es as required; ling work; inked for assigning work; GEOSCIENCE ASSESSMENT OFFICE 1:15:4
Name Sure - I-Brai-	REJANS		Telephone Number
Address	ANE LONDON	Zur der fri	705-690-0765 Fax Number
512 PL4TTS. 6 Name	ANE LONDON	LI NOGSEY	Telephone Number
Address			Fax Number
Name			Telephone Number
Address			Fax Number
Address 4. Certification by Recorded H	older or Agent		Fax Number

I, <u>RicutARD</u> <u>Rint Name</u>, do hereby certify that I have personal knowledge of the facts set forth in

this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Age	nt term		Date 52P-16/98
Agent's Address' 54 JACOB ST LIUT	ELY PSYLE3	Telephone Number $692-3648$	Fax Number 692-597/

0241 (03/97)

. . .

Dec 15/98

5. V:ork to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this n 4 furm 0 400

work v minin colum	g Claim Number. Or if vas done on other eligible 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.	)9870.DC 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
eg	TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
2	1234567	12	0	\$24,000	0	0
8	1234568	2	\$ 8,892	\$ 4,000	0	\$4,892
1	1223093	2	1065 15 410 M	800	0	268.19.
2						
3						
4						
5						
5	·					
7	******					
3	······································					
3						
10						
11						
12						
13						
14						
15						
	Column Totals	2	1068.19	800	0	268.19.

#### \_ , do hereby certify that the above work credits are eligible under 164.78 ١, IĆ, (Print Full Ner

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

where the work was done.

Sign	ature of Recorded Holder or Agent Authorized in Writing	Date SEPT. 16/98	SEP 16 1900	_
6.	Instructions for cutting back credits that are no	t approved.	GEOSCIENCE ASSESSMENT	

Some of the credits claimed in this declaration may be cut back. Please check (1) in the boxes below to show how you wish to prioritize the deletion of credits:

- 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.

eived Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
(03/97)	Approved for Recording by Minin	g Recorder (Signature)

Mirante of Northern Development and Mines

(🕅 Ontario

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## Statement of Costs for Assessment Credit

Transaction Number (office use)

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.

1 22 3293			
Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilo- metres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
4T GRID HINK	4Km Geril I Day	25.0. " / DAY	250-00
HMPLE Conversion	5 SAMPLES	150.00 pay	150 - 10
HULDGILAL MAPPING	, DAY.	350 - " / Dug	350-00
Poweric REPORT	12 HRS.	20.00/1.12	240 - 4
ssociated Costs (e.g. supplie	s, mobilization and demobilization).		
			· · · · · · · · · · · · · · · · · · ·
Trans	sportation Costs Grif 5		20
Food	and Lodging Costs Former		58. 14.
	Total Value	of Assessment Work V SEP 1 6 19	
alculations of Filing Discoun	ts:	GEOSCIENCE ASSES	
. If work is filed after two year	f performance is claimed at 100% of th s and up to five years after performance If this situation applies to your claims, u	e above Total Value of A e, it can only be claimed	at 50% of the Total
TOTAL VALUE OF ASSESS	MENT WORK × 0.50 =	Total \$ val	ue of worked claimed.
equest for verification and/or c	eligible for credit. uired to verify expenditures claimed in orrection/clarification. If verification and/ f the assessment work submitted.		
•			
easonably be beter mined and		- 6. (1	
be accompanying Declaration	of Work form as The head		
he accompanying Declaration o make this certification.	of Work form as tree folder, agent, or sta	to company position with signing as $f(x) = f(x) = \frac{1}{2} e^{-\frac{1}{2}x} e^{-\frac{1}{2}x$	ithority)
	Contract Aprilant, again, or an	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	of Work form as to recorded holder, agent, or sta		



#### **Declaration of Assessment Work Performed on Mining Land**

Transaction Number (office use)	
W9870. 00539 Assessment Files Research Imaging	
Assessment Files Research Imaging	

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

Personal information collected on this form is obtained under the authority of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this 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 a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 685.

Instructions:	- For work performed on Crown Lands before recording a claim, use for	orm 0240.	-1	$\sim$	0	5)	-
	<ul> <li>For work performed on Crown Lands before recording a claim, use for</li> <li>Please type or print in ink.</li> </ul>			8	8	J	سعہ

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

Name RICHARD RINTALA	Client Number 18763/
Address 54 JALOB ST	Telephone Number 6923648 off
LIVELY ONT P341E3	Fax Number 692 - 5971
Name	Client Number
Address	Telephone Number
	Fax Number

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

Geotechnical: prospecting, surveys, assays and work under section 18 (regs)	
Work Type	Office Use
PROSPECTING	Commodity
, ,	Total \$ Value of Work Claimed (374
Dates Work     From     O/     O9     98     To     16     O9     98     J       Performed     Day     Month     Year     Day     Month     Year	NTS Reference
Global Positioning System Data (if available) Township/Area	Mining Division Sudbury
Mor G-Plan Number	Resident Geologist District Kirkland Lake
<ul> <li>Please remember to: - obtain a work permit from the Ministry of Natural Resource - provide proper notice to surface rights holders before stard - complete and attach a Statement of Costs, form 0212; - provide a map showing contiguous mining lands that are li - include two copies of your technical report.</li> <li>3. Person or companies who prepared the technical report (Attach a list if</li> </ul>	ing work; SEP 1 6 1998 inked for assigning work; GEOSCIENCE ASSESSMENT OFFICE 1:157 1:157
Name SLOTT JOBIN - BENANS	Telephone Number 705-690-0765
Address 512 PLATT Rolland NEGSEY	Fax Number
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

#### 4.

Certification by Recorded Holder or Agent <u>Richae</u>, do hereby certify that I have personal knowledge of the facts set forth in (Print Name) ١, this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its

completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent		Date . SEPT-16/98
Agent's Address	Telephone Number	Fax Number
54 JACCB ST LIVELY P3YIES	692-3648	692-5771
0241 (03/07)		

0241 (03/97)

Dec 15/98

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

work v minin colum	g Claim Number. Or if was done on other eligible g land, show in this in the location number ated 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
eg	TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg	1234567	12	0	\$24,000	0	0
eg	1234568	2	\$ 8,892	\$ 4,000	0	\$4,892
1	1223094	1	1374.10	4001	Bire	174.10
2	122 3092	1	0	4001		_
3	122 3098	1	Ø	400'		
4						
5		· · · · · · · · · · · · · · · · · · ·				
6						
7						
8				<u>}</u>		
9						
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11						
12						
13					+	
14	<u> </u>					
15	· · · · · · · · · · · · · · · · · · ·		+			
	Column Totais	3	1374.10	1200	800	174.10

KICHARD KINTALH	, do hereby certify that the above work credits are eligible under
(Print Full Name)	

(Print Full Name) subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for applicate ...

where the work was done.			1
Signature of Recorded Holder or Agent Authorized in Writing	Date	SEP 1 6 1998 ;:1	<u> </u>
- fit all to get all		GEOSCIENCE ASSESSMENT	
6 Instructions for cutting back credits that are not ar		OFFICE	

<u>ciaim</u>

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

Some of the credits claimed in this declaration may be cut back. Please check (1) in the boxes below to show how you wish to prioritize the deletion of credits:

- 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.

For Office Use Only		
Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
0241 (03/97)	Approved for Recording by Mining	g Recorder (Signature)



😵 Ontario

### Statement of Costs for Assessment Credit

Transaction Number (office use) 870. 005 9

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Werk Regulation 676. 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 number of hours/days worked, metres of drilling, kilo- metres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Cut GRID LINE	1.0 Kin Gaio 1 Day	250. " 1DA1	250.00
SAMPLE COLLECTION	9 Samples 1 Day	150 - DAH	150.00
GANGGIULL MAPPINE	2 DAYS	350 / DAY.	700. "
George Ratori	B. Has.	20 /HA.	160.00
Associated Costs (e.g. supplie	s, mobilization and demobilization).		
Trans	sportation Costs GAS		35-14
Food	and Lodging Costs From.		78.36
	Total Value o	1 Assessment EIN	ED, 814.10
Calculations of Filing Discount	` <b>S:</b>	SEP 1 6 1008	1;15 Ent
2. If work is filed after two years	f performance is claimed at 100% of the s and up to five years after performance f this situation applies to your claims, us	above Total Value of A , it can only be claimed	at 50% of the Total
TOTAL VALUE OF ASSESSI	MENT WORK × 0.50 =	Total \$ valu	ue of worked claime
request for verification and/or co	eligible for credit. uired to verify expenditures claimed in th prrection/clarification. If verification and/o f the assessment work submitted.		
Certification verifying costs: I, <u>Ricchitco</u> <u>Rino 74</u> (please print full name) reasonably be determined and f		e amounts shown are as	s accurate as may

the accompanying Declaration of Work form as

to make this certification.

mpany position with signing authority) I am authorized (recorded holder, ag 11 HOLDER " KELLEDEN

Signature Date < 10

ч.

0212 (02/96)

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

January 25, 1999

RICHARD WAYNE RINTALA 54 JACOB STREET LIVELY, Ontario P0M-2R0 Geoscience Assessment Office 933 Ramsey Lake Road 6th Floor Sudbury, Ontario

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: 2.18831

P3E 6B5

 Subject: Transaction Number(s):
 W9870.00538
 Approval After Notice

 W9870.00539
 Approval After Notice

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 Bruce Gates by e-mail at bruce.gates@ndm.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,

- 120

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

Correspondence ID: 13329 Copy for: Resident Geologist

### **Work Report Assessment Results**

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Submission Num	ber: 2.18831			
Date Correspond	ence Sent: Januar	y 25, 1999	Assessor:Bruce Gates	
Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9870.00538	1223093	CHAMBERS	Approval After Notice	January 23, 1999
<b>Section:</b> 12 Geological GEC	CL			
The revisions outline	ned in the Notice da	ated December 9, 1998, have been co	prrected. An additional \$136 has bee	n added for the analyses submitted.
Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9870.00539	1223094	CHAMBERS	Approval After Notice	January 23, 1999
<b>Section:</b> 12 Geological GEC	CL			
The revisions outli	ned in the Notice da	ated December 9, 1998, have been co	prrected. An additional \$246 has bee	n added for the analyses submitted.
Correspondence	to:		Recorded Holder(s) a	and/or Agent(s):
Resident Geologis	t		RICHARD WAYNE R	RINTALA
Kirkland Lake, ON			LIVELY, Ontario	
Assessment Files Sudbury, ON	Library			

### **Distribution of Assessment Work Credit**

The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: January 25, 1999

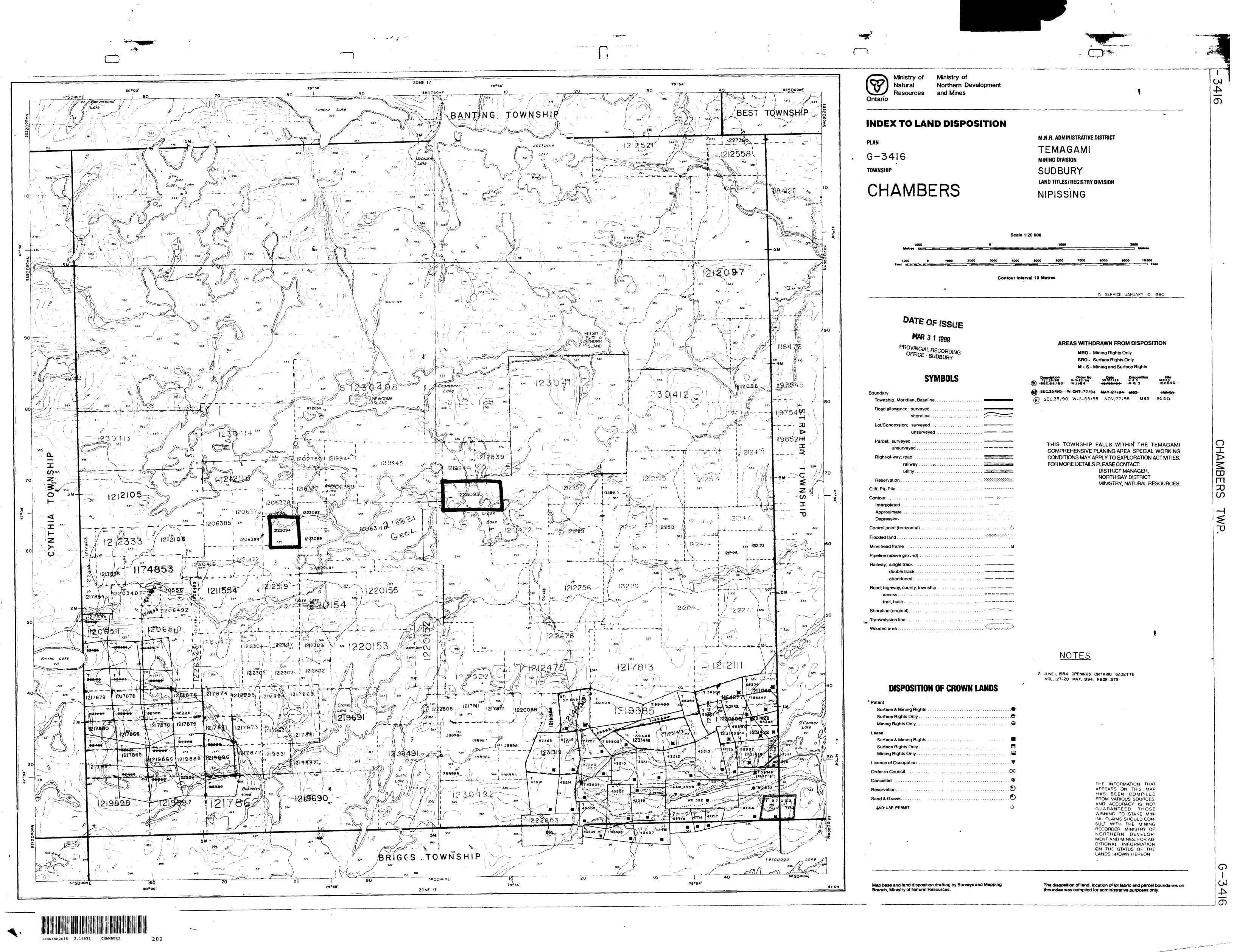
Submission Number: 2.18831

Transaction Number: W9870.00	538	
Claim Number	Valu	e Of Work Performed
1223093		1,204.00
	Total: \$	1,204.00
Transaction Number: W9870.00	539	
Claim Number	Valu	e Of Work Performed
1223094		1,620.00

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