Mineral Exploration Activity in Nova Scotia, 2012

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Mineral Exploration Monitoring

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 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 the auditing of confidential assessment reports that are submitted in the support of the renewal of exploration licences. In 2012, 196 assessment reports were received and audited for compliance with the Mineral Resources Regulations. The number of reports represent a modest increase of just over 10% in comparison to the 176 reports submitted for assessment credit in 2011.

Mineral Exploration Activity in 2012

Mineral exploration in Nova Scotia during 2012 showed a moderate decrease in the level of activity from the previous year with field expenditures estimated to be approximately \$7.7 million compared with \$9.4 million in 2011 and \$11.3 million in 2010. Prices for both base metals and gold rose steadily throughout 2009 as the demand for metal commodities rebounded following the financial crisis in 2008, and metal inventories were reduced. The price for gold continued to climb throughout 2010 and 2011 and fluctuated in the \$1600 - \$1750US range throughout 2012. The prices for copper, lead and zinc have declined moderately from recent highs of \$4.25US for copper, \$1.25US for lead and \$1.10US for zinc during the first half of 2011. Prices for the metals were trading in the range of \$3.60US for copper, \$1.00US for lead and \$0.90US for zinc during the end of 2012.

The continued global demand for precious metals as an investment hedge, and a steady increase in the demand for base metals in the major world markets, particularly in China, as well as emerging and developing economies, has continued to drive the strong demand for metal commodities. The increased demand for rare earth elements (REEs), relatively stable base metal prices, and a strong demand for gold has continued to help maintain the current level of mineral exploration activity in the Province. A principal factor that has impacted significant growth in exploration activity in the province can be attributed to the difficulties encountered by the junior mining sector to raise exploration funds, and may have contributed to the moderate decline in expenditure levels in 2012.

Table 1. Details of exploration and development activity in Nova Scotia, 2003-2012.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	P2012
Total Field Exploration Expenditures (\$) ¹	3 267 643	7 962 526	5 164 949	9 271 631	13 792 090	13 919 603	4 767 840	11 261 367	9 4000 000	7 700 000
Total Licences Issued (all categories)	744	570	762	938	1401	1389	1082	1224	1197	850
Claims In Good Standing (new and resissued)										
General	18 947	11 242	22 204	25 571	51 215	48 614	26 926	28 967	28 790	14 000
Special (Order in Council)										
Salt and Potash	500	218	349	349	263	131	131	1	ı	ı
Coal	102	102	128	1380	1348	1252	1252	ı	ı	ı
Geothermal	158					1				1
Underground Gas Storage	183	201	201	201	ī		ı	ı	ı	1
Tailings	1		1			1	1			1
Other (gold, base metals)	78	78	78	100	100	100	100	100	100	100
Uranium*	(226)	(226)	(226)	(226)	(226)	(226)	(226)	(226)	(226)	(226)
Total (excluding closures and uranium licences) Total Area Held Under Licence	19 968	11 841	22 960	27 601	52 926	50 097	28 409	29 067	28 890	14 100
(ha)	323 241	191 681	371 676	446 804	856 764	810 969	459 884	470 536	467 670	228 250
(acres)	798 720	473 640	918 400	1 140 040	2 117 040	2 003 880	1 136 360	1 162 680	1 155 600	564 000
Work Reported For Licence Renewals (\$)	1 197 208	4 270 042	5 704 121	6 273 377	9 632 665	15 035 159	3 743 728	4 015 920	9 656 401	12 558 754
Number Of Assessment Reports Received	96	141	113	162	200	234	118	147	176	196
1 Updated figures from Statistics Canada										

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p Preliminary figures * Parentheses around uranium claims indicate ground alienation due to the uranium moratorium December 31, 2012

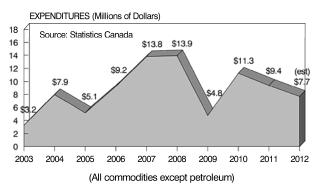


Figure 1. Exploration expenditures in Nova Scotia, 2003 to 2012.

Preliminary figures for the total number of general claims staked in 2012 show a substantial drop of approximately 50% over the previous year from 28,790 to approximately 14,000 claims (Table 1, Fig. 2). A preliminary total of 14,100 claims for all commodities were in effect at the end of 2012 represented by approximately 850 general and special licences covering an area of 228,250 ha or 2,282 km², approximately 4.2% of the total area of the Province. The amount of exploration drilling was down significantly over the previous year with a preliminary estimate of 8,600 metres in 2012 compared with 28,019 metres in 2011 and 37,432 metres in 2010 (Fig. 3). In addition, an estimated 1,400 metres of reverse circulation drilling was also completed in 2012, compared with 16,900 metres in 2011 and 1,380 metres in 2010 (Fig. 3).

Approximately 229 companies and individuals held exploration interests (licences or options) in the Province in 2012 including 2 major, 14 junior and 58 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 2012 included 1 major, 9 junior and 28 private companies (Tables 2, 3, 4 and 5), as well as a number of individuals.

Overview of Exploration Activities

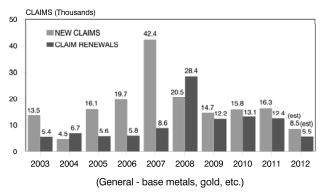


Figure 2. Claim staking in Nova Scotia, 2003 to 2012.

Gold

Exploration for gold continued to be the primary focus for mineral exploration in the Province during 2012. The recent strength in the price of gold and continued global demand for precious metals has helped to maintain a positive impact for gold exploration in the Province. The Lower Paleozoic Meguma Group of southern mainland Nova Scotia continued to be the principal focus for gold exploration with the majority of the exploration work concentrated on the historical gold districts in Halifax and Guysborough Counties (Table 5).

Acadian Mining Corporation, through its whollyowned subsidiary Annapolis Properties Corporation, continued an evaluation of the potential for Meguma hosted gold deposits on several gold properties throughout Halifax, Guysborough and Queens Counties during 2012 including the Moose River, Harrigan Cove, Lake

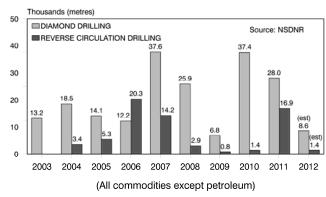


Figure 3. Exploration drilling in Nova Scotia, 2002 to 2011.

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

Year	2010	2011	2012
Georgia-Pacific Canada Incorporated	-	-	-
The Shaw Group Limited	-	X	X

x indicates work performed

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

Year	2010	2011	2012
Acadian Mining Corporation (formerly Acadian Gold Corporation)	х	Х	X
Annapolis Properties Corporation	X	X	X
Atlantic Gold NL (formerly Diamond Ventures NL)	x	X	-
Avalon Rare Metals Incorporated (formerly Avalon Ventures Limited)	x	-	
Black Bull Resources Incorporated	-	-	-
Canuc Resources Corporation		X	X
Chrysos Capital Corporation	X		
Cornerstone Resources Incorporated	X	-	
Exploration Orex Incorporated	X	X	-
Globex Mining Enterprises Incorporated	X	X	-
Gold World Resources Incorporated		-	-
Landis Mining Corporation	-		
Merrex Gold Incorporated	X	X	X
Minotaur Atlantic Exploration Limited	X	X	X
Osisko Mining Corporation	X	X	
Ressources Appalaches Incorporated	X	-	X
Scorpio Gold Corporation	-	X	
ScoZinc Limited	X	X	X
Silvore Fox Minerals Corporation	X	X	X
Strikepoint Gold Incorporated	X	-	
Tripple Uranium Resources Inc.	X	X	-
Vostok Minerals Incorporated (formerly RJZ Mining Corporation)	-		

x indicates work performed

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

⁻ company inactive

⁻ inactive

 Table 4. Private exploration companies in Nova Scotia.

Year	2010	2011	2012
2134889 Ontario Incorporated	-		
2403406 Nova Scotia Limited			-
3228463 Nova Scotia Limited		X	X
3234885 Nova Scotia Limited		_	-
6179053 Canada Incorporated	-	X	-
6531954 Canada Incorporated	-		
Allgreen Minerals Incorporated			X
AlNova Mining Incorporated		-	X
Alpha Uranium Resources Incorporated	X		
Atlantic Canada Antimony Incorporated			X
Atlantic Industrial Minerals Incorporated			-
Ayarco Gold Corporation Limited	X	X	-
Alva Construction Limited	-	-	-
Beatrix Ventures Incorporated		-	-
Blackfly Exploration & Mining	-	X	X
Burnt Point Resources Incorporated	-		
Celtic Tiger Minerals Exploration Incorporated			-
Champlain Mineral Ventures Limited (formerly Champlain Resources Incorporated)	x	X	-
Chebucto Resources	-	-	-
Chrysos Capital Corporation	X	-	
Clear Lake Resources Incorporated	X	X	X
Cobequid Gold Corporation	-	-	-
Cogonov Incorporated		-	X
Conrad Brothers Limited	X	-	X
Coxheath Resources Limited	X	-	
Craig Nochols Farms Limited		_	-
D.D.V. Gold Limited	X	X	X
Derek E. Thomas Incorporated			-
Donkin Tenements Incorporated	X	-	
Dufferin Resources Incorporated	-	-	-
Ecum Secum Enterprises Limited	-	-	-
Elk Exploration Limited	X	X	X
Frontline Gold Corporation	-	X	-
Gallant Aggregates Limited	-		
Gifthorse Resources Incorporated	-	-	-
Glencoe Resources Incorporated	X	X	X
Golden Kamala Resources Inc.			X
Gray Jay Holdings		-	
Great Atlantic Resources Corporation (formerly Greenlight Resources Incorporated)			
Greyhawk Ridge Minerals Incorporated	<u>-</u>	_	_

50 Mineral Resources Branch

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

Year	2010	2011	2012
Guyco Consulting Services Incorporated			X
Hudgtec Consulting Limited	X	X	X
John Logan Enterprises Limited	-	-	
Kaoclay Resources Incorporated	_		
Kelly Rock Limited	-		
Leadbetter & Associates Management Consultants		-	-
MacLeod Resources Limited	_	-	-
Magnum Resources Incorporated	X	X	
Mercator Geological Services Limited		-	-
Meguma Resource Enterprises Incorporated	X	-	
Moose River Resources Limited	-	_	_
Mosher Limestone Company Limited		_	X
Mt. Cameron Minerals Incorporated	_	X	-
New Road Resources Limited		Α	
Northern Innovations Holdings Limited	-		
NSGold Corporation/Corporation NSGold	X	X	X
Nycon Resources Incorporated	X	-	X
O'Brien Exploration and Driver Training			-
Preston Mineral Resources Limited			X
Rainbow Resources Limited	-	-	X
Rare Earth Mineral Sands Incorporated (formerly Maritime Titanium Incorporated)	X	X	-
Rheingold Exploration Corporation		-	X
S. Farrell & Associates Limited	-	X	-
Scratch Exploration and Mining Company Limited	X	X	-
Slam Exploration Limited			X
South Shore Ready Mix Limited			X
Stay Gold Incorporated	-	X	X
Stocks N Rocks Incorporated	-		
Sugarloaf Resources Incorporated		X	X
The Goldfields Group		-	-
Thundermin Resources Incorporated			X
True Metallic Exploration Incorporated	X	-	-
Unama'ki Resource Exploration and Investment	-		
Votix Corporation Limited		-	-
Web Exploration Services		-	-
Witch's Glen Gold Incorporated	X	X	X
Yava Technologies Incorporated	X	X	X

x indicates work performed

inactive

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

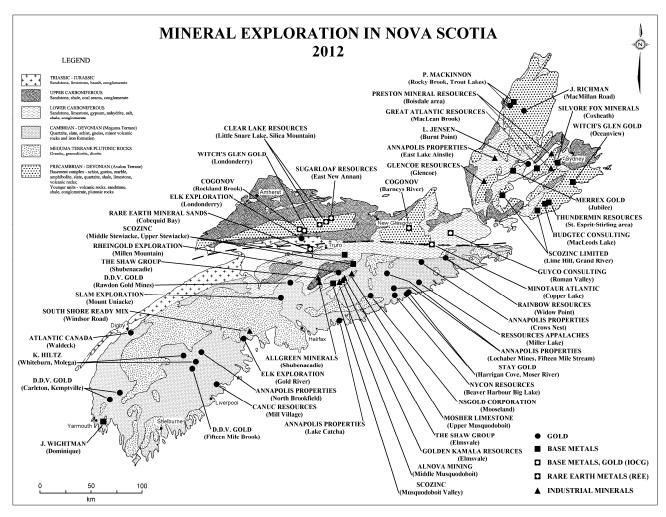


Figure 4. Mineral exploration programs in Nova Scotia, 2012. Simplified geology after Keppie, 1979.

Catcha, Cross Lake, Lochaber Mines and Dufferin Mines areas in Halifax County, the Mile Lake, Crows Nest, Frasers Lake and Costley Lake areas in Guysborough County, and the North Brookfield area in Queens County. Work on the properties consisted of prospecting, geological mapping, rock sampling and till sampling. The company also continued to focus on the company's Fifteen Mile Stream gold property during the year with the completion of an updated resource estimate following the completion of the drilling program in 2011. To date, a resource estimate of 200,000 ounces (3.8 million tonnes @ 1.66 g/t) in the inferred category has been established for the property.

Atlantic Gold NL, through its wholly-owned Canadian subsidiary DDV Gold Limited, continued a regional exploration program during 2012 to evaluate the potential for disseminated Touquoystyle gold deposits in other areas of the province. The company has acquired extensive mineral rights throughout mainland Nova Scotia including areas in Yarmouth, Queens, Hants, Halifax and Guysborough counties, as well as a number of options on existing mineral rights held by private interests. Work on the properties consisted of prospecting, rock sampling, till sampling and reconnaissance ground geophysical surveys. More detailed work was completed on several properties during the year including percussion drilling and basement rock sampling on the Kemptville property and drill core sampling of previous drill holes on the Carleton property, both in Yarmouth County, percussion drilling and basement rock sampling on the Fifteen Mile Brook property in Queens County, and diamond drilling and drill core sampling on the Rawdon Gold Mines property in

Reverse circulation drilling	Gold	Kemptville, Yarmouth County	
Reverse circulation drilling	Gold	Fifteen Mile Brook, Queens County	
Prospecting, rock sampling, reverse circulation drilling	Gold	Rawdon Gold Mines, Hants County	(Substitute) of Audillac Cold (AL)
Prospecting, rock sampling, drill core sampling	Gold	Carleton, Yarmouth County	D.D.V. Gold Limited
Prospecting, rock sampling, spectrometer survey	Copper, gold	Rockland Brook, Colchester County	
Prospecting, rock sampling	Copper, gold	Barneys River, Pictou County	Cogonov Incorporated
Rock sampling, stream sediment sampling, XRF analysis	Gold, rare earths	Silica Mountain, Colchester County	
Stream sediment sampling, XRF analysis	Gold	McLeod Brook, Colchester County	
Rock sampling, stream sediment sampling, XRF analysis	Gold, rare earths	Little Snare Lake, Colchester County	Clear Lake Resources Incorporated
Prospecting, geological mapping, rock sampling, soil sampling, ground geophysics, diamond drilling	Gold	Mill Village, Queens County	Canuc Resources Corporation
Soil sampling, rock sampling, ground geophysics, trenching	Gold	Indian River, Guysborough County	Bruce Mitchell
Prospecting, rock sampling, stream sediment sampling	Gold, antimony	Waldec, Digby County	Atlantic Canada Antimony Incorporated
Rock sampling, till sampling	Gold	Moose River, Halifax County	
Bulk sample analyses	Gold	Mile Lake, Guysborough County	
Geological mapping, rock sampling, till sampling	Gold	Lochaber Mines, Halifax County	
Prospecting, till sampling, rock sampling	Gold	Lake Catcha, Halifax County	
Prospecting, rock sampling	Gold	Harrigan Cove, Halifax County	
Geological mapping, rock sampling	Gold	Frasers Lake, Guysborough County	
Resource analysis	Gold	Fifteen Mile Stream, Halifax County	
Bulk sampling, processing tests	Barite, fluorite	East Lake Ainslie, Inverness County	
Geological mapping, rock sampling, stream sediment sampling	Gold	Crows Nest, Guysborough County	
Rock sampling, till sampling	Gold	Cross Lake, Halifax County	
Drill core sampling	Gold	Costley Lake, Guysborough County	
Rock sampling	Gold	North Brookfield, Queens County	Annapolis Properties Corporation
Drill core sampling, 3D modelling	Kaolin, silica sand	Middle Musquodoboit, Halifax County	Alnova Mining Incorporated
Drill core sampling, 3D modelling	Kaolin, silica sand	Shubenacadie, Hants and Halifax Counties	Allgreen Minerals Incorporated
Prospecting, rock sampling	Gold	Pretty Mary Lake, Annapolis County	Alex Thomson
PROGRAM	COMMODITY	LOCATION	COMPANY/INDIVIDUAL

Table 5. Exploration programs in Nova Scotia, 2012 (cont'd).

COMPANY/INDIVIDUAL	LOCATION	COMMODITY	PROGRAM
Dominic Shadbolt	East Jeddore, Halifax County	Gold	Prospecting, geological mapping, rock sampling
Elk Exploration Limited	Gold River, Lunenburg County	Gold	Prospecting, geological mapping, rock sampling
	Londonderry, Colchester County	Gold	Prospecting, rock sampling
Glencoe Resources Incorporated	Glencoe, Inverness County	Marble	Diamond drilling
Golden Kamala Resources Incorporated	Elmsvale, Halifax County	Kaolin, silica sand	Drill core sampling, 3D modelling
Great Atlantic Resources Corporation	MacLean Brook, Cape Breton County	Base metals, gold	Prospecting, soil sampling, rock sampling
Guyco Consulting Limited	Roman Valley, Guysborough County	Copper, gold	Prospecting, rock sampling, stream sediment sampling
Hudgtec Consulting Limited	MacLeods Lake, Richmond County	Copper, gold	Prospecting, geological mapping, rock sampling, till sampling
Jim Michaelis	Coldstream, Colchester County	Gold	Prospecting, rock sampling, stream sediment sampling
Joe Richman	MacMillan Road, Victoria County	Gold	Prospecting, rock sampling, trenching
John Wightman	Dominique, Yarmouth County	Base metals	Gravity survey
Ken Hiltz	Molega, Queens County	Gold	Prospecting, rock sampling, pitting, tailings sampling
	Whiteburn, Queens County	Gold	Prospecting, rock sampling
Lyndon Jensen	Burnt Point, Victoria County	Gold	Diamond drilling
Merrex Gold Corporation	Jubilee, Victoria County	Base metals	Soil sampling
Minotaur Atlantic Exploration Limited	Copper Lake, Antigonish County	Copper, gold	Ground geophysics, diamond drilling
Mosher Limestone Company Limited	Upper Musquodoboit, Halifax County	Limestone	Prospecting, rock sampling, trenching
NSGold Corporation	Leipsigate, Lunenburg County	Gold	Tailings sampling
	Mooseland, Halifax County	Gold	Prospecting, rock sampling, diamond drilling
Nycon Resources Incorporated	Beaver Harbour Big Lake, Halifax County	Gold	Geological mapping, soil sampling
Patrick Bellefontaine	Big Pike Fire Brook, Colchester County	Gold, base metals	Prospecting, rock sampling
Perry Bezanson	Moser River, Halifax County	Gold	Prospecting, rock sampling
Perry MacKinnon	Rocky Brook, Inverness County	Gold	Prospecting, rock sampling, LIDAR survey
	Trout Lakes, Inverness County	Base metals	Prospecting, rock sampling

	,		
Gravity survey	Copper, molybdenum	Oceanview, Cape Breton County	
Ground geophysics, diamond drilling	Copper, gold	Londonderry, Colchester County	Witch's Glen Gold Limited
Diamond drilling	Base metals, gold	St. Esprit-Stirling area, Richmond County	Thundermin Resources Incorporated
Processing tests	Silica sand	Shubenacadie, Hants County	
Processing tests	Silica sand	Elmsvale, Halifax County	The Shaw Group Limited
Stream sediment sampling	Gold	Nuttby, Colchester County	
Prospecting, rock sampling, stream sediment sampling	Gold, rare earths	East New Annan, Colchester County	Sugarloaf Resources Incorporated
Rock sampling, till sampling	Gold	Mushaboom, Halifax County	
Prospecting, rock sampling, soil sampling	Gold	Moser River, Halifax County	
Diamond drilling	Gold	Harrigan Cove, Halifax County	Stay Gold Incorporated
Prospecting, geological mapping, stripping	Aggregates, base metals	Windsor Road, Lunenburg County	South Shore Ready Mix Limited
Prospecting, rock sampling, soil sampling	Gold	Mount Uniacke, Hants County	Slam Exploration Limited
Diamond drilling	Base metals	Coxheath, Cape Breton County	Silvore Fox Minerals Corporation
Airborne geophysics	Base metals	Walton, Hants County	
Airborne geophysics, soil sampling	Base metals	Upper Stewiacke, Colchester County	
Soil sampling	Base metals	South Branch, Colchester County	
Airborne geophysics, soil sampling	Base metals	Musquodoboit Valley, Halifax County	
Airborne geophysics, soil sampling	Base metals	Middle Stewiacke, Colchester County	
Soil sampling	Base metals	Lime Hill, Inverness County	
Airborne geophysics	Base metals	Grand River, Richmond County	
Soil sampling	Base metals	Gays River, Halifax County	Scozinc Limited
Prospecting, rock sampling	Gold	North Brookfield, Queens County	Scott Grant
Prospecting, geological mapping	Gold	Millen Mountain, Halifax and Colchester counties	Rheingold Exploration Corporation
Prospecting, geological mapping, rock sampling	Gold	Miller Lake, Guysborough County	Ressources Appalaches Incorporated
Sand sampling	Rare earths, titanium	Cobequid Bay, Hants and Colchester counties	Rare Earth Mineral Sands Incorporated (formerly Titanium Minerals Inc.)
Diamond drilling	Gold	Widow Point, Guysborough County	Rainbow Resources Limited
Prospecting, rock sampling	Graphite	Christmas Island, Cape Breton County	
Prospecting, rock sampling	Graphite	Boisdale, Cape Breton County	Preston Mineral Resources Limited
PROGRAM	COMMODITY	LOCATION	COMPANY/INDIVIDUAL

Hants County.

Atlantic Canada Antimony Incorporated initiated an exploration for gold and antimony in the Waldeck area of Digby County. Work on the property included prospecting, geological mapping, rock sampling and stream sediment sampling in the vicinity of a previously discovered antimony showing by Shell Canada Resources in 1979. Rainbow Resources Limited completed additional diamond-drilling on the Widow Point gold property in Guysborough County during the year.

NSGold Corporation, in an option agreement with Globex Mining Enterprises Incorporated, completed additional work on the Mooseland gold property in Halifax County during the year consisting of prospecting, rock sampling and additional diamond-drilling. The company also completed a tailings sampling program on the Leipsigate gold property in Lunenburg County. Ressources Appalaches Incorporated carried out a preliminary exploration program for gold on the Millar Lake gold property in Halifax County during the year consisting of prospecting, geological mapping and rock sampling and Nycon Resources Incorporated completed an exploration program for gold in the Beaver Harbour Big Lake area in Halifax County consisting of geological mapping and soil sampling. Rheingold Exploration Corporation completed a preliminary exploration program for gold in the Millen Mountain area, Halifax County consisting of prospecting and geological mapping.

Canuc Resources Corporation, under an option agreement with Elk Exploration Limited, carried out a preliminary diamond-drilling program on the Mill Village gold property in Queens County as a follow-up to field work completed by the company in 2011. Elk Exploration Limited continued an exploration program for gold in the Gold River area in Lunenburg consisting of prospecting, geological mapping and rock sampling and Slam Exploration Limited initiated an exploration program for gold in the Mount Uniacke area including prospecting, rock sampling and soil sampling. Stay Gold Incorporated completed additional diamond-drilling on the former Harrigan Cove gold deposit in 2012. The company also

completed additional work in the Mushaboom area in Halifax County, as well as completing a preliminary exploration program for gold in the Moser River area during the year. Work on the two properties included prospecting, geological mapping, rock sampling and soil sampling.

Sugarloaf Resources Incorporated, in an option agreement with Blackfly Exploration & Mining, continued an exploration program for gold in the Nuttby area, Colchester County. Work on the property included sediment sampling and XRF analyses. The company also carried out an exploration program for gold and rare earth elements in the East New Annan area in Colchester County, consisting of prospecting, rock sampling, stream sediment sampling and XRF analyses.

Lyndon Jensen completed diamond-drilling on the Burnt Point property in Victoria County during the year as part of an ongoing exploration program on the property. Joe Richman continued work on the former Inco-Scominex gold property in MacMillan Flowage area, Victoria County during the year consisting of prospecting, trenching and rock sampling. Bruce Mitchell carried out soil and rock geochemical sampling, ground geophysical surveys and trenching in the Indian River area, Guysborough County. Ken Hiltz continued work on several gold properties in Queens and Lunenburg County during the year consisting of prospecting, rock sampling and tailings sampling of previous mining operations. Dominic Shadbolt carried out prospecting, geological mapping and rock geochemical sampling in the East Jeddore area in Halifax County and Perry Bezanson completed additional work consisting of prospecting and rock sampling in the Moser River area, Halifax County. Perry MacKinnon carried out prospecting and rock sampling in the Rocky Brook area in Inverness County.

Several other individuals and private interests also carried out exploration for gold on a number of properties throughout southern mainland Nova Scotia and Cape Breton Island during the year (Table 5).

Base Metals

Exploration for base metals in 2012 continued at roughly the same level of activity as the previous year. The current activity has been focussed primarily on the Lower Carboniferous Windsor Group sediments in northern mainland Nova Scotia and southeastern Cape Breton Island, IOCG (iron oxide, Cu-Au) deposits and associated polymetallic mineralization (Pb, Zn, Ag, Sn, W, Mo) and Rare Earth Elements (REE) along the Cobequid-Chedabucto Fault Zone throughout central mainland Nova Scotia, porphyry-style Cu-Au-Mo mineralization associated with Late Precambrian volcanic rocks in the Coxheath Hills area in eastern Cape Breton Island, and polymetallic mineralization occurring in Precambrian volcanic and sedimentary rocks in the Stirling area in southeastern Cape Breton Island.

Scozinc Limited completed additional soil sampling along the northeast strike extension of the Scotia Mine property during the year as part of an ongoing program to evaluate the potential for additional lead-zinc deposits in the Gays River area. The company also expanded its exploration program in 2012 to include an evaluation of the base metal potential of the Lower Carboniferous Windsor Group in the Stewiacke Valley area east of Gays River, the Musquodoboit Valley areas in Halifax and Colchester Counties, and in the Walton, Gormanville and Latties Brook areas in Hants County. In addition, the company also acquired mineral rights in the Lime Hill area in Inverness County and in the Grand River area in Richmond and Cape Breton Counties. Work on the properties included soil sampling and airborne geophysical surveys.

Cogonov Incorporated initiated an exploration program for gold and copper in the Rockland Brook area, Colchester County and in the Barneys River area, Pictou County during 2012. Work on the properties included prospecting, spectrometer surveys, rock sampling and XRF analyses. The company also completed an airborne magnetic and electromagnetic survey over several properties in northern mainland Nova Scotia during the year. Minotaur Atlantic Exploration Limited continued an exploration program for IOCG (iron oxide, Cu-

Au) deposits in the Copper Lake area, Antigonish County in 2012. Work on the property included an IP survey and diamond-drilling. Elk Exploration Limited carried out an exploration program for gold and rare earth elements in the Londonderry area in Colchester County consisting of prospecting, rock sampling and XRF analyses. Clear Lake Resources Incorporated continued an exploration program for gold and rare earth elements (REE) on several properties in the Silica Mountain, McLeod Brook and Little Snare Lake areas in Colchester County during the year. Work on the properties included stream sediment sampling, rock sampling and XRF analyses.

Witch's Glen Gold Limited continued an exploration program for copper and gold in the Londonderry area during the year following the completion of prospecting and geological mapping in 2011. The current work program included ground geophysics and diamond-drilling. The company also completed a gravity survey for copper and molybdenum in the Oceanview area in Cape Breton County. Guyco Consulting Limited initiated an exploration program for copper and gold in the Roman Valley area, Guysborough County, consisting of prospecting and rock and stream sediment geochemical sampling.

Thundermin Resources Incorporated carried out a preliminary diamond-drilling program for base metals in the St. Esprit-Stirling area in Richmond County during the year as a follow-up to field work completed by the company in 2011. Merrex Gold Corporation, completed a soil sampling program on the Jubilee base metal deposit at Little Narrows, Victoria County during the year and Silvore Fox Minerals Corporation completed additional diamond drilling in the Coxheath area in Cape Breton County. Hudgtec Consulting Limited initiated a detailed exploration program for copper and gold in the MacLeods Lake area, Richmond County during the year. Work on the property included prospecting, geological mapping, soil and rock geochemical sampling, ground geophysical surveys and trenching.

Great Atlantic Resources Corporation initiated an exploration program for base metals in the MacLean Brook area, Cape Breton County. John

Wightman completed a gravity survey on the Dominique property in Yarmouth County during the year as part of an ongoing exploration program for tin and associated base metal mineralization. Work on the property included prospecting and soil, stream sediment and rock geochemical sampling. Perry MacKinnon carried out exploration for base metals in the Trout Lakes area in Inverness County consisting of prospecting and rock sampling.

Industrial Minerals

Exploration for industrial minerals demonstrated a modest increase in the level of activity over the previous year. Current work has been focussed on a variety of industrial mineral commodities including kaolin, silica sand, titanium sands and associated rare earth elements, limestone and graphite.

Acadian Mining Corporation, through its whollyowned subsidiary Annapolis Properties Corporation, completed additional work on the company's Lake Ainslie barite-fluorite property early in the year. Exploration activities consisted of analytical work on processed material from a small scale metallurgical testing program that was completed in late 2011 on samples of barite-fluorite collected from the Upper Johnson and Upper Johnson North veins. A detailed petrographic study of the Upper Johnson Vein was also undertaken in conjunction with the metallurgical work. The company acquired a 100% interest in the Lake Ainslie fluorite-barite property in 2007. The deposits host an uncategorized resource of 4.25 million tonnes grading 34% barite and 17.3% fluorite.

Associated companies Allgreen Minerals Incorporated, Alnova Mining Incorporated and Golden Kamala Resources Incorporated initiated a detailed evaluation of the kaolin, titanium and silica sand potential of Cretaceous clay deposits in the Shubenacadie area of Hants and Halifax Counties in 2012. Preliminary work on the project included a review and sampling of previous drilling in the area, 3D modelling of the Cretaceous deposits and processing studies on clay samples.

Glencoe Resources Incorporated continued an exploration program on the Glencoe limestone deposit in Inverness County in 2011. Work on the property included an analysis of shaded relief digital elevation data and diamond drilling. Preston Mineral Resources Limited initiated an exploration program for graphite in the Boisdale and Christmas Island areas, Cape Breton County. Work on the properties included prospecting, rock sampling and sampling of previous drilling in the area. Mosher Limestone Company Limited completed an exploration program for limestone in the Upper Musquodoboit area in Halifax County during the year consisting of prospecting, rock geochemical sampling and trenching.

Rare Earth Mineral Sands Incorporated (formerly Maritime Titanium Incorporated) continued an exploration program for rare earths and titanium on the company's mineral sands holdings in the Cobequid Bay area during the year. Work consisted of a preliminary drilling program to assess the potential for identifying metal-rich sand horizons in the sand dunes. South Shore Ready Mix Limited completed a preliminary exploration program for aggregates and base metals in the Windsor Road area in Lunenburg County including prospecting, geological mapping and stripping.

Reference

Keppie, J. D. (compiler) 1979: Geological map of the Province of Nova Scotia; Nova Scotia Department of Mines and Energy, Map 1979-001, scale 1:500 000.