NUTRIEN LTD.

CORY POTASH

NATIONAL INSTRUMENT 43-101 TECHNICAL REPORT ON

CORY POTASH DEPOSIT (KL 103B),

SASKATCHEWAN, CANADA

FEBRUARY 20, 2018

NUTRIEN LTD. AND POTASH CORPORATION OF SASKATCHEWAN INC.
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The scientific and technical information included in this report has been prepared under the supervision of persons who are ‘‘qualified persons’’ under Canadian National Instrument 43-101. **Craig Funk, P. Eng., P. Geo.** is the qualified person who supervised the preparation of the information presented in this report and who verified the data disclosed herein.

	/s/ “Craig Funk”
Signature	**Craig Funk, P. Eng., P. Geo.** **Director, Earth Science** **Nutrien Ltd.**
Date	**February 20, 2018**

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The scientific and technical information included in this report has been prepared by, or under the supervision of, persons who are ‘‘qualified persons’’ under Canadian National Instrument 43-101.

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EFFECTIVE DATE OF REPORT

The effective date of this report is December 31, 2017, other than information with respect to the ownership of Potash Corporation of Saskatchewan Inc. by Nutrien Ltd., which information is effective January 1, 2018, and where otherwise noted.

1.0 SUMMARY

Effective January 1, 2018, Potash Corporation of Saskatchewan Inc. ("PotashCorp") and Agrium Inc. ("Agrium") completed a court-approved plan of arrangement (the "Arrangement"), involving, among others, PotashCorp, Agrium and Nutrien Ltd. ("Nutrien") the new parent company of PotashCorp and Agrium. As a result of completing the Arrangement, PotashCorp and Agrium are wholly-owned subsidiaries of Nutrien. References to "the Company" means Nutrien, indirectly through PotashCorp, or, for references prior to the completion of the Merger, PotashCorp, as the context requires.

Nutrien is the world's largest provider of crop inputs and services, with operations and investments in 14 countries. It produces the three primary plant nutrients: potash, phosphate, and nitrogen. It also has a retail network that services over 500,000 growers worldwide.

Nutrien is a corporation organized under the *Canada Business Corporations Act*, the common shares of which listed and publicly traded on the Toronto and New York stock exchanges (symbol NTR).

The Company owns and operates a potash mine at Cory, Saskatchewan, Canada (Cory Potash, Cory mine, or Cory). A photo of the Cory surface operations is shown in Figure 1. The Cory Crown Subsurface Mineral Lease is numbered KL 103B. Production of potash from the Cory mine began in 1968.

Figure 1: Photo of Cory surface operations, fall, 2014.

As of December 31, 2017, annual nameplate capacity for Cory was 3.0 million tonnes and current annual operational capability is 0.8 million tonnes of finished potash products (concentrated KCl). Estimates of nameplate capacity are based on capacity as per design specifications or Canpotex entitlements once these have been determined. Operational capability is the estimated annual achievable production level at current staffing and operational readiness (estimated at beginning of year), not including any inventory-related shutdowns and unplanned downtime.

In recent years the Cory mine underwent a major expansion which brought the nameplate capacity up to 3.0 million tonnes of finished potash products per year. In December 2013, operational changes were announced that reduced the operational capability of the Cory facility to 1.4 million tonnes per year. This was in response to market conditions and to optimize the Company's lowest cost operations.

In October 2017, Cory reverted to a pure crystallization plant producing only white potash products, and further curtailing production to 0.8 million tonnes per year.

While the term potash refers to a wide variety of potassium bearing minerals, in the Cory region of Saskatchewan, the predominant potash mineralization is sylvinite, which is comprised mainly of the minerals sylvite (KCl / potassium-salt) and halite (NaCl / rock salt), with minor amounts water insolubles. Carnallite ($KMgCl_3 \cdot 6H_2O$) occurs only in trace amounts at Cory. Potash fertilizer is concentrated, nearly pure KCl (i.e. greater than 95% pure KCl), but ore grade is traditionally reported on a % K_2O equivalent basis. The "% K_2O equivalent" gives a standard measurement of the nutrient value of different potassium-bearing rocks and minerals. To convert from % K_2O equivalent tonnes to actual KCl tonnes, multiply by 1.58.

The Cory mine is a conventional underground mining operation whereby continuous mining machines are used to excavate the potash ore by the stress-relief mining method, with continuous conveyor belt transport of ore from the mining face to the bottom of the production shaft. In addition to hoisting potash ore to surface, the production shaft provides fresh-air ventilation to the mine and serves as a secondary egress. The Service Shaft is used for service access, and exhausting ventilation from the mine. Raw potash ore is processed and concentrated on surface, and concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

Virtually all Cory underground mining rooms are in the potash mineralized zone situated approximately 14 m below the top of the host evaporite salt, the Prairie Evaporite Formation. More specifically, the Cory mine is located within the Patience Lake Member of the Prairie Evaporite Formation. In this Member, there are two potash seams named A Zone (the upper seam) and B Zone (the lower seam); at present, only the A Zone is being mined at Cory. Mine elevations range from approximately 980 m to 1045 m, averaging approximately 1010 m. These depths to A Zone potash mineralization are anticipated over most of the Cory lease area. Mine workings are protected from aquifers in overlying formations by salt and potash beds which overlie the mineralized zone. Conservative local extraction rates (never exceeding 45% in any mining block) are employed at Cory to minimize potential detrimental effects of mining on overlying strata; this is common practice in flat-lying, tabular ore bodies overlain by water-bearing layers.

Part of the normal surface infrastructure associated with operating the potash mine in Saskatchewan includes waste disposal on the land and disposal of salt brine into deep subsurface aquifers. The Company stows salt tailings within an engineered and licensed Tailings Management Area (TMA) and operates four brine disposal wells near the surface plant of the Cory mine.

Over the 49-year mine life, 112.632 million tonnes of potash ore have been mined and hoisted at Cory to produce 35.486 million tonnes of finished potash products (from startup in 1968 to December 31, 2017). The life-of-mine average concentration ratio (raw-ore / MOP-product) is 3.17 and the overall extraction rate over this time period is 27%. Actual production of finished potash products at Cory for the last 10 years is shown in Figure 2.

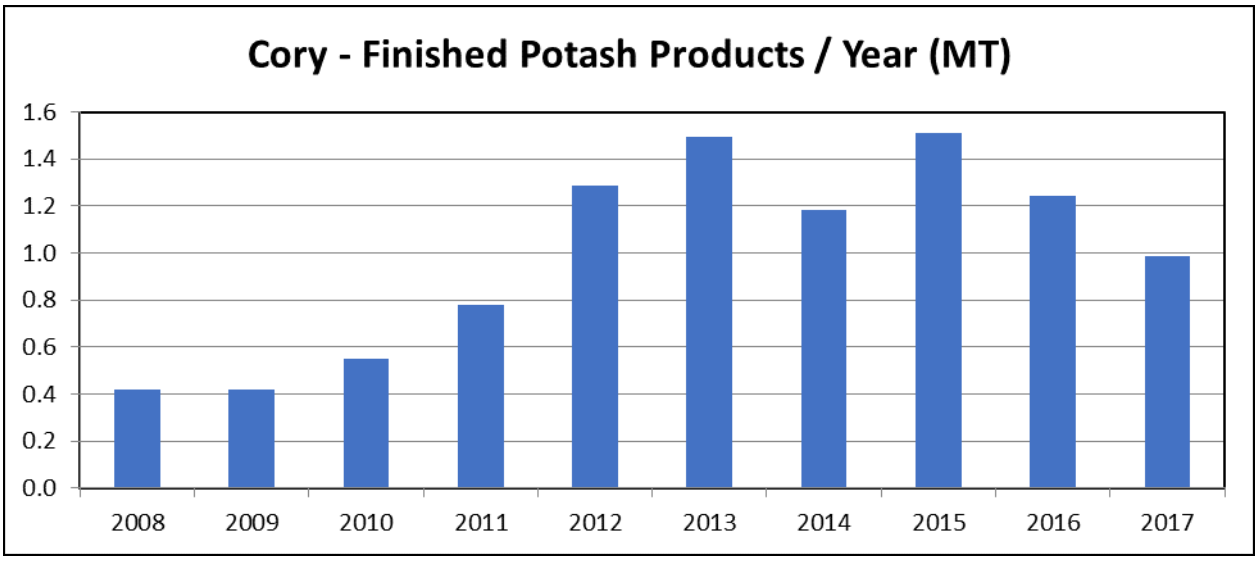


Figure 2: Actual finished potash products production from the Cory mine over the past 10 years (in million tonnes per year).

Over the past three years (2015, 2016, 2017), actual potash production at Cory has totaled:

- 12.974 million tonnes of ore mined and hoisted (4.325 million tonnes per year, on average)
- 3.737 million tonnes of concentrated finished potash products produced (1.246 million tonnes per year, on average)
- Average mill feed ore grade was 24.0% K_20 equivalent
- Average concentration ratio (ore mined / potash produced) was 3.47

The Canadian Institute of Mining and Metallurgy and Petroleum (CIM) has defined Mineral Resources and Reserves in *The CIM Definition Standards for Mineral Resources and Reserves* (2014). Based on these guidelines, all mineral rights owned or leased by the Company at Cory Potash can be assigned to Mineral Resource categories (Inferred, Indicated, and Measured) and Mineral Reserve categories (Probable and Proven). Mineral Resources (reported as in-place tonnes) and Mineral Reserves (reported as recoverable ore tonnes) for Cory as of December 31, 2017 are outlined in Table 1. Mineral Resources reported are exclusive of Mineral Reserves.

Table 1: Mineral Resources and Reserves for Cory Potash, as of December 31, 2017.

Proven Mineral Reserve (millions of tonnes recoverable ore)	79
Probable Mineral Reserve (millions of tonnes recoverable ore)	170
Total Mineral Reserve (millions of tonnes recoverable ore)	**249**
Measured Mineral Resource - A Zone (millions of tonnes in-place)	978
Measured Mineral Resource - B Zone (millions of tonnes in-place)	1,345
Indicated Mineral Resource - A Zone (millions of tonnes in-place)	445
Indicated Mineral Resource - B Zone (millions of tonnes in-place)	447
Inferred Mineral Resource - A Zone (millions of tonnes in-place)	1,309
Inferred Mineral Resource - B Zone (millions of tonnes in-place)	1,316
Total Mineral Resource (millions of tonnes in-place)	**5,840**
Average % K_2O Grade - A Zone (from Cory in-mine samples)	22.5%
Average % K_2O Grade - B Zone (from Lanigan in-mine samples)	20.3%
Years of Remaining Mine Life	**58**

The average mineral grade of the Cory A Zone Mineral Resource and Mineral Reserve is 22.5% K_20 equivalent, and was determined from 4,590 in-mine samples at Cory. The average mineral grade of the Cory B Zone Mineral Resource and Mineral Reserve is 20.3% K_20 equivalent, and was determined from 20,230 in-mine samples at Lanigan mine where the B Zone has been extensively mined.

Potash production in any given year at the Cory mine is a function of many variables, so actual production in any given year can vary dramatically from tonnages produced in previous years. The Mineral Reserve tonnage and historic average production are used to estimate remaining mine life. If the average mining rate seen over the past three years (4.325 million tonnes of potash ore mined and hoisted per year) is sustained, and if Mineral Reserves remain unchanged, then the Cory mine life is 58 years from December 31, 2017.

The mining of potash is a capital-intensive business subject to the normal risks and capital expenditure requirements associated with mining operations. The production and processing of ore may be subject to delays and costs resulting from mechanical failures and such hazards as: unusual or unexpected geological conditions, subsidence, water inflows of varying degree, and other situations associated with any potash mining operation.

2.0 INTRODUCTION

The purpose of this document is to give a formal reporting of potash Mineral Resource and Reserve for Cory Potash, and to provide a description of the method used to compute Mineral Resource and Reserve tonnages. Sources of geological and geotechnical information analysed from this study include:

- Publicly available geological maps, reports, and publications (listed in Section 27.0)
- Internal reports on historic exploration drillholes
- Hydrogeological analysis conducted in historic exploration drillholes
- Geological studies conducted at the Cory mine over the past 49 years
- In-mine geophysical studies conducted at the Cory mine over the past 49 years
- Geotechnical studies conducted for the Cory mine over the past 49 years
- 2D surface seismic exploration data (approximately 99 linear km collected to date)
- 3D surface seismic exploration data (an area covering approximately 222 km^2 to date)

All data and reports are archived at Nutrien's corporate office in Saskatoon and at the Cory mine. In addition, drillhole data (well-log data, drilling reports, drill-stem test results, etc.) are archived with the Saskatchewan Ministry of the Economy, Integrated Resource Information System (IRIS), and surface seismic data (shot records and stack) are archived through an offsite commercial data storage service.

All geological and geophysical data and information presented in this report were personally reviewed and inspected by Nutrien technical staff under the supervision of Craig Funk (P. Eng., P. Geo., Director, Earth Science). All historic mining and mineral rights data and information presented in this report were personally reviewed and inspected by Lisa MacKenzie (GIS Cert.) and Jodi Derkach (GIS Cert., P. Geo.). Jodi Derkach (GIS Cert., P. Geo.), Tanner Soroka (P. Geo.), and James Isbister (G.I.T) conducted or were involved with geological studies and investigations at Cory, and Randy Brehm (G.I.T.), and Matthew van den Berghe (G.I.T) conducted or were involved with geophysical studies and investigations at Cory. Each of these staff visits the Cory mine numerous times every year. Additionally, geological and geophysical data and information pertaining to the Cory mine are regularly presented to and discussed with technical and engineering staff from the Cory mine.

The authors of this report would like to acknowledge former staff, Arnfinn Prugger and Terry Danyluk for their past contributions to this report. The authors would also like to thank the many staff who provided information and expert reviews on portions of this report.

3.0 RELIANCE ON OTHER EXPERTS

Responsibility for the accuracy of the technical data presented in this report is assumed by the authors. Outside experts were not used in the preparation of this report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 GENERAL

The Cory mine is located in central Saskatchewan, approximately 7 kilometers west of the city of Saskatoon, Saskatchewan. The general location is shown on the map in Figure 3.

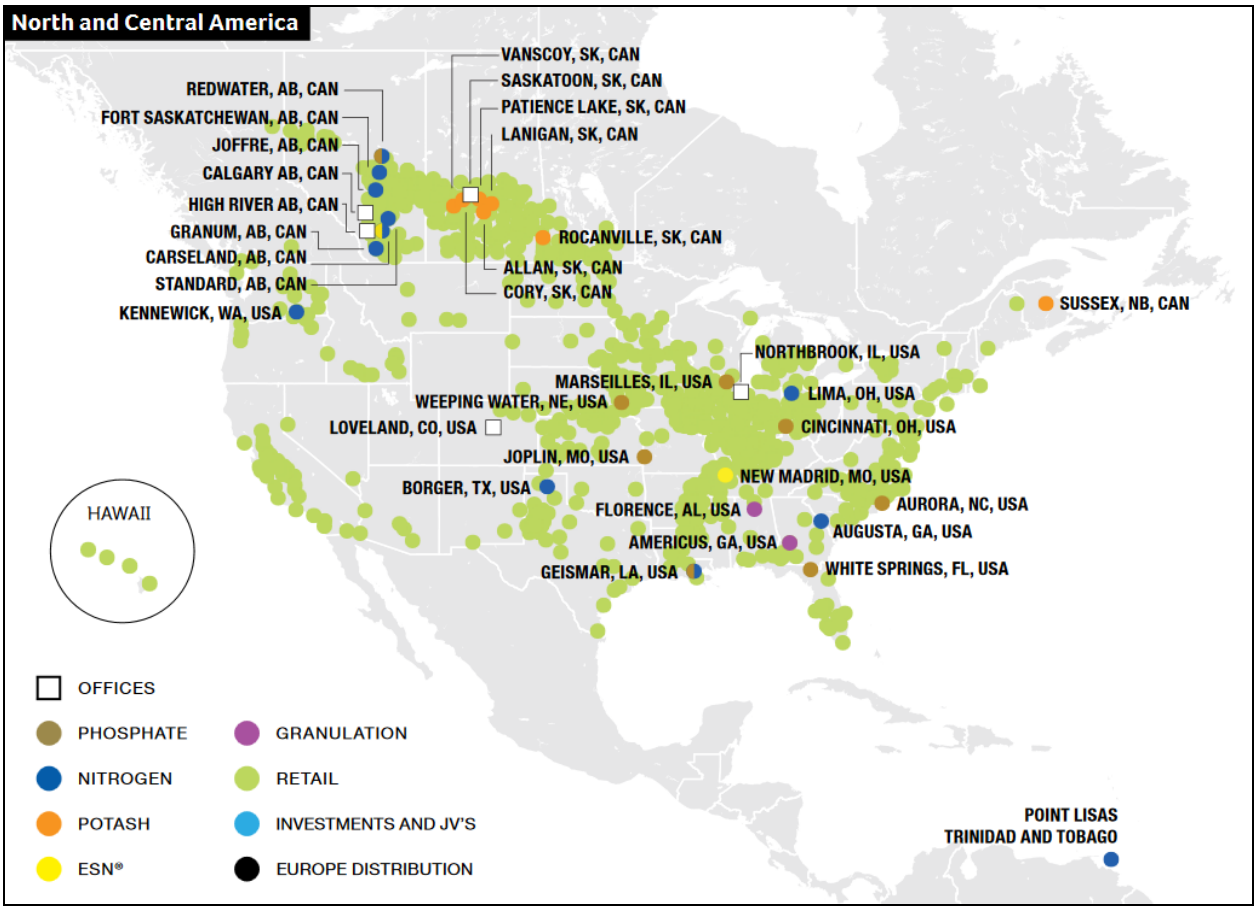


Figure 3: Map showing location of Nutrien Operations, including Cory.

The Legal Description (Saskatchewan Township / Range) of the Cory surface operation is Section 18 Township 36 Range 06 West of 3rd Meridian. More precisely, the Cory Shaft #2 collar is located at:

- Latitude: 52 degrees 05 minutes 30.15 seconds North
- Longitude: 106 degrees 51 minutes 16.32 seconds West
- Elevation: 502.92 metres above mean Sea Level (SL)

- Northing: 5772861 m
- Easting: 372951 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

The Company owns approximately 2,109 hectares (5,212 acres) of surface rights required for current Cory mine operations, including all areas covered by the existing surface plant and tailings management area, and all surface lands required for anticipated future Cory mine and expanded milling operations.

All permits and approvals required for the operation of a potash mine in Saskatchewan are in place at Cory.

Figure 4 is a more detailed map showing the location of Cory relative to the potash deposits in Saskatchewan.

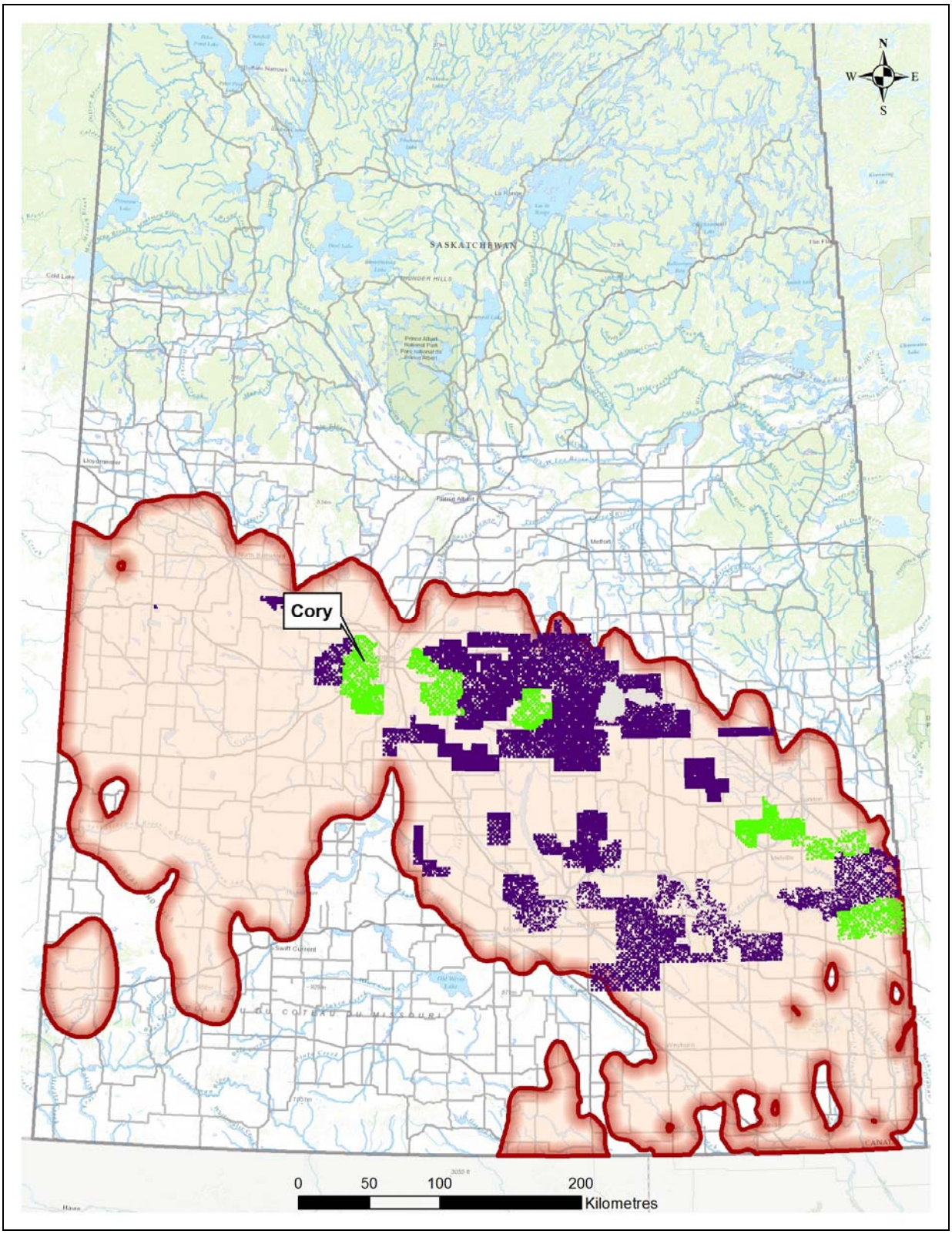


Figure 4: Map showing Cory Potash relative to Saskatchewan potash mineralization (pink). Also shown are Company (green) and other (purple) Crown Subsurface Mineral Leases (Saskatchewan Mining and Petroleum GeoAtlas).

4.2 MINERAL RIGHTS

Mineral rights at Cory are mined pursuant to mining leases with the Province of Saskatchewan, Canada (the Crown), and with non-Crown (Freehold) mineral rights owners. Crown mineral rights are governed by *The Subsurface Mineral Tenure Regulations, 2015,* and Crown Leases are approved and issued by the Ministry of the Economy. The original Cory Crown Subsurface Mineral Lease, numbered KL 103, was entered into in September 1962. In the following years, various minor amendments were made to this Crown Lease, resulting in Crown Subsurface Mineral Lease KL 103B.

KL 103B covers an area of approximately 46,902 hectares (115,897 acres), as shown in Figure 5. At Cory, the Company has leased potash mineral rights for 25,918 hectares (64,045 acres) of Crown Land and owns or has leased approximately 18,368 hectares (45,389 acres) of Freehold Land within the lease boundary. The Cory Crown Lease term is for a period of 21 years from September 2004, with renewals (at the Company's option) for 21-year periods. Freehold Lands also remain under lease providing, generally, that production is continuing and that there is a continuation of the Crown Lease.

Within the Cory Crown Lease area, 29,772 hectares (73,569 acres) are mined pursuant to a Unitization Agreement, with mineral rights holders (Freehold and Crown) within one Unitized Area shown in Figure 5.

When underground workings of a potash mine are designed, there are inevitably regions that are mined with higher mining extraction (e.g. production panels) and other regions where mining extraction is lower (e.g. conveyor-belt development rooms). To treat mineral rights holders in both low extraction and high extraction areas fairly, and to promote good mining practices, a Unitization Agreement is the preferred method for determining royalty payouts. Under a Unitization Agreement, each mineral rights holder is paid a royalty based on their proportional share of the entire Unit Area regardless of whether or not their lands are actually mined. For example, if one mineral rights holder owns rights to 4,000 hectares within a 40,000 hectare Unit Area, they would be paid 10% of the total monthly royalty payout from that Unit Area.

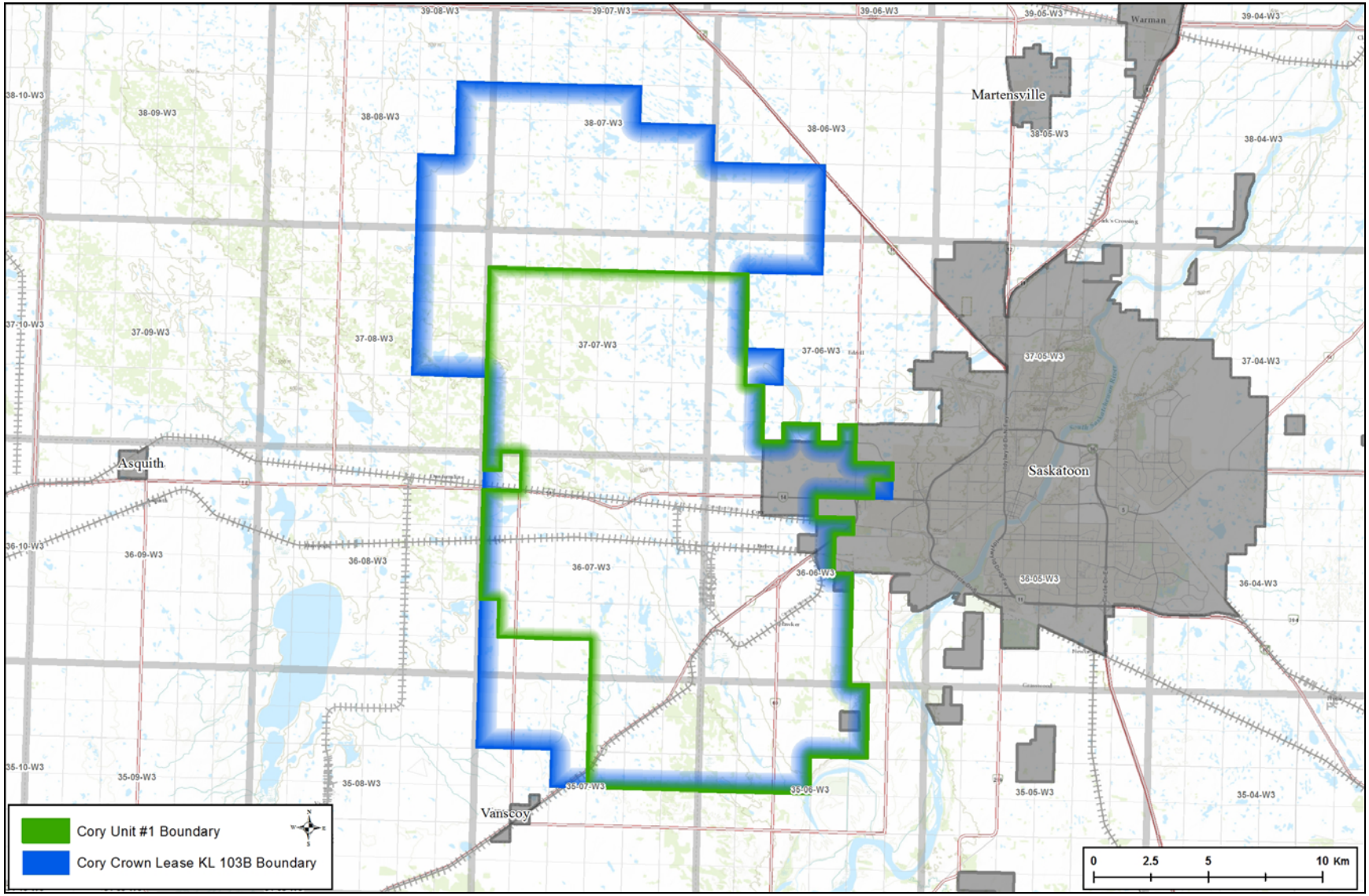


Figure 5: Map showing Cory Crown Lease KL 103B (blue) and the Unitization Area (green).

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Cory mine surface facilities are accessed by an existing paved road that is part of the Saskatchewan Provincial Highway System. All potash product is shipped by rail over existing track. The location of Cory Potash with respect to the features described in this section (major road and rail infrastructure, as well as nearby river systems) is shown in Figure 6.

The Cory mine is served by a number of villages within 50 kilometres of the minesite. The nearest city is Saskatoon (7 km distant).

Cory is situated near the northern extent of the Great Plains of North America. Topography is relatively flat, with gently rolling hills and occasional valleys. The Cory surface plant lies approximately 10 km north-west of the South Saskatchewan River, a major continental drainage channel. Climate at the Cory mine is typical for an in-land prairie location at latitude 52º North (often characterized as “mid-latitude steppe” climate).

Part of the normal surface infrastructure associated with operating the potash mine in Saskatchewan includes waste disposal on the land and disposal of salt brine into deep subsurface aquifers. Facilities to carry out all aspects of these tasks are in place at Cory (see Section 20.0).

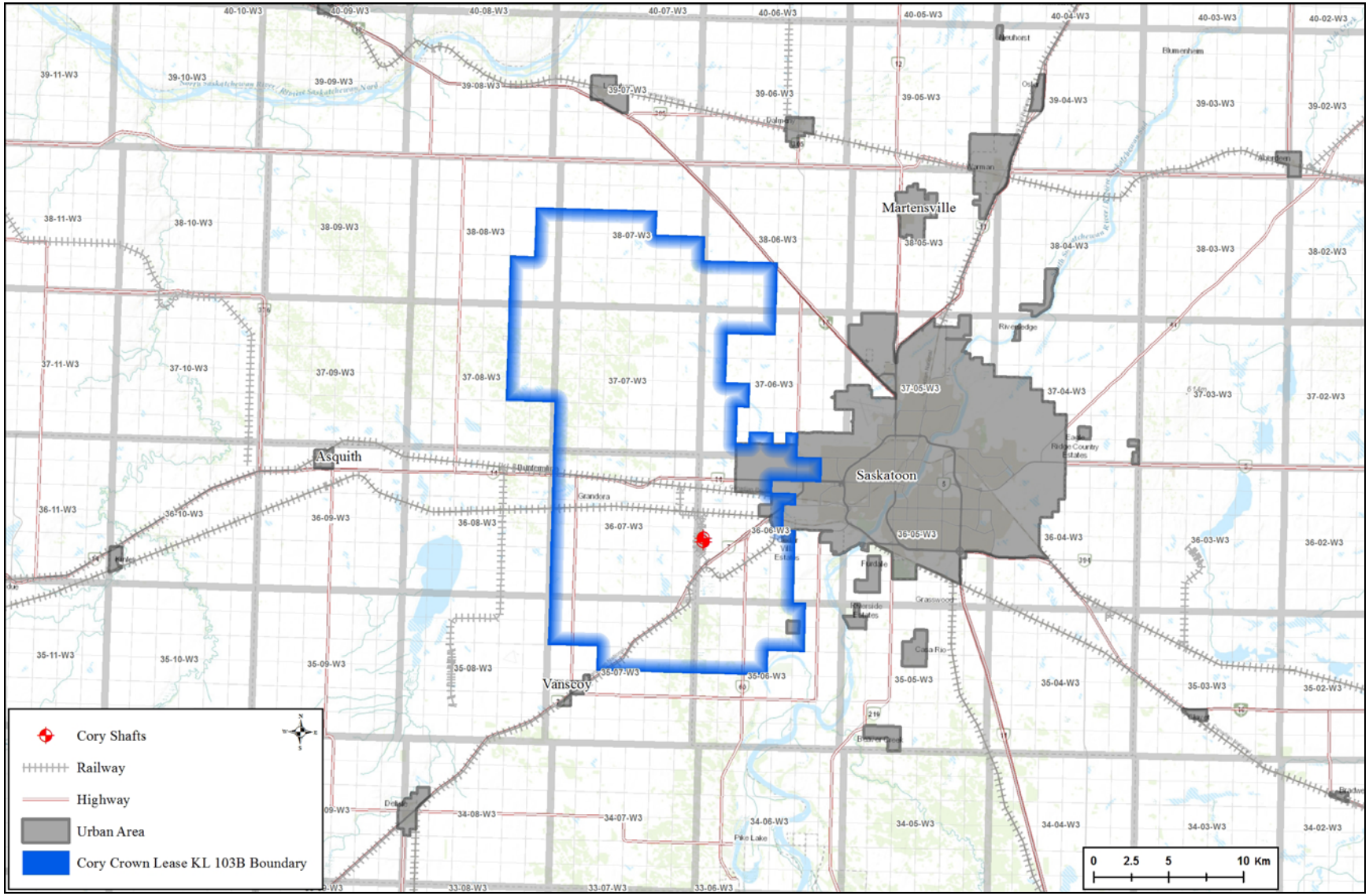


Figure 6: Map showing infrastructure (City of Saskatoon, towns, rivers, roads, and railways) near Cory Potash. Cory shaft locations are shown by red markers.

6.0 HISTORY

Ten potash mines were brought into production in Saskatchewan in the period 1962 through 1970. With nearly 50 years of production history, most potash mines have contracted or expanded production in response to the demand for potash. No new mines had been commissioned until 2017, when a solution mine and production facility near Moose Jaw, Saskatchewan began production. At present, eight of the eleven operating mines are conventional underground mines, and three operate using solution mining methods.

Exploration drilling for potash in the Cory area was carried out in the 1950s and 1960s. The Cory mine was built by a company called Duval Sulphur and Potash Company in the 1960s. Potash production began at Cory in 1968 and the mine has run on a continuous basis since then (other than short-term shutdowns taken for inventory management purposes or occasional plant maintenance and construction work). PotashCorp acquired the Cory mine in 1976.

Effective January 1, 2018, PotashCorp and Agrium completed the Arrangement. As a result of completing the Arrangement, PotashCorp and Agrium are wholly-owned subsidiaries of Nutrien.

In 1988, production was curtailed at the Cory mine. This downsizing included shutdown of the flotation plant. Since 1989, only crystallization methods have been used at Cory to produce a variety of specialized white potash products. In 2008 through 2011 the Cory mine underwent a major expansion which involved the re-commissioning of refurbished flotation circuits. Products include soluble, granular and standard grade potash used for agricultural applications, and high-grade white soluble potash and chicklets used for industrial applications.

In recent years, the Cory mine underwent a major expansion which brought the nameplate capacity up to 3.0 million tonnes of finished potash products per year. In December 2013, operational changes were announced that reduced the operational capability of the Cory facility to 1.4 million tonnes per year. This was in response to market conditions and to optimize the Company's lowest cost operations.

In October 2017, Cory reverted to a pure crystallization plant producing only white potash products, and further curtailing production to 0.8 million tonnes per year.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

Much of southern Saskatchewan is underlain by the Prairie Evaporite Formation, a layered sequence of salts and anhydrite which contains one of the world's largest deposits of potash. The potash extracted from the predominantly sylvinite ore has its main use as a fertilizer. A map showing the extent of the potash deposits in Saskatchewan is shown in Figure 7.

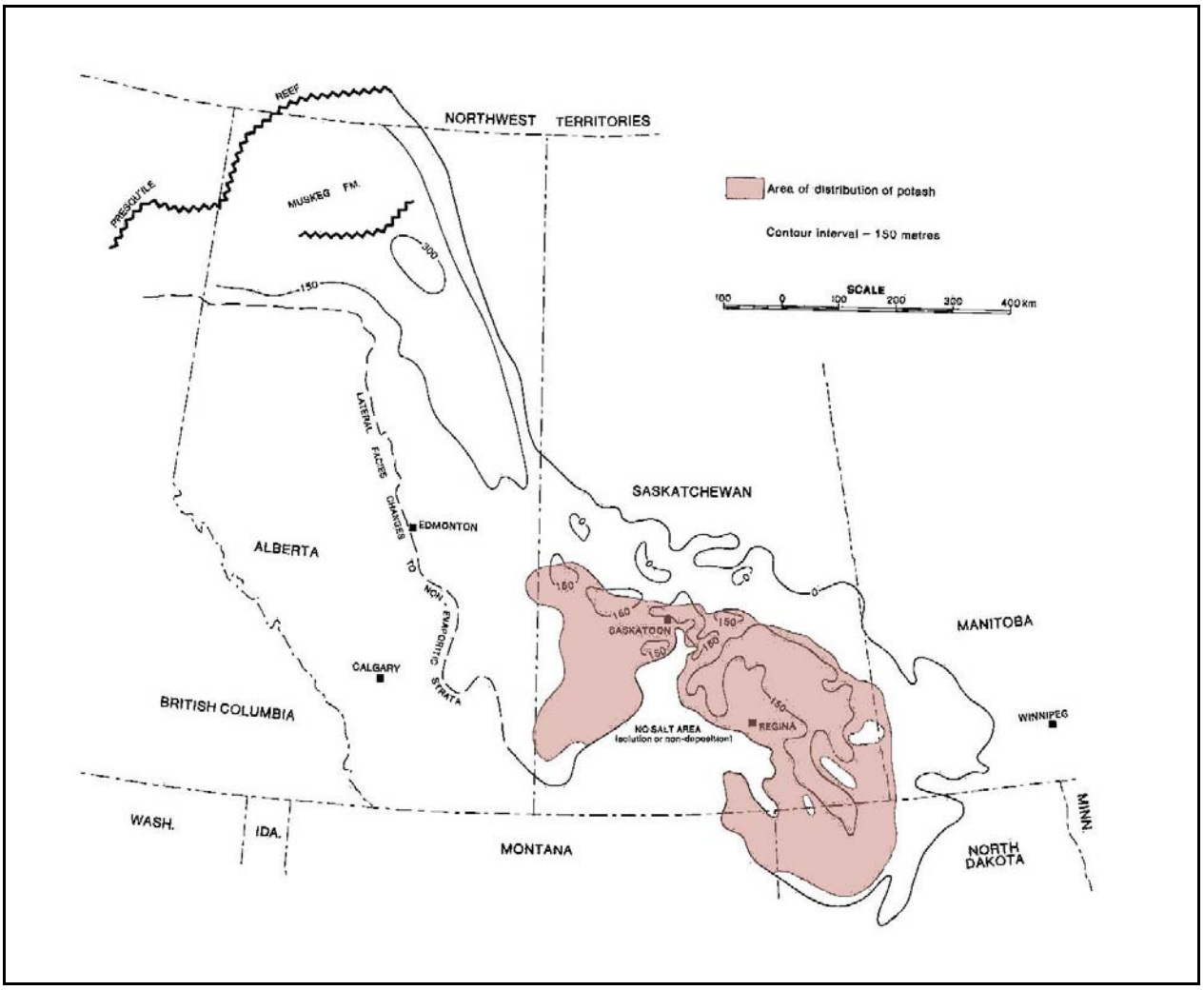


Figure 7: Thickness of the Prairie Evaporite Formation and area of potash distribution within these salts (from Fuzesy, 1982).

The 100 m to 200 m thick Prairie Evaporite Formation is overlain by approximately 500 m of Devonian carbonates, followed by 100 m of Cretaceous sandstone, and 400 m of Cretaceous shales and Pleistocene glacial tills to surface; it is underlain by Devonian carbonates (Fuzesy, 1982). The Phanerozoic stratigraphy of Saskatchewan is remarkable in that units are flat-lying and relatively undisturbed over very large areas. A geological section representing Saskatchewan stratigraphy is shown in Figure 8. A geological section representing the Prairie Evaporite Formation stratigraphy in the Saskatoon area is shown in Figure 9.

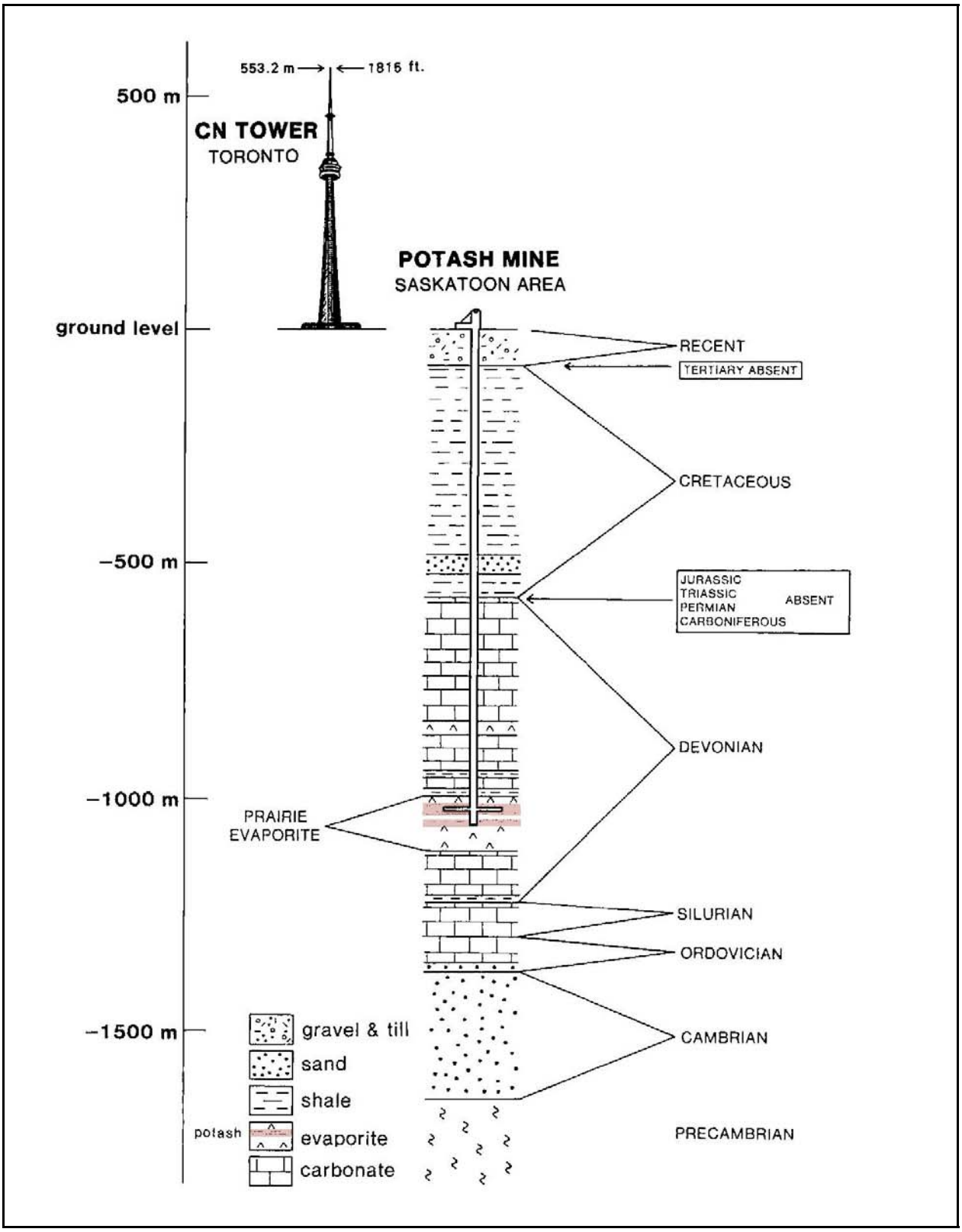


Figure 8: Diagrammatic vertical section showing basic layered-Earth stratigraphy in a typical Saskatchewan potash region (from Fuzesy, 1982).

Potash mineralization in this region of Saskatchewan is predominantly sylvinite, which is comprised mainly of the minerals sylvite (KCl) and halite or rock salt (NaCl), with trace carnallite ($KMgCl_3 \cdot 6H_2O$) and minor water insolubles. Potash fertilizer is concentrated, nearly pure KCl (i.e. greater than 95% pure KCl), but ore grade is traditionally reported on a % K_2O equivalent basis. The "% K_2O equivalent" gives a standard measurement of the nutrient value of different potassium-bearing rocks and minerals. To convert from % K_2O equivalent tonnes to actual KCl tonnes, multiply by 1.58.

Over the past three years (2015, 2016, 2017), the average, measured potash ore grade of the mill feed at Cory was 24.0% K_20 equivalent. The average ore grade reported from 10 historic surface drillhole intersections, all within Cory Subsurface Mineral Lease KL 103B, is 25.6% K_20 equivalent (discussed further in Section 10.0). The average ore grade observed from 4,590 in-mine samples taken over 49 years of mining (to the end of December 2017) is 22.5% K_20 equivalent (discussed further in Section 11.2).

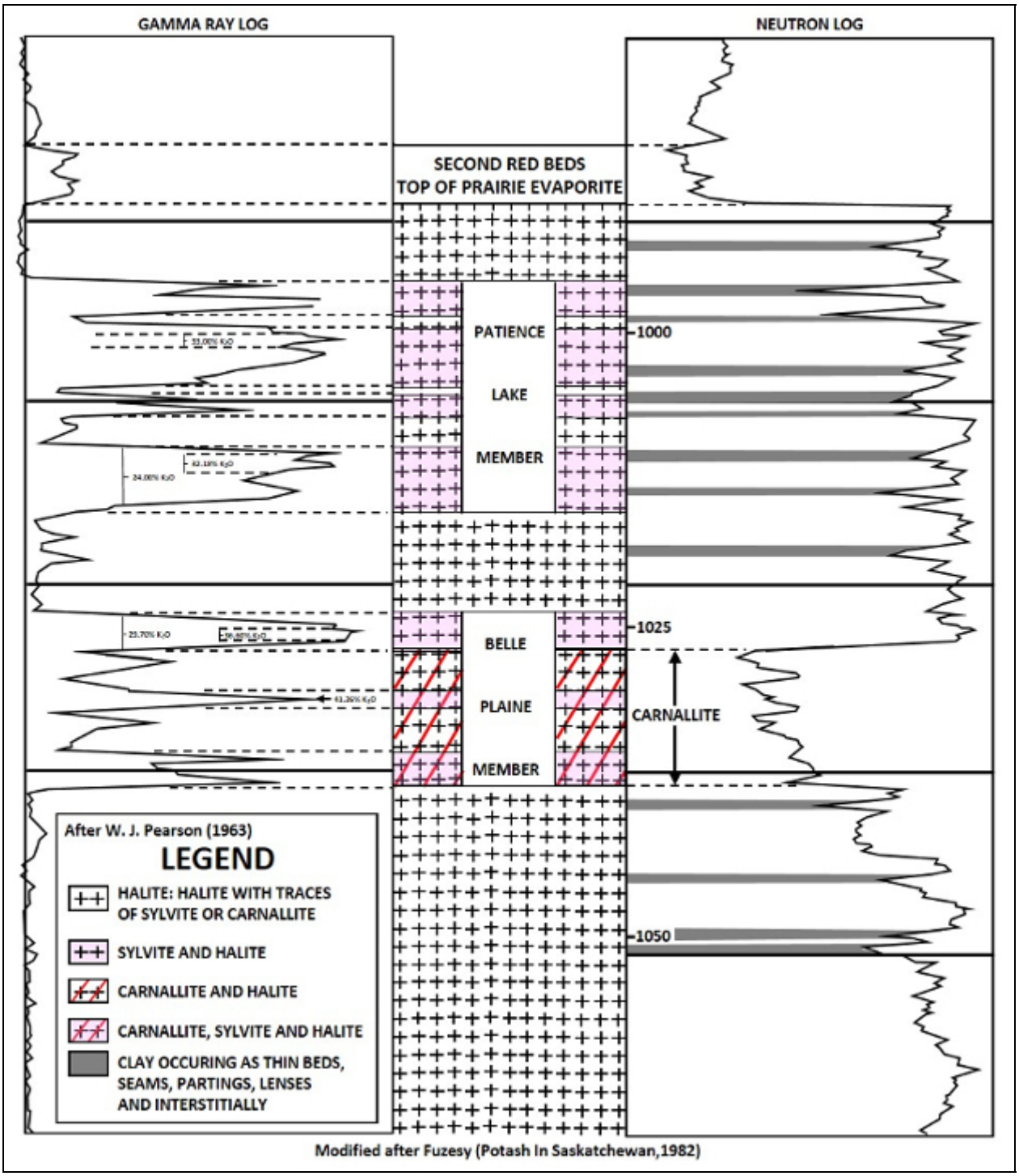


Figure 9: Diagrammatic vertical section showing basic stratigraphy of the Prairie Evaporite Formation in the Saskatoon area (from Fuzesy, 1982).

8.0 DEPOSIT TYPE

There are three mineable potash members within the Prairie Evaporite Formation of Saskatchewan. Stratigraphically highest to lowest, these members are: Patience Lake, Belle Plaine, and Esterhazy. A geological section showing potash members that occur in Saskatchewan is shown in Figure 10.

The Cory potash deposit lies within the Patience Lake Member of Prairie Evaporite Formation. There are two potash seams named A Zone and B Zone within this Member; at present, only the A Zone is being mined at Cory. Some test mining has been carried out in the B Zone, but no mining is done in this layer at present. Neither the Esterhazy nor the White Bear Potash Members are present in the Cory area. The Belle Plaine potash member is present at Cory but it is too thin to be mined.

Cory A Zone potash mineralization occurs at an average of about 1010 m depth below surface. The A Zone is approximately 3.35 metres thick and occurs near the top of the Prairie Evaporite Formation salts. Salt cover from the ore zone to overlying units is approximately 14 metres. The Cory mine operates as a conventional, underground potash mine.

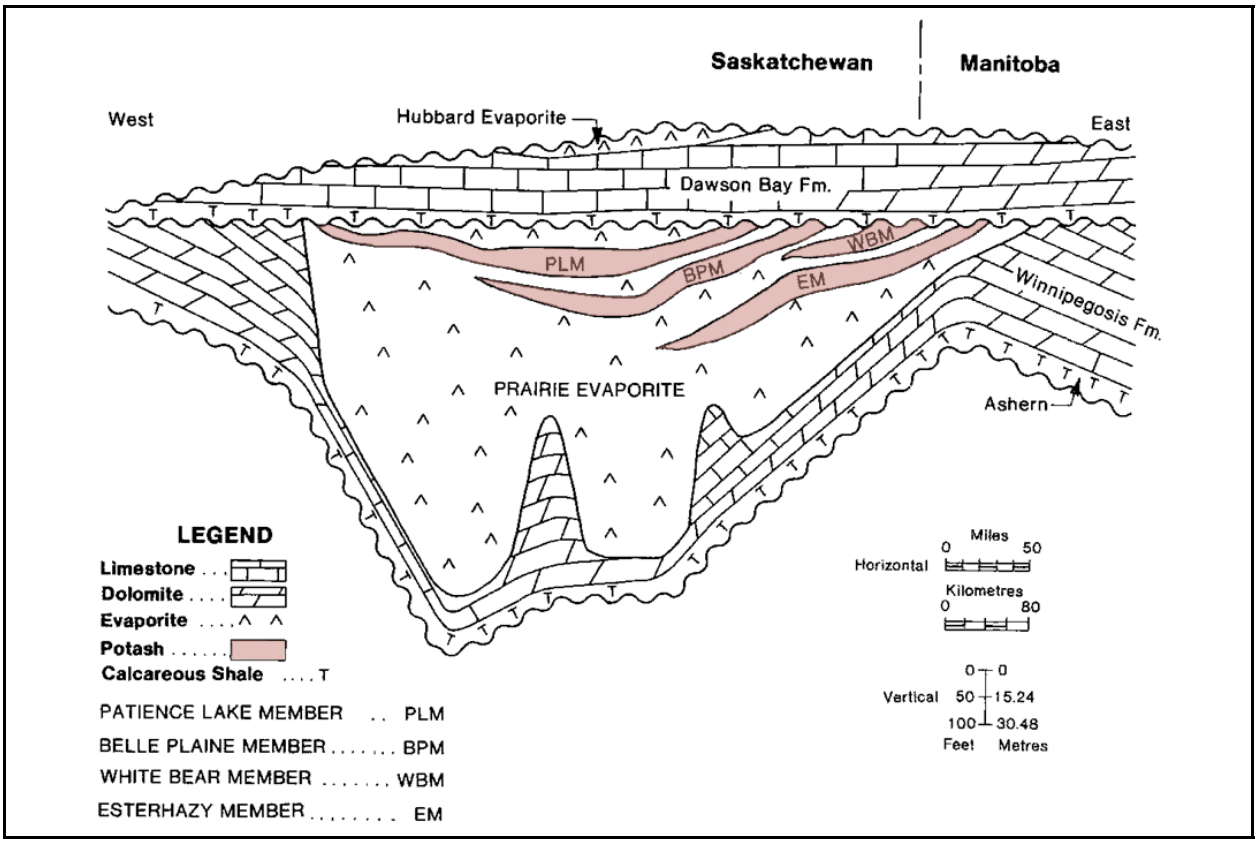


Figure 10: Schematic cross-section across southern Saskatchewan of the Prairie Evaporite Formation showing relative position of potash members. At Cory, potash is mined from the Patience Lake Member, labeled "PLM" (from Fuzesy, 1982).

9.0 EXPLORATION

Before the Cory mine was established in 1968, all exploration consisted of drilling from surface and analysis of core from these drillholes; drilling results are discussed in Section 10.0. Since mining began in 1968, there have been just two exploration drillholes; these two drillholes did not intersect the ore zone of the Prairie Evaporite Formation, but rather targeted overlying formations. A map showing potash exploration coverage at Cory Potash (drillholes, 2D and 3D seismic coverage) is shown in Figure 11. A detailed air photo showing the area around the Cory surface operations is shown in Figure 12.

In most of southern Saskatchewan, potash mineralization is in place wherever Prairie Evaporite Formation salts exist, are flat-lying, and are undisturbed. Since the surface seismic exploration method is an excellent tool for mapping the top and bottom of Prairie Evaporite salts, this has become the main potash exploration tool in any existing Saskatchewan Subsurface (potash) Mineral Lease. Historically, 2D seismic, and now the more accurate 3D seismic methods are used to map continuity and extent of potash beds in flat-lying potash deposits. Seismic data are relied upon to identify collapse structures that must be avoided in the process of mine development since these structures can act as conduits for water. As a result, isolation pillars or mining buffer zones are left around these anomalous features. This practice reduces the overall mining extraction ratio, but the risk of inflow to mine workings are effectively mitigated.

A total of 99 linear kilometres of 2D seismic lines have been acquired at Cory. A total of 222 square kilometres of 3D seismic have been acquired at Cory between 1988 and 2013. The most recent seismic surveys were conducted in 2013 and accounted for 49 square kilometres of the total square kilometres stated above.

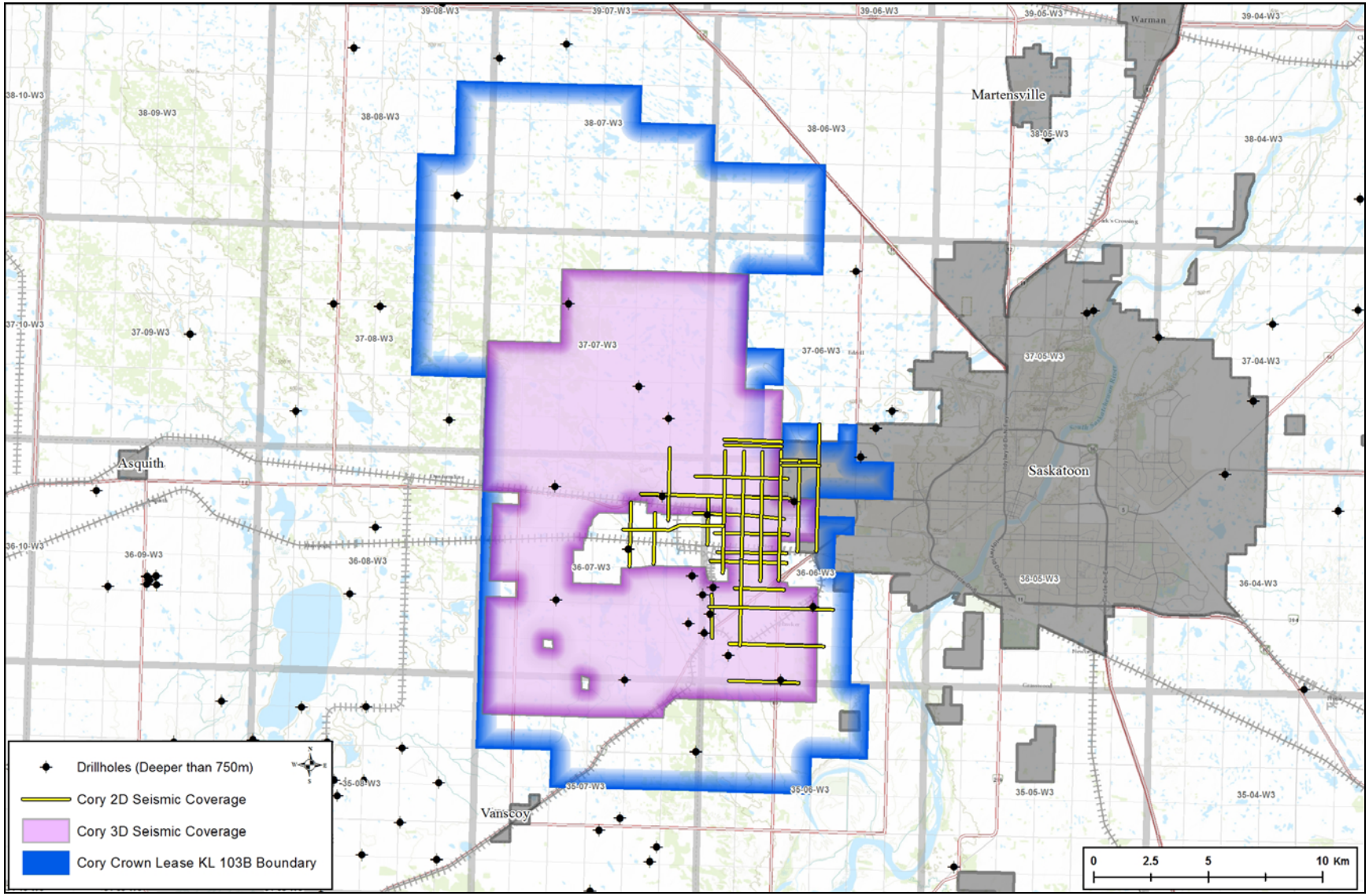


Figure 11: Potash exploration at Cory (2D & 3D surface seismic and potash exploration drillholes).

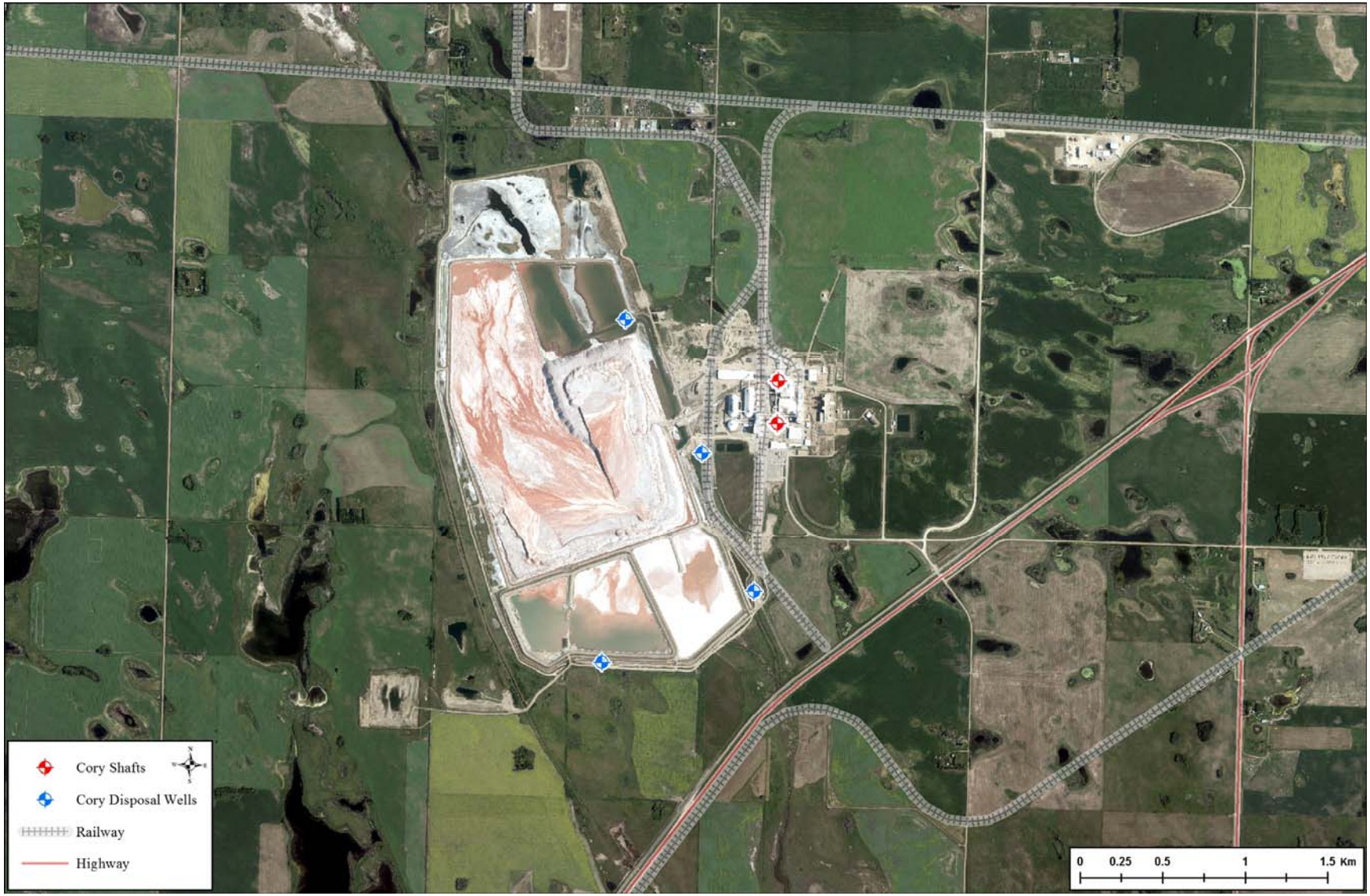


Figure 12: Air photo showing Cory Potash surface operations and Tailings Management Area.

A typical seismic section from the Cory area is shown in Figure 13. This is a fence section extracted from the "Cory 2007" 3D survey. A 2x vertical stretch has been applied to these data. The vertical scale is in metres relative to sea level (SL). The seismic section is coloured with rock velocities computed from the seismic data: blues are slow (shales), reds are fast (carbonates), and pinks / whites are intermediate (sand, salt). Note that the reflectors at both top and bottom of the unit marked Prairie Evaporite (salt) are continuous. This indicates an undisturbed, flat-lying salt within which potash is likely to be found based on 49 years of mining experience at Cory. The reflection from a Cory mine panel also shows up.

Figure 14 is a detailed (zoomed-in) view of the data plotted in Figure 13. In this figure, mine elevations from the in-mine level survey are added into the seismic data volume; the seismic data were acquired in 2007 and the room plotted in the figure was cut before seismic acquisition.

Experience has shown that the potash mining zone is continuous when seismic data are undisturbed and flat-lying, as shown in Figure 13. Surface seismic data are generally collected three to five years in advance of mining. Any area recognized as seismically unusual is identified early, and mine plans are adjusted to avoid these regions.

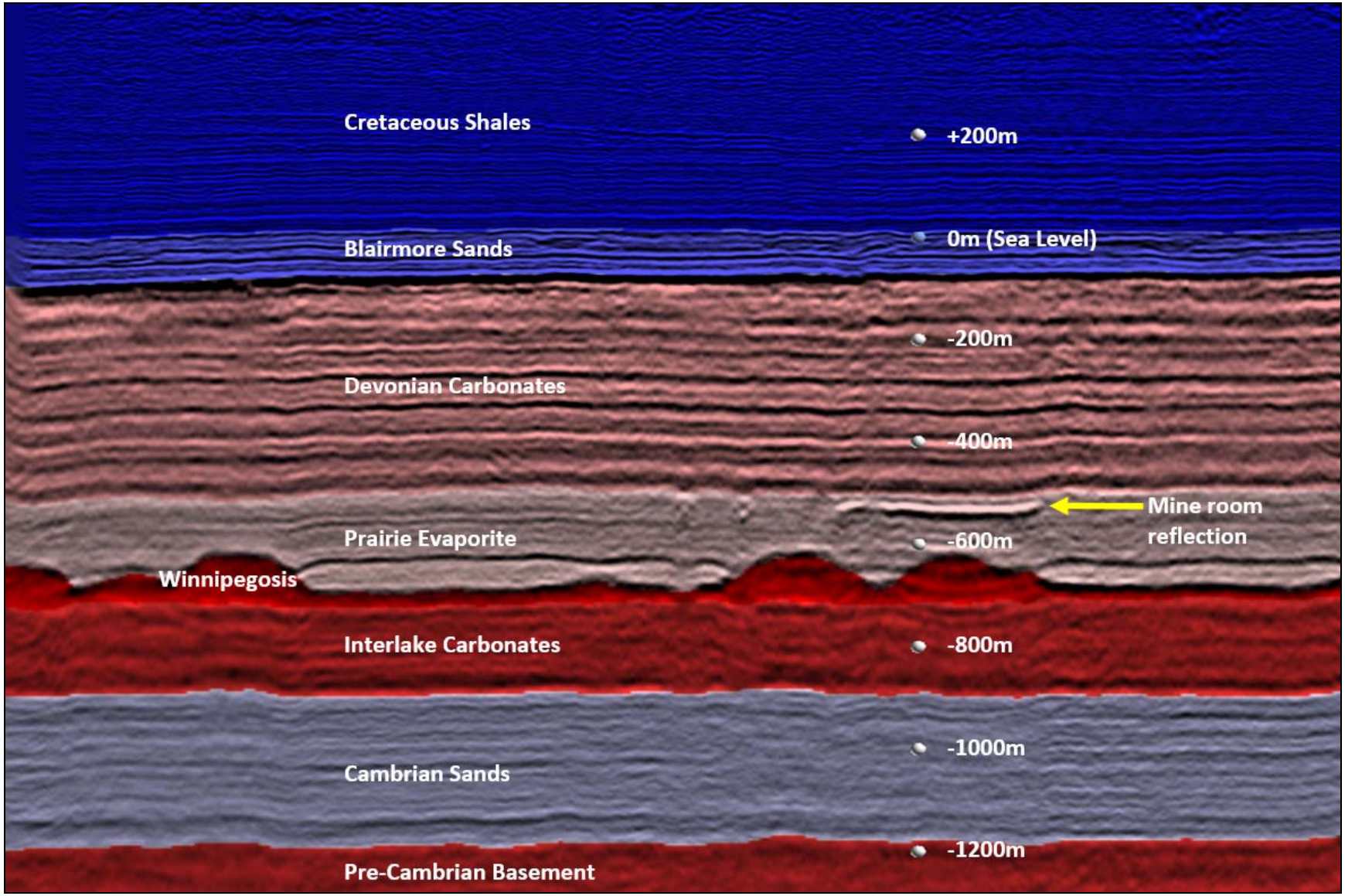


Figure 13: Seismic section from the Cory 2007 3D seismic data volume showing relative rock velocities. Sea level (SL) is marked in metres and major geological units are labeled.

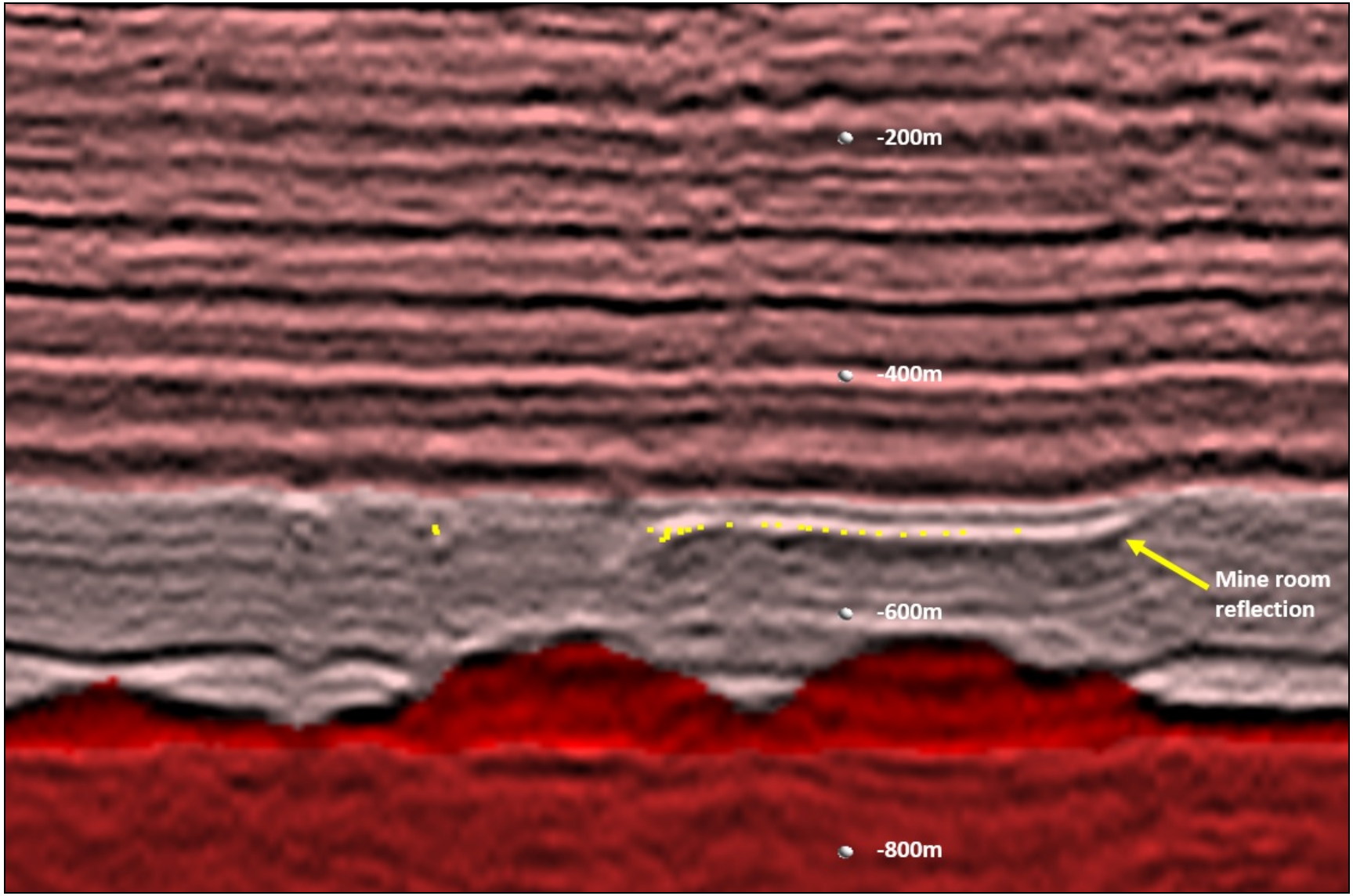


Figure 14: Detail of seismic section from the Cory 3D seismic data volume. Actual mine room reflection is marked in yellow. Ground surface is at approximately +500 m above Sea Level.

10.0 DRILLING

For the original Cory potash test holes drilled in the 1950s and 1960s, the primary objective of this drilling was to sample the potash horizons to establish basic mining parameters. Seismic surveys (2D) were done sparingly in those days, so the drillhole information was relied upon heavily to evaluate potash deposits. Test holes would penetrate the evaporite section with a hydrocarbon based drilling mud (oil-based or diesel fuel) to protect the potash mineralization from dissolution. Basic geophysical well logs were acquired, and in many cases, drill stem tests were run on the Dawson Bay Formation to help assess mine inflow potential. Core samples from the targeted potash intersections were split or quartered (cut with a masonry saw) crushed and analysed to establish potash grades.

Relatively thin interbeds or seams, referred to as clay seams in the potash industry, are an ever-present component of the A Zone and B Zone at Cory. Figure 15 shows the basic stratigraphic relationships. These seams, along with the clay or clay-like material disseminated throughout the rock, make up the water insoluble portion of the mineralized horizons. The same sequences of clay seams can be correlated for many kilometres across the central Saskatchewan potash mining district.

At Cory, a particular sequence of three clay seams marks the top of the A Zone, as illustrated in Figure 16. These seams are used to guide the vertical positioning of the mining machine. The uppermost portion of the sequence of three seams is maintained at the top of the mining cut to keep the cutting “on grade”. Cutting too high above this upper seam or top marker results in dilution, as halite (rather than sylvinite) immediately overlies the production zone. In practice though, the top marker seam is slightly overcut (between 10 cm to 20 cm) to prevent an unstable condition from being created. Clay seams are often planes of weakness, and if they are undercut, material immediately below the clay seam becomes a hazard as it may separate and fall. Since the hazard must be remediated prior to proceeding, thus slowing production, the moderately diluted mineral grade that results from the overcutting is preferable from a safety point of view.

The A Zone mining interval was historically fixed at 3.35 m (11’). Recently acquired mining machines cut at a fixed height of 3.65 m (12’). At present, five older mining machines cut at a height of 3.35 m (11’) and five new mining machines cut at a height of 3.65 m (12’). These mining heights allow for comfortable working headroom and efficient extraction of potash ore. It is difficult to determine at which mining height certain Mineral Resources and Reserves will be cut in the future, so the more conservative mining height of 3.35 m (11’) was applied to Mineral Resource and Reserve calculations.

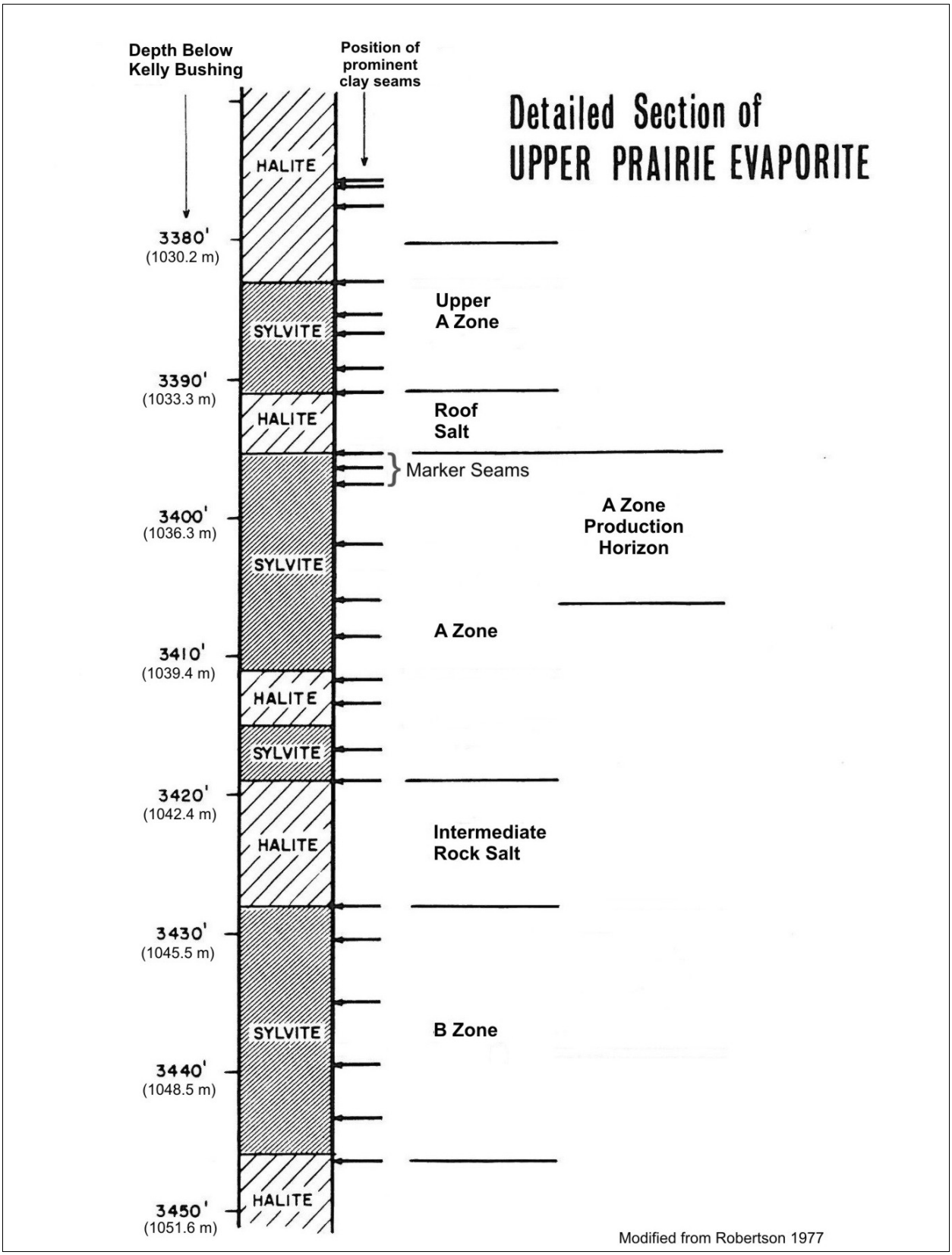


Figure 15: Stratigraphic section showing local nomenclature for potash zones and approximate position of prominent clay seams (modified from Robertson 1978).

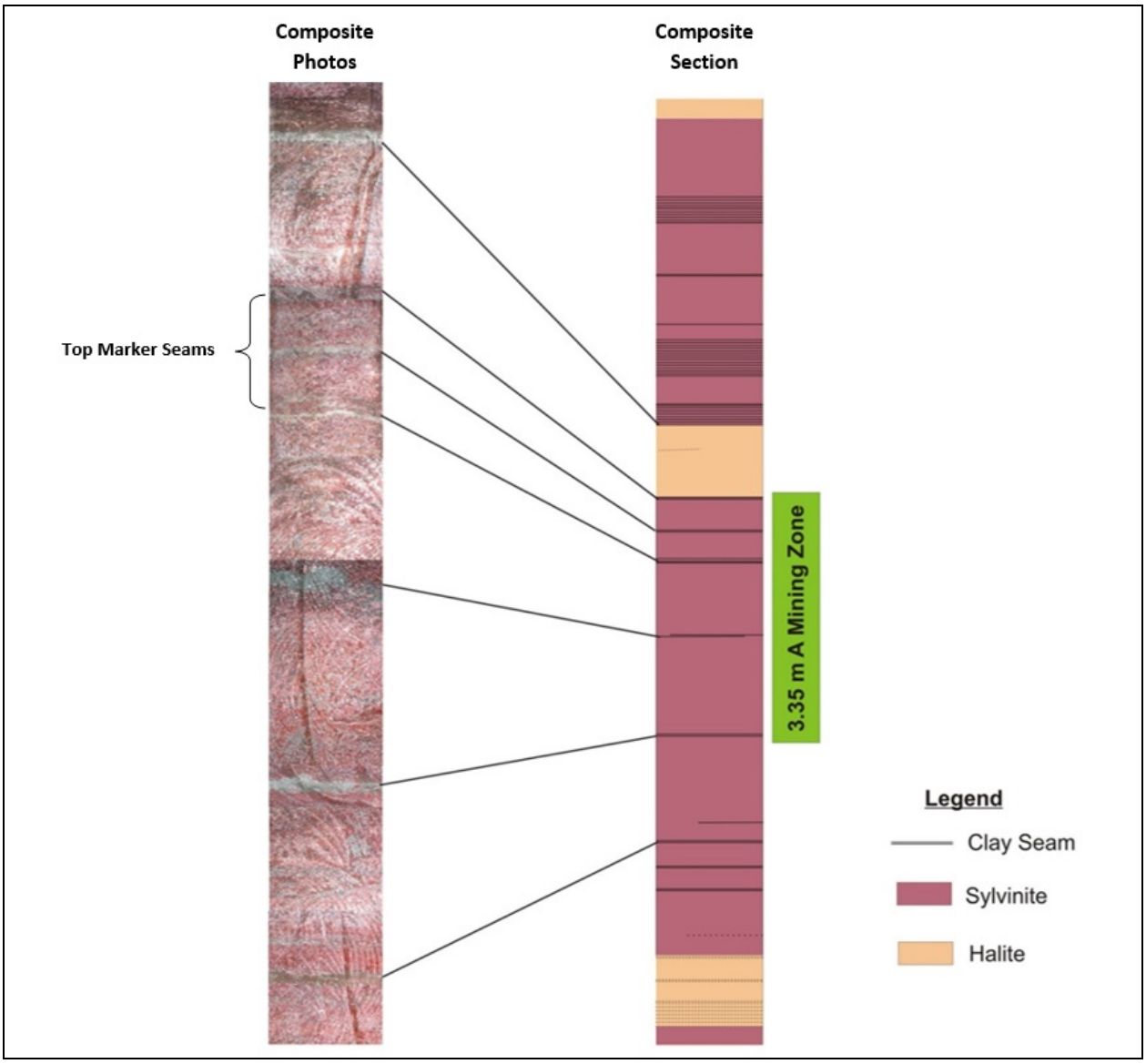


Figure 16: Typical stratigraphic section correlated with composite photos covering the A Zone production interval.

Original drill core assays were studied by independent consultant David S. Robertson and Associates (1976), and are found in Table 2. The best 3.35 m (11') mining interval intersected in each hole was determined from the assay values, using clay marker seams as a guide.

The original Cory exploration area was explored with 14 test holes spaced at intervals of 1.6 km to 6.4 km (1 – 4 miles). All 14 of these wells are within Cory Lease KL 103B, but only 10 are used in the average ore grade calculation in Table 2. Two of the excluded drillholes have anomalous hydrogeological indicators, and the area around them is excluded from mine development. The other two excluded drillholes intersected the Prairie Evaporite Formation, but assays were not performed.

Drillhole assay data for the A Zone at Cory gives an estimated mean grade of 25.62% K_2O with 5.05% water insolubles.

B Zone mineralization is indicated by gamma ray geophysical log response in each of the exploration holes listed in Table 2 indicating a potash Mineral Resource. Some test mining of the B Zone has been done. However, sustained production from that zone has not been established. Assay results for the B Zone are not presented here.

Table 2: Assay results for all potash test holes within Cory Lease KL 103B.

Average in 3.35 m (11') mining interval (undiluted)			
Drillhole	**Year Drilled**	**% K_2O**	**% Water Insolubles**
14-28-036-06 W3	1954	*	*
04-28-037-07 W3	1955	24.93	4.59
01-11-037-07 W3	1955	25.96	4.78
08-22-036-07 W3	1956	29.1	4.55
04-16-036-07 W3	1965	27.04	6.18
16-34-035-07 W3	1965	27.98	4.87
01-25-035-07 W3	1965	17.27	6.78
01-32-036-07 W3	1965	26.41	5.17
06-18-036-06 W3	1965	23.75	3.92
05-07-036-06 W3	1965	26.45	4.71
04-04-036-06 W3	1965	29.44 (anomalous)	4.59 (anomalous)
05-30-036-06 W3	1965	27.34	4.91
01-16-036-06 W3	1965	25.61 (anomalous)	5.71 (anomalous)
13-01-038-08 W3	1968	*	*
Average of 10 usable values:		**25.62**	**5.05**

Due to the remarkably consistent mineralogy and continuity of the resource, as experienced through 49 years of mine production, no potash exploration drilling has been done at Cory since 1965. Instead of exploration drillholes, seismic surveying has been relied upon to explore ahead of mine development. Where normal Prairie Evaporite sequences are mapped in the seismic data, potash beds have unfailingly been present. Localized, relatively small mine anomalies, not mapped in seismic data do occur. When they do, they are dealt with in the normal course of mining and extraction through these anomalous areas is typically minimized. Anomalies associated with possible water inflow problems, which are mapped in the seismic data, are avoided.

11.0 SAMPLING METHOD AND APPROACH

11.1 BASIC APPROACH

Exploration in the Cory area was conducted in the 1950s and 1960s. Sampling and assaying of potash core samples was done using methods considered consistent with standard procedures for potash exploration at these times.

Drillhole sampling methods have remained essentially the same over the years. Potash core samples are acquired as described in earlier sections of this report. Short segments of core usually about 0.3 m (1') in length are labeled based on visible changes in mineralization, and sometimes based on more or less fixed intervals. Each segment of core is then split using some type of rock or masonry saw. The split portion of core is then bagged and labeled and sent to a laboratory for chemical analysis. Historical potash samples remain stored at the Subsurface Geological Laboratory (Regina, Saskatchewan) of the Saskatchewan Ministry of the Economy. Most of these have deteriorated substantially.

An assay plot for drillhole PCS Cory 05-30-036-06 W3 is shown below in Figure 17. Similar data were compiled for all historical potash test holes. The best 3.35 m (11') mining interval intersected in each drillhole, as discussed in Section 10.0, is determined from the assay values, using clay seams as a guide. Table 3 lists the assay values plotted in Figure 17.

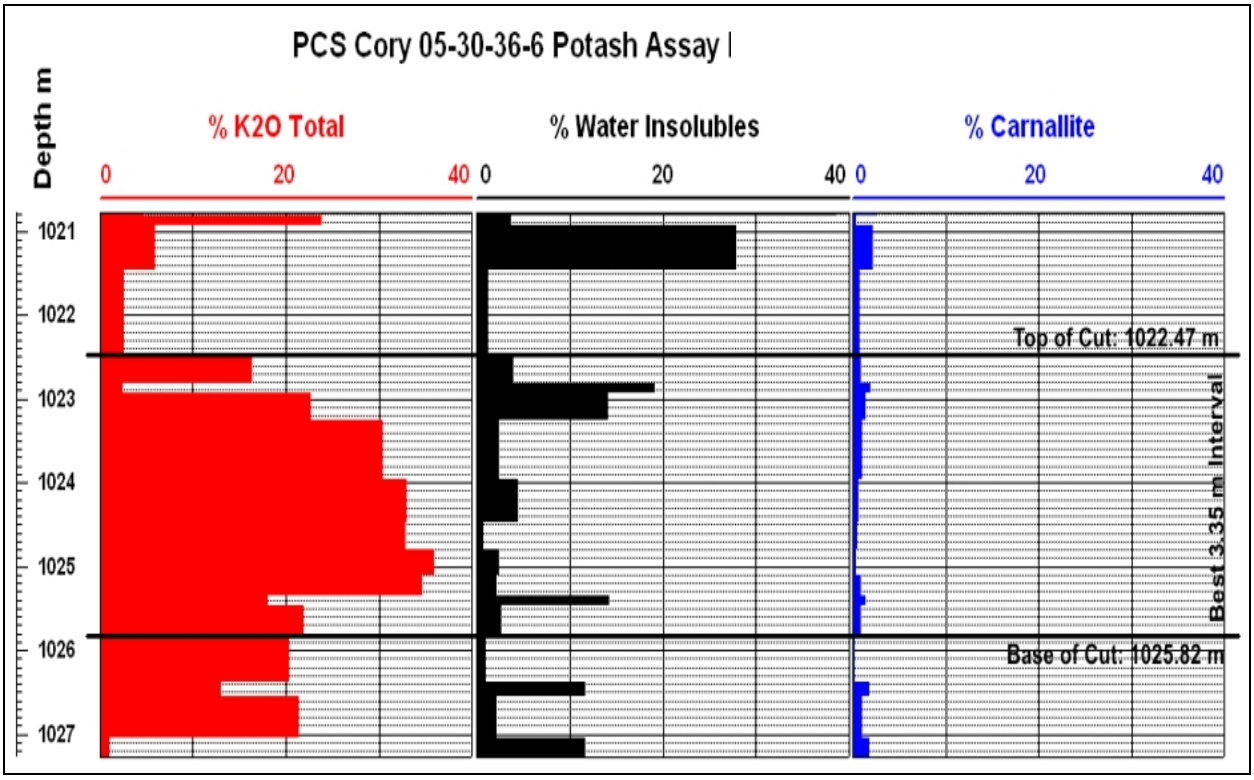


Figure 17: Potash assay plot for drillhole PCS Cory 05-30-036-06 W3 indicating the best 3.35 m (11') mining interval.

Table 3: Values for potash assay plot in Figure 17.

PCS Cory 05-30-36-6 Assay Values						
#	From (m)	To (m)	Interval (m)	% K_2O	% Water Insol.	% Carnallite
1	1020.78	1020.82	0.05	4.81	38.71	2.63
2	1020.82	1020.93	0.11	23.87	3.69	0.34
3	1020.93	1021.46	0.53	5.9	27.96	2.17
4	1021.46	1022.47	1.01	2.54	1.27	0.80
3.35 m (11') Mining Interval Top of Cut 1022.47 m						
5	1022.47	1022.82	0.35	16.39	3.91	0.91
6	1022.82	1022.94	0.12	2.5	19.21	1.94
7	1022.94	1023.26	0.32	22.66	14.15	1.37
8	1023.26	1023.97	0.71	30.4	2.45	1.03
9	1023.97	1024.48	0.52	33.05	4.52	0.69
10	1024.48	1024.79	0.30	32.89	0.69	0.57
11	1024.79	1025.10	0.31	35.95	2.39	0.46
12	1025.10	1025.35	0.24	34.75	2.11	0.91
13	1025.35	1025.47	0.12	18.05	14.2	1.37
14	1025.47	1025.82	0.35	21.9	2.65	0.91
3.35 m (11') Mining Interval Base of Cut 1025.82 m						
14	1025.82	1025.87	0.05	21.9	2.65	0.91
15	1025.87	1026.38	0.51	20.34	0.95	0.23
16	1026.38	1026.56	0.18	13	11.67	1.83
17	1026.56	1027.05	0.49	21.42	2.2	1.03
18	1027.05	1027.28	0.23	1	11.72	1.83
19	1027.28	1027.61	0.33	15.39	1.18	0.91
3.39m (11') Mining Interval Weighted Average				**27.44**	**4.95**	**0.93**

A total of 4,590 in-mine ore grade samples were collected at Cory to the end of December 2017. All in-mine samples were analysed in the Cory mill laboratory using analysis techniques that were up-to-date for the era in which the sample was collected.

Regarding quality assurance for analytical results of in-mine samples, the Company participates in the Saskatchewan Potash Producers Association (SPPA) Sample Exchange Program to monitor the accuracy of analytical procedures used in its labs. In the early 1970s, the SPPA initiated a round-robin Sample Exchange Program, the purpose of which was to assist the potash laboratories in developing a high level of confidence in analytical results. This program has continued up to the present, and participants include all major Canadian potash mine site labs, the Nutrien Pilot Plant Lab, and an independent surveyor lab. The Sample Exchange Program provides the participants with three unknown potash samples for analysis four times per year. Results for the unknown sample analysis are correlated by an independent agency that distributes statistical analysis and a summary report to all participants. Completed SPPA

samples can be used for control standards as required in QA/QC sections of standard analytical procedures.

The Nutrien Pilot Plant is secured in the same way as modern office buildings are secured. Authorized personnel have access and visitors are accompanied by staff. No special security measures are taken beyond that. Currently, no external laboratory certification is held by the Nutrien Pilot Plant. On occasion, product quality check samples are sent to the Saskatchewan Research Council, a fully certified analytical facility.

In the opinion of the authors, the sampling methods are acceptable, are consistent with industry-standard practices, and are adequate for Mineral Resource and Reserve estimation purposes.

11.2 MEAN POTASH MINERAL GRADE FROM IN-MINE SAMPLES

It has been the practice at Cory for the past several years to collect two in-mine grade samples (one in the left break-through and one in the right break-through) from the floor at the start of every cutting sequence. This is equivalent to two samples taken every approximately 25 m in production panels, and two samples taken every approximately 50 m in development panels. In-mine grade sampling practices at Cory have varied over the years resulting in a less than ideal distribution graph. However, it is the belief of the authors that the average grade reported from these in-mine samples is representative of A Zone potash mineralization in the Cory area. In-mine sample data can be roughly confirmed by mill feed grade data collected over the years.

Since start-up in 1968 through to the end of December 2017, a total of 4,590 in-mine potash mineral grade samples have been collected from the Cory A Zone, the main potash horizon at Cory. All samples were analysed in the Cory mill laboratory using analysis techniques that were up-to-date for the era in which the sample was collected. Figure 18 shows a histogram of A Zone in-mine grade sample results from the Cory mine.

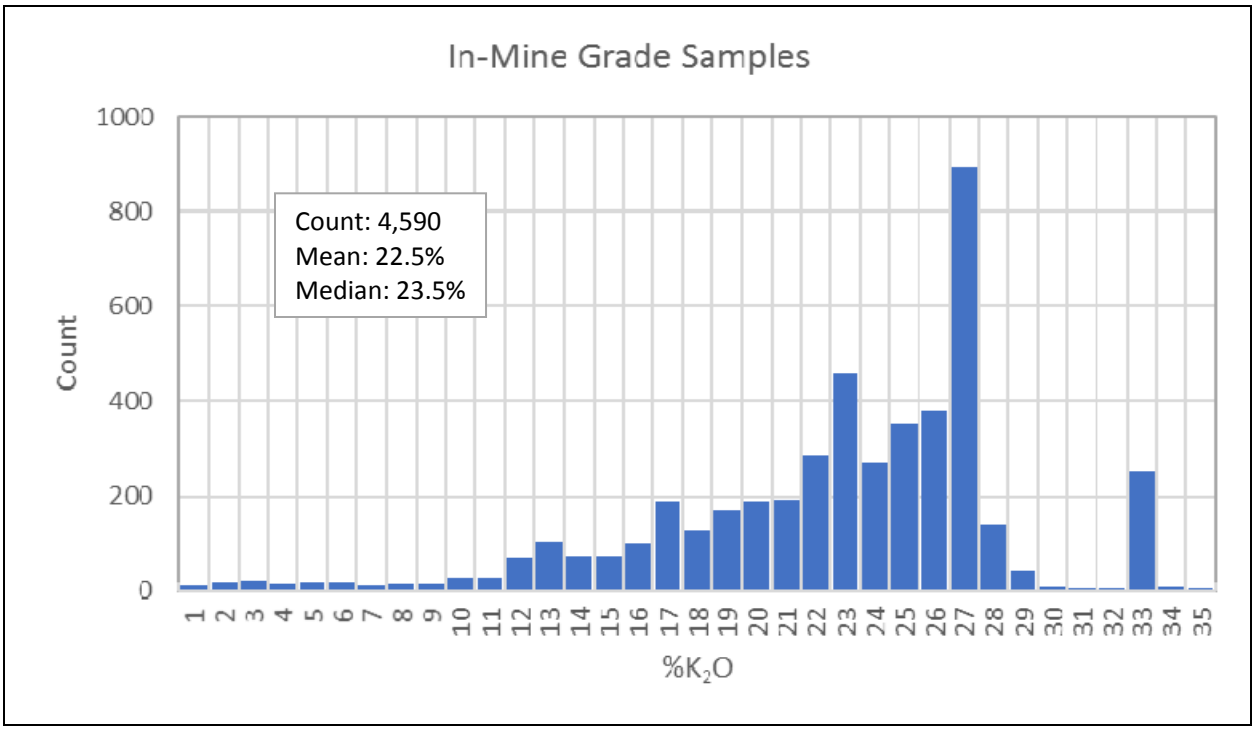


Figure 18: Histogram of potash ore grade from 4,590 Cory in-mine grade samples (data from 1968 through to end of December 2017).

The median ore grade for this family of in-mine samples is 22.5% K_2O equivalent and the mean ore grade is 23.5%. This is considered to be a more representative estimate of expected potash ore grade at Cory than drillhole assay results presented in Section 10.0.

For the B Zone at Cory, mineral grade is reported to be 20.3% K_2O equivalent, the grade observed from 20,230 in-mine samples at the Lanigan mine where the B Zone has been extensively mined. Even though Cory mine is some distance from Lanigan, this is considered to be the best estimate of expected mineral grade for this potash layer because the deposit is known to be regionally continuous from west of Cory to east of Lanigan (Fuzesy, 1982 and references therein). Although it is possible that once mining proceeds into the B Zone the reported grade could change from what is reported, it is expected that any such change would be minimal.

11.3 POTASH ORE DENSITY FROM IN-MINE MINERAL GRADE MEASUREMENTS

An estimate of in-situ rock density is used to calculate potash mineralization volumes in Mineral Resource and Reserve assessments. A common approach is to determine in-place Mineral Resource and Reserve volumes (m^3) to a certain degree of confidence, then multiply this number by in-situ bulk-rock density (kg / m^3) to give in-place Mineral Resource and Reserve tonnes. However, establishing an accurate bulk-rock density value is not an easy or trivial task. Well-log data from drillholes can be used for this if accurate and calibrated well-logs are acquired during exploration drilling. In practical terms, modern well-logs tend to meet these

criteria, but historic well-logs (collected before the 1990s) do not. In Saskatchewan, almost all potash exploration drilling took place in the 1950s and 1960s, well before density logs were accurate and reliable.

Another approach is to look up density values for the minerals which constitute potash rock – values determined in a laboratory to a high degree of accuracy and published in reliable scientific journals / textbooks – then apply these densities to the bulk-rock in some way. Given that the density of each pure mineral is quantified and known, the only difficult aspect of this approach is determining what proportion of each mineral makes up the bulk-rock at a particular sample location. Because historical Cory in-mine mineral grade analyses did not include measurements of the insoluble content, this approach cannot be used at Cory. Instead, potash bulk-rock density is calculated using 6,738 in-mine samples from Allan A Zone:

$$\mathbf{RHO_{bulk\text{-}rock}\,(Cory) = RHO_{bulk\text{-}rock}\,(Allan) = 2110\ kg / m^3}$$

This estimate is considered acceptable since Cory and Allan are mining the same potash seam, both mines use boring machines that are the same height, and both mines use the same basic mineral grade sampling methodology.

Not enough B Zone mining has been carried out at Cory to permit a bulk density calculation based on in-mine grade samples. Instead, potash bulk-rock density is calculated using 20,230 in-mine samples from Lanigan B Zone:

$$\mathbf{RHO_{bulk\text{-}rock}\,(Cory\ B) = RHO_{bulk\text{-}rock}\,(Lanigan) = 2120\ kg / m^3}$$

This estimate is considered acceptable since the Cory B Zone and Lanigan B Zone are the same potash seam.

12.0 DATA VERIFICATION

12.1 ASSAY DATA

The majority of original drill core assays were studied by independent consultant David S. Robertson and Associates (1976). The original assay results for core samples from historical wells were taken as accurate in these studies, as there is no way to reliably reanalyse these samples. Most of the remaining samples in storage have long since deteriorated to the point where they are not usable.

Ore grades of in-mine samples are measured inhouse at the Cory mine laboratory by Company staff using modern, standard chemical analysis tools and procedures; an independent agency does not verify these results. However, check sampling through the SPPA program, discussed in Section 11.1, does occur.

It should be noted that assay results from historical wells match mine sample results closely –

within approximately 0.9% – even though sample spacing is obviously much greater in the case of drillholes. This fact is a validation of the methodology. Based on 49 years of in-mine experience at Cory, these historical assay results are considered acceptable and provide a good basis for estimating ore grade in areas of future mining at Cory. However, the mean mineral grade of 22.5% K_2O equivalent determined from 4,590 in-mine grade samples is thought to provide the most accurate measurement of potash grade for the Cory mine.

12.2 EXPLORATION DATA

The purpose of any mineral exploration program is to determine extent, continuity, and grade of mineralization to a certain level of confidence and accuracy. For potash exploration, it is important to minimize the amount of cross-formational drilling, since each drillhole is a potential conduit for subsurface groundwater from overlying (or underlying) water-bearing formations into future mine workings. Every potash test hole from surface sterilizes potash mineralization; a safety pillar is required around every surface drillhole once underground mining commences. This is the main reason that exploration drilling has not been carried out at Cory in recent years.

Initial sampling and assaying of cores was done during potash exploration at Cory in the 1950s and 1960s. Methods were consistent with standard procedures for that era. The mine began production in 1968 and no further core drilling has been carried out since then. This approach to potash sampling is in accordance with widely accepted industry practice for areas adjacent and contiguous to an existing operating potash mine.

Assay of physical samples (drillhole cores and / or in-mine samples) is the only way to gain information about mineral grade, but extent and continuity of mineralization are correctly determined using data collected from geophysical surveys correlated with historic drilling information. To date, surface seismic data at Cory have been collected, analysed, and verified by Company staff, at times, in cooperation with an independent consultant. Ultimate responsibility for final analyses including depth conversion (seismic depth migration), as well as the accuracy of these data, rests with Nutrien qualified persons.

Data for the Mineral Resource and Reserve estimates for Cory mine reported in Sections 14.0 and 15.0 were verified by Company staff as follows:

- Annual review of potash assay sample information (drillholes and in-mine grade samples),
- Annual review of surface geophysical exploration results (3D and 2D seismic data),
- Annual crosscheck of mined tonnages reported by minesite technical staff with tonnages estimated from mine survey information, and
- Annual crosscheck of Mineral Resource and Reserve calculations carried out by corporate technical staff.

This approach to data verification of potash mineral grade and surface seismic information is in

accordance with generally accepted industry practice for areas adjacent and contiguous to an existing operating potash mine.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

At Cory, potash ore has been mined and concentrated to produce saleable quantities of high-grade finished potash products since 1968. In 1988, production was curtailed at the Cory mine. This downsizing included shutdown of the flotation plant, leaving only the crystallization plant which produced a variety of specialized white potash products. From 2008 through 2011, the Cory mine underwent a major expansion which again allowed for the production of red product through floatation circuits. This expansion brought the nameplate capacity up to 3.0 million tonnes of finished potash products per year.

In December 2013, operational changes were announced that reduced the operational capability of the Cory facility to 1.4 million tonnes per year. This was in response to market conditions and to optimize the Company's lowest cost operations.

In October 2017, Cory reverted to a pure crystallization plant producing only white potash products, and further curtailing production to 0.8 million tonnes per year. At present, only concentrated white potash products (near-pure KCl) are produced at Cory; these include high-grade specialized white soluble potash, white granular, chicklets, and prills. These products have industrial, agricultural, and feed applications.

Over the 49-year mine life, 112.632 million tonnes of potash ore have been mined and hoisted to produce 35.486 million tonnes of finished potash product (from startup in 1968 to December 31, 2017). Given this level of sustained production over 49 years, basic mineralogical processing and prospective metallurgical testing of Cory potash is not relevant.

See also Section 17.0.

14.0 MINERAL RESOURCE ESTIMATES

14.1 DEFINITIONS OF MINERAL RESOURCE

The Canadian Institute of Mining and Metallurgy and Petroleum (CIM) has defined Mineral Resource in *The CIM Definition Standards for Mineral Resources and Reserves* (2014) as:

1) **Inferred Mineral Resource:** that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

2) **Indicated Mineral Resource**: that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient

confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade quality continuity between points of observation.

3) **Measured Mineral Resource**: that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

CIM defines Modifying Factors as "considerations used to convert Mineral Resources into Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors."

In south-central Saskatchewan, where geological correlations are straightforward, and within a (potash) Subsurface Mineral Lease with an operating potash mine, Mineral Resource categories are generally characterized by PotashCorp as follows:

1) **Inferred Mineral Resource**: areas of limited exploration, such as areas that have been investigated through regional geological studies, or areas with 2D regional surface seismic coverage, little or no drilling, at some distance from underground workings, and within Crown Subsurface Mineral Lease KL 103B.

2) **Indicated Mineral Resource:** areas of adequate exploration, such as areas with 3D surface seismic coverage, little or no drilling, at some distance from underground workings, and within Crown Subsurface Mineral Lease KL 103B.

3) **Measured Mineral Resource:** areas of detailed, physical exploration through actual drilling or mine sampling, near existing underground workings, and within Crown Subsurface Mineral Lease KL 103B.

The mine began production in 1968 and no further core drilling has been carried out since then. Instead, exploration involved collecting surface seismic data, which became better in quality over the years. Exploration drilling has demonstrated the presence of the potash horizon, and seismic coverage shows the continuity of the Prairie Evaporite Formation within which the potash horizon occurs.

Along with this approach, analysis of in-mine samples for potash grade has provided an observation-based understanding of the potash mineralized zone at Cory that is far superior to the level of understanding provided by any surface drilling based exploration program. The

authors believe that this approach provides a body of information that guides and constrains exploration inferences in a much better way than could be achieved from any conventional exploration investigation in areas immediately surrounding, and contiguous to, the Cory potash mine.

14.2 CORY POTASH RESOURCE CALCULATIONS

Exploration information used to calculate reported Mineral Resource tonnages at Cory consist of both physical sampling (drillhole and in-mine) and surface seismic (2D and 3D) as discussed in earlier sections. Based on the definitions and guidelines in Section 14.1, all mineral rights leased or owned by the Company, and within Crown Subsurface Mineral Lease KL 103B, are assigned to one of the three Mineral Resource categories.

Mineral Resources are reported as mineralization in-place and are exclusive of Mineral Reserves. In-place tonnes were calculated for each of the Mineral Resource categories using the following parameters:

Mining Height:	3.35 metres (11 feet)
Ore Density:	2.110 tonnes / cubic metre (A Zone)
Ore Density:	2.120 tonnes / cubic metre (B Zone)

The Mineral Resources for Cory, as of December 31, 2017 are as follows:

Cory A Zone:

Inferred Resource	1,309	millions of tonnes
Indicated Resource	445	millions of tonnes
Measured Resource	978	millions of tonnes
Total A Zone Resource	2,732	millions of tonnes

Cory B Zone:

Inferred Resource	1,316	millions of tonnes
Indicated Resource	447	millions of tonnes
Measured Resource	1,345	millions of tonnes
Total B Zone Resource	3,108	millions of tonnes

Total for Cory (A Zone + B Zone):

Inferred Resource	2,625	millions of tonnes
Indicated Resource	892	millions of tonnes
Measured Resource	2,323	millions of tonnes
Total A Zone + B Zone Resource	5,840	millions of tonnes

Cory Mineral Resources are plotted in Figure 19.

The average mineral grade of the Cory A Zone Mineral Resource is 22.5% K_20 equivalent, and was determined from 4,590 in-mine samples at Cory. The average mineral grade of the Cory B Zone Mineral Resource is 20.3% K_20 equivalent, and was determined from 20,230 in-mine samples at Lanigan mine where the B Zone has been extensively mined. See Section 11.2 for more detail.

The tonnage reported in the Cory A Zone Measured Resource is comprised of the potash that is within 1.6 km (1 mile) of a physically sampled location (i.e. drillholes or mine workings). Also included as Measured Resource is the potash that is left behind as pillars in mined-out areas of the Cory mine. In a potash mine, it is common practice to consider mining remnant pillar mineralization using solution methods after conventional mining is complete, or after a mine is lost to flooding. The Patience Lake mine was successfully converted from a conventional mine to a solution mine after being lost to flooding in 1989. Since conversion to a solution mine is not anticipated in the near future at Cory, in-place pillar mineralization remains as a Mineral Resource rather than a Mineral Reserve at this time.

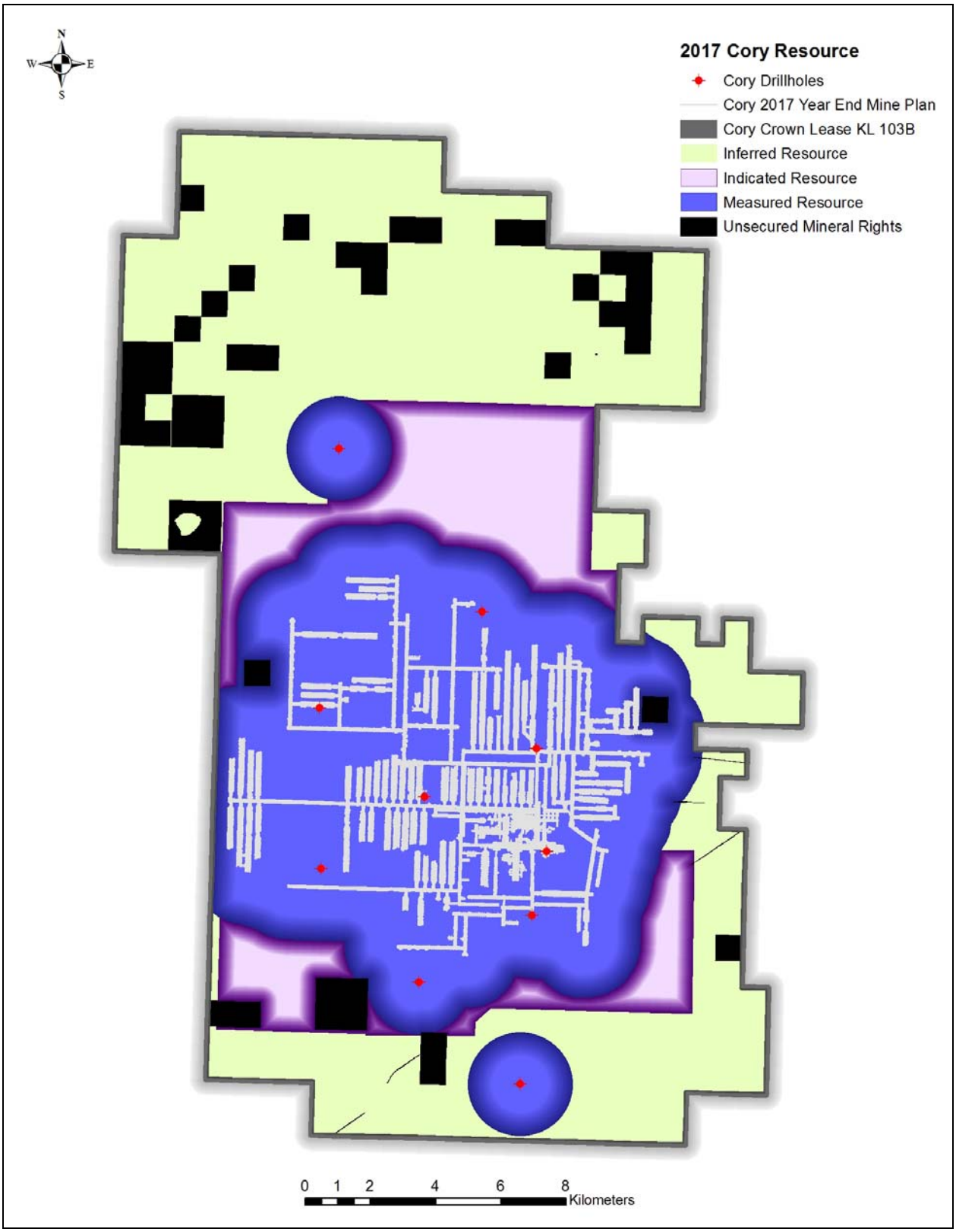


Figure 19: Map showing Cory Mineral Resource with mine workings to December 2017.

15.0 MINERAL RESERVE ESTIMATES

15.1 DEFINITIONS OF MINERAL RESERVE

The Canadian Institute of Mining and Metallurgy and Petroleum (CIM) has defined Mineral Reserve in *The CIM Definition Standards for Mineral Resources and Reserves* (2014) as:

1) **Probable Mineral Reserve:** the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

2) **Proven Mineral Reserve**: the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

CIM defines Modifying Factors as "considerations used to convert Mineral Resources into Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors."

For Saskatchewan, in regions adjacent and contiguous to an operating potash mine, Mineral Reserve categories are characterized by PotashCorp as follows:

1) **Probable Mineral Reserve:** identified recoverable potash mineralization classified as a Measured Resource, within a 1.6 km (1 mile) radius of a sampled mine entry or contiguous exploration drillhole, and within Crown Subsurface Mineral Lease KL 103B.

2) **Proven Mineral Reserve**: identified recoverable potash mineralization classified as a Measured Resource, delineated on at least three sides by sampled mined entries or exploration drillholes to a maximum of 3.2 km (2 miles) apart, and within Crown Subsurface Mineral Lease KL 103B.

Along with this approach, analysis of in-mine samples for potash grade has provided an observation-based understanding of the potash mineralized zone at Cory that is far superior to the level of understanding provided by any surface drilling based exploration program. An understanding of the amount of ore that can be conventionally mined from the Measured Resource category using current mining practices comes from nearly 50 years of potash mining experience at Cory.

15.2 CORY POTASH RESERVE CALCULATIONS

Using the definitions outlined in Section 15.1, part of the Cory A Zone Measured Resource has been converted to Mineral Reserve. The assigned Mineral Reserve category is dependent on proximity to sampled mined entries also described in Section 15.1. An overall extraction rate

for the Cory mine has been applied to the area outlined as Measured Resource in Figure 19. This extraction rate is significantly lower than the local extraction rate described in Section 16.1, as it takes into account areas which cannot be mined due to unfavorable geology.

The overall extraction rate at the Cory mine is 27%. It was derived by dividing the total tonnes mined to date by the tonnage equivalent of the total area of the mine workings (i.e. the perimeter around the mine workings) less future mining blocks. Since an extraction rate has been applied, Mineral Reserves are considered recoverable ore, and are reported as such.

Note that only drillholes whose 1.6 km radii are contiguous to mine workings or the 1.6 km radius placed around mine workings are used to compute Probable Mineral Reserve. The remaining non-contiguous drillholes remain in the Measured Resource category.

The Mineral Reserves for Cory as of December 31, 2017 are as follows:

Cory A Zone:

Probable Reserve	170	millions of tonnes
Proven Reserve	79	millions of tonnes
Total A Zone Reserve	249	millions of tonnes

Cory B Zone:

Probable Reserve	nil
Proven Reserve	nil
Total B Zone Reserve	nil

Total for Cory (A Zone + B Zone):

Probable Reserve	170	millions of tonnes
Proven Reserve	79	millions of tonnes
Total A Zone and B Zone Reserve	249	millions of tonnes

Cory Mineral Reserves are plotted in Figure 20.

The average mineral grade of the Cory A Zone Mineral Reserve is 22.5% K_20 equivalent, and was determined from 4,590 in-mine samples at Cory.

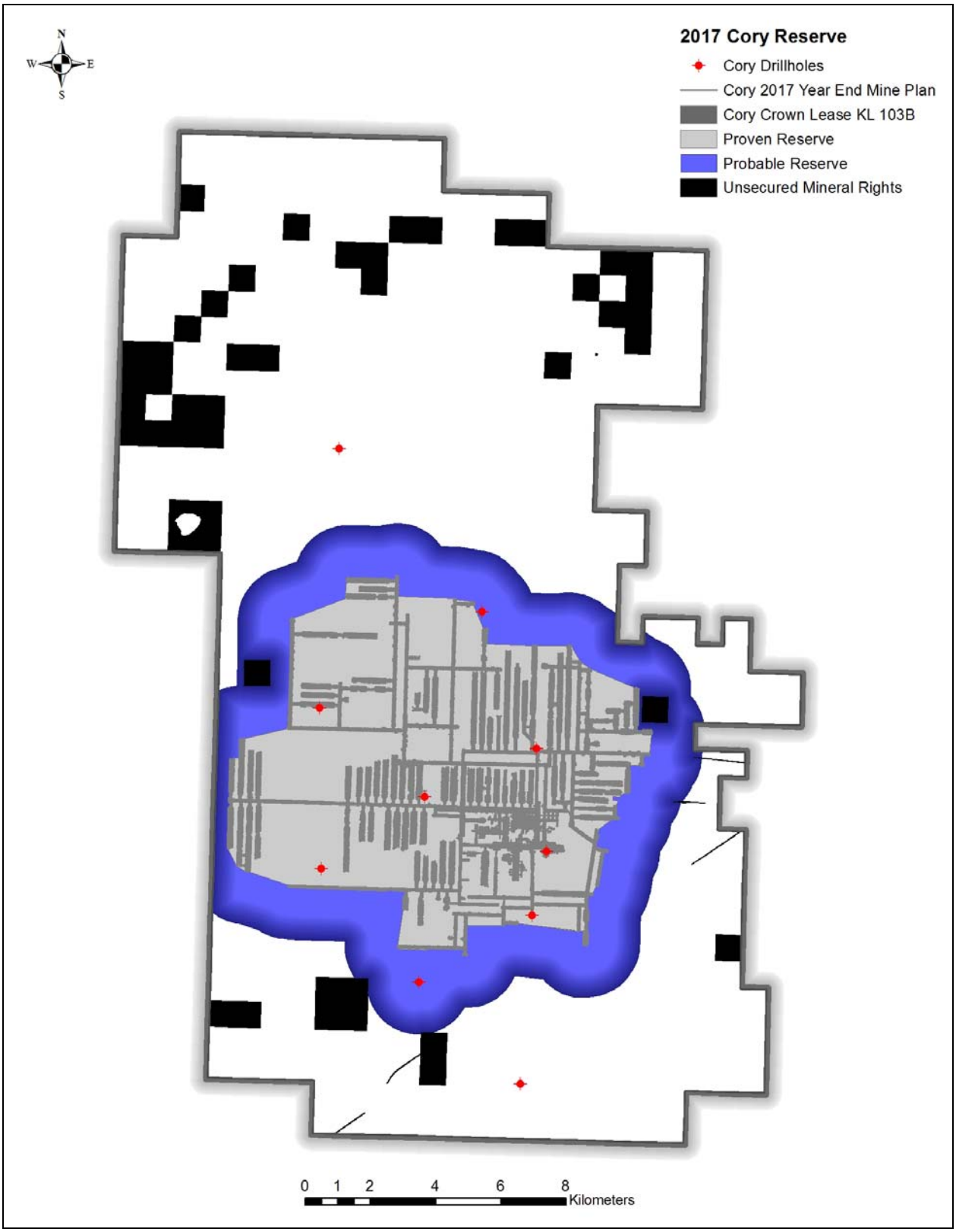


Figure 20: Map showing Cory Mineral Reserve with mine workings to December 2017.

16.0 MINING METHOD

16.1 MINING OPERATIONS

All conventional potash mines in Saskatchewan operate at 900 m to 1200 m below surface within 9 m to 30 m of the top of the Prairie Evaporite Formation. Over the scale of any typical Saskatchewan potash mine, potash beds are tabular and regionally flat-lying, with only moderate local variations in dip. At Cory, potash ore is mined using conventional mining methods, whereby:

- Shafts are sunk to the potash ore body;
- Continuous mining machines cut out the ore, which is hoisted to surface through the production shaft;
- Raw potash is processed and concentrated in a mill on surface; and
- Concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

Sinking of the two original shafts (Shaft #1 and Shaft #2) from surface to the potash zone was completed in 1968, and the first potash ore was hoisted in the fall of that year. The Cory mine has run on a continuous basis since the first ore was hoisted in 1968, other than short-term shutdowns taken for inventory management purposes or occasional plant maintenance and construction work.

In recent years, the Cory mine underwent a major expansion which brought the nameplate capacity up to 3.0 million tonnes of finished potash products per year. However, in 2014 the operational capability of the Cory facility was reduced to 1.4 million tonnes per year due to market conditions. In October 2017, Cory reverted to a pure crystallization plant producing only white potash products, and further curtailing production to 0.8 million tonnes per year.

Virtually all Cory underground mining rooms are in one potash mineralized zone, the upper layer (or A Zone) of the Patience Lake Member of the Prairie Evaporite Formation (the host evaporite salt). In contrast, some potash mines further east in Saskatchewan mine in a different potash layer, the Esterhazy Member of the Prairie Evaporite Formation. Saskatchewan potash geology is illustrated in Figure 21. At Cory, mine elevations range from approximately 980 m to 1045 m, averaging approximately 1010 m. These depths to A Zone potash mineralization are anticipated over most of the Cory lease area. Mine workings are protected from aquifers in overlying formations by approximately 14 m of overlying salt and potash beds, along with salt plugged porosity in the Dawson Bay Formation, a carbonate layer lying immediately above potash hosting salt beds.

The Cory mine is a conventional underground mining operation whereby continuous mining machines are used to excavate the potash ore by the stress-relief mining method. Continuous conveyor belts transport ore from the mining face to the bottom of the production shaft. Mining methods employed in Saskatchewan are discussed in Jones and Prugger (1982) and in

Gebhardt (1993). The highest mineral grade section of the Cory potash seam is approximately 3.35 m (11') thick, with gradations to lower grade salts immediately above and below the mining horizon. The actual mining thickness at Cory is dictated by the height of continuous boring machines used to cut the ore. Five older borers are designed to cut at a thickness of 3.35 m (11') and five new borers are designed to cut 3.65 m (12').

As discussed in Section 10.0, Cory cuts to a marker (clay) seam that is slightly above the high-grade mineralized zone to establish a safe and stable mine roof. The top marker seam is slightly overcut by 10 to 20 cm. Clay seams are often planes of weakness, and if they are undercut, material immediately below the clay seam becomes a hazard as it may separate and fall. Since the hazard must be remediated prior to proceeding, thus slowing production, the moderately diluted mineral grade that results from the overcutting is preferable from a safety point of view.

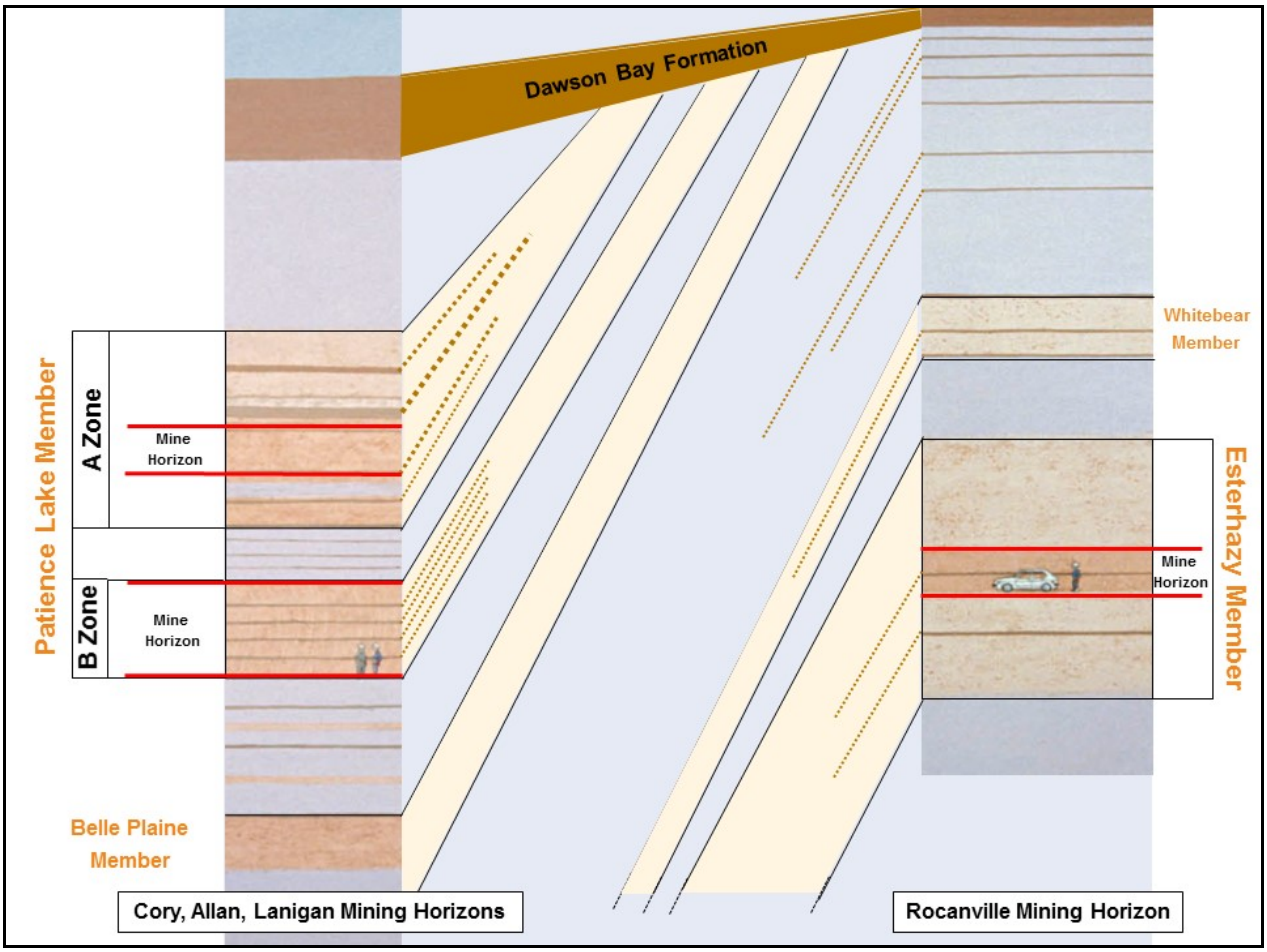


Figure 21: Typical stratigraphic section correlated with composite photos covering both the Patience Lake Member and the Esterhazy Member potash production intervals. At Cory, mining takes place in the Upper Patience Lake Member (A Zone).

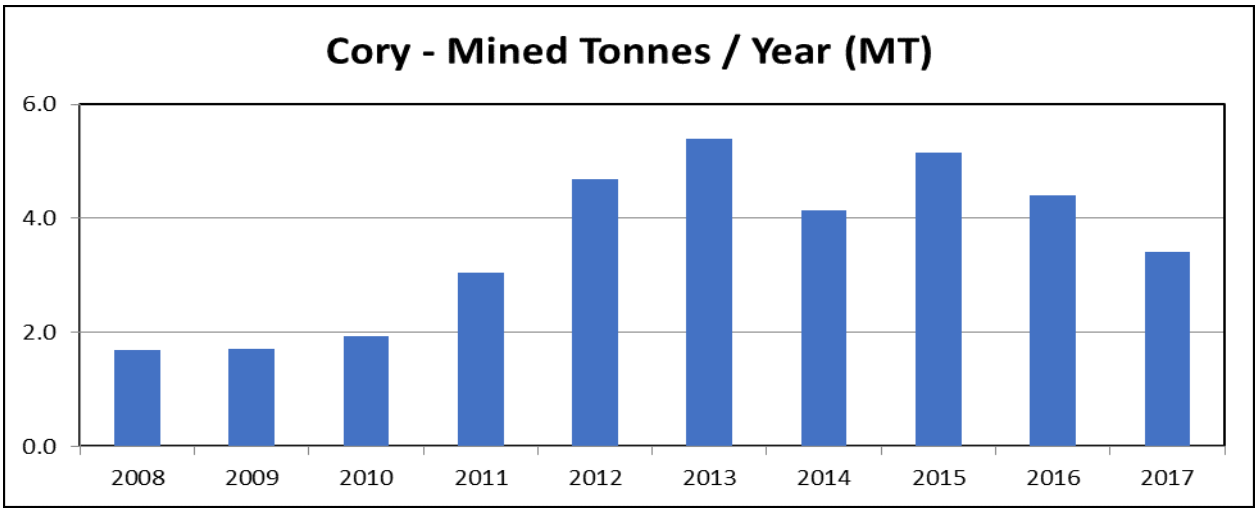
Conservative local extraction rates (never exceeding 45% in any mining block) are employed at all Saskatchewan mines, including Cory, in order to minimize potential detrimental effects of

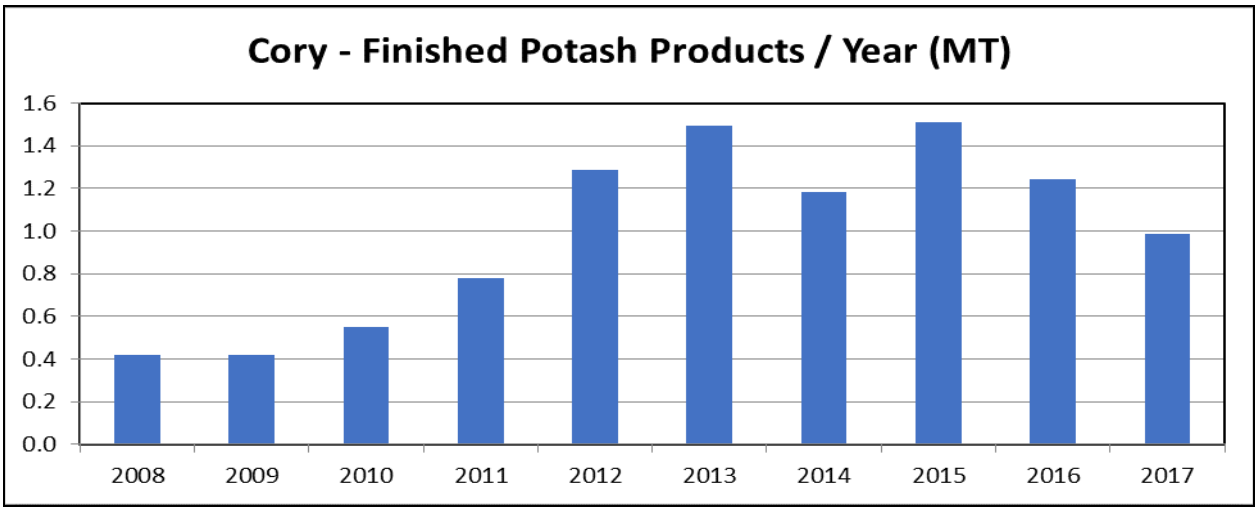
mining on overlying strata; this is common practice in flat-lying, tabular ore bodies overlain by water-bearing layers.

From the shaft bottom, potash ore is hoisted approximately 1000 m from the potash level through the vertical shafts to a surface mill. In addition to hoisting potash ore to surface, the production shaft provides fresh air ventilation to the mine and serves as a secondary egress. The Service Shaft is used for service access, and exhausting ventilation from the mine.

Over the 49-year mine life, 112.632 million tonnes of potash ore have been mined and hoisted at Cory to produce 35.486 million tonnes of finished potash products (from startup in 1968 to December 31, 2017). The life-of-mine average concentration ratio (raw-ore / MOP-product) is 3.17 and the overall extraction rate over this time period is 27%.

Actual potash production tonnages for the Cory mine, along with concentration ratios (tonnes-mined / tonnes-product), are plotted for the past decade in Figure 22.





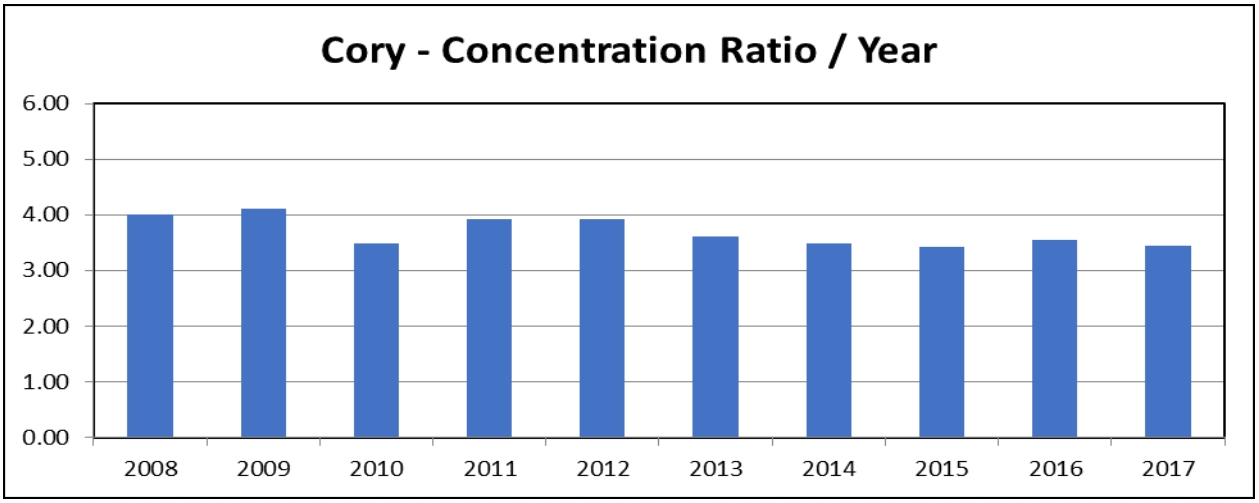


Figure 22: Actual mining, production and concentration ratio for the Cory mine over the past 10 years.

16.2 RISKS TO POTASH MINING OPERATIONS, WITH EMPHASIS ON WATER INFLOWS

The mining of potash is a capital-intensive business, subject to the normal risks and capital expenditure requirements associated with mining operations. The production and processing of ore may be subject to delays and costs resulting from mechanical failures and such hazards as unusual or unexpected geological conditions, subsidence, water inflows of varying degree, and other situations associated with any potash mining operation.

Potash beds in all regions of Saskatchewan are overlain by a number of water-bearing formations, and there are water zones underlying the potash beds as well. A water inflow into mine workings is generally significant in a potash mine since salt dissolves in water; an inflow can lead to anything from increased costs at best to closure of the mine at worst (e.g. see Prugger and Prugger, 1991).

Over the past 49 years of mining at Cory, there have been numerous small brine inflows into underground workings. Each new inflow is treated with concern and appropriately investigated, and all active inflow sites are monitored as long as areas of interest can be accessed. However, the seepages have generally proven to be no more than a minor nuisance to underground operations. Flow rates in the mine vary from place to place and with time, but current rates are rarely higher than approximately 200 litres / minute at any one location. At present, inflows are being monitored at nine underground locations at Cory. The flow rate at two of these inflow locations is derived from sump pump rates which are approximately 152 litres / minute and 76 litres / minute. The rate of inflow is being directly measured at the seven other inflow locations; one site at a rate approximately 4 litres / minute, and the remaining six locations at a rate of less than 1 litre / minute.

To date, there has been no ingress of subsurface brines of any significance at Cory. At present, the total flow into Cory mine workings from all sites is estimated at 250 litres / minute. Brine from these inflows is collected underground, then pumped up to surface for disposal in the Tailings Management Area. Total inflows into the existing shafts is estimated at 40 litres / minute.

17.0 RECOVERY METHODS

At Cory, potash ore has been mined and concentrated to produce saleable quantities of high-grade finished potash products since 1968. At present, only concentrated white potash products (near-pure KCl) are produced at Cory; these include high-grade specialized white soluble potash, white granular, chicklets, and prills. These products have industrial, agricultural, and feed applications.

The crystallization method is used to concentrate potash ore into finished potash products at the Cory mill. A simplified process flow diagram is shown in Figure 23. Raw potash ore is processed on surface, and concentrated white potash products are sold and shipped to markets in North America and offshore.

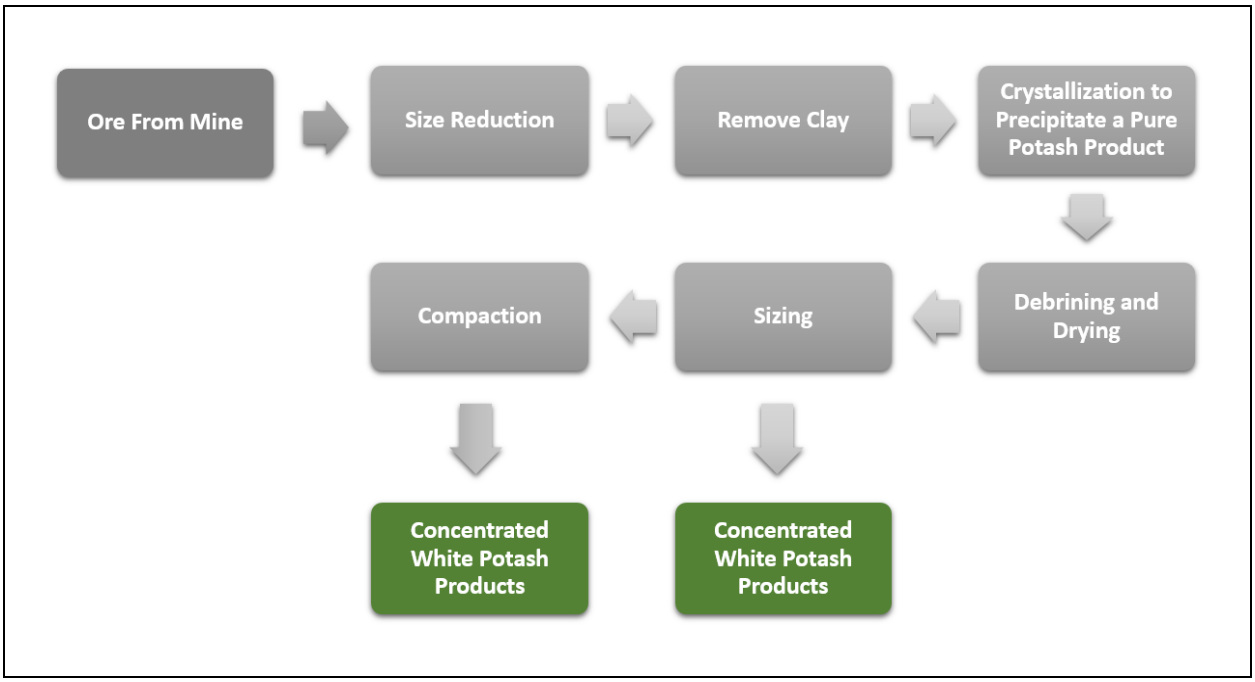


Figure 23: Simplified flow diagram for potash crystallization milling methods used at Cory.

Over the past three years, production of finished potash products at Cory was:

2015: 1.508 million tonnes finished potash products at 61.45% K_2O (average grade)
2016: 1.241 million tonnes finished potash products at 61.56% K_2O (average grade)
2017: 0.988 million tonnes finished potash products at 61.96% K_2O (average grade)

Over the past decade, actual mill recovery rates have been between 66.4% and 75.6%, averaging 72.0% (see Figure 24). Mill recoveries at Cory are lower than at other Nutrien plants because a larger portion (now all) of Cory's total production is made through the crystallization process.

Given the long-term experience with potash geology and actual mill recovery at Cory, no fundamental potash milling problems are anticipated in the foreseeable future.

Quality control testing and monitoring geared towards fine-tuning and optimizing potash milling and concentrating processes are conducted on a continual basis at all Nutrien minesites and at Nutrien research facilities. At Cory, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

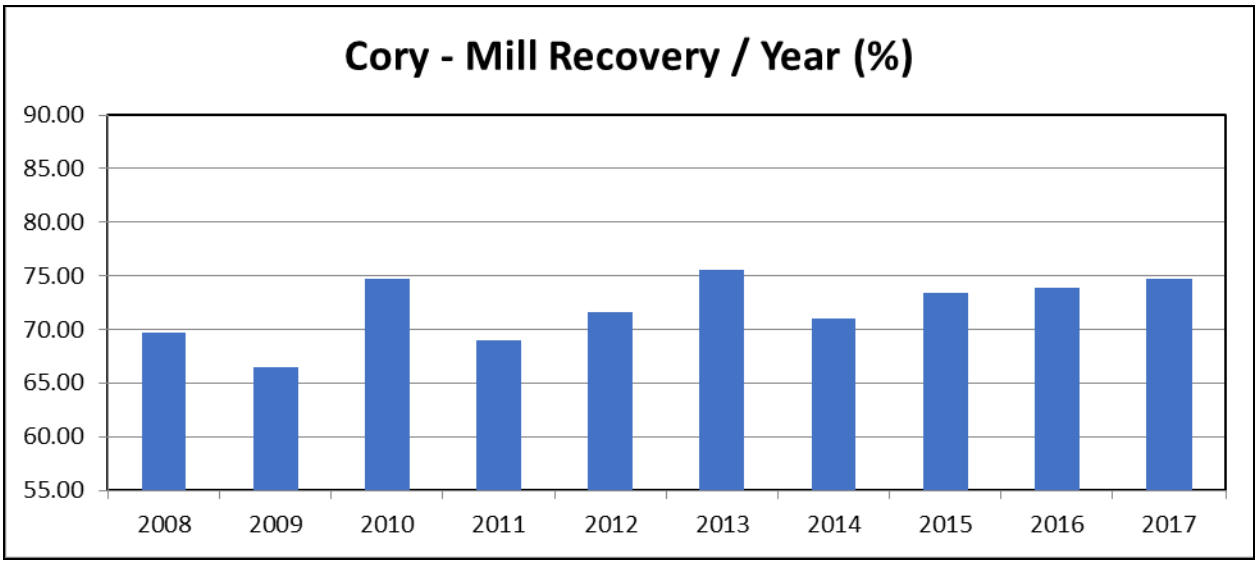


Figure 24: Cory mill recovery rate over the past 10 years.

18.0 PROJECT INFRASTRUCTURE

Infrastructure is in place to meet current and projected requirements for transportation, energy (electricity and natural gas), water and process materials at Cory. See also Section 5.0.

The Cory mine is served by a number of villages within 50 kilometres of the minesite. The nearest city is Saskatoon (approximately 7 km distant).

The Cory surface facilities are accessed by existing paved roads and highways that are part of the Saskatchewan Provincial Highway System. All potash product is shipped by rail over existing track.

At present, high voltage power capacity at Cory is 52 MVA. The ten-year projection of power utilization indicates that the utility can meet all foreseeable future demand.

The Cory operation requires a sustained fresh water supply for the milling process which is provided by a waterline from the South Saskatchewan River (approximately 10 km distant). This water supply provides a sustainable source of process water for Cory milling operations without having any impact on other users of water in the area.

19.0 MARKET STUDIES AND CONTRACTS

Potash from Company mines (including Cory) has been sold on a continuous basis since mining began in 1968. At present, Nutrien products are sold in more than 50 countries, to three types of end-use:

1. **Fertilizer**, focused on balanced plant nutrition to boost crop yields in order to meet the world's ever-increasing appetite for food (nitrogen, phosphate, potash)

2. **Feed Supplements**, focused on animal nutrition (mainly phosphate)

3. **Industrial**, focused on products for high-grade food, technical and other applications (nitrogen, phosphate, as phosphoric acid, potash)

The Company owns and operates five potash mines in Saskatchewan and owns one potash mine in New Brunswick, Canada. The potash mine in New Brunswick is currently in care-and-maintenance mode. Nutrien, indirectly through Agrium, also owns and operates a sixth potash mine in Saskatchewan. Over the past three years (2015, 2016 and 2017) PotashCorp had potash sales of 26.712 million tonnes. Historical PotashCorp potash sales data for the past 10 years are plotted in Figure 25 and Figure 26.

Potash is mainly used for fertilizer, which typically makes up approximately 90 percent of the company's annual potash sales volumes. By helping plants develop strong root systems and retain water, it enhances yields and promotes greater resistance to disease and insects. Because it improves the taste and nutritional value of food, potash is often called the "quality nutrient." Industrial applications of potash include use in soaps, water softeners, de-icers, drilling muds and food products.

Potash fertilizer is sold primarily as solid granular and standard products. Granular product has a larger and more uniformly shaped particle than standard product and can be easily blended with solid nitrogen and phosphate fertilizers. It is typically used in more advanced agricultural markets such as the US and Brazil.

Most potash consuming countries in Asia and Latin America have little or no indigenous production capability and rely primarily on imports to meet their needs. This is an important difference between potash and the other major crop nutrient businesses. Trade typically accounts for approximately three-quarters of demand for potash, which ensures a globally diversified marketplace.

The most significant exporters are producers with mines in the large producing regions of Canada, the Middle East and the former Soviet Union, which all have relatively small domestic requirements.

World consumption of potash fertilizer has grown over the last decade, with the primary growth regions being developing markets in Asia and Latin America. These are countries with expanding crop production requirements, where potash has historically been under-applied and crop yields lag behind those of the developed world. Although temporary pauses can occur in certain countries, the underlying fundamentals of food demand that encourage increased potash application are expected to continue the growth trends in key importing countries. See Figure 27 for world potash shipments and consumption in 2016.

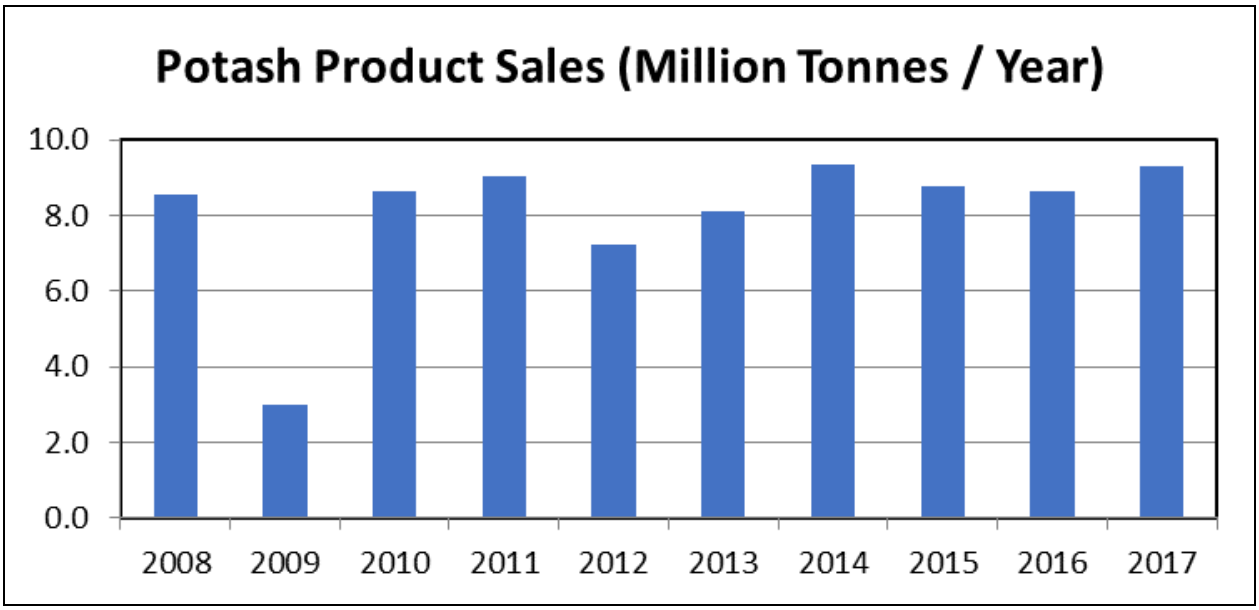


Figure 25: Historical PotashCorp potash sales, 2008 to 2017 in million tonnes / year (from Nutrien Financial Reporting).

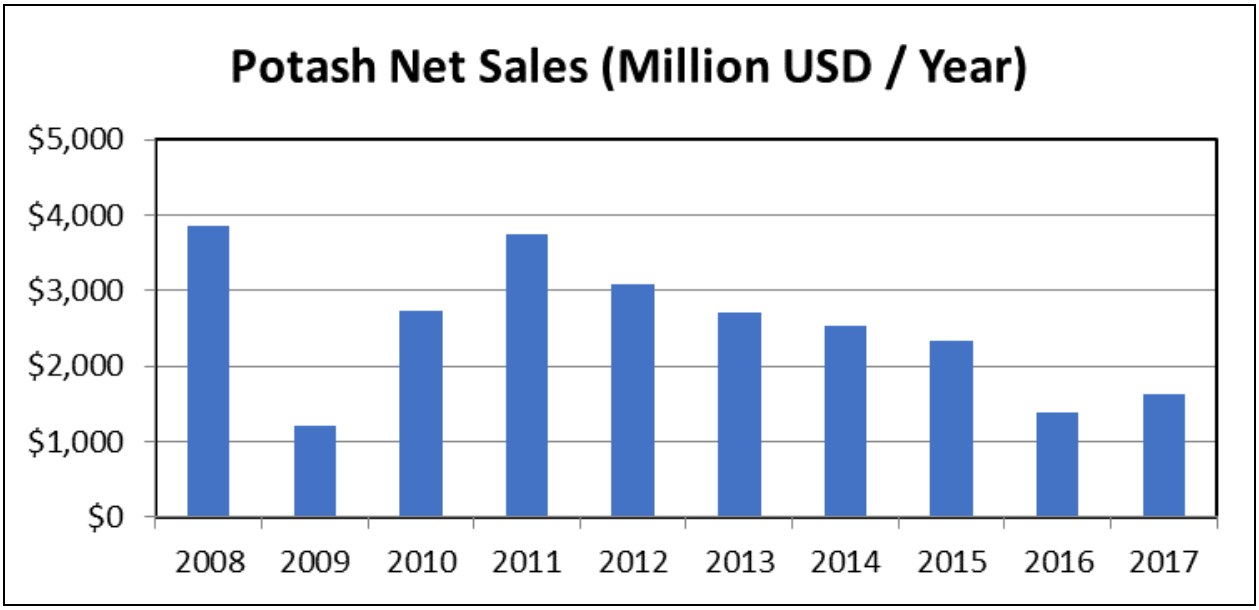


Figure 26: Historical PotashCorp potash net sales, 2008 to 2017 in million USD $ / year (from Nutrien Financial Reporting).

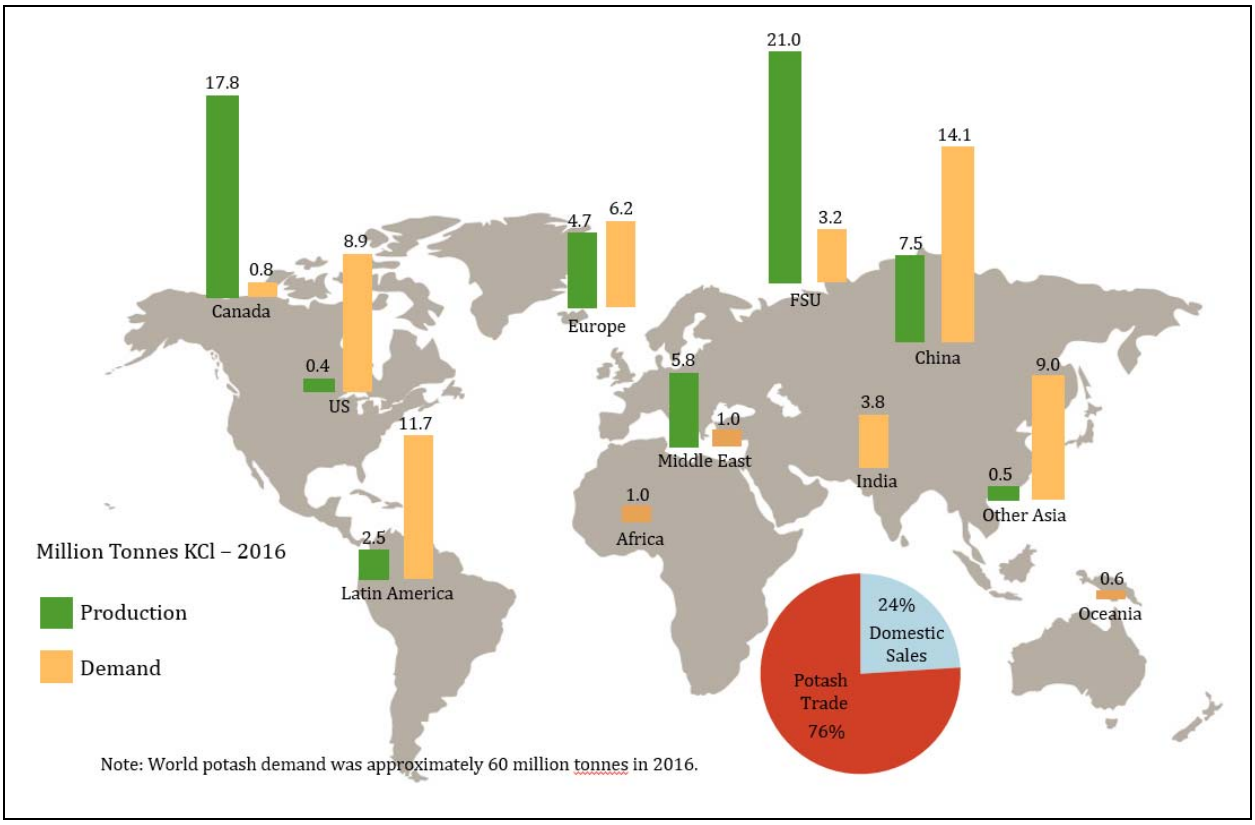


Figure 27: World potash production and demand for 2016 (from Nutrien Financial Reporting).

Potash is used on many agricultural commodities. Wheat, rice, corn, oilseed, and sugar crops consume over half of the potash used worldwide. Fruits and vegetables are also important users of potash fertilizers, accounting for about 19 percent of the total consumption. The remainder goes to other consumer and industrial crops such as oil palm, rubber, cotton, coffee, and cocoa. See Table 4 for primary potash market profile. This diversity means that global potash demand is not tied to the market fundamentals for any single crop or growing region.

Table 4: Primary Potash Market Profile

Country/Region	Growth Rate*	Key Consuming Crops
China	4.1%	Vegetables, rice, fruits, corn
India	0.1%	Rice, wheat, vegetables, sugar crops
Other Asia	4.6%	Oil palm, rice, sugar crops, fruits, vegetables
Latin America	4.2%	Soybeans, sugar crops, corn
North America	0.2%	Corn, soybeans

*10-year CAGR for consumption (2006 – 2016)

Historically, the major consuming regions of Brazil, China, India and other Asian countries have accounted for approximately two-thirds of total potash consumption. The Company believes that potash-deficient soils in these major offshore markets provide the opportunity for significant long-term growth in consumption.

World potash shipments declined during the global economic downturn of 2009 as distributors and farmers acted with more caution and were averse to holding inventories. And, India's potash demand fell subsequently in 2011 due to changes in potash subsidies. However, potash markets have rebounded strongly in recent years, supported by strong customer engagement, record global consumption and positive potash sector fundamentals. The Company believes that supportive agriculture fundamentals and the need to address declining soil fertility levels will enable strong demand growth in the years ahead. World potash shipments and consumption in recent years is shown in Figure 28.

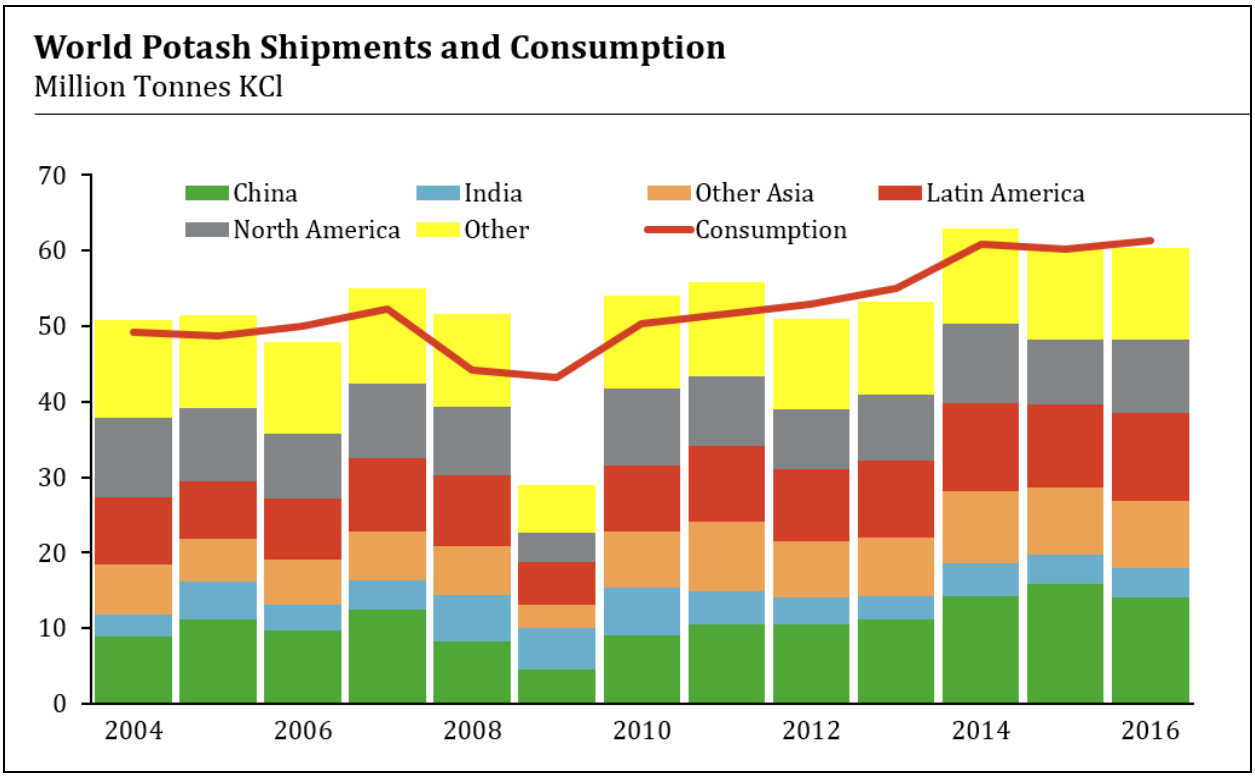


Figure 28: World potash shipments and consumption, 2004 to 2016 (from Nutrien Financial Reporting).

Canpotex Limited (Canpotex), the offshore marketing company owned by the Company and other Saskatchewan potash producers, handles all sales, marketing and distribution of potash produced by its member companies to customers outside of the US and Canada (including the potash produced at Allan).

In North America, Nutrien sells potash to retailers, cooperatives, and distributors, who provide storage and application services to farmers, the end-users. This includes sales to Nutrien's retail distribution business, which has the largest retail distribution network in North America. Typically, the Company's North American potash sales are larger in the first half of the year. The primary customers for potash fertilizer products for the Cory operation are retailers, dealers, cooperatives, distributors and other fertilizer producers who have both distribution and application capabilities.

Nutrien's market research group provides management with market information on a regular basis including global agriculture and fertilizer markets, demand and supply in fertilizer markets and general economic conditions that may impact fertilizer sales. These may include specific market studies and analyses on different topics as may be required. This information is reviewed on a regular basis and the author of this report takes this information into account in understanding the markets and the assumptions within this report.

Plans and arrangements for potash mining, mineral processing, product transportation, and product sales are established by Nutrien and are within industry norms.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

The tailings management strategy at all Nutrien potash mines in Saskatchewan, including Cory, is one of sequestering solid mine tailings in an engineered and provincially licenced Tailings Management Area (TMA) near the surface plant site. The Cory TMA currently covers an area of approximately 416 hectares (1027 acres) of land owned by the Company. Solid potash mine tailings typically consist of 85% to 95% rock-salt (NaCl) and 5% to 15% insolubles (carbonate mud = $CaCO_3$, anhydrite mud = $CaSO_4$, and clays like chlorite, illite, and so on). An engineered slurry-wall has been constructed on the north, west, and south sides of the Cory TMA in the areas where near-surface aquifers could be impacted by mine waters. Near-surface geology to the east of the TMA limits the possibility of brine migration into these areas. The slurry-wall provides secondary containment of any saline mine waters, stopping these brines from reaching surrounding near-surface aquifers. Areas surrounding the TMA are closely monitored; this includes everything from daily visual perimeter inspections to annual investigations and inspections of surrounding groundwater and aquifers.

Cory currently operates four brine disposal wells near the surface plant of the Cory mine (marked in Figure 12) where clear salt brine (i.e. no silt, clay-slimes, or other waste) is borehole-injected into the Winnipeg / Deadwood Formations, deep subsurface aquifers approximately 1500 m to 1700 m below surface (marked in Figure 13). The groundwater in these extensive deep aquifers is naturally saline.

Emissions to air (mostly salt dust and potash dust) are kept below regulatory limits through various modern air pollution abatement systems (e.g. dust collection systems built into mill processes) that are provincially licensed. This same procedure is followed at all Nutrien mines in Saskatchewan.

The Cory operation requires a sustained fresh water supply for the milling process which is provided by a waterline from the South Saskatchewan River (approximately 10 km distant). This water supply is provincially licensed and provides a sustainable source of process water for Cory milling operations without having any impact on other users of water in the area.
In Saskatchewan, all potash tailings management activities are carried out under an "Approval to Operate" granted by the Saskatchewan Ministry of Environment (MOE), the provincial regulator. The Cory mine is in compliance with all regulations stipulated by the Environmental

Protection Branch of MOE. The current Cory Approval to Operate has been granted to June 30, 2018, the renewal date.

In terms of long-term decommissioning, environmental regulations in the Province of Saskatchewan require that all operating potash mines in Saskatchewan create a long-term decommissioning and reclamation plan that will ensure all surface facilities are removed, and the site is left in a chemically and physically stable condition once mine operations are complete. PotashCorp has conducted numerous studies of this topic, and the most recent decommissioning and reclamation plan for Cory was approved by MOE technical staff in October 2016. Because the current expected mine life for Cory is many decades into the future, it is not meaningful to come up with detailed engineering designs for decommissioning at present. Instead, decommissioning plans are reviewed every five years, and updated to accommodate new ideas, technological change, incorporation of new data, and adjustments of production forecasts and cost estimates. Any updated decommissioning and reclamation reports generated by this process are submitted to provincial regulatory agencies. For Cory, a revised decommissioning and reclamation plan is required in July 2021.

In addition to the long-term decommissioning plan, provincial regulations require that every potash producing company in Saskatchewan set up an Environmental Financial Assurance Fund, which is to be held in trust for the decommissioning, restoration and rehabilitation of the plant site after mining is complete. This fund is for all mines operated by Nutrien in the province of Saskatchewan (i.e. Vanscoy, Cory, Patience Lake, Allan, Lanigan and Rocanville).

21.0 CAPITAL AND OPERATING COSTS

The Cory mine has been in operation since 1968; in the years immediately preceding this, major capital investment was made to bring this mine into production. Since then, capital expenditures were made on a regular and ongoing basis to sustain production, and to expand production from time to time.

A major refurbishment and expansion of the Cory mine was completed in 2012, increasing nameplate capacity to 3.0 million tonnes of finished potash products per year. This work involved enhancement of hoists and shaft conveyances, major expansions of both mine and mill, improvements to loadout facilities, and some infrastructure improvements. Total capital expenditure for this expansion work was CAD $1.65 billion. All construction was carried out without significant disruption to existing potash production from the site.

In December 2013, operational changes were announced that reduced the operational capability of the Cory facility to 1.4 million tonnes per year. This was in response to market conditions and to optimize the Company's lowest cost operations.

In October 2017, Cory reverted to a pure crystallization plant producing only white potash products, and further curtailing production to 0.8 million tonnes per year.

22.0 ECONOMIC ANALYSIS

22.1 FUNDAMENTALS

The Company conducts ongoing and detailed economic analyses on each of its operations and on all aspects of its business. While the Company considers its operating costs and results on a per mine basis to be competitively sensitive and confidential information, the Company is confident that the economic analysis conducted routinely for each of the Company's operating potash mines is complete, reasonable, and meets industry standards.

On a cash flow basis, PotashCorp's potash segment generated USD $5,338 million in net sales over the past three years (2015, 2016 and 2017) based on sales volume of 26.712 million tonnes of finished potash products. The annual average realized potash price for manufactured products (includes North American and offshore sales) over a 10-year period (2008 – 2017) is plotted in Figure 29.

Over the past three years (2015, 2016 and 2017), the Cory mine produced 3.737 million tonnes of finished potash products, accounting for 13.6% of total potash production at PotashCorp over this time period. Cory is currently making a positive contribution to the Company's potash segment.

Given the Company's previous history (including 49 years of mining at the Cory operation), recent market conditions, and extensive reserve base, the economic analysis for Cory has met the Company's internal hurdle rates.

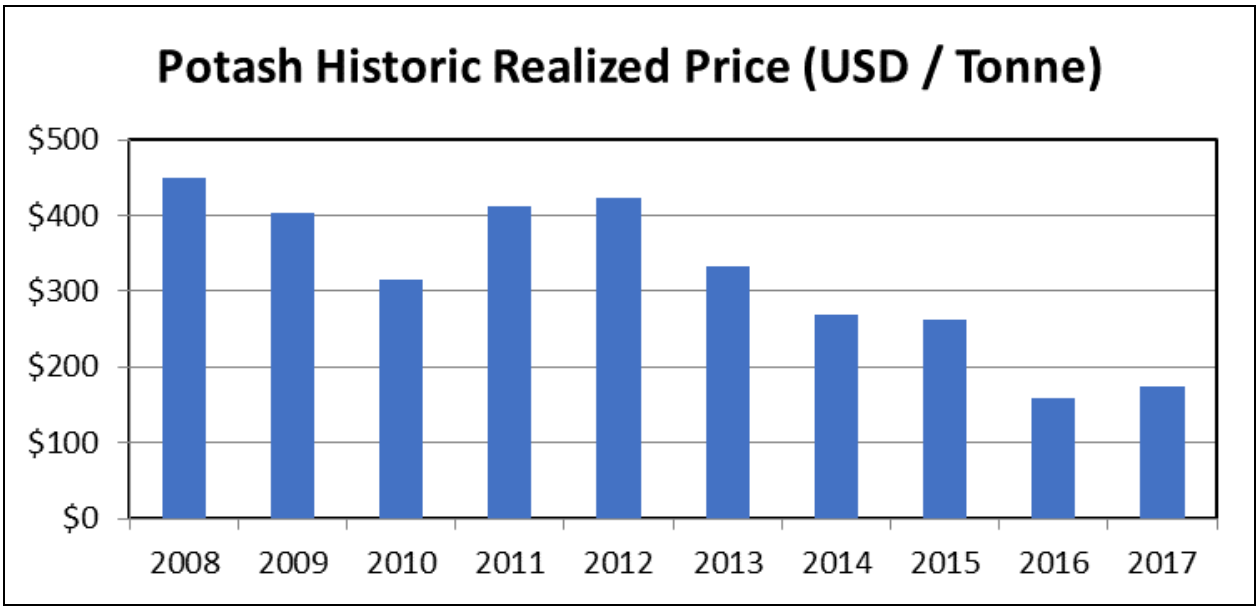


Figure 29: Historic annual average realized potash price in USD / tonne (from Nutrien Financial Reporting).

22.2 TAXES

Royalties are paid to the Province of Saskatchewan, which holds approximately half of the mineral rights in the Cory Crown Subsurface Mineral Lease. Royalties from non-Crown lands are paid to various freeholders of mineral rights in Saskatchewan. The crown royalty rate is 3% and is governed by *The Subsurface Mineral Royalty Regulations, 2017*. The actual amount paid is dependent on selling price and production tonnes.

Municipal taxes are paid based on site property values.

Saskatchewan potash production is taxed at the provincial level under *The Mineral Taxation Act, 1983*. This tax, governed by *The Potash Production Tax Regulations,* consists of a base payment and a profit tax, collectively known as the potash production tax. As a resource corporation in the Province of Saskatchewan, Nutrien is also subject to a resource surcharge that is a percentage of the value of its resource sales (as defined in *The Corporation Capital Tax Act of Saskatchewan*).

In addition to this, Nutrien pays federal and provincial income taxes based on corporate profits from all its potash operations in Canada.

23.0 ADJACENT PROPERTIES

The Company Cory Lease KL 103B is adjacent to the following potash dispositions (Figure 30).

Producing Subsurface Mineral Leases:

- Company Patience Lake Potash KL 109 A
- Company Allan Potash KL 112R A
- Agrium Vanscoy Potash KL 114 A & KL 204

Non-producing Potash Exploration Permits and Subsurface Mineral Leases:

- BHP Billiton Canada Inc.
- Canada United Potash Ltd.

For up-to-date information on Crown Potash Leases and Exploration Permits, see the Saskatchewan Mining and Petroleum GeoAtlas which is available online at the Government of Saskatchewan website.

Nutrien, indirectly through Agrium, operates a mine with extensive underground workings within Potash Lease areas KL 114 and KL 204, which are immediately adjacent to Cory Lease area KL 103B. A safety buffer exists between the two mines where no mining will occur. This buffer ensures that mine workings at one operation will not impact mine workings at the other.

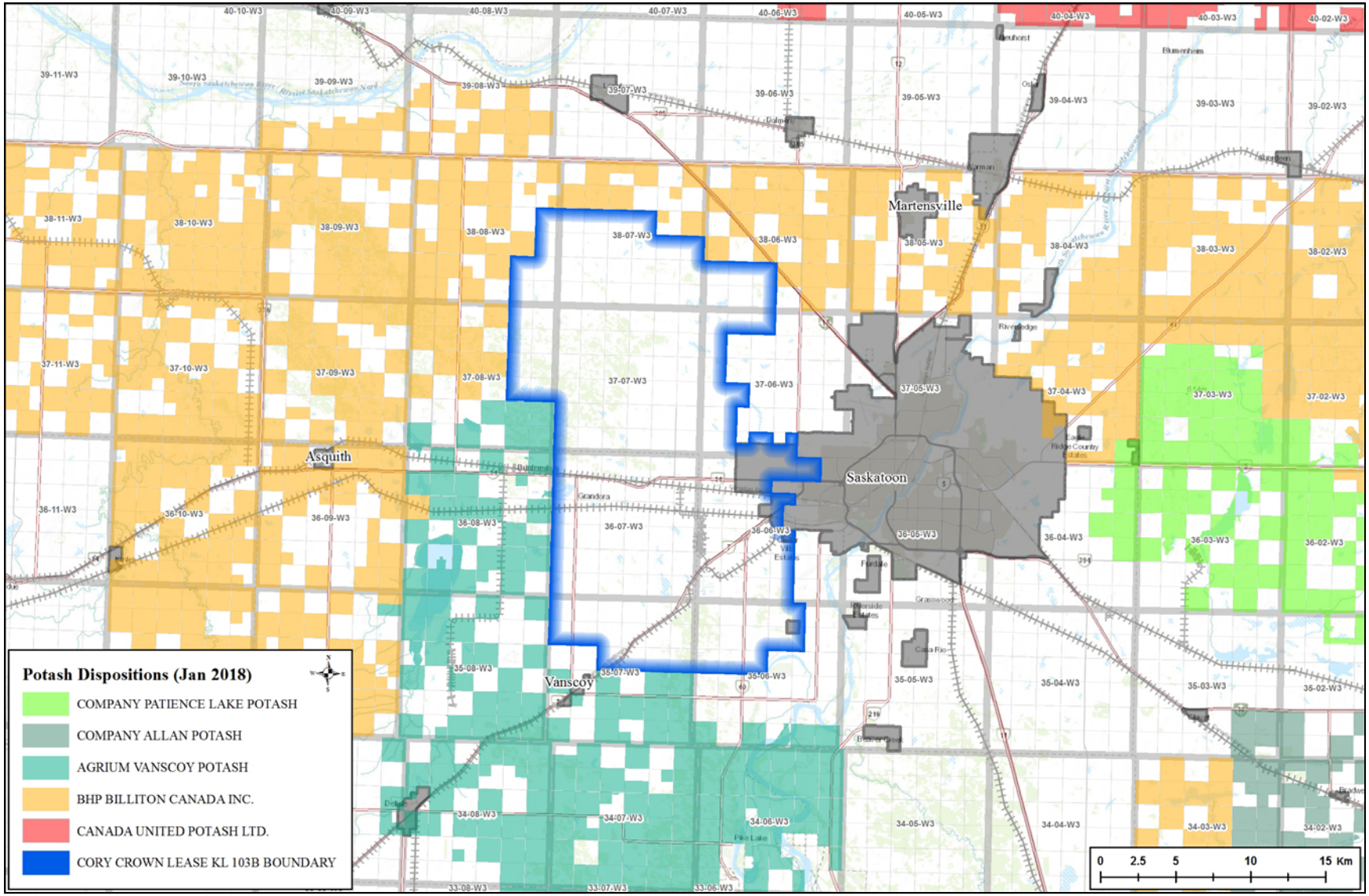


Figure 30: Potash properties adjacent to Cory Potash.

24.0 OTHER RELEVANT DATA AND INFORMATION

Not applicable.

25.0 INTERPRETATION AND CONCLUSIONS

PotashCorp has a long history of successful potash mining at Cory, where potash has been produced for the past 49 years. The Company believes that the experience gained mining and milling potash for this length of time has produced a reliable body of information about potash mineralization, mining and milling at Cory.

In a Saskatchewan potash mine that has been producing for many decades, reduction of mine life through increased production is counter-balanced by development mining into new mineral land parcels. This increases mine life through increasing the potash Mineral Reserve.

For Cory, mine life can be estimated by dividing the total Mineral Reserve (Proven + Probable) of 249 million tonnes by the average annual mining rate (million tonnes of ore hoisted per year). For Cory, the mining rate is defined as equal to the actual three-year running average (consecutive, most recent years). The average mining rate at Cory over 2015, 2016 and 2017 was 4.325 million tonnes of potash ore mined and hoisted per year.

If this mining rate is sustained and if Mineral Reserves remain unchanged, then the Cory mine life would be 58 years.

This estimate of mine life is likely to change as mining advances further into new mining blocks, and / or if mining rates change.

26.0 RECOMMENDATIONS

Not applicable for a potash mine that has been in operation since 1968.

27.0 REFERENCES

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