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Report of Activities, 2007 Resident Geologist Program

Red Lake Regional Resident Geologist Report: Red Lake and Kenora Districts

2008



ONTARIO GEOLOGICAL SURVEY

Open File Report 6216

Report of Activities, 2007 Resident Geologist Program

Red Lake Regional Resident Geologist Report: Red Lake and Kenora Districts

by

A.F. Lichtblau, C. Ravnaas, C.C. Storey, P. Hinz and J. Bongfeldt

2008

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Toronto - MMIC, Macdonald Block, Room M2-17, 900 Bay St., Toronto M7A 1C3

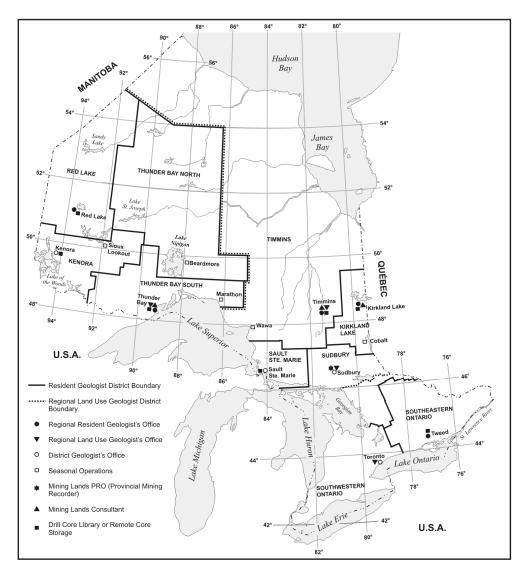
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Mines and Minerals Division Regional and District Offices

CITY	ADDRESS	OFFICE(S)	TELEPHONE	FAX
Kenora	Suite 104, 810 Robertson St., Kenora P9N 4J2	0	(807) 468-2819	(807) 468-2930
Red Lake	Box 324, Ontario Government Building, 227 Howey Street, Red Lake P0V 2M0 Temporary Office: 51A Hwy 105	• •	(807) 727-3272	(807) 727-3553
Thunder Bay – North	Suite B002, 435 James St. S., Thunder Bay P7E 6S7	• • •	(807) 475-1331 (807) 475-1368 (807) 475-1311	(807) 475-1112 (807) 475-1112 (807) 475-1124
Thunder Bay – South	Suite B002, 435 James St. S., Thunder Bay P7E 6S7	• = •	(807) 475-1331 (807) 475-1368 (807) 475-1311	(807) 475-1112 (807) 475-1112 (807) 475-1124
Sault Ste. Marie	Suite 200, 70 Foster Dr., Sault Ste. Marie P6A 6V8	0	(705) 945-6931	(705) 945-6935
Timmins	Ontario Government Bldg., P.O. Bag 3060, 1270 Hwy 101 East, South Porcupine P0N 1H0	• • •	(705) 235-1619 (705) 235-1622 (705) 235-1600	(705) 235-1620 (705) 235-1620 (705) 235-1610
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Sudbury	Willet Green Miller Centre, Level A3, 933 Ramsey Lake Rd., Sudbury P3E 6B5	∘ * ▼	(705) 670-5735 (705) 670-5887	(705) 670-5681 (705) 670-5818
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ONTARIO GEOLOGICAL SURVEY

RESIDENT GEOLOGIST PROGRAM

REPORT OF ACTIVITIES - 2007

RED LAKE REGIONAL RESIDENT GEOLOGIST REPORT

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- 1. Red Lake District
- 2. Kenora District



Ontario Geological Survey Regional Resident Geologist Program

Red Lake Regional Resident Geologist (Red Lake District)—2007

by

A. Lichtblau, C.C. Storey and P. Hinz

2008

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Red Lake Regional Resident Geologist (Red Lake District)—2007

A. Lichtblau¹, C.C. Storey² and P. Hinz³

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INTRODUCTION

Gold was the only commodity mined in the Red Lake District in 2007. Total yearly production increased by 35 400 ounces (5.3%) over the 2006 total, to 700 590 ounces gold (Table 1, Figure 1). Goldcorp Canada Ltd.'s Red Lake Gold Mines marked 2007 as the first full year of production from integrated operations, which combined the previously separate Campbell and Red Lake mines.

Continued advances in mineral development on gold and base metal properties have seen 2 projects moving toward Advanced Exploration status: 1) Gold Eagle Mines Ltd.'s BCD gold discovery in the Red Lake greenstone belt; and 2) Tribute Minerals Inc.'s Arrow base metal deposit in the Confederation Lake greenstone belt.

	Production in 2006		Production in 2007		Reserves Plus Resources (all categories) at end of 2007	
Mine	Tonnage @ Grade	Total Commodity	Tonnage @ Grade	Total Commodity	Tonnage	Grade
Goldcorp Canada Ltd. Red Lake Gold Mines ⁽¹⁾	592 800 tonnes @ 31 g/t Au (653 450 tons @ 0.91 opt Au)	592 900 ounces Au	721 022 tonnes @ 30.90 g/t Au	700 590 ounces Au	10 760 000 tonnes	19.67 g/t Au
Placer Dome (CLA) Ltd. Campbell Mine ⁽²⁾	176 000 tonnes @ 12.8 g/t Au (194 120 tons @ 0.37 opt Au)	72 700 ounces Au	N/A	N/A	N/A	N/A

Table 1. Mine production and reserves in the Red Lake District in 2007.

(1) Goldcorp Canada Ltd., news releases, January 8, 2008 and February 19, 2008, and J. Rogers, Goldcorp Canada Ltd., personal communication. (2) Placer Dome Inc., news release, February 20, 2006.

The price of gold continued to rise (Figure 2), closing the year with a December average price of US\$803, an increase of 21% relative to the price (US\$635) at year-end 2006 (price information from Web site www.kitco.com).

Claim staking activity increased from levels attained in 2004 (Table 2), with most open ground in the Red Lake greenstone belt having been acquired prior to 2004. Active claim units also increased over previous years; claims are being held in good standing, with a subsequent increase in the number of active units, and decrease in the number of cancelled claims.

During 2007, 43 assessment work and other technical reports were received in the Red Lake Resident Geologist's Office (Table 4). The total value of the work received was \$5 418 175.

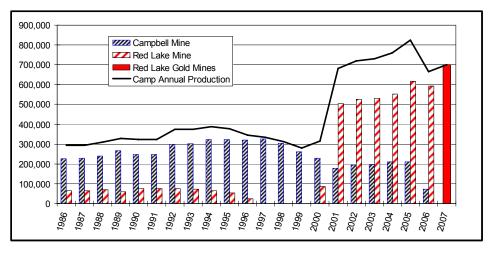


Figure 1. Annual gold production in the Red Lake belt, 1986–2007. (*No production at the Red Lake Mine between 1997 and 1999 due to strike by unionized employees.*)

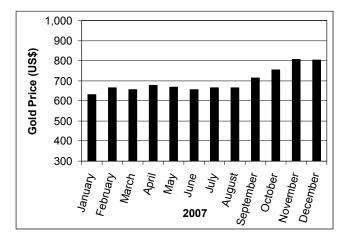


Figure 2. Average monthly price of gold in 2007 (price information from Web site www.kitco.com).

Year	Cancelled (Claim Units)	Recorded (Claim Units)	Active (Claim Units)
2007	1878	4716	18 334
2006	4759	3358	15 436
2005	5165	3117	16 911
2004	3690	2099	18 647
2003	1842	6781	21 127
2002	1795	7689	15 732
2001	290	291	2269

Table 2. Summary of claims recorded in the Red Lake District, 2007.

MINING ACTIVITY

Gold production in Red Lake continued unabated at the integrated operations of Goldcorp Canada Ltd.'s Red Lake Gold Mines, comprising the Campbell and Red Lake complexes. Historical statistics for all producers in the district are given in Table 3.

Goldcorp Canada Ltd.-Red Lake Gold Mines

Red Lake Gold Mines' growth scenario aims for production of 1 million ounces gold by 2011 (information from Web site www.goldcorp.com). Strategic developments are dependent on

- 1) discovery of new High Grade Zones (HGZ)
 - conceptual models of HGZ2, HGZW and Deep HGZ were drill-tested during 2007
- 2) successful mining of large, bulk-tonnage Sulphide Zones
 - underground exploration drilling during the year focussed on deep, footwall sulphide zones,
 "Party Wall" opportunities, Red Lake Complex sulphide zone above 30 Level, and surface and near-surface, low-grade targets
- 3) accelerated development
 - the mining rate was accelerated through increased workforce flexibility and equipment replacement
- 4) mill expansion and productivity improvements
 - Red Lake Complex mill expansion to >1200 tons per day was completed as was the #3 Shaft, which reduces travel time and improves efficiencies in ore/waste haulage
- 5) custom milling
 - potential for development in 5 years from wholly owned Cochenour property, and joint-venture properties (e.g., Sidace Lake property, with Planet Exploration Inc.; Rahill-Bonanza and East Bay properties with Premier Gold Mines Limited) in the Red Lake greenstone belt

Goldcorp Canada Ltd. spent approximately \$26 million in underground exploration drilling and development in 2007. This entailed approximately 590 000 feet of drilling, with up to 15 drills at one time, and 2000 feet of exploration development (information from Web site www.goldcorp.com).

Catagoria	T	Grade (g/t Au)	Contained Ounces	
Category	Tonnes		Au	
Proven and Probable Reserves	6 870 000	20.42	4 510 000	
Measured and Indicated Resources	3 890 000	18.39	2 300 000	
Subtotal	10 760 000	19.67	6 810 000	
Inferred Resources	6 410 000	18.26	3 760 000	
Total all categories	17 170 000	19.14	10 570 000	

Source: Goldcorp Inc., news release, February 19, 2008

At year-end 2007, the mine employed 229 salaried and 317 hourly employees; 626 contract personnel (including Dynatec Corporation, Boart Longyear Canada, Cementation Canada Inc. and Major Drilling Group International Inc.) were also on site. Dan Gagnon was Mine Manager.

RED LAKE DISTRICT-2007

Table 3. Gold production in the Red Lake District to December 31, 2007.

M	Maria (Dec. 1.) (Co.	Ore Milled	Gold Produced		
Mine	Years of Production	(Short Tons)	Troy Ounces	Ounces per Ton	
Red Lake Gold Mines	2006-present ⁽¹⁾	1 448 240	1 293 490	0.893	
Campbell Mine	1949–2006 ⁽²⁾	19 944 241	11 216 443	0.564	
Goldcorp (Dickenson)	1948–2006 ⁽³⁾	9 606 894	5 962 948	0.621 ⁽⁴⁾	
Madsen	1938–1976, 1997 ⁽⁵⁾ –1999	8 678 143	2 452 388	0.283 ⁽⁶⁾	
Cochenour-Willans	1939–1971	2 311 165	1 244 279	0.538 ⁽⁷⁾	
McKenzie Red Lake	1935–1966	2 353 833	651 156	0.277	
Howey	1930–1941, 1957 ⁽⁸⁾	4 630 779	421 592	0.091 ⁽⁹⁾	
Hasaga	1938–1952	1 515 282	218 213	0.144	
Starratt Olsen	1948–1956	907 813	163 990	0.181	
Berens River	1939–1948	560 607	157 341	0.281	
Uchi	1939–1943	757 074	114 467	0.151	
Jason (Argosy)	1934–1952	276 573	101 875	0.368	
H.G. Young	1960–1963	288 179	55 244	0.192	
Sachigo River	1938–1941	46 457	52 560	1.131	
McMarmac	1940–1948	152 978	45 246	0.296	
Gold Eagle	1937–1941	180 095	40 204	0.223	
Jackson Manion	1934–1940	105 357	27 142	0.258	
Red Lake Gold Shore	1936–1938	86 333	21 100	0.244	
Hudson Patricia	1936–1937	11 228	1857	0.165	
Buffalo	1981–1982	31 986	1656	0.052	
Abino	1985–1986	2733	1397	0.511	
Lake Rowan	1986–1988	13 023	1298	0.100	
Mount Jamie	1976	972	377	0.388	
Kostynuk Brothers	1963-1966	577	1126	1.951	
Bobjo	1929	N/A	362 ⁽¹⁰⁾	N/A	
Bathurst	1927–1937	562	307	0.546	
Red Summit	1935–1936	591	277	0.469	
Sol d'Or	1933–1936	458	258	0.563	
McFinley	1987	N/A	N/A	N/A	
TOTAL		53 912 173	24 248 231	0.450	

(1) Includes total production from the Red Lake complex from January 1, 2006, and

production from the Campbell complex subsequent to May 12, 2006, the date of acquisition. (2) Includes production figures under Placer Dome (CLA) Ltd., to May 12, 2006.

(3) For 1997, 1998 and 1999, no production due to strike by unionized employees.

(4) From 1970, includes production from Robin Red Lake.

(5) Includes clean up of ore and materials from the mine site.

(6) Historic grade, actual grade for 1999 was 0.14 ounce per ton gold.

(7) Includes production from Annco and Wilmar properties.

(8) Continuous production 1930 to 1941; includes 268 ounces recovered from clean up in 1957.

(9) The ore mined at Howey, before sorting, totalled 5 158 376 tons.

The average production from run-of-mine ore was therefore 0.0817 ounce per ton gold.

(10) Not included in total production figure.

N/A Data not available.

Notes:

EXPLORATION ACTIVITY

Assessment work received by the Red Lake Resident Geologist's office is listed in Table 4, and a summary of exploration activity is given in Table 5. The 46% increase in the price of gold between January 2006 (US\$550) and December 2007 (US\$803) and the overall increase in the price of most base metals, coupled with major exploration successes by several companies (e.g., Gold Eagle Mines Ltd., Premier Gold Mines Limited, Tribute Minerals Inc.) sustained high exploration interest and expenditures in the Red Lake District.

Table 5 lists the companies and individuals who reported some activity on their property during 2007; several are described in more detail in the following pages. Programs with significant exploration expenditures and/or significant known results, and properties whose location is of particular strategic or geologic interest are described below. Information included in this section is taken from assessment files in the Red Lake Resident Geologist's office, unless otherwise indicated. Programs are keyed to Table 5 and Figures 3, 4, 5, 6, 7 and 8.

Table 4. Assessment files received in the Red Lake District in 2007.

Abbreviations						
AEM	Airborne electromagnetic survey	IP	Induced polarization survey			
	Airborne magnetic survey		Linecutting			
	Airborne radiometric survey	MMI	Mobile Metal Ion [™] soil sampling survey			
Веер	Beep Mat survey	OD	Overburden drilling			
	Bulk sampling		Overburden drill hole(s)			
DD	Diamond drilling	PEM				
DDH	Diamond drill hole(s)	PGM				
DGP	Down-hole geophysics	Pr	Prospecting			
	Geochemical survey					
	Ground electromagnetic survey	Samp				
GL	Geological survey					
GM	Ground magnetic survey	SP				
GRA	Ground radiometric survey		Stripping			
Grav	Gravity survey					
HLEM	Horizontal loop electromagnetic survey	UG	Underground exploration/development			
	Heavy mineral sampling	VLEM				
IM	Industrial mineral testing and marketing	VLFEM	Very low frequency electromagnetic survey			

Township or Area	Company Filing Report (Property)	Year	Type of Work (Work Value)	AFRO Number	Resident Geologist Office File Designation
Agnew Township, Uchi Lake Area and Earngey Township	Rice Lake Exploration Inc. (Lost Bay Property)	2006	GM (\$13,119.00)	2.33566	RL5079
Armstrong Lake Area	Candor Ventures Corp. (Shrimp Lake Property)	2006	Lc (8 km), GM, HLEM (\$51,995.00)	2.33824	RL5073
Avis Lake Area	English, Perry Vern (Kesaka Lake Project)	2007	Str, Tr (\$20,627.00)	2.34816	RL5094
Ball Township	Halo Resources Ltd. / Goldcorp Canada Ltd. (West Red Lake Property)	2006	GL, Assay (\$27,988.00)	2.33675	RL5075
Ball Township	Halo Resources Ltd. / Goldcorp Canada Ltd. (Middle Bay - May Spiers Property)	2007	IP, Lc, GM (\$226,299.00)	2.35048	RL5103
Balmer Township	Goldcorp Canada Ltd. (Dunlop Property)	2005	DDH(6)=1995 m (\$268,100.00)	2.34131	RL5072

Township or Area	Company Filing Report (Property)	Year	Type of Work (Work Value)	AFRO Number	Resident Geologist Office File Designation
Balmer , Dome Townships	King's Bay Gold Corp. (Headway Property)	2007	Compilation with Recommendations for Exploration	Non-assessment	RL5091
Bateman Township	Goldcorp Canada Ltd. (Bateman Project)	2006	GC (MMI), Assay (\$2,959.00)	2.33487	RL5065
Belanger Township	Tribute Minerals Inc. (Garnet Lake Property)	2006	DDH(7)=4100 m, Assay (\$522,260.00)	2.34889	RL5093
Belanger Township	Tribute Minerals Inc. (Garnet Lake Property)	2007	NI43-101 Report on Resource Estimate for Arrow Zone	Non-assessment	RL5102
Borland Lake Area , Favourable Lake Area (North part)	Shoreham Resources Ltd. (Favourable Lake Property)	2007	Property evaluation and exploration recommendations	Non-assessment	RL5088
Borland Lake Area , Favourable Lake Area (North part)	Gold Canyon Resources Inc. \Shoreham Resources Ltd. (Favourable Lake Property)	2007	Lc, GL, Pr, Assay (\$127,319.00)	2.34895	RL5101
Bruce Lake Area	Schellenberg, Gary David (Bruce Lake Area Property)	2007	GM (\$17,223.00)	2.34940	RL5099
Byshe Township	Solitaire Minerals Corp. (Chukuni Property)	2006	Lc, DDH(11)=2117 m, Assay, VLFEM (\$301,834.00)	2.34137	RL5084
Camping Lake Area	Crawford, Daniel Miles (Sandy Creek Beryl Property)	2007	Recut claim boundary, Pr (\$2,390.00)	2.34196	RL5089
Casummit Lake Area, Keigat Lake Area, Satterly Lake Area, Seagrave Lake Area	Gold Canyon Resources Inc. (Springpole Lake Property)	2006	Independent Technical Report and Resource Estimate	Non-assessment	RL5066
Casummit Lake Area	Vital Resources Corp. (Horseshoe Island Property)	2006- 2007	Lc, MMI, Assay (\$32,964.00)	2.34226	RL5083
Coli Lake Area	Goldcorp Canada Ltd. (Sidace Lake Project)	2004	DDH(14)=6237 m (\$363,421.00)	2.33550	RL5068
C oli Lake Area , Black Bear Lake Area	Goldcorp Canada Ltd. (Sidace Lake Project)	2005	DDH(43)=12 558 m, Assay (\$2,100,840.00)	2.33820	RL5071
Dome Township	Goldcorp Canada Ltd. (Claim KRL 4205226)	2006	Samp, Assay (\$996.00)	2.33910	RL5076
Dome Township	Grandview Gold Inc. (Sanshaw-Bonanza Property)	2006- 2007	Lc, GM (\$4,812.00)	2.34059	RL5081
Dome Township	Goldcorp Canada Ltd. (McKenzie Island Property)	2007	DDH(4)=1493.4 m, Assay (\$194,657.00)	2.34872	RL5097
Dome , Heyson and Byshe Townships	Caracle Creek International Consulting Inc. (Red Lake Project)	2006- 2007	Lc, IP, GM (\$81,707.00)	2.35026	RL5100

Township or Area	Company Filing Report (Property)	Year	Type of Work (Work Value)	AFRO Number	Resident Geologist Office File Designatior
Fairlie and Graves Townships	Sedex Mining Corp. (Corallen Property)	2007	Lc, GM, VLFEM (\$46,909.00)	2.34834	RL5096
Gerry Lake Area	Campbell, G.J. (Joy North Property)	2006- 2007	MMI, Assay, Pr (\$14,332.00)	2.34508	RL5086
Mattson Lake Area	Candor Ventures Corp. (Tahoe Lake Property)	2006	Lc, GM, HLEM (\$27,097.00)	2.33825	RL5074
Mitchell and Bowerman Townships	Sienna Minerals Inc. (Confederation Lake Property)	2006	MMI (\$52,681.00)	2.33615	RL5070
Mitchell and Belanger Townships	Confederation Minerals Inc. (Confederation Lake Property)	2007	Lc, MMI (\$49,920.00)	2.35496	RL5107
Mulcahy , Ball and Killala Townships	Goldcorp Canada Ltd. (Trout Bay Property)	2007	AEM, AM (\$135,060.00)	2.34577	RL5090
Ranger Township	Ansil Resources Ltd. (Ranger Project)	2007	DDH(2)=245 m, Assay (\$91,505.00)	2.35452	RL5105
Root Lake Area	Landore Resources Canada Inc. (Root Lake Property)	2005	GL, Pr (\$9,952.00)	2.33959	RL5077
Setting Net Lake Area and Favourable Lake Area (South part)	Shoreham Resources Ltd. / Leahy, Michael John (Bearhead Lake Property)	2007	Le (24.4 km), Pr, GRA (\$37,407.00)	2.35352	RL5104
Setting Net Lake Area	Anaconda Gold Corp. (Borthwick Lake Property)	2007	Pr (\$9,773.00)	2.35970	RL5106
Shabumeni Lake Area , Narrow Lake Area, Skinner Township, Goodall Township	Merrex Gold Inc. (Uchi Lake Claims)	2007	Pr, Assay, GC (\$52,208.00)	2.34407	RL5092
Skinner Township	Sabina Silver Corporation (Skinner Property)	2006	DDH(1)=424 m (\$78,911.00)	2.33576	RL5080
Skinner Township	Sabina Silver Corporation (Golden Sidewalk)	2007	Lc, GM (\$7,103.00)	2.35088	RL5095
Skinner Township	Sabina Silver Corporation (Golden Sidewalk)	2005- 2006	DDH(2)=1311 m, Assay (\$182,129.00)	2.34892	RL5098
South of Otter Lake Area	Schellenberg, Gary David	2006	GM, GC(soils) (\$12,999.00)	2.32805	RL5067
Thorne Lake Area, Ellard Lake Area, Levitt Lake Area, Ellard River Area	Superior Diamonds Inc. (AEM Diamond Exploration Project)	2006	GL	Non-assessment	RL5069

Ellard Lake Area, Levitt Lake Area, Ellard River Area, Loney Lake Area, Bonnell Lake Area, Dadson Lake Area, BMA 546 912, BMA 547 913, Aljo Lake Area, North of Hendren Lake Area

Township or Area	Company Filing Report (Property)	Year	Type of Work (Work Value)	AFRO Number	Resident Geologist Office File Designation
Todd Township	Amador Gold Corporation (Todd Project)	2007	Lc, GM, VLFEM (\$12,078.00)	2.34000	RL5078
Uchi Lake Area and Earngey Township	Overseas Investment B.A.S.A. (Hazard Lake Property)	2007	Lc, GM, VLFEM (\$15,908.00)	2.34282	RL5085
Willans Township and South of Otter Lake Area	Tri Origin Exploration Ltd. (Red Lake Extension Gold Project)	2006	DDH(6)=927.7 m (\$172,113.00)	2.34096	RL5082
Willans Township and South of Otter Lake Area	Tri Origin Exploration Ltd. (Red Lake Extension Gold Project)	2006	Lc, GM, IP, HLEM (\$48,580.00)	2.34109	RL5087

Table 5. Exploration activity in the Red Lake Resident Geologist District in 2007, keyed to Figures 4 to 8.

Abbr	eviations
AEMAirborne electromagnetic survey	Lc Linecutting
AM Airborne magnetic survey	MMI Mobile Metal Ion [™] soil sampling survey
ARA Airborne radiometric survey	OD Overburden drilling
BeepBeep Mat survey	ODH Overburden drill hole(s)
Bulk Bulk sampling	PEM Pulse electromagnetic survey
DD Diamond drilling	PGM Platinum group metals
DDH Diamond drill hole(s)	PrProspecting
DGP Down-hole geophysics	QVquartz vein
GC Geochemical survey	RESResistivity survey
GEM Ground electromagnetic survey	SampSampling (other than bulk)
GLGeological survey	Seismic Seismic survey
GM Ground magnetic survey	SPSelf-potential survey
GRA Ground radiometric survey	Str Stripping
Grav Gravity survey	Tr Trenching
HLEM Horizontal loop electromagnetic survey	UGUnderground exploration/development
HMHeavy mineral sampling	VGvisible gold
IM Industrial mineral testing and marketing	VLEM Vertical loop electromagnetic survey
IP Induced polarization survey	VLFEM Very low frequency electromagnetic survey

No.	Company/Individual (Stock Symbol) Property Name	Township/Area (Commodity)	Exploration Activity
1	Amador Gold Corporation (AGX) Maskootch Lake Property	Avis Lake Area (Au, Cu)	Additional staking of 406 claim units AEM (AGX, Management's Discussion and Analysis (MD&A), July 31, 2007) Lc, GM, IP, Pr, MMI, Tr
2	Amador Gold Corporation (AGX) Todd Township Property	Todd Township (Au)	Lc, GM, VLFEM (AFRO No. 2.34000)
3	Ansil Resources Ltd. (ANSL) Ranger Project	Ranger Township (Au)	DDH(1)= 245 m. Intersected 3-5% pyrite in mafic volcanic at contact with "feldspar-porphyry intrusive" (ANSL MD&A, July 13, 2007)
4	Canstar Resources Ltd. (ROX)	Armstrong Lake Area (Cu, Zn, Au,	DDH(9)= 1002 m
	Shrimp Lake Property	Ag)	DD returned numerous samples anomalous in base and precious metals, with individual highs of 0.6 g/t Au and 0.87% Zn (ROX, news release, Aug. 20, 2007 and David Palmer, Canstar Res., personal communication, 2008)

No.	Company/Individual (Stock Symbol) Property Name	Township/Area (Commodity)	Exploration Activity
5	Canstar Resources Ltd. (ROX) Tahoe Lake Property	Mattson Lake Area (BM, Au)	DDH(1)= 101 m (ROX, news release, Aug. 20, 2007 and David Palmer, Canstar Res., personal communication, 2008).
6	Claude Resources Inc. (CRJ) Madsen Project		DDH(87)=31 000 m for details see "Claude Resources Inc."
7	Cypress Development Corp. (CYP) 80% /Skyharbour Resources Ltd. (SYH) 20% Broulan Reef Project	Dome Township (Au)	Completed option agreement requirements to earn 100% interest in Broulan Reef property (CYP, SYH news release, May 29, 2007)
			DD program commenced late in 4th quarter 2007. Planning 2 mother holes and several wedge holes, totaling up to 10 000 m with a budget of \$2.5M, targeting Balmer assemblage rocks at depth (news releases: CYP Oct. 16, 2007; SYH Oct. 17, 2007).
8	E-Energy Ventures Inc. (EEV) Rivard (Heath) Gold Property	Todd Township (Au)	DDH (12)=1629 m. Best assays 125.59 g/t Au over 0.40 m and 1.65 g/t Au over 13.80 m (EEV news release, May 28, 2007).
			Str, Samp, Lc, "geophysical surveys" and GL (EEV MD&A, July 25, 2007).
			Reported assay results from 2006 diamond drilling program results from DDH EE06-03 through EE06-06; 2 holes included several high-grade intersections over very narrow widths (EEV news release, Feb. 26, 2007).
			DDH EE06-07 through EE06-11 includ 28.62 g/t Au over 2.90 m (EEV news release, March 12, 2007).
)	Gold Canyon Resources Inc. (GCU)	Favourable Lake Area (Uranium)	ARA, Pr, Samp
	Bear Head Uranium project		New surface discovery 3 km W of historical occurrences returned 0.043% uranium (0.05% U ₃ O ₈) over 3 m (GCU news release, June 11, 2007).
			ARA survey detected 4 km long by 2 km wide uranium anomaly >100 counts per second. U believed to be hosted in thick Bi-rich sills, not the pegmatite veins previously targeted (GCU news release, Aug. 17, 2007).
			For details see "Gold Canyon Resources Inc."
10	Gold Canyon Resources Inc. (GCU)	Satterly Lake Area (Au)	Str, Samp, MMI
	/ Vital Resources Corp. Horseshoe Island Property		Staked ground between Horseshoe Island property and Springpole property making them contiguous (GCU news release, July 27, 2007).
11	Gold Canyon Resources Inc. (GCU) Springpole Property	Casummit Lake Area (Au)	DDH(11)=2125 m, for details see "Gold Canyon Resources Inc."
12	Goldcorp Canada Ltd. (G) Cochenour–Willans Property	Dome Township (Au)	Development plans and permitting underway to dewater and rehab Cochenour shaft for drill access (G new release, Nov. 26, 2007).
			DDH(20)=19 000m.
			\$4.5 million expenditures

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RED LAKE DISTRICT-2007

No.	Company/Individual (Stock Symbol) Property Name	Township/Area (Commodity)	Exploration Activity
13	Goldcorp Canada Ltd. (G) Mine site exploration	Balmer Township (Au)	For details see "Goldcorp Canada Ltd Red Lake Gold Mines "
14	Goldcorp Canada Ltd. (G) 60%	Coli Lake Area, Sobeski Lake and	DDH(60)=16 000 m.
	/Planet Exploration Inc. (PXI) 40% Sidace Lake Property	Black Bear Lake areas (Au)	For representative assays see "Goldcorp Inc/Planet Exploration Inc."
15	Goldcorp Canada Ltd. (G) /Sabina Silver Corporation (SBB) Redaurum Property	Baird Township (Au)	SBB relinquished 5% interest in the property to Goldcorp Canada Ltd. for a 20% "free-carried" interest to production (SBB MD&A, Nov. 29, 2007).
			DDH(10)=4600m.
16	Gold Eagle Mines Ltd. (GEA)	Dome Township (Au)	DDH(44)=39 953m.
	Gold Eagle Mine Property		For details see "Gold Eagle Mines Ltd."
17	Grandview Gold Inc. (GVX) 64% /Fronteer Development Group Inc. (FRG) 36% Dixie Lake Property	Dixie Lake Area (Au)	DDH(9)=2544 m. Results include discovery of new "NS" zone and extension of 4 existing zones. Best assays include 163.75 g/t Au over 0.47 m and 20.90 g/t Au over 2.86 m (GVX news release, Sept. 19, 2007).
			GVX fulfilled terms of option agreement and increased its interest in the property to 64% (GVX news release, Oct. 17, 2007).
18	Halo Resources Ltd. (HLO) /Goldcorp Canada Ltd. (G)	Ball Township (Au)	GL, Pr, Assays, IP, RES, GM completed over the Pipestone-Phillips Channel
	West Red Lake Property (includes Biron Bay, Middle Bay-May Spiers, West Trout-Bridget Lake and Pipestone-Phillips Channel areas)		area. Survey identified a 1.3 km long by 100 m wide magnetic low coincident with a weak-to-moderate IP chargeability anomaly associated with May-Spiers occurrence (HLO MD&A, released Dec. 20, 2007).
19	Hawkeye Gold and Diamond Inc. (HKO) Dedee Rhode and Dixie Bell properties	Dedee Lake and Dixie Lake areas (Au)	Staked additional 600 acres contiguous to Dedee Rhode and Dixie Bell properties, and to Grandview Gold property (HKO news release, Oct. 25, 2007).
20	Hawkeye Gold and Diamond Inc. (HKO) Grand Dixie South Property	Dixie Lake Area (Au)	Acquired 1280 acres by staking adjacent to its Dedee Rhode and Dixie Bell properties, and to Grandview Gold property (HKO news release, Dec. 4, 2007).
21	Hy Lake Gold Inc. (HYLK) Golden Tree Property	Todd Township (Au)	DDH(1)=448.2 m (Ken Guy, HYLK, personal communication, 2008).
22	Hy Lake Gold Inc. (HYLK) /Jamie Frontier Resources Inc. Mount Jamie Property	Todd Township (Au)	DDH(39)=7843.4 m (phase 1 and 2) (Ken Guy, HYLK, personal communication, 2008).
			Phase 1 diamond drilling consisted of 16 holes for 1854 m. Results from 5 DDH reported. Best assays include 103.9 g/t Au over 0.5 m and 215.3 g/t Au over 0.5 m (HYLK news release, April 2, 2007).

Best results include 37.7 g/t Au over 3.5 m and 35.1 g/t Au over 1.5 m (HYLK news release, April 12, 2007).

No.	Company/Individual (Stock Symbol) Property Name	Township/Area (Commodity)	Exploration Activity
23	Hy Lake Gold Inc. (HYLK) /Goldcorp Canada Ltd. (G) Rowan Lake Gold Project	Todd Township (Au)	King's Bay Gold Corp. terminated option agreement with G (KBG news release, Feb. 27, 2007). Property optioned to HYLK, which can earn 60% interest (HYLK news release, Oct. 3, 2007).
			DDH(8)=4683.5m (Ken Guy, HYLK, personal communication, 2008).
24	King's Bay Gold Corp. (KBG) /Mainstream Minerals Corporation (MJO)	Dent Township (Au)	Lc, Str, Samp, GM, VLFEM DDH(28)=5717.1 m.
	Bobjo Mine Property		Mineralized intersections, ranging from 0.2 to 3.4 m and assays ranging from 6 g/t to 32.95 g/t Au (one assaying 93.09 g/t Au) (KBC news release, Sept. 19, 2007).
			Intersected new zone with visible gold assaying 53.61 g/t Au over 2.45 m (KBC news release, Oct. 25, 2007).
			Staked an additional 164 claims to north and south of current land package. Intersected 5.49 g/t Au over 1.2 m core length (KBG, MJO news releases, Nov. 20, 2007).
25	King's Bay Gold Corp. (KBG) /Mainstream Minerals Corporation (MJO) Goodall Township Property	Goodall Township (Au, Cu, Zn)	Acquired by staking 90 claim units, 3 km N of South Bay Mine (KBG news release, Feb. 20, 2007).
26	Magna Resources Shanty Bay	Dent Township (Au)	Tr
27	Merrex Gold Inc. (MXI)	Shabumeni Lake Area (Au)	Pr, Samp, Str, GL, GC
	Birch-Uchi Gold Project (Shabumeni property)		As of Aug. 31, 2007 the company has incurred exploration expenditures of \$243,284.
28	Premier Gold Mines Limited (PG) /Goldcorp Canada Ltd. (G) Rahill-Bonanza Project	Dome Township (Au)	DDH(32, including 6 wedge-offs) =31 585 m.
			DDH(1 UG)=650 m from 41 level of Campbell Complex.
			For more information see "Premier Gold Mines Limited"
29	Puget Ventures Inc. (PVS.P) West Timmins Mining Inc. (WTM)	Ball, Killala and Mulcahy townships (Cu, Ni, Pt, Pd)	Option to earn West Timmins 60% interest from Goldcorp.
	/Goldcorp Canada Ltd. (G) Trout Bay Project		AEM, AM
30	Redstar Gold Corp. (RGC) Newman–Todd Property	Todd Township (Au)	Completed 100% earn-in from AngloGold Ashanti (RGC news release, Sept. 19, 2007).
31	Rubicon Minerals Corporation (RMX)	Dome Township (Au)	DDH(5)=2854 m.
	/Agnico-Eagle Mines Ltd. (AGE) DMC Property		Best assay 57.37 g/t over 0.5 m, associated with a 10 cm VG bearing QV Structure remains open down plunge (RMX news release, April 16, 2007).
32	Rubicon Minerals Corporation (RMX)	Fairlie, Baird and Todd townships	DDH(3)=1380 m.
	/Solitaire Minerals Corp. (SLT) Humlin Property	(Au)	No significant assays were reported (RMX MD&A, May 14, 2007).
33	Rubicon Minerals Corporation (RMX) 60%	Dome Township (Au)	DDH(11)=7713 m.
	/Golden Tag Resources Ltd. (GOG) 40% McCuaig Property		For more information see "Rubicon Minerals Corporation"

No.	Company/Individual (Stock Symbol) Property Name	Township/Area (Commodity)	Exploration Activity
34	Rubicon Minerals Corporation (RMX)	Bateman Township (Au)	DDH(24)=13 705 m.
	Phoenix Gold Project		For more information see "Rubicon Minerals Corporation"
35	Rubicon Minerals Corporation (RMX)	Black Bear Lake Area (Au)	DDH(8)=1394 m.
	/Solitaire Minerals Corp. (SLT) Red Lake North Property (Main Block)		DD, 5 km southeast of Sidace Lake area. VG in hole RLN-07-07 at 387 m down- hole, assaying 9.70 g/t Au over 1.4 m (including 19.95 g/t Au over 0.65 m) (RMX news release, Oct. 16, 2007).
36	Rubicon Minerals Corporation (RMX) /Solitaire Minerals Corp. (SLT)	Coli Lake Area (Au)	DDH(1)=510 m. One drill hole was deepened to 2100 m.
	Red Lake North Property (Sidace Area)		3.42 g/t gold over 4.6 m and individual assays up to 7.7 g/t gold over 1.0 m (RMX news release, Dec. 20, 2007).
37	Rupert Resources Ltd. (RUP) Gold Centre Property	Balmer Township (Au)	Second mother hole (2800 m) to begin "shortly" (RUP news release, Jan. 17, 2007).
			Drilling has reached a depth of 2163 m and will continue to 3000 m (RUP MD&A, July 13, 2007).
8	Sabina Silver Corporation (SBB) Golden Sidewalk Property	Skinner Township (Au)	DDH(12)=3351 m. GL
9	Sabina Silver Corporation (SBB) Skinner Property	Skinner Township (Au)	GL, Pr
40	Schellenberg, G.D. Claims KRL3019642 and KRL3019643	Bruce Lake Area (Au, BM)	GM (AFRO# 2.34940)
41	Shoreham Resources Ltd. (SMH)	Favourable Lake and Setting Net Lake areas (U)	ARA, AM, Lc, GRA, Pr, Samp, GL
	/RPT Uranium Corp. (RPT) Bear Head Lake Uranium Project		Historic resource of 978 810 tons at $0.06\% U_3O_8$ to a depth of 500 feet. MDI 53C13SE00061
12	Shoreham Resources Ltd. (SMH) /Gold Canyon Resources Inc. (GCU) Favourable Lake Property	Borland Lake and Favourable Lake North areas (Ag, Au, BM, Mo)	AEM, AM
13	Shoreham Resources Ltd. (SMH) /Confederation Minerals Ltd. Matless Lake Project	Setting Net Creek and Setting Net Lake areas (U, Mo, Ag)	AEM, AM, GRA
4	Shoreham Resources Ltd. (SMH)	Setting Net Lake Area (Mo, Cu)	ARA, AM, VLFEM, Pr, Samp, GL, Str
	Setting Net Lake property		Historic resource of 100 million tons at 0.09% MoS ₂ to a depth of 600 feet (MDI53C13SE00066)
15	Shoreham Resources Ltd. (SMH) Twinpeak Property	Setting Net Lake Area (Mo, Cu)	ARA, AM, Samp, GL
16	Skyharbour Resources Ltd. (SYH) South Bay Properties	Dent, Agnew and Mitchell townships (Cu, Zn)	Lc=30 km, Titan 24 DCIP & MT =26 km
17	Solitaire Minerals Corp. (SLT) Heyson-Chukuni Property	Heyson Township (Au)	Pr, Samp AFRO No. 2.35656
18	Tribute Minerals Inc. (TBM)	Belanger Township (Zn, Cu, Au,	DDH(3)=1500 m.
10	Copperlode Property	Ag)	For more information see "Tribute Minerals Inc."

No.	Company/Individual (Stock Symbol) Property Name	Township/Area (Commodity)	Exploration Activity
49	Tribute Minerals Inc. (TBM)	Belanger Township (Zn, Cu, Au,	DDH(23)=12 000 m
	Garnet Lake Property (Arrow zone)	Ag)	Borehole RES
			Permitting process has been initiated to obtain an UG bulk sample and Notice of Project Status – Advanced Exploration has been submitted. Environmental and geotechnical studies and public consultation process to commence spring 2007 (TBM news release, Jan. 17, 2007).
			Hired Golder Associates Ltd. to complete baseline environmental and geotechnical assessment studies (TBM news release, April 30, 2007).
			Resource Estimate by Broad Oak Assoc. - at 3% Zn equivalent indicated resource: 2.071 Mt of 5.92% Zn, 0.75% Cu, 0.58 g/t Au and 21.1 g/t Ag; inferred: 120 552 tonnes of 2.60% Zn, 0.56% Cu, 0.40 g/t Au, and 21.5 g/t Ag (TBM news release, Aug. 14, 2007).
			For more information see "Tribute Minerals Inc."
50	Tribute Minerals Inc. (TBM)	Karas Lake Area (Zn, Cu, Au, Ag)	Lc
	Snake Falls Property		Titan 24 MT and Deep IP covering Dixie 3 Zn showing
51	Tri Origin Exploration Ltd. (TOE)	South of Otter Lake Area (Au, Ag,	ODH(23)
	Red Lake Extension Property (RLX)	Cu, Zn)	Anomalous gold samples were returned from 3 samples
52	West Timmins Mining (WTM) formerly Band- Ore Resources Ltd. (BAN) Trout Bay Project	Ball, Killala and Mulcahy townships (Cu, Ni, Pt, Pd)	AEM, AM

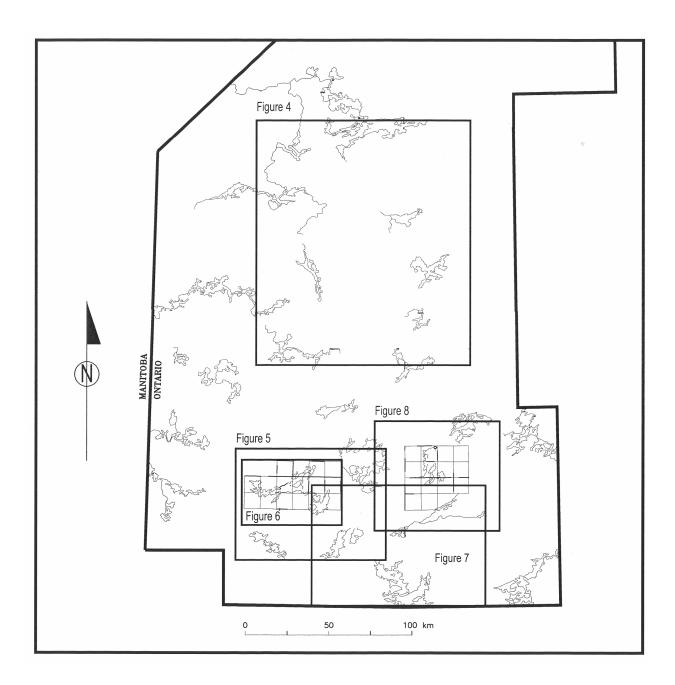


Figure 3. Red Lake District, index map.

Red Lake Greenstone Belt

Exploration in the Red Lake belt has continued at a steady pace since 2001. Table 5 lists the companies and individuals who reported some activity on their property during 2007; several are described in more detail in the following pages.

Work on significant discoveries from 2004 and 2005 continued in 2007 and in two cases, the projects are moving forward toward Advanced Exploration status (Gold Eagle Mines Ltd.'s BCD and Tribute Minerals Inc.'s Arrow project), with plans to proceed to underground exploration and bulk sampling. During the year, Claude Resources Inc. commenced dewatering its Madsen Mine workings, where production had ceased in 1999. Throughout 2007, a minimum of 12 surface diamond drills were active in the Red Lake greenstone belt; late in the year, the number rose to 23, a strong sign of the industry's confidence in sustained metal prices and the potential of the belt.

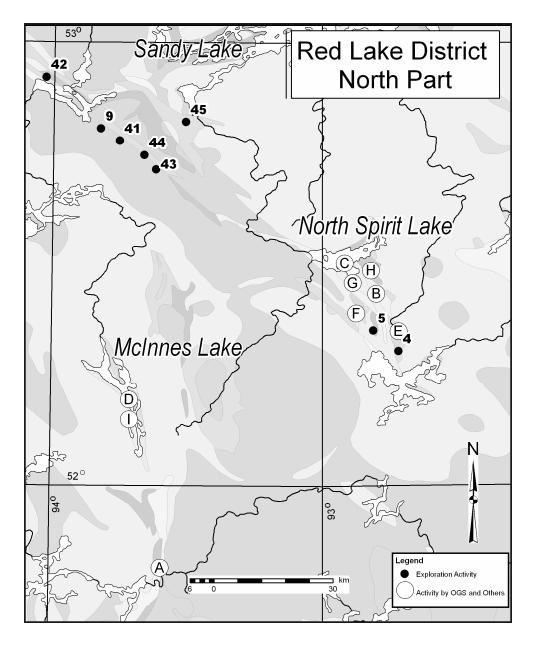


Figure 4. Red Lake District (north part): exploration activity, OGS and other activity (see Table 5).

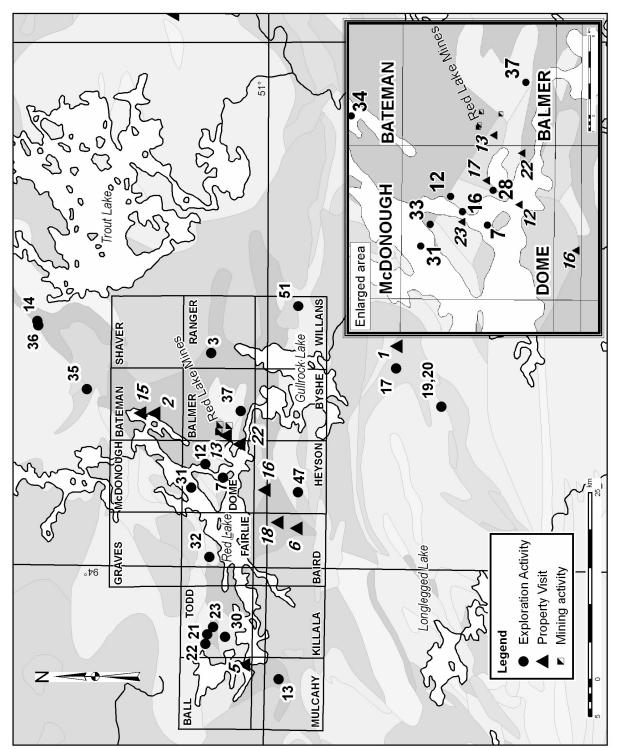


Figure 5. Red Lake greenstone belt: exploration activity and property visits (see Tables 5 and 7).

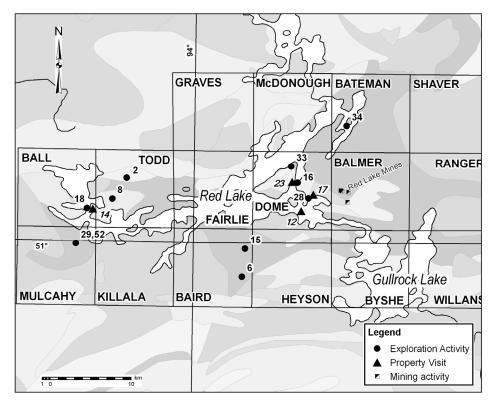


Figure 6. Red Lake greenstone belt: exploration (see Table 5) and mining activity (symbols as for Figure 5).

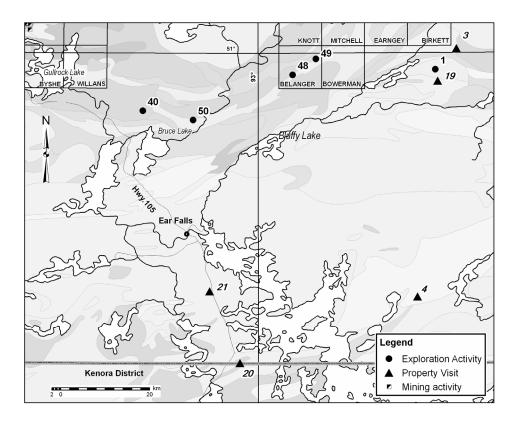


Figure 7. Red Lake greenstone belt and English River gneiss belt: exploration activity and property examinations (*see* Tables 5 and 7).

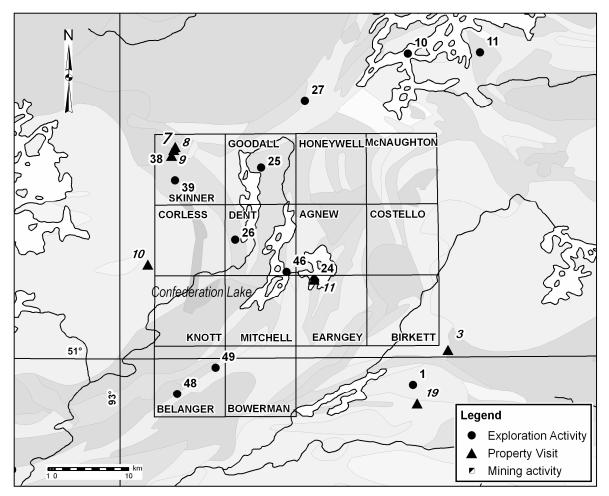


Figure 8. Birch–Uchi greenstone belt: exploration activity and property examinations (see Tables 5 and 7).

CLAUDE RESOURCES INC.

Exploration work on the **Madsen Project** consisted primarily of surface diamond drilling directed at the Treasure Box Zone and the upward extension of the previously mined **Zone 8** mineralization (Claude Resources Inc., news release, July 17, 2007). The **Treasure Box** zone was discovered in 2002 and given its name due to nuggety visible gold present in drill core. Work on the Treasure Box zone included 49 vertical diamond-drill holes totalling 13 285 m. The vertical holes varied from 213 to 414 m in depth. This zone is characterized by quartz-tourmaline-calcite-sulphide stringers and veins up to 35 cm wide carrying nuggety visible gold. The main quartz-tourmaline network of veins averages 20 m in thickness, with a general northwest trend and dip of 45 to 60° to the northeast. The mineralization is continuous along 165 m of strike length and is considered open on both ends and at depth (description from Claude Resources Inc. Web site, www.clauderesources.com). Results to date include 16.66 g/t Au over 1.80 m, 12.08 g/t Au over 6.05 m, 10.44 g/t Au over 1.45 m and 9.06 g/t Au over 3.55 m (Claude Resources Inc., news release, July 17, 2007).

Geological and geochemical surveys were also carried out over significant portions of the property, including the main ultramafic body extending from Russet Lake southwest to the **Starratt Olsen Mine** (also owned by Claude Resources Inc.) and the "polymetallic target" in the northwestern part of the property. Drilling of the "polymetallic target" has returned 1.0 to 26.5 g/t Au, 0.1 to greater than 2% Cu, 0.03 to 2% Mo and greater than 0.05% W, in addition to significant silver values (Claude Resources Inc., news release, November 8, 2007).

The underground workings of the Madsen Mine are being dewatered and the shaft and hoist are being recommissioned to allow access for underground diamond drilling. At year-end, dewatering had proceeded to Level 8. Level 16 is expected to be de-watered by the second half of 2008 and de-watering will continue to Level 24 (the lowest level). Level 16 will be used to drill Zone 8 mineralization while dewatering continues (Claude Resources Inc., news release, August 8, 2007).

GOLDCORP CANADA LTD.

Diamond drilling by Goldcorp Canada Ltd. in the Red Lake belt totalled 39 786.9 m in 71 holes (T. Twomey, Goldcorp Canada Ltd., personal communication, 2008). Drilling was performed on the wholly owned Cochenour–Willans and related properties (20 holes totalling 19 000 m) and joint-venture properties. Drilling on joint-venture properties included 41 holes (totalling 16 186.9 m) on the Sidace Lake property with Planet Exploration Inc. (40%), and 10 holes (4600 m) on the Redaurum property, where Goldcorp is earning a 50% interest from Sabina Silver Corporation.

Extensive surface and underground exploration is taking place on the Goldcorp mine sites (Campbell Complex and Red Lake Complex); *see* 'Mining Activity', this report.

Sidace Lake Project

Goldcorp is operator of the project and carried out several diamond-drilling programs during 2007. Drilling focussed on expanding the Main Discovery Zone (MDZ) and Upper Duck Zone (UDZ).

Main Discovery Zone (MDZ): comprises a 'Z'-fold within a deformed porphyry, now expressed as a quartzsericite schist unit. Gold mineralization is associated with disseminated arsenopyrite in abundant, disrupted quartz veinlets, and commonly with realgar, stibnite and pyrite. Dips of the fold limbs and plunges of the fold noses are steep, with the central (Main) limb almost vertical. The MDZ has been followed down to almost 1000 m in depth (Planet Exploration Inc., Second Quarter 2007 Report, September 30, 2007, released on SEDAR, November 29, 2007). Higher-grade intersections include 26.06 g/t Au over 1.0 m in RL07-159, 28.34 g/t Au over 2.0 m and 16.53 g/t Au over 4.0 m in hole RL07-161, and 26.56 g/t Au over 1.0 m in RL07-168. Significant assay results are tabulated below.

	From	То	Width	Au	
Hole #	(m)	(m)	(m)	(g/t)	Zone
RL07-159	271.00	292.00	21.00	3.72	MDZ
including	272.00	273.00	1.00	26.06	MDZ
RL07-161	396.00	398.00	2.00	28.34	MDZ
	406.00	410.00	4.00	16.53	MDZ
RL07-168	527.00	583.00	56.00	2.05	MDZ
including	573.00	574.00	1.00	12.27	MDZ

Source: Planet Exploration Inc., 2nd Quarter Report, September 30, 2007, released on SEDAR Nov. 29, 2007

Hole #	From (m)	То (m)	Width (m)	Au (g/t)
RL-06-136	553.00	576.00	23.00	2.49
	608.00	644.00	36.00	2.63
RL-06-136A	541.00	560.00	19.00	2.19
	575.00	586.00	11.00	3.19
RL-06-137	1067.00	1077.00	10.00	2.89
RL-06-137B	1129.00	1134.00	5.00	2.04

Planet Exploration released the following results from holes targeting the depth extension of the Main Discovery Zone, completed in January 2007 (Planet Exploration Inc., news release, January 30, 2007).

Skarn Zone: occurs 1500 m southwest of the MDZ and comprises centimetre- to metre-thick calc-silicate veins in sheared mafic metavolcanic rocks. Diopside is the dominant mineral; variable quantities of quartz and garnet also occur. Mineralization is manifested as fine flecks of visible gold within pyrite-pyrrhotite-arsenopyrite aggregates. Results are pending from one hole drilled in October 2007 (Planet Exploration Inc., Second Quarter 2007 Report, September 30, 2007, released on SEDAR Nov. 29, 2007).

Upper Duck Zone (UDZ): is a 2.0 to 4.0 m thick iron formation unit, 300 m north of the Skarn zone and over 1100 m southwest of the Main Discovery Zone ("MDZ"). Drilling on the UDZ has now traced the zone for approximately 1400 m; the 300 m long core zone of the UDZ is over 1 km southwest of the MDZ. Gold mineralization in the UDZ is typically associated with iron formation and associated arsenopyrite. Highlights of currently released assays include:

Hole #	From	То	Width	Au
	(m)	(m)	(m)	(g/t)
RL07-138	335.00	336.00	1.00	10.39
	467.50	468.50	1.00	5.24
RL07-141	295.80	297.00	1.20	4.87
RL07-142	318.00	319.00	1.00	8.18
RL07-143	270.00	271.00	1.00	5.42

Source: Planet Exploration Inc., news release, June 14, 2007

Western Duck Zone: One hole, RL07-176, was drilled to follow up on hole RL-04-77 (37.08 g/t Au in banded iron formation) drilled in 2004. Results are pending (Planet Exploration Inc., Second Quarter 2007 Report, September 30, 2007, released on SEDAR Nov. 29, 2007).

GOLD EAGLE MINES LTD.

The company continued an aggressive exploration program on the **Gold Eagle Mine Project**, comprising 35 patented claims in Dome Township. The metasedimentary-rock-hosted Bruce Channel zone is the major exploration target. A deep diamond-drilling program of master holes with several wedges from each totalled 44 holes (with 106 wedges) and 39 953 m (C. Collins, Gold Eagle Mines Ltd., personal communication, February 2008). Drilling continued through 2007 with 1 drill rig on McKenzie Island and 3 on the mainland.

The **Bruce Channel Zone** (BC) mineralized envelope is 645 m long (northeast-trending) by 450 m (northwest-trending) wide, extends 1100 m vertically and is open in all directions. Gold is present as native gold in quartz veins and within sulphide-rich zones, particularly with felted fine-grained arsenopyrite (Gold Eagle Mines Ltd., news release, July 16, 2007). A complete list of relevant gold assays are given on the company's website; however, some highlights of the drilling on the BC zone compiled from various company press releases are listed below.

	From	То	Width	Au
Hole #	(m)	(m)	(m)	(g/t)
BC 17-16	1222.55	1223.80	1.25	8.49
BC 17-19	1029.00	1094.70	65.70	8.74
	1124.00	1126.90	2.90	5.89
BC 19-3	1357.00	1369.80	12.80	6.48
including			8.80	8.44
	1652.10	1653.50	1.40	9.92
	1663.30	1664.65	1.35	37.88
	1682.40	1683.55	1.15	65.08
DG 10 1	1827.00	1831.80	4.80	4.41
BC 19-4	1372.80	1376.50	3.70	28.48
	1394.60	1396.80	2.20	21.02
	1408.00	1415.20	7.20	8.45
BC 19-6	1412.70	1420.80	8.10	6.50
	1889.50	1890.80	1.30	53.64
BC 19-7	1378.59	1393.95	15.36	23.24
including			0.79	167.13
BC 19-8	1435.90	1446.30	10.40	7.82
including			0.37	80.64
	1581.90	1584.30	2.40	21.30
including			0.80	59.52
BC 19-9	1258.80	1277.50	18.70	8.05
BC 19-10	1356.40	1358.80	2.40	14.07
	1492.60	1494.20	1.60	5.15
BC 19-11	1680.90	1683.20	2.30	10.25
BC 19-12	1681.20	1684.20	3.20	24.38
	1710.80	1714.80	4.00	17.74
DG 10 10	1969.20	1970.70	1.50	11.55
BC 19-13	1665.00	1667.00	2.00	9.56
	1758.00 1782.00	1765.00 1789.60	7.00 7.60	12.82 19.83
BC 19-14	891.00	893.00	2.00	19.83
BC 17-21	891.00	895.40	2.00 8.00	7.35
DC 17-21	1194.60	1243.30	48.70	8.84
BC 21-4	1988.00	1989.60	1.60	16.90
BC 21-6	1694.00	1703.00	9.00	11.92
including			0.40	47.69
and			0.40	50.98
BC 23-2	1314.60	1325.00	10.40	16.95
including			1.20	70.43
BC 23-3	1581.30	1587.40	6.10	7.30
	1671.40	1675.30	3.90	7.04
	BC27-4	1653.20	1655.80	2.60

Source: Gold Eagle Mines Ltd., news releases, February 16, July 16, October 11, and December 20, 2007

Drilling was stopped for the Christmas break and resumed in early January, 2008, with the addition of a fifth rig, capable of drilling to 2500 m.

The company raised \$89.9 million for Bruce Channel zone exploration, including a work program to sink an exploration shaft to approximately 1460 m, with exploration levels at 800 m, 1100 m and 1400 m. A total of \$65 million is budgeted to fund the shaft sinking program (Gold Eagle Mines Ltd., Management's Discussion and Analysis (MD&A) for the period ending June 30, 2007, posted on SEDAR August 10, 2007). Initial work included a 1460 m vertical pilot hole collared in the McKenzie Island granodiorite stock. J.S Redpath Ltd. was selected for engineering, site investigation and planning of the program. AMEC Earth and Environmental has been designated to provide engineering, analytical and supervisory services for environmental permitting and approval work (Gold Eagle Mines Ltd., news release, August 22, 2007).

The FN-series of holes, drilled from McKenzie Island, were designed to provide reconnaissance information in the southeastern portion of the property, 400 m south of Gold Eagle Mines' Western Discovery Zone (Gold Eagle Mines Ltd., news release, June 4, 2007). Hole FN 1-1 was designed as the "mother" hole for a series of wedge-offs. It reached a final depth of 2411 m, at approximately 2300 m vertical depth. The hole intersected a sequence of Confederation Lake Assemblage (CL) metasedimentary rocks in the first 1094 m, followed by McKenzie Island granodiorite (1094 to 1792 m), Bruce Channel Assemblage metasedimentary rocks (1792 to 2103 m) and Balmer Assemblage metavolcanic rocks to the end of the hole. Significant gold-mineralized rocks were encountered in both the McKenzie Island granodiorite stock (MIS target) and in biotite-altered Balmer Assemblage (BA target) rocks (see table below).

Hole FN 2-1 was collared from the same location as FN 1-1, but was turned to explore the southern border of the property. Metasedimentary rocks of the Confederation and Bruce Channel assemblages were intersected to 1960 m, and Balmer Assemblage metavolcanic rocks extended from 1960 m to the end of the hole at 2519 m. Gold was encountered in veining within the metasedimentary rocks (CL/BC target). The FN-series holes collared south-southwest of the current southern end of the gold-mineralized envelope successfully intersected favourable host rocks, carbonate-silica-altered zones and gold-mineralized rocks similar to those at the Bruce Channel discovery, 450 m to the north-northeast. This new zone has been called the Finn Zone, after Finntown, one of the first settlements on McKenzie Island. Highlights of the assay results compiled from press releases are listed below.

Hole #	From (m)	To (m)	Width (m)	Au (g/t)	Target
FN 1-1	331.65	332.45	0.80	6.89	MIS
	860.10	861.00	0.90	42.63	MIS
	2114.00	2116.00	2.00	12.55	BA
FN 1-2	2501.40	2506.2	4.80	7.97	
including			1.80	18.45	
FN 1-3	2071.80	2072.80	1.00	4.10	
	2096.45	2096.82	0.37	9.50	
	2431.10	2432.75	1.65	5.87	
FN 2-1	754.95	756.00	1.05	7.67	CL/BC
	984.00	987.20	3.20	6.22	CL/BC

An initial two-hole, 3000 m diamond-drilling program was started in October from a drill rig situated on Goldray Island to test the possible extension of gold-mineralized zones previously mined at the McKenzie Red Lake Mine in the period from 1935 to 1966 (Gold Eagle Mines Ltd., news release, October 11, 2007).

PREMIER GOLD MINES LIMITED

Premier Gold Mines Limited holds interests in 3 gold properties in the Red Lake greenstone belt: Rahill-Bonanza, East Bay and Newman-Madsen; and 1 property, Argosy, in the Birch–Uchi greenstone belt. In 2007, work was only performed on the Rahill-Bonanza Project.

The **Rahill-Bonanza Project** is located along the main Red Lake "Mine Trend" and is contiguous with Goldcorp Canada Ltd.'s producing Red Lake Gold Mines to the east and Goldcorp Canada Ltd.'s Cochenour-Willans Mine and the Bruce Channel discovery of Gold Eagle Mines Ltd. to the west. This property includes the Bonanza deposit, discovered in 2004, and the past-producing Wilmar Mine.

During 2007, the property was held under a 50:50 joint-venture partnership between Premier Gold Mines Limited and Goldcorp Canada Ltd.; Premier is operator during the initial \$5 million of expenditures. The Rahill-Bonanza property comprises 2 Premier Gold Mines properties (the Bonanza property, which includes the former Follansbee property, and the Marathon-McNeely properties), and the Kostynuk and Rahill-Wilmar properties from Goldcorp Canada Ltd.

The property hosts several gold deposits and gold-mineralized zones, including the Wilmar and West Granodiorite deposits, and the Follansbee, Bonanza, CP and North Contact zones. The Bonanza deposit was discovered in 2004 and was the subject of several drilling programs that ended in mid-2006. The partners are currently working towards a National Instrument (NI) 43-101-compliant resource of the deposit, which remains open along strike and down-dip (Web page, www.premiergoldmines.com/s/RahillBonanza.asp., accessed January 31, 2008). Development plans and permitting studies have been initiated for the potential dewatering of the adjacent Cochenour-Willans Mine (Premier Gold Mines Limited, news release, November 29, 2007). Dewatering and rehabilitation of portions of the underground workings would provide access for delineation drilling at Wilmar, on the Premier Gold Mines Limited-Goldcorp Canada Ltd. joint-venture property.

During 2007, 32 diamond-drill holes (including 6 wedge-offs) were completed on the Rahill-Bonanza property, for a total of 31 585 m; one hole (1239.6 m in total length) was drilled approximately 650 m onto the joint-venture property from the 41 Level (underground) of the adjacent Campbell Complex (M. Long, Premier Gold Mines Limited, personal communication, January, 2008). Ice- and land-based drilling focussed on extending the Bonanza deposit further to the southwest and to depth. In addition, in-fill drilling was completed in selected areas to increase confidence in the resource estimate. Other drilling concentrated on the strike and depth extensions of the Wilmar Mine zones and the West Granodiorite Zone. Selected assays include:

Hole #	From (m)	To (m)	Interval (m)	Au (g/t)	Zone
PG07015W4	1273.00	1274.00	1.00	49.00	New zone below the Wilmar deposit
PG07018W1	905.00	910.00	5.00	14.19	New zone below the Wilmar deposit
including	905.00	906.00	1.00	59.09	New zone below the Wilmar deposit
PG07020	552.00	552.80	0.80	29.90	West Granodiorite Zone
PG07020W1	574.10	577.00	2.90	12.20	West Granodiorite Zone
including	574.10	575.00	0.90	18.50	West Granodiorite Zone

Source: Premier Gold Mines Limited, news releases, August 27 and October 22, 2007

RUBICON MINERALS CORPORATION

Rubicon Minerals has an extensive land position in the Red Lake greenstone belt. Exploration work was reported from 6 of the properties.

Phoenix Gold Project

Rubicon Minerals completed 24 diamond-drill holes, totalling 13 705 m, targeting 5 areas of significant gold mineralization in close proximity to Rubicon's wholly owned, 137 m deep McFinley shaft.

The **North Peninsula Target** (NPT) is located approximately 700 m north of the McFinley shaft. The target includes Upper and Lower mineralized zones. Associated with the Upper Zone is a biotite-altered fault zone, with associated colloform / crustiform quartz-carbonate veining and varying amounts of sulphides, including 5 to 10% arsenopyrite. The Lower Zone is characterized by wide zones of intense silica-arsenopyrite replacement of carbonate veins over widths from 4 to 9 m (Rubicon Minerals Corp., news release, July 30, 2007). Assays included:

Hole #	From (m)	To (m)	Interval (m)	Au (g/t)
NPZ-07-02	309.33	310.62	1.29	5.40
NPZ-07-04	326.24	327.33	1.09	6.85
NPZ-07-05	293.70	295.27	1.57	10.59
	340.35	341.35	1.00	34.14

Source: Rubicon Minerals Corporation, news release, July 30, 2007

The **West Mine Target** is within 500 m of, and west of, the historic McFinley shaft. The gold target is a fault zone in moderately to strongly biotite-altered basalt. Assays from 2 holes through the structure included:

Hole #	From (m)	To (m)	Interval (m)	Au (g/t)
WMT-07-01	87.90	89.45	1.55	42.99
	121.00	122.00	1.00	8.70
	455.70	459.70	4.00	1.58
WMT-07-02	178.35	179.50	1.15	2.20
	205.50	207.50	2.00	2.41

Source: Rubicon Minerals Corporation, news release, July 30, 2007

The **KZ Target**, 600 m northeast, and the **Deep Footwall Target**, 950 m northeast of the North Peninsula Target, also returned significant gold grades and provided support to Rubicon Minerals' deep-drilling efforts. The company has budgeted for 10 000 m of deep drilling throughout the property, during the winter of 2007-2008 (Rubicon Minerals, news release, November 15, 2007).

McCuaig Joint Venture (Rubicon Minerals Corporation (60%) / Golden Tag Resources Ltd. (40%))

The partners, with Rubicon Minerals as operator, completed 11 diamond-drill holes, totalling 7713 m, in an ice- and land-based program during 2007. The first holes of the program successfully tested the down-dip extension of the granodiorite-hosted #1 Vein of the McKenzie Red Lake Mine, where it intersects Balmer Assemblage volcanic

stratigraphy. The target comprises a 20 m thick section of heavily quartz-ankerite-veined and altered mafic metavolcanic rocks, containing variable amounts of sulphides, including trace to 2% fine arsenopyrite. Assays included:

Hole #	From (m)	To (m)	Interval (m)	Au (g/t)
MC-07-01	868.70	870.40	1.70	4.24
MC-07- 01AW	868.30	869.85	1.55	15.65
	878.45	879.45	1.00	2.04

Source: Rubicon Minerals Corporation, news release, April 16, 2007

Birch–Uchi and Confederation Greenstone Belts

The Birch–Uchi and Confederation greenstone belts are geologically similar to the Red Lake belt, with the exception that a much larger proportion of the rocks are assigned to the Confederation Assemblage. Both gold and base metals have been historically produced, but there are no currently producing mines. While large areas of ground are held, exploration activity is not as intense as that in the Red Lake belt. Moreover, there has not been the same amount of recent geological research as there has been in the Red Lake belt.

GOLD CANYON RESOURCES INC.

The wholly owned Springpole Lake Gold property, in the Birch Lake greenstone belt, comprises approximately 20 000 acres in the Casummit, Satterly, Seagrave and Keigat lakes claim map areas. It comprises 30 patented claims and 189 unpatented, contiguous mining claims. In November 2006, a NI 43-101-compliant resource estimate of the Core Area was published (Armstrong et al. 2006). The total measured and indicated resource comprised 249 000 t at a grade of 5.66 g/t Au; total inferred resources were 1 353 000 t at 4.53 g/t Au. See Lichtblau et al. (2007) for a brief description of the Core Area mineralized zones.

Exploration in 2007 concentrated on diamond drilling to extend Core Area mineralized zones. Eleven diamonddrill holes, totalling 2125 m, were completed on 2 new zones, the Northwest Extension Zone (northwest of Core Area resource) and the Southwest Extension Zone, which was identified from 3-dimensional (3D) modelling and previous exploration. Gold Canyon Resources Inc. has started 3D modelling of the Core Area resource, in addition to continuing its lithogeochemical assaying program to identify unique geochemical signatures of additional goldhosting structures that could be applied to future exploration. To date, the company has identified at least 3 goldhosting structural events, each with a unique geochemical alteration signature (Gold Canyon Resources Inc., news release, February 20, 2007).

Diamond drilling of the central, potential NW Extension zones within the Core Resource area, encountered a new style of gold mineralization—a 6 m intersection of gold-bearing, bedded, cherty rocks with sulphides and minor banded iron formation in hole BL07-383. Assays included:

II ala #	From	То	Width	Au
Hole #	(m)	(m)	(m)	(g/t)
BL07-383	42.00	43.00	1.00	1.038
	43.00	47.26	4.26	8.399
	47.26	48.00	0.74	0.464

Source: Gold Canyon Resources Inc., news release, April 12, 2007

Hole #	From (m)	To (m)	Width (m)	Au (g/t)
BL07-378	89.62	90.16	0.54	19.319
	114.22	116.00	1.78	2.845
BL07-379	56.89	57.26	0.37	14.069
	60.81	61.10	0.29	5.648
BL07-380	138.00	138.42	0.42	4.188

Drilling of the westernmost potential extension intersected numerous gold-bearing, interflow, cherty, sulphidebearing units. Assays included:

Source: Gold Canyon Resources Inc., news release, April 12, 2007

A new exploration model interpreted the Southwest target area stratigraphy to be perpendicular to what was previously believed; the company believes the 2007 drilling proved this new model to be correct. Assays from the drilling included:

Hole #	From (m)	To (m)	Width (m)	Au (g/t)
BL07-375	110.55	111.24	0.69	2.316
BL07-376	29.20	29.93	0.73	2.444
BL07-377	105.45	105.95	0.50	3.155

Source: Gold Canyon Resources Inc., news release, April 12, 2007

Future exploration plans include diamond drilling on a new semi-massive sulphide discovery made in the spring of 2007, with a \$1 million budget. Plans also include further exploration of the fluorite-bearing carbonatite zone for rare-earth elements (Gold Canyon Resources Inc., news release, November 26, 2007).

TRIBUTE MINERALS INC.

Drilling on Tribute Mineral Inc.'s polymetallic Arrow Zone on the Garnet property continued throughout the year, with up to 2 drill rigs testing the up- and down-plunge extent of the deposit. A total of 23 holes were drilled on the deposit, totalling approximately 12 000 m (T. Boyd, Tribute Minerals Inc., written communication, 2008). The company also completed a borehole resistivity tomographic survey in selected holes of the Arrow Zone, designed to delineate the shallower eastern extent of the mineralized zone. Work in the latter half of the year involved drilling definition holes in the centre of the Arrow Zone. Core from these holes will be used for metallurgical bench-testing.

Tribute Minerals Inc. has initiated the permitting process for obtaining permission to gather an underground bulk sample of the Arrow Zone for metallurgical testing. A Notice of Project Status-Advanced Exploration has been submitted to MNDM. The company has hired Golder Associates to conduct baseline environmental geotechnical assessments on the Garnet property, to fulfil permitting requirements for driving a ramp on the Arrow Zone (Tribute Minerals Inc., news release, April 30, 2007). Initial planning envisages start-up of ramp construction in the fourth quarter of 2008.

Broad Oak Associates published an updated resource estimate of the Arrow Zone (Tribute Minerals Inc., news release, August 14, 2007). At a 3% Zn-equivalent cut-off grade, and a 3 m minimum mining width, the indicated and inferred resources are:

Category	Tonnage (t)	Zn (%)	Cu (%)	Ag (g/t)	Au (g/t)
Indicated	2 070 888	5.92	0.75	21.1	0.58
Inferred	120 552	2.60	0.56	21.5	0.40

Additional information on the resource estimate may be obtained from Tribute Minerals' Web page at http://www.tributeminerals.com/press_releases/pr2007/august142007.html.

High values of the rare metal indium have been found in sulphide-rich drill core intersections of the Arrow Zone. This metal was not included in the resource estimate. However, Tribute Minerals' current assay results strongly indicated that indium may be a potentially significant by-product. Drill core assays included:

Hole #	Interval (m)	Zn (%)	Cu (%)	Ag (g/t)	Au (g/t)	In (g/t)
GL-2006-39	1.20	7.37	0.42	144.0	0.23	45.50
GL-2000-39				11110		
	4.80	2.24	0.77	82.2	0.10	3.26
GL-2007-41	1.40	2.01	0.05	7.8	0.08	2.80
GL-2007-46	4.90	4.36	0.24	14.9	0.16	35.40
including	1.20	15.90	0.52	52.7	0.45	118.00
GL-2007-47	10.60	3.41	0.61	11.9	0.66	40.90
including	3.00	8.63	0.70	21.6	0.70	71.60

Source: Tribute Minerals Inc., news releases, February 28, May 16 and June 7, 2007

Northern Greenstone Belts

In the Red Lake District, the northern greenstone belts include those volcanic belts formed on rifted continental crust of the North Caribou Terrane (McInnes Lake, North Spirit Lake, Setting Net Lake, Favourable Lake, Sandy Lake, Muskrat Dam Lake, Sachigo Lake, Lingman Lake belts), and belts within the Stull–Oxford terrane that formed as products of juvenile ocean floor–arc volcanism (Stull Lake, Ellard Lake belts) (Sanborn-Barrie et al. 2005).

Although numerous mineral occurrences are reported from both terranes, mineral production from this portion of the Red Lake District has been restricted to the Berens and Sachigo River mines, both prior to 1950. Precious and base metals (157 341 ounces gold, 5 676 486 ounces silver, 5 105 873 pounds of lead and 1 797 091 pounds of zinc) from polymetallic veins were produced at the Berens River Mine in the Setting Net Lake belt. The Sachigo River Mine (produced 52 560 ounces gold) is situated within the Ellard Lake belt of the Stull–Oxford terrane (MDI 53J11SW00002).

A total of 12 companies hold claims in the northern terranes, either individually or in joint-venture agreements; information on their properties is summarized in Table 5. Exploration efforts are directed toward uranium, molybdenum, copper and diamonds, as well as gold and silver. The Favourable Lake and Setting Net Lake greenstone belts host projects directed at uranium, molybdenum and copper, and polymetallic silver-gold mineralization. In addition, there are rare-metal pegmatite occurrences that are covered by claims but were not explored in 2007. There are several other properties, including both staked and leased claims, in the northern terranes that were inactive in 2007.

RESIDENT GEOLOGIST STAFF AND ACTIVITIES

In 2007, staff of the Red Lake Resident Geologist's office comprised Andreas Lichtblau *P.Geo.*, Regional Resident Geologist; Carmen Storey *P.Geo.*, District Geologist; and Denise Saunders *P.Geo.*, District Support Geologist (DSG). Denise Saunders left the DSG position in December and was replaced by Kelly Joy on a short-term contract. Kirsten Thompson and Dayle Cottrell were employed as office assistants in the Summer Experience Program from June 25 to August 3, 2007. The office was still located in temporary facilities at the Red Lake Heritage Centre (51A Hwy. 105, Red Lake).

During the year, staff of the Resident Geologist's office made 23 visits to active and inactive mineral properties and one quarry and gave 5 field trips (totalling 38 participants) in the Red Lake District. Field and office activities focussed on delivering high-quality services to the exploration and mining sector.

A.F. Lichtblau attended the Northwest Ontario Mines and Minerals Symposium meeting in Thunder Bay in April, the Ontario Exploration and Geoscience Symposium (OEGS) in Sudbury in December, the Resident Geologist Program (RGP) annual meeting and Hemlo Expo in Marathon in September, and Branch and Divisional meetings in Sudbury in November and December. He also attended the Boreal Prospectors Association's Northern Ontario Mines and Minerals Symposium in Sioux Lookout in February, where he gave an overview of Red Lake production and exploration.

C.C. Storey attended the Prospectors and Developers Association of Canada conference (PDAC) in Toronto in March, the Northwest Ontario Mines and Minerals Symposium meeting in Thunder Bay in April, the Manitoba Mining and Minerals Convention in Winnipeg in November, and the OEGS meeting in Sudbury in December. He also attended the RGP annual meeting and Hemlo Expo in Marathon in September, and Branch and Divisional meetings in Sudbury in December. He continued to be actively involved in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Red Lake Branch and was re-elected as Technical Program Chair for the current year.

C.C. Storey and A.F. Lichtblau organized a very well-attended Annual CIM Exploration Roundup and Field Trip in June in Red Lake, which included talks by industry representatives and a field trip to see major features of the Red Lake camp. Several field trips were organized in the Red Lake District for industry representatives, academics and students in 2007, including 2 general Red Lake field trips for industry representatives and a trip for Lakehead University and University of Regina faculty in June, and a University of Manitoba student and faculty field trip in September.

The office played an active role in promoting the mining industry to local area youth and assisted local teachers in presenting geological topics through loans of educational materials (rock and mineral specimens and slides) and several presentations made at the museum and at local schools. An Open House was held during the Norseman Days Festival in July, drawing approximately 100 people to view minerals, ore samples, and a "black smoker" video.

DRILL CORE STORAGE SITE

The remote diamond drill core storage compound is located 6 km south of Red Lake, on Highway 105. The compound is operated as a self-serve facility by the Red Lake Resident Geologist's office. The Kenora Drill Core Library houses an additional 14 529.9 m of diamond drill core from the Red Lake District.

In 2007, the remote drill core facility had 19 users. Industry visits usually extend over several days, involving examining, relogging and sampling core that would be otherwise unavailable.

Diamond-drill core from one property and the bedrock intersections from overburden drilling on one property was donated to the remote core facility this year (Table 6). There is additional diamond-drill core from industry projects stored at the site but not yet incorporated in the collection and not included in the table.

Company	Property	Township/Area	Length (m
Ansil Resources Ltd.	Baird Tp	Baird Township	177.9
Ansil Resources Ltd.	Willans Tp	Willans Township	351
*Ansil Resources Ltd.	Ranger Lake	Ranger Township	245
Asarco Exploration Co. of Canada Ltd.	Skinner, Goodall	Skinner and Goodall townships	444.0
Barrick Gold Corporation	Hasaga Mine	Heyson Township	2889.8
Barrick Gold Corporation	Red Lake Gold Shore Mine	Dome Township	106.7
Barrick Gold Corporation	Red Lake Gold Shore Mine	Dome Township	257.6
Belmont Resources Inc./ International Montoro Resources Inc.	Walsh Lake	Bateman Township	474.0
Belmont Resources Inc./ International Montoro Resources Inc.	Shaver Lake	Bateman and Shaver townships	882.2
Canadian Industrial Minerals Corp.	Bouzan Lake	Heyson Township	2029.2
CANMET Howey and Hasaga Mine Hazards Drilling	Howey-Hasaga	Heyson Township	1027.2
Central Geophysics Ltd.	Conifer Lake Complex	Sumach Lake Area	170.8
Cross Lake Minerals Ltd.	Gerry Lake	Gerry Lake Area	981.0
Cypress Development Corp./ Skyharbour Resources Ltd.	McKenzie Island	Dome Township	3059.9
Cypress Development Corp./ Skyharbour Resources Ltd.	McKenzie Island	Dome Township	2081.8
East-West Resource Corporation	Bouzan Lake	Heyson Township	1489.5
Freewest Resources Ltd.	McQuaig Property	Dome Township	993.1
Hemlo Gold Mines Ltd.	Miles Red Lake	Todd Township	369.3
ITL Capital Corp./Rupert Resources Ltd.	Durham-McEwen	Balmer Township	1682.5
Lac Properties Ltd.	Hasaga Mine: Time-Domain Reflectometry (TDR) cables installed in the Crown Pillar	Heyson Township	33.7
Loydex Resources Inc.	Bug River	Heyson Township	190
Mutual Resources Ltd.	Dixie Lake	Dixie Lake Area	499.3
Noramco Explorations Inc.	Various	Ball Township	31 268.6
"		Balmer Township	
"		Byshe Township	
"		Dome Township	
"		Fairlie Township	
"		Goodall Township	
"		Honeywell Township	
"		McDonough Township	
"		Ranger Township	
"		Shabumeni Lake Area	
"		Skinner Township	
"		Todd Township	
Noranda Exploration Company Ltd.	Selco Dixie Joint Venture	South of Otter Lake and Karas Lake areas	1638.2
Pure Gold Resources Inc.	McKenzie Island	Dome Township	1762.4
Rio Algom Exploration Co. Ltd.	Fly Lake	Mitchell Township	731.0
**Skyharbour Resources Ltd.	Heyson	Heyson and Byshe townships	2018.2
**Skyharbour Resources Ltd.	Heyson	Heyson and Byshe townships	731.0
**Skyharbour Resources Ltd./ Consolidated Abaddon Resources Inc.	Sidace Lake Property	Sobeski Lake Area	2215.7

Table 6. Drill core stored at the Red Lake Resident Geologist's District Remote Drill Core Compound.

Company	Property	Township/Area	Length (m
**Skyharbour Resources Ltd./ Consolidated Abaddon Resources Inc.	Black Bear Property	Black Bear Lake Area	694.9
Teck Exploration Ltd.	Howey Mine	Heyson Township	7255.5
Tri Origin Exploration Ltd.	RLX Property	Willans Township	120.0
*Tri Origin Exploration Ltd.	RLX Property	South of Otter Lake Area	32.3
United Reef Petroleums Limited	Aiken-Russett	Baird Township	8154.0
Western Pacific Energy Corp.	Swain Lake	Goodall Township	1936.2
тот	AL		80 928.5

*2007 submission; **length is total length of hole including overburden

PROPERTY EXAMINATIONS

Table 7 lists the property visits conducted by staff in 2007 in the Red Lake District. Major authorship of the following property examinations is indicated in parentheses following the titles. A location map, keyed to the property numbers, is shown in Figures 4, 5, 6, 7 and 8. The figure locations are superimposed on geology from the *Bedrock Geology of Ontario* (Ontario Geological Survey 2000).

Number	Property or Occurrence	Location	see Figure
1	Grandview Gold core shack (Grandview Gold Inc.)	Dixie Lake Area	Fig. 5
2	Intelisano (C. Intelisano)	Bateman Township	Fig. 5
3	Jubilee Lake	Birkett Township	Fig. 7
4	McKenzie Bay Road	Wapesi Lake area	Fig. 7
5	Galena Island (Goldcorp Canada Ltd.)	Ball Township	Fig. 5
6	Madsen ultramafic rocks (Claude Resources Inc.)	Baird Township	Fig. 5
7	Bathurst Mine (Sabina Silver Corporation)	Skinner Township	Fig. 8
8	KT Vein (Sabina Silver Corporation)	Skinner Township	Fig. 8
9	Joe Vein (Sabina Silver Corporation)	Skinner Township	Fig. 8
10	Corless Quartz (G. Kafka)	Little Bear Lake & Knott Township	Fig. 8
11	Bobjo Mine (King's Bay Gold Corp.)	Earngey Township and Uchi Lake Area	Fig. 8
12	Sanshaw (P. English/patented)	Dome Township	Fig. 5
13	Balmertown Tailings (Goldcorp Canada Ltd.)	Balmer Township	Fig. 5
14	West Red Lake (Shane Resources Ltd.)	Ball Township	Fig. 6
15	Rivard Cross Island drill site (Premier Gold Mines Ltd./Goldcorp Canada Ltd.)	Bateman Township	Fig. 5
16	Buffalo Shaft (Claude Resources Inc.)	Heyson Township	Fig. 5
17	Bonanza-Rahill (Premier Gold Mines Ltd.)	Dome Township	Fig. 5 & 6
18	Treasure Box (Claude Resources Inc.)	Baird Township	Fig. 5
19	Kesaka Lake (P. English)	Avis Lake Area	Fig. 7 & 8
20	CN Trax Road gabbro	Scout Lake Area	Fig. 7
21	Hwy 105 rusty garnet gneiss	Cristene Lake Area	Fig. 7
22	Headway Pit (King's Bay Gold Corp.)	Dome Township	Fig. 5
23	Gold Eagle Mine (Gold Eagle Mines Ltd.)	Dome Township	Fig. 6

Table 7. Property visits conducted by the Red Lake Regional Resident Geologist and staff in 2007 (keyed to Figures 5 to 8).

Intelisano Property (C.C. Storey)

The Intelisano gold property is located in Bateman Township on the eastern side of East Bay (Figure 9). The property comprises 4 patented claims as shown on Figure 9. Access is from the Nungesser Road, which passes the eastern boundary of the claims, or from the waters of East Bay, Red Lake. Very old trails cross the property but are now largely completely overgrown.

The property was part of a much larger claim block held by Beatrice Red Lake Gold Mines Ltd. ca.1946. A geological map of this claim block is contained in a Beatrice Red lake Gold Mines Ltd. assessment file (Red Lake file number Bateman Township #25). Two diamond-drill holes were drilled from the small island adjacent to claim KRL254. Very old trenches can be found in the northwest corner of claim KRL252. The date of this work is not reported. Exploration work by J. Intelisano in 1990 included power stripping and sampling. Atkinson et al. (1993) has a brief description of work on the property and reported assay values.

The area has been mapped by Pirie and Grant (1978), Ferguson (1962) and Sanborn-Barrie et al. (2004). Sanborn-Barrie et al. (2004) showed the claims to be underlain by tholeiitic mafic metavolcanic rocks of the Balmer Assemblage. The western side of the property has been affected by the East Bay Deformation Zone and an ultramafic rock unit now known as the East Bay Serpentinite is exposed on the small island off the shore of claim KRL254 (Ferguson 1962; Pirie and Grant 1978). Komatilitic flows have been identified on the eastern side of the property and a narrow, poorly exposed granitoid dike intrudes the metavolcanic rocks in the same area. More detailed mapping by Pirie and Grant (1978) showed the claims to be underlain by pillowed and massive mafic metavolcanic rocks intruded by narrow felsic dikes. Ferguson (1962) showed the same rock types and exposure pattern, overlain by magnetic contours. The magnetic survey showed northeast-trending contours more or less parallel to the strike of the bedrock units. Both maps show only small bedrock exposures, except along the lake shore.

Exploration workings consist of very old trenches in the northwestern corner of claim KRL252 and the stripped areas and trench as shown on the sketch (Figure 9). An old overgrown trench was found at the southern boundary of the property. The KRL252 trenches are largely overgrown and do not have rock exposures, except for the bottom of Trench 2. However, neither quartz veins nor sulphide-mineralized rock were visible. A small outcrop of mafic metavolcanic rock near these trenches shows fine pyrite as blebs and thin, discontinuous layers (sample 2007CS001; *see* Figure 9 for sample locations). Stripped areas and trenches referred to by Atkinson et al. (1993) are shown on Figure 9, but are now becoming overgrown. The stripped areas show several narrow, white quartz veins striking 026° but are devoid of obvious alteration features or sulphide mineralization. All the rocks exposed in the stripped areas are foliated to schistose. Felsic units are exposed in the stripped areas. The contact between these units and the mafic units is 028° where it could be measured. They may be intercalated felsic flows or felsic dikes. Their true width is not exposed. Rocks exposed along the shore on claims KRL252 and KRL254 comprise mafic metavolcanic rocks affected by varying amounts of iron carbonate alteration, accompanied by minor quartz veins.

The results of major and selected trace element analyses are found in Tables 8 and 9; sample locations are shown on Figure 9. Sulphides are restricted to sample 2007CS001, where they are most well-developed, and SAMP1 and SAMP6. Quartz veins and iron carbonate alteration are present in bedrock exposures along the shoreline. The 2 samples analyzed for major elements are both mafic metavolcanic rocks, typical of the rock exposed on the property. With a few exceptions, the trace element values are in the background range. Sample 2007CS001 is anomalous in copper, shows measurable platinum and palladium, and elevated chromium and titanium. SAMP1 is elevated in copper and titanium and has measurable platinum and palladium. SAMP3 has elevated gold, chromium, titanium and zinc. SAMP4A and SAMP4B are essentially the same material (sample was divided into 2 parts prior to sending to the lab) and have similarly low trace element values. SAMP5 is low in all trace elements except zinc and gold. SAMP6 is elevated in copper, chromium, nickel, and titanium. SAMP7 is low in all trace elements.

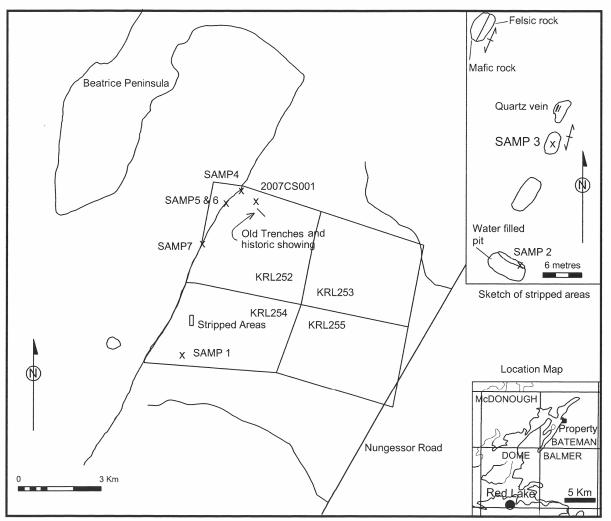


Figure 9. Location map and sample locations, Intelisano property.

Atkinson et al. (1993) reported low gold and silver assays from 3 samples taken from the stripped areas on claim KRL254. SAMP2 from this area is similar in silver content but is higher in gold (77 ppb Au). Atkinson et al. (1993) also quoted a gold assay of 0.09 ounce Au per ton, returned from a sample taken from claim KRL252 by the property owner ca. 1991. While this sample site was not located, it is believed that 2007CS001 and SAMP5 were taken in the vicinity of this sample; they display elevated gold values.

The Intelisano property is in a favourable gold environment. There is evidence of iron carbonate alteration, quartz veins and sulphide mineralization in the exposed bedrock. Gold has been reported from this general area and modern exploration has identified gold resources in East Bay at the McFinley Property (Rubicon Minerals Corporation's Phoenix Project) and the East Bay joint-venture project of Goldcorp Canada Ltd. and Premier Gold Mines Ltd. The property warrants more prospecting and follow-up exploration.

Sample No.	Sample Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Ni (ppm)	Pt (ppb)	Pd (ppb)	Cr (ppm)	Ti (ppm)	Zn (ppm)
Detection		6	2	3	3	0.4	1.3	24	26	<u>(ppiii)</u> 8
Limit		0	2	5	5	0.1	1.5	21	20	0
2007CS001	Fine-grained, dark green basalt with fine pyrite as blebs and thin	26	3	692	84	5.6	4.2	436	3448.88	55.97
SAMP 1	discontinuous layers Dark grey-green, fine- grained mafic metavolcanic rock with a trace of finely disseminated pyrite	<6	3	151	40	4.7	3.9	<24	4337.50	93.30
SAMP 2	Dark grey-green, fine- grained mafic metavolcanic rock in contact with sericitic felsic rock of undetermined origin	Not assayed								
SAMP 3	Fine-grained, grey, cherty rock containing minor quartz veins	77	2	28	56	0.8	<1.3	272	797.86	183.17
SAMP 4A	Iron carbonate-altered and silicified, dark green mafic metavolcanic rock; rusty weathering due to iron carbonate	<6	2	13	21	<0.4	<1.3	43	39.09	40.09
SAMP 4B	Same as 4A	<6	3	13	20	< 0.4	<1.3	39	52.17	43.26
SAMP 5	White to light grey quartz vein hosted by iron carbonate-altered mafic metavolcanic rock	87	<2	7	28	<0.4	<1.3	79	60.04	119.36
SAMP 6	Foliated, fine-grained, dark grey mafic metavolcanic rock, lightly carbonatized with minor amounts of white calcite veinlets; trace amounts of pyrite	6	3	106	220	5.2	4.9	>600	2657.88	68.36
SAMP 7	White, sugary-textured quartz vein hosted by iron carbonate-altered mafic metavolcanic rock; mafic rock is similar to SAMP 5	<6	2	6	29	<0.4	<1.3	119	164.32	29.52

Table 8. Intelisano property, sample descriptions and selected trace element analysis results.

Analyses by Geoscience Laboratories, Ministry of Northern Development and Mines, Sudbury, Ontario.

		1 1 5,		5		2						
	Al ₂ O ₃	CaO	Fe ₂ O ₃	K ₂ O	LOI	MgO	MnO	Na ₂ O	P ₂ O ₅	SiO ₂	TiO ₂	Total
Units	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%
Detectio n Limit	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	
SAMP1	14.11	9.17	14.19	0.08	0.99	6.75	0.17	2.07	0.1	51.39	1.0	100.01
SAMP6	13.48	12.96	10.44	0.7	2.71	9.45	0.2	0.97	0.05	48.72	0.6	100.29

Table 9. Intelisano property, results of major element analyses.

Analyses by Geoscience Laboratories, Ministry of Northern Development and Mines, Sudbury, Ontario.

McKenzie Bay Road Pegmatite (C.C. Storey)

The McKenzie Bay Road pegmatite is located in the Wapesi Lake claim map area (Figure 10), 55 km southeast of Ear Falls. There is no recorded exploration activity in this area and the pegmatite has not been examined previously. It was discovered by C.C. Storey in the summer of 2007 while carrying out geological reconnaissance.

The area lies within the English River Subprovince and has been mapped by Williamson and Hudec (1959) as being underlain by undifferentiated granitoid rocks. Breaks et al. (1976b), at a reconnaissance scale, mapped them as homogeneous diatexite (generally 95% medium-grained to pegmatitic granitoid mobilizate), a migmatitic rock derived from metasedimentary rocks. The current *Geology of Ontario* compilation (OGS 2000) indicates that this area is underlain by muscovite-bearing granitic rock. The actual outcrops examined in 2007 are not shown on any of these maps.

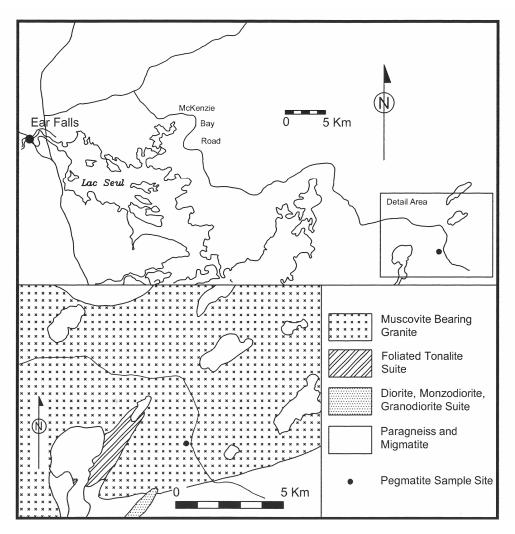


Figure 10. Location map and general geology of the McKenzie Bay Road pegmatite.

The McKenzie Bay Road pegmatite occurrence consists of several low-lying outcrops of light grey granitoid rock with a strong foliation (050°/subvertical). Muscovite-bearing pegmatite dikes, 5 cm and greater in width, are oriented roughly parallel to the foliation, but pegmatite is also found as patches and as a large dike roughly 3.5 m

wide that strikes 160°. Muscovite occurs as discrete books and felted masses in the pegmatite. Sample 2007CS010, taken at the site (see location on Figure 10), is representative of most of the pegmatite dikes. It comprises 85% white to pale pinkish-white alkali feldspar, 10% grey transparent to translucent quartz, and 5% muscovite. Feldspar occurs as both blocky crystals with quartz intergrowths and muscovite inclusions, and as masses of small grains associated with the more quartz-rich parts of the sample. Muscovite occurs as small, silver-grey to light brown books and irregular masses mostly 5 to 10 mm wide. A small amount of biotite occurs as isolated flakes, similar in size to the muscovite, and encrusted along grain boundaries of both feldspar and quartz. There is hematite staining on some feldspar crystal faces and as small pink blebs at grain boundaries.

A sample of muscovite and a sample of bulk pegmatite were submitted for major, trace element and rare earth element analysis (Tables 10, 11 and 12). The trace elements were analysed by both Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and x-ray fluorescence (XRF). The analytical results were interpreted by the methods outlined by Breaks et al. (2003); molecular and elemental ratios are in Table 13. The ratio of A/CNK (molar $Al_2O_3/(CaO + Na_2O + K_2O)$ is a molecular ratio calculated from the major element analysis by the method in Breaks et al. (2003, p.173). The sample of bulk pegmatite is mildly peraluminous, based on its A/CNK ratio.

The Mg/Li ratio (< 30) indicates a high degree of fractionation, but the other elemental ratios do not support this. The K/Rb and K/Cs ratios are less than half of the same ratios for average upper continental crust, as compiled by Breaks et al. (2003), but the Nb/Ta ratio is very close to the average. Pegmatites with the greatest potential for rare metals have very low K/Rb, K/Cs, Nb/Ta and Mg/Li ratios. The mica sample shows elevated Be, Cs, Li, Rb and Ta values over crustal abundances. The values are in the range for fertile granites (Breaks et al. 2003). The K/Rb vs Cs plot (Figure 11) indicates this sample is from a pegmatite that is not as evolved (fractionated) as economically important rare metal pegmatites. On a Ta vs Cs plot (Figure 12) sample 2007CS009 falls outside the range of tantalum-bearing pegmatites. In general, pegmatites from northwestern Ontario with the most rare metal economic potential contain muscovite with Li > 1000 ppm, Rb > 10 000 ppm, Cs >50 ppm, and Ta > 65 ppm (Breaks et al. 2003).

The remaining trace element analyses are found in Table 12. These include rare earth elements, titanium, uranium and thorium. Reported crustal abundances are much greater than the values found in these samples. This work shows that pegmatites with elevated rare metal content and displaying some of the features of potential rare metalmineralized pegmatites do occur in the Wapesi Lake area, but more intense exploration and sampling is required to determine if potentially economic rare metal pegmatites are present.

	Al ₂ O ₃	CaO	Fe ₂ O ₃	K ₂ O	LOI	MgO	MnO	Na ₂ O	P_2O_5	SiO ₂	TiO ₂	Total
Units	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%
Detect Limit	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	
2007CS009	34.48	0.02	2.34	10.47	5.11	0.49	0.03	0.63	0.04	45.71	0.12	99.44
2007CS010	15.07	0.38	0.53	4.16	0.97	0.08	0.02	4.77	0.28	73.42	0.03	99.7

Table 10. Results of major element analyses, McKenzie Bay Road pegmatite.

Analyses by Geoscience Laboratories, Ministry of Northern Development and Mines, Sudbury, Ontario.

Sample	Be	C	Ga	Li	Li Mo Nb		Nb XRF	Rb	Rb XRF	Sn	Sr	Sr Ta W		Zn	Zr
nits	mqq	mqq	udd	mqq	mqq	mqq	mqq	udd	mqq	mqq	d udd	udd udd	mqq	mqq	uudd
Detection Limit	0.06	0.006	0.05	0.2	0.03	0.04	7	0.2	1	0.08	0	0.2	0.5	8	б
07CS009	20.55	89.203	177.79	648.7	2.25	>200	251	>300	>300 1830	124.01	\Diamond	23.4 28.9	28.9	156	14
2007CS010	3.16	9.169	25.26	40.5	0.52	14.48 15	15	>300 316	316	5.58	23	1.3	1.9	30	8
Urustal Abundances	Э	3.7	17	20		25		112		5.5	350*	350* 2.2 2.1*	2.1*		240*

Table 11. Results of trace element analyses, McKenzie Bay Road pegmatite, and trace element crustal abundances for rare metals and pegmatite-associated elements.

abundances from Breaks et al. (2003), except those with asterisk are from Kollinson (1993).

Table 12. Results of analyses for rare earth trace elements, McKenzie Bay Road pegmatite, and crustal abundances.

	Ce	Ce Dy	Er	Eu	Gd	Ηf	Ho	La	Lu	ΡN	Pr	Sc	Sm	Hf Ho La Lu Nd Pr Sc Sm Tb Th Ti Tl Tm U Y Yb	Τh	Τi	Π	Tm	n	Y	Υb
Units	mqq	ndd mdd mdd	mqq	mqq	mqq	mqq	mqq	mqq	mqq	mqq	mqq	mqq	mqq	udd	mqq	mqq	mqq	mqq	udd	mqq	bpm
Detect Limit	0.2	0.02	0.2 0.02 0.02	0.005	0.02	0.09	0.003	0.09	0.002	0.08	0.02	0	0.02	0.09 0.003 0.09 0.002 0.08 0.02 0.02 0.003 0.09 26 0.005 0.002 0.08 0.009	0.09	26	0.005	0.002	0.02	0.08	0.009
2007CS009 <0.2 <0.02 <0.02 <0.005 <0.02	<0.2	<0.02	<0.02	<0.005	<0.02	0.91	0.004	<0.0>	0.005	<0.08	<0.02	5.3	0.03	0.91 0.004 < 0.09 0.005 < 0.08 < 0.02 5.3 0.03 < 0.003 0.34 565 9.515 0.002 0.24 0.09 = 0.093 0.013 = 0.003 0.003 0.013 = 0.003 0.003 = 0.	0.34	565	9.515	0.002	0.24	0.09	0.027
2007CS010 2.5 0.1 0.07 0.047 0.18	2.5	0.1	0.07	0.047	0.18	0.3	0.024	1.2	0.019	0.85	0.26	1.5	0.24	0.3 0.024 1.2 0.019 0.85 0.26 1.5 0.24 0.027 1.11 129 2.195 0.015 0.37 0.89	1.11	129	2.195	0.015	0.37	0.89	0.116
Crustal Abundances	64			0.88		5.80		30	30 0.32 26	26			4.5	4.5 0.64 10.50	10.50				2.50	2.50 22 2.20	2.20
Analyses by Geoscience Laboratories, Ministry of Northern Development and Mines, Sudbury, Ontario. All by ICP-MS. Crustal abundances from Rollinson (1993).	Jeoscien	ce Labora	tories, M	inistry of 1	Vorthern	Develop	ment and	Mines,	Sudbury,	Ontario.	All by IC	P-MS.	Crustal 8	bundance	s from R	ollinson	(1993).				

Table 13. Elemental ratios, McKenzie Bay Road pegmatite.

Sample	A/CNK K/Rb	K/Rb	K/Cs	Nb/Ta	Mg/Li
2007CS090		47.5	974.2	10.04	
2007CS010	1.095	109.2	3762.7	11.5	11.9
Crustal		252	7630	11.4	
Abundances					
Constal along action from Ducate at al (2000)	James webies	Cuerto Duesel	0001 10 000	11	

Crustal abundance ratios from Breaks et al. (2003)

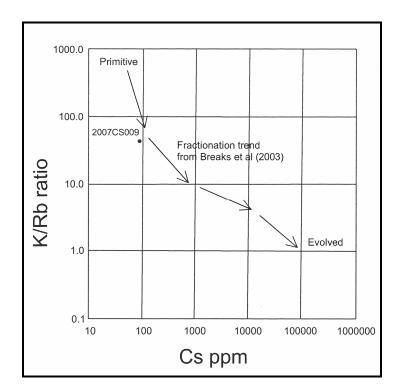


Figure 11. Cs vs K/Rb plot, showing sample from McKenzie Bay Road pegmatite relative to the fractionation trend of evolved pegmatites.

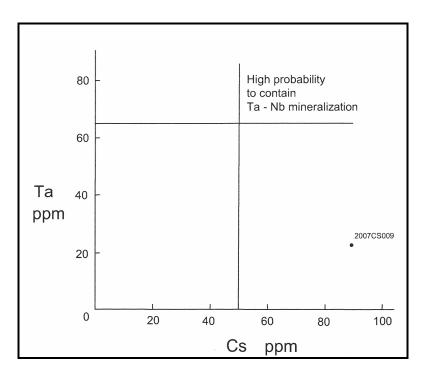


Figure 12. Ta vs Cs plot of a muscovite sample from the McKenzie Bay Road pegmatite. For the data set used by Breaks et al. (2003) a muscovite sample with greater than 65 ppm Ta and greater than 50 ppm Cs has a high probability to contain Ta-Nb mineralization.

RECOMMENDATIONS FOR EXPLORATION

Gold

Recent significant gold discoveries in the heart of the Red Lake camp by Premier Gold Mines Limited (Bonanza deposit) and Gold Eagle Mines Ltd. (Bruce Channel discovery) are interpreted to occur immediately adjacent to the contact between older Balmer Assemblage (2.99–2.96 Ga) and younger Confederation Assemblage (2.75-2.74 Ga) rocks (i.e., the **Neoarchean–Mesoarchean unconformity**). Exploration along the unconformity's 105 km length within the Red Lake greenstone belt is highly recommended.

A helicopter-supported, high-density lake sediment and water geochemical survey of the Red Lake greenstone belt, carried out by the Ontario Geological Survey in 2005, succeeded in outlining approximately 20 geochemically anomalous areas, including anomalous results for Au, Ag, Cu, Ni, Mo, Cr and Zn (Dyer and Hamilton 2007). The Medicine Stone Lake area (NTS 52L/16) is underlain by the southwestern extent of the Red Lake greenstone belt and hosts a number of geochemically anomalous areas that may be prospective for gold, based on coincidental indicator and pathfinder element values. As of December 2007, many of these areas were open for staking.

Two areas adjacent to Woodland Caribou Provincial Park, 45 km west-southwest of Red Lake, have multi-element lake sediment anomalies featuring elevated Au, As, \pm Cr, \pm Co in the **southwestern Telescope Lake** area (#1, Figure 6, Dyer and Hamilton 2007) and anomalous Au, W, \pm Cd, \pm Zn in the **eastern Telescope Lake** area (#3, Figure 6, Dyer and Hamilton 2007). The highest gold concentration (170 ppb Au), the highest cobalt concentration (64 ppm Co) and the second-highest arsenic concentration (29 ppm As) in the survey results were obtained from lakes in the **southwestern Telescope Lake** area. The only recorded work in the Telescope Lake area was performed in 1974 by a joint-venture between Selco Mining Corporation Limited and Cochenour Willans Gold Mines Ltd. Mafic and ultramafic rocks and sulphide-magnetite iron formation were encountered in 4 drill holes south of the western portion of Telescope Lake (AFRI 52L16NW0001 and 52LSW8127). Semi-quantitative spectrographic analyses of an ultramafic unit returned up to 0.3% Ni from random samples over 15 feet of core, and up to 0.2% Zn over 5.6 feet in a cherty, sulphide iron formation. It is not known whether gold analyses were performed on any of the drill holes. At year-end 2007, the area was open for staking.

In the Lee Lake-Laird Lake area, 25 km west-southwest of Red Lake, several lakes returned a Ni ±Cr geochemical signature that may be a lithological response to the presence of ultramafic rocks underlying both Lee and Laird lakes (Dyer and Hamilton 2007). Previous work (Atkinson 1996) interpreted the felsic to ultramafic rock package as belonging to the Balmer Assemblage. Mapping by Atkinson (1999) confirmed the presence of a narrow, easterly trending band of ultramafic rocks in the Lee Lake-Laird Lake area. Well-documented gold occurrences are present over a strike length of approximately 2.5 km south of Laird Lake (MDI 52L16NE00009, MDI 52L16NE00007, MDI 52L16NE00010, MDI 52L16NE00034). Gold is generally associated with grey quartz veins, veinlets and stringers in silicified and biotite-altered and deformed mafic to ultramafic rocks, exhalites and granodiorite. Cyprus Gold Canada Ltd. reported 2 separate drill-hole intersections: 0.245 ounce gold over 1.3 m in strongly silicified, mylonitized granodiorite, and 0.205 ounce gold per ton over 1.5 m in silicified and biotite-altered, komatiitic basalt (AFRO 52L16NE00017). The area was available for staking as of December, 2007.

Two adjacent lakes in the **eastern Medicine Stone Lake** area, 20 km southwest of Red Lake and 6 km east of Laird Lake (#6, Figure 6, Dyer and Hamilton 2007), featured anomalous concentrations of Au, Ag, Cu, Ni, Mo, Se, and S. The area is underlain by interpreted Balmer Assemblage felsic to mafic and ultramafic rocks and hosts the Medicine Stone Lake gold occurrence (MDI MDI52L16NE00006). As of December, 2007, the ground was staked (Herbert-Medicine Stone property).

All 3 areas lie along the extrapolated western extension of the **Howey Bay-Flat Lake Deformation Zone**, which hosts the past-producing Howey, Hasaga, Madsen and Starrat Olsen mines (3.25 million ounces of combined gold production). Numerous gold prospects occur within and adjacent to the deformation zone. The southwestern extent of the unconformity between older Balmer Assemblage and younger Confederation Assemblage (i.e., Neoarchean–Mesoarchean unconformity) is spatially associated with the deformation zone. It has been reported that the bulk of

gold deposits and significant gold occurrences are found within a short distance (<1 km) of the unconformity (Dubé et al. 2003).

Gold occurrences have been documented along portions of the **Lake St. Joseph-Sydney Lake Fault** that are within a few kilometres of the Papaonga Lake quartz-diorite stock, 100 km east of Red Lake. The fault represents the subprovince boundary between the Uchi metavolcanic terrane to the north, and the English River metasedimentary gneisses to the south. At least 6 gold showings are known between Curie and Papaonga lakes; they are hosted by sheared, silicified, sericitized ± tourmalinized tuffs and sedimentary rocks, which are cut by quartz-tourmaline-arsenopyrite veins. At the PL-1a zone of the Papaonga Lake occurrence (MDI 52K16NW00005), sulphide-bearing, graphitic wacke hosts a 1.7 km long zone of contorted, quartz-tourmaline veining. Channel sample assay values as high as 0.33 ounce gold per ton over 0.5 m were reported from the North Showing of the Curie Lake occurrence (MDI 52K16NE00003) during the last exploration work performed in mid-1980s.

Gold mineralization in the Curie and Papaonga lakes area has certain similarities with **Roberto-style** gold mineralization, being actively explored at Goldcorp Canada Ltd.'s Eleonore property in Québec. They include: 1) the regional association of gold mineralization with a quartz diorite stock, adjacent to a subprovince boundary; 2) the polydeformed nature of host sedimentary rocks and tuffs; and 3) the association of gold with tourmaline-arsenopyrite-sulphide veins and disseminated sulphides.

Base Metals

Volcanogenic massive sulphide (VMS) deposits and prospects, and associated, proximal chlorite and aluminosilicate alteration, have been documented in the Red Lake and Birch–Uchi greenstone belts, hosted in Confederation Assemblage rocks (Parker 1999). **FII-type and FIII-type rhyolites** (cf. Lesher et al. 1986) have also been documented (Parker 1999) in a 100 km band of greenstone, extending east from Red Lake to the past-producing South Bay Mine (1.6 million tons grading 11.06% Zn, 1.8% Cu and 2.12 ounces Ag per ton; MDI 52N02SE00012).

Tribute Minerals Inc. holds a large number of claims in the greenstone belt southwest of the South Bay Mine. The company continues to build upon its exploration success in tracking sulphide-mineralized horizons with deeppenetrating Titan-24 magnetotelluric-induced polarization geophysical surveys. The company is in the first stages of permitting for a ramp to extract a bulk sample and perform underground delineation drilling on its **Arrow Zone** (indicated resource of 2.1 million tonnes at 5.92% Zn, 0.75% Cu, 0.58 g/t Au, 21.1 g/t Ag, with indium and gallium values). Further exploration in this prospective VMS belt is highly encouraged. At year-end 2007, a significant portion of the ground was still open.

Numerous sulphide occurrences have been documented in many of the northern greenstone belts (e.g., Sandy Lake, North Spirit Lake, Stull Lake, Cherrington Lake belts). Geological compilation maps produced by the OGS and its predecessors indicate the locations of these occurrences, but little further is known about them. Some of these may warrant investigation as grassroots-type VMS exploration targets.

OGS ACTIVITIES AND RESEARCH BY OTHERS

Publications received in the Red Lake Resident Geologist office during 2007 are listed in Table 14. Research activities in the Red Lake District in 2007 are listed below. A location map, keyed to the activity letters, is shown in Figures 4 and 8.

- A. G.M Stott, S. Buse and S. Préfontaine (Precambrian Geoscience Section, OGS) investigated a possible Mesoarchean anticlinorium in the Berens River region as part of the Far North Geological Mapping Initiative (FNGMI) (Stott et al. 2007)
- B. S. Buse (Precambrian Geoscience Section, OGS) carried out bedrock geological mapping on the Hewitt Lake and Matson Lake area (FNGMI) (Buse et al. 2007).

- C. S. Préfontaine (Precambrian Geoscience Section, OGS) carried out bedrock geological mapping on the North Spirit Lake area, located in the North Spirit Lake greenstone belt, north of Red Lake (FNGMI) (Préfontaine and Williams 2007).
- D. Davis et al. (2007) studied new age constraints on the Berens River area and McInnes Lake greenstone belt in the North Caribou Terrane north of Red Lake (FNGMI).
- E. Avery Henderson (Lakehead University) carried out work for a BSc thesis on the geochemistry and petrology of a synvolcanic pluton in the Shrimp Lake area.
- F. Leanne Smar (Carleton University) carried out work for a BSc thesis on the structural geology within the main anticline at Hewitt Lake.
- G. Matthew Williams (University of Toronto) carried out work for an MSc thesis project on the structural geology of the northern section of the North Spirit Lake area.
- H. Fugro Airborne Surveys completed the GeoTEM₁₀₀₀ airborne survey for OGS over the North Spirit Lake greenstone belt started in 2006 (FNGMI) (Reford 2007).
- I. Fugro Airborne Surveys carried out a GeoTEM₁₀₀₀ airborne survey over the McInnes Lake greenstone belt for OGS (FNGMI) (Reford 2007).

D.K. Tinkham (Laurentian University) continued investigating partial melting reactions that form migmatites in the Longlegged Lake area, English River Subprovince and is conducting U-Pb and Sm-Nd geochronology to constrain metamorphic P-T-t paths and mechanisms of partial melting.

K. Williamson continued his PhD work at INRS-ETE, Université Laval on the Goldcorp Red Lake Mine deposit.

M.A. Puumala carried out a compilation of all mineral occurrences of the Central and Eastern Uchi domain and the North Spirit Lake greenstone belt that meet the minimum requirements of the Mineral Deposit Inventory (FNGMI) (Puumala 2007).

H.W. Nesbit and G. Young (University of Western Ontario) are completing work on the North Spirit Lake metavolcanic rocks.

Title	Author	Type and Year of Publication
Structurally Controlled, Magmatic Hydrothermal Model for Archean Lode Gold Deposits: A Working Hypothesis	G.P. Beakhouse	Ontario Geological Survey, Open File Report 6193, 2007
Report of Activities, 2006, Resident Geologist Program, Red Lake Regional Resident Geologist Report: Red Lake and Kenora District	A. Lichtblau, C. Ravnaas, C.C. Storey, D. Saunders and J. McDonald	Ontario Geological Survey, Open File Report 6200, 2007
Report of Activities, 2006, Resident Geologist Program, Thunder Bay North Regional Resident Geologist Report: Thunder Bay North District	M.C. Smyk, G.D. White, M.A. Puumala, M.A. Magee and C.L. Komar	Ontario Geological Survey, Open File Report 6201, 2007
Report of Activities, 2006, Resident Geologist Program, Thunder Bay South Regional Resident Geologist Report: Thunder Bay South District	J.F. Scott, D.A. Campbell and C.L. Komar	Ontario Geological Survey, Open File Report 6202, 2007
Report of Activities, 2006, Resident Geologist Program, Timmins Regional Resident Geologist Report: Timmins and Sault Ste. Marie Districts	B.T. Atkinson, M. Hailstone, A.C. Wilson, D.M. Draper, A. Pace and H. Woo	Ontario Geological Survey, Open File Report 6203, 2007

Table 14. Publications received by the Red Lake office in 2007.

Title	Author	Type and Year of Publication
Report of Activities, 2006, Resident Geologist Program, Kirkland Lake Regional Resident Geologist Report: Kirkland Lake District	D.L. Guindon, G.P.B. Grabowski, G. Meyer and M.C.M. Picotte	Ontario Geological Survey, Open File Report 6204, 2007
Report of Activities, 2006, Resident Geologist Program, Kirkland Lake Regional Geologist Report: Sudbury District	D. Farrow and J.M. Gaudreau	Ontario Geological Survey, Open File Report 6205, 2007
Report of Activities, 2006, Resident Geologist Program, Southern Ontario Regional Resident Geologist Report: Southeastern and Southwestern Ontario Districts, Mines and Minerals Information Centre, and Petroleum Resources Centre	P.J. Sangster, K.G. Steele, P.S. LeBaron D.A. Laidlaw, C.R. Lee, T.R. Carter and M.R. Lazorek	Ontario Geological Survey, Open File Report 6206, 2007
Report of Activities, 2006, Resident Geologist Program, Regional Land Use Geologist Report: Northwestern, Northeastern and Southern Ontario Regions	R.L. Debicki, P. Hinz, G. Wm. Seim and K.G. Steele	Ontario Geological Survey, Open File Report 6207, 2007
Recent Advances in the Geology and Structure of the Confederation Lake Region, Northwestern Ontario	N. Rogers, C.R. van Staal and V. McNicoll	Geological Survey of Canada Current Research, 1999-C
Red Lake Area High-Density Regional Lake Sediment and Water Geochemical Survey, Northwestern Ontario	R.D. Dyer and S.M Hamilton	Ontario Geological Survey, Open File Report 6198
Lake Sediment and Water Geochemical Data from the Red Lake Area, Northwestern Ontario	R.D. Dyer	Ontario Geological Survey, Miscellaneous Release – Data 218, 2007
Geology of the Canadian Shield in Ontario: An Update	J.A. Percival and R.M. Easton	Ontario Geological Survey, Open File Report 6196
Geology of the Canadian Shield in Ontario: An Update	J.A. Percival and R.M. Easton	Ontario Geological Survey, Miscellaneous Release – Data 216, 2007
A Prospector's Guide to Selective Leach and Other Deep Penetrating Geochemical Techniques in Mineral Exploration	S.M. Hamilton	Ontario Geological Survey, Open File Report 6209
Van Horne Area of Interest 2007 Geological Compilation Report	J.W. Patrick Lengyel	City of Dryden, Economic Development
Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of Geological Provinces and Exploration Methods	W. D. Goodfellow ed.	Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5
Report of Activities 2007	Manitoba Geological Survey	Ministry of Industry, Economic Development and Mines, Manitoba Geological Survey, 2007
Surficial Geology of Manitoba	G.L.D. Matile and G.R. Keller	Manitoba Geological Survey, Surficial Geology, Compilation Map Series, SG-MB
Rare Earth Element Mines, Deposits, and Occurrences	G.J. Orris and R.I. Grauch	United States Geological Survey, Open File Report 02-189
Precambrian Geology of the McInnes Lake Greenstone Belt, the Supracrustal Remnants Study Area and the Frame Lake Pluton, Berens River Subprovince, Ontario	S. Buse and S. Prefontaine	Ontario Geological Survey, Open File Report 6210

Title	Author	Type and Year of Publication
Precambrian Geology of the McInnes Lake Greenstone Belt, Northwestern Ontario – North Sheet	S. Prefontaine and T. Mumford	Ontario Geological Survey, Preliminary Map P.3589, scale 1:20 000
Precambrian Geology of the McInnes Lake Greenstone Belt, Northwestern Ontario – South Sheet	S. Prefontaine and T. Mumford	Ontario Geological Survey, Preliminary Map P.3590, scale 1:20 000
Precambrian Geology of the Frame Lake Pluton, Northwestern Ontario	S. Buse	Ontario Geological Survey, Preliminary Map P.3591, scale 1:20 000
Precambrian Geology of the Supracrustal Remnants in the Berens River Area, Northwestern Ontario	S. Buse	Ontario Geological Survey, Preliminary Map P.3592, scale 1:40 000
Summary of Field Work and Other Activities 2007	C.L. Baker, E.J. Debicki, J.R. Parker, J.K. Mason, R.I. Kelly, M.C. Smyk, J.A. Ayer, G.M. Stott and P. Sarvas	Ontario Geological Survey, Open File Report 6213, 2007
Geological, Geochemical and Geochronological Data from the McInnes Lake Greenstone Belt, the Frame Lake Pluton, and the Supracrustal Remnants Study Area, Berens River Subprovince, Ontario	S. Prefontaine and S. Buse	Ontario Geological Survey, Miscellaneous Release – Data 222, 2007
Precambrian Geology Hudson Bay and James Bay Lowlands Region Interpreted from Aeromagnetic Data - West Sheet	G.M. Stott	Ontario Geological Survey, Preliminary Map P.3597, scale 1:500 000
Precambrian Geology Hudson Bay and James Bay Lowlands Region Interpreted from Aeromagnetic Data - East Sheet	G.M. Stott	Ontario Geological Survey, Preliminary Map P.3598, scale 1:500 000
L. Mamen Group, Bee Lake with Notes on Adjoining Properties Red Lake Mining Division	R. Thompson	Ontario Department of Mines, Preliminary Report P.R. 1945-1
Preliminary Report on the Birch-Springpole Lakes Area	W.D. Harding	Ontario Department of Mines, Preliminary Report P.R. 1935-2
Preliminary Report on the Geology of Balmer Township, District of Kenora (Patricia Portion)	E.O. Chisholm	Ontario Department of Mines, Preliminary Report P.R. 1947-3

MINERAL DEPOSITS NOT BEING MINED

 Table 15. Mineral deposits not being mined in the Red Lake District in 2007.

	Abbre	viations				
AF	Assessment Files	MLS	Mining Lands, Sudbury			
СМН	Canadian Mines Handbook	MR				
GRGeological Report NMThe Northern Miner						
MDC	Mineral Deposit Circular	OFR	Open File Report			
		PC	Personal Communication			

Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status
Abino Bateman, Balmer and Dome Townships (52N/04SW)	Au	Total Granodiorite zone: drill-indicated tonnage 405 162 tons 0.203 opt Au from three sub-zones	AF (McClean 1976)	Patent
Aiken–Russet Baird Township (52K/13NW)	Au	Total reserves of 102 555 tons of 0.22 opt Au	AF (Kuryliw 1967)	Patent
Alcourt (Copper Man, Hanson–Campbell) Fairlie Township (52N/04SW)	Au	<u>Reserves:</u> 20 000 tons of 0.45 opt Au from 1959-60 diamond drilling <u>No. 1 vein</u> : 17 000 tonnes of 0.2429 oz per tonne Au from 1959-60 diamond drilling and 1981 sampling program	AF (Tilsley 1981)	Patent
Annco Mine Dome Township (52N/04SW)	Au	Reserves: 50 000 tons of "Excellent Grade" (0.35 opt Au?)	Energy Mines and Resources Canada 1989	Patent
Bathurst Mine Skinner Township (52N/07SW)	Au	Reserves: 80 000 tons of 0.587 opt Au	Energy Mines and Resources Canada 1989	Leased
Bear Head Lake Prospect (53C/12NW)	U_3O_8	<u>Reserves:</u> 978 810 tons of 0.06% U_3O_8 to a depth of 500 feet	MDC 25 (Robertson and Gould 1983)	Staked Claim
Berens River Mine (Golsil, Zahavy) (53C/13SE)	Au, Ag, Pb, Zn	<u>Reserves:</u> <u>No. 1 zone:</u> 75 000 tons of 0.10-0.2 opt Au, 4.0-5.0 opt Ag <u>No. 3 zone:</u> 982 213 tons of 0.26 opt Au, 4.8 opt Ag, 0.77% Pb, 1.12% Zn (713 249 tons indicated, 268 964 tons inferred) at 0.15 opt Au cut-off to 750 metre level	AF (Bevan 1983)	Staked Claim
Bluffy Lake (52K/14SE)	Fe	<u>Reserves:</u> 21 000 000 tons at 22.86% Fe	Prelim. Map P.1199 (Breaks et al. 1976a)	Licence of Occupation
Bonanza Deposit (52N/04SW)	Au	Inferred Resource: 2 283 000 tonnes of 6.98 g/t Au (NI43-101 compliant)	Premier Gold Mines Ltd., news release, February 6, 2008	Patent, Staked Claims
Borland Lake (53D/16NE)	Ag, Au	<u>Probable Reserves:</u> 502 412 tons of 8.09 opt Ag and 0.02 opt Au	Massive Resources Ltd., Preliminary Prospectus, August 6, 1987	Open
Buffalo Red Lake Heyson Township (52N/04SW)	Au	Reserves: 421 728 tonnes of 0.139 opt Au drill indicated in 1980	AF (Kita 1988)	Patent
Cochenour–Willans Mine Dome Township (52N/04SW)	Au	Reserves: Proven and probable 173 000 tons of 0.51 opt Au, possible reserves 274 000 tons of 0.59 opt Au	NM - Dec. 12, 1994 p.7	Patent, Licence of Occupation

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Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status
Cole Gold Mine Ball Township (52M/01SE)	Au	<u>Reserves:</u> 119 780 tons of 0.41 opt Au probable and indicated	AF (Wilton 1973)	Patent, Licence of Occupation
Consolidated Marcus Dome Township (52N/04SW)	Au	Reserves: 60 000 tons of 0.18 opt Au	Energy Mines and Resources Canada 1989	Patent
Copper Lode A–Rexdale Group Prospect (52K/15NW)	Cu, Ag	<u>Reserves:</u> 236 424 tons of 1.94% Cu, 1.22 opt Ag or 425 612 tons of 1.56% Cu, 0.98 opt Ag or 854 007 tons of 1.01% Cu, 0.57 opt Ag	AF (Archibald 1970) MP 152 (Atkinson, Parker and Storey 1990b)	Staked Claim
Copper–Lode D Belanger Township (52K/15NW)	Cu, Zn	<u>Reserves:</u> 36 000 tons of 0.26% Cu, 7.58% Zn	AF (MacDougall 1996)	Leased
Copper–Lode E Belanger Township (52K/15NW)	Cu, Ag	<u>Reserves:</u> 160 000 tons of 8.28% Zn, 1.02% Cu, 0.39 opt Ag	AF (Archibald 1970)	Leased
Dixie Creek (52K/13SE)	Au	Reserves: 417 000 tons of 0.12 opt Au	MDIR	Staked Claim
Dixie 3 Prospect (52K/14NW)	Cu, Zn	<u>Reserves:</u> 91 000 tons of 10.0% Zn, 1.0% Cu	AF (MacDougall 1995)	Leased - Mining Rights Only, Staked Claim
Dixie 18 Prospect (52K/14NW)	Zn	<u>Reserves:</u> 110 000 tons of 0.5% Cu, 12.5% Zn, 0.57 opt Ag	AF (King and Petrie 1998)	Staked Claim
Garnet Lake (52K/15NW)	Zn, Cu, Ag, Au	<u>Reserves:</u> 2 190 000 tons of 5.92% Zn, 0.75% Cu, 0.58g/t Au, 21.1g/t Ag		
GAZ Bateman Township (52N/04NE)	Au	<u>Resource (NI43-101):</u> 1 400 000 tonnes of 8.0 g/t Au, in 5 lenses	Wolfden Resources Inc., news release, Feb. 23, 2005	Staked claims
Gold Eagle Mine (Western Discovery zone) Dome Township (52N/04SW)	Au	<u>Resource (NI43-101):</u> 309 000 tonnes at 16.67 g/t Au (uncut)	Micon International (Pressacco 2004)	Patent
Grassett Prospect Earngey Township (52N/02SE)	Au	<u>Reserves:</u> 78 295 tons of 0.22 opt Au (Part of the Hill–Sloan–Tivy Vein)	Energy Mines and Resources Canada 1989	Patent
Griffith Mine (52K/14SW)	Fe	<u>Reserves:</u> 120 000 000 tons of 29% Fe	GR 82 (Shklanka 1970)	Withdrawn from staking
Hasaga Mine Heyson Township (52N/04SW)	Au	<u>Reserves:</u> <u>C Block</u> (below 1800 feet) - 200 203 tons of 0.192 opt Au (Ferguson 1968) <u>Stopes</u> - 41 430 tons of 0.104 opt Au <u>Pillars</u> - 6365 tons of 0.134 opt Au	GR 56 (Ferguson 1968)	Patent
Hill–Sloan–Tivy Earngey Township (52N/02SE)	Au	<u>Reserves:</u> 296 000 tons of 0.219 opt Au (Grassett Prospect Reserves may be included in total)	AF (Germundson 1995)	Patent
Horseshoe Island (52N/08NW)	Au	Reserves: 893 508 tons of 0.14 opt Au	Northwest Prospector, March/April 1990, p.27	Staked Claim
Howey Mine Heyson Township (52N/04SW)	Au	Reserves: 780 000 tons of 0.08 opt Au	Energy Mines and Resources Canada 1989	Patent, Licence of Occupation
Jackson–Manion Mine Dent Township (52N/02SE)	Au	Reserves: 40 000 tons of 0.5 opt Au	NM - March 14, 1985, p.21	Patent

Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status
Joy–New zone (Diamond Willow zone, Creek zone) (52K/14NW)	Cu, Zn	Reserves: 300 000 tons of 4% combined Cu-Zn	AF (Lewis 1994)	Staked Claim
Kesaka Lake (52K/16NW)	Fe	<u>Reserves:</u> 312 500 000 tons of 31.1% Fe to a depth of 100 feet	MRC 11 (Shklanka 1968)	Open, Staked Claim
Laverty (Thrall) Heyson Township (52N/04SW)	Au	<u>Reserves:</u> Speculative reserves from the <u>Diabase dike zone:</u> 329 000 tons of 0.08 opt Au or 75 000 tons of 0.15 opt Au	AF (Gillies 1982)	Patent
Lingman Lake (53F/15SW)	Au	<u>Reserves:</u> 1 172 753 tons of 0.20 opt Au in all zones at 5.0 foot minimum width and a cut-off grade of 0.08 opt Au	AF (McPhee 1989)	Patent
Madsen Mine Baird Township (52K/13NW)	Au	Inferred Mineral Resource: 490 000 ounces Au at 0.29 opt Au historic resource not NI43-101 compliant	B. Skanderbeg, Claude Resources Inc. personal communication (Feb. 5, 2008)	Patent
May–Spiers Ball Township (52M/01SE)	Au	Reserves: 30 000 tons of 0.09 opt Au	AF (Bayne 1981)	Staked Claim
McCombe (Root Lake) (52J/13NE)	LiO ₂	<u>Reserves:</u> 2.3 million tons of 1.3% LiO ₂ to the 500 foot level	MP 90 (Breaks 1979)	Patent, Licence of Occupation
McFinley Mine Bateman Township (52N/04SE)	Au	Inferred Mineral Resource: 334 007 in situ at anaverage grade of 0.20 opt Au to a depth of 400 feet;Broken down as follows: <u>FWC-3 zone:</u> 3875 tons of 0.50 opt AuCzone: 10 520 tons of 0.50 opt AuFWC-1 + 2: 30 600 tons of 0.24 opt AuC-2 zone: 128 700 tons of 0.11 opt AuC-3 zone: 36 562 tons of 0.19 opt AuWL zone: 10 500 tons of 0.49 opt AuMU zone: 10 500 tons of 0.49 opt AuMU zone: 10 500 tons of 0.80 opt AuMU zone: 106 250 tons of 0.15 opt AuD zone: 106 250 tons of 0.15 opt Au <td>AF (Hogg 2002)</td> <td>Patent, Licence of Occupation</td>	AF (Hogg 2002)	Patent, Licence of Occupation
Mount Jamie Todd Township (52M/01SE)	Au	Reserves: Main zone: 47 048 tons of 0.425 opt Au No. 2 Shaft area: 25 360 tons of 0.37 opt Au	AF (Gordon 1988)	Patent
My-Ritt (Coin Lake) (52N/04SW)	Au	Unknown		
New Faulkenham Mines Ltd. (Faulkenham Lake) Baird Township (52K/13NW)	Au	<u>Reserves:</u> 15 000 tons of 0.428 opt Au (\$15.00 at \$35.00 per ounce Au)	AF (Holbrooke 1958)	Patent
North Spirit Lake (Crown Trust) (53C/07NW)	Fe	<u>Reserves:</u> 1.3 million tons per vertical foot of 33.94% Fe	MRC 11 (Shklanka 1968) GR 150 (Wood 1977)	Patent, Leased
Northgate Prospect Earngey Township (52N/02SE)	Au	Reserves: 64 600 tons of 0.28 opt Au	AF (Zinn 1984)	Staked Claim
Ogani Lake (52K/15NE)	Fe	<u>Reserves:</u> 100 000 000 tons of 21.6% Fe	MRC 11 (Shklanka 1968)	Open
Papaonga Lake (52K/16NE)	Fe	<u>Reserves:</u> 13 500 000 tons of 31.06% Fe	MDIR	Open

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Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status
Red Crest (Red Summit) Todd Township (52M/01SE)	Au	<u>Reserves:</u> 47 439 tons of 0.269 opt Au (uncut grade) (Horwood 1945) 38 000 of 0.3 opt Au	NM - March 14, 1985, p.21 ODM Annual Report (Horwood 1945)	Patent
Redaurum Baird Township (52N/04SW)	Au	Possible Reserves: 14A zone: 243 750 tons of 0.22 opt Au, 26 250 tons of 0.20 opt Au No. 2 zone: 137 500 tons of 0.18 opt Au No. 3 zone: 102 500 tons of 0.18 opt Au Camp zone: 24 750 tons of 0.13 pt Au	AF (Barclay 1986)	Patent
Richardson (Kostynuk Bros. Mine) (52N/09SW)	Au	<u>Reserves:</u> 700 000 tons of 0.2 opt Au inferred reserves	OFR 5835 (Parker and Atkinson 1992)	Patent
Rowan Todd Township (52M/01SE)	Au	<u>Reserves:</u> 10 900 tons of 0.657 opt Au (\$23.00 a ton at \$35.00 per ounce)	AF (Bishop 1939)	Patent
Sanshaw (Whitehorse Island) Dome Township (52N/04SW)	Au	Reserves: 175 000 tons of 0.20 opt Au	NM - June 11, 1953	Patent, Licence of Occupation
Setting Net Lake (53C/13SE)	MoS_2	Reserves: 100 000 000 tons of 0.09% MoS_2	MDIR NM - March 23, 1973	Open
Sol d'Or Honeywell Township (52N/07SE)	Au	Reserves: 8565 tons of 0.57 opt Au	Energy Mines and Resources Canada 1989	Staked Claim
Springpole Lake Prospect (52N/08NW)	Au	<u>Reserves (NI 43-101)</u> : 35 000 t of 6.27 g/t Au measured, 214 000 t of 5.56 g/t Au indicated, 1 353 000 t of 4.53 g/t Au inferred	Armstrong et al. (2006)	Patent, Staked Claims
Starratt–Olsen Mine Baird Township (52K/13NW)	Au	Reserves: 15 000 tons of 0.45 opt Au	NM - July 26, 1973	Patent
Trout Bay Zinc Pit zone Mulcahy Township (52M/01SE)	Zn, Cu, Pb, Ag, Au	<u>Reserves:</u> <u>West zone:</u> 13 776 tons of 4.75% Zn, 0.68% Cu, 0.94 opt Ag <u>East zone:</u> 124 760 tons 7.86% Zn, 1.5% Cu, 0.24% Pb, 1.7 opt Ag, 0.007 opt Au	MP 147 (Atkinson, Parker and Storey 1990a) Preliminary Map P.567 (Riley 1969) MDIR	Patent (Mining Rights Only), Leased (Minin Rights Only, Licence of Occupation
Uchi Mine Earngey Township (52N/02SE)	Au	Reserves: 214 000 tons of 0.147 opt Au	Energy Mines and Resources Canada 1989	Patent
Wilmar Mine Dome Township (52N/04SW)	Au	Reserves: Quoted from OFR 5558 unless indicated otherwise:Diorite Dike zone: 140 000 tons of 0.21 opt Au East Breccia zone:31 500 tons of 0.32 opt Au (Proven) 50 500 tons of 0.25 opt Au (Probable) 1 777 000 tons of 0.24 opt Au (Possible) Carbonate zone: 25 000 tons of 0.17 opt Au (Probable) 7500 tons of 0.15 opt Au (Possible) West Granodiorite zone: 3.15 to 4.5 million tons of 0.076 to 0.131 opt Au (Energy Mines and Resources Canada 1989) Granodiorite zone: 5 700 000 tons of 0.10 to 0.15 opt Au	OFR 5558 (Durocher, Burchell and Andrews 1987) Energy Mines and Resources Canada 1989	Patent
Woco Vein Earngey Township (52N/02SE)	Au	Reserves: 21 263 tons of 0.80 opt Au	AF (Germundson 1995)	Staked Claims

Deposit Name and NTS	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status
Young, H.G. Mines Ltd. Balmer Township (52N/04SW)	Au	Reserves: 270 000 tons of 0.31 opt Au	OFR 5558 (Durocher, Burchell and Andrews 1987)	Patent

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. Except where noted, none of these estimates are known to conform to the standards required for National Instrument 43-101 and should be considered inferred mineral resources not reserves.

LAND USE PLANNING ACTIVITIES

The Regional Land Use Geologist-Northwest (RLUG-NW), P. Hinz, is based in Thunder Bay and coordinates input into land use planning activities in the Red Lake–Kenora district. The objectives of the RLUG are: to effectively represent mineral-related values in the context of competing interests for land use; to optimize the land base available for mineral exploration and development; and to raise awareness within the mineral sector of the implications of legislation and regulations, other than the *Mining Act*, on their activities. The competing interests for land use vary from place to place across the province, but most have potential to restrict the availability of mining lands, access to them, and exploration-related activities. In 2007, the RLUG-NW dealt with a variety of land use planning issues in the Red Lake–Kenora district.

The Ministry of Northern Development and Mines (MNDM) engages with the Ministry of Natural Resources (MNR) when land use planning activities on Crown Land have the potential to impact the Provincial mineral interests. These activities include forest management planning, implementing management strategies for Ontario's Living Legacy Signature Sites, Northern Boreal Initiative – Community-based Land Use Planning, and other issues related to access to Crown Land.

The RLUG-NW provided comments and input to the Red Lake and Wabigoon Forest Management Units' planning teams. The Forest Management Planning Manual requires socio-economic descriptions of the minerals industry in the forest management unit. The RLUG-NW provided, to both planning teams, factual data on the past and potential future contributions of mineral resources to the management unit and local communities.

During the year, there were several inquiries dealing with access issues, related either to the potential decommissioning of water crossings installed by the forest industry or construction of roads/trails by mineral exploration companies. These inquiries often require bringing the various interests to the table to develop a solution and/or identifying the definitions applied by the MNR in regard to roads and trails.

The RLUG-NW also worked with the Northwestern Ontario Prospector's Association (NWOPA) to identify mineral representatives for the Crossroute Local Citizens Committee. Local Citizens' Committees work with the MNR to provide input into land use planning initiatives that impact Crown Land, primarily the development of forest management plans. The RLUG-NW worked with the MNR and NWOPA to have Annual Work Schedule maps posted on the Association's website, http://www.nwopa.net/landuse/fmulist.htm. The production of Annual Work Schedule maps are a requirement of the Forest Management Planning process. The maps display areas of proposed forest industry activity, including planned harvest areas, renewal areas, road construction and water crossing abandonment. These maps are useful to prospectors and exploration companies, as they provide an accurate representation of the road network within the forest management unit and areas where forest industry and exploration industry activities may coincide.

The Kenora District Geologist and RLUG-NW participated in a planning process initiated by the MNR to evaluate sites within the district for possible protection under the Room to Grow initiative. Room to Grow resulted from the Ontario's Living Legacy Land Use Strategy and the Ontario Forest Accord as an initiative to address gaps in representation. A few years ago (ca. 2004), the MNR, Bowater Incorporated and the Partnership for Public Lands

(PPL) identified 14 sites to address gaps in representation within Bowater Forest Products forest management units, some of which are in the Red Lake–Kenora district. Preliminary review to identify conflicts with significant mineral potential at that time eliminated one site. Subsequently, a consultant conducted mineral resource assessments of the remaining 13 sites using the Provincially Significant Mineral Potential methodology. Since 2004, 4 sites have been dropped; 2 sites have been combined; and 6 sites have had their boundaries revised. In 2007, after discussions with the MNR and the Ontario Prospector's Association, 5 sites were approved for regulation. One of the 5 sites, St. Raphael North, is located within the Red Lake–Kenora district. Two new sites, Willow Narrows and Mit Lake, were reviewed by the RLUG and Kenora District Geologist. As a result of this review and discussions between the MNR and the Ontario Prospector's Association, it was decided that Willow Narrows would proceed to regulation while Mit Lake would be held back, due to concerns with a high level of staking related to uranium exploration.

MNDM supports municipal and private land use planning though the One Window Planning Service led by the Ministry of Municipal Affairs and Housing. When requested, the RLUG-NW provides input into, and participates in, the review of draft Official Plans, Official Plan Amendments, draft plans of subdivision and consent applications. In 2007, the RLUG reviewed and commented on 5 subdivision applications, 13 consent applications and 2 Official Plan Amendments in the Red Lake–Kenora district. In addition, the RLUG attended several meetings in regard to the development of the Town of Red Lake's Official Plan.

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Ontario Geological Survey Regional Resident Geologist Program

Red Lake Regional Resident Geologist (Kenora District)-2007

by

C. Ravnaas and J. Bongfeldt

2008

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RED LAKE REGIONAL RESIDENT GEOLOGIST (KENORA DISTRICT)-2007

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INTRODUCTION

The Kenora District extends from the Manitoba border, east to Savant Lake and south to the International Border. It encompasses the towns of Kenora, Vermilion Bay, Dryden, Ignace, Sioux Lookout, Savant Lake, Fort Frances and a number of First Nation communities.

Dimension stone continued to be produced in the Kenora District in 2007. No metallic mineral production was recorded in the District. Major exploration projects targeted gold at the Goldlund Mine (Tamaka Holdings Inc.); Plomp Farm property (Champion Bear Resources Ltd.); Mine Centre property (Q-Gold Resources Ltd.); Rainy River property (Rainy River Resources Ltd.); and West Cedartree properties (Houston Lake Mining Inc.). Base metals and platinum group elements were targeted at the Atikwa Lake property (Opawica Explorations Inc.); Kenbridge Nickel Mine property (Canadian Arrow Mines Ltd.); North Rock property (MetalCORP Limited); Stake Lake property (Tri-Gold Resources Inc.); and the Westco property (Numax Resources Inc.). In 2007, exploration programs were initiated for molybdenum at the Pidgeon property (MPH Ventures Ltd.) and uranium was targeted at the Kenora Uranium Project (Delta Uranium Inc.).

With a continued rise in commodity prices, and positive results from exploration efforts in 2006, activity in the Kenora District exceeded the levels of previous years. A total of 73 exploration projects were conducted by mineral exploration companies and individual prospectors during the year (Table 2). Work completed within the Kenora District and filed for assessment credit, or otherwise provided, is shown in Table 1.

MINING ACTIVITY

There was no production of either base or precious metals in the Kenora District in 2007. Production continued from 5 granite quarries in 2007. The quarries are keyed, with letters, to Figure 5.

Nelson Granite Ltd. (A Division of Granite Monuments Ltd.)

Nelson Granite Ltd. continued year-round production from 5 stone quarries in the Kenora District during 2007.

Production continued at the **Docker Township quarry** (A), 10 km southwest of the town of Vermilion Bay. Homogeneous, medium-grained, pink granite is produced from a granite plug, which is part of the Dryberry batholith. Fracturing is negligible, allowing for removal of blocks of virtually any size. The majority of the stone produced is used in the monument industry and is sold as "Vermilion Pink". In 2007, approximately 21 197 m³ (228 168 ft³) were produced (G. Zebruck, Nelson Granite Ltd., personal communication, 2008).

The company continued production at their **Red Deer Lake quarry** (B) in 2007. The quarry is located near Red Deer Lake, approximately 40 km northeast of Kenora and 15 km northwest of the railway stop at Jones. A total of 8360 m³ (89 986 ft³) were produced for use as monument and building stone (G. Zebruck, Nelson Granite Ltd., personal communication, 2008). The stone is marketed as "Red Deer Brown" or "Canadian Mahogany" and is sold primarily to clients in North American markets.

The company continued to produce stone from their **Forgotten Lake quarry** (C) in 2007. The quarry is located on the eastern side of Forgotten Lake, approximately 35 km north of Kenora and 10 km north of the hamlet of Redditt. A total of 4904 m³ (52 785 ft³) were produced for use as monument and building stone. The stone is green megacrystic granite marketed as "Pine Green" (G. Zebruck, Nelson Granite Ltd., personal communication, 2008).

The company continued production at their **Second Mountain quarry** (D) in 2007. The quarry is located approximately 3 km east of their Forgotten Lake quarry. A total of 1062 m³ (57 706 ft³) of the yellow, feldsparmegacrystic granite, sold as "Crystal Gold", was extracted in 2007 (G. Zebruck, Nelson Granite Ltd., personal communication, 2008).

Production resumed at the **Shepody quarry** (E) in 2007. The quarry is located approximately 45 km north of Kenora and 15 km northwest of the railway stop at Jones. A total of 98.7 m³ (1062 ft³) were produced in 2007 for construction and dimension stone use, under the market name "Shepody" (G. Zebruck, Nelson Granite Ltd., personal communication, 2008). The stone is a medium- to coarse-grained, porphyritic granite composed of potassic feldspar phenocrysts in a matrix of plagioclase, potassic feldspar, quartz and biotite.

Table 1. Assessment files received in the Kenora District in 2007.

Abbreviations				
AEM	Airborne electromagnetic survey	GL	Geological survey	
AM	Airborne magnetic survey	GM	Ground magnetic survey	
ARA	Airborne radiometric survey	Gr	Geological report	
BS	Beneficiation Study	IP	Induced polarization survey	
Bulk	Bulk sample	Lc	Linecutting	
DD	Diamond drilling	MRE	Mineral Resource Estimate	
DDH	Diamond drill hole(s)	Pr	Prospecting	
DDR	Diamond drill hole re-logging	RES		
DDU	Diamond drill hole underground	Samp		
GC	Geochemical survey	Str	Stripping	
	Ground electromagnetic survey		Very low frequency electromagnetic survey	

Township or Area	Company Name	Year	Type of Work (Work Value)	AFRO Number	Resident Office Fil Designati	e
Atikwa Lake Area	Canadian Arrow Mines Ltd.	2006-07	AEM, AM (\$123 572)	2.35178	52F05NE	KK-1
Aubrey Township	Champion Bear Resources Ltd.	2005-06	IP, AM, RES, Gr (\$89 786)	2.33952	52F14SE	E-8
Avery Township	Riives, J.	2006	Samp, GL (\$15 028)	2.33816	52F09NW	N-1
Bad Vermilion Lake Area	Q-Gold Resources Ltd.	2006	DDH, Samp, Gr (\$43 495)	2.33819	52C10NE	LLL-3
Bad Vermilion Lake Area	Q-Gold Resources Ltd.	2006	DDH, Samp, Gr (\$35 807)	2.33773	52C10NE	LLL-5
Bad Vermilion Lake Area	Q-Gold Resources Ltd.	2006	DDH, Samp (\$40 253)	2.32865	52C10NE	LLL-1
Bad Vermilion Lake Area	Q-Gold Resources Ltd.	2006	DDH, Samp (\$31 620)	2.33004	52C10NE	LLL-2
Bad Vermilion Lake Area	Q-Gold Resources Ltd.	2006	DDH, Samp, Gr (\$26 632)	2.34447	52C10NE	LLL-4
Beckington Lake Area	Emerald Field Resources Corp.	2005	DDH, Samp (\$4 758)	2.32341	52J02NE	79
Beckington Lake Area	Emerald Field Resources Corp.	2005	Pr, Samp, Lc, Gr (\$38 492)	2.32776	52J02NE	80

Township or Area	Company Name	Year	Type of Work (Work Value)	AFRO Number	Resident Office File Designation	e
Beckington Lake Area	Millstream Mines Ltd.	2006	DDH, Samp (\$39 100)	2.31952	52J02NE	81
Bennett Township	Angove, R.	2004	Pr, Samp (\$277)	2.35773	52C16SE	F-1
Bliss Lake Area	Fairservice, R.	2006	Pr, Samp, Gr (\$8 618)	2.32991	52C10NW	AA-1
Bliss Lake Area	Numax Resources Inc.	2006-07	AEM, Samp, Str, Gr (\$11 713)	2.33532	52C10NW	Z-2
Bliss Lake Area	Numax Resources Inc.	2007	Lc, GM, GEM, Str, Tr, Pr, Gr	2.35119	52C10NW	J-1
Boyer Lake Area	Glatz, A.	2006	(\$15 835) Pr, Samp (\$15 665)	2.33324	52F07NE	000-1
Conant Township	Avalon Ventures Ltd.	2006-07	DDH, Gr, Samp (\$160 582)	2.33923	52J07SE	106
Contact Bay Area	City of Dryden	2007	Gr	donated	52F10NW	BBB-1
Dash Lake Area	Western Warrior Resources Ltd.	2006-07	Samp (\$8 202)	2.34489	52F04SE	U-1
Dash Lake Area	Western Warrior Resources Ltd.	2006	GM, AEM, Gr (\$62 823)	2.33589	52F04SE	U-2
Docker Township	Fairservice, R.	2007	Gr, Samp (\$1 737)	2.35848	52F13SE	X-6
Docker Township	Nelson Granite Limited	2004	Str, Bulk (\$108 362)	2.32077	52F14SW	L-8
Dogpaw Lake Area	Houston Lake Mining Inc.	2006	IP, RES (\$55 455)	2.32462	52F05SW	KKKK-6
Dogpaw Lake Area	Houston Lake Mining Inc.	2007	IP, RES (\$99 614)	2.35470	52F05SW	КККК-7
Eagle Lake Area	Western Warrior Resources Ltd.	2005	AM, Gr, GC (\$48 000)	2.32868	52F11NE	00-1
Echo Township	Camreco Inc.	1981-87	Gr, IP, GM, GEM	donated	52F16NW	123
Echo Township	Camreco Inc.	1988	GR, DDH, Samp	donated	52F16NW	121
Echo Township	Camreco Inc.	1988	Gr	donated	52F16NW	124
Echo Township	Camreco Inc.	1989	DDH, Samp	donated	52F16NW	122
Echo Township	Glatz, A. & Riives, J.	2006	Gr (\$20 598)	2.32764	52F16NW	118
Echo Township	Goldlund Mines Ltd.	1976-79	Gr, DDH, Samp	donated	52F16NW	119
Echo Township	Goldlund Mines Ltd.	1984	Underground level plans	donated	52F16NW	120
Fisher Lake Area	Western Warrior Resources Ltd.	2004-07	AEM, GM, GEM, GC (\$370 662)	2.33976	52F12SE	L-1
Flying Loon Lake Area	Benton Resources Corp.	2006-07	DDH, GEM, Lc, Samp (\$547 390)	2.33975	52G13SE	G-14

KENORA DISTRICT—2007

Township or Area	Company Name	Year	Type of Work (Work Value)	AFRO Number	Resident (Office File Designatio	5
Fourbay Lake Area	Best, A.	2006	GM, Gr (\$14 000)	2.34886	52J02SW	108
Glass Township	Halo Resources Ltd.	2006	Pr, Samp, GL (\$13 266)	2.33214	52E10SW	FFF-1
Halkirk Township	MetalCORP Ltd.	2005-06	Pr, Samp, AEM (\$258 978)	2.32111	52C11NE	BBB-3
Indian Bay Area	Cabo Mining Enterprises Ltd.	2005-06	DDH, Samp (\$82 766)	2.34802	52E11NE	BBB-3
Kawashegamuk Lake Area	Amador Gold Corp.	2005-06	GM, GEM (\$26 208)	2.34799	52F08NW	GG-1
Kawashegamuk Lake Area	Amador Gold Corp.	2006	Samp, GC (\$6 731)	2.35292	52F08NW	GG-2
Kilgour Lake Area	Redditt Stones Inc.	2006	Str, GL (\$4 483)	2.35231	52K04SW	E-1
Kirkup Township	O'Flaherty, K.	2006-07	GR, Pr, Samp (\$9 059)	2.34197	52E09NW	KKK-1
Line Lake Area	Emerald Field Resources Corp.	2004	AEM, AM, Gr (\$3 797)	2.32299	52F11NW	Z-8
Little Turtle Lake Area	Q-Gold Resources Ltd.	2006	DDH, Gr, Samp (\$57 922)	2.34181	52C15SE	SS-1
Little Turtle Lake Area	Q-Gold Resources Ltd.	2006	Gr, DDH, Samp (\$89 206)	2.33810	52C15SE	SS-2
Lower Manitou Lake Area	Rubicon Minerals Corp.	2006	GC, Pr (\$51 553)	2.33905	52F07SW	LL-2
MacFie Township	Gossan Resources Limited	2006	Pr, GC, Samp, GL (\$145 219)	2.33145	52F16SW	II-1
MacNicol Township	Delta Uranium Inc.	2006	DDH, Gr, Samp (\$20 968)	2.35762	52F13SW	GG-1
Mang Lake Area	Radisson Mining Resources Inc.	2005-06	Pr, Samp (\$46 162)	donated	52F02NW	I-1
Menary Township	Western Troy Capital Inc.	2006-07	Gr, DDH, Samp, Str, Pr (\$8 142)	2.34747	52C13NW	Н-5
Parnes Lake Area	Ginguro Exploration Inc.	2006-07	Lc, GM, GEM, IP, Gr (\$47 746)	2.34477	52G13NW	43
Penassi Lake Area	Unitronix Corporation	2005-06	Pr, Samp (\$56 180)	2.31740	52G14NE	65
Potts Township	Rainy River Resources Ltd.	2006-07	GL, Gr, Samp (\$69 450)	2.34901	52C13NW	Q-3
Senn Township	Rainy River Resources Ltd	2007	DDH, Gr (\$97 680)	2.34914	52C13NW	Q-2
Sharron Lake Area	N.W.T. Copper Mines Ltd.	2006	Str, Samp, GL (\$5 406)	2.34750	52J04NE	42
Snook Lake Area	Nelson Granite Limited	2005-06	Str, Samp, GL (\$117 134)	2.33084	52L02NE	K-1
Squaw Lake Area	Emerald Field Resources Corp.	2005-06	GR, Pr, Samp (\$3 793)	2.32322	52J02SE	135
Squaw Lake Area	Emerald Field Resources Corp.	2005	GR, Pr, Samp	donated	52J02SE	136

Township or Area	Company Name	Year	Type of Work (Work Value)	AFRO Number	Resident Office Fil Designati	e
Squaw Lake Area	Emerald Field Resources Corp.	2005	DDH, Pr, Str (\$89 797)	2.30843	52J02SE	138
Squaw Lake Area	Equator Mining Corp.	2006	Gr, GEM (\$36 773)	2.32568	52J02SE	137
Squaw Lake Area	Holbik, J.	2006-07	Pr, Str, Samp (\$2 155)	2.34923	52J02SE	139
Stokes Township	Kilburn, L.	2005	DDH, Samp (\$89 413)	2.30977	52F15NE	36
Swan Lake Area	Redditt Stones Inc.	2006	Samp (\$2 839)	2.33641	52L02SW	F-1
√an Horne Township	Kozowy, A.	1995	Pr, Samp	donated	52F10NW	F-6
Watten Township	MetalCORP Ltd.	2006	Gr, Str, Samp (\$424 992)	2.35191	52C11NE	BBB-4
Wonderland Lake Area	Redditt Stones Inc.	2006-07	Gr, Samp (\$1 595)	2.33599	52L01SE	H-1
Wonderland Lake Area	Redditt Stones Inc.	2006-07	Str, Samp (\$136 162)	2.34976	52L01SE	H-2
Total Value			(\$4 043 651)			

EXPLORATION ACTIVITY

A complete summary of exploration activity, including prospecting, is given in Table 2. The extent of staking is shown in Figure 6. Gold, base metals and platinum group elements were the predominant targets in 2007. The significant exploration programs targeting these commodities were largely based on success from previous years' work. Significant land acquisition by several companies can be directly related to these successes. Exploration programs targeting molybdenum and uranium were also initiated in the Kenora District in 2007. Described below are programs with significant exploration expenditures and/or results. Programs are keyed with numbers to Table 2 and Figure 5.

Gold

Bayfield Ventures Corp. (2) initiated an exploration program on the Claim Blocks B and C gold properties. Bayfield Ventures Corp. and joint-venture partner **Range Metals Inc.** also commenced an exploration program on the Claim Block A gold property. These properties are located approximately 55 km northwest of Fort Frances. Ground magnetometer and horizontal loop electromagnetic surveys were completed on all properties (Bayfield Ventures Corp. and Range Metals Inc., press release, May 2, 2007). Conductive geophysical responses were tested with drilling on the properties. Five reverse circulation holes, totalling 170 m, and 6 diamond-drill holes, totalling approximately 1300 m, were completed on Claim Block A. Claim Blocks B and C were tested with 35 reverse circulation holes totalling 1080 m. Additional work is planned for 2008 (Bayfield Ventures Corp. and Range Metals Inc., press release, December 21, 2007).

Champion Bear Resources Ltd. (15) continued work on the Plomp Farm gold and base metal property located approximately 17 km west of Dryden. Detailed bedrock mapping, lithogeochemical sampling, induced polarization and ground magnetometer surveys were completed on the property. Gold-anomalous zones, situated east and west of the Main Mineralized zone, were tested with 5 diamond-drill holes, totalling approximately 1353.2 m (Champion Bear Resources Ltd., press release, June 27, 2007). Diamond-drill hole PF-06-119, completed in 2006, intersected a

0.4 m section that returned 31.7 g/t Au, 33.3 g/t Ag and 1.36% Cu. This part of the Main Mineralized zone was tested in 2007 with 3 wedged diamond-drill holes, using drill hole PF-06-119 as the "mother" hole. The total length of the 3 holes was approximately 892.6 m. The directional drilling was designed to test potential gold-mineralized zones north of those intersected in hole PF-06-119. Based on examination of the diamond-drill core, Champion Bear Resources Ltd. believes high-grade, gold-bearing structures cut pre-existing mineralized zones. Based on this interpretation, additional diamond drilling is planned for this part of the property (Champion Bear Resources Ltd., press release, August 1, 2007).

The **City of Dryden** (16) funded a compilation of historical data on an area situated in the southern part of Van Horne Township, approximately 8 km southwest of the community. A total of 12 patented claims located in the study area are registered to the City of Dryden. The compilation also presented historical data on other patented and unpatented claims, and Crown Land within the study area. The geology of 24 gold occurrences and 54 sulphide showings are summarized in the report. The purpose of the report is to assist in promoting the mineral potential of the area (Kenora District Office, Assessment Files, 52F10NW BBB-1).

Conquest Resources Limited (17) continued an exploration program to locate the source of high-grade, goldbearing, blue-black quartz float boulders, found on the south shore of King Bay, Sturgeon Lake. The property is located approximately 25 km south of Savant Lake, on the northern part of Sturgeon Lake. In 2007, 11 diamonddrill holes, totalling approximately 1053 m, targeted the W-series anomalies. These magnetic anomalies were identified following a ground magnetic survey completed in 2004 on the ice of King Bay. Nine holes from the 2007 drilling program intersected gold-bearing, blue-black quartz veins. These veins are hosted by intensely altered quartz-feldspar porphyry. Conquest Resources Limited also completed a detailed ground magnetometer survey that was designed to cover all ice-accessible parts of King Bay (Conquest Resources Limited., press release, March 19, 2007).

Fortune River Resources Corp. (28) continued work on the Drayton gold property, approximately 12 km southeast of Sioux Lookout. Ten diamond-drill holes, totalling approximately 2400 m, were completed in the Shaft area. This drilling program continued to test the gold associated with auriferous quartz-carbonate alteration zones (Fortune River Resources Corp., press release, March 9, 2007).

Ginguro Explorations Inc. (31) continued exploration work on the Minnitaki gold project, approximately 12 km south of Sioux Lookout. Geological mapping and ground electromagnetic and magnetometer surveys were completed in the past two years. These exploration efforts assisted in identifying at least 12 gold occurrences associated with deformation zones. In 2007, mechanical removal of overburden targeted 13 areas over a 1.5 km extension of a deformation zone. This effort tested 6 areas that were located by the mapping programs, 4 zones associated with historical occurrences and 3 conductive zones identified by ground geophysical surveys. These exposures were pressure-washed, channel-cut, mapped and sampled. In total, 150 channel-cut samples were submitted for analysis as part of the program. Channel-cut and grab samples from these zones returned up to 10.45 g/t Au and 117.73 g/t Au, respectively. Additional work is planned for 2008 (Ginguro Explorations Inc., press release, January 28, 2008).

Houston Lake Mining Inc. (37) continued an aggressive exploration program on the West Cedartree gold project, approximately 20 km southeast of Sioux Narrows. Exploration efforts continued to examine several zones of gold mineralization in the project area. Figure 1 illustrates the location of gold zones on this property that received exploration work in 2007. Approximately 30 km of the grid established over the gold-bearing zones was covered by an induced polarization survey. In 2007, a high-resolution colour aerial photography survey was also completed over Houston Lake Mining Inc. land holdings in the Dogpaw Lake area (Houston Lake Mining Inc., press release, November 13, 2007).

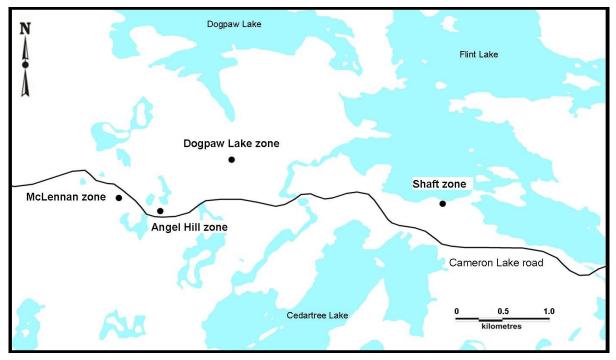


Figure 1. Location of gold zones associated with the West Cedartree gold project, Houston Lake Mining Inc. (Locations from G. Anthony, Houston Lake Mining Inc., personal communication, 2008, with information from the company's Web page, www.houstonlakemining.com.)

Overburden was mechanically removed from the southern extension of the Angel Hill gold zone (AHGZ) in 2006. In 2007, overburden was removed from the No. 2 and No. 4 veins on the Dogpaw Lake gold zone (DLP) and from part of the McLennan gold zone (MGZ). These exposures, including the AHGZ, were pressure-washed, channel-cut, mapped and sampled. The number of channel-cut intervals submitted for analysis exceeded 250 samples (Houston Lake Mining Inc., press release, May 30, 2007).

In 2007, 21 diamond-drill holes, totalling approximately 3037 m, tested the gold-bearing zones on the property. Three holes tested the southern extension of the AHGZ. Seventeen holes targeted the No. 1 vein on the DLP and one hole tested the MGZ. Down-hole induced polarization surveys were completed on selected holes collared on the AHGZ and the DLP. Approximately 6656 m of diamond-drill core, which was recovered from historical programs, was re-logged and sampled. Additional work is planned to test these gold zones in 2008 (Houston Lake Mining Inc., press release, August 1, 2007).

Houston Lake Mining Inc. increased their land holdings in the Dogpaw Lake area by acquiring the Dubenski, Dogpaw West and Gold Sun properties. The Dubenski gold property is located approximately 3 km east of the AHGZ. A compilation of historical data was initiated before the commencement of an exploration program. Based on the recommendations presented in this report, a diamond-drilling program is proposed to test the Shaft zone on the property (Houston Lake Mining Inc., press release, December 18, 2007).

Laramide Resources Ltd. (41) announced the purchase of the Thunder Lake Deposit, approximately 17 km east of Dryden, in 2007. An inferred mineral resource for the deposit is 2.97 million tonnes grading 6.47 g/t Au (Laramide Resources Ltd., press release, April 3, 2007). This gold-mineralized zone is adjacent to the northern boundary of the Goliath property. Recommendations presented in a compilation report completed by Laramide Resources Ltd. were to examine the lateral and down-dip extension of the deposit (Laramide Resources Ltd., Technical Report on Thunder Lake property, November, 15, 2007).

Metalore Resources Limited (44) continued work on the East Cedartree gold property, approximately 68 km southeast of Kenora. Five diamond-drill holes, totalling approximately 811 m, tested the Discovery zone. One

diamond-drill hole, which was completed in 2006, was lengthened as part of the 2007 program. Based on the results of a diamond-drill hole compilation, additional drilling is planned (A. Chilean, Metalore Resources Limited, personal communication, January 31, 2008).

Q-Gold Resources Ltd. (53) continued work on the Mine Centre property, approximately 55 km east of Fort Frances. In 2007, Q-Gold Resources Corp. increased their land holdings by acquiring the Manhattan gold occurrence, Iron Ridge copper-nickel property and all assets held by **Nipigon Gold Resources Ltd.** These assets include the McKenzie Gray and Jolly Roger gold occurrences and a mineral processing building. All of these properties are contiguous to the Mine Centre claim group (Q-Gold Resources Ltd., press release, January 26, 2007). In 2007, a diamond-drilling program tested several conductive zones possibly related to the Finger Lake fault; these zones were identified after an induced polarization survey. Quartz vein systems were the target of a series of diamond-drill holes completed at the Manhattan Mine and Lucky Linda gold occurrences. Two diamond-drill holes tested the quartz vein structures associated with the Foley Mine North Shaft gold prospect (Q-Gold Resources Ltd., press release, January 31, 2008). Q-Gold Resources Ltd. also continued with efforts to de-water the historical Foley Gold Mine workings. The construction of maintenance and collar buildings was completed at the North Foley Shaft. The collar was re-constructed and a water pump was installed at the 400 foot level (Q-Gold Resources Ltd., press release, June 27, 2007).

Rainy River Resources Ltd. (55) continued work on the Off Lake property, northwest of Fort Frances. This area, part of the Rainy River project, is located approximately 16 km northeast of the 17/ODM Gold Zone. Prospecting and lithogeochemical sampling were carried out over several parts of the property. Overburden was mechanically removed in 3 areas. The exposures were then pressure-washed, channel-cut, mapped and sampled. Samples collected from this program returned values up to 15.25 g/t Au, 7.66% Zn and 2.75% Cu (Rainy River Resources Ltd., press release, December 17, 2007). Reconnaissance and detailed bedrock mapping has identified characteristics similar to the 17/ODM Gold Zone in Richardson Township, which is currently modelled as a gold-rich, volcanogenic massive sulphide (VMS) deposit (C. Baker, Rainy River Resources Ltd., personal communication, January 15, 2008).

Three diamond-drill holes, totalling approximately 756 m, tested gold-mineralized zones in an area 11.5 km south of Off Lake. A zone of conductive bedrock, located on the Pinewood claim, was also tested with 3 diamond-drill holes (ibid).

1n 2007, Rainy River Resources Ltd. increased their land holdings in the area by acquiring ground situated adjacent to the Off Lake exposures. Additional work is planned for the property in 2008 (Rainy River Resources Ltd., press release, December 17, 2007).

Rainy River Resources Ltd. (56) also continued an aggressive exploration program on the Rainy River gold project in Richardson Township, approximately 55 km northwest of Fort Frances. The exploration program tested the theory that a gold-rich, volcanogenic massive sulphide (VMS) geological setting exists on the property. Figure 2 illustrates the locations of the known gold zones and gold-mineralized trends on the property.

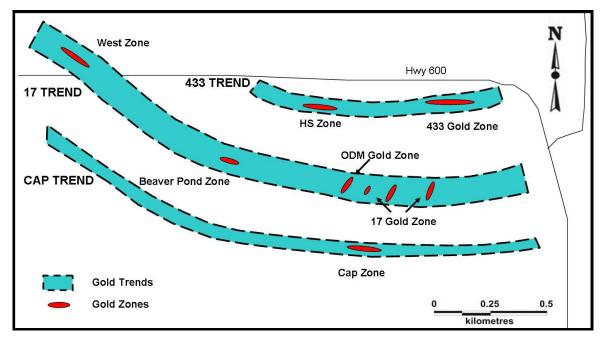


Figure 2. Location of gold zones and gold-mineralized trends on a portion of the Rainy River gold project, Rainy River Resources Ltd. (Locations from W. Rayner, Rainy River Resources Ltd., personal communication, 2008, with information from the company's Web page, www.rainyriverresources.com.)

In 2007, a 100 m line-spacing, high-sensitivity, airborne magnetic gradiometer survey was completed over the entire property. The area underlain by known gold-mineralized zones was flown with a 50 m line spacing. Titan 24 DC induced polarization and magnetotelluric ground surveys were completed over the zones and "gold trends". The part of the property which is underlain by the 34 Nickel zone was also tested with ground gravity and InfiniTEM[®] electromagnetic surveys (W. Rayner, Rainy River Resources Ltd., personal communication, January 23, 2008). The area located north and south of the 17 Gold Trend, between the Beaver Pond and West zones, was tested with a 34-hole, reverse-circulation till and rock sampling program. Plans for 2008 are to continue to test the western part the gold trends with approximately 46l reverse-circulation drill holes (Rainy River Resources Ltd., press release, August 2, 2007).

In 2007, 79 diamond-drill holes, totalling 41 376.4 m, were completed on the property. Sixty-nine holes from this program targeted the 17/ODM Zone and the 17 Gold Trend. The remainder of the diamond-drill holes completed in 2007 targeted gold mineralization related to other zones and gold trends on the property (Rainy River Resources Ltd., press release, January 21, 2008).

The results of a revised inferred mineral resource estimate of the 17/ODM Zone and a portion of the 17 Gold Trend, are planned to be announced in 2008. The approximate area of the resource estimate is 700 m long, between 25 m and 100 m wide and extends to a maximum vertical depth of 350 m. Metallurgical testing of representative diamond-drill core was also initiated in 2007 (W. Rayner, Rainy River Resources Ltd., personal communication, January 23, 2008).

Diamond-drill hole NR-07-189 (with a final length of 1657 m) was successful in intersecting the down-plunge extension of all gold trends identified on the property. All diamond-drill holes completed on the property by Rainy River Resources Ltd. were collared north of this hole. The upper parts of the hole, between 486.5 m and 498.5 m, intersected the Cap Zone, comprising semi-massive to massive chalcopyrite-pyrite-sphalerite bands, hosted in hydrothermally altered mafic metavolcanic rocks. This interval graded 8.93 g/t Au and 75.34 g/t Ag over 12 m (Rainy River Resources Ltd., press release, January 21, 2008).

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Based on results from the reverse-circulation and diamond-drilling programs, the company interpreted at least 3 gold trends on the property. Figure 3 presents a cross-sectional view of these sub-parallel gold trends. Plans for 2008 are to test the 17/ODM Zone and 17 Gold Trend to a vertical depth of 500 m and continue targeting other known gold occurrences on the property (W. Rayner, Rainy River Resources Ltd., personal communication, January 22, 2008).

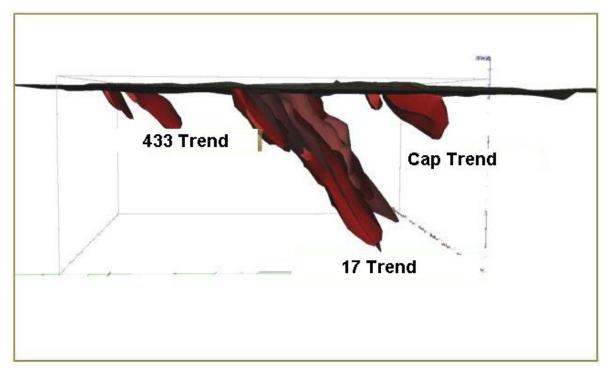


Figure 3. Cross-section view, looking east along the sub-parallel gold trends at the Rainy River gold project, Rainy River Resources Ltd. (Data from W. Rayner, Rainy River Resources Ltd., personal communication, 2008, with information from the company's Web page, www.rainyriverresources.com.)

Skyharbour Resources Ltd. (64) initiated an exploration program on the Claim Block D1 and D2 gold properties, approximately 55 km northwest of Fort Frances. Ground magnetometer and horizontal loop electromagnetic surveys were completed on both properties. In 2007, areas of conductive geophysical responses were tested with 5 reverse-circulation holes and 8 diamond-drill holes, totalling approximately 1000 m and 2056 m, respectively. Additional work is planned for 2008 (Skyharbour Resources Ltd., press release, December 21, 2007).

Tamaka Holdings Inc. (65) initiated an exploration program on the Goldlund gold property, approximately 38 km northeast of Dryden. A three-dimensional model of the geological setting of the Goldlund deposit was created, based on historical diamond-drill holes and assay values, plus surface and underground geological mapping. Based on the interpretations of this model, a 43-hole diamond-drilling program, totalling approximately 9300 m, was completed in 2007. Additional work at the former mine site involved rehabilitation of historical mine infrastructure. Additional work is planned for 2008 (K. Pieterse, Tamaka Holdings Inc., personal communication, January 31, 2008).

Tri-Gold Resources Corp. (69) continued work on the Stake Lake copper-gold property, approximately 50 km north of Ignace. In 2006, samples collected from angular float boulders returned values ranging up to 4.16% Cu, 2.7 g/t Au and 82 g/t Ag (Tri-Gold Resources Corp., press release, September 17, 2007). In 2007, an exploration program was designed to locate the source of these boulders. Ground magnetometer and induced polarization surveys covered the area adjacent to the float boulders. Geophysically anomalous zones identified by these surveys were stripped, pressure-washed, channel-cut, mapped and sampled. Six diamond-drill holes, totalling

approximately 1398 m, also tested the anomalies. Data collected from this work were not successful in explaining the induced polarization responses. Down-hole geophysical surveys of selected holes are planned for 2008 (Tri-Gold Resources Corp., press release, December 10, 2007).

Western Warrior Resources Inc. continued to evaluate the extensive land holdings known as the Pipestone Project. This land package, which covers approximately 754 km² and includes 4713 contiguous claim units, is located east of Nestor Falls and is situated mainly in the Kakagi-Rowan lakes greenstone belt. A 50 m line-spacing, high-definition airborne magnetometer survey, totalling approximately 35 500 line-kilometres, was completed over the project area. A compilation of historical data was also completed in 2007. The geological settings of 123 mineral occurrences, located on the Pipestone Project, were summarized in this report (Western Warrior Resources Inc., press release, January 22, 2007).

In 2007, Western Warrior Resources Inc. initiated exploration programs on the Bluffpoint (71) and Wampum (73) gold properties as part of the Pipestone Project. Ten diamond-drill holes, totalling approximately 1996 m, targeted three zones on the Bluffpoint property. These zones are related to areas of intensely hydrothermally altered felsic intrusive rocks (Western Warrior Resources Inc., press release, June 20, 2007). Mechanical removal of overburden exposed the bedrock at the Shaft and North zones on the Wampum property. These exposures were pressure-washed, channel-cut, mapped and sampled. Five diamond-drill holes, totalling approximately 779 m, tested the Shaft zone (Western Warrior Resources Inc., press release, November 28, 2007).

Base Metals

Canadian Arrow Mines Ltd. (12) initiated an aggressive exploration program on the Kenbridge Nickel Mine property, approximately 70 km southeast of Kenora. An airborne magnetometer and electromagnetic survey was completed over the entire land holdings in the area. Selected parts of the property, based on geophysical responses and historical data, underwent prospecting, mapping and lithogeochemical sampling (Canadian Arrow Mines Ltd., press release, May 11, 2007).

Most of the work completed in 2007 on the property was designed to increase the historical mineral resources at the Kenbridge Deposit. Mechanical removal of overburden targeted part of its surface expression. These exposures, which extend for approximately 150 m along strike, were pressure-washed, channel-cut, mapped and sampled. One hundred and fifty diamond-drill holes, totalling approximately 25 000 m, were completed to confirm the geometry and mineralization above the 150 m level. Drill holes tested this mineralized zone at 30 m intervals for 290 m along strike. Based on the results of this drilling program and historical data, a revised indicated resource estimate of this zone is 6.7 million tonnes grading 0.38% Ni and 0.32% Cu (Canadian Arrow Mines Ltd., press release, January 21, 2008).

Thirty diamond-drill holes, totalling approximately 7000 m, tested the zone below the 150 m level. This part of the deposit will be the target of a proposed 2008 drilling program. A revised, indicated mineral resource estimate for this zone, based on this drilling and historical data, is 3 million tonnes grading 0.63% Ni and 0.32% Cu (ibid).

Canadian Arrow Mines Ltd. initiated environmental and engineering studies on the Kenbridge Deposit as part of the preliminary assessment study. Environmental baseline studies included wildlife, ecosystem, soil, vegetation, fish habitat and water quality surveys. Geotechnical programs involved design parameters of the open pit walls, underground mine opening and areas for storage of waste rock and tailings. Flotation work designed to determine the recovery of the nickel was initiated during metallurgical testing of drill core (Canadian Arrow Mines Ltd., press release, August 23, 2007).

Canadian Arrow Mines Ltd. started discussions with Treaty No. 3 First Nations, including the four First Nation communities located near the Kenbridge Nickel property (Canadian Arrow Mines Ltd., press release, November 5, 2007). The company also announced the intention to de-water the historical workings at the deposit to conduct underground diamond drilling and sampling. In preparation for this program, Canadian Arrow Mines Ltd. also announced the purchase of a headframe and hoisting equipment (Canadian Arrow Mines Ltd., press release, November 15, 2007).

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MetalCORP Limited (43) continued work on the North Rock copper-nickel property, approximately 25 km east of Fort Frances. Thirty-four diamond-drill holes, totalling approximately 10 921 m, tested historical mineral occurrences and high-priority airborne geophysical conductors. Figure 4 illustrates the locations on the property that were tested with this drilling program.

The 25 drill holes completed at the Belacoma occurrence tested the nickel-copper potential of an ultramafic (komatiitic) metavolcanic flow unit. Eleven holes tested the Nickel Lake area, 3 holes targeted the Beaver Pond zone and 3 holes were completed at the Mironsky occurrence. Airborne geophysical conductors in the West End zone were tested with 2 diamond-drill holes (M. Dumoulin, MetalCORP Limited, personal communication, January 10, 2008).

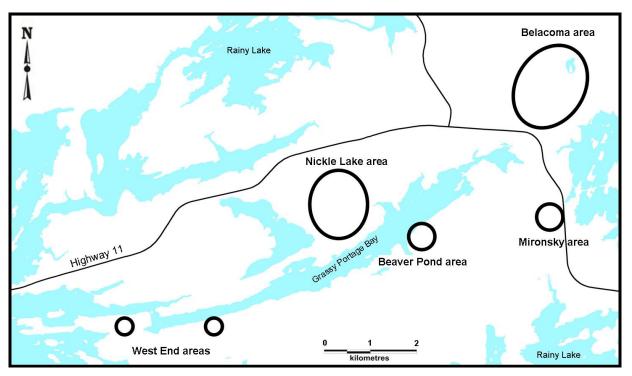


Figure 4. Parts of the North Rock property targeted with diamond drilling in 2007, MetalCORP Limited. (Locations from M. Dumoulin, MetalCORP Limited, personal communication, 2008.)

Numax Resources Inc. (49) continued work on the Westco property, approximately 48 km east of Fort Frances. The property is predominantly underlain by layered mafic intrusive rocks of the Bad Vermilion Lake intrusion. Felsic intrusive and mafic metavolcanic rocks lie north of this intrusion. In the past 2 years, exploration efforts identified lode gold, volcanogenic massive sulphide and mafic intrusive-hosted, copper-nickel-platinum group element mineralization on the property. Exploration efforts in 2006 identified massive, stringer and disseminated sulphides, hosted in coarse-grained, mafic intrusive rocks (R. Bernatchez, Numax Resources Inc., personal communication, January 28, 2007). In 2007, prospecting, reconnaissance mapping, detailed bedrock mapping, ground electromagnetic and magnetometer surveys were completed over parts of the land holdings. Mechanical removal of overburden was completed at 26 sites on the property. These exposures were pressure-washed, channel-cut, mapped and sampled. Nine areas, centered on the sulphide-bearing zone underlain by the Bad Vermilion Lake intrusion, were targeted in this 2007 program. Six areas of potential lode gold mineralization and 9 areas of potential volcanogenic massive sulphide mineralization were also tested during these exploration efforts (R. Bernatchez, Numax Resources Inc., personal communication, January 28, 2007).

Opawica Exploration Inc. (51) continued work on the Atikwa Lake copper-gold property, approximately 70 km southeast of Kenora. Three diamond-drill holes, totalling approximately 1000 m, tested ground electromagnetic

responses. These responses are adjacent to the Maybrun Open Pit zone (Opawica Exploration Inc., press release, November 28, 2007). In 2006, a compilation of historical data identified numerous mineralized zones on the property. In 2007, a grid was established to cover these mineralized areas, centered on the Maybrun Open Pit zone. A Phase I induced polarization survey, completed in 2007, covered the southern half of the grid and identified 16 anomalies. A diamond-drilling program is planned to test several of the high-priority anomalies. A Phase II induced polarization survey, which will cover the northern half of the grid, is also planned for 2008 (Opawica Exploration Inc., press release, December 5, 2007).

Molybdenum

MPH Ventures Corp. (45) initiated an exploration program on the Pidgeon molybdenum property, approximately 39 km northeast of Dryden. A compilation of historical data was completed on the Pidgeon molybdenum deposit. An inferred mineral resource, based on historical data, is 8.5 million tonnes grading 0.099% Mo. Seven diamond-drill holes, totalling 1201 m, tested the molybdenum-mineralized zones. Mineralization is manifested as coarse-grained molybdenite flakes and grains associated with quartz veins, aplite dikes and quartz-feldspar pegmatite. All of these intrusive rocks are situated in the outer margin of the Lateral Lake felsic stock (MPH Ventures Corp., press release, December 27, 2007).

Uranium

Delta Uranium Inc. (20) initiated an exploration program on the Kenora Uranium Project. The western part of the property is located approximately 30 km east of Kenora and extends eastward to Vermilion Bay. The project area is covered by 1855 claim units and is underlain by 32 known uranium occurrences (Delta Uranium Inc., press release, November 20, 2007). In 2006, an airborne radiometric survey was completed over the property. In 2007, Delta Uranium Inc. initiated ground radiometric and lithogeochemical sampling programs. These surveys were completed using 30 grids that were established to cover some of the airborne radiometric and most of the known uranium occurrences. Based on the results of these surveys, mechanical removal of overburden, channel-cutting and sampling commenced on the Bee Lake and Cobble Lake uranium occurrences (Delta Uranium Inc., press release, November 29, 2007). Radioactive uranium-mineralized zones are associated with pegmatite. Samples collected from the pegmatite returned uranium values ranging up to $0.30\% U_3O_8$ in channel samples and $0.26\% U_3O_8$ in a grab sample from the Bee Lake occurrence (ibid). Additional work is planned for the project area in 2008 (ibid, December 18, 2007).

Granite Dimension Stone

Nelson Granite Ltd. continued to examine the quality of stone at the Silver Lake site, approximately 23 km northeast of Kenora. In 2007, two 1000 tonne bulk samples were excavated from this site. These blocks were slabcut to test the quality of stone. Mechanical removal of overburden and trenching were completed on parts of the property. Nelson Granite Ltd. also applied for a permit to remove additional bulk samples from this site (G. Zebruck, Nelson Granite Ltd., personal communication, January 28, 2008).

	Abbrev	viations
AEM	Airborne electromagnetic survey	GMI Ground magnetic response interpretation
	Airborne magnetic survey	Lc Linecutting
AR	Airborne radiometric survey	IP Induced polarization survey
CC	Channel cutting	IS Public information sessions
Comp	Compilation	Met Metallurgical studies
DDG	Downhole geophysical surveys	MRE Mineral Resource Estimate
DDH	Diamond drill hole(s)	MS Marketing studies
DDR	Diamond drill hole(s) re-logging	ODH Overburden drill hole(s)
DW	De-watering underground workings	Pr Prospecting
GC	Geochemical survey	Rad Ground radiometric survey
EBS	Environmental baseline studies	Samp Sampling (other than bulk)
GEM	Ground electromagnetic survey	Str Stripping
GL	Geological survey	Tr Trenching
GM	Ground magnetic survey	VLFEM Very low frequency electromagnetic survey

Table 2.	Exploration	activity in th	ie Kenora	District in 2007.	Locations shown on	Figure 5.

No	Company/Individual (Occurrence Name or Property)	Township/Area (Commodity)	Exploration Activity
1	Amador Gold Corp. (Mennin Lake Property)	Kawashegamuk Lake area (Mo)	Str, GL, GC, Samp
2	Avalon Ventures Ltd. (Separation Rapids Property)	Patterson Lake area (Li, Cs, Rb, Ta)	MS
3	Bayfield Ventures Corp. (Blocks B, C)	Richardson and Tait townships (Au)	ODH 35-1080m, GM, GEM, Lc, Comp, Samp
4	Bayfield Ventures Corp. & Range Metals Inc. (Block A)	Richardson Township (Au)	DDH 6-1299m, ODH 5-170m, Lc GM, GEM, Comp, Samp
5	Bending Lake Iron Corporation (Bending Lake Property)	Bending Lake area (Fe)	Comp
6	Benton Resources Corp. (Armit Lake Property)	Armit Lake area (Ni, Cu, PGE)	Pr, Str, Samp
7	Benton Resources Corp. (Flying Loon Lake Property)	Flying Loon Lake area (Au, Ni, Cu)	DDH 3-1000m, Samp
8	Benton Resources Corp. (Rex Lake Ni-Cu Property)	Rex Lake area (Ni, Cu, PGE)	Le, Samp
9	Bjorkman, K. (Donner Property)	Jutten Township (Au)	Pr, Samp
10	Bjorkman, K. (Kawash Lake Property)	Armit Lake area (Au)	Pr, Samp
11	Canadian Arrow Mines Ltd. (Glatz Property)	Turtlepond Lake area (Ni, Cu)	Pr, Samp
12	Canadian Arrow Mines Ltd. (Kenbridge Nickel Mine Project)	Atikwa Lake area (Ni, Cu, Co, PGE)	DDH 160-27882m, AM, AEM, DDR, Comp, MRE, EBS, GL, Str, CC, Pr, Samp
13	Champion Bear Resources Ltd. (Alcona Property)	Zarn Lake area (Au)	Comp, Lc, Samp
14	Champion Bear Resources Ltd. (Eagle Rock Property)	Eagle Rock Lake area (Cu, Pd, Pt)	DDH 3-927m, DDR, Samp, GM, IP, GL
15	Champion Bear Resources Ltd. (Plomp Farm Property)	Aubrey Township (Au, Ag)	DDH, GL, GM, IP, Samp
16	City of Dryden (Van Horne Gold Properties)	Contact Bay area (Au)	Comp, GL

No	Company/Individual (Occurrence Name or Property)	Township/Area (Commodity)	Exploration Activity
17	Conquest Resources Ltd. (King Bay Gold Property)	Fourbay Lake area (Au)	DDH 11-1053m, GM, Samp
18	Cooke, A. (High Lake Property)	Ewart Township (Au)	Pr, Samp
19	Cousineau, L., Cousineau, R. & Desjardin, K. (Bliss Lake Au Property)	Bliss Lake area (Au)	Pr, Samp
20	Delta Uranium Inc. (Kenora Uranium Project)	McNicol to Langton townships (U)	AR, Rad, CC, Pr, Lc, Samp
21	Dobransky, D. (Agimak Lake Property)	Balmoral Lake area (Au, Cu, Zn)	Pr, Samp
22	Dobransky, D. (Ford Lake Property)	Osaquan Township (Mo)	Str, CC, Pr, Samp
23	Dobransky, D. (Phyllis Lake Property)	Grummett Township (Au, Cu, Mo, Zn, PGE)	Pr, Str, Tr, CC, Samp
24	Emerald Field Resources Corp. (King's Bay Property)	Beckington Lake area (Au)	Pr, Lc, GEM, GM, Samp
25	Emerald Field Resources Corp. (St. Anthony Property)	area of former Squaw Lake [◆] (Au)	Pr, Lc, Samp
26	Fairservice, R. (Docker Twp. Property)	Docker Township (Au, Cu, Zn)	Pr, Samp
27	Fenwick, K. & Lecuik, G. (Gundy Lake Property)	Forgie Township (Mo)	Pr, Samp
28	Fortune River Resources Corp. (Drayton Property)	Drayton Township (Au)	DDH 10-2400m, Samp
29	Freewest Resources Canada Inc. (Thor Property)	Paterson Lake area (U)	GL, Pr, Samp
30	Gamah International Ltd. (Gordon Lake Property)	Werner Lake area (Cu, Ni, Pd, Pt)	Comp, Samp
31	Ginguro Exploration Inc. (Minnitaki Gold Project)	Parnes Lake area (Au)	GL, GEM, GM, Str, CC, Tr, Lc, Samp
32	Glatz, A. (Melgund Property)	Melgund Township (Au)	Str, Pr, Samp
33	Glatz, A. & Riives, J. (Avery Property)	Avery Township (Au)	Pr, Samp
34	Glatz, A. & Riives, J. (Vermilion Lake Property)	Vermilion Township (Au)	Pr, Samp, GC
35	Gossan Resources Ltd. (Separation Rapids Project)	Paterson Lake area (Li, Cs, Rb, Ta)	GC, Pr, Samp
36	Halo Resources Ltd. (Duport Gold Property)	Snowshoe Bay area (Au)	Pr, Samp
37	Houston Lake Mining Inc. (West Cedartree Gold Project)	Dogpaw Lake area (Au)	DDH 21-3037m, DDR, Str, CC, Lc IP, IS, DDG, Comp, Pr, Samp
38	International Millennium Mining Corp. (High Lake Property)	Ewart Township (Au)	Lc

[•] the name "Squaw Lake" (north of Vista Lake and east of Sturgeon Lake, NTS 52 J/02) was officially rescinded by the Ontario Geographic Names Board in September 2002. A new name has yet to be assigned.

No	Company/Individual (Occurrence Name or Property)	Township/Area (Commodity)	Exploration Activity
39	King's Bay Gold Corporation (Helenna Lake Property)	Dash Lake area (Au)	Lc, VLFEM, GM, IP
40	King's Bay Gold Corporation (Sakoose Property)	Melgund Township (Au)	Comp, Lc, Samp
41	Laramide Resources Ltd. (Goliath Property)	Zealand Township (Au)	Comp, Samp
42	McMillan, S. (Thunder Lake West Property)	Zealand Township (Au)	Pr, Samp
43	MetalCORP Limited (North Rock Property)	Halkirk Township (Cu, Ni, PGE)	DDH 34-10921m, Comp, Samp
44	Metalore Resources Ltd. (East Cedartree Lake Property)	Dogpaw Lake area (Au)	DDH 5-811m, GL, Comp, Samp
45	MPH Ventures Corp. (Pidgeon Property)	Echo Township (Mo, Cu)	DDH 7-1210m, Comp, Lc, GM, Samp
46	Nelson Granite Ltd. (Silver Lake Property)	Jackman Township (Stone)	Bulk Sample 2-1000 tonnes, Str, Tr
47	Norris, M. (Rowan Lake Property)	Rowan Lake area (Au, Cu)	Str, Pr, Samp
48	Nuinsco Resources Limited (Cameron Lake Property)	Rowan Lake area (Au)	IS
49	Numax Resources Inc. (Westco Property)	Bliss Lake area (Ni, Cu, Pd, Pd, Au)	Str, Tr, GM, GEM, GL, CC, Pr, Le Samp
50	Nordstrom, F. (Ford Lake Property)	Osaquan Township (Mo)	Pr, Samp
51	Opawica Explorations Inc. (Atikwa Lake Property)	Atikwa Lake area (Cu, Au)	DDH 4-1000m, IP, GM, Comp, Samp
52	Q-Gold Resources Ltd. (Iron Ridge Property)	Bliss Lake area (Ti, Fe, Cu, Ni)	GL, Tr, Samp
53	Q-Gold Resources Ltd. (Mine Centre Gold Property)	Bad Vermilion Lake area (Au)	DDH 21-5910m, GL, Samp, DW, EBS
54	Q-Gold Resources Ltd. (Rainy River Property)	Morley, Pattullo and Tait townships (Au)	Comp, Pr, Samp
55	Rainy River Resources Ltd. (Off Lake Property)	Senn Township (Au)	DDH 6-1332.5m, GL, Str, Tr, CC, Pr, Samp
56	Rainy River Resources Ltd. (Rainy River Property)	Richardson Township (Au, Cu, Zn, PGE)	DDH 79-41376m, AM, Met, ODH 34-1282, Samp
57	Redditt Stones Inc. (Havik Lake Property)	Kilgour Lake area (Stone)	Str, GL, Samp
58	Roisin, F. (Lockhart Lake Property)	Farrington Lake area (Cu, Pb, Zn)	Pr, Samp
59	Seafield Resources Ltd. (Elora Gold Project)	Boyer Lake area (Au)	Comp
60	Sedex Mining Corp. (Mine Centre Property)	Bad Vermilion Lake area (Cu, Zn, Au)	Comp, Samp
61	Sedex Mining Corp. (Nabish Lake Property)	Contact Bay area (Cu, Ni)	Comp, Samp

No	Company/Individual (Occurrence Name or Property)	Township/Area (Commodity)	Exploration Activity
62	Sedex Mining Corp. (Windy Bay Property)	Bliss Lake area and Farrington Township (Cu, Zn, Au)	Comp, Samp
63	Shotgun Exploration (Straw Lake Beach Property)	Bluffpoint Lake area (Au)	Pr, Samp
64	Skyharbour Resources Ltd. (Blocks D, D1, E)	Pattullo, Sifton, Tait townships (Au)	DDH 8-2056m, ODH 35-1300m, Lc, GM, GEM, Comp, Samp
65	Tamaka Holdings Inc. (Goldlund Project)	Echo Township (Au)	DDH 43-9300m, Comp, Samp
66	Takara Resources Inc. (Basket Lake Project)	Abamategwi Lake and Hook Lake areas (U)	Comp, Pr, Samp
67	Teck Cominco Limited (Thundercloud Lake Property)	Boyer Lake area (Au)	DDH 5-1150m, Lc, GEM, GM, Str, Samp
68	Temex Resources Corp. (Huston Lake Property)	Reynar Lake and Umfreville Lake areas (U)	Pr, Samp
69	Tri-Gold Resources Corp. (Stake Lake Property)	Press Lake area (Au, Cu)	DDH 6-1398m, Lc, GM, IP, Str, Tr, CC, Samp
70	Unitronix Corporation (Sturgeon Lake Property)	Sixmile Lake area (Au, Cu, Zn)	Comp, Pr, GL, Samp
71	Western Warrior Resources Inc. (Bluffpoint Property)	Bluffpoint Lake area (Au)	DDH 10-1996m, Samp
72	Western Warrior Resources Inc.	Dash Lake area	AM, DDR, Samp
	(Dash Lake Property)	(Au)	
73	Western Warrior Resources Inc.	Rowan Lake area	DDH 5-779m, AM, Str, GL, DDR,
	(Wampum Property)	(Au)	Pr, CC, Samp

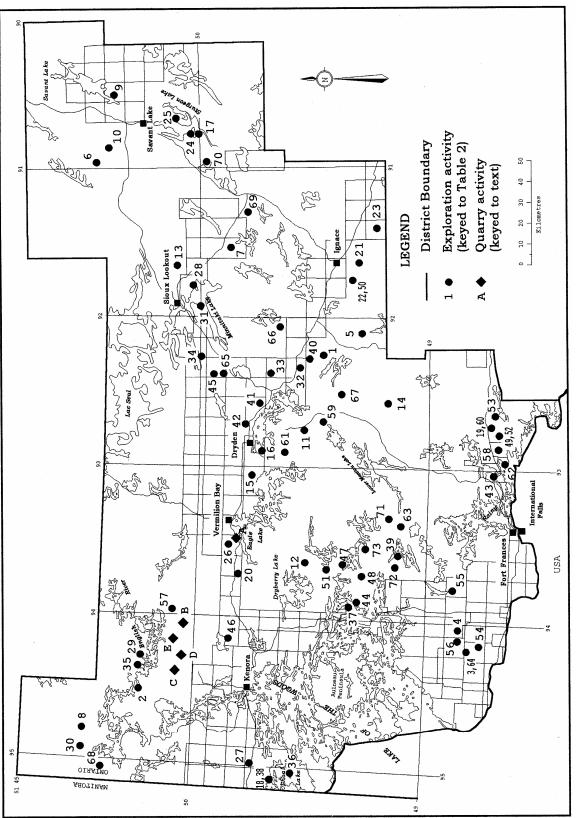
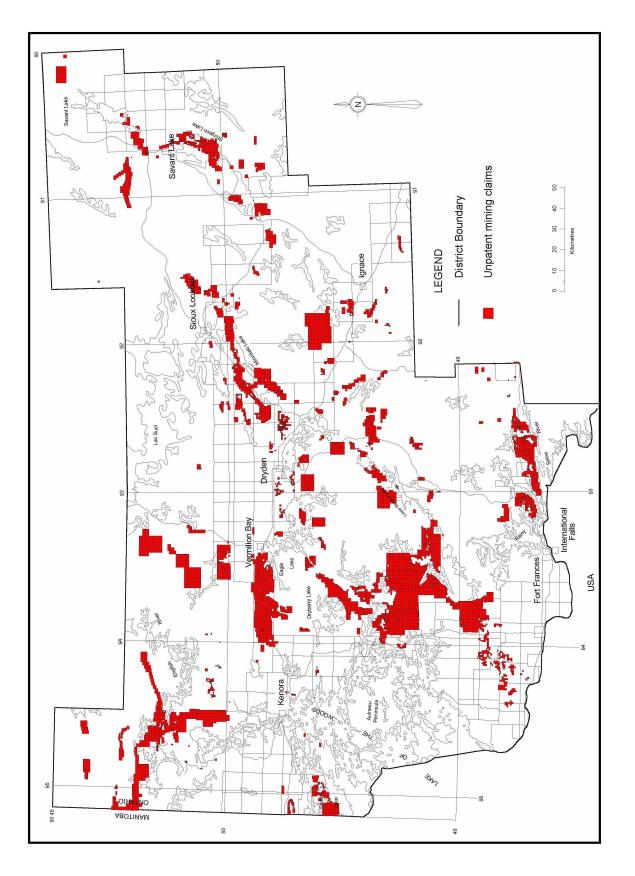


Figure 5. Exploration and quarry activity in the Kenora District in 2007. Locations listed in Table 2 and in text.



KENORA DISTRICT STAFF AND ACTIVITIES

The Kenora office was staffed by C. Ravnaas *P.Geo.*, District Geologist; A. Raoul, District Support Geologist (January – February); Joanne Bongfeldt, District Support Geologist (contracted April – present), and T. Dorge, summer assistant (Summer Experience Program).

Kenora staff attended the following conferences and symposia:

- a poster and oral presentation highlighting activities in the district were presented at the Northwestern Ontario Mines and Minerals Symposium held in Thunder Bay in April; and
- the Manitoba Mining and Minerals Convention held in Winnipeg, Manitoba in November.

Kenora office staff also gave a talk on mineral exploration activities in the Rainy River District to the Rainy River Annual Municipal Association meeting. Kenora staff also delivered presentations on quarry production, mineral exploration and the aboriginal engagement to the Kenora Economic Development Team. The Kenora office facilitated a meeting between exploration companies and Sioux Narrows – Nestor Falls municipality executives.

Kenora staff maintained, in conjunction with the Northern Development Offices, field offices in the towns of Dryden, Fort Frances, Ignace and Sioux Lookout. These offices operate as seasonal satellite field offices during the May to October field season.

Kenora staff attended the Resident Geologist Program annual meeting and Marathon Mining Conference and participated in the Hemlo tour delivered by T. Muir. Kenora staff also attended Wellness Day, toured Red Lake Gold Mines gold processing facility and delivered a presentation to MNDM staff in Red Lake on significant exploration activity in the Kenora District. The Kenora office and Numax Resources Inc. facilitated a tour of the Westco Property exposures for Dr. Anthony Naldrett. Kenora staff completed the St. Johns Ambulance first aid course.

Kenora staff attended the following public information sessions on proposed advanced exploration programs:

• Nuinsco Resources Limited - Cameron Lake deposit

In 2007, 41 property visits were conducted by Kenora District Office staff (Table 3 and Figure 7).

Number	Client – Occurrence
1	Bayfield Ventures Corp. & Range Metal Inc Claim Block "A" Au occurrence
2	Bjorkman, K. – Cliff Lake Au occurrence
3	Bjorkman, K. – Donner Au-Cu-Zn occurrence
4	Bjorkman, K. – Sidor Au occurrence
5	Bjorkman, K. – Smarty Au occurrence
6	Canadian Arrow Mines Ltd. – Kenbridge Ni-Cu deposit
7	Champion Mine occurrence
8	Conquest Resources Ltd King Bay Au occurrence
9	Desserre, K Pattullo Twp. Au showing
10	Dobransky, D. – Agimak Lake Au-Cu occurrence
11	Dobransky, D. – Ford Lake Mo showing
12	Dobransky, D. – Phyllis Lake Central Cu-PGE occurrence
13	Dobransky, D. – Phyllis Lake East Mo occurrence
14	Fortune River Resources Corp Shaft Au occurrence
15	Glatz, A. – Melgund Porphyry Au occurrence

 Table 3. Property and field examinations conducted by the Kenora District Geologist in 2007. Locations are keyed to Figure 7.

Number	Client – Occurrence
16	Glatz, A. & Riives, J Avery Au occurrence
17	Glatz, A. & Riives, J Katisha Lake Au occurrence
18	Houston Lake Mining Inc Angel Hill Au prospect
19	Houston Lake Mining Inc. – Dubenski Au prospect
20	Houston Lake Mining Inc Dogpaw Lake Au prospect
21	Houston Lake Mining Inc McLennan Au occurrence
22	McMillan, S Thunder Lake west showing
23	MetalCORP Limited – North Rock Cu-Ni prospect
24	Metalore Resources Ltd East Cedartree Au occurrence
25	Numax Resources Inc Westco Cu-Ni-PGE occurrence
26	Numax Resources Inc. – Westco East exposures
27	Q-Gold Resources Ltd. – Foley North prospect
28	Rainy River Resources Ltd. – Black Lake Stock
29	Rainy River Resources Ltd Richard Township Au prospects & occurrences
30	Roisin, F. – Gagne Lake Au-Cu-Zn occurrence
31	Roisin, F. – Moran Bay Cu-Zn showing
32	Roisin, F Tait Twp. Au showing
33	Southeast Bay exposures
34	Sioux Narrows felsic intrusions
35	Swede Au occurrence
36	Tamaka Holdings Inc. – Goldlund Au prospect
37	Teck Cominco Ltd Thundercloud Lake Au occurrence
38	Tri-Gold Resources Ltd Stake Lake Au-Cu occurrence
39	Western Warrior Resources Inc Bluffpoint Lake Au occurrence
40	Western Warrior Resources Inc Hilltop Au showing
41	Western Warrior Resources Inc. – Wampum Au showing

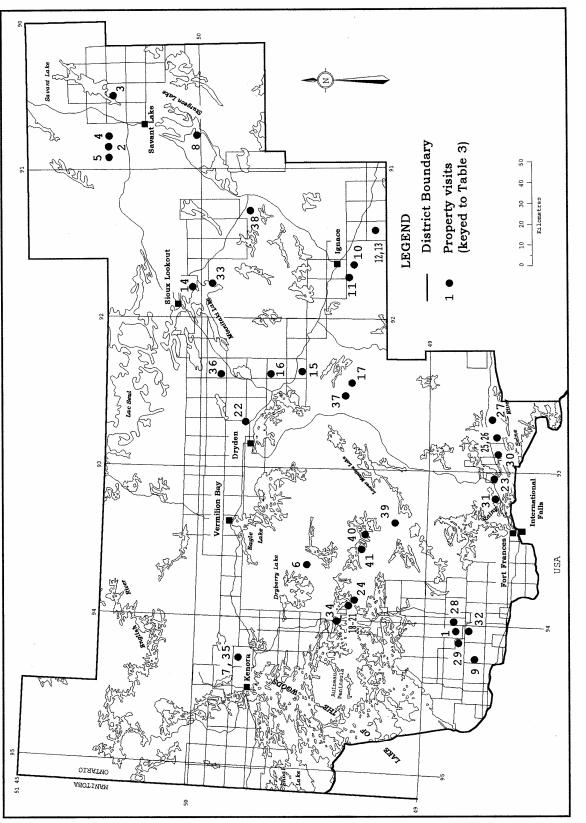


Figure 7. Property visits and field examinations conducted in the Kenora District in 2007.

PROPERTY EXAMINATIONS

All Universal Transverse Mercator (UTM) co-ordinates are in North American Datum 1983 (NAD83), Zone 15. Analytical values presented in tables and text, unless indicated otherwise, were processed through the Geoscience Laboratories (Geo Labs), Ontario Geological Survey, in Sudbury.

Avery Gold Occurrence

Dryden prospectors Alex Glatz and Joe Riives have been examining the gold potential of the Avery property, approximately 9 km northeast of Dinorwic. Historical and recent exploration work has concentrated on evaluating the Avery occurrence (UTM 543640E, 5505380N).

The area is underlain by dominantly mafic, massive pillowed metavolcanic rocks of the Eagle-Wabigoon-Manitou lakes greenstone belt, which have been intruded by mafic and felsic intrusions. Parker (1989) and Berger (1989) visited the property and provided detailed descriptions of the geological setting, mineralizing events, historical work and sample results for the Avery Main occurrence. Parker (1989) described the geological environment of the Avery Main exposures:

The shear zone hosts a sheared and fractured northeast-trending quartz-feldspar porphyry dike and two northeasttrending, carbonatized breccia zones. The breccia zones consist of very fine-grained, angular fragments of host rock embedded in a pyritic (1-2%) quartz-carbonate matrix. ... Narrow fracture-hosted quartz carbonate veinlets extend from the breccia zones into the sheared metavolcanics [sic], forming a stockwork of intersecting calcite and ironcarbonate-rich veinlets.

Berger (1989) presented a description of the alteration associated with the breccia zone:

An area approximately 40m by 15m has been stripped, exposing a basalt-hosted silica-carbonate alteration zone. The most intense alteration as exposed in a single outcrop is characterized by a breccia containing carbonate and silica fragments in an amorphous silica-carbonate matrix.

In 1985, A. Glatz extracted an 80 ton sample from the Avery Main exposure. This program targeted the altered breccia zone. Grab samples from this extracted material returned values up to 0.2 ounce gold per ton (Parker 1989). In 2006, the prospectors mechanically removed the overburden from several zones on the property. All exposures were pressure-washed, channel-cut and sampled. This program largely attempted to increase exposure around the Avery Main bulk sample site.

An area approximately 290 m south of the bulk sample site also had overburden mechanically removed. Intensely carbonatized mafic metavolcanic rocks in this area are cut by narrow quartz-carbonate veins. The rocks here are significantly more carbonatized than those at the Avery Main exposures. However, in contrast to the bulk sample site, these southern exposures do not display brecciation.

Results from grab samples collected by Parker (1989) and Berger (1989) showed that the unaltered metavolcanic rocks, quartz-feldspar-porphyry and intensely carbonatized metavolcanic rocks do not contain gold. These authors suggested gold is located in the siliceous rocks associated with the breccia zones and in the quartz veins on the property.

The purpose of the 2007 site visit conducted by the District Geologist was to collect rock samples that would be representative of the geological setting and mineralizing events on the property. These samples were selected to confirm the hypothesis presented by Parker (1992) and Berger (1989) about potential gold-bearing rocks. At least three stages of silica introduction appear to be represented on the property, based on examination of exposures and slab-cut grab samples. The stages of carbonatization were also examined. Table 4 presents these events for two areas on the property. The suggested alteration and mineralizing events for the Avery Main zone are illustrated in chronological order.

Rock Type	Silica Introduction (Stage)	Sulphides	Carbonate	Au (ppb)
Main Zone				
Unaltered mafic metavolcanic rock	nil	1% fine-grained cubic pyrite	1% disseminated calcite	39
Breccia zone	(1) Fragments are silicified; quartz occurs between fragments, as blebs and within fractures in fragments	3 to 5% fine-grained pyrite in quartz-bearing material	5% calcite as blebs or disseminated in quartz	6514
Breccia zone	(2) White quartz veins cut pre-existing silicification; quartz veins in randomly oriented fractures	1% fine-grained pyrite	nil	1137
Unaltered mafic metavolcanic rock	(2) These white quartz veins extend from the breccia zone into surrounding mafic metavolcanic rocks	1% fine-grained pyrite	nil	857
Breccia zone	nil	nil	15 to 40% calcite and iron carbonate in fractures that cut breccia and metavolcanic rocks	
Southern Zone				
Altered metavolcanic rocks	nil	1% fine-grained disseminated pyrite	15 to 30% calcite and iron carbonate in mafic metavolcanic rocks	22
Altered metavolcanic rocks	(0)		nil	34

Table 4. Sequence of the alteration and mineralizing events and assay results from samples collected at the Avery property.

All samples collected from the property contained sulphides and carbonate. Sulphides occur in rocks that are associated with anomalous gold values but are also in rocks that contain very low gold values. The presence of sulphides, as presented in Table 4, is not an indicator for gold-bearing rocks. Parts of the exposures located at the Avery Main zone contain high concentrations of carbonate. This intense alteration is related to carbonate occurring in fractures that cut pre-existing, gold-bearing rocks. These fractures affected both brecciated and unaltered mafic metavolcanic rocks. It is unknown if the carbonatization associated with the altered metavolcanic rocks in the southern exposures is related to any of the events suggested at the Avery Main zone. Based on the low gold values of samples collected from these intensely carbonatized exposures, carbonatization should not be used as a guide for identifying auriferous rocks on the property.

Based on the results presented in Table 4, gold is most closely associated with some of the silicification and quartz veining events. The silicification and quartz veins located in the breccia zone returned elevated to highly anomalous gold values. Since these quartz veins cut pre-existing, gold-bearing, silicified rocks, there are at least two gold-bearing events. Samples collected both from unaltered and intensely carbonatized mafic metavolcanic rocks did not return anomalous gold values. Silicified and/or brecciated rocks, which may also host quartz veins, should definitely be sampled for gold.

RECOMMENDATIONS FOR EXPLORATION

Highly Anomalous Lake Sediment Sample Sites in Kenora District

In 2000, the Ontario Geological Survey (OGS) initiated lake sediment sampling programs in the Kenora District. The eastern and northern parts of the district were covered by 9 sampling programs (Table 5; Figure 8). These lake sediment sampling programs covered parts of the English River, Winnipeg River and Western Wabigoon subprovinces (OGS 2003).

Open File Report #	Year	Label on Figure 8	Survey Area	Reference
OFR 6069	2001	Sioux 6069	Sioux Lookout – Bamaji Lake area	Dyer (2001)
OFR 6087	2002	Sturgeon 6087	Sturgeon Lake – Lake St. Joseph area	Russell and Jackson (2002)
OFR 6092	2002	Perrault 6092	Perrault Falls area	Dyer (2002)
OFR 6104	2005	Eagle 6104	Eagle Lake area	Felix (2005)
OFR 6106	2003	Ignace 6106	Ignace area	Jackson (2003)
OFR 6118	2003	Savant 6118	Savant Lake area	Russell (2003)
OFR 6125	2004	Wabigoon 6125	Sturgeon Lake – Wabigoon Lake area	Russell (2004)
OFR 6188	2006	Kakagi 6188	Kakagi Lake area	Dyer et al. (2006)
OFR 6194	2006	Manitou 6194	Upper Manitou Lake area	Felix (2006)

Table 5. Summary of OGS lake sediment sampling programs completed in the Kenora District.

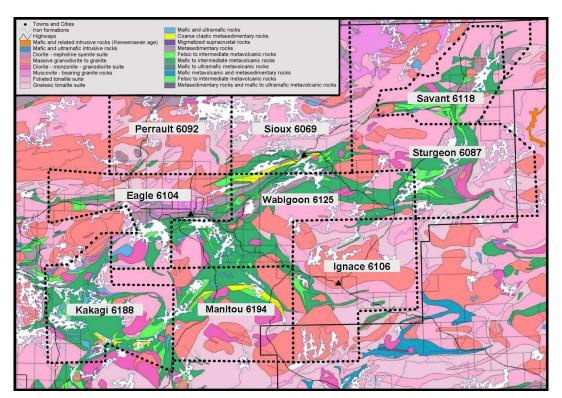


Figure 8. Areas covered by OGS lake sediment sampling programs, 2000-2006, Kenora District.

In a study initiated and carried out by the Kenora District staff, results from the 9 OGS lake sediment sampling reports were extracted and compiled into a single database to allow manipulation using Geographic Information

System (GIS) technology. The purpose of the Kenora RGP study was to recommend areas for exploration in the Kenora District based on the highly anomalous values of certain indicator and pathfinder elements in the lake sediment samples. For most elements, concentrations exceeding the 98th percentile are classified as highly anomalous (Felix 2006).

The assay results for at least 57 elements are presented in each of the OGS lake sediment sampling reports. The analytical results for all 14 133 sites collected by these surveys were combined into one data set. Erroneous highly anomalous element values can occur if the 98th percentile is calculated from the combined data set. This error can occur because the assay results represent material collected from sites that are underlain by a variety of rock types (R. Dyer, Ontario Geological Survey, personal communication, April, 2007). Dyer (ibid) recommended that the sample sites for the study area be grouped based on dominant rock type. With that in mind, Kenora RGP staff subdivided the eastern and northern parts of the Kenora District into 3 dominant rock type areas (Figure 9). Two of these areas cover part of the Western Wabigoon and English River subprovinces (OGS 2003), and are underlain predominantly by felsic to mafic metavolcanic rocks, and metamorphosed and migmatized clastic metasedimentary rocks, respectively. The third rock type area is underlain predominantly by felsic intrusive rocks. The number of sample sites from the OGS studies that fall into each rock type area is presented in Table 6. Analytical results from these sample sites were used to tabulate the data in Tables 7 and 9, and Figures 10 to 14.

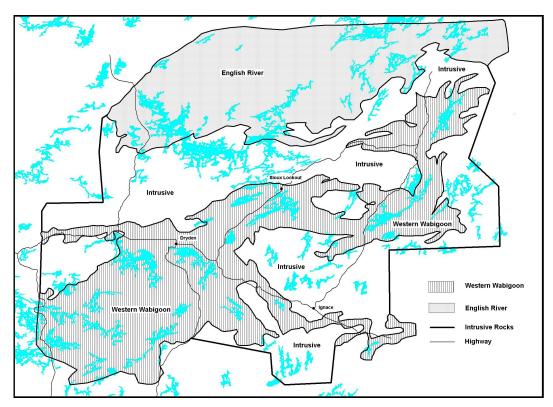


Figure 9. Location and extent of the 3 dominant rock type areas within the eastern and northern parts of the Kenora District.

Rock Type Areas	Number of Sample Sites
English River	3052
Western Wabigoon	5351
Intrusive Rocks	5730
Combined	14 133

Table 6. Rock type areas and number of OGS lake sediment samples grouped in each area.

Table 7 presents the highly anomalous (98th percentile) values for each of the 57 elements calculated from the combined data set and subdivided by rock type area. Gold values in Tables 7 and 9 are presented in parts per billion. The other trace elements in the tables are presented in parts per million. Selected trace elements such as copper, molybdenum and uranium illustrate distinct variances when comparing the analytical values of the combined data set with values presented for each rock type area. The difference in values is possibly related to the different rock types that underlie the lake sediment sample sites.

Western Wabigoon 0.31 26585.00 15.38 4.84 5 236.28 1.09 92.2 English River 0.36 28181.12 13.00 5.73 2 200.28 1.40 84.4 Combined 0.31 27995.80 11.00 6.00 4 218.00 1.22 83. Ca Cd Ce Co Cr Cs Cu Intrusive 19571.00 0.86 180.00 20.93 66.00 2.46 47.28 3.5 English River 28504.40 0.93 97.64 20.69 57.00 2.46 47.28 3.5 Combined 19571.30 0.90 180.00 20.33 60.00 2.57 89.27 5.5 Er Eu Fe Hr Hg Ho K 111. Untrusive 2.72 2.12 5429.00 0.27 0.20 0.99 2927.16 1111. Mestern Wabigoon 2.60 0.33 <t< th=""><th>Rock Type Areas</th><th>Ag</th><th>Al</th><th>As</th><th>Au</th><th>Au_INAA*</th><th>Ba</th><th>Be</th><th>Br</th></t<>	Rock Type Areas	Ag	Al	As	Au	Au_INAA*	Ba	Be	Br
English River 0.36 28181.12 13.00 5.73 2 200.28 1.40 84. Combined 0.31 27995.80 11.00 6.00 4 218.00 1.22 83. Ca Cd Ce Co Cr Cs Cu I Intrusive 19571.00 0.86 180.00 20.93 60.00 2.57 51.01 5. Western Wabigoon 19197.76 0.92 160.00 22.49 66.00 2.96 113.30 5. Combined 19571.30 0.90 180.00 20.93 60.00 2.57 89.27 5. Intrusive 2.72 2.12 54290.00 0.27 0.20 0.99 2927.00 111. Western Wabigoon 2.60 2.18 53573.62 0.30 nil 0.92 2927.10 111. Western Wabigoon 2.60 0.33 1328.00 0.37 0.20 0.99 2927.10 111. <th< td=""><td>Intrusive</td><td>0.31</td><td>27996.00</td><td>11.00</td><td>6.00</td><td>4</td><td>218.00</td><td>1.22</td><td>84.00</td></th<>	Intrusive	0.31	27996.00	11.00	6.00	4	218.00	1.22	84.00
Combined 0.31 27995.80 11.00 6.00 4 218.00 1.22 83. Intrusive 19571.00 0.86 180.00 20.93 60.00 2.57 51.01 5. Western Wabigoon 19197.76 0.92 160.00 22.49 66.00 2.96 113.30 5. English River 28504.40 0.93 97.64 20.69 57.00 2.46 47.28 3. Combined 19571.30 0.90 180.00 20.93 60.00 2.57 89.27 5. Intrusive 2.72 2.12 54290.00 0.27 0.20 0.99 2927.00 111. Western Wabigoon 2.60 2.18 5357.362 0.30 nil 0.60 2867.20 466. Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 111. Mestern Wabigoon 3.00 0.33 11852.72 1678.18 8.04 519.36 2.61 </td <td>Western Wabigoon</td> <td>0.31</td> <td>26585.00</td> <td>15.38</td> <td>4.84</td> <td>5</td> <td>236.28</td> <td>1.09</td> <td>92.00</td>	Western Wabigoon	0.31	26585.00	15.38	4.84	5	236.28	1.09	92.00
Ca Cd Ce Co Cr Cs Cu Intrusive Intrusive 19571.00 0.86 180.00 20.93 60.00 2.57 51.01 5. Western Wabigoon 19197.76 0.92 160.00 22.49 66.00 2.96 113.30 5. English River 28504.40 0.93 97.64 20.69 57.00 2.46 47.28 3. Combined 19571.30 0.90 180.00 20.93 60.00 2.57 89.27 5. Er Eu Fe Hf Hg Ho K 111. Intrusive 2.72 2.12 54290.00 0.27 0.20 0.99 2927.00 111. Western Wabigoon 2.60 2.18 5357.362 0.30 nil 0.92 3149.08 92 English River 1.54 1.24 3764.68 0.24 nil 0.60 2867.20 46.0 Combined 29.00	English River	0.36	28181.12	13.00	5.73	2	200.28	1.40	84.00
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Combined	0.31	27995.80	11.00	6.00	4	218.00	1.22	83.67
Western Wabigoon 19197.76 0.92 160.00 22.49 66.00 2.96 113.30 5. English River 28504.40 0.93 97.64 20.69 57.00 2.46 47.28 3. Combined 19571.30 0.90 180.00 20.93 60.00 2.57 89.27 5. Er Eu Fe Hf Hg Ho K 111 Mestern Wabigoon 2.60 2.18 53573.62 0.30 nil 0.92 3149.08 92. English River 1.54 1.24 37644.68 0.24 nil 0.60 2867.20 46. Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 111. Li Lu Mg Mn Mo Na Nb M Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90. Western Wabigoon 30.00		Ca	Cd	Ce	Со	Cr	Cs	Cu	Dy
English River 28504.40 0.93 97.64 20.69 57.00 2.46 47.28 3. Combined 19571.30 0.90 180.00 20.93 60.00 2.57 89.27 5. Er Eu Fe Hf Hg Ho K M Intrusive 2.72 2.12 54290.00 0.27 0.20 0.99 2927.00 111. Western Wabigoon 2.60 2.18 53573.62 0.30 nil 0.92 3149.08 92. English River 1.54 1.24 37644.68 0.24 nil 0.60 2867.20 46.6 Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 111. Li Lu Mg Mn Mo Na Nb M Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90. Western Wabigoon 30.00 <	Intrusive	19571.00	0.86	180.00	20.93	60.00	2.57	51.01	5.49
Combined 19571.30 0.90 180.00 20.93 60.00 2.57 89.27 5.5 Er Eu Fe Hf Hg Ho K 111 Intrusive 2.72 2.12 54290.00 0.27 0.20 0.99 2927.00 111 Western Wabigoon 2.60 2.18 53573.62 0.30 nil 0.92 3149.08 92 English River 1.54 1.24 37644.68 0.24 nil 0.60 2867.20 466 Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 111 Li Lu Mg Mn Mo Na Nb 111 Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 900 Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79. English River 28.28	Western Wabigoon	19197.76	0.92	160.00	22.49	66.00	2.96	113.30	5.27
ErEuFeHfHgHoKHIntrusive 2.72 2.12 54290.00 0.27 0.20 0.99 2927.00 111 Western Wabigoon 2.60 2.18 53573.62 0.30 nil 0.92 3149.08 922 English River 1.54 1.24 37644.68 0.24 nil 0.60 2867.20 466 Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 1111 Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 900 Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 $79.$ English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 $41.$ Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 $900.$ Mestern Wabigoon 54.00 nil 11.41 10.00 11.39 1.20 36.77 $9789.$ Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 $11693.$ Western Wabigoon 54.00 nil 11.14 10.00 11.39 1.20 36.77 $9789.$ Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 $11693.$ Western Wabigoon 54.00 nil 11.14	English River	28504.40	0.93	97.64	20.69	57.00	2.46	47.28	3.10
Intrusive 2.72 2.12 54290.00 0.27 0.20 0.99 2927.00 111. Western Wabigoon 2.60 2.18 53573.62 0.30 nil 0.92 3149.08 922. English River 1.54 1.24 37644.68 0.24 nil 0.60 2867.20 466. Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 1111. Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90. Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79. English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Intrusive 49.00 2604 13.10 6.29 24.75 1.30 38.	Combined	19571.30	0.90	180.00	20.93	60.00	2.57	89.27	5.49
Western Wabigoon 2.60 2.18 53573.62 0.30 nil 0.92 3149.08 92. English River 1.54 1.24 37644.68 0.24 nil 0.60 2867.20 46. Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 111. Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90. Mestern Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79. English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Mestern Wabigoon 54.00 nil 14.89 4.00 21.59 1.41 41.91 14088. Intrusive 49.00 2604.12 13.10 6.29 24.75 1.30 <t< th=""><th></th><th>Er</th><th>Eu</th><th>Fe</th><th>Hf</th><th>Hg</th><th>Но</th><th>K</th><th>La</th></t<>		Er	Eu	Fe	Hf	Hg	Но	K	La
English River 1.54 1.24 37644.68 0.24 nil 0.60 2867.20 46. Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 111 Li Lu Mg Mn Mo Na Nb M Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90. Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79. English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Intrusive 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Mit P Pb Pd Pr Pt Rb 70. 73.0 38.59 11693. Western Wabigoon 54.00 nil 11.489 4.00 21.59	Intrusive	2.72	2.12	54290.00	0.27	0.20	0.99	2927.00	111.25
Combined 2.72 2.12 54289.90 0.27 0.20 0.99 2927.16 111. Li Lu Mg Mn Mo Na Nb M Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90. Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79. English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Mestern Wabigoon 54.00 nil 14.89 4.00 21.59 1.41 41.91 14088. English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789.	Western Wabigoon	2.60	2.18	53573.62	0.30	nil	0.92	3149.08	92.03
Li Lu Mg Mn Mo Na Nb Mo Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90.00 Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79.00 English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41.00 Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90.00 Ni P Pb Pd Pr Pt Rb 74.00 Intrusive 49.00 2604 13.10 6.29 24.75 1.30 38.59 11693.00 Western Wabigoon 54.00 nil 11.489 4.00 21.59 1.41 41.91 14088.00 English River 48.00 nil 13.310 6.29 24.75 1.30 38.59 11693.00 1.32 20.0	English River	1.54	1.24	37644.68	0.24	nil	0.60	2867.20	46.82
Intrusive 29.00 0.36 10515.00 1329.00 5.10 445.00 2.52 90. Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79. English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Ni P Pb Pd Pr Pt Rb Intrusive 49.00 2604 13.10 6.29 24.75 1.30 38.59 11693. Western Wabigoon 54.00 nil 14.89 4.00 21.59 1.41 41.91 14088. English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Mestern Wabigoon 0.35 10.00 13.38 0.74 44.00 1.30 1.32	Combined	2.72	2.12	54289.90	0.27	0.20	0.99	2927.16	111.25
Western Wabigoon 30.00 0.33 11852.72 1678.18 8.04 519.36 2.61 79. English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Ni P Pb Pd Pr Pt Rb 70. Intrusive 49.00 2604 13.10 6.29 24.75 1.30 38.59 11693. Western Wabigoon 54.00 nil 11.489 4.00 21.59 1.41 41.91 14088. English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Mestern Wabigoon 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20<		Li	Lu	Mg	Mn	Mo	Na	Nb	Nd
English River 28.28 0.30 9632.20 1013.28 4.03 309.12 2.59 41. Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Ni P Pb Pd Pr Pt Rb Intrusive 49.00 2604 13.10 6.29 24.75 1.30 38.59 11693. Western Wabigoon 54.00 nil 14.89 4.00 21.59 1.41 41.91 14088. English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Mutusive 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 0.75 1	Intrusive	29.00	0.36	10515.00	1329.00	5.10	445.00	2.52	90.42
Combined 29.00 0.36 10514.80 1328.80 6.06 444.70 2.52 90. Ni P Pb Pd Pr Pt Rb <t< td=""><td>Western Wabigoon</td><td>30.00</td><td>0.33</td><td>11852.72</td><td>1678.18</td><td>8.04</td><td>519.36</td><td>2.61</td><td>79.47</td></t<>	Western Wabigoon	30.00	0.33	11852.72	1678.18	8.04	519.36	2.61	79.47
Ni P Pb Pd Pr Pt Rb Intrusive 49.00 2604 13.10 6.29 24.75 1.30 38.59 11693. Western Wabigoon 54.00 nil 14.89 4.00 21.59 1.41 41.91 14088. English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Mestern Wabigoon 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 1.24 13. English River 0.53 10.00 6.84 0.70 43.00 1.20 0.75 11.4 Combined <	English River	28.28	0.30	9632.20	1013.28	4.03	309.12	2.59	41.71
Intrusive 49.00 2604 13.10 6.29 24.75 1.30 38.59 11693. Western Wabigoon 54.00 nil 14.89 4.00 21.59 1.41 41.91 14088. English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Key Sc Sm Sn Sr Ta Tb Tb Intrusive 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 0.75 11. English River 0.53 10.00 6.84 0.70 43.00 1.30 1.32 <td>Combined</td> <td>29.00</td> <td>0.36</td> <td>10514.80</td> <td>1328.80</td> <td>6.06</td> <td>444.70</td> <td>2.52</td> <td>90.42</td>	Combined	29.00	0.36	10514.80	1328.80	6.06	444.70	2.52	90.42
Western Wabigoon 54.00 nil 14.89 4.00 21.59 1.41 41.91 14088. English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Sb Sc Sm Sn Sr Ta Tb Tb Tb Intrusive 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 1.24 13. English River 0.53 10.00 6.84 0.70 43.00 1.20 0.75 11. Combined 0.35 10.00 13.38 0.74 43.78 1.30 1.32 20. Ti Ti Tm U V W Y Y		Ni	Р	Pb	Pd	Pr	Pt	Rb	S
English River 48.00 nil 11.14 10.00 11.39 1.20 36.77 9789. Combined 49.00 2604.12 13.10 6.29 24.75 1.30 38.59 11693. Sb Sc Sm Sn Sr Ta Tb Tb Tb Intrusive 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 1.24 13. English River 0.53 10.00 6.84 0.70 43.00 1.20 0.75 11. Combined 0.35 10.00 13.38 0.74 43.78 1.30 1.32 20.	Intrusive	49.00	2604	13.10	6.29	24.75	1.30	38.59	11693.00
Combined49.002604.1213.106.2924.751.3038.5911693.SbScSmSnSrTaTbIntrusive0.3510.0013.380.7444.001.301.3220.Western Wabigoon0.398.5512.430.7846.001.201.2413.English River0.5310.006.840.7043.001.200.7511.Combined0.3510.0013.380.7443.781.301.3220.	Western Wabigoon	54.00	nil	14.89	4.00	21.59	1.41	41.91	14088.24
Sb Sc Sm Sn Sr Ta Tb Ta Intrusive 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 1.24 13. English River 0.53 10.00 6.84 0.70 43.00 1.20 0.75 11. Combined 0.35 10.00 13.38 0.74 43.78 1.30 1.32 20.	English River	48.00	nil	11.14	10.00	11.39	1.20	36.77	9789.52
Intrusive 0.35 10.00 13.38 0.74 44.00 1.30 1.32 20. Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 1.24 13. English River 0.53 10.00 6.84 0.70 43.00 1.20 0.75 11. Combined 0.35 10.00 13.38 0.74 43.78 1.30 1.32 20. Ti Tl Tm U V W Y Y	Combined	49.00	2604.12	13.10	6.29	24.75	1.30	38.59	11693.20
Western Wabigoon 0.39 8.55 12.43 0.78 46.00 1.20 1.24 13. English River 0.53 10.00 6.84 0.70 43.00 1.20 0.75 11. Combined 0.35 10.00 13.38 0.74 43.78 1.30 1.32 20. Ti Tl Tm U V W Y Y		Sb	Sc	Sm	Sn	Sr	Та	Tb	Th
English River 0.53 10.00 6.84 0.70 43.00 1.20 0.75 11. Combined 0.35 10.00 13.38 0.74 43.78 1.30 1.32 20. Ti Tl Tm U V W Y Y	Intrusive	0.35	10.00	13.38	0.74	44.00	1.30	1.32	20.00
Combined 0.35 10.00 13.38 0.74 43.78 1.30 1.32 20. Ti Tl Tm U V W Y Y	Western Wabigoon	0.39	8.55	12.43	0.78	46.00	1.20	1.24	13.78
Ti TI TM U V W Y	English River	0.53	10.00	6.84	0.70	43.00	1.20	0.75	11.00
	Combined	0.35	10.00	13.38	0.74	43.78	1.30	1.32	20.00
		Ti	Tl	Tm	U	V	W	Y	Yb
Intrusive 1097.00 0.39 0.38 27.18 76.00 0.55 28.82 2.	Intrusive	1097.00	0.39	0.38	27.18	76.00	0.55	28.82	2.34
Western Wabigoon 1222.36 0.38 nil 18.71 73.00 0.56 27.12 2.	Western Wabigoon	1222.36	0.38	nil	18.71	73.00	0.56	27.12	2.23
English River1004.280.41nil10.6762.000.5415.751.	English River	1004.28	0.41	nil	10.67	62.00	0.54	15.75	1.39
Combined 1097.00 0.39 0.38 27.18 76.00 0.55 28.82 2.	Combined	1097.00	0.39	0.38	27.18	76.00	0.55	28.82	2.34
Zn Zr LOI									
Intrusive 141.00 13.00 77.05									
Western Wabigoon 144.18 14.28 75.40 English River 138.00 12.00 81.90									
English River 138.00 12.00 81.90 Combined 141.00 13.03 77.05	e								

Table 7. Highly anomalous (98th percentile) OGS lake sediment sample values for trace elements.

*INAA - Gold value as determined by Instrumental Neutron Activation Analysis

Areas recommended for exploration presented in Figures 10 to 14 are based on geochemical patterns typically associated with a specific style of mineralization. Table 8 presents ore-associated, indicator and pathfinder elements that are often related to some metallic deposit models (Parker 1992).

Table 8. Ore associations, indicator and pathfinder elements for selected metallic deposit models (modified after Parker 1992).

Ore Association	Indicator Elements	Pathfinder Elements
Lode gold	Au, Ag	As, Cu, Sb, W
Orthomagmatic	Cu, Ni	Co, Cr
Volcanogenic massive sulphide	Cu, Zn	Ag, Pb
Molybdenum	Мо	
Uranium	U	

Geographic information system (GIS) techniques were used to assist in identifying the highly anomalous areas presented in this study. Sample site GIS shape files for each rock type area were created for the indicator and pathfinder elements that had assays results exceeding the 98th percentile values, presented in Table 9.

Table 9. Highly anomalous values for elements, grouped by rock type areas within the eastern and northern portions of the Kenora District.

		Rock Type Area		
ELEMENT *	Intrusive	Western Wabigoon	English River	Combined
Ag	0.31	0.31	0.36	0.31
As	11.00	15.38	13.00	11.00
Au_INAA	4.00	5.00	2.00	4.00
Со	20.93	22.49	20.69	20.93
Cr	60.00	66.00	57.00	60.00
Cu	89.00	113.30	47.28	89.27
Мо	6.06	8.04	4.10	6.06
Ni	49.00	54.00	48.00	49.00
Pb	13.10	14.89	11.14	13.10
Sb	0.35	0.39	0.53	0.35
U	27.18	18.71	10.67	27.18
W	0.55	0.56	0.54	0.55
Zn	141.00	144.18	138.00	141.00

* only elements illustrated in the figures are presented in this table

A GIS comparison of the pathfinder and indicator elements in the 98th percentile identified multi-element and multisite clusters. These clusters are related to deposit model types identified in Table 8. Figures 10 to 14 illustrate the approximate extent of areas in the Kenora District that are underlain by these clusters. The highly anomalous ore association elements, which are unique for each area, are also presented in the figures.

The areas indicated in these figures were subjectively outlined; the reader is encouraged to undertake their own examination of the data. These areas could identify parts of the Kenora District that historically have not received exploration work but, based on the OGS lake sediment sample results, should be examined. The Open File Report for each OGS survey (*see* Table 5) also includes recommendations for exploration based on geochemical interpretation of the data.

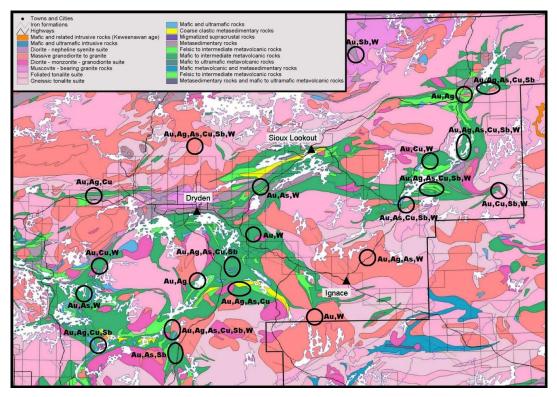


Figure 10. Lode gold prospective target areas based on the location of highly anomalous ore-associated elements.

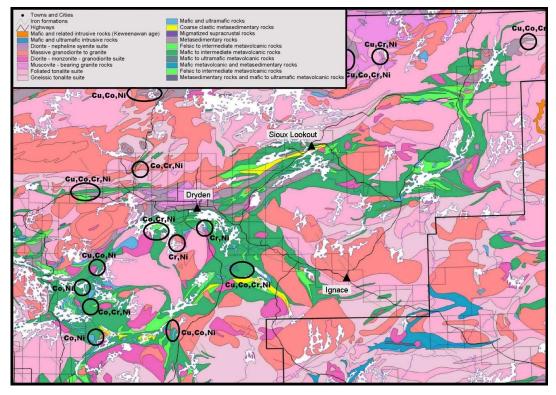


Figure 11. Orthomagmatic base metals prospective target areas based on the location of highly anomalous ore-associated elements.

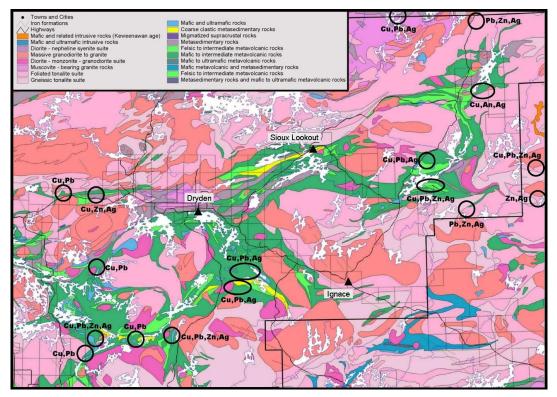


Figure 12. Volcanogenic massive sulphide prospective target areas based on the location of highly anomalous ore-associated elements.

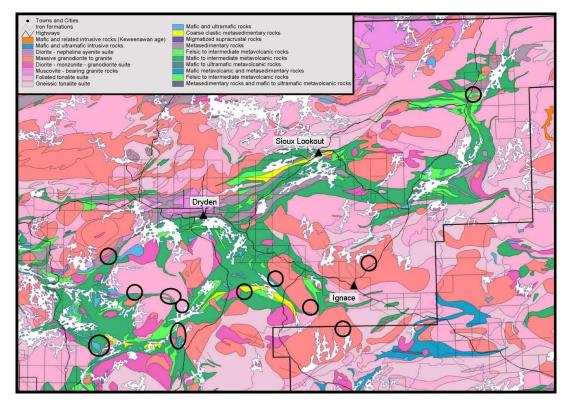


Figure 13. Molybdenum prospective target areas based on the location of highly anomalous ore-associated elements.

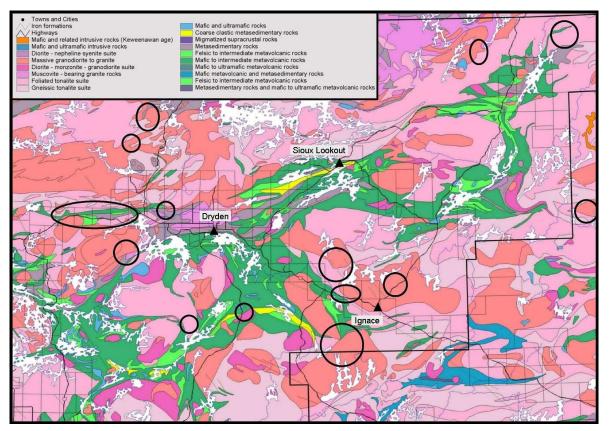


Figure 14. Uranium prospective target areas based on the location of highly anomalous ore-associated elements.

OGS ACTIVITIES AND RESEARCH BY OTHERS

The Ontario Geological Survey did not conduct any programs in the Kenora District in 2007. University research projects included:

A. Karkowka, University of Manitoba, Manitoba (BSc Honours thesis), examined the electromagnetic signature of the Duport Gold Deposit, Shoal Lake, western Ontario.

J. Keigher, Lakehead University, Thunder Bay, Ontario (BSc Honours thesis), examined the geochemistry and mineralization events at Houston Lake Mining Inc., West Cedartree Project, Angel Hill gold zone.

S. Secord, Lakehead University, Thunder Bay, Ontario (MSc thesis), conducted a study on the geochemistry and gold mineralization events at the Kakagi-Rowan Lake greenstone belt, concentrating on Houston Lake Mining Inc., West Cedartree Project.

Table 10. Mineral deposits not being mined in the Kenora District in 2007.

	Abbrev	viations	
AF	Assessment Files	MLS	Mining Lands, Sudbury
СМН	Canadian Mines Handbook	MR	Mining Recorder
GR	Geological Report	NM	The Northern Miner
MDC	Mineral Deposit Circular	OFR	Open File Report
MDIR	Mineral Deposit Inventory record	PC	Personal Communication
RoA		SMDR	Source Mineral Deposit Record

(NTS)	·	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status (as of Jan. 2008)
Bad Vermilion Lake–Seine Bay Prospect (52C/10NW)	Fe, Ti, V	Reserves: 1.2 Mt tonnes at 15% TiO ₂ and 45% Fe. Potential for 177 800 tonnes of titanium sponge	NM 08/15/85, p.3 (Beaver Energy Resources)	Active, 8 claims
Bending Lake Prospect (52F/08SE)	Fe	Recoverable Ore (proposed): 2000 m by 300 m wide with a resource of 247 Mt @ 23% Fe Proposed concentrate of 70% Fe (96–97% magnetite) using magnetic separation	Bending Lake Ore Corporation, personal communication, 2006	Active assessment Bending Lake Iror Ore Corporation; 70 patented claims
Big Master (Kenwest Mine) (52F/07NE)	Au, Ag	Production: 2565 oz Au and 184 oz Ag from 14 470 tons Indicated 1967 drilling: 30 000 t @ 0.36 opt Au Old workings: 19 000 t @ 0.30 opt Au Reserves (proven and probable): 123 000 t @ 0.30 opt Au and Indicated: 600 000 t @ 0.22 opt Au	MDC 16, p.9 CMH, 1988–1989, p.92 (Canamerica Precious Metals Inc.)	Inactive, patented claims HP366, HP373, HP301
Big Whopper Pegmatite (52L/07SE)	Li, Cs, Rb	Preliminary resource estimated @ 11.6 Mt averaging 1.34% Li ₂ O and 0.30 Rb ₂ O	CMH, 2000–2001, p.45 (Avalon Ventures Ltd.)	Active, 12 staked claims
Cameron Lake Deposit (52F/05SE)	Au	Measured & Indicated Reserves: 572 000 t @ 6.54 gpt Au Inferred reserves at 1 012 000 t @ 5.20 g/t Au (using NI 43-101 standards)	Nuinsco Resources, press release, Apr. 9, 2005	Active, 61 leased claims
Canadian Arrow Prospect (Dogpaw Lake) (52F/05SW)	Au	Indicated Reserves: 96 650 t @ 0.43 opt Au in 2 veins	NM 4/5/61 (Consolidated Golden Arrow Mines Ltd.)	Active, 17 claims
Cates Prospect (52F/13SE)	Zn, Ag	Zone: 2700 m by 12 m by 60 m Reserves: 5.83 Mt @ 0.5% Zn and 0.5 opt Ag	AF 52F/13SE M-1 to M-6 (Noranda) AF 52F/13SE B-1 to B-6 (Rio Algom)	Active, 9 claims
Cedar Island Deposit (Cornucopia) (52E/10SW)	Au	Production: 5620 oz Au Indicated reserves: 1.096 Mt @ 6.63 g/t Au Inferred reserves: 0.832 Mt @ 5.63 g/t Au (both Cedar Island and Mikado)	Amador Gold Ltd., press release, October 6, 2003	Inactive, patented claims D212, D265
Dobie Deposit (52C/12NW)	Cu-Ni	Reserves: 5.0 Mt @ 0.28% Cu and 0.24 % Ni	AF 52C/12NW B-3	Inactive, patent claims and reserve
Dubenski Gold Prospect (52F/05SW)	Au	Drill-indicated reserves: 355 286 t @ 6.32 g/t (calculated to a depth of 150 m)	CMH, 1999–2000, p.52 (Avalon Ventures Ltd.)	Active, 22 leased claims

Deposit Name (NTS)	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status (as of Jan. 2008)
Duport Mine (Consolidated Professor)	Au	Production: 4672 oz Au and 1143 oz Ag from 1287 tons	MDC 16, p.11	Inactive, patented claims S.170, K1332, K1333,
(52E/11SE)		Indicated Reserves: 424 000 t @ 13.4 g/t Au Inferred Reserves: 387 000 t @ 10.7 g/t Au	Halo Resources Ltd., press release, Aug. 10, 2005	K2374
Elora (Jubilee)	Au	Production: 1370 oz Au and 296 oz Ag from 13 766 tons	MDC 16, p.15	Active, patented claim HP 301
(52F/07NE)		Reserves (Au): Probable: 228 500 tonnes @ 0.18 opt, Speculative: 5000 t @ 0.10 opt from dump	OFR 5332, p.37, Table 8	
F-Group (52G/14SE)	Cu, Zn, Pb, Ag	Original Reserves (Dec. 1978): 630 000 tonnes @ 8.10% Zn, 0.98% Cu, 0.49% Pb, 1.80 opt Ag Reserves (Dec. 1982): 200 000 tonnes at 8.20% Zn, 0.80% Cu, 0.60% Pb, 1.80 opt Ag	CMH 1979–1980, p.194 (Noranda) CMH 1982–1983, p.254 (Noranda)	Inactive, patent claims PA312564 65, PA312567-68, PA226490-91
Foley Mine (52C/10NE)	Au	Production: 855 oz Au and 149 oz Ag from 568 tons Reserves: 40 000 tonnes @ 0.5 opt Au proven /probable and 400 000 tonnes @ 0.5 opt Au speculative	MDC 16, p.16 NM 09/25/80 (Seaforth Mines Ltd.) OFR 5539, p.194	Active, patented claims K475101- 103
Gaffney Prospect (52F/07SW)	Au	Reserves: 300 000 tonnes @ 0.15 opt Au	СМН, 1990–1991, p.393	Inactive, patents K3594-3595
Goldlund Mine (52F/16NW)	Au	Production: 111 891 tonnes @ 0.15 opt Au (Dec. 1984) Reserves: 781 000 tonnes @ 0.14 opt Au with 150 000 tonnes @ 0.15 opt Au that can be mined by open pit	AF 52F/16NW 081 (Locke Riche Minerals Ltd.) CMH 1995–1996, p.223	Active, patented claim KRL 18802
Gordon Lake Mine (52L/07NW)	Cu, Ni, PGE	Production: 1.6 Mt @ 0.78% Ni, 0.41% Cu and 0.026 opt Pd (Dec. 1971) Reserves: 170 420 t at 0.85% Ni and 0.35% Cu (Dec. 1971)	OFR 5975, p.121	Inactive, mining patent KRL 19096 97, 29065-66, 30055, 31373-74, 31823-26, 31829- 32, 33206, 33208, 33210, 36272-74
High Lake- Evenlode (52E/11NE)	Mo, Au	$\begin{array}{l} \text{Reserves: } 126\ 000\ \text{tonnes}\ @\ 0.68\%\ MoS_2\\ \text{and}\ 0.015\ \text{opt}\ Au\\ \text{Indicated: } 200\ 000\ \text{tonnes}\ @\ 0.63\%\ MoS_2\\ \text{Inferred: } 550\ 000\ \text{tonnes\ estimated\ to\ a}\\ \text{depth\ of\ 145\ m} \end{array}$	OFR 5695, p.114	Inactive, patented claims K8705, K8707 and staked claims
Kenbridge Prospect (52F/05NE)	Ni, Cu	Reserves: 6.7 Mt @ 0.38% Ni and 0.32% Cu (above -150m level). 3.0 Mt @ 0.63% Ni and 0.32% Cu (below -	Canadian Arrow Mines Ltd., press release,	Active, patented claims K6672, K6634, K6635
		150m level)	January 21, 2008	
Lockhart Lake– INCO (52C/10NW)	Zn, Cu, Au, Ag	Reserves: 6.1 Mt @ 1.06% Zn, 0.27% Cu, 3.2 g/t Ag and 0.006 g/t Au	AF 52C/10NE Y-6 (Minnova 1989)	Inactive, patent claims K417852- 854, K418156- 157, K446504-509

Deposit Name (NTS)	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status (as of Jan. 2008)
Lyon Lake Zone (Creek Zone) (52G/15NW)	Cu, Zn, Pb, Ag	Original Reserves: 3.945 Mt @ 6.53% Zn, 1.24% Cu, 0.63 % Pb, 3.42 opt Ag and 0.01 opt Au	CMH 1979–1980, p.194 (Noranda)	Closed mine, patented claim CLM 185
		Reserves: 0.695 Mt of 10.34% Zn, 0.75% Cu, 1.62% Pb and 5.96 opt Ag	CMH 1990–1991, p.332 (Noranda)	
Marchington Road Deposit (52J/07SE)	Cu, Zn, Pb, Ag	Reserves: 150 000 t @ 0.98% Cu, 3.11% Zn, 1.16% Pb, 1.97% Ag	Umex Inc. AF 52J/7SW 0024	Inactive, patented claim CLM 337
Mattabi Mine (52G/15SW)	Cu, Zn, Pb, Ag	Original Reserves: 13.66 Mt @ 7.50% Zn, 0.80% Cu, 0.77% Pb and 3.10 opt Ag	GR 221, p.4	Closed mine, patented claims GTP Block 7
		Reserves: 0.387 Mt of 0.13% Cu, 9.28% Zn, 0.58% Pb and 1.77 opt Ag	CMH 1988–1989, p.338 (Noranda)	
Mavis Lake Prospect (52F/15SE)	Li, Ta	Reserves: 500 000 t of 1% LiO ₂	OFR 5718, p.151	Inactive, leased claims K498288- 290, K498292, K498308, K498140
Maybrun Mine (52F/05NE)	Cu, Au	Production: 125 000 tonnes at unknown grades (Aug. 1973 to Dec. 1974)	MDIR K0203	Active, Care and maintenance,
		Reserves: 2.8 Mt @ 1.18 % Cu and 0.08 opt Au (1966)	Opawica Expl., press release, June 26, 2006	patent claims K15364-381, K15524-427
Mikado Mine (52E/10SW)	Au	Production: 31 000 oz Au (see Cedar Island Deposit)	www.AmadorGold. com	Inactive, patented mining claim D14
Norpax (Reynar Lake) (52L/06NE)	Ni, Cu	2002 drilling intersected 3.35 m of 1.308 g/t PGE and 2.94% Cu, Ni Reserves: 1 Mt @ 1.2% Ni and 0.5% Cu	Atikwa Minerals, press release, Aug. 28, 2003 Norpax Nickel Mines Ltd., AF	Inactive, patent claims KRL350101, KRL347670
North Kaskaweogama Prospect (52J/07NW)	Fe	Reserves: 405 000 tons at 28% Fe in 4 zones and a possible 50 Mt at unstated grade	MDC 11, p.443	Inactive, open Crown Land
North Pines Mine (52K/01SE)	Pyrite	Production: 500 000 tonnes at 28% Fe (1909–1921) Reserves: open	GR 101, p.36	Inactive, patented claim HW 715
North Rock Mine (South Grassy) (52C/11NE)	Cu	Zone: 400 m x 2–30 m x 91 m Reserves: 1.02 Mt @ 1.17 % Cu including 265 230 t @ 2.08% Cu	OFR 5512, p.50	Active, 8 staked claims
Pidgeon Molybdenum Mine (52F/16NW)	Мо	Resource: 8.5 Mt @ 0.099% Mo	MPH Ventures Ltd, press release, December 27, 2007	Active, patented claim Pat 4051
Purdex Prospect (A-D Zones) (52E/11NE)	Au	Reserves: 226 800 t grading between 8.57 and 10.28 g/t Au	International Millennium 2006 Technical Report	Active, patent claims K25130- 131

Deposit Name (NTS)	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status (as of Jan. 2008)
Rainy River Zones 17, 34 (52D/16SE)	Au, PGE, Cu, Ni	17 Gold Zone: Indicated Resource: 1.74 Mt of 1.56 g/t Au, 0.03% Cu, 0.21% Zn and 4.0 g/t Ag Inferred Resource: 11.0 Mt of 1.33 g/t Au, 0.02% Cu, 0.20% Zn and 3.60 g/t Ag	Nuinsco Resources Limited, press release, Dec. 17, 2005	Active, patented land
		34 Nickel Zone: Resource: 150 000 t at 2.00% Ni, 1.9% Cu, 2.5 g/t Pt, 6 g/t Pd, 2 g/t Au and 21 g/t Ag	Nuinsco Resources Limited, research article, Nov. 18, 1997	
Richard Lake Prospect (52F/13SW)	U	Zone: 213 m x 3 m x 300 m Reserves: 650 000 t of 0.10% U ₃ 0 ₈	GR 130, p.46	Active, patented claim K18761
Scramble Mine (Homestake) (52E/16SW)	Au	Zone: 366 m to 457 m by 3.7 m wide zone @ 0.15 opt Au Reserves: 150 000 tonnes at 0.24 opt and 70 000 oz (at 0.05 opt. cut-off) drill indicated	NM 07/25/88 (Madeline Mines Ltd.) CIMM, Dist.4 Field Trip Guidebook, p.44	Inactive, Jaffray Twp., Con.6, Lot 13 and 14
St Anthony Mine (52J/02SE)	Au	Production: 331 069 tons @ 0.19 opt Au Reserves: 37 800 tons @ 0.18 opt Au	MDC 13, p.295	Active, patented claim BG 154
Sturgeon Lake Mine (52G/15NW)	Cu, Zn, Pb, Ag	Original Reserves (Dec. 1974): 2.10 Mt @ 10.64% Zn, 2.98% Cu, 1.47% Pb, 6.14 opt Ag and 0.021 opt Au	GR 221, p.4	Inactive, patented claim
		Reserves (Dec. 1978): 599 000 tonnes @ 2.34% Cu, 8.98% Zn, 1.30% Pb, 5.17 opt Ag and 0.018 opt Au	CMH 1980–1981, p.102 (Falconbridge)	
Thunder Lake Deposit (52 F/15SE)	Au	Bulk Sampling: 428 oz Au and 1161 oz Ag from 2365 t Inferred Resource: 2.974 Mt averaging	Corona Gold 1999 Annual Report; CMH, 2004–2005, p.127 (Corona Corp.)	Active, Laramide Resources Ltd.; patented and staked claims
Vanlas Prospect (52F/10NW)	Au	6.47 g/t Au Reserves: 100 000 tonnes @ 0.20 opt Au	Power Expl. Inc. AF 52F/10NW UU-1	Inactive, patented claim K70627
Victor Island Prospect (52F/05SE)	Au	Reserves: Drill-indicated 300 000 tonnes @ 0.12 opt Au to a depth of 213 m	MP 128, p.16	Inactive, patented claim K4712, claims 690655, 718785
Wendigo Mine (52E/09NE)	Au, Ag, Cu	 Produced: 67 423 oz Au, 14 762 oz Ag and 1.89 million lbs. of Cu from 206 054 tonnes Reserves (Au): Vein 1: 110 m x 0.8 m x 230 m depth @ 0.33 opt Au (production vein) Vein 2: 118 m x 0.6 m Vein 3: 180 m x 0.3 m Vein 4: unknown tailings: 61 970 tonnes at 0.027 opt Au 	SMDR 001350 OFR 5695, p.352	Inactive, patented mining claims MH 208-210

Deposit Name (NTS)	Commodity	Tonnage-Grade Estimates and/or Dimensions	Reserve References	Status (as of Jan. 2008)
Werner Lake Cobalt (52L/07NW)	Co, Cu	Production: recovered 389 363 lbs. of Co (1932, 1940–1944); grades 2% Co and 0.75% Cu Reserves: 1.01 Mt at 0.31% Co and 0.29% Cu	MDC 1, p.37 Canmine Resources Corporation, press release, Feb. 9, 1999	Inactive, patented mining claim KRL 9383
West Cedartree – Angel Hill Gold Zone (52F/05SW)	Au	Inferred Resource (NI 43-101): 106 400 t @ 2.97 g/t Au with 2.0 g/t Au cut-off	Houston Lake Mining, press release, Oct. 20, 2005	Active, patented claim K10026

*N.B. This table contains tonnage and grade estimates, referred to as "reserves" (indicated, possible, probable), which were determined at various times by methods largely unreported. It is not known if any or all of these estimates are in compliance with the reporting standards required by National Instrument 43-101.

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Metric Conversion Table

Conversion from SI to Imperial			Conversion from Imperial to SI				
SI Unit	Multiplied by	Gives	Imperial Unit	Multiplied by	Gives		
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		
		AR	EA				
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	m2		
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 cm3	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	m3		
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)	(U)	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)/	1 ounce (troy)/	34.285 714 2	g/t		
		ton (short)	ton (short)				
1 g/t	0.583 333 33	pennyweights/	1 pennyweight/	1.714 285 7	g/t		
		ton (short)	ton (short)				

OTHER USEFUL CONVERSION FACTORS

	Multiplied by	
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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