

# Mineral Exploration Activity in Nova Scotia, 2006

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Monitoring of mineral exploration activity in Nova Scotia is coordinated through the Mineral and Petroleum Titles Section of the Minerals Management Division by the author, who works out of the regional office in Stellarton, Pictou County. Regional Geologists of the Regional Services Branch offices in Coxheath (Brendan MacKenzie), Truro (Donald Weir) and Bridgewater (Sandra Johnston) assist in the field monitoring of mineral exploration activity in their respective regions.

The monitoring process covers exploration activities throughout the province and consists of visits to company offices and exploration sites, liaison with industry personnel, and the review of current assessment reports and other material submitted by industry. Liaison with industry allows the department to maintain an awareness of current exploration activities throughout the province. Assistance or advice is provided as necessary, and any drill core generated by mineral exploration activity in the province is recorded as part of the monitoring process. This core may be recovered for archiving in the Drill Core Library in Stellarton when no longer required by the companies.

The Exploration Monitoring geologist is also responsible for auditing confidential assessment reports that are submitted in support of the renewal of exploration licences. In 2006, 162 assessment reports were received and audited for compliance with the *Mineral Resources Regulations*. This number is up significantly from the 113 reports submitted for assessment credit in 2005.

## Mineral Exploration Activity in 2006

Mineral exploration in Nova Scotia during 2006 continued at roughly the same level of activity as the previous two years, with field expenditures estimated to be in the range of \$7 million compared with \$6.3 million in 2005 and \$6.6 million in 2004. The recent upswing in mineral exploration in the province roughly doubles the annual expenditures

since the beginning of 2000, which ranged from \$3.1-\$3.5 million between 2000 and 2003 (Table 1, Fig. 1). The current level of exploration expenditures is reflected primarily in the recent upswing in gold exploration, focused on historical gold mining districts in Halifax and Guysborough Counties. Exploration for base metals has also demonstrated a modest increase over 2005 with the majority of work focused on carbonate-hosted Pb-Zn exploration in the Lower Carboniferous sediments of the Windsor Group throughout northern mainland areas of the province, as well as central Cape Breton Island. Work also continued for industrial minerals, although the number of active exploration programs continued to show a modest decrease over the past two years in comparison to the level of activity prior to 2004.

The amount of money available for exploration in the province has continued to improve over the past three to four years, with most of the exploration activity currently being carried out by the junior mining sector. The increase in exploration funding is primarily a function of a significant increase in the price of gold, which rose gradually from approximately \$300US/oz. in early 2002 to roughly \$450US/oz. in the fall of 2005, and then followed by a further sharp increase in the next nine months to the \$625US/oz. range during the latter half of 2006. Base metals also followed a similar trend, with prices rising from approximately \$0.75US/lb. for copper, \$0.20US/lb. for lead, and \$0.35US/lb. for zinc in mid-2003, to approximately \$2.10US/lb. for copper, \$0.60US/lb. for lead, and \$0.95US/lb. for zinc by the end of 2005. Prices then continued to increase dramatically in 2006, reaching highs of \$3.50US/lb. for copper, \$0.75US/lb. for lead and \$2.00US/lb. for zinc toward the end of 2006. The sharp rise in the prices also prompted a renewed increase in base metal exploration. As has been the case over the past couple of years, the availability of readily accessible equity capital in the Canadian market, along with a favourable mining tax system and the lack of any impediments to investment in Canada by foreign companies, has

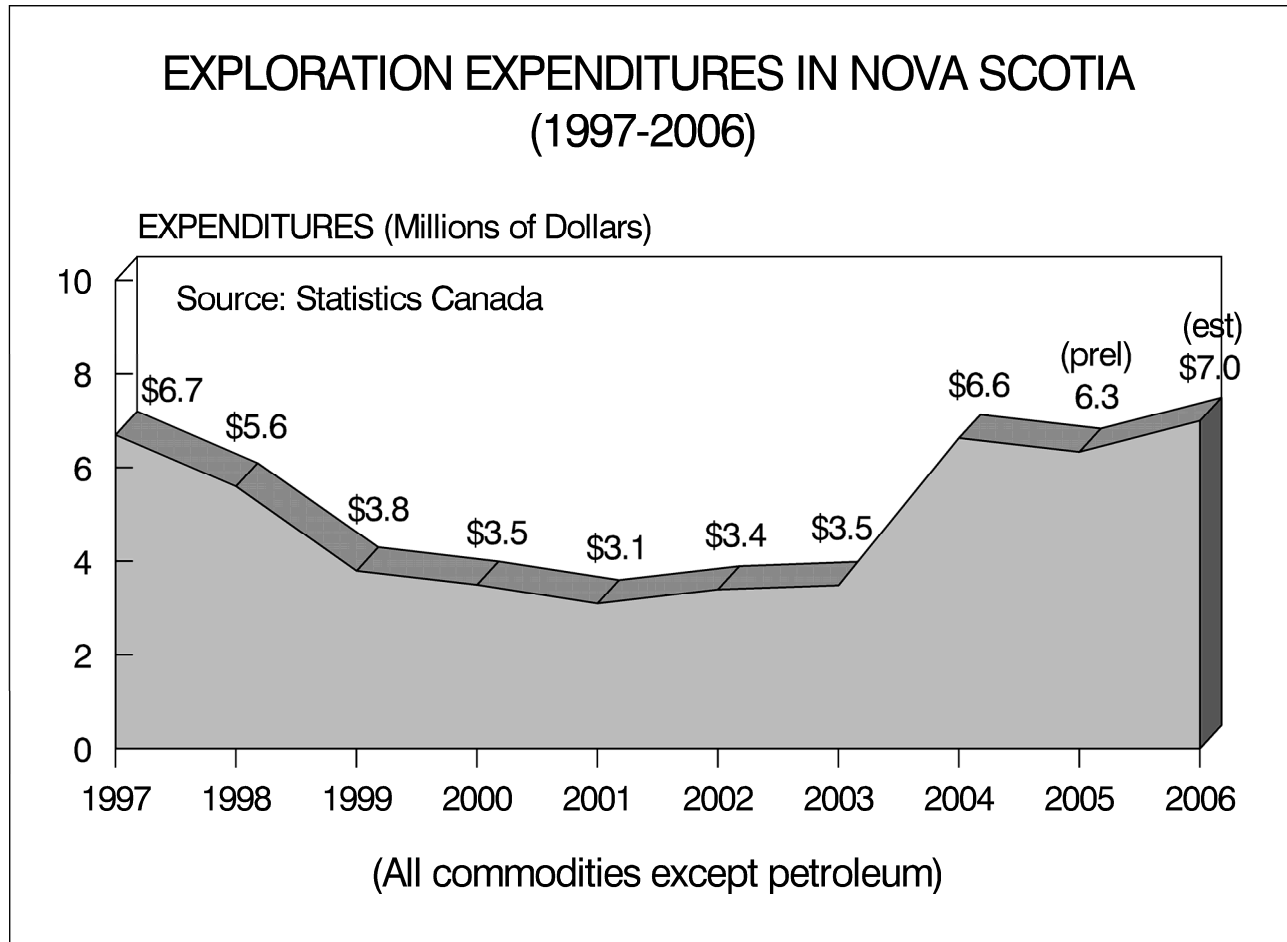
**Table 1. Details of exploration and development activity in Nova Scotia, 1997-2006.**

	1997	1998	1999	2000	2001	2002	2003	2004	P2005	P2006
Total Field Exploration Expenditures (\$)	6 700 000	5 600 000	3 800 000	3 500 000	3 100 000	3 400 000	3 491 710	6 632 520	6 337 550	P7 000 000
Total Licences Issued (all categories)	978	711	707	606	498	553	728	521	686	P764
Claims in Good Standing (new and reissued)										
General	25 190	11 452	14 045	10 951	8 406	12 494	18 711	10 579	21 162	P22 450
Special (Order in Council)										
Salt and Potash	214	820	804	255	255	500	500	218	349	349
Coal	240	253	173	-	-	102	102	102	128	1 380
Geothermal	158	158	158	158	158	158	158	-	-	-
Underground Gas Storage	-	106	106	106	183	183	183	201	201	201
Tailings	146	-	-	-	-	-	-	-	-	-
Other (gold, base metals)	130	130	132	10	10	10	78	78	78	100
Uranium*	(226)	(226)	(226)	(226)	(226)	(226)	(226)	(226)	(226)	(226)
Total (excluding closures and uranium licences)	26 078	12 219	15 418	11 480	9 012	13 445	19 732	11 178	21 918	24 480
Total Area Held Under Licence (ha)	422 150	209 132	249 586	185 838	145 886	217 647	319 421	180 949	354 808	P396 281
(acres)	1 043 120	516 760	616 720	459 200	360 480	537 800	789 280	447 120	876 720	P979 200
Work Reported for Licence Renewals (\$)	3 146 899	5 385 194	2 969 047	1 136 304	2 811 393	1 457 012	1 197 208	4 270 042	5 704 121	6 273 377
Number of Assessment Reports Received	133	134	100	85	72	102	96	141	113	162

P Preliminary figures for 2006

\* Parentheses around uranium claims indicate ground alienation due to the uranium moratorium

December 31, 2006



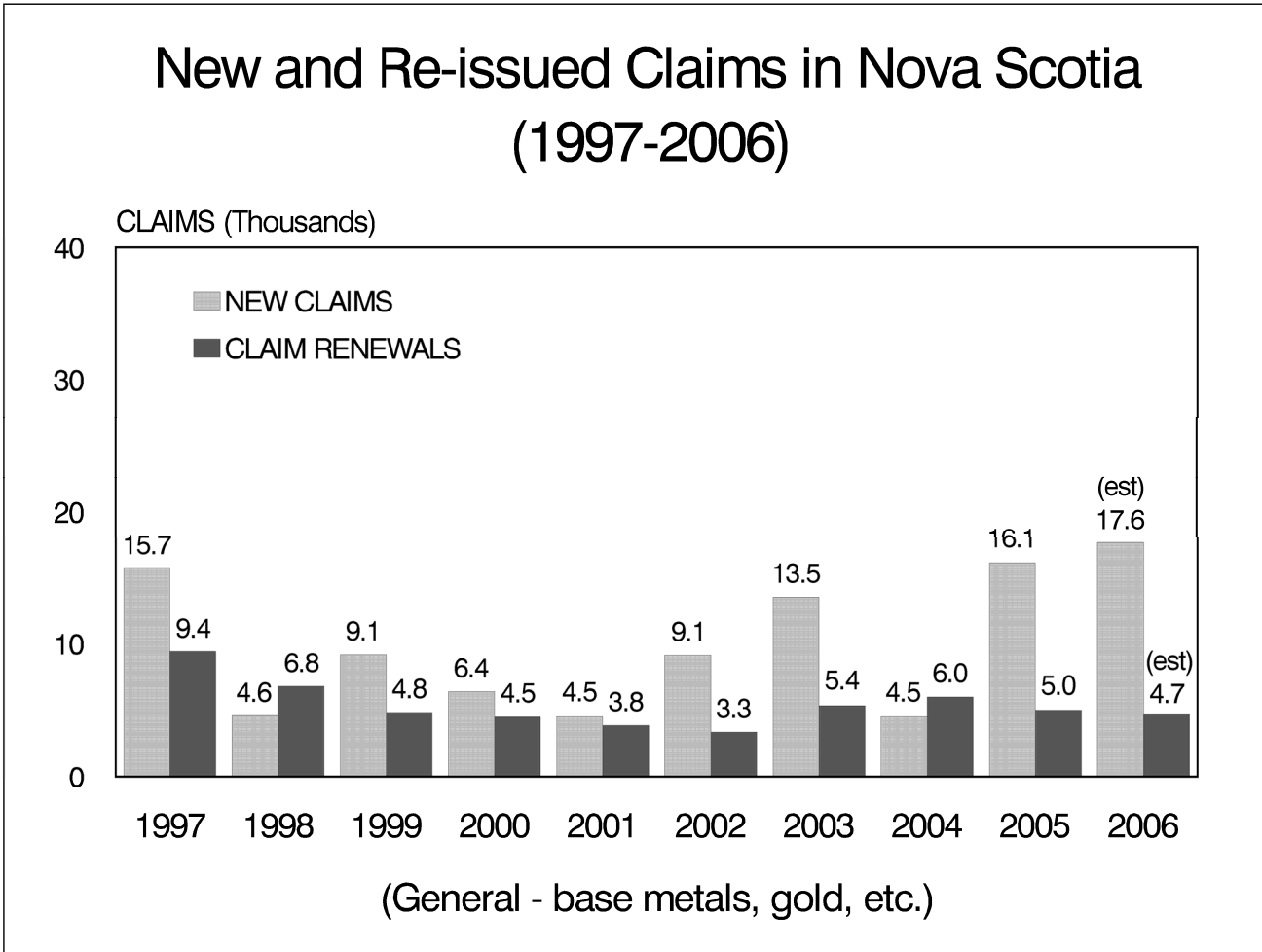
**Figure 1.** Exploration expenditures in Nova Scotia, 1997-2006.

continued to help sustain an overall increase in the level of mineral exploration in most areas of the country. In addition, a strong global demand for metal commodities, including in particular the rapidly growing economies in China and India, along with recent supply constraints, has helped to fuel both investor interest and increased base metal exploration.

Preliminary figures for the total number of general claims staked in 2006 showed a small increase of 6.1% over the previous year from 21,162 to 22,450 claims (Table 1, Fig. 2). A preliminary total of 24,480 claims for all commodities were in effect at the end of 2006 represented by 764 general and special licences covering an area of 396 281 ha or 3,962 km<sup>2</sup>, approximately 7.2% of the total area of the province. The amount of exploration drilling was up significantly over the previous year with a

preliminary estimate of 17 000 m in 2006 compared with 11 037 m in 2005 and 18 506 m in 2004. In addition, an estimated 25 000 m of percussion drilling was also completed in 2006, compared with 5 600 m in 2005 and 3 450 m in 2004.

Approximately 138 companies and individuals held exploration interests (licences or options) in the province in 2006 including 3 major, 16 junior and 37 private companies (Tables 2, 3 and 4). In addition, several mining lease holders carried out exploration and development work on leases or on unclaimed ground where these commodities did not require licences (e.g. limestone, gypsum). Organizations actively engaged in exploration during 2006 included 4 junior and 16 private companies (Fig. 3, Table 5), as well as a number of individuals.



**Figure 2.** Claim staking in Nova Scotia, 1997-2006.

**Table 2.** Major companies with exploration interests (licences or options) in Nova Scotia.

	2004	2005	2006
Aur Resources Incorporated	-	-	-
Georgia-Pacific Canada Incorporated	x	-	-
Intragaz Limited Partnership	-	x	-
Statia Terminals Canada Limited	-		

x indicates work performed

- company inactive

blanks indicate that the company did not hold an exploration licence in that particular year

**Table 3.** Junior companies with exploration interests (licences or options) in Nova Scotia.

	2004	2005	2006
Acadian Gold Corporation	x	x	x
Aurogin Resources Limited	-		
Avalon Ventures Limited	x	x	-
Azure Resources Corporation	x		
Black Bull Resources Incorporated	x	x	-
Canstar Resources Incorporated (formerly Candor Ventures Corporation)	-	x	x
Corner Bay Silver Incorporated (formerly Corner Bay Minerals Incorporated)	-		
Atlantic Gold NL (formerly Diamond Ventures NL)	x	x	x
Exploration Orex Incorporated	-	x	-
Globex Mining Enterprises Incorporated	x	x	-
Heartland Resources Limited	-	-	
Landis Mining Corporation	-	-	-
Monster Copper Resources Incorporated	x	x	-
Newfoundland Goldbar Resources Incorporated	-	-	
Pan East Petroleum Corporation	-	-	-
Regal Goldfields Limited	-	-	-
RJZ Mining Incorporated	x	x	-
Scorpio Mining Corporation	x	-	-
ScoZinc Limited	x	x	x
South-Malartic Exploration Incorporated		-	
Titanium Corporation Incorporated (formerly Titanium Corporation of Canada Ltd)	x	-	-
Wallbridge Mining Company Limited		x	

x indicates work performed

- inactive

blanks indicate that the company did not hold an exploration license in that particular year

**Table 4.** Private exploration companies in Nova Scotia.

	2004	2005	2006
2403496 Nova Scotia Limited			-
6179053 Canada Incorporated	-	-	-
Atec Power Incorporated			-
AYARCO Gold Corporation Limited	x	x	-
Alva Construction Limited	-	-	-
Annapolis Valley Goldfields Incorporated	x	-	
Blackfly Exploration & Mining	-	-	x
Benrock Limited		-	x
Burnt Point Resources Incorporated	-	-	x
Canada Direct Trading Limited			-
Cape Crushing Company Limited	-	-	
Champlain Resources Incorporated	x	-	-
Cobequid Gold Corporation Limited	x	x	
Conrad Brothers Limited	x	x	x
Copper Valley Holdings Limited	-	-	
D&D Metal Detectors Limited	-	-	
D.D.V. Gold Limited			x
Donkin Tenements Incorporated			x
Dufferin Resources Incorporated	x	-	-
Ecum Secum Enterprises Limited	-	-	x
Elk Exploration Limited		-	x
Ellsin Resources Incorporated	x	x	-
Golden Kamala Resources Incorporated		-	-
Gordon James Resources Company	-	-	
Geosearch	-		
Geostorage Associates	-	-	-
Glencoe Resources Incorporated	x	x	x
Gold 'n' Crystal Minerals	-	-	
Golden Ace Mineral Explorations Limited	x	-	
Goldenville Mining Corporation	x	x	
H & E Mullen Investments Limited	x	-	x
Hansone Limited	-		
Highland Range Minerals Limited	-	-	
Hudgtec Consulting Limited		-	x
John Logan Enterprises Limited	-	-	-
Jubilee Minerals	-	x	x
KaoClay Resources Incorporated	-	-	-
Kelly Rock Limited		-	-
Lynx Minerals Corporation	-	-	
MacLeod Resources Limited	x	-	-

**Table 4.** Private exploration companies in Nova Scotia (cont'd).

	2004	2005	2006
McLaren and Associates Geological Services	-		
Meguma Resource Enterprises Incorporated	x	x	x
Minas Basin Pulp & Paper Company Limited	-	-	
Mindset Resources Limited		-	
Moose River Resource Limited	x	x	x
Mt. Cameron Minerals Incorporated	x	-	
Municipal Capitol Incorporated		-	-
New Road Resources Limited	-		
Nycon Resources Incorporated	x	x	-
Pettizite Minerals and Exploration		-	
Rainbow Resources Limited	x	x	-
The Shaw Group Limited	-	-	-
Tri-Explorations Limited	-		
True Metallic Explorations	-	-	x
Unama Ki Resource Exploration and Investment		-	x
United Reef Limited			-
Votix Corporation Limited	x	x	
Yava Technologies Incorporated	x	x	-

x indicates work performed

- inactive

blanks indicate that the company did not hold an exploration license in that particular year

## Exploration Activities

### Gold

Exploration for gold continued to dominate mineral exploration in the province during 2006 with the level of activity showing a modest increase over 2005. The lower Paleozoic Meguma Group of southern mainland Nova Scotia continued to be the principal focus for gold exploration, with the majority of exploration work concentrated on the historical gold districts in Halifax and Guysborough Counties. A steady increase in the price of gold as well as the continuation of an improved investment climate for the junior mining

sector has helped to sustain a renewed interest in the exploration and development of Meguma gold deposits.

Acadian Gold Corporation continued a large scale exploration program for gold during 2006, with its primary focus on the Meguma gold deposits of southeastern mainland Nova Scotia. The company currently has more than two dozen active properties with the majority of the work being carried out in Halifax and Guysborough Counties. Acadian continues to focus its efforts on developing mineable reserves on four key properties, including the Beaver Dam and Tangier properties in Halifax County and the Goldenville and Forest Hill properties in Guysborough County.

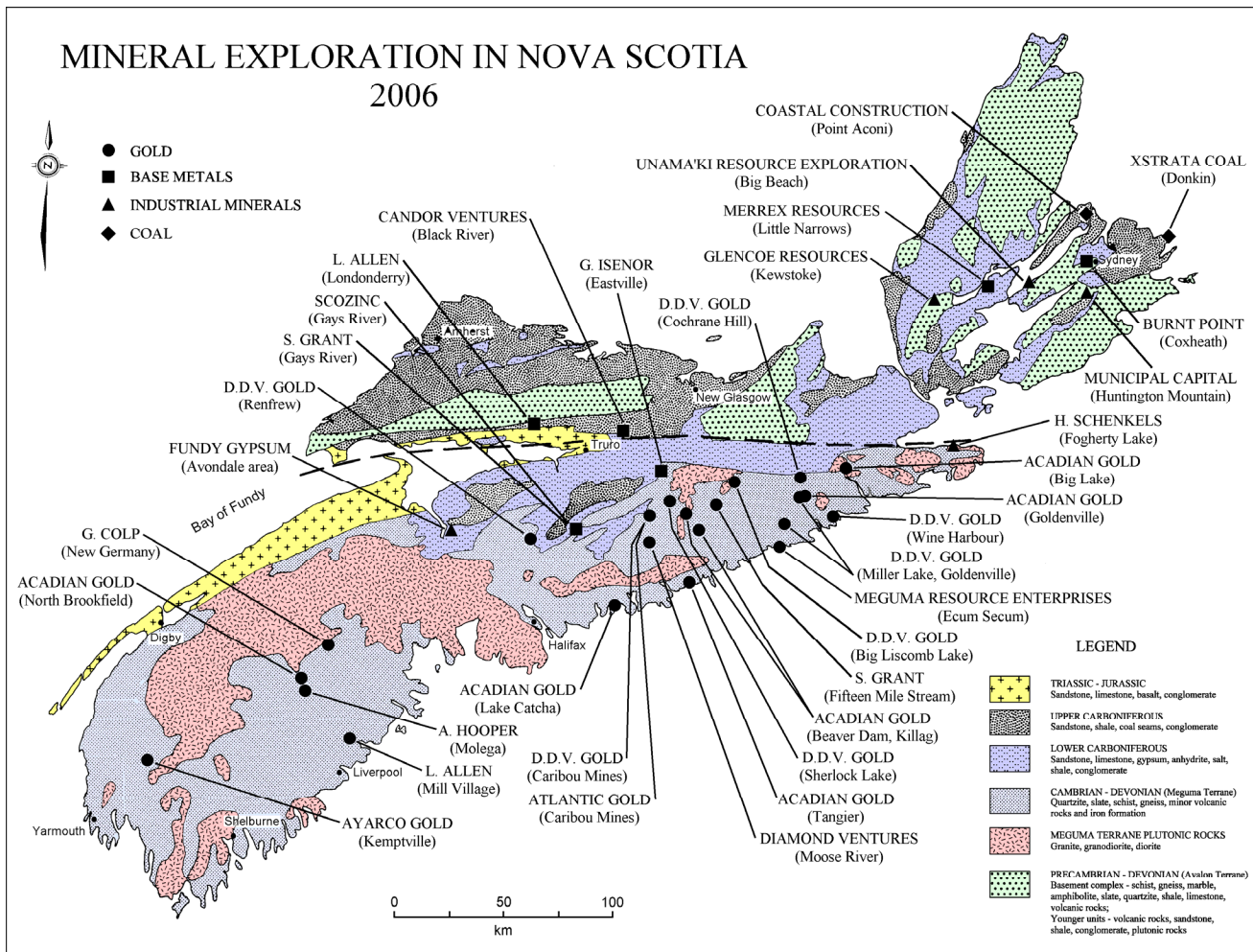


Figure 3. Mineral exploration in Nova Scotia, 2006.

A resource study by Acadian on the low-grade bulk tonnage potential of the Beaver Dam property in 2004 reported a preliminary reserve of 219 000 tonnes with an uncut grade of 2.22 g gold/t, plus indicated reserves of 1 106 000 tonnes with an uncut grade of 2.36 g gold/t. Based on these results, the company initiated a diamond-drilling program on the property in 2005. Drilling continued on the Beaver Dam property in 2006, and by the end of the year the company had completed 119 drillholes totalling approximately 16 000 m. Drilling has been completed on the Main Zone, the Mill Shift Zone located 800 m west of the Main Zone, and the North Zone located 600 m north of the Main Zone. The drilling program included in-fill drilling on the Main Zone, re-drilling of several holes on both the Main Zone and the East Zone, and large diameter coring for metallurgical testing. Results to date have extended the Main Zone an additional 200 m

to a total of 725 m. Based on a cut-off grade of 3.5 g/t, published resources include measured and indicated reserves of 2 918 000 tonnes with an uncut grade of 2.97 g/t, plus inferred reserves of 2 880 000 tonnes with an uncut grade of 3.36 g/t. The bulk of the published resources (93%) occur in the Main Zone over an approximately 70 m wide zone to a depth of 200 m and over a strike length of 500 m.

Acadian also completed a resource study on the Tangier property in 2004 and reported indicated reserves, based on a 3.5 g/t cutoff, of 134 000 tonnes with an uncut grade of 9.67 g gold/t, and inferred reserves of 271 000 tonnes with an uncut grade of 15.09 g gold/t. Work on the Tangier property in 2006 included prospecting, additional rock geochemical sampling, and re-logging and sampling of diamond-drill holes completed by NSDNR in 1990. The company completed a



detailed resource evaluation of the Goldenville property early in 2005 and reported measured reserves, based on a 3.5 g/t cut-off, of 62 554 tonnes with an uncut grade of 16.62 g gold/t plus inferred reserves of 384 596 tonnes with an uncut grade of 18.78 g gold/t. Acadian completed additional surface exploration on the property in 2006 including prospecting, rock geochemical sampling, and diamond-drilling. Work on the Forest Hill property in 2006 focused on preparation of a detailed mine plan of the property to assist in the preparation of a pre-feasibility study. Current resources for the Forest Hill property include indicated reserves, based on a 3.5 g/t cut-off, of 225 000 tonnes with an uncut grade of 24.02 g gold/t plus inferred reserves of 383 000 tonnes with an uncut grade of 12.42 g gold/t.

Acadian carried out surface exploration on more than 20 other gold properties during 2006. Highlights included prospecting, ground geophysics and diamond-drilling on the Killag gold property in Halifax County, diamond-drilling on the Cameron Dam and Big Lake properties in Guysborough County and diamond-drilling on the Lake Catcha gold property in Halifax County. Additional work consisting of prospecting, reconnaissance mapping, ground geophysics, rock geochemical sampling and soil sampling was carried out on the remaining properties (Table 5).

Atlantic Gold NL (formerly Diamond Ventures NL), under an option agreement with Moose River Resources Incorporated, continued a detailed open-pit feasibility study and resource evaluation of the Touquoy gold deposit at the Moose River gold property in Halifax County during 2006. The company proceeded to the feasibility stage in 2005, which included a comprehensive delineation diamond-drilling program, development of resource estimates, metallurgical test work, and other studies including geotechnical and hydrogeological test work. Work to date on the Touquoy deposit has outlined measured reserves, based on a 0.7 g/t cut-off, of 5.85 million tonnes grading 1.8 g/t, indicated reserves of 2.5 million tonnes grading 1.7 g/t and inferred resources of 1.41 million tonnes grading 1.9 g/t. The company has also outlined indicated reserves of 870 000 tonnes grading 1.9 g/t and inferred reserves of 650 000 tonnes grading 2.2 g/t for the Higgins & Lawlor and Stillwater zones approximately 2 km

west of the Touquoy deposit. Other aspects of development work on the property are also under way, including mining engineering studies, metallurgical testing, and permitting. The company also continued to evaluate the potential for Touquoy-style mineralization along the northeast and southwest strike extension of the Moose River property during the year.

Under an option agreement with Acadian Gold Corporation, Atlantic Gold also continued a detailed evaluation of the potential for Touquoy-style mineralization along the northeast and southwest strike extension of the Caribou gold property, which lies approximately 10 km north of the Moose River gold property along the Caribou-Cameron Dam anticline. The company completed additional rotary percussion drilling (RAB drilling) during the year, along with a three hole diamond-drilling program at the beginning of the year. The company also completed rotary percussion drilling on several other gold properties throughout Halifax and Guysborough Counties during the year as part of an expanding regional exploration program to evaluate the potential for additional Touquoy-style deposits (Table 5).

A number of small exploration programs were also completed on several properties throughout the Meguma Group by individuals and private interests (Table 5). Ayarco Gold Corporation Limited completed a diamond-drilling program on the Kemptville gold deposit in Yarmouth County and Meguma Resource Enterprises Incorporated completed trenching and dump sampling on the Ecum Secum gold property in Halifax County. Hudgetec Consulting Limited carried out rock geochemical sampling and soil sampling on the Country Harbour Mines property in Guysborough County and True Metallic Explorations Incorporated carried out prospecting and geological mapping as part of an ongoing program to evaluate the paleoplacer potential for gold in the Fall Brook area in Hants County. Blackfly Exploration & Mining completed prospecting and rock geochemical sampling in the McCulloch Brook area in Colchester County.

Scott Grant carried out prospecting and related work in the Isaacs Harbour and Lower Seal Harbour areas in Guysborough County and completed prospecting and rock geochemical sampling on the Fifteen Mile Stream property in

Table 5. Exploration programs in Nova Scotia, 2006.

COMPANY/INDIVIDUAL	LOCATION	COMMODITY	PROGRAM
Acadian Gold Corporation	Beaver Dam, Halifax County	Gold	Diamond-drilling
	Big Lake, Guysborough County	Gold	Diamond-drilling
	Brookfield, Queens County	Gold	Prospecting, rock sampling, ground geophysics
	Cameron Dam, Guysborough County	Gold	Diamond-drilling
	Caribou Mines, Halifax County	Gold	Prospecting, geological mapping, rock sampling
	Cranberry Lake, Halifax County	Gold	Prospecting, rock sampling, ground geophysics
	Dollivers Mountain, Guysborough County	Gold	Prospecting, rock sampling
	Fifteen Mile Stream area, Halifax County	Gold	Prospecting, soil sampling
	Guys River, Guysborough County	Base metals	Feasibility study
	Goldenville, Guysborough County	Gold	Prospecting, rock sampling, diamond-drilling
	Issacs Harbour, Guysborough County	Gold	Prospecting, rock sampling, soil sampling
	Kent Lake, Halifax County	Gold	Prospecting, geological mapping, rock sampling
	Killag Mines, Halifax County	Gold	Prospecting, ground geophysics, diamond-drilling
	Lake Catcha, Halifax County	Gold	Diamond-drilling
	Meaghers Grant, Halifax County	Gold	Prospecting, rock sampling, ground geophysics
	Mineville, Halifax County	Gold	Prospecting, rock sampling
	Moose River Area, Halifax County	Gold	Prospecting, rock sampling
	Mooseland, Halifax County	Gold	Prospecting, ground geophysics
	Moser Lake, Halifax County	Gold	Soil sampling
	Oldham, Hants County	Gold	Prospecting, rock sampling, ground geophysics
	Sandy Point, Halifax County	Gold	Prospecting, rock sampling, ground geophysics
	Seal Harbour, Guysborough	Gold	Prospecting, rock sampling, soil sampling
	South Uniacke, Hants County	Gold	Prospecting, geological mapping, rock sampling
Tangier, Halifax County	Gold	Prospecting, rock sampling	
Waternish, Guysborough County	Gold	Prospecting, soil sampling	
Alex DeBay	Dollar Lake, Halifax County	Gold	Prospecting, pitting, rock sampling
Allen Hopper	Molega, Queens County	Gold	Prospecting, rock sampling, mill testing & sluicing
Atlantic Gold NL (D.D.V. Gold Limited - subsidiary)	Black Brook Lake, Guysborough County	Gold	Percussion drilling
	Hunting Lake, Guysborough County	Gold	Percussion drilling
	Caribou Mines area, Halifax County	Gold	Percussion drilling
	Little Liscomb Lake, Halifax County	Gold	Prospecting, rock sampling, percussion drilling
	Little Liscomb River, Halifax County	Gold	Percussion drilling
	Mill Brook, Guysborough County	Gold	Percussion drilling
	Miller Lake, Guysborough County	Gold	Rock sampling, percussion drilling
	Moose River, Halifax County	Gold	Feasibility study, resource evaluation
	Pleasant River Barrens, Lunenburg County	Gold	Prospecting, rock sampling
	Renfrew, Hants County	Gold	Percussion drilling, rock sampling
	Rock Island Lake, Guysborough County	Gold	Percussion drilling
	Sherlock Lake, Halifax County	Gold	Percussion drilling, diamond-drilling
	Smith Lake, Guysborough County	Gold	Percussion drilling
	Wine Harbour, Guysborough	Gold	Rock sampling, percussion drilling

Table 5. Exploration Programs in Nova Scotia, 2006 (cont'd)

COMPANY/INDIVIDUAL	LOCATION	COMMODITY	PROGRAM
Ayarco Gold Corporation	Kemptville, Yarmouth County	Gold	Diamond-drilling
Benrock Limited Blackfly Exploration & Mining	Chedabucto Bay, Guysborough County Cheverie, Hants County McCullough Brook, Colchester County	Industrial minerals Base metals Gold	Geological mapping, rock sampling Geological mapping, trenching, rock sampling Prospecting, rock sampling
Burnt Point Resource Incorporated	Coxheath Hills, Cape Breton County	Base metals	Diamond-drilling, trenching, bulk sampling
Canstar Resources Incorporated (formerly Candor Ventures Corporation)	Black River, Colchester County	Copper, gold	Diamond-drilling
Coastal Construction & Excavating Ltd	Point Aconi	Coal	Trenching, bulk sampling
Dominic Shadbolt	Beaver Dam area, Halifax County	Gold	Prospecting, rock sampling
Ecum Secum Enterprises Limited	Barneys River area, Pictou County Kirkmont area, Pictou County Georgeville, Antigonish County	Base metals Base metals Base metals	Compilation, prospecting Compilation, prospecting Compilation, prospecting
Fundy Gypsum Company	Avondale, Hants County	Gypsum	Diamond-drilling
Glencoe Resources Incorporated	Kewstoke, Inverness County	Carbonates	Geological mapping, rock sampling
Greg Isenor	Eastville area, Colchester County	Base metals	Diamond-drilling
Henry Schenkels	Fogherty Lake, Guysborough County	Base metals/ Industrial minerals	Prospecting, rock sampling, soil sampling, mineralogical studies
Hudgetec Consulting Limited	Country Harbour Mines, Guysborough County	Gold	Rock sampling, soil sampling
Lindsay Allen	Debert Lake, Colchester County Londonderry, Colchester County Snare Lake Bog, Colchester County	Base metals Base metals Base metals	Prospecting, rock sampling, silt sampling Prospecting, rock sampling Prospecting, rock sampling
Michael Collen	Staples Brook, Colchester County	Coal	Percussion drilling, reverse circulation drilling
Meguma Resource Enterprises Inc	Ecum Secum, Halifax County	Gold	Trenching, dump sampling
Merrex Resources Incorporated	Little Narrows area, Victoria County	Gold	Diamond-drilling
Perry MacKinnon	Glendale, Inverness County	Carbonates	Geological mapping, trenching & pitting, ground geophysics, rock sampling
Scott Grant	Fifteen Mile Stream, Halifax County Gays River, Halifax County Isaacs Harbour, Guysborough County	Gold Base metals Gold	Prospecting, rock sampling Prospecting, geological mapping, rock sampling Prospecting
SeoZinc Limited	Gays River, Colchester County	Base metals	Diamond-drilling
Ted MacNaughton	Crows Nest, Guysborough County	Gold	Prospecting, geological mapping

**Table 5.** Exploration Programs in Nova Scotia, 2006 (cont'd).

COMPANY/INDIVIDUAL	LOCATION	COMMODITY	PROGRAM
True Metallic Exploration Incorporated	Fall Brook, Hants County	Placer gold	Prospecting, geological mapping
UnamaKi Resource Exploration and Investment	Christmas Island, Cape Breton County	Graphite	Prospecting, rock sampling
Xstrata Coal Donkin Management Limited	Donkin, Cape Breton County	Coal	Tunnel rehabilitation

Halifax County. Allen Hooper carried out prospecting, rock sampling and small-scale mill testing and sluicing on the Molega property in Queens County. Ted MacNaughton completed prospecting and mapping on the Crows Nest property in the Cochrane Hill area in Guysborough County and Dominic Shadbolt completed prospecting and rock geochemical sampling in the Beaver Dam area in Halifax County. Perry Bezanson carried out prospecting and rock sampling in the Pye Brook and Ecum Secum areas in Guysborough County and Alex DeBay completed prospecting, pitting and rock geochemical sampling in the Dollar Lake area in Halifax County.

## Base Metals

Exploration for base metals in 2006 continued at roughly the same level of activity as the previous two years. The increase in activity over the past three years was reflected primarily in a shift in focus to new geological environments including the potential for Olympic Dam style iron oxide-copper-gold (IOCG) deposits along the Cobequid-Chedabucto Fault Zone in central mainland Nova Scotia, carbonate-hosted base metal deposits associated with the Lower Carboniferous Windsor Group throughout northern mainland Nova Scotia and Cape Breton Island, shale-hosted environments of Precambrian age in northern Nova Scotia, and granitic environments in the southwestern areas of the province.

Acadian Gold Corporation acquired the former Gays River lead-zinc mine and 1500 t/day mill facility (Scotia Mine) from ScoZinc Limited in July 2006 through the purchase of the company's assets from HudBay Minerals Incorporated. The company completed a feasibility study on re-opening the mine with plans to proceed with the development

of an open-pit mining operation in 2007. Current resources for the Scotia Mine include proven and probable reserves of 4 590 000 tonnes grading 1.7% lead and 3.6% zinc, and inferred reserves, at a 0.75% cut-off, of 1 800 000 tonnes grading 1.1% lead and 3.1% zinc. Prior to Acadian's acquisition of the property, ScoZinc completed diamond-drilling in the immediate vicinity of the mine early in the year.

Acadian also recently acquired the former Getty Mines lead-zinc property immediately to the west of the Scotia Mine from the Nova Scotia government, with plans to initiate exploration work on the property in 2007 to develop additional reserves for the Scotia Mine. Uncategorized reserves for the Getty property consist of 4 500 000 tonnes grading 1.3% lead and 1.9% zinc. Acadian has also acquired extensive ground holdings throughout the province with plans to begin exploration for additional zinc reserves.

Canstar Resources Incorporated (formerly Candor Ventures Corporation) continued work in the Black River area near Riversdale, Colchester County, to evaluate the iron oxide-copper-gold potential in the area of a known copper showing along the east-west Cobequid-Chedabucto Fault Zone. The company completed diamond-drilling on the property in 2006. Merrex Resources Incorporated, under an option agreement with Jubilee Minerals Limited, completed additional diamond-drilling in the Little Narrows area, Victoria County, during 2006 to assess the base metal potential of the Lower Carboniferous Windsor Group in the vicinity of the Jubilee Pb-Zn property.

Greg Isenor completed a diamond-drilling program for base metals in the Eastville area, Colchester County, along the strike extension of the Eastville Pb-Zn deposit.

Burnt Point Resources Incorporated continued exploration in the Coxheath Hills area east of Beechmont to evaluate the Cu-Mo-Au potential of the Coxheath porphyry-style polymetallic deposit hosted by late Precambrian (Hadrynian) felsic volcanic rocks of the Coxheath Plutonic-Volcanic Belt. Work on the property included diamond-drilling, trenching, and bulk sampling. Ecum Secum Enterprises Limited initiated a preliminary exploration program for base metals in the Precambrian rocks of the Georgeville Group in the Antigonish Highlands. Initial work focused on the Barneys River and Kirkmont areas in Pictou County, and in the Georgeville area in Antigonish County.

Blackfly Exploration & Mining completed geological mapping, trenching and rock geochemical sampling for base metals in the Cheverie area in Hants County. Lindsay Allen carried out prospecting and rock geochemical sampling for base metals in the Londonderry, Debert Lake and Snare Lake Bog areas in Colchester County.

## Industrial Minerals

The level of exploration activity for industrial minerals in 2006 demonstrated a marginal improvement over the previous year, with activity focused primarily on gypsum and carbonate deposits.

Fundy Gypsum Company continued a large-scale diamond-drilling program in the Avondale area, Hants County, during 2006 as part of an ongoing program to extend the company's open-pit gypsum resources.

Glencoe Resources Incorporated completed additional work consisting of geological mapping and rock geochemical sampling on the Kewstoke carbonate deposit near Glencoe, Inverness County.

Perry MacKinnon completed additional work consisting of geological mapping, ground geophysics, and trenching on a carbonate prospect in the Glendale area, Inverness County.

Benrock Limited carried out an exploration program for industrial mineral commodities in the Chedabucto Bay area, Guysborough County. Work included geological mapping, rock sampling and thin section studies. Henry Schenkels completed an exploration program for base metals and industrial mineral commodities in the Fogherty Lake area, Guysborough County. Work included prospecting, rock geochemical sampling, soil sampling and mineralogical studies.

Unama`Ki Resource Exploration and Investment carried out prospecting and rock geochemical sampling for graphite in the Christmas Island area, Cape Breton County.

## Coal

Exploration for coal was carried out in the Upper Carboniferous rocks of the northern mainland Nova Scotia and eastern Cape Breton Island.

Exploration for coal resources was continued by Michael Cullen in the Debert area, Colchester County. The work program in 2006 consisted of both rotary percussion drilling and reverse circulation drilling. Coastal Construction & Excavating Limited completed a trenching and bulk sampling program for coal in the Point Aconi area, Cape Breton County.

Xstrata Coal Donkin Management Limited initiated a program late in the year to re-open the Donkin Mine tunnels near Sydney, Cape Breton County. The company plans to rehabilitate the declines to facilitate a feasibility study on the potential of re-opening the mine. Current resources include approximately 200 million tonnes of thermal- and metallurgical-grade coal.