

Appendix 1

Mining Industry Activity in Nova Scotia, 1997

Mining Industry Expenditures

Investment by the mining industry in Nova Scotia is monitored by means of annual surveys of all companies having operations or activity in the province. Aggregate producers are not included in this survey. The surveys are carried out by the Nova Scotia Department of Natural Resources (DNR) jointly with Natural Resources Canada (Minerals and Metals Sector - Minerals and Mining Statistics Division), and Statistics Canada (Investment and Capital Stock Division). The Mines and Energy Development Division of DNR actively participates in the Annual Survey of Canadian Mineral Exploration Expenditures and the Annual Survey on Exploration Development, Capital and Repair Expenditures.

Preliminary figures indicate exploration expenditures in 1997 remained at roughly the same level as 1996 (Table 1.1). Diamond-drilling, however, was up significantly in 1997 over 1996. Capital expenditures at existing mines were down slightly in 1997 from 1996 and repair and maintenance expenditures were down moderately.

Mining Leases

There were no Mining Leases issued during the year.

Mining Permits

There were no Mining Permits issued.

Production Information from Mines, Quarries and Other Operations

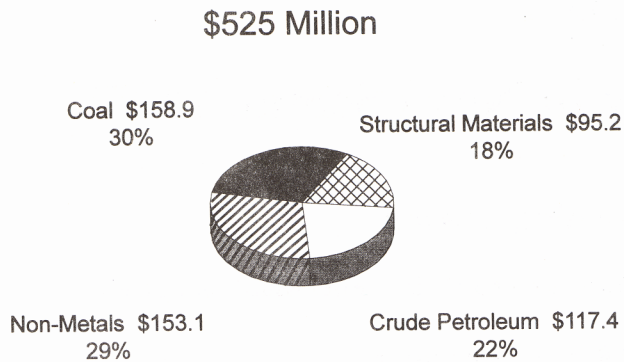
In 1997, the estimated total value of Nova Scotia's mineral production, including secondary mineral processing and crude petroleum, totalled \$525 million (Fig. 1.1), a decrease of 16% from the year before. This decrease was due largely to lower outputs of crude petroleum and coal. Excluding petroleum, the total value of Nova Scotia's mineral production totalled \$407 million, down 5% from 1996's figure of \$428 million. Coal sales dropped approximately 16% in 1997 to 2.7 million tonnes from 1996's figure of 3.2 million tonnes as production problems plagued the

Table 1.1. Mining industry expenditures in 1996 and 1997.

	1996	1997 ¹
Mineral Exploration Expenditures (field plus overhead) ²	\$6,892,000	\$6,726,000
Exploration diamond-drilling ²	13 895 m	26 487 m
Exploration drilling - other ²	1 865 m	1 440 m
Mineral Development Expenditures (field plus overhead)	\$6,036,266	\$5,483,000
Capital and Repair Expenditures at Mining Establishments		
Construction:		
Capital	\$ 7,730,000	\$3,032,700
Repair	\$ 2,600,000	\$438,754
Machinery and Equipment		
Capital	\$29,060,000	\$30,894,805
Repair	\$33,080,000	\$24,610,000

¹preliminary

²includes deposit appraisal



Includes secondary mineral processing where applicable

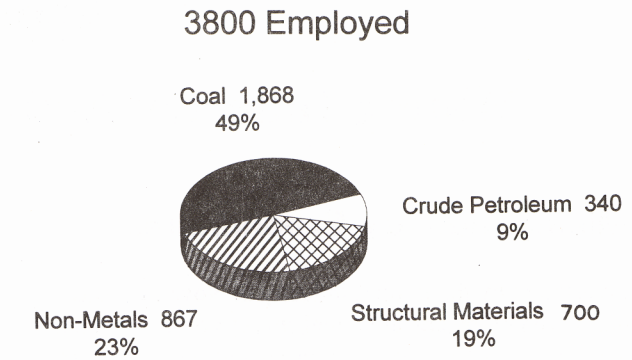
Figure 1.1 Value of mineral production by commodity group.

province's largest coal mine, the Cape Breton Development Corporation's Phalen Colliery. Employment in Nova Scotia's mineral industry totalled roughly 3800 persons (Fig. 1.2), a 5% decrease from the year before (Fig. 1.3).

On a more positive note, Nova Scotia's industrial minerals producers had another good year in 1997, producing more than 21 million tonnes of industrial minerals worth an estimated \$248 million. 1997 was a record year for Nova Scotia gypsum shipments with a total of 7.09 million tonnes shipped, mainly to wallboard plants along the U.S. Eastern Seaboard. This just surpasses the old record of 7.04 million tonnes set in 1994. Seventy percent of all gypsum imported into the United States in 1997 came from Nova Scotia. Nova Scotia is Canada's largest gypsum producer, accounting for more than 80% of the country's total production.

Salt shipments rose 17% in 1997 over 1996 to 1.3 million tonnes. Cement sales, however, were down 28% from 1996. Overall, aggregate products (crushed stone, sand and gravel) increased by 9% in 1997 from the year before. Crushed stone production rose by 28% while sand and gravel production dropped by 20%. The increase in crushed stone output can be largely attributed to construction of the Cobequid Pass (Highway 104 western alignment).

Although petroleum is included in the overall value of Nova Scotia's mineral production, this appendix focuses on the non-petroleum sectors of the industry (Table 1.2), providing a description of each mine site. Tables 1.3 to 1.5 provide more detailed information on production of different commodities. Site locations are



Includes secondary mineral processing employment where applicable

Figure 1.2. Employment by mineral commodity group.

shown on the accompanying maps, Figures 1.4 and 1.5. Production data are for the calendar year 1 January 1997 to 31 December 1997.

Metal Mines and Gold Mines

Metal Mines

There were no producing metal mines in 1997.

Gold Mines

There were no producing gold mines during the year.

Coal Mining Operations

During 1997, there were two underground coal mines and seven surface coal mines operating in the province. Table 1.3 summarizes production information for the coal mines. The summaries below give brief details of the underground and surface coal mines operating in Nova Scotia.

Underground Coal Mines

CAPE BRETON DEVELOPMENT CORPORATION

Manager(s): B. MacDonald, General Manager, Phalen Colliery
 T. Isaacs, General Manager, Prince Colliery
 Address: P. O. Box 2500
 Sydney, N. S. B1P 6K9

Raw Coal
 Production: 2,562,711 tons (2 324 876 tonnes)
 Employees: 1,743

Table 1.2. Summary of Nova Scotia mineral production, 1996 and 1997.

DESCRIPTION	1996		1997	
	VALUE '000\$ ¹	EMPLOYMENT*	VALUE '000\$ ¹	EMPLOYMENT*
<u>METALS</u>				
Gold				
Total metals	0 ²		0 ²	
<u>INDUSTRIAL MINERALS</u>				
(Non-Metals)				
Anhydrite	2,193		2,148	
Barite	**1,071		**731	
Gypsum ³	65,554		72,655	
Limestone ⁴ and Dolomite	2,009		4,776	
Peat	**1,319		**1,491	
Salt	**60,312		**68,680	
Silica	**2,000		**2,600	
Total Non-Metals	134,458	882	153,081	867
(Structural Materials)				
Dimension Stone	374		303	
Cement	**45,000		**32,260	
Clay Products	**4,680		**5,000	
Plaster Products	**1,800		**0 ²	
Crushed Stone	33,939		43,575	
Sand & Gravel	17,751		14,032	
Total Structural Materials	103,544	797	95,170	700
Total Industrial Minerals	238,002	1,680	248,251	1,570
FUELS				
Coal	189,826	2,020	158,949	1,868
Petroleum - Crude	195,000	340	117,450	340
Total Fuels	384,826	2,360	276,399	2,208
TOTAL MINERAL PRODUCTION	623,000	4,000	524,650	3,800
CHANGE FROM PREVIOUS YEAR	5%	-7%	-16%	-5%

¹ Estimated from Department of Natural Resources sources

² There were no metal mines operating in 1996 or 1997

³ Does not include the value of gypsum quarried for plaster products

⁴ Does not include the value of limestone quarried for cement production

* Average number of persons during production period

** Processed or manufactured value

Note: Production represents shipments; numbers may not add to totals due to rounding

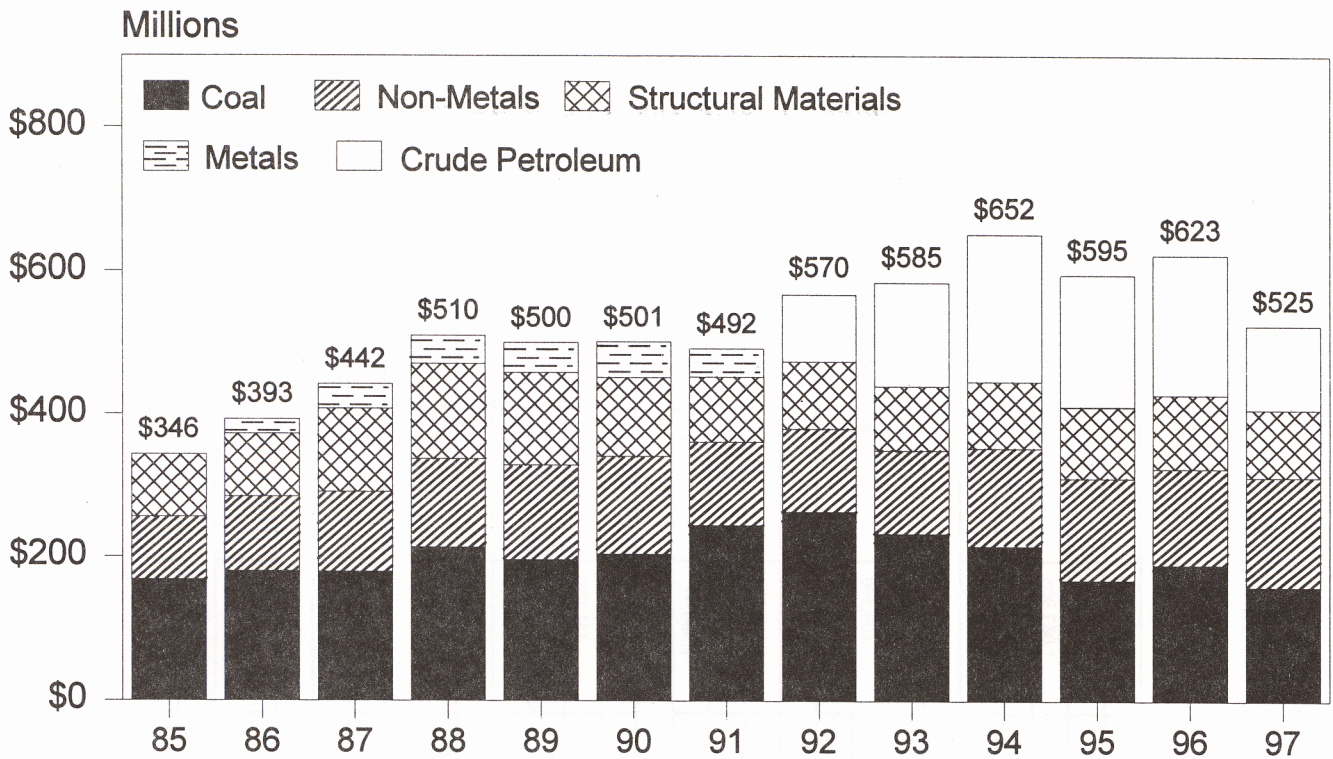
Table 1.3. Coal production for the calendar year 1997.

COMPANY	MINE NAME	LOCATION	PRODUCTION		TOTAL NUMBER EMPLOYED ¹	APPROX. S VALUE ²
			TONS	TONNES		
UNDERGROUND MINING						
Cape Breton Development Corp. (CBDC)	Prince Mine	Point Aconi, Cape Breton County				
	Phalen Mine	Lingan, Cape Breton County				
Total (underground)			2,638,906	2 394 000	1,743	
OPEN PIT MINING						
Black Gold Enterprises Limited	Springhill Rail Bed Project	Springhill, Cumberland County	12,501	11 341	8	
Brogan Mining Company Limited	Sullivan Creek and Toronto Rd. Mines	Sullivan Creek Cape Breton County	69,445	63 000	20	
Cape Crushing Company Limited	Merritt Point Mine	North Sydney, Cape Breton County	2,568	2 330	2	
Evans Coal Mines Limited	St. Rose Mine	St. Rose, Inverness County	58,977	53 504	29	
Pioneer Coal Limited	Stellarton Mine	Stellarton, Pictou County	181,565	164 715	46	
Thorburn Mining Limited	Thorburn Mine	Thorburn, Pictou County	22,177	20 119	20	
Total (open pit)			347,224	315 000	125	
TOTAL FOR ALL COAL PRODUCERS			2,986,130	2 709 000	1,868	158,949,000

¹personnel employed in clerical, supervisory, etc. positions as well as mining personnel

²estimated from Nova Scotia Department of Natural Resources sources

NOTE: Production represents shipments; numbers may not add to totals due to rounding



Includes secondary mineral processing where applicable

Figure 1.3. Historical trend of the value of mineral production in Nova Scotia, 1986-1997.

The Cape Breton Development Corporation is a federal Crown Corporation that operated two underground coal mines in Cape Breton County during 1996.

Phalen Colliery

Raw Coal

Production: 1,488,105 tons (1 350 000 tonnes)

The Phalen Colliery, near New Waterford, Cape Breton County, commenced production in 1987 in the Phalen Seam. The coal is extracted by the mechanical retreat longwall method. During the year, coal was mined from the No. 3 Center and No. 7 East longwall panels. Development work was conducted on the entries for the No. 8 East and No. 9 East panels.

Mining operations in No. 3 Center panel were

interrupted by a roof fall in October 1997. Production at the mine resumed in January 1998.

Prince Mine

Raw Coal

Production: 1,074,606 tons (974 876 tonnes)

The Prince Mine is located in Point Aconi, Cape Breton County. The mine began underground production from the Hub Seam in 1975, initially using room and pillar methods. Mechanized retreat longwall operations began in 1980.

During 1997, coal was mined from the No. 15 West longwall panel. Development work was carried out on the No. 1 North longwall panel.

Table 1.4. Industrial minerals production for the calendar year 1997.

COMPANY	LOCATION	PRODUCTION		TOTAL NUMBER EMPLOYED ¹	APPROXIMATE S VALUE ²
		TONS	TONNES		
GYPSUM					
Fundy Gypsum Co.	Miller Creek and Wentworth Road, Hants County	1,873,659	1 699 777	170	
Georgia-Pacific Corp.	Sugar Camp, Inverness County	1,088,026	987 051	88	
Little Narrows Gypsum Co.	Little Narrows, Victoria County	1,083,906	983 313	104	
National Gypsum (Canada) Limited	East Milford, Halifax County	3,767,844	3 418 166	100	
Total (gypsum)		7,813,000	7 088 300	462	72,655,200
ANHYDRITE					
Fundy Gypsum Co.	Miller Creek and Wentworth Road, Hants County	91,966	83 431	see gypsum	
Little Narrows Gypsum Co.	Little Narrows, Victoria County	106,590	96 698	see gypsum	
Total (anhydrite)		198,524	180 100		2,148,000
SALT					
The Canadian Salt Co. Ltd.	Pugwash, Cumberland County	1,288,297	1 168 735	210	
Sifto Canada Inc.	Nappan, Cumberland County	98,202	89 088	73	
Total (salt)		1,386,495	1 257 820	283	68,680,000 ³
LIMESTONE AND DOLOMITE					
Kelly Rock Ltd.	Glen Morrison, Cape Breton County	122,224	110 881	17	
Lafarge Canada Inc.	Brookfield, Colchester County	451,850	409 916	11	
Mosher Limestone Co. Ltd.	Upper Musquodoboit, Halifax County	77,492	70 300	22	
Ridge Brokers Ltd.	Southside Harbour, Antigonish County	8,501	7 712	1	
Scotia Limestone Ltd.	Kellys Cove, Victoria County	62,831	57 000	12	
Total (limestone and dolomite)		722,898	655 809	63	4,776,000 ⁴
BARITE					
E-Z-EM Canada Inc.	Brookfield, Colchester County	642	582	19	731,353 ³
Total (barite)		642	582	19	731,353 ³
CLAY					
Shaw Brick (a member of the Shaw Group Limited)	Lantz, Hants County Shubenacadie, Halifax County	17,414	15 798	2	0 ⁵
SHALE					
Shaw Brick (a member of the Shaw Group Limited)	Milford, Hants County New Glasgow, Pictou County	7,464	6 771	2	0 ⁵
Total (clay and shale)		24,878	22 569	4	0 ⁵

Table 1.4. Continued.

COMPANY	LOCATION	PRODUCTION		TOTAL NUMBER EMPLOYED ¹	APPROXIMATE S VALUE ²
		TONS	TONNES		
SILICA SAND					
Shaw Resources (a member of the Shaw Group Limited)	Nine Mile River, Hants County	64,704	58 699	6	2,600,000 ³
Total (silica sand)		64,704	58 699	6	2,600,000 ³
DIMENSION STONE					
Heritage Memorials Ltd. ²	Quarry: Nictaux, Annapolis County (granite) Plant: Windsor, Hants County	1,929	1 750	20	
Wallace Quarries Ltd.	Quarry: Wallace, (Sandstone) Cumberland County	332	301	5	
Total (dimension stone)		2,261	2 051	25	303,000
PEAT MOSS					
Annapolis Valley Peat Moss Company	Berwick, Kings County	5,401	4 900	19	
Clare Organic Products Ltd. ²	Meteghan Station, Digby County	2,250	2 041	15	
Total (peat moss)		7,651	6 941	34	1,491,000 ³
AGGREGATES					
Crushed Stone	Various	9,606,545	8 715 000	344	43,575,000
Sand and Gravel	Various	3,866,868	3 508 000	204	14,632,000
Total (aggregates)		13,473,413	12 223 000	548	57,607,000
TOTAL FOR INDUSTRIAL MINERALS⁶		23,695,000	21 496 000	1,444	210,992,000

¹total employees: mining, production, clerical, supervisory, etc.²estimate from Nova Scotia Department of Natural Resources sources³processed or manufactured value⁴does not include the value of Lafarge Canada Inc. production which value is transferred to the higher manufactured value (cement)⁵value assigned to the higher manufactured valuation (bricks)⁶excluding secondary mineral manufacturing (Table 1.7)

Note: production represents shipments; numbers may not add to totals due to rounding

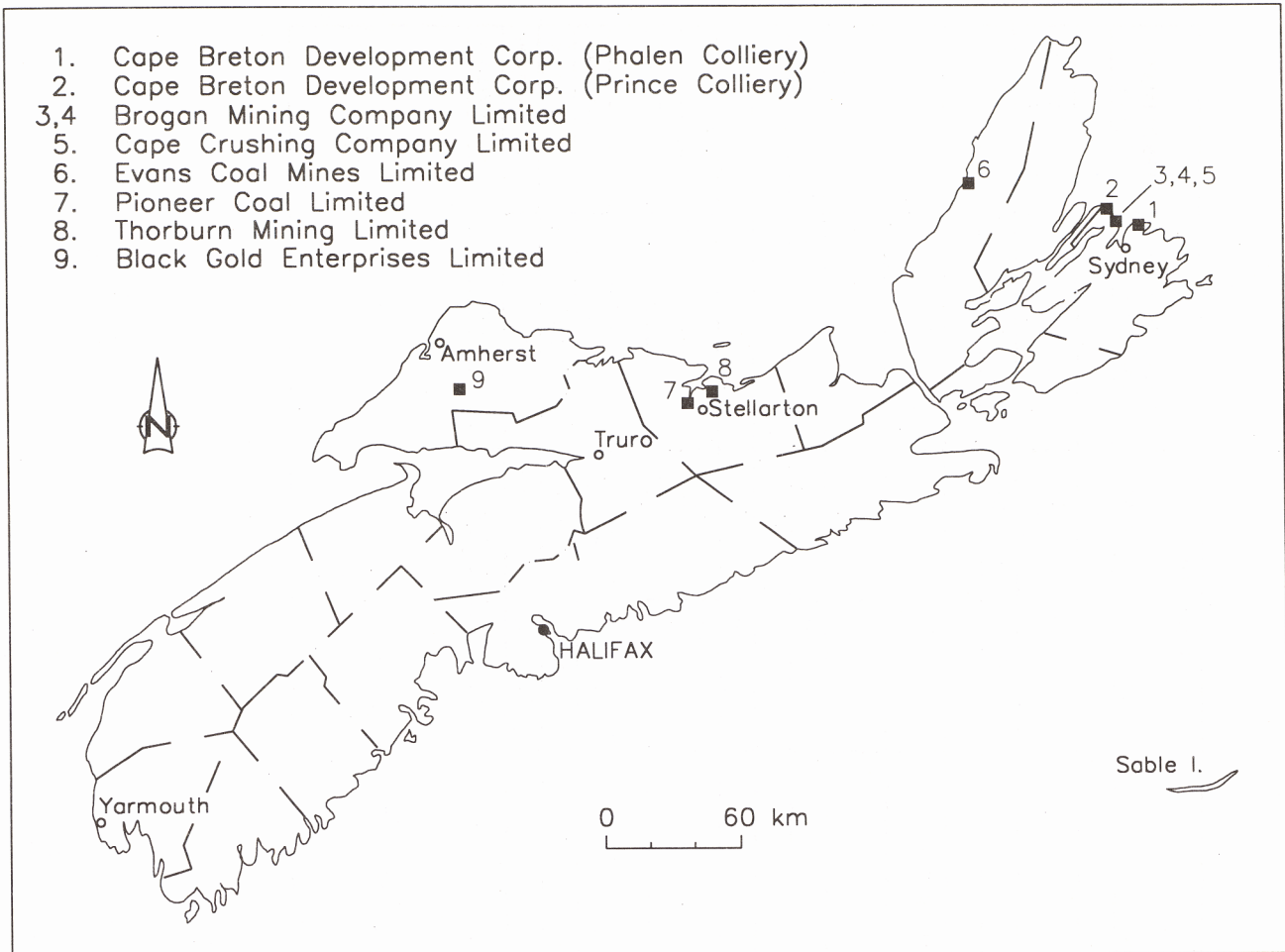


Figure 1.4. Locations of coal mines in Nova Scotia.

Surface Coal Mines

EVANS COAL MINES LIMITED

Manager: E. Fraser
 Address: R. R. #1
 Inverness, N. S. B0E 1N0
 Production: 58,977 tons (53 504 tonnes) of coal
 Employees: 29

The Evans Coal Mines Limited began surface coal mining operations at St. Rose, Inverness County, in 1993, following the closure of the underground mine in 1992. Coal is extracted from the No. 5 Seam crown pillar and from the pillars left behind by the underground operation. In 1997, mining was conducted during the periods from January to June and September to December. Mining proceeded in a southerly direction. Overburden and waste rock were removed by blasting and ripping by bulldozers. Material is loaded and hauled using hydraulic

excavators and dump trucks. Extensive underground workings were encountered during the coal extraction process. During the year, the Duggan Mountain Road was temporarily relocated to facilitate mining and reclamation.

PIONEER COAL LIMITED

Manager: C. Chisholm
 Address: P. O. Box 929
 Westville, N. S. B0K 2A0
 Production: 181,565 tons (164 715 tonnes) of coal
 Employees: 46

Pioneer Coal began mining coal from the Foord Seam at the Stellarton mine site in March 1996, using hydraulic excavators and dump trucks. The seam was mined in both an easterly and westerly direction from the existing pit. The Foord Seam is approximately 40 feet thick. Mining becomes more selective in the western end

Table 1.5. Secondary mineral manufacturing for the calendar year 1997.

COMPANY	LOCATION	PRODUCTION		TOTAL NUMBER EMPLOYED ¹	APPROX. SVALUE ²
		TONS	TONNES		
CLAY PRODUCTS					
Shaw Brick (a member of the Shaw Group Limited)	Lantz, Hants County	24,878	22 569	45	5,000,000
PORTLAND CEMENT					
Lafarge Canada Inc.	Brookfield, Colchester County	292,631	265 473	77	32,260,000
TOTAL FOR SECONDARY MINERAL MANUFACTURING				122	37,260,000
¹ total number of employees including office, clerical, supervisory, mining and production					
² estimated from Nova Scotia Department of Natural Resources sources					
NOTE: Production represents shipments; numbers may not add to totals due to rounding					

of the mine as the percentage of ash increases. The company conducted mining operations at the site from March to June and September to December.

The coal mined from the Stellarton operation was blended on-site with coal trucked from the Evans Coal Mine and the Thorburn Mine before being shipped to the Trenton generating station.

THORBURN MINING LIMITED

Manager: C. Chisholm
 Address: P. O. Box 929
 Westville, N. S. B0K 2A0
 Production: 22,177 tons (20 119 tonnes) of coal
 Employees: 20

Mining at the Thorburn site began in June 1995. In 1997, the mine operated from September to December.

Coal was extracted from the McBean Seam crown pillar and from pillars remaining from the former underground mining operations. During the year, overburden and waste rock were removed by ripping with bulldozers. Material was loaded and hauled using hydraulic excavators and dump trucks. The seam varies in thickness from 4 to 7 feet.

CAPE CRUSHING COMPANY LIMITED

Manager: E. Brogan
 Address: P. O. Box 265
 North Sydney, N. S. B2A 3M3
 Production: 2,568 tons (2 330 tonnes) of coal
 Employees: 2

The company operates a small surface coal mine at Alder Point, Cape Breton County. Coal was mined during the year from the Upper and Lower Bonar Seams using small scale excavating equipment.

BROGAN MINING COMPANY LIMITED

Manager: R. Brogan
 Address: 126 Main Street
 North Sydney, N. S. B1V 2L6
 Production: 69,445 tons (63 000 tonnes) of coal
 Employees: 20

The company operated two surface coal mines in Cape Breton County during 1997. Coal from both operations was blended to produce a saleable product.

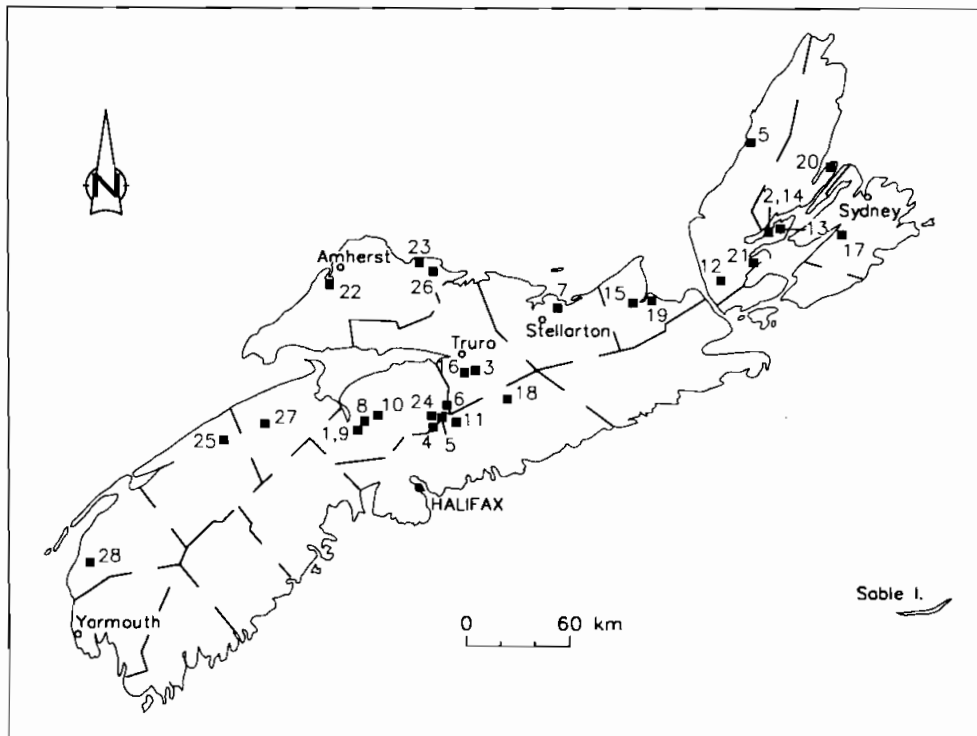
At Sullivans Creek, coal was mined from the Sydney Main Seam. Overburden was removed using a dragline, while waste rock and coal was mined with bulldozers, excavators and dump trucks. The company completed mining at the site during the year and began reclamation work.

At the Toronto Road mine site, surface mining operations recovered coal from both the Sydney Main and Stubbart coal seams. The coal was blended with coal mined from Sullivans Creek. Mining is carried out using bulldozers, hydraulic excavators and dump trucks. The company conducted progressive reclamation of the mined areas during the year.

BLACK GOLD ENTERPRISES LIMITED

Manager: R. Smith
 Address: P. O. Box 576
 Springhill, N. S. B0M 1X0
 Production: 12,501 tons (11 341 tonnes) of coal
 Employees: 8

The company commenced operations at the site in 1995 to recover coal from an abandoned rail bed in the Springhill area. The coal material is processed in a small portable wash plant installed on site. Operations during the year began in May and continued until November.



ANHYDRITE

- 1. Fundy Gypsum Co.
- 2. Little Narrows Gypsum Co.

BARITE

- 3. E-Z-EM Canada Inc.

CLAY AND SHALE

- 4-7. Shaw Brick, a member of the Shaw Group Limited

GYPSUM

- 8-9. Fundy Gypsum Co.
- 10. Domtar Gypsum
- 11. National Gypsum (Canada) Ltd.
- 12. Georgia-Pacific Corp.
- 13-14. Little Narrows Gypsum Co. Ltd.
- 15. Nova Construction Co. Ltd.

LIMESTONE AND DOLOMITE

- 16. Lafarge Canada Inc.

- 17. Kelly Rock Limited
- 18. Mosher Limestone Co. Ltd.
- 19. Ridge Brokers Ltd.
- 20. Scotia Limestone Ltd.
- 21. Shaw Resources, a member of the Shaw Group Limited

SALT

- 22. Sifto Canada Inc.
- 23. The Canadian Salt Co. Ltd.

SILICA SAND

- 24. Shaw Resources, a member of the Shaw Group Limited

DIMENSION STONE

- 25. Heritage Memorials Ltd.
- 26. Wallace Quarries Ltd.

PEAT MOSS

- 27. Annapolis Valley Peat Moss Co.
- 28. Clare Organic Products Limited

Figure 1.5. Location of industrial mineral operations in Nova Scotia.

Industrial Minerals Mining

Gypsum and Anhydrite

GEORGIA-PACIFIC CANADA INCORPORATED

Manager: D. Duncan
 Address: P. O. Box 400
 Port Hawksbury, N. S. B0E 2V0
 Production: 0 tons (0 tonnes) of gypsum
 Employees: 0

There was no production at the mine in 1997.

FUNDY GYPSUM COMPANY LIMITED

Manager: T. Davis
 Address: P. O. Box 400
 Windsor, N. S. B0N 2T0
 Production: 91,966 tons (83 431 tonnes) of anhydrite
 1,873,659 tons (1 699 772 tonnes) of gypsum
 Employees: 170

The Fundy Gypsum Company operates quarries and crushing plants in the Wentworth Creek and Miller Creek areas near Windsor, Hants County. In 1997, the company produced gypsum from its Miller Creek quarry and both gypsum and anhydrite from the Wentworth Creek quarry. The Wentworth Creek ore is processed in the company's heavy media plant to separate anhydrite from gypsum.

The gypsum and anhydrite are transported by unit train to ship-loading facilities at Hantsport, a distance of 12 miles (19 km). These products are transported to wallboard and cement plants in the United States.

GEORGIA-PACIFIC CORPORATION

Manager: J. Graham
 Address: P. O. Box 400
 Port Hawksbury, N. S. B0E 2V0
 Production: 1,088,026 tons (987 051 tonnes) of gypsum
 Employees: 88

Georgia-Pacific Corporation operates a gypsum quarry at Sugar Camp, Inverness County. Overburden at the site is removed using a dragline and truck and shovels. The gypsum is drilled and blasted prior to being transported to the crusher by trucks. The crushed gypsum is then transported by truck to ship loading facilities at Point Tupper, Richmond County, a distance of 12 miles (19 km).

LITTLE NARROWS GYPSUM COMPANY LIMITED

Manager: Bruce Allan
 Address: R. R. #1
 Little Narrows, N. S. B0E 1T0
 Production: 106,590 tons (96 698 tonnes) of anhydrite
 1,083,906 tons (983 313 tonnes) of gypsum
 Employees: 104

Little Narrows Gypsum Company Limited operates two gypsum quarries and one anhydrite quarry near Little Narrows, Victoria County. All the gypsum and anhydrite produced is shipped from the company's dock on the Bras d'Or Lakes to destinations in Canada and the United States.

NATIONAL GYPSUM (CANADA) LIMITED

Manager: Pat Mills
 Address: P. O. Box 57
 Milford, N. S. B0N 1Y0
 Production: 3,767,844 tons (3 418 166 tonnes)
 Employees: 100

National Gypsum (Canada) Limited operates the largest gypsum quarry in the province at East Milford, Halifax County. The gypsum is drilled and blasted and loaded onto trucks with hydraulic excavators and loaders. The gypsum is then transported by unit train from Milford to Wright's Cove, Dartmouth, a distance of 28 miles (45 km), where it is loaded onto ships for points in Canada and the United States.

NOVA CONSTRUCTION COMPANY LIMITED

President: J. Chisholm
 Address: P. O. Box 1328
 Antigonish, N. S. B2G 2L7
 Production: 0 tons (0 tonnes) of gypsum
 Employees: 12 (when in production)

There was no production from this quarry at Brierly Brook, Antigonish County, in 1997.

Salt

THE CANADIAN SALT COMPANY LIMITED

Manager: A. Davidson
 Address: P. O. Box 160
 Pugwash, N. S. B0K 1L0
 Production: 1,288,297 tons (1 168 735 tonnes) of salt
 Employees: 210

The Canadian Salt Company Limited mine is located at Pugwash, Cumberland County. The salt is mined by a room and pillar system of extraction, using diesel and electric drills, undercutters, loaders and trucks. Primary production during the year was from the 1000 foot level. Secondary production was from the 730 foot level and the 830 foot level.

The processing plant at the site produces industrial grades of salt, salt blocks for farm use and refined salt for domestic consumption. Transportation is either by road, rail or from the company owned ship-loading facility at Pugwash.

SIFTO CANADA INCORPORATED

Manager: D. Dickie
Address: P. O. Box 550
Amherst, N. S. B4H 4A1
Production: 98,202 tons (89 088 tonnes) of salt
Employees: 73

Salt has been produced from a solution salt mine at Nappan, Cumberland County, since 1947. Salt is mined by pumping water into underground wells where the salt is dissolved by the water and the resulting brine solution is then pumped back to the surface. The salt is then recovered from the brine in a processing plant, using a 'mechanical vapour recompression evaporating process' system.

During the year, salt was produced from the No. 7 and No. 8 brine wells.

Barite

E-Z-EM CANADA INCORPORATED, NYSTONE DIVISION

Manager: V. Prostak
Address: P. O. Box 69
Debert, N. S. B0M 1G0
Production: 642 tons (582 tonnes) of pharmaceutical grade barite
Employees: 19

The barite deposit is located 1 mile (1.6 km) northeast of Brookfield, Colchester County. During 1997, the surface mine was dewatered and approximately 1,650 tons (1 497 tonnes) of ore were mined from the pit. All of the material that had previously been mined and

stockpiled at the mine was trucked to the company's plant at Debert where it was upgraded to a pharmaceutical quality product. Refined products are then transported to the parent company, E-Z-EM Corporation, New York, USA, for further processing and packaging.

Limestone and Dolomite

LAFARGE CANADA INC.

Manager: J. Cross
Address: P. O. Box 5
Brookfield, N. S. B0N 1C0
Production: 451,850 tons (409 916 tonnes) of limestone
Employees: 11 (quarry) 77 (cement plant)

Lafarge Canada Inc. operates a limestone quarry at their Brookfield cement manufacturing plant, located 3 miles (5 km) west of Brookfield. The total production from the quarry is used to produce cement.

MOSHER LIMESTONE COMPANY LIMITED

Manager: D. Mosher
Address: P. O. Box 28
Upper Musquodoboit, N. S.
B0N 2M0
Production: 77,492 tons (70 300 tonnes) of limestone
Employees: 22

Mosher Limestone operates quarries near Upper Musquodoboit, Halifax County. The company produces agricultural grade dolomitic limestone in its grinding plant at Upper Musquodoboit. The product is bagged or supplied in bulk for distribution throughout the Atlantic Provinces. In 1996, the company began producing a pelletized limestone product for the domestic garden market.

SHAW RESOURCES, A MEMBER OF THE SHAW GROUP LIMITED

Manager: K. Hardie
Address: P. O. Box 60
Shubenacadie, N. S. B0N 2H0
Production: 0 tons (0 tonnes) of marble
Employees: 2 (when in production)

Shaw Resources produces marble intermittently from a quarry at Marble Mountain, Inverness County. This marble is used for brick manufacture and in landscaping.

RIDGE BROKERS LIMITED

Manager: A. Alward
 Address: P. O. Box 59
 Havelock, N. B. E0A 1W0
 Production: 8,501 tons (7 712 tonnes) of limestone
 Employees: 1

The company operates a small quarry at Southside, Antigonish Harbour, Antigonish County. During the year, 16,535 tons (15 000 tonnes) of limestone was drilled, blasted, screened and crushed at the site.

SCOTIA LIMESTONE LIMITED

Manager: D. Mosher
 Address: P. O. Box 28
 Upper Musquodoboit, N. S. B0N 2M0
 Production: 68,831 tons (57 000 tonnes) of dolomite
 Employees: 12

In 1996, Mosher Limestone Company Limited purchased the assets of the Kellys Cove dolomite quarry from Scotia Limestone. The mine produced an agricultural grade dolomite for domestic sale as well as a product for the offshore steel industry. No mining took place at the site during 1997; all production came from existing inventory.

KELLY ROCK LIMITED

Manager: D. MacKenna
 Address: P. O. Box 1206
 Sydney, N. S. B1P 6J9
 Production: 122,224 tons (110 881 tonnes) of limestone
 Employees: 17

The limestone quarry at Glen Morrison, Cape Breton County, began production in 1993. The company produces several products at the on-site milling facility. In 1996, the company completed construction of a secondary and tertiary processing plant and a large limestone storage facility. During the year, most of the production from this site was shipped to Point Aconi for use in the fluidized bed power generating station.

Clay**SHAW BRICK, A MEMBER OF THE SHAW GROUP LIMITED**

Manager: B. Frizzell
 Address: P. O. Box 2130
 Lantz, N. S. B0N 1R0

Production: 24,569 tons (22 569 tonnes) of clay & shale
 Employees: 4

Shaw Brick mines clay from pits at Lantz, Milford and Shubenacadie, all in Hants County, and shale from a quarry in New Glasgow, Pictou County. These materials are used in the company's plant in Lantz for the manufacture of bricks and other structural clay products.

Silica Sand**SHAW RESOURCES, A MEMBER OF THE SHAW GROUP LIMITED**

Manager: K. Hardie
 Address: P. O. Box 60
 Shubenacadie, N. S. B0N 2H0
 Production: 64,704 tons (58 699 tonnes) of silica sand
 Employees: 6

Shaw Resources produces silica sand from a deposit at West Indian Road, Hants County. This sand is processed into several silica sand products including glass grade sand.

Dimension Stone**HERITAGE MEMORIALS LIMITED**

Manager: G. Nelson
 Address: P. O. Box 308
 Windsor, N. S. B0N 2T0
 Production: 1,929 tons (1 750 tonnes) of granite (est.)
 Employees: 20

The company periodically operates a small quarry at Nictaux West, Annapolis County. The grey granite is used as dimension stone at the company's memorial manufacturing plant at Windsor, Hants County.

WALLACE QUARRIES LIMITED

Manager: S. Flynn
 Address: P. O. Box 203
 Wallace, N. S. B0K 1Y0
 Production: 332 tons (301 tonnes) of building stone
 Employees: 5

The Wallace Quarries, located near Wallace, Cumberland County, continued to supply building stone for major building rehabilitation work in Halifax and central Canada. Blocks of stone are sent for cutting to processing facilities in Nova Scotia, New Brunswick and Quebec to supply local markets.

Peat Moss

ANNAPOLIS VALLEY PEAT MOSS COMPANY LIMITED

President: H. Endres
Address: Berwick, N. S. B0P 1E0
Production: 5,401 tons (4 900 tonnes) of peat moss
Employees: 19 (some part time)

The company uses vacuum harvesters to recover agricultural peat from a 500 acre (200 ha) bog located near Berwick, Kings County. Baled peat products are shipped to markets in Canada, the United States and Japan.

CLARE ORGANIC PRODUCTS LIMITED

Owner: Gerald Thimot
Address: Box 174-A, Saulnierville
Digby County, N. S. B0W 2Z0
Production: 2,250 tons (2 041 tonnes)
Employees: 15 (some part time)

1996 was the first year of production for the

company, which uses vacuum harvesters to recover agricultural peat from a 200 acre (81 ha) bog located near Meteghan Station, Digby County. The company has a contract to supply a major Maritime peat producer with baled peat destined for international markets.

Aggregate Resources

Approximately 12 million tonnes of construction aggregates were produced in Nova Scotia in 1997. Twenty-five companies reported crushed stone production totalling 8.7 million tonnes while 42 producers reported sand and gravel production totalling 3.5 million tonnes. The majority of aggregate was consumed within the province, with approximately 1.7 million tonnes exported.

Two companies eclipsed the 1 million tonne mark for crushed stone production in 1997. Rocky Lake Quarry Limited of Bedford, Nova Scotia, reported shipments of 1.3 million tonnes while Martin Marietta Materials Canada Ltd. reported just over 1.8 million tonnes shipped. Martin Marietta's Porcupine Mountain operation was the country's eight largest in 1997.