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**Ontario Geological Survey
Open File Report 6202**

**Report of Activities, 2006
Resident Geologist Program**

**Thunder Bay South Regional
Resident Geologist Report:
Thunder Bay South District**

2007



ONTARIO GEOLOGICAL SURVEY

Open File Report 6202

Report of Activities, 2006
Resident Geologist Program

Thunder Bay South Regional Resident Geologist Report:
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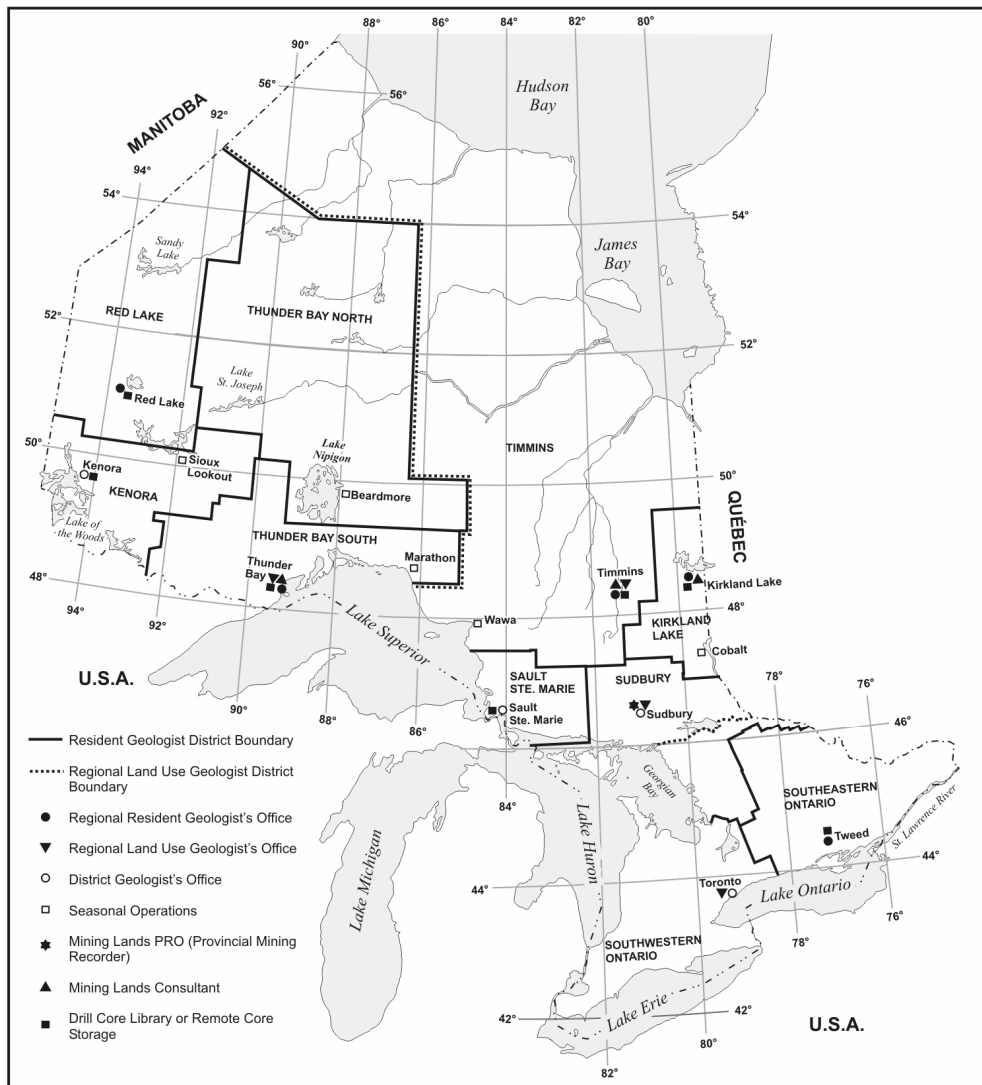
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**Ontario Geological Survey
Regional Resident Geologist Program**

**Thunder Bay South Regional Resident Geologist
(Thunder Bay South District)—2006**

by

J.F. Scott, D.A. Campbell and C.L. Komar

2007

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Thunder Bay South Regional Resident Geologist— 2006

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INTRODUCTION

The Thunder Bay South District encompasses an area of about 76 500 km². It extends from longitude 92°30'W in the southwest near Namakan Lake, south of Mine Centre, easterly to longitude 85°20'W just west of White River, Ontario. The southern boundary is the international border between Canada and the United States touching on the states of Michigan and Minnesota. The northern boundary is irregular in nature, but extends up to latitude 50°25'N just northwest of Armstrong, Ontario. The reader is referred to the location maps (Figures 3 and 4) for details.

All Universal Transverse Mercator (UTM) co-ordinates are reported in North American Datum 1983 (NAD83), unless otherwise noted. All assays were performed at the Geoscience Laboratories, Ontario Geological Survey, in Sudbury, unless otherwise noted. The authors note that, for ease of reading, all Web addresses were accessed on March 19, 2007, unless otherwise noted.

MINING ACTIVITY

In 2006, there were 3 producing gold mines and 1 producing base metal mine active in the Thunder Bay South District. As well, there were numerous seasonal producing amethyst properties. Mine production and reserves are listed in Table 1. Assessment work received is listed in Table 2. Exploration activity is depicted in Table 3 and keyed to Figures 3 and 4. The Golden Giant Mine closed in early 2006.

Table 1. Mine production and reserves in the Thunder Bay South Resident Geologist's District in 2006.

Mine	Production to end of 2005		Production in 2006		Reserves at end of 2006	
	Tonnage @ Grade	Total Commodity	Tonnage @ Grade	Total Commodity	Tonnage	Grade
David Bell Mine	8 644 487 t @ 13.31 g/t	3 616 208 ounces Au	335 327 t @ 9.42 g/t Au	95 670 ounces Au	713 236 t	11.55 g/t Au
Golden Giant Mine	19 245 215 t @ 10.64 g/t	6 780 373 ounces Au	Mine Closed Jan. 2006	Mine Closed Jan. 2006	Mine Closed Jan. 2006	Mine Closed Jan. 2006
Lac des Iles Mine	28 041 045 t	1 623 398 ounces Pd 130 969 ounces Pt 121 626 ounces Au 36 928 176 pounds Cu 21 273 981 pounds Ni	4 570 926 t @ 2.18 g/t Pd	237 338 ounces Pd 22 308 ounces Pt 17 237 ounces Au 5 155 588 pounds Cu 2 721 042 pounds Ni	N/A	N/A
Williams Mine	47 663 685 t @ 5.76 g/t	8 449 655 ounces Au	3 019 310 t @ 3.44 g/t Au	314 028 ounces Au	15 700 118 t	2.32 g/t Au

Amethyst

Two areas northeast of Thunder Bay are well-known locations for amethyst veins and production. In the area along the Magone Lake Road, north of MacGregor Township (accessible via Highway 527), 4 sites see periodic, small-scale extraction of amethyst. In McTavish Township, 8 deposits are accessible from Highways 11 and 17, four of which operate as seasonal tourist attractions. The Blueberry Amethyst Quarry also operates as a seasonal tourist attraction, southwest of Kakabeka Falls. Local amethyst deposits and mines are listed below.

Deposit or Mine	Location	Owner(s)
Amethyst Mine Panorama	McTavish Township	S. and T. Lukinuk
Ancliff Station Amethyst Quarry	McTavish Township	C. Anderson
Bak Quarry	McTavish Township	D. Bak
Blueberry Amethyst Quarry	Marks Township	J. Hakala and S. Belletini
Blue Points Amethyst Mine	McTavish Township	L. Swanson
Boulder Creek Amethyst Quarry	North of MacGregor Township	C. Anderson
Breezy Mountain Amethyst Mine	McTavish Township	T. Twomey
Crystal Creek Amethyst Mine	North of MacGregor Township	R. Hietapakka
DanBill Amethyst Mines	McTavish Township and North of MacGregor Township	B. Richardson and D. Arsenault
Diamond Willow Amethyst Mine	McTavish Township	D. Noyes
Gem Mountain Amethyst Mine	North of MacGregor Township	O. and R. Harty
Keetch Amethyst Quarry	McTavish Township	N. Keetch
Ontario Gem Amethyst Mine	McTavish Township	P. Marino
Purple Haze Mine	North of MacGregor Township	M. and S. Grieve

Gold

The 2 remaining Hemlo mines, the David Bell Mine, and the Williams Mine, continue to produce gold from the Hemlo deposit. Mining operations at Newmont Canada's Golden Giant Mine have terminated and the site is being decommissioned.

DAVID BELL MINE (TECK–CORONA OPERATING CORPORATION)

Production from the David Bell Mine (Teck Cominco Limited (50%) – Barrick Gold Corporation (50%)) in 2006 consisted of 95 670 ounces of gold from 335 327 t milled, at a feed grade of 9.42 g/t gold (J. Mustafa, Teck–Corona Operating Corporation, personal communication, 2007).

As of January 1, 2007, proven and probable reserves from the 'A', 'C' and 'D' zones totalled 713 236 t at a grade of 11.55 g/t Au (J. Mustafa, Teck–Corona Operating Corporation, personal communication, 2007).

WILLIAMS MINE (WILLIAMS OPERATING CORPORATION)

Production from the Williams Mine (Teck Cominco Limited (50%) – Barrick Gold Corporation (50%)) in 2006 totalled 3 019 310 t milled at an average grade of 3.44 g/t Au (314 028 contained ounces of gold) (J. Mustafa, Williams Operating Corporation, personal communication, 2007).

As of January 1, 2007, proven and probable reserves totalled 15 700 118 t at a grade of 2.32 g/t Au (J. Mustafa, Williams Operating Corporation, personal communication, 2007). The Williams Mine is actively exploring to delineate the total resource on the mine property.

Platinum Group Elements

LAC DES ILES MINE (LAC DES ILES MINES LTD.)

In 2006, **North American Palladium Ltd.**'s Lac des Iles Mine milled 4 570 926 tonnes of ore from which it extracted 237 338 ounces of palladium, 22 308 ounces of platinum, 17 237 ounces of gold, 2 721 042 pounds of nickel, and 5 155 588 pounds of copper.

Exploration continues at the mine property to delineate and define resources at depth. Underground mining achieved commercial production in 2006. With the added development underground, further diamond drilling to delineate the mineral resource will be carried out more quickly and efficiently from underground than from surface.

The underground mine will supply 2000 tonnes per day at an average grade of 6.62 g/t Pd. Eighty additional employees will be required once operations commence. The mine currently employs approximately 400 people.

EXPLORATION ACTIVITY

Mining Lands

In the Thunder Bay South District, 7381 claim units were staked, 6937 claim units cancelled, and a total of 39 230 claims units were active as of December 31, 2006.

Exploration

Alto Ventures Ltd. summarized its exploration activity in several news releases, at the Coldstream property, as follows:

During the past year, Alto made strategic land purchases that cover approximately 10 km of a prospective mineralized structure and completed a 2,062 m drill program on the East Coldstream gold deposit. Drilling has confirmed the wide zones of gold mineralization grading 1.2 g/t gold over 68 m and has extended the mineralization along strike. The mineralized system has now been traced for two km at East Coldstream and remains open along strike and to depth (Alto Ventures Ltd., news releases, August 9, 2006 and September 19, 2006).

The East Coldstream gold deposit occurs at the northeast end of a linear corridor that extends west southwest for over 20 km and includes the North Coldstream Copper Mine (historical production of 102 million pounds of copper, 440,000 ounces of silver and 22,000 ounces of gold from 2.7 million tons of ore), Alto's Burchell property with multiple gold zones of up to 0.95 g/t gold over 34 m and the Moss Lake gold deposit with a historical resource of 60 million tonnes grading 1.1 g/t gold.

The styles of alteration and mineralization at East Coldstream display many characteristics of Iron-Oxide- Copper-Gold (IOCG) deposits found in other parts of the world. Recognition of this style of mineralization is significant since IOCG deposits are typically large deposits with substantial quantities of gold, copper and other metals. (Alto Ventures Ltd., news release, November 27, 2006).

More information can be found at www.altoventures.com.

Benton Resources Corp. conducted prospecting, stripping and trenching, channel sampling, and diamond drilling, on the Bermuda property in 2006. The Bermuda property is hosted within the Proterozoic Port Coldwell alkalic complex located near Marathon, Ontario. To date, Benton Resources Corp. has completed 55 diamond-drill holes over a 15 km strike length. An additional 10 000 m of drilling is planned for the winter 2006–2007. While no NI 43-101 compliant resource figure is available, drill results indicate that the target rocks are mineralized with copper plus PGE (platinum group elements). Latest drill results include 1.11 g/t total precious metals (Pt+Pd+Au: platinum+palladium+gold) over 20.5 m in hole SL-06-09. Included within that is a higher grade section that assayed 8.16 g/t Pt+Pd+Au over 1.5 m (Benton Resources Corp., news release, January 4, 2007). Benton Resources Corp. has initiated a 10 000 m diamond drilling program at the Bermuda property (Benton Resources Corp., news release, February 14, 2007).

Benton Resources Corp. is active in the Sibley Basin and has entered into a joint venture arrangement with Tri Gold Resources Corp. to explore the Benton claims in the Black Sturgeon Lake area of the district. The properties under exploration contain radiometric anomalies associated with the Proterozoic–Archean unconformity. Large regional gravity anomalies are unexplained on the property. The potential for iron oxide-copper-gold (IOCG) deposits needs to be assessed.

Benton Resources Corp. is also involved in gold exploration. Teck Cominco Limited optioned Benton’s Saganaga Lake property and has drilled 11 diamond-drill holes. According to a Benton Resources news release, dated January 18, 2007, the results indicate the presence of a large gold-bearing structure associated with a mafic intrusion. The 2000 m 11-hole drill program was designed to test a large induced polarization (IP) anomaly that extends in excess of 1 km. Two gold zones named the Powell and Starr zones, respectively, have been outlined on the Saganaga property. Historical favourable gold results have been reported, “including a drill hole that intersected 31 gpt over 5.9m [0.99 ounce per ton over 20 feet] in the Powell zone. Past work on the Starr zone ... returned [assays] up to 5.3gpt gold across 36.7m [in trenching]” (www.bentonresources.ca/s/Saganaga.asp). “Limited shallow diamond drilling returned two intervals of 5.27 gpt gold over 10.1 m followed by 5.58 gpt gold over 6.4 m in drill hole 97-12” (direct link to document: www.bentonresources.ca/BentonResources_Brochure.pdf).

The results from 6 of the 11 diamond-drill holes, completed by Teck Cominco in December 2006, are shown in the summary table below (Benton Resources Inc., news release, January 18, 2007). “The highlight of assay results from the first 6 drill holes comes from the Starr zone area where drill hole SAG06-11 intersected 5.36 grams per tonne (gpt) gold (Au) over 20 m starting from surface” (Benton Resources Corp., news release, January 18, 2007).

Hole ID	From (m)	To(m)	Interval (m)	Au (g/t)
SAG06-01				NSV
SAG06-02	56.0	59.0	3.0	0.67
SAG06-03	48.3	49.5	1.2	4.24
SAG06-05	17.2	18.1	0.9	8.20
<i>and</i>	84.5	105.5	21.0	0.18
SAG06-10	0.0	6.5	6.5	0.35
SAG06-11	0.0	20.0	20.0	5.36
<i>includes</i>	14.0	20.0	6.0	10.18

Beaufield Resources Inc. drilled one 400 m hole to test a significant Mobile Metal Ion (MMI) geochemical gold anomaly, situated within the Hemlo shear zone 15 km west of the Hemlo mines. Beaufield intersected several 10 to 20 m wide mineralized zones. These zones contained intercalating altered mafic volcanic rocks, pyritized sedimentary rocks, quartz flooding and sericitization, features usually consistent with ore-grade gold deposits; however, no gold values were returned except for one gold assay of 0.8 g/t at the bottom of the hole. Follow-up drilling to lengthen the drill hole and further exploration is planned. In April 2006, Beaufield acquired 20 claims, from individual prospectors, contiguous with Beaufield’s existing Hemlo property. A magnetometer survey and line cutting totalling 79.7 km was completed on the new claims. Additionally, 15 rock samples were collected and one sample returned 2.12 g/t gold. (Beaufield Resources Inc., Management Discussion and Analysis, December 18, 2006, *see* document filed with SEDAR® ([SEDAR Home Page](#)))

Brett Resources Inc. entered an option agreement with **Kinross Gold Corporation**, in March 2006, on the Hammond Reef gold property near Atikokan, Ontario. The terms of the agreement require Brett Resources to expend a total of \$5 million on exploration and development within 4 years, in order to earn up to a 60% interest in Kinross' Hammond Reef (Brett Resources Inc., Management Discussion and Analysis, January 26, 2007, *see* document filed with SEDAR® ([SEDAR Home Page](#))).

Clark Exploration Consulting Inc. prepared a NI 43-101 Technical Report (June 15, 2006) on the Hammond Reef property (Cullen and Clark 2006). The following information is summarized from this report:

Two low-grade gold mineralized zones, the “A” and “41” zones have been outlined on the Hammond Reef. Roscoe Postle Associates Inc., in 1997, audited an estimate by Pentland Firth Ventures Ltd., indicating a historical inferred resource of 85.6 million tonnes @ 0.93 g/t Au for 2.56 million ounces gold [Pentland Firth Ventures Ltd. 1998]. In a Kinross internal memo, Eastwood (2002) estimated a revised historical resource which excluded the grades/tonnages for sections with no/insufficient drilling, was 60.8 million tonnes @ 0.96 g/t Au for 1.8 million troy ounces gold. (Cullen and Clark 2006, p.2-9)

At the Hammond Reef property, gold is hosted in a northeast-trending zone of sheared granitoid rocks. The zone has been traced for a 2.3 km strike length and ranges in width from 100 to 300 m. Mineralization is associated with fracture-controlled quartz vein stockwork. (www.brettresources.com/s/HammondReef.asp?ReportID=134215)

Brett is continuing with an extensive exploration program that commenced in September 2006, involving geological mapping, prospecting, sampling, trenching and diamond drilling. Brett released the results of the initial diamond drilling on the Hammond Reef (news release, January 18, 2007). Highlights from the first 2 holes include hole BR-1 intercepting 38.5 m of 0.81 g/t Au and hole BR-2 intercepting 43.5 m of 1.22 g/t Au. Ten drill holes, totalling 2753 m, were completed in December 2006; the results are shown in the following summary table (Brett Resources Inc., news release, January 18, 2007).

Hole #	From (m)	To(m)	Interval (m)	Au (g/t)	Zone
BR-01	64.5	69.0	4.5	1.14	41 Zone
	105.0	111.0	6.0	1.14	
	124.5	163.0	38.5	0.83	
<i>including</i>	160.0	163.0	3.0	3.14	
	224.0	230.0	6.0	1.20	
BR-02	145.0	188.5	43.5	1.22	41 Zone
<i>including</i>	158.5	161.5	3.0	8.85	
	197.0	201.5	4.5	1.16	
BR-03		no significant results			
BR-04	13.5	15.0	1.5	17.99	41 Zone Extension
	111.0	118.5	7.5	0.65	
	160.5	163.5	3.0	1.65	
BR-05	7.5	22.5	15.0	1.12	41 Zone Extension
<i>including</i>	7.5	15.0	7.5	1.82	
BR-06	85.5	93.0	7.5	1.14	41 Zone Extension
BR-07		no significant results			41 Zone Extension
BR-08		no significant results			41 Zone Extension
BR-09		no significant results			41 Zone Extension
BR-10	96.0	103.5	7.5	0.53	Snail Bay Zone
BR-11	144.0	150.0	6.0	0.49	hole not complete

Canadian Golden Dragon Resources Ltd. has been actively exploring its properties in the Seagull Lake–Disraeli Lake area, the Vanguard, Tilly Creek and Elephant Lake properties in the Shebandowan area, as well as the South Legris property near Legris Lake.

Three deep NQ holes were completed at the Seagull property in June 2006. The purpose of these holes was to test the continuity of several PGE horizons discovered in drill core previously. The PGE horizons were intersected in the new drilling, but assay results indicated slightly lower grades. This drilling gave further credence to the idea that the Seagull intrusion is a definable layered complex and the presence of multiphase layering is a good indication that other zones could occur. For details regarding grades encountered and the location of the drill holes, see www.goldendragon.ca.

Canadian Golden Dragon Resources Ltd. completed a three-hole program at the Vanguard property, Shebandowan greenstone belt early in 2006. A 0.8 m zone of disseminated sulphides was intersected at a depth of 67 m that assayed 3.4% Zn, 0.12% Cu, and 1.25 g/t Au; a second 1.0 m zone, intersected at 71 m below surface, assayed 0.41% Cu and 20.1 g/t Ag. Canadian Golden Dragon continues to explore the chert exhalite horizon between the East and West Vanguard occurrences. This horizon also extends southwesterly into the North Coldstream Mine area and beyond (Canadian Golden Dragon Resources Ltd., news release, May 3, 2006).

Canadian Golden Dragon Resources Ltd. completed 2 diamond-drill holes on the Elephant Lake property, located 2.7 km west of the southwest corner of Moss Township, to test the continuity of an IP anomaly. Hole EL-06-1 intersected several porphyry zones with disseminated pyrite, chalcopyrite and molybdenite. The molybdenite was confined to a quartz stockwork vein system that spanned 80 m of core. Within the porphyry section, molybdenum values ranged from 166 to 2700 ppm and copper values ranged from 783 to 4010 ppm. Hole EL-06-2, located 400 m east of hole EL-06-1, intersected a 25 m wide porphyry with disseminated pyrite with copper values ranging from 891 to 1415 ppm with elevated tungsten values of up to 400 ppm (Canadian Golden Dragon Resources Ltd., news release, March 28, 2006).

Canstar Resources Inc. has announced the acquisition of property in the Sunday Lake area located about 30 km north of Thunder Bay. A very large negative magnetic anomaly is situated immediately east of Sunday Lake. Canstar Resources contracted Terraquest Ltd to fly a 285 line-kilometres survey over the area to delineate the anomaly. Geophysical modelling by Canstar has indicated that the intrusive body has been emplaced at shallow depth and extends vertically for at least 750 m. A carbonatite–kimberlite complex or a mafic to ultramafic complex is suspected (Canstar Resources Inc., news release, January 26, 2007).

According to MacDonald (1941), the area is underlain by metasedimentary rocks of the Quetico Subprovince that have been intruded by Keweenawan diabase dikes.

The anomaly may represent a cluster of at least 3 intrusions, based on the internal magnetic character of the anomaly. Also, the aerial extent of the rocks causing the anomaly would be quite a bit less than indicated. A cursory examination of the area, by program staff, found no rock units that could account for the large negative magnetic anomaly; however, the source rocks for the anomaly may not be exposed. Lithologies noted in the area were mainly wackes and siltstones; some very narrow mafic dikes were seen in one outcrop. Figure 1 depicts the negative magnetic anomaly and the profile along line A–B is shown in Figure 2.

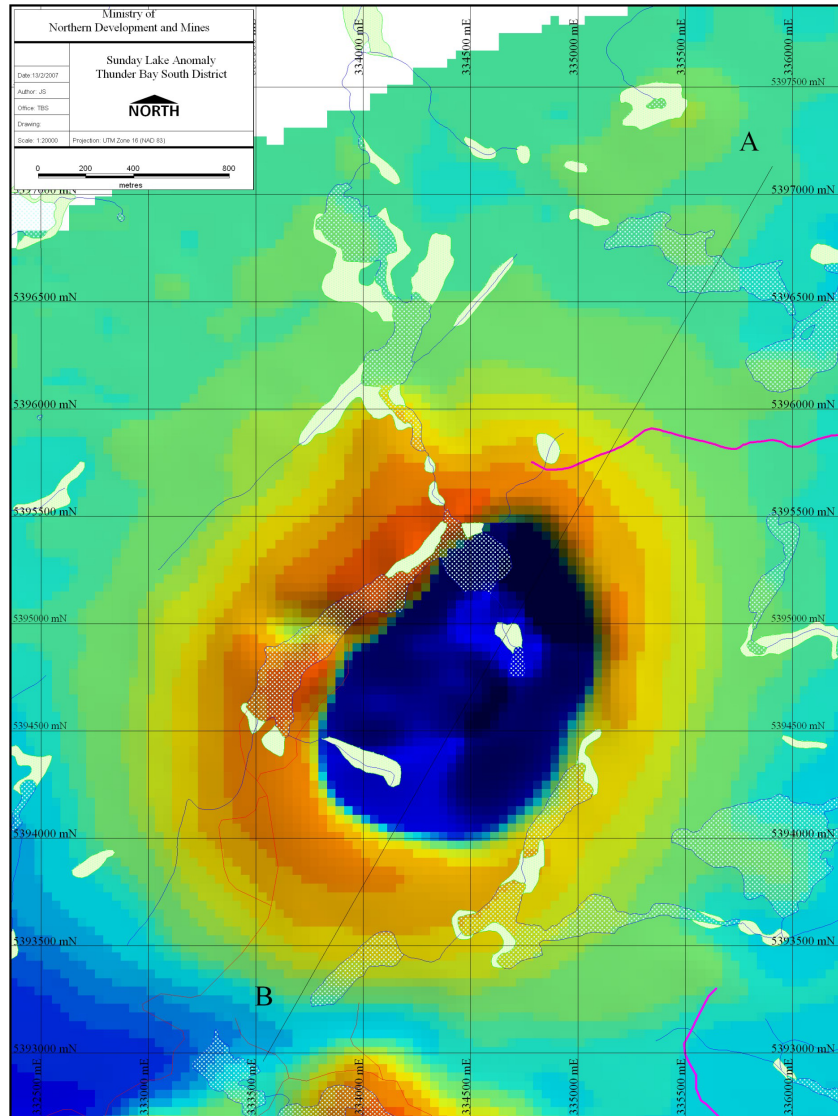


Figure 1. Sunday Lake magnetic anomaly (derived from OGS 2003).

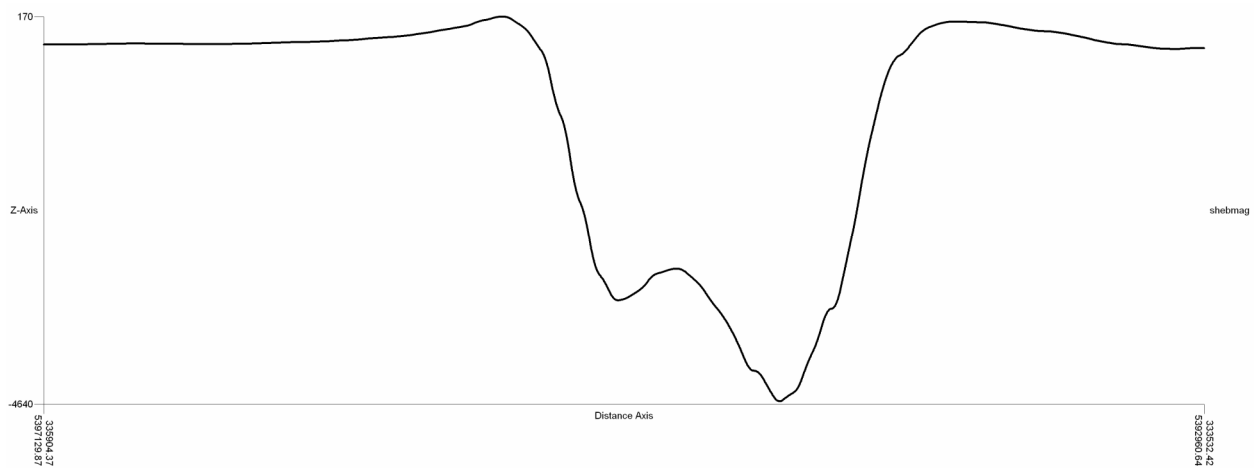


Figure 2. Profile of the Sunday Lake magnetic anomaly (derived from OGS 2003).

East West Resource Corporation and associated companies Maple Minerals (a division of Mega Uranium Ltd.), Canadian Golden Dragon Resources Ltd. and Canplats Resources Corporation have a significant land position in the Thunder Bay area with claims in the Shebandowan greenstone and the Nipigon Plate areas. These companies, under the direction of R. Middleton, P.Eng., have been aggressively exploring for a variety of mineral deposits. Targets include volcanogenic massive sulphide (VMS) base metals, Cu-Ni-PGE in layered mafic to ultramafic complexes, uranium and iron oxide-copper-gold (IOCG), as well as Cu-Au-Mo porphyry and lode gold deposits.

The central focus of exploration activity in 2006, within the Thunder Bay South District, has been the western Shebandowan belt (Hamlin, Deaty, Powell, Burchell, Ardeen–Pele Option, Tilley and Vanguard), the Black Sturgeon Lake area of the Nipigon Embayment (Seagull and Disraeli intrusions), and various uranium properties (Greenwich Lake and others).

In 2005–2006, continued exploration on the Hamlin, Powell, Ardeen (Pele Mountain–East West Resources–Maple Minerals) and Burchell properties consisted of geological mapping, airborne geophysics, ground IP-resistivity surveys and diamond drilling. Diamond drill programs were completed on Hamlin (50 DDH for a total of 8823 m), Deaty (18 DDH), Powell (15 DDH), Ardeen (13 DDH) and Burchell (4 DDH) (East West Resources, Management Discussion and Analysis, September 29, 2006, *see* document filed with SEDAR® ([SEDAR Home Page](#))).

The Hamlin property, jointly owned by East West Resource Corporation (50%) and Maple Minerals (50%), consists of a 77-claim block located in the vicinity of Hamlin Lake. The geology is favourable for the occurrence of both gold and VMS base metal deposits. It is situated on strike to the northeast from the recent Freewest Resources VMS discovery in the vicinity of Wye Lake. Mineralization occurs as stringer chalcopyrite, pyrite, with minor molybdenite in an extensive brecciated felsic volcanic and/or quartz porphyry complex. Widespread chloritic alteration, rusty zones with chalcopyrite and intense brecciation have been explored by stripping, sampling and diamond drilling after a detailed versatile time-domain electromagnetic (VTEM) survey of the area. The Hamlin property is described in detail at East West Resource Corporation (www.eastwestres.com).

This claim group covers both base metal and gold settings in an extensive rhyolite volcanic pile. Large sections of anomalous gold are associated with sericite schist, potassic alteration, quartz eye porphyries and breccias. These deformed and altered zones can be traced for several kilometres and provide excellent targets for further exploration.

The Hamlin property is described by East West Resources Corporation in its 2006 Annual Report as follows:

On the south side of the Hamlin claims, the volcanics immediately north of Hamlin Lake contain wide spread chlorite alteration, rusty zones with disseminated chalcopyrite, malachite stain and ferricrete (iron oxide cement). IP surveys completed in July 2005 defined four zones in this area, two of which correlate with Max Min EM conductors and airborne EM trends. Grid lines and geological mapping cover the entire property. A gravity survey commenced in August 2005 to define areas of high density (sulphide concentrations).

A new copper discovery of 1.49% copper and 4.0 g gold/tonne was found in a disseminated sulphide zone in altered brecciated rhyolite. This zone has been traced for 800m in outcrop and parallels another copper bearing zone along the base line. The pink altered brecciated rhyolite now appears to be the brecciated margin of a younger alkali intrusion (syenite) which formed a 200-300m wide breccia roof pendant next to the unbrecciated Archean age felsic volcanics.

Copper mineralization occurs throughout the breccia as 0.5 - 1.0m random masses of chalcopyrite as well as disseminated chalcopyrite. Gold and silver values directly correlate with copper; however, molybdenite occurs in irregular patches on slip planes and in narrow quartz veins and has an indirect correlation with copper.

Chert exhalite units occur in the volcanics on Hamlin, which can be traced southwest from the Vanguard massive sulphide through the North Coldstream Mine (Cu-Ag-Au), and through Burchell to Deaty Creek and eventually to the Sungold. (Annual Report, 2006, np.)

Drilling on Hamlin resumed in September 2005 to test the extensive breccia system north of Hamlin Lake with the completion of holes HAM-05-29 to HAM-05-38 by December 2005. (Annual Report, 2006, np.)

The breccia zone at Hamlin appears to be an iron oxide copper gold (IOCG) system in the form of a roof pendant breccia that has stopped up underneath the vertically dipping Archean rhyolite volcanics and is therefore a younger event than the older greenstone belts rocks. Age dating using molybdenum samples has produced a date of 2692 ± 9 my, which is Timiskaming and is consistent with the occurrence of these same age of rocks in the eastern Shebandowan belt. All of the alkali (syenite) intrusives in the Shebandowan belts are considered to be Timiskaming

age since they cut Timiskaming sediments. The importance of this is the fact that several major IOCG deposits in Brazil have been determined to be Timiskaming in age. (Annual Report, 2006, np.)

Drilling recommenced in January 2006 with five holes infilling the gaps along the breccia trend and one hole to the north in the volcanics to test an EM conductor and eastern step-out to Hole HAM-05-37 where gold values were found in the rhyolite volcanics. (Annual Report, 2006, np)

Further details on these projects are available from East West Resource Corporation (www.eastwestres.com). A map depicting the various land holdings in the western Shebandowan belt can also be viewed (www.eastwestres.com; select Properties).

Freewest Resources Canada Inc. continued to evaluate its Sungold property located in the western Shebandowan area. Three types of mineralization occur on the property: gold associated with porphyries and felsic volcanic rocks, VMS-style copper-zinc-silver associated with felsic volcanic rocks, and iron oxide-copper gold (IOCG) associated with breccias proximal to the Knife Lake fault.

In 2006, an InfiniTEM[®] survey was carried out near Redfox Lake to delineate an airborne electromagnetic conductor. This anomaly was tested with 3 diamond-drill holes that intersected carbonatized sulphide-bearing iron formation. Geological mapping was carried out southwest of Wye Lake to trace the favourable VMS horizon along strike. Mapping was also carried out in the northeast sector of the property (Hamlin grid). The main focus of the mapping was to determine if the mineralized breccia zone on the East West Resources Corp. claims extended into the Freewest property. The breccia zone was found to extend into the Freewest claims where copper-gold-molybdenum-mineralized zones 125 m wide and at least 400 m long were delineated.

All three types of mineralization on the Sungold property warrant further exploration. Only 1.5 km of the 26 km favourable Wye Lake VMS horizon has been drilled. The IOCG-style of mineralization near Hamlin Lake has potential for a lower grade-high tonnage copper-gold-molybdenum deposit. Limited work has been done on the original Sungold gold occurrence. This occurrence is hosted by the felsic volcanic rocks associated with the Wye Lake occurrence. This unit has been traced across the property and should be prospected for gold.

W. Gilbert, a Thunder Bay prospector, is prospecting his claims in the Yule Lake area, near Black Sturgeon Lake, for copper-nickel-PGM. The host rock is coarse gabbro with traces of sulphides. The claims are adjacent to the Benton Resources Corp. ground on which Benton is investigating a large gravity anomaly.

E. Holbik, a Thunder Bay prospector, continues to work his claim group in the Shebandowan area. The property is prospective for both gold and Cu-Zn base metals. Sampling, trenching and stripping has uncovered sulphide-rich zones that require further assessment.

R. Kwiatkowski, a Thunder Bay prospector, is exploring his claims in the Bateman Lake area, northwest of Kakabeka Falls. Prospecting has uncovered mafic to ultramafic rocks that contain traces of copper and nickel.

Magma Metals Limited is currently evaluating PGE-copper-nickel mineralization discovered in a mafic to ultramafic intrusion on its Thunder Bay North Project property, located in the Current Lake area, approximately 50 km north-northeast of Thunder Bay. The intrusion, outlined by a magnetic anomaly, is approximately 1.5 km long and 200 m wide. Associated mineralization is similar to the recently discovered Eagle nickel-copper deposit, on the south side of Lake Superior in Michigan. The Eagle deposit, discovered in 2002, contains approximately 5 million tonnes at 3.7% Ni and 3.1% Cu (www.magmametals.com.au).

Magma's current drill program will consist of 11 diamond-drill holes totalling approximately 3 000 m. Magma released the following results (Magma Metals Ltd., news release, January 18, 2007) from the first 2 drill holes:

TBND001: 10.5 m @ 2.80 g/t Pt+Pd+Au, 0.45% Cu & 0.34% Ni from 72 m
 TBND002: 7.2 m @ 0.51 g/t Pt+Pd+Au from 79.8m

The distance separating the first 2 holes is approximately 1 km, suggesting potential for a large mineralized system. Magma recently increased its land position in the area and re-commenced drilling with a third hole, which is situated midway between TBND001 and TBND002 (Magma Metals Ltd., news release, January 31, 2007).

Magma Metals Limited is also engaged in an exploration project in the Tib Lake gabbro, a property optioned from Houston Lake Mining Inc. Mineralization at Tib Lake is similar to that at Lac des Iles. It is characterized by PGE-sulphide mineralized zones within a vari-textured gabbro that is generally more weakly magnetic than the surrounding rocks. Magma has proposed 2 reconnaissance diamond-drill holes to explore magnetic lows which may reflect zones of mineralized vari-textured gabbro.

Marathon PGM Corporation continued its diamond-drill program on its Marathon property, which is located approximately 10 km north of Marathon, Ontario. The 2006 diamond drilling program was designed to further define and increase the measured and indicated resource and to come to a reliable estimated total resource. The 2006 drilling was able to increase the current resource by about 39%. The current resource is shown in the table below (Marathon PGM Corp., news release, January 25, 2007).

P&E 2007 Resource, All zones within Pit Shell						Contained Metals			
Category	Tonnes (×10 ⁶)	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	Pd (ounces)	Pt (ounces)	Au (ounces)	Cu (pounds ×10 ⁶)
Measured	37.5	0.99	0.26	0.10	0.35	1 194 000	313 000	121 000	289
Indicated	30.8	0.80	0.24	0.09	0.30	792 000	238 000	89 000	204
Measured + Indicated	68.3	0.91	0.25	0.09	0.32	1 986 000	551 000	210 000	493
Inferred	1.9	1.02	0.33	0.13	0.23	62 000	20 000	8 000	10

To date, Marathon PGM Corporation, has drilled a total of 83 104 m. An NI 43-101 resource estimate was completed by Eugene Puritch, P.Eng., of P & E Mining Consultants of Brampton, Ontario (*see* www.marathonpgm.com, “Reports” March 28, 2006). A program of an additional 35 000 m of drilling in 2007 is under way. This program will focus on step-out drilling, upgrading of an inferred resource, metallurgical test sampling and further exploration (Marathon PGM Corp, news release, January 25, 2007).

Mega Uranium Ltd. and East West Resource Corporation have optioned 2 uranium properties in the Greenwich Lake area, approximately 53 km northeast of Thunder Bay, Ontario. Access to the western portion of the property has been enhanced by recent logging roads.

Mengold Resources Inc. is currently exploring its Burchell Lake property, 110 km west of Thunder Bay. More than 13 conductive zones are being investigated and include numerous VTEM anomalies that were identified in a recent helicopter-borne survey, conducted by Geotech Ltd. Drilling to date has intersected some pyrite zones with traces of chalcopyrite in a VMS environment.

Additional work is being conducted on Mengold’s Gold Creek properties, located about 60 km west of Thunder Bay; for further details, *see* www.mengold.com.

MetalCORP Ltd. continued with its mineral exploration program at the Big Lake property located approximately 20 km southeast of Marathon, Ontario. A third mineralized discovery, the BL14 zone, has been interpreted to be a copper stringer zone associated with a VMS hydrothermal system. The zone is made up of bands, veins and stringers of chalcopyrite and pyrite, and contains up to 5% disseminated sphalerite with minor galena. Assays of drill core yielded up to 2.5% Cu, 1.0% Zn, 46.0 g/t Ag, 1.6 g/t Au and 0.1% Pb across 0.9 m (MetalCORP Ltd., news releases, 2005).

A 16-hole diamond-drilling program in 2006 intersected further good grades. Hole #37 intersected mineralization in the BL14 zone from 68.8 to 73.3 m that assayed 3.1% Cu, 1.6% Zn, 63.1 g/t Ag and 1.7 g/t Au across a true width of 4.5 m. Hole #38 also intersected the mineralized BL14 zone between 38.5 and 41.1 m and yielded assays of 2.1% Cu, 1.5% Zn, 42.2 g/t Ag and 1.7 g/t Au (MetalCORP Ltd., news release, December 20, 2006).

A second drill will be deployed in January 2007 to test other airborne EM anomalies on the property. MetalCORP remains excited by the ongoing success of the drill program in delineating this mineralized zone. Further details are available at www.metalcorp.ca.

Moss Lake Gold Mines Ltd. is “a 62% owned subsidiary of Wesdome Gold Mines Ltd. that owns a large tonnage, low-grade gold deposit at Snodgrass Lake in the Shebandowan area, 100 km west of Thunder Bay, Ontario. A recent NI 43-101 compliant technical report completed by independent consultants Watts, Griffis, McOuat Ltd. (WGM) defines an inferred resource of 56.1 million tons grading 0.027 ounce gold per ton for the Moss Lake deposit, containing 1.51 million ounces of gold. This includes 39.0 million tons grading 0.035 ounce per ton applying a 0.015 ounce per ton cut-off grade. WGM recommends a Preliminary Assessment to determine the economic conditions necessary to promote the resource classification and advance development options.” (www.mosslakegold.com/)

North American Palladium Ltd. also explored its Shebandowan Mine option in 2006 along the northwest strike extension of the Inco Shebandowan ore zone. A deep-penetrating ground electromagnetic survey was undertaken to refine drill targets. A 21-hole diamond drilling program in 2006 totalled 4010 m. Drilling investigated the area west of the Number 1 shaft, the “West Zone” and the “Road Zone”. An infill drilling program is expected to commence soon; a program of shallow test drilling and trenching will further delineate the D-zone. North American Palladium released the following the drill-hole assay results from the Shebandowan Mine option (North American Palladium Ltd., www.napalladium.com/, news release, September 12, 2006 (see “Archived Press Releases”)):

HOLE	FROM	TO	INTERVAL	NICKEL%	COPPER%	COBALT%	GOLD g/t	Platinum g/t	Palladium g/t	NIEQ% *	UNIT
WEST ZONE											
SP06-001	85.00	91.00	6.00	0.7874	0.3322	0.0238	0.041	0.219	0.629	1.056	Main
SP06-002	86.47	91.00	4.53	0.9387	1.2039	0.0475	0.121	0.208	1.307	1.594	Main
and	98.80	110.68	11.88	1.9161	0.7734	0.0714	0.051	0.633	0.812	2.529	
	128.00	148.15	20.15	0.9135	0.6924	0.0327	0.131	0.158	0.635	1.307	South
SP06-003	146.00	157.00	11.00	0.4183	0.8172	0.0205	0.267	0.630	2.049	1.100	Main
	197.00	198.00	1.00	0.7642	0.3683	0.0236	0.140	0.238	0.538	1.053	South
SP06-004	300.00	302.00	2.00	0.3206	0.1217	0.0226	0.147	0.596	2.872	0.856	Main
SP06-005	82.00	92.50	10.50	1.5899	1.0057	0.0588	0.166	0.500	1.849	2.339	Main
and	96.50	97.90	1.40	1.4195	0.3220	0.0563	0.242	0.219	0.818	1.799	
and	106.00	108.00	2.00	0.5071	0.1566	0.0398	0.038	0.188	0.523	0.736	
SP06-006	129.55	136.00	6.45	0.5885	1.6606	0.0151	0.952	0.839	6.266	2.091	Main
and	140.00	147.00	7.00	1.5948	0.5959	0.0297	0.183	0.402	1.767	2.134	Main
SP06-007	142.00	144.00	2.00	0.3284	1.1128	0.0138	0.423	0.246	1.491	0.961	Main
and	151.00	156.80	5.80	0.4523	0.7330	0.0278	0.169	0.331	1.127	0.945	
SP06-008	80.00	82.00	2.00	0.6836	0.4011	0.0267	0.303	0.279	1.049	1.073	Main
and	86.90	90.00	3.10	0.7616	1.0956	0.0312	0.188	0.401	1.376	1.414	
and	118.00	122.00	4.00	0.2917	0.5080	0.0166	0.127	0.243	0.381	0.591	South
and	124.00	128.00	4.00	0.1877	0.6094	0.0120	0.261	0.199	1.011	0.582	
SP06-009	166.25	168.55	2.30	0.2703	0.2735	0.0165	0.058	0.096	0.733	0.491	Main
SP06-010	147.00	149.00	2.00	0.3153	0.2172	0.0151	0.089	0.092	0.375	0.483	Main
SP06-011	122.60	125.00	2.40	0.9807	0.6577	0.0335	0.151	0.418	1.259	1.493	Main
SP06-012	157.85	161.00	3.15	1.8056	0.8566	0.0567	0.228	0.919	3.164	2.747	Main
and	208.00	209.00	1.00	1.2198	0.0660	0.0403	0.067	3.786	2.301	2.448	
and	214.00	217.00	3.00	0.9862	0.4187	0.0333	0.219	0.340	1.000	1.392	
and	223.00	227.00	4.00	2.2701	0.9452	0.0620	0.246	0.319	2.933	3.087	
SP06-013	181.00	183.00	2.00	0.4352	0.1173	0.0217	0.077	0.430	1.006	0.728	Main
	267.40	269.40	2.00	0.5067	0.5531	0.0220	0.128	0.327	2.070	1.023	South
SP06-014	116.00	118.00	2.00	0.2904	0.8108	0.0097	0.192	0.370	1.049	0.774	Main
and	123.00	134.00	11.00	1.0536	1.1115	0.0331	0.155	0.439	1.711	1.753	
SP06-016	139.00	141.00	2.00	0.7102	0.2877	0.0254	0.064	0.249	1.148	1.032	volcanics
	80.00	84.00	4.00	0.7873	0.7094	0.0255	0.074	0.217	1.166	1.232	Main
and	105.00	113.00	8.00	0.4726	0.2524	0.0228	0.118	0.144	0.518	0.698	
SP06-017	147.70	154.50	6.80	0.6526	1.9050	0.0243	0.337	0.626	2.079	1.680	Main
and	159.00	163.00	4.00	0.4461	0.3070	0.0188	0.058	0.534	1.177	0.829	
ROAD ZONE											
SP06-015	33.00	35.00	2.00	0.3856	0.1194	0.0113	0.073	0.275	0.666	0.587	Main
and	63.85	65.00	1.15	1.8669	0.5246	0.0735	0.193	0.281	0.822	2.349	
and	69.00	74.00	5.00	1.4224	0.6813	0.0526	0.144	0.500	1.035	1.975	
	121.90	142.00	20.10	1.9350	1.0171	0.0546	0.157	0.184	0.945	2.512	South
and	147.00	148.00	1.00	1.4820	0.3377	0.0425	0.098	0.101	0.605	1.768	
SP06-018	120.17	122.62	2.45	0.3473	0.5685	0.0134	0.474	0.327	2.041	0.898	Main
SP06-019	72.80	80.00	7.20	1.7230	0.8990	0.0478	0.214	0.421	1.356	2.356	Main
and	150.05	151.80	1.75	0.7158	0.4356	0.0288	0.154	0.149	0.623	1.025	
D ZONE AU TARGET											
SP06-020				no significant values							
SP06-021	36.00	37.07	1.07	0.0032	0.0046	0.0026	0.419	0.016	0.005		

Note: true widths are interpreted to average 65-75% of drilled widths

* Ni EQ calculated at an in-situ value: Nickel US\$5.00/lb, Copper US\$1.50/lb, Cobalt US\$10.00/lb, Gold US\$500/ounce, Platinum US\$800/ounce and Palladium US\$350/ounce

Peat Resources Ltd. is continuing to carry out studies to determine the technical viability of its peat resource, located in the Upsala area, as an energy replacement for coal. Peat Resources would like to supply the Atikokan Generating plant with fuel-grade peat to replace the current coal system. Peat Resources has estimated that there is sufficient fuel-grade peat in the area to supply the plant for 50 years and provide 200 direct jobs (*Northern Ontario Business*, August 2006).

Phoenix Matachewan Mines Inc. continues to explore the Steel River property, located midway between Terrace Bay and Marathon. During May 2006, the company conducted an 1100 line-kilometres airborne electromagnetic–magnetometer survey that covered almost the entire 155 km² property. Phoenix announced in a December 20, 2006, press release, that a 10 to 15 diamond-drill hole program will commence to test high priority airborne electromagnetic targets, coincident with prospective zinc-copper-gold occurrences previously identified from prospecting, trenching, sampling and geological mapping programs during the 2006 field season (www.phoenixmatachewan.com; Phoenix Matachewan Mines Inc., Management Discussion and Analysis, September 29, 2006, *see* document filed with SEDAR® ([SEDAR Home Page](#))).

R. Pizzolato and partner **C. Zimowski**, two Thunder Bay prospectors, are currently sampling and evaluating the potential for both PGE and diamonds on their recently staked claims in the Escape Lake area. The Escape Lake prospect is situated within the Quetico Subprovince, but the main feature of the claim is a very well-defined negative magnetic anomaly. Anomalies of this kind elsewhere have been prospected for kimberlite.

Probe Mines Limited has started a diamond-drilling program in the Norway Lake area within the Lumby Lake volcanic belt. The drilling will target a newly discovered base metal prospect that returned 1.1% Cu, 7.7% Zn, 6.5% Pb, 36 g/t Ag and 0.5 g/t Au in a recent channel sample. Trenching at the site has revealed a 7 m wide zone of base metal sulphides hosted by metavolcanic rocks. The program will drill 1000 m in 10 holes to test depth and continuity along strike (www.probemines.com).

Rampart Ventures Ltd. has announced a new drilling program to further test the high-grade uranium occurrences that were found and sampled by company personnel in 2005 and in 2006 on the Split Rapids Dam property. The property is located in the Black Sturgeon Lake area, 100 km north-northeast of Thunder Bay. Previous shallow drilling in the area in 2005 intersected values as high as 2.99% U₃O₈ across 1.5 m. Surface grab samples assayed as high as 17.9% U₃O₈ (Rampart Ventures Ltd, news release, September 27, 2006).

Many of the uranium occurrences on the Split Rapids Dam property are associated with a regional Archean iron formation trending from Lake Nipigon southwesterly into the Mawn Lake area north of Thunder Bay. This iron formation can also be traced through the Beardmore and Geraldton gold camps. The iron formation has acted as a geochemical reducing trap that has captured uranium from solution.

Hematitic alteration and veins of halite in basement rocks were encountered in drilling 100 m below the unconformity between the Archean basement rocks and the Sibley Group Pass Lake Formation sandstones. This has been interpreted to mean that there was fluid interaction between the basement and the overlying Sibley Group. This interaction is still ongoing today as evidenced by the numerous salt springs and mineral licks in the Sibley Basin. This fluid movement is a prerequisite for the formation of unconformity related uranium deposits.

R. Renner, D. Michano, B. Gionet, and J. Moses, a group of Marathon area prospectors, together with **J.E. Bond**, continue to prospect the area around Page Lake north of Marathon. The area is underlain by felsic pyroclastic rocks and the potential for VMS-style mineralization is very good. Prospecting, stripping and sampling have uncovered new sulphide occurrences.

Ripple Lake Diamonds Inc. discovered 3 microdiamonds in November 2003, on the Trans-Canada Highway (TCH) property in a small 3 by 3 m diatreme associated with a calc-alkalic lamprophyre (minette) dike. The TCH property is located approximately 30 km west of Marathon. Based on this discovery, Ripple Lake Diamonds staked over 3000 claim units following a north-trending corridor, a portion of the Trans-Superior tectonic zone.

Ripple Lake Diamonds Inc. announced results (news release, November 28, 2006) from a 2005 sampling program on the TCH property as follows: “More than 11,900 kimberlite indicator mineral (KIM) grains were identified in the samples including 85 pyrope grains, 9,150 picroilmenite grains, 595 chrome spinel grains, 496 clinopyroxene grains and 1591 olivine grains. All the pyrope grains have kimberlitic, short transported origin: they are angular, with relics of magmatic surfaces. Approximately 5% of pyrope grains belong to the diamond association (G10 pyropes); the rest are Iherzolitic (G9) pyropes.” (Ripple Lake Diamonds Inc., news release, November 28, 2006)

RJK Explorations Ltd. completed a nine-hole (826 m) diamond-drilling program, between November 2005 and January 2006, on the Stares–Calvert option in Aldina and Sackville townships. Drill holes testing a 700 m long segment west of the discovery area returned up to 0.16% Zn and 0.04% Cu over 2 m. A single diamond-drill hole tested a felsic horizon with TDEM and IP anomalies 2 km to the north returned 2 separate sections intersecting 0.36% Zn and 0.03% Cu over 2.1 m; 0.02% Zn and 0.22% Cu over 1.0 m. (RJK Exploration Ltd., Management Discussion and Analysis, April 28, 2007, *see* document filed with SEDAR® ([SEDAR Home Page](#)))

Sabina Silver Corporation announced (news release, November 7, 2006) that they entered into an option agreement to acquire the Rockstone property in Adrian Township. The property is well positioned with respect to the Stares–Calvert and RJK Exploration VMS discoveries in the area. Preliminary work indicates that the property exhibits geological conditions conducive for the discovery of more copper-zinc-silver deposits.

R. Stenlund, a Thunder Bay prospector, is exploring for gold, copper and zinc on his mining claims in the Nault Lake area. The geology is complex and consists of a felsic to mafic volcanic sequence that has been intruded by dikes and masses of blue-eyed quartz and quartz-feldspar porphyries. Numerous chalcopyrite-rich zones have been found; some of these have assayed over 0.5 ounce per ton gold (Thunder Bay District Geologist files). The potential for gold and VMS base metals is considered to be high.

Tri Gold Resources Corporation has been engaged in a mineral exploration program in the Big Duck Lake area that includes trenching, washing, sampling and mapping along a 5.2 km shear zone that extends through Big Duck Lake. Many of the gold deposits in the Big Duck Lake area are associated with quartz porphyry intrusive rocks that occur in the area. The Big Duck Lake property encompasses approximately 2900 ha and is located 5 km northeast of the Winston Lake Mine. Historically, the area contains more than 40 different gold occurrences; some diamond drilling intercepts have included 4.9 m grading 17.31 g/t Au. The Coco–Estelle property has a historical (non NI 43-101 compliant) resource of 53 700 tonnes grading 10.7 g/t Au (Tri Gold Resources Corporation, www.trigoldresources.com, news release, July 17, 2006).

ValGold Resources Ltd released a NI 43-101 mineral resource estimate, completed by Caracle Creek International Consulting Inc. of Sudbury, Ontario, on the U- and V-zones at ValGold’s Tower Mountain gold property. The U-zone contains 2 152 460 inferred tonnes at 0.61 g/t Au for a calculated reserve of 1 319 408 g Au (42 420 ounces); the V-zone contains 2 353 902 inferred tonnes at 0.77 g/t Au for a calculated reserve of 1 811 412 g Au (58 238 ounces). The totals are 4 506 362 inferred tonnes at 0.69 g/t Au for a calculated reserve of 3 130 820 g Au (100 658 ounces) (ValGold Resources Ltd., news release, January 30, 2006).

Table 2. Assessment files received in the Thunder Bay South District in 2006.

Abbreviations					
AEM	Airborne electromagnetic survey	IP	Induced polarization survey		
AM	Airborne magnetic survey	Lc	Linecutting		
ARA	Airborne radiometric survey	Met	Metallurgical testing		
Beep	Beep Mat survey	OD	Overburden drilling		
Bulk	Bulk sampling	ODH	Overburden drill hole(s)		
DD	Diamond drilling	PEM	Pulse electromagnetic survey		
DDH	Diamond drill hole(s)	PGM	Platinum group metals		
DGP	Down-hole geophysics	Pr	Prospecting		
GC	Geochemical survey	RES	Resistivity survey		
GEM	Ground electromagnetic survey	Samp	Sampling (other than bulk)		
GL	Geological Survey	Seismic	Seismic survey		
GM	Ground magnetic survey	SP	Self-potential survey		
GRA	Ground radiometric survey	Str	Stripping		
Grav	Gravity survey	Tr	Trenching		
HLEM	Horizontal loop electromagnetic survey	UG	Underground exploration/development		
HM	Heavy mineral sampling	VLEM	Vertical loop electromagnetic survey		
IM	Industrial mineral testing and marketing	VLFEM	Very low frequency electromagnetic survey		

Township or Area	Company Name	Year	Type of Work	AFRO Number	Resident Geologist Office File Designation
Aldina Township (Stares Project)	RJK Explorations Ltd/ GLR Resources Inc.	2005–2006	DD, Samp	2.32252	52A05/NW-063
Armistice Lake (Tib Lake Project)	Houston Lake Mining Inc.	2006	GL, Petrography	2.32757	52H05/SE-011
Black River (Dotted Lake Property)	1179406 Ontario Ltd.	2005	GEM, GM, Lc	2.31619	42C13/NW-017
Black Sturgeon Lake (Claim 1216415 Canister Lake)	Fleck, R.	2001–2005	Pr, Samp	2.30492	52H07/NW-008
Bomby Township (GMX Hemlo Project)	Golden Meadow Exploration Inc.	2006	GM, Lc	2.31544	42C12/NW-122
Bomby Township (GMX Hemlo Project-Grid H)	Golden Meadow Exploration Inc./ Skogsberg, R.D./ Lambert, K.H.	2006	GM, Lc	2.31545	42C12/NW-123
Burchell and Nelson lakes	East West Resource Corporation/ Mega Uranium Ltd.	2004–2005	DD, Samp	2.31222	52B10/SE-177a-d, 52B07/NE-011
Burchell Lake (Burchell Lake Property)	Alto Ventures Ltd.	2005	AEM	2.31892	52B10/SE-179
Burchell Lake (Burchell Property)	Helm Exploration Ltd./ Fogen, M.N./ Ternowesky, J.E.	2006	AEM, AM	2.32653	52B10/SE-188a,b
Burchell Lake (Coldstream Project)	Alto Ventures Ltd.	2005	IP, Lc	2.32461	52B10/SE-185
Burchell Lake (Vanguard Property)	Canadian Golden Dragon Resources Ltd.	2005–2006	DD, Samp	2.32150	52B10/SE-180
Burchell Lake (Vanguard Property)	Canadian Golden Dragon Resources Ltd.	2005	IP, Lc	2.32203	52B10/SE-181
Cecil Township (Fairies Property)	Gionet, G./ Gionet, M.	2005	Pr, Str, Tr	2.30858	42F04/SE-037
Cecil Township (North Fairies Lake Property)	Gionet, G./ Gionet, M.	2005	Pr, Str, Tr	2.30854	42F04/SE-036
Conacher and Hagey townships (Rossmere Property)	East West Resource Corporation	2006	GL, Lc, Samp	2.32992	52B09/NE-079
Conmee Township	Maxwell, G.	2004	Str, Tr, Samp	2.31684	52A05/NE-019
Conmee Township (Conmee Property)	Lehto, B.J.	2006	Pr	2.32449	52A05/NE-020
Conmee Township (Tower Mountain Property)	Stewart, M.A.	2004–2005	DD, Str, Samp	2.32408	52A12/SE-033

Township or Area	Company Name	Year	Type of Work	AFRO Number	Resident Geologist Office File Designation
Dawson Road Lots (Gold Cache Property)	Kukkee, P.E.	2006	Str, Tr, Samp	2.32597	52A12/SW-137
Dawson Road Lots (Gold Cache Property)	Kukkee, P.E.	2006	Str, Tr, Samp	2.32900	52A12/SW-138
Dawson Road Lots (Gold Cache Property)	Kukkee, P.E.	2006	Str, Samp	2.31542	52A12/SW-135
Duckworth Township (Duckworth Property)	Haavaldsrud, B.S., et al.	2003	DD, Samp	2.32479	52B09/SE-128
Eva Lake	Morehouse, W.D.	2006	Pr, Samp	2.33097	52B14/SE-046
Eva Lake	Morehouse, W.D./ Asselin, R.	2005	Pr	2.32773	52B11/NE-009
Finlayson Lake	Fern Elizabeth Gold Exploration Ltd.	2006	Samp	2.33265	52B13/NE-022
Finlayson Lake (Fern Elizabeth Property)	Fern Elizabeth Gold Exploration Ltd.	2006	Manual/ Mechanical	2.32907	52B13/NE-021
Flood Township	Thorsteinson, E.F.	2003–2005	Str	2.31961	42C14/SW-004, 42C11/NW-011
Freeborn Township and Steep Rock Lake	Pitkanen, R.W./ Moffat, R.C.	2005	Manual/ Mechanical, Samp	2.30712	52B13/SE-044
Freeborn Township (Fern Elizabeth Property)	Fern Elizabeth Gold Exploration Ltd.	2004-06	GL, Str, Samp	2.31760	52B13/SE-045
Graydon Lake (Black Sturgeon Uranium Project)	Rampart Ventures Ltd./ Magrum, M./ New Shoshoni Ventures Ltd.	2005	DD, Samp	2.31947	52H07/SW-020a,b, 52H07/SE-003
Greenwich Lake (Greenwich Lake Project)	Harper, G./ Wilson, G.C.	2006	GL, Samp, Petrology	2.32750	52A15/SW-023
Hagey Township (Project 3012220)	D'Silva, B.V.	2005	Pr, Str, Samp	2.30809	52B09/NE-078
Hagey Township (Project 3001008)	Parker, D.P.	2005	Pr, Str, Samp	2.30810	52B09/NE-077
Haines Township (Dream Catcher Property)	Holbik, E.J.	2004–2005	Pr, Str, Tr, Samp	2.31363	52B09/SW-071
Laurie and Duckworth townships (Goldcreek Property)	Helm Exploration Ltd.	2006	AEM, AM	2.32654	52A12/SW-139, 52B09/SE-129
Laurie Township (Shabaqua Gold Project)	RJK Explorations Ltd./ Hinterland Metals Inc.	2005	AEM, AM	2.31635	52A12/SW-136, 52B09/SE-127
Leckie Lake (Seagull Intrusion)	East West Resource Corporation/ Canadian Golden Dragon Resources Ltd.	2006	DD, Samp	2.32748	52H02/SW-032
Leckie Lake (Seagull Property)	East West Resource Corporation/ Canadian Golden Dragon Resources Ltd.	2006	PEM	2.33203	52HO02/SW-033
Lecours Township (Hemlo/ West Rous Lake Property)	Golden Meadow Exploration Inc./ Skogsberg, R.D./ Lambert, K.H.	2005	GEM, GM, Lc	2.31080	42E09/NE-123
Little Sturge Lake	Arsenault, V.C.	2003–2005	Pr	2.30375	52H02/NW-019
Lorna Lake (Page Lake Property)	Michano, DM./ Moses, P.A./ Gionet, B.D.	2005	Pr, Tr, Samp	2.30945	42D16/SW-128, 42D16/SE-059
MacGregor Township	Ciccarelli, M.A.	2005–2006	Manual/ Mechanical	2.32282	52A06/NE-008
MacGregor Township	Friborg, G.L.	2005	Str, Manual/ Mechanical	2.31484	52A11/SE-031
Mapledoram Township (Geco Project)	Falconbridge Limited	2005	IP	2.31877	42F04/NW-076a-e

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Township or Area	Company Name	Year	Type of Work	AFRO Number	Resident Geologist Office File Designation
McComber Township (Cote–Archie Lake Project)	Alto Ventures Ltd.	2005	Pr, Str, Samp	2.31351	42E12/NW-198a,b
McTavish Township	Bak, D.M.	2005	Manual/ Mechanical	2.31393	52A10/NE-075
McTavish Township	Bak, D.M.	2006	Manual/ Mechanical	2.32361	52A10/NE-077
McTavish Township (Anderson Lake Molybdenum Project)	Bjorkman, K.E./ Fenwick, K.G.	2005	GL, Samp	2.32295	52A10/NW-034
McTavish Township (Big Pearl Lake and Sward Lake properties)	Kowtuski, L.R.	2005	Pr, Str, Samp	2.31337	52A10/NE-074a,b
McTavish Township (Pearl Lake Amethyst Mine)	Arsenault, D.J.	2004–2005	Str	2.31936	52A10/NE-076
McTavish Township (Sward Lake Property)	Kowtuski, L.R.	2005	Pr, Str, Samp	2.31091	52A10/NE-073
Moss and Ames townships and Crayfish Lake (Obadinaw Property)	East West Resource Corporation/ Maple Minerals Corp.	2005	IP, Lc	2.30778	52B10/SE-174, 52B10/NE-023
Moss and Ames townships and Crayfish Lake (Obadinaw Property)	East West Resource Corporation/ Mega Uranium Ltd.	2005	DD, Tr	2.30779	52B10/SE-173, 52B10/NE-022
Moss and Tilly townships and Powell Lake (Clay Lake, Mystery and Mishibishu Blocks)	Noront Resources Ltd./ Murgor Resources Inc.	2005	AEM	2.30352	52B10/SW-109, 52B10/SE-175, 52B07/NW-079
Moss Township and Burchell Lake (Shear and Deaty Claim Groups)	East West Resource Corporation/ Mega Uranium Ltd.	2005	AEM, AM	2.32410	52B10/SE-182a,b, 52B07/NE-012, 52B07/NW-085
Moss Township and Powell, Nelson and Burchell lakes (Deatys Creek Property)	East West Resource Corporation/ Mega Uranium Ltd.	2005–2006	GM, IP, Lc	2.32775	52B07/NW-090, etc.
Moss Township (Ardeen Property)	East West Resource Corporation/ Mega Uranium Ltd.	2005	DD, Samp	2.32385	52B10/SW-112a-c, 52B10/SE-183
Moss Township (Moss Lake Property)	Moss Lake Gold Mines Ltd.	2004	DD, Samp	2.31459	52B10/SE-178a,b
Moss Township (Mystery Gold Property)	Murgor Resources Inc.	2004	GC, GL, Samp	2.32840	52B10/SW-117
Moss Township (Pele Gold Claim Group)	Pele Gold Corp.	2005	AEM, AM	2.32373	52B10/SW-111
Moss Township (Shear Property)	East West Resource Corporation/ Mega Uranium Ltd.	2006	IP, Lc	2.31341	52B10/SE-176
Mussy Lake and Pic Township (Big Lake Property)	MetalCORP Limited	2004	DD, Samp	2.31023	42D09/SE-021
Mussy Lake (GMX Mussy Lake Project)	Skogsberg, R.D./ Lambert, K.H.	2006	GM, Lc	2.31784	42D09/SE-022
Mussy Lake (GMX Mussy Lake Project)	Skogsberg, R.D./ Lambert, K.H.	2006	GM, Lc	2.31782	42D09/SE-023
Nelson Lake	Bever, C.J.	2006	Samp	2.33070	52B07/NE-015
Nelson Lake (Burchell Lake 2 Claim Group)	East West Resource Corporation/ Mega Uranium Ltd.	2005	AEM, AM	2.32418	52B10/SE-185, 52B10/SE-184, 52B07/NW-088
Norway Lake (Norway Lake Project)	Bjorkman, K.E./ Saunders, D.B.	2006	DD	2.33200	52G03/SW-054
Olie Lake (Hillsport Lake Property)	Inco Limited	2005	DD, Samp	2.32298	42F05/SE-016

Township or Area	Company Name	Year	Type of Work	AFRO Number	Resident Geologist Office File Designation
Onion Lake	Friberg, G.L.	2006	Str	2.32917	52A11/SE-032
Pic Township (Heron Bay–Hemlo Shear Zone Property)	Michano, D.M./ Michano, W.M.	2005	Pr, Str, Tr, Samp	2.31197	42D09/NE-122, 42D09/NW-131
Powell Lake and Moss Township (Powell and Clay properties)	East West Resource Corporation/ Mega Uranium Ltd.	2005	GC, GL, Samp	2.32833	52B07/NW-092a,b, 52B10/SW-116a,b
Powell Lake and Moss Township (Powell Property)	East West Resource Corporation/ Mega Uranium Ltd.	200–2006	Str	2.32830	52B07/NW-091
Powell Lake (Clay Lake Property)	Murgor Resources Inc.	2005–2006	DD, Samp	2.33101	52B07/NW-093
Powell Lake (Hamlin East Property)	East West Resource Corporation/ Mega Uranium Ltd.	2005	GEM, GM, Grav, IP, Lc	2.31354	52B07/NW-081
Powell Lake (Hamlin Lake Project)	East West Resource Corporation/ Mega Uranium Ltd.	2005	GEM	2.31114	52B07/NW-083
Powell Lake (Hamlin Property)	East West Resource Corporation	2004–2005	IP, Lc	2.31280	52B07/NW-080
Powell Lake (Kashabowie Survey)	Freewest Resources Canada Inc.	2005	AEM	2.30874	52B07/NW-076, 52B07/SW-031
Powell Lake (Powell Property)	East West Resource Corporation/ Mega Uranium Ltd.	2005–2006	DD, Samp	2.32413	52B07/NW-086
Powell Lake (Powell Property)	East West Resource Corporation/ Mega Uranium Ltd.	2005–2006	DD, Samp	2.32415	52B07/NW-087
Powell Lake (Sungold Project)	Freewest Resources Canada Inc./ Kulp, J.	2005	DD, Samp	2.31801	52B07/NW-082a,b
Powell Lake (Sungold Project- Wye Lake Prospecting)	Freewest Resources Canada Inc./ Hackl, J./Hackl, J.C.	2005	GL, Pr, Tr, Samp	2.31799	52B07/NW-084
Powell Lake (Sungold Property- Russell Grid)	Freewest Resources Canada Inc.	2005	GEM, GM, Lc	2.30875	52B07/NW-075
Powell Lake (Sungold Property- Wye Lake Grid)	Freewest Resources Canada Inc.	2005	GEM, GM, IP, Lc	2.30876	52B07/NW-077
Powell Lake (Sungold Property- Wye Lake Grid)	Freewest Resources Canada Inc.	2005	Grav	2.30878	52B07/NW-078
Priske Township	Kravchik, S.	2005	Pr, Samp	2.31749	42D14/SW-053, 42D14/SE-126
Priske Township	Kravchik, S.	2005	Precut	2.31002	42D14/SW-052, 42D14/SE-125
Priske Township (Harkness Hays- Gold Range Property)	Leishman, D.M./ Fenwick, K.G./ Haquoil Construction Ltd.	2005	Pr, Samp	2.30733	42D14/SE-123
Priske Township (Schreiber #1 Property)	Bond, J.E./Renner, R.P.	2005	Pr, Samp	2.31047	42D14/SE-124a,b, 42D14/SW-51
Ramsey Lake (Ramsey Lake Area Property)	Gionet, M.L.	2006	Tr	2.32670	42F05/NW-004
Rope Lake (Big Duck Lake Property)	Noble, T.W., et al.	2005	DD, Samp	2.30895	42E03/SW-052, 42D14/NW-080
Rope Lake (Big Duck Lake Property)	Noble, T.W., et al.	2005	IP, Lc	2.30946	42D14/NW-079, 42E03/SW-051
Sabawi Lake (Sabawi Lake Property)	MetalCORP Limited/ Staines, L.B.	2005	DD, Samp	2.31235	52B14/SW-070

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Township or Area	Company Name	Year	Type of Work	AFRO Number	Resident Geologist Office File Designation
Sabawi Lake (Sabawi Lake Property)	MetalCORP Limited/ Staines, L.B.	2006	DD, Samp	2.32450	52B14/SW-071
Saganagons Lake (Saganaga Lake Property)	Benton Resources Corp./ Wye Resources Inc./ Wing Resource Inc.	2005–2006	IP, Lc	2.33221	52B07/SW-033
Saganagons Lake (Q-9 Property)	Stares, M.R.	2005	AEM, AM, Pr, Samp	2.31058	52B07/SW-032
Sawbill Bay (Sande–Stewart Property)	Sande, E.J.	2004–2005	Str, Samp	2.30816	52B14/NW-035
Seeley Lake (Marathon PGM Deposit)	Marathon PGM Corporation	2004–2005	DD, Samp	2.31770	42D16/SW-129
Shabotik River and McGill Township (Bulldozer Property)	Cox, W., et al.	2005	Pr, Samp	2.30994	42C14/NW-014
Sibley Township (Sibley Sandstone Property)	Yozipovic, T.R.	2005	Ind. Min. Studies	2.32660	52A10/SE-008
Syine Township	Kravchik, S.	2006	Pr	2.31957	42D14/SE-127
Syine Township (Steel River Property)	Bond, J.E./Renner, R.E./Wahl, R.	2005	Pr, Samp	2.31366	42D15/SW-106
Tartan Lake	Hietapakka, R.A., et al.	2004–2006	Str	2.32490	52A10/NW035a-c
Tib Lake and Lac des Iles (East Dog River Property)	Morehouse, W.D./ Richmond, W.J.	2005	Pr	2.31223	52H04/NW-047
Tib Lake (Tib Lake Property)	Houston Lake Mining Inc.	2005	Pr, Samp	2.30791	52H04/NW-046, 52H05/SW-022
Tilly Lake (Elephant Lake and Tilly Lake properties)	Canadian Golden Dragon Resources Ltd.	2005	IP, Lc	2.32622	52B10/SW-113
Tilly Lake (Elephant Lake Property)	Canadian Golden Dragon Resources Ltd.	2006	DD, Samp	2.32621	52B10/SW-114, 52B07/NW-089
Powell Lake (Sungold Property-Russell Grid)	Freewest Resources Canada Inc.	2005	GEM, GM, Lc	2.30875	52B07/NW-075
Tilly Lake and Moss Township (Tilly Lake Claims)	Canadian Golden Dragon Resources Ltd.	2005	AEM	2.31113	52B10/SW-110
Tilly Lake and Moss Township (Tilly Lake Claims)	Canadian Golden Dragon Resources Ltd.	2005	DD, Samp	2.31048	52B10/SW-111
Tuuri and Walsh townships (Steel River Property)	Nuinsco Resources Limited, et al.	2006	AEM, AM	2.32989	42D15/SW-109
Tuuri Township (Steel River Project)	Phoenix Matachewan Mines Inc., et al.	2005	GL, Lc, Samp	2.30511	42D15/SW-105
Tuuri Township (Steel River Project-Santoy Lake Claim Group)	Fenwick, K.G./ Phoenix Matachewan Mines Inc.	2005	Pr, Samp	2.31433	42D15/SW-107
Wabikoba Lake (Lunny Lake Property)	Fowler, B.D.	2005	GL, GM, Pr, Lc, Samp	2.30706	42C13/SW-124
Wabikoba Lake (Musher Lake Property)	Griggs, H.T.	2005	GL, GM, Pr, Lc, Samp	2.30682	42C13/SW-125
Wabikoba Lake (North Hemlo Property)	Skogsberg, R.D./ Lambert, K.H.	2005	GM, Lc	2.31093	42C13/SW-126
Wabikoba Lake (Valley Lake Property)	Fowler, B.D.	2005	GL, GM, Samp	2.30707	42C13/SW-123
Walsh and Tuuri townships and Foxtrap Lake (TCH Diamond Project)	Ripple Lake Diamonds Inc., et al.	2004–2005	AM, GC, GL	2.31534	42D15/SE-084a-b, etc.
Weaver Township	Morehouse, W.D.	2006	DD	2.33177	52B14/SE-045

Table 3. Exploration activity in the Thunder Bay South District in 2006 (keyed to Figures 3 and 4).

Abbreviations			
AEM	Airborne electromagnetic survey	IP	Induced polarization survey
AM	Airborne magnetic survey	Lc	Linecutting
ARA	Airborne radiometric survey	Met	Metallurgical testing
Beep	Beep Mat survey	OD	Overburden drilling
Bulk	Bulk sampling	ODH	Overburden drill hole(s)
DD	Diamond drilling	PEM	Pulse electromagnetic survey
DDH	Diamond drill hole(s)	PGM	Platinum group metals
DGP	Down-hole geophysics	Pr	Prospecting
GC	Geochemical survey	RES	Resistivity survey
GEM	Ground electromagnetic survey	Samp	Sampling (other than bulk)
GL	Geological Survey	Seismic	Seismic survey
GM	Ground magnetic survey	SP	Self-potential survey
GRA	Ground radiometric survey	Str	Stripping
Grav	Gravity survey	Tr	Trenching
HLEM	Horizontal loop electromagnetic survey	UG	Underground exploration/development
HM	Heavy mineral sampling	VLEM	Vertical loop electromagnetic survey
IM	Industrial mineral testing and marketing	VLFEM	Very low frequency electromagnetic survey

No.	Company/Individual (Occurrence Name or Property)	NTS Area (Commodity)	Exploration Activity
1	Alto Ventures Ltd. (Coldstream property)	Burchell Lake (Au)	DD
2	Beaufield Resources Inc. (Hemlo property)	Marathon (Au)	GM, DD, Lc
3	Benton Resources Corp. (Bermuda property)	Goodchild Lake (Cu, Ni, PGE)	Pr, Str, Tr, DD, Samp
4	Benton Resources Corp. (Saganaga property)	Mowe Lake (Au)	IP, DD
5	Benton Resources Corp. (Sibley Basin)	Black Sturgeon (U, IOCG)	Pr
6	Bever, C.J. (Nelson Lake property)	Nelson Lake (Au)	Samp
7	Bjorkman, K.E. and Saunders, D.B. (Norway Lake property)	Gulliver Lake (Cu-Zn-Ag-Au)	DD
8	Brett Resources Inc. (Hammond Reef)	Sapawe (Au)	GL, Pr, Tr, DD, Samp
9	Canadian Golden Dragon Resources Ltd. (Elephant Lake property)	Burchell Lake (Au, Cu, Mo)	DD
10	Canadian Golden Dragon Resources Ltd. (Seagull property)	Shillabeer Lake (Cu, Ni, PGE)	DD, Samp
11	Canadian Golden Dragon Resources Ltd. (Vanguard property)	Shebandowan (Cu, Zn, Ag)	DD
12	Canstar Resources Inc. (Sunday Lake property)	Onion Lake (diamonds?)	AM
13	Ciccarelli, M.A. (MacGregor property)	MacGregor Township (amethyst)	Manual/Mechanical
14	East West Resource Corporation (Deatys Creek property)	Mowe Lake (Cu, Au)	AEM, AM, Str, DD, Samp
15	East West Resource Corporation (Hamlin property)	Mowe Lake (Cu, Au, Mo)	AEM, AM, Str, DD, Samp
16	Fern Elizabeth Gold Expl. (Finlayson Lake-Elizabeth property)	Atikokan (Au)	Mechanical, Samp
17	Freewest Resources Canada Inc. (Sungold property)	Mowe Lake (Cu, Zn, Ag)	DD
18	Friborg, G.L. (Onion Lake property)	Onion Lake (amethyst)	Str
19	Gilbert, W. (Yule Lake property)	Black Sturgeon (Cu, Ni, PGE)	Pr, Samp
20	Gionet, G. and Gionet, M. (Fairies Lake property)	Manitouwadge (Cu, Ni, PGE)	Pr, Str, Tr
21	Golden Meadow Exploration Inc.	Marathon (Au)	GM, Lc
22	Hackl, J. (Bolton Bay property)	Savanne (Au)	Pr, Samp
23	Hackl, J. (Lily property)	Bedivere Lake (Cu, Ni, PGE)	Pr, Samp
24	Harper, G. and Wilson, G. (Greenwich Lake property)	Greenwich Lake (Cu, Ni, PGE)	GL, Samp
25	Helm Exploration Ltd. (Burchell Lake property)	Burchell Lake (Au)	AEM, AM
26	Helm Exploration Ltd. (Laurie-Duckworth-Gold Creek property)	Shebandowan (Au)	AEM, AM
27	Holbik, E. (Greenwater-Loch Erne property)	Shebandowan (Cu, Zn, Au)	Str, Samp
28	Houston Lake Mining Inc. (Tib Lake property)	Lac des Ilse (Cu, Ni, PGE)	DD, Samp
29	Inco Limited (Moshkinabi property)	Manitouwadge (Cu, Ni, PGE)	Str, Tr, DD, Samp
29A	Kennecott Exploration (Gorham Twp)	Onion Lake (PGE)	AEM, AM, DD

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No.	Company/Individual (Occurrence Name or Property)	NTS Area (Commodity)	Exploration Activity
30	Kukkee, D.E. (Gold Cache property)	Sunshine (Au)	Str, Tr, Samp
31	Kwiatkowski, R. (Bateman property)	Sunshine (Cu, Ni, PGE)	Pr, Samp
32	Lehto, B.J. (Conmee property)	Kakabeka Falls (Cu, Zn, Au)	Pr
33	Magma Metals Ltd. (Greenwich property)	Greenwich Lake (Cu, Ni, PGE)	AEM, AM, DD, Samp
34	Magma Metals Ltd. (Tib Lake property)	Tib Lake (Cu, Ni, PGE)	DD, Samp
35	Marathon PGM Corporation (Marathon)	Goodchild Lake (Cu, Ni, PGE)	DD
36	Mega Uranium Ltd. (Greenwich Lake property)	Greenwich Lake (U)	Pr
37	Mengold Resources Inc. (Burchell Lake property)	Burchell Lake (Cu, Zn, Ag, Au)	AEM, AM, Pr
38	MetalCORP Limited (Big Lake property)	Marathon (Cu, Zn, Ag)	DD
39	MetalCORP Limited (Sabawi Lake property)	Sapawe (Cu, Ni)	DD, Samp
40	Morehouse, W.D. (Eva Lake property)	Sapawe (Au)	Pr, Samp
41	Moss Lake Gold Mines Ltd. (Sndogross property)	Burchell Lake (Au)	Report NI 43-101
42	Murgor Resources Inc. (Powell Lake property)	Mowe Lake (Au)	DD, Samp
43	North American Palladium Ltd. (Inco option)	Shebandowan (Cu, Ni, PGE)	DD
44	Nuinsco Resources Limited (Prairie Lake property)	Killala Lake (U)	AEM, AM
45	Peat Resources Ltd. (Upsala)	Firesteel River (Peat)	Samp
46	Phoenix Matachewan Mines Ltd. (Steel River property)	Coldwell (Cu, Zn, Ag)	GL, Pr, DD, Lc, Samp
47	Pizzolato, R. and Zimowski, C. (Escape Lake property)	Greenwich Lake (Cu, Ni, PGE)	Pr, Tr, Samp
48	Probe Mines Ltd. (Norway Lake property)	Gulliver Lake (Cu, Zn, Ag)	DD
49	Rampart Ventures Ltd. (Black Sturgeon property)	Black Sturgeon Lake (U)	DD
50	Renner, R., Michano, D., Gionet, B., Moses, J., Bond, J.E. (Page Lake property)	Goodchild Lake (Au, Cu, Zn)	Pr, Str
50A	Ripple Lake Diamonds Inc. (TCH property)	Coldwell (Diamonds)	Samp
50B	RJK Explorations Ltd. (Stares–Calvert Option)	Kakabeka Falls (Cu, Zn, Ag)	DD
51	Sabina Silver Corporation (Rockstone property)	Kakabeka Falls (Cu, Zn, Ag)	Pr
52	Skogsberg, R.D. and Lambert, K.H. (Mussy Lake property)	Marathon (Cu, Ni, PGE, Au)	GM, Lc
53	Stenlund, R. (Nault property)	Cheeseman Lake (Cu, Au)	Pr, Samp
54	Tri Gold Resources Corporation (Big Duck Lake property)	Dickison Lake (Au)	Str, Tr, DD, Samp
55	ValGold Resources Ltd. (Tower property)	Sunshine (Au)	Report
56	Vismand Exploration Inc. (Geco property)	Manitouwadge (Cu, Zn, Ag)	DD

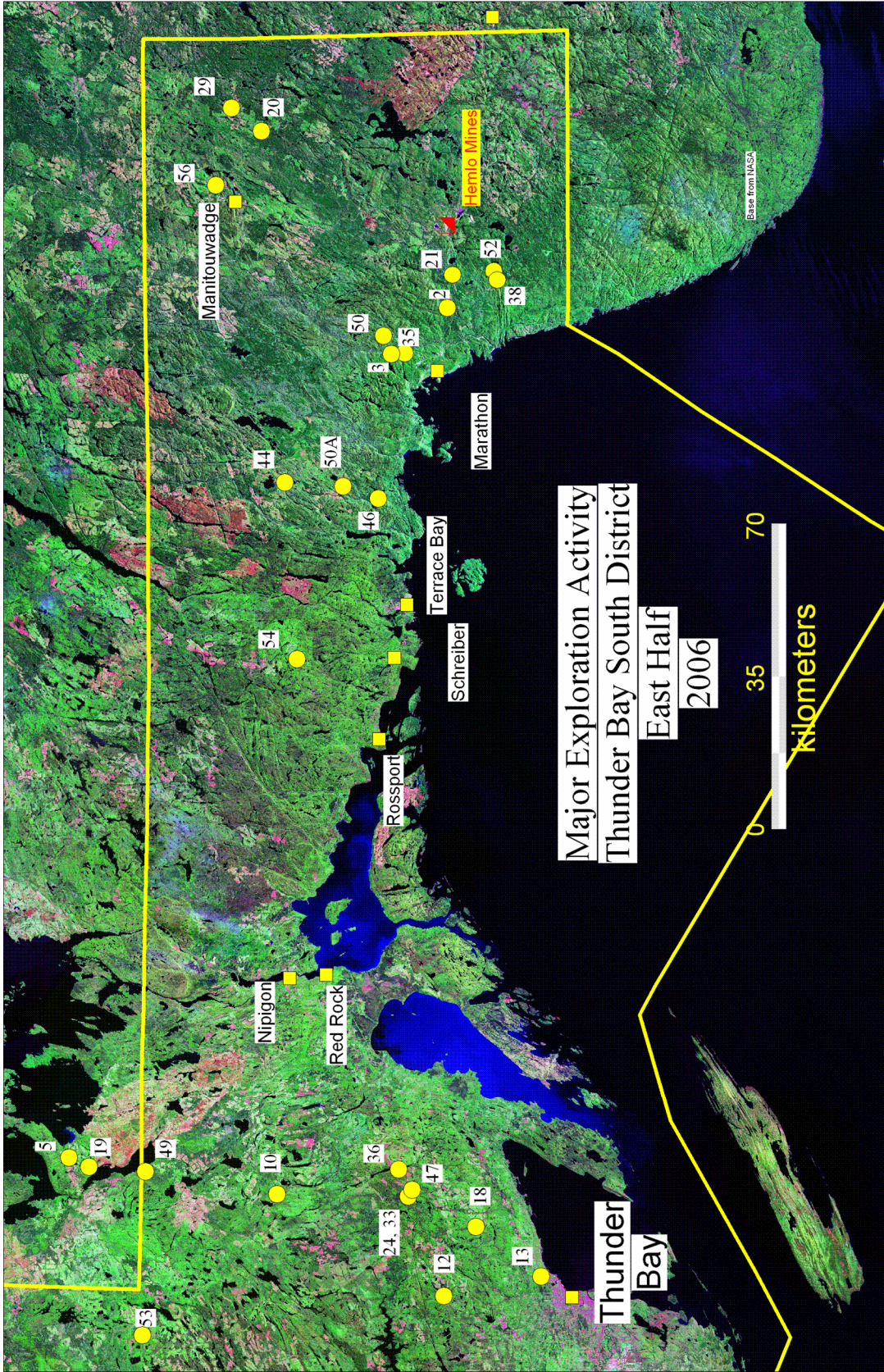


Figure 3. Thunder Bay South Resident Geologist's District (eastern portion), exploration activity 2006 (modified from NASA 2004).

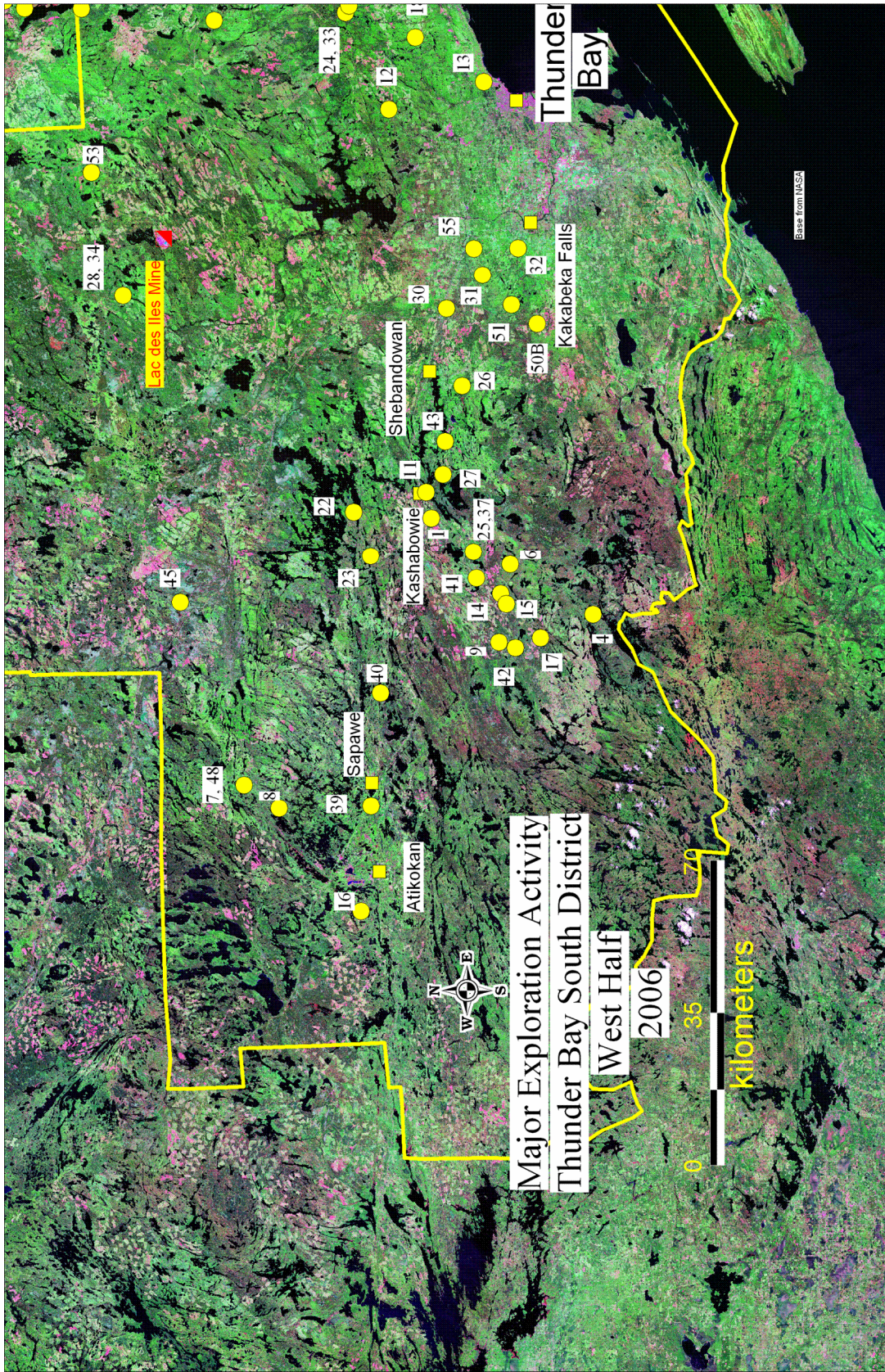


Figure 4. Thunder Bay South Resident Geologist's District (western portion), exploration activity 2006 (modified from NASA 2004).

RESIDENT GEOLOGIST STAFF AND ACTIVITIES

The Thunder Bay South District is staffed by J.F. Scott, *P.Geo.*, Regional Resident Geologist, D.A. Campbell, District Geologist, and C.L. Komar, Administrative Assistant. Angeliqe Magee resigned as District Support Geologist late in 2006 to take a position with the Federal Government. Dorothy Campbell has been appointed as the new District Geologist for the Thunder Bay South District.

The Thunder Bay South District staff dealt with more than 4000 inquiries from the mining and mineral exploration sector, other government agencies and the general public. The satellite office in Marathon was staffed as required. Core storage facilities in Thunder Bay, Marathon and Conmee Township were made available for both exploration client and university client use.

Thunder Bay South District staff conducted 23 property visits in 2006 (Table 4). Field trips were conducted for industry and university groups, and the office resources were made available to facilitate an ILSG field trip to the Slate Islands. Office staff attended and/or made presentations at the Institute on Lake Superior Geology (ILSG) conference in Sault Ste. Marie, the Prospectors and Developers Conference in Toronto, the Cordilleran Roundup in Vancouver, and the Northwestern Ontario Mines and Minerals Symposium in Thunder Bay. Support and field assistance was given to the OGS and industry geologists where required.

Table 4. Property visits conducted by the Thunder Bay South Resident Geologist's Office in 2006.

Number	Property or Occurrence with Commodity	
1	Hemlo area	Au
2	Heron Bay area	Au
3	Slate Islands	Au
4	Wye Lake	Cu, Zn
5	Sungold Gold	Cu, Zn, Au
6	LaRose Gold	Au
7	Hamlin Lake	Cu, Au, Mo
8	Deatys Creek	Cu-Au
9	Moss Mine	Au
10	Snodgrass Lake (Moss Gold)	Au
11	Beaverlodge Lake area	Au
12	Moshkinabi Lake area	Cu, Ni, PGM
13	Dotted Lake	Au
14	Dead Otter Lake	Au
15	Good Morning Lakes	U
16	Spar Island Mine	Ag
17	Prince Mine	Ag
18	South McKellar Mine	Ag, Barite
19	Jarvis Island Mine	Ag, Barite
20	Bateman Lake	Cu-Ni
21	Nault Lake	Cu-Au
22	Lily Rd	Cu, Ni, PGM
23	Rampart Ventures Ltd.	U

PROPERTY EXAMINATIONS

Nault Lake Property

LOCATION AND ACCESS

The Nault Lake area claims are situated approximately 110 km north on Highway 527 from the Highway 11/17 intersection. The claim block straddles Highway 527 in the vicinity where Nault Creek crosses Highway 527. The central part of the claim group is located at UTM co-ordinates, zone 16U 326258E 5464354N.

The five-claim group is owned by R. Stenlund, a Thunder Bay prospector. The claim numbers are as follows: TB 3008367 (2 units), 4209737 (2 units), 4209738 (2 units), 4210007 (2 units), and 4210008 (3 units). Their location is shown on the following claim map.

The area received considerable attention for mineral exploration when Highway 800 (now Highway 527) was constructed in the late 1960s and early 1970s. The area was prospected for copper and gold by a number of companies and individuals, including Amoco Canadian Petroleum, Hanna Mining, Bill Hayne, Phelps Dodge Corporation Canada, Steep Rock Iron Mines, Cumberland Resources Ltd., and Noranda Exploration Company Ltd.

Sage et al. (1974) and Hart, MacDonald and Lepine (2001) provides the most recent government geological mapping. Geological maps of specific properties by mineral exploration companies can be found in the Thunder Bay office assessment files.

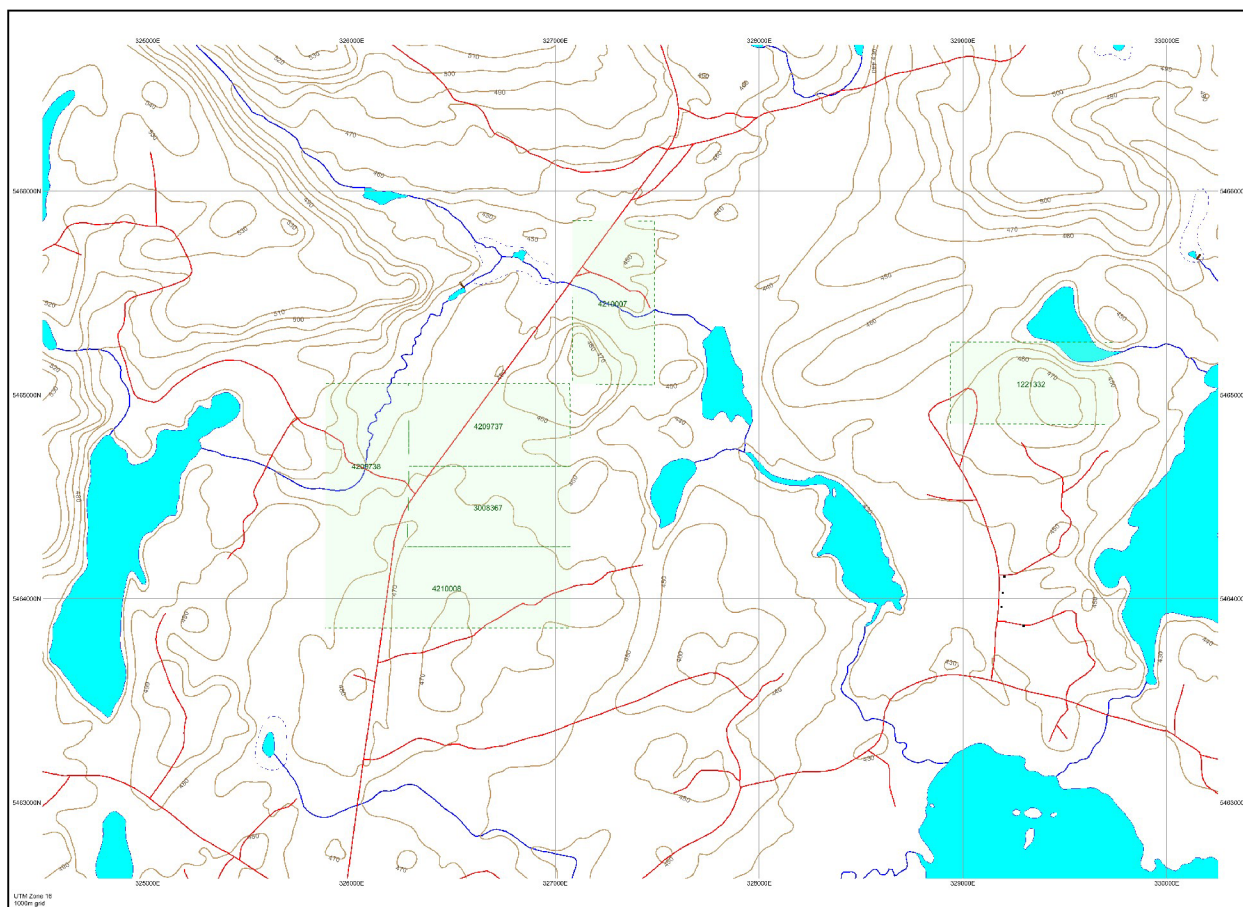


Figure 5. Map showing claims (lightly shaded areas) in the Nault Lake area.

GEOLOGY

The property is underlain by felsic and mafic volcanic rocks that have been intruded by blue-eyed quartz porphyries, and quartz-feldspar porphyries as dikes and lens-like sills and masses. A granodiorite stock has intruded the volcanic rocks to the southeast of the claims. Keweenawan diabase in the form of dikes and sills are present in the area.

Chalcopyrite and bornite occurs as stringers and blebs in chlorite-altered volcanic rocks. The felsic volcanic rocks are fragmental in nature and contain sulphide fragments. In some samples, the chalcopyrite makes up from between 2 to 5% of the rock.

The property was visited on August 4, 2006, and nine samples were collected and assayed for gold, silver, copper and zinc with the following results:

Sample #	UTM (NAD27, Zone 16)		Au (ounce per tonne)	Ag (ounce per tonne)	Cu (ppm)	Zn (ppm)
	Easting (m)	Northing (m)				
JFS-Nault-01	326327	5464377	0.05	ND	16 115	130
JFS-Nault-02	326327	5464377	0.01	ND	4380	96
JFS-Nault-03	326395	5464205	ND	ND	8480	84
JFS-Nault-04	326453	5464308	ND	ND	3930	84
JFS-Nault-05	326311	5464282	0.05	ND	6970	231
JFS-Nault-06	326891	5464432	ND	ND	968	397
JFS-Nault-07	326939	5464469	0.01	ND	4600	220
JFS-Nault-08	326737	5464762	ND	ND	1760	253
JFS-Nault-09	327192	5465354	ND	ND	6650	213

While the assay results seem low with respect to gold, silver and zinc, 2 samples taken in 1991 from a location near where sample JFS-Nault-05 was taken assayed 16 000 and 15 000 ppb Au and 0.89% and 0.865% Cu, respectively (Thunder Bay Resident Geologist files, 1991 assays). This would indicate that gold is present in the system and its distribution is erratic.

The presence of a VMS system should not be discounted. The property is available for option.

RECOMMENDATIONS FOR EXPLORATION

The Thunder Bay South District is actively being explored for a variety of deposit types that include copper-zinc VMS, copper-nickel-PGM, lode gold, unconformity uranium, Olympic Dam (IOCG), copper-molybdenum, diamonds, amethyst, stone and peat. With the increase in the demand for iron from Asia, the iron deposits in the Thunder Bay South District should be re-evaluated.

Copper-Nickel-Platinum Group Metals

With the discovery of copper-nickel-PGM mineralization in peridotite by Magma Metals (www.magmametals.com.au/) in the Current Lake area (UTM zone 16, NAD27, 357291E 5402943N), other magnetic anomalies in the region as well as other mafic to ultramafic intrusive bodies should be explored. A careful examination of available aeromagnetic maps should delineate some of these anomalies. Mapping by Scott and Sequin (1990a, 1990b) has outlined a few discrete amphibolite-pyroxene intrusions in the MacGregor Township area. New logging roads have made access to these intrusions easier.

Scott and Sequin (1990a, 1990b) mapped a massive to porphyritic gabbro in the eastern portion of MacGregor Township; Morehouse (1960) describes a “massive, fine-grained biotite andesite or trap” that has a “lamprophyric aspect” in the same general vicinity. The unit is exposed in a rock cut on top of the hill between Highway 587 and Nelson Road. The rock is a very dark green metagabbro with coarse pyroxene metacrysts. Finer grained lamprophyric rocks crop out just north of the Nelson Road Highway 11/17 intersection.

Numerous other small amphibolitic and or pyroxenites have been mapped in MacGregor Township by Scott and Seguin (1990a, 1990b) and deserve to be investigated. Many have a weak magnetic anomaly associated with them.

A careful review of Rogers (1995) reveals a gabbroic contact zone associated with the batholith situated in southern Duckworth Township. A strong Ni-Cr-Co-chromite anomaly present in the area deserves exploration (Bajc 2000). Till sampling and prospecting has been recommended by Bajc (2000) for this area to fully evaluate the source of this anomaly. Road access to this area is good.

Beaverlodge Lake Volcanic Rocks

A narrow, but prominent, band of volcanic rocks trends from Hazelwood Lake to Kingfisher Lake. This volcanic area contains quartz stock vein systems south of Beaverlodge Lake. Old blast pits in a sulphide-rich iron formation were noted south of Beaverlodge Lake. A new logging road system makes this area accessible. Based on the presence of stockwork quartz vein systems, faulting and carbonate alteration, the area should be prospected for gold. MacDonald mapped the area, the results of which were published as part of the Gorham Township and vicinity report (MacDonald 1941).

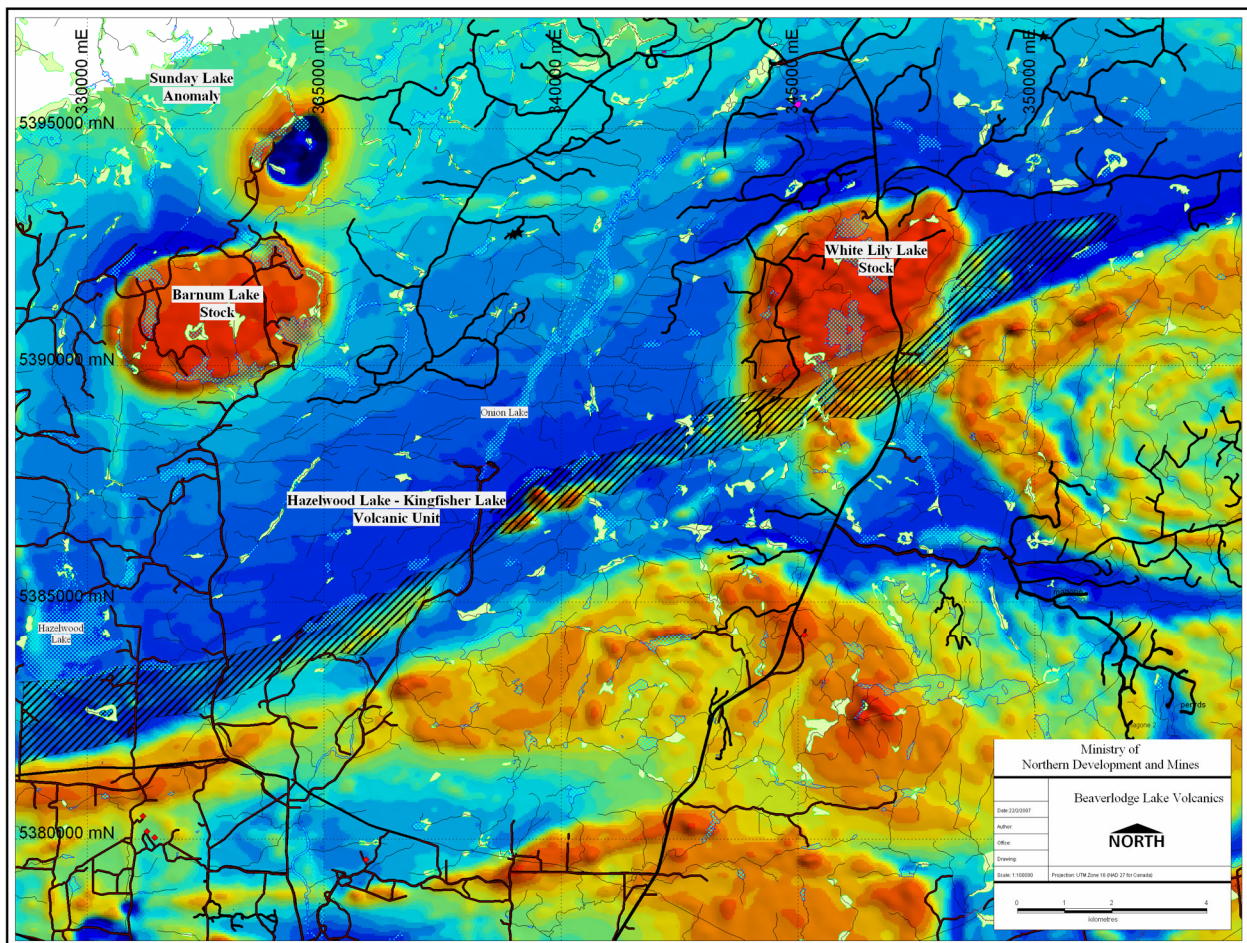


Figure 6. Aeromagnetic signature of Hazelwood Lake–Kingfisher Lake volcanic unit (from OGS 2003).

Lumby Lake Area

Prospecting for gold is recommended in the Lumby Lake area, in the vicinity of Snow and Spook Lakes, northwest of Norway Lake. A cluster of highly anomalous lake bottom sediment gold anomalies, reported by the OGS (through projects conducted under Operation Treasure Hunt: OGS 2000a, 2000b; *see also* Dyer 1999a, 1999b), are situated along a northeasterly trending regional shear zone, flanking the Norway Lake pluton. This area is virtually unexplored and open for staking as of February 6, 2007.

Atikokan - Lumby Lake Area

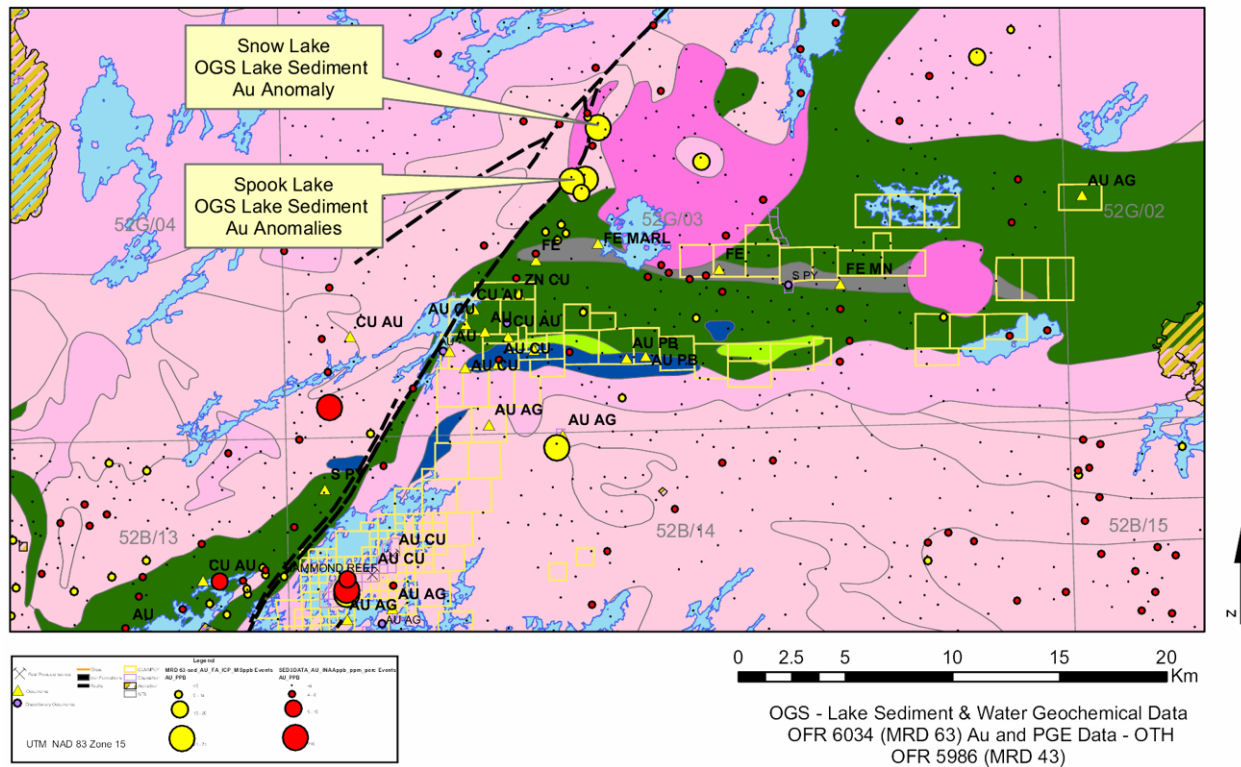


Figure 7. Lake sediment and water geochemical anomalies in the Atikokan–Lumby Lake area (compiled from Dyer 1999b; OGS 2000b).

OGS ACTIVITIES AND RESEARCH BY OTHERS

1. OGS, Precambrian Geoscience Section Projects 2006–2007
 - Rare Metal Mineralization, Ontario (provincial scale pegmatite mineralization); area covers majority of the Superior Province by F.W. Breaks, A.G. Tindle, J.B. Selway
 - Characteristics of mineralized intermediate to felsic plutonic systems (provincial scale metallogenic inventory); area covers majority of province by G.P. Beakhouse
 - Geology of central Wabigoon area by D. Stone (1:250 000 compilation map)
 - Shebandowan greenstone belt mapping project by T.R. Hart
 - Regional metamorphic study of the Hemlo greenstone belt by G.P. Beakhouse, T.L. Muir, P.H. Thompson
2. OGS, Sedimentary Geoscience Section Project 2006–2007
 - Lake Nipigon surficial mapping
3. The Atikokan Mineral Development Initiative (AMDI) is a geoscience project managed by the Ontario Prospectors Association. The project area is approximately 19 300 km² covering the Mine Centre, Atikokan, Lumby Lake, Lac des Mille Lac and western Shebandowan areas. Projects associated with the Atikokan Mineral Development Initiative (AMDI) are under the direction of Garry Clark, Executive Director of the Ontario Prospectors Association (gjclark@ontarioprospectors.com). The first phase of the Atikokan Mineral Development Initiative involved a Gap Analysis and geographic information system (GIS) compilation of existing geological, geochemical, geophysical, mineral deposit inventory, diamond drill hole, abandoned mine inventory system, assessment file information, publications, Landsat and mineral occurrence research data.
4. Dr. Phil Fralick of Lakehead University studied Precambrian sedimentary sequences (English River–Wabigoon–Quetico–Wawa subprovinces, banded iron formation, Sibley Group).
5. M.L. Hill of Lakehead University studied the structural geology of the Paleoproterozoic Gunflint Formation, Animikie Group, as it relates to the Penokean orogen.
6. Faculty and students at Lakehead University, Thunder Bay, have recently been, or currently are, involved in a number of research projects in the Thunder Bay South District:

Faculty Member	Research Topic(s)
Dr. P. Hollings	continuing Midcontinent Rift-related research with Mark Smyk (OGS) and Tom Hart (OGS)
BSc (Hons) Thesis:	
Rinne, M.	Geology and geochemistry of PGE mineralization at the Big Lake property
Kowalczyk, B.	Petrology and geochemistry of porphyritic intrusions at the Hemlo deposit
MSc Theses:	
Alexander, M.	Rare earth element mineralization of the Coldwell Complex; Supervisor - Roger Mitchell
de Villaneuva, C.	Magmatic and hydrothermal controls of PGE mineralization, Coldwell Complex; Supervisors - Drs. Andrew Conly & Roger Mitchell
Richardson, A.	Geochemical and mineralogical characteristics of the Nipigon Sills; Supervisor - Dr. Peter Hollings
Shute, A.	Petrology, volcanic facies and mineralization of the Hamlin Lake VMS system; Supervisor - Dr. Peter Hollings

A complete listing of publications received in the Thunder Bay South District office in 2006 is included in Table 5. Properties not currently being mined in the district are listed in Table 6.

Table 5. Publications received by the Thunder Bay South Resident Geologist's Office in 2006.

Title	Author(s)	Type and Year of Publication
Sulphide Saturation Mechanisms in Gabbroic Intrusions in the Nipigon Embayment: Lake Nipigon Region Geoscience Initiative	S.A. Kissin, G.J. Heggie and A.K. Somarin	Ontario Geological Survey, Open File Report 6176, 17p. (2006), Miscellaneous Release—Data 190 (2006)
Stratigraphic, Geochemical and Isotopic Data from Lakehead University Researchers: Lake Nipigon Region Geoscience Initiative	P.W. Fralick, P. Hollings, S.A. Kissin, G.J. Heggie, R. Metsaranta, A.J. Richardson, B. Rogala and A.K. Somarin	Ontario Geological Survey, Miscellaneous Release—Data 190 (2006)
Preliminary U/Pb Geochronology Results: Lake Nipigon Region Geoscience Initiative	L.M. Heaman and R.M. Easton	Ontario Geological Survey, Miscellaneous Release—Data 191 (2006)
Preliminary Results of the Audiomagnetotelluric Study of the Nipigon Embayment: Lake Nipigon Region Geoscience Initiative	J.A. Craven, S. Shareef, T.R. Hart, A. Martí and C. Farquharson	Ontario Geological Survey, Miscellaneous Release—Data 192 (2006)
Magnetic and Gravity Three-Dimensional (3D) Modelling: Lake Nipigon Region Geoscience Initiative	L.E. Reed and D.R.B. Rainsford	Ontario Geological Survey, Miscellaneous Release—Data 193 (2006)
Multidisciplinary Study of North to North-northeast-trending dikes in the Region West of the Nipigon Embayment: Lake Nipigon Region Geoscience Initiative	R.E. Ernst, K.L. Buchan, L.M. Heaman, T.R. Hart and J. Morgan	Ontario Geological Survey, Miscellaneous Release—Data 194 (2006)
Regional GIS Database for the Lake Nipigon Area: Lake Nipigon Region Geoscience Initiative	H. Izumi	Ontario Geological Survey, Miscellaneous Release—Data 195 (2006)
Report of Activities 2005, Resident Geologist Program, Thunder Bay South Regional Resident Geologist Report: Thunder Bay South District	J.F. Scott, M.A. Magee and C.L. Komar	Ontario Geological Survey, Open File Report 6182, 38p. (2006)
Index to Maps, Bedrock Geology 1991–2005	Publications Services Section, OGS	Ontario Geological Survey, Index Maps, scale 1:1 000 000 (set of 4)
Index to Maps, Surficial Geology 1991–2005	Publications Services Section, OGS	Ontario Geological Survey, Index Maps, scale 1:1 000 000 (set of 4)
A New Metamorphic Framework for the Hemlo Greenstone Belt: Implications for Deformation, Plutonism, Alteration and Gold Mineralization	P.H. Thompson	Ontario Geological Survey, Open File Report 6190, 80p. (2006)
1:250 000 Scale Bedrock Geology of Ontario	Precambrian Geoscience Section, OGS	Ontario Geological Survey, Miscellaneous Release—Data 126 – Revised (2006)
Precambrian Geology of the Northwest Portion of the Nipigon Embayment, Northwestern Ontario	T.R. Hart	Ontario Geological Survey, Map P.3579, scale 1:100 000 (2006)
Precambrian Geology of the Southwest Portion of the Nipigon Embayment, Northwestern Ontario	T.R. Hart	Ontario Geological Survey, Map P.3580, scale 1:100 000 (2006)
Summary of Field Work and Other Activities, 2006	OGS Staff, edited by C.L. Baker, E.J. Debicki, R.I. Kelly, D.J. Rowell, J.K. Mason, J.A. Ayer, R.M. Easton and G.M. Stott	Ontario Geological Survey, Open File Report 6192, 363p. (2006)
Report of Activities 2005, Resident Geologist Program, Thunder Bay South Regional Resident Geologist Report: Thunder Bay South District	J.F. Scott, M.A. Magee and C.L. Komar	Ontario Geological Survey, Open File Report 6182, 38p. (2006)
Hydrothermal Iron Oxide Copper Gold And Related Deposits: A Global Perspective, v.1	Edited by T.M. Porter	PGC Publishing, Adelaide, Australia (2000)
Hydrothermal Iron Oxide Copper Gold And Related Deposits: A Global Perspective, v.2	Edited by T.M. Porter	PGC Publishing, Adelaide, Australia (2002)

Table 6. Mineral deposits not being mined in the Thunder Bay South Resident Geologist's District in year 2006.

Abbreviations					
AF	Assessment Files	MLS	Mining Lands, Sudbury		
CMH	<i>Canadian Mines Handbook</i>	MR	Mining Recorder		
GR	Geological Report	NM	<i>The Northern Miner</i>		
MDC	Mineral Deposit Circular	OFR	Open File Report		
MDIR	Mineral Deposit Inventory record	PC	Personal Communication		

Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Ownership References	Reserve References	Status
Anderson Lake 52A/10NE	Mo	1 346 000 T (grade not stated)	K. Fenwick optioned to El Nino Ventures Inc. (news release, February 3, 2005)	W.N. Ingham (16/06/1959) in Lindsay Explorations Ltd., prospectus (19/06/1959)	Inactive
Ardeen Mine 52B/10SE/SW	Au	90 650 T @ 15.3 g/T Au (uncut) [84 904 T @ 11.6 g/T Au, assays cut to 2 oz Au/t]; inferred resource of 1 082 939 T @ 14.4 g/T Au (uncut) [991 739 T @ 11.2 g/T Au, assays cut to 2 oz Au/t]	Pele Mountain Resources Inc. (CMH 2002–2003, p.335)	<i>The Ontario Prospector</i> , v.1, no.3, p.35 (1998); CMH 2002–2003, p.335	Over \$2 million spent in exploration since acquisition in 1996; diamond drilling in 2003
Atikokan Iron Mine 52B/14	Fe, Cu	12 000 000 T @ 35% Fe, 0.040% Cu	K. Bjorkman (Resident Geologist's Files)	NM (26/10/1972)	Inactive
Aumacho (Brink) 42E/05SW	Li	759 475 T @ 1.65% Li ₂ O, plus 96 000 T @ 1.5% Li ₂ O	A. Hayes (Resident Geologist's Files)	GR 31, p.64	Active; VLF-EM survey conducted in 1995
Coco–Estelle 42E/03SW	Au	53 700 t @ 10.7 g/t	J.E. Bond et al. (Resident Geologist's Files)	AF	Optioned to Tri-Alpha Investments Ltd. in 2003
Coldstream 52B/10SE	Au	7.6 Mt @ 2 g/t Au	Alto Ventures Ltd. (news release, October 1, 2002)	Alto Ventures Ltd. (news release, October 1, 2002)	Drilled by Noranda and Freewest 1990/1991; acquired from The Other Mining Company (U.S.) Inc. in 2002
Conway 52H/08NE	Li	1.83 MT @ 0.96% Li ₂ O to 300 m	E.S. Conway (Resident Geologist's Files)	GR 31, p.68	Inactive
Coubran Lake 42D/16NW,SW	Cu, Fe, Ti, P	60 MT @ 0.2% Cu, 27% Fe, 5% Ti, 5% P; plus 32 MT @ 0.3% Cu, 23% Fe, 0.02% Ni, 2.48% Ti, 0.36% P	Newmont Mining Corporation of Canada Limited (Newmont Capital) (CMH 2002–2003, p.170)	AF (F.N. 2.14737; 1991)	87 leases and additional claims acquired from acquisition of Redstone Resources Inc. and Franco-Nevada; optioned to Aurogin Resources Ltd.
Dead Horse Creek North 42D/15SE	Pb, Zn, Ag	14 000 T @ 1.45% Pb, 7.28% Zn, 8.27 opt Ag	G. and W. Michano (2 of 8 original patented claims); remainder open for staking (Resident Geologist's Files)	Resident Geologist's Files	Inactive

Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Ownership References	Reserve References	Status
Dead Horse Creek South 42D/15SE	Pb, Zn, Ag	35 000 T and 36 000 T (Zones 1 and 2) @ 19.87% Pb, 9.08% Zn, 27.65 opt Ag	J. McCabe (Resident Geologist's Files)	Resident Geologist's Files	Inactive
Dorion Mine 52A/15	Pb, Zn	Maximum of 35 000 T @ 10% Pb	K. Haskell (Resident Geologist's Files)	Andowan Mines Ltd., Prospectus, (30/03/1957)	Restaked by current holder in 2002
Elizabeth Mine 52B/13SE	Au	250 000 tons @ 4.57 g/t Au	R. Moffat (Resident Geologist's Files)	CMH, 1998–1999, p.309	Inactive
Geordie Lake 42D/16SW	Cu, Ag, Pd	Indicated 24.4 Mt @ 0.33% Cu, 0.54 g/t Pd, 2.52 g/t Ag	L.E.H. Ventures Ltd. (CMH 2002–2003, p.247)	CMH 2002–2003, p.247	Drilling continuing in 2003
Great Lakes Nickel 52A/4SE	Cu, Ni, PGE	45.6 MT @ 0.344% Cu, 0.183% Ni; Pt & Pd values	Great Lakes Nickel Limited (CMH 2002–2003, p.197)	CMH 2002–2003, p.197	1970s bulk sample and feasibility study
Hammond Reef 52B/14NW	Au	~86 Mt @ 0.93 g/t Au (= 2.56 million oz Au)	Brett Resources Inc-Kinross Gold Corporation (CMH 2002–2003, p.336)	Pentland Firth Ventures Ltd. (news release, 1997)	2006, prospecting, stripping, diamond drilling
Hemlo (Interlake) 42C/12NW	Au	10.8 M tons @ 0.216 opT Au (=2 328 000 oz Au)	Newmont Mining Corporation of Canada Limited (Newmont Capital) (CMH 2002–2003, p.170)	Franco-Nevada Mining Corporation Limited, First-Quarter Report, (1999)	Advanced exploration drifting and underground diamond drilling 1998–1999
Jack Lake 52B/14SW	Au	Possible: 75 000 T @ 0.35 opT Au and 3000 T @ 0.30 opT Au; or 100 000 T @ 0.45 opT	M. Wicheruk (Resident Geologist's Files)	OFR 5332, p.J-7; Annual Report, Asamera Inc. (1981)	Inactive
Jean Lake 42E/05NW	Li	1.689 MT @ 1.30% Li ₂ O	Golden Nugget Exploration Inc. (CMH 2002–2003, p.190; Resident Geologist's Files)	Jean Lake Lithium Mines Ltd., Annual Report (1957)	Inactive
Kaministikwia Prospect 52A/12	Fe	190 MT that could produce 47.5 MT of concentrate 62.85% Fe	Inland Steel Company	MRC 11, p.374	Inactive
Lac La Croix 52B/05SW	Li	1.525 MT @ 1.27% Li ₂ O	Within Quetico Provincial Park	AF	Mining Lease of Occupation expired in 1970
M.N.W. 52H/04NE	Li	40 000 T "high-grade Li"	Golden Nugget Exploration Inc. (CMH 2002–2003, p.190; Resident Geologist's Files)	GSC Economic Geology Report 21, p.61	Option to earn 70% interest granted to Platinova A/S in 2001 (CMH 2001–2002, p.296)
Marathon prospect 42D/16SW	Cu, Ni, PGE	68.3 Mt measured and indicated resources grading 0.91 g/t Pd, 0.25 g/t Pt, 0.09 g/t Au, 0.32% Cu	news release, January 25, 2007	Marathon PGM Corporation (news release, January 25, 2007)	100% owned by Marathon PGM Corp
Matawin Iron Range, Duckworth, Laurie and Horne Townships 52B/09 and 52A/12	Fe	120 MT @ 29.56% Fe	Monpre Mining Company Limited	MRC 11, p.376	Inactive

THUNDER BAY SOUTH—2006

Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Ownership References	Reserve References	Status
McVittie 52H/08NE	Li	261 000 T @ 1.03% Li ₂ O	Golden Nugget Exploration Inc. (CMH 2002–2003, p.190; Resident Geologist's Files)	GR 31, p.89	Inactive
Mt. Edna Prospect 52B/08 and 52B/01	Fe	270 MT @ 26.9% Fe	K. Kukkee	MRC 11, p.386	Active Claim
Nama Creek 52H/08NE	Li	4 292 232 tons @ avg. 1.06% Li ₂ O	Coniagas Resources Limited (CMH 2002–2003, p.109)	CMH 2002–2003, p.109	Inactive since 1957
Nicopor 42D/14NW	Ni, Cu	185 000 T @ 0.48% Ni, 0.26% Cu (0-90 m); plus 190 000 T @ 0.40% Ni, 0.12% Cu (90-180 m)	B. Fowler and M. Shuman; optioned to Novawest Resources Inc. (CMH 2002–2003, p.317)	Zenmac Metal Mines Ltd., Annual Report (1970)	Optioned to Novawest Resources Inc.; explored in 2001–2003
North Shore 42D/14SW	Au	Geological reserves of 2 Mt @ 2.2 g/t Au (Afric zone)	Autotrac Ltd.; currently optioned to International Taurus Resources Inc. (CMH 2002–2003, p.230)	Resident Geologist's Files	Explored in 1997 by Cyprus Canada Inc.; currently optioned to American Bonanza Gold Corp.
Ontario Lithium (Jackpot) 42E/05SW	Li	1.18 MT @ 1.084% Li ₂ O	International Precious Metals Corporation (CMH 1997–1998, p.250) (company address and status unknown; CMH 2000–2001, p.220)	CMH 1997–1998, p.250	Drilling in 1994
Pistol Lake 52B/09NW	Au	9.6 mt @ 1.4 g/t Au or 2.9 mt @ 2.6 g/t Au	D. Parker and B. D'Silva	AF - geology report	Drilled by Detector Resources Ltd. 1994–1995
Powell 52B/07SW	Au	250 000 T @ 0.25 opT Au	Benton Resources Corp.	NM (Jan. 22, 1990)	Milling bulk sample on site, 1992
Prairie Lake 42E/02SE	U, Nb, REE, wollastonite	200 000 T @ 1.8 lbs/T U ₃ O ₈ , 5.0 lbs/T Nb ₂ O ₅	Nuinsco Resources Limited (CMH 2002–2003, p.319)	NM (03/05/1979)	Prefeasibility study on cement/lime products completed with positive results
Sapawe Mine 52B/14SW	Au	528 614 T @ 0.31 opT Au	Sapawe Gold Mines Ltd. (Resident Geologist's Files)	Sapawe Gold Mines Ltd. (news release, March 10, 1995)	Diamond drilling, 1995
Sawbill Lake 52B/14	Au	66 600 T @ 0.20 opT Au		OFR 5332, p.J-4	
Schreiber–Pyramid 42D/14SE	Au	107 T @ 0.71 opT Au	B. Fowler (Resident Geologist's Files)	Resident Geologist's Files	Inactive; last worked in 1992
Silver Mountain 52A/04NW	Ag	60 000 T @ 5.0 opT Ag, 12% CaF ₂		NM (28/10/54)	
Silver Islet 52A/07SW	Ag	115 000 T @ 40 opT Ag in dump, plus 300 000 oz Ag in roof pillar; or 1 050 000 oz Ag plus 750 000 oz Ag in pillars and stopes	Cross estate (Resident Geologist's Files)	MP 71, p.44; MRC 10, p.74; NM (18/10/1979); NM (10/02/1983)	Dump material processed ca.1984 by QC Explorations Ltd.
Shodgrass Lake 52B/10SE	Au	56.1 Mt @ 0.027 opt Au; includes 39.0 Mt @ 0.035 opt Au	Moss Lake Gold Mines Ltd.	Watts, Griffis, McOuat Ltd. NI43-101 compliant technical report	Evaluating geotechnical data.

Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Ownership References	Reserve References	Status
Stewart–Fire Tower 52A/12SE	Au	4 506 362 inferred tonnes @ 0.069g/t for calculated reserve of 3 130 820 g Au	ValGold Resources Ltd.	Caracle Creek International Consulting Inc.	Inactive
Sunbeam 52B/14	Au	4410 T @ 0.42 opT Au	(unknown)	OFR 5332, p.J-2	Acquired by Allegheny Mines Ltd. in 1996 (company delisted 1999)
Swamp River 52B/09SE	Au	998 000 T @ 0.12 opT Au (incl. 675 000 T @ 0.146 opT Au)	Band-Ore Resources Ltd. (CMH 2002–2003, p.52); optioned to Staccato Gold Resources Ltd.	CMH 2002–2003, p.52	Drilling in 2003 on main zone; Mag, EM, IP
Vanguard 52B/09NW	Cu, Zn, Au, Ag	East Vanguard: 100 000 T @ 1.8% Cu, 3.4% Zn, 0.22 opt Ag, 06 to 0.19 opT Au; West Vanguard: ~200 000 T @ 1.3% Cu, 1% to 2% Zn, 0.28 opT Ag	C. Bumbu, M. Fogen and J. Martin (Resident Geologist's Files)	Allegheny Mines Corporation (news release, Nov. 4, 1997)	Optioned to Canadian Golden Dragon Resources Ltd. in 2002; VTEM in 2004; diamond drilling in 2006
Vegan 42E/05SW	Li	750 000 T @ 1.38% Li ₂ O	Golden Nugget Exploration Inc. (CMH 2002–2003, p.190; Resident Geologist's Files)	NM (22/03/1956)	Inactive
Willecho and Willroy 42F/04NW	Cu, Zn, Ag	759 448 T @ 4.42% Zn, 0.28% Cu, 1.47 opt Ag (combined)	Noranda Inc. (<i>The Chronicle-Journal</i> , 25/10/98)	Willroy Mines Ltd., Annual Report (1976)	Past producers; last optioned/worked by Noranda Mining and Exploration Inc.
Winston Lake 42D/14NW	Cu, Zn	598 000 t @ 1.0% Cu, 21.2% Zn (incl. 33% dilution)	Inmet Mining Corporation	Inmet Mining Corporation, Pers. Comm., 1999	Mine closed, February 1999
Wisa Lake 52C/08NE	Li	330 000 T @ 1.15% Li ₂ O	P. Gagne (Resident Geologist's Files)	Lexindin Gold Mines Ltd., Manager's Report (1958)	Diamond drilling, 1950s; staked in 2001 by current holder

Note: This table contains tonnage and grade estimates referred to as reserves (indicated, possible, probable), which were determined at various times by methods largely unreported. None of these estimates are known to conform to the standards required for National Instrument (NI) 43-101. All should be considered inferred mineral resources not reserves.

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Metric Conversion Table

Conversion from SI to Imperial			Conversion from Imperial to SI		
<i>SI Unit</i>	<i>Multiplied by</i>	<i>Gives</i>	<i>Imperial Unit</i>	<i>Multiplied by</i>	<i>Gives</i>
LENGTH					
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
AREA					
1 cm ²	0.155 0	square inches	1 square inch	6.451 6	cm ²
1 m ²	10.763 9	square feet	1 square foot	0.092 903 04	m ²
1 km ²	0.386 10	square miles	1 square mile	2.589 988	km ²
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
VOLUME					
1 cm ³	0.061 023	cubic inches	1 cubic inch	16.387 064	cm ³
1 m ³	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m ³
1 m ³	1.307 951	cubic yards	1 cubic yard	0.764 554 86	m ³
CAPACITY					
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
MASS					
1 g	0.035 273 962	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 747	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 622 6	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311 3	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 90	t
CONCENTRATION					
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

	<i>Multiplied by</i>	
1 ounce (troy) per ton (short)	31.103 477	grams per ton (short)
1 gram per ton (short)	0.032 151	ounces (troy) per ton (short)
1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in co-operation with the Coal Association of Canada.

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