Stockholm Potash Property
Saskatchewan, Canada
Technical Overview

Prepared by: North Atlantic Potash

May 2013
# Technical Overview

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1.0 Introduction - North Atlantic Potash

This summary report will serve to introduce the reader to North Atlantic Potash Inc. (North Atlantic) a Canadian company owned by JSC Acron Group. The information described below is based on two years of potash exploration on North Atlantic properties identified as the Stockholm Project in the province of Saskatchewan. This overview report was prepared by North Atlantic’s internal technical team. Detailed independent reports by North American leading potash geologic, geophysical and engineering consultants support the seismic and geologic information used for the Technical Overview discussed in this report (Section 1.2). These reports are available to parties interested in additional information.

North Atlantic is a growing company focused on developing potash production in Canada. The company initially owned 26 permits covering 850,000 hectares (2.1 million acres) in the Saskatchewan Potash Area, selling 8 permits in September 2011 to Yancoal Canada, a subsidiary of Yanzhou Coal Mining Company Limited of China. Currently North Atlantic possesses 18 potash permits in Saskatchewan (485,000 hectares) within the government Potash Designated Area. This includes 245,000 hectares fully controlled by North Atlantic and 240,000 hectares held within a Joint Venture with Rio Tinto Exploration Canada Inc. (60% NAP, 40% Rio).

An extensive exploration program, directed by Rio Tinto, is underway in the Joint Venture which has potash solution mining capability. North Atlantic’s wholly owned permits were evaluated and permits were selected as having the highest priority for potash exploration. KP421 bordering the Mosaic Esterhazy Mining Lease and BHP Billiton Permits, was also selected for evaluation. A 2D Seismic Survey re-evaluation was completed by RPS Boyd PetroSearch and a drill hole location selected. A drill rig was moved onto location the week of July 23, 2012 and was completed in early August with very favorable results as detailed in Section 3 - Stockholm. Mosaic K1 and K2 and PCS Rocanville mines produce from the Esterhazy Member and are considered to have the lowest operating costs in Canada.

North Rim Exploration Ltd., one of the leading geologic consulting firms in North American potash exploration, was selected to plan, monitor, secure, log, and sample the potash wells and prepare a geologic resource evaluation. A Canadian standard 43-101 Resource Report for the Foam Lake property by North Rim was completed December 2012.

KP421 bordering the Mosaic Esterhazy Mining Lease and BHP Billiton Permits, was also selected for evaluation. A 2D Seismic Survey re-evaluation was completed by RPS Boyd PetroSearch and a drill hole location selected. A drill rig was moved onto location the week of July 23, 2012 and was completed in early August with very favorable results as detailed in Section 3 - Stockholm.
1.1. Permit Description

The Saskatchewan potash permits are located in the world’s largest potash reserve in a country with very stable government, world-class financial system, highly skilled workforce, excellent transportation and infrastructure. This is in sharp contrast to other Greenfield properties frequently located in geopolitically unstable regions with poor infrastructure and often very complex potash geology. The Saskatchewan Potash Area is presently 100% permitted including ownership by many of the world’s largest mining companies such as BHP Billiton and Rio Tinto and leading potash producers PCS, Mosaic, K+S and Agrium.

1.1.1. Location Map

![Location Map Image]

Figure 1: North Atlantic Potash Permit Location Map
1.1.2. Regional Geology

The Potash resources of Saskatchewan are part of extensive shallow marine sequence of the Middle Devonian, Elk-Point Group. The potassium bearing minerals in the Elk Point Group are located in the Prairie Evaporate Formation (see Figure 3).

The potash-bearing Prairie Evaporite Formation of Saskatchewan was laid down within the Saskatchewan Subbasin at the distal end of the Middle Devonian Elk Point Basin. Saline waters flooded the Basin from the north through a series of at least four sub-basins. The northernmost of these features has been designated as the Mackenzie Sub-basin and sea water flowing from here into the more southerly Northern Alberta Sub-basin was somewhat restricted by the Pres’Quile Reef complex. The Northern Alberta Sub-basin was, in a similar manner, partially separated from the Central Alberta Sub-basin immediately to the south by the tectonically positive Peace River-Athabasca Arch. The Meadow Lake Escarpment, which is interpreted to have been a tectonically positive feature in Middle Devonian times, restricted normal seawater flow into and out of the Saskatchewan Sub-basin. The increasingly concentrated nature of the Elk Point Sub-basin water toward the southeast resulted in more highly saturated saline seawater and the ultimate deposition of potash minerals within the Saskatchewan region.

Three potash units may be present including (from the base to uppermost) the Esterhazy, Belle Plaine, and Patience Lake Members (Holter, 1969). The Prairie Evaporite is underlain by the Winnipegosis Formation and immediately overlain by the Second Red Beds, the basal strata of the Dawson Bay Formation. Both the Winnipegosis and Dawson Bay mainly include carbonate strata. The potash strata of Saskatchewan have a relatively simple mineralogy, stratigraphy, and structure. Two potash minerals are prevalent: sylvite (KCl) and carnallite (KCl.MgCl₂.6H₂O). Prairie Evaporite potash bedding demonstrates widespread lateral consistency and individual higher grade units may normally be traced for more than tens of kilometers.

These mineralized zones are generally flat lying interbeds of sylvite, halite, carnallite and clay, with minor amounts of anhydrite. The Esterhazy and Patient Lake Members are mined in the 7 conventional underground mining sites in Saskatchewan while Mosaic’s Belle Plaine solution operation extracts all three members. The Esterhazy Member sylvinitic is considered the best potash interval in the world in terms of mineralogy with very low insolubles and favorable rock mechanics which allows wide mining rooms with minimum ground control.
The uppermost contact between the Prairie Evaporite and the Dawson Bay is termed the Second Red Beds and consists of dolomitic shale. The basal depositional contact is marked by a sharp transition from Prairie Evaporite halite to an assortment of Winnipegosis Formation dolostones, limestones, and anhydrite interbeds. Regionally, the Winnipegosis forms a broad flat basin to platform deposit with local development of limestone/dolomite reef-like systems known as Winnipegosis mounds which are readily apparent on seismic profiles.

Overlying the Elk Point Group is a sequence of rocks commonly referred to as the Manitoba Group which consists of the Dawson Bay Formation and overlying Souris River Formation. Two halite beds are locally found to be incorporated into the Manitoba Group including the Hubbard Salt and Davidson Evaporite.
The section demonstrates the lateral extent and consistency of the Prairie Evaporite Formation across southern Saskatchewan over hundreds of kilometers through the correlation of clay seams and mineralized beds.

### 1.1.3. Saskatchewan Potash Permit Regulations


Crown Mineral Rights are mineral titles that are owned by the Saskatchewan Provincial Government and in some instances the federal government as in the case of National Parks or Reserve land.
Today provincially held mineral rights are administered by the Saskatchewan Government Ministry of Energy and Mines.

Freehold Subsurface Mineral Rights are mineral titles which are owned by companies or by private individuals and can be disposed of under any terms and conditions the owner chooses. Any homestead grants issued after the late 1800’s were for surface rights only and the mineral rights remained the property of the Crown. In some cases both the surface and mineral rights could be obtained when Saskatchewan settlers purchased land from private holding companies or railways. Over the years most Freehold titles have passed through several owners and in some instances the mineral rights have been separated from the surface title.

**ACTS AND REGULATIONS**

Subsurface Mineral Permits are described in the Saskatchewan Government Subsurface Minerals Regulation. The following conditions are relevant to potash permits owned by NAP:

1. Application for permit, the area not to exceed 100,000 acres and such lands to be one solid block of contiguous lands as approved by the Minister.
2. The Application shall be accompanied by:
   a. A plan and legal description of the area applied for;
   b. A fee of $100 CAD;
   c. Rental for the first year of the term of the permit, the rental being $0.50 CAD per acre for the first 5 years with $10,000 CAD for the first extension period, $20,000 CAD for the second extension, and $40,000 CAD for the third extension period;
   d. A deposit of $2,000 CAD, which is refundable within 30 days after the expiration date of the permit or sooner if terminated earlier than the full term;
   e. Details of the work to be carried out;
   f. Names and addresses of the directors and officers if the applicant is a corporation; and
   g. A statement of financial position of the applicant.
3. The permittee shall have the exclusive right to prospect for subsurface minerals in the Project Area.
4. The term of the permit shall be 5 years from the date of issue and such term may be extended upon application by the permittee for not more than three extension periods of one year each.
5. The permittee shall be required to expend for work upon the permit lands the amounts of $40,000 CAD during each of the second and third years of the term of the permit and $80,000 CAD during each of the fourth and fifth years of the term of the permit with proof offered to the Minister in the form of a detailed statement, such statement which may require certification by a chartered accountant or certified public accountant satisfactory to the minister.
6. In the event the permittee is deficient in the amount spent during any one period, the deficiency may be satisfied by a cash payment equivalent to the deficiency.
7. Consolidation of smaller permits is allowed, provided that the size of the consolidated permits does not exceed 100,000 acres.
The permittee has the right to surrender at any time all lands in the Project Area or any portion thereof, but the surrender shall not entitle the permittee to a refund of any rental for the current year. The permittee may, with the approval of the Minister, add or substitute Crown subsurface mineral lands for lands in the permit.

1.2 Technical Expertise

1.2.1. RPS Energy

RPS Energy, formerly Boyd PetroSearch (RPS), has been involved with seismic acquisition and interpretation since 1977. Specifically, RPS has been involved with the potash industry since 1984. RPS has conducted similar potash projects for a number of companies, including BHP Billiton Canada, Potash Corporation of Saskatchewan, International Minerals Corporation, Mosaic Potash, Potash One, Western Potash, Vale Potash, and Agrium Potash. RPS Energy has been the primary seismic consulting firm for all operators in the Canadian potash industry since 1986. As a seismic technology services provider for Potash Corporation of Saskatchewan, Mosaic Potash, Vale Potash Canada, Western Potash, and Agrium Potash, RPS has an unprecedented understanding of the Prairie Evaporite geological section gleaned from thousands of kilometers of 2D and tens of thousands of square kilometers of 3D seismic in the vicinity of Saskatoon, Regina and Esterhazy, Saskatchewan. During this time RPS has undertaken in excess of 70 projects at 13 different mine sites. Mining depths on these projects have ranged from less than 450 meters to over 1200 meters. Geological conditions have included both horizontally layered Western Canadian sites and highly structured sites in Canada’s Maritime Provinces. Projects typically involve all facets of seismic exploration: survey design, acquisition, processing, interpretation, reporting, and final presentation.

1.2.2. North Rim

North Rim Exploration Ltd. was contracted to carry out the geologic evaluation of the Foam Lake and Stockholm Projects. This included drill planning, core control and security, logging, sampling and preparation of 43-101 Resource Calculations and Report all as required within NI 43-101 Resource Studies. North Rim has worked on potash and coal projects for Encanto Potash, America West Potash, Athabasca Potash, NuCoal Energy, Westcore Energy and Wescan Goldfields as well as has completed data reviews of historical potash deposits in Australia and Arizona, and has completed a historical resource calculation of a potash deposit in the Holbrook Basin, Arizona. In 2012 North Rim completed reviews of properties in Laos, Brazil, Spain, North America and Australia.

Mr. Dave Mackintosh, P. Geo, consulting for North Rim, reviewed the contents of North Atlantic Potash’s Foam Lake 43-101 compliant Resource Report. Mr. Mackintosh, of ADM Consulting, offers expertise in all aspects of potash and salt mining. With over 41 years of experience in soft rock mechanics and mine
engineering, ADM Consulting specializes in mine design and mine planning as well as carrying out mining feasibility studies, ore reserve evaluations and audits. Dave has completed various feasibility studies and ore reserve estimations on potash properties in Thailand, Argentina, Brazil, and Canada, nitrate and iodine prospects in Chile, and trona properties in Wyoming, U.S.A. He has managed mine inflow and shaft grouting projects in Canada, as well as seismic and deep core drilling exploration programs. He continues to provide geological, rock mechanics and mine planning services to a potash mine producing 2.0 million tonnes of product per year.

1.2.3. Golder Associates

Golder Associates is currently working on “Integrated Engineering and Environmental Strategic Planning Report” for the Foam Lake Project with completion anticipated by the end of January. Established in 1960, Golder is a global, organization with over 8000 employees in 180 offices worldwide. Golder offers clients around the world a comprehensive suite of consulting, design and construction services related to the specialist areas of earth, environment, and energy. Golder is well established and recognized for their work in Saskatchewan’s green and brown field potash developments.

2.0 Stockholm

2.1. Introduction

KP 421 is located near the town of Stockholm, Saskatchewan east of the provinces capital city Regina with access via Highway 1 east to Whitewood then north by Highway 9 through the property. A grid road system of north-south and east-west gravel roads transects the area. The closest rail line is the main Canadian National line which services the nearby Mosaic K1 and K2 mines (25 km).

The average annual daily temperature of the area is 2°C with an average summer maximum of 18°C and a winter average minimum of -22°C. Winds from the west predominate to the north (Saskatoon area) with maximum sustained speeds of 17 km/hr. The average annual precipitation is about 350mm of which 278mm is recorded as direct rainfall. The average annual snowfall is 87.5cm.

The local terrain is gently to moderately rolling farmland with scattered deciduous forested areas and minor wetlands. Local drainage is partially towards the north with the exception of drainage along the southern
edge of the permit into Qu’Appelle River system. Surface elevations range from about 520m in the south west of the permit to 560m the northeast. The principal resource base of the area is based on agriculture.

NAP drilled a single exploration well on the property during July 2012. Two high-grade potash members were intersected, the Belle Plaine Member yielded 42% KCL over 2.5 metres and the Esterhazy Member yielded 36% KCL over 2.3 metres. This property has very high potential for both the Esterhazy Member’s as well as Belle Plaine Member.

2.1.1. Permit description

The Property is comprised of one crown exploration permit, KP-421. This permit encompasses 55,987.35 acres of Crown land.

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<th>Townships</th>
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<th>Acres</th>
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<td>17, 18, 19</td>
<td>1,2,3,4,5</td>
<td>55,987.35</td>
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Table 1: Permit description/acres-KP421
Figure 4: KP421 Location Map
2.1.2. **Stockholm Local Geology**

Within the North Atlantic property boundaries the Prairie Evaporite has a regional dip of approximately 6m/km towards the southwest. The depth to the top of the Formation varies between about 1050m in the north to over 1200m to the south. The Formation is mainly comprised of halite beds with some anhydrite strata commonly encountered at the base and near the middle of the unit. The entire Formation is approximately 170m in maximum thickness, of which the uppermost 35 to 50m includes mainly sylvinitic potash beds.

The Formation can be further subdivided into a “Lower Prairie Sequence” and an “Upper Salt” unit. The Upper Salt contains four potash-bearing Members and several regional marker beds. In ascending stratigraphic order they are: the Esterhazy Member, the White Bear Marker Beds, the Belle Plaine Member, and the Patience Lake Member. These mineralized zones are generally flat-lying interbeds of sylvite, halite, carnallite, clay, with minor amounts of anhydrite.

The Belle Plaine and Esterhazy Members of the Prairie Evaporite Formation are present within the Project Area. Salt horizons barren of sylvite as well as discreet clay and anhydrite seams as well as insolubles-rich zones occur between the potash-bearing members (Holter, 1969).

The Esterhazy Member is present in all eleven of the wells drilled to date in the study area with an average thickness of about 12 m. The most recent hole, drilled by North Atlantic Potash in 2012 showed the higher grade upper beds of the Esterhazy Member to have an average total K2O grade of 17.09% with an insoluble content averaging 2.27% and interstitial carnallite at 0.31% over a 1.99m thickness. Stratigraphically lower beds of higher grade within the Esterhazy analysed 22.69% K2O, 0.18% carnallite, and 0.86% insolubles over a 2.29m thickness.

The Belle Plaine Member occurs stratigraphically above the Esterhazy Member and is present in ten of the reference wells. The Belle Plaine Member on the property averages approximately 7m in thickness and has very thin salt back. Analyses of this Member were run on the NAP Stockholm 5-10-19-3 core to indicate 20.09% K2O, 0.49% carnallite, and 4.95% insoluble over the uppermost 5.04m. The lowermost 6.82m of the Member were of considerably lesser grade. The salt back on the Belle Plaine is typically thin at 2.6m.
No massive salt solutioning has been documented within the area as indicated by regional geophysical mapping (Sawatsky, 1968) and recently reinterpreted 2D seismic surveys (Edgecombe, 2011).

2.2. Exploration Activities

A total of 3 deeper holes penetrating the Prairie Evaporite Formation have been drilled within the Permit boundaries. The most recent well was drilled by North Atlantic Potash during the summer of 2012. Eight other wells have been drilled within a radius of up to 20 km’s (12 miles) of the property. Potash exploration was particularly active in Saskatchewan during the late 1950’s and 1960’s but no significant activity was concentrated in the Stockholm area during that period of time.

The spacing of historic test holes (all of which are currently of non-confidential status) varies considerably from 8 km (5 mile) to as much as 24 km (15 miles). Quality and coverage of geophysical log suites also vary depending on the vintage of the drilling. Earlier test holes may only have some form of electric log whereas later more complete logging suites were run typically including caliper, resistivity, gamma ray, sonic, and neutron logs.

A one-hole exploration drilling program was completed within the permit south of Stockholm in 2012. The drill hole location were designed by North Atlantic with drilling operations being carried out by CanElsin Drilling utilizing oil-field drilling equipment capable of drilling to depths beyond that of the Prairie Evaporite Formation.

The hole was drilled vertical, penetrating the potash-mineralized Members of the Prairie Evaporite Formation with the strategic coring of the potash-bearing zones. The objective of the drilling program was to provide a preliminary indication of the potential of the Permit for further exploration. The drill hole location was selected based on the following parameters:

- Presence of laterally continuous potash-bearing beds (avoiding anomalous ground);
- Potential for intersecting potash-bearing beds, specifically the Esterhazy Member; and
- Acquiring drill-hole data suitable to support eventual documentation of a NI 43-101-compliant potash mineral resource.
As part of a subsurface investigation of Potash Permit KP-421, North Atlantic Potash Inc. contracted RPS Boyd PetroSearch to acquire 117.5 linear km (70.5 miles) of two dimensional (2D) market seismic data in the area of. The primary objective of this effort was to reinterpret previously-generated geophysical information with the intent of more accurately delineating the Prairie Evaporite structure and continuity (Edgecombe, 2011). One historic well penetrating the Prairie Evaporite provided a calibration point at the zone of interest (Pheas Bach Broadview 4-27-19-3; Lsd. 4-27-19-3w2). Horizon identifications were made based on the sonic logs from this single well within the area as well as through previous experience gained in the region by RPS Boyd PetroSearch.

The Belle Plaine and Esterhazy Members of the Prairie Evaporite Formation are present within the Project Area. Salt horizons barren of potash occur between the potash-bearing beds as well as discreet clay seams and clay-rich zones. The stratigraphic nomenclature is based on that presented by Holter (1969). The following is a summary of the key potash-bearing members:

- **Belle Plaine Member**: The Belle Plaine Member is currently being exploited using solution-mining techniques at Mosaic’s Belle Plaine Potash Mine. The Belle Plaine Member has an average thickness of about 7m throughout the Project Area over 10 wells which intersected it; the top of the Member ranges from about 1000 to 1200 m. The Member is absent in the historic Riddle Tidewater Clayridge Cr. 16-14 well (Lsd. 16-14-17-1W2).

- **Esterhazy Member**: The Esterhazy Member underlies the Belle Plaine Member and is separated from it by a barren halite zone with minor clay marker horizons. It has an average thickness of about 12m and ranges in depth between approximately 1100 and 1200m. The Esterhazy Member is the most prospective of the potash-bearing Members in the Project Area. In Saskatchewan, sylvite is extracted from this Member by conventional underground techniques at the Esterhazy and Rocanville Potash Mines and by solution-mining techniques at Mosaic’s Belle Plaine Potash Mine.

The Esterhazy Member was selected as the most prospective potash Member of interest as it has the following characteristics:

- the most continuous stratigraphic continuity;
- the most favorable grades over a mineable thickness; and
- considerably thicker and more consistent salt back than the Belle Plaine Member.
Table 2: Analysis Summary for NAP Stockholm 5-10-19-3

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<th>Member</th>
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<th>Av. %Sylvite</th>
<th>Av. %Carnallite</th>
<th>Av. %Insolubles</th>
<th>Av. Total %K2O</th>
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<tr>
<td>Upper Esterhazy Beds</td>
<td>1.99</td>
<td>26.55</td>
<td>0.36</td>
<td>2.27</td>
<td>17.09</td>
</tr>
<tr>
<td>Lower Esterhazy Beds</td>
<td>2.29</td>
<td>35.68</td>
<td>0.18</td>
<td>0.86</td>
<td>22.69</td>
</tr>
</tbody>
</table>

Figure 5: NAP 5-10-19-03W2 gamma geophysical log
3.0 Conclusion

North Atlantic North Atlantic Potash Inc. is a growing company focused on developing potash production in Canada. The company initially owned 26 permits in the Saskatchewan Potash Area, selling 8 permits in September 2011 to Yancoal Canada, a subsidiary of Yanzhou Coal Mining Company Limited of China. Currently North Atlantic possesses 18 potash permits in Saskatchewan covering over 485,000 hectares within the government Potash Designated Area. This includes 245,000 hectares fully controlled by North Atlantic and 240,000 held within a Joint Venture with Rio Tinto Exploration Canada Inc. (60% NAP, 40% Rio).

The Stockholm Project which consisted of seismic reinterpretation and the drilling of one well, served to confirm the historic drill results and continuity with neighboring potash operations of Mosaic and PCS. Two high-grade potash members were intersected, the Belle Plaine Member yielded 42% KCL over 2.5 metres and the Esterhazy Member yielded 36% KCL over 2.3 metres. This property has very high potential for both the Esterhazy Member s as well as Belle Plaine Member. Stockholm is in close proximity to infrastructure servicing potash operations in the area.
4.0 References


North Rim Technical Summary Report, December 2012

Sawatsky (1968). Figure 24A. *Composite Seismic Map*, Southern Saskatchewan.
Appendices

Appendix A

Arie Zuckerman

Arie Zuckerman joined North Atlantic Potash Inc. (NAP) as president in 2011. He received his LL.B and LL.M from the Hebrew University of Jerusalem, where he later held several positions in the Israeli Prime Minister’s office. His responsibilities included the management of the financial negotiations unit.

Since 2009, Mr. Zuckerman has served as a vice president of JSC Acron - one of the world’s leading international fertilizer companies with operations in Russia, Canada and China.

In November of 2010, Mr. Zuckerman led negotiations on behalf of NAP in the sale of an exploration permit comprising of 84,000 acres to BHP Billiton. In October of the same year, Mr. Zuckerman was the key player in the sale of an NAP exploration permit totaling 88,395 acres sold to Sanya Resource Corporation. Mr. Zuckerman was the lead in negotiations on behalf of NAP which resulted in a major potash deal in Canada with the sale of 8 permits to Yancoal Canada, a subsidiary of Yanzhou Coal Mining Company Limited of China in September of 2011.

Mr. Zuckerman was instrumental in the Joint Venture agreement with Rio Tinto Exploration Canada Inc. in 2011 with a JV split of 60% NAP, 40% Rio. The agreement relates to NAP’s potash permit holdings located in the southern part of Saskatchewan’s potash district. The joint venture covers nine permitted areas of about 600,000 acres (about 241,000 hectares) that extends from the eastern shore of Last Mountain Lake southeast to Broadview.

Mr. Zuckerman is a member of the board of directors of Maayan Ventures - a high-tech company working in the fields of telecommunications, internet and biotechnology. He is also a board member with Germany-based Future Foundation (EVZ), which is an initiative launched by the German Federal Government and the German Industry Foundation. EVZ manages a billion dollar fund and supports various human rights projects throughout Europe.
Appendix B

David C.E. Waugh

Mr. David Waugh has over 40 years of progressive leadership experience in the potash sector in the areas of exploration, development, mine construction, and mine operations.

Appointed CEO of North Atlantic Potash Inc. (NAP) in September 2011, Mr. Waugh is currently tasked with evaluating and developing potash assets in Saskatchewan.

Prior to his appointment with NAP, Mr. Waugh was general mine manager and vice president of operations for the Mosaic Colonsay Company from 2006 to 2011. In this position he was responsible for managing all aspects of a 1.6 million ton underground potash mine in Saskatchewan. During this period Mr. Waugh lead two large expansions of the Colonsay operation including a 30% - $650 million project beginning in 2009.

From 1997 to 2006, Mr. Waugh was mine manager for the Mosaic Potash Carlsbad mine in New Mexico (formally IMC Potash Company) and was responsible for managing a 25,000 ore tons per day underground operation in a geologically complex potash deposit.

During Mr. Waugh’s tenure at the Mosaic Carlsbad operations he led the transition from drill & blast mining method to continuous miners for both the sylvite and langbeinite mining levels. Process improvements were achieved which enabled a 35% productivity gain, while increasing overall production by 20% as well as a corresponding 60% reduction in accident frequency.

As President of Mineral Services Ltd. from 1991 to 1997, Mr. Waugh managed a consulting practice that supplied technical and management services to the exploration and mining industry. During this period, Mr. Waugh’s team completed technical and economic evaluations for IMC Global of potash properties in North America as well as international properties including locations in South America, Asia and Africa. Mr. Waugh also carried out long term mine planning, ore reserve calculations, mining project evaluations, and ground control investigations.

While with Mineral Services, Mr. Waugh appeared as a mining technical expert for the Carlsbad Mining Association in New Mexico, USA, in a 6-month court case with the petroleum industry and the US Federal Department of the Interior.

Mr. Waugh worked with Potacan Mining Company at their eastern Canada potash mine from 1979 through 1991. Potacan was owned by K + S of Germany and MDPA of France. During this period he was involved with all aspects of exploration, feasibility, financing, and mine design through construction of the New Brunswick potash operation. During the production stage he managed the technical services group – comprised of mine planning, rock mechanics, ventilation planning and control, geology, mine projects, industrial engineering and
surveying. He maintained daily, intermediate and long range planning, design and layout for the annual production of over 3,000,000 tonnes of ore and the hydraulic placement of 2,000,000 tonnes of tailings in a geologically complex deposit.

From 1972 to 1979, Mr. Waugh held a number of progressively senior roles in grassroots exploration and mining production with a number of leading organizations in the United States and Canada. This included being part of the team that discovered the potash deposits in New Brunswick, Canada which later became two producing mines.

Active in the community, Mr. Waugh has chaired the Saskatoon United Way Campaign, he was a director of the Saskatchewan Mining Association, President of the New Mexico Mining Association and has volunteered on a number of mining innovation, safety, and university engineering advisory boards in the United States and Canada.

During his career, Mr. Waugh has contributed to the knowledge and understanding of the geological nature of potash and potash mining in a number of national and international publications.

Appendix C

Milton Holter M.Sc., P. Eng, P. Geo

Mr. Holter has 50 years of experience as an industrial minerals geologist. He has been associated with North Atlantic Potash and Acron since the company’s acquisition of potash permits in Saskatchewan in 2007 and has been directly involved in the completion of individual property evaluations, establishing recommendations for active exploration, and providing technical presentations for permits released for sale to other mining interests.

Prior to his support to NAP, Mr. Holter was most actively engaged in private consulting to a number of companies, mainly on potash and coal projects.

Mr. Holter was first employed by Saskatchewan Energy and Resources where he completed a comprehensive study of the Saskatchewan potash deposits and stratigraphic studies of lignite coals in the southeast of the province. He then was employed by the Alberta Research Council and was responsible for studies on quarriable minerals and the supervision of a province-wide deep coal drilling program.

Mr. Holter went on to serve as Senior Supervising geologist with Monenco Consultants. His responsibilities were to access both undeveloped thermal coal deposits and determine extended reserves and verify coal quality specifications of existing operations.
He entered into private consulting practice in 1980 and continued to emphasize coal assessment work along with providing support to resolution of potash mining issues in Saskatchewan.

During the 1990’s Mr. Holter became more involved in environmental support work including the supervision of watershed restoration projects and completion of forest cutblock reviews in British Columbia while employed by the Forest Service. Similar work was carried out subsequently while retained by Coast Forest Management and Silvatech Consulting. Following this, he was employed by the Lummi Indian Nation in Bellingham, WA as Resource Protection Manager as well as Timber, Fish and Wildlife Coordinator.

At the present time, Mr. Holter is registered as a professional engineer and geoscientist in Saskatchewan, Alberta, and British Columbia. He is also registered as a geologist and engineering geologist in the State of Washington.

Appendix D

Derrick Finney B. Sc., Project Lead

Mr. Finney obtained his Bachelor of Science degree with a major in Geology from the University of Saskatchewan in 2011. As a member of the Association of Professional Engineers and Geoscientists of Saskatchewan and the Association of Professional Engineers and Geoscientists of Alberta he is actively pursuing a career in sedimentary geology. His duties at North Atlantic Potash include the management of all exploration activities which entails geological mapping, seismic interpretation, geophysical log analysis, core analysis, new ventures analysis, management of exploration budget as well as all related drilling operations.

Mr. Finney’s prior sedimentary geology experience was obtained in the oil and gas field where he was an area geologist for an unconventional tight gas play in northeast British Columbia. Mr. Finney worked with a multidisciplinary team to plan deep horizontal wells targeting the Montney Formation which produced natural gas and natural gas liquids. His duties included subsurface mapping, well log interpretation, defining porosity cut-offs from core analysis, 2D and 3D modeling and evaluating secondary target formations.