

## Potash Investment

### 1. Introduction

The world-class Russell-McAuley potash deposit is located in southwestern Manitoba along the border with Saskatchewan (Figure 1). Its development as a conventional potash mine has long been promoted but, until recently, the potash lands were divided among a number of companies. The whole of the potash resource in Manitoba is now available for development, presenting the opportunity for a single operator to assess the technical and economic potential of the entire deposit. Historically, the McAuley deposit had been referred to as the St. Lazare deposit.

In 2013, the Government of Manitoba acquired 100% of Manitoba Potash Corporation (MPC). Combined, the Government of Manitoba and MPC own or control approximately 69,520 acres (28,142 ha) of undeveloped potentially mineable high grade potash deposits on the Russell-McAuley property (the "Property"; Figure 2). The Northern block of the Property comprises the area that was assessed most recently by BHP Billiton Canada Inc. (BHP Billiton) while the Southern block was held under a potash exploration permit by Agrium Inc. (Agrium).

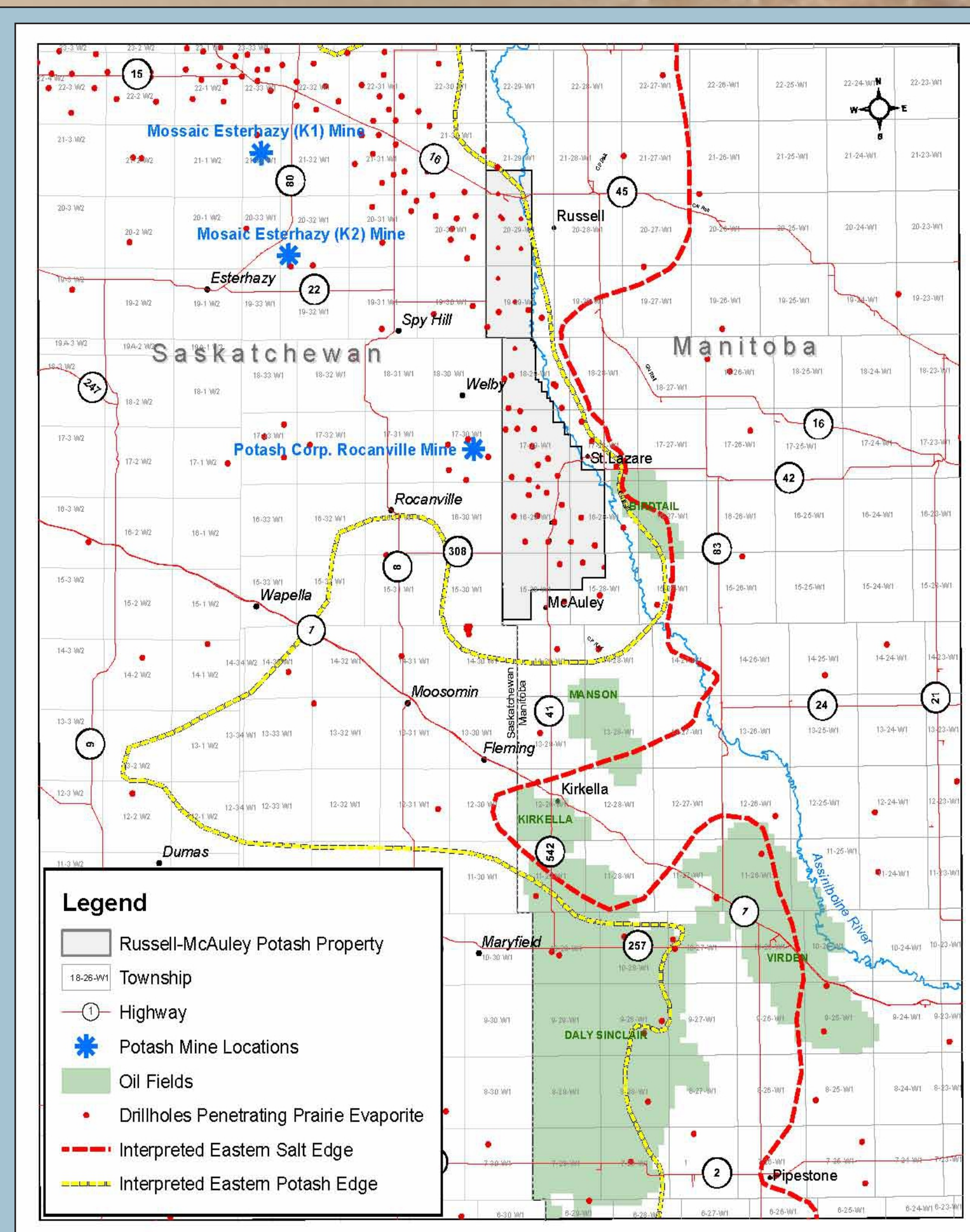


Figure 1: Geological map showing the eastern edge of the Prairie Evaporite salt dissolution front (red), and the eastern edge of the known potash area (yellow), drillholes that penetrate the Prairie Evaporite, and location of nearby potash mines in southeastern Saskatchewan.

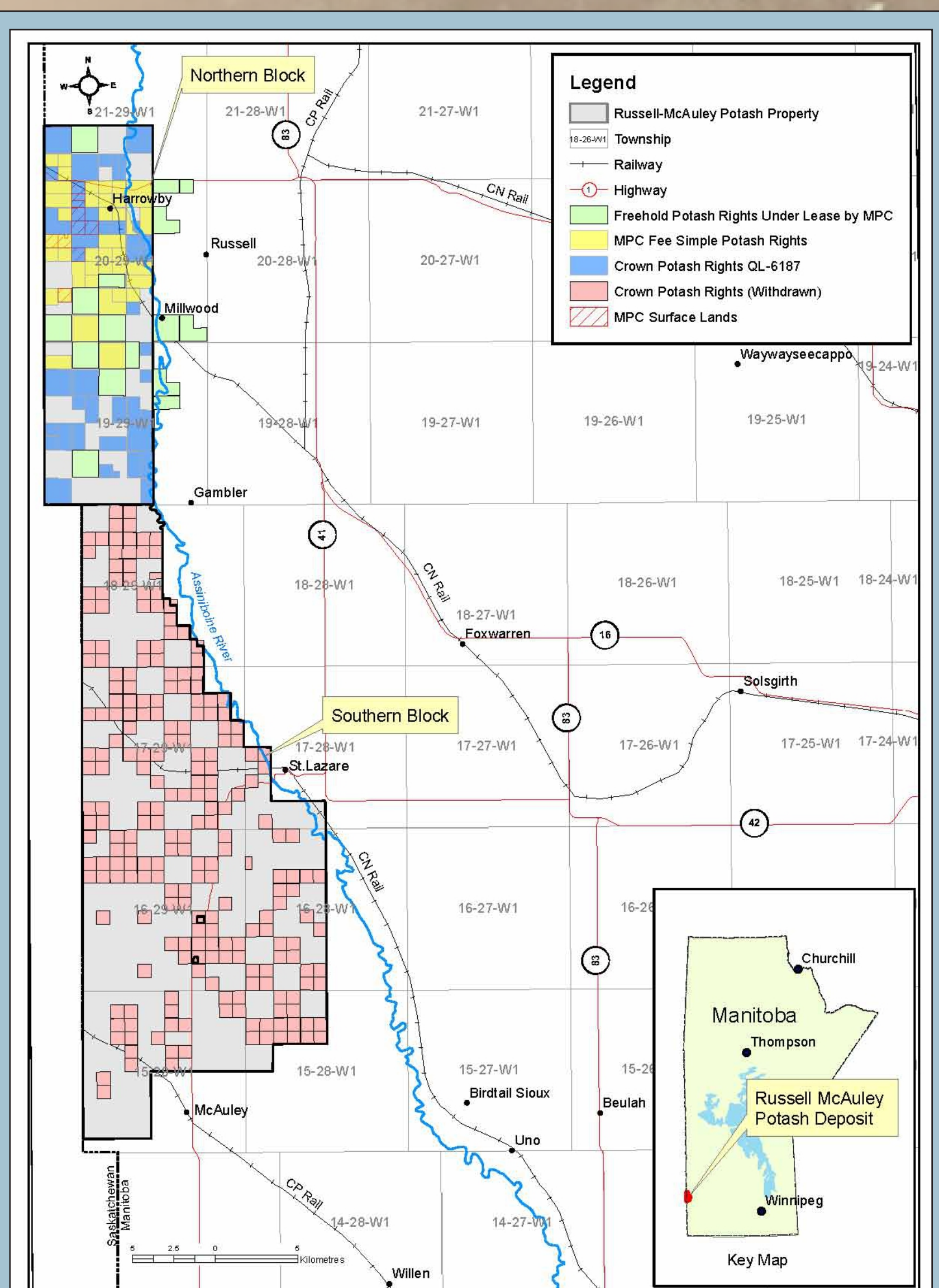


Figure 2: Manitoba Potash Corporation (MPC) property location and assets map.

### 2. Exploration History

The discovery of potash in Manitoba was in an oil well drilled in 1951 at 15-18-10-27W1. This discovery led to exploration programs by Sylvite of Canada and its predecessor companies, S.A.M. Explorations and Tombill Mines, resulting in a total of 10 holes drilled during several exploration programs between 1956 and 1966.

The most extensive exploration campaign was conducted by Prairie Potash which drilled 15 holes between August 1964 and March 1966. Amax and Canamax focused exclusively on the area around the town of Russell, where eight holes were drilled between 1980 and 1986. No drilling has been conducted on the Property since 1986.

On the MPC Property, there is an exploration database for 40 holes that penetrate the Prairie Evaporite Formation, with additional data available for a number of other holes, both within and outside the Property. There is also 2-D and 3-D seismic data available for certain areas in and around the Property.

### 3. Potash Resource

Previously, the Russell-McAuley deposit was divided into two blocks. Formal mineral resource estimates have been prepared for the Northern (or Russell) block, most recently in 2009. A historical resource estimate for the Southern (or McAuley) block was prepared in 1983. Table 1 summarizes the estimated resources for both the Northern and Southern blocks. The estimated resources have not been combined since they were conducted at different periods using different parameters. This property has a robust resource potential for a long term, minimum 20 year, secure supply, at a rate of 2 Mt/y KCl, or higher.

It is estimated that the project to develop a potash mine may take approximately 11 years, starting with estimation of a mineral resource for the entire Property or selected portions, and project definition prior to commencing feasibility study work (Table 2).

Table 1: Mineral resource estimates for the Russell and McAuley areas in southwestern Manitoba.

Area	Million tonnes <sup>a</sup>	Average grade (% K <sub>2</sub> O)
Russell (North Block) <sup>1</sup>	392	22.5
McAuley (South Block) <sup>2</sup>	650	20.9

<sup>1</sup> BHP Billiton reports from ADM Consulting Ltd. and AMEC Americas Ltd. (2009)

<sup>2</sup> Bannatyne (1983), 16% cut off grade

<sup>3</sup> Neither of the resource estimates has been reported using the definition standards of the Canadian Institute of Mining, Metallurgy and Petroleum and, therefore, do not meet the reporting requirements of Canadian National Instrument 43-101.

Table 2: Potential project development timeline.

Work Phase	Years											
	1	2	3	4	5	6	7	8	9	10	11	12
Mineral resource estimation												
Project definition												
Prefeasibility study												
Feasibility study												
Environmental assessment and licencing												
Construction to first ore output												
Ramp-up to full production												

### 4. Mineral Rights

The MPC assets include the following mineral rights:

- MPC Fee Simple Potash Rights – MPC owns potash rights covering approximately 9,600 acres (3,886 ha).
- Freehold Potash Rights under Lease – MPC is the lessor of freehold potash rights covering approximately 5,120 acres (2,073 ha).
- Crown Potash Rights QL-6197 – MPC is the lessor of Crown potash rights covering approximately 14,300 acres (5,789 ha).
- Crown Potash Rights Withdrawn – Manitoba has withdrawn Crown potash rights totalling 40,500 acres (16,394 ha) within the Property boundary and is prepared to lease the rights to MPC or a successor company as part of this transaction.

## Potash Geology

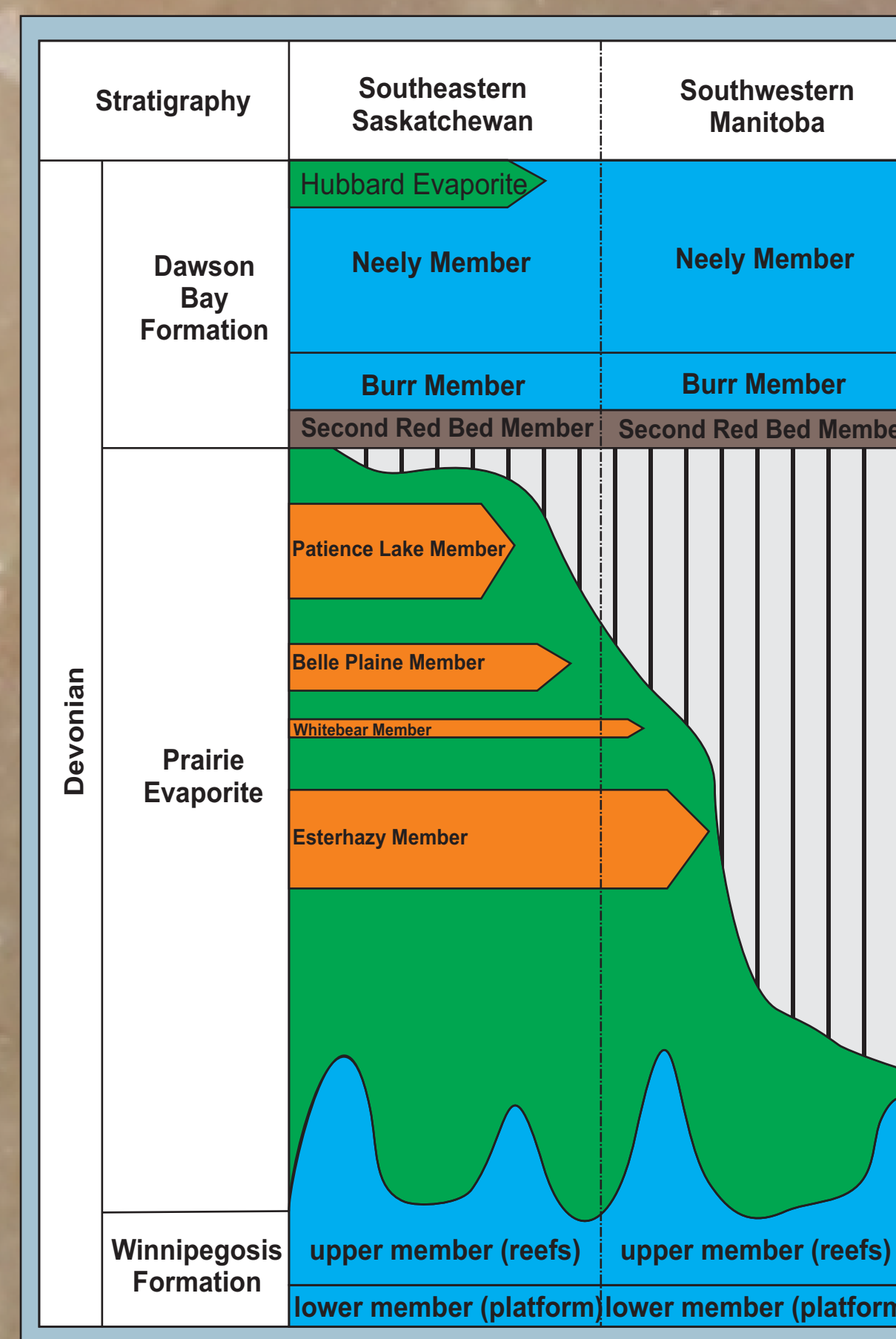


Figure 3: Stratigraphic column the middle Devonian formations showing correlations between southeastern Saskatchewan and southwestern Manitoba.

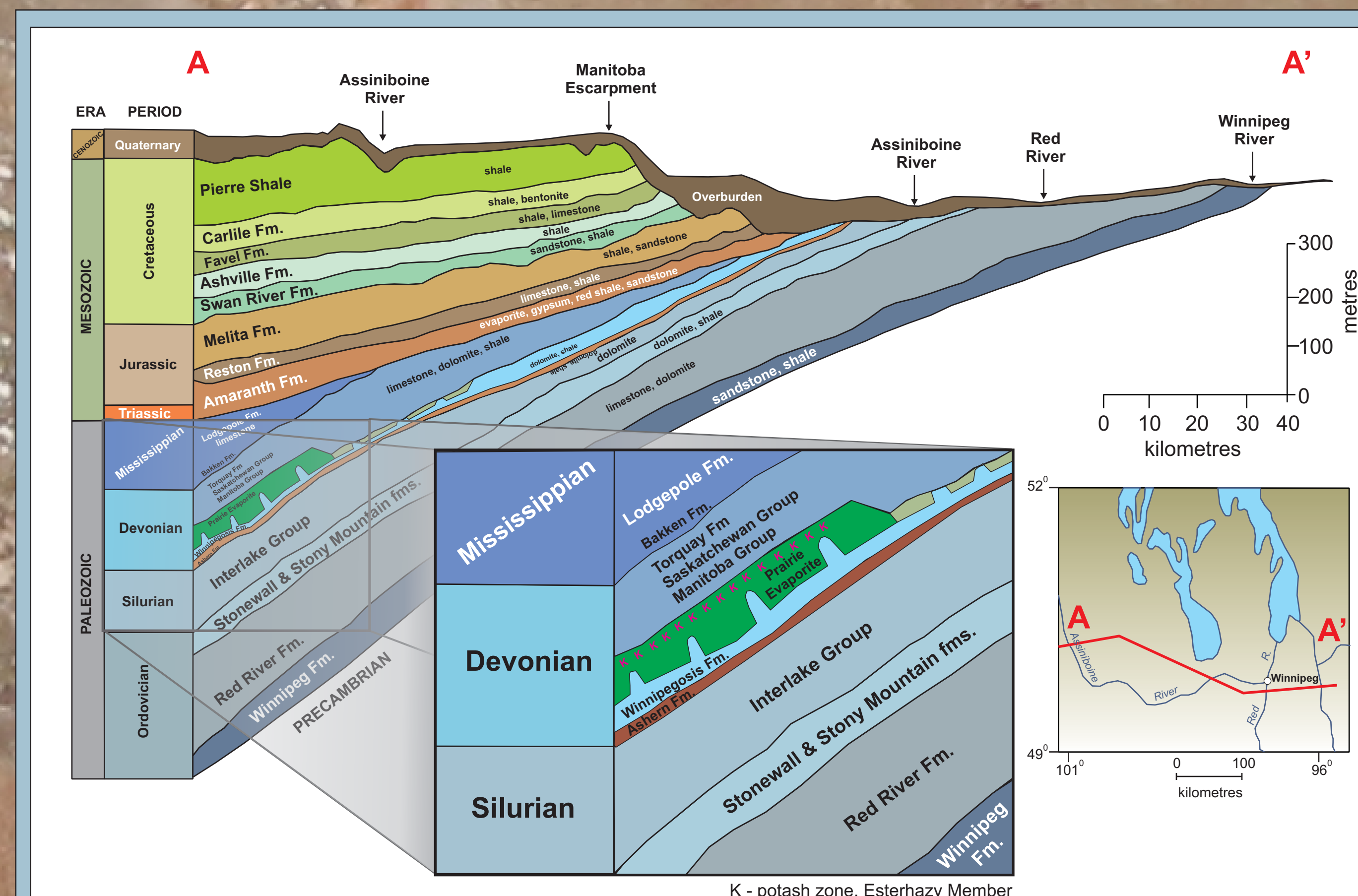


Figure 4: Vertically-exaggerated and simplified cross-section of Paleozoic to Cenozoic formations in southern Manitoba, showing the stratigraphy of the potash-bearing Prairie Evaporite, and underlying Winnipegosis and Ashern Formations. (Modified from Bamburak and Nicolas, 2009)

### 7. Regional and Local Geology

In Manitoba, the Paleozoic-, Mesozoic- and Cenozoic-age strata form a basinward-thickening, southwesterly-sloping wedge, with the strata reaching a total thickness of 2.3 km in the extreme southwestern corner of Manitoba (Figure 4). The stratal sequences within this stratigraphic package were deposited in three basins: the Williston Basin, Elk Point Basin and Western Canada Sedimentary Basin. The potash-bearing Devonian-age Prairie Evaporite was deposited within the Elk Point Basin (Figure 5). This formation overlies the carbonate rocks of the Winnipegosis Formation, and is overlain by the Second Red Bed Member at the base of the Dawson Bay Formation (Figure 3). The Prairie Evaporite consists mainly of halite, with minor anhydrite and four localized potash beds. Within the basin, the formation can exceed 210 m in thickness, and lies at depths of 400 to 2,700 m below surface.

The overlying Second Red Bed Member of the Dawson Bay Formation consists of grey, brown and red shales and argillaceous mudstones, which are overlain by limestone, dolomite and some interbedded anhydrite. The underlying Winnipegosis Formation consists of interbedded dolomite, dolomitic limestone and anhydrite. Reef structures within the Winnipegosis Formation have been identified by seismic surveys. These project up into the overlying Prairie Evaporite in a number of locations and are shown schematically in Figure 4 and 6.

In Saskatchewan, the upper 60 m of the Prairie Evaporite carries four groups of potash-bearing beds which occur at depths of 600 to 2,500 m below surface. From bottom to top, these are the Esterhazy, White Bear, Belle Plaine and Patience Lake members (Figure 3). Each member consists of one or more potash horizons, up to 7 m thick, separated by halite. The potash members tend to thin from northwest to southeast and

### 5. Investment Opportunity Highlights

- Opportunity to develop a world-class potash deposit in Manitoba.
- The Government of Manitoba owns 100% of the shares of the Manitoba Potash Corporation (MPC). Combined, the Government of Manitoba and MPC own or control approximately 69,520 acres (28,142 hectares, ha) of undeveloped, mineable high-grade potash deposits in the Russell-McAuley area in southwestern Manitoba, adjacent to the border with Saskatchewan. (Figure 2)
- Deposits occur in the same geological sequence that hosts the potash operations in Saskatchewan which, collectively, account for over 25% of world potash production. (Figure 3)
- Proximity to the K-1 and K-2 mines of Mosaic at Esterhazy, Saskatchewan and the Rocanville, Saskatchewan mine of PotashCorp (considered to be one of the lowest cost potash mines in the world). (Figure 2)
- Previously, separate sections of the Russell-McAuley property were explored by a number of companies; the entire potash resource is now available for development which represents an opportunity for a single operator/investor to access the potential of the entire area of mineralization.
- The total royalty/tax burden on a new mine in Manitoba is expected to be less than on the same new mine in Saskatchewan.

### 6. Divestiture Process

Micon International Limited (the "Advisor") has been retained by the Government of Manitoba to assist and advise in the sale of MPC and its assets. The Advisor is currently in the process of contacting select parties to discuss this opportunity and assess the interest level in pursuing a potential transaction.

Interested parties are requested to contact the Advisor directly regarding any aspect of their interest in this process. Contact information is provided below.

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occur at shallower depths in the eastern part of the basin than in the centre (Figure 6). The Esterhazy and White Bear members are the only members present in Manitoba (Figure 7). The Esterhazy Member is the potash-bearing bed in Manitoba with sufficient thickness to support economic mining activities. Manitoba has a total area of approximately 2,247 km<sup>2</sup> of known, potentially mineable, potash occurrence (Figure 8).

The Esterhazy Member is intermittently present in a narrow, elongate strip in southwestern Manitoba, from Township 5 to 21, Ranges 27 to 29 W1 (Figure x). The Prairie Evaporite salt dissolution edge runs roughly north-south from Township 1 to 29, through Range 27 W1, and represents the maximum eastern extent of salt (and therefore potash) occurrence (Figure 1). At large scale, the salt dissolution edge is slightly irregular (Figure 5), but on a smaller scale, it becomes more convoluted (Figure 1). The potash beds dip gently to the southwest at depths ranging between approximately 800 m near Russell in the north to approximately 1,000 m near McAuley in the south. Over the area of known potash occurrence in Manitoba, the thickness of the Esterhazy Member averages 5.6 m.

The Esterhazy Member in Manitoba compares favourably in grade, size and mining conditions to deposits supporting producing mines in southeastern Saskatchewan. Potash grades, and the content of insoluble minerals and carnallite, appear to be comparable to those in the Esterhazy Member in southeastern Saskatchewan where it is mined at depths of over 1,000 m. The Esterhazy Member is mined at the operations of Potash Corp. at Rocanville and at Mosaic's operations at Esterhazy, just west of the MPC property. It is the only potash bed of potentially economic significance in Manitoba.

### References

ADM Consulting Limited. 2009. Review of material relating to the resource estimate for the Manitoba potash project; report prepared for AMEC Americas Limited.

AMEC Americas Limited. 2009. BHP Billiton Russell Project – High Level Development Scenario; report prepared for BHP Billiton.

Bamburak, J. D. and Nicolas, M. P. B. 2009. Revisions of the Cretaceous stratigraphic nomenclature of southwest Manitoba (parts of NTS 62F, G, H, J, K, N, O, 83 C, F); in Report of Activities 2009, Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, p. 183-192.

Bannatyne, B.B. 1983. Devonian Potash Deposits in Manitoba; Manitoba Energy and Mines, Open File Report OF83-3, 27 p.

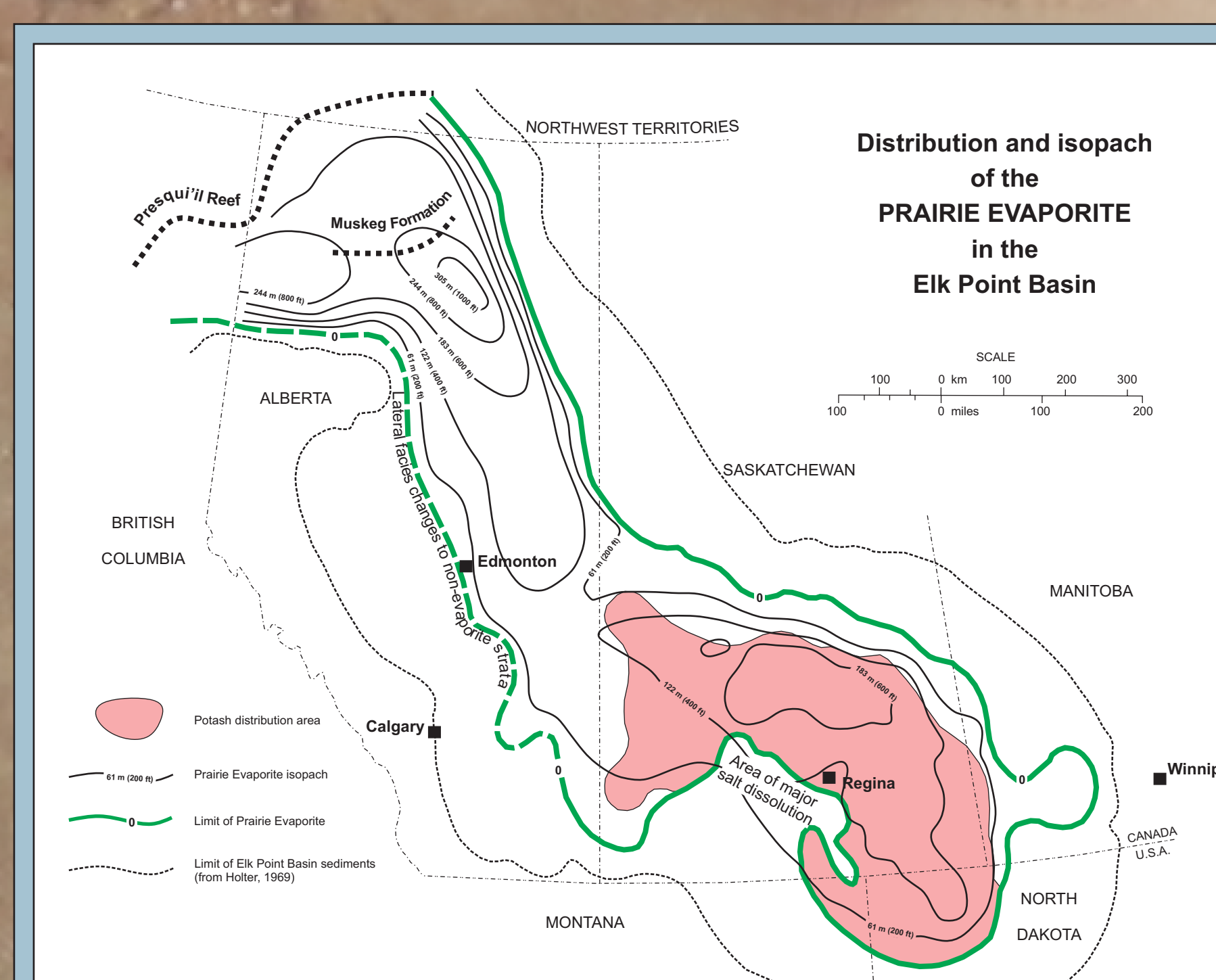


Figure 5: Distribution and isopach of the Prairie Evaporite in the Elk Point Basin. (Modified from Bannatyne, 1983)



Figure 7: Core photograph of the Esterhazy Member, Prairie Evaporite, showing the potash ore from an approximate depth of 970 m at 8-6-17-29W1.

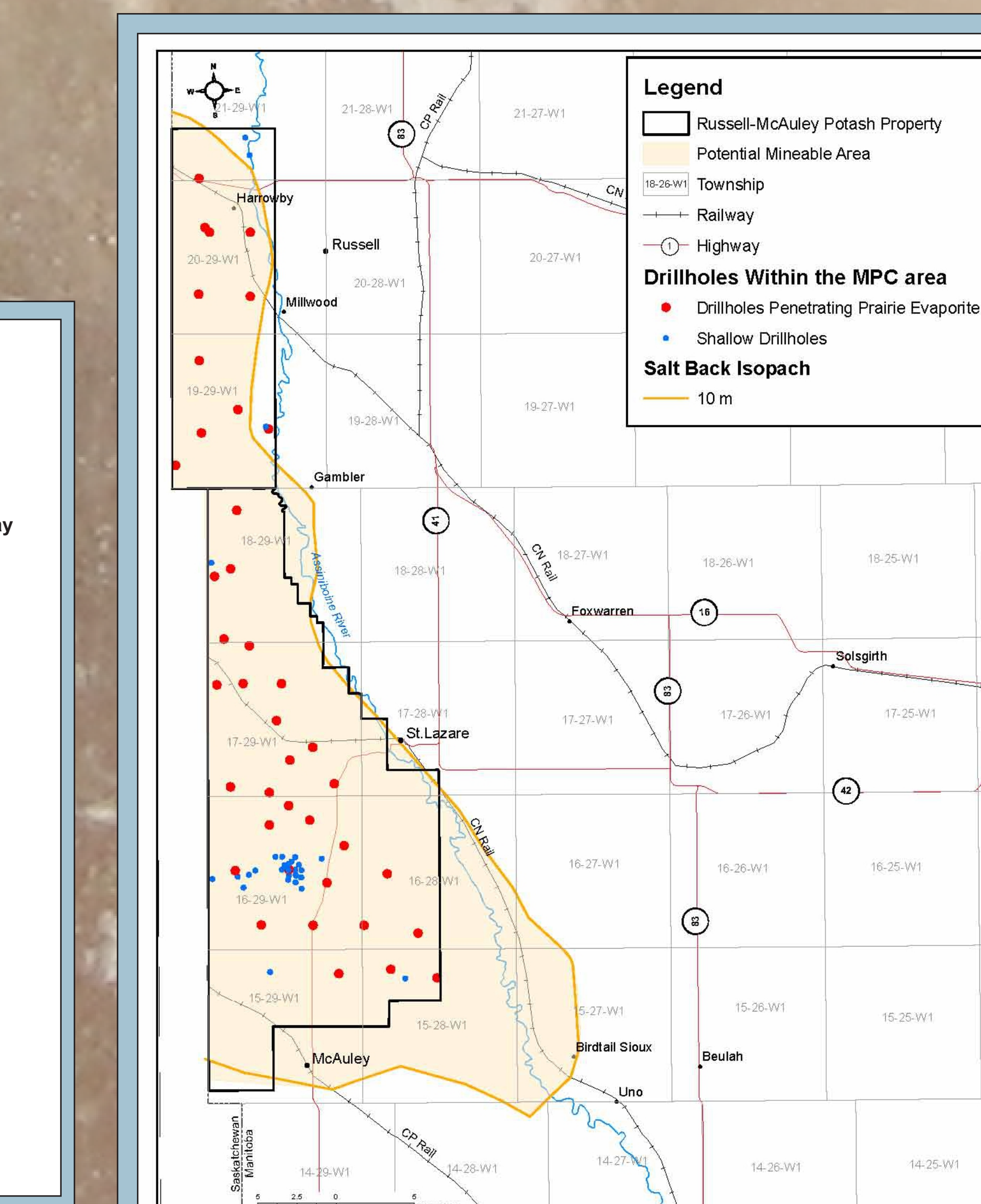


Figure 8: Map showing the potential mineable potash area, assuming a salt back thickness minimum of 10 m above the Esterhazy Member, and drillholes within the Manitoba Potash Corporation (MPC) property.