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Canada

Natural Resources Canada

ARCHIVED - Potash

Canadian Minerals Yearbook (CMY) - 2009

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HIGHLIGHTS

- Canada is the world's largest potash producer and exporter, accounting for more than one third of its total potash production and exports.
- Global demand for potash collapsed in 2009. Global production plunged by 39%, shipments dropped by 43%, and the trade volume decreased by 51%. Global potash production and trade volumes were at their lowest levels of the past 30 years.
- Major global potash suppliers did not settle contracts with China, the largest potash importer, and only settled with India in mid-July at US$460/t cfr. The Vancouver spot market f.o.b. price declined from a high of US$965/t in January to a low of US$450/t in December 2009. The Baltic-Black Sea spot market f.o.b. price dropped from a high of US$1020/t in January to a low of US$300/t in December.
- Global demand for potash is expected to slowly recover in 2010; Canada expects its potash production and exports to recover to between 14 and 15 Mt, moving closer to pre-2009 levels.

INTRODUCTION

Potash is a generic term used to describe a variety of mined minerals and manufactured chemicals that contain potassium. Potash includes potassium chloride (sylvite), potassium magnesium chloride (carnallite), potassium magnesium sulphate (langbeinite), potassium sulphate, and potassium nitrate. The dominant potash product is potassium chloride (KCl), or muriate of potash (MOP), a naturally occurring pink, salty mineral of which Canada is the leading producer and exporter.

Potassium, nitrogen, and phosphorus are the three basic nutrients for plants. Potash supports plant growth and enhances the absorption of other nutrients. There is no substitute for potash. Smaller amounts are used for the manufacture of potassium–bearing chemicals, detergents, ceramics, and pharmaceuticals; as water conditioners; or as an alternative to de-icing salt.

Potash is a limited resource that is found in only a few places in the world. Canada has the world's largest known potash resource. The Prairie Evaporite Deposit, the largest in the world, lies underneath the southern plains of Saskatchewan and western Manitoba, and extends into northeastern Montana and North Dakota. A 1973 Saskatchewan government report estimated potash reserves and resources in the province to be around 107 billion t, sufficient to mine for several thousand years at the current production level. In addition, potash deposits are found in Alberta, Manitoba, and New Brunswick.

The second largest deposit is in Russia. The brine of the Dead Sea in the Middle East is rich in potassium. Most of the potash is mined by conventional underground or solution mining. A portion of the potash is also recovered from brine by solar evaporation.

Canada is the world's largest potash producer and exporter, accounting for more than one third of its total potash production and exports. Canada exports more than 95% of its potash output and has a work force of more than 4000 employees. The industry is a significant contributor to Canada's Gross Domestic Product.

There are eleven potash mining and processing operations in Canada. Nine operations extract potassium ore by conventional underground mining and two extract it by solution mining. Ten of the mining/processing operations are located in Saskatchewan and one is in New Brunswick.

Potash Corporation of Saskatchewan Inc. (PotashCorp), based in Saskatoon, Saskatchewan, is the world's largest publicly owned potash producer with six Canadian operations: Allan Division, Cory Division, Lanigan Division, Rocanville Division, New Brunswick Division, and Patience Lake Division (a solution mine). PotashCorp has also invested in other global fertilizer companies; it owns 32% of Sociedad Quimica y Minera de Chile S.A. (SQM) in Chile, 28% of Arab Potash Co. Ltd. (APC) in Jordan, 14% of Israel Chemical Limited in Israel, and 22% of Sinochem Hong Kong Holdings Limited (Sinofert). PotashCorp also owns 25% of the reserves at Esterhazy, Saskatchewan, which are mined by Mosaic Potash Esterhazy Limited Partnership under a long-term agreement.

The Mosaic Company (Mosaic) of Plymouth, Minnesota, has four potash operations in Saskatchewan: Mosaic Potash Canada Ltd. for the mine at Belle Plaine (a solution mine), Mosaic Potash Esterhazy Limited Partnership for the two mines at Esterhazy (K1 and K2), and Mosaic Potash Colonsay ULC for the mine at Colonsay.

Agrium Inc. (Agrium), based in Calgary, Alberta, has one mine in Vanscoy, Saskatchewan.

Canpotex Limited (Canpotex), owned by Agrium, Mosaic, and PotashCorp, is an exclusive offshore marketing and distribution company for handling Canadian potash destined for overseas markets. Canpotex's potash sales are currently in the range of 8-10 Mt/y. A corporate office in Singapore directs Canpotex's international marketing activities and ocean transportation function worldwide. Offices in Hong Kong and Tokyo maintain direct contact with Asian buyers. A corporate office in Saskatoon, Saskatchewan, maintains daily operations, including product supply, inland transportation, terminal services, corporate finance, and administration. Canpotex also offers comprehensive ocean freight services to customers through its in-house Ocean Transportation Group and its exclusive chartering and brokerage networks.

Most Canadian potash exports were shipped out of ocean terminals in Vancouver, British Columbia, and Portland, Oregon, in the northwestern United States. PotashCorp's New Brunswick Division production was exported via Saint John, New Brunswick.

CANADIAN DEVELOPMENTS

The global economic and financial crisis hit the global potash sector hard in 2009. Demand for potash collapsed, causing chaos on the global potash market. It is estimated that global potash consumption dropped by about 9% in 2009, following a 16% decline in 2008. Preliminary data indicate that global potash production plunged by 39%, shipments declined by 43%, and the global trade volume dropped by 51% in 2009. Global potash production and trade volumes were at their lowest levels of the past 30 years.

As the largest potash producer and exporter in the world, Canada was severely affected. Preliminary figures indicate that Canada's potash production was 7.6 Mt of KCl (4.6 Mt of K_2O equivalent) in 2009. This figure indicated a 56.3% production decline compared to output of 17.3 Mt of KCl (10.6 Mt of K_2O equivalent) in 2008. This shows just how vulnerable Canadian potash producers are to global market fluctuations.

PotashCorp reported its output as 3.4 Mt of KCl in 2009 (including a 25% share from the Esterhazy partnership), a 60.8% decline compared to 8.7 Mt in 2008. Production from Mosaic's Canadian operations was 3.5 Mt of KCl in 2009 (including a 25% share to PotashCorp from its Esterhazy partnership), a 56% decrease compared to 2008's output of 8 Mt. Agrium produced 875 000 t of KCl, a 50% drop compared to 1.8 Mt in 2008.

Canada's potash sales were 7 Mt of KCl (4.3 Mt of K_2O equivalent), a 59% decrease compared to 17 Mt (10.4 Mt of K_2O equivalent) in 2008. Exports were 6.8 Mt of KCl, a 59% decline compared to 16.5 Mt in 2008.

The Saskatchewan government has made changes to Saskatchewan's potash production tax to ensure a level playing field for both existing potash producers and new companies entering the province's potash industry. The changes, effective January 1, 2010, establish a tax base for new industry entrants at 75% of its sales up to a total of 1 Mt of K_2O. Once this base level of sales is reached, the company will be able to further expand its sales without increasing its taxable tonnes, thus providing the company with treatment similar to that given to existing producers in 2003. Also effective January 1, 2010, all potash producers will be subject to a tax floor equal to 35% of their total sales. The tax floor will ensure that, regardless of growth, a base level of sales for all producers is subject to taxation.

Production Capacity and Usage

In 2009, Canada's production capacity was 23.8 Mt of KCl (14.5 Mt of K_2O equivalent), the world's largest, accounting for 36% of the world's MOP production capacity of approximately 67 Mt (40.3 Mt of K_2O equivalent). The average usage rate against nameplate capacity was only 32%, the lowest in recent years. PotashCorp reported its annual nameplate production capacity was 13.3 Mt of KCl and its operational capacity was 11.2 Mt in 2009. The production capacity for Mosaic's Canadian potash operations was 9.8 Mt of KCl in 2009 while Agrium's production capacity increased to 2.1 Mt of KCl.

Expansions

PotashCorp completed its debottlenecking project at Patience Lake in 2009, which brought 360 000 t of KCl production capacity back on stream.

Despite the collapse of global demand for potash, all Canadian potash producers continued their planned capacity expansions in 2009. Canadian producers believe the demand for potash will recover. The rationale is based on the fact that crops take nutrients from soils, and replenishing nutrients is needed to maintain proper soil conditions for healthy crop growth in order to meet the increasing global demand for food.

PotashCorp has five projects ongoing: a two-phase debottlenecking/expansion project at Cory (1.2 Mt/y and 1 Mt/y), an expansion at Allan (1 Mt/y), a replacement mine and expanded mill in New Brunswick (1.2 Mt/y), and a mine and mill expansion at Rocanville (2.7 Mt/y). These projects will add 7.1 Mt of KCl mining capacity and a significant compaction capacity. The expansions will increase PotashCorp's annual production capacity to 17 Mt of KCl by the end of 2015.

Mosaic continues its capacity expansion plan in Saskatchewan that was announced in April 2008. The company plans to increase production capacity by 1.3 Mt/y at Colonsay from 2011 to 2017; by 1.8 Mt/y at Esterhazy from 2013 to 2016; and by 2 Mt/y at Belle Plaine from 2015 to 2020. Its total production capacity will increase by 5.1 Mt of KCl at an estimated cost of US$3.2 billion. Upon completion, Mosaic's annual capacity in Canada will be approximately 15 Mt of KCl.

Agrium continued to work in 2009 on its proposed US$800 million expansion of the Vanscoy mine in 2009. The planned expansion would add 750 000 t of annual potash capacity to the mine. Final project approval is expected in late 2010. Most of the construction work would be completed in 2013 and 2014, and its full production capacity of 2.8 Mt/y of KCl would be reached in 2015. Agrium has deferred its development work on its proposed 2-Mt/y Greenfield mine in southeastern Saskatchewan.

Exploration in Saskatchewan

Saskatchewan continues to be the main target for potash exploration. The Government of Saskatchewan issues potash leases (KL) and potash permits (KP). A producer must obtain potash leases to carry out potash production. A potential potash explorer must acquire a potash permit to conduct exploration activities. At the end of 2009, 19 KL and 172 KP had been issued by the Saskatchewan government.

BHP completed exploration on the Jansen project in April 2009 and started a pilot hole drilling program in October 2009. At the same time, BHP received the project-specific guidelines from the Saskatchewan Ministry of Environment for the Environmental Impact Statement. The Jansen project proposal was submitted in November 2008. The Jansen project is located 140 km east of Saskatoon, adjacent to PotashCorp's Lanigan mine. The project area is covered by four potash exploration permits: KP285, 286, 287, and 290. BHP has proposed an underground mine with an annual production capacity of 8 Mt. The company suggests that it could start the ground freezing in 2010 and construction could follow in July 2011. The mine would be a long room and pillar. BHP intends to begin production in January 2015 with expected production of 2.5 Mt/y by February 2016. The preliminary design for the Jansen plant includes conventional wet milling, flotation, and dry compaction. The life of the project is expected to exceed 50 years. BHP also started exploring its Boulder property in November 2009. The Boulder project is located south of the Jansen project area near the town of Nokomis, Saskatchewan.

In January 2010, BHP signed an agreement with Athabasca Potash Inc. to acquire all of API's assets. The total value of the transaction is approximately $340 million. The transaction was completed on March 23, 2010, and API's stock was delisted from the Toronto Stock Exchange. The acquisition provides BHP with 100% control of the Burr project and some of API's potash exploration properties in Saskatchewan. BHP now has access to more than 14 000 km^2 of prospective exploration land in Saskatchewan.

Potash One Inc. (Potash One) submitted its Legacy project proposal to the Saskatchewan Ministry of Environment for environmental assessment in September 2009. The company proposes to develop a solution mine 80 km northwest of Regina, adjacent to Mosaic's Belle Plaine solution mine. The Legacy project area covers some 97 240 acres of land. An NI 43-101 technical report outlines measured mineral resources of 29 Mt of K_2O, indicated mineral resources of 222 Mt of K_2O, and inferred mineral resources of 852 Mt of K_2O. Potash One completed a pre-feasibility study in June 2009 that identified annual production of 2.5 Mt of KCl over a mine life of 40 years. The estimated capital cost for the mine development is US$1.88 billion. A full feasibility study began in October 2009 and is expected to be completed in mid-2010.

Potash One and Potash North Resource Corp. signed an agreement to merge in January 2009. A British Columbia court approved the merger on April 14, 2009. As a result of the merger, Potash One possesses six exploration permits in Saskatchewan totaling 515 000 acres, including the Legacy project.

Encanto Potash Corp. (Encanto) entered into an agreement to acquire 100% of Raytec Metals Corp.'s (Raytec) potash asset on June 16, 2009. The transaction was completed on August 24. Encanto indicates on its web site that "Encanto was created to work with First Nations Peoples in Saskatchewan to assist them in developing potash resources on their lands. Encanto is focused on exploring for potash in five southeastern Saskatchewan prospects, working with the Chacachas, Day Star, Muskowekwan, Muscowpetung and Ochapowace First Nations." Encanto has 100% potash mineral title to all six exploration permits totaling 181 000 acres and the First Nations have a 3% Gross Overriding Royalty on production. Raytec filed an NI 43–101 compliant resource calculation in July 2008 on five permit areas (KP441, 455, 466, 467, and 468), also referred to as the Spar property. The calculation, which covered only 17% of the Spar property, estimated a net recoverable indicated resource of 12.5 Mt of K_2O and an inferred resource of 12.2 Mt. Encanto completed drilling programs and 2D seismic surveys on both the Ochapowace and Muskowekwan properties in December 2009. Further exploration activities, such as 3D seismic surveys, are expected in 2010. Encanto commenced 2D drilling on the Muskowekwan property in October 2009.

Western Potash Corp. (WPC) is a mineral exploration company engaged in the acquisition, evaluation, and exploration of potash mineral properties in Saskatchewan and Manitoba. WPC acquired three potash permits in southeastern Saskatchewan in May 2008 totaling 123 948 acres. The three permits are located approximately 30 km southeast of Regina and to the southeast of Mosaic's Belle Plaine operation, and adjacent to potash permits held by BHP Billiton, Vale, and Potash One. After drilling and 2D and 3D seismic surveys, WPC issued an NI 43-101 compliant mineral resource calculation for potential solution mining on the Milestone property (three permits) in February 2010. The report estimated indicated potash resources of 32 Mt of KCl and inferred potash resources of 230 Mt of KCl. The company initiated a preliminary economic assessment of the Milestone potash project (scoping study) in April 2010. The preliminary economic assessment will aim to

conceptualize the viability of a potash mining operation on the Milestone property. The company has also secured a firm to assist with environmental baseline studies and the preparation of an Environmental Impact Statement for the project in 2010.

Vale, the Brazilian mining company, acquired Rio Tinto's undeveloped potash assets, including exploration assets near Regina, Saskatchewan, for US$850 million in February 2009. Vale Potash Canada Ltd. is currently holding four exploration permits (KP 335, 336, and 337, and KLEF01) near Regina. Exploration activities on the property are at an early stage.

Exploration in Manitoba

WPC has the Russell–Miniota property in southwestern Manitoba along the Saskatchewan border. In 2009, WPC completed the drilling of four additional exploratory wells on the property. Results suggest that the potash mineral prospects in that area could warrant further drill testing to confirm their extent and the potential to be an economically viable project.

BHP Billiton obtained the right to explore for potash in the Russell-Binscarth area of southwestern Manitoba in 2007 and invested US$15 million in exploration.

Agrium obtained a five–year exploration permit from the Manitoba government to explore for potash in the St. Lazare area in October 2005. The permit covers 117 000 acres and allows Agrium to conduct seismic exploration work to determine whether there are sufficient reserves to warrant potash mining. Agrium has conducted preliminary seismic surveys and has the option to convert the exploration permit to a potash mineral lease in 2010.

Exploration in Alberta

CanAsia Industries Corp. (Canasia) sold a 51% interest in the Eyehill Creek potash property in Alberta to Colonnade Capital Corp. in January 2010. Following the transaction, Colonnade and Canasia formed a joint venture to develop the property, which lies along the Alberta –Saskatchewan border. Canasia updated the NI 43-101 compliant report on April 30, 2009. The report described a high probability of potash-bearing beds underlying the Eyehill Creek property. Specifically, potential economic-grade potash beds at approximately 25% K_2O are found in the east-central and southeastern areas of the property. The deposit is aligned with the potash deposits in Saskatchewan and is a part of the Prairie Evaporite Formation.

Canasia is a Vancouver–based exploration company that obtained 21 Alberta metallic and industrial minerals permits consisting of approximately 453 058 acres in the Eyehill Creek area in May and June of 2008.

Terminals Expansion

In May 2008, Canpotex announced a US$500 million expansion plan. The plan includes a capacity expansion at the Neptune Terminals in Vancouver to 10 Mt/y and a new 10–Mt terminal for Prince Rupert, B.C. The expansion projects will almost double Canpotex's shipping capacity from the current 12 Mt/y to 20 Mt/y at West Coast ports. This expansion will ensure sufficient capacity to foster Canadian export growth and to meet the global demand for potash.

PRICES

Global demand for potash collapsed in 2009. China, one of the largest potash importers and consumers, did not sign any new contracts to import potash until mid-December 2009 when it reached a settlement with Belarusian Potash Corp. for 1 Mt of Muriate of Potash (MOP) at US$350/t cfr for shipment in 2010. India, another major consumer and importer, only settled contracts with major suppliers in mid-July 2009 for the period July 2009 to March 2011. The contract price was US$460/t cfr, a decrease of US$165/t or 26%, when compared to the previous contract price of US$625/t cfr. The total volume of all contracts was about 4 Mt of MOP.

Canadian potash exports to offshore markets are managed by Canpotex. Most of the products are sold on an annual contract basis. The annual contract price settlement with China is typically considered a benchmark price for sales for the year. However, Canpotex did not reach a deal with China in 2009 and the settlement with India was only reached in mid-July. A small amount of Canadian potash was also sold on spot markets. The spot market price for standard grade KCl f.o.b. Vancouver was at a high of US$965/t in January, but declined during the year to a low of US$450/t in December. The spot market price for Baltic-Black Sea dropped from a high of US$1020/t in January to a low of US$300/t in December.

The average realized Canadian potash export value was $539/t of KCl f.o.b. in 2009 based on the recorded export product value. Despite the low export value, the 2009 average realized value showed an increase of $158/t from the previous year's $381/t of KCl on an f.o.b. basis.

Canadian potash producers sell potash directly to clients in the North American market. PotashCorp reported its average potash sale price in North America was US$464/t of KCl f.o.b. in 2009, an increase of $22/t over the 2008 price of US$441/t. Agrium reported its average sale price at US$457/t of KCl f.o.b. in 2009, a decline of $68/t compared to the previous year's price of US$525/t.

CONSUMPTION AND TRADE

Potash is one of the three essential nutrients for plant growth and is needed throughout the world. More than 95% of the world's potash is consumed as an agricultural fertilizer. The global leading potash–consuming countries have large agricultural sectors or agriculture–based economies and typically lack potash resources. China, the United States, Brazil, and India are the leading potash-consuming countries. In recent years, Malaysia and Indonesia have also emerged as significant potash–consuming countries.

In 2009, global potassium fertilizer consumption dropped again following a decline in 2008. This was a direct result of the global economic crisis. It was estimated that global consumption of potassium fertilizer was below 21.9 Mt of K_2O in the 2009 calendar year, a decline of about 9% compared to 24 Mt of K_2O in 2008. In 2007, potassium fertilizer consumption was 29 Mt of K_2O.

More than 80% of the world's potash production is traded internationally. In 2009, the global potash trade volume was estimated at 20 Mt of KCl, a decline of 51.3% from the previous year's volume of 41 Mt of KCl. The six leading potash–producing countries (Canada, Russia, Belarus, Germany, Israel, and Jordan) accounted for 97% of global potash trade.

OUTLOOK

The primary driver for potash production is the demand for food. The world's population reached 7 billion in April 2010 and is forecast to reach 7.5 billion by 2015 and 8 billion by 2020. Not only will the global agricultural sector have to meet the needs of this growing population, but it will also need to meet changing dietary demands (e.g., the move towards a high–protein diet from a carbohydrate diet).

The global financial crisis and economic downturn are temporary setbacks for the fertilizer industry. Global demand for fertilizer, including potassium fertilizer, will gradually recover. Potash is primarily used in growing rice, soybeans, sugar cane, corn, palm, rubber, bananas, oranges, and coffee. It is expected that global demand for potash will recover and grow at a rate higher than the historical annual 3% growth rate. This bullish forecast is based on the fact that Asia, particularly China and India, is switching from a traditional rice- and grain–based diet to a high-protein diet. Strong GDP growth in all developing countries is expected in the future. Increased income levels will further enable developing countries to enjoy improved and more balanced diets, and a higher protein (meat) intake. Increased meat consumption will ensure continuing demand for crops such as corn and, indirectly, fertilizers.

Fertilizer demand will also be supported by a growing demand for crops for biofuel production, including ethanol and biodiesel. The drive for cleaner fuels will continue to boost the planting of grain crops, sugar cane, and palm oil seeds. These crops are used to produce ethanol, biodiesel, and other types of biofuels, all of which require potash. The United States, the largest ethanol producer, uses mainly corn as the precursor feed material; Brazil, the second largest biofuel producer, relies on sugar cane while Malaysia and Indonesia produce palm oil seeds as the principal precursor in the production of biodiesel fuels. Predictions of higher price points for oil and fuel products will maintain the momentum for global biofuel programs. The United States has committed to use 15 billion gallons of corn–based ethanol by 2015 and 36 billion gallons of renewable fuels by 2022. Brazil's farmers are expected to plant more sugar cane to meet the anticipated growth in demand for ethanol in both domestic and export markets. High palm oil prices will continue to boost palm oil plantings in Malaysia and Indonesia to provide long-term supply for biodiesel production in Europe.

Consumption in China and India remains critical to forecasting future potash demand. The demand for potash in both countries is largely driven by their governments' policy on increasing agricultural production and achieving higher yields, and improving farmers' income and living standards. China could potentially use 25 Mt of potash if it follows agronomists' recommended nutrient levels. The same applies to India, which could potentially use 10 Mt, and to Brazil, which could use 11 Mt in its agricultural sector.

Canada exports more than 95% of its output, which exposes Canadian producers to global market fluctuations. As potash demand for some major consuming countries is expected to continue recovering in 2010, Canada's production and exports are expected to have a healthy recovery as well, but may not reach the historical high set in 2007. Natural Resources Canada is positive that the recovery in global demand for potash will have a positive impact on Canada's production and exports. Canada's potash output and exports are expected to recover to the 14- to 15-Mt of KCl level in 2010, and may do even better in 2011.

RELEVANT CANADIAN POTASH WEB SITES

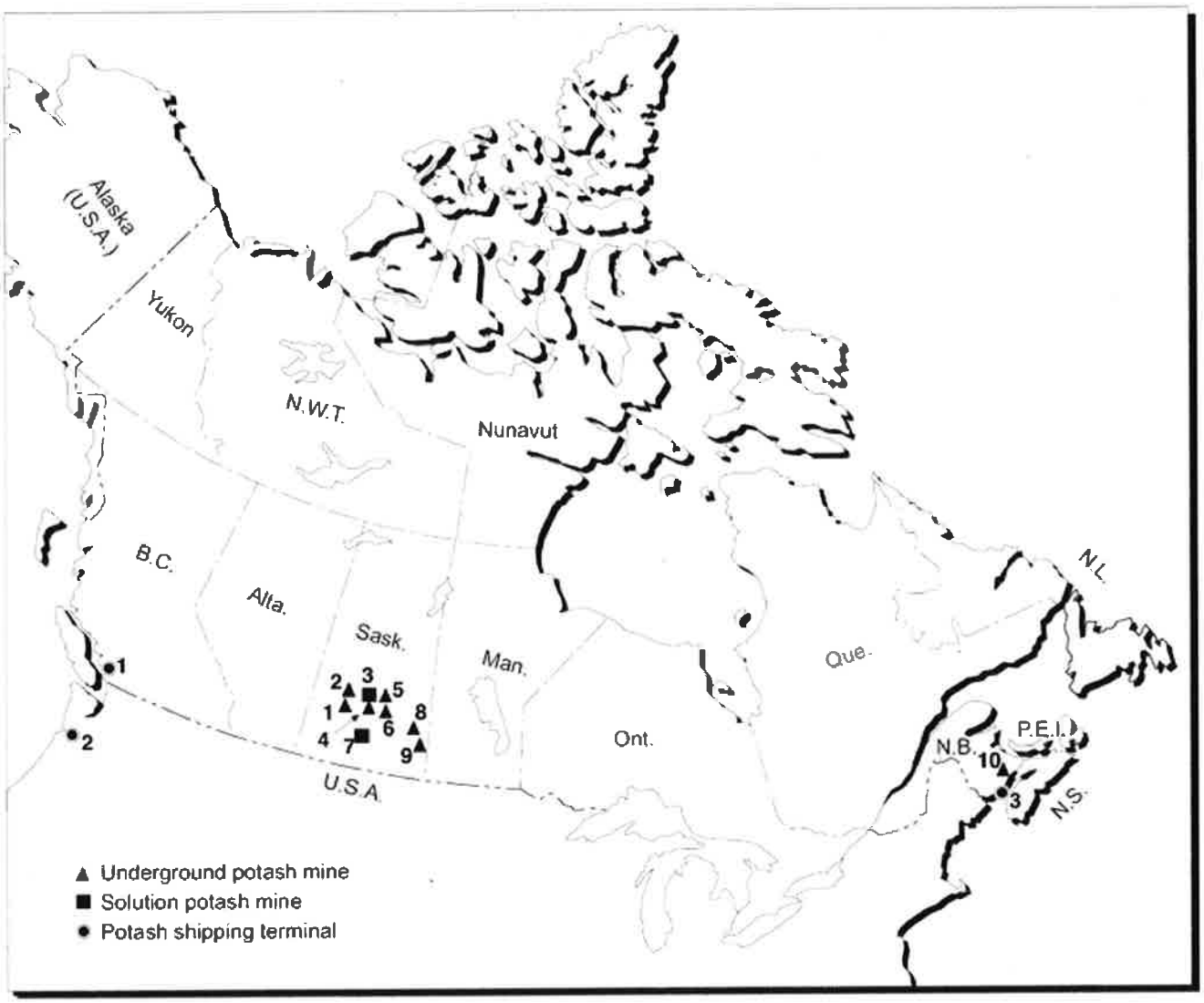
Potash Corporation of Saskatchewan Inc.
www.potashcorp.com
The Mosaic Company
www.mosaicco.com
Agrium Inc.
www.agrium.com
Canpotex Limited
www.canpotex.com
Canadian Fertilizer Institute
www.cfi.ca
International Fertilizer Industry Association Ltd.
www.fertilizer.org
International Plant Nutrition Institute
www.ipni.net

Notes: (1) For definitions and valuation of mineral production, shipments and trade, please refer to the chapter entitled "Definitions and Valuations: Mineral Production, Shipments, and Trade." (2) Information in this review was current as of March 31, 2010. (3) This and other reviews, including previous editions, are available on the Internet at http://www.nrcan.gc.ca/minerals-metals/business-market/canadian-minerals-yearbook/4070.

Note to Readers

The intent of this document is to provide general information and to elicit discussion. It is not intended as a reference, guide or suggestion to be used in trading, investment, or other commercial activities. The author and Natural Resources Canada make no

Figure 1
Location of Potash Mines in Canada and Shipping Terminals, 2009



Numbers refer to locations on map above.

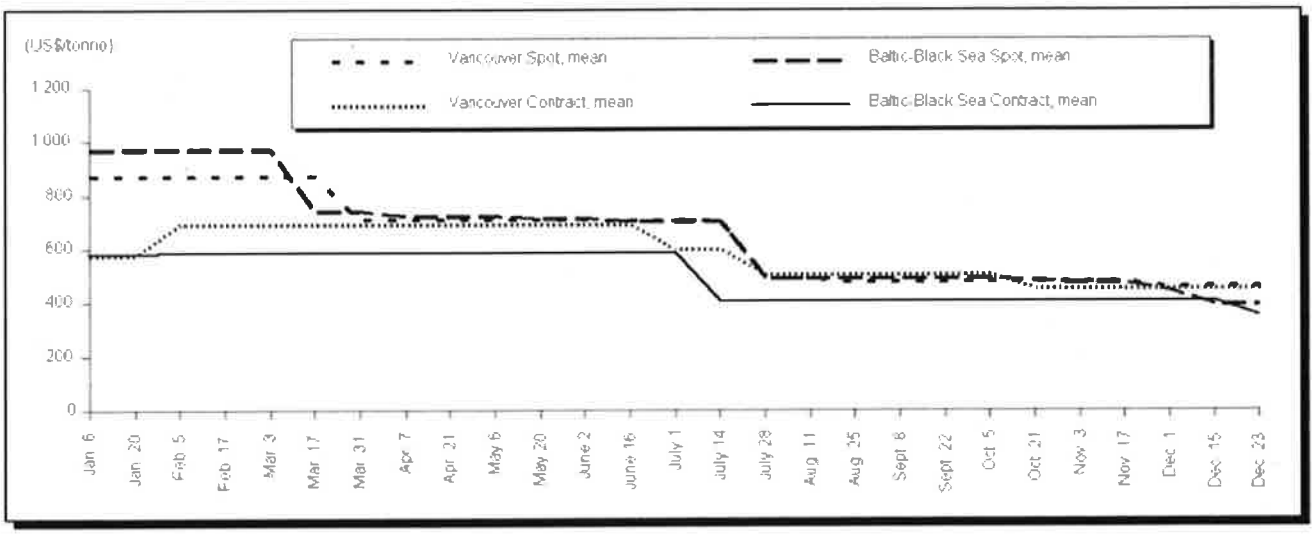
Underground Potash Mines
1. Agrium Inc., Vanscoy, Saskatchewan
2. Potash Corporation of Saskatchewan Inc., Cory Division, Saskatoon, Saskatchewan
4. Potash Corporation of Saskatchewan Inc., Allan Division, Allan, Saskatchewan
5. Mosaic Potash Colonsay ULC, Colonsay, Saskatchewan
6. Potash Corporation of Saskatchewan Inc., Lanigan Division, Lanigan, Saskatchewan
8. Mosaic Potash Esterhazy Limited Partnership (K1 and K2 mines), Esterhazy, Saskatchewan
9. Potash Corporation of Saskatchewan Inc., Rocanville Division, Rocanville, Saskatchewan
10. Potash Corporation of Saskatchewan Inc., New Brunswick Division, Sussex, New Brunswick

Solution Mining Operations
3. Potash Corporation of Saskatchewan Inc., Patience Lake Division, Patience Lake, Saskatchewan
7. Mosaic Potash Canada Ltd., Belle Plaine, Saskatchewan

Potash Shipping Terminals
1. Neptune Bulk Terminals, Vancouver, British Columbia

2. Portland Bulk Terminals, Portland, Oregon
3. Barrack Point Terminal, Saint John, New Brunswick

Figure 2
Potash Prices, Standard Grade, Muriate of Potash, f.o.b., 2009



Sources: Natural Resources Canada; FERTECON Limited.

TARIFFS

Item No.	Description	Canada			United States	EU	Japan
		MFN	GPT	USA	Canada	Conventional Rate (1)	WTO (2)
2815.20	Sodium hydroxide (caustic soda); potassium hydroxide (caustic potash); peroxides of sodium or potassium: potassium hydroxide (caustic potash)	Free	Free	Free	Free	5.5%	3.9%
2834.21	Nitrates: nitrates: nitrates: of potassium	Free	Free	Free	Free	5.5%	3.9%
2835.24	Phosphinates (hypophosphates), phosphonates (phosphites) and phosphates; polyphosphates, whether or not chemically defined: phosphates: of potassium	3%	Free	Free	Free	5.5%	3.9%
2836.40	Carbonates; peroxocarbonates (percarbonates); commercial ammonium carbonate containing ammonium carbamate: potassium carbonates	Free	Free	Free	Free	5.5%	3.9%
2839.90	Silicates; commercial alkali metal silicates: other	Free-3%	Free	Free	Free	5%	3.3%
31.04	Mineral or chemical fertilizers, potassic						
3104.20	Potassium chloride	Free	Free	Free	Free	Free	Free
3104.30	Potassium sulphate	Free	Free	Free	Free	Free	Free
3104.90	Other	Free	Free	Free	Free	Free	Free

Sources: Canadian *Customs Tariff*, effective January 2010, Canada Border Services Agency; *Harmonized Tariff Schedule of the United States*, 2010; *Official Journal of the European Union* (Tariff Information), October 31, 2009 edition; *Customs Tariff Schedules of Japan, 2010.*
GPT General Preferential Tariff; MFN Most Favoured Nation; WTO World Trade Organization.
(1) The customs duties applicable to imported goods originating in countries that are Contracting Parties to the General Agreement on Tariffs and Trade or with which the European Community has concluded agreements containing the most-favoured-nation tariff clause shall be the conventional duties shown in column 3 of the Schedule of Duties. (2) WTO rate is shown; lower tariff rates may apply circumstantially.

TABLE 1. CANADA, POTASH PRODUCTION, SHIPMENTS AND TRADE, 2007-09

		2007		2008		2009 (p)	
		(tonnes)	($000)	(tonnes)	($000)	(tonnes)	($000)
Production, Potassium chloride							
	Gross weight	17 816 913	..	17 315 348	..	7 559 580	..
	K_2O equivalent	10 890 795	..	10 548 520	..	4 613 327	..
SHIPMENTS	K_2O equivalent	11 084 939	2 814 563	10 379 069	7 662 373	4 318 432	3 380 281
EXPORTS (1,2)							
2815.20	Potassium hydroxide (caustic potash)						
	United States	42	145	253	205	11	46
	Peru	–	–	–	–	2	12
	Turkey	–	–	–	–	7	8
	South Korea	1	9	-	-	...	2
	Cuba	1	133	...	...	...	1
	Iran	–	–	–	–	1	1
	Australia	1	17	–	–	...	1
	Other countries	441	1 579	424	1 483	...	...
	Total	**486**	**1 883**	**677**	**1 688**	**21**	**71**
2834.21	Potassium nitrate						
	Cuba	–	–	2	1	3	1
	Other countries	...	...	13	7	...	...
	Total	**...**	**...**	**15**	**8**	**3**	**1**
2835.24	Potassium phosphates						
	United States	–	–	–	–	3	6
	Hong Kong	–	–	–	–	2	2
	Other countries	–	–	...	...	...	...
	Total	**–**	**–**	**...**	**...**	**5**	**8**
2836.40	Potassium carbonates						
	United States	–	–	–	–	6	10
	Other countries	–	–	1	2	–	–
	Total	**–**	**–**	**1**	**2**	**6**	**10**
3104.20	Potassium chloride						
	United States	10 022 928	1 705 926	9 490 570	3 369 920	4 255 626	2 256 891
	India	998 841	177 442	1 508 179	688 024	848 871	439 891
	Indonesia	627 369	111 109	939 954	366 075	508 233	277 625
	Brazil	1 179 028	215 302	1 134 214	421 297	313 629	164 939
	Malaysia	668 019	119 004	611 195	233 855	215 496	125 198
	China	2 347 815	414 630	1 104 338	534 825	147 532	120 973
	New Zealand	120 879	21 741	182 480	79 337	70 213	43 116

	Thailand	201 636	35 894	261 419	93 028	65 734	37 038
	South Korea	72 858	13 033	148 323	55 203	64 582	36 694
	Colombia	123 970	25 577	85 327	46 334	37 533	20 685
	Japan	8 516	1 543	41 675	12 159	30 010	17 945
	Dominican Republic	51 800	11 304	37 900	19 330	24 350	16 719
	Belgium	73 831	12 936	35 902	18 299	29 537	15 280
	Philippines	117 474	21 041	105 409	41 724	27 047	12 812
	Taiwan	117 398	20 985	122 479	34 792	20 222	11 447
	Vietnam	210 864	37 824	201 131	73 933	24 078	10 273
	Total	**17 291 383**	**3 010 318**	**16 511 750**	**6 296 588**	**6 744 637**	**3 637 867**
3104.30	Potassium sulphate						
	United States	13 018	6 098	20 444	12 045	20 963	18 553
	Netherlands	20	12	649	340	4 830	2 410
	Brazil	–	–	2 558	1 619	1 371	819
	Dominican Republic	–	–	–	–	202	121
	Other countries	96	43	297	164	247	137
	Total	**13 134**	**6 153**	**23 948**	**14 168**	**27 613**	**22 040**
3104.90	Other potassic fertilizer						
	United States	625	123	1 017	420	50 762	2 788
	China	–	–	42	15	166	59
	Hong Kong	–	–	–	–	5	2
	Other countries	–	–	75	31	–	–
	Total	**625**	**123**	**1 134**	**466**	**50 933**	**2 849**
Total exports		**17 305 628**	**3 018 477**	**16 537 525**	**6 312 920**	**6 823 218**	**3 662 846**
IMPORTS (1,2)							
2815.20	Potassium hydroxide (caustic potash)						
	United States	19 843	9 380	21 147	15 686	13 416	16 540
	South Korea	1 060	1 051	1 210	1 840	945	1 956
	Jordan	128	111	190	241	419	707
	China	44	35	238	525	121	292
	India	2	3	91	227	135	283
	Sweden	38	282	36	266	24	221
	Other countries	482	336	53	143	30	79
	Total	**21 597**	**11 198**	**22 965**	**18 928**	**15 090**	**20 078**
2834.21	Potassium nitrate						
	Chile	1 201	786	1 638	2 282	1 747	2 594
	Israel	1 851	1 159	3 351	4 988	1 475	2 309
	Denmark	322	207	1 145	1 140	608	896
	United States	290	302	442	628	450	853

	Germany	4	11	4	15	124	191
	Jordan	580	310	2 149	1 882	140	162
	Other countries	583	488	231	509	100	259
	Total	**4 831**	**3 263**	**8 960**	**11 444**	**4 644**	**7 264**
2835.24	Potassium phosphates						
	United States	730	1 087	985	1 736	1 078	2 019
	Israel	436	511	875	2 052	582	1 196
	China	224	236	599	1 311	342	535
	Germany	80	140	148	328	212	449
	Belgium	82	72	252	542	64	240
	Other countries	120	288	221	614	226	597
	Total	**1 672**	**2 334**	**3 080**	**6 583**	**2 504**	**5 036**
2836.40	Potassium carbonates						
	United States	3 507	2 904	3 143	3 315	2 306	3 011
	France	275	205	284	309	528	470
	China	207	146	408	263	589	426
	Other countries	68	72	45	45	84	109
	Total	**4 057**	**3 327**	**3 880**	**3 932**	**3 507**	**4 016**
2839.90.10.00	Other, of potassium						
	United States	3 249	2 547	4 379	3 424	2 095	3 016
	Germany	...	...	2	4	39	84
	Other countries	553	537	4	4	...	...
	Total	**3 802**	**3 084**	**4 385**	**3 432**	**2 134**	**3 100**
2839.90.90.10	Other, precipitated calcium silicates						
	United States	2 893	579	2 659	532	3 023	605
	United Kingdom	424	85	235	47	210	42
	China	80	16	34	7	11	2
	Other countries	1 502	300	1 099	219	–	–
	Total	**4 899**	**980**	**4 027**	**805**	**3 244**	**649**
2839.90.90.20	Other, magnesium silicates						
	United States	2 004	1 300	987	1 679	936	1 288
	Japan	4	7	4	4	13	14
	Germany	11	25	8	9	2	2
	Other countries	863	990	2	2	...	...
	Total	**2 882**	**2 322**	**1 001**	**1 694**	**951**	**1 304**
2839.90.90.30	Other, zirconium silicate						
	United States	39	26	247	185	806	606
	United Kingdom	–	–	–	–	48	36
	Other countries	1	1	26	20	9	7

	Total	**40**	**27**	**273**	**205**	**863**	**649**
2839.90.90.90	Other, other						
	United States	6 619	3 498	4 360	2 770	2 788	2 015
	India	484	1 578	90	503	131	236
	Japan	24	181	5	219	4	233
	Other countries	4 545	1 959	1,321	944	105	211
	Total	**11 672**	**7 216**	**5 776**	**4 436**	**3 028**	**2 695**
3104.20	Potassium chloride						
	United States	2 071	1 798	2 106	3 227	5 179	5 396
	Russia	–	–	–	–	5 592	4 547
	Germany	1	6	84	77	218	332
	Canada	3	5	65	23	276	292
	Other countries	25	62	91	142	68	99
	Total	**2 100**	**1 871**	**2 346**	**3 469**	**11 333**	**10 666**
3104.30	Potassium sulphate						
	United States	11 605	3 313	5 625	2 108	7 161	2 966
	Chile	69	34	263	233	131	132
	Belgium	306	151	881	1 005	84	105
	Other countries	167	173	227	327	38	56
	Total	**12 147**	**3 671**	**6 996**	**3 673**	**7 414**	**3 259**
3104.90.00.10	Magnesium-potassium sulphate						
	United States	71 131	7 016	68 651	6 475	41 263	4 817
	Chile	–	–	–	–	593	53
	Switzerland	–	–	–	–	272	25
	Other countries	. . .	. . .	246	18	–	–
	Total	**71 131**	**7 016**	**68 897**	**6 493**	**42 128**	**4 895**
3104.90.00.90	Other potassic fertilizer						
	United States	1 209	1 435	1 865	2 523	3 512	3 457
	Israel	1 486	945	1 595	1 927	619	983
	Netherlands	257	343	240	547	448	768
	China	63	88	2	7	98	253
	Chile	1 258	783	933	961	154	204
	Norway	2 115	662	1 822	647	441	143
	Other countries	1 043	613	446	535	116	188
	Total	**7 431**	**4 869**	**6 903**	**7 147**	**5 388**	**5 996**
Total imports		**148 261**	**51 178**	**139 489**	**72 241**	**102 228**	**69 607**

Sources: Natural Resources Canada; Statistics Canada.
– Nil; . . Not available; . . . Amount too small to be expressed; (p) Preliminary.
(1) Countries are ranked in descending order of value for 2009. (2) Fertilizer potash.
Note: Numbers may not add to totals due to rounding.

TABLE 2. POTASH SITUATION, 2004-09

	2004	2005	2006	2007	2008	2009 (p)
	(000 tonnes K_2O)					
CANADA						
Capacity	13 194	13 500	13 500	14 549	14 549	14 549
Production	10 109	10 594	8 369	10 891	10 549	4 613
Capacity use (%)	77	78	62	75	73	32
Shipments	10 332	10 140	8 518	11 085	10 379	4 318
Home	458	449	351	429	457	224
Exports	9 874	9 691	8 167	10 656	9 922	4 094
WORLD						
Capacity	36 270	37 575	38 139	38 954	39 442	40 282
Production	31 167	32 794	29 426	33 476	32 497	19 740
Capacity use (%)	86	87	77	86	82	49
Shipments	31 287	31 487	29 294	33 765	31 506	18 063
Home	5 756	6 178	6 086	6 578	6 661	6 080
Exports	25 531	25 309	23 208	27 187	24 845	11 984
CANADA/WORLD						
Capacity (%)	36	36	35	37	37	36
Production (%)	32	32	28	33	32	23
Exports (%)	39	38	35	39	40	34

Sources: Natural Resources Canada; International Fertilizer Industry Association.
(p) Preliminary.
Note: Capacity, production, and shipments refer to potassium chloride only; excludes potassium sulphate and other forms.

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